Issue 64 ● September 1993 ● £3.25 Overseas price £3.50 ● Hfl 15.95

# COMPUTING

# RED HO

They're easier than ever with Caligari 24

Top level graphics engine





Now you can create stunning araphic effects easily EGVP

SAVE DISABLED (2Mb RAM rac

PLUS:

Handy and cute Warkbench friend

Great stand alone anim player

Triktrak Backgamman

style game

QuickGrab

& Screen X
Two excellent
screen grabbers

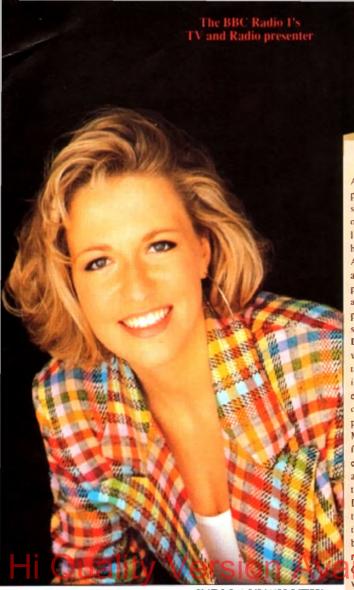


The new Amiga CD 32 console – all is revealed

VLab Y/C – grabs the headlines and the video



REVIEWED: V Lab Y/C ● Office shareware ● Phone Pak Colour scanner • Survival guide to hard drives • Printer roundup



### A4000 / 030 **EXCLUSIVE INDI PACK**

The new Amiga 4000 / 030 is back in stock and even better value with the new Indi Added Value Pack.

Amiga 4000 / 030 80 Mb HD (2Mb of 32 - bit RAM, 1Mb chip and IMh fast)

### FREE INDI GRAPHICS PACK

PD C - light, Graphic Utilities, Ray Tracing and Rendering package pre loaded on to your Hard Drive

FREE WORDWORTH The ultimate word / document processor. Normal RRP £129.99 inc VAT.

### INDI PRICE £979.99

Amiga 4000 / 030 120 MB HD.(2 MB OF 32 - Bit RAM | Mb chip and 1 Mb fast)

### FREE INDI GRAPHICS PACK

PD C - light, Graphic Utilities. Ray Tracing and Rendering package pre loaded on to your Hard Drive

FREE WORDWORTH The ultimate word / document processor. Normal RRP\_£129.99 inc VAT.

INDI PRICE £1059.99

# STOP PRESS

Amiga 32 -bit CD arrives August Call (0543) 419 999 for details.

### INDI LAUNCH NEW MULTI MEDIA CLUB

Last month saw the launch of the Indi Multi Media Club and what a response there has been. Early indications show that without a doubt it is destined to be the largest of it's kind. Apart from all the obvious club benefits the Indi operation offers a true 'One Stop Shop' for all members.On offer each month with an ever increasing product range, members can obtain software to cover every application, including Morphing Rendering Ray Tracing and Video, There's a vast range of accessories and peripherals again encompassing members every need and a PD Library second to none. The Club also offers a very comprehensive range of videos including the Cult Manga Titles, Music Features and Special Interest. There really is something to suit everyones taste.

For those members with CD ROM players (including CDTV, PC and SEGA) there's plenty on offer. Not only does the 'Club' cover CD ROM titles, there are also some great audio titles available.

With so much happening on the Multi Media scene it's hardly surprising that Indi are there to provide a competitive single source of product supply

Membership costs only £10 and each member receives a quality gift on joining , even though there is absolutely no commitment to purchase at any time. If you would like to be a part of this exciting club then call Indi on 0543 419 999.

### DMA ENSURES HIGHEST PRACTICE

As with most industries, the UK's personal computer industry has its share of cowboys operating in the mail order sector and at the receiving end a line up of despairing consumers who have suffered at their hands.

A personal computer is a sophisticated and expensive item and provided the purchaser is dealing with a reputable and accredited supplier, buying a computer by mail order can be a perfectly safe and cost effective exercise. The Direct Marketing Association (DMA) was set up in April 92 to set and maintain high standards for the sake of the industry and society at large, and to ensure that we can continue to regulate our own activities on the basis of

proper professional responsibility.

Membership of the DMA is not conferred lightly - it is a privilege which entails responsibilities, to the consumer as well as to the industry. The foundation for this must be good practice. DMA members are required to abide by the highest standards as laid down in the DMA's code, enforced on members by The Authority of the DMA a separate body with an independent Chairman and which is an assurance of vigorous self - regulation and professional responsibility.

DMA members also agree, as a condition of membership, to abide by The British Code of Advertising Practice and The British Code of Sales Promotion Practice: to apply the Mailing Preference Service file when appropriate: and to subscribe to the Advertising Standards Board of Finance (ASBOF) and to the Mailing Standards Levy as applicable

The DMA symbol can only be used by members. Printed on stationary, advertising and other promotional material it demonstrates that these companies conform to the Association's high standards and are subject to the DMA's Code of Practice, thus enhancing the companies credibility with customers, suppliers and of greatest importance, the

Since the symbol was introduced last June, it has become synonymous with quality, professionalism and and responsibility. While it cannot be shown in any way which will become a sign of best industry practice and of strict adherence to DMA codes of conduct. The symbol represents authority for members and reassurance for consumers. It has been a high valued mark of confidence signifying to the consumer the truly professional edge of the

Alison Slan (Director of Public Relations, DMA)

# INDI DIRECT MAIL **Proudly Presents** THE JAKKI BRAMBLES COLUMN

It seems that every month I'm able to report some exciting news from Commodore. This month is no exception but probably the most exciting to date .... A1200 PRICE CRASH!!! That's right

Commodore have announced that the RRP of the A1200 is now £299.99. At this price there cannot be a better computer anywhere based on a Power to the Pound ratio. Armed with this news, Indihave got some pretty exciting A1200 offers, just take a look in the following Indi pages!! Do you like the new Indi Logo?

I'm told that a certain person in the Indi Marketing Team has made it clear that when it comes to the

Amiga 4000/030 he is the main man. So equipped with an Opalvision 24 - bit graphics

card he was set loose. The image was converted to an IBM compatible

file using Art Department Professional, ported over to a 1.4 gigabyte graphics PC Workstation, then using the A4000 workbench file transferred and finally slotted into the Indi Advert.

I'm sure that you will agree that the end product is superb and a real demonstration of the Amigas Graphic Capabilities, Still on the subject of the Amiga the winner of this months 'Hints and Tips' competition is Peter Shelley of Stafford. Peter shows how you can save memory when using your

Edit the startup sequence which can be found in the workbench partition in the 'S' directory. Delete the last fine of the sequence: "END CLI" This will enable you to quit workbench (once toaded) and drop into shell (Amiga DOS) saving over 100 K that would normally be taken up by the multi tasking windows environment. All commands are still resident including DIR, DELETE etc... Of course I can only recommend this for those users who wish to work outside the Amigas graphical environment and who are conversant with the Amigas command line interface.

Thankyou Peter, your prize is on its way, many thanks to all those who have written to me, keep those letters coming.

Buying a printer to go alongside your Amiga is a big decision and one that every serious Amiga owner has to face.

Everyone knows that Indi fully researched the printer market before choosing Panasonic printers and believe that Panasonic Ouiet Printers are the best on the market, but they would say that wouldn't they!

Now I'm told that Romtee the computer Industry analysts have announced that the Panasonic KX-P 2123 has become the UK's top selling colour matrix printer. Well done Panasonic (and Indi) Indi have just sent me details of their new Multi Media Club, it's a very interesting idea offering all home entertainment products under one roof not just computer games. It's well worth a look. Kind Regards,

Apologies from Indi that we ran out of signed Jakki Brambles photographs, Jakki has now signed more copies and they are on their way.



## DEFERRED CREDIT ON ALL ORDERS OVER £200. \*PAY 10% NOW AND NOTHING MORE FOR 3 MONTHS

AMIGA A1200



### **CUSTOMER CHARTER**

INDI Direct Mail is original and very exciting. Before you buy mail order you must first be confident that you will receive the product you've ordered and that the supplier will be still be there in the future, should you need

A mail order purchase from INDI is a safe and secure decision, and here's

INDI is a wholly owned subsidiary of a public company now in it's tenth year of trading specialising in the supply of computer prod-

With a turnover approaching £30 million per annum, we have the resources and the purchasing power to offer you the best deals, deliver them next day nationwide and always be around when you need us.

### **ALES AND SUPPORT**

The INDI sales team have been trained to take your order with the utmost care and effi ciency. All stock offered for sake is held in stock, centrally at our group ware hou plex and is available for next day delivery, direct to your home or business. If at any time we are out of stock your money will not be banked until the product is available (a point worth checking should you be tempted to pur chase elsewhere)

General information regarding product is available from our sales team, however technical support is always on hand should you end assistance.

All prices quoted are inclusive of VAT.

**INDITELESALES** TEL 0543 419999 FAX 0543 418079

### CREDIT FACILITIES

INDI are now able to offer competitive credit facilities on all orders over £200. All credit facilities are subject to status and applicants must be over the age of 18.

If you would like a quote simply call our our sales line where acceptance can normally be notified within the hour. We are also able to offer Credit Insurance to cover repayments in the event of sickness or unemployment.

AMOUNT	13 MG	NTHS	24 MC	SHTHE	14 MONTHS		
	PONTIALY PONNTS						
200	£22.00	C264.98	£12.00	£29£.12	49.31	£335.63	
500	ES4.99	<b>4459.88</b>	431.04	4745.44	423.27	6837.72	
1000	EP. PO 13	41)19,76	462.13	61491.12	444.54	(1675.44	

APR 29.9% WRITTEN QUOTATIONS AVAILABLE ON REQUEST "After deposit paid

### **AFTER SALES AND** SPECIALIST SERVICE

All products are guaranteed for 12 months. Some products carry a 12 months at home sersome products carry a 12 months at home service and repair guarantee (where indicated). In the unlikely event that any product purchased from INDI arrives at your home faulty, we will collect from your home and replace the product completely free of charge.

As part of our policy of continual product development and refinement, we reserve the right to change specifications of products advertised. Please confirm current specifica-

Prices are valid for month of publication only

### OFFICIAL A1200 HD SYSTEMS

The Amiga 1200 supplied by Indi Direct Mail now includes the officia (legal) Commodore installation disk and hard drive utility manual. Ind are proud to be an official supplier of Amiga 1200 Hard Drive systems, include the official software, documentation and on - site

## STOP PRESS

ALL A1200 PRICES CRASHED INCLUDING ALL HARD DRIVE SYSTEMS

### COMIC RELIEF PACK

ent may be over but the fund raising still goes on. If you're looking for the latest Amiga technology then this is the starter pack for you. Based around the outstandin A1200, this pack also gives you sleepwalker, a most addictive platform game from ocea software. You'll be pleased to know that every one of these packs purchased raise another £10 for Comic Relief

### A1200 STANDARD FEATURES.

68020 Processor \* PCMCIA Slot \* 2MB Chip RAM \* 3.5" Intern: Drive . AA Chipset. Built in TV modulator. Alpha numeric keypad. 12 Months at home maintenance.

FREE Sleepwalker and £10 donation to Comic Relief

### INDI PRICE

£289.99 or from £11.04\* per manth

"(Credit price based on 36 monthly payments APR 29.8%. Total repayment £397.92 and 90 day deferred payments.

A1200 80 MEG HD INDI PRICE £499.99 A1200 120 MEG HD INDI PRICE £589.99 INDI A1200 ADDED VALUE PACKS

### Pack Contains:

- International Games Challenge \* The Cool Croc.
- Paradroid 90. \* Zapsac Rucksack and Zappo T shirt.

INDI PRICE £19.99

80 Mb Hard Disk upgrades available on any A1200. Upgrade does not invalidate your Wang warranty on A1200 and Hard Disks. Phone for a quote.

## AMIGA A4000

### NEW MONITOR RANGE

THE NEW DUAL SYNC1942 Monitors have been specially designed for the New Amiga 1200 and 4000 computers. Both monitors feature built - in stereo speakers



14 Inch screen size - 0.39 mm dot matri:

# INDI PRICE 1942 Monitor £379.99



**ZAPSAC AND T - SHIRT** INDI PRICE £17.99

(Free with A1200 Comic Relief Pack, INDI A600 Accessory Pack)



### Parnet Adaptor for CDTY

Connect a CDTV player to any Amiga, and access the worl of CD - ROM software The Parnet interface and software will allow the Amiga CDTV to be used as a CD - ROf drive withe any Am ligs and will give any Amigs owner acces to the vast range of CDTV software currently available.
The CDTV player offers excellent value for money whe compared with a standard CD - ROM drive and interface Most CD - ROM drives will set you back over £400 while CDTV will cost you less than £300 and will play audio CD in addition to CD - ROM / CDTV disks your Amiga, into face cable and PD disk with driver software for your CDTV player. (The Parnet adapter can be used to link any Amigas together)

INDI PRICE £39.99

A4000/030 + CDTY + 1942 MONITOR + PARNET, INDI PRICE £1599. CDTV + PARNET.
INDI PRICE £329.99

# **AMIGA A600 PRICE CRASH**



It's here - The new Amiga 4000/030

The NEW Arriga 4000/030 features a EC68030 processor

running at an incredible 25Mhz, and upgradable at a fater

date to a faster processor. The 4000/030 has a powerful 2

Mb of 32 - bit RAM (I Mb chip & I Mb fast) expandable to

18 Mb using industry standard 32 - bit Simms module. In line

with the Amiga Flagship 4000/040 the 4000/030 features the new AGA graphics chipset, giving you a massive pallet of

16.8 million colours. A range of hard drive options are available from 80 - 240 Mb and includes a SCSI option.

4000/030 80 Mb HD INDI PRICE £979.99

Other Drive Options 4000030 120 Mb HD INDI PRICE £1059.99 4000030 240 Mb HD (exclusive to INDI)

A full range of approved upgrades are available for the

4000(30, including additional memory modules, hard drives, PC bridge boards, FPU's (6888 868882)and the 24-bit Opal Vision graphics and video system

4000/030 120 Mb SCSI HID (exclusive to INDI)

THE WILD THE WEIRD AND THE WICKED A600 to ideal starter pack containing a considered mix of softy most of the Amigas capabilities.

### PACK CONTAINS:

- A600 Single Drive Built in TV Modulator
- I Mb Memory Pushover: Grandprix
- \* Silly Putty: Deluxe Paint III
  \* Mouse and Manuals

NEW LOW LOW PRICES

A600 - SD A single drive Amiga for those of you requiring a basic A600 at a very com-PACK INCLUDES: A600 single drive, built in TV modulator, I Mb memory, 12 Months at

INDI VALUE ADDED FREE . Kick Off 2 . Pipemania . Space Ace Populous Microswitched Joystick



A600 EPIC PACK (40 Mb HD) PACK INCLUDES: A600 Hard Disks (40Mb) \* I Mb Memory \* Epic \* Rome \* Myth \* Trivial Pursuit \* Amiga Text \* Deluxe Paint III \* 12 Months at home service. PLUS INDI ACCESSORIES PACK



INDI A600 ACCESSORY PACK (Featured with WWW)

Microswitched Joystick Lockable Disk Box Disk Wallet 10 Blank Disks Kick Off 2 Pipemania Space Ace Populous Zapsac A600 Carry Case

INDI PRICE

£26.99



# **AMIGA RECOMMENDED PERIPHERALS & ACCESSORIES**

### **NEW FROM MICROBOTICS!!!.** M1230XA ACCELERATOR LAUNCH!!

Microbotics beats the competition in price/ performance/ features and configurations. INDI is very pleased to announce the availability of the new 68030 accelerator product for the A1200: the microbotics M1230 XA (call it the "XA" for short). 50 Mhz as standard! Huge 128 MB memory design is standard (the biggest memory space in any A1200 peripheral) just look at these specifications and prices!

M1230 XA W/40 MHZ EC 030 OMB INDI PRICE £299.99 M1230 XA W/40 MHZ EC 030 4MB INDI PRICE £399.99 M1230 XA W/40 MHZ EC 030 8MB INDI PRICE (499.99 M1230 XA W/50 MHZ MMU 030 0MB INDI PRICE £399.99 M1230 XA W/50 MHZ MMU 030 4MB INDI PRICE £499.99 M1230 XA W/50 MHZ MMU 030 8MB INDI PRICE £599.99

**AUDIO VISUAL** 

MEGAMIX. Low cost, hi spec digital effects

Allows stereo sampling from almost any musical

INDI PRICE £29.99

INDI PRICE £37.99

Harris Cartoon Club

cartridge plugs into the printer port of the Amiga.

TAKE 2. Animation package is a must fee comput-

er artists and enthusiasts of all ages. As used in Rolf

VIDI AMIGA 12. The ultimate low cost colour

digitiser for the Amiga. The best value full colour

digitiser on the market" AMIGA FORMAT.

HAIDI ERICELLYS.99V C



Entry level Genlock for all Amigas. Record stunning Amiga Graphics into standard video or overlay text and graphics onto a video signal.

INDI PRICE £69.99

ROCTEC ROCGEN PLUS. ROCTEC ROCKEY.

As above but with extra features such as tinting and signal inversion Allows for real time editing of graphics. Companble with all Amigas. INDI PRICE £133.99

INDIPRICE CIBILIZE OF

/ Video fans. Separate RGB controis to chroma key on any colour

The ultimate accessory for Amiga

INDI PRICE£249.99

ROMBO VIDI AMIGA 12 (RT). Based on the best selling Vidi Amiga 12. This all new version offers real time colour capture from any video. source. Full AGA chipset support as standard for all Al 200 / 4000 user

**DISK DRIVES** 

EXTERNAL 3.5

### **MEMORY UPGRADES AND ACCESSORIES**

MBX1200.

The original and best floating point unit and memory upgrade for the Amiga A1200. Available with 0.4 or 8 MB of

32 bit Fast RAM and a choice of floating point units. Now

IMBX1200Z 6881 14 MHZ 0MB IND1 PRICE £149.00

MBX1200Z 6881 14 MHZ 4MB IND1 PRICE £299.00 MBX1200Z 6881 14 MHZ 8MB INDI PRICE £399.00 MBX1200Z 6882 25 MHZ 0MB INDI PRICE (199.00

MBX1200Z 6882 25 MHZ 4MB INDI PRICE (349.00 MBX1200Z 6882 25 MHZ 8MB INDI PRICE 4429.00

MBX1200Z 6882 50 MHZ 0 MB INDI PRICE (399.00

MBX1200Z 6882 50 MHZ 4MB INDI PRICE £499.00

MBX1200Z 6882 50 MHZ 8MB INDI PRICE 4599.00

complete with real time clock (RTC)

M501 The original 0.5MB battery backed upgrade for the A500.

INDI PRICE £29,99

M502 The original H1 MB battery backed upgrade for the A500.

INDI PRICE £49.99

8 Up memory board. Designed for the A1500/ A2000. Memory upgradeable to 2/4 or 8MB

INDI PRICE £69.99

Hard frame suitable for AI 500/ A2000. Allows for the interface of a SCSI hard drive

INDLPRICE 4 1999

ROMBO VIDI AMIGA 24(RT). For the more serious user, this 24 - bit version will again capture from from any video source with true photo realistic images! A staggering 16.7 million colours can be utilised with incredible results. Full AGA chipset support.

INDI PRICE £239.99

source

Third Party OpalVision Software

(Available now or coming soon)

Imagemaster, Imagine, Michtron Entertainment Products Morph

Libraries, 3D Professional, Transporter, Tv Paint, Vista Pro, Video

Aladdin 4D, Amilink Video Editing Products, Art Department

Professional, Caligari 24, Cine Morph, Fractal Pro, Image FX,

Plus, Real 3D, Scala Multi media 100, Texture City Image

Visions and more!!!



2MB SMARTCARD. The original and still the only fully PCMCIA compatible memory card for A600/ A1200.Comes with lifetime

4MB SMARTCARD, Same as above but maximum 4MB.
INDI PRICE £199.99

ZAPPO 601. rapdoor upgrade for the A600. IMB with RTC. INDI PRICE £49.99

ZAPPO 601 INC. As above only 512K no clock INDI PRICE (29.99



ZAPPO EXTERNAL FLOOPY
You've seen all the reviews on his poor and afforce second Amiga drive. Company with all Amigas. and affordable

INDI PRICE £59.99

Quality: 9 out of IO. " Exceptional value for money. AMIGA COMPUTING JAN 93

### MONITOR



**1084ST MONITOR.** 

Commodores original and best selling colour stereo monitor Now includes swivel and tilt stand for total ease of use.

INDI PRICE £189.99

(£179.99 if purchased with A600 / A1200 / A1500)

# The NEW OPAL VISION system (Rev.2) The amazing Opalvision 24 - bit graphics board and software suite has been updated and is now even better value for money.

The software suite now includes:

Opal Paint V2.0 - Now includes full magic wand implementation and Alpha Channel that allows photo compositing with selectable levels on a pixel by pixel basis. The new Chrominance effect allows absolute, real time control of image contrast, brilliance and re - mapping of colours

Opal AnimMATE V2.0 - ofering real time play back of animations created by ray tracers, landscape generators, morphers and all other 24 - Bit

software,
Opal Hotkey V2.0 - Display OpalVision graphics anytime with key

Opal Presents - Comprehensive, icon - driven presentation package. Special Limited off er

IMAGINE V2.0 for only £59.99 when purchased with OPALVISION Imagine 3D is the most popular 3D rendering software, that now supports OpalVision. This is a full version that would cost £300 if purchaed separately. 'Quite simply, it's a spectacular product. Amigd Combuling

"Undoubtedly the finest, most professional paint program to arrive on the Amiga" Amiga Format

"Professional quality at this Price can't be turned away" - Arriga User International "The verdict was unanimous - brilliant" - Arriga Shapper

### **OpalVision NEWS FLASH**

At Last - OpalVision Upgrade Modules!

OpalVision Video Processor - Plugs into the OpalVision mainboard and adds a waelth of additional features # 24 Bit real - time frame grabber from composite or S - Video. \* Professional quality genlocking \*VLSI microcode processor "Roaster CIp" for Digital Video Effects. \*Luninance & Chroma Keying \* 256 - level "Alpha Channel" (transparency) key.Management Software

Full specification available on request OpalVision Video Suite - An advanced external rack mounted video and audio switching device with it's own internal computer. Includes 9 video and 10 audio inputs, 24 - Bit frame store and a host of special effects triggered manually or automatically. Full specification

available on request

OpalVision Scan - Rate Convertor - For 31 Khz non - interlaced output of Amiga graphics. OpalVIsion images and any Pal or NTSC source. Time Base Correction adds to the list of professional features of a unit that simply plugs into the OpalVisionmain board. Full specification available on request

Amiga 4000 OpalVision Systems

Complete Amiga 4000 / OpalVision systems are available for a range of

Graphics/ Fine Artists \* Multimedia \* Videographers \* Animators Desktop Publishing Designers

INDI PRICE £599.99

# TERMS AVAILABLE OVER 6, 12, 24, & 36 MONTHS SUBJECT TO STATUS. WHY NOT RING FOR A QUOTE. SAMEDAY RESPONSE. (SEE EXAMPLE)

# **Panasonic**







We researched the colour printer market at great depth to find a colour printer good enough to cope with Amiga's powerful output, yet at an affordable price We found the perfect printer in the KX - P2180 and KX - P2123 quiet printers.

We then considered that if you were going to buy a Panasonic printer you would probably need a quality word processing package to use with it. We found that too, with 'Wordworth' yet at a retail price of £129.99 we thought that might be a little too expensive on top of your printer purchase! So together with Panasonic we decided to give a copy of 'Wordworth' free with every Panasonic printer. How's that for added value?

anasonic

KX - P2180

**Panasonic** 

KX - P2123



WORDWORTH COMPLETELY FREE! WITH PANASONIC

QUIET PRINTERS. The writers choice. The ultimate word processor for AMIGA computers. Wordworth is undoubtedly the ultimate word / document processor for the full range of AMIGA computers. The graphical nature of WORDWORTH makes producing documents faster and easier, with the enhanced printing fonts (including full Panasonic KX - P2180 and KX - P2123 colour printing support), Collins spell checker and thesaurus, no other word processor comes close. "Without doubt this is one of the best document processors for the AMIGA, Today" (Amiga Format)

NORMAL RRP £129.99 inc. VAT

INDI PRICE

£189.99

The new Panasonic KX - P2180 9 -pin quiet printer Produces crisp clear text in mono or in 7 glorious colours with new quiet technology. THe new KX - P2180 is typically 15dBa quieter in operation, than the competition.

\* Fast Printing Speeds 192 CPS NLQ

- a Colour Printing 7 colour palette (blue, red, green, yellow, violet, magenta,black)
- Quiet printing Super quiet 45 48 dBa sound level (most matrix printers are typi cally in excess of 60 dBa)
- 6 Resident Fonts Over 6,100 type styles using Courier Prestige, Bold PS, Roman, Script and Sans Serif Fonts.
- a 3 Paper Paths Paper handling from bottom, top and rear for total flexibility
- . I Year Warranty for total peace of mind

INDI PRICE

£239.99

The new high performance Panasonic KX - P2123 24 pin. Quiet colour printer offers leading edge quiet printing technology at an affordable price

- Fast Printing Speeds 192 CPS draft, 64 CPS LQ and 32 SLQ.
- Colour Printing 7 colour palette (blue, red, green, yellow, violet, magenta, black)
- Quiet Printing Super quiet 43.5 46 dBa sound level (most matrix printers are typically in excess of 60 dBa)
- 7 Resident Fonts Over152,000 type styles using Super LQ, Courier Prestige, Bold PS, Roman, Script, and Sans Serif Fonts.
- 24PIN Diamond Printhead High performance and high quality output
- # I Year Warranty for total peace of mind.

### **Panasonic** LASER PRINTER

**KX - P4410 LASER PRINTER** 



WORDWORTH COMPLETELY FREEWITH PANASONIC LASER FRINTERS ne writers choice. The ultimate we processor for AMIGA computers NORMAL RRP £129.99 Inc VAT

- P4430 LASER PRINTER



Once again INDI have joined together with Panasonic to offer all Amiga owners the most outstanding Laser Printer offer ever. We are now able to offer high quality, professional laser printing at affordable prices. We are also giving away a copy of Wordworth with every Panasonic Laser Printer purchased (RRP £129,99). Whether you are looking for a laser printer to handle word processing, DTP, presentation or complex graphic applications - the Panasonic range offers you the power to meet your requirements.

- KXP 4410 5 pages per minute
- 28 resident fonts
- Optional 2nd input bin(total printer
- capacity 2 x 200 sheets) Low running costs
- Parallel interface
- Optional memory expansion to 4.5 Mb
- (0.5 as standard)
- # HP laserjet II Emulation

INDI PRICE

inc. VAT Imminent price increase

This price while stocks last

WORDWORTH COMPLETELY FREE WITH LASER PRINTERS



KXP - 4430

- Šatinprint (optimum resolution technology)
- 5 Pages per minute
- HP Laserjet III Emulation, PCL 5
- 8 Scalable fonts & 28 bitmap. functions
- Optional 2nd input bin (total print er capacity 2 x 200 sheets

  Optional memory expansion to
- 5.0 Mb (1 Mb as standard)

INDI PRICE

Imminent price increase. This price while stocks last

atmprinters use optimum resolutio logi to produce truly outstanding pri This software technique smooths as small passed delges on curred charact is by varying the printed dot size

WORDWORTH COMPLETELY FREE WITHLASER PRINTE

# Panasonic PRINTER ACCESSORIES



1) PANASONIC AUTOMATIC SHEET FEEDER Automatic sheet feeder for KXP 2180/ KXP 2123 holds 80 A4 Automatic sheet feeder for K sheets. INDI PRICE £89.99

2) PRINT DUST COVER

Specially tailored quality dust cover for Panasonic KXP 2180' KXP 2123 printer. INDI PRICE £8.99

3) PRINTER STAND 2 piece printer stand. INDI PRICE (9.99

4) PAPER PACK 500 sheets quality A4 paper, INDI PRICE £9.99

5) CONTINUOUS PAPER 2000 sheets | part listing paper. INDI PRICE £19.99

6) PARALLEL PRINTER CABLE To be used when connecting Americo Panasonic printers.

INDI PRICE (8.99 (45.99 it purchased with a printer)

7) PANASONIC COLOUR RIBBON Colour ribbon for KXP 2180/ KXP 2123 INDI PRICE£18.99

8) PANASONIC BLACK RIBBON Black ribbon for KXP2180/ KXP2123, INDI PRICE £9.99

### SAVE!!!!SONTHEFOLLOWING ACCESSORY PACKS

PANASONIC COLOUR RIBBON PACK Contains 6 colour ribbons for the KXP 2123 RRP

INDI PRICE £34.99 SAVE £30!!!

PANASONIC RIBBON PACK

Contains 2 black and 4 colour ribbons for KXP 2180/ KXP 2123.RRP £99.99. INDI PRICECC69.99 SAVE C30!!!

PANASONIC DELUXE ACCESSORY PACK

Contains automatic sheet feeder, 2 black ribbons, 2 colour ribbons, 1 dust cover, 2 piece printer stand. RRP (169.99 INDI PRICE (139.99 SAVE (30

Add (250 correspond) and primary accessories or combinations thereof

### 12 MONTHS INTEREST FREE CREDIT AVAILABLE ON CDTV EXTERNAL HARD DISK SUBJECT TO STATUS. LOW INTEREST CREDIT **AVAILABLE ON ALL ORDERS OVER £200**

### MIGA CDTV

### THE MULTIMEDIA COMPUTER TOTAL HOME



### **ENTERTAINMENT SYSTEM**



everyone to realise its full potential.

CDTV is no exception and in our opinion everything we have read does a pretty poor job of explaining just what CDTV can do and why it is so exciting

### THE INDI GUIDE TO CDTV

IT'S A CDTV PLAYER - Yes, it will play all your Primal Scream, Paverotti, Pink Floyd and any other CD you care to mention in superb high quality stereo, with infra red remote control.

IT' AN AMIGA - Plug in the keyboard, switch on the external disk drive and the colossal range of inexpensive Amiga Software can

'S A MULTIMEDIA SYSTEM - Just imagine, stereo sound, images and text all on screen. It asks a question, you respond, it responds - truly interive! Each CD disk holds hundreds of megabytes of data with instant optical access. The whole of Hutchinsons encyclopeadia fits on to one disk. This interive system is a unique aid for Education, Business or Leisure. The future is here!

ACK CONTENTS AS STANDARD \* Amiga CDTV Player \* CDTV Keyboard \* CDTV 1411 3.5" Disk Drive \* CDTV Infra Red Remote ntroller \* CDTV Wired Mouse \* CDTV Welcome Disk \* Manuals \* Fred Fish CDTV Disk

DI VALUE ADDED FREE \* Lemmings CDTV (£34.99)

Blues Brothers (£12.99 ) \* Pipemania- Populous, Kickoff 2, Space Ace.

PRICE CRASH

PACK AS SHOWN £249.99

INDI PRICE

MULTI MEDIA PACK WITH-OUT INDI VALUE ADDED £229.99

CDTV CONNECTS DIRECTLY TO YOUR TV SET

### AMIGA CDTV ACCESSORIES



THE BRICK - ETTE just plug in the brick - ette and use any wired Amiga compatible joystick, mouse of trackball device on the Commodose CDTCV. The CDTCV. Th

Processor gives the Berk ette big smarts in a timp package and makes it easy to use just plug into the remote port and it is ready to go with real time mouse or joy-stick movement on your to. No loading of driver programs or software. No teches for mouse or joystick. Special settings (with use) allow you to blast away with with three rapid modes & dual fire buttons. Comes complete with non-Micro switched joystick.

ton Micro switched joystick.
DI EXCLUSIVE (49.99
th two joysticks (59.99



BLACK 1048S MONITOR

At last the CDTV Monitor you have been waiting for. The original and best selling colour/ stereo

monitor from Commodere is now available in black to complement your CDTV INDI PRICE £189.99

with CDTV Multi Media pack



If you are thinking of buying CDTV or already own one you'll be pleased to know that INDI stock all CDTV accessories and software that are available from manufactures. We believe in CDTV and we therefore continue to support this exciting product. You will always have a source of product for your CDTV from INDI.

L to R

CDTV Encore SCSI Controller + Internal Mount £109.99 CDTV Internal Genlock € 149.99 Black 10845 Colour Stereo Monitor €189.99 (When purchased with CDTV Multi - Media Pack) £179.99 CDTV Remote Mouse Scart TV / Monitor Lead €14.99 (inc Stereo Phono Lead)

CDTV Trackball 669.99

### AMIGA CDTV EXTERNAL HARD DISK DRIVE

You've got the CDTV, you've got the keyboard and the floopy disk trive. For a total computer colution all that's needed it an ultra task hard its deline.

The CDTV - HD unit boasts a massive 85 Mb of hard disk storage with lightning fast access times through its SCSI interface. The unit comes complete with Workbench 1.3 and all necessary



INDI PRICE

£299.99

ON THIS PRODUCT.

### MIGA CDTV SOFTWARE

### **SEE THE JAKKI BRAMBLES PAGE** FOR DETAILS OF THE INDI SOFTWARE CLUB

TS AND LEISURE		LTV - English as a 2nd Language	€34.99	All Dogs Go To Heaven Bestric Crayon	€34.99	Case of the Cautious Condor	£34.99
		Mind Run	£29.99	Classic Board Games	€34.99	Super Games Pack	£24.99
anced Military Systems	. £29.99	Mud Puddle	£34.99	Dinosaurs for Hire	£14.99	Tiebrake Tennis	£19.99
men in Mation	£29.99	My Paint	629.99	Hounds of the Baskevilles	£29.99		
ness Disc of Records	(14.99	Paper Bag Princess	€34.99	Psycho Killer	£29.99	MUSIC	
nals in Motion	€29.99	Scary Poems for Rotten Kids	(39.99	Sim City	£29.99		
noisseur Fine Arts	£34.99	Tale of Benjamin Bunny	(39.99	Trivial Pursuit (PAL)	£49.99	Music Maker	£34.99
ts & Vegetables	434.99	Tale of Peter Rabbit	639.99	Wrath of the Demon	£29.99	Remov	(29.99
es & Shrubs	634.99	Thomas 's Snowsuit	€34.99	Raffles	₹34.99	Karaoke Fun Hits I	€14.99
or Plants	634.99	Moving Gives me Stomach Ache	634.99	Prehistorik	434.99	Voicemaster + Microphone	(39.99
AN FAIRE	654187	Barney Bear Goes Camping	629.99	Snoopy	£34.99	Husic Haker	£26.24
UCATION		Astero: English for French	634.99	Town with No Name	€29.99	Blues Brothers (Audio CD only	
CEATION		Japan World (PAL)	(49.99	European Space Simulator	634.99	,	,
School - Under 5's	624.99	Fractal Universe	€14.99	Fantastic Voyage	€34.99	REFERENCE	
	(34.99	Read with Asterix	(19.99	Global Chaos	629.99		
ing Hard Day at the Ranch un for Barney	£34.99 £29.99	TICLE WIGHT POLICE	211.77	Turrican II	£29.99	American Heritage Dictionary	(49.99
un tor Barney derella	639.99	ENTERTAINMENT		Guy Spy	€29.99	Complete Works of Shakespeare	(29.99
				Curse of Ra	624.99	Illustrated Holy Bble	429.99
School for 6 to 7	624.99	Battlechess	£39.99	Space Wars	(29.99	New Basic Electronic Cookbook	(19.99
School for Over 7's	£24.99	Battle Storm	129.99	Defender of the Crown	629.99	Timetable of Business	£19.99
ther Hits her First Home Run	£34.99	Dattie Stoffii	127.77	belander of the Crown	==//	Dr Wellman	454.99

TEL 0543 419999 FAX 0543 418079



# **DESPATCH**

All orders received by opin Monday to Friday are despatched sameday for delivery using our national courier - Securicor. (UK Mainland only). Saturday deliveries are available at a small surcharge. If you are out when we deliver, a card will be left at your home giving you a contact tele-phone number to arrange a convenient re - deliv-

using our on - line computer.

Chaque orders are despatched immediately on cheque clearance, usually 10 working days from receipt. A delivery charge of £5.00 is made per

item unless otherwise stated.
WE ALSO ACCEPT B.F.P.O. ORDERS (DUTY FREE) CARRIAGE CHARGE AT UK POSTAL RATES

# **HOW TO ORDER**

BY POST - Simply fill in the coupon below. BY PHONE - phone lines open9.00am - 7.00pm Mon - Frl. 9.00am - 4.30pm Sat. - where your call will be answered by one of our INDI sales team. After 7.00pm each day your call will be answered by answerphone. If you would like to place an order have all the details at hand including credit card. All offers subject to availability. Prices cor-rect at time of going to press. Hay we suggest you call before ordering

SEND YOUR ORDER TO: INDI DIRECT MAIL I RINGWAY INDUSTRIAL ESTATE,
EASTERN AVENUE, LICHFIELD STAFFS. WS13 7SF
Please send
Price + Delivery.  I enclose cheque/ PO for £
Expiry
Name
Address
Deliver to if different

Daytime Tel-

# WE PUT YOUR PIECES TOGETHER

Puzzled about music and the Amiga?
Look to us for the answers!

At The Blue Ribbon SoundWorks, we've developed a strong lineup of talent. Each of our products receives the special care it takes to produce a winner. That's why you'll find a Blue Ribbon on every box!

Take SuperJAM! With this automatic copyright-free composer, you'll

be writing the

next hit song or creating the perfect soundtrack for your video production in no time. SuperJAM! comes with over 30 different musical styles and a backup band that performs beautifully, whether it's Mozart or Motown. And with the

Extras Disks for Super Airleyou can instantly increase your repertoire with styles like Fusionist, FunkJungle, Rachmaninoff and Rockapeggio.

Our One-Stop Music Shop turns your Amiga into a powerful music machine! This hardware-software combination includes all you need to get 16-bit stereo multi-timbral audio for an incredible price!

When you're ready for multi-track recording, automated mixing, notation

printing and state-of-theart MIDI sequencing, you're ready

BARS& PIPES PROFESSIONAL

for Bars&Pipes Professional. Special effects, multi-media sync, sophisticated

TO ORDER, CONTACT YOUR AUTHORIZED MERIDIAN DEALER OR CALL 081-543-3500 FAX 081-543-2255
TECHNICAL SUPPORT 081-322-6959

MERIDIAN S/W DISTRIBUTION LTD
EAST HOUSE
EAST RQAD TRADING ESTATE
LONDON SW19 1AH

narmonies, non destructive editing, and an unlimited number of tracks for recording only begin to describe it. Plus, you can integrate it seamlessly with SuperIAM!

If you're into MIDI but don't need full power, check out BARS&PIPES, music software made simple. BARS&PIPES features multi-track recording, graphical editing, tempo mapping and more BARS&PIPES is expandable, so it grows

as you do.

Once the music is flowing, pick and choose from the BARS&PIPES ADD-ON SERIES. These packages make BARS&PIPES OF BARS&PIPES

Professional even more fun to own.

Use the Creativity Kit to invent fresh musical ideas, or the Pro Studio Kit for complete control of your MIDI studio. The Internal Sounds Kit eliminates the need for MIDI altogether. Imagine, multi-track recording inside your computer! To round it off, we present Rules for Tools, documentation and C source code for writing your own musical features.

Can't find it nearby? Call us!

To get organized, grab The PatchMeister, our graphical, universally-configurable MIDI patch librarian. It comes with dozens of MIDI drivers and templates. Don't see what you want?

Make it yourself with the special driver creation feature. And, The PatchMeister integrates easily into Bars&Pipes Professional for the ultimate composition environment.

Want to triple the capacity of your MIDI studio? Use **Triple Play Plus**, our

MIDI interface that includes 3 separately-addressable MIDI outs for 48 simultaneous MIDI channels. Of course, we designed it especially for our software. No compatibility

problems here. D. C. Synchronizing with video and

audio tape is simple with SyncPro, our universal SMPTE synchronization box for audio,

video and multimedia production.
Yes, it comes with special Blue

SyncPro

Ribbon software and works with any Amiga application that supports MIDI Time Code.

The Blue Ribbon SoundWorks.
When it comes to quality, we don't miss a beat!

THE BLUE RIBBON SOUNDWORKS LTD

Venture Center 1605 Chantilly Drive NE Suite 200 Atlanta, GA 30324 USA (404) 315-0212 Fax (404) 315-0213 UK Support (081) 332 6959



# Nine pages for enquiring minds

The most authoritative monthly columns in the business, covering all areas of specialised Amiga activity

### Alex Gian Tells bour to use your Amiga by remote control. It's all down to the ARexx language, of course...

### Video

Paul Austin attempts to lead the chronically confused through the minefield of renders and ray-tracers

### **Programming**

Margaret Stanger belps you to get to the heart of your Amiga in her final programming column

### Music



What does the latest generation of Amiga equipment offer the musician? Paul Austin finds out

### Comms



Phil South reports on recent improvements and service enhancements at The Direct Connection

### **Amos**



Take a look at drawing techniques with Phil South, and read the latest on the Amos mailing list

### Publishing



Ben Pointer belps to brush up your publishing skills by showing bow to create a stationery pack

# **FEATURES**

## Printers round-up

A selection of the best dot matrix, bubblejet, and laser printers tested and compared

# Survival guide to hard drives

47

Take a guided tour inside one of the most complex peripherals money can buy

# Bars&Pipes ir support

69

A last helping of valuable hints on using our July CoverDisk freebie

## Business on a shoestring

You needn't spend a fortune on making an Amiga work for you

### Cine Morph ir support

Take a warping a step forward with our top tips tutorial

# Updates

Superb point and click batch processing for ADPro

The latest Amiga 3D modeller is the ideal animation tool



## Phone Pak

A fax, answering machine and information system on one card? Yes indeed

# Tue Hed Thu 3 4 5 18 11 12 17 19 24 25 26 31

### VLab Y/C

63

Truly amazing video digitising with the latest MakroSystems release

### Alfa Colour hand scanner

Bring those documents to life without breaking the bank

# GAMER

Relax into a frenzy of dogfighting and alien blasting with the only kickin' games section

### Gamer Globe

104

Sneak peaks at the goings-on in software

### **Drawing Board**

See how two games are shaping up

### **Cheap Seats**

Budget releases given a second look

### **Cheat Mode**

Concluding our investigation into Ishar

### GAME REVIEWS

Goal Lost Vikings Robocod (A1200)

Ishar ? Dune 2

Scrabble

# Amiga Market

The monthly round-up of the latest hardware and software on the market, buying advice, classified ads, and much more ...

### **Shop Window**

145

- X-Copy Pro Invoice Pro
- Wild West Movies



Spotlight

Classifieds

**Product locator** 

Amiga Computing September 1993



# page 29 REGULARS

Hot news on the Amiga CD32 console. Is it a Sega beater?

16 USA News

Find out if the Amiga is faring any better across the Atlantic

18 Comment

What will a CD-based console Amiga mean to the rest of us?

Beginners' Disk 25

How our CoverDisk works and how can you get the most from it

55 ESP

Take a swipe, take a bow, or take liberties in the pages written by readers

59 **AmigaDOS** 

A brand new series of tutorials designed to explore and explain AmigaDOS

91 ACAS

Placate your printer and soothe your CPU with concise technical advice

102 **Public Sector** 

Can you afford to miss the best PD and shareware bargains of the month?

Disk Offers 136

Make the most of the latest CoverDisk giveaways by cashing in on our upgrade offers



Win yourself £1300 worth of ultimate edit control in the form of the videopilot **V330 Computer Controlled** Editing System - the key to achieving professional results for all budding video enthusiassts



### Image FX

Try some truly amazing graphic effects with our demo of ane of the most powerful processing packages around

### Quickgrab & ScreenX

Two superb screen grabbing utilities, one for Kickstart 2/3, the other for 1.3 owners

### Bobby

Let your Workbench do the walking with this unbearably silly hack

### View

Examine any image file or animation with the latest Iff viewer

Backgammon with a difference to challenge your old grey matter



**TURN TO PAGE 22** 



# Money back on subscriptions!

Amiga Computing has teamed up with top high street retailers to provide you with cash vouchers when you subscribe. PLUS every tenth subscriber gets additional vouchers free! For details see page 100.



# N E W S

by John Butters

# d grab

A 32-BIT CD games system based on A1200 technology will push Commodore to the forefront of the console market when it goes on sale at the end of August

Amiga CD32 will be Britain's most powerful and cheapest CD-based console, making Commodore believe they can sell around 250,000 of the machines by the end of January.

It will come with two games, a multifunction joypad and, as Amiga Computing exclusively revealed in January, the top-loading machine will use a 68020 processor and 2Mb of

Up to 256,000 colours will be available on-screen from a palette of 16.8 million and the Workbench operating system will be resident in ROM.

A hayboard connector and full expansion bus have been included but Commodors refuse to say whether they are developing add-ons needed to build the console into a computer.

But they say a full motion video (FMV) module based on the MPEG standard will be available from around September. It will cost about £199 and be supplied with

Already most large software publishers have given the console a vote of confidence, pledging their immediate support by detailing a line up of planned titles

"The global interactive industry is convinced that CD represents the future storage media for games," said Ocean Software's David Ward.

"Commodore have developed the first low price CD video games machine and have stolen a lead over the competition."

David's comments were echoed by other key industry figures at Gremlin Graphics, Mindscape, Millennium. Thalion and Grandslam.

Eighteen games promised in time for the launch include Diggers, Zool 2. James Pond 2, Chaos Engine and Jurassic Park. Disc prices will average

Commodore's David Pleasance said: The Amiga CD32 simply wipes out the opposition. It's considerably more powerful, has better software support and. best of all, costs less.

With this machine Commodore have nce again proved themselves to be the true pioneers of the games business.



# **Prices tumble in surprise cuts**

COMMODORE have just announced surprise price cuts for two 32-bit Amigas, including the flagship A1200, less than a year after their launch.

The A1200 sees a £100 cut, with its new £299 tag aimed at helping the manufacturer reach their targeted 250,000 sales this year.

"Pricing is a key issue in the home computer field," said Commodore boss David Pleasance.

"Following the huge sales of the A600 at £199 and the great success of the A1200/A500 trade-in we decided to look again at the A1200 price point."

David says that the firm want the machine to become a mass market product, and at its new price he expects that process to

Meanwhile, the powerful A4000/040 with a massive 120Mb hard disk and 6Mb of memory has had its price slashed to £2,099, a saving of more than £360.

Commodore say that since the machine's launch last summer, it has established itself as a favourite with business users in the pre-

The firm claim that high demand even caused a temporary



A1200 Surprise price cut to £299

shortage of the computers earlier this year.

Prices for A4000/030s remain unchanged at £999 for a machine with an 80Mb hard drive and £1,099 for a 120Mb hard disk model. Both have 2Mb of memory

# Who says Final Copy II is the Best Word Publishing Program?

Not *just* thousands of satisfied Amiga owners, but Amiga Format too!

We call it a Word Processor, but if both experts and satisfied users alike insist on calling *Final CopyII* a 'Word Publisher' [once they have discovered its unique blend of powerful features], we're not about to argue with them.

Final Copy coined the phrase "Perfect Printing" on any printer,

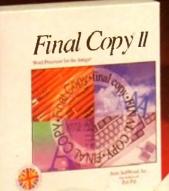
and we mean it... the document shown below proves it!

below proves it!
We hope you too
will find that Final
CopyII is Perfect
for your printing!





Please look for a UK lega on the box as your quaranter of sechnical support and future operade offers. British English, Feen h and German versions available



PREPARED TO THE PROPERTY OF TH

Large direction. One of the buyers of size big one, the signs in 3-4 or, (10.15) Makes are untilly entered of size big one, the signs in 1 or (10) Makes are untilly entered of size big one, the size of the size of size big one, and unsight 221-271 by 100,000 h) but none of the size of the size

the way have been used. They kill by the season was to have been used to have with a kine of the been to be a compared to the clears, then are not of the clears, then are not on the property of the compared to the compared

# Final Copy!

Word Publishers go beyond simply producing normal letters and documents (at which Final Copyll naturally excels) and progress into a world where how the whole document looks is just as important as what it says. Admittedly, this can be achieved with Desk Top Publishers, but they can't easily be used as Word Processors, especially when a good looking letter needs creating quickly-they're far too cumbersome. This is where Final Copyll offers the perfect balance between the two requirements. Ease and speed of use combined with complete control and perfect final printed presentation. Complete control over how documents look, now YOU have it at your finger tips on your Amiga?

Features include:

On-Sereen Drawing Tools for generating boxes borders and lines or arrows at any angle. Multiple Newspaper Style snaking columns combined with the unique ability to use the same PostScript outline fonts—on absolutely any penater in postract or landscape. Text auto Flows around graphic objects and imported pictures, which can be placed anywhere scaled and cropped with no loss of printing quality. Text can also be printed actually over graphics (refer to—The Tiger heading on our document) All these features mean that no matter what you may have thought, no other Amiga. We id Processor has all the capabilities that Final Copyli users now simply take for granted!

We don't have room to list EVERY feature that Final Copyll can boast, so please call for your free DETAILED information pack now.

SoftWood - Quality software for your Amiga

With Final Copy it you're not just getting a one off moduct! SoftWood are acknowledged as the World's leading software comp.

ny who develop for the Amiga, and no other system. Once you're a registered SoftWood product owner, you'd be gaining access to unlimited free technical support (others charge), and preferential upgrades to new versions of this and other exciting products being developed right now!

Compatible with all Amigas from A500 to latest A1000/A000 ranges with either second floops or hard drive Minimum 1Mb, as alable free RAM required (A000).

MRR dance of SMRC the work all Silvanced graphened programs extra

Final Copy coined the phrase "Perfect Printing on any Printer".

We mean it this document moves it.

Censted in Einat Cope II and pratect in exceptable Dispin Citizen, it shows another of Einat-Cope II speatures. Smooth Scalestife Hittline Eouts Multiple Citizanes. Desiring Toolt for Booes Boules. Shakhus. Lines on Acrones. White Out Text. Text Except once Graphics. Text Oblinang, Autori-Text around Graphics and of course, Import of Colouri Mono Graphics Ficts

# Available from all good Amiga Software Dealers,

SoftWood Products Europe - UK PO Box 19 Alfreton Derbyshine DE55 7BP Tel: 0773 836781 Fax: 0773 831040

VEM (Essonne Mailing) - France 14 rue de Boix Sauxage 91055 EVRY Cedex Tel: (1) 64.97.96.54 | Fax: (1) 69.91.19.25



TupSoft - Australia/New Zealand 9 Miller Avenue Hornsby NSW 2077 Tel: (02) 477 5353 Fax: (02) 476 5736

Amiga Oberland - Germany der Schneidsohl 5 W-6242 Kronberg 2 Frankfurt Tel: 06173-65001 Fax: 06173-65385 Place role of Personal copy of the of the

Plant Police & Address.





# News Briefs

# Showing in VGA...

TWO VGA monitors are now available from dealer Silica Systems (081-309 1111) for Amigas running AGA graphics – the Commodore 1940 and 1942.

Both feature stereo sound and sit on a swivel and tilt base. The £299 Commodore 1940 has a .39mm pitch and the 1942 with a pitch of .28mm costs £399.

# Blue Ribbon support

A CUSTOMER support service has just been set up by Blue Ribbon Soundworks, makers of music packages Bars and Pipes Professional and SuperJAM.

It is available to anybody in need of information about Amiga music software as well as existing owners of

Blue Bibbon brotrams who require technical advice. Felephone 081-332 6959.

### CD plan for A1200

A1200 owners will be given the chance to use compact discs with their machines when Commodore launch a CD-ROM drive for the computer around Christmas time.

Details remain sketchy but the manufacturer's joint general manager David Pleasance has confirmed it will have full motion video capability.

# Music comes in a kit

SOUND samplers, Midi interfaces, an audio mixer, and sound enhancements units will soon be sold in kit form by Lancashire-based Omega Projects (0942 682203).

All will be fully documented for the novice and the firm will be offering advice for those people who find that things won't work as expected.

The first product is Sound Trap 3, a sampler which it is claimed gives superb sound reproduction and costs £19.99 plus postage and packing.

# Recognition for scanner

POWER OCR, a recent addition to Power Computing's (0234 843388) range of Amiga software, is claimed to use latest technology to recognise characters quickly and accurately.

It features automatic typeface identification to read more than 20 typefaces, and can be trained to remember others.

Context-sensitive dictionaries in four European languages take timesaving decisions about unusual, defaced or questionable characters or words.

Text can be read in 10 to 18 point proportional and monospaced fonts from typeset, typewritten, laser-printed and NLO dot matrix-printed sources.

The package is compatible with the firm's Power Scanner and costs £49.

### **CBM** say goodbye to PCs

AMIGA users can expect more support from Commodore as the firm prepare to quit the cut-throat PC-compatible market to concentrate on the Amiga range.

The move is part of the massive restructuring programme detailed last month after the manufacturer announced a third quarter loss of more than \$177 million.

Commodore's David Pleasance says that by dropping PC products his firm will be able to focus on 32-bit Amiga technology, with all resources going on the machines

In countries where they are a major PC player – such as Germany – the firm will sell third-party manufactured machines badged with the Commodore name.

PC: Commodore quit to put effort into Amiga



# From Amigas grow trees

ORIGINS is a dedicated database for Amiga users who want to keep track of genealogical information. It can store information on over six million people, but according to the program's developer its interface is easy to use by anyone wanting to record their own family history.

The software will handle multiple marriages, step children and unmarried parents, and can report on Persons, Family Group sheets, Pedigree Charts, Descendants Charts and Tiny-Tafels. Its manual contains illustrations and tutorials and within the program there is a word-indexed Hypertext help system to give "online" information.

Two floppy drives are required, although hard drive installation is supported. Price,

# rsion Available on AMIGA Police call for porn education

A MANCHESTER police officer has called for Britain's schools to teach computer ethics following a steady rise in the amount of pornography spreading across playgrounds on computer disks.

A range of images can be found, spanning the board from soft core pornography to the most degrading and perverse material featuring children or animals.

In August's issue of Atari ST User magazine, Sergeant John Ashley of Greater Manchester Police's Obscene Publications Division says the problem is widespread.

"I'd be surprised if the number of teenagers who have access to pornography isn't a lot greater than teachers and parents realise," he said. "Children owning computers in any school soon get to know each other and swap disks among themselves to the extent that most of them will have copies of each others' disks."

According to Sgt Ashley, education should be a vital weapon in combating computer pornography. "All schools should teach computer ethics," he says. "They're all for teaching children how wonderful computers are, but they should also teach them about the harm they can cause."

Journalist Phil Morse says that pornography comes to Britain as computer signals over telephone lines from countries as far away as Thailand. He says that the way porn is being transmitted and distributed is practically unpoliceable, and the problem is currently spiralling out of control.

# **Greater** graphics

A NEW cut-down paint program and an improved graphics package are due for imminent release by specialists Amiga Centre Scotland (0896 87583).

TV Paint Junior is a 32-bit paint software for users of graphics boards Harleguin and Retina.

According to ACS boss Martin Lowe the package is a "fully-fiedged paint system with some of the more advanced features missing."

He said that it works in a similar way to the higher priced version already on sale, although users will find that some of the options have been taken from menus.

And owners of 24-bit graphics board Retina will soon be able to upgrade to version 1.3 of its accompanying software.

Benefits include the 256-colour Workbench support even on non-AGA computers and the addition of 8, 16 and 24-bit animation programs.

Upgrades cost £5, while the complete package sells for between £345 and £499 depending on specification. The price for TV Paint Junior remains to be fixed.

# Answer to the memory trap

FOUR megabytes of memory can be added to A1200s using Manchester-based Siren Software's (061-724 7572) new Turbotech A41200 expansion.

The board fits into the trapdoor underneath the computer, and in addition to extra memory is claimed to double the Amiga's speed.

A battery-backed clock is featured and the upgrade is being sold at a special introductory offer of £159.99 until the end of September. Thereafter it will cost £249.99.

Espansion: An estra 4Mb of memory for £159



# DIARY DATES

5 to 7 September 1993

European Computer Trade Show Organiser: Blenheim (081-742 2828)

Venue: Business Design Centre, London

A trade-only event where new games will be unveiled.

### 16 to 20 September 1993

Live '93

Organiser: News International (071-782 6000)

Venue: Olympia, London A public consumer electronics show. Commodore plan to attend.

### 11 to 14 November 1993

Future Entertainment Show (0225 442244) Venue: Olympia, London A multi-format computer and console show.

### 19 to 21 November 1993

International Computer Show Organiser: Westminster Exhibitions (081-549 3444) Venue: Wembley, London

Discounted software and hardware plus product releases.

 If your company is organising a show relevant to the Amiga and it's not listed, let us know so we can include the information in the diary.

### **Easy digging** for dinosaur facts

AS the blockbuster movie Jurassic Park thrusts dinosaurs into the spotlight, online information system CompuServe have just set up a forum for fans of the prehistoric reptiles.

By logging on to the conference, enthusiasts all over the world can find updates on scientific reports. museum events and schedules, current information and conversation.

Graphic images can be viewed on screen and experts - including Matt Smith, the creator of the Snake River dig site for Jurassic Park – will answer questions online.

It costs about £6 per month for unlimited access to 37 basic services during off-peak hours.

Joining 1,700 other areas, including the Dinosaur Forum, with a 1,200 or 2,400 bits per second modem costs about £5.40 per hour extra. CompuServe can be telephoned on 0800 289378

# Citizen find a printing pal

WORDPROCESSOR Pen Pal is being given away with every Citizen Swift 240 dot matrix printer sold to Amiga users before the end of September

The free package is worth £60 and is part of a summer promotion to celebrate the first anniversary of the

It is a 24-pin model and can print at up to 215 characters per second in draft mode and 66cps in letter quality. It sells for £398, or £421.82 with a colour kit

The Swift 240C has established itself as a favourite of both users and the media alike in the field of dot matrix printing," claimed Citizen's Richard Pook.

With this promotion Citizen are offering users of Amiga home computers an even greater opportunity than before to take advantage of high quality, low cost colour printing."



Offer: Citizen give Pen Pal with Swift 240 printer

### MicroProse turbulence clears

FLIGHT simulator specialists MicroProse have merged with Spectrum Holobyte, with the later now owning a majority stake of 60 per cent in the firm. The move gives MicroProse funding of \$10 million just months after the company announced a net loss of \$5.3 million for the year ended March 31.

The loss has been blamed on a late entry into the booming console market, an unsuccessful venture into arcades, delayed product launches and increased overheads dragged the firm down.

The company's spokesman Jason Dutton said: "Spectrum Holobyte have long been respected in the flight sim market, and this merger broadens our range of quality products.

# CygnusEd collapse

TEXT editor CygnusEd Professional has just been upgraded to version three, offering latest Workbench compatibility, support for several languages and new features.

They include the inclusion of a macro editor, a system clipboard to enable blocks to be shared with other programs and a better search and replace facility.

Outside the software, the package's manual has been enhanced and its pages re-typeset for better quality.

Existing owners can upgrade for \$45 if they live outside the United States, or \$35 within the US. The price for newcomers is \$119.95 from ASDG (010 1 68 273 6585).

LONGTIME distributor of serious Amiga software HB Marketing have gone into liquidation following the collapse of their parent company, Direct Marketing International plc.

The company's former managing director Keith Howells blames the failure on an accounting problem in the firm's leisure development area.

He says DMI were in a shrinking market, and faced increased competition when MicroPACE entered the Amiga peripheral and software distribution market.

Anybody with outstanding orders should contact the liquidators, Begbie Norton on 071-430 2321.

## Now **HiSoft buy** Microdeal

BEDFORD-based HiSoft (0525 718181) have extended their commitment to the Amiga market with the recent take-over of Microdeal.

The move comes just weeks after the firm bought AVR, the makers of several hardware gadgets previously marketed by Microdeal.

"This a logical step for HiSoft," said the firm's boss David Link. "Since as a publisher as well as a software house it is natural for us to produce the complete AVR product line in house."

"From Microdeal's point of view it was an inevitable move to consolidate their products under our umbrella since we controlled the AVR hardware, a major part of Microdeal's range.

Products will be produced and distributed from HiSoft's office and existing software contracts have been transferred to the firm. The Microdeal brand name will continue.



# **Editors to start** clock watching

VIDEO editors are targeted for Zen Computer Service's (061-793 1931) latest Amiga program, an ident clock featuring a 30-second analogue clock and seven lines of text on screen.

VTClock can count down from 10, 15, 20 or 30 seconds and generates a tone between 25 and 20 seconds. A white flash-frame appears at ten seconds.

The screen will go black at a user-definable time between 9 and 0 seconds, and remain so for a further three seconds after zero is

Ident text can be edited using a simple wysiwyg editor and any Amiga font can be displayed. Cost: £35.25.

VTClock: Video editors do it with clocks

# ANNOUNCEMENT

# KCS POWER PC BOARD

For The Amiga

## MAKE YOUR AMIGA IBM COMPATIBLE

KCS announce that due to COMMODORE having discontinued manufacture of the Amiga A500 and A500 Plus, the price of the Power PC Boards has been DRAMATICALLY REDUCED!

> KCS Power PC Board for A500 £89,95 incl VAT. Postage £3.60 extra KCS Power PC Board for A500P £89.95 incl VAT. Postage £3.60 extra MS-Dos 4.01 can be supplied at the special low price of £29.95 plus £6.60 postage

"PC emulation is a contentious issue – but the KCS Power PC board is the only one to carry my personal recommendation. It is an excellent product that does all it claims and does it well." comments Mark Smiddy, co-author of Mastering AmigaDOS 2.

The above offer is subject to availability, and can only be obtained direct from Bitcon Devices. Prices subject to change without notice. At these low low prices a Help-line service will not be available from Bitcon Devices Ltd. However, should advice be needed, you can contact KCS direct for help (details below). Alternatively, you could join the KCS INDEPENDENT USERS GROUP (details below). This club has no connections with KCS or their agents whatsoever.

All KCS products earry a full 12 month guarantee (through Bitcon Devices Ltd). Refunds only possible on faulty products and within 30 days from purchase. After 30 days, we will repair or replace at our discretion. No refunds under any circumstances on MS-DOS. Reluctantly due to the low mark-up, all credit card transactions will carry a 2.2% surcharge. (Please allow up to 28 days for delivery).

Compatibility is excellent but no-one can guarantee every single program available, therefore if your purchase depends on a particular program, please ask us first or send in a copy of the program. If using a hard drive, check first if it is supported.

.....Tel: 010 31 78 146803 (3-5pm) Kuipershaven 22 ......Fax: 010 31 78 312650 Dordrecht 3311 AL Holland

KCS Independent Users Group...Tel: 091 460 7814 (Between 10-4)

# KCS DUAL HD-DRIVE In Amiga mode:

(due shortly)



(no PC Board necessary) Suitable for all AMIGA models: 500/500P/600/1200/1500/2000/3000/4000 Capacity: 880Kb/1.76Mb/appr. 2Mb 4Mb by means of realtime compression. Read and write in High Density mode runs two times faster than a standard disk drive. Compatible with the software of Synchro Express, Cyclone and Blitz. Highspeed copy in appr. 25 seconds in Low as

well as High Density format. KCS Backup program for hard disk backup of Amiga as well as PC partition (up to 4Mb on 1 disk).

Hardware NO CLICK.

KCS File system for read/write of MS-Dos diskettes in both Low and High Density format, and also read/write of PC partition(s) in Amiga

### In PC/MS-Dos mode:

Suitable for all Amiga models in combination with the KCS Power PC Board. Capacity: 720Kb/800Kb/1.44Mb and 1.6Mb. Read/Write in High Density mode runs two times faster than a standard disk drive. Track display.

Approx £199.99

KCS DUAL HD-DRIVE HAS AN ON/OFF SWITCH AND LOW POWER CMOS TECHNOLOGY.



# Supplied by BDL Bitcon Devices Lt

88 Bewick Road, Gateshead, Tyne & Wear, NE8 1RS, England Tel: 091 490 1919 Fax: 091 490 1918

Cut out this coupon if you want more information. Remember to write your address clearly in BLOCK Co	APITALN
Please inform me when the High Density floppy drive is available	
VAIE	

ADDRESS

lack Friday hit Commodore again in June, when a large portion of the West Chester, Pennsylvania development staff was laid off, including a number of old-timers and folks who were vital to the development of Workbench 2

Some staffers actually asked to be included in this latest round of layoffs, because they were concerned about losing accumulated vacation time credit or because they had already lined up other opportunities.

Among those who left the company were Lauren Brown, who has long been one of Commodore Applications and Technical Support's (CATS) Amiga evangelists; Mike Sinz, the man responsible for recent updates of Workbench and for Enforcer; and Brian Jackson, who had been working on networking software for the Amiga.

Sinz has moved on to do development for SCALA Inc. Although many other programmers and engineers were given their walking papers, Commodore development hasn't shut down completely - many other talented people are still left, including Dave Haynie, Martin Taileffer, Spencer Shansson, and Peter Cherna.

Still, when a company is having financial troubles, cutting the people who help make your products some of the best on the market doesn't seem like the logical solution.

Meanwhile, Commodore's stock value has plunged after their recent huge loss. The

# Cull at Commod

# Denny Atkin reports from the States on Commodore's latest difficulties

company is banking on a big turnaround after they announce the CDGS system (also called Amiga CD32). This could indeed happen - Atari's stock value has risen greatly here in the States after they announced a \$500 million deal with IBM to manufacture The 64-bit laguar games console/

But the Jaguar is a cartridge system, and industry pundits are placing the future on CD-ROM, something CDGS has and Jaguar

### **Another dimension**

Do you spend most of your time with your favourite 3D program not rendering, but trying to create basic objects? Why do all that work when there are many great freely-distributable objects out there already?

The Syndesis 3D-ROM is a CD-ROM that contains more than 500 freely distributable 3D models stored in a number of different formats for Amigas and other computers. Created using Syndesis' InterChange Plus program, the 3D-ROM contains versions of each object in NewTek LightWave 3D, Impulse Imagine, Wavefront, 3D Studio, and AutoCAD formats.

If you own InterChange Plus, you can also port the objects over to Sculpt 3D. VideoScape, CAD-3D, PAGErender, and VistaPro DEM formats

These aren't cheesy, boxy objects either. Many are from well-known commercial modelling companies such as Viewpoint, VRS Media, Mira Imaging, and Noumenon Labs.

Also included on the disk are more than 400 tileable, wrappable texture maps and a fully-indexed, cross-referenced object catalogue, Because the disk is ISO9660 format, it can be read by an Amriga with a SCSI CD-ROM drive of A570, a CDTV unit, or a

For more information, contact Syndesis, P.O. Box 65, 235 South Main Street, Jefferson, WI 53549; phone (414) 674-5200; lax (414) 674-6363.

# Landscape generators get updates

Hot on the heels of VistaPro 3.0 are updates of two other landscape generator programs, proving once again that if you want to create your own universes, you just can't beat the

Amiga. VistaPro's closest competitor, Scenery Animator, is now at v3.0. The biggest change in the update is support for AGA graphics modes, including 256 colour and Ham8. for both pictures and animation

Seeing a Scenery Animator animation play in Super hires Ham8 with moving clouds and shadows is just mindboggling.

But developer Brent Casebolt didn't stop there. The new version will also load VideoScape obj files and let you place them in your scenes - see the illustration with F-117 Stealth Fighters for an example.

No more having to load a paint program to composite your 3D landscapes and objects. You'll find tonnes of VideoScape objects in the public domain, and most objectediting programs will create them as well

Along with the new graphics modes and object rendering, the program has a number of other minor tweaks and enhancements. You can now place trees either manually or automatically, and the preview mode has been significantly

sped up. Night scenes cna be rendered, complete with accurate constellations. And it now loads VistaPro-format DEM landscape files.

Although it doesn't have an ARexx port. the built-in animation

interface is so easy to use that the majority of users will never find the lack of scripting a problem.

The program requires 3Mb of RAM and retails for \$99.95. It's available from Natural Graphics, P.O. Box 1963, Rocklin, CA 95677; phone (916) 624-1436; fax (916) 624-1406

Also new on the market is Panorama v3.0. What, you say, v3.0? But I never heard of versions 1 and 2! Well, you may have

In an earlier life, the program was the original landscape generator for the Amiga, Microlllusions' Genesis, the Third Day. Although the program has grown in capability dramatically since its first release, it doesn't quite match VistaPro or Scenery Animator in the output quality department.

It doesn't render into AGA modes, but you can create pictures in AGA screen sizes, save them as 24-bit IFF files, and use a program like ADPro or the shareware Rend24 to render the pictures in AGA modes.

Although the package isn't quite as up-to-date as its

competitors, it does have some nice features. It will render pictures in up to 8,000 x 8,000 resolution (memory permitting), and offers really neat control over water in the picture - the waterfalls are just amazing

And while Panorama's landscapes might seem a bit more artificial than the others, its fog effect can't be beaten - this program lets you simulate ground log and haze. instead of just hazing out the entire picture.

It doesn't directly load DEM files, but includes a utility called GeoRama which will load and combine DEM them. There's plenty to play with here, too - the package includes three disks packed with DEM files and example pictures.

An ARexx port can be used to automate rendering to other boards such as the Video Toaster or FireCracker 24.

or to create animated passes over the landscapes

Panorama is available from Push-Button Publishing/ Inventure. Market St., Morrison, Colorado, 80465; phone (303) 697-5270: fax (303) 697-5260.



### UTILITIES

POU 14 AIR TUNNEL SIMULATOR (F) POU 12 FISHKIAL AMALYTIC S, SMELT (F) POU 99 HAM RADIO UTILITIES (F) -5 (I)SK

POU 99 HAM BADIO UTIL POU 301 MENU MAKIB POU 101 LAMIL DESIGNES POU 101 IC ON MAKIB P

POU TOA ICON MANIA (P)

POU TOE CHOSSWOOD CRIATOR I

POU 151 FLEDISK IP

ATARI ST EMULATOR

POU 38 A FARM SY EMULATOR (NOUSH POU 38 A) SPECTRUM IMMULATOR POU 380 CA EMULATOR POU 390 CA EMULATOR POU 390 CA EMULATOR POU 390 CA EMULATOR POU 390 CA EMULATOR POU 391 AMULATOR POU 391 CA EMULATOR POU 391 (NOUSH POU 391 CA EMULATOR PAU 391 CA EMULATOR POU 382 MESSYDD IN SEADOWITH PC CINCS PP POU 382 MESSYDD IN SEADOWITH PC CINCS PP POU 382 MESSYDD IN SEADOWITH PC CINCS PP POU 383 SPECTRA PAINT 3-2 IP)

POU 384 DISK MASTER 43.6 (F) POU 345 ELECTROCAD 41.4 - SHAKEWARI DISIGN

POU 184 AMIGAJOX DIF PROGRAM IPI

POUSE ACC RUSHIES LETTERS (\*)
POUSE BASEN - EXCELENT, IAST (LATABASE D)
POUSE TORMS BEALLY UNLIMITED (\*)
POUSE AMIBASE PROFESSIONAL 2 (\*)

POU 399 D-COPY V2.0 IP!
POU 400 NORTH C=2 DESS P!
POU 407 OPTI VTILS II = GEEA! IP!
POU 400 OPTI VTILS 42 - (VIN 6ETTE P!
POU 400 GELIGNITE FONTS II

### HOME BUSINESS PACK

DISK PACK CONTAINS TOXT ENGINE VEH.4
POCESSOR, II-BASE II DATABASE, VESICALO
SHIFET, DTP PROCRAM, 600 BUSINESS LETTLES,
SS CARD MAKER, BATKING LITES AND A FORMS

A MUST FOR HOME BUSINESS HAIRS

### £12.00

POU 410 SUPERSOUND II - THIS IS THE LICENCEWARD
VERSION NOW RELEASED AS PO. THE 46ST SAMPLE

WATE IMPLODED IN DIESE COMPELS SON LITTLE POU 412 HARD DRIVE UTILS IF

POU 412 PROFESSIONAL D COPY + 2 6-12/CILINII POU 414 PROFESSIONAL D COPY + 2 6-12/CILINII POU 414 SID +2 00 NIW VIRSION OF THE MAST DRECTORY LITERTY PE SHAREWARE

## DIRECTION LIMITY OF SHARMASE PROMISE IN PAREAUS THE DIRECTION OF THE PROMISE IN PROMISE IN PAREAUS THE DIRECTION OF THE PROMISE IN PAREAUS THE DIRECTION OF THE PROMISE IN PAREAUS THE DIRECTION OF THE PROMISE IN PAREAUS THE PAREAUS THE PROMISE IN PAREAUS THE PAREA POU ATE AMOS UPDATER 11.34 P INTER DRIVERS -STARTERS HERESCHIL

POLI ALIP KING JAMES MOLE COMPLETE DIXINGTH

POURS DRAWN FONTS - (XCI) [BR] CUI N'PASIL

### CLIP ART PACK

MARIA AL ANY DI

ALL 13 DISKS £15.00

### POU 434 TYPING TUTOR - Bet

PDU 437 WORD POWER POU 438 STAR PRINTER DRIVERS AND COLOUR DRIVATES DIRECT FROM STAN (F)

POU 441 PRESCOPT VI.A. BINOVINED COPILA IN POU 444 PRESCOPT VI.A. BINOVINED COPILA IN POU 446 DOC DUMP. CREATS SAIAN BOOKIES SOOM TEXT TRES, THE UNIMATE PRINT LIBRATY BY

### EDUCATIONAL

PDS I LEARNS PLAY VI - A SURE OF TOR YOUNG CHILDREN PI PDS I LEARN & PLAY VE (P) PDS I STORYLAND 2 - SAVETOWAR

POL 4 TOTAL CONCEPTS ASTRONOMY

POL A TOTAL CONCEPTS DINOSOARS #1

MR MEN STORIES - GOOD READING AIR

PDE E. SIMON SAYS & SPACE MATHS -V GOOD IP! HORAY FOR HINRIETTA CEMO TROM TWARL (F)

POE 10 SPILLBOUND - AND THE DEMO (P)
POE 11 NENBETTA'S BOOK OF SPELLS - DEMO (P)

### RED SECTOR INC.

POU 401 200 SECTOR DEMO MARIE WITH POU 324 RN EXTRAC #1 POU 321 RN EXTRAC #1 POU 322 RN EXTRAC RUNCY EDITOR POU 324 RN FORT EDITOR POU 324 RN FORT EDITOR POU 324 RN FORT EDITOR POU 324 RN VECTORRALIS EDITOR

POU 316 RSI VECTORIALIS ILITI POU 346 150 VECTOR DESIGNER

### **GAMES**

PDG 1 STAR TERE I BICHTIES VIESION 2 DISKS (P) PDG 2 STAR TREK — BY FRIC GUSLAVSCIN, 2 DISKS, 459 2 DRIVES, VIEW (000) (P) PDG 32 LEGEND OF FARIONALL (P) PDG 38 FAIR THE LDUCATIONAL CAME (P)

PDG 44 TRUIT MACHINI, POOL & OTHERS PDG 40 TRUIT MACHINI, POOL & OTHERS PDG 40 SEALANCE - SUBMARING SM GAME PDG 40 AIR ACE II - WINE SHOOT-EM-UP (P) PDG 41 ELECTRIC TRAIN SET IP!

POG 63 ZE SPECTEUM GAMES HITHC EMULAION POG 63 ZE SPECTRUM GAMES VOL Z INC EM PI

POD 43 2E SPICTRUM CAMES VOLT INC IM (P POD 470 DIED - VERY COLO PRI GAME (P) POD 73 LLAMATRON - BY JELT MOTTER POD 73 TWINTES - 100 BLS VIESCON (P) POD 77 STAN TRIK THE MET GENERATION BY POD 77 STAN TRIK THE MET GENERATION BY JERU MINISTRALISM IN SCRAMBERS (P)

POG SA CRAZY SUE

POG ES PEVENOS OF THE MUTANT CAMELS - BY

POG 89 NEW STAR TREK-BY IN BARBIN, 2 DISKS POG 91 LÉGEND DE LOTHIAN-ULTINA TIPE

POG 91 ASHIDO - CILENTAL ELE GAME GOOD! PI PDG 94 LEAMINGOIDS - LIKE ASTLEOIDS TUND! PDG 95 INTERNATIONAL CEICRET - 000D SHAREWARE GAME, YERY PLAYAGE! (F)

### GAMES PACK

HIS NEW 12 DESK PACK HAS ALL OF THE LATEST VND 06ST PIO GAMES. THEY ARE LASY IO USE AND AFV GOOD CLIMITY

A MUST ICE ALL GAMERS

PDG TOTAL WAR - STEATEGY GAME OF ROG TOTAL WAR - STEATEGY GAME OF ROG TOTAL WARA - SHOOT SACDAM & THE REACH.

WE NOW STOCK ALL OF THE ASSASSING GAME DISKS THEY ARE WELL PRESENTED, EASY TO USE AND CONTAIN ALL OF THE LATEST AND BEST FO GAMES ... GREAT VALUE \_\_TARE A LOOK!

PDG 109 ASI#1 - TANK BOLLEPIDE AMIGDIES

CAVI BLINNIE, AVAIRS
FDG 111 ASHA - MIGA BALL DEN'I Ø1

PAGE 11. ABMA = BEGA BALL, DBIFL (F)
POG 112. ABMA = JUANNE, GOMECKU, CRACKER,
JUMPY, TUBBO DUEL, KLONCYKE (F)
POG 114. ABMA = GO TOCKY, KSTAMANOR, RAID (F)
POG 114. ABMA = DOWNHEEL CHARITING, PACKAM
"17, MIRAGHARCIN LIAMAS WELLIRIK
POG 114. ABMA = DOSINHAEL HON. MOONBAM, FROC.
MIGHTWORKS, CLOUD BURNER

BBU IIA ASIAR ZIE API II II BAJI ANIMME DIBI.

POG 118 ASIATO PROKOUT, I SCAPE, SYS, PIPILIPI P. PDG 119 ASIA11 - DAD, CONNEX 30WUS OF HAND

PDG 120 ASK#12 - CAR, ILAMATRON POWER FOND

# JUT PORT I (ASINI) - MALE ASTRONOS, INVINTRA BIOCICA JI, MOURROSE, MARGAJIANION (P) POR 127 ASINIA — (MINÀ CHALLINGE IL AMIGA

ASSASSINS PACK

THIS IS A NEW COLLECTION OF THE FIRST 35 ASIG AME DISKS. THERE ARE COVER 100 GAMES, ALL MENN DERVEN. VIEW EASY TO LIE! DEAL FOR THE MEDS ALL SE DISKS FOR COMY.

€34.95

POG 123 AM11 BATTI CARS, MANDA MOVI POG 124 AM116 PACMAN, IVASTIJANDS, DI-IMMA, MISSICH X IV. POG 125 AM117 JITMAN, DIJINDA, TOMCAI,

10 128 ASH418 - OMEGA RACE, SKY FLYTE, HEARY PARKE, MAGATRON

PDG 124 ASI/40 - AMOS COIN DROP, MICHORS (\*\*THYMOGUE IRMA, MAICH PAICH (P) PDG 129 AMI/21 - ZUIS, II ITIUX, TIJES, BALLIEMENIS

POG 13 A MEZI - ZUIS, INTERZ, TRES, RATHMERNES POG 130 AND 22 - LEMMINGGIOS, DULL. MOLITH MAN. WIZ 7'S GUEST IG POG 132 AMP23 - REVINGE OF INF. MUTANT CAM-ISS, NIBURA, CACARS, 30 MAZE, DURS IG 999 132 - AMP23 - E-TIPPI, ASTIBICIDS, IMMINUDS, COPPEL, ME WOODLEY, AND BESCK (P) POG 134 AMP28 - SUPER PACEMAN, "92, SMASH IV, ASTROLL AMP28, SASTEM IV, POG 144 AMP28 - WONDERAND, BUB. ATRACK, MOLITERS AMP28 - SUPER PACEMAN, INF. AND AMP28. IR ICOL TACTIC DONKLY KONG @ PDG 148 ASIA37 - KLAKTRIS, PACCIE, POD. GHOSI

PDG 144 ASIASA - ONE ON CONE SCYDYRE 2 BALDY

P = Compatible with A400 / A500 Plus

PERSONAL CALLERS WELCOME.

Portuge & Packing is FREE on all orders of 3 disks or

3 draks please add£1.00

..£1.50 each

DISK PRICES

Europe add 25s per disk

Rest of World add 50p per disk

10 - 19 .....

### GAMES CONTINUED

PDG 184 ASH28 - DODDY, DI

FLAG CATCHER, MAD BOMBLE &! POG 137 ASHEEP - DOG, ROME, NOVA, BRIDGE BALL

ATTACKS, OLIADEK (P) POG 118 ASH410 – CHRONIL, TANK ATTACK, ICITAL

IRI, BOLINCI YMBAY (P)
POG 19 AMERI - SHED-O-MATE, CRAZY PIPES,
ARAZIMAN, SHED-O-MATE, CRAZY PIPES,
ARAZIMAN, SHEQUILION (P)
POG 140 AMERI - SHED SHED SHEMBER, SEC CHE (P)
POG 141 AMERI - TOTAL WAR, LOVERBULL (F)
POG 142 AMERICA - TRAIT BAZYE, C) DAR UNCO-PDG 143 ASIASI - PONG. SNAKE RIT, JU

ARCILLCYBERNITEX (P)
PDG 147 ASH 29 - NEW CARD GARRES (P) POG 148 ASH40-PUZZII COLECTION PI POG 149 MINE SWEEPER - SIMLAR TO WINDOWS

YERSION D'S

### DEMOS

ANABCHY DSM O

POD 3 SLVIRA DEMO

PDD 7 EVIER DRMC PDD 18 SIDDOC PDD 18 SIDDOC

PDG 177 BUDGEAIN S

POD 186 PHENOMENA TERMINATOR POD 111 ODDISSEY BY ALCARAZ — HEARLY AN HOUR OF BUSTERING VECTOR MOVIE WITH BUSINANT

POD 311 MARROWIELD BY CHICKNESS STRING CIDINGS 990 313 YOYAGE RAZOR 3911 87 900 314 BID SECTOR THIS ZONE" 81 900 315 BALOY THE SILAMS 81 900 315 BALOY THE SILAMS 81 900 316 BALOY THE SILAMS 81 900 317 SYSTEM YOLATION BY ANALOGY 87 900 317 SYSTEM YOLATION BY ANALOGY 87 900 319 BALOS ONE 91 SANIEND 87 91 DESCE 900 319 AMARICAY THE THE RITCHEM\_" (8)

### **ANIMATIONS**

POA 13 STAR TREK - AGATRON #2 POA 13 STAR TREK - AGATRON #17 POA 8 MOCINWALKER

FOR E4 NASA GRAPHICS

PDA BO WALKER II - 2 DISKS, 2M6 RECID (P) PDA BO AGATRON "ENTERPRISE LEAVING DICK" (S) POA 122 STEALTHY MANDEUVERS BY THIS

SCRIMARIT (P)
PDA 305 ANTI LEMMIN' DEMO - 2 DISIS 2008 0P
PDA 136 ALEE DATING GAME - 2 DISIS 3008 0P
PDA 136 NELZEE - BAYTEAGO 3 DISIS 5008 0P
PDA 136 AT THE MOVIS N - BRILLANT 4 DISIS
WALKS WITH WIN BUT ROCKE HALKOFF HE BITTON
PDA 136 AT THE MOVIS N - CREATED AND A POPULATION OF THE POPULATION OF THE POPULATION OF THE BEACH - SCRIPPARIZ 3408, 2 DISIS PP PDA 142 GUILE CONFILIC - SURFARIZ 2008 0P
PDA 142 GUILE CONFILIC - SURFARIZ 2008

# POA 142 GULF COMPLET SUPRIM ZAMEN POA 143. ENTER TRYSTAGE, PULL E CONCILI ELISTO ELIST

### CLIP ART

POU 483 WEDDINGS - 7 DISKS PS POU 484 HOUSES - 2 DISIS PI POU 468 FAHCY BORDERS 2 DISIS PI

FOL 464 COLOURING BOOK - IDEAL FOR EIDS: PI POL 464 COLOURING BOOK - IDEAL FOR EIDS: PI POL 465 WOMEN AT WORK - 2 DISIG (P) -POL 465 SPORT - 2 DISIG (P) -POL 469 SPORT - 2 DISIG (P) -POL 460 ANIMALE (I)

PDU 460 ANIMALS ()
PDU 461 CATS ES
PDU 462 WORLD WAR II AIRCRAFT IN
PDU 464 MYTHOLOGY IN

POU 445 CHUSCH & PASTORAL 3 DIGES (F) POU 444 AFRICAN WOODCUTS (F)

PDU 447 WOODCUT CATS P

#PDU 443 WODDCUT CATE ||

\*\*PDU 448 WODDCUT GOS #|

\*\*PDU 474 O ANCTIC WODDCUTS #|

\*\*PDU 471 AND WODDCUTS #|

\*\*PDU 472 MIXED ANNAL WODDCUTS #|

\*\*PDU 473 BIRD WODDCUTS #|

\*\*PDU 474 EANNAL WODDCUTS #|

\*\*PDU 474 EANNAL WODDCUTS #|

\*\*PDU 474 VEQTARIAN CLIPS #|

\*\*PDU 474 VEQTARIAN CLIPS #|

\*\*PDU 475 EANNAL WODDCUTS #|

\*\*PDU 474 WODTARIAN CLIPS #|

\*\*PDU 475 EANNAL SUPS #|

\* BUSINESS (P) SAILORS, FISHERMEN, SEA LIFE

ALL OF THE ABOVE ARE HUGE, HIGH QUALITY IM-AGES, THE CISKS ARE AUTO BOOTING WITH STIDE SHOW VIEWERS, MITHTIPLE SETS ADD AVAIL

**HOW TO ORDER** 

PAYMENT

PD DIRECT

DEPT. AC92

NEWCASTLE

STS 1DN

STAFFORD SHIRE

PO DIRECT and send to:

86 GEORGE STREET

..... WE ARE OPEN FROM 9.30 • 6.00 MONDAY TO SATURDAY

We accept all major credit cards

Please make cheques and P.O's payable to

### **MUSIC DISKS**

9 PIDE ON TIME/ BAT DANCE 19 BAD - MICHAEL JACKSON

POM SO BAY DANCE IP MATERIAL III

POM 125 DIGITAL DISCO

THE ONE STOP SHOP FOR AMIGA® PUBLIC DOMAIN SOFTWARE

POM 224 PROTON MUSIC PI POM 227 HARDCORE III - YOU KNOW THE SCORE

POM 212 ISSTERDAY—BY SANTY IPS POM 212 GARTIELD SINGS POM 811 NASA vd. 2 - 7 DISKS, WELL REVIEWED (NOW

WES OF PDM 131 PET SHOP BOYS 41 HIT MUSIC OF PDM 132 PET SHOP BOYS 42 HAMIN RIM PDM 35 MIAMI VICE THIME 4 DESKS PDM 40 MIT VANGEUS DEM 0 11

### MUSIC MAKERS PACK

VED 3.30 MUSIC TOTTON, SOUND TEACHER V2, 6, STAB HEKKER, 3 SONGS DISKS, 4 INSTRUMENTS DISKS, 1145 5 OUR BEST SHITING PACK (A 500 / A 600 Composible) A MUST FOR HOME MUSICIANS 1

### £12.00

POM 30 DISTRA CONCERT II
POM 31 DISTRA CONCERT II
POM 31 DISTRA CONCERT II
POM 31 DISTRA CONCERT II
POM 45 DISTRA CONCERT II
POM 47 DISTRA CONCERT II
POM 47 DISTRA CONCERT II
POM 47 DISTRA CONCERT II
POM 40 BITTY 800 Ø1
POM 10 BITTY 800 Ø1
POM 10 BITTY 800 Ø1
POM 10 BITTY 800 Ø1 POM 130 TEM PINT IN THE BLACK JACKSON, SU

### **SUPER SOUND 4**

THIS IS THE LATEST VEHIL SAMPUNG SOFTWARE BY KIELE IT WILL ADD REVER! AND LOADS OF DINER BEAL-TIME FX TO YOUR SAMPLES. COMPATIBLE WITH MOST SAMPLING HARDWARE IT IS NOT FO AND BOYALTIES AND PAID 

POM ITE HACKTRICK "LOAD SAMONEY" I I

POM 120 LAURIL & HARDY - 2 DISKS (\*) POM 165 PARASITES KLI

POM 52 PORPYS MISTS THE BEACHBOYS PL POM 52 PRIODY REVISOR POM 52 KERRENS JUKE BOX

POM 104 BASS X #5 POWER SIMIX POM 105 BASS X #4 SIDNEY YOUNDSLOOD IP! POM 214 NASP IV- 2 DISKS, LATEST VERSION IP!

CATALOGUE DISK OUR NEW DATA BASE CATALOGUE CON-TAINS DITAILS OF OUR COMPLETE DISK COLLECTION, TO RECEIVE YOUR COPY SEND 3 FIRST CLASS STAMPS, ALTERNA-TIVELY, YOU CAN HAVE ONE FREE WITH YOUR FIRST ORDER ON REQUEST

ASSASSINS PACK 2 HAS ALL MEW PACK OF 39 DEALSCONTAINS THE LATEST AN GAMES DISKS (36 TO 70 ) ONCE AGAIN

> ALL 26 DISKS FOR ONLY £34.95

LICENCEWARE PROGRAMMERS LICENCEWARE PROGRAMMERS
AS YOU MAY BE AWARE THE DELIA YU
LIBRARY HAS NOW CLOSED, WE ARE
PUTTING TOGETHER PROPOSALS FOR A
SETTER LICENSING SYSTEM, WE ARE
CURRENTLY LOOKING FOR GOOD QUALITY
PRODUCTS TO CONSIDER FOR INCLUSION
IN OUR LIBRARY IT IS LICENCEWARE WILL BE
STATE OF THIS LICENCEWARE WILL BE
STORT IN FORMERS AS WILL THE ROYAL THE SLIGHTLY MIGMER. AS WILL THE ROYALTI PAID TO PROGRAMMERS IF YOU WOULD LIKE FURTMER DETAILS EITHER CALL OR WRITE TO US AT THE ADDRESS BELOW

### LATEST DISKS

PBU 814 V-MORPH v2.81 IATEST VEGSION O PDA 198 ALIENS SPECIAL EDITION SLIDESHO DIBUT PRODUCT BY TRACTALITE - 9 GOOD 2 DISKS IP PDU 515 GAMS TAMER VE S IP

VISA

NETSPRINT LYEN COOR
POR 184 SUPER HAM SUDISHOW 44 - AGA
POR 185 SUPER HAM SUDISHOW 45 - AGA
POR 185 SUPER HAM SUDISHOW 46 - AGA
POR 187 PLANT GROOVE BENT IN MINUS
(441 AGA ONLY DEMO GERATIX & MUSIC

POU ELL ASSASSINS AUDIO MADIC vol 1 D.

DO ISB TEXAS CHAINSAW MASSACRE -BIRUANI GAMI POSSIBLY CHEATEL WITH THE CHOP (M-UP-CONSTILUCTION KILL WIT FOR KIDSIP) PDG 119 CLASH OF THE EMPRES INVPOLENCE

24 HOUR ANSWERING SERVICE YOU CAN NOW SIND FARES OF LEAVE YOUR ORDER ON OUR ANSWERING MACHINE - 24 HOURS A DAY 7 DAYS A WIER

### AUGUST SPECIAL OFFER

ANY ORDER OVER £12.00 RECEIVED DURING THE AUGUST WILL AUTOMATICALLY QUALIFY FOR A 3.5" DISK DRIVE CLEANING KIT (WORTH £1.99) ABSOLUTELY PREE

OFFER ENDS 31ST AUGUST 1993 EAGE

LATEST DISKS cor

POU 444 AMOS COMPILE UPDATE «134 P)
POU 447 MARE-1158 -TACDAM KULSE WIG 2 GOMEY
POU 441 SCALLARLI PONTS - TESK SIT SY
90U 450 SOUND TRACKES ¥ 2.4 P)
90U 450 SOUND TRACKES ¥ 2.4 P)

PDU 450 SOUND TRACESS V Z.A. 97 PDU 451 NOISE PLAYER Y 4.0 (F) PDU 458 MAZE MAPPER - A MUSI 108 ALL OF YOU

PDU 481 NUCLIAR FONTS - CUI N PAUL FONTS.

VIEY GOOD CLIMITY IP!
PDU 482 GELIGNITE FONTS III - MORE IT! FONTS.

PDU 483 OLUGHTE FONTS III—BEILLIAN LAGAIN: IP!
PDU 484 LAND BUILD 13 2 — LANGSCAP! GENERAION
PROGRAM SEMALWAM, VERY GOOD! IP!

### KICK 1.3...

### ONLY ..... £1.75

THIS HAS GOT TO BE ONE OF THE BEST DISKS THIS YEAR:....

POD 330 XPOSE BEMO - BY SIGNIS 2 DISKS IPI POD 331 WILDFIRE MEDADEMO POD 335 MARIMUM VEROCITY DEMO POU 485 CO HELPS IPI POU 484 TACK 1.3 - ANIMATION CONSTR. MIT (\$1)

POU 487 TEXT ENGINE 4.0 LATES VIRSON OF THIS GREAT WINED PROCESSOR NOW WITH EXC BRITISH SPILL CHICKER (P) 984 488 ASOO PLUS IMULATOR LOAD SYSTEMS AND AND AND LIAMS SYSTEMS AND AND AND LIAMS

DOCSTART 2 0 INTO MEMORY BRREIANT : PBU 489 PROTRACKER v3.0 GOOD MUSIC POU 490 GRINDER GRAPHICS CONVERSIONS

FROM PC/MAC TO AMIGA IFT PDU 491 QMJ 48.31 - THE QUALITERNION MANDEIBROT BUILD BY POU 492 WHOM III - DATABASE ON STAB THE AND ING ... VIEW GOOD ! 49

POU 493 FERM CHECK PLUS GOOD (F) POU 494 DATABASES - IDAN 3.5, DAIAHEN

ADDIS SHE AN VIGORACE, BY ADDIS SHE AN AMAP PACKAN DELVIZ, LEAP IL BRACCIOS BEAN, BELLZONI SAZ 87 PDG 181 ASKPAS GALAČA 1/2, DOGS IN SPACE, INTELDER ALIES, AS CATACOGUS EP PDG 183 AMAP GOTOTHELD, BRITERODS, ILAMPROG, GAMEROY TITIS, BOULDTE & CROSS MAZT SIE.

POG 153 ASMAA GALAXVIDE ROLLOW MIRWIN MOUSE IMPOSSINE OF PDG 164 ASIAM KASTE KLIMQUAL, D. GRIS, EHE BEAN 2.2. B CASTE, PARCHETSE ITSIRAL PI POG THE E-TYPE II CLASSIC ASTEROIDS IP PDG THE H-THE II CLASSIC ASTEROIDS IP PDG THE HIGHTING WARRIGHS (SELET AWD)S BEALEM UP RECOMMENDED BY

MORE NEW CLIPART POLICE TRANSPORT COSTS OF THE COST OF T

PDD 311 HALFREAIN SUNSTONE DEMO (1 10) KIPP PDD 324 AMARCHY 20 DEMO E IPP PDD 326 JOYRIDE BY PHENDMINA (F) PRO 325 STATE OF THE ART SPACEBALLS OF PRO STATE OF THE ART SPACEBALLS OF PROGRAM, WILL REVIEWED OF

POD 137 CAZY SUE (1) POD 137 CAZY SUE (1) POU SUE THE VIDEO CAZY SUE (1) POU SUE THE VIDEO CHILDING INTHUSIASI (1) POU SUE HAREGUINI VIDEO CONTS 41 (1) POU SUE HAREGUINI VIDEO CHITS 41 (1) POU SUE HAREGUINI VIDEO CHITS 41 (1) POU SUE HAREGUINI VIDEO CUPART (1) POU SUE HAREGUINI VIDEO CUPART (1)

NEW FOR AMIGA A1200 & A4000 PDA 150 WIERD SCIENCE AGA SEDESHOW 61 PDA 151 WIERD SCIENCE AGA SEDESHOW 62 PDA 152 WIERD SCIENCE AGA SEDESHOW 64 PDA 167 WIERD SCIENCE AGA SEDESHOW 64 PDA 163 SEPER HAM SEDESHOW 62 AGA SECESHOW MITTO GOOD

HAST AGA ONLY DIMO. GREAT IX & MUSIC POG 228. MINDWARF AND HER TEAM HOLDER POU SOA GOU SCORE VI.84 (F) POU SOE RICTURE CONVERTOR (FIR AND/INCE FOU SIZE BILLIURI L'UNITERIURI DE PROPORTIONE
POU EO AMAZIA EL FORMAT CONVERTOR DE
POU EO SUDESHOW GENERATOR SIZE DE
POU EO SONO EON TILLOUI
POU EN ASSASSINS PRINTER UTILE DE
PONT, L'ARLE BASE, HTTERCAT, SUMER RET LAR
POU ET ASSASSINS PRINTER UTILE DE
POU ET ASSASSINS PRINTER
POU ET ASSASSIN

TELEPHONE OR FAX 0782 7152

# High noon fo Sonic? press release landed in the AC offices today describing a game that until now would have been impossible to produce on the Amiga. Full

# With arrival of the Amiga CD32, that hedgehog better get outta town while the going's good

acres of animations, and all on one disc The CD32 release of Diggers from Millennium is important in two ways. First, it is one of an initial wave of about 20 titles which will be released for the new Amiga (see this month's news for full details of this spectacular new machine) to take full advantage of the potential offered by an AGA chipset married to a CD drive

256-colour backdrops, megabytes of digital stereo music,

Secondly, it is released one full month ahead of the A1200 version despite the fact that there will be many more A1200s in circulation than CD32s on the game's launch day.

It is obvious from the enthusiasm with which games houses have greeted the new machine that it cannot help but be successful, and it is this sheer enthusiasm which will drag CD32 past the chicken-and-egg barrier.

On the launch of any new hardware platform, the most important question is always going to be "how much software support does it have"? and only games companies can provide the answer.

If there is no software support a machine will fail, and if the machine doesn't sell, no software company will put money into developing software for it.

This is the chicken-and-egg barrier, and it is one which Commodore seem to have successfully negotiated. Several major software houses have been working a secret with prototypes for almost a year to develop real CD titles which take advantage of the machine, such that on its July 16 launch the proud parent company was able to show off a range of 16 brand new games

Taken in combination, CD32's AGA capabilities, fast 300k/s CD drive, and imminent MPEG add-on should make existing Sega and Nintendo consoles look very old indeed

The world's first 32-bit CD console is streets ahead (for the moment) in hardware, and with the huge base of Amiga-literate software houses out there, many of whom have already started to write their company's second CD32 release, the software will quickly make Mega CD owners green with envy

New consoles, such as 3DO, will close the gap somewhat, but it is unlikely that there will for a few years be any development past this sort of technology level in the console war. There is nothing like establishing a large user base

and milking it dry to make those balance sheets look rosy, and constantly changing your hardware is no way to build up a user base

The one dark cloud on Commodore's horizon is the spectre of Japanese marketing muscle. With the best will in the world, it is difficult to sell a product to compete with Sega and Nintendo if the two giants have marketing budgets many times in excess of your own, even if your technology is superior.

Remember Betamax video recorders, that classic case of superior hardware losing out to viciously marketed but inferior competition?

### **AMIGA GAME FANS**

Commodore, realistically accepting that they will not be able to out-advertise their oriental competitors, are putting their atth in the legions of Armga game fans and the brand name of what is still the most popular home computer in

If high street dealers and the independent shops which are the life blood of the Amiga industry - pick up CD32 and simply demonstrate it to the public, say Commodore, sales are guaranteed.

So confident are the Maidenhead crew that they predict sales in the hundreds of thousands world wide after only a matter of months, and are putting great efforts into MPEG and CD32-compatible drives for the rest of the Amiga

If Commodore can be believed, the drive for the A1200 will appear before or around Christmas, though if the A570 saga is anything to go by "Christmas" might stretch

Commodore's sales predictions are probably a bit overoptimistic, designed perhaps to add to press hype and launch day excitement than anything else. However, it takes only a second or so to work out that the latest Amiga has one priceless advantage over every one of its predecessors. It is virtually pirate-proof.

Though large scale piracy will always be a threat, such criminal rackets are identifiable and can be policed. It is the computer club and the school dinner time which will cease to pose a commercial threat once CD becomes the norm for games

The inevitable, and marked, superiority of CD games over those restricted to a few floppies will force game lovers to migrate to CD32, and as every game they buy is unpiratable, the games companies will be able to recoup their development costs without worrying about every game sold ending up in dozens of Jolly Roger disk

In theory, therefore, CD will be better for the nunter fering much better games, and better for the industry.

We might even see some of the US companies who

have abandoned the Amiga come back into the fold now that they needn't worry about piracy.

How much improved would the Amiga leisure scene be if the majority of games sold were full AGA 256colour titles with massive scenarios, superb stereo music, and graphics to stop a bus load of bored school kids at 100 paces?

If all else fails, we should see the end of a long running issue within the piracy debate. Many representatives of the software industry have, over the years, stated that piracy was the main reason for software prices soaring to their present ridiculous levels.

With the advent of CD32, this excuse will have disappeared, yet predicted prices for the first batch of games point to a price range of £20 to £40, more or less exactly the same as floppy-based games. What is wrong with this picture?

# he AC team

ASSOCIATE EDITOR **TECHNICAL EDITOR** ART EDITORS

Paul Austin Colin Yarnall Tym Lecky Terry Thick John Butters Phil Morse

Jonathon Maddock

Simon Clavs

**NEWS EDITOR** PRODUCTION EDITOR STAFF WRITERS

ADVERTISING MANAGER Simon Lees AD SALES Andy Simpson AD PRODUCTION

MARKETING MANAGER Lucy Oliver PRODUCTION MANAGER Sandra Childs

SYSTEMS MANAGER David Stewart

CIRCULATION DIRECTOR David Wren

DISTRIBUTION COMAG (0895) 444055

SUBSCRIPTION 051-357 2961

Member of the Audit Bureau of Circulations

64,418

Jan-June 1992

Published by Europress Enterprise Ltd. Europa House, Adlington Park. Macclesfield SK 10 4NP Tel: 0625 878888 Fax: 0625 850652

CHAIRMAN Derek Meakin MANAGING DIRECTOR Ian Bloomfield

> 8425 859746 Thursday, 2-5pm only

We regret Ampe Computing cannot offer sectional help on a personal basis either by inlephone or in writing. All reader enquries should be submitted to the address in the panel for possible publication

Arrigin Computing is on independent publication and Committee Eurores.

Machines List one out responsible for any of the articles in this issue. of for any of the opinions expressed

Ol 993 Europress Enterprise Ltd. No material may be reproduced in whole or in part without written permission. While every care is taken. the publishers cannot be held legally repossible for any errors in articles latings or advertisements

THE PARTY OF THE P



For five years Amige Computing has been the leading magazine for Amiga anthusiasts. As a key member of the Europress maga zine group. Amigo Computing promises to inform, educate and entertain its readers each month with the most deducated coverage of the Amiga available.

Aming Computing & Appri ST User & Appri ST Review & PC Today Acom Computing \* GB Action \* Amiga Action \* ST Action re Force # Segs Force # N-Force # Amiga Force # flad Influence # Super Action # PC Hame

> Printed in the United Kingdom by BPCC Ltd. Carlisle

# **ACCELERATORS**

of the service application year appropriate and did at secretarity programme with a feature service and a feature service and a feature service and a feature service fee Amous a spend

The a single of A1500 A2000 accelerators with builting the competition for speed and declarations. Their G-Force range includes the set A-sign accelerator evaluation throspeed accelerators are selected from 88040 30-each acceleration of a range of functions, such as RAMA suppration. SCSI interaces and matter acceleration for the research from the control that includes of size Acceleration the control that control and size and desired. For booting the power of your Amiga you can beet the GYP G-Force range!



42mb QUANTUM MARG £169 1244

G-FORCE ACCELERATORS	030 25 <sub>MHz</sub>	030 40mHz	030 50mHz	040 33MHz
Speed MIPS'	7.48	12.1	15	30
Processor	68030EC	68030EC	68030	68040
Matha Co-Pro.	68882 included	68882 included	68882 included	in 68040 processor
Std 32-bit RAM	1 <sub>Mb</sub>	4wb	4Mb	4 <sub>Mb</sub>
Max 32-bit RAM	13мь	16 <sub>Mb</sub>	16мь	64Mb
Extras	SCSI	SCSI	SCSI	SCSI Ser/Par
PRICE	£399	£699	£999	£1299

HARD DRIVE & ACCELERATOR PLUG-IN FOR AMIGA 500 AND

mm

TOTAL PER

40Mc

The AS30 in a unique combination of a hard drive, RAM board and an accelerator, Inside is a full Motorola 68030rc processor running at 40we making your Amga taster than you thought possible. The A530, with a matrix co-processor, a up to 300 times laster than a standard A500! The new processor and 32-bit SIMMs is joined by up to 8th of 32-bit RAM, which further enhances its performance. Features Include:

- 40mm 68030EC Processor
- Up to 8va 32-bit Memory, 1st fitted
- Cut Off Switch For Game Competibility
- Designer Styling to Match the A500
- Dedicated Power Supply and Fan Unlike Many Competitors
- Mini-slot for Future Expansions
- Factory Installed Hard Disk
- High Speed DMA SCSI Controller

286-16<sub>MHz</sub> A530 HARD DRIVE & 40MHz ACCELERATOR 42<sub>Mb</sub> 80Mb 120мь

£699 £799 £899

A hard drive will have an immediate affect on you Amige. Where you used to constantly swap disks, was for files and programs to load and at around eating to disk accesses, you linear be justified to some up with your Amiga! Hard drives work in the same way as floopy desks, but can hold a great deal more information and access this data much cuscles.

The ASOU-HDR- provides the utilities in hard drive performance, if can also increase the memory of your Amiga, and provide PC compatibility. Features include:

- Ultra Fast Access SCSI HD
- I Un to Rus of FAST RAM
- Mini-slot for Future Expansions
- Cut Off Switch For Game Compatibility
- Designer Styling to Match the A500

100 E99 m

Dedicated

Power Supply and Fan Unlike Many Competitors

. High Speed DMA SCSI Controller -Can Handle 7 Devices

HD8. HARD DRIVES

**40MHz ACCELERATOR** 

42<sub>Mb</sub> 80мь 120мь £299 **F399** £499

### GRAPHICS CARD



ALL-IN-ONE GRAPHICS CARD

### FREE SOFTWARE WITH 1V24

Create stunning 3D rendered mages ratio cliptured images and wipe between 2 w sources with 50 psychaged video transform production studio effects Also included MatcroPart 2 a powerful 24-bil graphics packs which paint in 16 8 million colours.

- 9 J.Sm 24-bit, 16 Amillion Colour Buth
- Real-time Framegrabber/Digitiser
   De-interfaced, Video Flicker Frame
   Movable/Surable PTP (Picture-in-Picture)
- 2 Video Genlock (RGB & Composite)
- 9 758 x 580 Resolution
- Captured Image Retouching/Processi.
- Titling/Character Generation
  Presi-time 24-tul Pamting
- nation/3D Rendering
- FREE! Caligari 24, MacroPaint 2, MyLad and Deaktop Darkroom Software

	- Can by - Can 274
IV24 ≈ VIU-S	IV24 III VIU-CT
£999 £999	£1299

## VIDEO GENLOCK

FOR ALL AMI G-Lock is a fully featured Genlock, which allows you to mix Amigs text

- You can then send the combined result back to you video recorder for recording Two Composite Video Inputs or S-Video (Y/C) inpu
- Simultaneous Composite
   S-Video and RGB Output
- Video Processor Real Tin Software Control of Video A (Sharpness Gein Brigatiness etc)
   A Rexx Compatible
- Works with Flicker
- a Multiple Keyer Modes
- Full Audio Support



# HARD DRIVE CARD



se your Amiga's RAN

- High Speed DMA SCSI Controller
- Ultra Fast Access
- Ultra Pass Drive
  SCS Pass Drive
  Up to Silibert FAST FAM
  Drive themory Access Style Dr

42мь 80мь 120мь

FOR THE AMIGA 1200

Adding RAM or a hard drive to your Arniga will have a considerable impact on its speed, The GVP SCSIRAM allows you to enhance your Amiga with both. Its SCSI hard drive interface is one the best services.

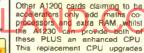
of the fastest available, whilst its 32-bit RAM upgrade is based on the same

technology as that featured in the best seeing A1230.

# **IMAGE PROCESSING**

- SEE DETAILS BELOW
- 1 Virtual Memory Support
  Local Serva and Convert to the Fallwaining Formats
  Affeld Self, Cliniband DCTV, Unit, Carl Habel,
  RAMI Memura, Europe, Revolucion,
  TARICA, TATE AND ORDER
  Control with Blockmin for
  Devices, US VI





This replacement CPU upgrades the A1200's existing processor with a 68030EC processor running at 40MHz

32-bit RAM and a maths co-processor can also be added, enhancing performance still further. The A1230 doesn't void your Amiga warranty, and is also compatible with PCMCIA standard cards, not preventing their use!

- The First True A1200 Accelerate
- # 68030EC Processor Running at 40anu
- Up to 32m of 32-bit RAM
- Easy Fitting Trapdoor Expansion Doesn't Vold Your Warranty
- Dosen'i Disable PCMCIA Interface
- Optional 58882 Co processor Twice the Speed of a 68881

A1220 ADMIL ACCELEDATOR

71200 -0 mili	OULLEIDION
Owo RAM	4m RAM - 40mm max my
NEW!	C400
LZJJ	<b>L433</b>

. 68S

# **SOUND SAMPLER**

.

to 21 Samples in Memory At Once Resistant Oscillo Echo and Reverb Graphic Editing of Wayer Forms

- Graphic Editing
  Wave Forms
  Stored or Mond
  Operation
- . MOD File & MIDI

DSS

 Buill-in, Full SCSI Hard Drive Interlace
 Optional 8m, of 32-bit RAM
 Optional 68882 Maths Co-processor Easy to Fit and Doesn't Void Warranty BOB ADAPTOR KIT - C48 INC VAT - HAR 1240

NEW! NEW

# DEO EFFECTS



- Supports the AA Chipset
- Static or Full Motion
- Single Image Warping
- Renders to HAM-E and DCTV

CINEMORPH

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

**SYSTEMS** SILICA **OFFER** 

FREE OVERNIGHT DELIVERY: On all hardware orders shipped in the UK mainland.

TECHNICAL SUPPORT HELPLINE: Teem of technical experts at your service.

PRICE MATCH: We normally match competitors on a "Same product". Same price" basis.

ESTABLISHED 14 YEARS: Proven track record in professional computer sales.

E12 MILLION TURNOVER (with 80 start): Solid, reliable and profitable.

BUSINESS - EDUCATION - GOVERNMENT: Volume decounts available 081-306 0888.

SHOWROOMS: Demonstration and training lacilities at all our stores.

THE FULL STOCK PANGE: All of your requirements from one supplier.

FREE CATALOGUES: Will be mailed to you with offers - software and peripheral details.

PAYMENT: Major credit cards, cash, cheque or monthly lerms (APP 20 8', - arean quotes on requell).

YMENT: Major credit cards, cash, cheque or monthly terms (APR 20 85 - writer quotes on requell), you decide when to buy your new Amiga products, we suggest you think vary carefully about by hem. Coneder what it will be like a few months after you have made your purchase, or may require additional perpherate or software, or help and advice, And, will the company you montred you with details of new products? At Sides Systems, we ensure that you will have to worm, about. We have been established for almost 14 years and, with our unrivalled nee and expertise, we can now claim to meet our customers' requirements with an understanding a sepond to none. But don't just take our word for it. Complete and return the coupon now for our REE literature and begin to expensed the "Stice Systems Service".





MAIL ORDER: 1-4 The Mews, Hatherley Rd. Sidcup. Kent, DA14 4DX Chair Lines Open Mon-Sai 9 00sm-6 00pm  No. Lata Ng/ti Opening	Tel: 881-389 1111 Fax No 661 308 6808
LONDON SHOP: 52 Tottenham Court Road, London, WIP OBA Opening Mount. Most-Sail 9 30sm-6 00pm  52 Tottenham Court Road, London, WIP OBA	Tel: 071-580 4000 Fax No 071-373 4737
Condon SHOP: Selfridges (Energeri Arena), Oxford Street, London, WTA TAB  Conning Mours Mon-Sei 9.30em-7.00pm	Tel: 071-629 1234
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX  Greening Indus. Mon-Set 9 Ottom-5 30pm	Tel: 081-302 8011 Fax No: 001-300 0017
ESSEX SHOP: Keddies (2nd Roor) High Street, Southend-on-Sea Essex SS1 1LA Covering Hours Mon-Po 10 Down-8 30pm (Sat 9 00pm) Late Night Thursday - 7pm	Tel: 0702 468039

To China Castana AMCOM 2002 CD 4.4 The Marie Hatteries Dd Cidera Marie DALL ADV

10	SIII	Systems.	MANGOIAL	-0333.0	0 1-4	THE	MICMP	matheritey	nu.	2.0cuh	Velil	DAIA	4DX
PI	LEA:	SE SEN	ID A	64	PAGI	E A	MIG	A COL	OL	JR C	ATAL	OGI	JE

Mr/Mrs/Miss/Ms	Initials .	Surname	
Company Name (if a	pplicable):		
Address:			

	Postcode:	CONTRACTOR OF CONTRACTOR CONTRACT
fol (Home):	Tel (Work)	

Which computer(s), if any, do you own?



### D.EV SANNER V3.0

The awarding winning PowerScanner is able to scan from 100 - 400DPI in 64 greyscales. The scanning software included allows you to edit and manipulate any image you scan.

The scanner interface includes a through port for a printer.

P	WC	/ER	SC	NNA	ER	V3.0		<b></b> £	99
P	WC	/ER	SC	ANN	ER	INC.	OCR	£1	49
0	CR	SC	)FT	WAR	E (	NLY		<b>3</b>	49

### COLOUR POWERSCANNER

Scan 100 - 400 DPI in 4096 colours, with the Colour PowerScanner. The scanning software included allows you to edit and manipulate any image you scan.

The scanner interface includes a through port for a printer.

COLOUR POWERSCANNER ....£239

### POWERSCAN UPGRADES

If you consider your scanner system to be inferior to the Power Scanner, we M upgrade your software and interface.

V3.0 UPGRADE (INC INTERFACE) .. £49.95 V3.0 UPGRADE (SOFTWARE, SEND SAE) £15

### EPSON GT-6500

High resolution 24-bit colour flatbed scanning from Epson. Scan up to A4 in size on this 600 DPI scanner. Comes with PowerScan software.

EPSON GT-6500 (INC SOFTWARE) ... £799

### EPSON GT-8000

High resolution 24-bit colour flatbed scanning from Epson. Scan up to A4 in size on this 800 DPI scanner. This is the ultimate in desktop scanning. Comes with PowerScan software.

EPSON GT-8000 (INC SOFTWARE) . £1199

### TRANSPARENCY ADAPTOR

Scan up to 5"x 4" transparencies. Available for the GT - 6500 and GT -8000 scanners.

### TRANSPARENCY ADAPTOR.....£589

### DOCUMENT FEEDER

Automatic 50-sheet document feeder for the GT-6500 and GT-8000 scanners.

### 

### ALOO MEMORY CARD

1MB RAM with battery backed clock

A600 1MB RAM .....£39.95

### PC501+ MEMORY CARD

Our RAM board is designed especially for the A500+ computer and comes with 1MB of RAM on-board to expand your memory to 2MB of chip RAM (fits in the trap-door).

PC501+ MEMORY CARD .....£35.95

### 1.5MB RAM BOARD

Fully supports 1MB of chip RAM and is fully compatible with Fatter Agnus (requires Kickstart 1.3 and above, not compatible with A500+. Your Amiga needs to be opened, this may effect your warranty).

1.5MB RAM BOARD ......£85

### IMB WITH THRU'PORT



Expand your A500's memory up to a total of 2MB without disposing of your existing 512K upgrade (works with 1MB chip RAM, 512K RAM must be 4 chip type or not exceeding 9cm in length. Your Amiga needs to be opened, this may effect your warranty).

1MB WITH THRU'PORT ......£49

### ASDO MEMORY CARD

4 Chip 512K RAM expansion with or without battery backed clock.

Free software included (A500+ compatible)

A500 CARD WITH CLOCK ......£29 A500 CARD WITHOUT CLOCK .. £24

### A500 AMB POWERBOARD

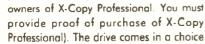
Expand your Amiga from 2MB to 8MB of RAM. Plugs into side slot, full auto config. and full through port.

A500 2MB POWERBOARD ....£129 A500 4MB POWERBOARD ....£189 A500 8MB POWERBOARD ....£289 1 X 4 ZIP .....£14.95

### A2000 AMB POWERBOARD

2MB to 8MB RAM expansion for the A2000

A2000 2MB POWERBOARD ..... £99 A2000 4MB POWERBOARD ... £149 A2000 8MB POWERBOARD ...£239



of two colours, black or cream. PC880B WITH BLITZ AMIGA .... £60 PC880B WITH BLITZ, X-COPY .. £75

PCAADB POWER DRIVE

The award winning external disk drive

which includes Anti-Click (cures that

annoving click), Virus Blocker (prevents

The PC880B is available with Blitz Amiga,

Blitz and X-Copy or Cyclone compatible

(this drive is only available to registered

viruses) and built-in Backup hardware.

PC880B (CYCLONE COMPATIBLE) .......£65

PC880B IN BLACK CASE ......£65



PC880E ECONOMY DRIVE .. £49.95 PC881 A500 INTERNAL ......£45 PC882 A2000 INTERNAL ......£45

### POWER DUAL DRIVE

Two high quality disk drives built into one compact unit, the drive includes the same features as the PC880B disk drive.

POWER DUAL DRIVE ......£125

### BLITZ AMIGA

Backup disks at lightning speeds, and stop all external drives from clicking.Blitz does not let viruses from being written into the bootblocker. (The 1988 Copyright act applies)

BLITZ AMIGA .....£15

### FLOPTICAL DISK DRIVE

The Floptical stores 20MB of data on a 3.5" disk (a SCSI interface is required).

FLOPTICAL A2000 KIT ......£289 FLOPTICAL A500 EXTERNAL....£389 A wide range of Amiga's are available.

A1200	2389
A1200	60MB HD£569
A1200	80MB HD£599
A1200	170MB HD£754
A1200	212MB HD£819
A4000	68040 120MB HD 6MB.E2329
A4000	68030 80MB HD 4MB£1129
A4000	68030 SOME HD 2MB\$979

### MONITORS

A wide range of monitors are available.

PHILIPS CM8833 MK2£	229
INCLUDES LOTUS 2, ON-SITE MAINTENANCE	
COMMODORE 10845E	199
MULTISYNC MONITOR	AO

### ICD PRODUCTS



ICD sole distributor. Trifecta is SCSI 2 or IDE compatible. (Trifecta EC is only IDE)

TRIFECTA 2000 LX BARE£139
80MB HD£239
160MB HD£329
200MB-HD£399
TRIFECTA SOO LX BARE
80MB HD£295
160MB HD£359
200MB£459
TRIFECTA 500 EC BARE£145
80MB HD£279
160MB HD£339
200MB HD£419
AD IDE 2 PRIMA BARE
80MB HD£245
160MB HD£309
200MB HD£399
PRIMA 3.5" MOUNTING KIT£29
AD IDE 2 NOVIA 60MB HD£259
80MB HD£299
130MB HD£379
212MB HD£499
NOVIA 2.5" MOUNTING KIT£19
ADSPEED AMIGA
FLICKER FREE VIDEO 2£185

### **ELECTRIC FINGERS CLUB**

The Power BBS is a bulletin board service. Phone 0234 841503. Speeds up to 16.8K

### SUPRA MODEMS

SUPRA FAX MODEM+£119
(INCLUDING PSU, CABLE AND SOFTWARE)
SUPRA FAX MODEM 32BIS£249

### HOME MUSIC KIT

HOME MUSIC KIT	
MIDI INTERFACE	£15 Q5

### GVP A530 TURBO HD

A 40 MHz 68030 EC accelerator.

80MB HD 0MB RAM£549
160MB HD 0MB RAM£649
200MB HD OMB RAM£699
68882 UPGRADE KIT£224

### GVP SERIES 2 HD

External hard drive for the Amiga 500. Expand up to 8MB on-board.

80MB HD	9883,
160MB HD	£409
200MB HD	99
EACH 1MB X 8 SIMM	083

### CHIPS AND SPARES

We stock a wide range of parts and spares

we stock a wide range of parts and spares.
1MB X 8 SIMM£30
4MB X 8 SIMM£POA
SIMM 32 X 1MB-60 GVP259
SIMM 32 X 4MB-60 GVP£179
SIMM 32 X 4159
SIMM 32 X 8£369
256K X 4 DRAM£5
1MB X 1 DRAM£4.50
1 X 4 ZIP£14.95
1 X 4 DIP£19.95
PCMCIA 2MB£149
V1.3 KICKSTART ROM£24
V2.04 KICKSTART ROM£32
FATTER AGNUS 8372£30
BIG FAT AGNUS 8375£40
HI-RES DEMSE CARY
PAULA£25
6570-36 KEYBOARD CHIP£19
CIA 8520£9.95
DATA SWITCHES 2 WAY£15.99
DATA SWITCHES 3 WAY£17.99
DATA SWITCHES 4 WAY£19.99
MODEM CABLE
PRINTER CABLE£6.95
SCSI CABLE£9.95
IDE CABLE FOR A600, A1200 INC.
INSTALLATION SOFTWAREE15.95
A500 POWER SUPPLY£39.95
WORKBENCH 2.04 KIT£75

### MISCELLANEOUS

_
POWERMOUSE£15
OPTICAL MOUSE£29.95
REPLACEMENT OPTICAL MOUSE MAT .\$10
100 BRANDED DISKS + BOX £69.99
10 BRANDED DISKS29.95
A1200 DUSTCOVER£5
AVIATOR 1 JOYSTICK£35
INTRUDER 1 JOYSTICK£29.99
MAVERICK 1 JOYSTICK£15.99
PYTHON 1 JOYSTICK
APACHE 1 JOYSTICK£7.99

### POWER OPTICAL DRIVE

Fit 128MB on one Optical disk.

128MB OPTICAL INTERNAL	£849
128MB OPTICAL EXTERNAL	9993.
128MB 3.5" OPTICAL DISK .E	39.95
SCSI CONTROLLER A2000	£129

### VIDEO BACKUP SYSTEM

Use a VCR as a backup storage device, 200 Amiga floppy disks fit on to a 4Hr tape which can be used for an alternative hard disk backup system. Whats more, you can watch television on your 1084S monitor.

VIDEO BACKUP SYSTEM .....£59.95

### BARE SCSI HARD DRIVES

We can supply SCSI or IDE 3.5" drives in many sizes. These hard drives are suitable for GVP G-Force, GVP or ICD.

BOMB .	£179	
160MB	£249	
200MB	£349	

### 2.5" IDE INTERNAL HD

Miniature hard drives for the A600/A1200 these drives come complete with a cable and installation software.

60MB INTERNAL HD	£179
80MB INTERNAL HD	210
130MB INTERNAL HD	£299
170MB INTERNAL HD	
212MB INTERNAL HD.	

GVP A2000 HARD CARD

High quality SCSI hard card.

BARE	3,	1	2	9
80MB	3,	2	7	9
160MB	2.	34	4	9
200MB	3	4	1	9

### AUTO ROM SHARER

One of the most advanced Rom sharers.

ROM SHARE£19.95
ROM SHARE INC. V2.04£50
ROM SHARE INC. V1.3£39
ROM SHARE A600£29
ROM SHARE A600 INC. V1.3£55

Power Computing Ltd Unit 8 Railton Road Woburn Road Ind. Est. Kempston Beds MK42 7PN

Tel 0234 843388 Fax 0234840234

Cheques payable to Power Computing Ltd.

Goods are sold subject to our standard terms and conditions of sale and are available on request.

Specifications and prices are subject to change without notice. All trademarks are acknowledged.

All prices include VAT

0234 **3**4







delivery 24hr £4.50 48hr £2.50 parcel post £1 (UK mainland only orders under £50)



mageFX is one of the very latest image manipulation packages to be produced by those inventive chaps at GVP. Obviously, we couldn't get hold of a fully working version for the CoverDisk so a save and print disabled version, with a limited number of load modules, will have to do. Even so, it should be sufficient to whet the appetite of even the most technologically shy Amiga owner.

Once the program is up and running, the first thing we need to do is load a picture to process. Clicking on the Load button, located under the histogram, brings up a window showing all the files and directories on the CoverDisk.

Select the Pix directory using the mouse or enter the word Pix into the requester. There is only one file in this drawer so select it and click on OK

After a few moments a requester will appear asking whether to enable cross block smoothing. This is a technique which will enhance the appearance of the image so click on the Yes button.

When the picture loads, the bottom half is obscured by the control panel. To preview the

### ImageFX memory requirements

Using Image FX, you can take any Amiga image and add a plethora of creative strokes in an instant

# the DISK

# Creative DICTUICES.COM

picture, move the mouse pointer over the water hen and press the right mouse button. Although it is displayed in mono, the picture is stored in a 24-bit buffer in colour.

To see what it looks like, press the right mouse button again to return to the control panel then click on the Prefs button (directly under Load). Select Preview Options from the list of options, then HAM. Click on OK followed by Use, and the picture will be redrawn in colour.

Above the progress chart are four small square buttons. The group of three are used for zooming while the other is used

to flip to the Workbench screen. Click on the plus sign to zoom in, minus to zoom out and 1:1 to restore the picture to its original state with a single click.

Right, let's get down to generating some startling effects using the facilities available to us. Select Effect from the toolbox then Wave Distort. For the time being, ignore the set of parameters that appear and click on OK. After a short delay, a requester appears for the amount of distortion. It is preset at 32 percent which should do nicely so click on OK and sit back and let your Amiga go to work.

Hopefully, the picture should now look as though a stone has been thrown directly onto a reflection of a water hen.

Restore the picture by clicking on Undo then click on Effect again. Select Roughen and set the slider to 255 then click on OK.

Ripples are generated with Wave Distortion



# Bobby

**Author: Martin Round** 

Although this is an old Workbench hack, written way back in 1990, we feel that the majority of our readers are unlikely to have seen it before

Bobby is a cute character who wanders aimlessly around the screen clambering over text and anything that has been drawn with an odd numbered colour. His existence is hampered by two decidedly deadly things: long falls and sprites.

Since the mouse pointer is a sprite, it is extremely lethal. If Bobby is inadvertently killed off, he spends a short spell in Sprite Heaven before being reincarnated in his window. The time span between lives is random but tends to be no longer than one

By default, Bobby is controlled by the computer but it is also possible to control him using a joystick. To do this, click in his window then select the joystick option from the menubar at the top of the screen.

When run on a Workbench 3 machine, Bobby is not displayed properly if the CoverDisk is used to boot the system. However, the program does work correctly if the Amiga is initialised with the Workbench disk.

### QuickGrab

**Author: Steve Hines** 

This is a next little utility that can capture the screen display and store it as an IFF picture. Part of the design specification was to make it a Workbench 2 (and upwards) program. As Amiga Computing still supports Workbench 1.3 Amigas whenever poswe have included ScreenX on the CoverDisk which is a similar utility

Quickgrab resides as a background task with no visible window. The control panel may be accessed at any time simply by clicking on the program's icon.

Crabbed pictures are usually saved to Ram: but they can be saved to any device by clicking on the Save Directory field and entering a path. For example, hard drive owners may have a directory set up called Piccys, so entering:

160:Piccus

in the box will result in pictures being saved to that directory.

Alternatively, clicking on the disk gadget at the end of the Save Directory field will allow you to chose a directory using the mouse

Using this method has the advantage that details about volumes are displayed. To view this information, click on the bottom right corner of the window and drag it to the full width of the screen

If you have just tried this, you will have noticed that the CoverDisk is very full so save the IFF files to somewhere else! Although the RAM: device is listed as being 100 per cent full there should be plenty of space available

Memory is shared between programs, so it would be silly to allocate a large, fixed amount of memory exclusively for the Ram: device and not use much of it. Therefore, the operating system adjusts the size of RAM:, so that it is just large enough to hold the files that are stored there. Consequently, it is a ways

Each grab is stored using the same base filename but with the number of the grab appended as a filename extension. For example, a series of three grabs, would be stored as:

AufekGrab 000 QuickGrab. 00' QuickGrab.002

The base filename can be changed by activating the field and entering a new one.

A hotkey is used to tell QuickGrab to capture a screen and this is usually the key combination: Ctrl, Left Amiga and S. Again, it is possible to configure this to another combination. For example, entering:

Shift recommand g

changes the hotkey to Shift, Right Amiga and G.

A time delay can be set between pressing the hotkey and QuickGrab capturing a screen. This is particularly useful for grabbing screens from games that require both hands to be used at the same time. And why should you want screen grabs of a game? Well how about printing them out and creating an incredibly accurate map?

Quickgrab displays an irritating message when it grabs a screen and this shows up on the IFF picture. Fortunately the author was kind enough to include an option to disable this

Finally, there are two other options on the control window, Hide and Quit. Hide is used to remove the control window, leaving QuickGrab activated, while Quit completely kills the

## CoverDisk **Hotline**

Amiga Computing operate a CoverDisk hotline on 0625 859766 to help anyone experiencing problems. It is ONLY available on Thursdays between 2-5pm so please do not try to call us at any other time as you won't get an answer

### Triktrak

### **Author: Walter** Verbrugge

Triktrak is a variant of the ancient game of Backgammon but has slightly more relaxed rules. Each player has fifteen counters that they must move around the board. They must all be taken to the compartment that their opponent started from, before removing them from the board. The player who has no counters remaining wins the game.

There are a few simple rules and instructions which are explained in the accompanying document file. By far the best way to learn how to play is to watch a demo of the computer playing itself. Once familiar with the concepts, the game may be played against either a human or computer opponent.



The result is reminiscent of a Swap Shop screen saver so let's try that again and choose a smaller roughness value - say 110. This time, quite an interesting mosaic effect is created.

Now use Undo to return to the original picture, or if you have made more than one change, simply load the demo picture again. If you have just reloaded the image, follow the steps described earlier and ensure that the screen mode is set to HAM.

Let's crop the image so that we have a close up of the hen and its reflection. Click on the size button and select Crop from the options provided. Click in the box closest to the word Size and enter 200 as the x dimension. Similarly, enter 175 for the v dimension.

To view the position of the crop lines, move the mouse pointer over the picture

and press the right mouse button. Don't worry about the messy lines that appear over the picture, they are not permanent and are only a side effect of using HAM

As you will see, the box size is all right but it is not over the area that we want. The offset values are used to move the box around the screen, so let's enter some values. Ninety and 25 should do nicely, so

enter these values and click on the crop

Now for something really interesting. Click the Convolve button on the Toolbox then Relief Map from the Convolutions list. However it is achieved, this is certainly a stunning effect!

At the moment, the water hen is looking to the left of the screen but what if we wanted it facing the other way? Well that's

no problem at all, because ImageFX has a facility for that too

Next to the Convolve button is one labelled Transform. There are five options under this heading and in our case we need Flip Horizontal.

The flip and mirror

options should be self explanatory but Roll needs a little explanation. Imagine that you have been given an image against a plain background but that the object is too far over to the left for your liking.

Roll can rectify this by shifting the picture across the screen and wrapping it around on itself. ImageFX is also capable of performing this operation vertically, or both horizontally and vertically at the same time

OK, we haven't got an image with a plain background but that's no excuse for not playing around with this function.

Click on transform again and select Roll. Move the horizontal distance slider to 130 and click on OK.

When the vertical distance requester appears, it should already be set to zero so just click on OK. The result is that the picture scrolls to the left with the truncated piece wrapping around as though it were looped over two rollers.

To restore the picture,







repeat the procedure but set the vertical slider to -130. When these sliders are dragged, they change the roll offset by adding (or subtracting) two. If more accutacy is required, click to one side of the slider and the change will be an increment

Finally, we'll take a look at a couple of instant colour effects. Having played around with the demo image, we need to load a fresh picture in again. By now, you should be familiar with how to do this so we won't bore you with step by step instructions

Once it has loaded, click on the Colour button and select Negative. Pretty isn't it? Now select Undo followed by Solarize. False Colour is quite nice too, so give it a whire with the Use Standard option. The

are plenty of other effects to try but we'll leave these for you to explore on your own. Have fun



### ScreenX

### **Author: Steve Tibbett**

This is another screen grabber that has been included for the benefit of Workbench 1.3 users. It opens a title bar which displays the current system time together with information about available memory. To access the options, click on this bar then press the right mouse button.

The title and dimension of each open screen is displayed on the left-hand side of the window while the operations that may be applied to them are on the right side. Before selecting an option, a screen must be chosen by clicking on its title.

Pop to Front and Push to Back are used to change the order of screens in much the same way as the gadget in the top right of most screens. At first glance these may seem to be redundant features, but not all programmers implement this facility in their programs so it is actually quite useful.

Rather than waste valuable processor time by automatically looking for freshly opened screens, the author has elected to include a user option to update the screen

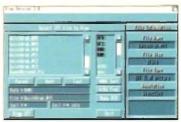
There is also a facility to close screens. Programmers should find this invaluable when working on bug-ridden code that fails to clean up the system properly. Some caution is needed though, as any program that tries to use a closed screen is likely to crash the Amiga

The main purpose of ScreenX is to grab a screen and save it as an IFF file. Unlike QuickGrab, it does not automatically generate file names so these must be entered before making each grab. To do this, click in the filename field at the bottom of the operations list then enter a meaningful name.

Exiting ScreenX is achieved by clicking on the close gadget, at the top left of either the main screen or the menustrip.



A roughened



**Faulty** CoverDisk?

If you subscribe to Amiga Computing and your disk has been damaged in the post, please return it to:

Amiga CoverDisk Europress Direct, FREEPOST. Ellesmere Port L65 3ED

If you bought your magazine from a shop and found that the CoverDisk was damaged, please return it to:

Mr Les Bare Pro-Saft, 5 River Gardens Business Centre, Spur Road, Feltham TW14 0SN Tel: 081-890 8290

### View

### Author: Michael W Hartman

View can be used to display both IFF pictures and animations. For those readers who do not own DPaint III it is an ideal way to see the results of using CineMorph Junior, which we gave away last month.

Use either Quickgrab or ScreenX to generate an IFF file stored in RAM: then load up view.

In the centre of the control panel, there is a list of physical and logical devices. Click on the word RAM:, to see a directory listing, then on the name of the file you want to see. Now select View IFF, at the

bottom left of the panel, and the file will be displayed.

To return to the main screen, press either the space bar, left mouse button, or the escape key (Esc).

View control

### Think you can do better?

Want to be famous? We are always on the look-out for quality Amiga programs for the CoverDisk. If you think you have written something good enough for others to share and enjoy, please send it in and we'll have a look

The Amiga Computing CoverDisk is used by thousands of Amiga owners every month in places all over the world from New Zealand to the USA, so if your submission finds its way onto the disk, you could be famous

Please make sure that you list ALL library and other files necessary for the program to work. Feel free to design your own icons for programs that run from Workbench, but please don't make them too big

If you ensure your program is as compatible as possible with a wide variety of Amigas, it will also stand a better chance of publication. We are especially interested in small programs whether they be games, utilities or whatever

We are prepared to pay our current rates for original work which has not been distributed in any other way and which has not been put in the public domain.

If you wish your program to be released as shareware or freeware we will be happy to publish it, but would, of course, be happier if we had been given it first!

Your submission MUST be accompanied by the submissions form, a copy of it, or a signed declaration to the same effect. Please supply your full name, address and phone number

Unfortunately we cannot undertake to return disks sent to us as the volume of submissions makes this an impractical exercise

Post your submissions WITH A COPY OF THIS FORM to: Colin Yarnall, Amiga Computing, CoverDisk Submissions, Europa House, Adlington Park, Macclesfield SK10 4NP.

Name Age
Address
Daytime phone Evening phone
Submission name Submission size
Type of program: Game Utility Other
You must sign this declaration;
The second state of the se

The material on this disk is mine. I didn't steal it from someone else. lished before and I haven't submitted it elsewhere because I want Amiga Computing to publish it. I understand that by submitting my work to Amiga Computing, and signing the declaration, I am giving full copyright control to Europress Enterprise Ltd.

I understand that if my submission is bought by Amiga Computing I will be paid the current applicable rate. I know what copyright means and I will be responsible for any possible litigation arising by breach of it by Europress Publications Ltd as a result of using my submis-

Signed	Date
312112U	Date

The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

New readers may have difficulties using our CoverDisk, so we have included this page to help you out.

Below we explain how to copy files from one disk to another, how to copy the entire CoverDisk and how to de-archive programs, none of the first things you must do when get your CoverDisk is make a backup copy, then put the original CoverDisk away for safe keeping. As a rule you should also do this with the majority of your software collection.



# How to make a backup

To copy the entire CoverDisk, load up your Workbench disk, then either click once on the CoverDisk icon and select Duplicate, or select Copy from the Workbench menu, or open CLI/Shell and type:

### DISKCOPY FROM BEG: TO DEG:

When prompted, put your CoverDisk (the source disk) in df0: and be ready to replace it with your blank disk (the destination disk). Follow the Amiga's on-screen prompts until the disk copy is completed. Now put the original away in a safe place and use your backup.



# Hi Quality Version Available on A

# Copying individual files

You might at some point want to copy a single program from a CoverDisk to your compilation, Workbench disk or even your hard drive.

To do this you'll need the COPY command. As most CoverDisk programs are stashed away in their own directories, the quickest way to copy a program is to copy the whole directory at once. Use the command:

### COPT (directory) TO (mendisk) ALL

where (directory) is the full pathname of the directory you wish to copy, and (newdisk) is the name of the disk and directory into which it will be copied.

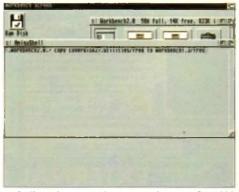
For example, if you wanted to copy a utility called FRED from CoverDisk 27's Utilities drawer to a directory called FRED on your Workbench disk, you'd type:

### COPY COVERDISK27: UTILITIES/FRED TO WORKBENCH1.3/FRED ALL

Alternatively, you can click once on the FRED directory icon and drag it across to the new disk's window. This has the advantage of creating a new directory for you and copying the icon as well.

Once you have moved a particular program to where you require it you could experience some problems running the program. This is sometimes caused by the program not being able to find files which it needs to run.

A good example is the text files on the CoverDisk. These have been crunched using PowerPacker, so when you try to copy them to another disk and then try to read them you can't unless you have also copied the Powerpacker library into your LIBS drawer.



So if you have copied a program from the CoverDisk to your Work disk or hard drive make sure you also copy any other files the program requires, ie fonts, libraries, device drivers and Ccommands.

# 3.68 REM 39.186 Copyright © 1985-1992 Commodere-Raiga. Inc. Bil Rights Reserved.

# **De-archiving**

Occasionally we have so many programs to fit onto the CoverDisk that we have to archive them. Archiving is where we take the entire contents of a disk and compress them into one file which is much smaller, giving us space to fit more programs onto the disk.

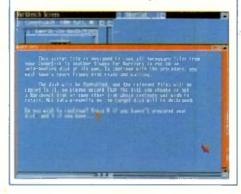
Dearchiving programs which are on the CoverDisk is a very simple task. If a program has been archived then you will need a blank disk to dearchive it onto.

Say we have archived a program called FRED. You simply double click on FRED's icon, and will be asked if you have a blank disk ready to dearchive to. Type "y" or "n" accordingly.

Your computer will then copy the archived file into its memory and ask you to insert your blank-disk. It will proceed to format the disk, and will then de-council the archived file onto your blank disk.

Once this has been done you can simply reboot your machine with the disk which contains the dearchived program on it and then use the program as instructed in the CoverDisk pages.

Note that if you have a Workbench 2 or upward machine you must boot with the CoverDisk write-enabled to perform the dearchiving process.



### Workbench 3

If you have a Workbench 3 machine, don't worry – most if not all of the programs on the CoverDisk will work on your machines.

If the program is specifically designed to work with Workbench 3 then you may have to copy the program to your hard drive or Workbench disk using the process described earlier on this page.

### **WINNER OF TWO PRESTIGIOUS**



PC DIRECT HITS AWARDS' 193



'Customer Service Excellence

Support & Service Excellence

PRICES INC. DELIVERY & VAT @ 17.5%

### HERE TODAY ~ HERE TO STAY

### **HOW TO ORDER**



Call us now on 0386 765500

**TELESALES OPENING TIMES** 9am - 7pm Monday-Friday 9am - 5.30pm Saturday



**Evesham Micros Ltd.** Uhit 9, St Richards Road, Evesham, Worcs. WR11 6TD



.... or FAX your Order with Access, Visa, Switch, AmEx card details to us on: 0386 • 765354

Government, Education & PLC orders welcome + Same despatch whenever possible • Prices include deliver (UK Mainland only) • Express Courier delivery (UK Mainland only) £6.50 extra • Please note that 5 banking days must be allowed for cheque clearance. Immediate clearance on Bank Drafta • Credit card orders: We do not charge the card until the goods are despatched



# Cards Welcome





### RETAIL SHOWROOMS

Normal Opening times. Monday-Saturday, 9.00-5.30 Late Night Opening Until 7pm Wednesday-Friday

Unit 9 St Richards Rd. Evesham Worcs WR11 6TD T 0386 • 765500

251-255 Moseley Rd **Highgate** Birmingham 812 DEA TO 021 • 446 5050

5 Glisson Road, Cambridge CB1 2HA T 0223 - 323898

### **MILTON KEYNES**

320 Witan Gate Milton Keynes MK9 2HP T 0908-230898

SUPPORT

T 0386-769403 Monday to Friday, 10.00 - 5.00

1 YEAR WARRANTY ON ALL GOODS Details correct at time of going to press . All goods subject to av

# AMIGA 500 SOLDERLESS RAM UPGRADES

RAM/CLOCK UPGRADE

ALSO WITHOUT CLOCK FOR ONLY

CONVENIENT ON / OFF MEMORY SWITCH & AUTO-RECHARGING BATTERY BACKED REAL-TIME CLOCK > COMPACT, ULTRA-NEAT DESIGN

# **'A500 PLUS' 1MB RAM UPGRADE**

### THE *FASTEST* AND EASIEST WAY TO UPGRADE YOUR A500+ TO 2MB RAM!

Simply Plugs into trapdoor expansion area Increases total RAM capacity to 2Mb 'ChipRAM RAM On/Off Switch 🛕 Compact unit size 👙 Only 8 low power RAM IC's 😭 High reliability

£42





Fully populated board increases total RAM in A500 to 2Mb1 o Plugs Into trapdoor area, & connects to 'GARY' chip o includes Battery-Backed Real-Time Clock & Socketed RAM ICs on 512K / 1Mb Versions

Unpopulated RAM board with clock

With 15Mb FASTRAM installed.....£ 69.99 available from us for £29.96





### 'MEGABOARD'

With our MEGABOARD, you can further expand your A500's memory to a total of 2MB without disposing of your existing 512K upgrade (must be 4 x RAM-chip type or not exceeding 9cm in length)

ONLY £47.99

# **CONNECTS TO YOUR** 512K RAM UPGRADE TO GIVE 1.5MB

### ROCGEN GENLOCKS

OFFERING EXCEPTIONAL MALUE FOR MONEY, the Receive Carricels offer live of quality, function and sophiatication not normally available in this price category



**GENLOCK PLUS GENLOCK MK.II** 

ONLY £79.99 ONLY £149.99

### **NEW PHILIPS TV/MONITOR**



mbines the advantages of a high quality the convenience of remote control Teletext
TV - at an excellent low price! Features dark
glass screen for improved contrast.

£249.00 Including VAI.

Philips CM8833 Mk.II Monitor (Genuine UK versi Year on-site maintenance and Lotus Espnt Turbo 2 game

Prices Include VAT, Delivery and Connection Cable

### ALL EVESHAM MICROS STAR PRINTERS INCLUDE 12 MONTHS ON-SITE WARRANTY

Star LC 20 Succession to LC 10, 4 fonts, 180/44cps	£ 129.99
Star LC 100 Entry level 9-Pin Colour, 4 fonts	20,881 3
Star LC 200 9-Pin Colour, 4 fonts, 180 45cps	£ 198.58
Star LC 24-100 24-Pin, 5 lonts, 192/64cps	£ 196 23
MEIN! Star LC 24-20 Mkill 24-Pin, 210cps high speed draft	£ 228.13
Star LC 24-200C Superb 24-Pin Colour, 5 fonts, 200/67cps	£ 278.13
Automatic Sheet Feeder for 10" LC printers (pls state model)	C 64.95
Star XB24-200 COLOUR 24-pin, 80 col. power printer.	€ 406.38
Star XB24-250 132 column version of XB24-200	£ 492.33

Citizen 240 COLOUR printer	E 299.99
AEW: Howfett-Packard Deskjet 610	E 327 83
Hewlett-Packard Deskjel 500C Colour	£ 445 33
Hewlett-Peckard Deskjet 550C Colour	€ 645.00
Canon BJ-10SX Inkjet Printer	£ 233.63
NEW: Canon BJ-200 Inket Printer 360dp. upto 240cps.	
8 Ignts, 80-sheet feeder, IBM and Epson emulation	£ 339.58
Epeon LX400 budget 10" carnage 9-pin 180-25cps	£ 136.00
Epson LQ100 24-pin 180/60cps. 8k buffer	£ 206 90
Panasonic KXP1124i uprated 24-pin model 300/100cps	£ 279 00
Panasonic KXP2123 good value 24-pin colour model	£ 200 00

# **EXTERNAL FLOPPY**



- Quality Citizen/Sony drive mechanism
- Enable / Disable switch
- Full 880K Formatted Capacity
- Long reach connection cable
- Throughport facility for addition of further drives

REPLACEMENT A500 **INTERNAL 3.5' DRIVE KIT** 



Fully compatible, with 1Mb unformatted capacity. Straightforward installation procedure. Kit includes full fitting instructions

ONLY £44,99

NEW LATE NIGHT SHOWROOM OPENING UNTIL 7PM, WEDNESDAY TO FRIDAY . REPORTED THE PROPERTY OF THE

metal casing

### TOP VALUE 400dpi HANDY SCANN

### QUALITY SCANNING AT THE RIGHT PRICE!



STILL ONLY £99.99

### TRUEMOUSE



WE GUARANTEE that this is the smoothest, most responsive and accurate replacement mouse you can buy for the Amiga. Excellent performance, now with a 300dp resolution. Amazing new price!

£14.99 SATISFACTION GUARANTEED

GOLDEN IMAGE OPTICAL MOUSE AN red. NEW LOW PRICE! £ 29.

### TRACKBALL



ONLY £29.

### *IEW!* A500 ROM SWITCHER

SWITCHING BETWEEN VERSIONS OF KICKSTART ON

YOUR ASOD IS EASY WITH OUR NEW ROM SWITCHER



Kickstart 2 0 ROM supplied segarately A500 Besteine 5 PCB Circuit Mo

**Amplified Stereo** Speakers

### **REALISE THE TRUE SOUND POTENTIAL**

**OF YOUR AMIGA WITH** THIS PAIR OF **FULL RANGE** SPEAKERS!





Enjoy quality stereo sound reproduction to the fa-with this new design twin speaker system incorporates a built in amplifier with separate adjustable volume controls for each speaker unit.

Create Demonstrate 160-05-105mm (Halland)

ONLY

### REPLACEMENT POWER SUPPLIES



Genuine Commodore Amiga A500 type replacement Power Supply Unit. Good quality 'switch mode type. Super low price:

ONLY £39.95

Replacement Power Supply for AS90 Hard Disk

## **ACCESSORIES**

MIDI Interface connects to sense port	2 19/91
Virus Protector Ms to last drive in system, protecting all drives.	2 6 90
VIDI-12 Amiga video digeser package no. VIDI-Chrome	£ 110.88
Amiga 500 Dust Cover	2 4.95
Amiga 600 Dust Cover	£ 4.95

### SOFTWARE

The second secon	THE RESERVE AND ADDRESS OF THE PARTY OF THE
Digita WorshorthC 99.00	MR Backup
Kind Words 3	AMOS C 37.50
Protext V5 5	HISoft Lattice C £ 199 00
Home Accounts V2 E 49 00	GFA BASIC Compiler
Deluxe Paint 4	
Deluxe Video 3 £ 84.95	Workbench Management £ 9.95

All life features eing eiti (Ucitiiwa)

É

- asi Access Time & Autoparking
- Disks without independent power supply
- Option for up to 4MB additional easy RAM EXPANSION, using SIM

ONLY £ 229 100Mb MODEL ONLY £329

40Mb MODEL

2Mb RAM Version: ADD £70.50 4Mb RAM Version: ADD £141.00

Reference Add-On Hard Drive 40Mb...£199 100Mb...£299

Incorporating the latest

ZIP DRAM technology,

our External Memory

Upgrade allows the

A500 / A500+ to be

upgraded by up to a further 8Mb of auto-

configuring FASTRAM

US NOW ON (0386) 765500 •

Evesham Hieros

US NOW ON (0386) 765500 •

- and MRBACK UP PRO (backup utility)

- RAM access LED
- RAM test/run switch
- Uses 1Mb 4-bit ZIPS
- Style matched to the A500
- \* Very low power consumption
- Throughport for further expansion
- Compatible with A590 and most other SCSI Hard Drives (please call to check)
- Optional PSU (allows Amiga to power other devices)
- Available fitted with 2Mb, 4Mb, or fully populated with 8Mb

With 2MB fitted...2112.59 with 4MB... £159.99 with 8ME ... £259.99 RTIALLY POPULATED UNITS EXPAND TO BMS WITH 2MS MODULES. AVAILABLE SEPARATELY AT ONLY 689 99 PER 2MS . OPTIO

# MIGA 600

# STANDARD PACK

ONLY £199.99

WILD WEIRD WICKED PACK

Features: Push-over • Grand Prix • Putty • Delux Paint III

12 months on-site maintenance

ONLY £229.99



IDE Hard Disk Controller - Kickstart 2 -1Mb ChipRAM • Accepts Memory Cards

**4MB RAM CARD** 

For any A600.....£189.00

### STANDARD PACE Special Hard Disk Mo Supplied with Evestiam Micros fitted

60Mb Hard Disk Please note that the Hard Disk installation is

EPIC PACK

ONLY £389.99

KickStartWorkbeach 3.0 - Fast 68020 processor • AGA chipset • CPU/DMA expension port - PCMCIA expension sid

£299.99

**Hard Disk** Model

With Evesham Micros fitted 60Mb Hard Disk

£469.99

### **UPGRADE YOUR OWN A600/1200 TO HARD DISK**

Bring the benefits of a Hard Disk installation to your existing Amiga 600/1200 with our easy to fit upgrade.

60Mb kit....£229.00

# A600 1MB RAM/CLOCK UPGRADE

THIS SIMPLE PLUG-IN MEMORY UPGRADE

- Simply Plugs into the A600's trapdoor expansion area
- Increases total RAM capacity of A600 to 2Mb 'ChipRAM'
- RAM Enable / Disable Switch
- Sattery-Backed Real-Time Clock

ONLY £44.99



EXTESTIBITION NEW LATE NIGHT SHOWROOM OPENING UNTIL 7PM, WEDNESDAY TO FRIDAY

# DIGITAL BROADCASTER

**From Digital Micronics** 

TRUE BROADCAST QUALITY, FULL SCREEN, REAL-TIME, NON-LINEAR, VIDEO EDITING SYSTEM

ELIMINATE FRAME BY FRAME RECORDING
ROTOSCOPING
ASSEMBLE & PLAYBACK AT 25 FPS
COMBINE GRAPHICS & VIDEO
FULL MOTION JPEG TECHNOLOGY
INCLUDE VIDEO IN YOUR ANIMATIONS
INCLUDE ANIMATIONS IN YOUR VIDEOS
SMPTE TIME CODE READ & WRITE
720 x 486 DIGITAL RESOLUTION
COMBINES WITH AD516 / STUDIO 16

# HI Quality Version Available on AMIGALAND.COM

8 TRACK, CD QUALITY, DIGITAL RECORDING SYSTEM

RECORD & PLAYBACK SIMULTANEOUSLY
64 TIMES OVERSAMPLING
MULTI-TASKING
SAMPLE RATES UP TO 48KHz
15Hz - 22KHz Response
REAL - TIME EFFECTS
SMPTE TIME CODE SUPPORT
COMBINES WITH DIGITAL BROADCASTER

COMBINES WITH BARS & PIPES PROFESSIONAL 2

PLEASE CALL FOR FURTHER INFORMATION ON THESE AND MANY OTHER PROFESSIONAL AMIGA PRODUCTS.

White Knight Technology 0992 - 714539

Please See Our Other Advert In This Issue For More Products

hough overshadowed in much of the Amiga world by the twin colossus that is Real 3D and Imagine, Caligari has since its release been widely regarded as one of the most elegant modelling programs with an interface which is at the same time easy to use and very intuitive.

Overtaken in terms of power and features by the dynamic duo, Caligari sank from sight outside America for a while, and it is with this latest release that its authors hope to recapture some of the lost ground.

In earlier versions, Caligari offered no 24-bit support, no real texture mapping, and no ray tracing. Caligari 24 does, of course, offer full 24-bit output, but it also has full texture and brush mapping, though ray tracing is still excluded.

The reason for this is that Caligari has always been a solid modeller as opposed to a ray tracer. In effect, this means that instead of going through the very maths intensive process of tracing each ray of



# Neat little



light, deciding how it reacts to materials, and calculating refraction, reflection, and so on, Caligari adds artificial shadows when needed and utilises a range of other techniques such as phong shading to achieve realistic effects.

Though the results will never quite match a full-blooded ray tracing for realism, Caligari is capable of excellent output without the speed penalties imposed by its slower cousins. Animators with no need for mind-bending light bending will therefore find in this package a useful and productive

Opening on a perspective view of a flat surface, the program immediately offers a very different prospect of the 3D world than that which both Real 3D and Imagine take as standard. It is easy to switch to side, front, and top views for a more traditional

eformed and brush mapped with a DPaint 4 file

view of the modelling space, but the essence of Caligari is that it concentrates on working in real time 3D.

Models are created in 3D, edited in 3D, rotated, sized, and moved in 3D, and all as the user looks on, the effect being that once this unusual approach is mastered it becomes natural and easy

I say unusual only in regard to those who have used one of the other major modellers. For new users with no projudices to carry on from other packages, the learning curve could hardly be more smooth.

All functions within the program itself are driven by gadget strips across the bottom of the screen which build up in layers as each set of tools is accessed

When, for instance, the user selects the Tools option from the main menu strip, a second layer containing its own buttons is

# Stevie Kennedy examines Caligari 24, possibly the Amiga's best broadcast animation system

added. The same goes for most of the access buttons, such as Anim and Scene, but to avoid unnecessary clutter, each strip can be individually shut down.

Given enough use, the system of gadget strips works very well, and the option to keep as many or as few open as needed makes the whole workspace very flexible and responsive to each user's way of

### LESS COMPLEX

This is hardly the same level of configurability as offered by Real 3D v2, but Caligari has a much less complex interface and so doesn't depend to such an extent on how much it can be altered from its default

As each gadget is rather thin and the program operates only in hi-res interlace, a decent monitor is an essential for use, and I would have liked to have seen some sort of concession to those who might want to make the menus more readable

Text is black on a grey background, a combination which reduces flicker but which can be difficult to read on smaller

screens. Fortunately, models appearing in the modelling space are clear and well represented, the currently active object highlighted in bright grey while the others are a toned down mid grey.

To avoid confusion when dealing with complex object groups in a hierarchy, Caligari displays the top level of any hierarchy in bright blue when it is the active object.

Hierarchies are formed when two or more objects are joined together to form a group. Just about every finished 3D model ever produced on the Amiga has had an hierarchical structure because using such an approach makes keeping track of all the component parts much simpler.

In addition, the ability to go the topmost level of an object's structure and apply a texture or effect to every object in the hierarchy makes for very fast and efficient

To take an analogy, a leg hierarchy might contain thigh, knee, calf, ankle, and foot objects. How much easier to tell the Amiga to give the leg hierarchy as a whole

### ANIMATION

a set of skin attributes than to assign them to each individual object in turn?

Real time editing is made much simpler by the program's use of the camera as the eve through which the user peers into the virtual world, ensuring that what you see on your editing screen is what you get upon

Other packages enable the user to see the camera's viewpoint, of course, but only Caligari makes it possible to change the camera's position and see in real time how this affects picture composition.

The camera, or "eye" as the program calls it, can be positioned anywhere and scaled to produce pseudo-telephoto and fish eye effects, so there is as much control as available in other programs.

What makes Caligari stand out from the crowd in this respect is the ease with which the camera-eye combination can be thrown around from place to place without the user ever becoming disorientated.

### PRIMITIVE

When it comes to actual object modelling, the program takes a primitive-based approach. At a stroke, any one of 18 primitives can be added to the modelling space, offering a fair degree of extra choice over the usual cube, sphere, pyramid, and so on.

This isn't the only way to create objects, and the extremely easy-to-use extruder will no doubt see a lot of hard service. Selecting this from the Tools strip brings up a flat grid on which the user draws a polygon, then chooses to either create it as a flat ubject. extrude it to length as a 3D object, or use the lathe on it, which is just another way of saying the object is swept around on an axis or edge chosen by the user.

My only gripe concerning this section is that to change settings for, say, the angle around which a polygon is swept, one must go through two other sub-strips, even though a small redesign would see the relevant settings options fit snugly onto the main extruder control menu.

Other than this, though, extruder is a powerful, easy to use tool which adds greatly to the program's productivity

In combination, Caligari's range of primi-



Another cubic mapping, this time taken from the objects point of view

tives and its well implemented extruder can supply sound foundations and the building blocks for a scene, but without its point editing and new organic deformation features, the program could not have produced the stunning imagery we've used to illustrate this article.

Probably the biggest talking point for this release is the organic deformation feature, so-called because it enables the creation of more natural objects through taking rough objects and changing their shape to

whatever form the user requires, is inclu-sion poosls the program societ creation facilities to a new plane, and does so with remarkable ease of use.

Located on the point editing strip, deform can be used on whole objects or, if the user wishes, individual faces. By simply selecting an object or entering point edit mode to activate a single face, a quick stab at the deform button throws a bright yellow grid box around the area to be deformed.

Dragging the left or right mouse buttons while the grid is on screen increases and decreases the number of slices through the three axes, and each point of intersection thus created can then be selected for use as a control point.

What you see on screen is what you get on rendering

Multiple selection of points or the quick selection of a complete slice to possible, so the user should find it easy to choose exactly the deform to suit his or her needs.

Once a control point or points is selected, all normal move, scale and rotation tools can be brought to bear on the surface of the object, resulting in superb flexibility of control over the final shape.

If more facets are required to ensure that the more organic result is smoother, the OnadDiv button instantly divides the selected face or object to create more faces.

The one downside with such operations is that speed can be crippled, even on the A4000, but turning off real time helps greatly, if only by sacrificing real time 3D

Instead of a representation of the object, a ghosted box appears whenever an editing option is used, enabling the quick sizing or positioning of complex objects without the hassle of screen refreshes. A compromise, perhaps, but one which works well.

Other useful editing tools include the slice option, which uses a real-time representation of a cross section through an object to make the cutting up of objects easier.

By selecting points on opposite faces of any object, the user creates the cross section, highlighted as usual in blue, then moves it through the object using the mouse button. The section changes shape and size as it moves to reflect the cut of an invisible razor.

When satisfied, clicking on separate will take the slice out of the parent for use as an object on its own, and the original object itself can be split along the slice using the decompose function.

This is a fairly well implemented feature, but I would have been much happier to have seen the sort of Boolean cutting tools available through Real 3D or the Imagine Slice feature which enables the use of one object as cutter and another as the target.

Caligari can offer no equivalent to these more powerful slicing and cutting tools, a fact which lends it a handicap in the object creation stakes.

However, the main meal on any Caligari menu must be the scene creator, from where the Broadcast Render module and the redesigned anim section can be accessed. It is here that lights, textures, and animations start to come into their own and where the real power lies.

### TEXTURES

A strange fact about Caligari is that it does not allow the user to assign textures and other advanced attributes until entering the Broadcast Render menu.

This is annoying at first having used other packages, but it makes sense to leave factors which affect only the final rendered appearance until after modelling is complete, and quickly becomes accepted.

Another weird method is that by which lights are positioned. Unlike most other packages, Caligari does not represent lights in the modelling space using symbols or small objects, preferring instead to give them their own menu strip and creation screen.

By accessing the appropriate menu, the user can put lights anywhere and jump to the viewpoint from that light to judge at first hand how well it illuminates the scene and at what angle it strikes an object.

This is very handy, but the method's advantage is wiped out by the placement technique, which is simply to type the X-Y-Z co-ordinates in at three string gadgets, then check to see if the light is in the correct place. Very clumsy

No other part of the Caligari environment suffers from this awkwardness, however, a fact which is especially evident in the main Broadcast Render screen. Here one can change just about every factor governing the final appearance of an object, from its diffusive properties (tendency to show shiny highlights) to its transparency and any tex-

# Virtual competition

There are no other major solid modelling packages available on the Amiga, unless Real 3D, which can perform solid modelling but is most usually employed as a ray tracer, is admitted in evidence.

Caligari's main rivals are therefore packages which mostly work on different principals, but the market in which they operate is the same so the comparison is valid.

### Real 3D v2

Now offering just about every effect and facility under the sun. Real 3D is an incredibly complex, powerful package capable of stunning results. It is, however. unwieldy with a fairly steep learning curve, and certainly fails in the user-friendliness and ease of use

For superb and realistic results. Real 3D v2 is a good bet, but is perhaps better suited to dedicated full-time

users and artists than those in need of quick results.

Supplier: Alternative Image Phone: 0533 440041 Price: £350

### Imagine 2.0

Now overtaken by Real 3D in terms of power features. Imagine is still a strong contender if only because it offers its own unique animation facilities. The Action Editor is much more flexible than Caligari's timeline system, even though clunkier in use and bereft of control over object hierarchies.

In terms of the power of Imagine to animate, its special effects, animated fexture maps, and so on give it a distinct edge. Caligari wins on ease of use, but there is less of a gap

between these two products as that between Real 3D and

Supplier: First Computer Centre. Phone: 0532 319444 Price: £120



Two cubic maps applied in the same scene makes rendering a bit of a drag

tures if may use.

Most of this is presented through the Attributes requester. Shading techniques are controllable from here, with a choice of faceted, gourad, or phong shading on offer combined with textures, environment mapping, and more.

Environment maps can be a pain to use if the simple horizon simulating 1D maps are discarded in favour of the more realistic "cubic" type. These are either loaded from the short list of pre-supplied examples or built up from within a scene and are designed to form an all-round view of scene itself to be reflected in shirty materials such as glass or chrome.

By selecting an object in a scene as the viewpoint - usually the shiny object on which the map will be reflected - the user chooses to create a new cubic environment and the Amiga toddles off to render six views taken from that viewpoint. The process is a very clever but time-consuming one, and the results can sometimes be unpredictable, but when successful the final image is worth the wait.

### SHINY OBJECTS

One disadvantage is that if there are two or more shiny objects in a scene, an environment map must be created specifically for each one unless they are all to reflect the scene from the wrong viewpoint. This restriction makes it impractical to create such scenes, a restriction which some users might find irksome

Having raised the point, no review would be complete without a note on the speed at which complex scenes are rendered once the preliminary messing about with environments and other scene-setters is accomplished.

As no ray tracing is taking place, images appear at a very respectable pace, much faster than one of the dedicated ray tracers could manage, so although rather clumsy for single image generation, Caligari's method of using environment maps to simulate reflections saves a great deal of time when many frames are generated.

An important downside is that a Cubic

environment is a snapshot of a scene taken while all objects are in a certain position, so or keep their limitations well in mind.

arrived at the meat and drink of Caligari's

Everything in this package aims the user at the target of producing animations quickly, easily, and effectively, but until this release the program was less than replete with animation tools.

ward a huge leap in terms of animation facilities and gives it a distinct advantage over many other packages. Simply speak-

displayed on the timeline, making it possi-

animations involving shiny objects will have to either forego Cubic environments Speaking of animations, we seem to have

The new Anim menu takes Caligari fer-

ing, it all comes down to a matter of timing.

By selecting the Time gadget, the user can summon a graphical timeline of all objects in the scene, a method which seems to have borrowed a few tricks from Imagine's Action Editor. All key frames are





ble to simply click and drag to either completely re-schedule an event or dispose of it

To control objects, one need only move them to a new position, attitude, or whatever, and confirm the changes using the Set button, thus creating a new key frame. In addition, the program's unique "channel" approach means that each object can have as many channels of animation as the user requires, and the hierarchy support enables the animation of all individual components

For example, a helicopter can be made to ily apart in pieces while the

rotor continues to spin simply by selecting each of the exploding objects in the chopper's hierarchy and assigning them their own movement paths.

All objects which are part of the hierarchy and do not have different paths assigned will carry on as normal, so it is easy to make a rotor spin and let the hierarchy worry about

it sticking to the top of the helicopter as it moves. In all, Caligari's hierarchical animation system, though lacking the special effects offered in other packages, is extremely easy to use and deceptively powerful. When used to produce quick and effective TV graphics it is unrivalled for the speed and ease with which a relatively inexperienced user can get things moving.

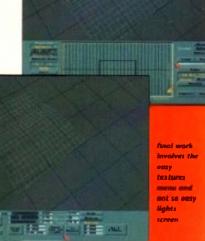
Not the best of programs for the most realistic results, and still lacking some of the

high quality effects found in its main ray tracing rivals, Caligari is nonetheless a much improved product and one which deserves to do well.

Once the joys of working within its very accommodating environment have been sampled, few will want to animate in any other way.



works a treat and is easy to use



# THE BEST DEALS, THE LATEST AMIGA TECHNOLOGY

### AMIGA 600 WILD, WEIRD, & WICKED PACK



Comprising the Amiga 600 computer with 1 Mb RAM, 3.5 inch 1 Mb floppy disk drive PLUS mouse, manuals, Workbench 2.0, all connections to your TV set, and the following FREE software:

- MICROPROSE GRAND PRIX
- SILLY PUTTY
- PUSHOVER
- DELLIXE PAINT III

### all for £319.95 inc.

### AMIGA 600 EPIC & LANGUAGE LAB PACK

Comprising the Amiga 600 computer with 1 Mb RAM, 20 Mb hard disk drive, 1 Mb 3.5 inch floppy disk drive, PLUS mouse, manuals, Workbench 2.0, all connections to your TV set and the following free software:

- EPIC MYTH ROME ● TRIVIAL PURSUIT (in 3 languages!)
- DELUXE PAINT III (painting package)
- AMIGA TEXT (Word Processor)
- FIVE LANGUAGE DICTIONARY



all for £449.95 inc.

and you can add more value, either games or

### AMIGA 600 DELUXE PAINT & GAME PACK

Complete Amiga 500 computer/with MERAM 95 disk Q269 95 Inc.

### **AMIGA 500+ CARTOON CLASSICS PACK**



Comprising the Amiga 500 plus computer with 1 Mb RAM, 18 key numeric keypad 1 Mb 3.5 inch floppy disk drive, PLUS mouse, manuals, Workbench 2.0,

all connections to your TV set and the following free software:

- LEMMINGS
- THE SIMPSONS
- CAPTAIN PLANET
- DELUXE PAINT III

all for £269.95 inc.

...... and you can add even more games or accessories with our exclusive added value packs detailed below.....

# ADD A

# **AMIGA 1200**

### THE NEXT GENERATION AMIGA

- True 32 bit computer with a 68020 processor running at a blistering 14Mhz, 5 x faster than previous Amiga's!
- 2Mb of 32 bit memory expandable via smart card slot
- New AA graphics chips give maximum 262,000 colours on screen from a palette of 16.9 million!
- Styled similar to Amiga 600, but Includes numeric keypad
- Compatibility mode for existing Amiga programs, whilst new releases will feature Amiga 1200 enhancements
- Includes new Workbench 3.0 operating system

Amiga 1200, only £369.95 inc.

### AMIGA 1500 PACK

Comprising the Amiga 1500 computer with separate system unit and detachable keyboard. 1Mb RAM and two 3.5 inch dek drives, nine internal expension stots, Workbench 2.0 and Kickstart 2.0, and the following free software:

THE WORKS Platinum Edition
(Word Processor, Spreadsheet, Database)
HOME ACCOUNTS OF LIXE PAINT

● ELF ● TOKI ● PUZZNIC ● GET THE MOST OUT OF YOUR AMIGA BOOK

all for £539.95 inc.

### **AMIGA 3000**

Comprising the Arriga 3000 computer with separate system unit and detachable keyboard, fast 25Mhz processor speed, 2Mb RAM and one 3.5 inch disk drive, latest version 2.0 machines, available with the following hard drives:

52Mb hard drive £1299.95 105Mb hard drive £1479.95

1935 SVGA monitor £259.95
1960 multisync monitor £419.95

### **AMIGA 4000 MULTI-MEDIA SYSTEM**

New avespme multi-media platform (salving 68040 32 bit processor running at 25Mhz, new AA chipset with 16.9 million colours, 6Mb RAM and high density 3.5 inch disk drive, latest Workbench 3.0 operating system

£1999.95

A4000 120Mb HD **£2199.95** 

### **CDTV ENTRY PACK**

CDTV player complete with remote controller, plays audio CD's, CD audio plus graphics disks, and Amiga interactive titles, comes complete with the following software:

WELCOME DISK

HUTCHINSONS ENCYCLOPAEDIA

• LEMMINGS

(the award winning game)

all for £369.95 inc.

# AMIGA CDTV PACK

MULTI-MEDIA SYSTEM Combination of the CDTV

and an Amiga compatible computer including CDTV player, black Amiga keyboard, infra-red mouse,

3.5 inch black Amiga disk drive, Wokbench disks and remote controller

all for £469.95 inc.

# ADD MORE GAMES, MEMORY OR ACCESSORIES WITH OUR VALUE ADDED PACKS!



# AWARD WINNERS PACK

● KICK OFF 2 ● PIPEMANIA ● POPULOUS ● SPACE ACI

ONLY £10 EXTRA!

PHOTON PAINT

GFA BASIC

ONLY £10 EXTRA!

# ACCESSORIES PACK

Essential extra s including, Zipotick Super Pro joystick, 10 blank 3.5 inch disks, ockable 40 capacity disk box high quality mouse mat and dust cover

ONLY £20 EXTRA!

EXTRA 1Mb RAM

A500 ADD £30

ADD £35

FUTURETECH

Orderline & enquiries telephone (0908) 211665 open 7 days a week 9am-7pm

# .....AND WE DELIVER FREE, DIRECT TO YOUR DOOR!

### PHILIPS 8833 MKII COLOUR MONITOR



The best selling monitor for the Amiga giving a crystal clear colour display together with fantastic stereo sound!

- FREE LOTUS TURBO 2 GAME
- FREE AMIGA CABLE
- 12 MONTHS IN-HOME SERVICE
- OFFICIAL UK PRODUCT

### all for £179.95 inc.

tilt & swivel stand £10.95 dust cover £3.95

### **PRINTERS**





printers include ribbons & Amiga cable!

1200 9 pin mono	£109.95
Cezen SWIFT 9 pin colour	£169.95
Cazan SWIFT 200 24 pin mono	£194.95
Cazan SWIFT 200 24 pin colour	£214.95
Citizen SWIFT 240 24 pin mono	£244.95
Cazen SWIFT 240 24 pin colour	€264.95

LC20 9 pin mono	£119.95
EW Star LC100 9 pin colour	£149.95
Mar LC200 9 pin colour	£169.95
EVI Star LC24-100.24 pin mono.	€ 84.05
L024-200 24 pin mena	£199/95

LC24-200 24 pin colour	£239.95
XB24-200 24 pin colour	£359.95
tar SJ48 inkjet	£194.95
tar Lanerjet 4 laser	2609.95
tar Laserjet 4 postscript laser	£949.95

Canon BJ10ex inkjet	£219.95
Canon 8J20ex inkjet inc. s-feeder	£309.95
arron BJ300 inkjet	2369.95
anon 8J330 wide carriage inkjel	£489.95

P	Desiget 500	mono inkjet	£324.95
P	Desiget 500	colour inliget	£449.95

### heet Feeders

SWIFT auto sheet feeder	£27.99 £74.99	
Itar LC20 auto sheet leeder	€57.99	
LC100 auto sheet feeder	259.99	
Mar LC200 auto sheet feeder	€59.99	
LC24-100 auto sheet feeder	€62.99	
LC24-200 auto sheet feeder	€62.99	
SJ48 auto sheet feeder	€49.99	

anon BJ1	Dex auto	sheet le	eder	€49.99
----------	----------	----------	------	--------

GENUINE	MC	ONO	COLOUR		
RIBBONS	3 eno	2 xiz	2 and	Sex E	
120D	3.95	20.95	-	-	
SWIFT series	4.45	21.95	15.95	92 95	
LC10LC20LC100	4.25	22.95	5.45	30.95	
LC200	5.45	30.95	11.95	63.95	
LC24-200	6.45	36 95	12.45	67.95	
SJ48 Canon BJ	15 45	89.95	-	-	
P Deskiet	21.45	125.95	25 45	149.95	

### HARD DRIVES

GVP HARD DRIVE 8 for A500 & A500 plus	52Mb drive £	120Mb drive £
with no RAM fitted	329.99	429.99
with 2Mb RAM fitted	369.99	469.99
with 4Mb RAM fitted	409.99	509.99
with 8Mb RAM fitted	489.99	589.99
GVP A530 COMBO, a hard drive and		
68030 accelarator for the A500 & plus	52Mb drive £	120Mb drive £
with 1Mb RAM fitted	659.99	750.99

# 68882 maths co-pro for A530 2 218 95. PC-286 enturator for GVP VIDA 2 1 68 es

699.99

979.99

799,98

869.99

1039.99

with 2Mb RAM fitted

with 4Mb RAM fitted

with 8Mb RAM fitted

GVP HARD CARD 8, a combined hard drive			
and RAM board for the A1500 & A2000	52Mb drive £	120Mb drive £	
with no RAM fitted	279.99	409.99	
with 2Mb RAM fitted	319.99	449.99	
with 4Mb RAM fitted	359.99	489.99	
with 8Mb RAM fitted	439.99	569.99	

### **CDTV ROM DRIVE**

Allows your Amiga to play	only
CDTV titles and music CD's.	
Models for 500/+/600/1200	£269.99

### **FLOPPY DRIVES**

Cumana 3.5 inch 1Mb drive	€49.95
Roctec Roclite 3.5 inch 1Mb drive	259.95
Power PC880E 3.5 inch 1Mb drive	£47.95
Power PC880B 3.5 plus BLITZ	€57.95
Power PC880B 3.5 plus X-Copy	£72.95

### MEMORY

	_
512K RAM exp. for A500 & plus	£17.95
512K RAM & clock exp. for A500	\$22.95
1Mb RAM exp. for A500 plus	€34.95
1Mb RAM exp. for A600	€32.95
1Mb RAM & clock exp. A600	€37.95
2Mb RAM smartcard A600 & 1200	£114.95
4Mb RAM smartcard A600 & 1200	£174.95

### SIMM BOARDS

_	_	_	_	_	_	_	_
1 Mb	SIMM	suitab	le for	GVP	HD8	etc	£21.99
4Mb	SIMM	suitab	le for	GVP	HD8	elc	99.993
1Mb	32bit 3	SIMM 1	or G	/P Co	mbo	etc	251.99
<b>4Mb</b>	32bit :	SIMM	or G	/P Co	mbo	etc	£151.99

### **ROMS & SHARER**

Kickstart 1.3 ROM	£23.90
Kickstart 2.0 ROM	€34.99
Keyboard switchable ROM sharer A500	£16.99
New! A600 ROM sharer	\$28.99
Official Commodore V2.0 upgrade kit,	
inc. V2 ROM, V2.0 disks & manuals	€79.99

### **CUSTOM CHIPS**

CIA 8520A I-O chip	£7.99
Super Denise custom chip	£21.99
Fatter Agnus 8372A custom chip	£30.99

### **SCANNERS**

Power B&W scanner, 64 greyscales, u	p
to 400 dpi, editing software inc.	€94.9
New! Power colour scanner, 4096	
colours, up to 400 dpl, software inc.	£229.9

### MICE, TRACKBALLS

Naksha upgrade mouse inc. freebies	£23.99
Squik quality replacement mouse	£11.99
Golden Image mega mouse	£12.99
Golden image crystal trackball	99.862
Zydec trackball	€29.98
High quality 8mm mouse mat	£3.49

### 3.5 DISKS, BOXES

10 3.5 1Mb bulk 100% certified	£4.95
25 3.5 1Mb bulk 100% certified	£10.95
50 3.5 1Mb bulk 100% certified	£19.95
100 3.5 1Mb bulk 100% certified	£37.95
500 3.5 1Mb bulk 100% certified	£174.95
Box of 10 branded TDK 3.5 1Mb	£7.95
Box of 50 branded TDK 3.5 1Mb	€37.25
Box of 100 branded TDK 3.5 1Mb	269.95
10 capacity 3.5 disk box	£1.49
40 capacity 3.5 disk box - lockable	£2.95
80 capacity 3.5 disk box - lockable	€4.95
500 3.5 disk labels	€5.95
1000 3.5 disk labels	28.95

### JOYSTICKS

Quickshot II Turbo	28.95
Quickjoy Jetfighter	210.95
Quickjoy Topstar	£17.95
Quickloy Superboard	£16.95
Zipstick Super Pro autofire	210.95
Competition Pro autofire, burstfire	£12.95
Voltmace Delta 3A analogue	€7.95

### **CONTROL CENTRES**

View centre, manifer stand only;	
A500 & A500 plus version	\$24.95
A600 version	€20.95
Control Centre, monitor stand & shelf:	
A500 & A500 plus version	239.95
A600 version	€34.95
Super Control Centre, monitor stand &	
two shelves	
A500 & A500 plus version	£54.95
ARM version	\$40 Q5

# We offer you

- Free delivery in the UK
- All prices include VAT
- Price match
- Computerised ordering
- Staff with 10yrs experience
- Free catalogi
- 12 month warranty on all products (in home service or Amiga's and Philips monitors
- Free collection of product in warranty period, if necessary

### How to order

Call our orderline shown below if you have a credit or debit card, or if you have any queries before you purchase. Be ready to quote your card number, expiry date and your name, address and contact telephone number.

OR, send your order into us at the address shown below, together with your personal cheque or a bank or building society draft made payable to. Futuretech Consumer Electronics Ltd. Please state your requirements clearly, along with your name, address and telephone number.

### **FUTURETECH**

Unit 3, Frederica Caldecote Street MILTON KEYNES MK16 0DD

Telephone (0908) 211665



Process and advectorations are subject to change without prior hostication. It. 8 O E. Goods are sold subject to granted by and are not subplied on a mail basis. Personal chiques regular 7 days to pour reach is Fallumeter Comunity Elections.

CALL US NOW AND ASK FOR YOUR FREE AMIGA CATALOGUE!

FUTURETECH

Orderline & enquiries telephone (0908) 211665 open 7 days a week 9am-7pm

### Citizen Swift 90c



of speedy 9-pin dot matrix printers, offering both standard and cheap golour options. For such a cheap effort, the Swift 90c has a surprisingly large tootprint. Still the top notch sheet leader has been enhanced again, though making it slightly less convincing if you ask me, but it never did jam, just gave the paper a hard time going round.

There's automatic sheet feeding which is a bit of a novelty at this end of the market, but a tasty feature nonetheless, and the traditional control panel has been given something of a going over. Instead of an LCD display like its more expensive predecessors, or cheap, tacky buttons and lights like everything else at this price, there's the sliding button and label menu system

Two sliders move in two menu sockets, and as they do selectable options appear in four windows with buttons alongside. It's peculiar to say the least, but it works. even if does take a little while before you know how to get to everything on the menu.

For all that this is the Swift range, and that 9-pins have been traditionally fast, the 90c isn't the guickest 9-pin you'll ever see, with a top speed of only 240cps - and that's using the ropey High Speed Draft font.

Still, if you want to print out listings or something it'll do the job. What is really surprising is the quality of the 45cps NLQ fonts. While big images or curves invariably look jagged, standard text output is pretty neat, and is even better than the output of some 24-pin machines I could name

There's bad news in the size of the printer buffer, which is a measty 8k, but good news in that Citizen supports all its printers with drivers for the Amiga - which saves you from having to go hunting for PD drivers as is usually the case

The only difference between the standard 90 and 90c is that the latter has the colour ribbon option built-in, and with those drivers available direct from Citizen

you'll be able to make use of the colour option very easily

The Swift 90 and 90c are sophisticated 9-pin printers, which may seem a contradiction in terms. but the features and output do belie the number of pins on the print head

abcdefghi

Gubbins, gubbins, Gubbins, gubbins, gubbins Hello and welcome to Amiga Computing from Europress

# **Epson** LO-100

It won't be long before the 9-pin market has been completely crushed from existence by the weight of budget 24-pins. They don't cost much more and the print quality is miles better. Witness then the Epson entrant to this market.

Where traditionally the Epson numbers game had been headed upwards, an about turn has resulted in the LQ-100, and possibly the most normal, and dull, looking printer in their range.

Looks can however, be misleading, as

Type: 24-pin dot matrix

RRP: £210

Speed: 167cps draft,

60cps LO

Emulations: Epson PS/2

Typefaces: Draft, Roman, Sans Serif, Courier, Prestige,

Script

Buffer: 11k

beneath that extremely minimalist - no confusion spared - front panel, you suddenly realise that you can't see into the machine at

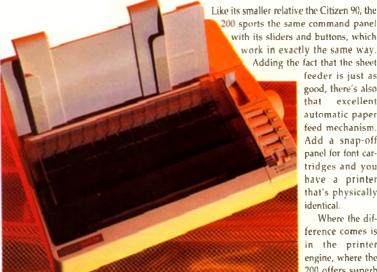
# Prints

Duncan Evans courts a range of low cost dot matrix, inkjet and laser printers in search of the perfect partner for his Amiga

ture on the shopping list is a printer. The trouble is which type - never mind model - do you go for? Will a 9-pin dot matrix suffice or do you need the speed and quality that a laser can offer? With prices of high-end machines falling there really is no need to look to a 9-pin dot matrix for your printing needs unless your budget really is restricted or you're looking to print lots of text, like listing for debugging programs. Twenty-four-pin printers are slower but much better quality and you get decent graphics albeit at a pedestrian pace.

For anyone who is going to print predominantly graphics then an inkjet is a much better idea, and if quality, speed, and graphics are the three main areas of concern it's time to take a look at some of the inexpensive lasers now appearing on the market.

# Citizen Swift 200



Adding the fact that the sheet feeder is just as good, there's also that excellent automatic paper feed mechanism. Add a snap-off panel for font cartridges and you have a printer that's physically identical.

Where the difference comes is in the printer engine, where the 200 offers superh all, and that the sheet feeder is in fact located in the bottom of the front.

This slides out to reveal a 50-page single sheet feeder, which is something of a novelty on a dot matrix printer. It then accepts the paper and slides back in again.

### CONFUSION

While the front panel does allow you to swap between the seven built-in fonts (two of which are scalable), it is also an exercise in confusion and requires guesswork or a trip to the manual before you are completely familiar with it.

Another bizarre feature of this model is that you can prop it up on its end, though just why you'd want to make your printer unstable I really don't know.

As usual, for an Epson ES/P 2 printer the output quality is top notch with finely curved lines and delicate text. The LQ-100 may be more rough and ready than the others in the range but it shares the same printing quality mechanisms.

Speedwise it's still pretty average because while it was nippy at 60cps in LQ mode it was also slow at 167 cps in

Expansion possibilities are limited, since there is no colour option, but considering the absurdly low price of this model it does



lend weight to the argument that the budget 24-pins have already killed the 9-pin market off

### Star LC-200

While your average Star printer wouldn't win any beauty contest awards, they are usually very competitively priced. Cheep in other words. The LC-200 is no exception, offering bland looks, decent 24-pin performance, and a cheap route into colour.

Having become used to Star printers being particularly unpleasant looking, the curved styling of the wide front area of the LC-200 was slightly refreshing. It looks good for a Star, but then that isn't saying much.

The single sheet feeder slots neatly over the tractor, and there is a choice of exit holes for paper, including, would you believe, the underside,

The actual feeder is pretty good. though there's a slight tendency for



hit the feed hole if you aren't careful. It isn'i particularly bad, but it does occasionally happen.

You know when the paper is in. though, because when it prints the LC-200 makes a fair old racket, especially printing graphics when it starts to

Controlling the printer itself is easy enough with the front panel being an old-fashioned buttons and lights Job. There are four LQ typefaces, and quite decent ones they are too, as well as the draft typeface. If you're printing from software that doesn't control the printer fonts then this is worth bearing in mind.

Quality wise it ain't bad, but neither is it brilliant, if you're looking for a workhorse printer, rather than a stallion, and want a bit more than 9-pin crudity, then this could be the answer.

### Type: 24-pin dot matrix RRP: £259 Speed: 225cps draft, 56cps LQ Emulations: Epson FX850, IBm Fonts: Draft, Sans Serif, Courier, Orator, Script Buffer: 16k

# charming

24-pin quality, and has a colour option, but at a higher LQ speed (60 cps) than that of the 9-pin version. That said there is no high speed draft option and what you do get isn't so much Swift as not slow

OK, so the control panel is definitely much cheaper than the LCD panel on the original Swift series, but it's also more sophisticated than all the other printers in this price range, and while it may not be the quickest printer you'll ever see it gives some of the best output.

Large black areas are a bit greyish, but curves and jagged edges are well printed and standard characters come out very well.

The 200 also has the selling point that while it may sound like a dentist's operating theatre, it also sounds as if the torture is happening some way away. The noise is pretty horrible, but muted, especially if you use the quiet print function.

Quality wise you're talking better than either Star, and pretty much even with the Epson LQ-100 - although the larger characters are handled much better by the Swift.

If you're looking for a best buy in this article, the Swift 200 with its six LO fonts, cheap colour ribbon option and high quality output is it.

Type: 24-pin dot matrix RRP: £259 Speed: 180cps draft, 60cps LQ Emulations: Citizen 200, Epson LQ, IBM Proprinter, Fonts: Roman, Sanserif, Orator, Prestige, Script, Courier plus Courier Draft Buffer: 8k (32k and 128k options)

# Fujitsu DL1150

RRP: £365

Type: 24-pin dot matrix

Speed: 200cps draft, 60cps

Emulations: Pujitsu DPL24C,

Fonts: Courier, Pica, OCR-

B, Prestige Elite, Boldface

Epson LQ-2500/2550, IBM Proprinter XI 24

PS, Dutch PS, Swiss PS.

Non-LQ: Correspondence,

speed Draft

Buffer: 24k

Compressed, Draft, High-

The first impression of this offering from Fujitsu is that it's a giant toaster. It's almost Epson-like in its protruding upright design, especially since bits of the light plastic casing snap off to receal the angularl nounted prints

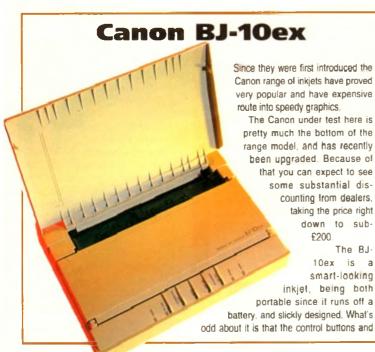
Full marks for strangeness, unfortunately nil points for the sheet feeder which is tripe - it's poor quality and there are no guiding arms to aim the paper so expect misaligned paper unless you use the tractor feed.

Still, there are a number of nice looking LQ fonts built-in, which are easy to get at from the simplistic front panel.

Performance-wise it isn't particularly noisy, is medium pace at 60cps in LQ mode and has a decent size printer buffer for those longer text printing jobs. It also has a good range of emulations, though the Epson one is not the most common you could ever see

Print quality is potentially pretty good since those curves and jagged lines are nicely smoothed, but larger areas of black tended to break up, and that's even accounting for the fact that the ribbon on the review machine had seen better days.





labels are presented sideways on and down the front. Expect to keep twisting your neck until you memorise their

Paper feeding is a bit weak, since you can either stick a sheet in the top and hope it doesn't become misaligned as it feeds, or use the underside feeder and have to balance your printer precariously on its end - not recommended.

Once in there though, it doesn't make much noise when printing, and it has to be said that 83cps in the LO modes is quicker than a number of inkjets and

most 24-pins. The draft mode is disappointingly the same speed, so there's no point in trying for a quick preview of a page

Supplied by: Gasteiner

Technologies (Tel: 081-

130e, Epson LQ-510, IBM

Type: 360 dpi Inkjet

● Emulations: Canon BJ

Fonts: HQ, Economy

Proprinter X24e

Buffer: 37k

365 1151)

RRP: £299

Speed: 83cps

Quality -wise the results are impressive for such a cheap machine. Text has little of the traditional spidery quality associated with inkjets and instead is nicely rounded and formed, with just a little waviness giving the game away that this is an inkjet not a laser.

On larger character and graphics the results are still as good, though large areas of the same shade tend to be a bit wishy washy.

While not the sturdiest of machines, all the Canon series offer excellent value for money and pretty good quality of print, and if you go for a BJ-10ex you can expect to pick up a real bargain.

# **Epson** Sylus 800

Type: 360 dpi Inkjet RRP: £379 Speed: 240cps draft, 45cps LO Emulations: Epson ESC/PS 2 Fonts: Roman, Sans Serif. Prestice. Script, Courier, Roman T (PS), Sans H (PS) RAM: 1Mb

The problem with the new range of Epsons is that no two look remotely similar. Equally the control panel and operating mechanisms for each are completely different. Where the Stylus 800 got me initially was that there is no online button. Sacrilege!

However, there is a paper out light, and very usefully, an ink out button. As is usual with the new Epsons, it isn't immediately apparent where the paper goes, and as usual you have a choice.

### **EFFICIENT**

You can either use the manual single sheet hole in the top, or you can fold out part of the 100 sheet tray feeder that feeds paper very efficiently into the bottom of this armchair-styled machine.

The printing takes place under cover of the back cushion part, which surprisingly can be lifted up to reveal not only the print head whizzing along with its 48 nozzles and 360dpi squirting, but also instructions for clearing paper jams, cleaning the head and other useful

Speedwise you aren't getting a competitor to a laser with a modest 225cps, but that's in top quality mode - the Stylus doesn't have any other. It's also much quicker than a dot matrix printer, and most of its competitors.

taking the price right

£200

down to sub-

The BJ-

10ex is a

smart-looking

Compared to inkjets of old the output of the Stylus is very good, especially considering how fast it is. Graphics are quite solid but the characters do have a jagged rather than a spideny look. They aren't as smudgy as the

Canon, merely not as rounded and more pointy than either.

It also sounded vaguely like an ambulance siren far off in the distance while printing, so you're unlikely to disturb anyone while doing so.

The only real similarities between this inkjet and other new Epson printers is that it shares the ESC/P 2 printing language, and of course, the quality of



# **Mannesmann Tally HighPrint**

When is an inkjet a laser? When it's a heat transfer-based ink-sheet printer, of course. I have to admit that I'd never seen anything like this portable printer as far as printing method goes.

Under the bonnet there are two rollers, passing an ink covered sheet

Type: Heat transfer RRP: £799 Speed: 6ppm text, 4ppm graphics Emulations: HP Laserjet II, HP Deskjet Plus, IBm PRoprinter, Epson LO-850 Fonts: Corpora, Swiss, Timor, maths RAM: 1Mb

from one to the other. Using a heat transfer technique the ink is fused onto the paper passing underneath. Basically it a like a laser but with the ink already in place.

As a page printer though it's good to see that it comes with 1mb of RAM as standard, which should be capable of most printing jobs. The HighPrint 730 is a portable printer, one that you can actually use on the move, perhaps if you used a portable or notepad away from your Amiga

It contains a battery unit (150 pages worth) and a charger (eight hours to recharge), and sports rather a strange single sheet feeder mechanism

This is a bit too delicate for my liking, especially if you're going to be moving it around. The paper rests against the back support, is gripped at the entrance to the printer and is stopped from flopping around by a Hannibal Lecter-like

Speedwise it's quite quick. Surprisingly, it's HP Laserjet Il compatible too. The quality of output is somewhat strange, though. The characters are perfectly formed, but faded, as if someone had photocopied a photocopy of a laser printer output. And that's with the paper set as close to the roller as possible.

Still, it's easy to set up and use, has standard emulations, is quick and gives reasonable results so if you are short on space or need to print in different locations the HighPrint 730 is certainly worth considering.



sional look, right down to the square, sen-

sible buttons on the easy-to-use control

and feed them through in one go. Pity

really because it's built in to the front of

panel. While the Deskjet is quite quick, and is miles faster than the Canon, it can't quite catch the Stylus for pace, though it isn't far off. What's good about it is that it's virtually silent, and the quality of output is chunky, but good.

Univers

Buffer. 16k

#### **GOOD GRAPHICS**

If anything, this was the one inkjet that had that tell-tale spidery aspect, which tended to fudge some of the characters, especially when printing small and close together. It's good for graphics though, since it is quick, and the curves and jagged edges on objects are curved and smoothed quite well.

The Deskjet 510 is a bit of a box, but it's an industry standard box, so getting drivers for it is hardly a problem. Now that it's also at a very low price, really not much more than the Canon, this is definitely worth looking at if you have plenty of desk space.

## Star LC-20



Every once in a while there's a commercial success story that has little or nothing to do with the merits of the product involved.

Take the Nintendo Entertainment System for example. A piece of tat that sold by the bucketload.

The Star LC-10 was a similar case in point. It was a dismal 9-pin printer that was a best seller simply for the reason that it was just about the cheapest thing you could buy that printed this side of a piece of potato and a bottle of ink.

The LC-20 is a direct replacement, offering this time three built-in type-faces, plus 24-pin quality, as well as ease of use thanks to a cheap looking front panel and simple internal mechanics.

You can even add a colour ribbon at minimal cost, but you'll need a printer driver from the PD market that are openly advertised in mags like AC to make use of it on the Amiga.

Basically you're looking at the budget end of the 24-pin market with this effort, since the quality is OK. A bit fuzzy maybe, but it's thankfully quieter than its big brother the LC-200, while offering only one less typeface.

Aesthetically the LC-20 is almost East European in its stark functionality, but if you're short of cash and need a 24-pin machine it is at least dirt cheap.



Gubbins, gubbins, Gubbins, gubbins, 1
Hello and welcome to Amiga Computing from Eur

- Type: 24-pin dot
- matrix
- RRP: 6189
- Speed: 185cps draft,
- 45cps LQ
- Emulations: Epson
- FX85, IBM Proprinter
- Fonts: Draft.
- SanSerif, Orator,
- Courier
- Buffer: 4k

#### Genicom

You probably haven't heard of Genicom, much less the anonymous sounding 7040EC. If you ever saw this printer on sale in a shop you probably wouldn't look twice at it either, and that would be a pity, because this is one of the best laser printers under £1,000 that money can buy.

Bold claims indeed, and really from looking at the thing it's quite a surprise to find out how good it actually is. The 100-page sheet feeder on the front isn't particularly good, but it's good enough, and as far as styling goes, the Genicom is immediately reminiscent of the genuine Hewlett Packard Laserjets. It isn't as boxy, being set lower, and the control panel with its eight buttons, four indicator lights and LCD info panel is easier to

Inside the casing the drum (10,000 page life) and toner slot together but can be replaced independently, saving quite a lot in the long run The toner dispenser can also be refilled when necessary.

Emulation-wise this is a Laserjet III-compatible with the addition of edge enhancement technology builtin, and boy does that make a difference!

The quality is superb, even better than that of the low cost Epsons, and while it is rated as a 4ppm printer it pro-

pages quickly enough for any home user.

Whether you need to produce piles of top notch text, or just lots of fabulous graphics and can't be bothered with the slowness and poorer

RRP: £998 Speed: 4ppm

Emulations: HP Laserjet IIIP, Epson PX-850, IBM Proprinter XL24e

Type: 300dpi Laser

Ponta: Bitmap Courier, Lineprinter.

Outline - CG Times.

Univers RAM: IMb

quality of inkjets, this machine certainly does the business.

When your bank balance has recovered from the initial outlay there are a number of upgrade options that are very tempting. The first is a PostScript cartridge, next is a Hewlett Packard font cartridge slot, and lastly you can add extra memory by simply inserting SIMMs onto the

internal tray (which is much cheaper than buying RAM upgrade kits for most printers).

While it weighs a tonne, it packs great features and quality into a small footprint. Also, it has great expansion possibilities if you ever need to go to professional printing level. Look for it at around £700-£750 from dealers, at which price you could do no

ype: 300dpi laser

Emulations: HP Laserjet

IIP, Epson LQ & FX Typefaces: Courier.

Lineprinter RAM: 512k

There are times when you begin to wonder whether Epson have employed a style consultant. The EPL-5000 is another in range of Epson machines that bear no resemblance to each other or indeed any other printer.

A general opinion of lasers is that they are large, heavy and expensive machines - you can see where you're money's gone. The Epson machine eschews a few of those standards by offering a very lightweight printer that's also compact and relatively

Designed like a sports car, the EPL-5000 slopes down at the front where underneath the bonnet lurks the paper feed and storage bay, if you've every fallen over, banged a knee or otherwise cursed at the sheer clumsiness of most lasers, you'll love this.

All the options are available on the front-mounted LCD control panel, with not only the standard selection of features being available, but also useful utilities like how much toner is left and how many pages has the machine printed (useful for knowing when the Epson EPL-5000

drum is past its best)

Internally, getting at the all-in-one toner-drum combo is simple, and the toner cartridge side will last for around 6,000 pages before packing up. A replacement imaging drum costs £117.

For a cheap printer it's also quite speedy at 6ppm and yet the print quality under HP Laserjet IIP emulation is pretty darned good. This is due to Epson's

own curve resolution technology that's built in to anti-aliase jagged edges. The result is a quick laser who's only real drawback is the modest 512k RAM inside - you really need 1Mb if you intend to print a lot of graphics.

Still with only a RRP of £749 you can expect to see the EPL-5000 on streets at around £500, at which price I'd heartily recommend it.



## **JARGON** BUSTING

#### emulation

Most printers, rather than being an odd man out, offer compatibility with the industry standards of Epson on the impact front and Hewlett Packard on the inkjet and laser front. Put simply. your printer will pretend be a more standard variety so that you can use it with the maximum amount of software.

#### typefaces v fonts

Often confused, a typeface is a unique set of self consistent characters. When you get bold, italic or a variety of sizes of typeface it's known as font. A printer offering 14 fonts may have only four different typefaces.

#### printer buffer

A term particularly important in dot matrix printers. This is an area of memory where the information to be printed is stored in the printer while it is currently printing. The bigger the buffer the sooner you get control of your computer back, though many software packages will use computer memory as a buffer so it isn't as vital as it once

#### bitmapped v scalable

Bilmapped or raster fonts are represented by individual dots, which means that if you expand their size then they get blockier. An outline or scalable font is a described font in that it doesn't matter what size it is because it is drawn from an internal description.

#### dpi

Dots per inch. The more the better as finer text and graphics can be achieved. Generally lasers offer 300dpl while many new inkjets go up to 360dpi to try and circumvent the inherent sloppiness of their operation.

#### cps

Speed of text output in impact and inkjet printers in terms of characters per second. All the speed ratings listed here are for output at 10cps. Characters per inch (cpi) is how closely printed characters are on a page. Fifteen cpi is a squash.

#### printer driver

A piece of software that translates information coming from the host software into a language that your printer will understand and so print properly.



# atest



VIIGA technology

# from Gordon Harwood Computers



ndividual product lines! Just look for the

At Harwoods YOU decide the configuration of your NEW AMIGA! Do you want an A600 or A1200? Do you need a Hard Drive, and if so will it be a 40Mb. or an 120Mb, capacity? Would you prefer serious software or a terrific games pack [see our PowerPlay Option]. Would you like to add memory to the computers capacity? Will you need a monitor or printer? Would you like the peace of mind of a LIFETIME WARRANTY?

ARE THERE FOR YOU TO TAKE!!!

AMIGA COMPUTER	SOFTWARE	HARWOODS HARD DRIVE (See page 2)				TIMILE PHILL		
▼ MODEL TYPE ▼	▼ INCLUDED ▼	PRICE FOR STD UNIT	40Mb.	60Mb.	901/16	120Mb.	210Mb.	
A600 Stand Alone Pack (No Software)	NONE	£194.95	£329.86	£379.95	£399 96 SAVE £25	NO OPTION	NO OPTION	
A600 Wild, Weird and Wicked Pack	MICROPROSE GRAND PRIX, PUSHOVER, SILLY PUTTY DELUXE PAINTII	£224.95	£354.95	£404.95	£424.55	£494.55	£594,56	
A600 Epic Pack with 20Mb. Hard Disk Drive	EPIC, MYTH, ROME, TRIVIAL PURSUIT, MULTI LANGUAGE DICTIONARY, ANIGA TEXT WP, DELUXE PAINT III	£294.95		£419.95			£629 %	
A1200 Stand Alone Pack [No Software]	MONE		-	£474 %		£564 %	£664.95	

THERE'S NEVER BEEN A BETTER TIME TO BUY ANY CONFIGURATION A1200!!!

A1200 PROPACK with 40Mb. Hard Drive

AMIGA A1200, CITIZEN 240C and... NOW WITH

£894 % £914 % £944 % £1014 % £1104 %

## LIMITED OFFER 'A1200 PRICE CRASH'

FANTASTIC NEW 68030 OR 68040 MO AMIGA ARE SHIPPING NOW WITH A CHOIC AMIGA ARE SHIPPING NOW WITH MEMORY FROM 2Mb, AND HARD

etails

# MIGA A1200+Printer and More!

**A1200 COMPUTER FITTED WITH** 40Mb\_HARD DRIVE and supplied with. CITIZEN 240C COLOUR PRINTER inc. all leads required and Citizen Print Manager 2 program PLUS: THE ALL NEW TATUNG SUPER HI-RES MONO MONITOR. A1200 Dust Cover, 240C Dust Cover, Mouse Mat, Printer Paper, Labels AND the brilliant Final Copy II W P package.

1200 PRICE CRASH!

Add just £5 and get the Comic Relief Red Nose Game, SLEEPWALKER tool

# stop





**NEW Professional Tatung 14" Mono Super** High-Res Monitor for A1200/3000/4000's.

Are YOU still struggling with a TV or Med-Res Colour Monitor and suffering from Interlace Elicker when using your WP or DTP package etc.? But... don't want to spend £100's on a new High-Res colour monitor? The perfect alternative is...

#### HARWOODS NEW TATUNG MONITOR!

Super High-Res: Up to 1024 x 768 Interloced, 800 x 600 non-interlaced, dark tinted none glare flat screen, works with A1200/4000 [High-Res modes only] and with ALL Amiga A3000 modes (and PC SVGA).
A remarkably LOW priced solution... £149.95

[Don't forget just keep using your existing colour monitor/TV for games etc.]



True Multisync 14" Colour Monitor, For ALL Amigas. only £439.95 |see page 2| Improve your Amiga by up to 4 x its normal speed!!! only £129.95 (see page 3) **REE...** PenPal for a limited time with every Citizen 240 Mono or Colour Printer!

#### Buy a Harwoods PowerPlay Pack for EXTRA ADDED VALUE!!!

Competition Pro 5000 Microswitched Joystick Amiga Dust Cover, 10 - 3.5" Blank Disks, Mouse Mat, Disk Storage Box, plus.

EIGHTEEN GREAT GAMES: Xenon 2 Megablest, TV Sporns Footbell, Hostages, Jumping Jackson, Shr Crazy, Bubble Plus, Bloodwych, FinTin On the Moon, Krypton Egg. Purple Saturn Day, Eliminator, Skychase, Saferi Gune, Lombard RAC Raily, CaptainBlood, Strke Force Harrier Sky Fox II and Lancaster

18 GREAT GAMES for only... £34.95

when purchased WITH AN AMIGA or just £39.96 separately (Note Xenon 2 Megablest, Strike Force Herrier & Eliminator are NOT compatible with A1200/3000/4000 computers!



HARWOODS

#### Buy a Pack & get both **Business & Games titles!**

- ZOOL Great Sonic style game!
- PINBALL DREAMS 4 Tables!
- STRIKER Fantastic Football!
- TRANSWRITE Easy to use Amiga WP!

Super £1 Low...

95 Purchased WITH AN AMIGA. or £19.95 separatel



#### **MULTI-PURCHASE DISCOUNTS**

When you buy more than one hardware item from Harwoods: **BUY A PRINTER WITH YOUR NEW** AMIGA AND GET UP TO £15 OFF BUY A MONITOR WITH YOUR NEW AMIGA AND GET UP TO £20 OFF!

Phone for prices when buying more than one hardware item



#### Why not add EXTRA RAM to your Amiga with one of the following...

Amiga A600 1Mb.

£44.95

PCMCIA CARDS for A600/1200

PCMCIA, 2Mb. £114 QE

PCMCIA, 4Mb.

£169.95

Please note the above prices only apply when upgrades are purchased WITH AN AMIGA!!!

Harwoods are pleased to announce their new "LifeTime" Warranty

Backed by one of the UK's leading independent insurers, you can now add a Warranty to ANY Hardware item from Harwoods. You'll never be faced with an unexpected repair bill again!!! Take out up to 5 Yrs cover and at the end of that period you can

extend cover annually... thus insuring your Amiga for a LifeTime. What's more the warranty IS fully transferable and so will help you to get the best possible price should you sell your computer at any time, 5 years warranty for a new Amiga A600 would cost just £45! This new scheme IS available now even if you have purchased your hardware elsewhere! Phone for details... And stop worrying straight away!!!

Computers



use right away with cable to use right away with cable to your Arriga and a quality viny dust cover FREE OF CHARGETT



PHILIPS CM8833/II MONITOR .14° Stereo Colour, 12Months On-site Werranty plus FREE LOTUS TURBO CHALLENGE 2111

#### PHILIPS PRO 2000 SUPER-RES **TELEVISION MONITOR**

14" Colour, 2000 Character Hi Definition FST Tube, Direct SCART Connector, RGB/AD, Composite Video and Direct Audio Inputs, Full FastText Teletext, Headphone Socke Infra-Red Remote, with Loop Ariel & FREE SCART Land £239.95 WATTS MEGASOUND



**NEW COMMODORE 1084ST** COLOUR 14" STEREO Commodores own MONITOR complete with a built-in Tilt &

Swivel Stand (for ALL Amigas) **NEW COMMODORE 1940 MULTISYNC 14" COLOUR** 

STEREO MONITOR Hor 12 A1200's, 3000's & 4000's] 9 monitor with .39 dot pitch res.

#### **NEW COMMODORE 1942 MULTISYNC 14" COLOUR**

STEREO MONITOR (for 18 A1200's, 3000's & 4000's] Highest res. CBM multisync monitor with .28 dot pitch!!!



CBM 1960 14" MULTISCAN COLOUR MONITOR EPHONE! .28 dot pitch resolution

#### TATUNG SVGA HIGH RES. MONO MONITOR

14" Mono for A1200/3000/4000's in High Res. Mode ONLY. Super quality display ideal for business applications etc.



This is for the REAL ENTHUSIASTIII of 1024x768 (interlaced) SUPERB. See "Stop Press" £439.95

#### amiga

for

Amiga A500 1/2Mb. Amiga A500+ 1Mb. £39.95 Amiga A600 1Mb. £47.95 4500 & A600 RAM expansions inc. Battery Backed Real Time Clock

PCMCIA CARDS for A600/1200 PCMCIA, 2Mb. £119.95 PCMCIA, 4Mb £174.95

GVP1230 40MHz, 68030ec, 32-Bit 1Mb. RAM Version 4Mb. RAM Version £479 95 MICROBOTICS MBX1200 RAM BOARDS

Including Clock & Maths Co-Processor

Including Clock & Maths Lo-F1
14MHz:
OMb. RAM £149.5
1Mb. RAM £214.95
1Mb. RAM £304.95
1Mb. RAM £304.95 SOMHZ: OMb. RAM £324.95 32-Bit SIMM Memo for MBX Boards: 1Mb, RAM £69.95 1Mb. RAM £388 95 1Mb. RAM £69.95 4Mb. RAM £479 97 4Mb. RAM £159 95



iding cable, paper & labels FREE OF CHARGE Dot matrix models come with tailored dust cover e also include specific Arniga driver disks with ALI printers FREE, (with Crizen models you get the excellent, new, improved Print Manager Version2)

ALL Citizens have a 2 Year Warranty!!! Please call for prices on any models not listed

120D+ Mono £129.95 NEW Swift 90 Mono £164.95 NEW Swift 90 Colour £179.95 Swift 200 Mono £209.95 Swift 200 Colour £229.95 Swift 240 Mono £259.95 Swift 240 Colour £274.95

LC20 Mono £139.95 LC100 Colour £154.95 LC200 Colour £204.95 LC24/200 Colour £269.95 XB24/200 Colour £389.95 SJ48 Mono Inkjet £209.95

**8J10sx Mono** £229\_95 BJ200 Mono, 250cps £349.95

Includes AutoSheet Feeder NEW BJ230 Mono, \$399.95 360dpi, 248cps, with facility

BIG

SIZE

to print on BOTH A4 AND A3 size paper!!! Ideal for use with Final Copy II



510 Mono Deskjet £359.95 500 Colour Deskjet £479.95 550 Colour Deskjet £709.95

which offer SUPERB QUALITY PRINTOUT and all have great standard features.

5 ppm, 14 Resident Fonts + 15 TrueType PC Fonts. LCD Display, Combined 300Sht Dual Paper Feeds, 1 Year On-Site Warranty and More...

	,	
LS-5	LS-5EX	LS-5TT
5ppm	5ppm	5ppm
512K exp. to 4.5Mb.	1Mb. exp. to 7Mb.	2Mb. exp. 10 8Mb.
HP Laserjet IIP (PCL 4)	HP L/J IIP (PCL 4), HP L/J III (PCL 5), HPGL2	As LS-SEX = Truelmage (Microsoft Postscript) Apple Laserwriter+
14 Std 15 PC	14 Std + 15 PC + 8 PCL5 (Agfa)	As LS-SEX + Truetype + 35 Postscript
Auto- paraliel & Serial	Auto- parallel & Serial	Auto- parallel & Serial - AppleTalk
	5ppm 512K exp. to 4.5Mb. HP Laserjet IIP (PCL 4) 14 Std 15 PC Auto- parallel	Sppm   Sppm

Resolution 300 x 300 300 x 300 300 x 300 600 x 300 & 600 x 300

Price £629.95 £749.95 £999.95

WITH FREE DUST COVER AND

Phone us now and ask for your FREE Guide to Stars NEW Lasers!!!

#### PRINTER

We only supply original manufacturers GENUINE replacement accessories!!!

	PRINTER	PRINTER TYPE	BLACK BLACK RIBBON SIX PACK		COLOUR RIBBON	COLOUR REBON	
S	CITIZEN 1200+	BLACK ONLY	£4.75 £22.95 N/A			N/A N/A	
	CITIZEN 124 CITIZEN SWIFT 9	BLACK/COLOUR	£4.75	£4.75 £22.95 N/A £4.75 £22.95 £16.45			
B 0	SWIFT 24/24E/22/I STAR LC10/20/100	BLACK/COLOUR BLACK/COLOUR	£4.75	£94.95			
8	STAR LC200	BLACK/COLOUR	£5.95 ZX9 £32.95 ZX9 £12.45 ZXX			£64.95 zxxx.	
	STAR LC24/200 STAR XB RANGE	BLACK/COLOUR BLACK/COLOUR	£6.95 Z24 £39.95 Z24 £12.95 x240; £8.95 Z24 £49.95 Z24 £14.95 x240;			£69.95 x24CL £74.95 x24CL	
æ	STAR SJ48 INK CARTRIDGE	BLACK ONLY	Also compa and Ca	Stylewriter biojet	£15.95ea.		
=			II Las Ba	1. 40/25-10-2			

80 Column 9:24 Pin Printer Colour Kit [ALL models except the Citizen 124 model] DESKJET 500. PAINTJET. £37.95 Black Ink Cantridge £21.95 Black Ink Cartridge Colour Ink Cartridge [Double Life] £20 95 Colour Ink Cartridge £27.95 32K RAM Expansion £13.95 Single Sheet Pape £18.95 [24Pin Crizens except 200/240] 32K RAM Expension [Standard] £20 35 Z-Fold Paper Transparency Film £19.95 Please phone for any item not £49.95 |Citizen 200/240| 128K RAM Expansion shown in our listings [Pack of 50 Sheets] AUTOMATIC SHEET FEEDERS Only ... 684 365
ALL Star /Citizen 80Col models (plasse state type when ordering) ICitizen 200/240



& Free Disk Head

Gesning Kit

ughPort, Extra Long Cable, | External 3.5° Drive Built-In Anti | 3.5° High Density External Drive Virus Checker & £64.95 free Head Ceaner £67

ROCLITE 3.5" ANTI-VIRUS with a FREE Head Cleane

tensive

peripherals & software

DISK **DRIVES** 

Our internal A600/1200 Hard Disk Drives are a igh quality industry standard units manufactured by the recognised Worldwide market leaders leg.Conner, Seagate, Western Digital etc).

EMEMBER: n the price we collect nstall the hard drive est, configure, & return your computer by first ISS COUTIET FREE!!!

SIZE 40Mb... £149.9! 60Mb... £199.95 80Mb... £229.95 120Mb...£289\_95 210Mb...£389.95

Probably the BEST WARRANTY provided with AN A600/1200 Hard Drive upgrade = 12 MONTHS!!! Should you have any problems, we will collect you Amiga, service or replace the hard drive and eturn the unit... COMPLETELY FREE OF CHARG

600HD Owners... Trade up your 20Mb. Drive - Phone us for full details/prices

ôМb. £364.95 £424.95 2Mb. £419.95 £474.95 4Mb. £469.95 £529.95 8Mb. £629.95 £684.95 120Mb

80Mb

120Mb

1Mb. £584,95 £644.95 2Mb. £649.95 £704.95 4Mh. f749.95 £804.95 8Mb. £914.95 £964.95

8882 Maths tloating point tor A530's **E** unit

**能DISK** ≥DRIVES

120Mh

£354 95

RAM 80Mb ر H OMb. £314.95 2 2Mb, £369.95 £404.95 Hard 4Mb. £419.95

**UPGRADES** 

£459.95 8Mb. £524.95 £564.95 HC8 & HD8 Drives add RAM in 2Mb SIMM incrementsts 1Mb - 629.95 4Mb - 6132.95

32-Bit SIMM for GVP Accelera lmin, 2Mb, increments, 32-Bitl 1Mb - £64.95 4Mb - £174.95

NB!!! Hard drives and memory may fluctuate in price due to the \$/E exchange rates. Please confirm prices when orders

# AMIGA

#### **AMIGA**

Colour Pic Plus £679.95 Super Pic £579.95 a K Rombo Vidi 12, V2.00 £79.95 Vidi 12 & Sound & Vision BL MegaMix Master F99 95 200 Amas 2 Sound Sampler & Midi 9-Interface inc. Microphone £74.95 50

200

Audio Engineer Plus Sound Sampler £179.95 Technosound Turbo Sampler £32.95 Miracle keyboard £299.95

Music X full version 1.1 £24.95 Midi interface Sport c/w cable £24.95 Super JAM £79.95 Bars & Pipes Professional £209.95 ZYFI Stereo Speakers with £39.95

separate power supply Clarity 16 £109.95 Stereo Master €31.95

Power Mono NEW V3.0 Hand Held Scanner £109.95 Power Colour Hand Held Scanner £239.95

Sharp JX 100 Colour Flatbed (A6 Paper size) £549.95 ProGen - Perfect high quality entry level true video signal

genlock £64.95 Rocgen Plus £139\95 Randale 8802 inc switch (179.95) and fader controls, A1200

**HQ Microswitched MEGA MOUSE** excellent magazine reviews.

**NEW LOWER PRICE...£12.50** 

HQ Microswitched mouse inc. Mouse Mat & Holder £19.95 High Quality microswitched Optical mouse £28.95 HQ Microswitched Trackball £29.95 Automatic Mouse and Joystick Switcher

GVP 286 PC Emulator for your GVP A500 HD8/530... Simply plugs into GVP drive mini slot (no DOS). Tap into a wealth of PC compatible software for the new low price of just... £149.95

Premier Control Centre & Monitor Plinth with shelf: For Amiga A500 £39.95 For Amiga A600 £34.95 For Amiga A1200 £39.95 Zipstick autofire £11.95 Competition Pro-Star autofire, burstfire & slow motion £13.95

£10.95

Full range of Quickjoy and other makes stocked - please call us for prices 10 Sony 3.5" DS DD €8.95 50 Sony 3.5" DS DD £34.95 Certified Bulk Disks with labels 10 with library case £6.95 50 Disks - only... £24.95 250 Disks - only... £94.95 3.5" Disk Head Cleaner essential

Python 1M

Cume

for reliable loading

#### SUPRATurbo 28MHz Accelerator

Compatible with ALL Amiga A500 and A500 Plus computers. [Amiga A1500 and A2000 versions also available -Please phone and ask for details). Simply plugs into sidecar slot of 500/ Plus or internal slot of 1500/2000's. SPEEDS YOUR AMIGA BY A FACTOR OF UP TO 4 x NORMAL SPEED. Complete vith throughport for RAM or Hard Drive expansions. Ideal for improving print output speeds when using your DTP, graphical or business programs like Final Copyll, Wordworth2, DPaint etc. Note! in order to gain full speed benefits your Amiga must have some FAST RAM (only Standard A500 Plus models DON'T). Any Sidecar or GVP H.D. RAM Expansion you've already fitted is FAST RAM. Please ask for more details if you are unsure

Raw Power x 4 A1200 Performance

## **MOUSE MECHANIC** Fantastic Universal Mouse Cleaning Too Cleans in Seconds, Needs No Fluid Use again & again

Amiga A1200 Insider Guide £14.95 × Amiga A600 Insider Guide £14.95 × Mastering Amiga Assembler £22.95 Mastering Amiga C £18.95 Mastering Arriga Workbench £18.95 Mastering Arniga DOS Vol. 1 £20.95 Sp Mastering Arniga DOS Vol. 2 £18.95 P Mastering Arniga ANIOS £18.95 P P Mastering Amiga AMOS

# AMIGA + x a

mega maths - A level £19.95 ADI titles available for ages 11 to 12, 12 to 13, 13 to 14 or 14 to 15 [pleasa specify] ADI english (not 14to15 age group) £18.95 ADI maths (specify from ages above) £18.95 ADI french [specify from ages above] £18.95 micro science - to GCSF standards £18 95 micro maths - to GCSF standards £18 95 micro english - to GCSE standards £18.95 micro french - to GCSE standards £18.95 micro german - to GCSE standards €18.95 primary maths - 3 to 12's £18.95 compendium six [6 great programs] £27 95 reading and writing course - over 3's £18.95 fun school 2 - Ages 2 to 6, 6 to 8, over 8's £6,45 fun school 4 software: |choose from - £18.95 under 5's, 5 to 7's or 7 to 11's, please specify! noddy's playtime (3yrs and over) £19.95 NEW...Childs Play Activity Centre and £24.95 Word Processor with SPEECH, 2 to 12vrs

## H

SHING Final Copy II Release 2 PROCESSI THE BEST WORD PUBLISHER 园 Kindwords 3 The Publisher MORD Professional Page V4.0 Pagesetter III Mini Office NTEGRATED

**FEATURING** Word Processor, Spreadsheet, Database and Disk Manager... FULLY INTEGRATED!

Homebase ABASE 4 Superbase 2 Personal **Gallery Pictorial Slide** Show/D8 X-CAD 2000 £109.95 X-CAD 3000 £269 95

**Export Draw** Video Master SS 분 Scala 500 Scala Professional

**GB Route Plus** 697.95 Voyager

> Mavis Baacon **Teaches Typing** £24.95 Workbench Upgrade Kit Action Reglay III

ISCELLANEOU SOFTWARE

ANIMATION AND GRAPHICS

Softfaces 1 to 4 F39.95 Softelips 1 to 4 £29.95 Softwood Proper Grammar: £49.95

Grammar cries as Amiga Word Processor Deluxe Paint 4.1 €64.95 Deluxe Paint 4 (AGA) **3D Construction Kit** Adorage Vista Pro 2 Vista Pro 3 Art Department Prof. V2 **DCTV Composite Video** 

Morph Plus £149.95 Quarterback V5 £44.95 Quarterback Tools €54.95 Cross DOS £29.95 Easy Amos F24 95 Amos The Creator €36.95 Amos Compiler £23.95 Amos 3D £25.95 Amos Professional £49.95 New SAS Lattice C V6 £239.95 Devose 3 £54.95 Directory Opus V4 £54.95 Can Do 2 £99.95

GA

Phone for access to our massive competitively priced range of Amiga Software Titles now and

Remember we supply the full range of Macintosh computers from a Classic\* to a Quadra' for personal callets... Telephone: 0773 521606 now!

£49.95

accessories and software including the new MEGA CD Phone us now!!!

COMPARE OUR

**GOLD SERVICE** 

He tire advarts happy to discurs your requirements and answer any queries you may here. And, remember Harvevoly have

ny aspect of the system you have purchased.

IMUM 12 MONTH HARDWARE WARRANTY:

EXPORT Most items are me

VISIT OUR SPACIOUS SHOWROOM

y not take a my out to visit us and see our full advertised, more, available at the SAME COMPETITIVE PRICES if opening times! There's planty of FREE parking nearby, too

ENING

9.00 until 5.00 Monday to Saturday

Wednesdays - 9.00 until 1.00

4-41-6-4

Enquiries & Order Line

How to find us..

BY PHONE: Phone our Order Hoffine with your Access Visa, Mastercard Switch or Lombard, Creditcharge Carro quoting number & expiry date (Most Dixons, Currys NASCR and other store; cands are Lombard Creditcharge and are happily accepted by us).

£49.95 £99.96 £37.95

£39.95 £129.95 £49.95

£19.95 €29.95 £39.95

Art Expression £149.95 £49.95 £59.95

£79.95 £189 95 **Broadcast Titler 2** £169.95

> £54.95 Turboprint 2.0 £34.95

£79.95 €54.95

Grammar checken for ALL those

£79.95 £49.95 €54.95 E54.95 £99.95 £149.95 £529.95 24-Bit Graphics System (PAL Version)

pick up a great deal!!!

Charts & Graphs

The complete range of SEGA hardware,





GORDON HARWOOD COMPUTERS DEPARTMENTA VIC.H9, NEW STREET, ALFRETON. DERBYSHIRE. DE5 7BP

TIMES

TEL: 0773 836781 FAX: 0773 831040

The Closer you look. The Better we look



# Order hotline. 0793 512073









LATEST

HOIS AGA DENIO A1200 VIRUS KILLERS

A1200 LITELS NEW AMOS GAMES EGG BLASTERS

Ultimate cheats and solut PCX\_DATATYPE AGA MAGIC MENU

MAGIC MENU SYSINFO VII OUTERIM A C.E.S. DATABASE V2 GRAMMER CHICKER

GRAMMER CHES KER CTUB MIX 3 ACTRIN REPLAY FOR AND BETTLE RENCH GIF SI IDE-SHOW 2 SLAM BALL (management) WB3 HACKS KIDS DISK I RAGING HORMONI (management)

AMUS IRUIT MACHINE II

THE OFAX FOR OF THE LEAGUE Great

Orest new front trachit ASI MULTIVISION

fissiball management gar ASTEROIDS 92 DEZZY DIAMONDA CHINESE CHI CKI RS ALIES HUNT SPECTRA PAINT 3.2

**EDUCATIONAL** 

QUICE AN YOU CAN DIVISION LOUR STROKE I NGINE

World War 2 by perbank STORY LAND KIDS PAINT Pictures & Letters

LIRI WORK ALPHABET MATHS REFLEX TEST Amore as

TOUR STROKE INGIME
MATHS CALCULATOR
HENRYSTTAS BOOK OF SPLLES
EFARY AND PLAY
STATES TALK
ALI GEBRA II
MATHS WIZARD

tions right as you ca

CLUDEO

Latest version of the speecy enti, new on 2 disks, it runs a treat on A (200, comes supplied with a few speecy games in disk, but can lived up your own soft week five coastile, they I (A) film face a wild held of (401) III of your require is, can use a standard somilier.

PPSHOW 3 0A can display criniched

DECENDER GAME GRAND PRIX MANAGER C470 new management game HYBRID PSYTRUMENTS C472 Catt

FORECASTIJUMINISPREAD □ C474 □ C475 race predictor and a spreadsho CONTINENTAL TECH dates Outrigeous new rave drivin FAST INTRO MAKER 2

graphical effects etc. SAMPLE FACTORY 2 III C412 more sampled south effects
KLAW GAMES 1
KLAW CITHITIES 2
Includes Amija Durty plus more
BOX THI ADVENTURE □ C480

#### SAMPLES

VOCALS VOLUME 1-5 (5 Didas)
BEATS VOLUME 1-5 (5 Didas)
C273 SAMPLIE FACTORY
13.12 CTREASE SAMPLE F-2 (2 Didas)
INSTRUMENTS 1-6 (5 Didas)
CD2133 FARTS & BISEA BLEAK CD2131 SICKNESS SIMULATOR B921-2 PURE SAMPLES 1-2 (2 Disks) B924 PURE SAMPLES 3 

ABASE VI. 11 Very powerful and fleuble database, perfect for anythi from a video collection to brends & relatives etc.
FREECOPY VL8 Removes copy protection from a number of game TEXTPLUS V4 00EN Powerful □ B937

THE NEW SUPER KILLERS BK15 ANTI H M KER Gets rid of POLY-ED 3D Object edited BUDGET Home accounts EXTERMINS Virus killers AUTO GRAPH Fie charts o AMOS PRO UPDATE L12 WORD POWER L3 Cross

tolist package
RPG ADVENTURI MAKER
PRINT STUDIO
DE GRADI-R Degrade your
A500-(A600)/A100 to allow you to run more elder titles NEW PRINTER DRIVERS A large □ B959

collection of printer drivers LITTLE OFFICE Complete Wordproussest, DBase, Spreadshe DUNKS DTP (Kols) BOILER PLATE A collection of **□ 896**4 B970 hundreds of gre-written letter VIDEO WIPES CAPTIONATOR A mitty but

powerful video filter SLIDESHOW GENERATOR CLATUTORIAL Juni got your Amagai. Then you'll probably need this, the whole disk is full of

AMIGA TI TORIAL this great disk □ 8911-2

C073

cataloguing your art file SCREEN BLANKERS C034

UTILITIES PROTRACKER 3 Total re-vamp of this great minus sequencer. Popular FAKEMILM FOR A 1200 Russ all □ C356 □ C151 □ C154

THAT ENGINE OF VICTOR WAS A STATE OF THE ASSET OF THE ASS | B004-2 | C328 | C066 SPLCTRA PAINT 3.2 VIEW 3.2 (ANIM VIEWER) Car C091

space generator ADDRESS PRINT V2 A sort of database for name and address □ CH2 NUMPAD FOR A500 Fashles you □ C121

ABACKUP New HU backup total

PRINTER UTILITIES A colicie PRINTER UTILITIES A collector of taseful foods for printing OCTAMED 40th ARESTAURE "UNDELETE" A lizably utility to have on your workbeach, will undelter delired UNLEUL TOOLS A load of great

□ B314 units in one disk.
CERTY PLAYER (CETY only)
VIDEO DAT 1.2 Catalogue your
sideo collection units a disk?
N.-KOPIA he hest PD disk copier
or wishble, new to PD
ASSASSINS MEGA BOOT
QL EMULATOR (2 Desky) C155

200 UTILITY DISK A collection utils for the A1200 DIPLODER V4

IMPLOTER WE SAS UTILITIES C MANUAL (12 Disks) The complete C Manual ENGINEERS KIT The only disk could over need to do a complete system check of your Amiga A1 RSI DI MO MAKER for A500LATEST

TETRIS PRO polished team.
DIGITAL TETRIS
HP PRINTER INDIVISES
ANDRE-HINTS
CG HINTS
INYSTICK TESTER
INTERACTIVE DANCE ITTER
EAST "SEDERAL CHOAS"
HEADI INE "SIGN CHOAS"

PLICE O MIND ANDROMEDA "POINT BRITAK" MORE WBTHACKS FAVORITES

Children C. FAVORITES WINBLENDER EXCEL DATABANE HPSSOC PRINTER DRIVER

STEANIC CHEAT OUALITY TIME SMEG with hard errors so you can still use

them.
NIA A1700 TODLS
FIT CHICKS DISK AGA
Professional Printer divers
RETTYA BIRKS RAVE new A1700
version of a great rave dermi
AGA SEDESHOW DESK
PRIJAKS BODY SHOP AGA
BAIT MASKING comical animation
form Edd. Search C423-2 C425 C426

from Felk Swatz HARD DISK UTTILITIES

PLASMA CLOUDS 256 RUSSIAN ADDRE HONTS Technological DEATH RAVE ACTION REPLAY IV (A1200) PC TASK V2 nm VGA software on

your A1200 NCOMM V3 DLYWARE JPFG UTILS aga JPLG UTILS aga THE DISK MAG ISSUE I\* UNDER COVER' BRILL

LATEST

KINCH VARIA RIBIT DIAK

The hible on disk FRACSCAPE VI.0 tractal

create your even in absentiare.

SHAUR BLADN is shortern
AMRIA BEGINNI RS GUIDE
TO a complete beginner get this day.
CASH FRUIT frost machine sam
DAVYS DENIBATS/CCG
compagnaghas. Durafuse
Escape from a very large rave
A cave runner clothe but good
OLEMPIAD Semilar to Decathalian
but saw content Learnings.

but you control Lammings? CASTLE NOMIS excellant new

platform game AMOS PRO UPDATE 1.12

e your Amon Pro to version 1.12 EXTREMING Essential onliection of

□ C136

CUI

ПСИЗ

□C341-2.

C345

□ C346

☐ CH7.

□ C308

#### AMAZING OFFER!!!

ORDER 15 TITLES AND GET A BOX OF TEN BLANK DISKS FREE

THE AMIGA, SUCH AS INTERNAL/EXTERNAL/ DRIVES JOYSTICKS.

Quickshot, Zip siek, Konto, etc. DISK BONES. 40 caps. 80 caps. 100 caps. 150Prisac MICE.

STEMORY UPGRADES PRINTER RIBBONS POWER SUPPLIES A500, A500+, A600, A1200 MOUSE MATS Various colours BLANK DISKS DSDD, DSHD

COMMERCIAL SOFTWARE

Mosa items in stock, call for a price

#### TOP TEN

KICK (-) Degrader for A500+/A600/A1200 X-KOPIA Most proverful copies NUMPAD FOR AGOI I socialist to SPACEBALLS (IMEG CHIP) The has ever rare drop ENGINERS KIT IBM LIMILATOR (ASODo only) NEW PRINTER DRIVERS ASTEROIDS UP FAKE MEM FOR A 1200 TEXT ENGINE 4 Emy to one

ORDER FORM

Total order value: § ..

Payment method

Name

#### BITS n' PIECES

AMINAMON DUNT CON R CAPACITY BOX BOX OF TEN Branded Disks OU CAPACITY BOX 3.5" HEAD CLEANER

#### **PACKS**

VIDEO PRODUCTION A superb collection of video triols for fifting inclinates TV graphics, Inscript. Healthire forms and a selection of video wipes all for only £5.95. BUSINESS KT Inclinates Test Engine J. A.-Z. Spell. —Blasse, But graph and Addresser all for £5.95. IBM FMULATOR PACK Do you Amiga? If the answer is your Amiga? If the answer is yes, get thus locludes the IBM Emulator (A500) only) and a copy of MS IXs. Only £5.95

#### LATEST DEMOS UNDER COVER MUSE

	C359	SANITY INTERFERENCE
1	M CC426	BATI MASKING, Swatz
	C357-2	KEIRENS DESERT DREAMS IN
		is the best demo to appear for a long
Į		time. A collectors item
1	□ C361	THE GATHERING
i	M C431	TECHNOLOGICAL DEATH
		Very impressive new Mega demo-
J	□ C162	SANITY World of Commodore
1	C007-2	DISTURION Ext.2 Dodg)
	M C422	RETINA BURN AGA
		A1200 version of brilliant rave dem
	C090-8	THE HALNTED OF Disks The bea
		ever Amiga animation, 2 meg
	FI CUN-2	ROAD HOG (2 Dolo)
	C058	SIMPLY STATE OF THE ART TO
	7.00	cold-marks many based M-CVM

Credit Card Details

PD Frices per dish

#1.75 each 11 or mier

Credit card no:

Amiga .

Total disks:

#### GAMES

☐ €462 platerin should up preal graphics between up, preal graphics bruther in the preal graphics bruther bruther in the state of the platerin feel to it.
VECTOR STREM very similar to the sild as also game. Tempes! built are also game. Tempes! built a players. C457 □ (.1.0) C'459

AGITMAN great conversion of an AZTEC CHALLENGE Addictive C4MI Azie, game toutsa teven MLGABALL 2.1 tares version of the best Break-out game available. ☐ C401

C351 PANASONIC Printer drivers large collection of printer drivers for one with participate printers CANON & CITIZIN devers POLYED pretty good 3D obj NEW WB3 SUPERKULLERS Siew was Secrated and Al 200 Al 200 Degraders (observers) Large collection of Degraders for the A1200, easy to use, no days. KEFRENS DESERT dreams pibly the best 2dmk megadem CIN

□ CMC te used on the A500+ and A1200 THE GATHERING GFX □.C361 AR BANGRIWN PICTURES BETTER BENCH 1.2 new Workbesch reputers OUTERIM V2 looks very structure to Millegium 2.2 □ C173

ASTRO 22 V3, let your com □ C376 nell you your star sign ADDRESS PRINT 3.1 store your □ C372

#### LATEST

SPACEBALLS MOBILE C'rlo new spaceball demo SOLITAIRE Lines and best solitaire juise by Tower si fixare ATRE V5 □ C350 C378. Amiga benchmark test, for testing Large collection of useful utilizies GRAPE-VENE df 15 RFLAYER GAME AMRGA E-V2.1 new programming language for the Amiga better than C BOP N PLOP kids game, with cuty prophiss. pibly the best Zhita megademic in we on the scene for a good few mount SANITY INTERFERANCE. Excellent new mega derivi by Sanity RM Derno maker 8004/a1/200 The best deino Makez available con now

> ALSO AVAILABLE BY NAME ASSASSINS GAMES DISKS 1-954

FISH DISKS 1-800+

#### A1200 ONLY NEW A1200 CATALOGUE DISK

first true A1200/A4000 PD catal contains detailed information of in of all our AGA specific PD disks

1.50 separate or only £1.00 with my order

2. ACTION REPLAY IV A 1200
A version of Action replay that you can usually use in the Amiga 1200; It allows you in or prophere, manning pames give yout-tell more here and more a EAKE MEMS is an executal new A 1200 do gradue, it is more prosented than other deep raidees, leave more prosented than other deep raidees because a makes your A 1200 think it a got it? Its chip memory a Librage fault, So thin will allow two in ruit huge amount of other Amiga (thes, it is also hard deak computible).

14. PC TASK V2/V4A 356 column FOC VIGA software on your amiga in golerone 350 column made. MSAsi is required to use this program, and is necessarily as the proposed to the program.

the worlds first A | 200 demo O'CHESS (4 meg) The first ever C153

Workbreich Unickdrops Impress NEW WB3 SUPER KH11 FRS A □ C355 C175

collection of virus hillers. DOS DRIVERS Should give every Arrigin owner full computability. SYS INFO VALIFFOR ATOMIC areversion of Sys Info which now can C295 test and compute the A1200/A4000 VIEW TEK 1.03 The first and most C255

impressive AGA graphics displayer
WB CRAINBOW A Speciacular new
look for your morkbeach, allows you
to put a snazzy user changeable
sanbow effect belond your
markborne.

#### OVERSEAS ORDERS

Overseas orders are welcome, but please add 25p to each disk ordered, and a minimum of 5 disks apply. All foreign orders are sent by first class Air Mail.

#### COLLECTING DISKS

You are welcome to collect your PD order, but you are advised to phone it through prior to collection. Office hours: 9.30m-5.30pm Mon - Sat.

#### ORDERING BY POST

Simply mark off the titles you wish to order, and send this page to: EPIC MARKETING. Ist Floor Offices, Ma. Farringdon Rd. Swindon, Wilts SNI 5AR, enclosing full payment either by Cheque. Postal Order, Money order, or simply your Credit Card details.

#### ORDERING BY PHONE

To place an order over the phone simply call any time between 9.30 & \$.50pm Monday to Saturday with your credit card details and the disks you would like to order.

Epic Marketing, First Floor Offices, 31a Faringdon Rd., Swindon, Wiltshire, SN1 5AR

t wasn't long ago that one could call an American company and either leave a message on the answering machine or hear a tape of someone rattling through the office hours if no-one was around.

Recently, however, a sinister development has seen the gradual take over of answer phones and human telephonic interface units (receptionists) by computerdriven voice mail systems.

With a voice mail system someone is always in, even if that someone is a stupid, inflexible, impassionate CPU. In addition, everyone's mailbox is available for messages, faxes can be sent, mail checked up on, and - a hundred and one other things you can't do with a simple answer phone are possible.

Over the last six months, our colonial cousins have gone for voice mail like a pack of hungry estate agents, so much so that it is possible, even in office hours, to phone an office, go through three different desks, leave your name and message, and try a couple of extensions without ever speaking to a human being. One notoriously bad example is a certain leading US Amiga third-party manufacturer, whose first system seemed dedicated to keeping annoying phone calls at a minimum

So what is voice mail? Simply put, by controlling a phone system through a computer, it is possible to use the dial tones on a modern telephone as coded instructions, making possible a huge number of actions, controlled by the micro and prompted by someone dialing the appropriate command number at the other end of the phone line.

#### **VOICE MAIL**

Anyone who has ever phoned a game company help line will probably have experienced voice mail. A system which gives the user information then asks for a choice, whether through vocal answers or by keying a number, is a voice mail system, and can range from simple information desks (such as the typical hotline) to full company mailbox/fax operations

GVP's PhonePak VFX is an attempt to bring a fully functioning corporate voice mail system to any Amiga with a spare Zorro slot, and is a combination of a card

New/Update Hailbox PATH DHM:PhonePak MBILBOX NAME panel is packed with buttons SG LENGTH (SEC for the A1500 and upwards and a couple of floppy disks. At first, it is difficult to associate this

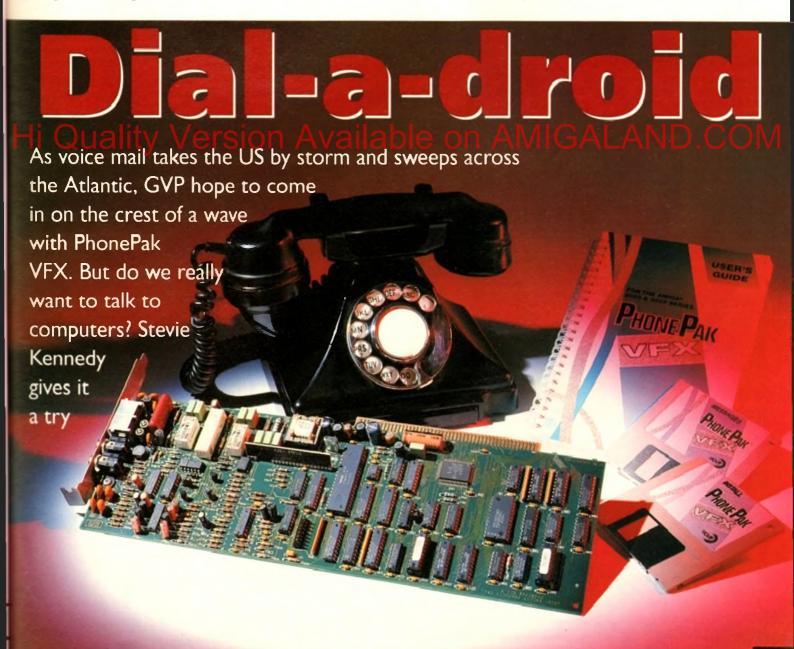
Creating new mailboxes using a simple requester

crammed little board with the seemingly labyrinthine systems one has encountered at the other end of the phone, but a little use is all it takes to dispel the impression.

Once the hardware is installed and the user's phone connected according to the reasonably clear instructions in PhonePak's manual, the user need only boot the software and follow the step by step guide to producing a first system.

The manual, though foggy and badly

organised in places (the fax section is a nightmare), is solidly biased in favour of beginners and includes several selfexplanatory tutorials which work from the setting up of a simple dumb answering machine to full-blown voice and fax mail



systems. Considering the often tetchy nature of telephones in general, and computer communications in particular, I was half prepared to spend an entire day struggling with baud rates, phone line initialisation, voltage disparities, and so on, but PhonePak provided a pleasant surprise by way of its smooth, trouble-free installation.

After only half an hour or so, the first time user should be well on his or her way to setting up their first infuriatingly nice computer receptionist.

This is achieved via the VFX control panel and its built-in Operator script language. The user creates mailboxes (in reality these are sub-directories on hard drive), then proceeds to the Switchboard screen to form the links between them and group them into systems.

Each mailbox has its own particular characteristics, its own greeting and other system messages, and its own status. Mailboxes can be either message receiving (in which case the user specifies a maximum message length when creating the mailbox) or the information-only variety, which do not record a caller's messages (message length set to zero).

#### **SWITCHBOARD**

Routes from one mailbox to another are also set in the Switchboard screen, and as there are up to four digits to play with, each mailbox can theoretically have as many as 9,999 links to other boxes.

The use need only specify which from ber is to be keyed in and click on the mailbox to which the caller will be transferred, making it easy to quickly set up the links for a complex chain.

Each mailbox can be set as IN or OUT at any time, so that during busy periods it is possible to shut certain boxes off or, if PhonePak is controlling an internal phone system, close down certain extensions.

In this case it is possible to set a default

## **Hello? Operator?**

PhonePak's built in power comes in the shape of the Operator script language which can be used for just about every operation one might want to carry out with a telephone, with the obvious exception of the 3am phone call. I mean, try getting an Amiga to throw the phone across the room and out the window

Operator scripts are called from the transfer function which can either be set when a mailbox is created or when the user updates the box

Typing a string of commands might sound an old-fashioned and clumsy way to control a modern piece of telephonic electronics, and it is, but the flexibility which

route which a call will take if a mailbox is

closed, so that the caller hears a "sorry, too

busy to bother with you" recording

user doesn't want to use the pre-recorded

American voice, can be recorded (sam-

pled) directly from the phone attached to

PhonePak into any mailbox list of system

messages, so any and all sorts of customi-

course, be used, so the prospect of Bogey

answering the phone with the line "Spit it

out, wise guy" is all too terrifyingly real.

Samples from other sources can, of

Music, either as background or for hold

small hard drive can begin to show. The

default messages supplied with PhonePak

won't leave much change out of 1.5Mb

storage, but some of these will never be

The script

language is

tedious, but flexible

and effective

sation is possible.

tunes, can be incorpo-

rated as long as it is

in standard IFF 8SVX

format, so no two

PhonePak systems should ever sound

A drawback with

such messages is that

when a system uses

many different sam-

ples the strain on a

the same.

All system messages, assuming the

instead of the usual answering message.

used and can be deleted

Storage space really begins to bulge when more than one mailbox in a system contains long sampled messages. Using the control panel, owners can move samples across from mailbox to mailbox, but it would have been better if this sort of duplication could have been avoided.

A simple assign to order the Amiga to look in a set directory for all samples would have been a more

the problem.

Setting up an answering phone system which would enable the owner to

economical solution to

phone and listen to his or her messages, record the voices of anyone who phones, and have a separate sub-system for busi-

ness calls would be a simple matter.

From the initial mailbox, a sample offering two choices (business or private) filters off the messages into their relevant mailboxes, while a third option leads to a box with no message facility and a simple message giving more information about the user's business.

#### **SAMPLES**

So long as the user ensures all samples match the routes he or she has created in the Switchboard screen (pressing "1" really does take you to the business mailbox) there should be few problems.

In many ways, the advantages of putting messages into the correct mailbox is a godsend. Password protection - a four-digit dial tone can be assigned to each mailbox makes it impossible for one family member to listen to the other's calls, and the business messages can be kept separate from everything else. No more playing through interminable messages from the kids' friends in search of that important call from the boss!

In terms of flexibility and power to handle the user's demands, PhonePak is hard to beat, but there are drawbacks. A hard drive is an essential, and setting up the more complex or advanced features can be a pain.

The manual section covering faxes is, as

Operator brings to PhonePak makes this exercise in tedium worthwhile. Commands cover everything from making a line off or on-hook, waiting for dial tones, dialling numbers, playing messages, and so on, and the manual is full of examples of how this power can be utilised.

Paging a person who isn't at his or her desk is one excellent example. Using a script which plays a ring tone to the caller while playing a sample along the lines of "Call for you!" from the Amiga's monitor or TV speakers, then waiting for a certain length of time before playing an apologetic sample and hanging up should demonstrate how much flexibility there is in this system.

#### PhonePak Scheduler 6:51 AM January 1978 Thu Fri Sun Mon Tue Hed Sat 1 2 3 5 6 9 8 10 11 12 13 14 15 16 17 19 20 21 27 22 23 24 25 26 28 29 30

Faxes can be sent immediately or scheduled to arrive in the early hours (hel hel)

and split over three different chapters, though this will hopefully be fixed when the planned manual rewrite takes place. When the price of £399 is taken into ount and weighed against the cost of a

mentioned, well nigh incomprehensible

fax and answering machine, PhonePak becomes a realistic option for businesses or those who work at home.

Bringing with it as it does the power to automate information systems, answering services, paging, faxes, and call transfers, there is precious little else for it to do except perhaps put its human counterpart (the receptionist - less efficient but friendlier and more flexible) out to seed.

PhonePak SwitchBoard: Click to tounte in/out. Shift+Click to onen

Switchboard enables the creation and management of whole 1ystems

least. In common with Supra fax modems, it utilises either a straight import of Ascii text and IFF graphics or a faxprinter in the shape of the PPakFax printer driver, but the resemblance ends there

When printing from any program which uses the faxprinter, a high definition image of the printed page is saved in a mailbox of the user's choice, but the awkward way of attaching a phone number to the fax when printing it causes frustration.

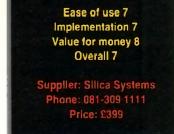
the fax machine rather than sit with an address book open in front of them all day.

Finished faxes are sharp and detailed, but the software by which they are created and despatched could do with some extra work. Given that faxes with voice messages attached are one of the supposedly hot new items for these systems, the clunky fax function is a bit of a disappointment, though not exactly catastrophic in extent.





The bottom line



## Fax needs fixing

The way PhonePak handles faxes is probably its weakest link, in software terms at

Most fax users will create a fax then scribble the number on it before shoving it in



# GENETIC PLAYGROUND

# THERE ARE TWO VERSIONS AVAILABLE: STANDARD - FOR ALL AMIGAS. ENHANCED - FOR A1200/A4000 ONLY

As you take the SimLife disks out of their pack you hear strange celestial music. Load them up and a deep rumbling sound is heard in the distance; the cosmos twitches. You are about to become a major player in the game of life.

Until now you thought gene splicing involved ripped trousers... a balanced ecosystem was a new washing powder - and that genomes lived at the bottom of the garden? Now you'll find out different.

In SimLife, take the challenge of our inbuilt scenarios or create your own unique world where your imagination can run riot. Design plants and animals, then decide how they act, how (even who) they eat - even how they reproduce!

Now watch this world evolve in front of your very eyes, as a completely new environment takes shape under your command. Will you be responsible for producing a tropical paradise, an arctic wasteland - or a planet inhabited by even stranger creatures

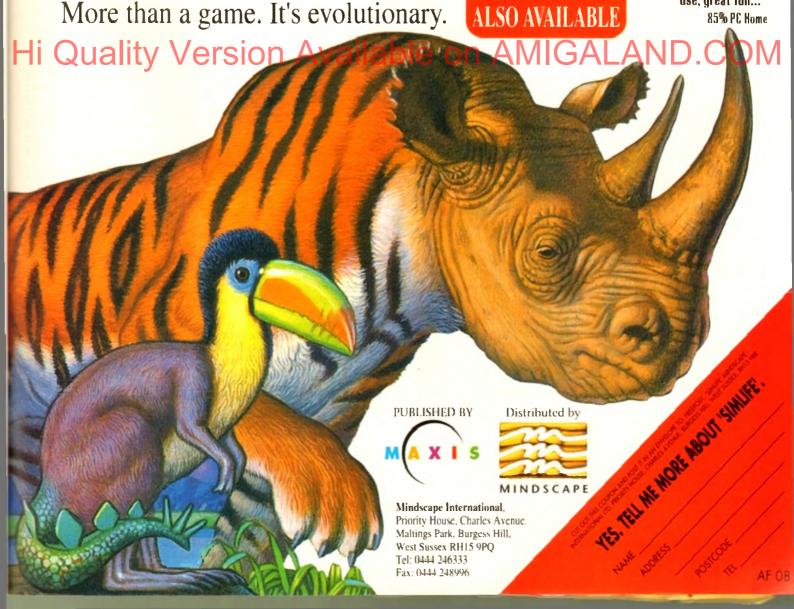
"Superbly designed, flawlessly executed..." 93% CU Amiga



ALSO AVAILABLE

"It is an entertaining piece of software and has years of enjoyment..." 85% MacFormat

> "Intriguing, very deep and absorbing, easy to use, great fun..." 85% PC Home



# ENOYUDES 1 ने गानि ता सुगर्



#### 33 Ormskirk Rd. Preston, Lancs, PR1 2QP

Ladbroke Computing International are one of the

it established home computer dealers in the U.K. We have developed an extensive service policy which involves testing of all hardware prior to despetch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

All prices are correct at copy date 7/7/93 (while stocks last), and are subject to change t prior notice. All prices include VAT but exclude

You can order by mail Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£11 for Saturday delivery).

Open Mon-Sal 9 30am to 5.00pm Ladbroke Computing Ltd trading as Ladbroke Computing International.

Fax: (0772) 561071 Tel: 9am-5.30pm (5 Lines)

# Floppy Drives

- 880K formatted capacity
- Double sided, Double density
- Through port
- Enable & Disable Switch
- Anti Click
- Anti Virus Mode

£64.99 Roclite external drive £49.99 Amiga 500 internal drive

# Speed Mouse

- 290dpi resolution
- 2 Microswitched buttons
- Opto/Mechanical mechanism
- Switchable between Amiga/ST
- Direct Mouse Replacement

Speed Mouse

£11.99

# GVP II Hard Drives





- Ultra fast 11ms access
- Up to 8Mb RAM on board
- 2 year warranty

#### Star Star LC100 Colour £165.00 Star LC20 £124.00 Star LC24/100 Mono £179.00 Starjet SJ48 Bubblejet £210.00 SJ48 Sheet Feeder £55.00 SJ48 Ink Cartridge £19.00

Citizen Citizen Swift 240 Colour £270.00

Hewlett Packard HP Deskjet 510 £329.00 HP Deskjet 550 Colour £669.99

#### Lasers

Seikosha OP104 £549.00

- 512K RAM (Exp to 2.5Mb)
- HP Laserjet IIP emulation
- 14 resident fonts
- Centronics/RS232C/RS422
- 12 months on-site warranty Seikosha 512k RAM upgrade £69.00

Seikosha Toner (2 units) £19.00 Seikosha Drum unit £79.00 Ricoh LP1200 £759.00

Add £3 for Centronics cable and £7 for next working day courier delivery.

# Repair Services

Our Service department can repair Amiga's in minimum time at competitive rates. We can arrange for courier pickup and return delivery of your machine to ensure it's safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day. We can fit memory upgrades, ROM upgrades. We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the charge is included in the minimum charge. Please note: The minimum charge covers labour, parts are extra-

_	
Quotation service	£15.00
Min repair charge	£35.25
Courier Pickup	£11.00
Courier Return	27.00
Same day service	£15.00

# Amiga Packs

Amiga A600 £194.99 Includes: The new reduced size keyboard, internal modulator, 1Mb on board RAM, Workbench 2.05. Will take smart cards. Also includes

12 months on site Warranty

Amiga 600 Wild, Weird and Wicked Pack £229.99 Includes A600 with Pushover, Microprose Grand Prix, Putty and \*

Deluxe Paint III

A500 Plus Cartoon Classics £199.99 Includes A500+ with Simpsons.

Lemmings, Captain Planet and Deluxe Paint III

A500+ No Software £194.99 Includes A500+, mouse, modulator, PSU, workbench

Amiga 1200 **Comic Relief Pack** £289.99 Includes A1200 with 2Mb RAM,

Sleepwalker game A1500 Home **Accounts Pack** 

£429.99

£34.99



# Software

Mini Office A LES Wordprosessor Database Spreads 239.99

Disc Utilities and Graphics

Pen Pal

Powerful wordprocessor with text wrap around graphics. Forms manager, Database manager, calculated fields etc. 100,000 word spelling dictionary, Mail Merge

£69.99 Final Copy II Amiga wordprocessor, 110,000 word spell checker, 826,000 word thesaurus. Automatic hyphenation, multiple

columns, HAM & 24 bit graphic support, Built in Postscript support £69.99 Deluxe Paint IV AGA

Paint and animate in 262,000 colours. Developed specifically for the Commodore A1200 and A4000, takes full advantage of the new AGA chip set. Metamorphosis, instantly transform the shape and image of one brush into any other brush, HAM support, Paint stencil mode, Translucency and tinting features for special effects. Requires 2Mb RAM, kickstart 2.04 or greater

# Falcon 030

- 16MHz 32 bit 68030 Central Processor, 16MHz Blitter. 32MHz 56001 Digital Signal Processor
- 1.44Mb 3.5" Floppy, up to 14Mb RAM. Displays 65536 colours from 262144 palette at 768 x 480 resolution
- 8 Channel, 16 bit higher than CD quality, Stereo sound sampling

FALCON 4Mb 65Mb HD 2959.00 **FALCON 4Mb No HD** £779.00



#### Golden Image Hand Scanner

- 100, 200, 300, 400dpi resolutions
- 1 letter mode, 3 photo modes
- Includes two of the most respected graphics packages. MIGRAPH'S TOUCH UP and **DELUXE PAINT III**

# RAM Upgrades

A500 512K upgrade

£14.99

A500+ 1Mb upgrade

£19.99

A600 1Mb with clock

£44.99

Plugs straight into A600 trap door. compatible with A600, A600HD

# Accessories

50 3.5" Disks £23.50 100 3.5" Disks £44.65 3.5" Disk head cleaner £4.00 50 Disk Box £5.00 100 Disk Box 00.83 A500 Dustcover £4.00 Mouse/Joystick extension 25.00 PRO 500 Joystick £7.00

## Monitors



Philips 8833 MKII £199 99 Includes 12 Months on site warranty (Mainland UK) and free Lotus Turbo Challenge 2 game

Commodore 1084S Colour £189.99 Amiga Colour, stereo monitor including cable

Philips 15" FSTTXT TV £259.99 Fully remote control, 60 channel, Fast text TV with scart input for near monitor quality display

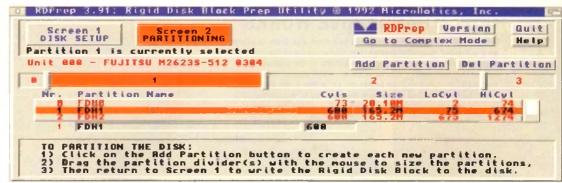
£239.99 Colour SVGA Monitor High quality Colour SVGA Monitor, 28 dot pitch. Includes Falcon Adaptor

Falcon VGA Adaptor 29.99 Philips SCART to Amiga 29.99 8833 MKII to Amiga 29.99

he day I first used a computer that had a hard drive fitted, my world changed.

For years I had been using floppies, inventing ways to cut down the number of disks required to boot the computer and run various software packages. Hard drives were so expensive back then that I simply couldn't afford one.

But now I had this filthy dirty PC-clone plonked on my desk because my colleague had been given a bigger and better machine. It had a hard drive the size of the planet - 10Mb no less! - and it was a billion times faster than a floppy drive. Or so it seemed to me at the time. On went the com-



If you are struggling with understanding about hard drives, contact a PD library and get hold of the freely usable RDPrep which contains a veritable encyclopaedia of on-line help

# Safe driving

puter's operating system. On went the various bits of software I used. And that was it. I didn't know, or want to know, how or why it worked. OK, so it made a continual high-pitched whining noise, but I didn't

It worked. That was good enough for me. It shouldn't have been, because understanding how something works is often the biggest and to getting the best out of it but fiding the time.

Truth is I was frightened of the hard drive because it was something new, and as nobody had the time to hold my hand and show me the ropes, I thought it wisest to let it be rather than risk making a mistake.

I had seen the look on the face of my boss when he had been told by a cringing colleague that his hard drive had "gone down", and while I didn't know exactly where "down" was, it was obviously somewhere pretty close to, if not exactly, Hell. The main difference being that, had it actu-

IDE

megabyte (Mb)

partition

project

SYS

ally gone to Hell, it apparently would have been easier to "recover" it. Nope. Best not touch it. Safest just to use it.

Bad mistake! Within a week my hard drive had joined my colleague's, and I was ordered to recover it PDQ or I could forget about applying for that promotion.

So circumstances forced me to learn about my hard drive anyway, only I eamed the hard way.

#### SEALED DRIVES

I learned from a book that inside the hard drive there were some metal disks, which, because they were thick and made of metal, were stiff as opposed to floppy. I learned that the hard drive was sealed so that no dust could enter the mechanism. And I learned that this enabled the read/write heads to travel closer to the disks, thus enabling the hard disks to be accessed much more quickly than floppy disks. This information didn't help me

Ignorance is far from bliss when your hard drive refuses to work. Ben Pointer advises how to keep on the

right side of your

recover my hard drive but now I under Atransfer stood why it had gone down. While the read/write heads were accessing a part of one of the metal disks I had tried to move the monitor. I had slipped and let it drop a

couple of inches on to the top of the computer case

This had either caused the read/write head to actually touch the metal disk, which the book told me was a Very Bad Thing, or had jogged the head a bit so that it had written important data in the wrong place and consequently confused the system, which was only a Bad Thing.

I would have to use a Special Utility to

ARD DRIVES much data as HARD DRIVES possible from the hard drive on to floppy disks, reformat the hard

drive, and then transfer the data from the floppies back on to the hard drive. This, the book said, took For Ever and Didn't Always Work, although it didn't explain why. In the end it was a piece of cake. I was lucky. I recovered my hard drive PDQ, my boss was well impressed, I got the promotion and overnight became the office's hard

drawe When you are using icons you call them drawers, when you are using a command line you call them directories.

integrated Drive Electronics.

Jargon

1,000 kilobytes or 1,024 kilobytes depending on whether you are selling a hard drive or using one.

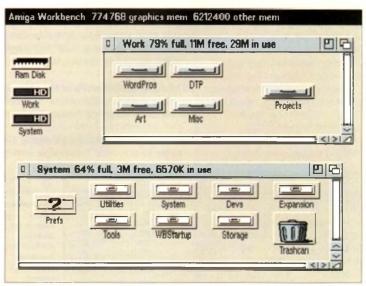
buster

operating system (OS) The programs, on disk and in ROM, that make the computer work.

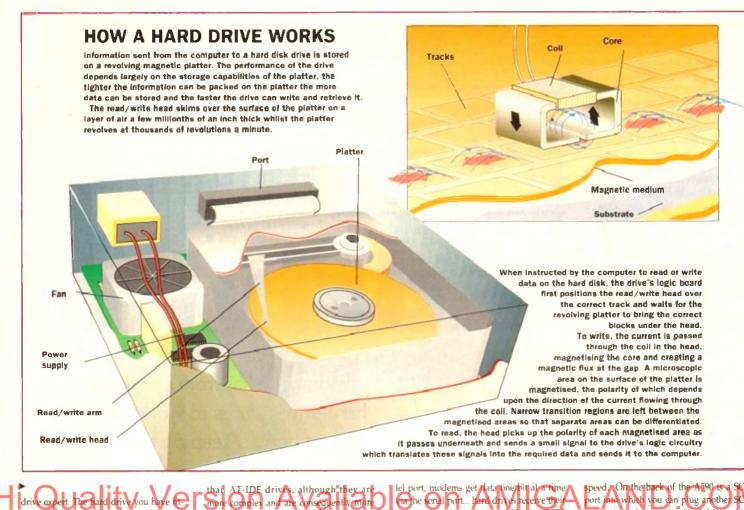
> A section of a big hard disk that is treated as a separate, smaller hard disk.

One or more files that comprise a job on which you are working. A text file may be a project of Final Copy, a picture that goes with it may be a project of DPaint; together they are the nut and the bolt you need to do the job so they belong in one drawer.

The root directory of the partition or disk from which the machine has booted.



Organising your hard drive neatly will enable windows to open more quickly



drive expert. The hard drive you have teted to your Amiga will probably be one of two types, AT-IDE or SCSI, and these terms refer to the hardware and software that is controlling the hard drive - the hard drive "controller" - as well as the hard drive itself.

In use there are no differences between the two systems. In other words, the type of the hard drive is not a consideration when deciding how to set up and organise your hard drive. SCSI drives are not faster

expensive. SCSI controllers allow you to plug in a chain of up to eight SCSI devices and these can be any kind of SCSI compatible devices, not just hard drives - whereas AT-IDE controllers currently allow just one more hard drive to be chained

SCSI and AT-IDE are the two most common standards for transferring (or "porting") data from the computer's memory to another device. Printers get their data sent to them eight "bits" at a time via the parallel port, modems get data une bit al a time ta he serial port... bare drives receive their data 16 bits at a time via a SCSI or AT-IDE

The SCSI standard has now been upgraded to SCSI-2, as seen on the new and at long last available Commodore 4091 hard drive controller, and this supports data transferred 32 bits at a time.

The Commodore A590 hard drive uses the predecessor to the AT-IDF controller, the XT-IDE, which transfers data eight bits at a time, explaining that hard drive's lack of speed. On the back of the Aii90 is a SCSI port into which you can plug another SCSI device, including another hard drive, which will work faster than the one inside the

But no matter how fast the hard drive or

hard drive controller, if you partition and organise your hard drive badly you can slow its operation down to a snail's pace.

Similarly, efficient partitioning and organisation can improve the speed of a "slow" hard drive so that in operation it appears to work faster than a poorly pre-

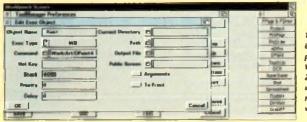
#### the trade rools of

There are quite a lew programs, may of them PD or shareware, that can help you organise. use and maintain your hard drive.

If working with icons isn't your scene, and even if it is, a "directory utility" like the shareware SID and DirWork or the commercial Directory Opus will, among many other things, help you to quickly and easily copy files, rename files, play sounds, view pictures, that sort of thing

One of the worst aspects of keeping a neat hard drive, with drawers inside drawers inside drawers, is that getting to any one program can take a dozen clicks of the mouse. Hard drive owners who are using Workbench 2 or 3 should not be without the shareware program

If you haven't got this wonderful piece of work, you don't know what you are missing; it is arguably the best shareware program ever written for the Amiga. ToolManager, among



d one Workbench 2/3 hard drive user should not be without

many other things, enables you to put any program into a window on the Workbench, from where a single click on its button will run it. You can even have icons animate themselves and play a sound samples when clicked.

There are shareware hard drive back-up programs as well, the most popular these days being A-Backup, which seems to get be getting updated and improved almost monthly

Of the commercial hard drive back-up utilities, Ami-Back and QuarterBack are the most popular, and both of these have associated packages, Ami-Back Tools and QuarterBack Tools, which can help you rescue data when your hard drive goes down.

C | Chalchalv Version 7 Conversals \* 1997-1993 by Dave H Device For Sow FFS het. Undelete Set Filter. Device jefa... Don't Core

Disk Salv 2 is the least painful way to salvage data or recover accidentally deleted files from your hard drive

On the shareware scene, Dave Haynie has at long last released DiskSalv 2, which is a superb utility, arguably better than anything of this type available commercially

It requires Workbench 2 or later though, so 1.3 owners will have to use the old version that has far fewer features and runs only from the command line. If you can't be bothered to backpared "fast" hard drive.

In effect, by partitioning a hard drive you turn that single hard drive into a number of smaller hard drives. For hard drives of 52Mb or smaller there's not much point in having more than two partitions - one to hold the operating system files, one for everything else.

I like to give the operating system -Workbench, I mean - about 10Mb, which is twice as much as it needs. This enables me (or hard drive installation programs) to add more commands to the C: directory, more libraries to LIBS:, more preferences setting to Prefs, and so and so forth, without having to worry about running out of space on my SYS: partition - which, to remind me what it is, I name System.

#### **TIDY FILES**

I call it System rather than the obvious Workbench because my main partition I call "Work". This partition takes up what is left of the hard drive. I have many different types of programs in Work, and I put these neatly into drawers so that I don't have a zillion program and data icons appear on the screen when I open the Work window.

I have a WordPros drawer, for instance, and inside here are two more drawers that contain the two wordprocessors I use, pluswhatever support files and tools that come with those programs.

This pattern is repeated for all the various bits of software I use, and although there's a lot of software and data\_in there, my Work partition window has just five icons in drawers for WordPros, DTP and Art, which is because this type of software is what I use most, plus a

Misc drawer for all those extra little bits and pieces I need from time to time. Inside the Misc drawer are a few more drawers, and inside those drawers are the miscellaneous programs themselves.

Data saved from all the programs I use goes into the fifth icon in the Work partition, a drawer called Projects. I have further

tape-streamer or second hard drive

dedicated to the back-up, the next

best alternative is Video Backup

System (VBS), which will back up

hard drives to standard videotapes

There are two type of utility you

should steer clear of unless you have

made a back up of the hard disk

before you use them - disk editors

and disk optimisers. Disk editors give

you a view of the disk at the bytes

level, and unless you know what you

are doing you can very quickly corrupt

your hard disk with them.

using a standard video recorder

Disk scan completed. No errors found. Castion: In one-disk mode ReOrg con net be interrupted I
BE SURE YOU HAVE BACKED UP YOUR DATA
BEFORE YOU START THE OPTIMIZATION III O | Bulley dok testimize (P)(G) ReOrg V2.3 https://pead.otsa.detinita Eormat Chi Write yerify graphical sector display Hode D Advanced out ton Option fite Select | Clear | Cancel Stagt 100 = -D not used - finished Cancel

Disk optimisers can destroy as well as enhance your hard drive, ignore wornings like this at your peril

drawers inside here to categorise the projects so that they are easy to find.

If I'm doing some work on a single project for my mate Fred that involves some text files, some pictures, a DTP'd document and a sound file, all these data files go in the one drawer named Job\_for\_Fred in the Work/Projects drawer

I don't have separate drawers for work saved from a particular art program, work saved from a particular wordprocessor, and so on and so forth, I keep all the files that comprise a single project in a suitably med drawer in Work Projects

For hard drives larger Man S2Mb voo might want to add an extra partition, making three partitions in all. This will speed up disk access times slightly because the read/write heads will never have to travel from one end of the hard drive to the other in order to access files. I've seen some large hard drives that have been partitioned into ten partitions, and while there's nothing to stop you doing this, I would advise against it because it can be counter-productive.

If backing up to floppy sounds like too much hard work,

consider getting hold of Video Backup System

That said, there are some good reasons to create more partitions. Say your favourite pastime on the Amiga is 3D modelling and ray-tracing, and that you own several modelling packages and have created lots of pictures and animations or whatever.

Then it could make sense to have a partition called Modelling and keep all the programs and data that relate to this subject in drawers on that partition. But you'd still have a System partition for the OS, and a Work partition in which you'd keep everything bar 3D modellers and ray-tracer

Amother popular idea is to have a System witton for Workbeach, a Work partition for all your programs and a Data or Projects partition for all the data saved from the programs you use. Why is this a popular idea? Because as you'll have on floppy the originals of all the programs that are on your hard drive, you've no need to back-up this partition, you can always re-install everything from the originals if this partition gets corrupted.

won't the whole hard drive become unusable? No, it is partitions that go down, rarely complete hard drives, and this fact is the strongest argument for having lots of smaller partitions because the more partitions you have, and the smaller they are, the less data is at risk from a hard drive crash.

The most important truth relating to how many partitions you set up is that the more you have, the slower the Amiga itself will run because each of those partitions will have its own "task" multitasking in the background.

With two or three partitions you won't slower, especially on the 68000 and 68020 based Amigas.

#### **PARTITIONS**

But if the Work partition is corrupted,

But, as I pointed out earlier, the manypartitions route is often counter productive. Each partition you mount will grab at least 30k of memory from the system. If you went overboard and created 20 partitions you would lose more than half a megabyte of

notice any difference in computing speed. After that things tend to get slower and



When I boot from my hard drive the Amiga tells me that one of my partitions is not validated. I can read from that partition and run programs from it, but it won't let me save anything. What do I do now?

Transfer all the data on the partition that is not validated on to floppy disks. format the hard drive (you can use the Workbench Format Disk menu item or the Formal command in a Shell), and then transfer the contents of the floppies back on to the newly formatted partition. A hard drive backup utility will make this job easier

This hard drive error occurs most frequently because the Amiga has crashed while some program was still writing to the hard drive. The same error will occur if you reboot the Amiga manually while the hard drive is still being written to.

I am getting dozens of read/write errors on my hard drive. It's only six months old. What do I do?

Back-up the entire contents of your hard drive, re-format all the partitions. then restore the back-up. If you still get lots of read/write errors contact your dealer and ask for a replacement. Hard drives should never develop this number of read/write errors after such a short period of use.

You should check that you are not exposing your drive to extreme temperatures. If the disk is in the drive gets very warm they will expand very slightly

If you write data to the drive while the disk is expanded, when the temperature lowers and the disks contract the computer will not be able to read that newly-written data because it will be in an ever-so slightly different physical position on the disk than it was when it was written.

How comes a program that says it needs 2.5Mb in order to run won't run on my 52Mb hard drive?

In the days when memory was measured in kilobytes, this confusion never arose. But with the Arniga now coming with 1Mb or more of memory as standard, it's easy for a new hard drive owner to assume that the megabytes of the hard drive are the same thing as the megabytes of memory.

Alas, they are not. Programs will be stored on the hard drive, but when you want to run them they need to be transferred from the storage device (the hard drive) into the computer's memory. If you don't have 2.5Mb of memory, then a program that says it needs that much won't be able to load and run.

I have a hard drive plugged into the expansion port of my Amiga 500 Plus. I am going to upgrade to an Amiga 1200. Will I be able to use my hard drive with the 1200?



No. The expansion bus on the 500 Plus is incompatible with the 1200

quickly; performance increases on hard drives are usually quite small and there's always the danger that at the end of the operation you'll be left with an unreadable partition. If the Amiga crashes during an optimisation session, the air will be blue if you have not got a

up to floppy and you can't stretch to a Widen Backer System Briga W.L. & 1992 Lymens Setting Productions

Finally, the temptation for owners of small hard drives is to "crunch" everything in sight with a program like Powerpacker or Imploder. These programs, like all other programs, are not perfect, and if you find that your system is crashing a lot I would suggest that it is because files are not de-crunching correctly, particularly if you are using Powerpacked files.

Disk optimisers attempt to reorganise the data on a partition so that it can be read more

# White Knight Technology



PROFESSIONAL AMIGA Specialists

£ 139

<del>~</del> (0992) 714539

10am - 7pm Monday - Friday And 11am - 4pm Saturday



PO BOX 2395, WALTHAM CROSS, HERTS, EN8 7HQ

#### A500 ACCELERATORS

 PP&S 040/500 28MHZ 68040, 4MB
 £ 599

 PP&S 040/500 33MHZ 68040, 4MB
 £ 799

 GVP A530 TURBO 40MHZ 68030,1MB

 WITH 42 MB HARD DRIVE
 £ 489

 WITH 85 MB HARD DRIVE
 £ 589

 WITH 120 MB HARD DRIVE
 £ 685

 WITH 210 MB HARD DRIVE
 £ 779

#### A500 / 1500 / 2000 ACCELERATORS

**SUPRA 28MHZ TURBO** (68000)

#### *A1500 / 2000 ACCELERATORS*

COMMODORE 2630, 25MHZ 68030/882 WITH 2MB 32-BIT RAM WITH 4MB 32-BIT RAM € 459 IVS VECTOR. 25MHZ 68030/882 £ 509 GVP G-FORCE 25MHZ 030/882 +1 £ 389 GVP G-FORCE 40MHZ 030/882 +4 £ 685 £ 979 GVP G-FORCE 40MHZ 030/882 +4 GVP G-FORCE 33MHZ 040 +4MB £1279 PP&S 040/2000, 28MHZ 68040, +0 £ 599 PP&S 040/2000, 33MHZ 68040, +0 ٤ 799 PP&S ZEUS, 28MHZ 68040/SCSI-2 3 749 PP&S ZEUS, 33MHZ 68040/SCSI-2 € 949

#### A3000 ACCELERATORS

 PP&S 030/3000.
 25MHZ 68040
 £ 599

 PP&S MERCURY.
 28MHZ 68040
 £ 699

 PP&S MERCURY.
 35MHZ 68040
 £ 999

 GVP G-FORCE.
 28MHZ 040.
 2MB
 £1279

#### ALL PRICES INCLUDE VAT

#### A1200 ACCELERATORS

GVP A1230, 40MHZ 68030, 0MB £ 289 GVP A1230, 40MHZ 68030, 1MB £ 355 GVP A1230, 40MHZ 030/882, 4MB £ 485

#### **MICROBOTICS M1230XA**

WITH 33MHZ 68030, 0MB RAM £ 289 WITH 33MHZ 68030, 1MB RAM £ 335 WITH 33MHZ 68030, 2MB RAM ç 385 WITH 33MHZ 68030, 4MB RAM £ 435 WITH 33MHZ 68030, 8MB RAM £ 549 345 WITH 50MHZ 68030, 0MB RAM ۶ £ 389 WITH 50MHZ 68030, 1MB RAM £ 439 WITH 50MHZ 68030, 2MB RAM WITH 50MHZ 68030, 4MB RAM £ 489 WITH 50MHZ 68030, 8MB RAM £ 595

# 1000/030, 2MB RAM, 80 MB £ 949

A4000/030, 2MB RAM, 80 MB £ 949
A4000/030, 2MB RAM, 120 MB £1049
A4000/030, 4MB RAM, 80 MB £1049
A4000/030, 4MB RAM, 120 MB £1149
A4000/030, 6MB RAM, 80 MB £1049
A4000/030, 6MB RAM, 120 MB £1149
A4000/030, 6MB RAM, 80 MB £1899
A4000/030, 6MB RAM, 120 MB £1899

#### AMIGA 3000

**25MHZ 68030 NOT EC & 68882, 2MB RAM**WITH 52MB HD & AMIGAVISION £ 829
WITH 105MB HD & AMIGAVISION £ 959

#### AMIGA 1200

SLEEPWALKER & ZOOL PACK £ 299
SLEEPWALKER & 85 MB HD £ 479
SLEEPWALKER & ZOOL +85 MB £ 489

#### A3000/4000 MEMORY

4MB SIMM £150 2MB SIMM £ 85 1MB SIMM £ 45 4MB SC ZIPS £ 180

#### **GVP PHONEPAK**

AVAILABLE NOW CALL FOR DETAILS £ 349

#### HARD DRIVES

#### A500

GVP HD8+ 40MB £ 245 GVP HD8+ 80MB £ 345 GVP HD8+ 120MB £ 389 GVP HD8+ 213MB £ 489 C= A590, 20 MB £ 195 ALFA, 40MB IDE £ 219

#### A600 / 1200

40 MB & CABLE £ 149 60 MB & CABLE £ 185 80 MB & CABLE £ 215 120 MB & CABLE £ 275 210 MB & CABLE £ 389

## A1500 / 2000

#### & A3000

85 MB SCSI 3.5" £ 209 127 MB SCSI 3.5" £ 245 240 MB SCSI 3.5" £ 365 345 MB SCSI 3.5" F 509 425 MR SCSL-2 £ 729 525 MB SCSI -2 £ 799 850 MB SCSI -2 CALL 1.0 GB SCSI -2 £ 939 1.5 GB SCSI -2 £1249 2.0 GB SCSI-2 £1499 2.8 GR SCSL-2 CALL

#### A4000

85 M8 IDE 3.5" £ 169 170 M8 IDE 3.5" £ 229 210 M8 IDE 3.5" £ 259 256 M8 IDE 3.5" £ 289 340 M8 IDE 3.5" £ 349 420 M8 IDE 3.5" £ 459

# HARD DRIVE

#### A500

GVP HD8+ £ 185
ICD TRIFECTA EC £ 159
ICD TRIFECTA LX £ 215
ALFA POWER IDE £ 119

#### A1500 / 2000

#### REMOVABLE DRIVES

SYQUEST 44MB SCSI INTERNAL	£ 299
SYQUEST 44MB SCSI EXTERNAL	£ 415
SYQUEST 88MB SCSI INTERNAL	£ 375
SYQUEST 88MB SCSI EXTERNAL	€ 490
SYQUEST 44MB CARTRIDGE	£ 75
SYQUEST 88MB CARTRIDGE	€ 100

#### OPTICAL DRIVES

FUJITSU 128MB SCSI INTERNAL	£ 779
FUJITSU 128MB SCSI EXTERNAL	£ 899
128 MB OPTICAL DISK	£ 40

#### TAPE BACKUP

TANBERG 250 MB STREAMER	£ 429
TANBERG 525 MB STREAMER	£ 539
TANBERG 1.2 GB STREAMER	£ 759
EXABYTE 4200 SCSI DAT 2GB	£ 899
FOR EXTERNAL VERSIONS ADD	£ 120

#### VIDEO BACKUP SYSTEM £59

Backup 120mb of Hard Drive Data or 200 Floppy Disks on one 3 Hour video Tape!

#### IBM PC EMULATORS

COMMODORE 386SX-25, DOS5, 1MB	£ 189	9
COMMODORE 486SLC-25, DOS5, 1MB	£ 289	3
COMMODORE PCAT/286, 1-2MB FDD	2 9	9
COMMODORE PC-AT WITH 360K FDD	£ 59	

Hi

#### 68881 / 68882 FPU'S

1				
I	68881 12 MHz PGA £ 35 68881 20MHz PGA	Ê	45	
I	68882 25 MHz PGA £ 99 68882 33MHz PGA	Ε	129	
I	68882 50 MHz PGA	Ε	8	
I	68882 25 MHz PLCC - For A4000/030 etc.	Ė	89	
1	68882 33 MHz PLCC - For A4000/030 etc.	£	119	
I	68882 40 MHz PLCC - For A4000/030 etc.	Ē	139	

#### A1200 MEMORY BOARDS **MICROBOTICS MBX1200-Z**

WITH 0 MB RAM, NO FPU	3	109	
WITH 1 MB RAM, NO FPU	3	149	
WITH 2 MB RAM, NO FPU	£	195	
WITH 4 MB RAM, NO FPU	£	259	
WITH 8 MB RAM, NO FPU	£	369	
FOR 12 MHz 68881, PLEASE ADD	3	30	
FOR 20 MHz 68881, PLEASE ADD	2	50	
FOR 25 MHz 68882, PLEASE ADD	£	109	
FOR 33 MHz 68882, PLEASE ADD	2	129	
FOR 50 MHz 68882, PLEASE ADD	£	159	
GVP SCSI / RAM PLUS			

WITH 0 MB RAM, NO FPU	2	195
WITH 1 MB RAM, NO FPU	3	259
WITH 4 MB RAM, 33MHz 68882	2	389
EXTERNAL SCSI ADAPTOR KIT	2	40

#### VIDEO PRODUCTS

DIGITAL BROADCASTER

#### (DIGITAL EDITMASTER) £1889

This card performs the major functions of a full, broadcast quality, digital video editor. It provides REAL-TIME\_FULL MOTION JPEG (25 fps) Capture & Compression, direct to disk. The captured video can then be edited and subsequently Decompressed and played back in REAL-TIME, at 25 fps in broadcast quality, direct to video, laser\* disk recorder etc.. Also included on the board is full SMPTE timecoding read & write. The card also interfaces with the AD516 Studio 16, 8 track stereo audio card from Sunnze, and the VIVID 24 Image Rendering Engine.

#### FOR FURTHER DETAILS, PLEASE CALL. **OPALVISION**

#### MAIN BOARD (V.2)

£ 599

24-BIT Professional Graphics board with Paint, Animation & Presentation software.

#### **VIDEO PROCESSOR**

£ 849

Real-Time frame grabber, professional gentock, Digital Video Effects (DVE) etc.

#### **VIDEO SUITE**

£ 849

19" Rack Mount Audio & Video switcher,

9 Video & 10 Audio inputs, Frame store. **SCAN RATE CONVERTOR** 

6 849

A flickor-fixer outing 31KHz non-interlaced signal for a multisync monitor. Also includes an infinite window RGB Time Base Corrector (TBC).

FOR FURTHER DETAILS . PLEASE CALL.

#### **GVP IMPACT VISION 24**

Grabber/Digitiser, Flicker -Fixer, Genlock & Picture -In - Picture etc. With Caligari 24, Macro Paint 2 Mylad & Desktop Dark com software € 969 1V24 With VUI-S (RGB/Comp) IV24 With VUI- CT (RGB/ S-VHS) £1259 Adaptor For Amiga 1500/2000 € 45

24-Bit Professional Graphics board with Frame

#### **AUDIO PRODUCTS**

#### SUNRIZE ADS16 / STUDIO 16

8 Track Stereo, 16- Bit . Better than CD Quality - Direct to Disk Recording, Editing & Playback. Can be used in conjunction with the Broadcast Editor via SMPTE.

FOR FURTHER DETAILS, PLEASE CALL

£1350.

#### MODEM5

J	SUPRA FAXMODEM 2400+ (With GPFax & A	Γalk	
	Software and Serial lead)	3	149
	SUPRA FAXMODEM V.32 (NO S/W)	3	219
	SUPRA FAXMODEM V32 BIS (With GPFax &	ATal	k
1	Software and Serial lead)	£	299
	US Robotics Sportster V.32 bis / Fax	3	299
	US Robotics Courier Dual Std. 16 8	3	539

#### **MONITORS**

COMMODORE 1084S	£ 199
COMMODORE 1940	289
COMMODORE 1942	£ 385
MICROVITEC CUB-SCAN 14-40	€ 459

#### STOP PRESS..

**NEW COMMODORE** 4091 SCSI-2 CARD FOR THE A4000 IS **NOW AVAILABLE** £219

#### **BARGAINSI**

COMMODORE A2091 CARD WITH 40 MB SCSI DRIVE \$175 COMMODORE A2058 CARD WITH 2MB (EXP. 8MB) €79 COMMODORE A2058 CARD WITH FULL BMB RAM £149 COMMODORE 1802 COLOUR COMP / SVHS MONITOR 199

#### **SYSTEM** BUILDING

WE HAVE THE **EXPERTISE TO BUILD A** COMPLETE SYSTEM **FOR YOUR APPLICATION-CALL TO DISCUSS YOUR** REQUIREMENTS

#### SPECIALISTS?

WE KNOW ABOUT THE PRODUCTS THAT WE SELL, AND ARE HAPPY TO ADVISE YOU.

#### SERVICE

FOR A PERSONAL SERVICE, AND AFTER SALES BACKUP THAT IS SECOND TO NONE, LOOK NO FURTHER

#### DELIVERY CHARGES

Orders under \$50 -Small Items - Express 25 Large items - Express 62 Any Items - Economy 23 for timed deliveries, or heavy orders, please call.

#### SURCHARGE

if you order using ACCESS or VISA. There will be a 2.5% surcharge. No surcharge for VISA-DELTA or SWITCH

#### HOW TO ORDER

HAVE YOUR DEBIT OR CREDIT CARD DETAILS AT HAND, AND CALL:-

#### 0992 - 714539

10-7 .Monday- Friday 11 -4 Sat, Closed Sun. OR BY POST, SEND YOUR ORDER TO: -

"WHITE KNIGHT TECHNOLOGY". P.O. BOX 2395. WALTHAM CROSS. HERTS, EN8 7HQ



ELITE 11.99



FIRST SAMMEGA 13.49



DESERT STRIKE

SILENT SERVICE 2



BODY BLOWS

16.49

11.99



**ICETOMITS** 

F15 STRIKE 2 11.99



ROBOCOP 3 11.49



RAILROAD TYCOON

13.99

ALIEN BREED 8.99



F1 GRAND PRIX 14.99



VIKINGS - FIELD OF CON





LEGEND 12.99



SABRE TEAM 11.49



ASSASSIN 11.99



RAVING MAD 9.49



PREMIER MANAGER



13.49



PROJECT X 9.99



CURSE OF ENCHANTIA



AM S 3D POOL 13.99



PRO TENNIS TOUR 2

10.99

GRAHAM TAYLOR'S



CHAOS ENGINE 16,99

#### Games marked NOP will not work on A500 Plus, A600 or A1200. Games marked NO12 will not work on the A1200.

ATH N INCHES (US FOOTBALLI INO12)	-	99
688 ATTACK BUII (NOT2) A-TRAIN (1 MEG) A-TACA (1 ME	0	86
A-TRAIN (1 MEG)	24	99
A 130 C (1 MEG) MEG) (NG13)	4	40
ADDAMS FAMILY (1 MEG)	11	48
ADVANTAGE TENNIS (NO12)	.16	90
AFTERBURNER	17	90
	17	
AIR SEA BUPREMACY		
(QURSHIP SILENT SERVICE, P47 WINGS, CARRIER COMMAND (NO12)	13	40
AIR SUPPORT	1	99
AIR, LAND & SILA (GOS ATTACK SUB.		
INDY 300 FIR WHENCEPHON INVIA	16	10.0
ALIEN BREED (SPECIAL EDITION) (1 MEG	1 8	99
ANNIOS		99
ANOTHER WORLD	14	99
APOCAL YESE (1 MEO)	17	49
ARABIAN NIGHTS ARCHER MACLEAN S POOL ARKANOO 2	15	.09
ARKANOIO 2	7	40
ASMOURTD FORMS	.83	40
AVER HARRIER ASSAULT		t
AVE HARMIEN ASIAUL	E	E
BATTLE BLE	.13	49
BATTLE BLE DATA DORK	13	2
BATTLETOADS	17	49
BC KID	.17	.49
BLACH VOLLEY (NO12)	7	49
MATINAN THE MOVE BATTLE BILE DATA DOSK BATTLE BILE DATA DOSK BATTLE BOT BRITAN BATTLETOADS BC KIO BEACH VOLLEY (NO12) BILL STOMATO DAME BLASTAR (I MEQ)	13	99
BLUES BROTHERS		99
BODY BLOWS (1 MEQ) BODY BLOWS (A1300 VERSION) BOSTON BOMB CLUB (NO12) BOSING MANAGER (NO12)	1	49
BOSTON BOMB CLUB (NO12)	7	49
BOYING MANAGER (NO12)	7	49
BURNING RUSSER	!7	.49
CAPSAR II MEGI (MG12)	11	98
EURING RUBBER RURING RUBBER CADAVER INO 12) CAESAR 11 MEG   INO 12) CAMPAION (1 MEG) CAPTIVE CAPTIVE 2 - LIBERATION (1 MEG)	21	99
CAPTIVE	12	.98
CHAMPONIME MANAGER (1 MEG)	12	27
CHAMPIONSHIP MANAGER (1 MEG) CHAMPIONSHIP MANAGER 10/M (1 MEG)	17	49
CHADS ENGINE	.18	30
CHUCK ROCK (ND12). CHUCK ROCK 2 (1 MEG)	13	90
CIVIL CATION (1 MEG)	22	.99
COMBAT AIR PATROL	19	90
(F18 STRIKE EAGLE 2, 688 ATTACK		
BUB, TEAM VANKEEL IT MEGI (NO12)	19	49
COOL WORLD IT MEG)	.17	.49
CORRUPTION (M'SCROLLS) COVERT ACTION (1 MEG)	44	- 572
CRACKDOWN		
COSTOROS	10	48
CHYETAL KINGGOM DIZZY CURSE OF ENCHANTIA (1 MEG)	12	90
D-DAY	19	99
de armai de de a desde a s	.12	99
DARK QUEEN OF KRYNN (1 MEG)	d	90
DESERT STRIKE (1 MEG)	10	۳
DIZZY PANIC	- 7	An
DIZZY PRINCE YOUNFOLK	7	40
DUZZY & EXCELLENT ADVENTURE	15	30
COURT OF SERVICE CONTRACTOR		.00

	DUNE 2 BATTLE FOR ARRAXIS (1 MEG)	
88	DUNGEON MASTER &	
99	CHAOS STRIKES BACK (1 MEG)	19,49
98	DYNA BLASTERS	19.9
	DINA GLAGIENG	
49	ELITE	11.9
48	ELVIRA 2 - JAWS OF	
96	CERGERUS (1 MEG) (NO12)	22 9
49	EDIC (1 MEG)	10.4
	EPIC (1 MEG) ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS (NO.12)	
90	ESCAPE FROM THE PLANET OF THE	
99	ROBOT MONSTERS (NO.12)	7.41
	ESPANA-THE GAMES 52 (1 MEG) (NO12)	19.49
	ROBOT MONSTERS (NOT2) ESPANA-THE GAMES SQ (1 MEQ) (NOT2) EYE OF THE BEHOLDER (\$3) (1 MEQ)	10.00
49	EYE OF THE BEHOLDER 2 (1 MEG)	22.0
	ETE OF THE BEHOLDER 2   1 MEGI	44 9
99	F15 STRIKE EAGLE 2 (1 MEG)	11 19
	F15 STRIKE EAGLE 2 (1 MEG)	10.80
.99	F19 STEALTH FIGHTER (NOP)	13.8
99	FABLES & FIENDS - LEGEND OF	
	PARCES & PIENDS - LEGEND OF	
99	KYRANDIA (NO12) (1 MEG) FANTABTIC WORLDS (REALMS	21.41
99	FANTASTIC WORLDS (REALMS)	
99	PIRATES NEGA LO MANIA POPULOUS	
49	WONDERS AND UT MEDI (NO.2)	22.0
49	PIRATES MEGA LO MANA, POPULOUS, WONDERLANDI (1 MEG) (NO12) FANTASY WORLD DIZZY	7.4
	PARTAGE WONLD DIZZY	
84	FIRE & ICE	17.4
99	FIRST DIVISION MANAGER	7 4
98	PIRST SAMURAL - MEGA LO MANIA (NO12)	13.4
40	ELANCO DE ABREDOM MICHIGANITES SI	44 A
	CLASSICAL PROPERTY OF THE PARTY	20.0
40	CHAPTER (1 MED)	20 4
	FLASHBACK (1 MED) FLIGHT SIMULATOR 2 (NOTY)	23.9
50	FOOTBALLER OF THE YEAR 2 (NG/2)	14 9
ii l	FOOTBALLER OF THE YEAR 2 MOVE	200
49	ECHMILLS LORAND BOTY	140
	FORMULA 1 GRAND PRIX FUN SCHOOL 2 (2-6) FUN SCHOOL 2 (6-8)	14 30
49	FUN SCHOOL 2 (2-6) FUN SCHOOL 2 (6-8) FUN SCHOOL 2 (8-1)	7.9
98	FUN SCHOOL 2 (6-8)	7.91
88	FUN SCHOOL 2 (Se)	7.9
49	FUTURE WARS (NO12)	. 9 9
40	FOTORE WARS [ROT2]	
49	GENERIA   1 MEG	17.9
40	GHOULS W GHOSTS	.7.4
99	GOAL	19 9
99		17.9
	0000	
99	G008	16 9
49	GOLF WORLD CLASS LEADERSOARD	_# 4¢
96	GRAHAM GODCH WORLD	
49	CLASS CRICKET (1 MEG)	17.9
	GRAMAM TAYLOR S	10.0
48		
	Ottom name to come a	
49	SOCCER MANAGER (1 MEQ)	10.9
49	GREAT NAVAL BATTLES (1 MEG)	10.9
.49 90	GREAT NAVAL BATTLES (1 MEG)	10.9 24 9 22.4
49 90 86	SOCCER MANAGER (1 MEQ)	22.5
49 90 96 98	SOCCER MANAGER (1 MEQ) OREAT NAVAL EATTLES (1 MEQ) GUNSHIP 2000 (1 MEQ) MARLEOUIN	16 9
.49 .90 .90 .90	SOCCER MANAGER (1 MEQ)  CREAT NAVAL EATTLES (1 MEQ)  CHUNSHIP 2000 (1 MEQ)  HARLEGUIN  HEAD OVER HEELS	16 9
49 90 96 98	SOCCER MANAGER (1 MEQ).  GREAT NAVAL BATTLES (1 MEQ):  GUNSHIP 2000 (1 MEQ)  HARLEGUIN  HEAD OVER HELLS  HEIMOALL (1 MEQ) (NO12)	16 9
.49 .90 .90 .90	SOCCER MANAGER (1 MEQ).  GREAT NAVAL BATTLES (1 MEQ):  GUNSHIP 2000 (1 MEQ)  HARLEGUIN  HEAD OVER HELLS  HEIMOALL (1 MEQ) (NO12)	16 9
.49 .90 .90 .90 .90	SOCCER MANAGER (1 MEQ).  GREAT NAVAL BATTLES (1 MEQ):  GUNSHIP 2000 (1 MEQ)  HARLEGUIN  HEAD OVER HELLS  HEIMOALL (1 MEQ) (NO12)	16 9
49 90 90 90 90 90 90 40	SOCCER MANAGER (1 MEQ) GREAT NAVAL BATTLES (1 MEQ) GUNSHP 2000 (1 MEQ) MARLEGUNN HEAD OVER HEELS HEMDALL (1 MEQ) (NO12) HEMDOUEST (0.012) HEMDOUEST 2 - THE LEGACY OF	16 9 7.4 11.9 8.4
49 99 99 99 99 99 49	SOCCER MANAGER (1 MEQ) GREAT MAYAL BATTLES (1 MEQ) GUNSHIP 2000 (1 MEQ) HARLEQUIN HEAD OVER HEELS HEMDALL (1 MEQ) (NOT2) HEROQUEST 2: THE LEGACY OF BORABL (1 MEQ)	16 9 7.4 11.9 8.4
49 99 99 99 99 99 49 49 90	SOCCER MANAGER (1 MEQ) GREAT HAVAL BATTLES (1 MEQ) GUNSHIP 2000 (1 MEQ) HARLEGOIN HEAD OVER HEELS HEMOALL (1 MEQ) (MOT2) HEROGUEST (NOT2) HEROGUEST 2 THE LEGACY OF BORABL (1 MEQ)	16 9 7.4 11.9 8.4
49 99 99 99 99 99 49 49 90	SOCCER MANAGER (1 MEQ) GREAT HAVAL BATTLES (1 MEQ) GUNSHIP 2000 (1 MEQ) HARLEGOIN HEAD OVER HEELS HEMOALL (1 MEQ) (MOT2) HEROGUEST (NOT2) HEROGUEST 2 THE LEGACY OF BORABL (1 MEQ)	16 9 7.4 11.9 8.4
49 99 99 99 99 99 49 49 90	SOCCEM MANAGER I MEGI GURAT MANAGE RI MEGI GURATIF 2000 (I MEGI MEGI MEGI MEGI MEGI MEGI MEGI MEGI	16 9 .7.4 11 9 .8 4 18.9 19.4
49 99 99 99 99 99 49 99 99	SOCCEM MANAGER I MEGI GURAT MANAGE RI MEGI GURATIF 2000 (I MEGI MEGI MEGI MEGI MEGI MEGI MEGI MEGI	16 9 .7.4 11 9 .8 4 18.9 19.4
49 99 99 99 99 99 49 49 90	SOCCEM MANAGER I MEGI GURAT MANAGE RI MEGI GURATIF 2000 (I MEGI MEGI MEGI MEGI MEGI MEGI MEGI MEGI	16 9 .7.4 11 9 .8 4 18.9 19.4
49 99 99 99 99 99 49 99 99	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (I MEG) HARLEOUM HEROOLEST IN MEGI HEROOLEST 2 THE LEGACY OF SORABL (I MEG) HIREO GUNST 1 MEGI GREAT 1 MEGI HIREO GUNST 1	16 9 7.4 11.9 8.4 18.4 22.4
.49 94 96 98 98 98 98 49 98 98 98 98	SOCCER MANAGER I MEGI GREAT MANAGE RI 1 MEGI GUNSHIP 2000 (1 MEGI MEGI MERIDALI II MEGI MEMOLLE II MEGI MEMOLEST MOI II MEGI MEGI CUMB (1 MEGI MEGI CUMB (1 MEGI MEGI CUMB (1 MEGI MEGI CUMB MEGI CUMB MEGI MOSTEMUSTER 2 LINGARA JONES ACTION MATMAN THE MOVIE) DIR (NOPI MOOK	16 9 .7.4 11 9 .8.4 18.4 22.4
49 99 99 99 99 99 40 99 99 99 99	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) MARILEOUN MERICANI MEGI (MEG) (MOZ) MEROGUEST 2 - THE LEGACY OF BORABL (1 MEG) MIREO GUNS (1 MEG) MIREO MIREO SI SI MIREO MIREO MIREO SI SI MIREO MIREO MIREO SI SI MIREO MIREO MIREO MI	16 9 7.4 11.9 8.4 18.4 22.4
.49 94 96 98 98 98 98 49 98 98 98 98	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) MARILEOUN MERICANI MEGI (MEG) (MOZ) MEROGUEST 2 - THE LEGACY OF BORABL (1 MEG) MIREO GUNS (1 MEG) MIREO MIREO SI SI MIREO MIREO MIREO SI SI MIREO MIREO MIREO SI SI MIREO MIREO MIREO MI	16 9 .7.4 11 9 .8.4 18.4 22.4
49 99 99 99 99 99 49 99 99 44 44 44 44 4	SOCCER MANAGER I MEGI GREAT MANAGE RI 1 MEGI GUNSHIP 2000 (1 MEGI MARLEQUIN MEAD OVER MEGI MEMOLE I MEGI MEGI MEMOLE I MEGI MEGI MEMOLE I MEGI MEGI MEMOLE MEGI MEGI MEMOLE MEGI MEMOLE MEGI MEGI MEMOLE MEGI MEGI MEMOLE MEGI MEGI MEMOLE MEGI MEMOLE MEGI MEMOLE MEGI MEMOLE MEGI MEMOLE MEGI MEGI MEMOLE MEGI MEGI MEGI MEMOLE MEGI MEGI MEGI MEGI MEGI MEGI MEGI MEGI	16 9 .7.4 11 9 .8.4 18.4 22.4
49 99 99 90 90 90 49 90 90 90 91 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) HARLEOUN HEROGUEST S. HEMOALL (1 MEG) (NOT2) HEROGUEST 2 - THE LEGACY OF SORABL (1 MEG) HIREO GUNS (1 MEG) HIREO GU	16 9 .7.4 11 9 .8.4 18.4 22.4 10 4 17 9 17 9
49 99 99 99 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (1 MEG) MARLEQUIM MEAD OVER MEELS MEMOLES I MEGI MESTORVIME MEGI MUSTORVIME SIL-19 (1 MEGI MOSTEMPTER 2 LINDIAN JONES ACTION BATMAN THE MOVIE) DIG (NOPI MUMANS (NOT2) MUMANE DATA OMEK (NOT2) MUMANE DATA OMEK (NOT2) MUMANE DATA OMEK ME	16 9 .7.4 11 9 .8.4 18.4 22.4 10 4 11 9 17 9 .7 9 .7 9
49 99 99 99 99 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (1 MEG) MARLEQUIM MEAD OVER MEELS MEMOLES I MEGI MESTORVIME MEGI MUSTORVIME SIL-19 (1 MEGI MOSTEMPTER 2 LINDIAN JONES ACTION BATMAN THE MOVIE) DIG (NOPI MUMANS (NOT2) MUMANE DATA OMEK (NOT2) MUMANE DATA OMEK (NOT2) MUMANE DATA OMEK ME	16 9 .7.4 11 9 .8.4 18.9 19.4 22.4 10.4 11 9 17 9 .7 9 .7 9
49 99 99 99 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) HARLEOUN HEROGUEST STORY HOROGUEST GUNSTER STORY HOROGUEST HOROGUES	16 9 .7.4 11 9 .8.4 18.9 19.4 22.4 10.4 11 9 17 9 .7 9 .7 9
49 99 99 99 99 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) HARLEOUN HEROGUEST STORY HOROGUEST GUNSTER STORY HOROGUEST HOROGUES	16 9 .7.4 11 9 .8.4 18.4 22.4 10 4 11 9 17 9 .7 9 .7 9
49 99 99 90 90 90 90 90 90 90 90 49 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GURSHP 2000 (1 MEG) MARLEOUM HEAD OVER MEELS HEROCUEST WOLD; HEROCUEST WOLD; HEROCUEST WOLD; HIREO GUNS (1 MEG) HOLL WOOD COLLECTION (ROBCO'C) HOLL WOOD COLLECTION (ROBCO'C) HOLL WOOD COLLECTION (ROBCO'C) HOLL WOOD COLLECTION (ROBCO'C) HUMANS (NO 12) HUMANS (NO 12	10 44 11 9 11 9 11 4 12 4 11 9 17 9 17 9 10 9
49 99 99 99 99 99 49 90 49 90 49 49 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (I MEG) HARLEONIN HEMOLUST IN MEGI HEMOLUST 2 - THE LEGACY OF BORGBLE (I MEG) HIREO GUNST (I MEG) HIREO MICHOLOGO HIREO GUNST (I MEG) HIREO MICHOLOGO HIREO GUNST (I MEG) HIREO MICHOLOGO	11.9 11.9 11.9 12.4 11.9 12.4 11.9 17.9 10.9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT MANA ER ATTLEE I MEGI GUNSHP 2000 (1 MEG) MEAN DOVER MEELS MEMOLES I MEGI MEGI MEMOLES I MEGI MEGI MEGI MEGI MEGI MEGI MEGI MEGI	11.9 11.9 11.9 12.4 11.9 12.4 11.9 17.9 10.9
49 99 99 99 99 99 49 90 49 90 49 49 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) MARILEOUN MERICONITION METORYLINE 1914-16 (1 MEG) MOLTEMOTORE 1, MONANA JONES MONOTECHNICAL STATE MEDICAL METORYLINE MONOTECHNICAL METORYLINE MONOTECHNICAL M	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) MARILEOUN MERICONITION METORYLINE 1914-16 (1 MEG) MOLTEMOTORE 1, MONANA JONES MONOTECHNICAL STATE MEDICAL METORYLINE MONOTECHNICAL METORYLINE MONOTECHNICAL M	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHP 2000 (1 MEG) MARILEOUN MERICONITION METORYLINE 1914-16 (1 MEG) MOLTEMOTORE 1, MONANA JONES MONOTECHNICAL STATE MEDICAL METORYLINE MONOTECHNICAL METORYLINE MONOTECHNICAL M	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GURASHP 2000 I MEGI GURASHP 2000 I MEGI GURASHP 2000 I MEGI HEAD OVER HEELS HEROGUEST 2 - THE LEGACY OF BORABL I MEGI HEROGUEST 2 - THE LEGACY OF BORABL I MEGI HEROGUEST 1 - THE LEGACY OF BORABL I MEGI HIROG GUNS I MEGI HOLOGO GUNS ENDERE Z LINDANA JONES ACTIONE BATMAN THE MOVIE) DIS INOPI HUMANS (MOI 2) HUMANS GUNS 2 - THE MOVIE) DIS INOPI HUMANS (MOI 2) HUMANS GUNS ENTRE HIROGI HOLOGO GUNS HOLOGO HITERRATIONAL OPEN GOLT HUTERRATIONAL OPEN GOLT HUTERRATIONAL PURB CHALLENGE	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT MANAGER I MEGI GUNSHIP 2000 (1 MEGI) MARLEOUIN MEAD DOVER MEGIS MERIOLUSI SILLIA MEGIS MEGISTANI MEGISTANI MEGIS MEGISTANI M	16 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I WEG) GREAT MANA LEATLES I MEGI GUNSHP 2000 (1 MEG) MEGIONAL I MEGIONA MERIDALI I MEGIONO (NOT2) MERIDALI I MEGIONO (NOT2) MERIDALI I MEGIONO MERIDALI I MEGIONO MEGIONET 2: THE LEGACY OF SORABL (1 MEGION MEGIONET 1914-16 (1 MEGIONO) MEGIONET 1914-16 (1 MEGIONO) MEGIONAL (NOT2) MEGIONAL (NOT2) MEGIONAL (NOT2) MEGIONAL (NOT3) MEGIONAL (NOT4) MEGION	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (1 MEG) HARLEOUN HEROGUEST S. HEMBALL (1 MEG) (NOT2) HEROGUEST 2 - THE LEGACY OF BORABL (1 MEG) HIREO GUNS (1 MEG) HIROUN HIREO HIROUN HIREO H	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (1 MEG) HARLEOUN HEROGUEST S. HEMBALL (1 MEG) (NOT2) HEROGUEST 2 - THE LEGACY OF BORABL (1 MEG) HIREO GUNS (1 MEG) HIROUN HIREO HIROUN HIREO H	16 9 11 9 11 9 11 9 11 9 11 9 11 9 11 9
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I WEG) GREAT MANA LE ATTLES I MEGI GUNSHP 2000 (1 MEG) HEAD OVER MEELS MERIONI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MEGI MOT3) MERIODALINE I MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI M	16 9 11 9 12 41 11 9 12 41 11 9 11 12
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I MEGI GREAT NAVAL BATTLES I MEGI GUNSHIP 2000 (1 MEG) HARLEOUN HEROGUEST S. HEMBALL (1 MEG) (NOT2) HEROGUEST 2 - THE LEGACY OF BORABL (1 MEG) HIREO GUNS (1 MEG) HIROUN HIREO HIROUN HIREO H	16 9 11 9 12 41 11 9 12 41 11 9 11 12
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I WEG) GREAT MANA LE ATTLES I MEGI GUNSHP 2000 (1 MEG) HEAD OVER MEELS MERIONI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MEGI MOT3) MERIODALINE I MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI M	16 9 11 9 12 41 11 9 12 41 11 9 11 12
49 99 99 99 90 90 90 49 90 90 90 90 90 90 90 90 90 90 90 90 90	SOCCER MANAGER I WEG) GREAT MANA LE ATTLES I MEGI GUNSHP 2000 (1 MEG) HEAD OVER MEELS MERIONI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MOT2) MERIODALI I MEGI (MEGI MOT3) MERIODALINE I MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI MEGI MIRORI M	22,41 11,9 11,9 11,9 11,9 11,9 11,9 11,9 1

9	JACK NICKLAUS GOLF	-7	98
	JAGUAR XJ220 (1 MEG)	19	98
9	JAMES POND	7	48
9	JIMMY WHITES SNOOKER	15	48
9		- 3	0.0
	JOHN MADDEN S (U.S) FOOTBALL	17	ΑÐ
9	KGB KICK OFF 2 (1 MEG) (NO12)	19	99
9	KICK OFF 2 (1 MEG) (NO12)	8	99
_	KICK OFF 2 (1 MEG) (NOT2) KNIGHTMARE KNIGHTS OF THE SKY (1 MEG) LECEND LECEND LECEND OF VALOUR (1 MEG) LEMMINOS	12	99
9	KNIGHTS OF THE BRY (1 MEG)	42	89
9	LAST NINJA 2 (NO12)	77	-
i	LEGENDO DE MAI OUD (1 MEG)	22	370
e e	PEASON OF AMEDON (1 MEG)	44	40
	LEMBRAGE 2	12	99
0	LEMMINGS 2 LEMMINGS DATA DISK OH NO!		94
•	LETHAL WEAPON (LIMEO)		
0	LETHAL WEAPON (1 MEG)	17	49
	LOMBARD RAC RALLY	_7	49
	LORD OF THE RINGS LOST VIKINGS LOTUS ESPRIT TURBO CHALL (NO12)	16	99
9	LOST VIKINGS	19	49
9	LOTUS ESPRIT TURBO CHALL (NO12)	-4	45
9	LOTUS TURBO CHALLENGE 2 (NO12)	9	49
7	LOTUS 3 - THE FINAL CHALLENGE		-
9	LOTUS 3 - THE FINAL CHALLENGE (1 MEG) (NO12) LURE OF THE TEMPTRESS (1 MEG) M1 TANK PLATOON (1 MEG)		.94
9	LURE OF THE TEMPTRESS (1 MEG)		90
-	NACIC WORLDS	110	5
1	MAGIC WORLDS ISTORM MASTER, DRAGONS BREATH	-	41
	CRYSTALS OF ARBONEA INCIZI		40
9	MAGICLAND DIZZY	7	49
i			49
9	MANCHESTER UNITED EUROPE	16	
Ö.	MANIAC MANSION (NO12)		91
0	MCDONALDS LAND	17	49
0	MEGA SPORTS		
0	(SUMMER CAMES 1 & 2, WINTER		
9	GAMES) (ND12)	10	99
0	GAMES) (ND12) METAL MUTANT (ND12) MICROPROSE 2D GOLF (1 MEG)	-2	49
9	MICHOPPOSE 3D DOLF (1 MEG)	13	876
9		-	
	MIDNIGHT RESISTANCE (NO12)	7	41
	MIDWINTER (NO12)	7	199
0	MIDWINTER (NO12) MIQ 29 (1 MEQ)	.7	90
	MIDWINTER (ND12) MIQ 29 (1 MEQ) MONOPOLY	.7	199
9	MIDWINTER (NO12) MID 29 (1 MEG  MONOPOLY MONSTER PACK 2   KILLING GAME SHOW, AWESOME, BEAST 2: (NO12)	7 9 17	96 06 09
9	MIDWINTER (NOI 2) MIG 29 (1 MEG) MONOPOLY MONSTER PACK 2 (KILLING GAME SHOW, AWESOME, BEAST 2) (NOI 2) MOTORNEAU	.7 .9 17 14	90 90 90 90
9	MIDWINTER (NO 12) MIQ 28 (1 MEQ) MONOPOLY MONETER PACK 2 [KILLING GAME SHOW, AWESOME, BEAST 2) (NO 12) MOTORHEAD NEW ZEALAND STORY (NO 12)	.7 .9 17 14 11 .7	90 90 90 90 90 40
9	MIDWINTER (NOT2) MIC 25 ( MEG) MONSTER PACK 2 ( MILLING GAME SHOW, AWESOME, BEAST 2) (NOT2) MOTORHEAD NEW ZEALAND STORY (NOT2) MCK FALOD S GOLF	.7 .9 17 14 11 .7 20	90 90 90 90 90 40
9 9 9 9 9 9	MIDWINTER (NOT2) MIG 241 MEG[] MCNOPOLY MONSTER PACK 2 [KILLING GAME SHOW, AWESOME, MEAST 2) (NOT2] MCTORNEAU MCTORNEAU NEW ZEALAND STORY (NOT2) NEK FALOD S GOLF	.7 .9 17 14 11 .7	90 90 90 90 90 40
9	MIDWINTER (NO12) MIG 261 MEGI MCAOPOLY MCAOPOLY MCAOPOLY MCAOPOLY MCAOPOLY MCAOMER PACK 2 [KILLING GAME 3HOW. AWESOME. BEAST 2) (NO12] MCTORNEAU NEW ZEALAND STORY (NO12] MCK PALOD G GOLF MCK PALOD G G GOLF MCK PALOD G G G G G G G G G G G G G G G G G G G	17 14 11 .7 20 15	90 90 90 90 40 10
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (ND12) MIDWINTER (ND12) MQ 20 ( MEQ) MQ 20 ( ME	.7 .9 17 14 11 .7 20 15	90 90 90 90 90 40 90
9 9 9 9 9 9	MIDWINTER (ND12) MIDWINTER (ND12) MQ 20 ( MEQ) MQ 20 ( ME	.7 .9 17 14 11 .7 20 15	90 90 90 90 90 40 90
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MICHAEL PACK 2 (NILLING GAME NONSTER PACK 2 (NILLING GAME SHOW AVESOME, BEAST 2) (NO12) MOTORHEAD NEW ZEALAND STORY (NO12) MOTORHEAD NOCKY BOOM MOGEL MARKELL'S WORLD CHAMP SHOP (1 MEG) NOSE MARKELL'S WORLD CHAMP SHOP (1 MEG)	.7 .8 9 17 14 11 .7 20 15	90 90 90 90 90 40 90 90 40
9 9 9 9 9 9	MIDWINTER (NO12) MICHAEL PACK 2 (NILLING GAME NONSTER PACK 2 (NILLING GAME SHOW AVESOME, BEAST 2) (NO12) MOTORHEAD NEW ZEALAND STORY (NO12) MOTORHEAD NOCKY BOOM MOGEL MARKELL'S WORLD CHAMP SHOP (1 MEG) NOSE MARKELL'S WORLD CHAMP SHOP (1 MEG)	.7 .9 9 17 14 11 .7 20 15 16 18	90 90 90 90 90 40 90 90 40 90 40
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MICHAEL PACK 2 (NILLING GAME NONSTER PACK 2 (NILLING GAME SHOW AVESOME, BEAST 2) (NO12) MOTORHEAD NEW ZEALAND STORY (NO12) MOTORHEAD NOCKY BOOM MOGEL MARKELL'S WORLD CHAMP SHOP (1 MEG) NOSE MARKELL'S WORLD CHAMP SHOP (1 MEG)	.7 .9 9 17 14 11 .7 20 15 .16 .18	90 90 90 90 90 90 40 90 40 90 41 90 90
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MICHAEL PACK 2 (NILLING GAME NONSTER PACK 2 (NILLING GAME SHOW AVESOME, BEAST 2) (NO12) MOTORHEAD NEW ZEALAND STORY (NO12) MOTORHEAD NOCKY BOOM MOGEL MARKELL'S WORLD CHAMP SHOP (1 MEG) NOSE MARKELL'S WORLD CHAMP SHOP (1 MEG)	.7 .9 9 17 14 11 .7 20 15 16 .8 16	90 90 90 90 90 40 90 40 90 41 90 91
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MIDWINTER (NO12) MQROPOLY MQROPOLY MQROPOLY SHOW, AWESOME, BEAST 2) (NO12) MQTORNERS NEW ZEALAND STORY (NO12) MEW ZEALAND STORY (	.7 .9 17 14 11 .7 20 15 .16 9 10 7	90 90 90 90 90 90 40 90 40 90 41 90 90
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MIDWINTER (NO12) MID 20 (MEQ) MONOPOLY MONOSTER PACK 2 (MILLING GAME SHOW, AWESOME, MEAST 2) (NO12) MID 22 (ANO12) MID 23 (ANO12) MID 23 (ANO12) MID 24 (ANO12) MID 25 (ANO12) MID 25 (ANO12) MID 25 (ANO12) MID 26 (A	.7 .9 17 14 11 .7 20 15 16 .9 10 .7 .16	99 99 99 49 49 99 49 49 49 49 49 49 49 4
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (NO12) MIDWINTER (NO12) MONOPOLY MONOPOLY MONOSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MCMONSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MCM FALDO B GOLF MCK PALDO B GOLF MCK PALDO B GOLF MCK PALDO B GOLF MOSEL MANGELL S WORLD CHAMP'SDEP (1 MCG) NIGEL MANGELL S WORLD CHAMP'SDEP (1 MCG) MOSEL MANGELL S WORLD CHAMP'SDEP (1 MCG) MOSEL MANGELL S WORLD OF MARTINE MOSEL S MORE MOSEL S MO	.7 .9 17 14 11 .7 20 15 16 .9 10 .7 .16	90 90 90 90 40 90 90 40 90 90 41 41 41 41 41
	MIDWINTER (NO12) MIDWINTER (NO12) MONOPOLY MONOPOLY MONOSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MCMONSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MCM FALDO B GOLF MCK PALDO B GOLF MCK PALDO B GOLF MCK PALDO B GOLF MOSEL MANGELL S WORLD CHAMP'SDEP (1 MCG) NIGEL MANGELL S WORLD CHAMP'SDEP (1 MCG) MOSEL MANGELL S WORLD CHAMP'SDEP (1 MCG) MOSEL MANGELL S WORLD OF MARTINE MOSEL S MORE MOSEL S MO	.7 .9 17 14 11 .7 20 15 16 .9 10 .7 .16	90 90 90 90 40 90 90 40 90 90 41 41 41 41 41
	MIDWITTER (NO12) MIDWITTER (NO12) MONOPOLY MONOMER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MONSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MOLE RALDO B COLF MOLE RALDO B COLF MOLE MANUELL 8 WORLD CHAMP'SHOP (1 MEG) MOSE MANUELL 8 WORLD MONEY MORE MANUELL 8 WORLD MONEY M	.7 9 17 14 11 -7 20 15 16 18 16 -7 16 16 -7 16 16 16 16 16 16 16 16 16 16 16 16 16	90 90 90 90 90 90 90 40 90 90 41 42 43 43 44 45 46 46 46 46 46 46 46 46 46 46 46 46 46
9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MIDWINTER (ND12) MIDWINTER (ND12) MQ 20 (MEQ) MQ 21 (M	7 14 11 7 20 15 16 18 16 7 16 7 16 7 16 7 16 7 16 7 16	90 90 90 90 90 90 40 90 90 41 42 42 43 43 44 45
	MIDWINTER (ND12) MIDWINTER (ND12) MQ 20 (MEQ) MQ 21 (M	7 14 11 7 20 15 16 18 16 7 16 7 16 7 16 7 16 7 16 7 16	90 90 90 90 90 90 40 90 90 41 42 42 43 43 44 45
	MIDWINTER (ND12) MIDWINTER (ND12) MQ 20 (MEQ) MQ 21 (M	7 14 11 7 20 15 16 18 16 7 16 7 16 7 16 7 16 7 16 7 16	90 90 90 90 90 90 40 90 90 41 42 42 43 43 44 45
	MIDWINTER (ND 12) MIDWINTER (ND 12) MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQTORHEAD MQ	.7 9 17 14 11 .7 20 15 16 .9 16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	90 90 90 90 40 90 40 90 40 40 40 40 40 40 40 40 40 40 40 40 40
	MIDWINTER (ND 12) MIDWINTER (ND 12) MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQTORHEAD MQ	.7 9 17 14 11 .7 20 15 16 .9 16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	90 90 90 90 40 90 40 90 40 40 40 40 40 40 40 40 40 40 40 40 40
	MIDWINTER (ND 12) MIDWINTER (ND 12) MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQTORHEAD MQ	.7 9 17 14 11 .7 20 15 16 .9 16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .16 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	90 90 90 90 40 90 40 90 40 40 40 40 40 40 40 40 40 40 40 40 40
	MIDWINTER (ND12)  MIDWINTER (ND12)  MONOTER PACK 2 [NELLING GAME SHOW, ANTESOME, BEAST 2) (ND12)  MONSTER PACK 2 [NELLING GAME SHOW, ANTESOME, BEAST 2) (ND12)  MICK PALOD S DOLF  MICK	7 9 17 14 11 7 20 15 16 18 16 22 13 18 11 12 17 8 7	90 90 90 40 90 90 44 49 90 40 40 40 40 40 40 40 40 40 40 40 40 40
	MIDWINTER (ND12) MIDWINTER (ND12) MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQNOOLY MQTORHEAD MQTORH	.7 .9 9 17 14 11 .7 200 15 16 16 16 16 16 16 16 16 16 16 17 16 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18	90 90 90 40 100 99 40 40 40 40 40 40 90 90 90 90 90 40 40 40 40 40 40 40 40 40 40 40 40 40
	MIDWITTER (ND12)  MIDWITTER (ND12)  MONOSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (ND12)  MONISTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (ND12)  MICK PALOD B COLF  MICK	.7 .9 9 17 14 11 .7 20 15 16 16 16 16 16 16 16 16 16 16 17 16 17 18 .	90 90 90 90 40 90 90 90 90 90 90 90 90 90 90 90 90 90
	MIDWITTER (ND12)  MIDWITTER (ND12)  MONOSTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (ND12)  MONISTER PACK 2 (NELLING GAME SHOW, AVESOME, BEAST 2) (ND12)  MICK PALOD B COLF  MICK	.7 .9 9 17 14 11 .7 20 15 16 16 16 16 16 16 16 16 16 16 17 16 17 18 .	90 90 90 90 40 90 90 90 90 90 90 90 90 90 90 90 90 90
	MIDWITTER (NO12) MIDWITTER (NO12) MID 20 (MONOPOLY MONOPOLY MONOPOLY MONOMER PACK 2 (MELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MONOMER PACK 2 (MELLING GAME SHOW, AVESOME, BEAST 2) (NO12) MICK FALDO B COLF MIC	.7 .9 9 17 14 11 .7 20 15 16 16 16 16 16 16 16 16 16 16 17 16 17 18 .	90 90 90 90 40 90 90 90 90 90 90 90 90 90 90 90 90 90
	MIDWITTER (ND12) MIDWITTER (ND12) MQAQOOLY MQAQOOLY MQAQOOLY MQAQOOLY MQAGOOLY MAGAGOOLY MAGAGOO	7 9 17 14 1 1 7 20 15 16 18 16 17 16 22 13 18 11 12 17 8 8 16 16 16 16 16 16 16 16 16 16 16 16 16	90 90 90 90 40 90 90 90 90 90 90 90 90 90 90 90 90 90

THE RESERVE TO SHARE THE PARTY OF THE PARTY	
POPULOUS 2 CHALLENGE	SUPERSKI 2 (NO12)
	SWITCHELADE 2 (NOT
POWER UP	SMITCHELADE 2 (NO)
CHARLE NO THERETAN YOUT	SWIY (NOP)
(CHASE H.Q, TURRICAN, X-QUT.	THE STATE OF THE S
ALTERED BEAST, RAINBOW ISLANDS)10 88	THE ADVENTURES (SI
POWERMONGER (NO12) 18 49 POWERMONGER WORLD WAR 1	HUNTER CORPORATI
DOMERINGINGEN MONTO MAN I	THE LOST THE ASUMES
DATA DISK (NO12)         11.49           PREMIER MANAGER (I MEQ)         13.49           PREMIER E(I MEQ)         11.90           PRIME MOVER         19.40           PRINCE OF PERSIA (I MEQ)         7.49           PRO TENNIS YOUR 2         10.99	(20 CLASSIC INFOCOM
PREMIER MANAGER (1 MEG)	ADVENTURES) (NO12)
PREMIERE (1 MEG)11.90	THUNDERHAWK
PRIME MOVER 19 49	TITUS THE FOX
PRINCE OF PERSIA (1 MEG)	TORNADO (1 MEG)
PRO TENNIS TOUR 2	TRANSARCTICA
PROJECT X (SPECIAL EDITION) (1 MEG) 8 99	TROJAN - ALIEX
PUBH-OVER (1 MEG)	(LIGHT PHAZER GAME
PUTTY 13.99	TROJAN - CYNER ASS
QUEST & GLORY (BLOODWYCH	(LIGHT PHAZER GAME
REPRESENTED CARAVER BATTOMOTOL 12 44	TROJAN - FIRESTAR
8 TVRC (NO.12) 2.48	(LIGHT PHAZER GAME
R-TYPE (NO.12) 7.48 RAGNAROK (NO.12) 21.99 RAUROAD TYCOON (1 MEQ) 13.99 RAINROW COLLECTION	TROJAN - THE ENFOR
RAU ROAD TYCOON (4 NEC) (2 DO	(LIGHT PHAZER GAME
RAINBOW COLLECTION	
	TURRICAN 2
IBUBBLE BOBBLE, RAINBOW ISLANDS	TURRULAN 2
NEW ZEALAND STORY) (NOP) 10 90 RAVING MAD (MECA TWINS JAMES	TV SPORTS BASEBAL
HAVING MAD IMECIA TWINS JAMES	TV SPORTS BOXING (
POND 2 - ROBOCOD ROOLAND) REACH FOR THE SKIES RICK GANGEROUS (NO 2) RISKY WOOD 17-40	TV SPORTS FOOTBAL
REACH FOR THE SKIES /1 90	ULTIMA 5 (NO12) ULTIMATE GOLF (NO1 LINIVERSAL MONSTEF
RISKY WOODS (NO.2) 7.49 RISKY WOODS 17-40 17-40	ULTIMATE OOLF (NOT
RISKY WOODS 17-40	LIMIYERSAL MONETER
AGAD RANH 17.44	UTOPIA . DATA DISK
	VIKINGS - FIELD OF CO
R050COP 2	YROOM (NO12)
ROBOCOP 3 (NO12)	VROOM DATA DISK IN
ROBOGOP 2	
ROOKIES19.99	WAXWORKS (1 MEG)
SARRE TEAM 11.40	WHERLS OF FIRE IMA
SABRE TEAM 11.49 SECRET OF MONKEY ISLAND (1 MEQ) 13.90	POWERDRIFT, CHASE
	POWERDRIFT, CHASE OUTRUN (NO12)
SENSIBLE SOCCER (192/93 BEASON)	WING COMMANDER 1
SEYMOUR GOES TO HOLLYWOOD	WIT-KID
SEYMOUR GOES TO HOLLYWOOD 7.49 SHADOW OF THE BEAST 2 (+ 1-SHIRT) 8 98	WIZARDRY 7 - CRUSA
SHADOW OF THE BEAST 3 19.49 SHADOWORLDS (NO12) 15.99 SHOOT- EM-UP CONSTRIN KIT (NO12) 8.49	THE DARK SAVANT (1
SHADOWOELDS (NO.12) 15.00	WWF WRESTLING INC
SHOOT- FM-UP CONSTRIN SIT (NO12) 8 49	WWF WRESTLING 2 (1
SHUTTLE (1 MEO)14.49	MÉNON à MEGABLAST
SILENT BERVICE 2(1 MEG) (NOP)12.99	ZAK MCKRACKEN (NC
SIM CITY & POPULOUS 16.99	200L (1 MEQ)
SIM CITY DELUXE (SIM CITY,	200L (A1200 VERSION
FUTURE CITIES & TERRAIN EDITOR) 22.49	ZOOL 2 (1 MEG)
SLEEPWALKER . 20.49	ZOOC Z (1 MEG)
	EDUCA
	AN AND INVESTIGATION
SPACE CRUSADE (NO12) 18 48 12.98	ADI ENGLISH (11-12 YI ADI ENGLISH (12-13 YI
SPACE CRUSADE (NO12)	ADI ENGLISH (13-14 Y
SPACE CHUSADE DATA DISA [NU12]	AD ENGLISH HAPIN
SPECIAL FORCES (1 MEG) 13.99 SPIKE IN TRANSYLVANIA 7.49	ADI FRENCH (11-12 YE
SPIRIT OF EXCALIBUR (1 MEG) (NOP) 899	ADI FRENCH (12-13 YE
SPIRIT OF EXCALIBURY IT MEGI (NOP) ILW	ADI FRENCH (13-14 YR
SPORTS MASTERS (PGA GOLF, INDY 500, ADVANTAGE TENNIS, EUROPEAN	ADI JUNIOR COUNTING
ADVANTAGE TENNIS, EUROPEAN	ADI JUNIOR COUNTRI
CHAMPIONSHIP \$ 1902) (1 MEG) (NO12) 19.99	<b>ADIJUNIOR READING</b>
STARBLADE (NO12)	ADI JUNIOR READING
STEVE DAVIS SNOCKER 10.89	ADI MATHS (11-12 YRS
STORM MASTER	ADI MATRIE (12-13 YRI
	ADI MATHS (13-14 YRI
STUART PEARCE'S SOCCER SELECTION'S	ALVIN'S PUZZLES IS-8
(KICK OFF 2, WORLD CHAMPIONSHIP	AMOS EASY (FIRST P
(KICK OFF 2, WORLD CHAMPIONSHIP SOCCER, MANCHESTER UNITED.	FUN SCHOOL 3 (2-5 Y)
INTERNATIONAL SOCCER) (NO12)12.99	FUN SCHOOL 3 (5-7 Y)
STUNT CAR RAGER (NG12)7.49	FUN SCHOOL 3 (7- YR
SUPER CARS 2 (NOP) 849	FUN SCHOOL 4 (5-7 Y)
RUPPR PROG (1 MEG) 16 40	FUN SCHOOL 4 (5-7 Y) FUN SCHOOL 4 (7- YR
SUPER HAND ON 7.46	FUN SCHOOL SPECIAL
SUPPR HERO 10 40	- MERLIN & MATHS (7-
SLIPPE SEYMOUR 7 40	FUN SCHOOL SPECIAL
SUPER CARS 2 (NOP)	CREATE EDUCATIONA
SUPER SPURIS CRALLERUS 12.89	PAPER IE ERROR I IOMA
WITH CLOCK (TECHORISE)	24.00
WITH CLOCK (TECNOPLUS)	32.98
1 MEGABYTE A600 RAM UPGRADEWITH 2 MEG PCMCIA UPGRADE FOR A600 OR	CLOCK34 99

	012 will not work on th	e l
Ī	SUPERSKI 2 (NO12).	.7.4
	SWITCHELADE 2 (NO12)	8.41
	SWIV (NOP) SYNDICATE (1 MEG)	11,90
	THE ADVENTURES (SUPPEMACY, HUNTER CORPORATION) (NO12) THE LOST TREASURES OF INFOCOM 1	13.99
	THE REAL PROPERTY AND ADDRESS OF THE PERTY.	
	ADVENTURES) (NO17) THUNDERHAWK TITUS THE FOX TORNADO (1 MEG) TRANSARCTICA	27 99
	DITUS THE FOX	8 85
	TORNADO (1 MEG)	20.96
	(LIGHT PHAZER GAME) TROJAN - CYBER ASSAULT	
	(LICHT PHAZER GAME)	8 99
	TROJAN - FIRESTAR (LIGHT PHAZER GAME)	8.01
	TROJAN - THE ENFORCER (LIGHT PHAZER GAME)	.0.99
	TURRICAN TURRICAN 7	7.41
	TV SPORTS BASEBALL (NO12)	2 84
	TV SPORTS FOOTBALL (NO12)	A St
	ULTIMA 5 (NO12)	PL
	UNIVERSAL MONETERS	a.
	TURRICAN TURRICAN 2 TURRICAN 2 TV BPORTS BOXING (NO12) TV BPORTS BOXING (NO12) TV BPORTS FOOTBALL (NO12) ULTIGAS INCOME? ULTIGAS INCOME? ULTIGAS INCOME? VICTOR AND	0 84
	VROOM (NO12)	12 9
	WALKER WAXWORKS (1 MEG)	19 44
	WHEELS OF FIRE  HARD DRIVIN',	22 41
	WAXWORKS (1 MEG) WHEELS OF FIRE (MARD DRIVIN', POWERDRIFT, CHASE H G, TURBO OUTRUN) (NO12)	12 00
	POWERDRIFT, CHASE M G, TURBO OUTRUN; (NO12) WING COMMANDER 1 (1 MEQ) WIZ-KID.	9.91
	THE DARK SAVANT (1 MEQ)	28.99 10.04
	WWF WRESTLING (NO12) WWF WRESTLING 2 (1 MEG) #ENON 2 MEGABLAST ZAK MCKRACKEN (NO12). ZOOL (1 MEG)	10.91
	ZAK MCKRACKEN (NO12)	9.94
	ZOOL (1 MEG)	11.84
	ZOOL (A1200 VERSION) ZOOL 2 (1 MEG)	7,4
	EDUCATIONAL ADI ENGLISH (11-12 YRS) ADI ENGLISH (12-13 YRS) ADI ENGLISH (13-14 YRS)	
	ADI ENGLISH (11-12 YRS) ADI ENGLISH (12-13 YRS)	16.44
	ADI ENGLISH (13-14 YRS)	16 41
	ADI ENGLISH (13-14 YRS) ADI FRENCH (12-13 YRS) ADI FRENCH (12-13 YRS) ADI FRENCH (12-13 YRS) ADI JUNIOR COUNTING (4-3 YRS) ADI JUNIOR COUNTING (4-7 YRS) ADI JUNIOR READING (6-7 YRS) ADI JUNIOR READING (6-7 YRS) ADI JUNIOR READING (6-7 YRS) ADI MATHS (11-12 YRS) ADI MATHS (11-12 YRS) ADI MATHS (12-13 YRS) ADI MATHS (12-14 YRS) ADI MATHS (12-14 YRS)	16 4
	ADI PRENCH (13-14 YRS)	18.44
	ADI JUNIOR COUNTING (6-7 YRS)	13.91
	ADI JUNIOR READING (6-7 YRS)	13 91
	ADI MATHS (11-12 YRS)	18.41
	ADI MATHS (13-14 YRS)	0.41
	AMOS EASY (FIRST PROGRAMMING)	21.96
	FUN SCHOOL 3 (5-7 YRS)	13.9
	FUN SCHOOL 3 (7- YAS)	12.94
	FUN SCHOOL 4 (2-8 YRS)	15 94
	FUN SCHOOL 477- YRS]	15.90
	MERLIN & MATHS (7-11 YRS)	16 41
	ADI MATHE (12-13 YRS) ADI MATHE (11-14 YRS) ALVIN 3 PUZZLES (4-14 YRS) ALVIN 3 PUZZLES (4-14 YRS) FUN SCHOOL (12-14 YRS) FUN SCHOOL (13-14 YRS) FUN SCHOOL (17-14 YRS) FUN SCHOOL (17-14 YRS) FUN SCHOOL SPECIAL - PAINT N CREATE EQUACTIONAL ART N CREATE EQUACTIONAL ART N CREATE EQUACTIONAL ART N - VRS)	18.46

We had the trist store ew

PUN SCHOOL SPECIAL  40 - SPELLING FAIR (7-13 YRS)  50 - CHAPTER  51 - CHAPTER  51 - CHAPTER  52 - CHAPTER  53 - CONFORMS TO MAINTEN  54 - CONFORMS TO MAINTEN  55 - CONFORMS TO MAINTEN  56 - CONFORMS TO MAINTEN  56 - CONFORMS TO MAINTEN  57 - CONFORMS TO MAINTEN  57 - CONFORMS TO MAINTEN  58 - CONFORMS TO MAINTEN  59 - CONFORMS TO MAINTEN  50 - CONFORMS T		200.
## SPELLING FAIR 7-13 YRS] 16 42 ## KIDSTYPE JUN OR WIPPOCCESSOR 1 5 28 ## KIDSTYPE JUN OR WIPPO	40	FIIN SCHOOL SORCIAL
80 MEGG MATTIG (A' LEVEL COURSE) 10 SI MICRO PROLISH (I YEST O COSE, MICRO PROLISH (I YEST O COSE, MICRO PROLISH (I YEST O COSE, MICRO PROME) TO MATCH (I WINDLE LINE) 10 SI MICRO PROME TO MATCH (I WINDLE LINE) 11 SI MICRO PROLISH (I YEST LOUIS) MIC		- SPELLING FAIR (7-13 YRS)
MICRO PRINCH INCOME  COMPORABITO INATIONAL CURRICULUM, 18 PE  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL 18 PE  PANTY POT 2 (4 10 YRS1		MECA MATING (AT LEVEL COURSE) 14 45
MICRO PRINCH INCOME  COMPORABITO INATIONAL CURRICULUM, 18 PE  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL CURRICULUM 18 PE  MICRO MATINS 11 YES TO OCIDE.  COMPORABITO INATIONAL 18 PE  PANTY POT 2 (4 10 YRS1		MICRO ENGLISH IS YES TO GOSE.
COMPORATE TO NATIONAL CUMPLELIUM, 18 IS- MICRO CERMAN (REGINNER TO 40 CCSE AND BUSINESS LEVEL, 50 COMPORATE TO NATIONAL CUMPLEUM 18 IS- MICRO CERMAN (REGINNER TO COMPORATE TO NATIONAL CUMPLEUM 18 IS- MICRO CERMAN TO NATIONAL CUMPLEUM 16 IS- MICRO CERMAN TO NATIONAL CUMPLEUM 16 IS- MICRO CERMAN TO NATIONAL CUMPLEUM 16 IS- MICRO CERMAN TO NATIONAL CUMPLEUM 15 IS- MICRO CERMAN TO NATIONAL COMPLEX MICRO CERMAN TO NATIONAL C	99	CONFORMS TO MATIONAL CURRICULUM: 16 99
BOOKSTORES TO AUTHORISE COMPILES AND SPECOLUMN 16 SI MICRO DETENDED TO AUTHORISE (1 MES) IN STO DESSE OF CONTROL OF CONTR		COMPOSITE TO MATIONIAL PROBLEMS TIME TO BE
BOOKSTORES TO AUTHORISE COMPILES AND SPECOLUMN 16 SI MICRO DETENDED TO AUTHORISE (1 MES) IN STO DESSE OF CONTROL OF CONTR		MICRO GERMAN (REGINNER TO
BOOKSTORES TO AUTHORISE COMPILES AND SPECOLUMN 16 SI MICRO DETENDED TO AUTHORISE (1 MES) IN STO DESSE OF CONTROL OF CONTR		CONFORMS TO NATIONAL CURRICULUM III III
MICRO DECIENCE (I MEDIS VIST TO GESE DOMPORAS TO NATIONAL CURRICULUM 16 SIS MODDY & BALAYTIME (I MED) POR CHE DIRTH AGED 3-1 PORT CHE DIRTH AGED 3-1 P	98	MICRO MATHS (11 YRS TO GCSE.
NODDY & PLAYTINE (1 MEC)  (EDUCATIONAL PROCESSOR  FOR CHE DREN AGED 3-1  WHICH WHERE WHAT? (4 WRS) 13 49  WHICH WHERE WHAT WHAT WHICH WHAT WHAT WHAT WHAT WHAT WHAT WHAT WHA	-	MICHO RCIENCE / MEDVE VRS TO GCGF
99 (EDUCATIONAL PROCRAM FOR CHAIRDRIN AGED 3-) 13 89 9 PANT POT 2 (4 10 YR8) 13 91 9 PANT POT 2 (4 10 YR8) 13 91 9 PANT POT 2 (4 10 YR8) 13 91 9 PANT POT 2 (4 10 YR8) 13 91 9 PANT POT 2 (4 10 YR8) 13 91 9 PANT POT 2 (4 10 YR8) 13 91 9 PAND S	90	COMPORMS TO NATIONAL CURRICULUM 16 M
FOR CHILDREN AGEO 3-1  SMODPHIGH BASET (6 4 YRS) 13 -8  SMODPHIGH BASET (6 4 YRS) 13 -8  WHICKEY WHERE? WHATE? (44 YRS) 13 -8  30 CONSTRUCTION KET 2 31 -89  30 CONSTRUCTION KET 2 31 -89  30 AMOS JARGES GREATORS 22 31 -89  AMOS ARGES GREATORS 22 31 -89  AMOS JARGES GREATORS 22 31 -89  31 AMOS JARGES GREATORS 22 31 -89  32 AMOS JARGES GREATORS 22 31 -89  33 AMOS PROFESSIONAL COMPLER RICHARD 31 -89  34 AMOS PROFESSIONAL COMPLER RICHARD 31 -89  35 AMOS JARGES GREATORS 22 99  36 CELUXE PAINT 3 (WTH A MASSTOR) 24 -89  36 CELUXE PAINT 3 (WTH A MASSTOR) 24 -89  37 CELUXE PAINT 3 (WTH A MASSTOR) 24 -89  38 DESIVEY ANNA 3 (WTH A MASSTOR) 24 -89  39 PUR SCHOOL SPECIAL PAINT 10  4 CREATE EQUITATIONAL ART (5, VRS) 15 -89  4 HOME OFFICE WT DELEXE  5 (KIND WORDS 3 WORD PROCESSOR 29 -89  4 HOME OFFICE WT DELEXER RICHARD 34 -89  4 KIND WORDS 3 WORD PROCESSOR 34 -89  4 KIND WORDS 3 WORD PROCESSOR 34 -89  4 KIND WORDS 3 WORD PROCESSOR 34 -89  30 PROFESSIONAL COMPLES ANNA 34  4 KIND WORDS 3 WORD PROCESSOR 34 -89  31 PRILLISHER (1 WTROS SOR, BYREADSWELL)  4 KIND WORDS 3 WORD PROCESSOR 34 -89  32 PRILLISHER (1 WTROS SOR, BYREADSWELL)  4 KIND WORDS 3 WORD PROCESSOR 34 -89  34 WIND WORD 3 SPREADSWELL AND WHITE 34  35 WORDWORTH WYROCESSOR 35 -89  36 WORDWORTH WYROCESSOR 35 -89  37 PROCESSOR 11 WORD SPOKE SOR 35 -89  38 PROFESSOR 11 WORD SPOKE SOR 35 -89  39 PROCESSOR 11 WORD SPOKE SOR 35 -89  30 WORDWORTH WYROCESSOR 35 -89  30 WORDWORTH WYROCESSOR 35 -89  31 WORDWORTH WYROCESSOR 35 -89  32 WORDWORTH WYROCESSOR 35 -89  33 WORDWORTH WYROCESSOR 35 -89  34 WORDWORTH WYROCESSOR 35 -89  35 WORDWORTH WYROCESSOR 35 -89  36 WORDWORTH WYROCESSOR 35 -89  37 WORDWORTH WYROCESSOR 35 -89  38 WORDWORTH WYROCESSOR 35 -89  39 WORDWORTH WYROCESSOR 35 -89  30 WORDWORTH WYROCESSOR 35 -89  30 WORDWORTH WYROCESSOR 35 -89  31 WORDWORTH WYROCESSOR 35 -89  32 WORDWORTH WYROCESSOR 35 -89  34 WORDWORTH WYROCESSOR	00	(FOLICATIONAL PROGRAM
TILLITY  10 30 CONSTRUCTION RT (WITH VIDEO) 11 MIN 30 CONSTRUCTION RT (WITH VIDEO) 12 MIN 30 CONSTRUCTION RT (WITH READ READ READ READ READ READ READ READ		EOR CHILDREN AGED 341 18.00
TILLITY  10 30 CONSTRUCTION RT (WITH VIDEO) 11 MIN 30 CONSTRUCTION RT (WITH VIDEO) 12 MIN 30 CONSTRUCTION RT (WITH READ READ READ READ READ READ READ READ	89	THOUSAND BARKET (A A YRR)
TILLITY  TUTLITY  TUT	99	WHICH? WHERE? WHAT? (4-8 YRS)13 40
89 30 CONSTRUCTION KIT (WITH VIDEO) 11.89 30 AND CONSTRUCTION KIT (WITH VIDEO) 11.99 31 30 CONSTRUCTION KIT (WITH VIDEO) 11.99 32 30 CONSTRUCTION KIT (WITH VIDEO) 11.99 33 30 CONSTRUCTION KIT (WITH VIDEO) 12.99 34 AND SIR (WITH VIDEO) 12.99 35 30 AND SIR (WITH VIDEO) 12.99 36 AND SIR (WITH VIDEO) 12.99 37 AND SIR (WITH VIDEO) 12.99 38 AND SIR (WITH VIDEO) 12.99 39 AND SIR (WITH VIDEO) 12.99 30 CHARLES AND SIR (WITH AND AND CONTROL OF THE VIDEO CO	41	UTILITY
99 AMOS I OR RECURSE MOSS 199 AMOS IN TRECUIRES MOSS 199 AMOS INTERPRETATION OF THE PROPERTY	80	30 CONSTRUCTION KIT (WITH VIDEO) 11.86
DAME AND THE PRIVETS AND THE P	99	AMOS (GAMES CREATOR) 29.00
B PROCEASIMMET : 3.08  AMOS PROFESSIONAL COMPILES 3.188  AMOS PROFESSIONAL COMPILES 3.188  AMOS PROFESSIONAL COMPILES 3.188  AMOS PROFESSIONAL COMPILES 3.188  WINTTEN BI AMOS EARY AMOS COMPILES 3.189  WINTTEN BI AMOS EARY AMOS COMPILES 3.189  WINTTEN BI AMOS EARY AMOS COMPILES 3.189  DELUXE PAINT 3 (MAC JO COMPILES 3.189  HOME ACCOUNTS 2 AND MAC JO COMPILES 3.189  HOME ACCOUNTS 3 AND MAC JO COMPILES 3.189  HOME ACCOUNTS 3 AND MAC JO COMPILES 3.189  HOME ACCOUNTS 3 AND	90	AMOS 10 (REQUIRES AMOS) 21 MI
40 PROCRAMMON II. 2189 4 AND PROFESSIONAL COMPILER 5 AND PROFESSIONAL COMPILER 5 AND PROFESSIONAL COMPILER 5 AND PROFESSIONAL COMPILER 6 AND PROFESSIONAL 2289 6 OR AMOS PROFILE AMOS AMOS PROFESSIONAL 2289 6 OR PROFESSIONAL 2289 6 OR AMOS PROFESSIONAL 228	X	AMOS COMPILER (REDUIRES AMOS)
100 MINUS PROFESSIONAL COSSIDER 11 COMPILES AND SPEEDS UP PROGRAMS 12 COMPILES AND SPEEDS UP PROGRAMS 13 COMPILES AND SPEEDS UP PROGRAMS 14 COMPILES AND SPEEDS UP PROGRAMS 15 COMPILES AND SPEEDS UP PROGRAMS 16 COMPILES AND SPEEDS UP PROGRAMS 17 COMPILES AND SPEEDS UP PROGRAMS 18 COMPILES AND SPEEDS UP PROGRAMS 19 COMPILES AND SPEEDS UP PROGRAMS 19 COMPILES AND SPEEDS UP PROGRAMS 10 CAN PROGRAMS	484	PROGRAMMING II
### COMPILES AND SPEEDS UP PROGRAMS WRITTEN IN AMOS EASY AMOS OR AMOS PROFESSIONAL) 23 99 DELUXE PAINT 3 (WITH AMOS AT 10) DELUXE PA		AMOS PROFESSIONAL COMPILER
DELUXE PAINT 3 (MED)  DELUXE PAINT 4 (MED)	40	ICOMPILES AND SPEEDS HE PROGRAMS
DELUXE PAINT 3 (MED)  DELUXE PAINT 4 (MED)		OR AMOS PROFESSIONAL) 23 90
90 (HAM MODE & ANIMATION) 54-99 90 (HAM MODE & ANIMATION) 54-99 90 AMAG NEW SHIT YAM MODE SIN 256 COLOUR 59 90 AMAG NEW SHIT YAM MODE SIN 256 COLOUR 59 90 PARA SHIT YAM MODE SIN 256 COLOUR 59 90 PARA CODY 2 WORD PROCESSOR 59 90 PARA CODY 2 WORD PROCESSOR 59 90 PARA CODY 2 WORD PROCESSOR 59 90 PARA CODY 3 WORD PROCESSOR 59 91 PARA WORD PROCESSOR 59 91 PAR		DELUXE PAINT 3 (WITH ANMATION) _ 24 to
90 DELUXE PAINT 4 (AGA POR AMOGA 1200 WORKES IN 256 COLOUR AMOD NEW SHIT HAM MODES DESINEY ANNA THOS TOURISM (S. 5756) 97 PUN SCHOOL SPECIAL PAINT (S. 1985) 98 PUN SCHOOL SPECIAL PAINT (S. 1985) 199 PUN SCHOOL SPECIAL PAINT (S. 1985) 190 WORK COLOURS 2 34 80 190 PUN SCHOOL SPECIAL PAINT (S. 1985) 190 WORK COLOURS 2 34 80 190 PUN SCHOOL SPECIAL PAINT (S. 1985) 191 WORK COLOURS 2 34 80 190 PUN SCHOOL SPECIAL PAINT (S. 1985) 191 WOOD WOOD SCHOOL SELECT (S. 1985) 191 WOOD WOOD SCHOOL SELECT (S. 1985) 191 WOOD WOOD SCHOOL SELECT (S. 1985) 191 WOOD WOOD WOOD SPECIAL PAINT (S. 1985) 191 WOOD WOOD SCHOOL SELECT (S. 1985) 191 WOOD WOOD WOOD SPECIAL PAINT (S. 1985) 191 WOOD WOOD WOOD SPECIAL	90	(HAM MODE & ANIMATION)
99 PHAL COPY S WORD PROCESSOR SHE	99	DELENKE BAINT 4 /AGA FOR
99 PHAL COPY S WORD PROCESSOR SHE	910	AND NEW 6-BIT HAM MODEL
99 PHAL COPY S WORD PROCESSOR SHE	99	DISNEY ANIMATION STUDIO (1 MEG) 57 58
99 HOME ACCOUNTS 2 34 89 90 HOME OFFICE BY THE LUKE HOME OFFICE BY THE LUKE HOME OFFICE BY THE AK AND 100 HOME OFFICE BY THE AND 100 HOME OFFI 100 HOME	99	
BO (KIND WORDD S. MAXI PLAN J. AND WHO O'VESTON J. RECURS OF CONTROL OF CONTR	99	CREATE EDUCATIONAL ART (5. YRS) 16.81
BO (KIND WORDD S. MAXI PLAN J. AND WHO O'VESTON J. RECURS OF CONTROL OF CONTR	89	HOME OFFICE KIT DELUXE
DISK DRIVE OR MARD DRIVE (1 MEG) \$50 M KID PIX I MEG) \$1 M MID MID MID MEG) \$1 M MID MID MID MID MID MID MID MID MID M	80	IKIND WORDS 3. MAXI PLAN 4, AND
KID PIX 11 MEQ)	49	DISK DRIVE OR HARD DRIVE // MEG) 48 88
44 KIND WORDS 3 WORD PROCESSOR 2000  45 MIND FORCE INTPROCESSOR, SPREADSWEIT,  46 DATABASE AND DISK UTILITIES)  45 SEPTEMBERS OF THE STATE OF THE ST		KID PIX (1 MEC) 18 MI
48 MINIOFFICE INTROCESSOR, SPREADSWEIT,  OATABASE AND DISK UTILITIES 3.4 588  49 PER PAL WORD PROCESSOR 54.589  80 SPREADSWEIT, AND WORD 32 WORD 38 SPREADSWEIT, AND WORD 32 WORD 39 SPREADSWEIT, AND WORD 32 WORD 39 SPREADSWEIT, AND WORD 32 SPREADSWEIT, AND WORD WORD 32 SPREADSWEIT, AND WORD WORD WORD 32 SPREADSWEIT, AND WORD WORD WORD 32 SPREADSWEIT, AND WORD WORD WORD WORD WORD WORD WORD WOR	40	KIND WORDS 1 WORD PROCESSOR 29 88
## PEM PAL WOND PROCESSOR ## \$4.50 ## POWER WOND PROCESSOR ## \$1.50 ## POWER WOND PROCESSOR ## \$1.50 ## POWER WOND PACKET ## POWER WOND PACKET ## POWER PACKET	48	MINI OFFICE IN PROCESSOR, SPREADSHEET.
44 POWERWORKS (MASIFLAN PLUS  SPREADAMENT, KIDN WORDD 3 WORD  PROCESSOR INFOPILE DEASE (NOF) 24 99  PUBLISHER (PAGE LAYON LE PLANTE)  60 CAN PRODUCE BLACK AND WHITE  81 PERSON PRODUCE BLACK AND WHITE  82 PERSON PRODUCE BLACK AND WHITE  83 PERSON PRODUCE BLACK AND WHITE  84 WEST PROSESSOR (MASIF OR AND WHITE  85 PERSON PROCESSOR (MACO) 75 99  WORDWORTH WITHOUTS AND	49	PEN PAL WORD PROCESSOR 54.86
99 PROCESSOR INFOPILE DRASE (NOP) 24 99 99 PUBLISHER (PAGE LAYOUT PACKAGE) 90 CAN PRODUCE BLACK AND WHITE 140 REPORTS AND MAJOR AND WHITE 141 REPORTS AND MAJOR AND WHITE 141 REPORTS AND MAJOR AND WHITE 141 REPORTS AND MAJOR AND	41	POWERWORKS (MAXIPLAN PLUS
88 PUBLISHER (PAGE LAYOUT PACKAGE) CAN PROCUES BLACK AND WHITE HE WELLETTERS, FLYERS, ANNUAL REPORTS AND SAGAZEMS OF TECNORY LOSS DRIVE OR HARD TECNORY LOSS SON TECNORY CONTROL KSPREAD 3 PERADSHET KSPREAD 3 PERADSHET KSPREAD 3 PERADSHET WORDWORTH WYROCESSOR (1 MC) 75 98 WORDWORTH WYR LEAMIGA 500 WORD PROCESSOR (1 MC) 75 98 WORDWORTH WYR LEAMIGA 500 WORD PROCESSOR (1 MC) 75 98 WORDWORTH WYR LEAMIGA 500 WORD PROCESSOR (1 MC) 15 MC WORDWORTH WYR LEAMIGA 600 WORD PROCESSOR (1 MC) 15 MC	99	PROCESSOR INFORMED/BASELINGS) 24 00
40 REPORTS AND MAGAZINES, REQUIRES 40 DAE EXTERNAL DISK DRIVE OR MARIO 40 DRIVE (1 MEG) (NOT2) 29.99 40 TECNOPLUS BUSINESS PACK FOR AMBGA 50 (K-SPREAD SUPERIDISKET) 71.48 50 MICROWORTH WITHOUSESTOR (1 MEG) 73.99 50 WORDWORTH VI.E AMBGA 500 WORD 50 PROCESSOR (18PCAL ENGLANCE 2 MEG 50 VERSION - 1 MEG UPGARE FOR AMOD) 70.99 50 PROCESSOR (18PCAL ENGLANCE 2 MEG 50 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL E		PUBLISHER (PAGE LAYOUT PACKAGE)
40 REPORTS AND MAGAZINES, REQUIRES 40 DAE EXTERNAL DISK DRIVE OR MARIO 40 DRIVE (1 MEG) (NOT2) 29.99 40 TECNOPLUS BUSINESS PACK FOR AMBGA 50 (K-SPREAD SUPERIDISKET) 71.48 50 MICROWORTH WITHOUSESTOR (1 MEG) 73.99 50 WORDWORTH VI.E AMBGA 500 WORD 50 PROCESSOR (18PCAL ENGLANCE 2 MEG 50 VERSION - 1 MEG UPGARE FOR AMOD) 70.99 50 PROCESSOR (18PCAL ENGLANCE 2 MEG 50 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL ENGLANCE 2) MEG 51 PROCESSOR (18PCAL E	49	HEWSLETTERS FLYERS ANNUAL
40 PORT ( I MEG) (POIZ) 23.98 91 TECNOPULES SPACK FOR ANDAS 92 (MORDWORTH MYPROCESSOR 93 (K-SPREAD SIPPREADNEST) 71.48 95 (K-ATA DATABASS) ( I MEG) 75.99 95 (MORDWORTH M. I.E. AMICA 60.0 WORD WORD FOR SPECIAL ENGANCED J. MEG 95 (MORDWORTH M. I.E. AMICA 600 WORD PROCESSOR (SPECIAL ENGANCED J. MEG 96 (MORDWORTH M. I.E. AMICA 600 WORD PROCESSOR (SPECIAL ENGANCED J. MEG 96 (MORDWORTH M. I.E. AMICA 600 WORD PROCESSOR (SPECIAL ENGANCED J. MEG 97 (MORDWORTH M. I.E. AMICA 600 WORD 97 (MORDWORTH		REPORTS AND MAGAZINES. REQUIRES
98 TECNOPLUS BUSINESS PACK FOR AMICA (WORDWORTH WYROCESSOR;  86 K-SPREAD 2 SPREADSHEET - K-CATA DATABASE; (I MEQ): 90 WORDWORTH V2 RAPROCESSOR (I MEQ): 97 HOCCSSOR (ISPECIAL ENHANCED 2 MEQ VERSION - I MEQ LIPICADE PÓR ASON): 97 HOCCSSOR (ISPECIAL ENHANCED 2 MEQ PROCESSOR (ISPECIAL ENHANCED 2 MEQ  44 VERSION - I MEQ LIPICADS FOR ASON): 94 50	49	DRIVE (1 MEG) (NO12)
BE K-SPREAD 2 SPREADSHEET - K-CATA DATABASS (1 MEG): 71.49 WINDOWORTH V2 MAPROCESSOR (1 MEG) 75.99 WORDWORTH V3.E MAIGH A50.9 WORD PROCESSOR (SPECIAL EMMANCED 2 MEG) VERSION - 1 MEG LUPCIALS EPO MANCED 2 MEG PROCESSOR (SPECIAL EMMANCED 2 MEG) PROCESSOR (SPECIAL EMMANCED 2 MEG) 44 VERSION - 1 MEG LUPCIALDE FOR ABBD): 94.99		TECNOPLUS BUSINESS PACK FOR AMIGA
99 K-DATA DATABASS (1 MEG) 71-49 90 WORDWORTH V 3 MIPROCESSOR (1 MEG) 75-99 90 WORDWORTH V 1.1E AMIGA 500 + WORD 9FROCESSOR (1 MEG) MIPROCESSOR (1 MEG) MIPROCESSOR (1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (5 MEG) 1 MEG WORDWORTH V 1.1E AMIGA 600 WORD 9FROCESSOR (1 MEG)	98	W. CORPAD & CORPADAUCET .
46 WORDWORTH VI 15 AMIGA 800 WORD PROCESSOR (SPECIAL ENHANCED 3 MEG 44 YERSHON - I MEG LIFORADE FOR A800)94 90		K-DATA DATABASE) (1 MEQ: 71.49
46 WORDWORTH VI 15 AMIGA 800 WORD PROCESSOR (SPECIAL ENHANCED 3 MEG 44 YERSHON - I MEG LIFORADE FOR A800)94 90	90	WORDWORTH VLIE AMICA 500 - WORD
46 WORDWORTH VI 15 AMIGA 800 WORD PROCESSOR (SPECIAL ENHANCED 3 MEG 44 YERSHON - I MEG LIFORADE FOR A800)94 90		PROCESSOR (SPECIAL ENGANCED 2 MED
46 YERSION . I MEG UPGRADE POR AGOO!94 96	49	
		PROCESSOR (SPECIAL ENHANCED 1 MEG
DISKS	49	12 MORN + 1 MEG UPURADE FOR AGO
		DISKS

#### **BITS'N'PIECES**



54.99

FOR AMIGA ASOO(STEEL MONITOR STAND WITH EXTRA SMELF FOR EXTERNAL DISK OWNER AND ACCESSORIES, CUSTOM FIT FOR THE ASOO) 32.99

32.99
EXTERNAL 3.8: DISK DRIVE FOR AMIGA WITH SONY/CITIZEN DRIVE MECHANISM. BBOK FORMATTED CAPACITY, QUIET, MIGH QUIALITY, SLIM LINE DESIGN. COLOUR MATCHED METAL CASE AND LONG REACH CONNECTION CABLE.

	POWER SCAN HAND SCANNER FOR AMIGA (VERSION 2) TRUE GREY SCALE, 100-4000PI (INCLUDES BOFTWARE) 99 91
	SCREENBEAT STEREO SPEAKERS FOR AMIGA OR IBM PC.
	REQUIRES 4AS BATTERIES OR MAINS ADAPTOR. DESIGNED SPECIFICALLY FOR COMPUTERS, INCLUDING MOUNTINGS FOR ATTACHMENT TO MONITOR
	MAINS ADAPTOR FOR SCREENBEAT SPEAKERS
	SOUND ENHANCER FOR AMIGA (BOOSTS SOUND 29.9)
	ZYDEC STEREO SPEAKERS FOR AMIGA WITH BUILT-IN
	AMPLIFIER AND VOLUME CONTROLS. 29 9
•	LEADO
	LEADS
1	HI-FI LEAD FOR AMIGA (STANDARD PHONO INPUT)3.9
	MONITOR LEAD FOR AMIGA TO
	PHILIPS CMS833 MK2 MONITOR
	SCART LEAD FOR AMIGA TO SONY TV
	(GIVES MONITOR QUALITY PICTURE)
	SCART LEAD FOR AMIGA TO TV WITH SCART INPUT
	(GIVES MONITOR QUALITY PICTURE)
	SCART LEAD FOR TV TO VIDEO (GIVES EXCEPTIONAL
	ENHANCED QUALITY PICTURE)
	AMIGA TO VOA PC MONITOR ADAPTOR (ALLOWS USE OF
	VQA PC MONITOR ON AMIGA)
i	MEMORY UPGRADES
	1 MEGARYTE ASOO PLUS RAM UPGRADE
	- ME GOOT - E OND - E OU HOW OF ORDINAL

2 MEG PCMCIA UPGRADE FOR A600 OR A1200.	
PLUGS DIRECTLY INTO SMART CARD SLOT.	
THESE ARE NOT BATTERY BACKED AND CAN'T BE	
USED AS A DISK, ONLY AS RAM.	114 99
4 MEG PCMCIA UPGRADE FOR A600 OR A1200.	
PLUGS DIRECTLY INTO SMART CARD SLOT.	
THESE ARE NOT BATTERY BACKED AND CAN'T BE	
USED AS A DISK, ONLY AS RAM	164.98
512K AMIGA RAM WITH CLOCK FOR ASSO AND ASSO-	20.00
	-44.00
512K AMIGA RAM WITHOUT CLOCK	
FOR A500 AND A500+	24.99
DUST COVERS	
	4.00
DUST COVER FOR ASOU	4.89
DUST COVER FOR AMIGA 600 OR	
ATARI ST (CLEAR PVC)	4.99
DUST COVER FOR MONITOR (CLEAR PVC)	4 99
MUSIC & VIDEO FOLIDMEN	T

#### MUSIC & VIDEO EQUIPMENT

VIDI AMIGA 12 (CAPTURES COLOUR IMAGES FROM VIDEO MACHINE OR CAMCORDER COMPATIBLE WITH TAKE 2. DELUXE PAINT 4 AND MOST ART PACKAGES). 72.99 FOUR PLAYER JOYSTICK ADAPTOR FOR AMIGA JOYSTICK EXTENDER CABLE FOR AMIGA (3 METRES)

VERBATIM
3.5" DSDD DISK
WITH LABEL
10 Pack £7.99
27.99 FOR 50

PACK OF10 TDK 3.5" MF-200 DISKS (0800)...

# **NEW MEMBERS DISCOUNT - EXTRA £2.00 OFF**

New members deduct £2.00 from any one item ordered as you join.

AMIGA A600 LEMMINGS PACK **1 MEG RAM EXPANDABLE TO 2 MEG** YEAR IN-HOME SERVICE WARRANTY

**WORKBENCH 2.0** MOUSE AND

**LEMMINGS GAME** 

**AMIGA A1200 HOME COMPUTER** WITH FAST 68020 PROCESSOR

2 MEG RAM EXPANDABLE TO 4 MEG YEAR IN-HOME SERVICE WARRANTY WORKBENCH 3 0

MOUSE SAVE £34

WORKS WITH A TELEVISION OR SUITABLE MONITOR VIA RF OR SCART CONNECTION

AMIGA A4000/030 HOME COMPUTER WITH 80 MEG INTERNAL HARD DRIVE POWERFUL 68030 PROCESSOR (25MHz) 4 MEG RAM (2 MEG CHIP + 2 MEG FAST) I YEAR IN HOME SERVICE WARRANTY

**WORKBENCH 3.0** 

AMIGA COMPATIBLE.

PRICE DOES NOT INCLUDE MONITOR)

**GOLDSTAR 14" TELEVISION/MONITOR** WITH REMOTE CONTROL

& SCART INPUT

FREE SCART LEAD STATE SNES SEGA OR AMIGAL

GIVES PIXEL PERFECT PICTURE

#### **SONY 14"** TELEVISION/ MONITOR

MODEL KVM1400 REMOTE CONTROL FREE SCART LEAD

(STATE SNES, SEGA, AMIQA or ST) & DEDUCT (20 OFF OUR PRICE OF ANY GAME (DR THE TOTAL OF SEVERAL GAMES) PURCHASED AT THE SAME TIME AS THIS SONY TV

**NEW MODEL** 

TELETEXT

SONY TYMONITOR ENABLES MONITOR QUALITY PICTURE FROM AMIGA, SUPER NES, ST OR MEGADRIVE VIA SCART CONNECTION, ALSO SUITS ALL CONSOLES VIA NORMAL RF INPUT. INCLUDES REAR SCARTEURO. SO CHANNEL TUNING BLACK TRINITON SCREEN, TWO POSITION TILT DESIGN FOR CHOICE OF ANOLE INCLUDES LOOP ARRIAL. SUPERB QUALITY.

ALSO AVAILABLE IN WHITE AT \$199.99 ALSO AVAILABLE WITH TELETEXT AT 249,99

#### PHILIPS 15" **FST COLOUR** TELEVISION/ MONITOR +

TELETEXT MODEL 15PT161A REMOTE CONTROL

FREE SCART LEAD

SAVE £15 OFF RRP

AUTO PROGRAMMINO, 1 YEAR WARRANTY. ENABLES MONITOR QUALTY PICTURE FROM ANIGA. SUPER NES MEGADRIVE OR MASTER SYSTEM 1 VIA SCART CONNECTION. ALSO SUITS ATARI ST AND ALL CONSOLES VIA NORMAL RF INPUT. INCLUDES SCART/EURO TO AV

#### CITIZEN 120D+ 9-PIN **MONO PRINTER**

80 COLUMN , 144 CPS/25NLQ. 2NLQ/1 DRAFT FONT FREE PRINTER LEAD

HIGH QUALITY BUDGET PRICED PRINTER

#### CITIZEN SWIFT 90C 9-PIN COLOUR PRINTER

WITH COLOUR KIT, 9 PIN, 80 COLUMN 240CPS/54NLQ 6NLQ FONTS, 2 YEAR WARRANTY FREE PRINTER LEAD
A 8 PIN PRINTER WITH
COLOUR FACILITY AND
FULL PAPER HANDLING FUNCTIONS

#### CITIZEN 200C 24-PIN **COLOUR PRINTER**

WITH COLOUR KIT, 24 PIN, 80 COLUMN 216CP9/72LO6 LQ/1 DRAFT FONT, AUTOSET FACILITY INPUT DATA BUFFER, AUTO PAPER LOADING ENVELOPE PRINTING, 2 YEAR WARRANTY FREE PAINTER LEAD 209.99

#### CITIZEN 240C 24-PIN **COLOUR PRINTER**

WITH COLOUR KIT, 24 PIN, 80 COLUMN 240CPS/80LQ 9 LQ/1 DRAFT FONT 240CPS/BDLU 9 LEGY
2 YEAR WARRANTY
FREE PRINTER LEAD
259.

ADVANCED VERSION
OF 24E WITH AUTOSET
FEATURE AND LCD CONTROL PANEL

#### **CANON BJ10-EX BUBBLE** JET PRINTER

64 NOZZLE, 80 COLUMN, 83LQ CPS 2LQ/1 FREE PRINTER LEAD A SMALL PORTABLE
PRINTER, VERY QUIET
IN OPERATION YET GIVING
OUTSTANDING PRINT QUALITY.

#### DISK BOXES

BANK DISK BOX 3.51(120) STACKABLE BANX DISK BOX 3.8" (80) STACKABLE .. ..12.49 DELUXE DISK BOX 3.5" (80), LOCKABLE, DIVIDERS ..... DISK BOX 3.5" (10 CAPACITY) 1,99 DISK BOX 3.5" (120) LOCKABLE, DIVIDERS

SEGA MEGADRIVE + THREE GAME PACK

WITH SONIC THE HEDGEHOG **EA ICE HOCKEY** JOHN MADDEN'S FOOTBALL

TWO SEGA JOYPADS

SUPER NES + STARWING WITH STARWING GAME ONE JOYPAD SAVE £20.00

AVAILABLE -PLEASE PHONE FOR DETAILS AND A FREE 12 PAGE CATALOGUE

#### **JOYSTICKS**



BOLLISTICK HAND



COMPETITION PRO EXTRA JOYSTICK (CLEAR BASE) 10.98











QUICKSHOT 111A JOYSTICK



QUICKSHOT 128F MAVERICK 1 JOYSTICK



SPEEDKING AMALOGUE
JOYSTICK FOR AMIGA (FOR
PROPORTIONAL CONTROL ON
SUITABLE SOFTWARE)





ZYDEC TRACKBALL

AMIGA OR ATARIST

We only supply official UIK products. Official suppliers of all leading branch. We sail games and peripherats all ill amazing project of Megadinis. Master System, Game Gier: Super NES, Gameson, NES, Lynx, Arriga, Aun ST



Special Reserve members can have all this. can 404?

**READ "NRG" Regular Club Magazine** 

CHOOSE from our Huge Selection 🚵 BUY at Best Possible Prices SAVE with our Special Deals 🕞 SAVE more with our XS (oupons WIN £60,000 worth of prizes FREE JOIN now from just £4.99

We only supply members but you can order as you join

There's no obligation to buy and you can be any age. Just send in the form below or phone Sales on 0279 600204.

As a member of Special Reserve you'll receive regular Issues of NRG magazine. NRG is our 48 page colour club magazine sent NRG is our 48 page colour club magazine sent bimonthly only to Special Reserve members, NRG contains:

- The best selection of games, peripherals and hardware for all pular formats. We are official Sega, Nintendo and Sony stockists.
- Reviews in colour and latest information on new products
- Charts and Release Schedule, to help you choose and plan The best prices. Just one purchase will save you your joining fee
- Hundreds of Special Offers. Top games at prices you won't believe XS Super Savers. Money-off coupons worth over £180 a year £60,000 worth of prizes per year in our FREE-to-enter BIG
- TARGET COMPETITIONS. That's £10,000 worth in every issue of

That's why over 160,000 people have joined Special Reserve, the biggest games club in the World!

60020

iem to 8om Weekdays, 8am to 5om Sekiedey, 10em to 5om m to 5om Bare Holdey/ Order Confirmation Receipt sent to IERS IS A SURCHARGE OF 500 PER QUARE ON TELEPHONED You can also Fax your order to us on: 0279 726842

We pride curselves on our after-sales service. I18 outlower service lines; sevitably some games listed may not yet be available. Please phone sales: We price conserve an out mentally some games tested may not yet be available. Pease phone sales on 0276 800204 to oneck symplophity before ordering. In the event of delay we issue refunds on request at any time prior to despectio. We reserve the right to change prices without prior notification. E. & O.E.

Registered Office & Club Shop, Inter-Mediates Ltd, 2 South Block, The Mattings Sawbridgeworth, Herts, CM21 9PG.

All prices include VAT and carriage to UK mainland. See base of order form for oversees surcharges. We supply hardware only to UK mainland addresses.

A MONTHS ONE YEAR TWO YEARS MEMBERSHIP MEMBERSHIP HARD GINDER UK MEMBERS 4.99 7.99 14.99

WE ONLY SUPPLY WEMBERS BUT YO	LI CAN ORDER AS YOU JOIN
THERE IS A SURCHARGE OF 50p PER GA	WE ON TELEPHONED ORDERS.
PLEASE PRINT IN BLOCK CAPITALS)	SONG

10.00

20.00

6.00

OVERSEAS EC MIMAIRS

Name

OVERSEAS WORLD MAMBLES

Address		
	Postcode	
Phone	Machine	
Enter membershi NEW MEMBERSH	p number (if applicable) or HIP FEE (ANNUAL UK 7.99)	
<u>dem</u>		
item		
item		
dem		
ALL PRICES INC	CLUDE UK POSTAGE & VAT	2

e'P.O. Access Mastercard Switch Visa (Switch Issue No

Card expiry date Cheques payable to: SPECIAL RESERVE

P.O. BOX 847, HARLOW, CM21 9PH Overseas Orders Surcharge (EC or World): Software orders please add £2.00 per Item. Non-software Items please add 25%, Hardware Items supplied to UK mainland only.

Overseas orders must be paid by credit card.











Amiga Computing and V3i brings all you budding video enthusiasts the chance to win Videopilot V330, which with its broadcast-type central control console, can become the focal point of your production system, now recognised as the key to achieving professional results.

This professionally-styled console can be used to control your video equipment directly, turning editing into a creative, easy-todo and pleasurable activity Videopliot will enable you to transform raw video footage into precision, high quality productions in a fraction of the time required with alternative systems.

## More advantages of **Videopilot:**

- Up to three players and one recorder can be used at once
- The easy-to-use screen based edit Commands enable up to 300 shots to be moved, copied, inserted or deleted in seconds
- The ability to perform large, complex edits in a fraction of the time needed with alternative systems means that Videopilot offers massive gains in productivity
- The extensive range of special effects enables advanced production techniques to be used with domestic equipment
- The Amiga version has a built-in

The amazing Videopilot V330 computer-controlled editing system could be yours for the cost of a quick phone call which should be under £1 at cheap rate. To keep the cost to a minimum try to avoid background noise, which may necessitate the repetition of answers

Videopilot V330 requires 1Mb of RAM



the Videopilot V330 computer controlled editing system



£1,300 worth of ultimate edit control!



The closing date is September 10, 1993. The prize winner will be drawn from all the correct entires received and will be informed in writ-ing within two months of the closing date. Result information may be obtained by writing to our offices. No cash alternative to the prize is available. The editor's decision is final. No corresponde

Calle are charged at 35p per minute cheep rate and 48p per minute at

## **HOW TO ENTER**

You can enter by phone as many times as you wish. All you have to do is answer the very simple



guestions below. Please try to avoid background noise. You will be asked to leave your answers together with your name and full postal address including postcode. Please speak clearly, spelling out any difficult words.

How many shots can the screenbased edit commands move, copy, insert or delete in seconds?

a, 100 b. 260 c. 300

How much does Videopilot retail at?

a. £900 b. £1,300 c. £1,800

How many video players/recorders can be used at once?

a two b three c four

Ezra Surf's Postbag

# Where's the support?

I feel the urge to write to you regarding the Amiga 4000 and how angry I am with Commodore in not encouraging big companies to write serious software for this excellent machine.

I bought my A4000/030 only a couple of months ago and during that time I have only seen a couple of serious new titles for the machine

All the rest have been new versions of software like Wordworth 2.0 AGA, which I have used to write this letter, or even more games software.

I feel I have been misled by Commodore to think that a flood of new business software will appear for the machine, and I'm very disappointed with the hardware being released, most of which is out of date when compared to peripherals for the PC. Just flick through a recent PC magazine if you don't believe

Although the A4000/030 is quite a powerful machine I feel that Commodore should have fitted extra hardware such as a SCSI interface, CD-ROM drive, more memory, higher resolution graphics, and 32,000 register colours, as you can buy a 24-bit graphics card on the PC for only

Why don't Commodore sell the machine with a monitor? The A4000/030 is overpriced because it doesn't come with a decent multiscan monitor, and at the very least should have some bundled software

If Commodore are serious about CD-ROM multimedia, why have they done so little to promote CD on the A4000? You can buy a complete PC CD-ROM package including the drive, Corel Draw painting package on CD, sound card, speakers, SCSI interface, and software for £299.

Commodore had better hurry up and

do something as it seems the IBM has a positive lead over the Amiga in this area, especially at that sort of price.

DTV has improved considerably and the Amiga's advantage as the ultimate DTV station is slowly slipping away. Composite video cards on the PC have also fallen in price while their specification has improved. You will still need an A520 modulator or genlock to put animations or graphics to videotape on the

So when can we expect to see powerful software in large quantities on the Amiga platform at reasonable prices, or will the image of the Amiga as a games machine never rub off?

Mark Bowles, Horsham

We agree and have always agreed that Commodore should sell machines with monitors at an aggressive price, encourage more serious software development, and market the Amiga in a more professional fashion, but we can't take the overly pessimistic stance which

The Penarket has come word vary since the days of green screen-induced boredom, but the examples you quote are very selective and not particularly relevant.

Take, for example, the so-called multimedia explosion. This has become so ridiculous an exercise that a low quality CD-ROM drive, a couple of games, a sound card, and some dodgy speakers can be bundled together and sold as a multimedia pack" despite the fact that the ensemble has as much to do with multimedia as Polly Peck has to do with good business practice

Again, talk of composite video cards will probably sound strange to the cars of Annea owners because the Amiga has its own built-in "composite video card" in the shape of its custom graphics chips which supply the best video **Protext** 

just purchased an A1200 80Mb hard drive, but upon installing Protext I got the "can't open screen" message reported by other readers.

The cure is simple. Just alter the config file so that screen mode is changed to NEW SCREEN/STAN-DARD DISPLAY.

To get the config program to run load Protext from floopy, then from within Protext run the config file and change the above option, and save the config file to the Protext drawer on your hard drive. Mine loads every time

That's all there is to it and this fix also applies to Prodata. I am typing Protest on my A1200.

I McMahon, Lisburn, Co. Antrim

Thanks for the tip. Hope it helps a lot of you A1200HD owners out there who might be having Protext trouble.

signal of any computer in the home or desktop markets

In addition, the Amiga's built in "sound card" - the Paula chip - is still superior to Soundblaster even though now long in the

Commodore have been slow to release the

A4000 internal CD-ROM drive, but it is now due for imminent release, and with the advent of the CDbased Amiga console, should benefit from the boost in CD software which will follow.

Finally, any talk of the Amiya's position in the video and multimedia markets should be tempered by a look at next month's review of the Video Toaster for the A4000.

It speaks volumes for the sheer quality of the Amiga platform that although its parent company has failed again and again to market it properly and support it in enough depth, it is still used in millions of homes worldwide and in many areas of the professional video and multimedia markets

Games tester

I've just received my July issue of your fantastic magazine, and as usual I went to the contents page to see what would appeal to me the most. The first thing to catch my eye was "A1200 software" in the

"At last," I thought, "a list of what works and what doesn't." But how accurate is the list? F16, Test Drive 2, and Z-Out are listed as incompatible. Wrong! I've got all three and they work. XJ220 is listed as disable caches, yet I was told different. My other advice may be wrong, but I was told it works straight off. Monty

## Hard drive hassles

I recently had to call out Wang to repair my computer. but though the date and time was arranged no-one turned up. I phoned Wang's headquarters to ask what happened, arranged another day, and again nobody showed up. That was the second day I had taken off work!

Unfortunately it was a Friday with a two-day Easter bank holiday on the Monday and Tuesday, so when I finally got through to Wang on the Wednesday, it was nearly two weeks since my first phone call. Someone finally turned up the next afternoon to replace my motherboard, but I was told by the engineer that I didn't have a drive cradle for the internal hard

Can I just say to Commodore UK to sort out all the

nitty-gritty and get something done about the four-day call out, or should I say the two-and-a-half week call out? Some people would claim compensation for taking two days off work, but I can forgive Wang for their own

What I want to know is how am I going to get a hard drive when I haven't got a drive cradle? The warranty seals business is a farce as I can obtain a hard drive very cheaply, but if I try to install it into my machine my on-site warranty will be void.

Commodore should sort this out as the Amiga user only wants to put a hard drive into the machine. A user like myself could fit a drive and still retain the warranty as the drive fits outside the metal shielding well away from sensitive chips, so come on Commodore, sort something out or the Amiga is going to be left behind as just a hasbeen computer.

Manprit Bains, Huddersfield

Yet another A1200 owner comes to the same conclusion -Commodore have made a mess of the A1200 hard drive market by launching the machine with no hard drive model, then allowing third-party distributors to strike their own deals with Wang for the supply of an A1200HD.

We at Amiga Computing think it outrageous that there exists no official upgrade path for the floppy-based A1200 user who wishes to fit an internal drive before the one year warranty runs out and we can only hope Commodore will listen to the genuine concerns of Amiga users.



Python is the opposite. It is listed as compatible, but you have to disable the caches or the graphics become corrupted.

I know this is only five games from the 334 listed, but I haven't got the other 329 to try out (unfortunately). To overcome this, how about compiling a list sent in by your readers? That way it's all first-hand experience of compatibilities not the word of another magazine, or whatever Computer Trade Weekly

Could you tell me if KGB, Lotus 3, and Elvira 2 are compatible, as they weren't listed. Finally, I noticed that a game exists called "Hitch Hiker's Guide". Is this the game of the series of the book of the travels of Arthur Dent? If so, what sort is it, is it worth getting, and where can I get it?

S Dolphin, Lossiemouth

Sorry you found that the list wasn't completely waterproof - I would have been interested to know which games you found were correctly listed.

As for your three games, they should all be fine as all are recent releases and I've heard nothing about A1200 problems on any of them. Check before you buy at the software shop, though.

Hitch Hiker's Guide To The Galaxy is an Infocom text-only adventure based on the Douglas Adams books and partly developed by the man himself.

If you can get your head around the idea of a game with no yraphics this these days—don't know they re corn), you will find it in the Lost Treasures of Infocom pack sold by Eagle Software on 081-361 5730.

For a slice of hilarious, challenging, and utterly brilliant computer game history, this is highly recommended.

#### No prize

In your issue 62, I used my keen senses to spot that you only had one compo, the one on page 130. So come on, AC, how

Got something to say through the pages of AC? Ezra Surf is our mailman. dedicated to reading your letters and selecting the most interesting

Ezra Surf's Postbag, Amiga Computing Adlington Park, Macclesfield SK10 4NP

for publication. Drop him a line at:

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop

about more compos?

Do I get a prize for my clever, smug, pedantic gem of info?

Daryl Booth, Ramsgate

If the readers want more compos we'll run more, but you don't get a prize for page counting. Sorry, but life's a lottery after all.

#### Music winner

Lentered the Miracle keyboard competition in the March issue of your journal and was amazed when one turned up on my doorstep. I was delighted to win as I have been looking for a suitable keyboard

for some time It is simple to set up and the excellent software works perfectly with my Amiga 4000/030. Without wishing to do Mindscape's advertising, I would recommend it to anyone who, like myself,

wishes to learn to play the piano. Steven Dacre, Wolverhampton

#### Shareware glee

I thought I had to write in support of Pete Wiseman, the author of Klondike 1.3 on your May CoverDisk. I sent off my fiver and in little over a week I re ceived v2.0, which is a major rewrite including different sound effects, four different sets of card graphics, and another variation on the theme called Demon - all

I would urge anyone who enjoyed Klindike 1.3 to send Pete the shareware fee. It's worth it.

Name and address supplied

It's good to hear of a reader who not only supports the shareware principle governing so many of the non-commercial programs on our CoverDisk, and even better to hear that the author concerned responded quickly to your registration fee.

Just goes to show that shareware isn't

# Antipodean Amigan

My husband has just bought me an A1200 with 40Mb hard drive to upgrade me from my old clunker IBM-compatible Commodore Colt

Hooray! I said and rushed out to buy the only Amiga magazine at the newsagents, your March issue. Trouble is, I still haven't got the Amiga to run due to lack of a 23-pin adaptor to hook up my 1084S monitor

None in Queensland. None in New South Wales. Why can't Commodore supply them as standard inside the package? Three weeks and eight long distance phone calls later I finally got the promise of a connector lead on receipt of a cheque.

I have read the March issue backwards and forwards and inside out and now the April issue has just arrived in the shops. I managed to get a back order of February, but no January issues are available in Australia according to the importers.

After dabbling in GW Basic, I'm wondering what language to learn as I am over 60 with plenty of time on my hands. It will need to be fairly simple and enable me to use graphics either from DPaint or animations. Will I have to purchase a book on AmigaDOS or is it similar to IBM's Commodore Colt DOS?

Finally, your tutorials for beginners lack one thing - a small type-in mini-program, one even a child could do. Such listings are a wonderful teaching medium and morale booster

Beverley Johnston, Queensland

Glad to hear you've seen the light and bought yourself a good machine, and I hope you'll find the A1200 both fun and a very useful tool

The situation in Australia seems to be fairly adverse for most Amiga users, and we can only hope you receive satisfactory service from whichever UK mail order house you are using

Anyone emigrating to Australia might be advised to think about setting up an Amiga mail order dealership over there, don't you think?

Sorry you seem to be having problems finding certain back issues, but the January issue went like hot cakes and we have very few left. Try our back order service on 051-357 1275, though I can't guarantee they'll have any either.

For ease of programming and the ability to quickly manipulate graphics, Easy Amos, from Europress Software, or Blitz Basic 2 from Acid Software of New Zealand will do very nicely.

Europress Software can be contacted on 0625 859333, but I don't have a number for Acid Software as their UK distributor recently ceased trading.

#### **Primitive** printers

Having used computers at my workplace for many years, I have come to take for granted that when I press a button to print a document it will pop out of the laser printer around the corner quickly and efficiently.

This illusion was shattered, however, when I recently purchased a Hewlett Packard Deskjet 550 printer for use with my A1200.

Though the printer is capable of superb output, I found the whole process of connecting it to my Amiga, setting up the various programs which would use it, and finally making sure that I knew the difference between the various types of output I had to choose from a complete and nerve-destroying nightmare.

Why are printers so advanced these days yet the system by which they are controlled so primitive? The preferences section of my Workbench disk seems much more of an obstacle than an aid to my final document.

Surely someone should mention this to Commodore? I mean, there are so many different printer drivers, font standards. PostScript. and a million and one other stupid largon phrases that my head has been in a constant whirl since buying the HP

I'm thoroughly disappointed that the Amiga, even at Workbench 3.0, can't compare with the Macintosh machines we use at our office. These, though a bit slow and useless for multitasking, are very stable, easy to use, and all use the same print standard which I don't have to mess about with.

J Edgar, Barnsley

You are by no means the first user to suffer under the printers cosh and will not be the last. Our survival guide to printers last month was designed to take some of the mystery out of the process, but using printers on the Amiga can be so complex that to cover the subject entirely would take a special issue on its own.

The problem, I suspect, originates with the first Workbench preferences programs and printer drivers which were so poor that noone really accepted them as a professional standard.

As software manufacturers went their own way and developed their own printer drivers and so on, confusion seeped in and preferences never really improved.

With Workbench 3.0, the situation is much better, but we would all still benefit from some sort of automatic printer selection and installation method which negated the need for users to copy printer drivers from one disk to another.

# SOFTWARE

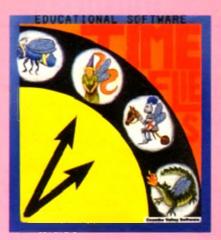
Time in words

A FULL ADVENTURE, TEACHING ALL POSSIBLE WAYS OF TELLING THE TIME On sale September 1st 1993









Time difference problems

Time in Numbers

Father Time has gone out for the day, leaving you to dog sit and Watch Dog. He's easy to look after, just give him his food and water and take him for a walk and he'll be happy. It's a pity that the Time Files have got loose but if you are good at solving time problems, they shouldn't be too much trouble.

Hi Quality Versions at solving time problems, they shouldn't be too much trouble. ALAND. CON

Other Titles still available from Coombe Valley Software Written by teachers, for ages 5-13 All are Educational Adventures designed to make learning fun.



#### Maths Dragon. Ages 5-12+

Designed to give practice in the four rules of number. Sum type and degree of difficulty can be selected. Set in the caverns of the Maths Dragons, you must rescue the scattered pieces of your train set from the attentions of the baby dragons.

#### Tidy the House. Ages 5-9

A first adventure game, set in the familiar territory of an untidy house, where the player must get their younger brother and sister ready to go out and do a bit of tidying up at the same time. The game helps develop reading and keyboard skills, plus logical thought and planning.

#### Cave Maze. Ages 8-13

A first adventure for a slighty older age range. You have befriended a lost, hungry and slighty awkward, baby dragon. All you have to do now is find his lunchbox, feed him and then guide him home past the obstacles in a maze of caverns. The game helps develop reading and keyboard skills plus logical thought and planning.

#### Reasoning with Trolls. Ages 5-12

You play the part of the Smallest Billy Goat Gruff, who wants to get to the other side of the river where the grass is greener. In order to get there you must cross a number of bridges, each with a resident troll. Safe passage will depend on your answers to a set of graded, reasoning questions.



#### Fraction Goblins. Ages 8-13+

A game which gives practice in fractions. Any or all of the rules of number can be selected, as can the difficulty level and type of fraction. The simplest level will allow the most hesitant novice to succeed while the hardest will probably require pencil and paper no matter how good you are.

#### Picture Fractions. Ages 7-10

This game is designed for those who have just started fraction work and who are not yet ready to deal with them in purely numerical form. Questions are presented in the form of pictures from which the player must work out a fraction and then answer in either word or number form.

If you have any difficulty getting hold of these products, please ring 0626 779695 or write to CVS,

18 Nelson Close,
Teignmouth,

Devon, TQ14 9NH.

Trade enquiries welcome

# 125 KINGSWOOD, THORPE MARRIOTT, NORWICH, NORFO



COMPATIBLE



IF THE ADACT FOR WHITE THE BOOK AND THE AND THE CAME ALL HIS WAY IN THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CAME AND THE CONTROL OF THE CAME AND THE CONTROL OF THE CAME AND THE CONTROL OF THE

SPECIAL ON COPY & NO.
GREAT D MOR COPTUL HORMAT, NIBIDE COPY, DOS COPY & NO.
STORE MAY DISK SPECIAL BY YAMEN OF DAYA.
SPICTAL DAYABASE FOR STORENG EF PRES, LEE THAN A SEPTEMBEN OF YOUR &
GREAT DAYABASE FOR STORENG EF PRES, LEE THAN SOULD REPORT REPORT
GET THAT SOULD REPORT REPORT
MORE AND REPORT OF BERRY.
BORRER.
BOR

NEW LATEST EDITION EVENT MAY

LATEST UPDATE REMOVES P A HONSE RACING PRIDE IN PROPERTY OF THE PRIDE CES CRIPPES, PR. CHAPTES, B. B. CRIP, A CORD DE CASSERE DE ATABLES ES SUB-ANDER DE CORDO DE CASSERE DE ATABLES ES SUB-ANDER DE CORDO DE C

SAME GREAT LOADING TOWN

SAME GREAT HOADING TOWN

MORE GREAT FETTURE

THE LATEST TRACKER, WITH GREAT FEATURES, ALSOID

A YEW MOME ACCOUNTS PACKAGE, ALSOID

FIRST LATEST VERSION FOR THIS GREAT COIN

A FAREIT FOLS CONTAS PACKAGE FOR WB 20 WB 10

SEND AND RICH EVENT PACKAGE OF TOR A MANGE A WB 10

SEND AND RICH EVENT PACKAGE OF TOR A MANGE A WB 10

SEND AND RICH EVENT PACKAGE OF TOR A MANGE A WB 10

SEND AND RICH EVENT PACKAGE OF TOR A MANGE A WB 10

SEND AND RICH EVENT PACKAGE OF TOWN THE PACKAGE OF TOW

SOUND SAMPLING SOFTWARE AT IT'S BEST.

THANKS A SHE THAN STITLE FRANKS ALPHABET

A GRAPTICAL L'EXISTE BATT FOR THE NOTICE BASES, LAU HOR RE

A GRAPTICAL L'EXISTE BATT FOR THE NOTICE BASES AL BASES AT BASE

A GREAT COLLECTION O MASSIVE COLLECTION OF BOO BACKS UP YOU'R HARD DISK SPECIALLY HAR TH

THE BEST PC AMIGA, AMIGAN'C FILE TRANSFER PROGRAM



WE PROMISE YOU GUARANTEED Ist CLASS SERVICE

WE GUARANTEE QUALITY ERROR AND VIRUS FREE DISKS

WE OPEN THE 9PM TO PROCESS YOUR **ORDERS** 

FRIENDLY TELEPHONE ADVICE WHERE POSSIBLE

ALL ORDERS RECEIVED BEFORE JPM ARE DISPATCHED SAME DAY BY FIRST CLASS POST



## WIN

■ Hard Drive for your Amiga 600/1200 Memory for your A500/600/1200

Details with every order & Cat Disk. And on request.



TYPING TOTOR
DESKTOP PUBLISHER

NORTH L DISK SALV BATTLEAN-KUN STUDIO DKB TRACE

DYNAMITE FONTS (# )
MEGAT TILLS
ANTIFLICKER
BEVARD
DEVPAR SON FOR CODES
GELGATTE FONTS
MESSY SID
LITTLE BENCH 20
MAGNETIC FORES
MED VIV.
ANNIGA PLAN LITTLE SID
ANNIGA PLAN LITTLE SID
DOODY VID.
ANNIGA PLAN LITTLES
DOODY VID.
DOODY VID.

PICTURE CONVERTERS PACK MEGA MUNITOR

SPRIGHTM OR VERNATOR TO THE ART THE STRUCTURED CLIP-ART THE SECONDARY OF MAINING COMPANION VI MANOS COMPANION VI MANOS COMPANION L'EDATOR L'EDATO

HAMI, AR & DESIR)
MODULE MACACE
22 MODULES 1-4
THE DISK UT
PHO PAGE TEMPLATES
PRO PAGE VIA GENES
VIRL'S CHECKER VERSITA'S 622
TRESOTY AND THE FREWORK ALPHARIEL
LEADITY AND THE FREWORK ALPHARIEL
LEADITY

AFAX DEMO

28 EHAWIN MPLGRAPHIC FONTS FOR FROPAGE V1+

CDISK
CLICKRUN
HIADCLEANER
HABEL SELECT
TOOLS DAEMON 20 C
ICON UPDATE
STARTRIACKER 13
BC TASK NO.

BATTLEANE KUN STUDIO DK B. TRACE JUKKBASE, LABELIRINT, VIDENLIBRARY, MENT

MED V3.2, THE GREATEST MUSIC MAKER + 4 DISKS FULL OF INSTRUMENTS, BEATS etc... TO GET YOUR REMIXES GOING!!

£6.50

Print just about anything with this pack. Graphics, Letters, Envelopes, Disk Labels, Video Labels, Cassette Labels,

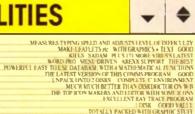
Banners, Forms and more also loads of drivers

£6.50

## UTILITIES







# **GAMES**

	-904	DRIP	./FAMOUS)
1	908	STARTRICK	(3 DREKE)
	909	TANX	ADDICTOR
- i	910	CHESS	
i	015	MISSILE COMMAND	
	916	AMEONA INVADERS	
	917	ROI LERPEDE, DAVALLERS	
	819	AMIGA DRAGON TILES V23	Great tiles manu
	919	ZELS	
	930	HOLLYWOOD TRIVIA	
	922	THE SIMPSONS	
	925	WIZZY'S OUEST	
	926	THINK TWICE	Master Shoul
	927	HYPER BALL	Arkanesi cime
٠	929	SEALANCE.	Substantine San, Good
9	930	SHAPES	Good for Kala
4	931	WACKO Ir	In Wenderland
	954	SCRANN F	
	935	WORMHOLE	
۰	956	ANAGRAMS	
	909	SKY PLYER	
	940	GALACTIC FOOD FIGHT	

ATIC ATAC D TRIS (TETRIS) ARCADE CLASSICS NUTHE SHOOT EM TE CARD GAME Girest stuff S lon th clone, NEW Assessib cross, .

Bed Tetra Clone and by Assessing (Strategy) TETREN ... 19 GAMES TOTAL WAR Law RISK

YUM YUM BATTLEMENTS INTLRNATIONAL CRICKET

MATIN ADVISTRE SURVIVOR ... SICAN BLAST QU'ADRIX ALASY QUADRIX CROSSWORD CREATER QUESTIONTORY ESCAPE V.J. ESCAPE V.3 «
GX200
MENTAL BIMMAGE GAMES I
MENTAL BIMMAGE GAMES I
HILLIADOR
SKREWE III
M. METT & THE ALIEN ENVADERS
HAG CARTONER
BATTLE OF BRITAIN & WAR
ANTEP. New name
of A type does
Sim above
Close in R Type
ther press shoot can up
Mante Monty
Watch those benthe!
Lishe Rede!

BATTLE ANTER ANTER TOP SECRET MASHIE MIRLING COIF ASSASSINS GAMES VIOLET ASSASSINS GAMES VIOLET ANTER TOP TO THE ASSASSINS GAMES ANTER TO THE TOTAL TO THE ASSASSINS ANTER TO THE ASSASSINS A Another goest collection Great has and geaplace Smales to I erroristies. Great colvernaties Pley your cards right! Seean gathe Good new Thoma goest Very smales to SWIV Very anales to SWIV Like I reat LEFDINGS.
DONKEY KONG.
FULL HOUSE
SPACE TRAX....
TURBO THRUST. RAID
XTI & H BALL
DOWNRILL CHALLENGE
SEGARALL
PUGGLES
OTHELLO

shdeshow & fab mu Yest Advern The Bourd Gar BATTLECARS II DESERT STORM CRAZY SLE II

ASSASSINS GAMES 45.

NOSTROMO GAME CHEATS Africas 600 jpto INTRUDER ALERT.

NUMERIX. A garm similar to Scrabble, using

**BUSINESS** 

PACK

WORDPROCESSOR, SPELL

CHECKERS, DATABASE

SPREADSHEETS, ACCOUNTS & MORE Regularly updated with latest

A1200 £6.50

Catalogue Disk with FREE GFX Ripper £1.50

TASK V: ECUTE FMULATOR VI & TENDON AD II



Compiled by us these disks are the best and latest editions. Out aim is to put a collection of progs of the same theme together. The disks self boot. No

need to load workbench. They have easy to find,

369/13/0 TERM

Contains following educational programs: SpellCheck, German, anish & French Tutor, Study Aid, Counting, Division, Mathematical, Reflex Test, The Weather, CalcKey, Gravity Well, AirFoil, Unit Converier, World DataBank, Plot, Quiz, Sherlock, Evo, Capitals, Maths Adventure, Elements. The Gallows & CryptoKing.

£6.50

POSTAGE ALL ORDERS EL SAME DAY DISPATCH UK £1.50 EUROPE £1.50 each

samples not seen on other disks.

POWER SAMPLES 2. More of the above & just as good.

Maximusic 1. Great music tracks.

MAXIMUSIC 2. More great music. AF7

# **LATEST**

00	RD-PREP		A Hard Dri	se postellunier	A12001 Works great
02	VIBUS CHECK	ER V6 21, 100	OTX V5.11.		Two of the Latest
					Virus Checkers
85	AMOS FRUITS	DATE VILL			
				A5005 PRO	PESSIONAL NOW!
*18	OI SUPERD.	RK 1531		Fun	DUDG SCHOOL MANAGE
+13	105 ALIDIO N	IAGIC !		Some more	great Marie Unlines
+11	ALTHU AND	ACRE 4	And mum	, Someting Ma	nic Rippers, Players
					Soorce code os
+13	IOR RACCOO	NILACIEDRO	PS FOR WE	1X.3X	Some BackDron
					for WorkBench

1109 RICOH LP1200 A DESKR-T STOC PRINTER ORISTERS AM/FM SPECIAL DISKS

vina amount of MIDI Move Files, or Move X, MED and Standard Mid others some great classics and major gop arrisis ric.

MT p mTracker v F 02. The very their exister and the very fates at that? windlarmers. This is not Public Dynamia. Licensed to AMFM Exclu-



#### Amiga Musicians FreeWare Mag

The worlds best Amiga music disk magazine, AMFM is just great, Full of tips, each issue Amiga only and midi. If you are keen with music and your Amiga then you just don't want to miss thir. Now on issue 11 and back issues available

£2.50 per issue

# A1200 AGAUTILS

ral senerates for AGA Mach Also appearls FPI 64881 256,000 min 1211 TETRIS.AG 6

1212 CHESSAGA

1213 INTERADER LJ

1214 JPEG UTILS

Same IPEC companies.

fe all those hate: 24 he partners enth your neppers.

1215 S.G.A. PRES NUMBER 1

LAND the contains NAB pertners for absoring on the ALDOVATIO Jacka.

1216 A.G.A. PRES NUMBER 2

Many 2. He pertners as the displayment on the ALDOVATIO.

1217 A.G.A. PRES NUMBER 3

Even more arenal 24 Bit pictures. Esnal them into Diffuse 4. Ad A on a

1219 A1200 UTIES 1

Funtaries - Billiank a De Innerliner for DPmm etc., Doubles, agai rid o black bender, Gill & PCX Dum Types for Math View on Will 30, Sys-fes AGA and Magh Menu a great new Menu for the AT 200 Work for 1283 THE DDNK UTIL.

DITASM LE

When ordering by post, please make cheques payable to BattleAxe, and include Name, Address, Postcode and if possible a daytime telephone number along with your order requirements. Thankyou

Utilities Utilities

Utilities

Utilities

.Utilities



**PACKAGE** This pack has been made due to the great demand for this type of material. It consists of: Smoste the text scroller, 2 disks full of backgrounds & fonts, & 2 disks full of Video Application utility software.

**DESKTOP VIDEO** 

£6.50



acked with great games from areade to hoard games including: Amiga Tanx, Amreha Imaders, Missile Command, Rollerpede, Copper, PacMan, Galaga, SYS, Towers, BackGarnin Rescue, YachtC, Drip, Chess, Naka, AirAce H, SubAttack and 15

£6.50

£1.25

£3 REST /WORLD

DELUXE PAINT TUTORIAL. A great fut disk showing you how to produce great effects for logos, fonts etc., etc. Incredible info 

FX1 The Print Workshop
FX2 The Hard Drive Workshop
FX3 The Graphic Workshop
FX4 The Video Titlers Workshop
FX5 The Packers Workshop

FX6 Disk Repair Workshop FX7 Hachers Workshop .....

ANIMATION L. Brill Ray Traced anim



GREAT COLLECTION OF PROGS TO HELP YOU GET THE MOST OUT OF YOUR CRUNCHERS - WELL REVIEWED IN AMIGA COMPUTING JUNE ISSUE

£5.00

#### f you had two apparently blank disks and examined their contents from AmigaDOS, you would see they look exactly the same. So what makes a boot disk bootable?

Think back to what happens when you format a disk. The formatting process has two stages: during stage one, AmigaDOS marks out the sectors on each of the 80 cylinders (double-sided tracks). In the second, much shorter stage, AmigaDOS initialises the disk by adding the root track and boot sector information. We'll come back to the root track shortly, but what about the boot sectors?

The boot sectors are the first two sectors on any AmigaDOS disk and account for 1k of disk space. When the machine is first switched on and a disk is inserted, AmigaDOS loads the contents of these sectors and looks for a boot program. If one is found it is executed and the machine starts up.

The so-called "limpet" viruses, still prevalent on the Amiga, "live" here by attaching themselves to the bootblocks: replacing the legitimate code with their own.

Upon first initialisation, AmigaDOS writes just disk type information to the bootblocks. The standard boot code required to make the machine start up must to be added later. First though, some preparation. You will need your working AmigaDOS disk.

Boot your working disk and open the Shelk Now enter this:

The command "RESIDENT" is used a lot in AmigaDOS - so it is worthwhile taking a few moments to study it. RESIDENT is mainly used to pre-load disk-based AmigaDOS commands into memory where they can be accessed easily and

Many AmigaDOS commands are located on your Workbench disk and have to be loaded every time you use them. That's one reason single-drive users are constantly being asked to replace the Workbench disk; you can find more information on RESIDENT in the panel.

To create a bootable disk, you will need:

- The blank, formatted disk from earlier
- Your working AmigaDOS disk

quickly

Reset your machine and place the blank, formatted disk in the internal drive. Notice how the initial startup acreen vanishes briefly and reappears? That's because although AmigaDOS can recognise the disk, it does not have a valid bootblock.

Remove the blank disk and insert the Working AmigaDOS disk. When the Workbench screen appears, open the Shell. Make sure your formatted disk is write-enabled: the blank write protect

# Delving into disks

shutter is closed. Now, pop your formatted disk in the internal drive and enter:

#### 1>INSTALL BEO:

This command automatically writes the correct information to the disk's bootblocks – you will see the drive light come on momentarily. It has another function though, which we'll come back to shortly...

Leave everything as it is and reset the machine. This time the boot screen does not appear: you have been taken directly to AmigaDOS instead. Remove the disk from the drive and enter the following:

#### 1>FORRAT DRIVE DF4: MARE EMPTY

A requester will appear asking you to replace yolume "BootDisk" in any drive; you disk is now the detailt system disk. For your disk in the drive and OK the request. AmigaDOS now responds:

#### FORRAT: Unknown command

Oh dear! AmigaDOS expects to find its commands located on the boot disk and they are not there. In fact, all the main commands live in a drawer (directory) called C. Incidentally, you can view this from Workbench using the Window -> Show... All Files option.

DF4, in case you were wondering, is a deliberate mistake - you wouldn't want to accidentally format your Workbench disk, If you thought all disks were the same,
Mark Smiddy has some news for you
in the fourth instalment of his
AmigaDOS tutorial...

now would you?

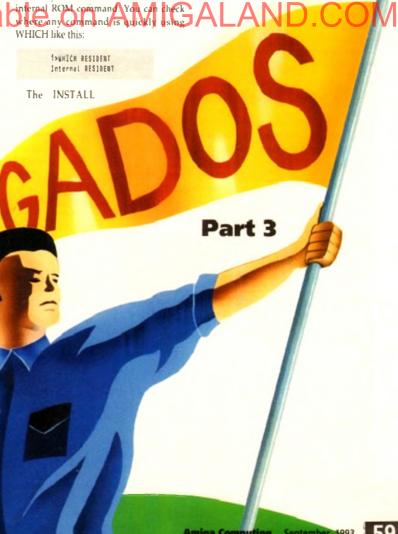
Not all AmigaDOS commands are disabled; some of the smaller ones are built in to the ROM. You can check which, like this:

#### 1>RESIDERT

The list produced shows all the commands which are available at any time from any shell. RESIDENT is itself an

command has another useful feature you might like to try out – it can check disks for their bootability suitability (tee hee) and for certain viruses too. You'll need the installed disk from earlier, your working AmigaDOS disks and a selection of other disks for this demonstration.

Reboot your machine with the Working AmigaDOS disk and make the command



#### **TUTORIAL**

resident. Now enter the following from the Shell

1>Instatt DFQ: CHECK

AmigaDOS should respond with a message like this

Appears to be a normal 2.0 OFS bootblock

AmigaDOS is telling you the disk can be used to start the machine as we saw earlier This disk should be your bootable Working AmigaDOS disk, so you would not expect any less

Replace the Working AmigaDOS disk with a disk chosen at random from your collection and repeat the last step. You will get one of the following messages:

Appears to be a normal 2.0 OFS bootblock Appears to be a normal 1.2/1.3 bootblock No bootblock installed May not be a standard bootblock

The last one may indicate something to worry about. It suggests there could be something on the disk that should not be there. Typically this message is returned by games and many PD demo disks, which have their own customised bootblocks

However, whenever you get this message, you should check the disk with a good virus checker since it may indicate the presence of a "limpet" virus. You may like to take some time out to check the rest of your collection. Illegally "pitated" disks are good place to start, but of course, you don't have any, do you?

In the protected environment we call Workbench, we never think twice about



what a drawer really is, what the Trashcan does, or what tools have to do within the universal scheme of things.

When we leave Workbench and progress along those dark, dusty corridors of AmigaDOS, it becomes necessary to learn more about what goes on under the

Probably the most basic part of all this is the hierarchical system of directories; and to understand what this means it helps to understand what the words mean! The base of "hierarchy" and "hierarchical" is heir. Most people understand Prince Charles is heir to the throne of England, but what has this got to do with computers?

An heir is the child of a couple, and each parent has two parents (the child's grandparents) and so on. We can show this diagramatically as what's commonly called a family tree or hierarchy: Figure 1 (it looks

#### more like the roots than the tree itself thangh). Brothers and sixters in this scheme are called "siblings"

Computers base a system of directories on this system. However, any directory

only needs a single parent and all directories are tied back through a series of branches to a common seed.

We call this the "root" directory and it is always located on the root track of a disk (the root track on 880k floppies is located at disk block 880 and this explains why, when block 880 fails, things go horribly wrong).

The children of any directory are called its sub-directories and they are all siblings belonging to the same common parent. So what is a directory then? Remember drawers from Workbench? Same thing!

The only difference between a directory at AmigaDOS level and a drawer on the Workbench is that the drawer has an icon fied to it - a so-called "dot-info" file. Hidden drawers viewed using Show...All Files are normal AmigaDOS directories. Let's take a look at that now. Boot your machine with your Working AmigaDOS disk. Open the Workbench disk as normal - don't bother with the Shell yet. Now select Show All

Files from the window menu - just to make sure you can see everything.

You are currently looking at the main

(root) directory of your AmigaDOS disk; which, among other things, contains several child drawers (directories) such as S, C, Libs, L and Devs.

Open the Devs drawer and study its contents. You will be able to see some files marked "nnnn.device" plus more child drawers like Printers and Keymaps.

We call these children "sub-directories" of the Devs directory; the Devs directory is a sub-directory of the root directory; Printer and Keymaps and grandchildren of root or sub-sub-directories. These latter analogies are never used in the real world: the blanket term "user-directory" is used instead.

The reason is simple - the AmigaDOS hierarchy is infinitely extensible and although it rarely gets more than a four or five levels deep, a depth of over 870 subdirectories is theoretically possible on a floppy disk!

As a parting gesture for this month, here is how to view the AmigaDOS structure from the Shell. Several commands are in charge of directories: their creation, removal and view - but we'll use a simple one here -

The name comes from DlRectory. In order to get the best from this command and use it at its simplest level, we'll make it available directly from the Shell with RESI-DENT. Here's how

#### 1>RESIDENT C:DIR

We are loading the command DIR from the directory "C" in this example - more of which next issue

Make sure your Working AmigaDOS sk is in some drive (it doesn't have to be in the internal one) and enter this:

#### 15018

AmigaDOS responds by displaying the contents of the current disk. Don't worry what all that means for now - all will become clear soon. At this stage, you will be able to see which names are directories because they are displayed with (dir) after their name.

Now, place any disk in the internal drive (you can leave the working AmigaDOS disk in there if you wish) and enter this:

#### 15018

AmigaDOS asks for the Working AmigaDOS disk back again! It thinks you mean the current disk - which is actually your Working AmigaDOS disk. Don't pull your hair out just yet...

One way to get a listing of any disk in the internal drive, is to specify the drive by name - just as we did with INSTALL. Here's how:

#### 1>DIR DFG:

That's fine so far, but you can do that from Workbench with less hassle. Here's a variation on DIR - without description - that will keep you thinking until next time:

1>018 DFO: ALL DIRS



#### of resident code The ins and outs

Deep back in the mists of time, all of AmigaDOS was diskbased. The reasons behind this are not worth discussing here, but as Amiga software has progressed, much of the language has been improved.

With the release of AmigaDOS 2, a large amount was moved into permanent ROM storage. You can make most commands resident like this

#### 1>RESIDENT C:nonn

where "nnnn" is replaced by the name of the command in question. Some commands cannot be made resident for a number of reasons, but these will be explained when we encounter

In the meantime, you can use RESIDENT to discover which commands are built-in by calling the command without arguments - like this:

#### 1>PECTOENT

You will see a long list of the commands under the headings Name and Use Count. Name is just the command name (advanced users can set their own names).

Use Count defines how many times the external code is being shared OR if a command is internally available in the ROM. But hang on - what is external code? And what's sharing got to do with it? You don't need to know this yet and can return to the main text now - the insatiably curious should read

Making a section of machine code resident in RAM is not a

new idea and it is really rather involved. This explanation is meant to serve as a brief introduction - you can get more detailed descriptions in AmigaDOS reference books (such as Mastering AmigaDOS 2 vol 2).

A program (command) is said to be resident when

- It is loaded into the machine's ROM or RAM memory.
- It can be used any number of times and always behave in the same manner; such code is said to be re-entrant.
- It can be used by many processes at the same time (shared) without falling over: this code is re-executable.

The last requirement is paramount for any command which may be called on to work in a multitasking environment, because two or more processes (Shells) might try to use it at any moment. Any code which complies to the last two conditions is referred to as "pure" and will be loaded by RESIDENT. The command knows if some code is pure because its "P" (pure) bit will be set - you can check this using:

#### 1>LIST C:nnnn

where "nnnn" is the name of the command. A set of eight "flags" appear usually (----RWED); if this contains "P" then the code may be made resident; if not, leave it alone

The RESIDENT command includes a Use Count figure which shows how many processes are sharing a command at any time, although few people ever bother to check this. A Use Count of 0 shows the command is idle and one showing INTERNAL means the command is part of the ROM operating system.

## CITIZEN PRINTERS

FROM SILICA SYSTEMS

- FREE DELIVERY
- WINDOWS 3,1
- 2 YEAR WARRANTY FREE HELPLINE
- FREE STARTER KIT With Citizen dal matrix printers from Silica



FREE STARTER KIT INCLUDES

- 3% Disk with Amiga Print Manag
   3% Disk with Windows 3.1 Driver
- 1.8 Metra Parallel Printer Cable 288 Sheets of Continuous Pages
- 100 Continuous Tractor Feed Address Labels
- 5 Continuous Envelopes on Tractor Food

# CITIZEN

144 CPS



Citizen Swift 200 - 24 pin - 80 column

- 270cps SD (15cm), 216 cps Draft, 72cps LQ
- 8K Printer Buffer (ACK max) + 7 LQ Fonts Parallel Interface

24

- · Graphics Resolution: 360 x 360 dpi
- . Epson, IBM, & NEC P20 Emulations
- Quarter Printing and Auto Set Facility
   Ultra Quiet Mode 43dB(A)
- . Colour Kit Optional Extra (See Left)
- · FREE Silica Printer Starter Kit

300 cps

CHITZIN 120D.

• Critizen 1200 - 9 pin - 80 co • 144cps Draft, 30cps NLQ

4K Printer Buffer + 2 Fonts Parallel or Senal Interface

9 PIN

- Graphics Resolution 240 x 216dpt Epson and IBM Emulation Pull tractor & bottom feed

FREE Silica Printer Starter Kit

**240** cps

CITIZEN 1200+

80 COLUMN

RRP ELICA STARTER HIT E49 TOTAL VALUE: 1248 SAVING: 1133 SILICA PRICE: E115

80 COLUMN

#### **PERIPHERALS ACCESSORIES**



CITIZEN PRINTER STAND

For Swift 9, 90, 24, 24e 200, 240 and 224 Printers



Citizen Projet inkjet - 80 column

360cps Draft 120cps NLQ

• 50 Nozzie Hear Whisper Quiet 47dB(A)

· 8K Printer Butter

RAM Card Detions

• 3 Fonts Built-in

· Optional HP Compatible Fonl Cards Parallel and Serial Interface

Granture Re

300 x 300dp

HP Dasiget Plus

2 Year Warranty

Emulation

#### SHEET FEEDERS

PRA 1200 1200 - E71 38
PRA 1222 1240 224 Suit 80 Col Pittint E81 13
PRA 1228 1240 224 Suit 81 Col Pittins E82 00 SERIAL INTERFACES

PRA 1189 1200 - 556 45
PRA 1209 Swift 99x-1240/224 532 25
PRA 1709 Swift 1474 x 24 200 240 526 38

32K MEMORY EXPN PRA 1

PRINTER STAND

ORIGINAL RIBBONS COLOUR KITS

PRA 1236 224 Smft 9/2 PRA 1268 Smft 96/24s

PN48 ACCESSORIES A 1548 PD68 Bathery A 1155 PD68 Cathe Entr A 1182 PD68 Can Adout

- The Sant 240/2402 24 pm 50 common
   300cm SD 55m 240 cm Draft 80cm SD 65m 240 cm Draft 80cm SD 65m SD -
- Supplies American and a strike
   Autor Set Facility Sub-directions at 5.
  Autor Emission Deletector
   Utra Chart Mode 42x80/A
   Chimar Printing Standard Supplies
   Chimar Printing Standard Supplies
- Chiber Printing Standard Sorth 240: Chiber Printing Optional Sorth 240 FREE Silica Printing Starter IVI

Cibien Swift 24x - 24 pin - 136 col
192cps Draft, 64cps NLQ
dlk Printer Buffer + 4 Fonts
Parallel Interface
Graphics Resolution: 360 x 360dpl

ion, IBM and NEC P6 Emula our Option Available

FREE Silica Printer Starter

SWIFT 240 MONO

STARTIN OT . Edd 1974L ION OF COM SUIGA PRICE EZSE

192 136

Tel (Home):

STARTER EIT COS FOTAL WALLE CARE SELECT PRIOR EXTE

STARTER KIT C49
TOTAL VALUE: C300
SAVING: C129
SRIGA PRICE: C129

BO COLUMN

SILICA STARTER KIT

SWIFT 240C COLOUR

Citizen PN48 Noteb
 Non-impact Printing of

Citizen Swirt 90 - 9 pin - 80 ceptum
Nilope 50 (10 pin 180 pin - 80 ceptum
Nilope 50 (10 pin 180 pin - 80 pin - 80 pin - 80 pin - 90 pin

Citizen PW48 Notebook Printing on Pique Paper
Non-impact Printing on Pique Paper
SScps LO - 4K Butter + 2 Fonts
Rear and Bottom Paper Loading
Parallel Interface
Graphics Res: 380 x 360dpl
Epon, BM, RCIP & Citizen Emulatio
Power: Mains, Buttery or Car Adapto

1005 F19

SWIFT 90 MONO

STARTER RIT . EAD TOTAL VALUE EZAS SILICA PRICE (145

SWIFT 90C COLOUR

STARTER KIT . £49 TOTAL VALUE C248 SAVAGE CIRC

BILICA PRICE TIOS

RUCA STARTER BUT CAN TOTAL EVALUATE COM SHAYING 12201 BRICA PRICE 12301 BRICA PRICE 12301

#### SILICA **SYSTEMS** OFFER

€496

TOTAL VALUE: \$496

SH ICA PRICE: 5279

SAVING: £217

- FREE OVERNIGHT DELIVERY: On all hardware orders shipped in the UK mainland.
   TECHNICAL SUPPORT HELPLINE: Team of technical expens at your service.
   PRICE MATCH: We normally match competitors on a "Same product Same price" basis.

PRICE MATCH: We normally match competitors on a "Sama product" - Same price" basis,

■ ESTABLISHED 14 YEARS: Proven track record in professional computer sales.

■ ESTABLISHED 14 YEARS: Proven track record in professional computer sales.

■ SILLION TURNOVER (with 60 staft): Solid, reliable and profitable.

■ BUSINESS - EDUCATION - GOVERNMENT: Volume discounts available 061-308 0688.

■ SHOWROOMS: Demonstration and training lacitiese at all but 15tores.

■ THE FULL STOCK RANGE: All of your requirements from one supplier.

■ FREE CATALOGUES: Will be mailed to you with ofters - software and peripheral details.

■ PAYMENT: Major credit cards, cash, chaque or monifily terms (APR 29 III) - writen quictes or requirements from this very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals and accessories, or help and advice. And, will the company you buy from contact you with distails of new products? AL Silica Systems, we are arout the your will have nothing to worry about. We have been established for almost 14 years and, with our unrivalled experience and experience with contact you with distails of new products? AL Silica Systems, we are requirements with an understanding which it socond to none. But don't just take our word for it. Completes and return the coupon now for our latest FREE literature and begin to expenience the "Silica Systems Service".



RRP



MAIL ORDER: 1-4 The Mews, Hatherley Rd. Sidcup, Kent, DA14 4DX Order Lines Open Mon-Set 9-90em-6-00pm	Tel: 081-309 1111 Fax No: 081-308 0808
LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA Opening Hours Mon-Sat 9:30am-6:00pm No Late Night Opening	Tel: 071-580 4000 Fax No: 071-323 4737
LONDON SHOP: Selfridges (Basement Averal) Oxford Street, London, W1A 1AB Opening Hours: Micro-Sat 9.30em-7.00pm Late Nide: Thursday - 8pm	Tel: 071-629 1234 Extension 3914
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Opening Hours Mon-Sat 9:00em-5:30pm Late Night, Priday = 7pm	Tel: 081-302 8811 Fax No: 081-309 0017
ESSEX SHOP: Keddies (Ind Roor) High Street, Southend-on-Sea, Essex, SS1 1LA Opening Mours Mon-Fri 10:00km-5:30pm (Sat 9:00km-6:00pm) Late Night Thursday - 7pm	Tel: 0702 468039 Fex No: 9702 468039

To Silica Systems, AMCOM-0993-55, 1-4 The N PLEASE SEND A BROCHURE	
Mr.Mrs.Ms Inflats Surname  Company Name (if applicable)	Date:
Address	
	Postrode

Tel (Work):

Which computer(s) if any, do you own?

AFTER SALES SERVICE NO NONSENSE TECHNICAL ADVICE INCLUSIVE OF V.A.T., CUSTOMERS COME FIRST

COMPUTER	S
Amiga A500 Cartoon Classics Pac	k
(IMb + Games Pack)	£199.00
A600	£269.00
Amiga A1200	РОА
Amiga A1400	PO.
A1500 (Home Accounts Pack)	
A2000	РОА
A3000	PO#
A4000	РОА
PRINTERS	
Citizen 120+D	£119.00
Citizen Swift 9 Colour	
Citizen Swift 24k Colour	

HP LaserJet III & IIIP PLEASE PHONE FOR ANY PRINTERS NOT LISTED

£279.00

£205.00 £315.00

£499.00

£499.00

.POA

Citizen Swift 9 136 Column. Citizen Swift 240 Colour...

Canon BI10 ex-

Canon BJ200 (New)...

Canon BI330

A500

512k 4 chip with clock	£23.95
512k 4 chip no clock	£18.95 -
Up to 8Mb plugs into side port	

.95
.00
.00
.0

	quality, uses 1 x 4 zap ic	am.
2Mb		£129.00
4Mb		£189.00
02		

r Car Carus	
2Mb	£119.00
4Mb	£189,00
Microbotics Internal Ram with FPU	έc
Clock	POA

All prices include VAT and are subject to change. Specifications are subject to change without notice. Please enquire about pkp with your order.

PICK	OF	THE	BA	RGA	INS

SUPERBASE 2	£29
PERSONAL WRITE	
SAXON PUBLISHER (LATEST VERSION)	£59

1CD	or side
Novia 60i internal hard disk	£349.00
Novia 85i	£449.00
AdSpeed	
Flicker Free Video 2	
Please phone for other ICD p	products

OUL I ANVI	
DESIGN	
Caligari 4	PO.
Imagine V2.0	
Morph Plus	PO.
Deluxe Paint AA	PO
Personal Paint	£49.0
Vista Pro 3.0	£54.0
Deluxe Paint 4	£59.0
X-Cad 2000	£89.0
X-Cad 3000	£229.0
Vidi Amiga Colour Solution	£99.0
Day Deam 2	

WP/DTP	
Comic Setter	£39,00
Pagestream	E H 00
Saxon	299.00
Mini Office	£39.00
Kindwords 3	
Pen Pal	£41.00
Wordsworth	£79.00
Pro Page J	£139.00
Pagesetter	£129.00
Final Copy 2	POA
Home Accounts 2	634.00

PROGRAMMING	
Amos 3D	620.0
Dev Pack 3	
System 3	
Lattice C 5.1	
Quarter Back	
Superbase Pro	
Pawal	£69.U

EDUCATIONAL
English, French, German & Spanish
Vocabulary and Grammareach £21.95
History 1 & 2each £21.95
British Politics £24.95
Comparative Politics (21.9)

#### VIDEO

Adorage	£59.00
Animagic	£39.00
Deluxe Video III	POA
Eigiview Media Station	POA
Scala 500 Titler	POA
Scala Video Studio	POA
Scala Professional	£150.00
Pro Video Plus	£137.00
Opal Vision	POA
Pal Genlock	POA
Rocgen Plus Pal	£139.00
Strius Genlock	
Y/C Genlock	POA

#### SOUND & SAMPLERS

500112 01011111	
Audio Master IV	£44.00
Bars & Pipes Pro	РОА
Super Jam	POA
Pro Midi Interface	
Audio Engineer Plus 2	£149.00
Mega Mix Master	£27.99
Amas 2	POA

I VIII I III O	
Infra Red Mouse	445,00
Inira Red Mouse Bionic Mouse	12.95
3 Button track ball	
290dpi Replacement Mouse	£12.95
300dpi Optical Mouse	£29.95
Optical Pen Mouse	
Budget Replacement Mouse	
F1 E	

Philips 8833 Mk2	£229.00
Multisync Monitor	
Cub/Scan 1440 14"	
15/40Khz for A1200	POA

HARD DRIVES

Alfa Power HD Systems IDE Controller for A500/A500+/A1500/A2000 0/8Mh Ram

Controller	£99.0
40Mb + Controller	£249.0
60Mb + Controller	
85Mb + Controller	
120Mb + Controller	
Each 2Mb Ram	£60.0
External Floppy Drive	£49.0

Top quality 400 dpi scanner ideal for scanning photos and line art for use in DIP newsletters, reports and brochures.



V3.0 COLOUR SOFTWARE Supplied with the latest version of the DaataScan Professional software.



#### FEATURES

- Real-time scanning display
- Image size limited only by memory
- Save in the popular IFF file format
- Crop. rotate. flip. resize, lighten, darken.
  16 colour palette from 4096 colours.
- Variable zoom & edit facility.
- Full drawing tools box, line, circle, text. COMPLETE PACKAGE ... ......£99.00 Version 3 software upgrade £20 Pandaal Interface/software upgrade ......£40

#### BEAT STUDIO

Record and mix sounds from a Walkman. CD player, or extract samples from games.

- True stereo sound sampling cartridge. Sound recording and mixing software.
- Stunning real-time effects.
- Song and MIDI sample sequencers
  FREE STEREO LEAD ......ONLY

The UK's newest Amiga store is conveniently located in central London sandwiched between London Kings Cross, Euston main line and tube stations and Russell Sq, Holborn and Tottenham Court Road tube stations, making us easy to reach from almost every corner of the country. Alternatively you can order from the comfort of your armchair, just pick up the phone and speak to our experienced sales/technical staff for satisfaction guaranteed. Government and Educational orders welcome.



# NTIC COMPUTER SYSTEMS

56 Tavistock Place, London WC1H 9RG Tel: 071-278 7602 Fax: 071-837 9024



s far as grabbing live video is concerned, VLabY/C has been the product to beat for well over a year. Only recently has its dominance been challenged by 24-bit boards such as the new IV24 v2, which although basic does match VLabY/C when it comes to pure image quality.

One of the reasons for the IV24's new found success is its support for Y/C or S-VHS – a format which is now on offer within the all-new VLabY/C.

Leaving prices aside, the obvious question is: If both systems offer great image quality, why not ignore VLabY/C and opt for the IV24 with its 24-bit paint package, Caligari, and assortment of multimedia tools?

In short, the answer is flexibility. Although fine for importing grabs into the paint package, that's about as far as the IV can take its digital captives. For VLabY/C, however, that's just the beginning.

#### INNOVATION

Contributing greatly to VLab's flexibility is an amazing new innovation – interleaved frame recording, or IFR. To say this feature is revolutionary would probably gain me a place in the understatement hall of fame.

With the assistance of IFR, VLabY/C brings the Amiga its first frame-by-frame digital video recorder. Courtesy of some truly amazing coding, IFR allows you to capture every frame from a video sequence without the need for timecode of any kind.

To initiate the process you simply set up the tape just prior to the sequence you want, press play on the VCS peri the VCK window and instruct the software to choose a key frame. When an appropriate frame is found,

Scize the Clay

If you're up for grabs and fancy full screen digital video, read on as Paul Austin puts the amazing VLabY/C through its pages

the software asks you to select a starting point. Once chosen you simply hit start. The program will ask you to rewind a few seconds prior to the key frame.

The tape is then placed, the key frame occurs and unce the stant many is found the grabbing begins. At this point the software grabs as many images as it can storing them in a predefined directory.

Once your particular combination of CPU, memory and storage medium has captured all it can, you're again prompted to rewind the tape and the process begins again with the software locating the key and start frames and then grabbing frantically until full.

The really amazing part is the accuracy of the system. By simply using these two frames as a reference the software can remember which frames have already been captured. As a result it then

Reg stunned as VLab V/C sells out at Aif's Mini Mart (Hamā)



Racquel looks on as Jack explains the benefits of a Y/C signal

# **Instant 24-bit display**

As existing users will be well aware, VLabY/C has always offered direct 24-bit display. However in the past this has been restricted solely to the Harlequin.

Now, however, the program's 24-bit repertoire has been expanded to include the impressive bargain basement Retina 24-bit board.

Thanks to the program's Output pull-down, the captured image can be displayed in a variety of ways, Harlequin and Retina included. Rather than saving the captured file and loading it back onto the display device later, they can be previewed directly in all their 24-bit beauty.

in the case of Retina, there's even the added bonus of support for the monitor window directly on the Retina.

skips them in preference for the frames which were missed in subsequent passes, thereby slowly building up the complete sequence.

I must admit that prior to using the IFR I had my doubts about the system making good on its claim to accurate frame-by-frame importation, but a difficult as it is to believe, it never faltered – even on hi-res, full colour, full frame imports.

Admittedly the process can take a long time – especially big sections. For example to capture just four seconds, approximately 100 frames will be needed, requiring between 15 to 35 passes – and maybe more depending upon RAM, the access time of your hard disk, CPU speed and the chosen image quality – which can vary between full frame, hi or lo-res, colour or greyscale.

Obviously with such vast amounts of data storage can be a real problem, especially in the case of full-frame images which can reach half a meg each in the case of himse colour.

To speed up the grabbing process and in

turn maximise storage, VLabY/C can make extensive use of its ARexx compatibility by adding scripts to the IFR which will grab directly into RAM and then automatically move the files to a predefined hard disk destination when RAM is full.

Better still, a selection of ARexx scripts can be easily tailored to your needs, thereby converting the stored 24-bit YUV data into the Amiga format of your choice.

#### **FAST CPUs**

Obviously with the vast storage and RAM required for full-screen playback, true digital video will only be available to those lucky few who have huge hard disks, buckets of RAM and blisteringly fast CPUs.

And even then, the only way to achieve respectable playback speed is convert the files into three bit plane DCTV animations. Even on an A4000/040 it's impossible to exploit the higher quality AGA modes at full screen without noticeable stuttering and unacceptably slow playback. However,

## **ARexx** capabilities

Like any self-respecting power product. VLabY/C boasts an impressive range of ARexx commands that cover all of the system's major functions, with perhaps the biggest impact being made by the ARexx control of the sequential and IFR grabbing options.

The software has a complete pulldown dedicated to ARexx macros, a number of which come as standard and can be appended to software as a permanent feature listed in the Macro pull-

My only complaint concerning the implementation of ARexx is the need for the user to edit scripts in order to define specific file formats and resolutions for converted images. Although not a difficult task, it would better if sequential file conversion was a little more intuitive.

when these vast files are scaled, edited and processed with the assistance of programs such as ADPro or ImageFX, even mere mortals have the opportunity to help usher in a new era in Amiga animation.

Now the pseudo DVEs or digital video effects mentioned in this month's Updates column - courtesy of ProControl - seem less pseudo by the second, as animated animation can at last consist of "apparently" live video rather than standard Amiga anims.

Even more good news awaits the arrival of Airlink. As mentioned earlier, capturing a complete sequence can take quite a while, with the user acting a slave to the machine, waiting for prompts, rewinding and playing the tape time and again until all the frames are safely stored.

Fortunately there is a solution, in the form of the AirLink programmable infa red controller which can be connected to the Amiga and controlled by a selection of autorewind ARexx scripts that can be added to the IFR options

Once in place, automation is complete with AirLink responding to the needs of the software, rewinding and playing the tape on request leaving the user free for other more productive endeavours.

Like the original VLab, VLabY/C comes on a hard card, offering two composite inputs plus a single Y/C. The lack of Y/C was the only real fault with the original and

its inclusion on the new board should make it a "must have" for the enthusiast/professional who work ssolely in S-VHS and

As you can hopefully see from the screen shots, the quality offered by S-VHS is superb - although it's likely you'll find it difficult to tell between S-VHS and composite due to the massive reduction in scale necessary for printing. Nevertheless there is a very marked improvement, which in turn is reflected in the pictures - honest...

All three inputs can be toggled via the software, providing the ideal setup for the professional. In fact, you can have two cards in a single machine, offering six source machines all controlled by the software simultaneously.

Aside from pure grabbing power, the most important aspect of any system is its interface. In this area VLabY/C performs extremely well. The program can appear in two forms, either as a full screen interface in the screen mode of your choice - or as a dormant pull-down menu on the Workbench

Once activated, the first job is to open the monitor which appears as a small, independent Workbench window or PIP, housing a constantly updating display of the incoming video signal. The window can appear in anything from four to 16 levels of greyscale, in either interlace or med-res.

The beauty of the window system is that when in Menu Bar mode the window sits quietly alongside the assorted Workbench clutter, happily dis-

playing the signal. When an appropriate grab appears, a simple click on a small accompanying con- and VLab Y/C trol window instantly captures the image.

Actually capturing images is literally that

simple - you merely sit back watching your miniature TV, patiently waiting for the optimum moment to click on the control panel.

combination

As many a videophile will be all too aware, interlace flicker can be a problem with any frame grabbing system - especially when grabbing fast moving images. In the case of VLabY/C the problem is still there, although to a lesser extent than most.

Nevertheless, interlace flicker can still be a problem - more so in a Y/C rather than composite grab as importation takes longer due to the additional information in the Y/C signal. However, if the unthinkable happens

and you capture a flickery but nevertheless impressive image, a de-interlace option can be applied to remove the offending field - instantly transforming a migraineinducing grab into a perfect if slightly lower quality picture

Once grabbed, the captive image can be con-

A display device is handy, but full screen back drops and live on-screen monitoring still da



Airight Barry, calm down, calm down

verted into any standard or AGA colour and resolution combination - either with or without Floyd Steinburg dithering - the only exceptions being HAM and Ham8 which for some reason do not support

dithering within VLabY/C. The importation process can also have a variety of filters applied to produce the optimum image.

#### **GRABBING**

Although static and IFR movies are impressive, they're not the limit of the system's capabilities. With the assistance of the pull-downs, you can access the programs sequential grabbing option which allows you to grab a maximum of 9,999 frames from a live video source with the time delay of your choice.

Thanks to the sequential option stop

frame and time lapse His hard to argue Animation is just as easy as making IFR with an ADPro movies or grabbing sin-

gle frames

If there's a chink in VLabY/C's armour, it's the program's love of copious amounts of memory and accelera-

tion - especially during sequential or IFR grabbing. Even on an A4000/40 there was a significant slowing of additional software despite the program's image buffers being

To be fair, the program itself performs faultlessly, but I'd say it's not a particularly good idea to employ the VLabY/C in the midst of a busy multitasking environment.

VLabY/C is to the best of my knowledge the only serious application to employ the impressive YUV file format. All captured images are stored in it and then converted to a particular display medium, whether that be 24-bit or two-colour bitmap - the choice is

The beauty of YUV is primarily its size, with the average file being one-third that of an identical 24-bit IFF, and they still retain all the relevant colour data. The only problem - as with any proprietary format - is its incompatibility with existing software.

To combat this, VLabY/C can also save out a standard Amiga/24-bit IFF in addition to any AGA or standard Amiga file format.

However the image must be converted, either internally or processed after saving with the sequence to Amiga ARexx script provided. As you've probably guessed, I'm as impressed with the combination of hardware and software as I'm sure you are with the images it provides.

VLabY/C appears to be the system that the professionals have been waiting for. With support for the YUV file format and a dedicated VLabY/C loader for ADPro provided as part of the support software, it's fairly clear where MicroSystem's see your creations ending up.

To be honest, it's hard to argue with an ADPro and VLabY/C combination. With both packages working in harmony, DVEs ary a breeze, with ADPro's Sentry program automatically picking up the files from VLabY/C, passing them on to ProControl for processing into a DVE effect, while AirLink controls the transport of the VCR.

All you have to do is set up the software play the tape and put the kettle on. It's that simple...











#### CUT, TICK & POST...CUT, TICK & POST...CUT, TICK & POST



V662 DCOPY v3.1 PRO

YESO WE 2/3 UTLITES

VZS3 SOFTWARE USTER ULA

• V758 TEXTPLUS +4 De

**V770 ACCOUNT MASTER** 

TEL OR FAX HOTLINE (0702) 466933



VIORY STOCK ANALYST

V1089 STATRAM VI.5 A

V825 WORLD DATA BANK v2.2 V849 LANGUAGE TUTOR VI.O

VB81 SECOND WORLD WAR . V927 CU TUTOR V933 GCSE MATHS Prog

V944 AMIGAWORLD V1015 JAPANESE

G51 FORMULA ONE Is a GS3 EARLY LEARNING MATHS GS4 SPELLE COPTER Cree of £4.99 SA SUPER SOUND v4.0 A

+ V16 AQUARIUM V277 FORTRAN-77 v1 3c V390 DESK TOP PURLISHING V394 CHEMESTETICS v2.14

V424 ANTI-FLICKER Sold I

VATO CHESS & LITTLITIES V490 MISSY SID v2 0

15 (2) VS73 FLE & HD HD

V575 HOME BUSINESS PACK

AvantGarde Baskerville BoshovsBold

nstat Barasina Berker Medium BEDROCKLYSHT BEEFWAR BEFFELD BengmatBold Genguiallig's Januarian Bajania Terratria

Y924 PLOT MAP YO.85

SHEWE HAR STATES IN THE STATES Biscifarci M ADES Mippolleon Nouves Bedity Beld fortorleaderfoldsom Laterials Sorterleader Flam : BIBLE CommCAVENAN Country Charlethan

PD-Soft Foot Disk 04 Caligada Comberix Corolth Canadeligh CarawayBold 4.0%, (miniferen CARNODEANS TO Colonia Chilowe B ESFEE

V944 SYSTEM OPTIMIZER

V949 TESTS

ction of WB Hocks & Checks + VP28 THE LITTLE OFFICE One

VESA LETTINS & BOILERPLATE

• VB27 REPAIR (T.2: New2ap +3.3

V842 SID v2.01

V850 FRAC V11 V856 PICTURE TOOLS

V873 LIGEC v1.1 (

V977 FILE & HD No 5-6 N

VIBS MEGA CHEATS +3 0

V1009 TURBO TEXT VL1 Exce

. VIOZZ UTTLE TRAVELLER NI I

VIOTA MANDELSQUARE VI 6

\*\* V1025 TERM v3 1

V1056 DEVELOPER

VIDSO GRADUICS

VI067 3D OBJECTS 3

1534 BATTLE CARS II

fick the COLLECTING DISKS

☐ (ET) 99 for 1000. Which includes P&P DISK BOXES ☐ 40 €5.49 ☐ 80 €8.99

Mics	All Per	DISA		П	Della	2	00	
2.50	11-20	DISKS	22	00	- 2	11-5	0	DISA
	_	-		9	-	_	_	_

CATALOGUE IMb 2Mb+ £2.50

£3.49

STAR TREK + SI-FI

							6-10	
							no £1,5	
	٠.			-	_	_		_

r Name	A/c No	
dress		
t Code	Telephune	

pampe-Our all NEW Fo

Von Ac Lenclose cheque PO for

VS84 FASTFACTS V792 KIDS GAMES Co

£4,99 (x £14.99 with a ful

V444 PRINTER DRIVER DISK III

PD-Soft Foot Disk 01

Adjutant AGR them Special Jan Turk Turk I La

andestepiano Archiou

V783 PROGRAMA

AachenBold AachenLight AARCOVER times partial LL letter

+ V790 ANIMATION UTLS

J \*+V791 DIRECTORY LILTS

Arctic2 chittee 200 chilles Atha

PD-Soft Font Disk 02 PD-soft Fant Disk #1

leaves leaveles Furl Abi Care Charge



# COMPUTER CENTRE OPEN 7 DAYS A WEEK

OPEN MON - \$AT......9.30AM-5.30PM SUNDAY OPENING.......11.00AM-3.00PM THURSDAY NIGHT LATE...9.30AM-7.30PM CLOSED BANK HOLIDAYS

AUTHORISED DEALERS FOR ACORN, CITIZEN, COMMODORE, DIGITA, PACE, PRIMA, SEGA, ROMBO, STAR, SUPRA,

# FREE DELIVERY! HOW TO ORDER

Order by telephone quoting your credit card number. If paying by cheque please make payable to the:

"FIRST COMPUTER CENTRE."
In any correspondence please quote a phone number & post code. Allow 5 working days for cheque clearance

- •interest credit available!
- Please phone for details

  All prices include VAT &
- UK mainland Delivery

  All hardware/computers
  are genuine UK spec.
- Standard Delivery.....£1.00
- Guaranteed 2 to 3 day (week days) Delivery.....£2.50Guaranteed Next Day
- (week days) Delivery.....£4.90
- Open seven days a week
  1200 sq. ft. showroom
- Free large car park
- Overseas orders welcome
- Full repair service
- Educational orders welcome

#### SALES & TECHNICAL

24 HOUR MAIL ORDER SERVICE 6 LINES!

0532 319444

FAX: 0532 319191

FOR DESPATCH & RETURNS ENQUIRES TEL. 0532 637988

#### **SHOWROOM ADDRESS:**

DEPT. AC, UNIT 3, ARMLEY PARK COURT, OFF CECIL STREET, STANNINGLEY ROAD, LEEDS, LS12 2AE.

Prices are subject to change without notice. E&OE.



# FIRST COMPUTER CENTRE (LEEDS) Tel: 0532 319444

## AMIGA 1200 £294.99!!!

now with SLEEPWALKER GAME

32 hit technology based on the 46020 chip running a 14.2 Mhz, AGA custom chipset. The 1200 represent the future of the Amiga. Buy It!! Comes with WB3.

#### The NewAmiga 4000/030

Based on the 48030 processor. Complete with hard drive & 2Mb of RAM (or 4Mb RAM for 129Mb versions & WB3

only £949.99 for 80Mb version or £1169.99 for 120Mb version

Amiga 4000/040 from £1859.99

Cartoon Classics Pack......£ 194.99
with Lemmings. Captain Planet. The Simpsons & D-Paint 3
AMIGA 500 Deluxe only £239.99
with built in ROM sharer 2.04/1.3

AMIGA 600 Basepack now with X OUT game (LIMITED OFFER) Only £194.99!

AMIGA 600 20HD The Epic pack20
Mb Hard drive, Epic, Rome, Myth, & Trivial
Pursuit, Dictionary, Language Lab & D. Paint 3
Only £289.99 (Incon Stre Malmonanes)

The A600 Wild, Weird & Wicked in Micro Prose Grand Prix, Deluxe Paint 3, Putty & Pushove Plans "X OUT" shoot em up only £219.99

A600 DELUXE .....OHLY £245.99

A600 20HD DELUXE .... ONLY £339.99

inc. ROM sharer with 1.3 & 2.04 ROM's making incompatibility a thing of the past. The A400 HD Deluxe comes with a Built in 20 Mb hard drive Just add 32.99 for a 2 Mb 600 Deluxe!!

# PRIMA A 1 200 REAL TIME CLOCK

at last now you can date and time stamp your files First directly onto the motherboard with no soldering.

now only £14.99!

check for compatibility

A600 & 1200's with built in Hard Drive plus HD kits for A600/1200's

Add £14.99 for Real Time Clock!

	HD KIT	A600	A1200
20МЬ		"£289.99 <u>"</u>	‱£394.99
60Mb	#6179.99	£379.99	£484.99
80МЬ	*£195.99	£399.99	£499.99
127Mb	*£269.99	_L469.99	£569 99
210Mb	<b>.</b> •£369.99	_£574.99	£674.99
	*Just Add (	16.40 for fittin	£

All Arniga's conse with Workbench, mouse & 12 month warranty. The A600 s. A I 200 & A4000 come with I 2 months on site warranty All I 200(600's also come with a built in integral hard disk option.

THE AMAZING ZOOL PACK!

ZOOL (97% Amiga Computing, Nov 92)

STRIKER (94% CU Amiga, June 92),

PINBALL DREAMS (94% AUI, Sept 92)

TRANSWRITE word processor

only £29.99
only £19.99 with any AMIGA!

#### CDTV MULTI MEDIA PACK

Complete with CDTV, Keyboard, Mouse, disc drive Fred Fish & Workbench 1.3 now only £329.99

CD Rom Amiga A570
Turns your Amiga 500 into a CDTV. Includes

Fred Fish, CDPD disk & Sim City
now only £147.99!

CDTV 65 Mb Hard Drive	Ĺ	339.	99
CDTV keyboard			99
CDTV mousellowstick interface			

# PRINTERS All our printers are UK spec.

Canon CITIZEN
FUJITSU
HEWLETT
PACKARD

All our printers come with ribbon/toner, printer drivers (if available), paper & cables!!

#### CANON

Canon BJ330.....£464.99
Wide carriage version of the BJ300

BJIO Autosheetfeeder...£52.99 CITIZEN NEW LOW PRICES!

Citizen printers have a 2 year guarantee Citizen Swift 90 Colour....... £169.99 Excellent value 9 pin colour. Highly recommended Swift 200 Colour..................£219.99 Same out put as the 240 but with less facilities

Swift 240 Colour.....£269.99
24 pin, 240cps draft, 10 fonts, quiet mode, 240cps.

Swift Auto Sheet feeder..£79.99
FUITSU
12 month onsite included except

12 month onsite included except DL-1150 (12 month B T Base)
Fujitsu DL-1150 Colour.£274.99
24 pin, 10 fonts, 200 CPS
Fujitsu Breeze 100......£219.99

Inkjet, draft & LQ mode, BJ 10EX beater Fujitsu Breeze 200 inkjet.....£309.99 HEWLETT PACKARD

HP Deskjet Portable..only £369.99 New! HP510 mono.now £319.99

HP 500 Colour.....now £439.99
HP 550 Colour.....now £644.99
4 times faster than the HP500C!!

StarLC20......£132.99

180 cps draft, 45 cps NLQ, quiet mode and multi fonts, push button operation.

Star LC100 colour.....£155.99 9 pin colour, 8 fonts, 180 cps draft, 45 cps NLQ

Star LC200 colour......£195.99 9 pin colour, 8 fonts, 225 cps draft, 45 cps NLQ, A4

NEW! Star LC24-20 MKII.....£224.99
24 pin quality, 210 cps draft, 67 cps LQ, 39K buffer expandible to 48K, 10 fonts and quiet mode.

Star LC24-200 colour.£264.99
Colour version with 30K buffer expandable to 62K
Star SJ48 Bubble jet.....£217.99
Laser quality, uktra quiet, Epson compatible # portable
Star SJ48 Autosheet feeder...£49.99

Laser Printers
on-site warranty standard

OKI 400e.....£514.99

4 page laser, mult font, \$12k memory, HP emulation
Ricoh PCL5.....£809.99

400 Dpl, 2Mb RAM, \$Page per minute

# MONITORS All our monitors are UK spec. All monitors

come complete with a free Amiga lead
PHILIPS CM8833 MK2 Colour

Colour starco monitor. 400°285 line resolution, gree screen facility, one years on site maintenance.

now with Lotus Turbo Esprit!!

now only £199.99 UK Spec.

PHILIPS TV Tuner for the 8833 £64.99

#### Commodore 1084ST Colour

features built in tilt & swivel stand this new colou monitor from Commodore is outstanding value only £199.99

MITAC SVGA .28 dp Colour monitor with overscan

High quality Super VGA resolution. Includes overscan facility, 28 dot pitch. a tituswivel stand.

NEW! COMMODORE 1940 Dualsync, .39 dpi only £284.99 NEW! COMMODORE 1942

Dualsync, .28 dpi only £379.994 COMMODORE 1960 multisync

.28 dpi only £379.99

#### **MICROVITEC MULTISYNCS**

A 3 year warranty comes as standard | 4".....£409.99
20".....£1099.99

Goldstar TV/Monitor only £189.99

TAT & SWIVEL STANDS

## **SUPRA MODEMS**

The Supra-Fax Modem V.32 bis (14400 baud !!!)

Allows you to send and receive fax messages. This new modem from Supra has full 14400 baud capability. Specincludes V.32bis, V.32, V.22bis, V22, V21, MNP2-S, V.42, V42bis, Class I & 2 commands, 960014400 Group 3 Fax. Includes free comms software & modem

only £259.99 including heavy duty PSU

#### Supra Fax Plus

With the ability to send faxes! Even faster than the standard 2400 from Supra with auto dial & auto receive. Hayes comp. V22b, V42 Bis, MNP 2-5 & auto adjust to maximise transmission speeds. Includes free modem cable & comms stell.

only £139.99

GP FAX SOFTWARE only £39.99 if bought with modem

**Supra 2400** 

Get on line using this great value list modern with suco dal & receive. 2400 baud Hayes comp, V22 BIS. Inc modern cable & comms s/w!!

only £74.99

All Supra Moderns come with a 5 year warranty!)
Supra moderns have not been tested by BT but they
have been given between 80 and 195 ratings (dependin
upon model) by many national magazine reviews.

## **US ROBOTICS**

Sportster | 4400 FAX Modem ...... £339.99
Courier HST | 6.8k Dual Standard.... £503.99
If you thought V32bin was last try this one! They come

#### PACE MODEMS

MicroLin V22b FAX ...... £216.99
MicroLin V32b FAX ..... £449.99
S year warranty and FULLY BABT Abbroved !!

#### PRIMA A500 & A600 RAM SZECIAL ROMBO DIGITISERS New! VIDI 12 Real Time. £138.99 DATALUX CLEAR MOUSE A500P A600 Real time colour digitizing from any video sou High quality clear 2 button mouse Home Accounts 7 full AGA support Unpopulated.....only £16.99...£23.99 £19.99 New! VIDI 24 Real Time.£229.99 Populated to 512K..only £19.99...£28.99 Mini Office 24 bit quality real time colour digitizing from any video source. Full AGA support Populated to 1 Mb...only £28.99...£33.99 2 Mb A600 OR A1 200 RAM card.......£99.99 **PAGESTREAM 2.2 PLUS** PERSONAL FINANCE MANAGER PILL only £59.99 New! VIDI 12 AGA.....£74.99 PLATINUM WORKS ... only (29 991) 4 Mb A600 OR A1200 RAM card.£169.99 fully support for AGA chinsetColour images cantured **XCOPY PRO** i less than a second, mono images in real time ny video source, Multitashing s/w, cut & paste AMIGA A500 512K RAM by PRIMA PLUS HARDWARE....£25.99 for the original 1.2/1.3 AMIGA..only £13.99 VIDI 12 AGA with built in **TECHNOSOUND TURBO** 32 BIT RAM (for A4000 etc) Megamix Master....only £98.99 GB Route Plus only £25.99 TAKE 2......£37.99 Features include load and save from D. Paint animations and IFF files. Supports HAM graphics. Megamix Master 429 99 2 Mb SIMM.....£84.99 **ROCHARD DRIVES for the** A500/A500+ from £219.99 8 Mb SIMM (only for Microbotics)....£274.99 **POWER SCANNER V3 RAM & CUSTOM CHIPS** Coprocessors for the A4006 **ACCELERATORS** Motoroia 68887 PLCC(75Mirz) £69 99 only £114.99 on der Motoraia 68887 PLCC (33 Minz) 679 99 Colour version only £229 99 **MICROBOTICS** Corprocessors for Microbatus etovola 68882 PGA (33Mhzj..£79.99 EPSON GS6500 COLOUR FLATBED New M1230 for A1200 withup to 120 Mb fast RAM! Motorola 68882 PGA (40Mhz) (POA Motorola 68882 PGA (50Mhz). £157 99 Amos 3D M1230 XA 40Mhz, 0Mb......£264.99 MI230 XA 50Mbz 0Mb Imb by 8/9 SIMMS per I Mb (31.99 1329.99 See "RAM & CUSTOM CHIPS" 4 Mb by 9 SIMMS.....per 4 Mb £134.99 AMS. .....per | Mb £42.99 I Mb by 4 ZIPS .... .....per | Mb £39.99 oir RAM Cail for prices on upgrades UTILITIES 256 by 4 DRAM (DILs) from MBX1200Z to MBX1200XA 4+ (512K)... now only £3.99 DATALUX CLEAR MOUSE GVP .now only £8.94 .now only £8.89 8+ (IMb). 41230/0Mb RAMfor A1200 anly £284 99 16+ (2Mb) AMIBACK PLUS TOOLS BUNDLE NEW! ... £74.99 41230/1Mb RAM for 41200 comy £384.99 Kickstart | 3 4 7 90 Zvdec Trackball..... 1500/2000 G-FORCE 030-25MHz with 4Mb Kickstart 2.04. 484.99 Golden Image Trackbail....£37.99 32 hit RAM Fatter Agnes 8372A. only £479.99 425.99 Zydec Trackball.....£29.99 Super Denisa... 415.90 G-Force 030-40MHz with 4Mb 32 bit RAM only £729.99 NEW! SUPRA ACCELERATOR 6571-0326 Reyboard controller 6 3.99 DISK DRIVES CIA 3520A | O controller Directory Opus 4.. MICROBOTICS RAM for the A500/A500+ Prima 3.5" only £56.99 & A1500/2000 The MBX 1200Z CO-PROCESSOR & RAM 28 Mhz, uses A500 side port so Ruciite 3.5" only £62.99 there is no internal fitting BOARD for the A1200 only £149.99! alize the full notential of your \$1700 with 6888 1 4 M H Z ......£119.99 **ACCESSORIES** 6888128MHZ.....£129.99 Cumana 3.5" only £57.99 68882 50MHZ Mouse/joystick manual port switcher. The RAM be ards can only work with Wideo Seart Switch ly €19.99 **OPALVISION** the use of the Co-Pro board With may Parallel port of **SUPRA RAM** QUALITY MOUSE MATS\_ aly the heat! Fits onto the side expa only £6 19.99 with Imagine 2! TO APACITY OUSE BOOK O CAR LOCKABLE DISK BOX 8Mb pop to 2 Mb. 90 CAP STACKAR F RANY BOX 15.99 8Mb pop to 4 Mb... 4214.99 8Mo pon to 8 Mb.... GVP Genlock. 8Mb pop to 2 Mb for 2000/1500 range...£149.9 AMIGA ASSO DUST COVER AMIGA 800 COVER (2.99 **GVP HARD DRIVES** 12" MONITOR DUSTOOMER 45.51 Rendale 8802 FMC...onlv £169.9 AMIGA A500 HARD DRIVES STO LEMETRE AMIGA PRINTER LEAD 44.99 from only £247.99 AMIGA CONTROL STATIONS A500 or 1200 VERSION A500 GVP Combo's A530 Combo 40MHz from only £475.99 AAROVERSION PRINTERSTATION..... 68887 Co. Processor Kit for AS30 anty (714 99 **PRIMA ROM SHARERS** DISKS PENPALL4 1500/2000 Hard Drives New High density 3.5 incl Impact Series II HC8+ from only £289.99 PAGESTREAM 2.2 U.K. version plus ART now only £19.99 or £27.99 All GVP products come with a full 2 year warranty QTY 3.5" DD/DS OR FUJI DDIDS **EXPRESSION** only £179.99 for keyboard switchable version **ROCHARD DRIVES** BRANDED PAGESTREAM 3 U.K. version 10......£4.99......£6.99 30.....£14.99.....£17.99 ROCTEC ASON CONTROLLER CARD .....£21.99.....£28.99 100....£39.99......£54.99 20D....£73.99.....£99.99 IMb of RAM using SIMMS......£149.99 500....£169.99..... 1600 £339 99 EMPLANT SYSTEM NEW ROCTEC 42Mb......£219.99 (POA ROCTEC 80Mb......£299.99 Branded disks come complete with labels Disk Labels 500 now only £6.99 Disk Labels 1000 now only £9.99

ROCTEC ROCMATE.....£99.99



# DISKOVERY P.D. 0274 880066

(No.) = HOW MANY DISKS TO ORDER, EG (2) = 2 DISK PACK

WHY NOT USE OUR TELEPHONE HOTLINE FOR SAME DAY DESPATCH, CREDIT CARDS WELCOME

SPECIAL OFFERS

1. FOR EVERY 10 P. D. DISKS YOU BUY, WE WILL GIVE
YOU A 10 CAP BOX WORTH \$1.99 ABSOLUTELY FREE! 2. FOR EVERY 25 P.D. DISKS YOU BUY, YOU CAN **CHOOSE ANOTHER 5 FREE** 



DEMOS D1...Mental Hangaver
D2...Inneceptor Demo
D4...Wild Copper
D10...17Bit Music Demo D11. World Demon 21 D13. Total Remis Demo D14/15 Predators(2) D20/21 Red Sector(2) D24/25 New Tek Reel3(2) D26 Total Remix 2 Demo D27. T.V. Thome D26. Total Remis 2 Demo
D27. T.V. Thisme
D30. Epic Demo
D34. P.D. Collection
D34. Virtual Works
D37. Vectra Sinking Demo
D38. Virtual Works
D37. Vectra Sinking Demo
D38. TFP Demo Voyage
D40. Safy Demo
D40. Safy Demo
D59. Vivico Effects 3D
D64. Cult Vectra Damce 2
D64. Septomoresa Demo
D70. Amos JD D

D111 Delcon I D117...Aucuru M/Demo D118...Cult M/Demo 2 D125...Precise Demo

D118. Cua.
D123. Precise Detto
D133. Fasination
D136. Gooldire Megademo
D137/183. So What (2)
D139. Devils "No RealityD144. The Silents "lee"
D145. Crystal Symphonies
D144. Ray Of Hope 2
D149. No Brain No Pain
D158/159. Cyborg Demo!
D193. Con aid Comp.
D193. Can aid Comp.
D193. Can aid Comp.
D193. Can aid Comp.
D194. Con aid Comp.
D195. Comp. D195. Comp. 19

D158/159.Cyborg Demot21 D195. Conxial Comp D197..MC Disk 1 Coma D199.End Of Century 1999 D206. Dreamers 3 D206. Avengers M/Demo D216/217. Bass o Matte (2) D316. Disorder Owner

D216/217. Bass o Matic (2)
D218. Divonder Omno
D219. Tuff Enuff
D225. Cool Fridge Demo
D23. Harponatic Harmore
D23. Harponatic Harmore
D23. Harponatic Harmore
D24. Six D1 Opt. Demo
D23. Lagrange Lagrange
D24. Total Respiray
D243. Bodram 3
D244. Phenomena Increpace
D245. Total Retrial
D247. Palling The Trigger

D247 Pulling The Trigger D253. CES Demos

D256 Total Recount D257, Total Rebate

D397. Total Rebase
D302. Spannishvir.
D204. Et-Moh M/Demo
D267. Sun Connection 2
D2701. Kefrous 'The Wall
D271. Times Hydra
D272. Ebectrip Demos 1
D274. Defpaskers Demo
D306. Canva La Weird
D279. Eraqui Demo
D200. Popeys Demo
D201. Exc alibur Demo
D202. Exc alibur Demo
D208. Signish Annachy

D298. Silents + Anarchy D301.. Sulvas Demo D302.. Tarot Demo

DMU, Subway Demo DMU, Tarot Demo DMU, Earl Demo DMU, L. Sh. Demo DMU, L. Sh. Demo DMU, L. Sh. Demo DMU, L. Sh. Demo DMU, Tarkmu DMU, Tarkm

D340, Wanchman Demo D341, Annechy Smoker Co D442, Ed 200 The Revenge D443, Ed 200 The Revenge D446, Waldine M/Demo D348, Waldine M/Demo D348, Waldine M/Demo D348, Waldine Moreno D348, Waldine Moreno D350, Sance D7 The Art D361, May D49, Revistore D362, May Revistore D362, Sance D7 The Art D361, May D49, Revistore D362, Sance D7 The Art D361, May D49, Revistore D362, Sance D7 The Art D361, May D49, Revistore D362, D361, D361, May Revistore D362, D361, May D49, Revistore D362, D362, D362, May D49, Revistore D362, D362, D362, May D49, Revistore D36

m Pressure

D367 InThe Can Demo

E255. Protracker v.2.0
E256. Astar ST Familion
U258. D-C Emulator
U258. D-C Emulator
U258. D-C Emulator
U259. D-C Emulator
U251. Minimized Vall
1279. Invoice Printer
U279. Invoice Printer
U279. Woman V2 02D
1279. Jeoutine Fourit
U279. Moman V2 02D
1279. Jeoutine Fourit
U279. Med Tiper Unit I
U299. Black Tiper Unit I
U299. Black Tiper Unit I
U299. Black Tiper Unit I
U294. Text Engine V40
U295. Claim Tamer
U296. Ultimized Disk Crea
U297... Io PT Copiers D368, Dynamic Illusions D369, Pieur Of Mind D170, 3D Demo 2 D371, Lethal Ext U297...10 PD Copiers U298 ...Protracker V3.0

UTILITIES

The Comma Disk Modem Utils Red Devils Utils 1 Soundtracker Special Paint, Music, Media

U39. Card Designer U40. Spectrum Ermilate U41. Red Devils Utils 4 Leau, aspectrum Ermilator
[E41, Red Devils Ulis 4
L43. Asture Componer
L44. Ketrom Materboot
L45. P.E. Gard Unis 186
L43. Label Devigner
L49. Elitimate Icon Drish
195. Pister Comp Utils
195. Pister Evils
195. Post Devigner
196. DePaire Fronts 1
196. Power Other
196. Seffracter Mega
196. Ultimate Boots 2
197. Power Gopt
197. Mr. Cad
197. Joannal Home Acc's
197. Home Utilities
1971. Electrocad
1971. Joannal Home
1971. Electrocad
1971. Bosythench VI 0
1972. Slidesham Maker
1973. Electrocad
1973. Bosythench VI 0
1973. Slidesham Maker
1973. Electrocad

UTI Anii Base
UTI Boshbench V2 0
UTI Shidowie Malee
UTI Cataling Workship 1
UTI Cataling Workship 1
UTI Hard Workship 1
UTI Ha

1100. Ham Lah
1101. Sad V-2 U

U168. Home Business 3 U172. Squeich (1.3 mly) 1.17b. GFX Uuls 3

UT2 Squekh H 1 story UT7. GRV Utf 3 UT7. Star Chart UT79-180. Dive (2) UT81-180. Dive (2) UT81-180. Dive (2) UT81-180. Dive (2) UT81-180. Diversion of UT90. Jeon Collection 1 UT90. Diversion of UT90. March 180. Diversion of UT90. Diversion o

J240 Jeon Editor P252 - Opticomois 2 0 Opticomnis 2 to New Superkillers 2

GAMES
G1 Renum To Earth
G2...Games comp 5
G3...Duzzy Lizzy
G4...Scom Haien
G5...Parachate Jount
G8..Frantic Fruddie
GII...Twintirs
G9...Pauedo Cop
G1G...Drip
G11...Bug Bash
G12...Asteroids
G13...Lamatran
G14...Eacape From Jovi
G15...Mora Adventurs
G16...Ground Attack
G17...Megaball
G18...Indiders Club
G19...Varjous Adventures
G22...Drague Gavi
G24...Rangs Of Zon
G24...Rangs Of Zon
G25...May hern
G25...May hern
G26...May hern
G26...May hern
G26...May hern
G26...May hern
G26...May hern
G26...May hern
G26....May hern
G26...May G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...May
G26...

GAMES

C24. Rong Of Zon
C23. Mayhern
C23. MeChillipii
C27. The Tennis Giame
C28. Elisabbue
102. Duck Rogers
C31. Flistabbue
103. Grey-Mayer
C31. This Tennis Giame
C32. Mean Cornop I
C33. 34. Sine Trek 1 (2)
C33. 34. Sine Trek 2 (3)
C33. 34. Sine Trek 2 (3)
C34. Sine Comp 2
C44. Sine Comp 2
C44. Sine Comp 3
C44. Sine Comp 4
C55. Cames Comp 4
C59. Cames Comp 4
C59. Cames Comp 6
C51. Sine Came Comp 6
C51. Sine Comp 6
C53. Cames Comp 7
C54. Cames Comp 7
C55. Cames Comp 7
C56. Cames Comp 6
C56. Cames Comp 6
C56. Cames Comp 6
C56. Cames Comp 7
C56. Cames Comp 6
C56. Cames Comp 7
C56. Cames Comp 6
C56. Cames Comp 6
C56. Cames Comp 7
C56. Cames Com

G61. Caveranter G62. Crystal Caverus G63. Intact G64. Eternal Rome G65. Lemmingoids

G65 Lemmitgoids G66...DownHill Challenge G67...Lame ST Prots G601. Paranoid

Grot. Parannial
Geo. Parannial
Geo. Parannia
Geo. Chime w Death
Geo. Parannia W Death
Geo. Parannia W Death
Geo. Servas J.
Grot. Dynamia Dick
Grot. Card Games I
Growth
Growth
Growth

077. Growth G78. Skare G79. Atic Atac G80. Napoleomic Sim G81. Project 1 G82. Larer Zone G83. Lemmings Pack G84. Star Trek N.E. UP G85. Letrix

G85 Lettrix G87 Matched Parts G88 Raphnels Revenge G89 Stanke Pa G90 Zeus G91 Men The Mercilless

GIP. Smake Pet City Color Smake Pet City Color Mery The Mercilless Color Smake Shiz and GiP3. The Mare Ginne Cr84. Subculture Cr94. Bility and GiP3. The Mare Ginne Cr84. Subculture Cr95. Holly word Trivia Cr97. Shootoot Cr99. Holly word Trivia Cr97. Shootoot Cr99. Holly Grail Adventure GiP0. Aman Cointalop GiP0. Card Games Comp GiP0. Card Games Comp GiP0. Card Games Comp GiP0. Subcomma X Raid Z GiP0. My Girne Shoot Cris GiP0. My Girne Shoot Card GiP0. My Girne Shoot Card GiP1. My Girne Color Midro GiP1. My Midro Chart Card GiP1. My Marlock GiP1. Subcommer Comp GiP2. Card Shapi I GiP2. Breakaut Com KiP1. GiP2. Breakaut Com KiP1.

Breakaut Con Kit

G128. Pipeline G129. Dung Of Doridian G132. Peters Quest G133. Star Treb 3 G134. Piperider G139. Door To Door G143. Solid Quad G144. Omega Race

ASSASSIN'S GAMES PACKS 1-70 NOW IN STOCK

G145. Mission X Raid 3 G146. Trek 73 G147. Wack In Wonderla 579 Freddies Dead \$80 Wendy James Stides \$81 The Invente World

S86\_Magical Pics

S91 .. Eldorado Slides

S88 Gulf War Tribute S89-90 S/Thing Fishy (2)

ANIMS

Al Probe Sequence
A2. Ghost Pool
A3. Jogger + Magician I

A2. Green Pool
A3. Jogger + Magician |
A4. Gymnar Derm
A4. Gymnar Derm
A5. Fractal Plight
A6. Barkechall Deno
A9. Magecian 2
A10. Pug's In Space
A10. Pug's In Space
A11. Laxor Toronger
A12. Joggier Dero
A13. Joggier Dero
A14. Cont Cougar
A17. Alono Cycle Anim
A20. Mayhem On Whoels
A21. Jogeis
A22. Asharin
A21. Floet Manouvr
A27. Floet Manouvr
A28. Billiard Anim
A29. EPPrise Lasves Dock
A30. Star mr 2 Anim
A31. Star Trek Anim
A31. Star Trek Anim
A32. Estar Trek Anim
A33. Star dero Green A35. Star Star Trek Anim
A34. Star Green A35. Star Trek Anim
A35. Star Green A35. Star Green A35. Star Trek Anim
A35. Star Green A35. Star Trek Anim
A35. Star Green A35. Star Trek Anim
A35. Star Green A35. Star Green A35. Star Trek Anim
A35. Star Green A35. Star Green A35. Star Green A35. Star Trek Anim

A35...Signithy Anima 2 A36...Raiders Of The L/Adi

A36\_Ridder Of The LiAdi A31\_Rog Bunny Show A38\_Iraq V\_3 UK Asim A38\_Iraq V\_3 UK Asim A38\_Iraq V\_3 UK Asim A48\_Right Asim A48\_Right Asim A48\_Right Car Chane A49\_Top Gon Dermo A50\_Asimafors Derno A51\_S Ways To Kill a Mula S52\_Another S Ways A51\_Right Asimafors Derno A51\_Right Asimafors Derno A51\_S Ways To Kill a Mula S52\_Another S Ways A51\_Right Asimafors Derno A51\_Right Asimafors Derno A51\_S Ways To Kill a Mula S52\_Another S Ways

32...Another 5 Ways 5 Datman Thomas 5 30 Spateship 55 Mr Potato Head

33-34 Spane-this
35-34 Post-this
35-34 Post-this
A57 Camouflage
A58 VGA Anim 4
A59. Look Level Flight
A61. Army Y 8 Walker
A64 Real Proball Anim
A65. Foral-kii The Fly
A66. Postsy Fig Anim
A67. Adventures Of Chuck
A69. Buston Bome
A70. Fly Marine A70. Alexander A70. Alexander A70. Anim
A71. Space-bastle Anim
A72. Flight Anim
A73. Flight Anim
A74. Flight Anim
A75. Flight Anim
A76. Poster Marine
A79. Dart Anim
A81. Holday Anim
A82. Fillet The Flah
A83. The Bonity
A84. Clothes Peg
A85. Miners Anim
A84. Poster Movies 2 (4)
A95. My TurToy
A96. T-Pox 2 Anim
A99. Terminator 3
A 100. Delphin Devans
A101. Hustory of Amy
A103. History of Amy
A103. Flogo Anim (2 Meg)

G148 - Squate Revenge G149 - Sky Fight G150 - Wet Beaver \$82-83 ... Terminator 2 (2) ..Airmeele Wuxard World

C154. Totally Frantic Quia C155. Chess V2.0 G156...Smash Telly G159...Billy The Dragon G160...1-Ching

G161 E-Type G162 TomCal G163 Sen Lanc Q164 .. Duzzy Diamonds Q165 .. No Mans Land

Clob. Now Many Land
Clob. Word Square Solver
Glob. Word Square Solver
Glob. Word Square Solver
Glob. West Lands
Glob. West Lands
Glob. Space Blitz
Glob. Space Blitz
Glob. Squamble
Glob. Glob. Glob. Glob. Glob.
Glob. Glob. Glob. Glob. Glob. Glob.
Glob. Glob. Glob. Glob. Glob. Glob. Glob. Glob.
Glob. Q189-193 Timelonis 1-5

G194 Nirvana G195-196 Neighbours (2) G198. Game Box Tetra 1 G199 . Teuro G210 Battlecars 2

G201. Dr Mano G204 - Ashido

G204. Ashlulo (2014., Cheats Disk 2 (206., Cheats Disk 3 (207., Petal Generation (208., Airport (200., E.R.A.C. (2110., The Golden Fleece (221). Legend of Lothium (212). 214. Timelonds 6-B (213). Amon Golden 1

55. Metwastar slides
58. Immacutate Collecti
59. Simptons Slides
510-11. Channel 42 (2)
512. Brace Lee Slides
513. Brace Lee Slides
514. Adams Family
515. Vir Mag Slides
516. Born 13.
517. Docklands Javre
518. Die Who Demo
519. Napalm Death
520. Napal Slides
521. Earthy 3D Slides
521. Earthy 3D Slides
522. 24. WWF Slides (3)
526. Cast ade Demo
527. Demoits Slides
529. Joe's Slides
529. How Slides
529. Joe's Slides

5.28. Total Recall
\$29. Jee's Sides
\$30. Ham Pays Show 2
\$31. D-Paint Sides
\$32. Neighbaurs Sides
\$32. Neighbaurs Sides
\$33. Riger Dean sides
\$34. Iron Manden Sides
\$34. Iron Manden Sides
\$34. Iron Manden Sides
\$35. En Totalsa Reither (2)
\$37. Jee Tru Sides
\$38. Braker (avz )
\$39. Eees Sides
\$30. Eees Beed Eees Eees
\$30. Eees Beed Eees Eees
\$30. Eees Beed Eees

564 Rock Star Manager 565 Images Slides 570 Muscle Mania

571 Creature Comforts 572 The Wonder Years 573. Watership Down 575 Ferrari 348 Pics

CLR LICENCEWARE

CLEO1 ... DNOSAURS II amm all about certain types of Dinosaurs in Jurianis. Triansic and C restaceous, on 2 disks (4.90). CLEO2. .. GEOLOGY (Want to know all about the volcament and their substances than try this. 2 disk

(4 50) CLB03 SOLAR SYSTEM Get to know its about the solar system with information on pine etc and with pictures to look at. 3 disks £4.99; CLED4. COLOURDIG PAD (A unique colous book at keep the kids amused for hours. 1 disks £2.50).

book in keep the kids annused for hours. I diek.

2 50.

CLEOS. A-CHORD (Learn to play the guitar by
CLEOS. A-CHORD (Learn to play the guitar by
Interning to nearly every single chord a suitable on
the instrument. I disk 6.3 50.

CLEOS. MATSI INSTRUCTOR (felely pourself
pet through the GCSE's with this superh mathe
instructor. Trag. Quadrates Stramlations, Volumes,
Area etc etc., I disk 6.3 50.

CLEOS. RESEMATER FISHING! (Think von
know all about farhing? Try thirs? 2 disks 6.3 50.

CLEOS. SRESHWATER FISHING! (Think son
know all about farhing? Try thirs? 2 disks 6.3 50.

CLEOS. WORDT SNY (Look at the sters, stunets,
etc from anywheng on the face of the earth and disk
on a displayed object for airo. 2 disks 6.4 50.

CLEOS. MSCRESHWATER FISHING! (Think
game for 1 or 2 players). I disk (2.3 50).

CLEOS. BASICALLY AMIGA (Get to know your
Amigs to the full. I disks 5.0 flight.)

CLEIO, BASICALLY AMBUR CANAGE TO BE AN INCIDENT A STATE OF THE STATE O

CLEIL LETS LEARN VI.1 (Learn wame, bares codes et de un the a scul frust harming and. Age ran go from 5-7, 1 disk 8.3.50).

CLEI2. ALPHABET TEACH (Try no apell what you wen on the screen, I disk 8.5.50).

CLEI3. HOME RREW With the regies to instructions on ferroamting site. Learn how so make home made wine. I disk 8.7.50].

CLEI4. ECOLOGY (Learn more about sociogy with this brill program. 3 disks 8.4.99).

CLIO1. VIDEO TITLER (Make your video lorsh professional. Sociolers set. 1 disk 8.7.50).

CLIO2. FISH INDEXER (Make pine chiers, graphs site. with figures. 1 disk 8.7.50).

CLUO2. SAS MENU MAKER (Make minus to ant you I drisk £7.90).

CLUO2. SAS MENU MAKER (Make minus to ant you I drisk £7.90).

CLUO2. SAS MENU MAKER (Make minus to ant you I drisk £7.90).

CLUO2. PROPER SOUND 3 (Create years own tunns with the muser utility. 2 disks 2.4.50).

CLUO2. PROPER ACCOLOTY (Keep accounts of your expenditure with password function, I disk £3.50).

you'e penditure with password function, I disk £3.50. CLUIL, CALC VI.3 (An excilum appendance for those cross calculations. I disk £3.50). CLUIZ, VIRTUAL WINDOWS I (A collection of

userus unique i tha adoptes book, mote paid, softwar-cati éte. I disk 62.501. CLUI3. DATOS (Fas) to use yet very powerful distables. I disk 62.501. CLOOL. NORRIS (A very addictive game set in the Medicars) dara. I disk 63.501. CLOOL. DARK THINGS (A brill platform scroftly control. Libral, 63.501.

pome: I dak £3.50;

G.GO: PHANE E AN EXClusion force also acroll
of account of the end of the £3.50;

CLADA, A \$131 E MA very address; given with
the soul and of level crimosers of dak £3.50;

CLADA, S. TRUCKING ON ITY and muntage your
own truck feet. Fireflent; 2 dahs £4.50;

CLADA, OBLITERATION (Another feet shoul est

CLGOS ... OBLITERATION (Another fast shoot esti-up type game. 1 dish £3.50 net Plus comp). CLGOS... DRAGON TILES (Old Japanese type Maj

CLOBA. DRAGON TILES (Old Japanuse 1) pe Maj Jone style game, I click EC 30, CLOD9. MOTOR DELE, I Drive n 3D car shooting and neining with oncomest. I did & £5.50, CT.GTO.-FUTURE SHOCK (A case of speting the hall through the mage. I disk & 55.90, CLOTI., ALL GUINS BRAGONG (Car game for 2 payers with the overhead view theme. I slik & £3.50, CLOTI., BLT.JDO/ZER BOR (Wipe unit the scream of coloured blocks) a faita. £3.50, CLOTI.-PARADON (A puzzle game to tent those powers can be longing. I disk & £1.50). CLOTI.-PARADON (SARTIE-HRAD Another platform with a game. I disk & £5.50). CLOTI.-SPILODGE THE REVENOR (Another platform with even with puzzles in solve. I disk & £1.50.) CLOTI.-SPILODGE THE REVENOR (Another platform with even with puzzles in solve. I disk & £1.50.)

platform game with puzzles to solve, I disk £3.50; CLG17\_IMBRILM DAY OF RECKONING (On

ASSASSINS PACKS £1.50 EACH

**RAVE & TECHNO PACK** 

SEPTST

#### **BUSINESS PACK**

#### **EDUCATIONAL PACK**

#### **ROCKFORD PACK**

#### C64 EMULATOR PACK

#### **CLIP ART PACK**

WE OFFER A FAST AND VERY FRIENDLY SERVICE TO ALL OUR CUSTOMERS WITH THOUSANDS OF TITLES TO CHOOSE FROM PLEASE SEND A S.A.E. FOR A **FREE CATALOGUE** 

ACCESSURIES	
MOUSE HOUSE	£1.99
MOUSE MAT	£2.80
SQUICK MOUSE	£19.99
10 CAP BOX	£1.99
100 CAP BOX	£6.99
A500 DUST COVER	£3.99
A600 DUST COVER	£3.98
3.5° BLANK DISKS	20.69
PRINTER STAND	
MONITOR STAND	£10.89
MONITOR COVER	£4.99

10. disks

HOW TO ORDER

ALL YOU NEED TO DO IS PUT THE NUMBERS OF THE DISKS REQUIRED AND SEND IT TO THE ADDRESS BELOW ALONG WITH A CHEQUE OR P.O. MADE PAYABLE TO "DISKOVERY"

PLEASE DON'T FORGET TO INCLUDE THE CORRECT POSTAGE TO ENSURE SPEEDY DELIVERY

**PRICES** 

£1.50 each Europe PD Accessories PUBLIC DOMAIN 1-9 disks

90p £1.50 £1.90

**KICK 1.3** NOW ALL P.D. DISKS

WILL WORK ON YOUR A500+/A600 & A1200 WITH THIS AMAZING DISK ONLY £1.50

SEND YOUR ORDER TO ...

WEA

WE ACCEPT ACCESS, VISA AND MASTERCARD

3

B

DISKOVERY DEPT (AC), 108 THE AVENUE, CLAYTON, BRADFORD, W. YORKS, BD14 6SJ

#### TUTORIAL

orking from the top down, the obvious place to start has to be the pull-down menus. Simply hold down the right mouse button and move to the top of the screen, highlighting the Song pull-down.

With the huge range of options – some of which are disabled – it's only possible to cover the high points, and in the case of the Song menu one of the real shining stars has to be the Revert option.

In a nutshell, it simply allows you to

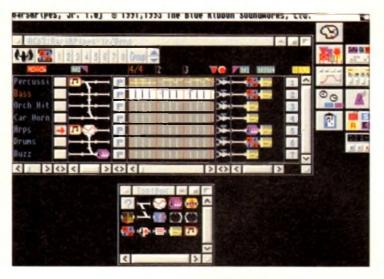


automatically re-load the original version of the song already loaded – particularly useful if things have gone rather astray since the last save.

At little lower down you'll see an option which toggles between enable and disable Midi. For those using internal sounds it's rather redundant but for anyone employing Midi equipment it can be invaluable.

If for some reason your synth or module decides to hang up leaving a note dangling indefinitely, you can use the option to terminate the Midi link thereby sending a Midi Off to all the equipment connected to the system. If you then toggle meoption back to Enable Midi the link is restored and the glitch removed.

Moving on to the track pull-down, the highlights include Time-shift and Toolise, the first of which allows you to move any track or group of tracks either forward or back in time. This may sound a rather strange concept but in practice it means that either subtle or dramatic adjustments





until the new voice fits perfectly. Toolise is yet another time saver. By applying the option, whatever tool is present in the Toolise window – next to solo in the group panel – will be applied to the selected track while ignoring the others.

When used with the program's Quantise tool hours of re-recording can be

# Tool talk

As promised, AC concludes its tutorial to Bars&PipesJr with an in-depth look at pull-down menus and that Signification of the total G

can be made to the relative timing of the various tracks. A perfect example of its power is the ability to easily adjust for the variation in attack between different voices.

For example a track may feature a piano voice. If this is then swapped for a choir, the timing could well sound very off-beat due to the difference in attack between the two.

As a result, time-shift can save a lot of heartache and re-recording by simply allowing you to compensate by moving the entire track either forward or back avoided while tools such as echo produce effects which would take hours to add manually.

Moving on to the edit pull-down we enter the world of multitrack handling as opposed to the individual track editing supported by the previous full-down it from here where the edit techniques learned in last month's tour of the flags can be applied.

As mentioned, all of the functions in this pull-down work on all tracks and rely heavily on the edit markers for their application – twin purple triangles used to sandwich a section of the sequence for

## A tour of the tools

Left

Move

Move

Edit

Remove

Connect

As mentioned earlier, the assorted tools aren't simply a collection of click and drop icons, and in fact there's an entire pull-down dedicated to advanced application of these miniature miracle workers.

Some of you may have already spotted that at least some of the tools don't directly modify sound. In fact the sharing of either incoming or outgoing information can often lead to even more dramatic results than just tools alone.

If you open the tool window you'll spot a couple of the most important of these non-modifiers in the form of the merge and branch tools – each resembling a small section of pipe complete with a miniature branch protruding from the side.

Although rather bland, the aforesaid duet are arguably the most important tools in the entire collection. To use either of the two you simply drop them in the pipeline but unlike the majority of their counterparts they're only useful when combined with others.

If you take a close look at the remaining tools you'll notice that transpose, key split and counterpoint all offer an extra connection point at the bottom. As you've probably guessed this allows direct connection to a merge tool on

Once connected the new connection will automatically filter off the new data generated by the chosen effect —

instantly passing it directly to your chosen track. Although probably the most dramatic trick it doesn't mean that the rest are redundant. In fact merge and branch connection can be made to the pipeline directly – avoiding tri-connecting completely. To actually join two pipelines simply drop a branch tool in one pipeline and a merge in another – they can be alongside or separated by several tracks, the choice is yours. Once each tool is safely entrenched, select one of them and move to the Pipetool pull-down.

Now highlight and release the connect option, move to the second tool and click once. At this point a branching pipe should join the two. If they're alongside the connection may not be obvious – however it will have been made.

If you now select either a Midi or internal sound source – following the usual setup procedure for each track – playing the instrument/sound assigned to the track containing the branch tool should produce identical playback on both, but with the second track using a different voice.

If this output is then further processed by another tool in either the input or output of the track, startling effects can be produced. However internal sound users should be careful as multiple effects can eat all four channels very quickly.

Now before you go mad adding tools, a quick lesson in tool management might be in order. As you may have already discovered, getting a tools into the correct order can be an essential and sometimes tricky business.

To achieve proper positioning you can either use the pull-down options or alternatively their keyboard equivalents. In the case of keyboard control simply highlight the tool and use the arrow keys move it left or right, to the Del key to delete and Amiga–K to make connections.



#### **TUTORIAL**



editing. When the aforementioned flags are in position, it's from this pull down that the edits are applied - whether they be simple cut and paste, multitrack toolising or even multiple insertions courtesy of the pull-down's repeat option.

To save confusion we'll look at the Pipetool pull-down in the tools section and for the moment move on to the Timing menu which as you may have already discovered holds a rather daunting array of options.

For the vast majority of users it would be wise to leave the various settings in



their default state as SMPTE and Miditimecode options are only of use to those with dedicated Midi or videographic hardware which can either send or receive the chosen timecode information.

Moving on, we arrive at the penultimate Windows pull-down which as the name suggests provides alternative access to the various control windows.

Personally I don't find double clicking

```
Accessories
ClipBoard
Define...
Edit Padlool Controls
Information
Master Parameters
Metronome
Mix Muestro
Set Flags
Song Construction
Tempo Map
Jempo Palette
Time-Line Scoring
JoolBox
Fransport
```

on a window icon a particular hardship, but if you prefer the pull-down approach here's where it can be applied. Finally we've arrived at the preferences pulldown which allows you to customise the

B&Pjr environment to your own particular taste. Notable options include Align With... which provides the user with the option to define how the flags will snap into position during editing.

By varying the options you can

define whether flags will jump to complete measures or individual beats within those measures. Although there is a third option to snap to anywhere you'd be well advised to avoid it as it's easy to make mistakes by accidentally removing or copying over information.

In addition it's dangerously simple to knock your complete composition out of time by pasting

or recording at the wrong point.

Much of the remaining options deal primarily with aesthetics and as a result it's very much a case of personal preference combined with available memory. If you're lucky enough to own a machine with extra memory, feel free to experiment with the various display modes.

In addition, those with extra RAM should always enable the Undo option in the memory savers – this can save a lot of time in constant re-loading – whether it be through the Revert option or via the load requester.

Alongside display variations there's also one very useful option entitled Clean cuts. When active it simple means that notes which hang over from one bar to the

Align with Interlaced Multiple Clean Cuts Control. Savers.. Remote Memory Savers Use ClipBoard Use Clips... Akign Clips... To Front Window Exploding Windows Workbench Pointer TimeLine. ombine Scrott Auto

next are cleanly editing during cut and paste operations. As a result the program will be much less prone to leaving Midinotes hanging during playback – which then require the Midi enable/disable process mentioned earlier.

Unfortunately hanging notes can never be totally eradicated thanks to a bug in Midi, but at least with the assistance of clean cuts their occurrence can be kept to a minimum.

Alas that's all that space will allow. We hope you've enjoyed, and will continue to enjoy our amazing giveaway in the future. If you have any burning questions concerning B&PJr don't hesitate to write to ACAS and we'll do our best to put your sequencing problems to the sword.

# Make the most of your

Bars&Pipes Professional 2.0 is without doubt the hottest item in both the sequencer and multimedia markets...

Amiga Computing

# BARS & PIPES

THE BLUE RIBBON SOUNDWORKS LTD

# Order form

Please send me the Bars&Pipes Professional 2.0 Upgrade (Order No 9547) Lenclose either:

- This original order form, or
- My original CoverDisk together with a photocopied form.

I wish to pay £199 (incl VAT and pap) by:

- Cheque / postal order payable to Europress Direct
- Credit card expiry date

Card No			

Deliver my order to:

Name \_\_\_\_\_

Address \_\_\_\_\_

Postcode — Daytime phone

Allow 28 days for delivery

Tick this box if you do not wish to receive promotional material from other companies

# CoverDisk

Now that you've had plenty of time to find out how good the july Amiga Computing CoverDisk program Bars&Pipes Professional 2 ir really is, perhaps you're wishing you had taken up our special upgrade offer.

Well here's another opportunity to move up to Bars&Pipes Professional 2 ir for just £199, including VAT and p&p. That's a £100 saving – so don't miss out again!

The upgrade kit includes two disks, an excellent 384-page manual in a binder, UK technical support and a registration card that qualifies you for upgrades and new product information.

To upgrade to the best Amiga music and multimedia package, Bars&Pipes Professional 2.0, send this order form to Europress Direct, PO Box 2, Ellesmere Port, South Wirral L65 3EA If you don't want to cut up your magazine you can send your original CoverDisk together with a photocopy of the form.

# POWER UP YOUR AMIGA!

# NEW NEW LOW PRICES!

A500

Don't let *anyone* tell you that your A500 is obsolete! Adding a GVP **A500-HD8+™** 

or an A530-Turbo+" will make your A500 feel like a totally new machine. Our A530-Turbo+ will make your A500 fly 4 times faster than an A1200 and many applications will run almost as fast as on an A4000! All this for much less than buying a new A1200 with a hard drive!

Both the A500-HD8+ and the A530-Turbo+ feature beautifully styled cases, fast DMA SCSI controller with external SCSI "pass through", SIMM sockets for adding up to 8MB of FAST RAM expansion, built-in high-speed SCSI hard drive (choose from 42MB to 213MB!, "Game Switch" to disable the whole unit for compatibility wit older games, and GVP's internal mi slot expansion connector for addiour optional 16MHz PC286 [PC Emulator] module!

The A530-Turbo+ also features a 40MHz 68EC030 CPU [accelerator], optional 40MHz 68882 FPU (Floating Point math co-processor, and 60ns, 32-bit wide FAST RAM.



A1200

The A1200's AGA graphics are great, but they eat up memory and can be slow

with the built-in 68EC020 processor and no FAST RAM. GVP now offers two exciting Power-Up solutions.

GVP's A1200 SCSI/RAM+\* [a.k.a. "FANG"] features SIMM sockets for up to 8MB of 60ns, 32-bit wide FAST RAM expansion, a high performance DMA SCSI controller allowing installation of an internal 2.5" SCSI hard drive, and an optional 33MHz 68882 FPU. The optional external SCSI connector kit allows you to attach large SCSI hard drives, CD-ROM drives, SyQuest drives, tape backup drives, or any other external SCSI device. Although the

A1200 SCSI/RAM+ supports faster FPU's

our tests show that the A1200's 14MH2 68EC020 cannot really take advantage of a 68882 running faster than 33MHz.

If you want your A1200 to fly past the A3000 and approach the A4000's performance, our A1230 Turbo+" accelerator (a.k.a. "JAWS") is for you. The A1230 Turbo+ features a blindingly fast 40MHz 68EC030 CPU, SIMM sockets for up to 32MB of fast 60ns, 32-bit wide memory expansion, and an optional 40MHz 68882 FPU



A 1 5 0 0 A 2 0 0 0

2 0 0 0 Breathe new life into your A1500 or A12000! Adding a GVP G-Force 040/33/MHz<sup>70</sup> Accelerator will make

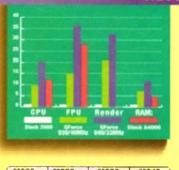
your A1500 or A2000 outperform the fastest A4000/040 and you'll spend a lot less! If you are on an even righter budget try our G-Force 030/40MHz or 75MHz."

Accelerator and you will zoom past both the A3000 and A40000030

All our G-Force Accelerators feature a highperformance DMA SCSI controller and 1MB / 4MB of fust 60ns, 32-bit wide RAM, expandable up to 16MB by using our 4MB SIMMs. The G-Force 040/33 also accommodates our new state-of-the-art 13MB/16MB SIMMs allowing expansion up to a massive 64MB of fast 60ns, 32-bit wide memory. Our optional SCSI hard-drive mounting bracket turns either model into the ultimate "Hard-Disk-Card" without using a Zorro expansion slot or a peripheral hay.

The G-Force 030/40 is equipped with a 25MHz/40MHz 68EC030
CPU and 68882 FPU while the G-Force 040/33 features a 33MHz 68040 CPU (with built-in FPU and large cache memory) as well as a high-performance RS232 serial port — backed up by two FIFO hardware buffers to prevent data loss — and a parallel port to give you more flexibility to add moderns, multiple printers, digitizers, etc....!

Don't feel left behind by the A4000, power your A2000 beyond it with the awesome processing power, flexible SCSI interface, and unmatched expandability of a GVP accelerator.



A2000

68030ec	68030ec	68030	68040	
25MHz	40mHz	50MHz	33MHz	
£399	£699 €	£999 K	£1299 5	

1-4 The Mews, Hatherley Rd, Sidoup, Kent, DA14 4DX Tel: 881-309 1111

GVP didn't become the largest Amiga developer by accident — it took hard work, dedication, and engineering excellence. Don't take a chance. Choose GVP — the winner of numerous Amiga Format Gold Awards & Amiga Computing Awards — for your storage and acceleration needs.

-	20093-1630	MAIL ORDER:
	SILICA SYSTEMS OFFER YOU	Crose Lines Open LONDON SHOT Opening Hours
	FREE OVERNIGHT DELIVERY: On all hardware orders shipped in the UK mainland, TECHNICAL SUPPORT HELPLINE: Team of technical experts at your service.	LONDON SHOP
	PRICE MATCH: We normally match competitors on a "Same product" - Same price "basis.  ESTABLISHED 14 YEARS: Proven track record in professional computer sales.	SIDCUP SHOP Opening Hours
	E12 MILLION TURNOVER (with 60 staff): Solid, reliable and profitable, BUSINESS + EDUCATION + GOVERNMENT: Volume discounts available 061-306 0888.	ESSEX SHOP: Opening Hours
B	SHOWROOMS: Demonstration and training facilities at all our stores.  THE FULL STOCK RANGE: All of your requirements from one supplier.	To: Silica Syst
	FREE CATALOGUES: Will be mailed to you with offers + software and peripheral details.  PAYMENT: Major credit cards, cash, cheque or monthly terms (APR 29 8% - written quotes on request).	PLEA
V	Selore you decide when to buy your new Amiga products, we suggest you think very carefully about WHERE you buy them. Consider what is will be like a lew months after you have made your purchases when you may require additional peripherals and software, or help and advice, And, will the company	Mr Mrs 'Mr
y n	ou buy from contact you with details of new products? At Silica Systems, we ensure that you will have lothing to worry about. We have been established for almost 14 years and, with our unrivalled expen-	Company Name
- 60	ince and expense, we can now claim to meet our customers' inquirements with an understanding which a second to nome. But don't just take our word for it. Complete and return the coupon now for our latest FREE literature and begin to expenence the "Silica Systems Service".	Address
I	MAIL ORDER HOTLINE SILICA	
l	7 081-309 1111 SYSTEMS S	Tel (Home)
	SUCCA IS A DIVISION OF PRODUCT AND	Which computer(s

Condon SHOP: Opening Hours Mos-Bat 9 30am-6 20pm	52 Tottenham Court Road No Lain Ng	London, W1P 0BA	Fei: 071-580 4000
Condon Shop: Selfridges Opening Hours Mar-Sel 1 30em 7 00pm		London WIA 1AB	Tel: 071-629 123 Extension 3914
SIDCUP SHOP: 1-4 Th Opening Hours Mon-Sai # 00am 5.20pm	ne Mews, Hatherley Rd, Sider	up, Kent, DA14 4DX	Tel: 021-302 881
ESSEX SHOP: Keddles 12nd Plac Opening Hours Mon-Pri 10 00am 5 30pm (Se	ri, High Street, Southend-on- 19 00mm-II 00pm; Late Night	Sea, Essex, SS1 1LA Thursday - Tom	Tel: 0762 466031 Fat No 0702 468030
To: Silica Systems, AMCOM-0993-	113, 1-4 The Mews, Hath	erley Rd. Sidcup.	Kent, DA14 4DX
PLEASE SEND A	BROCHURE ON	THE GVP I	RANGE
Mr.Mrs.'Mg Initials Sumai	ne	Dat	е
Company Name (if applicable):			
Address			
	Postcode	I	
The second secon	Tel (Wor	tl	
Tel (Home)			and a second of a second of a second

## COLOUR KITS for MONO PRINTERS

Ever wished you'd bought a colour printer instead of a mono one? Wouldn't it be nice to print out pictures in colour? Now you can with Amiga "Flexicolor Kit". Each Amiga Flexicolor kit comes complete with everything you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly the same way as your black ribbons so it will not affect your guarantee. Also on all models listed below paper alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below please phone. Amiga Flexicolor kits for Star LC10, LC20, all Star 24 Pin. Panasonic 1080/81/1123/1124. Epson FX80, FX100, LQ800 etc. Citizen 120D+, NEC P6, P6+. Please note colour kits come complete with coloured ribbons.COMPLETE KIT £39.95

## FLEXIDUMP 2

- \* Total COLOUR CONTROL
- \* Select area to print
- \* Select size to be printed
- ★ Balance control for enhancing dark pics IFF or HAM
- ★ Now includes new feature to insert colour pics into word processor documents. ★ Page control. ★ Colour sieve
- \* Ink correction. \* Pattern rotate. \* Dot pattern control
- \* Automatic poster mode for larger than A4
- ★ Production Graphic/Text Labels/Letterheads
- \* Multiple copies control
- \* PRINT FULL COLOUR ON YOUR BUBBLE JET PRINTER
- ★ Colour separation for B Jets. ★ Laser quality colour graphics
- ★ Import larger than screen size files and use Flexidump to reduce (produces superb letterheads).
- \* Gamma correction (fully adjustable and savable)
- \* Colour/Mono catalogue function. Will print a mini picture (size selectable) of a complete disc (sorted alphabetically) including titles
- ★ Ideal for T-Shirt printing. Drives a wide range of Colour and Mono printers. Star LC10, LC20, LC200, Citizen Swift, Nec, Panasonic KXP2180/2123, Canon etc.

£39.95

# T-SHIRT PRINTING RIBBONS PRINT ON NORMAL PAPER IRON ON T-SHIRE

4 Colour Citizen Swift	£29.95
4 Colour Citizen Swift (Reload)	£14.95
4 Colour Star LC10	£14.95
4 Colour Star LC200 9 Pin	£19.95
4 Colour Star LC200 9 Pin (Reload)	£12.95
4 Colour Star LC200 24 Pin	£29.95
4 Colour Star 24 Pin (Reload)	£14.95
1 Colour Citizen 120D/Swift	£11.95
1 Colour Star LC10	£11.95
1 Colour Star LC200 9 Pin	
1 Colour all Star 24 Pin	£11.95
1 Colour Epson FX80/LQ400/MX80	
1 Colour Epson LX80	£11.95
1 Colour Epson FX100	£11.95
1 Colour Panasonic KXP 1080	
1 Colour Taxan/Canon 1080A	£11.95
Heat transfer Pens 5 large red/orange/yellow/gre	
blue, Large pens have a marker size nib	
Heat transfer Pens 5 small red/orange/yellow/gre	
blue, Small pens have a fine nib	

T-SHIRT RIBBONS NOW AVAILABLE IN RED, BLUE, GREEN, BROWN, YELLOW and BLACK AND FOR A WIDE RANGE OF

UPGRADE FROM FLEXIDUMP TO FLEXIDUMP 2 £11,75

PRINTERS AND CARRIAGE D.

#### **COLOUR PRINTER RIBBONS**

Don't throw away your plastic printer ribbon cases when the ribbon wears out. Just take the top off, take out the old ribbon and reload it with a new one. It's simple. Full instructions supplied.
Reloads for:-

Star LC200 9 Pin 4 Colour (Normal Ink)1	Reload	1 – £5.99	5 Reloads – £	23.95
Star 24 Pin 4 Colour (Normal Ink)	Reload	- £6.99	5 Reloads - €	29.95
Citizen Swift 4 Colour (Normal Ink)	Reload	d – £6.99	5 Reloads - £	29.95
		1 – £6.99	5 Reloads - £	29.95
		C DI D I		

Ink ribbons also available in Gold, Silver, Magenta, Orange, Purple, Brown, Green, Blue, Red for a wide range of printers. Special reink for Panasonic printers and Star LC200 9-pin black 59ml bottle......£14.95

## HP DESKIET/CANON BUBBLEJET REFILLS

"CARE THREE PACK"

will refill HP51608A Cartridge 3 times.
The Canon BC-01/SJ48 Cartridge 3 times.
Three Pack available in Yellow, Magenta, Cyan
Red, Blue, Green, Brown, Purple, Black
£14.98 each.

"TRI-COLOUR PACK"

1 Yellow, 1 Magenta, 1 Cyan refill £17.95

available for Bubblejet and Deskjet

"CARE SIX PACK"

will refill HP51608A cartridge 6 times. The HP51626A High Capacity 3 times The Canon BC/01 Cartridge 6 times. Please state type when ordering

#### **6 BLACK REFILLS ONLY £24.95**

How to order: Enclose cheques/PO made payable to: CARE ELECTRONICS or use Access/Visa.

#### CARE ELECTRONICS

Dept AMC, 15 Holland Gardens, Garston, Watford, Herts, WD2 6JN. Fax: 0923 672102

7

T ORDER LINE ON 0923 894064



record number of small businesses have gone down in the last 18 months, and nobody denies that times have been extremely difficult. Yet many could have survived had they kept customer satisfaction and loyalty a little higher and overheads lower - and kept a tight and informed rein on the purse-strings at the

In owning an Amiga, you have a tool powerful enough to help you immensely in all of these areas. Whether it's sorting customer information or visiting the bank manager, a computer can clue you up and keep you on top at all times. And all of the software listed is either free or shareware - no £300 all-singing, alldancing, business-breaking packages

But first, your equipment. Let's say you own an Amiga 500, 600 or 1200. Chances are you've already got a hard drive. If you haven't, it would be well worth your while considering one

You can get away with floppies when you're predominantly playing games, but when a number of programs are involved and you wish to swap and change between them, it becomes tediously unproductive having to keep changing disks

The bigger the better, but for £160odd, A600/1200 owners can get a slick 60Mb hard drive that fits inside the machine. Nice

A monitor is better than a TV due to its picture quality (less strain on the eyes thanks to much improved clarity and a stiller image). One cost-cutting tip. though, is to see if your video and/or TV have Scart sockets

#### CLARITY

These allow the direct inputting of things such as computer information, so all you may need is a lead in order to watch the computer, monitor-quality, through any TV

Finally, a printer is an essential purchase. For the small business nowadays, an inkjet is really the only choice. With output scarcely interior to laser printer material, it will serve nicely churning out letters, flyers, instruction manuals, business cards

From scratch and brand new this lot including the software about to be reviewed - will cost you around £700. This is an incredibly low price for the productivity available to you, and you get a state-of-the-art computer too.

The golden rule of small business is "keep your overheads low" - working at home on a computer you may even already own is the epitome of this philosophy

People who realise this, and realise that to stay alloat, customer relations must be firmly balanced with behind-thescenes prowess, are much more likely to survive than the happy-go-luckies. The choice is yours, but the free and cheap software is waiting

### **Text Engine v4.0**

17 Bit, 1541

A wordprocessor is pretty much an essential purchase. Business letters must be neat, concise and well written, and a wordprocessor will aid your chances of achieving these objectives considerably.

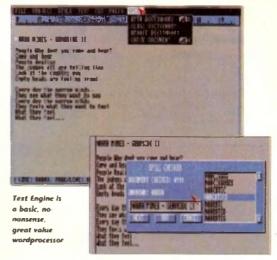
Basically a typewriter on-screen, a good wordprocessor will allow you to type out a document, set the page out how you feel it should go, run a spelling checker across it to highlight typing and spelling errors, choose a typeface and print the whole ball game

The beauty is that you can generate draft after draft, giving you the chance to get that all-important subtle wording exactly how you feel it should be, without rewriting the whole thing every time as would have been the case if the work were simply typed.

When I last saw Text Engine it was a very basic wordprocessor, resembling a stripped-down Protext. With v4 it has gained 3D appearance, more statistics regarding your document on permanent display across the bottom of the screen, and a few newer features

While some wordprocessors offer a pile of complex options, Text Engine's strength is in its speed - a functional bias, and one which will appeal to the overworked.

The features you do get ensure that all the important bases are covered. It is possible to load and save Ascii (great for transferring files to and from other wordprocessors), run the program on an interlaced monitor for higher resolution should you be lucky



Even Text Engine's dictionary struggles with non-standard words

enough to have one, choose between a number of typefaces (and 13 different variants upon each face); there's even a palette so should the Workbench 2-style screen be not to your taste you can tweak the colours it uses.

A big improvement on earlier versions, Text Engine v4.0 represents tremendous value for the business person requiring a reliable and unflashy workhorse.

# shoestr

#### **Invoice Master v2**

**CLU 21** 

A professional stab at the handling of invoices, this program proves its serious intent right from the off by offering a special program to run first, which asks you questions and ascertains information on your business for incorporation into the main program.

Invoice Master keeps a data file on disk, and so always "knows" where you're up to - you don't start it blind every time you boot it up.

As far as actual invoice creation goes, Invoice Master literally guides you through the process, making it a truly painless one. First you are asked to confirm the invoice number and enter the name of the customer to be invoiced, along with his or her address.

Then you enter the quantity, price and description of the goods and ser-

vices on offer, to which the computer will add (rate-variable) VAT and postage and packing if relevant, until the invoice is complete.

The option is available to print it out once, twice or any number of times. Being able to select "twice" is a good idea - unless you're a dab-hand at feeding two sheets of foolscap and some carbon paper into a printer in order to keep a copy of the invoice for yourself.

It would have been nice to have a small database of customer name and addresses to save the typing fingers, but as the author admits, for £3.50 this is simple, functional and friendly. Recommended.

Stay fit and lean in business with a selection of software designed to boost your prospects without denting your wallet. Phil Morse keeps the overheads low...



Bill your debtors the efficient way with Invoice Master

## **EasyCalc**

#### Roberta Smith, BU108

A spreadsheet such as EasyCalc allows you to enter a set of data and process it to provide you with more meaningful information, only this time concerning numbers.

It can take a lot of the bread-and-butter number-crunching work out of sorting out your accounts and, more importantly, making predictions for your balance in the months ahead.

For example, you could have a financial year (April to March) set up across the top of the spreadsheet and details of bank income and expenditure down the side. Should car tax rise, changing the appropriate number in your yearly financial plan will have a "knock on" effect, adjusting all the other numbers accordingly. Try doing that on paper!

This spreadsheet claims to be fast, easy to use and to contain all of the basics (ie the features you're deemed likely to find yourself using every day) but without superfluous extras

The author claims that he wrote EasyCalc because no other PD spreadsheet reached his expectations, and it must be said that in the claimed areas of functionality and ease of use, EasyCalc does indeed shine.

If you're planning on mastering a largescale, multi-scenaroed financial/strategoprojection of some importance, you'll find it too primitive

But if you have a rather more mundane set of predictions ("how much money will have left by the end of the month?" being a perennial) then you'll find EasyCalc both cheap and competent.

#### **Amibase Pro 2**

17 Bit, 1654



Amibase Pro 2 is clear, simple and undounting in its presentation

What is a "database", and why should one be important to the small business? Well, information is one thing which can put you out of business or ahead of the field, depending upon the quality and relevance of the information you possess regarding your customers and their needs, and the ability with which you can process and thus make positive use of such information.

Basically an electronic card index, a database can store a number of pieces of information on each "card". Once entered, the informa-

tion can be manipulated in all sorts of ways – you can search through all of your "cards" for certain words (enter a specific town and it could tell you all of your customers in that area, for instance) or characteristics (say, all men over 35 on your books, should you be trying to sell a hair restoring compound!).

How you set up and use your database will vary depending upon the nature of your business and the information available to you, but whatever road you take, a database makes the updating of information easy and snowballs its value by allowing you to carry out a whole heap of processes with it which would be at best time-consuming and at worse impossible by hand.

A well-presented list of keyboard commands adom the top of Amibase's screen. The mouse is utterly redundant – it may steepen the learning curve, but as users become more experienced at using programs, they tend to migrate towards the keyboard short-cubs anyway.

The program allows a respectable ten "fields" per entry. This means that for every item in the database, you can have ten parameters. So if I was keeping a track of my record shop's stocks, I could specify the artist, title, producer, format, genre, label and year of every record in the database, and still have room for three more entries per item!

Amibase Pro 2 has a full array of data manipulation commands – apart from the usual add and delete there are search options such as move, sort and jump, and a full printing set up.

Should you feel that you have any first of information which would benefit from being computerised (after all, information is nothing if you're not able to fully understand what it's telling you). Amilbase Pro 2 is an extremely stable and honest workhorse.

Searching for a particular entry in Amibase Pro 2



Type Description

EAC Brogest Corward

FROE Enot

CAR Petrol and Car Maintenance

EAC Pay cheque

CLIM Conducter grous / accessories

BILL Bills

SPRE Sports

FREME Accomplation ment

CAST Cash deposit / not Entravel

DATE Entertainment

TOTAL

Any corner shop could benefit greatly from this system

# Stock Controller

Similar in appearance to Invoice Master, this is an attractive and useful program which would be a real boon to any business with a stock control problem.

From corner shops to service stations, stock control has always been as boring as it is necessary.

Many breweries, for instance, have realised the benefit of tight stock control (look at the itemised complexity of the till next time you're in a pub), and with programs such as this one, you can have the chance too.

EasyCale Versian 1. Ea 15HAREMARE) - Coauright 1et 1992-3 Andrew Moods				
This worksheet demonstrates all the EasyCaic functions available:				
H				
Land Save Print H I I P L C	R	et Leck Inlock for	at	
A I		(	6	
1 This worksheet depresentes all	the Eas	wCalc functions avai	lable:	
2				
3 large to work ort		functions:		
. 4 5		abs(1.2)	1.2	
5 6		atn(1.2)	0.8768511	
6		cint(1.2)	. 1	
7 12.3		ros(1.2)	4.3622518	
8		feg(1.2)	68.75697	
9 Total:	32.3	exp(1.2)	3.328117	
1E Average:	.175	fix(1.2)	1	
11 Hunimum value:	5	int(1.2)	1	
12 Haximum value:	12.3	log(1.2)	8.1822214	
12		rnd(158)	11.22544	
14 Bill the standard maths operators	H	rad(388)	5,235813	
15 10 + 2	12	sign(-3)	- 1	
16 18 - 2	8	sin(1.2)	8.9328351	
File Loadet.				

EasyCale is a powerful spreadsheet at an absolute borgain price

## **Business Card Maker**

17 Bit, 1546 • Not A1200 compatible

This large and involved program is basically an extremely simple customised DTP package designed to help you create and print business cards.

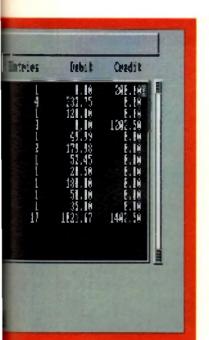
Which isn't a bad idea as soon as you look at the cost of having cards designed and made professionally! With Business Card Maker the user can design a logo, choose the right lettering and work on the layout without the worry of paying a professional print bureau for the design time.

Although it can sometimes appear a little tedious in use (user friendliness wasn't what it is now when this program was written way back in 1987) it is nevertheless highly useful.

Your first stop is the options screen, which allows you to choose one of seven supplied printer drivers, or your own if you have one. An involved screen permits full editing of printer codes and the ability to save such information once defined – never again will the computer's "italic" be misread by the printer as "bold strike-through", or something equally irrelevant.

The main screen contains a rectangular representation of a blank business card. Selecting Make Icon from the menus (if you have an icon already made which you wish to use, you can load one from disk) brings up a mini DPaint-style screen, with a small work area for designing your icon and some basic circle, line and fill-style tools.

Once an icon has been chosen and positioned, the user decides upon the



The user enters the product's name, stock code, price and up to two suppliers for it. There is the ability to run searches and find out how many items are in stock ,whether an item requires re-ordering... all you would expect.

Most parameters are variable; you can specify what level the stocks of a product drop to before re-ordering is necessary, and you can add stock codes to your descriptions and quantities – to tie in with codes on the till roll, for instance.

With a program like this running by the cash till, or updated at the end of every shift, professional-style stock control and all the benefits which that reaps for your customers and so pocket, can be yours. No small business can afford to turn its nose up at a lucrative sideline...

# Who to contact...

17 Bit Software, 1st Floor Offices. 2/8 Market Street, Wakefield WF1 1DH

Roberta Smith PD, 190 Falloden Way, Hampstead Garden Suburb. London NW11 6JE

 Central Licenceware Register disks (those marked CLU in the text) are available from many libraries including 17 Bit and the following:

Blitterchips, Cliffe House, Primrose Street, Keighley BD21 4NB

Old Colwyn LL29 9NP

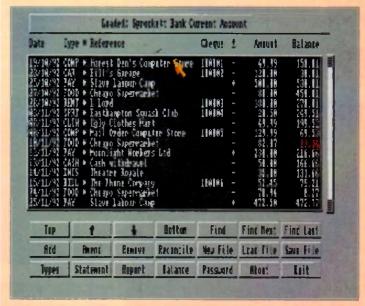
NBS. 1 Chain Lane, Newport PO30 5QA

Vally PD, PO Box 15, Peterlee, Co Durham SR8 1NZ

Virus Free PD, 31 Faringdon Road. Swindon, Wiltshire

# **Power Accounts**

CLU10/1Mb req'd



Keep a detailed tab on your "Hquid" assets with Power Accounts

White a spreadsheet can take care of predictions and "what if?" scenarios, a program such as Power Accounts can really simplify and help the small business person to keep on top of the day-to-day cashflow situation.

One of the hardest things to do with a domestic bank account, let alone a business one, is reconcile your statements with what you reckon you've spend and received. Luckily, Power Accounts has been designed to make this, and other bank account management tasks much easier.

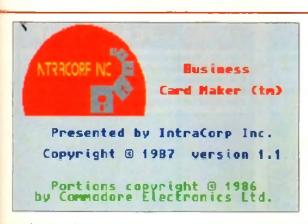
Boasting clear and friendly work screens, the use of different transaction types for clarity, the ability to generate account statements and income/expenditure reports, and full encryption to stop the wrong eyes from finding out all such information, and you have a program of genuine use.

And from the excellent hard drive installer program to the tidy icons and well-written ReadMe, the program gives a really professional feel which inspires confidence.

Basically suited to a personal or small business account. Power Accounts allows easy entry of transactions as and when they occur.

When a statement arrives you can tell Power Accounts which items are listed and it will adjust itself and its information accordingly.

This is a fast, functional program which would benefit greatly any small business without a similar set-up.

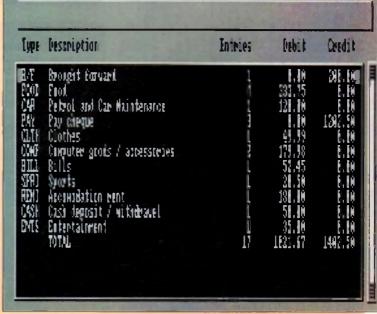


Create your own business cards with this novel utility

typeface(s) to be used, prepares the text and places it onto the card exactly where required.

Finished cards can be printed two-across onto good quality A4 paper or card, cut out with a guillotine or knife, and suddenly you've got business cards at a real fraction of the cost.

Of course, you could take the whole thing a stage further... instead of making just your own cards, why not offer a service to others? No small business can afford to turn its nose up at a lucrative sideline...



This bit only works if you're truthful about what you spent your money on...



BO YOU WANT TO INCREASE YOUR CHANCES OF WINIMING ON THE MERCENT THEN LOOK NO FUETHER

Independent comparative reviews confirm that fire fluction is still -the performance benchmark by which all others are

The best racing software... available. The Racing Post

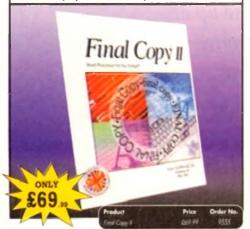
Officially proven to the racing press and other magazines by sending time and date franked setters by Post Office fold. Profunter has shown that it can gredict winners with remarkable accuracy. Pro-fundo Man causeus with your money. If it thinks there is any could about the goice the of the

MEE. IT will achone you not to be The MEW second generation Pro-Punter is written to professional standards and is lathactive and easy to use, it features full adding and review at race data effected and also a groups low-manners are distablise that does not need the facility polaring.

in addition to UK features. For Further 2 confident with

#### **FINAL COPY II**

Final Copy II is not only the Amiga's most powerful word processor with every feature you would expect, plus many more normally found in DTP stackages, but it also gives superb scalable outline fonts with any Arriga, even at your printer's highest. resolution, with aimost PostScript laser perfection = no matter what printer you may have, It includes a 110,000 word British-English Collins proximity spell checker, along with an 826,000 synonym Thesaurus, It is also easy to learn and to use



#### ALFADATA HAND SCANNER

The scanning package comes with the excellent Touch Up and Merge It packages and the AlfaData scanning rule. By using the Merge It software you can scan A4 pages in several passes and paste all the scans together.

Other features include 100-400dpi scanning resolutions, 256 greyscale conversions, easy to learn & intuitive user interface, easy installation, with 1 text and 3 photo mode selector switches, and award winning package.



#### VGA MONITOR ADAPTOR

the AMI.VGA Adaptor is a handy little gagget which gives most Amiga owners easy access to the higher resolution display of a VGA monitor.



- It is very easy to use just plug in and off you go
- Works with any standard VGA or Multisync monitor
- Use screens of up to 640 pixels x 480 lines without interface and
- Compatible with Amiga 500, 500+, 600, 1200, 1800, 2000
- Operates with Kickstart 1.3, 2.045 and 3.0
- Screen driver software supplied
- Through-port allows the connection of a CGA tileplay
  - Full mechanical support telepholia apport

# PAIABLE DIAMORATARES

## Order Hotline: 051-357 1275

Fax: 051-357 2813 General Enquiries: 051-357 2961

Order at any time of the day or night. Don't forget to give your name, address and credit card number

#### X-COPY PROFESSIONAL

This superb package enables the Arniga user to back up their discs efficiently and effectively

#### statel victude

- A the most comprehensive back-up unitsy · Includes Roppy disk back-up, hard dit back-up and file back-up
- Also ber to up ST, 18M esc disk . Overlis delta for errors
- ises data for faster loading
- · Fast formatting \* Cognés um to 4 disks in 48 seconds
- a Full update service available

R-COPY PROFESSIONAL caters for all your needs, included in the gittlage it which hardware treatment are on your recess, included in the partial near of the Arrings and your external data drive (4) you have one; plausi free time had of the Prientace. This allows the Digital his Image Cusy Mode to use the Arrings Pulse Width Medulation routines to bishup virtually all known died.

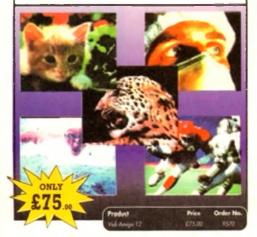
BB COPYRIGHT ACT Europress Direct methill conduities from Submirisés dhe Lon of ans software for the reproduction of course of some The tacilities effected by X-Copy Pro any intended to exclude user-lower self-size. PD Soften other such programs where plantation had be-

ONLY

September 1993

#### **VIDI AMIGA 12**

The ultimate low-cost colour digitiser for the Amigal No RGB splitters or optical filters are required, and you can grab full-colour images in less than a second (mono are grabbed in real time). With an abundance of file formats, full multitasking and composite or 5-video output, it's versatile and powerful



#### **4MB MEMORY UPGRADE FOR A1200**

eatures of the 4Mb Ram upgrade for the A1200 are as follows

- 32bit wide FASTRAM Increases the speed of the A1200 by twofold
- Fits in the trapdoor for easy installation Does not invalidate the guarantee Real time battery backed up by clock 
   Uses 1Mb x 4 ZIP rams for low power
- consumptionm @ Full instructions included @ 12 month guarantee



#### AMOS PRO COMPILER, AMOS PRO, EASY AMOS & MASTERING AMIGA AMOS

#### Amos Professional Compiler -

Following the phenomenal success of Amos Professional, Europress Software has announced the long awaited arrival of Amos Professional Compiler. This updated and considerably improved version of the original Amos Compiler contains 200 more commands than the original version. They are all designed to simplify the compiling of programs created with Amos, Easy Amos and Amos Professional. Amos Professional Compiler is very easy to use and is backed up with a comprehensive user guide and the help of Europress Software's technical team. It will work with any Amiga A500, A500+, A600, A1000, A1200, A1500, A2000, A3000 and A4000 and requires at least 1 meg of memory

Easy Amos - Even the complete beginner can learn how to master graphics, animation and games.

#### Amos Professional

Amos Professional

- is the ultimate programming tool for the Amiga with easy to use and comprehensive manual

Mastering Amiga Amos - Explains the fundamentals and skillful shortcuts to great programs and covers Amos, Easy Amos and



Product	Price	Order No.
Amen Professional Compiler	£29 93	9574
Arres Professional	£29.95	9559
Madering Amiga Amos	£14.95	9550

#### **WORKSTATION 2**

Have you got the very latest Amiga? If so, you need the ultimate Worldence 2 accessory. Whether you have an ASOO Plus, A600, A1500 or pernaps a Kickstart upgrade on a 1,3 machine, the time has come to take control thanks to the amazing WorkStation 2. It's the disk the Amiga world has been waiting for

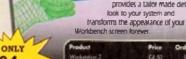
WorkStation 2 has been designed specifically for the new breed of Amigas with the gapress purpose of simplifying the computing process while providing all the computing tools you'll ever need.

This indispensable collection of utilities includes the very latest and best

shareware compiled within a smooth and simple user friendly interface. No more CLI or Shell, a simple point and click is all you'll ever need.

This is just a small selection of the tools and utilities on offer. Others include ScreenX and GFXMem

the artists out there icon Edit awaits to produce customised icons, while NickPrefs adds the oppon for a 16. colour designer backdrop. animated pointers and nonprovides a tailor made designer



Product	Price	Order No
Workston 2	E4.50	9519
Workstotion for A500	£3.50	9958
Graphic Station	£4.50	9876
Workstator + Grophic Station	£7.50	9601
Workstation 2 + Graphic Station	£8.00	9602

#### **POWERPACKER PROF**

Here's a winner! Using this powerful utility, you can fit around 40% more information on every disk you use - sometimes up to 70%. The powerful "crunching" routines actually shrink your programs, and expand them on running. Along with the supplied utilities, this contains all you need to pack those disks.



#### TURBO TOUCH JOYPAD

This is a radical new style of hand held controller, Just pass your finger over the sensor - No more finger latigue or bisters. And thanks to better diagonal and circular [360°] control, the newest and most challenging games are easier to control and more fun to play. The Turbo Touch 360 brings a new dimension of control and comfort to video game play.



#### **CLARITY 16**

At last from Microdeal comes the first ever low cost Stereo 16 Bit Sampler for the Amiga. Contains two 16 bit analog to digital/digital to analog convertors to allow stereo sound digitising. The system can record sound from suitable equipment such as CD players, cassette recorder or any 'AUX' or line level signal source via the stereo phone sockets provided. Stereo

phono outputs are provided for connection to an amplifier or mixer. The hardware plugs into the senal and printer ports and so can be used with the whole Amiga

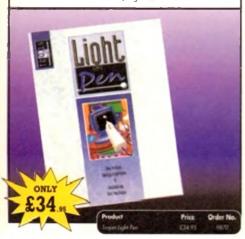
range of computers. As if this not enough, Carry, 16 also contains a Midi interface for use wi a Midi keyboard or similar, which is compatible with major commercial

The Editor program provides the user with the ultimate in power and sophistication, packed with features which appear for the first time for any home computer. The fully multi-tasking, window styled editor allows individual samples to be loaded into the computer and edited separately



#### TROJAN LIGHT PEN

Wouldn't it be good to really 'draw' when using paint and graphics packages? Well now you can, by plugging the amazing Light Pen in instead of your cumbersome mouse. It comes with a specially designed drawing package, Kwikdraw, as well as compatibility software for most Workbench-run programs.



#### **COVERDISKS**

Did you miss out on any Amiga Computing CoverDisks? If so, now is your chance to obtain our pack of 12 CoverDisks for 1991 and our pack of 6 cover disks from January to June 1992.





#### **VIDEOMASTER**

The Ultimate Multi Media System for your computer. Videomaster is a revolutionary breadtrough in home computer technology combining the complexity of a Video Digitiser with a Sound Sampler in a single only to utilities cost unit to bring you the utilities home multi-media video/audio editing

on you to record manachrome, quarter screen pictures at speeds of up to 25/30. frames per second discroperUSA; providing ultra smooth playback at high speeds. These pictures can be recorded from the output of a video recorder or directly from a video camera or a camcorder and replayed on your computer screen.

facility. The colour fitters provided in this portage will enable the users of video carner in or cameor to produce high quality sell pictures in glorious colour.

maritor features a sound sampler as part of the hardware though the software can be used with us sound samplers. This is supported by a flut feature sound recording and editing program the videomarier software. The Videomuriser system also features a video requestor.

The complete package contains the Videoriaster video digitioning and sound sampling hardware unit, TIDColour Main for calcur camera use, comprehensive user guide and full system pollusive.





reat offers over the page

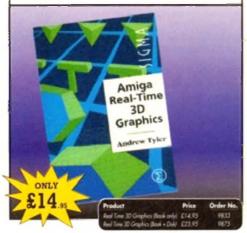
#### **ACCESSORIES & SOFTWARE BOX**

Even our Aladdin's Cave of goodies gets crowded from time to time so here are a load of absolute bargains that we're practically giving awayl



#### **REAL-TIME 3D GRAPHICS**

Learn how to write programs with smooth flowing 3D effects and produce high speed animation in real time controlled by the Amiga joystick with this book. At the same time, learn about Amiga assembly language painlessly and enjoyably. (listings disk also available to avoid the effort of typing them all out).



#### **RE-INK SPRAY**

money and the environment with Relink Spray and bring back life to your exhausted printer ribbon. Simple and cost effective, it can save you up to 90% on ribbon costs and gives cleaner, blacker print with no blotches and it works for all fabric ribbons. Just open the ribbon case, spray Re-link onto the ribbon and hey prestol



#### GAME MAKER'S MANUAL

Author of several authoritative computer manuals, Stephen Hill is well placed to offer page after page of invaluable information covering every single aspect of writing games, from high-speed sprites to simulations, animation to assembler - all you need to know to design and create your masterpiecel



#### **ALPHA DATA TRACK BALL**

Features include

- Supports auto-fire and key lock function
- Top quality construction with opto-mechanical encoder
- Exquisitely designed for easy one hand operation
- Effortless finger-tip operation with reliable microswitch buttons



ORDER NO

#### TECHNO SOUND TURBO

A fun-to-use sampler and sequencing package all in onel Now you can take any sounds from anywhere - tape, CD, microphone - and arrange them into songs and creations which are entirely your own There are loads of special effects to spice up your sound, tool includes pre-recorded samples and sampler cartridge



# READER OFFERS Offers subject to availability.

All prices include UK postage, packing and VAT. For orders over £10 please add £5 for Eire/EEC, £10 for overseas

ess specified above. Overseas orders despatched by Airmail Valid to September 30, 1993

Please add postage as detailed		
Please box if you do not wish to receive promotional measure! from other compa	anies TOTAL	£

Cheque/Eurocheque made payable to Europress Direct

Access/Mastercard/Eurocard/ Bardaycard/Visa/Connect	Expiry Date	/			
1111111111	11	ı	1		

Post Code

Daytime telephone number in case of gueries.

Send to: Europress Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB (No stamp needed if posted in UK)

lly despatched within 48 hours of receipt but delivery of certain items could take up to 28 days

#### **BINDER & BACK ISSUES**

If you've missed any of these issues, now's your chance to put things right, by either buying an individual issue or a full six months' worth. But hurry - stocks are limited!

Keep all your back issues in pristine condition with the Amiga Computing binder, a must for any senous Amiga user



# **Order Hotline:**

Fax: 051-357 2813 General Enquiries: 051-357 2961

Order at any time of the day or night. Don't forget to give your name, address and credit card number



# the colour

without raw image data to work on, the user is stuck with the output unless a copy of ADPro is ready to hand.

REALTIME

If AlfaData have ensured that the scanner problem of keeping to a straight line, must

If AlfaData have ensured that the scanner works in 18-bit internally, they would be well advised to consider a colour 24-bit or 18-bit

In many ways this is an advantage as it keeps image file sizes below 1Mb for most scans, but it does have the disadvantage that

For the sake of those with AGA machines, it should be noted that SuperColour mode enables scanning directly in Ham8, a process which will even work in real time given a fast enough machine.

These AGA images, being virtual 24-bit in quality but very efficient on disk space, are ideal for those working with a small hard drive or a floppy-based A1200 machine.

Speed is, of course, a problem with images which are imported and processed at the same time, but by turning off the real-time option it is possible to scan a sizeable picture without it taking all day to appear on-screen.

The simple but effective control software will estimate the RAM required to scan and hold each image, so users with limited memory can ensure that their machines won't lock up because the scanner has gobbled it all up.

A problem most hand scanner users encounter is the difficulty of maintaining a

problem of keeping to a straight line, must ruin thousands of images every week. In an attempt to make their scanner as

In an attempt to make their scanner as easy to use as possible, AlfaData have included a warning beeper in the interface box which sounds whenever the scanning head is drawn too quickly across the target artwork.

This is at first an intensely irritating feature, and was almost responsible within five minutes for the violent end of the interface box, but after a while the user should adapt to the speed of the scanner and find the occasional complaint from the buzzer a useful judge of speed.

As long as real time scanning is disabled - and if it isn't the buzzer can drive one mad — the unit is generous enough to allow reasonably smooth operation.

Scan resolution is up to 400 dots per inch

200dpi for colour images, and scanning can take place in any of five modes. SuperColour is slowest of all, importing data as it does and converting it to Ham8

Supercolour is slowest of all, importing data as it does and converting it to Ham8 format for display and export, but it is easily the best for quality on AGA machines.

(dpi) in mono or dithered colour mode, or

On older Amigas, the software supports HAM (colour grey mode) and 16 greyscales (mono grey mode), giving the unit few big advantages over some of its much cheaper mono competitors. With AGA machines, full Ham8 or 64 greyscales are available, the latter in up to 400dpi, resulting in superb mono quality.

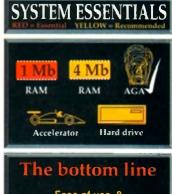
Unfortunately, Ham8 quality isn't quite up to scratch at the moment. Although the scanner itself seems more than capable of importing the colour data, the way in which the data is processed before arriving on screen or on disk leaves a lot to be desired.

Colour images, even in the SuperColour Ham8 mode, seem always to be dithered and grainy, and are saved in exactly the same way. There is no option to save raw 24-bit image data, so the user has precious little control over how an image will finally appear, and a revamp of the software seems necessary.

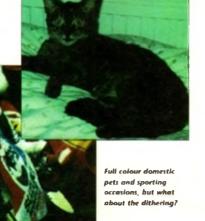
The distributors inform us that software updates are on the way, but for the moment a very promising scanner with well thought out hardware is being hampered by unforgiving and inflexible software.

displays its plumage to Stevie Kennedy

This is a pity, as with better software I'm sure the AlfaColour could be a very attractive package, something that for the moment it just about fails to be.







# GASTEINER

Tel: 081 365 1151 Fax: 081 885 1953

Unit 2, Millmead Business Centre, Millmead Road, Tottenham Hale, London N17 9QU

#### THE FIRST 9MB 32 BIT INTERNAL RAM CARD FOR AMIGA 1200

#### Facitures:

- ★ Integrated 32 bit Ram conveniently expandable to 5Mb or 9Mb (comes with 1Mb installed). Giving a maximum capacity of up to 11Mb to your Amiga 1200.
- \* Option to conveniently install an FPU with up to 50MHz and oscillator to increase performance.
- \* Real time battery backed-up clock, a must for hard drive users.
- \* Auto-config with zero wait states.
- More than twice as fast as the graphic RAM of the Amiga 1200 thanks to the double clock rates and shorter access cycles.
- \* 100% compatible with all Amiga 1200.
- \* Easy installation, just plug in and go

#### Important:

Please note: To operate the Mathematic Co-Processor with clock rates over 14MHz you need a Quartz (Oscillator). The Quartz (Oscillator) must have the same clock rates as the Mathematic Co-Processor.

RAIT CARD FOR AITIOA IZES	
ITEMS	PRICE
AF1200 1Mb with clock, no Oscillator, no FPU Processor	£115.00
AF1200 5Mb with clock, no Oscillator, no FPU Processor	£239.00
AF1200 5Mb with clock. Oscillator, 16MHz 68882 FPU	£285.00
AF1200 5Mb with clock, Oscillator, 20MHz 68882 FPU	£290.00
AFI200 5mb with clock, Oscillator, 25mHz 68882 FPU	£295.00
AF1200 5Mb with clock, Oscillator, 33MHz 68882 FPU	£299.00
AF1200 9Mb with clock, no Oscillator, no FPU Processor	£369.00
AF1200 9Mb with clock, Oscillator, 16MHz 68882 FPU	£415.00
AF1200 9Mb with clock, Oscillator, 20MHz 68882 FPU	£420.00
AF1200 9Mb with clock, Oscillator, 25MHz 68882 FPU	£429.00°
AF1200 9Mb with clock, Oscillator, 33MHz 68882 FPU	£439.00

#### THE NEW 256,000-COLOUR HAND SCANNER FOR AMIGA

# Powerful Colour Image Processing Tools for the Office or Home Environment. No longer a "Professional Task" to scan high quality images

#### Software features:

- \* Eggy to learn and use intuitive user interface.
- \* Real-Time Scanning display on screen
- Supports 256,000 colours and 64 greys for Amiga 1200 and 4000 with new AGA chip sets.
- \* Supports 4.096 colours, 16 greys, dilhered colour and black & white capabilities for all Amiga models image size is limited only by the amount of RAH available.
- \* Memory requested does not have to be Chip RAM.
- \* Full multi-tasking with all Amiga computers.
- Intelligent moximum scanning length indication.
- \* Imports/Exports IFF file formats

#### System requirements:

- ★ For all Amiga models with a Honitor or compatible TV set. 1 Hegabyte of RAM and a flappy drive.
- Hore memory and hard disk are recommended but not required.
- ★ Compatible with Amiga WB 1.3 and higher (WB 3.0 also
- Anu painting, publishing, and OCR programs that road FF files, Examples: Deluxe Paint, Professional Page, Page Stream, Saxon Publishers, Higraph OCR.

PRICE £299

#### Hardware features:

- \* Easy installation, plug in and go in just minutes.
- # 256,000 colours, 105mm (4 inch) scanning width.
- \* Built-in over-speed buzzer to prevent scanning too fast.
- With SC (Super Colour), CG (Colour Grey), MG
  (Fonochrome Grey), and D/T (Dithered/Text) modes setaction writch.

  \* Selects 50/100/150/200 DPI by resolution selector sw
- for SC and CG modes.
- Selects 100/200/300/400 DPI by resolution selector switch for MG and D/T modes.
- \* Hetal Interface Box with a printer through port.

#### HARD DRIVES

- \* External IDE HDD for Amiga A500/A500+
- \* Internat IDE HDD for Amiga A1500/A2000.
- ★ Memory conveniently expandable to 2/4/6/8Mb by using IM x 4 Zips.
- \* 100% compatible.

A1200 and A4000

- \* Easy installation, just plug in and go.
- \* Auto boot, Auto config and zero wait states.

Controller for A500/A500+/A1500/A2	000 £99.00
Controller + 40Mb Hard Drive	£249.00
Controller + 65Mb Hard Drive	£279.00
Controller + 85Mb Hard Drive	£299.00
Controller + 120Mb Hard Drive	£329.00

#### HARD DRIVES FOR A600/A1200

40Mb + IDE Cable	£149.95
65Mb + IDE Cable	£199.00
85Mb + IDE Cable	£279.00
120Mb + IDE Cable	£299.00
Fitting for A600 or A1200	£29.95

# 256 GREYSCALE SCANNERS With latest Touch-up, Merge-it, compatible with

£129.95

with Scan & Save, Merge-It	199.90
With latest Touch-up, Herge-It & Junior	
OCR	£179.95
With Scan & Save. Herge-It and Junior	
OCB	4140 OF

# GIGAMEM

# VIRTUAL MEMORY FOR AMIGA APPLICATION

Most recent powerful application for the Amiga (e.g., for graphics, music, animation, raytracing, DTP....) require more main memory than is available or possible to integrate. GigaMem is a program which simulates up to 1 GigaByte, memory, which swaps onto any mass storage system (i.e. hard disk). Intelligent management accomplishes simultaneous use of several programs in a multitasking mode.

#### System requirements:-

- ★ Gigamem works with all AMIGA <R> computers with MMU (Memory Management Unit); i.e. Amiga's with 68020 or 68030 accelerator and MMU.
- No restriction on type of HD controller and hard disk
- \* GigaMem is compatible to Kickstart 1.2/1.3



#### MIGRAPH PRODUCTS

ColourBurst Scanner + OCR	£399.00
Full OCR Software	£99.00
Touch-Up Version 3.1x	£49.00
Scanning Tray	£49.00
Touch-Up Upgrade & Junior OCR	£79.00
Touch-Up Upgrade V3.1x available	£29.95

#### MICE & TONCKERON I

MICE O TRACKERBALL	
Optical Pen Mouse with Mat	£35.95
Three Button Trackball	£29.95
Crystal Trackball with two colour	
shining ball	£34.95
Mega Mouse 290 DPi	£12.95
Mega Mouse Mk II 260 DPI	£11.95
Mega Mouse with Mat & Holder	£17.95
300 DPI Optical Mouse with Metal Mat	
& Holder	£29.95
400 DPI Mouse	£14.95
Cordless infra Red Mouse with Mat	
ઈ Holder	£49.95

#### ACCESSORIES

Hard/Soft Mouse Mats	£3.00
Auto Mouse/Joystick Switch	£12.95
Auto KickStart Switch for A500/2000	£17.95
Expansion Adapter for 500+	£17.95

Greyscale Scanners
Total solution for scanning A4 images

Shopper best bu y

Features: True greyscales, 100-400 dpi, 105mm head, OCR option

Top quality hardware with the latest version of software from Migraph. Allows real time scanning, provides powerful editing/ painting features. Compatible (imports/exports) IFF,IMG,PCX,TIFF and MACPAINT formats.Compatible with all Amiga's A500,A500+,A600,A1500,A2000,A2500 and A3000

Touch UP and Merge It Software

Full OCR Version Software Available .00,003

Touch UP, Merge It and Special OCR software. Compatible with all Amigas inc. Al 200 and A4000

Minmum system requirement 2Mb RAM, and a Hard

## **Trackballs**



AWARD WINNER IN ST FORMAT 92%

GOLD

Stylish three button trackballs. ST with third button supporting REVIEW auto fire and drag and hold 91%

> With two colour shining Crystal Ball

Auto Mouse/ Jostick Switch



St Format 78%

Automatic Switcher between two input devices with a click of a button. E.g. mouse/mouse,

mouse/joystick, joystick/ joy stick

#### Mega Mouse



GOLD AWARD WINNER IN AMIGA **FORMAT** 90%

A 290 dpi high resolution Opto-Mechanical Mouse. Top quality construction ensures rapid and smooth movement, with micro switch buttons.

Goldenlmage Mouse

with Mat

Golden Inlage -

Optical Mouse - \$23.95

Mouse only

Mouse with hard mat and mouse holder

**GOLD** 

AWARD

WINNER

IN AMIGA

**FORMAT** 

90%

# **Optical Mouse**



#### St Format 81% Cu Amiga 79%

Superb 300dpi Optical Mouse with effortless micro switch buttons. Fast, smooth and reliable

Includes Ontical Mouse Pad and Holder

1 Mb RAM with Clock A600

512k RAM with Clock A500

LMb RAM for A500+

Bootselector Switch Power Supply for A500

3.5° External Drive

1 Mb Simms

Power Scanner

Kickstart Switch

1 Mb RAM without Clock A600 £19.95

2-8 Mb RAM for A2000/A1500 £129.00

#### **Optical Pen** Mouse



A stylish Pen Mouse with quality construction and smooth fast movement. Micro switch buttons.ldeal for DTPartwork etc.

Includes Ontical Pad

\$29.95

£19.95

£19.95

£14.95

POA

£34.95

\$49.00 5.25.00

£95.00

Infrared Mouse



Remote control mouse, long working distance. Long life rechargeable battery, 260 dpi.

Includes Hard Mouse Mat.

# **Cordless**



#### Cu Amiga 81%

#### GASTEINER 400DPI MOUSE





#### **MONITORS**

£ 13.95

Philips CM8832 Mkft	£199.00.
Commodore 1900 Mulisyne Monitor	£369.00
Commodore 1972 Moltisyne Monitor	£329,00

A CONTRACTOR OF THE PROPERTY O	
Amiga A6(3)	£179.00
Araige Aeso with jo Med 10.	\$269.00
Amiga A1200	£289.00
Amiga A1200 wash 85 Am ND	\$469,00
Antiga A1200 with กับเป็น เมื่อเลือกก	4529.00
Amiga A1200 with 420 M5310	£_66.00
Amiga 4000 030 80 M26445	\$939,00
Amga чоко оза 120 мб НО	£1039 (0)
Amiga (000 030 150) Sib Hit Special Price	\$1035,00
Amiga 4000 080 250 Mb HD Special Price	£1089.00

Please add £3.50 postage and packing to all orders under £100.00 and Orders over £100.00 add £5,00 postage and packing, COURIER CHARGE £10.00. All prices include VAT. Gasteines accepts payments by Visa, Access, Chaque et postal etdet,



# United Public Do

# THE BEST SELECTION OF PD IN THE UK!



# Distributors

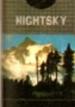
Most CLR titles

ok on A1200!

















#### .. The Central Licenseware Register ..

Commercial Quality programs at a PD price!

Most CLR titles ok on A1200!

hords & hear the Amiga play them: 1 disk 3.50. • CLE26 SNAP An educational game for languages, this comes on

CLE32 CATLThis is a superb Tarof reading program; Now you can read your own 1 3 disks 4 991.

CLE28 FUN WITH CUBBY There are 8 flun games on this disk for typing apelling painting counting 8 much more! Super! 1 disk 3 50.

CLE29 PREHISTORIC FUN PACK Here are 4 super directair games all with a premistoric therms, great for the king 1 disk 3.50.

CLE30 PEG A PICTURE Make a picture from coloured pegs or coloured shapes; great for young kids! 1 disk 3.50.

CLE31 UNDERSTANDING AMOS This set will really help you learn how to use Amos! I MEEDS AMOS! 2 disks 4.50.

CLE32 SPITFIPE! Superb (flustrated bools on 8 disk covering the segendary WWII Ripher plane! 2 disks 4.50.

CLE33 WESSERSCHMITT 8F109 Another super WWII book on 8 disk; the lime the Garman Messerschmit! 2 disks 4.50.

CLE34 YOUR FIRST PONY Want to learn to look after 8 nde a pony?

This will learn you all you need to know! 2 disks 4.50.

CLE35 TOTAL CONCEPTS SOLAR SYSTEM II See below:

1350. \* Uttl CALÇAVI.3 Do all of your calculations with this very useful eadsheefprogram! I diek 350. • UTZ VIRTUAL WINDOWS

GAMES

CLGOS TRUCKIN ON Truck management simulation 2 desks 4.50 2.006 OBLITERATION Super blast em up! (NOT DOS 2) 1 desk 3.50 2.006 OBLITERATION Super blast em up! (NOT DOS 2) 1 desk 3.50 2.009 MOTOR DUEL great 3d car racing game 1 desk 3.50 2.009 MOTOR DUEL great 3d car racing game 1 desk 3.50 2.019 FUTURE SNOCK (Bude belit through mazel 1 desk 3.50 2.011 ALQUINS BLAZING 2 player, ownersed view 1 disk 3.50 2.011 BULLDOZER BOS Cheir screen of blocket 1 desk 3.50 2.011 BULLDOZER BOS Cheir screen of blocket 1 desk 3.50 2.011 SONIC SMARTIENEAD Clazy platform gamet 1 desk 3.50 2.011 SONIC SMARTIENEAD Clazy platform gamet 1 desk 3.50 2.011 SONIC SMARTIENEAD Clazy platform gamet 1 desk 3.50 2.013 SPLODGE THE ESCAPE puzzle platform gamet 1 desk 3.50 2.013 SPLODGE THE ESCAPE puzzle platform gamet 1 desk 3.50 2.016 STELLAR ESCAPE Vertical shoot em upl 3 desk 4.99 2.020 JUNGLE BUNGLE Nos adventure gamet 1 desk 3.50 2.032 SOCKING FILLERS SESSENDE XIVERS gamet 1 desk 3.50 2.032 MARVIN THE MARTIAN A mazel type game, 1 desk 3.50 2.032 SEVENDE THE SELAND Dungsen Master gamet 1 disk 3.50 2.032 SEVENDER ISLAND Dungsen Master gamet 1 disk 3.50 2.032 SEVENDER ISLAND Dungsen Master gamet 1 disk 3.50 2.033 CAPTAIN IN Nice platform gamet 1 desk 3.50 2.033 DIRTY RACKETS 3 tennis games on here! 1 desk 3.50 2.033 DIRTY RACKETS 3 tennis games on here! 1 desk 3.50 -







WAGAS JPEG leader!! This disk water of fire pictures which unjured in rantom display as Superham Ren ii 12m min in bone! Refliant! CLASSEC SUDESHOW V.I. Fab KELLH RHODES PICS Brilliant

Squeb on his spaties 1 Mill on order itus. WSAGAI - 5 WEIRD SCHENCE SUPER HAM:

Inntary All April 21

IPPE 24 HIT PIC ST

TO MAN THE ST AND THE ST

CLEOST TOTAL COUNCEPTS SIGLAR STREEM IN THE BODGE THE BODGE THE PROPOSED THE PROPOSED THE PROPOSED THE PROPOSED THE PROPOSED THE STREET THE PROPOSED TCI Solar System. Suppled on 3 disks only 4 99 +

CDPD I Fentium Fred Fish 1 660 hundres main multible. & noise match more? 19 98

CDTV DEMO DISK Over 600 megabatecul demos, samples, games, elipurt, animaliuns & 1990 months in play?

#### COLOURED CLIPART! NEW!

mode (4098 colours), flouch some d can be loaded into Delux Paint 4 S004, 600, 1200 & 4000f)













CLASSIC CLIPART (Block & White)

CLASSIC CLIPART (Black & When)

(Okay on A1200 | A4000.)

The chaper in this collection is very high quality,
hage bitmaps, many greater them on a straig hiers served,
for not in Dynalia or DFF puckages, each dild antibours
in a nilderhow endowing with a view the entire bitmap
by moving the monate? (Proces per disk?)

ARTOL MEDIOMA'S hape we deding (spint, 1 disk4).

ARTOL MEDIOMA'S half would make it planet.

ARTOL MEDIOMA'S balles and in a man in work?.

ARTOL MEDIOMA'S disks and in or an in work?.

ARTOL MEDIOMA'S Links collisting bird (spint).

ARTOL MEDIOMA'S Links and straight of spint,

ARTOL MEDIOMA'S Links and straight of spint,

ARTOL MEDIOMA'S A disks for a straight of spint,

ARTOL MEDIOMA'S A disks of careoon pixel.

ARTOL AND A disks of careoon pixel.

ARTOL AND LICE TIPS. It apper but super quality places.

ARTOL MEDIOMA'S Values and pure authometrics.

ARTOL MEDIOMA'S Caleday of whom joictures.

ARTOL CALEDAY STANDAY CALEDAY STANDAY S





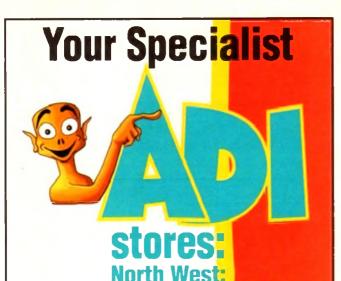


ART27 ART NOUVEAU FLOWERS Floral artiART28 BL TEERFLIES Nice pictures!\*
ART38 BL TEERFLIES Nice pictures!\*
ART39 FMOD Adds/s on a fond hitchen theme!ART39 GOLD Adds/s on a fundaments macariART39 MART39 Call Adds/s findson dipart:ART39 MART37 FARE Adds/s fashion dipart:ART39 MART39 FARE CALL ADDS/s Call ART39 FARE ADDS/s Call ART39 MART39 MART39 MART39 MART39 MART39 MART39 MART31 MAR

NBS

FAX:0 9 8 3 8 2 1 5 9 9

TEL: 0535 667 469



Bolton Computer Centre Castle Computers Computer World UK **VU Data** 

**VU Data** 

Soft Centre

Bolton Lancaster Bolton Ashton Under Lyne Stockport

0204 841937 0524 61133 0204 495011 061 339 0326 061 477 6739

Midland and Wales

Comptazia Games World Long Eaton Software Miles Better Software Mr Disk North Notts Computers ST Electronics

Merryhill, Birmingham Bristol Long Eaton, Notts Cannock Queensway, Birmingham Sutton in Ashfield Nottingham Cwmbran

081 446 7170

0252 375088

0420 541167

0227 762590

0734 583062

0491 834366

0227 766788

081 520 7763

0273 728681

0705 269333

071 6362666

0892 511542

0252 311766 0992 25323

0268 778909

0926 337648

0908 670620

0277 633003

#### South East:

Adams World Finchley Partiborough A & A I

Barkmans **ADM Computing** Bits 'n' Bytes Computer Cavern Computer Cavern Computer Cavern Computer World Database **Erol Computers** Faxminster Gamer **GB** Microland Input Invicta J.C. Computers

Logic Platinum Spa Computers Softly Sore Thumbs

Kingston Upon Thames 081 546 5941 Kent 0473 219961 **Ipswich** Reading Wallingford 0628 891101 Marlow Canterbury 0708 890976 Thurrock Walthamstow Hatfield 0707 272919 Brighton Waterlooville Rathbone Place, W1 Tunbridge Wells Hampshire Cheshunt Essex Learnington Spa Milton Keynes Billericay

#### North East:

Maughan Micros Chips Tomorrow's World Topsoft

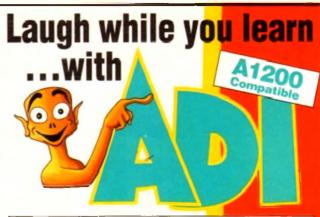
Gateshead Middlesborough Hull Stockton

091 493 2308 0642 252509 0482 24887 0642 670503

For your nearest Computer Store dealer telephone Head Office on: 0302 890000

**OPRESS** OFTWARE

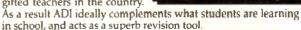
Europa House, Adlington Park, Macclesfield SK10 4NP Telephone: 0625 859333



Explore English, Maths and French with ADI, the lovable extraterrestrial. As you learn, he'll entertain you with funny remarks,

whistly voice and weird faces. He'll congratulate you when you do well and cajole you if you make mistakes.

There's one package for each school year and the software closely follows the guidelines of the National Curriculum, drawing on the talents of some of the most gifted teachers in the country.



#### Available NOW:

English 🔞 🕸 🐠 🎩





Having problems with your nouns and adjectives? Can't sort out your suffixes and prefixes? You need ADI English, covering all the basic elements of English grammar required by the National Curriculum syllabus.

#### **Martins** (172) (213) (314







If your algebra and geometry are causing you grief, look no further than ADI Maths. These are just two of the topics covered by the packages whatever your maths problem, ADI's got the answer.

#### French (1/12 (2/13 (314)







Say bonjour to French with ADI! The ADI French 11/12 package introduces first year students and beginners to France and French, and older students will find the 14/15 package ideal as a revision aid.

...and each pack costs just £25.99!

Join the ADI family today!

OFTWARE

Europa House, Adlington Park, Macclesfield SK10 4NP Telephone: 0625 859333





Available for the Amiga, PC and ST.

If you have difficulty obtaining ADI please contact Europress Softwan ast month the essential information needed to create morphs was covered in the CoverDisk pages. This month we are going to take a look at some of the more advanced features facilitated by CineMorph, but before we dive in at the deep end, let's do a little recapping.

Before starting a new morph we need to decide whether to work on a single or dual image. Having done that we need to tell CineMorph, by choosing the appropriate mode from the Settings menu.

The difference is that single image loads the same picture into both the source and destination windows while dual image allows morphing from one picture into a completely different one.

Individual points can be moved in both the source and destination windows by clicking on them, using the left mouse button, and dragging them to new positions.

Multiple points are moved by holding down the Shift button, clicking on any number of points before dragging them and releasing the left mouse button.

During morphing, you may decide that it's time to start again and reset the points to their original positions using the Reset Points option from the Points Menu. To create detailed morphs it is advisable to zoom in to the picture and add more points. This is achieved by selecting an existing point then the Add Row and Add Column options.

#### Permanent

Once the points have been manipulated the results can be seen using the Praview. Single option of the Morph, menu which allows any of the 25 frames to be viewed. Once you are happy with the morph it is time to produce some more permanent pictures.

There are two methods of doing this and it is essential to note the difference. Generating images stores the resulting pictures as 24-bit images while rendering them uses the current screen resolution.

Morphed pictures can be saved as single images, as a sequence, or rendered as an animation. CineMorph does not have its own animation player, as the authors did not want to reinvent the wheel, so it is left for individuals to use their favourite PD viewer. Alternatively, you could load anims into an art package such as Deluxe Paint 3 which has a player built-in.

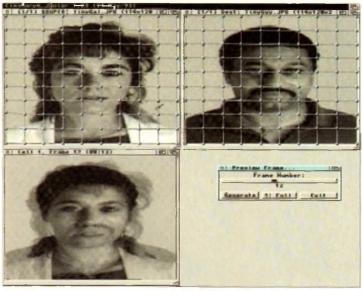
Well that's the summary over, now let's take a look at some more advanced features. As you may have discovered, the grid is great for positioning points but doesn't really give much idea of how the finished morph might look.

For this reason, there is a Preview option in the Morph menu. However, previewing pictures can take quite a while, particularly on the A500 Plus and A600.

On the settings menu, you'll find an option called anti-alias which may be employed to remove or suppress what are commonly known as jaggies. These often occur when a curve is drawn on a pixelled display which is not of a sufficiently high resolution.

The result is an approximation to a curve that is comprised of a series of Following on from last month's

CoverDisk, we delve deeper into this amazing program and provide a step-by-step guide to morphing



Here's one we did cartier

# Mastering Ciamerange Markering Markering

stepped, jagged lines (jaggies). This is an inherent problem of all computer displays but it is less apparent when working in higher resolutions.

One solution is to apply the mathematical technique of anti-aliasing. Again, because of the calculations involved, rendering times will suffer at the expense of

accuracy. Sometimes the required effect is a fade from the source image into the destination one, rather than transforming them into each other with a morph. If this is the effect that you are looking for, choose the Dissolve Only option from the Morph Options.

Fading from one image into exactly the

same picture is not a logical thing to do as this would result in a series of frames that are exactly the same. Therefore, this potential mistake has been programmed out of CineMorph and it is only possible to select the dissolve option in the dual image mode.

If you discover that a morph is not warping properly from one image to the other, check that the Dissolve Only option has not been selected by mistake. Although this may seem like an obvious statement now, it might not be so obvious when you are trying to work out where you are going wrong.

# Fraviou Francy ( enn Norber) Reseated St Fatt

Without warping, morphs can look untidy

#### Reduced mono

Rendering times can be reduced by working on a project using mono copies of your images that have been reduced in size by at least a half. Once you have perfected the morph the original colour images can be loaded in. The morphing information will be retained so that it works with these images.

OK, so much for theory, how about a spot of practice? On last month's CoverDisk there were two pictures, one of a man, the other of a woman. Unfortunately, 1Mb users were unable work in dual image mode because these





After tidying up the face, two key areas remain.

>

images are too memory hungry

To rectify this situation we have converted them to the IFF format and put them on this month's CoverDisk. Anyone experiencing memory problems should therefore use these pictures.

Once CineMorph has loaded, it is automatically in dual image mode so select Load Image from the Cell menu. Click on the samples directory and load in the fingular image. We then need to load the tinyguy image into the dest(ination) window by activating the window and selecting the appropriate image.

If we were to morph without moving any points the result would not be very smooth. To see what I mean, select Preview Single from the Morph menu and click on the Generate gadget. The first thing that you will notice is that the woman's hairline and shoulders do not match up with those of the man. The facial features do not match up either and the result is blurred.

#### Nose & mouth

During a morphing animation involving faces, attention is naturally drawn to the eyes, nose and mouth so let's tidy up those areas first.

Click on one of the two points directly below the man's chin then look at the position of the corresponding point on the woman's image. On the woman, both of these points lie on her chin whereas the corresponding points lie below the man's chin. On the man, move these two points so that they are on his chin.

Look at the line directly above these points on the man then at the corresponding line on the woman. When comparing two images in this way it is a good idea to look quickly at one image then quickly at the other and repeat this rapidly two or three times.

If you have just tried this technique you will have discovered how easy it is to spot differences between the images. Clearly,

this line on the man is too low as it passes below his bottom lip while the corresponding line passes across the top of the woman's bottom lip.

To rectify the situation, hold down the Alt key. Now select one of the dots on the offending line of the man picture. All the dots in this line should now have changed from grey to yellow. Keeping the Alt key pressed, move the line up so that it lies on the man's top lip then release both the left may be the pressed one that, examine the next

line up around the area of the nose. On the woman the two dots by her nose lie either side of her nostrils so position the corresponding points either side of the man's nostrils.

The next line up, on the man, is too low and is offset to one side of his eyes. Using the Alt key again, re-position this line so that it lies on his bottom eyelid and there is a point at each corner of his eyes.

On the line above, there are four points on the man's forehead. Click on each of



... and hair

# these in turn and look at the position of efforts. If you are at all unhappy with the corresponding points on the woman.

They all lie roughly on her fringe so these points on the man should be moved to his hairline.

The final step for the face is to examine the four points directly above the ones you have just moved. On the woman, they all lie in the middle of her hair while on the man they are very close to his hair-line. Obviously, this line should be moved up on the man so that it lies in the middle of his hair.

Having done this, click on the generate button and study the results of your on the man until you are satisfied with the results.

There are two key areas to be altered now, namely, the shoulders and the blur created by the woman's hair. First, let's take a look at those shoulders

Move the mouse pointer to the bottom left point on the woman image then click on the one directly above it. This lies on her shoulder, whereas the corresponding one on the man is lower down on his shoulder. Move this point so that it is actually on top of his shoulder then click on the point above it.

This one is too close to his body so move it up half a square. Follow the grid line diagonally to the right, click on the next point and move that up too. Now select the point below it and move it so that it touches the top of his shoulder then click on the generate gadget.

Follow the same procedure for the other shoulder then make any minor adjustments, to both shoulders, that you feel are necessary.

By now you should have a good understanding of how to successfully morph between the two images. There isn't enough space to explain in detail how to tackle the hair but, as the same technique is used, there should be few problems. Finally, when you are happy with the morph, save the project using the Save As option and render the animation.

#### Lines and curves

Again, CineMorph provides an effective way to judge how things are progressing in the form of the Splines option (on the settings menu). By selecting Display Mesh As Splines, the grid lines are replaced with curves.

These are a far better indicator of the morph but are less easy to manipulate than lines due to the complex calculations that are required. Straight lines can be positioned more accurately and only give way to splines when a quick preview is required.

The quality of morphing is controlled using a similar but conceptual grid. Obviously, the number and position of points is mapped from the user's grid; however, the type of line is controlled independently.

By default, straight lines are used which leads to shorter rendering times at the expense of output quality. Improving this type of morph may be achieved by adding lines, as described in the resume, to provide more detail.

Alternatively, the conceptual grid may be changed to splines thereby producing more effective morphs that take longer to render.

As these are conceptual lines, used only to specify the morphing method, they do not have to be the same as the line type that is used in the input and output windows. Choosing the internal mesh type is achieved by toggling the Use Splines option of the Settings menu.

SYSTEMS -THE UK's No1



Zool, Transwrite, Pinball Dreams and Striker - Value £127.92

All Amigas from Silica (excluding A600 Standalone and Amiga 4000) Include a FREE ZOOL pack as well as GFA Basic and Photon Paint II.



€49.95 £25.99 - 94% Ou Amgs - June 192 **ZOOL PACK: £127.92** 

GFA BASIC v3.5.. £50.00 PHOTON PAINT II £89.95

TOTAL VALUE: £267.87



#### AMIGA 500 PLUS CARTOON CLASSICS **STANDALONE**



TEAN NETURN TO SILICA W	APPLANT
PACK INCLUDES:	
	C298 91
BUILT-IN 1Mm DRIVE	-
A520 TV MODULATOR	-
THE SIMPSONS	€24 98
CAPTAIN PLANET	625.91
LEMMINGS	£25 95
DELUXE PAINT	£79 91
PROFESSION SECTION STREET	0247 87
TOTAL PACK VALUE:	£724.60
LESS PACK SAVINO	
SILICA PRICE	£199.00
enn 5%	et T

# AMIGA 600



ON ALL CONFIGURATION	
Please Facility at a rese to \$500 C \$150, a fel \$100 to-eq of the pro-	eco of only
PACK INCLUDES:	
@ 1im AMIGA 600	£186 00
· BUILTIN 1to DRIVE	-
* BUILT-IN TY MODULATOR	-
PLUST PRES PROM SHIPCA	
PHOTON PAINT #	€80.95
TOTAL PACK YALUE LESS PACK SAYING	

SILICA PRICE: \$199.00

## **AMIGA 600**



PACK INCLUDES	
■ 1 <sub>th</sub> AMIGA 600	£199 99
BUILT IN 1sk ORIVE	-
- BUILT-IN TV MODULATOR.	-
DELUXE PAINT III	\$79.00
• LEMMINGS	125 98
FREE FROM SALICA (See Tay Late)	£267.97
107AL PACK VALUE: LESS PACK SAVING	
SILICA PRICE	-
PREVIOUSLY E	250

AMIGA 600





PACK INCLUDES:	
Im AMIGA 600.	£190 no
BULT-RI IN DRIVE & TV MODULATOR	-
DELLIKE PAINT III	€79 99
MICROPROSE GRAND PRUI	£34 99
SILLY PUTTY	C25 90
PUSH OVER	C25.90
FREE FROM SUJICA (San Top saft)	€207.87
TOTAL PACK VALUE:	
LESS PACK SAVING	£405.82

# AMIGA 600<sub>HD</sub>



#### ACK INCLUDES:

EPIC - A SOUR ADVENTURE 529.00 PONE ROLE PLAYING ADVENTURE \$25.00 MINUS STOP THE SPREAD OF EVIL \$10.00 TRIVAL PURBLIT - POPILLAR GUIZ ... £29 88 PACK VALUE: E723 E2 PACK SAVEQ E423 82 SILICA PRICE: E299 50 EE FROM BLICA (See Top Left

30= 64=

#### **AMIGA 1200** COMIC RELIEF



bellucture Processor
 14. 1986-14. Clock Speed
 32-bit Architecture
 2 ins Chip RAM
 Amiga DOS v3 0
 AC rup Set for Enhanced Graphics
 16.8 Million Coliciums
 256,000 Colours on Screen
 Built-in Ty Modulator
 1. 20.98 in Chip Ramperiero Stot

1 a 32-Bit CPU RAM Expansion Stot PCMCIA Setart Card Slot takes 512K, 1 No or 44m PC Cards 96 Key keyboard with Integral

Numeric Keypad

2)F Internal IDE Hand Criss

Options - necessary

1 Year On-Site Warranty

FREE GIFTE FROM BALICA

RRP THE

# **AMIGA 1200**

**HARD DISK** 



2... 2 64: 2 85: 4 2 2... 209:

**AMIGA 1500 HOME ACCOUNTS** 



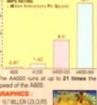
YEAR RETURN TO BLICA WARRANT ACK INCLUDES:

FOTAL PACK VALUE SILICA PRICE: £309.00

DO TROOP

# AMIGA 4000





#### AMIGA 4000 CONFIGURATIONS

FREE FROM SILICA TO VICE BROWN FAMEL O CF 803 4 120

4- 214 4- 245

42... 340

6 **120** 6tu 214 6 245

6 340 ± 6 540

## CDTV ADD-ON





Enables your Arrige SOC to sun COTV softw Plays normal quidio CC discs

Compatible with CD = G and CD = MID to
 Compatible with ISO9880 standard
 Some oid ASOS area modification = side.

COTY £145

Shice Systems are a fully authorise Arrigal dealer. We can upgrad Arriga 600 or 1200 s with has direct, for new or earling owners without affecting Commissions official on site search. We office upgrades and repeir serves to ASOB and ASOB. xc Complete Company of the Commissions of the Commission of the Commission

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

#### SILICA SYSTEMS **AMIGA SPECIALISTS** - THE

Before you decide when to buy your new Arrigal computer, we suggest you think very carefully about WHERE you buy it. Consider what I will be like a few months after buying you Arrige, when you may require actional peripherate or advanse, or halp and advice with your new purchase. And, will he company you buy from contain you will have nothing to secry about We have been established for animals 14 years, we see Arrige specialists and an a Convention approved deviet. With our univisited experience and expertise, we can now clean to meet car customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return this coupon new for unit table TREE filterature and begin to experience the "Silica Systems Sterice".

- COMMODORE APPROVED UPGRADES:
  Official Hard Drive upgrades with WANG on-site warranty.
   FREE OVERNIGHT DELIVERY:
  On all hardware orders shapped in the UK mainland.
- TECHNICAL SUPPORT HELPLINE:
  A team of Amiga technical experts will be at your service.
- PRICE MATCH: atch competitors on a "Same product - Same price" basis.
- ESTABLISHED 14 YEARS.

  We have a provin track record in professional computer sales.

  £12 MILLION TURNOVER (with 60 etail): We are solid, reliable and profitable

- BUSINESS EDUCATION GOVERNMENT Volume discounts are available. Tel: 081-300 0008.

PAYMENT:

SHOWROOMS:
We have demonstration and training facilities at all our stores

THE FULL STOCK RANGE

All dyour Amiga requirements are available from one supplier.

FREE CATALOGUES:
Will be mained to you, with special reduced price Amiga offers, as well as details on all Amiga software and peripherals;



MAIL ORDER: 1-4 This Mens, Hatherley Rd, Sidoup, Kent, DA14 4DX Order Lines Open Mon-Set 9 Ottom 6 Open No Line Reght Opening	Tel: 881-389 1111 Fax No: 081-308 0808
LONDON SHOP: 52 Tottenham Court Road, London WTP CEA	Fax No. 071-323 4737
Copping Hours Mon-Set 8 30mm7 (00pm Care Name Arms) Oxford Street, London, W1A 1AB	
SIDCUP SHOP: 1-4 The Mews, Hathertey Rd, Sidcup, Kent, DA14 4DX Opening Hours: More Salt 8 00am-5.30pm	
ESSEX SHOP: Keddies 12nd Footi, High Street, Southend-on-Sea, Essex, SS1 1LA Opening Hours: Mon-Fri Hill Oben-6 Steps (Set 9 00en-8 00en) Late Night Thursday - 7pm	Tel: 0702 468039 Fax No 0702 468030

To: Smca Systems, AMCUM-0993-104, 1-4 The	Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX
PLEASE SEND A 64 PAGE A	MIGA COLOUR CATALOGUE
Mr.Mrs/Miss/Ms Initials Suma	ame:
Company Name (if applicable)	
Address	
HOLINE CONTROL OF THE PROPERTY	Postcode
Tel (Home):	Tel (Work):
Which computer(s) if any do you own?	104.1

o say ADPro is blessed when it comes to updates would be something of an understatement. However this the ADPro evolution doesn't directly involve the program itself - although the latest v2.3 of the software is essential.

In the past the main complaint concerning the program was automation, or batch editing as it's more often known. To give ASDG their due they have made valiant efforts of late, primarily in the form of Fred, the rather quaint acronym for ADPro's very own frame editor

Although perfectly adequate - after a little practice - Fred nevertheless still received some flak due to the need for at least a rudimentary knowledge of ARexx in order to build your own designer scripts.

In addition, processing via the program was very much a cut and paste procedure building anims, compositing frames, file conversion and so on. All very handy, but not the sort of stuff to set the world on fire.

However even with its limitations it must be said that the inclusion of countless mini scripts which can be appended to build really huge multi-processing epics has certainly won the hearts of many - especially those who have a still frame recording facility ready to take advantage of the program's output.

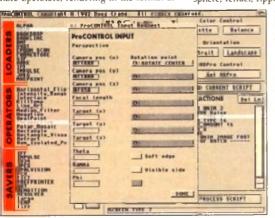
#### POINT AND CLICK

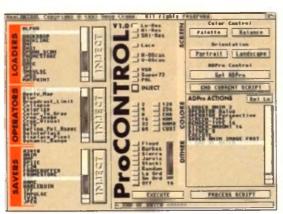
Still, even with the best efforts of Fred, flexibility was - and in fact still is - a problem. As a consequence, ASDG have now released ProControl, a spectacular point and click interface that makes even complex processing and DVEs - digital video effects - a doddle.

For the ADPro aficionados, the ProControl screen shot may well seem vaguely familiar, being very reminiscent of third-party ADPro utilities such as Macro Maker and Macro Studio, both of which have made various attempts at point and click automation in the past.

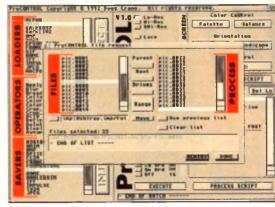
Alas, none of these third-party products have managed the power of ProControl and tend to suffer badly when attempting to keep pace with the flood of ADPro updates which seem to add a new range of features almost

lthough graphically similar to the various third-party efforts, the real power of ProControl isn't that obvious. At its most simple processing consists of loading an image or range of images applying one or more operators, rendering in the format of





The ultimate in point and click, just select and inject – It couldn't be simpler



Automated multi-file processing made simple with the program's excellent range loader

your choice and saving-out as either individual frames or as part of an anim.

The next step up might be to composite two images together maybe employing the aforesaid operators to produce dissolves or maybe bizarre crossfades.

Better still, composition also allows animation between the two images - and thereby offers the first step to pseudo DVEs with one image sliding across its counterpart over a predefined distance and number

It's at this level where the subtle power the package starts to impress. In order to achieve the aforesaid DVEs the program uses two forms of incrementing variables.

In the first or F form, the software automatically calculates the increments between two points over a specified number of frames. In the second or D form, a fixed increment is added by the user and the software simply applies this amount from a starting point over the desired number of

Obviously to achieve movement across a backdrop some form of incrementation is essential. However in a stroke of pure genius the designers of ProControl have added the option for using increments in every ProControl requester requiring input from the user

As a consequence, variables can be applied to operators such as perspective, sphere, refract, ripple, rotate... the list goes

on and on. The end result is swirling statics and better still, animated animation

Courtesy of ADPro's anim loader, even existing anims can be processed to procure animation within animation - pseudo DVEs at a stroke, and better

DVEs at a touch

At last a friendly face for ADPro that makes astounding special effects a simple matter of point and click...



still it's really easy...

As if that's not enough, various scripts can be strung together, so for example an anim or static could be loaded, scaled and transformed into a ball within one script and then zoomed out with the assistance of the perspective operator in the second

When life becomes more complex - as in the example listed above - ProControl offers a brilliant touch of forward thinking by allowing the user to select files that - as vet - do not exist.

#### VIRTUAL FILES

OK. I know that sounds a bit confusing. but in practice it simply means that the program keeps a record of all the files which will be produce by the script. As a result you can select these virtual files - which it knows will be created when the script is run - but as yet only exist in the program's

In addition, the point at which an operator or composition increment is applied can also be defined. For example, to move an image across and then down a backdrop you would simply add two loaders. The first gives the horizontal variable increment and distance and the second the vertical.

To apply over 30 frames with a change in direction half way you simply click on the loader lines - within the script window - and set the frame in/out at 1/15 and 16/30 respectively. When processed the anim or files would show an image sliding over the defined distance with a direction change in the middle.

With this kind of power there's no reason why a combination of variables, operators and the frame in out options couldn't emulate even the most complex DVEs, as seen on

The real beauty of the package is that it can be as simple or as complex as you want it to be. At the most basic level you simply click on the loader, perhaps followed by

Next you define the screen format and dithering prior to rendering with the execute button. Lastly simply pick a saver and run the script. Whether it be one image or 1,000, the effect will be the same - a whole directory full of designer graphics

Whether you want to add animation or composition is your choice but if you do there's relatively little effort involved on the part of the user.

As you've probably guessed I'm more than a little impressed with ProControl and in my opinion at least the impact of ADPro is increased tenfold by the presence of this spectacular add-on.

Don't miss next month for a look at ADPro2.3, the mysterious Sentry - plus the usual array of upgrades on both the firm and soft side of the Amiga scene

Remember, ProControl requires ADPro 2.3 to operate, so make sure you're either upgraded or invested in the very latest version before you invest.

# SERIOUS SOFTWARE



A small selection from the vast range of titles we stock.

none for a complete price list containing over 600 titles including great value compilations.

TITLE	PARE		TITLE	PRICE		TIME	PRICE
1869 (A1200)	19.99		D-DAY	20.99		A-2 ZOMMHELL BROWN YOM HO	10.99
40 SPORTS BOXING	8.99		D-GENERATION	11.99		OPEN GOLF	18.99
4D SPORTS DRIVING	8.99		DESERT STRIKE	20.99		OVERDRIVE	18.99
A-320 N AMERICAN	22.99		DIZZY COLLECTION	16.99		PACIFIC ISLANDS/TEAM Y 2	17.99
*ABANDONED PLACES 2	20.99		DIZZY PANIC	6.99		PIRATES	9.99
ADDAMS FAMILY	7.99		DOODLE BUG	16.99		POPULOUS & PROMISED LANCS	
ALIEN BREED 92	8.99		DOUBLE DRAGON 3	5.99		PREMIER MANAGER	18.99
AMNIOS	18.99		P DRAGON S BREATH	7.99		PROJECT X	9.99
AMOS PRO	23.99		DUNE 2	19.99		* PUTTY	9.99
ANCIENT WAR IN SKIES	23.99	w	F18 STEALTH FIGHTER	11.99		RAILROAD TYCOON	17.99
- APOCALYPSE	16.99		FACE OFF	7.99		RAVING MAD	9.99
AQUATIC GAMES	18.99		FALCON	11.99		REACH FOR THE SKIES	19.99
ARABIAN NIGHTS	15.99		FIRE & ICE	16.99	102	RISKY WOODS	16.99
ARMOUR GEDDON	10.99		FLASHBACK	21.99		ROBOCOD	10.99
ASHES OF EMPIRE	10.99		XIRT DIARRO BIO ALLINOOT IN	17.99		R080C0D A1200	15.99
ASSASSIN	16.99		GOAL (1 MEG)	19.99		ROME AD 92	15.99
- ATAC	23.99		GRAHAM GOOCH CRUCKET	20.99	1	SABRE TEAM	15.99
ATOMINO	10.99		GLOBAL GLADIATORS	16.99	20	SENSIBLE SOCCER 92/93	16.99
A-TRAIN	23.99		GUNSHIP 2000	23.00	10 1	SHADOWORLDS	15.99
A-TRAIN CONS KIT	10.99		HERO QUEST 2	18.99		SILENT SERVICE 2	17.99
<b>◆ AV8B HARRIER</b>	19.99		HILL ST BLUES	7.99		SIM CITY DELUXE	25.99
8-17 FLYING FORTRESS	23.99		HISTORY LINE	21,99		SIM CITY/POPULOUS	19.99
BARBARIAN 2	10.99		HUMAN RACE JURASSIC LEVELS	16.99		SIM LIFE (A1200)	23.99
■BAT 2	21.99		* HUMANS	12.99		SOCCER KID	19.99
BATTLE ISLE '93	15.99		HUMANS DATA DISK	13.99		STARBLADE	4.99
B C KID	16.99		RIDY JONES PATE OF ATTUALITIES	25.50		STORM MASTER	8.99
BEAST 2	10.99		SHAR-LESEND OF FORTRESS	10.99		SUPERSKI 2	4.99
BIG RUN	5.99		ISHAR 2	19.99		<ul> <li>SPACE HULK</li> </ul>	19.99
BILL S TOMATO GAME	10.99		JAGUAR XJ220	9.99		SPACE LEGENDS	20.99
BLADE OF DESTANY	27.99	IR	JIMMY WHATE'S SNOOKER	10.99		SUPER CAULDRON	16,99
BLASTAR	16.99	ш	DOE & MAC	16.00		SUPER FACE	17 99
BLUES BAOTHERS	10.99	-	KID GLOVES 2	10.99		SWIV	7.99
BODY BLOWS	17.99		KNIGHTMARE	10.99		SYNDICATE	23.99
BOSTON BOMB CLUB	4.99		LEGEND	10.99		TENNIS CUP 2	7.99
BUDOKHAN	9.99		LEMMINGS 2	17.99		TEST DRIVE 2	6.99
BURNIN RUBBER	16.99		LEMMINGS DOUBLE PACK	19.99		THE GREATEST	19.99
CAMPAIGN MISSION DISKS			<b>* LETHAL WEAPON 3</b>	9.99		THEIR FINEST HOUR	15.99
CAPTIVE	10.99		LION HEART	16.99		THE PATRICIAN	21.99
CENTREFOLD SQUARES	8.99		LOOM	10.99		* TITUS THE FOX	9.99
CHAMPIONSHIP MANAGEF ST	18.99		LOST VIKINGS	20.99		TRODDLERS	10_99
CHAOS ENGINE	16.99		# LOTUS THE FINAL CHALLENGE	12.99		TROLLS (A1200)	16.99
CHUCK BOCK	8.99		MAELSTROM	23.99		UNIVERSAL MONSTERS	18.99
CHUCK ROCK 2	18.99		MANIAC MANSIONS	9.99		WALKER	20.99
CIVILIZATION COMBAT AIR PATROL	23.99 19.99	1	MAN UTD EUROPE	7.99		WAR IN THE GULF	20.99
COMBAT CLASSICS			METAL MUTANT			WING COMMANDER	10.99
COOL WORLD	9.99		MIG 29 MONKEY ISLAND 1	9.99		WORLDS OF LEGEND → WWF 2	16.99
CREATURES	15.99		MONKEY ISLAND 2	25.50		• A010	9.99
CRYSTALS OF ARBOREA	4.99	1	• MONOPOLY	17.99		ZOOL	15.99
CURSE OF ENCHANTIA	15,99		MORPH	15.99		MOYSTICKS	10.18
CYTRON	10.99		MYTH	7.99		MICHAEL MICHAE	5,99
DALEK ATTACK	11.99		NO SECOND PRIZE	15.99		QUICKSHOT APACHE	5.99
DARKSEED	19.99		ORITUS	10.99		QUICKSHOT PYTHON	8.99
AND DESCRIPTION OF THE PARTY OF							
0480	4988	9	PHONE FOR A COMPL LIST OF OVER 660 TIT	LES		0480	1963

at

All Items are subject to availability. Prices can be subject to change. E & O E.
g: UK = 75p per item 2nd Class; £1.50 per item 1st Class; £1.80 per item 1st Class Recorded.

EEC post = £2.75 per item; non-EEC = £3.75 per item;
Express Air Mail = £4.75 per item.

Titles marked with a \* may not be released at time of going to press. Please press lone for availability and a full copy of our terms and conditions.

Titles marked with a \* are available at price shown while stocks last.

VISA

BE ENTERED ONTO THE ECU DATABASE

Huntingdon, CAMBS PE17 4LF

NAME	8		
ADDRESS	No.		
	4		
POSTCODE			
ITEM	PRICE		
ITEM	PRICE		
ITEM	PRICE		
Visa/Mastercard/Switch Number:	POSTAGE		
	TOTAL		
Switch issue No: Card Expiry Date:	Make cheques payable to: European Computer User & send to:		
SIGNATURE:	Units A2/A3 Edison Rd,		
TICK THIS BOX IF YOU DO NOT WISH TO	St Ives.		

# **New Horizon Computers**

The Hard Drive Specialist

#### A1200 Hard Drive

£475.00

INCNAT & DELIVERY

*40 MEG* £399.00



Sizes Available **Call for Latest Prices**  SPECIAL OFFER

**INCLUDES 2 YEAR EXTENDED WARRANTY** 

#### HARD DRIVE DIY KITS FOR A1200 OR A600

**INCLUDES HDTOOLBOX AND INSTALL3.0/2.0** 

#### PHONE FOR LATEST LOW LOW PRICES

20, 40, 63, 80, 85, 128, 137 & 210 Meg in stock now!!!

☆☆☆ INSTALLATION ☆☆☆ New forizon will collect your Amiga, fit the drive of your choice and deliver it back to you within 48 hours. Full 12 month RTB

Warranty on your Computer when we install the drive. Wang UK carry out our repairs. Phone our Sales Hotline for further details.

☆☆☆ SPECIAL OFFER ☆☆☆

#### A1200 BLIZZARD

**32 BIT TRAPDOOR** MEMORY AND FPU ACCELERATORS

Includes Real Time Clock and Zero Wait State Memory

CONFIGURATION	PRICE
4 MEG 32 BIT FAST MEMORY	£169.00
4 MEG PLUS 14 MHZ 68881	£218.00
4 MEG PLUS 20 MHZ 68882	£248.00
4 MEG PLUS 33 MHZ 68882	£268.00
ADDITIONAL 4 MEG MEMORY	£149.00
	4 MEG 32 BIT FAST MEMORY 4 MEG PLUS 14 MHZ 68881 4 MEG PLUS 20 MHZ 68882 4 MEG PLUS 33 MHZ 68882

#### HOW TO ORDER



1. By Phone. Next day delivery on small items please add £5.00. Next day delivery on Computers, Monitors and Printers add £12 00



2. By Post, Send a cheque or Postal Order made payable to New Horizon Computers and post with your order to

> New Horizon Computers (Mail Order) High Hope, Lea, Ross on Wye, Herefordshire, HR9 7LN



**CREDIT CARDS WELCOME** 



SALES HOTLINE 0989 750260 TECH SUPPORT 0989 750337

# next month's AMIGA

Not just one, but two disks, full to the brim with, among other great programs, CHLIGHHI, a fully-functioning solid 3D modeller and animation system that you can't afford to miss



Caligari offers unrivalled ease of use, powerful object creation tools plus sophisticated shading and rendering - it's

all to be found on one of Amiga Computings MIGA

CoverDisks next month!

Make sure you don't miss out on this fantastic issue On sale Aug 26

Keeping you right up to date, we take a first good look at the Amiga CD32 the world's first 32bit CD console, and Video Toaster, the television studio in a box which produces digital video effects. Thanks to the new PAL version, it can at last be used on British systems.



liquing the towadown on Brittlance, the latest point and entiretion package for the new AGA chip set. And don't miss our Survival guide to modems - it's got everything you'll ever need to know.

Two disks - Caligari, the full program - Video Toaster - Amiga CD32

#### **High hard** drive transfer rate



Like Martin Grundy (ACAS issue 61), 1 too couldn't get MaxiPlan4 to

work from my A1200 hard drive, in spite of copying all the files and using an assign statement in my startupsequence.

When I read his letter in the June magazine, I tried your solution and MaxiPlan came to life from my hard drive so I suspect that I used improper syntax in my original assign statement.

While the main program now worked, the Help function for each menu still wouldn't work. Each time I tried to access Help, the screen would flash and the main screen would

The reason I'm writing this note is to offer some advice that may help some of your readers with this and possibly other problems with software on their hard drives.

I had an earlier problem getting Pacific Islands to work from my hard drive in that the opening animation played most of the way through and when it got to the end it simply

When I checked at the local Commodore dealer, the salesman suggested that the maximum transfer rate on my drive might need to be

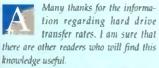
He gave me a number to try and sure enough it worked. I only changed this number on my games partition, since the programs on other partitions worked fine

When the Help function of MaxiPlan wouldn't work, I tried it on the partition containing MaxiPlan and once again it worked. Here's the information that may help some frustrated hard drive users:

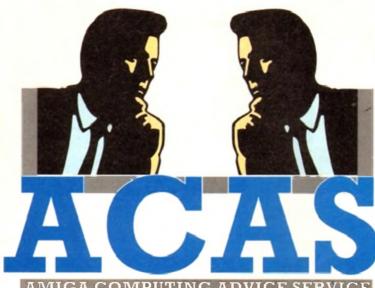
From Workbench 3, double click on the tools drawer, double click on the HDToolBox icon, click on Partition Drive, click on Advanced Options then click on Change. This will allow access to a box labelled Max Transfer.

This was set at 0xffffff and the rate I was advised to use is 0x1fe00. After changing the Max Transfer click on OK, Save Changes To Drive then Exit and reboot.

Bob Stinson, Maple Ridge, Canada



We would like to answer your unpublished questions regarding reader offers but have misplaced your address. Please drop us a line and we'll forward the information.



AMIGA COMPUTING ADVICE SERVICE

Beginners' questions galore this month with advice on dodgy drives, A1200 compatibility, using CoverDisks and more

#### **Binary basher**

I have had an Amiga for some years now and have all the issues of Amiga Computing, but I have never seen an explascreen when a binary file is read. The attached sheet shows what I mean, and is a part of the WB2.0:utilities/display file. It looks like the higher numbers of the Ascii code and is obviously related to machine

I would very much like to see an article on this subject which would explain what it is and how it is related to machine code.

The same query applies to hexidecimal code and its relationship to machine code. A tree diagram showing all of the high level codes and the stages they go through to actually operate the Amiga would, I am sure, take a lot of the confusion out of codine.

D J Lewis, Newbury

It is unlikely that you will ever see an explanation of binary files such as the one you refer to as they are executable programs and meaningless to humans when displayed using a command such as Type. The way to go about producing such files is to write a program, using a text editor, their compile it using a compiler of assembler, finally the resulting object code may be linked with the system libraries to produce a program that is

It is however possible to decode executable files using a tool known as a disassembler. The result is a screen full of strange looking characters and a translation into more readable

Trying to work backwards is not a good way to learn how to code. If you are serious about learning how to program the Amiga, forget about binary files and take a look at assembly language, C, Pascal, Amos or any other language.

Once you have gained some fundamental programming knowledge it is also advisable to obtain the ROM Kernel Reference Manuals which explain how the Amiga's operating sys-

#### CoverDisk Calamity

I carried out the instructions for decrunching the CoverDisk as described in the magazine and finished up with two separate disks; one for Infofile and the other for Scala.

When loading Scala the program continually crashed and on one occasion the computer went completely dead until I switched off and rebooted. I am now too scared of trying that

When the Infofile is selected a requester appears with the following information:

> Type can't open sys: INFOFILEBLARS object not found Do you wish to continue

I replied YES, then this was opened onto the screen:

Can't open format for input Can't open (z for input Can't open Endif for input Can't open Echo for input Can't open Failat for input Can't open Endell for Input Can't open Infofile.izh for input

I am a beginner having had this A1200, my first computer, for only three weeks and the above information is so much Greek to me. Nothing in any of the manu-

I've sent the disk back in order to check whether that is at fault but have not ye had it returned. Any help you can give my will be greatly appreciated.

F.R. Fisher, Doorer

The error messages that you have told us about are generated because the Amiga could not find the files that our program asked it to access. The program tries to execute commands which it looks for on the system disk - the one that was used to boot the

As you probably used the Workbeach disk, it became the system disk and hence our program couldn't find the files it needs to unarchive Infofile. The solution is to boot your Amiga using our CoverDisk before trying to run any programs that are on it.

Quite a few novices have contacted us

## Floppy failure



I am a computer novice. I put software in the disk drive and let the machine do the rest! I have come across an annoying trait when attempting to load legitimate disk copies.

This has developed gradually over a period of time. I place the copy in the internal disk drive, a whirring noise accompanies the disk drive light, to be followed by the message Not a DOS Disk in DF0:

When I use the original disk in DFO: it works fine. It also doesn't make any difference which way the copy is made, eg Workbench or MiniOffice disk utilitles.

However, when I use DF1: the offending copy works perfectly. This results in me working predominantly in DF1:, using repeated disk changes, a thing I had hoped to avoid by buying an extra drive.

Mike Birch, Lincolnshire

The good news is that the problem is not due to a virus, although regularly checking for these is always a good idea. The bad news, however, is that the read/write heads in your internal drive may have become mis-aligned.

If this is the case, your local Commodore dealer should be able to re-align them. It is also possible that the heads are dirty, so ask your dealer to check this too.

#### **TECHNICAL HELP**

regarding similar problems in using programs on Amiga Computing CoverDisks. They have received messages that files are missing when they do actually exist on our disk.

Further problems can arise if the CoverDisk has not been used to boot the system. As part of the boot procedure, the Amiga reads a file called the startup-sequence. This file often contains AmigaDOS commands to tailor the computer system and prepare it for some of the programs that appear on our disks.

This is also true of the disks that we archive in order to give away more programs. In order to use our disks it is always necessary to boot from the disk which contains the program that you want to run, rather than from the Workbench disk.

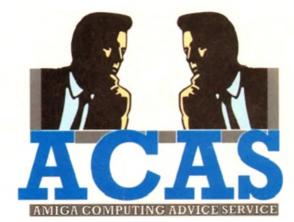
While on the subject of Infofile, some readers have discovered that it is only possible to store a limited number of records. The reason for this is that they are saving to the unarchived disk which is already quite full. It is advisable to format a blank floppy and use this

When saving an infofile, delete the text in the file requester and enter the data disk name followed by a colon (:) then the file name which should end in dot FLR (.FLR).

To load an infofile from the data disk, insert it in any drive and select the Open option. Click on the Drive gadget until the name of the data disk appears then select the file that you wish to load.

) A1200/

compatibility



way it appears if one tries loading straight from disk

I immediately thought it was a hardware fault and duly got Wang down to sort it out. Their engineer thought it was a machine fault and replaced the machine, reinstalling my hard drive. He went away and I thought the problem was solved so I played the game. It crashed again.

I phoned Wang but after explaining the problem, they felt it was most probably a software fault. I rang to speak to David Dibnah but was told the bad news that he had left. I was then told to write in and hope to get my answer that way.

I hope you can help. Is this a software or a hardware problem raised when the enhanced chipsethis selected on h

Mr B K Oliff, Cardiff.

both mouse buttons while booting their

#### Dried up Fountain

I own an Amiga 600 and I have just got another disk drive. My problem is that when I try to use the Fountain program on the Extras 2.0 disk, it comes up with:

Cannot Open Diskfont. Library version 37.

In the manual it says to enter this line in the User-Startup file:

Assign font: Asigafonts2.0 DEFER

V Horton, Rochdale

I was very pleased to get Pacman as a CoverDisk program but after all the trouble it has caused me, I wish I'd never seen guidelines laid down by Commodore.

I loaded the Pacman program onto the hard disk of my A1200 and to run it I had to use Enhanced Chipset but I didn't mind that. What I did mind was the game crashing on me and the screen going back to the This is a software problem caused by the programmer failing to follow the programming

In order to play the CoverDisk Pacman, disable the CPU cache as well as selecting enhanced chip set from the boot options

New A1200 owners, who are wondering how to access these options, should hold down

There are actually two problems here, the first is that you have mistuped the AmigaDOS command. There should be an safter the word

The other problem is that the system cannot find the file Diskfont library which should be present in the Libs directory of your system disk (ie the disk you booted from).

It can be found in the Libs directory of the Workbench disk so booting from this disk should sort matters out. If not, the file is missing and you need to copy it across from the original Workbench disk.

To do this, boot from the original, insert your boot disk in DF1: and open a shell window. Now enter the AmigaDOS command:

Copy df0:Libs/Diskfont.Library to df1:Libs

When you boot from your usual work disk, you should find that Fountain runs correctly.

#### Maxiplan saving

I bought a copy of your Maxiplan 4 book, but cannot save any work. I chose save from the protect menu and entered "one" into the edit box above the words Maxiplan:4/maxiplan worksheets. On being told the disk was full, I tried a formatted disk to be told that it cannot be created and "Please check the the format of your file name". When I changed to DFO: I was told: Not a DOS disk in

device DFO: The computer is a 500 Plus and I would be very pleased to hear from you regarding what is probably a simple matter but for my computer inexperience. Alan Feldman, Middlesex

When a requester appears telling you that a disk is not a DOS disk it means that it has not been formatted (or is commercial software that is copy protected).

The first thing to do is to load Workbench. then formal a disk by clicking on its icon and select Initialise (WB1.3) or Format Disk .. (WB2.0 and higher). Use the rename option to change the disk name to something useful like MyMaxFiles.

Now when you want to save from Maxiplan you should specify the disk and file names in the requester, for example:

MyMaxFiles:FileOn

#### Modem muddlina

I have been given a modem made by Master Systems (Data Products) Ltd. The person who gave me the modem has lost the manual.

I have tried getting a replacement manual for the modem but the company wants £30 for one (which is a bit expensive for me). I was wondering if you may have come across the modem or if a reader has any details about it?

All I need to know is the DIP switch settings, the commands necessary for use on a BBS and what the nine modes are. I would be very grateful if you could help me with this problem. Below are all the details about the modem that I know:

Master Systems (Data Products) Ltd MSI 2123 Revision: REV 2 UK Model 21/23

Peter Thomas, Slough

Unfortunately we don't have any details of this modem so we are unable to tell you what the nine modes on the dial are. Perhaps one of our readers has this model and will be able to help you out. Comms software and related topics are covered regularly in Amiga Computing's Amiga Insight section. Basically you will need some terminal emulation software, such as Ncomm, which is available in the public domain.

The actual commands that are entered to navigate a particular BBS will depend upon the software that the board is using. However, all good boards have a help facility and are auite easy to use.

You got problems too? Then drop a line to Amiga Computing Advice Service, Europa House, Adlington Park, Macclesfield SK10 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAEs.

#### Inter-machine file transfer

Here's one I bet you can't help me with! A long time ago I had a 520ST (well wash my mouth out) and produced many pictures using Neochrome.

Eventually, having come to my senses, I sold off the Atari and bought an Amiga (1.2) A500. I have now worn that one out and bought an A500 Plus rather than an A1200 which sounds great but would not load most of my software.

Anyway, what I need to do is load the Neochrome pics into a program that will convert them into IFF picture files. There must be a way. I have tried some programs that say they can convert (such as Grinder) but they hang up as soon as the Atari disk is put into the machine.

Please help as I wish to compile a book featuring these pictures and with luck make loadsa money!

Tony Adams, Gillingham

This problem breaks down into two smaller ones. One is to convert the file format, and the other to transfer a file from an ST disk to an Amiga one.

I am reliably informed that ST disks use the same formal as IBM ones. If you still had access to an ST, the file format could be changed using GemView and then read by the Amiga using Dos-to-Dos, MessyDOS or any similar utility.

As you have sold the ST (good move), the way to proceed is to copy the files to an Amiga disk, using one of the above utilities, then change the file format using one of your file transfer

I suspect that the reason Grinder failed is because you asked it to read from an ST format disk, which it was unable to do.

# JBLIC DOM

**NOW ALSO AVAILABLE** FROM HARGWARE IN

STRICTLY PD, Dept AC, 11 YORK PLACE, NR BRANDON HILL, HOTWELLS, BRISTOL BS1 5UT AUSTRALIA

## **Keeping Public Domain at Strictly Public Domain Prices**

#### LATEST DISKS

A1200 DEGRADER - Makes some A1200 incompatible C.HANUAL (4 data) - Hundreds of sources of source HO034

code etc (\*) BASIC TUTIOR - The first steps to issuring how so

program Arvins Basic (\*)
TEXT BYGNE V3 4 - The latest various of this commercial
sulfits workforcombin (#)
C64 BYSLATON (2 Disks) - Emulsions the C64

PECTRUM EMULATOR - Non corner complete with LILIOTA

stand (\*)
POWELLOGO VI 2 – The best loss package in P.D. [\*]
ANGADO: - Keep your informes at on conjugat (\*)
PORMS REALLY UNLIMITED – Cresses your own forms

#19CRI ett (\*) COMPOSER V2.0 - Create your own musical masseryleces with stores a noom (\*)

CAPTIONATOR - Product stricting messages for video

LIGI CELEBRITY IMPERSONATIONS - Ever had problems leaving a message on your answer places, this 4 dish licenceward not features recorded messages from Dame Edna, Bob Geldonf, The Queen, Robill Day, Ester Ranczen and costs £4.00 (\*)

TYPING TESTER - 5 rests to check your typing capitality

MAGNUM VI D - Creme a brilliant del megizne ico LIMBAR

NO BUICKS - Makes unusable hard errored floppies and hard date scholle by fiding the demand process (s) LOG RIFO VI 2 - Ange shopper and this is one of the Best straward strops round. Helpf abbraits your phone costs when an eng. Nooren (s) 19 SON APETIT - Keep 1 record of your recipes - some

included (\*)
STOCK BACKER - Keep table on furthercore on the money

L003 THE FINAL FRONTIER - Having recently received a 10/10 rating this superb Star Treis Fanzane is now licensewers and costs just 66.00 for the 4 disk set

#### GLIP ART

The Clop art in the collection is which quality.
Huge bettings, many marker than an Arrigo Hires screen.
For use in Dipairto in packages.
Each disk authorities as a sittle-show allowing you to view
the entire betting by moving the mosting the mouse.

emore bemap by moving the moving the Weddings (its art Q dista) \* Mouster - perceived in marcons Q dista) \* Reliscou - ful of hosy (its art Q dista) \* Well Aurority (it dista) \* Well Aurority (it dista) \* Wenner Q dista ful of more at work \* Women Q dista ful of more at work \* Women Q dista ful of more at work \* Women C dista ful of dista) \* Office - more of the same \* Suderic Relia full of part \* Safetyne - safety at all in colores \* Safetyne - safety at all in colores \* Safetyne - safetyne of C dista) \* Pende - caraboric etc. (I dista) \* Pende - caraboric etc. (I dista) \* Anneau - e sage safetyne y etc. (I dista) \* Serooli (Z dista) \* Serooli (Z dista) \* Illabora \* Serooli (Z dista) \* Illabora \* Sporta - (I dista) \*

Blabes \* Calalal \* Olympic - more sporting south (2 data) \* Predict day at 12min) \* Sal Maria - 12min) \* Sal Maria - 12min) \* Sal Maria - 14min - 12min) \* Decompere mornta - pic for every month \* Wasky compty day at \* Holdiny \* General \* Official \* Second \* Official \* Official \* Second \* Official \* Official

Hohdiys \*
Barneri (2 disa)
Barneri (2 disa)
Art Navvisu - faral art \*
Butterfies \*
Foot - cufrer cless(2 disks) \*
Cotus rig Reos - Cotbur ili Dipare
Borders - for use in DTP (2 disks) \*
Morritack - sortic clis art \*
Morritack - sortic clis art \*

rac Cup - during macuni (2 disks) \*
Hormback - somic cip art \*
Teddy i Biens (2 disks) \*
Yanny Far - Panhon clos (2 disks) \*
Hallowson dip art \*
Snowsmin - dancine snaing etc \*
Yegeturian cip art \*
Romi - il 4 pact \*
Hysicol - vacri and acclass \*
Dig isoodcus \*
Cia = roodcus \*

Mored animal woodcurs is Birds woodcurs in More animals if Animal insert in

anustes energy \*
Fathly scenes [2 disks] \*
God numour (2 disks) \*
Space and transport \*
Solscone 2 - rural clip art \*
Sports 3 \*

Sports 3 \*
Nevy - tots of nevy type pics \*
Travel (2 data) \*

Border and alphabet clips \* Acents and fashes \*

We now have FRED FISH 1-750

#### USEFUL UTILITIES

UU027 Filolisi – Reminds you of important appointment UU028 Bitle (4 disks) – The complete King James Bitle

UU029 Tarot II - Read your own stars (2 disks) U384 Cyclops VI.O. Art creation package: Create Plasma

etc. (+) Professional D-Copy V3.0 - As good as most commercial coolers

commercial copiers. Intro Malium Kit – Malie dwin unitro screens with IPF (848, digitated samples and verocal/horizonical scrolled

Multiplayer - Onims to be the most powerful

versable music player for the Amiga (\*). Kefrere Fort Edeors and Boot Meru

Label Maker - Make your own

UU030 Understanding Amos – success! (\*). US08 175 Uplicits – The most on

one disk usni Fowerbase V3.2 - Powerful and user friendly

database (\*).
Thrallbound – Contains speicheds VI.3 and Examine VI.0 which help you so learn and sests you on foreign

sords. Also a good text adventure game (+). The main event – set a dice and your Amiga will remind you – cross between calendaristarm clock (+).

Wordpower VI.3 — Word Utility: Spell Checking, Crosswords, Anggram solving (\*). P.C. Emulator — Runs most P.C. Business Solviana.

Plus! [13 disks) – 13 Disks crammed with programs info ecc. Enterely for ASO0 (4) and A600 users (4).

Recommended (\*). Strictly P.D. Essencal Collection (4 disks) – Jam packed with uplices, games, music creators and printer utils

UU001 A-Graph - Very easy to use - Make bar & line graphs -

# pie charts (+) UU001 CU Torontal – Lagranal about projets Garen 70% Gong in mogazini +1 UU001 1+255YSID V2 – Anada and wrong PC dals. Gaven

magazine rating of 95% (+) ULI004 Pools Predictor - Increase your chances of becoming a millionaire (\*)

UU005 Date Optimiser – Britishrdy simple! Any d to 15 times faster. Mag rating of 93% (+)

UU004 ASOO Plus Emulator – Emulate the Amiga plut on your 1.3 Amiga Really works (I'mag rea) UU007 Freecopy VI.1 – Removas password protection to

allow copying (+)
UU008 Cursor VI B – Compiler for Amiga basic programs (4)
UU009 Browser II – An alternative to SID, Some may find it easier and better. Very popular! (+)

USUB18 PC Task VI OI - Powerful multitasking PC emulator, supports CGA graphics. MS DOS, Floopies and even your Hard Drive (+)

UUEI I NB V2.0 - Removes prosection and copies. Very

powerful (\*)
UU012 Gators Graphic Gallery – Examples and step by step tutorials on how to create professional logos like ones lound in demos (\*)

UU013 Fish Tank Sim – Smulazes an aquanum (\*)

UU014 Analocalc Spread (2 dists) - This is the bes

screeds eet program to date on the Amigs (+)
UU015 Amigs Punt Program - Predict which horse wil win from past form (+)

UU014 JA Comm vI 02 – Latest version of this useful modern program (\*)
UU017 Bestrick Potter Clip Art – An

excellent collection of clip art for any DTP program or D-Paint (+)

UII Program or Differt (9)

UIII B Promg and Graphics (2 disks) - Contains a
powerful full flatanced plotting prog, and a
computer aided disability grog. (4)

UIII DB - A database with up to 50 fields, max of about 1.2

million records (+)

million record (\*)

UU023 Home Manager - A great all in one address book with an investory damease \* to do list (\*)

UU021 Azero Pro Astrology - The best astrology program on the Ampa by fax (\*)

UU022 Multidos VI.12 - After this disk has been installed your

Amge drives can read IBM disks (\*)

U0014 Textplus Y4.9 (E) – Latest update of this excellent word processor program. Now compatible with Text the professional hyperetting grog. Found in the fish

collection (\*)

UO025 Arros Lesson I – Find out how to get the most out of Amos. Had good review (\*)

UO026 Edward 2.2 - Best text editor around. Received 9 (0) from Amiga Shopper (\*)

UO027 Megacolour VI.0 - A program which transforms a bive

screen into a full colour screen (+)

We now have T-BAG 1-61

#### GAMES & EDUCATION

We now have Assassins compilation games 1-41.

Total Concepts (2 disks) — Very well presented stary basis about Astronomy and Dinamum (\*) American Football Coach — Play the role of an American football

103 American Footbill Cased — Pilly this rotic of an American Footbill releases (\*\*)
103 Battlement - Serain on Hundrhack on the Spectrum and CM (\*\*)
104 Orbital — The last PO version of this claims being given. A fines still work and being the review where the work was region of the Spectrum of the

dates (\*) But Tali - Decume convey lever back problems, the causes and treatments green Liber detailed pics 4 prime (4) Transmy Log - Make a stended top of your fitness

grand; (4) Spand: Franci; German: Italian Tutors – Four grant language succes N015

A Year to the Red Planet - Guillel tour of Mars - hackward (\*) ADDAMS FAMILY - Help rescue the family in the spendid payl DESDEPACION + 12 - Esculus version of the

WAGGLE AWAY - Betters contact wagging gener DECENDER GAPE - Clore of a old areate climic temperat with

-lettorned graphics (4) ACT OF WAR - The risk done received a storling review from

Arrige Former (\*) GRAND PROCESH – See if you're got the brain to be the next Nigo ANNII - Addresse Missre him Bedging Lap my actor o

the arrang game (\*) GENERAL ELECTION - Take part in agreemal election with a

# apart stranger workers) 2 only SURS SCOR SHALESTE - Strat for throughts with part OFMUA (No DMUBD C - 4 pages on our mole makes transparent strangs grant 19 TANK ATTACK - Assessed to their HQ broading enemy const-

G)97 appoil stated are up (\*) TOP SECRET - Great text adversure with case graphics. Given 100% G198

of ministral review (\*). TOHCAT – By your F-15 agents overry plants, sings and gun TOWAYS (\*);
RIGHTER PLOT – Superty List World War Eighter shoot on up (\*)
CAND\_BOARD AND ANCADE GAMES – 1) great games on 1 day.
P.D. PLOZZES – Include passing yor + pusses relain Highty.

#### DEMOS & MUSIC

WAY P.CS - The creates H-Ret aics (veisions RAUNCHY SLDIS - Picture of pricts airs. SO-WAYZTOONS () diabs) - Packed with report carriers denies

by Enc Schwerz SAM FOX SLIDESHOW HARLA WHITAKER SLIDESHOW KATHY LLOYD SLOBHOV TARIA WHITAKELANIN

GRUS OF SPORT ALLETHATED

HADCORE II - Europies used straits and graphics
174. TECHNOMANA VI - West that man your RAF - excellent
HB70. NEW WAYE Signer your allower and bodge down
M405. EURESIONS 1 - 3 Tracks with 27 minutes worth of

M145 ALCATRAZ - More than must - Highly original MISS\_CHARTTECHNO! - 25 rest of altern4 reme MISS\_BANGING RAYE! - The 2nd Corning || | | | | | | | | | |

#### MISSY SUPPORTATION OF THE PROPERTY AND PROPE **BLANK DISKS**

#### **VIDEO PRODUCTION**

Video Production Package (4 disks). Given 18:10 rating, complete with \$0 page Instruction manual - £18,00 (+).

All disks are compatible with the A500.

Ihose marked with '+' are also compatible with the A500 (+) and A600

S-Movie - Smooth scrolling witeo otter (\* Turbottler - Add subtities to your videos (\*) TV & Votes Graphics (6 date) - Packed with beorground

screens for your video productions, different types of graphic sovies. Peel takes at IFF pic and peeb it slown the screen (\*) Video Production (3 dists) — Packet with index \* Genlock

Yideo Screens | - Bicoground pictures for video production

Video & Anex: Video DB – keeps track of your ⊀ideo tape collector, RTAP lets you run large atims on small mem

Image Lab - Like a mini art dept. Tools on cap - does fades

or bars & gray turn (+) Value Sellators - used to create over the shoulder graph of nurs the stell dictock news

Shades & Faites Animhater - A upling to faite screens in & out. Superview will deploy IFF pics. Turboools creases suboides (\*)

Antroids Back Video Grounds - Selection of B/G pictures (\*) Harlesun Video Art & Fore Disis (I dists) - After its review in CU Arrago shot to No 1 in sales chars, Escalant (4)

#### **CREATIVE UTILITIES**

Arrigiventure & Adveys (\*) make your own text adventure

es with these progs (4) Print Studio - Excellent for printing pictures or stats (4) Arimezion Studio - A brilliant arimi creator for you to male YOUR OWN STITISCOTS (\*)

using the X, Y & Z views Loads Scape ID 4D & Turbo

# CR005 Photolog Course - Consist year 10 vector staject in India Seasas Series Securi with CR004 Jeff in CR004 Pages VI.30 - Create your own day magazini.

Received 10/10 in review by Arrigo Shopper raig (+)
Strate VI.0 – Landscape Generator which allows printing of

them from any angle, any position & any magnification (\*) Amostrox VI. I(A) — The update has even more Fracal troos which include Loristic Equation, Coast Lines & Trace

Graphic Production - Utilities collection which contains scenery VI.O. Landscape. Lands-4d V3.2. Classid 9. Genese

FONTSLOGOS - Misses for use with D-Paint [\*] PROFESSIONAL DEMO MAKER - Create your own demo

SPEECH TOY - Get your Arriga talking (\*) VOICES - Add speech to your demos etc. (\*)

leater - spiendid stak (+) SUPA FONTS - Muses of them for use with D-Parit etz (\*) ELECTROCAD - Impressive package (\*)

Liata MCAD - Greet 3D Design Pictogs (\*) LAND BUILD 12 - Generate tandscapes and view from any

argle\_Arrazing! (\*)
ULTRAPAINT - Feb pairs puckage (\*) SCREEN MOD - Customise the way programs and screens

SHADOW DENO HAKER - 1 Brillians dumo making

USOD DEMO CREATOR FACK (6 DISKS) - Get the most out of

◆ CHEQUES/P.O's payable to STRICTLY PD

◆ Over 21 disks ONLY 85p EACH

♦ Buy 30 or more disks for just 75p each

 Only 99p per disk when you order 11 or more! ◆ Orders of 10 or less pay £1.25 per disk

◆ Please add £1 to all UK orders for first class postage, Orders from Europe please add 25p per disk and Rest of World add 50p per disk for extra postage costs

◆ Catalogue disk available only £1. Reviews of well over 1000

◆ The complete Strictly P.D. library is now available in Australia. To order a catalogue please send cheque or postal order for \$2.00 to Hargware, Dept AC, 29 Woralu St. Waramanga, ACT 2611, Australia

U241

SLIDESHOW MAKER - Shows how so present eldeshows in different ways (\*)

MANDLEBROTS - The best Mandlebrot generator around U112 ULTIMATE ICONS - Includes Icon Lab. Icon Master & Icon

U491 DKB TRACE - Excelore Ray Trace prog (+)

STRICTLY pd

DEPT AC. 11 YORK PLACE. NR BRANDON HILL.

HOTWELLS, BRISTOL BS1 5UT



EST. 1991



POR DISTRIBUTION ENGLISHED BY CHAMODORY UK

A600/A1200 IF TOU OWN AN AJ200 THEY DWY **KICK 1.3** 

EM400

# DELTRAX PD

Tel/Fax: 0492 515981

PUBLIC DOMAIN AND SHAREWARE AT ITS VERY BEST

A600 OWNERS **GET** NUMPAD EM397 TO GET MORE PROGS WORKING

BUSINESS

2 & 2 SPELL Spekd actor 1 LL min Laift Photograph TO MANUACIPALITY AND DESCRIPTION OF CAMPACIAN AND CAMPACIA

BLITER WATER TRANSPERS AT A STANSPERS AND A ST

HOBBIES

HOW CALORIE BASS

HOOS ASTRO 22 : 3 6 Land astrology
H307 FARM V HISTORY B-BASI
H310 TEN PIN BOWLING B-BASI
H333 ANIGA PUNT H010 FACING

HOSO DARTS LEAGUE O BASE

LAST WILL & TESTAMENT





EST. 1991

TO SECURE PLANT TO PROCESSOR AND A SETTING TO CONTROL OF SECURIOR SETTING TO CONTROL OF SECURIOR SETTING THE SECURIOR SETTING THE SECURIOR SECURIOR

BLOSS D LAB County

DUSCO LOGOTO C Promos bids for recotors

DUSCO LOGOTO C Promos bids for recotors

DUSCO LOGOTO LA TOP Specialistical

BLOSS G ROSS B. A TO Duschand

BLOSS DATABASE S HOW port

BLOSS DATABASE S HOW PORT

BLOSS DATABASE S HOW PORT

BLOSS DECEMBER S HOW PORT

BLOSS DECEMBER S HOW PORT AND TOP S CORP

BLOSS DECEMBER S HOW PAR A MORTE DOWN CORP.

HEER PERMICHECE OF A Pools products

MASI STRUMENT CITIES STOP:
MASI STRUMENT CITIES STOP:
MASI STRUMENT CITIES STOP:
MASI STRUMENT CONTROL
MASI STATE MASI CITIES
MASI CONTROL
MASI CONT

#### UTILITIES

I GADE THRUTTER Chromities, only 10 Uni 4 JAZZE ENCH Afternion Will 5 Charlandows Comes what!

HENDRALTIN VI | Covery to - plant and

DESIMASTIA DI EL-VEZOY DO -DECIMANA DEL PETRO DE DECIMANA DEL PETRO DE DEL MORI DEL MORI

O ZODAGE COMPACTED 1: 0 Programme 2005 Bits 1960 DRI-VTR, reppirer 3 est 2005 Bits 1960 DRI-VTR, reppirer 3 est 3 PRULEPARTE STUTIES count of ent 10 PRULEPARTE STUTIES Amende to ent 10 PRULEPARTE STUTIES Amende to 80 Bits 11 DECEMBER 1960 Bits 1960 AMENT AUGUST MENDER 19 CHANGE STUTIES TO BE 3 MENT AUGUST MENDE 10 CHANGE STUTIES TO BE 3 MENT AUGUST MENDE 10 CHANGE STUTIES TO BE 3 MENT AUGUST MENT AU

DESCRIPTION OF THE PROPERTY A

Single Darlysis of MULTIVA

OLDICATION TO THE ACTION TO TH

COMMUNICATIONS

C 26 COMMISSIANDE Needs G25
C 28 COMMISSIANDE Needs G25
C 62 AZ-COMM Modern programme
C 71 SUPERTEX v2.1 Videolin hern En
TC 76 MODERN UTILS Accessivi 4 Chief

COZZ JR COMM V1 M2 100 PRODORNO
CLEO TENNI M V1.1 COMMON PRODORNO
CLEO TENNI M V1.1 COMMON PROD V12.2
CLEO TENNI M V1.1 COMMON PROD V12.2
CLEOS OPTICOMON IN IL COMMO 2
COMMON PROD V1.2
CLEOS AMATEUR RABOO S 2 PRODURENT M
CLEOS AMATEUR RABOO S 2 PRODURENT M
CLEOS AMATEUR RABOO S 2 PRODURENT M
CLEOS AMATEUR RABOO S 3 STORM S
CLEOS AMATEUR RABOO S 5 STORM S
CLEOS AMATEUR RABOO S 14 AMATEUR S
CLEOS AMATEUR RABOO S 14 AMATEUR S
CLEOS AMATEUR RABOO S 16 AMATEUR S
CLEOS S

CS17 AMATEUR RABIO 17 ACCSS 1 42 ACCSS 1 42

AMATEUR RADIO 25 Commit 15%

**EDUCATION** 

TO EQUICATION TRIBET I Surrough Taken allo SE EQUICATION TORRE I Surrough the SE EQUICATION TORE I RETURN TOUGH OF FEBRUAR TORRE DOES I RETURN TOUGH OF FEBRUAR TORRE DOES I COUNTRY OF HEADER FOR THE SET OF THE SET I LEADING PLAY - Cash I INSTERN I LEADING PLAY - Cash I INSTERN I WORD GAMEN VIOL 1 I MATHER SOIL!

ATHS SIMILITY OF THE PROPERTY OF THE PROPERTY CONCUMENT SOMETHING SOMETHING SOMETHING OF THE ATHER STREET, AND AN ARREST OF THE ATHER SOMETHING OF THE ATHER SOM

It is in themes

PART IT Law taked states

PART IT MARKET AND BOTH TO THE STATES

TO COUNTY IT IT IN THE STATES

AND T

3 LAS MANUS.

3 R. GERMA

1 ALL GERMA

1 ALL GERMA

1 ALL GERMAN PARTY WITH WORTH

1 ALL GERMAN PARTY

1 ALL GERMAN PARTY

1 ALL GERMAN

MR MEN STORES AT JOSE SIVOL READ TORES ! AT JOSE !

INTERPORT HIS RE 2 Date Date puring pro

20 MMATTHE I VALUE 2 CHAIRS - DIS INDIFFICIAL SHARP AND PROBLEMS AND P

C187 VT 148 Terminal Em. C222 JR COMM v1.82 for moder

C DELTRAR UTILITIES 2 5 LITTE ERRECH ADERLEY WI II DROTHERWOOD UTERS 1 Discours 1 Mars Thermood UTERS 2 Johns All II DROTHERWOOD UTERS 3 Was Allers at II DROTHER COMER LIST 2 WAS ALLERS COMER LIST 2

METALL PERMITTED THAT HAS NOT THE DUMB WE ASSOCIATED WE ASSOCIATED WE ASSOCIATED WHAT IS WE ASSOCIATED WHAT IS WE ASSOCIATED ASSOCIA

A DAREST AND UTLANDA TO THE CONTROL OF THE CONTROL

COMPUTEREYES ICOMS

AMOS COMPLEX UPDATE VI 34

- AMOS COMPLER UPDATE VET 24
MEMORIAN BLOCK STORE STANDARD STANDAR

**EMULATORS** 

EM150 DM GAMES DISK 2 circular EM215 AM EMULATOR v2 8° (2 dues)

EM217,2X SPECTRUM EMULATOR
EMOSE MS-GOS PROGS-EOR PC 1ASX
EMO24 RICKSTARY 2

FM400 BICE 1.5 (lockstert 2 & 3 only)

EMIL12 FAKEMEN Digramm to 1 3/5126

CLASSICS

BOOKS ON A DISK Holps with your English Literature rovision All states run on ASSIC ASSIC (1800) A1280

THE STATE OF THE S

C. B. HERRY W PARTS I SEZ WHERE Y C. B. HERRY W PARTS I SEZ WELL COMESY OF ERRORS I THE SAME OF THE SA

CL19 WORKS OF MILTON 1. PARAD SIL CORT DL19 WORKS OF MILTON 2. POCHES SOMESTS TO: DL19 WORKS OF MORRE! THE LLAND OF MIL DL19 WORKS OF MORRE! THE LLAND OF MILTON DL19 WORKS OF MORRE! THE OF SOMESTS CL19 MAIN THAN 1-TO SEMEST ALL SEMESTS AND THAN THAN 1-TO SEMESTS AND THE MILTON THAN 1-TO SEMEST AND THE MILTON ALL SEMESTS MORSENADO. ALICE THROUGH THE LOOKING CLIES.

LIMITE SPECCY CHULATOR of 4

EM II SPECTRUM - 40 GAMES EM139 A64 v1.8 C84 emulato EM141 MeM

PC orrelator EM142 ST EMULATOR

FIATAL SPECTRUM THE 141 CM CAMES DISH 1 HOLD WITH

(M248 PC TABE

1.2 users gat that ENGET MUMIPAU (A600 ONLY)

#### PRINTER DRIVERS

\* PRINCER ORIVERS 12 Disks Loods of 472 O PRINCES DRIVER GEST PATER had you o Suby OF PRINCESS COVERS - DISK I PRINCESS OF PRINCESS OF DISKS I PRINCESS OF THE PRINCESS OF THE PRINCESS OF THE PRINCESS OF THE PRINCESS OF T

PRINTING GRAVERS UPDATE 3

9 BITE & BATE 2 Apportment of JETS 3 WORKSEWCH PLACES (8500, A600) IS PROF DENIC CREATOR VI. 1 IS SUFFLY POWER PACKERS

C-COMMANDS AND 22 20 UTILS PHANTASMACORIA PERSONS CONCRE

PHARM ASSANCEMENT TERMONY CONTINUES IN THE STATE OF THE S

EMBREES RIT DAJOSS: 1998 SELEPTES RIGHTE I JA1200 0001 LEIL TUGES FANTASTICA AYRII UTLE LEO LEGAL UTLE SE

LEO LEGAL UTILE SE

LSO LEGAL UTILE SA LSO LEGAL UTILE 42 LSO LEGAL UTILE 44

LOC LICAL WITH S SA

S-TEXT Test packet

LYAPONOVIA PICLINI (INNEXES) ARESTAURE United minoral his EAGT INTEG MINORER 5 P-COMPRESS PACHE

Star Epson Parasino

#### CAMON PRINTER BRITERS

POSS PRINTER DRIVERS CARON BATON
POSIS PRINTER DRIVERS CARON BATON
POSIS PRINTER DRIVERS CARON BATON
POSIS PRINTER DRIVERS COLL
POSIS PRINTER DRIVERS COLL

#### COPIERS

FLORE ACCOUNTS ACCOUNTS WITHIN TO NOT B. SE ARRIVADAY SET TO SENSITION BLOCK ASSETS TO THE PROPERTY OF THE SET OF THE S

7 (177 milet se 2 Diver 
177 milet se 2 Diver 
177

H 57 GENEADLOGY

H DE CROSSWORD DERIGHER H 148 A CEME

Family history
HTS GOLF RECORDER = 1.84
HTSS ROAD ROUTE USA
HTSS BETAID
M214 FOOTBALL LEAGUE EDITOR
HSSS AUTOGRAPH

CP147 PD COPY PROF vD & CP100 B COPY v1.6 Excellen CP234 PLASH COPY v1.8 Feet CP257 FREE COPY v1.8 Feet

CC2313 httl v2 ill Removal

EP340 ASI CREMICH "II" COPY 2 Collection CP341 COOL COPIER 12 B full & soft CP346 ASI DIEK COPIERS Collection

#### **GRAPHICS**

I SA AGU EMINERAL UTILITIES NO 24

BOUTH AND INCOME AND THE TIES BUT AND AND THE TIES BUT AN

REAL TIMES IS Disks | 30 Pics

BICK PARKS ART

240 NICK PARKS ANT 246 NOOTPIC YI 2 240 CLIP-ART PORTFOLIO (15 disku 261 LAAGE FONTS DISK (2 Disku) 268 SCAUNER CLIP-ART (3 DUNS) 268 PO CLIP-ART 260 ENILE FORTS

MILE FORTS

GUISSO DYNAMITY FORTS
BILLIZY PORTS & SUMMACIS
BILLIZY PORTS & SUMMACIS
BILLIZY CALIF ART COUL, III DIVENS
BILLIZY CALIF ART COUL, III DIVENS
BILLIZY CALIF ART COUL, III DIVENS
GUIZZ CALIF ART COUL, II DIVENS
GUIZZ S CONSTRUCT
BILLIZY BONNAMIT FOR NOTHING S
BILLIZY BONNAMIT FOR NOTHING S
BILLIZY BONNAMIT FOR SUMMACIS
BILLIZY BONNAMIT

ELZON CONTINUENT PURT A
ELZON SONIC DEV CONVERTERS PACK
CULPTO MENTRIX POTTER CLIP-ART
OLIVOO GELEGITE FORTS
CLISON RAY CAMEE (2 Dumn)
GUSTO T.S. P. PECTUME FORTS
ELECTI DISH MAMAGER - FORTS (Pun cry)

QU313 MOVE MARE!

QU314 AMRAITIONS BRIDGE VI 0

QU314 AMRAITIONS BRIDGE VI 0

QU315 DOCC QU316

QU315 DOCC QU316

QU316 DOCC QU316

QU316 DOCC QU316

QU316 DOCC QU316

QU316 DOCC QU316 QU316

QU316 DOCC QU317 QU317 QU317

RUG2 MARIOTIC PAGES VI J.

RUG2 MARIOTIC PAGES VI J.

RUG2 QU317 QU317 QU317 PAGE VI QU317

RUG3 QU317 QU317 QU317 PAGE VI QU317 PAGE VI QU317 Q

2 DIRECT ACTION A

CLICE IMPRICE ACTION AND creation
GLIGE IM A.R. Memobile of a file
GLIGE IM A.R. Memobile of a file
GLIGE FARE FAMIL Casy of DiPaint
GLIGE FARE FAMIL Casy of DiPaint
GLIGE FARE FORE SE Lumps & Armol
GLIGE FARE FARE SE LUMP & Armol
GLIGE FARE FARE SE LUMP & Armol
GLIGE FARE FARE SE LUMP & Armol
GLIGE FARE FARE SE SENDE FARE SE
GLIGE COLOUR FARES SE SENDE FARE SE
GLIGE COLOUR FARES SE
GLIGE COLOUR FARES SE
GLIGE FARES SE
GLIGE COLOUR FARES SE
GLIGE FARES SE
GLIGE COLOUR CLIP—ART SE
GLIGE COLOUR CLIP—ART SE
GLIGE COLOUR CLIP—ART SE
GLIGE COLOUR CLIP—ART SE
GLIGE COLOUR FARES SE
GLIGE CLIP—ART SE
GLIGE
GLIGE CLIP—ART SE
GLIGE CLIP
GLIGE CLIP
GLIGE CLIP
GLIGE CLIP
GLIGE
GLIGE CLIP
GLIGE
GLIGE CLIP
GLIGE
G

GU415 CONTACH CLIP-ART 2 Buildings, Xmax

Transport
GU-14 CONTACH CLIF-ART 2 Signs, Telthys.

Work

64366 WEW 3.2 Artim Player

64347 NAM LAB PRO V2 NB Picture converte

64447 RAAPHICE 10018.3

GUAIS RAYENADE (3 Disks)

#### SUPERB QUALITY CLIPART

20329 ANT DOE (2 Dates to 20.327 ANT TWO (2 Dates) H

ALUSSI MET THREE (3 Distor) For GLECO MET FOUR WAY) Arcist

OUSSE ANT FIVE (2 Once) Mor 62331 ANT SEE (2 Once) Worter DUSSE ANT SEVEN (2 Dinney Gelo

(0.00) AND ENDIT OF DUCCH AND MORE Office DUCCHS AND THE STADES

231 ANT (1 EVEN SION 137 ART TWELVE (3 Down) Eventson 136 ANT THARTESH (3 Down) Eventson 136 ANT THARTESH (3 Down) 130 ANT POLITICEN Assents

GLIND ANY POTTERN CON DEDIT ANY STATES STreamen GLIDAY ANY SEVENTERN (2 Outer School SLIDAY ANY REPORTERN (2 Outer School SLIDAY ANY REPORTERN (2 Outer) Sport

#### **VIDEO WORK**

V 99 CATALOGUE WORKEHOP 1

Y179 WIDEO APPLICATION UTILS Y180 WIDE FORTS 1 V220 WIDEO GRAPHICS (4 Disks)

VAGE TELE TITLE 2

MUSIC

€7.50

# R 1 C LIMITANT MARILAL () CINIS Y A D LAMISAND COMMUN SH A D PRODUMENTED SEX LUTY AND WITH A D PRODUMENTED SEX LUTY AND WITH THE PROPERTY OF THE PRODUMENT AS SEX SECONTRAIN 1913 AND A DOWN EXPENSE SHALL STOOM PO 2775 CURSION EXEMPLES SHALL STOOM PO

PROJ. (MIN. 91.46 Program ment Timi Editor PROJ. 1002 of 86.6.2 Disput C Environment PROJ. 602 Disput Timica Compani PROJ. 602 DISPUT C BOSE A7 Test this compt in PROJ. 628 DISPUT C BOSE A7 Test this compt in PROJ. 628 DISPUT C BOSE A7 Test this compt in PROJ. 628 DISPUT C BOSE A7 Test this compt in PROJ. 628 DISPUT C BOSE A7 TEST DISPUT C BOSE A7 TEST DISPUT PROJ. 628 DISPUT C BOSE A7 TEST DISPU

MAJO SE PRITARIU COMPOSERI SOLIFI MULTOS DEL MIRTO UT DA PRAST MA MAJOS POMERI PLAYT R UZ 1 PRO-MAJOS PLAY A MART UT D. 2 DOCE.

PLET & BASE 11 1.2 To Day, on the mediant by MED places, some page 12 to 2 to be placed by MED places. Some page 12 to 2 to be placed by MED places. Some page 12 to 2 to be placed by MED places. Some page 12 to be placed by MED places. Some p

DO 100 Pennué élébés Aldro ammation syldid Antyloghys a gamples lin vot sola éleka

PROTRACIER 42 1 NOSE TRACIES 46 4 SOURCE TRACIES 46 6

#### **VIRUS HELP**

AA TAASTER WINNI AND ERD WE S MANUSCUS ANICH RETTERS

#### A1200 A4000 ONLY

S EXCITING NEW DISKS FOR A1200/A4800 ONLY WEIRDSCIENCE 1-5 (5 Disks) Slideshow + Music

NEW SUPER HAM PICS! FOR A1208/A4008 ONLY SH 1-6 (6 Disks) Superb quality pictures

MIN AGA BERED --- 15 1200 dame

#### HOSS ANYSEN Family HOSS POOLS WIZARD

**PROGRAMMING** 

#### **MUSIC UTILITIES**

\$1-80 - CATYON BETWEEN HEB SECURICA CONTROL SECURICA SECU

### HARD DRIVE UTILS

#### DEMOS

MACHAAN MI BADENG 7 MEWIFA DEMONSTREEL 1-2 : OLIOONAN WEGACENG 1

12 CHARDRAIN WE CANCENS 2
IN MEN CHART WE CANCENS 2
IN MEN CHART WE CHART W

A William of E S 12 mins 22 mins MONS.

19 MANDER HE S 15 mins 22 mins MONS.

19 MANDER HE MONS A LINE A MINS A MI

**EDUCATION PACK 2:** 

6 DISK PACK £7.50

#### **BUSINESS PACK 1**

PACK 1

PACK 2

5 Sample Disks ST11-15

6 DISK PACK

#### EDUCATION PACK 1: 4 Science-Weather, gravity, in

E3 Nature-Clouds, bugs, storms, etc. El Language-German Tulo

# E6 Learn & Piny 1 & 2 E9 Mailly Orll E11 Mails Paint

E12 Simons Colours & Sonot

6 DISK PACK 67 50

#### **BUSINESS PACK 2**

5 Sample Deks P DISK PACK EB.76

6 DISK PACK £7.50

6 DISK PACK

E5 General-Calendar, World Map etc 5 DISK PACK £6.25

# NO FRILLS - NO GIMMICKS - JUST GREAT PD - WYSIWYG!!

		ALEX CONTRACTOR	GAMES	THE REAL PROPERTY.	Name and Address of the Owner, where	
62 WASTRLANDS AS - OLD - CONTROL OF THE STATE OF THE STAT	CAR MECHANICA IS COMMITTED STRUCTURE	BIOS BLEIN HOLD Fragger - Get across to	DE100 RAPHARES OF WHATE	Turn SEII	C 0277 SHPER SECON CHALLERON	
GS STAR TREE (-2) Starts	GSS RECONDINE Curcle	6137 TENETE LPELET Spant hall tops 6129 Wet beaven gamen Provi	STOP MUNICIPAL THREE GAR	ME Actu	GUIT COMPUTER COMPLET 1	6.333 MECHANICS & 3.71 Latest open in 5334 Phopen by Markets Game Strangs
GF PIPEL DE PORTACE 3 pe GF BREAKQUIT CONN SET 10 pers	GOC TREM TRAVAL Class for Tradition CO: SUMMORN Space arterities	G131 WORLD OF POOLS SEU columns		time how t	GANS ANYER & SULTI CARE GAME NO.	GCOS BOLL ON A LANGER TOWN GCOS BOLL ON A LANGER TO A MOUNT & MICH.
GI BLOZZÁR Malti emir norgantat scrolling Girl MONA * Gurgatin & Drajati Alimitare	CAT COMP ANY SCREETINGS DOING	G133 CAND SHARP 5 card grants G134 TOTAL MAR dan type	G206 ENIONE OF WORLDO	1 3 dail Adv	G203 CARD CANES 2 G205 AMOS GAMES 21	GSST MELLATIANE S E LL presu GSSN DIE FILTH (2) Si P 1 Az Soni
B12 COLOSSAL WORLD ASSESSAL B13 CASTLE OF BOOM SOUTHIE	GS- COMP ACM SCHIFFING finds 2 GSS DECAY THE MENCH CASH Platform growt program	G135 Addison Purturn	G257 MIGHT AT THE TOWN G250 BUADAGE PACE FROM	Ted an	GOOD HYPER SEXT CHEATS GOOT TECHNOLOGY FLY, IS GOOD	GOAD THE ACE CHEATE DIDE 2 LIES
614 NO.1 STAIL led cry american 615 GOLDEN PLECE led cry admittant	THE EMPLOYED HEAT OF A PUBLISHED SAW	GAST PURILES Q best and	G201 FUN 1UM ' PIESTAN		G200 THE REAST NAMES IN ALL	G342 THE SECRET OF MONTAIN SEARCH A CASE
CI (I I LAN)	GOOD DOCAT CHE MAKEN YE II	G*39 PAUL (T SLADY) G*41 GAMES COMPLATION ( G DETIS	G211 REVENDE AND ANT & G211 BATTLINENTS HAVE	And sidens	G290 NADE OT NOW Cat & day choice G291 DISCH COSSIS Floor Stoles	S341 WARRED F AMAY HER IN TO DECIMAL
649 DALI DRE VOLLIMI 1 1 Togorius 640 TRUCCOR (1) (2 Dount Strangy	G70 PARACHETE Abust Good g quinca G21 CRTS IAL CAUTING A racin ada tolela & carolini	DATE ATLANTED COLUMN	6212 LEADENGERDS HAST	Puzzie	G292 ARSOLUTE AND VOL ONE	G345 GUSMASTER # 1.0 Test your knowledge
G22 CAMS GAMES FOR S. Pint. Colores of: G23 SUPPR TRUBSTRIE Shape d'appeni excelore	GP2 TRUST-P2 Synchrology and GP2 TRUST - THE CAME Storm of the	G142 MAPOLEONIC WAS SIMULATION SIZE 0143 MISSION FAIO PART II S E U	GZ10 EXAMPL IN THE CRAFE	Patters .	G204 GAME TAKEN VS A	\$340 MEDILA System of fast actions \$347 ENCAPE Into specif
G24 BOLLERPENF Specificorispede a mast	GTA GUNDARIN DOLLYCH & Chang Mann	GIAL SHAFTS & LADDENG GOOD G145 GAMES GALONE VOX 7 For the years	G720 WIND OF THE FOLIN G: G221 WIZARDS BOMAIN G:	anine adv	G111 AGAZMAZ 47 4-45 G304 MELL ZOME Em	GOVERNMENT OF STREET STREET AND ADDRESS OF THE STREET
637 CAMES BISK SIT games on the dies 629 CAMES BISK I BACKGATHEOD GIS	GE CHANGE IN DEATH ! I distribe mass from	G147 OR WARRION AUTS condution	GETT ANCADE TRANSPORT	note node he	GOOD FATAL MICRON Send stool on an	
GOS MENTAL MAGES GAMES DISM 1 3 parties and Summitted (Decay) Tray	E'E CHOSSERS " Explicit for tale.	G151 E-PVPE Arcidi S E U	6334 POINT & POINT Pag the 6225 BM BRICE - More be	NATIONAL - stop the brook	CHI CHOSENAZI CRYPTO ENG POPTS	
GOO WAZZYS GLUEST * Artists puzzle, good gray-in GOO RETURN TO EARTH E-to T-YK, space adverting	INC WOODEN BALL Mirris how	G152 DUNCE DUE OF MADRIOJ HISTORIJE G151 BUICK & STEERN HISTORIJE E-colori	GZM RANG IN SEV - mem	d	6300 OFFICIOCH (AMOR): 21 INVINE 6300 TAKK ATTACK & MOUTHMAN	6374 (BLUDDE PACHIAN 9375 (BALADA BE \$320) on sp
SUS ELAMORTHON SIZE & 15th Shopl art of SUB BARP " Arcade type, second the nearboot	GAL DENICE ENDE MIRESON * Bordon GAL BLACKLINGS COM GALLA	G154 MASTER OF THE TOWN Shoot Pin No.	SCHOOL GET WE THE TRANS OF		6311 THRALLBOUND VERM ADV THE 6112 SOUNCE AND BLAST PUTCHY	G374 LIBERATOR BANG Shoot-en-up
CAO ANTEROODS Actade classes	GES MYPERBALE Min zon type GES PETER'S BLUEST Avandy - Reacon the Manday	G156 ETHOS Feet adv + pess G157 MATTLE CARS 30 cars S J U	S200 NUMBER OF THE ALIEN 6202 LOTHIAN Graphic adv	ANALOGIS Name of the	G313 SOCKEN CANDS Am the clab G3 4 CYBERNETIA Fast action	STATE CHARLE SHE 2 Latest portions STATE TRACES 8 121 Ar 1970 and
GAY ENCAPE FROM JON Space Arcado GIZ CRAW ATTACK Door and Arcado	Sig Mille Paint Coloring best GREYELF Rick every Bin am	G153 CHALLEMBER Chie - 5 steps G162 CATACOMS Gricosc adv - also well do	5777 000 CA MACC CA III TO	ent	G110 PLAS CATCHER ST Gree purz	GSS ZHICOS B GAME STORM
GAL DOWNNELL CHALLENGE Tactics, the to over GAL MATTLEPOINCE	GET TYPPICAN II DEND THE ANGLANAS GANCE TO DEVICE	G183 EDRESON AT WAR that guran. G184 STREET TO REPORT 5 E.U. FARTURE	G252 MR & MRS Young part G253 TAKE Breat 60%	K 1 garres lerit – very good	631 000 SECRET Facility Displaces plant	Chief today of the account of the
G45 BRAGON CAVE Distance Martin flore	SAS BOOKER CHALLENGE II Good SAD BOOKER ving playable convent	5185 00001 Mario hora partiers	G264 SEFENDA Arcado 16%	Fried conernor	COO RESCORES TO MAKE THE	G382 THE REPVANTA GAME PINTORN SPREAM THAT
GAT ROOGS OF 2010 1 Areads (12 players	MI 80 LOSEY SE II GOOD DIETH	G101 NO-DHOOT EM UP SAICA G100 SOLIO DINAD ' POLITY FAN	G265 BEARD PROF SIMILAY G266 BERNELD FARMLED No.	er han europe	6321 BACK TO THE PUTCHED IN FIRMS	G314 PROT MACHINE & AMOS good G317 ORLANDS Crieron clond
G48 MAYNEM Soury Adventur = good G43 MECHFICHES RPS Red planted sarry	SIG BLOCKET Good graphs - App SIM MACK Tool adv	G186 BTRINE BALL fireward first	C247 LEMMI INCOMO RISCI po G264 GROWTH	(a)	GT23 TOMCAT F15 shoot on un	G3M BOMM JACKY Partners
GEO THE TENNIS CAME * FOR IT ACCESS GET BLOCK ROOSERS (PD CAME) SOME STOOL DOT AL	GIC SMAGRIN TILES Grant time garry GIC BOARD GAMES	1910 CREPT DIF Fridge, Selection	6209 SHATE 6270 PROLECT (		G125 POWER POMS Bong	GOOD OTWELLD Court gave single GOO! SOLL TANKE SAMPLED Carts
GET SCHWEATERS Street on 14	COL ATM ATAN DOL COME ON BANK	6-13 NEWLY IN PARICULARY MORE - 1075 AND 6-14 CONCENTRATION V3 2 Par 6 - 271.39	diction 0.271 CA250 20mE 0 grantos 0.277 I EMMANGO PACA	1	G117 MENTIN CAND	G392 WILLY IN THE CASTLE Contain partition 9383 PROFF SALAS Partition Reviewed in Formal
GAS START TREE 2 * 11 Access selections GAS FOR PAIN GENERAL * A Contract of the selection	GIO BAN'S SOMPROM Serviting S.E.L. G124 PRPE ALDIA Space Francis (I.E. U.	G199 DESTINATION INCOMBASE ?	G273 THE MAZE GAME G274 SUBCLE THINE	j	6329 DICAL III III SPOOL OF UP	COM MARIO III W CHEET PLANE BY C (COM - Maga Como Aga Tetro II 1200 Vagos
GSA PROUT MINISTRUCE * Faculty of	GIN BAMEY Pring	GASTINO WARS LAND May S [ 1]	G275 APRILYA G275 SMORT AUT	1	G331 SCHAMBLE Very Spaces*	6305 BOOM Street now good never game 6307 ZALYCON (2 down Specified up up
BOULDI	EDBAGN			THE REAL PROPERTY.	1002 JETHAN Good stood eri ed	GOIN ATOMS (No. 1)
BOOLD	O NO 44 - ADVENTURES OF MR B + P2H 2		SSINS			ENCEWARE
Plocas note all billion nee on ASCR	IID 46 - EAT MINES 1	New most work on ASSE+, ASSE & A1200 all New collection!	All 47 Elevation Furriges Class Arms All 48 Facet to proof. Physics parts ale.	CAN DODAM UM II	EDUCATION  And other team of Demonstrationing, Tomas	2 JUL 1000 FRACE Sow for promotes such 2 from \$4.50
To run games on A500+,1600 A1200 Use KICH 1 2 Degrader (£400)	0 40 - EAT MINES 2 0 80 47 - EAT MINES 3	C All 1s As DOM the other press; C All 1 Tare Palaryold, Analys, Amposts at:	All 40 Destitorype i opera See 1×2 or. All 50 Espheron Reach Motel, Ballory grove		NA REPORT OF EXPLORATE PARTY PROPERTY OF	CLUS PLAY AND MADE 2 A music model leave to death music 2 date (A.S.).  CLUS PERSON ACCOUNTS AND sections of join properties with passing of vectors 1 depticals.
BO 1 FLASCHRIER (	BD 46 - EAT MINES 10	L. ASI 2 treature, Bioly 2 Mounts Continued etc. L. ASI 3 Magazini & Day Superit garregace.	CARL ST Largery Political Wavener Street	COLES SOLAR SYSTEM GOV	more allow the Salar system with only on Plants at	Company of the same
80 2 FLASCHBIFFI H	II D 49 - NO ONE MINES 1 BD 50 - NO ONE MINES 2	El Adi & Fragger Se Mobe Couple Average etc.  Adi 1 Red Se Look & Residen	CAS SI PACKAGE MANDETAL & No.	WIT DUTUMS, 3 6596 (4.98)	the colorest term in heat the east property for force	Control of the Control
BD 1 - BOULDERGASH COLLECTION I BD 4 - BOULDERGASH COLLECTION II	D BD 51 - NO ONE MINES 3	ASI 6 Pacres - Downstrophese Steller etc.	All 55 Cirios Pacatic & Antonio.	CLOSS A CHORD Carry to play	the factor of passent of state treat bridge latted	Light Brown and the Birth of the different reasons a day for the
NO 5 BOOLDERDASH COLLECTION III	80 52 - NO ONE MINES 5 80 53 - NO ONE MINES 6	Clastification Tile, Rightworks	Add 5d Site Hungle, Entrans Malance & Tim. Add 57 Per-per Durmon Digry Digressin	CLUB MATHE INSTRUCTOR Guidratic Area de 1 dia 12	Set through the SCSE's with this Martin matricials. This	Committee Commit
80 8 - BOULDERDASH COMPLATION 1/2/3/4/+ Cores uction Rd	BO 54 - NO ONE MINES 7	U. ASIT Among your Samegor & Navabellander	Sparre.  Call St Super rad & Magneton: & Manage.		Third you know all about being? I'm thu, Z apply	Control Contro
80 7 - EMERALD EAT MINE	DO 54 - NO ONE MINES II	All I Femon Eath you & Broad All 18 Encyc Paster Femol & Spt.	ASI 50 Teller Street SCOO & Landress ASI of Figs Mexico Aust Nation & Chapters		the parts of himselves are down analysis	C U.S. COMM N/10 P(NCT) Orbert forb for your A/15 Shobays prime 1 cm
80 8 - EMERALD MINE TOOLS EDITOR v 4 (7 disks)	II 0 57 - NO OME MINES 10 II 0 58 - SPUO MINES 2	ASI 11 Day Comm. Revery Toward & Trape. ASI 12 Librarys, Co. Production 281 Sp.	All 41 Relievels Reveny Chara Soul	C. FOL MINERS & LANSING A	earl gooding gave for 1 or 2 phones 1 dear CLAS In conversion house for the 1 or 1 or 1 or 1 or 1	CLIC! MADE MATTER Surface process of early will the east 1 dec (1 SI
8D 10 - EMERALD MINES CAVE EDITOR 8D 10 - EMERALD PRO	BD 28 EMIMA WINES	ARI 13 Territor, Squarestin Shape & Ball all 2 ARI 14 China Challenge 2 & Aringa Calumna	Dunter All 62 Figures 2 Manageme & Up and Doors	10057 100005	man even more on to get second wit yith their	County First and Michigan Prince to the company of the County First and Co
BD 11 - EMERALD PRO 3	BD 60 - BOBBYDASH BD 41 - DERIMINE 1	COAS 13 Selecter Later & Manhamour	ASI 60 America Printy & Dress of ASI 64 Chibron Pall's Brandon Con 40 atr		in the same of the same of the first of the same of th	2.5.25 (This reports allowershies feet type per brutes by post packages data (4.5)
80 12 - EMERALD PRO 4 90 13 - EMERALD PRO 4 EXTRA	BD 82 - LADYBIRD MINE - KIDS	CAS 16 Hunters Manua X Delicting	ASI ES Paramolo Chesa Want Poptio Migral Search.	CCE4 600.667 percent	1330. Half-Enton will the half-propose it even by Mills	CLUS STAR WHACE AMMUNICATES AT THE INTERIOR OF JUST DICTIONS .
BE 14 LAZERS EMERALD MINE 2	80 63 - INTO THE FUTURE FIELDS	1 Aval	AGE SE Care ware for regular root & Archester.	Accept to Child Control Control	and the section of the Walter	CALL MANAGE Lawy panels grap contact a real city and law
BO 15 - EMERALD MINES TOTOGRAL - 2nd	80 65 NIJO THE GOLD CAVES	n Avail	The state of the s		And a second ration of a party of	dimes (199
BO 18 - EMPRALO MINES 2	RO 65 - MARAN YAME RO 67 - FUN MINE 1	C AS 20 Minutes refractiff this can drop. C AS 21 Days Tetrix Butternetts & Diagneties.	All: 71 Digital Patric Managhi & Talon pro All: 21 Increase Bullingape & by Types	SATE PROGRAMMY IN THE CO.	8	Cross come to the control of the con
BO 17 - EMERALO MINES 3 BD 18 - EMERALO MINES 4	0 60 - ACE MINE 1 0 80 - SUPER AMIDASH	CLAST Commission, Ways quest Duel Ministeracy.	All 72 Escape pro Route duch (set 1200)	Services to fade relative lace	mandy 1 dies (C) (C) mandy 1 dies (C) (C) mandy 1 dies (C) (C)	THE VAN WATER OF A PART BERGERS AND THE WAY AND AND ADDRESS OF THE PARTY.
8D 18 - EMERALD MINES 18	III 70 - ROCKNUTS 1	All 21 Chairs ressay. Biff. Interforce Accade.	All (Busines Concentration & Challenges	COURS NO. 709 FOR June 4	NAME OF THE PARTY OF THE PARTY.	CLASS TRACEMENT AND FOR some reporting of the state bad state of the color of the state of the s
IID 20 - EMERALD MINES 11 BD 21 - EMERALD MINES 12	© 80 71 - ROCKHUTS 2 © 80 72 - 800LDERDASH C64	CAS 21 th Stot. Comm. Humanicals	ASI 74 Cross desser II Burtomatiy & Chain ASI 75 Counter-squares Colours & County of	TACAST STATES	the side typing to one are any are particularly specified historical to prove a very colli-	C. Care Distance to the first process has produce than some 1 and 72 for
80 22 - EMERALD MINES 13 80 23 - EMERALD MINES 14	TO 73 - PROFESSIONAL BOULDERDASH 1	E-7 <sub>100</sub>	Perf. Add 20 Ding Chang Colleg & Gott.		Life a dictionary this regions word makings had	Less moral dute. The A This probability and companie organizers. I deal of a first former before Autor of pering the ball brough the man if the CLAN
BO 24 - FAIERALD MINES 15	BD 74 - PROFESSIONAL BOULDERGASH 2 BO 75 - FIRST CLASS BOULDERGASH	Solan Feb.	ASI 77 Beloeracy, CRI Hargan & Concurrier ASI 78 Little Souten Headqurees, Foult Paris:	SCORES 12.50	Late of that weeking if you have problems, 2 major	CLE I ALL DATE BLADES Lie pains to 2 phonos and the promoti one there is the Sign 10020 Mill from an the power of primary through 1 day (1.54
BO 25 - EMERALD MINES 18 BO 26 - SUPER EMERALD MINI	00 76 - BOUL DEROASH CONSTRUCTION	All 27 Antichet cost garen Really good CAS 30 Doody Dr Mare, rountes 2	AS 75 Gray Adjust, Ventur Storm Algent AS 85 Army Money Pap 8 Golf No. Spillars		tion to pay offered plants to the passe 1 pay	Co. 1 4 SONC THERTONIES AND MARKET THE PARTY TO SEE LAND TO SEE
8D 27 - EMERALD RUNNER MINE 1	ID 77 - OFFICIAL BOULDERDASH	Wellowbell	The suddens. Where the Marrier AGE #1 Associ Codences Thursday Trees	10.20	of the count passes or many April - 1 days	CORP. NATIONAL USE AND ADDRESS WITH THE PERSON OF THE 19TH
ID 28 - EMERALD PLINNER MINE ? BD 28 - EMERALD EATER	O AD 78 MEGA BOULDERDASH	Africa Street A Blant Total Fire Tark Attach	Gergordula	OUT CAT! A committee	City to the first method at an amount page 17	COURT COMMON ANY OF PERSONNESS Core of these province advances hypergroups excellent 1 and 17 M
ID 30 - THE NEW EMERALD MINES	BD 79 - STONEAGE BD 79A- STONEAGE (PLUI COMPATIBLE)	AG-12 fint Sector and & Freelighter AG-12 Important & Wast 2 good garren.	ASI 63 Londo-a-money Ports Spicier	COM FOR MICH COMP! 1 2/20	special to help the children during the finder	C. C.14 (MAR 20 in a partners) with 225 from product of level recentley, 1 days
ID 31 - RECYCLEO EMERALD MINES 1 ND 32 - RECYCLED EMERALD MINES 2	60 80 - LITTLE BOULDER 60 81 - BOULDERS GROVE 6 G EDITOR		AGI SA Everyna, Januaria Sarberia AGI SA Procedos Processo Matericania Audio:		Man the demonstrate of the game parties from	CLEYN STELLAR COCKYE PERSON STYLING STOCK OF US GARRE 3 SOOK EA SIN CLEYN JAMES MANUEL A recome care of the achievant that will have you planted by
IO 33 - EMERALD HEAD IO 34 - DANMARK II	(ASI 56)		AD M Smarthart Land of Hinde Laggest of		ure with other page or shows excelled for	TO STATE OWN POWER for the force force when he was not as a second
IO 35 - MARATHON MINES I	90 82 - CAVE RUNNER	All Si tame Dunning Passe do	ASI 87 Adia: Challenge Joseph Full Stratel		I song proteins learning lines, set anymore with	CAST STOCKED FRANCES ) parent of self-Directions travels. 1 day (3.5) 2.607 MARKED THE PARENTAL IS received their type parts of each page called Sunga on 180, often 1 day (3.5).
IO 36 - MARATHON MINES 2 IO 37 - MARATHON MINES 3	BOULDEROASH PACKS	All 28 Dies on Chr. Buch Styllyw2.	All III Deleta Fator Masse	protect 1 days (4.5)	An pag of is first bridge that the case	CLES BATT BARET Accharge, by Type Careed. 1 cold (\$50) CLESS WHITE BARRETS Accharge, by Type game 1 cold (\$50)
ID 30 - BOND MINES 1	ANY 18 - E12 86	All all that fall at states parts great great.	ASI III Magalat I. I Fox Conto ASI III Plancibles Startura Manhala	DOOR \$ 2000 EARL		Distance if any (a. it.)
ID 38 - BOND MINES 6 ID 40 - RUPPLE MINES	Any 28 - \$26 M	AGE 41 Process deless Medicana Layer in etc. 451 42 Galages solveder alest Dogs en appear	ISSIAS DIRECTALINA	CLUD' SEGS TITLE NOW HAT	UTILITIES	CLOSS BILLS MALL Same finds through 5 whites of Probes Secretarion in my 1 date
D 41 - EASY RUPPLE MINES	Any 58 = E47,58 Or Singly at PO Proces	ASI 42 Interfect Families Octoballs at ASI AN Minter Microst Impossible Roll on all	Amy 18 a £17.56		and in fall for they 100 GM	23 Std COPTAIN & Collect Femore, and all healths to refer to such these diversity of
0 43 - RUPPLE MINES EDITOR 0 43 - WATER MINES		All 45 Drie Fernhalt S-Cadle Teatres etc. All 45 Arago Q Chy Checker Cort etc.	Any 26 + 250 36 Any 26 + 347 36		ord to party with mag. 1 day (2 Mg. The last control of the last	1 Ditti Pratrams = C2 64
CAMED DAGU			Or maply at PS Process	Committee on a supply	COLOR PROPERTY	2 Dati Programa - 24 55 3 Det Programa - 24 60
GAMES PACK 1: 195 Bragon Tiles	GAMES PACK 2	: GAM	IES PACK 3:	GAME	S PACK 4:	BLANK DISKS
i53 Scum Haters	G11 Moria G12 Collosal World	G9 Flasci		G22 Card G	ames	10 Bulk dinim£4.99
55 Pom Pom Gunners	G13 Castle of World	G6 Pipelli		G59 Klondil	(e	25 Bulk diales£11 99
Megaball	G15 Golden Fleece	G26 Spac	zy s Quest	G82 Black	ack	FOST & PACKING:
23 Super Twinting	G45 Dragon Cave	G38 Drip	100	G133 Card	A Puzzle (2)	+10% per order UK
5 DISK PACK £6.25	5 DISK PACK £6.		C PACK £6.25	6 DISK	PACK £7.50	≈20% per order Europe
PIODIE						+30% per order ROW
RIORITY						
RDER:						□ A500 □ A500+
LIP & POST						[] A600FD
LIP & POST						A600HD A1200
LIP & POST						A1500 A2100 A3000

**CLIP & POST** CLIP & POST

CLIP & POST

Address.

Tel...

A500 OWNERS GET EM324 KICK 2 TO GET LATEST PROGS WORKING DELTRAX PD (AC), 36 Bodelwyddan Ave, Old Colwyn, Clwyd LL29 9NP

#### ■PD and SHAREWARE



There is a comprehensive contents file detailing each program in Workbench 2 Utilities 2

A varied selection of high quality freebies and cheapies come under the microscope

in the most up-front PD column around. Phil Morse tears open your Jiffy bags...



# Workbench Utilities 2

Kew II, U1053

A well presented suite of utilities, which open with a window displaying neatly and clearly the contents of the entire disk. Each utility has its own doc file, and there's a list of contents which includes a well-written, short description of each utility, along with useful information such as the amount of memory the utility occupies and its level of compatibility as regards different Workbench variants and machine models.

One of the more useful programs from this disk is AppMenu, which from its title will be familiar to anyone who's used an Apple Macintosh before.

Using AppMent, the names of any programs you wish can be added to the Tools menu on Workbench, and when selected from this menu, the aforesaid program(s) will run – just like the same thing using the App(le) Menu on the Macintosh.

To use a program in this manner, all the user need do is drop its icon into the AppMenu folder; paths are remembered automatically.

As well as this useful utility (it's great for accessing a calculator or address book from your favourite wordprocessor or spreadsheet, for instance, or to cut into, say, a sample editor from your sequencer) there are a host of other interesting programs.

One little routine entitled Close All Windows allows you to define a hotkey to do just that - if you've ever clicked half a

ABZOTILE-S BER full, 181K free. 735K in use



up your Workbench, you'll see the value in a utility such as this.

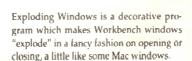
Another item of interest is Mouse Shift, as program invented for those who write a lot with a wordprocessor. This neat little number converts the right-hand mouse

button into a Shift key, allowing the user to use it for multi-selection of text/items instead of keeping one hand on the keyboard's Shift while moving the mouse to do the highlighting.

It's a simple idea, but it works without fuss and would be a genuine time-saver for the word-crunching junkie.

> From the sublime to the ridiculous now. PrintManager is a print spooler designed to work with every printing device going, whether it attaches to the serial or the parallel port; and

The many neatly presented and useful utilities on Workbench 2 Utilities 2



An Asteroids rip off in all but the sprites...

As you might have guessed, this is one of the best utility disks I've seen in a while, and one which comes highly recommended to Workbench 2 and above readers wishing to give their front-ends a bit of a tweak...

#### Assassins Games 94

**Roberta Smith PD** 

The latest in a long line of credible PD game releases, this latest compilation from Assassins brings three games, two of which are new to this page.

Giddy is a typical PD platforming

affair, featuring cute and highly colourful graphics, unfeasibly blocky animation and your usual Amos-style speed of play - not very fast, in other words.

It's a little (all right, very) derivative, but it's nicely done, and it has got that "one more time" factor. Still, how many more platformers such as this can we take?

The next game, Mechanoids, is a curious beast indeed. Boldly "dedicated to the good people of Arizona", it's basically a complete rip-off of Asteroids (I think the author prefers to call it a "tribute"...) which runs in Interlace and, as far as I can tell, is uncannily like the real thing.

Except, that is, that the author has redrawn the asteroids and ship, thereby personalising it while at the same time adding some kind of dubious justification for such a large-scale rip-off.

So the algorithms, gameplay and peripheries are identical to Asteroids, but



Amiga music accolade merely minutes after I got my sweaty paws on it.

As usual the disk contains three pieces of music, and is presented neatly and stylishly.

exception, hence its claim to the top

Eschewing any kind of screen animation (the author wisely knows where his strengths lie, or where his memory does, at least!) for simple but attractive stills,



the sprites are unique to this version something which you forget very quickly as you battle to finish the first, highly authentic-feeling sheet.

One tip, though; get yourself a monitor which can handle Productivity mode, or you'll be saucer-eyed from watching what is effectively a strobe light as your monitor/TV flickers trying to display more than it can handle. Not good for the eyes...

The final game, the previously reviewed Super Skoda Challenge, completes another interesting Assassins release.

#### Captain K

#### CLG30

This is one of those platformers which come with an extremely limp and unlikely scenario. Wrap your head around this: You're Captain K, a peaceful character Calling all PD libraries...

..and individuals with anything remotely worth my while having a peek at. If you want something released as PD, or you're a library with stacks of hot new stuff that you haven't seen reviewed in these pages yet, why not drop me a line with a copy, full documentation and everything clearly labelled? I promise I'll at least look at your work.

From music to education, business to utilities - anything you felt deserved your shoving onto a floppy disk, lemme at it and I'll do the rest. Address?

> Phil Morse, PD submissions, Amiga Computing Europa House, Adlington Park, Macclesfield SK10 4NP

who is, erm, forced to leave his jungle hide-out due to his learning the devastating knowledge that aliens are invading

This unlikeliness leads to a platformer that errs on the puzzly side more than the arcadey, and contains the usual PD trappings of lots of colours, disjointed and 'unique" sound effects and highly unrealistic animation - cheap and cheerful.

What Captain K is, though, which a lot of similar efforts aren't, is highly addictive; it had us grappling for the joystick long after it should have been put away so that something else could be reviewed.

#### **AUGIR**

#### Computer and Design Services

This is a very good idea - a list of bulletin boards, user groups and other contacts of note in places as far apart as the USA, Canada and Europe. Oh, and before you start to feel left out, there's a section for the Rest of the World, too.

It's all arranged in separate folders to make it easy for you to access exactly what you want from Workbench, and is very friendly in its approach, giving small descriptions and a general feel of helpfulness rather that cold authority!

As the authors say, there's nothing else like this, and it's an idea worth supporting, if only to help those unfortunate enough not to live near a large Amiga user



Defeated fair and square

base to keep in contact with the outside world.

Put together by a group formed from those disillusioned with the level of support for the Amiga on the enthusiasts' level, this is the kind of shareware/PD-led pursuit which keeps the breads-and-butter user base alive. Worthy of your support.

#### **Amos Karate**

#### R Warner

I can't recall having ever seen a karate simulation before, either full priced or PD/shareware. That being said, some of the fight routines in the more arcadey platformers bear a lot in common with this, but here we have a game based entirely on such fight sequences.

The karate takes place on a log, which has fallen over a stretch of water contain-

After nearly having a nervous break down thanks to the presence of a nasty virus alongside the pictures and words for this very article on my hard drive, I feel obliged to give some timely advice.

I was lucky in having a lot of highly knowledgeable people to help me rid my Amiga of its unwanted infection. You mightn't be so fortunate. Either way, it makes great sense to make sure you have a good virus killer and keep it updated.

A virus killer will check every disk the second it slots into your machine. It's not failsafe, but update it regularly and it's the best defence going against the crippling little blighters.

And if you still think "it'll never happen to me", I came across two viruses while sifting through disks for review for the very feature you're reading now, so believe me, they're still alive and spreading. PD fans are particularly at risk, for a virus can copy itself to a PD floppy without the distributor ever knowing - although the larger the PD house you buy from, the less likely that a virus will have slipped through the net.

You'll only have yourself to blame if you get caught out.



Can Captain K remember what he's trying to do

these mixes are faithful in feel to the original tunes, but the subtle remixing and rejigging adds the life to them which justilies the sometimes rather mystifying reasoning behind rejigging music and releasing it on floppy format

Contained within are How's Gee, a slab of pure funk madness from a couple of years back coming to you courtesy of Black Machine, which had a friend of mine babbling at hyperspeed about how he'd pay serious money to own an onginal copy; the mad disco sound of Hell's Party by Glam, thankfully still respiendent with far-from-immortal line: "If there's Hell below, we're all gonna' go... and possibly the most innovative dance record of last year (certainly one of the most danced to) in TC1992's Funky Guitar - all skippy breakbeats and seesaw guitar riffs designed to get even the most lead-like feet at least tapping.

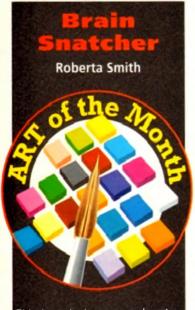
Sounding (rather unfathomably) a little quiet and muffled on my machine, this disk is nevertheless up to the author's usual high standard, and comes with my strong recommendation.



of the best dance remixes in the PL



.. but he still comes back for more



This is a nicely presented, outrageously sick but ultimately credible demo charting the tragic existence of one Oscar, the baby with the saddest life history going.

After contracting almost every cranium-related disease known to man and living (and he lives through some corkers, I can tell you), Oscar's brain simply grows and grows, and he gets brighter and brighter. The only visible sign of his catalogue of unfortunate and highly coincidental medical history is his oversized head.

Being a normal kid underneath, he joins a rock band as a bassist, and this is an excuse for some very well done and amusing "on-stage"

Poor Oscar's enemies have designs on him which are highly incompatible with his pending rock career, however, and he ends up in an alien space ship, miles away from home, accompanied by the, um, essences of Hitler, Galileo, Newton. Einstein and more luminaries from our intellectual (in some of their cases) history. Intrigued?

This is an original, fun and heartwarming (sort of) demo, although don't order it unless you can stand a healthy bit of gore! Recommended.



never a fight to the death at the local leisure centre when I was a nipper, that's for sure

Before you start, you get the chance to

select what belt (proficiency level) the computer is to have, thereby defining the quality of vour opposition.

Scoring is by a tugo'-war-style method, whereby a bar is displayed with a marker which moves towards your end of the bar if you're winning and vice versa.

After a while you see limitations in the moves and strategies available to you, but having said that there's some pretty spectacular coding going on which belies the simple look of the whole thing. So it is that you can jump crouch, kick

punch and do that really good, Sonic-style backflip/roll, catapulting you from one end of the screen to another in record

With the option of replacing the computer with another human opponent, this is the best fighting game I've come across in the public domain for a long time.

#### Titanic Cheats v1.4

The Middle Men

This is a real labour of love, containing a massive A to Z directory of hundreds of games, many I know you'll have and even more I could guarantee you've forgotten

about. Under each game are listed whatever tips, cheats and short-cuts are available to the compilers, and it's the kind of information that's guaranteed to have you digging out old, torgotter games where you've been unable to get past a

certain point for months or years!

The only problem is, of course, that you really need another Amiga to look at your cheats on while you play the games on the first one, but that would really be asking for too much.

The author updates his list regularly, and there's even a selectable form on the disk which you print out and fill in to let him know of any cheats you've come across, and to obtain updates yourself. One for those who take their games-playing seriously.

#### **Time Rift**

CLG28

Another platformer, but this one positively demands review due to the absolutely amazing animation of the main character.

It's a slick, well presented, stylish game anyway, but when you see your sprite walking, climbing, jumping and crawling you realise how much work has gone into what must be the most realistically animated character in a PD game

I'm hesitant to mention Flashback, due to the huge price difference between the two and the absurdity of comparing Amiga PD with a full-priced, frontierbreaking masterpiece, but there are definite parallels to be drawn between the presentation of the main characters of both of these games. The rest of the



> 029 of 1160 70 s 1-1-10 D TINIS PIQ

The best animated main sprite I've seen anywhere for a long time in Time Rift

sprites are pretty simple, but nevertheless they add up to a hard and challenging platformer. One to see.

#### Contact addresses

Computer and Design Services, Dept PD. 24 Blackmoor Croft, Tile Cross, Birmingham B33 OPE

Kew II, PO Box 672, South Croydon CR2 9YS

Andrew McEniry, 9 Leyton Cross Road, Wilmington, Dartford DA2 7AP

17 Bit, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH

Roberta Smith PD, 190 Falloden Way, Hampstead Garden Suburb. London NW11 6JE

R Warner, The Middle Men PO Box 8253 Allenstown 4700 Australia

Central Licenceware Register (CLR, CLE, CLU...) disks are available from most major PD libraries.



# VIRUS FREE PD, 31 Faringdon Rd, Swindon, Wilts. Tel: 0793 432176

	The state of				
CLR	NEW TITLES	NEW TITLES	UTILITIES	GAMES	Latest & Greatest
EDECTROVAL  CLEROL-2 DINOSAURS (2 D)4	DOM: VEW SHANIM PLAYER		2019 RI. ORG 2.3*	THE PETER SQUEST NIEWS	C 1412. ACTION REPLAY IV A1246
Very missions 14.5	eset may ItAMS	RAC SCAPE VIII	A powerful med disk	plactorn game  FGG III ASTERS* Avenue	1 - 100 THE HALNTED A DISKS?
CLEOUS 2 CHOLOGY (2 Disks)	THURST WAS SEVENDED	and Amiga Beginners pode"	010000001 010000001 010000001	digot 'on up, with music by	C +3434 PC TASK V2 Excellant new
O DOLOURING PAD &	WUN Late of the seer Nim	e 1342 ESCAPE from a Very Large	Great file transfer	Texts   Line   L	PC estulator. If you have us A1 200 you can even run PC
CLINOS A-CHORD 43-50	NOAD HOG (2 Disks)	1 (1/4)	243155 X-RCHEA*	Fireflett men vitraget of space	VGA software
CLEON TAMIES SO CLEON 2 IRISH WATER FOR	+905.2 TOTAL CHAOS MUSIC (	Di -3346 AMOS PRO L PDATE LEM	collection of 311 serious, WTW.	TI + 2824 MENTAL IMAGE GAMES I	□ +2968. HEELZYINE
(2 Distor (1.50	T + 1306 MIX ONE FP	[ Ediah (	DIGITAL ILLUSIONS VI 05	-1001 PSYCHOSANTA	□ +3121 NUMPAD 103( A600 □ +3199 OCTAMED 4015
NGHESKY (140 WORDS & LADDER	COURTS AND LISTEN CARE SPA	+1112 CRAZEE Cic (100 h 3 purt amint +1133 h DUNCS Back h 15 Disks)	AMIGA FOX DIP"	Take control of a Psychoac Sunta	[ 3467 PPSHOW 10s Displays AGA
Index & Latin Cell	ADDRESS PRINT OF EM	ul (AMeg)	A collection of 6(4) pre nymen business hymen	1300 TAPET MACHINE ID BALOONACY Book Bloc	[] +2524 SUPLR POWER PACKERS
ha nd to beginn	abbres proving abbry	Great short on up action	= +3236 V-MCTPH*	Supplied game	2 62474 BANKN & CLERK*  2 62474 KIDSPAINT*
CLISH INTSLEADING	+1110 ZEMER GAME!	STARWARS BY 2000 and	Owngles Marphag package    +2420   MCMM V2.0*	Address Massister patter	CAND KIDSPAINTS
CLERCY HOME BREW 42.50	1.5() Tales of a time travellor! Di 1.3 Majurhyte cuntrial	-3140 BATTLE OF BRITAIN mum	Consumer Communication	#3282 LEEVATION	☐ +2167 DISK REPAIRERS
CLEBIA DEGROOT (3 Disks)		+3142-2 RED SECTOR Time pane"	3897 MICKSTART21ML1 ATOR	Very addutive platform game CAR WARS' 1-201 LAME ST PORTS	A2409 NIA LITE ITIES!
CLIBIS TAST FRET (150)	243196 VBUSZV227*	SPACEDURE III MUSIC	TOOGLE CLICK FOR A1241	Azan ST game port overs	3410 LOCKPICK 24 a fentance
informative C Disks)		=3146 ERIK THE WARRIOR*	A very computative ward	2952 GAMEBOY TETRIS	new dock copies that cast actually sentence any form of
CLIBIT THENGAMAJIG COS	- Addis BOOT JOB -	Vers steeler to Omerlet  FURMYRU Shoot 'em up	- Side VIDEO EDITURS KIT	Play a gater of gamelony Terrys on the Armign)	production from a number of games. Over 400 games listed
CLEON WORK A PLAY 13.5	17 43765 ROKOTK 5.23 44.5	□ #3148 TOOGLECLICK ↔* Steps was date clicking on	□ 42/00 SHOWER WILK FORE	ASTEROTISS '91" Very Not	□ +2997 URM EMELATOR WILL
CLHUI IIGMANIA (1.50	STOR STORIGA VEGA	Art II & the new Amou 1 201.	An examinal purchase for you to display the 51200 ago	SHOOT SHOOT SHOOT SAND	□ +1000 CEUTHOY □ +1002 FANCY DISK CABILLER
ETH ITES	2300 VII WT7 K V L 0 3 141	+3155 N KUPLA +6.5° drid copper	manda.	Compilerest of short emop's	WONDERLAND SPACEDIALES
CLUOTE VIDEO PITTES LAS	□ +3210 NLWPOP	Quite practify the most presented PD course or might, features various	A2000 SURFACT PLOTS A1258-2 LAUTH NOVIA (2 DINAN)	#1310 CLUFFRY Amiga version of	C +3194 ENGINEERS KIT*
CLUSS TYPING DITOR (3)	CONTRACT MANAGEMENT AND ADDRESS OF THE PARTY	con made that is bright.	EXTERMINAL	the classic bound game	DIACNOCTICS
CLUM SAS MENUMAKER	T 1775 6 Super II LM Plea of district	ATIST WHIT ACREENS**	WORKBENCH	DANS ARENA BALLANA	DIAGNOSTICS
CLLOOK PHROESO	G 4356 5 HINTS & CHEATS' (5 do		Mary Mandalach (1900)	2000 TETRIX Turn clime 2004 KAMAKAZI CHESS DIZZY DIAMONDS' Nes	3.336 AVS [NSD 31]*
crossworth etc (2 Disk		1184 WORLD GLOCKAPHY	Replacement worthers to toe	DIZZY DIAMONDS* New	C. Time Parchage as were
CLUBS 2 PLAY S RAVE V2 Middle Inters (2 Dal	164 50 Primare Terra clong	# STALL SELEPTESS NIGHTS 312	@WBZ OF WORKIENCH 206 (3.40	17 +260.1 Stringlers from space	2341 DINK RIPARIERS
PUNTRACTULATE	2-3540 IROS CLADS DISK B	A collection of stations that work on the new A1200	Replacement copy of WH for	head with a mafter.	3347 IXII RMINE Vine Killen
£3.50	G 1731 GIF DATATYTE ON IN S	#3162 Ward OF COMMODORF*	☐ WB2 05 WORKHEM H 205 €3:50	The best pulser grown available	files from your dok
CLUBIC CALCELSO  CLUBIC VIRTUAL WINDOW	Politic workbrech 3 Duranya	SHALL Eding VER AND GAVE	C WILL WORKBISS H 3 MD £3.50	☐ +2715 TETREN Clur of the best 2	= 3394 BYSTICK TESTER* great bille jovench testing program
PC Windows Close E	SAMPLE I ACTORY VOL		Repla votent for the new A1 XII  All WB disks are subject in as arlability	PARTY CHINESE CHECKERS* CASTLEMENDUAL*	
CLUBIA STOCK CONTROLL		+1189 PHYMRITACKY GAME! +1130 SASKTRUDY suffection ?**	DODDUG ANDRO	Additive are platiered	TETRIS GAMES
EAPPE shall under over	Useful program for keeping	#1175 T CHESS <sup>AA</sup> (AGA mile)	RODDY'S ANIMS	□ +3263 GIGA TETRUS*	THEOL SHEET WINTERS OK
CLUBIS CROSS STITCH ELS	track of pas, tax, & S1  3 +3(25) T.A.C.K.5 v.12 The Animali	A great new chess game only for the A 1 200 A 2000 areasing graphics. In	DUNCAN THE DUNG Beatle'	CO + 1014 N. Olital S. W. O. March 1982 D. P. Charles	TETO TRITRIS 3 players Amaga's
CLUB LC200 HONTS (3.50	Construction Ket	dars however require taking of time +3182-12 Professional C MANUAL*	Cattrical animation introducing Discours in the first feature	Fast pared Marie pintheracy phote	TETM FIGHTAL IT IRIS (NEW)
CLUM CANON HISE PER I	A1290 NEW AMOS GAMES	The Laren vacance of the C	length anim	Callin Hotel Sam Red Sprage*	THE ALDITHERS NO.
A collection of faith fo		married sin whole perglage critical ent a total of 12 disks.	This is the follow up to the	Fig. 4331 RPG ADVENTER'S maker'	TETTIK GAMEBOY TETRIS
DOTTON INVOKE MASTER	SII DIN MAGICALEMIA 1977 ACLS DATABASE V21	in facts on tasker facts who immersioned (1.2 divitor)	Anti Lemmings demer by Swarz, ICs a great buigh and	The team in a long last of 1005	TETIO KLAKTRIS
GAMAS CHOINE SORRIS 43.50	G-1598 GRAMMAR CHECKER*	E + 1010 SPACHSALIS ( 3	features some of the best custom gife for a long time.	power, and this one has to be at	TITLE AMIGA COLLARS
CLOUG DARK THENOVEYS	2-1299 CLUB MIX 3 2-1300 ACTION REPLAYS 60 600	THE PATASSAYS	Clining RAM regul 2 DISKS1	The highest state of the first of the control of th	TETTA SHAPES
COLOR MAN TO SEN	TATEM WHITHACKS**	TAREN VARIETY DE	A classic piece of assistation by	Gallin SEASERE ADE Ran of the	TETIS TETRIX
GCLOOD 2 TRICK NON 2	AMMETIVEOR	LAST WELL & Todayers	Roady McMillan (2 Doks) KMGHTY NIGHT NORMAN	mail cloud am up	TETTA TETRIS METALICA
4.50		1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vory house, anapomos (Armer)	The Carling are true	TET D TRES
THE CONTRACTOR OF THE SAME	A STATE OF THE PARTY OF	A STATE PAINT REVISION 17"	MAL KNIGHT MGHT NORMAN	Charles Charles Charles	THE RESERVE
CLOSS MOTOR DEFE 63:50	CHINE CHINESE CHECKEDS	Politikal Discret sheet	- 1090 8 THE HAUNTED (2 mg)*	CYDERTEK GAMES Vol.	TETEL DR MARIO
CLOOK SUTTING SHOCK CO.	Ser - 1001 C ADEMI-FOX TO	Named to a gree new selling for the	An eight disk epic of animation 14 mag of graphics	Completion of gates, great	TETEL THERACHEY
CLOUD PARADOX 63:00	50 Junes Concess	Addit it stales your Amigu thish o's get a measur keeped	A second. These is defended and to be mounted	Plus Describins with Incomings CASTLENOMIS* Ran of the	TETS CList's 40 service of tetra
CLOUI4 SONIC SMARTE HE	TALL SALES	AMERICA BOOKER WORK	DANIAS DANCAN S BACK (4 mog)	mil Dangson Master clone	DEGRADERS
Ridder Platomer (3 SH ODGE (3 St	-55% SENTY JESTERBAY* -75% HELLY "plotted chrise." ribe	The purpose comes supplied with a lim of over 400 of the layer garage	Fire dids ting. Another truly trolliant and heavy assessmen	- INC. TRIES Very prod	THE DESTREE IN
CLOUIT IMBRIEM 23:50 CLOUIS SKAN 29 E3:50	free god man.	and the others a parameter or	Dy Robby STAR WARS II' (2 mg)	PWI FP" Save the post (wells -3811 HI MI BROWN Review strade	With this disk of your profession yets dut nelect from any of the
CLOSIP J STELLAR ESCAPE E		comply copy original in seco. This is	A jurned up Swaru immini	conversion of the Asternals	Ampris kickwarts to me_gisses great compatibility with old
CLOSS ANGERUNGEL	SO CIANDI BREDOMODI	the attitudes backup and get it area TTANICS CHEATS* Over 4	JUST IN	C = 1049 MYTHERI (JAD" is the	names etc.  □ 1146 FAKENEM 1 ++ 41
CLOCK FLOWER POWER 23	T +140 Auditable from Section	immierel elleren for gamen	C +1152.2 KIERLYN Dewit Daram."	Amign version of Lead Ranger SPACE INVADERS II (**)	Fakement gises your Amiga
CLG023 MARVIN THE MAIN	AN CHILDREN'S Green	☐ Min KILLAGA V2 <sup>M</sup> Intest version	Financies density Referral distan-	Grant new vertices of the classes lan aders	1200 512k of chip mem A 1 5mm fact this making
Maticul Gime EL SU CLOUSE EASY MONEY (L.S.)	50 State Wishington	# 4412 # ADFORMAT" Index had tracks on floppy disks so you	-1300 NEW RSI DEMOMANER	C (SE) STIFFR QUIZ	99.97 of all writing re work THE DEGRACIER (***)
CLOUS WHITERABLITS CI	THE EXCEL DATABLE	on till set then	Medical data to a mon treats on A50 - di A130 de base dano	STATE CRAY SLAYER	Another superh disk that will esent allow you to disable
DATA LA COMPANIA	Charles SYCET DATABASE.	5 +3419 2 FTE CHICKS** (2 disks)	router available The GATHERUNG GEX*	THE HACKER Similar	floppy drives, memory etc. you
PRINTERS	3156 HRI FTP.AASC Frome Jin	pictures for A FATI only	Attacking humbaran pictures	TEAM 17	contracts from acting to new.
TAR PRINTER DRI	IRS*	The same of the sa	DATACA GRAMMINE MATERIAGE	TANKS TO THE PROPERTY OF THE P	3097 KICK 1.3 (++*) Is regarded by most as the best degrades
A culto, that of printer for the range of Star pr	STATE STATE OF THE	Brilliam new A1700 rase dema-	+3300 REPLAYER GAME*	PROPET View various £11.99	Sillé Kill L. MiA V Soot Turnel!
inchilling 9 & 24 par mineracioleur & Bothlie	Cales HALPMAN* Sacrified	#M250 AGA NI DESHOR 50 2 dida •3425 TRE ANSBORY SHOPS	New recommendate between	SUPER PROG (18.99	pen AGA chinel
C +3451 PANASONIC DIIIVT	C) - Nest AZTI C CHALLENGE	A-mail reloction of A1200 get	BOPS PLOPS ADDRESS PRINT 3.11	ELLE EDUITE: (10 no	WORD FINDER +
Supports 9 pin & 24 pi senters	A Nam from the pure	FINANCIA BATTMANKING*	+3373 OUTERM V7 +3374 MODE SWITCH' SONOADA	BOOY BLOWS 21 (41300) (10 00)  ALIEN BRIEFIT 21 (41300) (10 00)	TICLUS Powerful grows and &
+ 421 PROFESSIONAL DRI A second of pointer of	DKS*	New Enk Switz minutest	+3375 DOS DRIVERS (***)		Anagram univer, 2 civil, set mily 1,4,50
for the store profession	met.	A collection of utilities for HD mars	43376 ASTRO 22 VP 43377 NEW SOLITAIRLE	FREE COMMERCIAL GAMES	COMPATIBILITY CHART
W. Liner, HP etc. Cital ditter delas, euro tecin		STARRANS* Amazing new pd	Great them abstracted card game by Tomer Software, Lone 81	We are giving away hundreds of tree games throughout Sent. All tops much be being	- FRIGHT (3 & 2 c) (A906/A906)
(minux the quality of s		whiteten of can platform pare.	CI 43EDL AIBBY	throughout Sept. All you need to do is simply pluce an order for £10 or more	Richstart 244 Also works on Kalestart 3 martines
print with the design on		CAMA UNDERGOVER* BRILLS	☐ «1302 LISD LEGAL TOOLS ##*	and we'll send you a free mystery game that works on all Appropas	** ** Kickstert Smithness ordy (MES) of Foreign full compatibilities at
CANON DRIVERS' Exercially for the BLs	bestiff Tables Add to Minister Manager Co.	colliness some spails great stand stacks and our favority. The job that	Superb collection of unlarge.	* While stocks last	A Commence of Anna Cal
Catest printers, in tack new BHOs & the class	Upgrade some Armin Pin so	hour bull"	This is the best entirement of A 1200 seeks not we state men	PRIORITY ORDER FORM	
Witter	complier and Arms 3D	COLL COLO	D+M29 PLASMA CLOUDS 25651	THIUNIT UNDER FURM	PD Prices per disk Single disk 93 00 each 2-5 diels E2 00 each 10 disks E1 75 each 11-20 disks E1 50 each
At lot a driver for the	POSIC CONTROL OF ANY SOUTHWEST AND ASSESSMENT AND ASSESSMENT AND ASSESSMENT A	UTILITIES	#MODE THE CHARGE OF THE ACTION	Name 6-	10 disks £1.75 each
SUPPRINTED STATES	andertion of very metal	2010 AMIGAPUNT Horspan	if you third Spaceholts you'll been this	Address	
1 - 1700 HP PRINTER DRIVE	Assistance process in properly	= 2841 ANTI FLICKLE Scrattu	study great new mega deute. WEW		
A nawell energy order HP directs, including the	400 BETTI B RENCH* New WI		The very latest service of Across repres	Tel	***************************************
A SUC.  DYNAMITE DRIVER	1288 Al200 VIRUS ATLLERS**	will water	for the AL200 only. Hack two pages.	Amiga Model	Payment method
THE RESERVE OF THE PARTY OF THE	ds A solution of suma follows the	2001 BM LAILB ATOR (++)	enfante frees som east to use includes a	Credit Card No	Expiry date
A frage sollaction of no	THE STATE SASISMENT ALTON	MSINS MSINS for IBM conduction	contribute machine code neutrinos  +1433 PC TASK V2º liment surfocces	Total disks ordered	
IGN all flavoral disvers, al goat a westell primare you		THE PERSON NAMED IN TAIL OF TH	Tally MCDMM VI Comments	Catalogue disk available only £1.0	J
100 different devers, il gor a weint primer you take ly timi a weint driv	he new Al 2011 of A4031	T LIEDT PASCAL LANGUAGE			
IGN all flavoral disvers, al goat a westell primare you	In the business of American	-	2+3415 DEVNAME IN GITTES	ORDERING BY POST	OVERSEAS ORDERS
100 differenti devens, di got a weini prime von labily l'imi a weini dre- tinia il con thre drik	in an Albaira Adam  in	AIRT   PASCAL LANGUAGE	© +3415 DEVWARE PEGETTES of Ipeg nutries	ORDERING BY POST	Denote order an excurse but place all 250 to our doc
100 different drivers, in gen a weild primer von Interly fain a weild primer von Interly fain a weild driver (min 2 mm thm drik).  3 ½ "DISKS A bus of 10 branded diskettes In	ha from the percentages of your following the first term of the fi	AREAL PASCAL LANGUAGE    - Bible HERTRAN CORPUTER    - 1014 SCREEN BALENGERY    - 1016 CASCAN PRINT 5TE 1012    - 1016 CASCAN PRINT 5TE 1012    - 1016 CASCAN PRINT 5TE 1012    - 1016 CASCAN PRINT STEED IN THE CORPUTER STEED IN THE STEED IN	A 1200 PUBLIC DOMAIN If you new an Aming 1300 or Admit als for	TZOP VE DNIRBORD	Denote order an excurse but place all 250 to our doc
100 different divises, di giot a weind primar you labely familia a weind drive mail: in: this disk.	ha real and preventages of votes    1		A1200 PUBLIC DOMAIN	ORDERING BY POST  HER TO describe the form of the first o	Denote order an excurse but place all 250 to our doc

killers, directory truth, sent relatives, boutsback mode are AUTO GRAF V2 HD\* Graph pointes. Pie chairs et

#### JUST COMPLETE THIS COUPON - WE'LL DO THE REST!

Name and Address of the Owner, where the Parket of the Owner, where the Owner, which the Owner, where the Owner, which the Ow						
Please enrol me as a subscriber to the ma	gazine(s) ticked	below:				
	/credit cord	Quarterly Direct Debit				
Acorn Computing (3.5 disk only)	£35.40	\$7.49	2576			
Amiga Action	\$47.40	£10.49	8258			
Amiga Computing	£38.99	£10.47	9537			
Atari ST User	C30 99	£0.47	9413			
PC Home	\$47.4ft	£10.49	1621			
PC Today	£47.40	£10.49	5388			
	247.40	210.47	3360			
Which vouchers?	100	3194				
Please send me my voucher for:		lic.	k ane box only			
Boats Marks & Spencer	Virgin	Argos	Tesca			
For payment by cheque						
Cheque enclosed payable to Europre	s Direct					
For payment by credit co	ırd					
Please debit my credit card:						
riouse debit my treum ture.			Expiry data			
AND THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I			_			
for payment by Direct D	ebit					
Complete this section ONLY if you						
AUTHORITY TO YOUR BANK/BUILD						
Brass of heal, finding sectory Address.	Yant astructions to the					
The second secon	the request of Euro	press Ltd.	Λ , ,			
Quality V	• the emerges or vivoribus damps	rabbin and stary be d	quad for A			
Same of second	■ Na exknowledgeme	et required	Section 1			
You account on	<ul> <li>Lundanterii mat E anii dates only afte</li> </ul>	national and though	the presents les.			
Seri cole	I will inform the her wish to concel this in		n writing if (			
Signatura(s)	• I understand that if	any Direct Debit is a	oid which			
Dote Originator's Identification No. 6 5 1 4 1 2	bracks the terms of hulding society will	the instruction, the make a refund	hank/			
for office one only Rel No.	Bank/hadding society to pay Biruci Dubil fro	may decline to occas or some types of eco	i lestructions both.			
W						
Your address label	100	1. 1. 1				
Please moil my magazines(s) to:						
Nome	Tel No					
Address						
	Post Cada					
Post Cade Please return the whole of this form to:						
Europress Direct, PO Box	2, Ellesmer	Port L65	3EA			
You can also take out a subseci	ation (and win	these years	horell			
You can also take out a subscription (and win those vouchers!) by ringing our 24-hour hotline:						
051-357 1275						
Or FAX it to: 051-357 2813						
(Not applicable to Direct Debits)						
If you would like to participate in the allocation of \$10 and \$25 vouchers without taking out a subscription						
simply complete the name and address section of this form and return it to the address shown above.						
Tick this box if you do not wish to receive promotional material from other companies %444 to 38.993						

This form is for use ONLY in the UK. Photocopies are not accepted.

# Now the when our fav

As a thank you to our ever-growing army of regular readers we orranged with some of the top names in Britain's High Streets to send £5 cash vouchers to EVERYONE who takes out a subscription

But that's not all. EVERY reader who returns the form stands a big chance of getting back even more - £10 for every 10th form we receive and £25 for every 25th!

You can use them at any of the shaps listed below.

And being a regular subscriber drings you many other Comiss AND. COM

- You receive your mayazine days before it reaches the shops which means you'll be first with all the latest news and reviews
- You benefit from our regular money-saving offers - ONLY available to subscribers
- We pay for the postage

MARKS & SPENCER



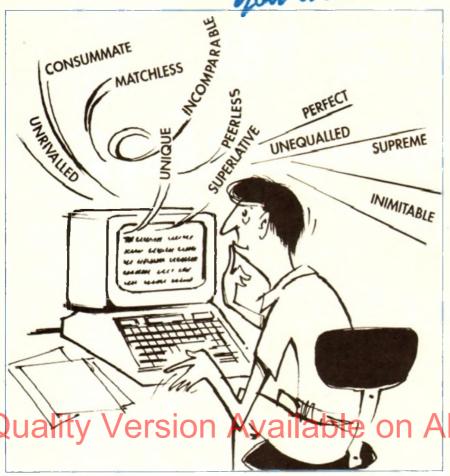


Books vouchers can also be used at Hallards, Children's World and Fads Homecare Centres



# PROTEXT 5.5

"Nou won't be lost for words".



"it's bloody brilliant"

ST FORMAT

"one hell of a performer"

COMPUTER SHOPPER

"if you need a professional word processor Protext is perfect"

**AMIGA COMPUTING** 

"nothing else available comes close"

ST APPLICATIONS

#### PRODATA 1.2

New version of Prodata now with pull-down menus, mouse or keyboard operation, automatic record numbering, merge database, instantaneous filtering, prologue form, edit fields in any order, 2-across label printing. Full details available from Arnor.

Price: £40

#### PRICES (including VAT and delivery)

For Commodore Amiga, Atari ST or TT.

Protext 5.5 now £80

Upgrade from 5.0 to 5.5 £30

Upgrade from 4,2/4.3 to 5.5 £40

Please return your original discs when upgrading

French or German spelling dictionary £35.25
When upgrading please return any extra spell checking
dictionaries for a free update to the revised version.

with Protext 5.5 because the pop-up thesaurus will pravide you with inspiration whenever you need it. With words provided by Collins the thesaurus has 43,000 main entries and 827,000 responses!

Protext 5.5 introduces enhanced text formatting options. Automotic hyphenation lets you produce a well-spaced page layout without the bother of manually putting in soft hyphens. Protext determines the correct hyphenation points by algorithms and look-up tables. Elimination of widows and orphans is also provided. You will no longer need to warry about those infuriating single lines at the top or bottom of pages. Pratext formats the text to avoid these as you edit the text. Extra blank lines at the top of a page can be suppressed.

New document analysis features provide a wealth of information about your text. You can examine a list of all the words used - alphabetically or by the number of occurrences. Other statistics shown include average word length, average sentence length and a table of the number of lines on each page.

# Plus many more improvements . . .

Enhanced file selector with different sorting methods, but k copy and etose.

- Prodato users mail merge directly from Prodata files, no need to export.
- Mail merge: nested repeat loops.
- New window-based help facilities.
- Improved line drawing.
- Spelling checker finds repeated word and missing capital letters.
- Conversion to and from WordStar 5.5 and Microsoft RTF
- Full printed documentation of new features.

# Of course Protext still includes . . .

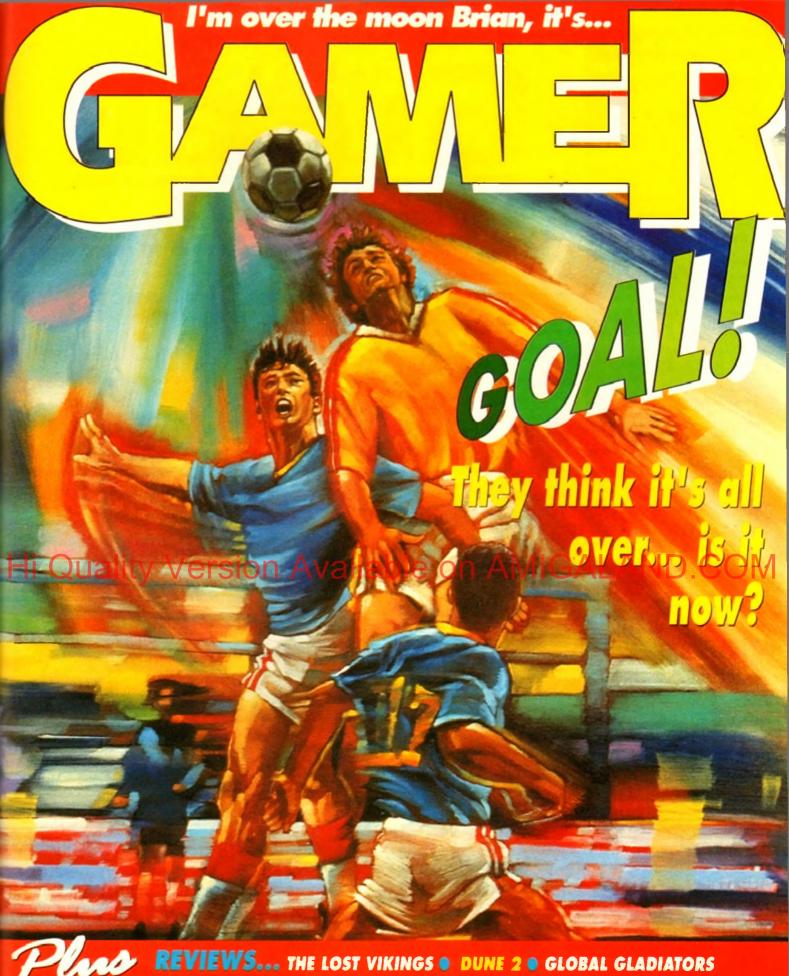
Choice of pull-down menu or keyboard operation, extensive printer font support and proportional formatting while editing, up to 36 files open, split screen editing, characters for 30 languages, index and contents, footnotes, newspaper column printing, file sorting, macros, indent tabs, mail merge programming language, exec files and the fostest search and replace around. Altogether the most comprehensive word processing software for your Amiga or ST.

Both Protext 5.5 and Prodata require 1Mb of memory









REVIEWS... THE LOST VIKINGS . DUNE 2 . GLOBAL GLADIATORS SCRABBLE . ROBOCOD A1200 . ISHAR 2 AND MUCH MORE!

ALSO ... THE SECOND AND FINAL PART OF OUR ISHAR CHEAT MODE • ALL THE LATEST BUDGETS REVIEWED • ON THE DRAWING BOARD: BRUTAL SPORTS FOOTBALL AND DIGGERS HOT NEWS FROM THE WORLD OF AMIGA GAMES...

# Domark in pole position

Domark have just released details af their next game F1. In a major deal with Fuji Television Network Inc, Domork have secured the rights to publish a series of official Formula One games for the '93 and '94 F1 seasons across all major games formats including the ST.

Domark's Managing Director Mark Strachan commented on the deal: 'This is the most important title Domark has ever published.

"The game's a winner on all counts - the licence is unbeatable, the program is superb and we will use all of our development and marketing expertise to ensure that F1 is our biggest ever hit."

"F1 is so fast that even Damon Hill in a hurry will have trouble keeping up with it!" he sold

In addition to the blistering pace, the game will have a wide range of set-up options including wing settings, gear boxes, tyres and much more. F1 also allows its players to compete in an entire world championship campaign where you will have to master the world's toughest Grand Prix tracks.

It has been in research for almost two years and has been thoroughly tested by professional drivers to help capture the excitement and detail of the real thing.

ment and detail of the real thing.

Developed by the makers of Vroom, it will be officially launched at the British Grand Prix, held at Silverstane. The game will be available in the shaps in September for £25.99.



## Amiga Computing's review team report on the games scene and goodies yet to come

#### Titus in the fast lane

Cast your mind back to last year and you'll remember the abundance of car racing games. One which shone like a bright light out of an otherwise pretty dull pack was Crazy Cars 3 from Titus.

Crazy Cars 3 was a firm office fave, but it did lack a two-player mode. Well all that can now be put to rights with Titus' next release, Lamborghini American Challenge.

Titus awn the exclusive rights to the Lamborghini licence and to cut a long story short they have rewritten Crazy Cars 3 and improved it len-fold including the much wanted two-player mode.

This time you are at the wheel of a fabled

Lamborghini Diablo as you speed through the crazy world of Saturday Night Races. The tournament is camposed of illegal roces across 60 routes of American highways.

There are plenty of features such as the ability to buy options for your car like turba boosts and radar detectors. The competition is

tough: Not only are the police out to nick you, but each race includes 20 artificially intelligent competitors, Lamborghini American Challenge is



looking good and will cost £25.99 when it orrives at your local computer game emporium in early October.

# Ne Sampaigns in painailal

Empire are just about ready to release the Campaign mission disk, the latest addition to this incredibly popular warfare simulation. The demand for Campaign has proved overwhelming with an amazing eight-month stand in the Gallup Charts to date. Empire say that sales are going from strength to strength.

The mission disk is a must for all Campaign enthusiasts and brings you yet another 25 maps covering most of the major land conflicts

of the Second World War.

The highly detailed and exciting missions from Northern Europe to North Africa will challenge your strategic abilities as well as testing your tactical skills.

The Campaign mission disk will available by the time you read this for £15.99 – a bargain and no mistake. Remember, in order to use the disk you must already own the full version of Campaian.



### You're gonna touch the sky



Microprose are back in the skies with yet another flight sim – a flight sim with a difference though. They've been finkering around and come up with a game of air-to-air combat, or dog fighting as it is more commonly known.

The game is entitled Dogfight and the player will be able to

select from 12 different aeroplanes, ranging from your good old Sopwith Camel through to the modern day fighter iets such as a F-16A Fighting Falcon. Whichever aircraft you choose you will be able to duel with enemy aircraft from

the same era. Alternatively you can choose any aeroplane from any era to bottle it out with.

This will enable you to engage in some pretty good daglights. For example you could have the agility of early Second World War planes such as the Spittire against the high technology of the modern



jets such as a Harrier.

Doglight is not only a doglighting flight sim, it also gives the opportunity to fly realistic missions, like defending the skies from the infamous Red Baron or protecting the Falklands from the Argentinian air force.

Those of you who fancy a flight sim game but are completely useless at them will take pleasure in the fact that Doglight has been designed with the beginner in mind enabling those lesser flight buffs to enjoy it within minutes of loading.



Doglight will be released later in the year for the Amiga and at the time of going to press, prices and exact dates are yet to be confirmed. Our only advice is for you to keep watching the skies because Microprose are out to prove that they are the flight sim

# Microprose fly to the moon

Microprose are aiming their sights a lot higher than just the skies for their next product. Starlord is their latest epoch-making game set in space where the object is to become emperor of the galaxy.

The game combines sci-fi with combat in a universe where Starlords are ranked in five levels of seniority, from Lord, Earl, Duke and King to your final objective. Emperor: Your task is formidable one with one thousand stars to conquer.

As Starlard you have to call upon the junior ranking Starlards to serve you in battle or provide you with money or other assets. Each Starlard has his own personality, characteristics and traits which are governed by genes generated by the computer.

Thus some are aggressive, some greedy, some unselfish and so on. Part of the gameplay involves working out how each individual is likely to behave. Skill is also required to plan battles, strategy and even marriage as you aim towards your ultimate larget.

The game contains a modure of pace, excitement, energy and strategy all of its own which adds up to some exciting entertainment. Well, that's what the press release says; we'll find out whether it's true when it arrives later in the year.

## Grandslam's grandslam

After the success of Nick Foldo's Golf and Beavers, Grandslom are once more infiltrating the Amiga games world with more than a couple of stunners this autumn. Grandslam have four releases planned, but precise release dates are yet to be announced

Realms of Darkness is billed as the role-playing game for those people who hate role-play ing games! The game features a hero who leaves the safety of his sheltered home and travels the land, a lonely figure with the whole world against him. Aww. What all this means I don't know, but we'll find out soon enough.



Realms features a "mutilating" landscape

beautiful graphics, an atmospheric soundtrack, arcade adventure sections with deviaus puzzles and promises hundreds of hours of intense challenge and entertainment.

Tensai looks like a platfarm/beat-'em-up/arcade adventure and features Tensai, the hero of the



game, battling against the evil tyrant Arashi. It features stylish graphics set in a post-apocolyptic landscape and beautifully animated characters and monsters

There are plenty of logical puzzles to solve while admiring the realistic sampled sound effects and eight-way scrolling parallax back-

Tensai is looking very nice indeed and will feature in these pages very soon. Meanwhile, two other releases from Grandslam are Reunion and The Seventh Sword of Mendor

Reunion promises to be a strategy adventure game set in space where you must take the role

of soldier, politician, economist and diplomat. Seventh Sward is yet another adventure game where you have a complete 3D world to explore. The game uses the friendly "point and click" control interface and features real-time combat sequences. For the A1200, a special 256-colour enhanced version is promised. As you can see, Grandslam are working double overtime at the moment and all the games

are looking impressive. Expect previews and reviews in Gamer very The Seventh Sword of Mendo

#### **Boom time!**

Last year there was a game called Nicky Boom which, despite the highly humanous title, was quite good. Paul Roundell (ex-Gamer ed) fell in love with it and they got married, living happily ever after.

Well, it's time he got a divorce because news of Nicky Boom 2 has just arrived. At the end of the first game peace had returned to the guiet woods. Well peace has guit the scene and brothers in arms evil and danger are book

Nicky, the star of this addictive little platformer, must once more make his way through the world until his objective of peace throughout the land is achieved. The game includes four graphic worlds of forest, jungle, valcano and cloud.

There are more puzzles, traps and animation than in the original. Nicky Boom 2 will cost you £25.99 and is planned for release on August 26. There's precision for you!

Let's take a look through the round window at...

#### REVIEWS ● REVIEWS ● REVIEWS

and scores with this the third instalment in the Kick Off series

Three Nordic Vikings in horny helmets get lost in space in Interplay's brilliant platform/puzzle 'em up

Millennium take James Pond 2, give it a dust down, a new lick of paint and let it loose on all those A1200 owners

Daze hit the adventure trail in this sequel to last year's big hit smash, Ishar – Legend of the Fortress

be used for a multitude of applications, or so Dave says

US Gold convert the board game that uses words in a sort of horizontal/vertical/linking kind way. Err, yes.

platform scene with this cutesy MegaDrive conversion

REGULARS • REGULARS • REGULARS

Drawing Board: Brutal Sports Football...117

Possibly the most violent sports game ever, it's sure to outrage a few grannies. Simon goes to Millennium to smell the blood

Drawing Board 2: Diggers . . . . . . . . . . 119

The next Lemmings? Could well be and Millennium are the lucky people who have a classic on their hands

Are you poor? Do you want some games? Well, turn to page 120 and dribble all over the latest cheapies and budgies

The second and final instalment of our complete guide to Ishar - Legend of the Fortress



You can play Alex Ferguson, selecting your players and tactics before the match

es, it's finally here. Stop warrying, settle down, make yourself a brew. perhaps treat yourself to a choccie biccy or two and read on, Let me cast your mind back by more than a few years and remember the game that was Kick Off.

Kick Off was a revolutionary product, and every man and his pet whippet loved it. I remember that fateful day when I first played it. There I was - and as I recall it was a Wednesday marning - and unfortunately I was bed-ridden thanks to a flu-bug flying around

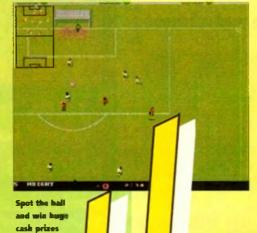
I had mail ordered Kick Off and as if by magic the postie arrived that fateful morn and guess what popped through the

Yep, all thoughts of flu rapidly disappeared as I slapped the disk in the drive. Not only had I got the day off school, the world's greatest football game had just landed in my sweaty palms. My luckiest day ever? Yes indeedy

As many of you know Kick Off works twice as

an eager chum to play it with. Another heavy dose of luck was the fact that my kid brother had also contracted the dreaded flu, so it was two player

best I had ever played. You can look back now and it's a different kettle of fish altogether the





In the midst of a goalmouth tussle, the ball finds the back of the net

They think it's all over? Well Goal is here at long last, but will it take its place back on the footy game throne?

as soon as it was out and found out that was indeed ten times bet ter than the original. Happy faces all round, but happiest of all was Dina Dini's, the creator of Kick Off 1 and 2. Another year had passed and talk of yet another Kick Off game was surfacing - Kick Off 3.

Everybody who thought Kick Off 2 was the best it could possibly be had to have a re-think. In the meantime people had enjoyed the Kick Off spin-offs such as Player Manager, Kick Off Extra Time, Final Whistle and the super abundance of data disks.

There just as the rumour phylat Off 3 was on the verge of being realised, a new, young and

pushy football game has forced its way onto the scene. Its name was Sensible Soccer, and that, my friends, is where all the trouble started

What is now known as the Sensi v Kick Off war erupted and it was so bad that even Kate Adie was reporting from the war zone. There were many casualties, some of which are still too disturbing to talk about

There were the Kick Off die-hards camped on one side while the Sensible Soccer young bloods were assembling on the other. In the middle there

P05

were several youngsters who were just plain confused and didn't know which game to turn to thanks to misinformed friends and hapless games

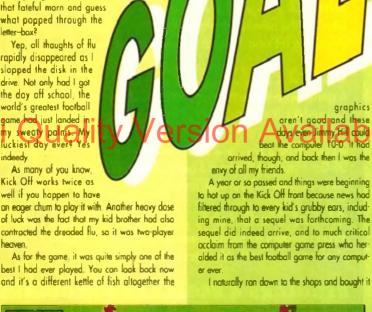
I myself loved both Sensible and Kick Off and just couldn't choose between the two no matter how I tried. Other people condemned me instantly and said that I must choose one of them and declare it he best

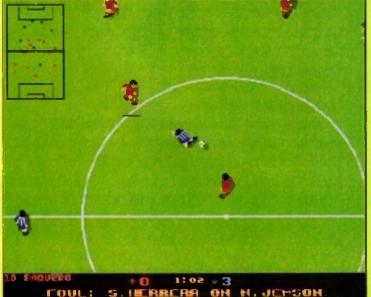
Why? Why must I choose between them? Well the simple fact is that I didn't choose. They are both different and they each have their merits and downfalls. There you have it... the truth.

I don't want to see any kind of argument over which one is best ever again. If you really want to keep me happy then I suggest you buy both of them and hey, you never know, it might bring the world that step closer to global peace.

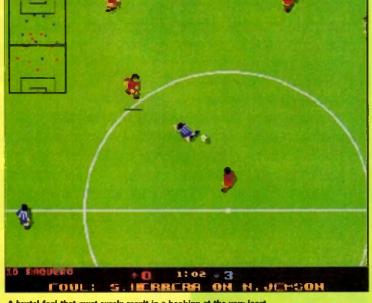
Rumours were confirmed that Kick Off 3 was indeed arriving. And we waited, and waited and then waited some more until we could wait no

P H 0 L OF GA >TS





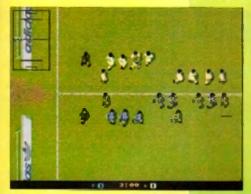
A brutal foul that must surely result in a booking at the very least



I 0 0 3 5 0 0 0 0 D • 2 Õ Õ Đ . 0 6 0 0 0 Ð • 0 1 0 0 LAZIO . LIVERPOOL MANCHESTER UNITED 3 RANGERS P ERIT

THE GOOL! LEAGUE

The league mode, and surprise surprise, United are top



It looks like the early part of one of those Halifax adverts. You know the ones, where lots of people form a glant X



You can play horizontally if you want. It's totally different - you could say it's a whole new ball game

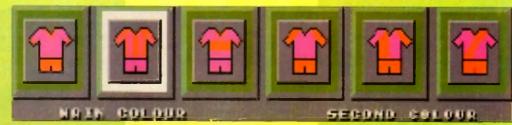
longer. Virgin Games must have got a bit bored waiting as well, so they decided to buy it aff the original company and give it the new moniker of Goal.

On the surface Goal, for all intents and purposes, looks dentical to its Kick Off predecessors. Let stake a little took under that surface and see what new features we can dig up.

#### **DIFFERENT MODES**

First thing you notice is the graphics and the fact that there are three different modes. There is the normal zoomed in view and also a wider zoomed out view, plus the standard setting where the computer swaps between the two views. Zoomed in view is the one you will use the most and the closest to the one used in Kick Off 2.

An interesting feature is the ability to play Goal horizontally rather than vertically. This virtually



Ooh I say, very fetching pink and orange kits



Embarass your opponent or your-self depending on the scoreline. The match stats tell you just how well - or how hadly - you've done

creates a brand new football game and for us Kick Off die hards and it takes a bit of getting used to Goall's graphics are naticeably better with Improved animated players that are positioned in

Improved animated players that are positioned in a well-drawn tootball stadium complete with athletic running track and Adidas sponsorship boards. The goals are also better defined and you get a more realistic feeling of scoring.

The free kicks, corners, goal kicks and throw ins have also been changed for the better. By moving a dotted line you are able to select the direction, length and height of the ball.

The control system as a whole seems to have changed slightly, but it still keeps the simplicity and playability that was such a feature of Kick Off 2. Obviously it helps to have played its predecessors.

but even for the beginner Goal is one of those footy games that takes a minute to play, but a lot longer

Now! could be accused to being really arep, but when you put the computer at the hardest level it's bloody hard to beat it. Four people played the game and all failed miserably, so that means it should also give you a bit of challenge over the manths ahead. Unless of course you are all God-like computer games-playing prodigies.

Replays have also been given a new look with the ability to play, stop, rewind and fast forward the action. You can also watch it slow motion if the desire takes you. A new innovation is the introduction of the match report which appears at half and full time.

#### STATISTICS

You can look at it and it'll tell you how many shots on goal you had, how many saves you made, the number of carners, throwins, penalties and how much percentage passession you had. It's very useful for solving those depressing arguments that constantly raye when playing it with a chum or indeed a chum-ess.

There are a few more options, but I haven't simply got the space to explain them all. You'll be able to find out all about them when you buy it, because believe you me if you don't you will be laughed at in the street by small children.

Goal is similar to Kick Off in many ways, yet totally different in others. For instance you do feel as if you're playing a brand new and totally original game, but it still has that feel of Kick Off about it

The new graphics are a definite improvement aver its predecessars and the sound effects have been improved to further enhance the atmosphere of the name.

The playability remains as fast and frontic as usual and the addiction factor is still at a danger level. It's a wonder how any of you lot managed to get your copy of Gomer this month because we've

had to be physically prised away from our

Goal is a classic computer game and I personally would recommend it to everyone, whether they'd be young, old, small, big, large ar skinny.

If you are a Sensible Soccer fan men ignore Gool at your peril - you wan't know what you're missing. Goal isn't better or worse than Sensible, it's just different... and very, very good,

JONATHAN MADDOCK



There are oodles of teams, including ones from English, French, Italian and Gorman leagues



he Norse culture has always been a great mystery to me. There are elements of their lives that I find bizarre, to say the least. I do speak from experience as well. I have a mate who is half Norwegian and he's an odd kettle of fish. Always running around half naked shouting "elskel" and "toske!".

I mean, let's examine the facts. Vikings were allegedly this bunch of ale swilling, debaucherous, roughneck, sex maniac marauders. OK. We'll take it that that bit's true. Why the hell did they have to sail around the known world to carry out their bowdy hell-raising?

What I'm getting at is, why bother sailing to monasteries to interfere with the monks' tranquillity when they could just as well stay at home with their own womenfolk? Everybody the world over knows the reputation that the nubile Nordic naughties have for beauty.

I guess that this will remain one of the universe's unanswered questions until time immemorial, so with a Kenneth Williams-type "Ooahhh! Na matron!", I shall return to the plot.

The Lost Vikings has its origins set in the lands of the midnight sun, its stars are three Viking brothers, who interestingly enough, are not away raping and pillaging.

Instead, they are home for the much celebrated Autumn festival – which is a bit like Glastonbury with no police, and subsequently much better.

#### **HURDY-GURDY**

Anyway, the highlight of this Pagan pastime is the hunt. Here, our three heroes have the chance to excel at their particular skills – which is a good enough reason for the loading screen and also shows Joe Public what our little Scandi-friends are copable of

However we're not the only ones privy to the Vikings' acts of physical dexterity. For, high above the foods, intergalactic zoo keeper and Johnny Monis tookalite Conday lurks

Being the villain of the piece, Tomator is on the look out for fresh specimens. Seeing the prowess of our boys, he decides they'd go down a treat in his alien menagerie.

So being a thoroughly nosty piece of work, Tomator proceeds to kidnap the Trandheim trio. Gasp! That's not the plot is it?

Why, yes. Steeped in Norse mythology that one, eh? Well so it's yet another cheesy, silly plot. But before I pass judgement too hastily, let's meet the hurdy gurdy boys.

The first thing I should say about the chaps is

that they're brothers. The fact that they appear to bear no resemblance to one another, apart from full beards and spiky helmets, is beyond me.

The oldest of the trio is Baleog the Fierce He's 25, fierce and according to the manual has an underwear fetish. Perhaps he should consider changing his name to Baleog the Frilly.

No, seriously. His particular skills lie in the swordsmanship department and he's also quite handy with a bow. He knows no fear, is somewhat of a bighead and likes to flex his muscles – that would explain the underwear! Next from the halls

of Valhalla comes Olof the Stout. Guess what? Olof's the fatty of the three. He is jovial, far, steadfast, tubby, and a stalwart in battle with an appetite for adventure almost as large as for a Danish – beer or pastnes?

Old's talents lie in the defence department. He does a sterling job of blocking the enemies and their shorts.

Last but by no means least is the youngest of the lads, Erik. Erik, or Erik the Swift as 1 should call him, is the nippy one of the bunch. He is the self-proclaimed leader of the pack, possesses speed and agility, and can't half put the nut on things if he's in the mood.

So, you're probably sitting there thinking to yourself. "This is all very nice, but what's this character profile bit got to do with anything?" Well bear with me and all will be revealed.

Having been kidnapped and zipped into a time vortex, your task is to control Sweden's answer to Aha on a bid to destroy Tomator and return home.

Now the game is definitely platform-oriented but it has to be said that Lost Vikings is subtly different to many of the same genre. This is where my

# THE LOST IKINGS



Olaf sinks 25 pints of loopy juice and floats home (hic!)

By Odin's elbow!
It's time to kiss
Brunhilda goodbye, clamber
aboard your
longboat and let
out a beserker's
bloodcurdling
bellow: "Rape
and pillage! With
the Lost
Vikings!"

# Norse to see you, to see you Norse!

Aga: 25 Haight: 6ft Oin

Weight: 220 lbs
Equipment: Bow, infinite arrows, sword, butch
moustache, macha attitude

Speciality: Fighting, chopping, general violence fevourite female: The blonde one in Abba



**Baleog** the Flerce

Age: 19 Height: 5ft Bin Weight: 160 lbs

Equipment: Spring loaded feet, concrete

Speciality: Jumping, head-butting
Fovourity female: The other one in Abba



Erik the Swift

Age: 23 Height: 6ft 2in Weight: 320 lbs

Equipment: Shield, large belly, silly laugh Speciality: Being fat and blocking everything Favourite female: Bella Emburg (sounds Scandinavian enough)



Olaf the Stout



It's hot work all this adventuring. I'm sure someone just shouted " Get yer Isis!"

character profile link may oppear to begin to have some relevance. You see the crux to success in Lost Vikings relies on teamwork.

Your three Norsemen must be controlled simultaneously to work your way around the traps, puzzles and nasties which occupy the levels.

For example, Olaf - being the shield-bearer - absorbs all the incoming attacks from the level inhabitants, thus protecting his brothers.

Meanwhile Baleog can utilise his trusty bow and reign arrows down on the foe, while still safe from harm.

# **HANDY NOGGIN**

Eric on the other hand comes into his own when performing jumps over objects. He is also adept at reaching artefacts otherwise out of reach, and his noggin comes in extremely handy for smashing walls apart.

Control of your three heroes sounds as though it should be tough, but it's far from it. The jaystick controls their particular skills and toggling between characters is but a touch of the keyboard away – as is using items and operating levers and switches.

There's a fair amount of humour involved in Vikings. The boys take every opportunity to bicker with each other, in a very brotherly way. They also like to chew the fat with same of the more happy-go-lucky characters around.

Another nice little humorous touch is that after

eating an item the boys let out a nice sampled belch - shot lads!

There are tons of levels divided into six worlds varying from the hi-tech spacecraft through to primeval dinosaur-infested lands, ancient Egypt and other hizarre places.

Your ultimate aim of course is to kill Tomator. This is easier said than done as he's one well 'ard sucker!

The level graphics are pretty enough, although the

backdrops on some levels seem to be non-existent. I can only imagine it was a very dark, starless night when the boys did their adventuring stint.

However, animation of the Norse nut-jobs is really nicely done. All three characters have definite personalities which come across to the player really effectively. They all perform idiosyncratic acts, particular to themselves while they are not in use.

On the whale they came across as a half decent bunch and probably warth wigging a couple of pints of grag with

On the mocabre side, there are some prefly cool animations when your characters meet with an untimely demise. Whether it's impaled on a stalagmite or frazzled in a forcefield, it's off to Valhalla to meet Thor.

The problem with this is that having lost one of the brothers it's impossible to complete the level. Fartunately an completion of a level you get an occess code so it's not all doom and gloom.

Overall, Lost Vikings is a very playable platform puzzler. It has fairly unique qualities, and it

The lads stop off in

Denmark for a bit of

titiliation at Madame

Ta-ta's strip joint

The Norwegian Eurovision entrants flop for the 25th year running, and once more face the firing squad!

makes a pleasant change to have to protect and nurture three characters.

Instead of your bag standard multi-talented Sonic-type chappie, these Scandie geezers have strengths and weaknesses.

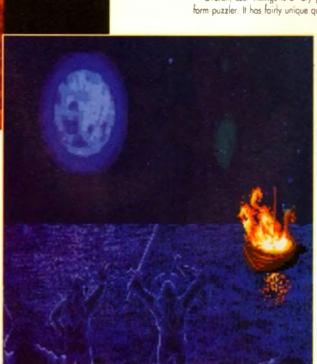
This makes for much more interesting play having to work out who is best suited to get past difterent trace.

Twe fiever been a great fan of arcade adventures, but in this case I have to say in my best Jimmy Swaggart voice "Lord! I've seen the light!"

I have to say I'm pretty addicted to this particular merging of puzzles and arcade frolics. So, as Norway's (well Iceland's but it's close enough for my bad joke) greatest troll, Magnus Magnusson would say. "I've started so I'll Finnish..."

SIMON CLAYS





Erik's up a

gum tree and decides to

chew the fat

missing link

Haaket from

with the

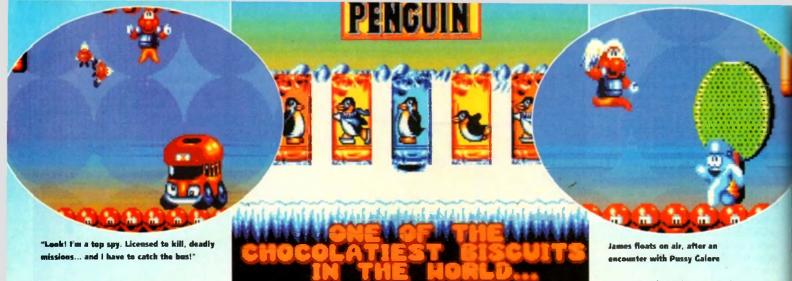
- or is it

Morten

Aha?

After your demise it's the full works with funeral arrangements





he re-emeraence from the bottom of the aquarium of the most scaly sex symbol in the seven seas set my mind thinking about fish.

Well, really about fishing. You see I've never been fishing, and whenever I quiz the fishing fraternity about their netarious habby, they always reply how tranquil an activity it is. Sitting around calm waters in rural settings - relaxing.

Maybe I'm missing the point? I can understand the peace, and relative calm of sitting by still waters an a

warm summers day with vast quantities of chilled beer - that I like.

But getting up at three in the morning, carrying 50ft poles around and dipping your hands into half a tonne of wriggling extras from a Hammer mayie? No

Well-endugh a Tiny listy tales and back to Captain Birdseye's stunt man, our James. As you might have gathered, he's back in a remake of his classic, second mission.

Most gamers will remember with a tidal wave of nostalgia the original A500 version. Starting as a virtual unknown, Mr Pond was heralded as fresh (fish), unusual, and highly playable with no big money tie-ups or licence endorsements.

# **ENHANCED MOOD**

Since then the "mean, green, part machine" tunatype chappie has become an overnight success, neigh a veritable "cod" of the platform world.

Well, after a while away swimming up the Gulf stream, James has cleaned his gills out, and is back in a refreshed, enhanced mood.

For those of you who don't recall the ariginal plot, I shall refresh your protein-starved brains. The evil Doctor Maybe has hijacked good of Santa's toy factory. The nasty piece of work has been manufacturing a range of lethal playthings in an attempt to knocker up Crimbo for everybody.

Desperate governments eventually come up with the solution. Get in touch with F.I.S.H, who in turn will contact the only man for the job - James Pond.

Pond immediately reports to F. Instead of kitting out Jimbo with hi-tech godgets like the homing condom, or a watch that turns into a space shuttle, F gives him a special robot suit, which enables our hake-like hero to breath on land.

It also enables him to expand his torsa to preposterous lengths. This comes in extremely handy during play as very often Jim has to reach ledges and grip on with his fishy fingers.

This leads me rather neatly on to the play. The action is stereotypical platform mayhem. There are

A1200 Version

Splash down! He's back, licensed to gill and fresh from the set of Goldfishfinger... James Pond!

ion Available on AV

James gets a stretch for running an illegal card school But what of the enhancements, I hear you gargle from your padded bowl? Well, the 1200 version to all intents and purposes looks very similar.

The same beautifully stylised graphics haven's altered. They just seem more slick and polished. The animation is still spot on and there are loads of little touches which make for more titillating play.

The major improvements seem to be with such things as the backdrops. They've gained more depth, loads of colour and scroll more slickly.

There also appear to be a few more sections to contend with on each level on this version, But really after that, that's yer lot.

Now please, don't think of the previous comments as a criticism on my part. James Pond is brilliantly addictive and great fun to play. If you had it on your ariginal Artigo and have just traced you trust to in for a 1200, I'm not sure. I'd buy it 'cos I think it's awesome, but abviously the choice is yours to ponder them.

However, if you've never got your fins wet before with the fishy one, don't delay, jump in at the deep end and enjoy endless fishmongering frolics with the hottest, halibut-type hunk in Hollywood.

VISION

SIMON CLAYS



Dan-Air Flight 201 apologises for spiking everybody, and the captain says "boomshanka, purple haze... man"

loads of power ups that enable you to do silly things like fly - I ask you, who ever heard of a flying fish?

James can also waddle aboard numerous other modes of transport. These vary throughout, but don't be surprised to find yourself trundling across the screen in a bath tub or flying past in a plane.

If this wasn't surreal enough. Each level is played in weird rooms made up of various giant toys and games. Not many times in a gamer's life he'll get mugged by Sindy! - not really. There are nine levels



James Pond the man with deadly dandruff, shaken not stirred

in all, and they're all as wacky as each other. One moment you'll be flipping past giant, grinning tennis balls; the next confronted by irote golf clubs.

Some mornings it's the last thing you need. Honestly Millennium, what are you running down there, a home for acid casualties?

Anyway, bosscally you've got to jump, squash, stretch and generally splash your fins around, defeating boddies and killing massive level mathers every two stages.



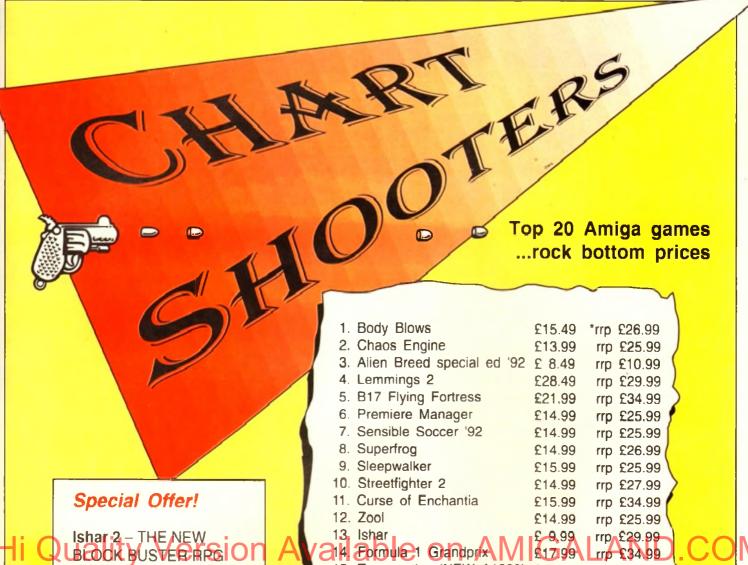


Chart Shooters price just £14.99 - save £15 Dark Seed £18.99 save £14

# Budget games at GIVE **AWAY PRICES**

Metal Mutant £3.99 Crystals of Arborea £3.99 Storm Master £6.99 Boston Bomb Club £3.99 Superski 2 £3.99 Starblade £3.99

# 15. Transarctica (NEW A1200) £14.99 rrp £29.99 16. Ishar (A1200 version) rrp £29.99 £14.99 17. Civilisation £20.99 rrp £34.99 18. Wing Commander £18.99 rrp £34.99 19. Nick Faldo's Golf rrp £25.99 £19.99 20. History Line 1914-18 £20.99 rrp £34.99

# Your Chance to Win Ishar 2

Return the coupon below for the chance to win a free copy of Ishar 2

(Free prize draw - no purchase necessary)

Yes - I want the top games at the lowest ever prices. Please send me by return the following games:
Name
Address
Total Payment enclosed (cheques and postal orders only - cheques payable to Chart Shooters)
Post to Chart Shooters, Freepost, NW6000, London NW6 6YG (enquiries tel 071 328 3144)



You won't tell me. Right, this calls for a bit of mouse pointer tertural

eality used to be a friend of mine. PM Dawn once sung that line in a song of theirs and even though they look quite stupid they were, in fact, correct. Reality is something we game reviewers don't get a laste of very often.

I know this opening sounds a bit deep and you're thinking that I've flipped my lid or been experimenting with funny smelling digarettes, but I haven't, so stick with it!

Game reviewers are more lucky than most other games players because we get to play every game that comes out on the market and we get them all for free. I can hear you punters swearing under your breath even as I write this, and all I can say is "heat"

Don't be too disheartened though because we have to play everything including all the bad

games and struggling through those is not a pleasant experience.

Disorientation is also a major problem. In one day you may find yourself flying a spaceship through the outer reaches of the

galaxy shooting down waves of nasty alien beasties from the Planet X.

Ten minutes later you're a cutesy, happy-golucky dragon blowing bubbles at minions of evil in a world full of platforms, then you're plaving football, then commanding a tank platoon, then flying a top secret government Steath fighter, then you're a secret agent, then a terrorist, then a clown, then a superhero (yes, I think we get the idea – Ed).

Whatever you are, all these games are enough to give you a bad case of schizophrenia. One of



Here is an inventory from just one of your warriors who seems to be a bit sparse on the clothing front. Cover yourself up women. Tutt, tutt

Silmarils return with another dose of Ishar. All adventure fans hold on to your maps and grip your spellbooks...



# ISHAR 2 MESSENGERS OF DOOM

the best types of games for you to lose yourself in is an adventure - see, told you I'd get there in the end. Here you can take the farm of a warrior, wizard or whatever takes your fancy. Forget about modern day life and lose yourself in worlds of wander and lands of fantasy. Last year Silmarils released Ishar and it received critical acdoin from games players and reviewers alike.

In my best Jackanary story-telling voice I will present you with a short tale. After the defect of Krogh and his Citadel of Evil the land of Ishar has

entered a new golden age of peace and prosperity.

This is an adventure game though, so the golden
age doesn't last for very long. It wouldn't be much

of an adventure if all you had to do was run around in fields, drink wine and be happy! Anyway, news reaches you of a new evil demanic figure, who is incidentally the head of a

Anyway, news reaches you or a new evil demonic figure, who is incidentally the head of a spider-like network of malevolence. Based on the islands surrounding Ishar, this evil

Based on the islands surrounding Ishar, this evil organisation is supplying addictive mind-controlling drugs to the locals with the direct aim of unopposed power and conquest.

Once again you must strap on your sword, brush up on your spellcraft and pack your sandwiches as you head for the islands with a brand new and sparkling team of heroes.

Like its predecessor, Ishar 2 is entirely cantrolled via the mouse. The left-hand button is used to select and the right-hand can be used to cancel the current aperation and also close the menus selected.

Most adventurers I know, like myself, prefer to use a combination between the mouse and the keyboard and Ishar 2 lets you do exactly this.

Thus the numeric paid emulate the movements of the mouse. Various other keys can be used instead of the left and right-hand mouse buttons.

As you wander around the world of Kendoria you will meet many people and your first job is to

recruit a team. This consists of a maximum of five characters, all of which have their own weaknesses and strengths. If you were lucky enough to play

the first Ishar game and if you can still find your save disk, then you can re-use an old team from the come

The characters will retain their characteristics, but they will lose their possessions and magic spells. Sametimes the characters' experience levels will be slightly altered to suit those present in labor 2

I won't spend my time explaining every little detail about what you can do and how to control everything because it'll get very baring, plus I'll leave you to find it out yourself which will generate hours of fun far you, err probably. I'll go over a few of the basics, though, in a

a few of the basics, though, in a short but informative manner. The first thing you need to learn is how to survive in the world of Kendaria, and this involves a quick lesson in the ancient art of fighting.

Fights in Ishar 2 take place in real time. The fight panel groups together the fight icons of each player with their active weapon. These icons are arranged in a quincunx – a very big and posh word which basically means that four of them are placed at the corners of a square with one in its centre.

These fight icons represent the five characters



One of these more so handy items that any decemiadventure cas's here to be willhald... a mag-



The start of the game and already your one adventurer is taking a hell of a bashing!

in the team, each identified by their own Roman numeral. To make a team member strike an enemy all you have to do is dick on the corresponding highticon.

Hits that the enemy gives to your team are represented on the picture by a small patch of blood

showing the damage points that your victim has lost.

The damage depends on several parameters, the power of the weapon, strength, agility, skill in weaponry and your enemy's constitution.

Other features include options to enrol, dismiss and even assassinate members of your team. You can also give first aid to a person if they are bodly injured.

To get around the world you have a compass positioned at the top of the screen, but what every



Gerry Anderson gets into the Ishar 2 adventure while providing the game with one of his delightful UFOs that comes complete with strings!

decent adventurer never leaves home without is a map.

appears on the screen. By selecting one of the island, you will obtain a detailed map of it showing your actual position represented by a floshing dot. At the start of the game the map is incomplete, but as you progress throughout the world it will slowly become more complete.

In the world there are several different places that you can visit. First are the shaps which there are three different kinds; animal traders, arms dealers and general merchants.

Inns play a major part in the game - they're where you pick up information, eat food and sleep. Bouses are also dotted about and you can expect to meet other people who will give you valuable information or suggest missions to you. If you're lucky you might even find a few objects in there. To get from island to island you must find a harbour. Here you will find a boatman. He will

then take you to a ship where you can select other harbours to journey to.

There are a whole wealth of options that I've not even bothered to tell you about due to lack of space, but no doubt

you'll find all about them when you buy the game yourself.

Oops, in one cunning swoop I've just told you

my opinion of it. Yes, I'm afraid to say that Ishar 2 is a must buy and should get to the top of every decent gamer's shopping list. The graphics are luscious and beat every other

adventure game of this ilk down to the ground. Same of the later levels are a sight to behold and the sprites as just as fantastic.

The music is not too bad - quite atmospheric and what sound effects you hear are mare than adequate.

I can't fault Ishar 2 on the playability and addiction front. The control and icon systems work brilliantly and even the most inadequate gamer will be adventuring before you know it.

Technically it beats all its competitors up with a big stick, but it is getting a very old and tired format, one of which I'm personally getting a bit sick of.

You could compere it to Dungeon Master and you wouldn't find much difference apart from the improvements in the graphics and sound departments.

I wouldn't mind seeing something a little different the next time around, possibly something as Targyan

original as when Dungeon Master first came out. Apart from that little autoble

Ishar 2 really is a winner and previous owners of Ishar are probably placing advance orders even as we speak. If you want a

little adventure and excitement in your life, you'd do no wrong by getting to grips with this.

JONATHAN MADDOCK



Our team of warriors take time out to play in Janet's superb tree-house...



never saw the film Dune. Perhaps that was because when it came out back in 1984, it was in the middle of Star Wars lever. Being a cheeky young nipper-type person at the time I didn't care for strange sci-fi films with seemingly incomprehensible plots when I could marvel at the stunning special effects masterpieces pouring out of Lucastilm Productions on a regular basis.

For me, Tatooine was the ultimate desolate desert planet, and Dune was merely an inferior

Apparently, the film was very strange and very long. Nearly two and-a half hours, in fact, and perhaps the reason for its strangeness was that it was directed by a certain David Lynch. Well, you learn something every day.

Of course, whether ar not this was a fair assumption I can't honestly tell. But now, a decade on, Virgin have seen fit to produce a second computer game based around the Dune universe. Unlike the first one, which was an adventure, Dune 2 is very much a strategy game.

Despite never having seen the film or read the books, I was the obvious choice to review Dune 2.

Why? Because I'm the gullible choppy around here. It must be said that neither Biff nor Simon wanted to have the task of reviewing this, for some reason.

To be quite frank, I don't think they've got the necessary noggin to cope with it. You have to be prepared to spend time learning how to play games like this, although the lengthy manual is very helpful and eosy to digest. Or perhaps they were put off by its initially unappealing nature.

Dune 2 is set on the world of Arrakis, commonly known as Dune, It appears that the situation on Arrakis is nothing short of critical. The planet is the only source of the spice which makes interstellar travel possible and can prolong human life. It's also a component of dermal unquents, if anybody

# DUNE 2

# In search of a little something to spice up your life? Maybe Virgin have the answer...

cores. Anyway, the point is, you need the stuff desperately. The problem is that you're not the only one who wants it. You represent one of three competing houses, and it's your job to make sure that you get the spice and they don't.

This desert planet boasts only two indigenous lifeforms; fremen and sand worms. The latter pose a threat to the average human, taking any opportunity to scoff them and their vehicles.

Basically, the ultimate objective of the game is

to take over the planet, although your first mission is simply to fill a spice quota.

Gameplay basically consists of constructing new buildings, repairing any existing and damaged buildings, scouting out new areas of the planet, harvesting spice and destroying the opposing forces.

The screen shows a section of the map, which is several screens in size. The map is not revealed until you have scouted out the area with a vehicle or person. Exploring is necessary to find new spice helds to harvest.

You will also find sandy areas (beware of Sand Worms here), sand dunes, rocky areas, and mountains which are impassable for vehicles.

The vehicles available include trikes, quads, tanks, amithopters (a type of weird aircraft) and so on. Some are well armoured and effective in bottle, whereas others are designed to be fast and are subsequently less well armoured.

You move your vehicles about by clicking on them, clicking on the action you wish them to perform in the command window on the right hand ride of the screen, and finally clicking on the place where the action will be performed.

For instance, if you wanted to attack an enemy

vehicle, you could click on one of your own trikes, then on ATTACK, then on the enemy. Clicking on your construction yard brings up the relevant menu in the command window. From here you can construct concrete foundations for buildings {this lessens the amount of repairs that will be needed later}, and a variety of buildings.

Different buildings perform different functions for example, a Wind Trap acts as a power plant a Light Factory produces small vehicles, and so an

Later in the game, buildings such as starports and research centres can be constructed, and this opens up new possibilities, such as trading and special new weapons.

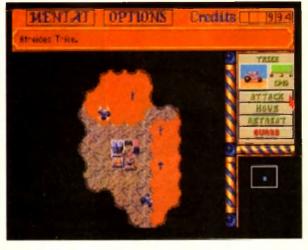
The entire game can be controlled by the mouse, or by some well-thought out key presses if you prefer. Throughout the game you can call upon this bloke (or bloke ess, depending on your house) called a Mentat who bestows pearls of wisdom upon you and gives you updates on your propress.

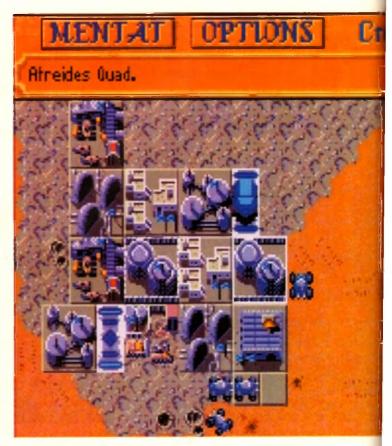
The graphics aren't wanderful but they are functional enough. The digitized sound effects however, soying things like "yes sir", laffinnaive and enemy unit destroyed" complete with radio clicks, are really well done, and some atmospheric



got to select a house to represent. You'll be presented with details about each before making the big decision

When you begin the game, you have but a single construction site. This could be a vast base, in dune course (sorry)





If you're going to get anywhere with this game, you've got to know what all the little icons do when you click on them. So here, courtesy of Gamer (the top magazine for the discerning spice harvester) is a guide to what does what on the screen:

- Click here to speak with your advisor
- This lets you save and load games and change the speed of the game to suit your taste
- 3 This is how much cash you've got
- When you click an a vehicle, something like this will appear in the command window. It shows you the vehicle's damage status and allows you to give orders
- 5 The radar scanner
- 6 The main map window which scrolls around
- 7 Various messages appear here giving you news and information

**Dune-know what this icon does?** 

1 2 3



music plays away in the background when it's not deafened by laser blasts. The soundtrack enhances the gameplay considerably. When you first begin, you may find it to be slightly confusing or dull, but as you play in order you'll find it becomes quite addictive.

It's not perfect, however, it can become a bit

It's not perfect, however. It can become a bit repetitive after a while, since the objective for each

pice scl

**当才また**三

Johnsh S Mas Loss

Dils

level is pretty much identical and the technique required to achieve it doesn't vary. It also seems to lack that certain indefinable something that truly classic games have. Beneath the rather dull focade there is octually quite a lot of depth and challenges (if) just that the challenges doptionage as the game progresses – it's always just a race to build the best buildings and protect your-

self against the enemy.

While this may all sound very similar to
MegaloMania, there are two significant differences. Firstly, MegaloMania had better graphics

and humorous sound which made it instantly

Secondly, in MegaloMania, as the game progressed and the tech level changed, the methods of gameplay required to succeed changed considerably, whereas in Dune 2/1124 method stay the same.

Despite this, Dune 2 is a very competent attempt at the genre, but not up there with the classics. Were there a little more variety it could have been a Gamer Gold...

**DAVE CUSICK** 



In some sectors of the planet there are plenty of spice fields. Once you've found one you can send out a harvester to do the biz











The computer plays like my sister, in that it makes up words and decides to let itself get away with it. Who's ever heard of such words as Calea, Cuing, Bundu, Boily and Woon?

was an immortal scent in The Tall Guy in which Jeff Goldblum and Emma Thampson stood alone in hompson's shouldy flat in the early afternoon.

Two people, alone, in the middle of the atternoon, murmured Thompson, "Tes," replied Goldblum, "Ideal conditions for Scrabba"

Needless say, they got up to a good deal more than Scrabble that afternoon, but that's not the point. The game has proved lostinging to people almough quite why light exactly style!

It's been around in this country since 1954, the manual says, and over 35 million copies have been sold in over 90 countries since its launch

The basic objective is to create words from your seven letters and place them on the board so as to score as many points as possible. Certain squares on the board double or triple the amount of points scored

must admit was sceptical when presented with Scrabble. When the game has already proved so popular in its original form, why convert it to a less portable and or more expensive computer format?

Well, I suppose the computer could at least settle disputes over allowable words. In addition, it provides an apparent of adjustable ability to challenge lonery Scrabbe players with nobody to play against

Boards can also be printed out fair posterity, if you want, for example, to adom your walls with poster-sized grabble boards.

The game is controlled via the mouse, and during

A captivating quasi-expressional diversion or an abominable and ineffective feigning of its table based progenitor?

play the screen is composed simply of a board on the left-hand side and your letters and a few options to dick ou down the right-hand side

When it's your turn, you call dick on letters and they appear of the top of the green. Here you can rearrange them and when you've got a word you think will score well, select whether the word will read across or down, and drag this to the position on the board where you want to place

If you're stumped as to what moves you could possibly make with your selection of letters, there's a cuite-in help mode which make suggestions to you. The dictionary runs to over 134,000 words, as listed

from mally basic low-scaring wards to whopping

help screens so that even

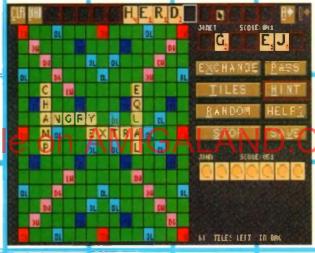
the first to

feel lost

player won't

C A NGRY XTRA HOVE DUMEEN: 1 Total possible hoves: 41 ALUET GIVEN AT FUEL F

The main game screen is simple and uncli And writing captions for it is nigh on imp n is simple and uncluttered.



making to n at th top of screen and from drag it onto the board

VISION

AUDIO

Price > \$25.99

Size ➤ ½ meg

HD Install > Yes

99999

great killer moves. Apparently the record word score Scrabble competitions is held by Dr Karl Khoshiaw of Manchester, who scored 392 points for "Caziques" which, also apparently, ithe plural for a West Indian hief). Whether the help mode could offer moves quite a that I don't know, but it's still very useful

The only disappointment for me is that in the amounter version you can't chect and swap your letters for more useful ones, when the other players aren't looking.

DAVID CUSICK

**666600000** Scrabble fans might be disappointed that a playr's letters are displayed on screen for all to see, DIFFICULTY in the Chambers Official Scrabb Words book although I really can't see any way of avoiding his. When it's another player's turn they do disappear **00000000** The help made can be set up to suggest anything LASTABILITY Graphically the game is about as exciting as @@@@@@@**@** TSB WILLS: MICTIMARY ne sound consists of an irritating tune and not a lot A good conversion, lse. However, this is excusable in a game of this type, THE DECTIONARY USED BY 150 ES DEFICIAL SIMBILE WASS PUBLISHED BY CONTRETS. THE DOLL AS IT IS ALSO SHOULD. CONTRETS ALL THE 2-TH H-LETTER DECLISE VOLUS: COIDS IT (MANUELS DELL'SED DETTONARY IN MY ME TO!) (ASTER 1220 DE PIRETRATED. WASTER 1-TH 3-LETTES FORT WAS INFECTED FORMS FAMILY AND LETTES IN 150 ENTRES TO THE SALET OF THE SAL but I can't see it ince the emphasis is putely on making the gameday appealing to all that as good as possible. many people. II What else is there to say? Scrabble is Scrabble, deserves more success than it's likely to get, because it's a very involving and the computer version is a perfectly computent and brain-laxing game. As close to tempt at converting the the real thing as it could be The problem is that traditionalists will prefer the poard game version anyway, and many people with 1 Publisher > US Gold vant to shell out £25 in these financially bleak times, Developer > In-house The game when they could buy the <mark>original for a tenner.</mark> has built-in Disks > 1

# BRUTAL

Drawingboard

hen the letter turned up in the post offering a sneaky look at Millennium's forthcoming attractions, it didn't take many minutes to reach a decision.

What, nice ride out to scenic Combridge, spot of lunch, few coldies and a preview of Brutal Sports Footy with those pleasant chappies who brought you Robocod and Rome AD92? I'll think about it. Not!

Before we go any further however, I've got to get this out of my system. Somebody for Heaven's sake build a bloody motorway to Cambridge! That or move it further north! Honestly, what a trek.

Anyway, you didn't start reading this column to listen to my moans about the state of Britain's road network. What about Brutal Sports?

Well the first thing I can report back is that it will be the first in a series of titles under the banner of Brutal Sports. Millennium say with some confidence that there are ideas in the pipeline for a series of violent forays into futuristic sports.

Although there are no fixed plans, a little bird told me that Brutal Basketball could well feature - the mind bagales!

However, first off the production line is Football, Well, I say it's football but the similarities are remote to say the least.

Set in the gloomy post-apocalyptic world of 2089, Brutal Sports Footy puts you in control of one of eight man-made mutant teams.

These vary between teams of sub-human muties like the Vikings through to the rather more bizarre teams of rhippes and lizards.

teams of rhinos and lizards.

All the teams have different skills particular to their species, for example, the dragons have anasty knack of breathing fire and toasting the apposition, whereas the rhinos favour the subtlety of the body stomp – nice bunch of lads the rhinos!

As for rules, well there aren't any. Basically it's every man for himself, in a survival of the maddest. However, there are a couple of ways to win.

Method one involves getting the rugby-shaped ball into the back of the goal (as one would expect).

The other technique is to employ absolute bloodlust mode and wipe out the opposition. This is sure to prove a popular option as there are so many

gory ways to rid the turf of the opposition.
You can slash large chunks out of each other by utilising a variety of swords that lie around the field of play. Or if you prefer, attempting a complete decopitation could be the order of the day!

There are also bags of other interesting modes of mutilation to occupy the psychotic mind and satisfie the most sadistic tendencies.

These came in all forms from lightning bolts which totally immobilise the opposition to temporary ice prisons which trap your opponent.

It's really totally over-the-top camage on a pitch which churns up the longer the play continues.

## **COMMENTARY JOCKS**

Watching over the bloodbath are Bob and Jim, the commentary jocks. There's no room for the Ludge supplies that Des watch who is not room for the room to the bather.

No, these guys are ex-pros, and they're both absolute beer-monsters, with the IQ of a jack strap and manners to match.

Their main contribution is to add some sickly spice in the commentary department. In fact, they converse in a very surreal, futuristic, slang lingo which describes certain moves and techniques involved in the play.

At the moment I'm still trying to get my battered bance around getting "atamised" or "Jules Verned". But, watch this space for more linguistic

Anyone who thinks Sunday League footy is dirty, think again. Millennium are about to set new levels of OTT behaviour with their impending gore-bucket release. Simon Clays takes a look...



Another goalmouth scramble... let's hope they get the right ball

CON

vernacular from the street game of tomorrow in the very near future. However, they are survivors and should be granted some respect. Well, they're hard cases who'll beat the crap out of you if you step out of line, Having played the "nearly com-

PORTS

# The mean team



Tight pants and feeling horny, it's the rock hard rhinos



No butts, it's the wild goats



Norse nutters the Vikings

pleted version", I can definitely say things are looking good for its October release date.

Although I got totally taken to the cleaners, I have to say the gameplay is excellent. The graphics are nicely defined and everything moves at a frantic rate.

The number of things going on in the play at once is ridiculous. While headless blood-coated carcasses lie redundant on the gore-soaked turf, some heartless ruffians welly their decapitated bonces around like coconuts!

Brutal Sports Footy looks set to be a biggy. It's the kind of game that's a great laugh to play with your mates. Loads of over the top violence that's far too stupid to take seriously coupled with compulsive argumentar.

So if brain-crunching, ear-splitting, nosewrenching mindless violence and a slight touch of ball skill's your thing, better start brushing the old leather armour down because Brutal Sports' is definitely the one for you.



Mack blasts a generator and in doing so helps save the environment. Fine, if Virgin say so...

burgers and cardboard-packaged French fries,

sponsoring a game about cleaning up the planet.

Is this an attempt to assuage a guilty conscience,

About as close as most of us ever get to being

environmentally friendly is recycling the odd alu-

minium can, or buying CFC-free aerosols. Global

While sitting in their local McDonald's reading

the latest copy of Global Gladiators (the magazine

for the truly sad burger junkies with no life whatso-

ever) our heroes Mick and Mack received a bizarre

visitation. Nothing supernatural... just Ronald McDonald, that highly humorous clown who never

Ronald, kind soul that he is, zaps these two into this twisted slimeworld, the only provocation for this being Mick (or passibly Mark)'s words "I wish i was a Global Gladiator" Whether he actually wanted to experience gladiating of the global kind for himself is debatable. Perhaps there's a moral in this story... being a McDonald's burger junkie could be a serious

Gladiators takes it all a stage further

fails to tickle one's fancy

threat to your health.

Anyway, whether or not they're

or is there really something in their new-found

"green" -ness?

ow this is a strange cookie. Here we

have possibly the world's biggest fast

food chain, who every day produce

millions of individually wrapped



Jumpy jumpy, blasty blasty. Jumpy blast, blasty jump. Blasty jump, jumpy blast. (Sigh) I love platformers

# Interesting - an ecologically sound game from

McDonalds! make amends for the masses of paper they've wasted in their all-too-frequent forays to their

weird green guns. In exactly what way slime is contributing to global environmental problems I'm not sure, but anyway, that's where you come in. You have to lead one or other of the cheeky chappies across numerous scrolly landscapes, shooting slime and

favourite fast food emporium, they've set out to

purge the earth of slime armed only with some

slime generators, collecting McDonalds "M" signs, and avoiding falling in pools of some acidic substance. Yes readers, it's a plotformer with shooty

Before you turn the page in disgust though, it's not as bad as it sounds, because Virgin have made quite a good job of it. The graphics are nicely done and your character is very well animated. He's also an athletic soul, being able to leap about, fire his blaster at all sorts of angles, and so an

When you're not actually moving him around, he'll happily chew away on some bubble gum, or prime his gun for action, or spin it around on his finger. The nice backgrounds make the whole game look stylish. The music's quite good too. The whole program is exceptionally well

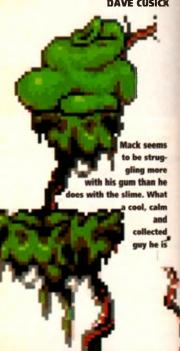
presented. The levels are pretty

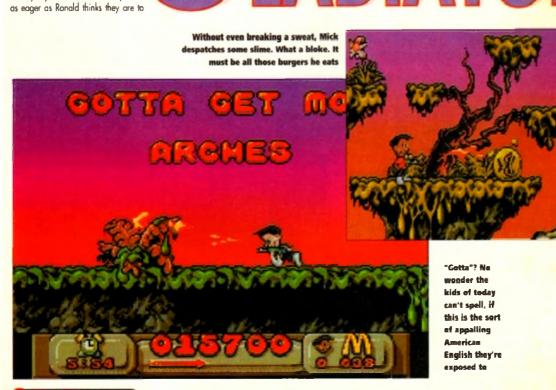
large, in fact they're a lot burger (sorry) than you'd expect. Because you're also up against the clock you'll probably find some of the levels pretty taxing.

You can't finish a level until you've collected a sizeable amount of "M" arches, so when you find yourself hunting for just one more arch with 30 sec onds left the game can become quite frantic.

While not radically different in game style to any other platformer ever, it is a slick example of the genre and will certainly appeal to fans of arcade-

DAVE CUSICK









Drawingboard

rival workers, there's more. The levels are full of all

hen I found out that a title was in development for the A1200 that centred its attentions on mining, I was intrigued to say the least. Were you to take on the role of Michael Heselfine, whose mission it is to close down every profitable

pit on the planet without suffering a heart attack? Or, were you to play Arthur Scargill's wife campaigning against the fact that there is to be no more shafting?

Well, the thankful answer is neither of these, In fact Diggers has nothing to with any form of terrestrial mining as we know it. Instead, it's

set in the depths of space on the planet Zarg. Here, on the glorious 412th, the planet's author-

ities allow a month of frenzied free mining and scavenging for all manner of precious gems. This probably does wonders for their tourist trade.

The problem is that it's awfully competitive, with many alien races converging on the place at the same time – sounds remarkably like Glastonbury.

You have two main routes to achieve success Route one is to raise cash by running a successful operation. The second, probably more popular choice, is to knock the pit-props out of rival compo nies and little their poordies.

This would be a fairly straightforward exercise but for one thing. Diggers looks set to be absolutely huge - and that's with a double "oo".

I'm not one to get techy with you, but when a game boasts this much you can't just skip over it. Diggers' comprises of 33 huge levels, each made up of 72 screens, in fact, Millennium are claiming a total of some 30,000 locations throughout play

Each level will relate to a different area on the planet surface. Subsequently, the terrain alters level to level, meaning having successfully quarried a forested area, your poor pit-ponies might land up in some Arctic zone, freezing their gem-stones off.

But what of the workforce, I hear you scream?

Simon Clays grabs his pit-boots and casts his open "mined" to matters

Hi-ho! Hi-ho! It's off to work we go...

ON THE

manner of nashes

These vary from nasty taxic mushies (remember kids, don't do drugs!) through to zombie-type folk who inhabit subterranean caverns

Anyway, after a hard day's slog down the pit,

what better way to wind down than a visit to the Zargon trading centre better known as the corner shop?

Here you will be able to purchase all the goodies to make life down the mine a trifle easier. You'll be able to buy all manner of hardware, from supersized mining drills

through to lifts and mining carts. In fact, you can even buy teleporters to zop into rival territory and rob valuables.

Having been fortunate enough to see a close-tocompletion version of Diggers, it looks and plays as well as the hype might suggest.

It's highly playable with acutely intelligent computer opponents who really are out to get you. Also the graphics are impressive, especially the backdrops which are really near.

Millennium have come up with a very intelligent unique piece of software. There are so many forets to this title, whether it be the artificial intelligence of the different races, or just the vastness and variety of life on planet Zarg,

All in all, diggers looks set to become bigger than itself, and that's tough. It's going to appeal to both puzzlers and strategists alike. It even has aspects which could liken it to a platformer.

When this game hits the shelves I can see fellow reviewers making comparisons to Lemmings or indeed, Humans. However, the only true likeness I can see is that, like both of these titles, it's going to

So, with this in mind I heartily recommend that you stake your claim in the intergalactic Klondike and get digging!



Habbish, who though intelligent, get bored easily

and down tools to have a pray. Or perhaps you'll

take on the montle of the Grablins. These critters dig

fast but are incredibly cowardly. The strategical

Control of your team will be via a number of

send them off to do your dirty work.

icons. Just clicking on your hapless workers will

choice will be yours.

Well, this is where things look set to take on dimensions of even greater proportion.

You see, at the outset of each scenario you will be given the choice of four different groups of miners who operate in teams of five. Each race of diggers will have vasily different personal attributes and idiosynchracies. This is unlike English miners who now only have one personali-

ly - unemployed.





my Hill takes on a saturday job at the Za<mark>rgon Trading C</mark>entre





It's time to whip out your ticket, grab a bucket of popcorn, get torch blindness from the usherette and grope your way into the Cheap Seats!

# **Simon's selection**



it wasn't many lunar cycles ago that I was playing the full price version of Team 17's foray into the world of space

Yet, no sooner am I just getting over a bad bout of

space sickness, and it's backl Now released on budget. Team 17 have trodden ground seldom trod by software houses. They've lis-

tened to the inane ramblings of the buying public and tweaked a product to suit. Heralded as the Amiga's top shoot-'em-up, Project X has no pretensions about complicated story

lines. Instead it's five levels of sizzling arcade action The gameplay is devastatingly rapid and not at the expense of the graphics. Project X boasts some massive sprites and some of the rockest level quardians live come up against - honestly these

dudes have tattoos, smoke bitter and drink tabs! Boasting a shuttleful of features and more weapons than a Ronald Reagan peace-keeping force in Central America, Project

If you didn't buy it first time around you were foolish. Miss it this time on budget and you're a mutie who should be sucking vacuum in nether-space!



**Project X** 

Team 17 • £12.99

Man's quest for eternal youth has been with him for thousands of years. To be able to sink 25 pints of lager on a Saturday night, get up with no hangover and

The Immortal

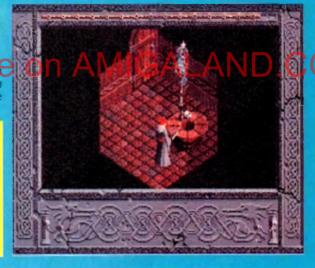
The Hit Squad • £12.99

then run around for 90 minutes playing football for the sunday team forever is the dream of many. However The immortal has nothing to down such pipe dreams. Instead you are cast as the sucker who has to rescue his boss from the depths of a labyrinth. In this case your boss is a top wizard-type dude called Mordamir. To make matters worse the dungeon is inhabited by the normal quota of nasties. Doesn't sound anything at all different yet does it?

Well actually it is! The display, rather than your bog standard Dungeon Master approach, is generated in a true 3D style. You control your character as one would in a hack-em-up, interacting with others as you stumble haplessly around the labyrinth.

There are loads of traps and puzzles to contend with as well as a host of spells for your do-gooder adventurer to use. Immortal is a visually attractive, most playable, addictive game. It's guaranteed to hold your attention for eternity!







# **Bart vs the Space Mutants**

Hit Squad • £9.99

Having invaded the TV screen, the charts and probably your sanity, the Bartman's back to annoy you in budget form.

To quote the ambassador of American youth culture, the plot goes something like this:

"A bunch of totally gross and putrid monsters are taking over the bodies of the people of Springfield - Bart's home town. They wanna build a weapon that's gonna take over the planet!"

So, tooled up with X-ray specs, spray paint and a skateboard, your job is to rid the world of the belligerent body snatchers

There are five levels in different areas of town and plenty of nasties like the Zebloid and the Glondip to keep you occupied on your tick-tocking travels. On the plus side, the animated intro is worth seeing once or twice and there are some pretty clever puzzle elements to the play.

But on the whole it's a fairly run of the mill platformy game riding on the back of the latest paper super brat.





The history books are full of infamous characters who have tried to dominate the world, but have failed.

Now here is your chance to write your name on the next page of history.

Quantum Software have developed a new game system enabling you to play against 5 other human players throughout the United Kingdom. This system is called Interactive Computer Play (I.C.P.). Although the origins of I.C.P. stem from Play By Mail, Quantum Software have taken this a step further. The game is played on your computer as in any other computer game, the difference being that in order to interact with other players all turns are saved to disk, forwarded to us for processing by our computers. All turns are on a seven to fourteen day basis.

Global Conflict is a contemporary strategic wargame for 6 players. The game is played on a world map consisting of 31 different countries. The computer will randomly choose 6 countries, one for each player. The remaining 25 countries are neutrals controlled by the computer. A player needs only to retain occupation of any one country to remain in the game.

# Features Include:

Hi

• Over 20 different types of Combat Aircraft • 6 different types of Armour • 6 different types of Artillery • Modern Stealth Aircraft • Recce Satellites • Modern Combat Infantry • Surface to Air Missile Batteries • Early Warning Radar Sites • Anti-Tank weaponry • Hand-Held Surface to Air Missiles • Aerial Recce • Strategic Bombing Missions • Precision Bombing Missions • Ground Attack Missions • Over 12 different types of Aircraft Armament • Both NATO and Soviet weaponry used • Option to view air mission from Aircraft Cockpit • Option to view ground combat from Battle Command Centre • Detailed graphical and written information on any weaponry used in the game • Further Weaponry Data Disks to come • Intelligent behaviour by computer controlled neutral countries • Option to printout a copy of all reports • Player to Player Message facility • Realistic Sound Effects • User-friendly Game Interface • Hard Disk Installable.

Quantum Software will present a cheque for £500 to the player who wins the VERY FIRST game of Global Conflict. Thereafter any further winners will receive a Quantum Gift Youcher.

A boxed game containing Manual, Disks and 2 Free Turns for only £12.99. Further turns are charged at £2.95.

Due to the complexity involved in matching players to games, please allow approx 28 days for delivery.

Global Conflict - Amiga 1Mb RAM only (A1200 Compatible)	(AC)
Full Name	
Address	
Post Codle	
Please supply me with a copy of Global Conflict	
l enclose a Cheque/Postal Order for the sum of £19,99 made payable Software.	to Quantum
QUANTUM SOFTWARE, 14 BENTHAM ROAD, LANCASTER LA	A1 4JX.
TEL: 0594 841616	

emember that in Elwingil lives
Thorm, who has some monk's
robes that you will need later on,
so go up to Thorm and collect
them. By now all your party
should be on level ten and have collected
31,000 experience points - if not, it is a
very good idea to go and collect them
because they will be needed soon.
You should also have four out of five

You should also have four out of five members of your team carrying runic tablets which in the later stages of Ishar will after you all some form of protection. Head back towards to the Fhulbrod Forest and then head North.

and then head North

Make sure that all of the team of brave

adventurers can drink a "brainwash" potion and you can use a protection spell or samething similar because you will meet a very powerful wizard who could blind, inverse and bind your party. Some effects wear off, but not inversion.

When you have despatched with the wicked wizard you will gain the entrance to the Valathar Dungeon. Make sure that



We continue this month with the second and final part of our solution to Ishar which has only just been released on the A1200

# Free drugs!

One last tip for Ishar – how to get your potions for free. First you have to click on the face pictures of everybody, then the hands picture of the member who has the potion to be copied, then pick sameone who would like the potion.

The member who has the potion should be holding a two-handed weapon. Pick up the potion, click on the shaded hand and then click on the other member's hand. Now put the potion back in the first member's hand — he should now have two bottles.

Pick up one and as soon as you click on the shaded hand the count should go up one. Now to finish, put the spare either in the first man's hand to boost his supply or the other man's hand.

# The Gamer guide to

your team have been refreshed. If they haven't then now is a good time to refresh them.

Having opened the door with Erwin's key you can enter the dungeon. The first lew rooms contains zombies that you can burn quite easily. Be on the look-out for treasure and food, and most important of all, try to find a key.

Leave through the opening and you will

Leave through the opening and you will find at the junction that there is a locked door. Turn right into a diamond shaped room, this is where the Black Knight lives. Instead of swapping tales about good and evil and generally being polite, fireball him.

Continue into the next room and then turn right and enter a maze that contains treasure, oil and yet another key. Open the locked door in the Black Knight's room and follow the maze. Collect the oil and eventually you'll come to a T-junction.

Turn left into a room with two levers and a key in it. Operate the lever that was on the far wall as you first came in the room. This lever opens the barred gate at the other end of the T-junction. Going that way you will encounter a solder quarting some food, and you'll also come across yet another key.

Now go back to the locked door and open it. Collect the oil and travel up the top of the corridor. To the right is a giant to be sorted out. Once the giant is defeated you will gain

Go through the opening in the

# Part 2

distance. You will be confronted by a baddie through the archway, so fireball him. If you are running low on energy at this point, go back and refuel – remember that the zombies you killed previously will

regenerate. Find the correct combination of levers to

gain an exit from these two corridors, at the end of which there is along corridor with a T-junction. Some Blue Gnouls will appear from nowhere and attack you; deteat them with your team. The left-hand exit has some all to be collected.

The right-hand exit leads to some more ghouls and a spiral corridor which terminates with a key and a transporter which will take you to the next dungeon level. Now is the time to recharge again because there is plenty of work to be done before you complete the game.

Use the teleport to go to the second level, immediately, go left and left again into a corridor with a lever and a door in it. This is the gas chamber, so give each of the party a drink of the "worgaz" potion to protect them. Once you've done that pull the lever, this will allow gas to enter the room, but the door will now open.

Search everywhere because there is a lot of treasure to be found. At the other end of the room is another lever; pull this and you are now through the gas chamber. There are two exits to this room, both of which are guarded by some very





gas chamber - remember to use the correct potion again. Return to the teleport room that you first arrived at, strengthen your team and the head South. After not too long you will come across a treasure box and a carridor to the right. Contained within in is a Demon.

Protect your seam of adventurers before attempting to kill it. This diamond-shaped room contains two doors for you to search behind. Travel East from the diamond-shaped room and you will come across a lever. Pull the lever and travel down the corridor to the West and you will find some oil. Carry on West and then turn South and you will have a choice of three corridors. Each one leads to the same room.

This room contains the last runic tablet

- however, it is guarded by lots of spiders.

There are also two hidden rooms; one to
the South and one to the North. Now go
back to where you pulled the lever. It
might be a good idea at this point in the
game to go and recharge all the members
of your team.

In the big room facing the lever is a maze complex containing more treasure, oil and another room containing a talisman (it looks like a jewelled broach). While you were wandering around you should have found a wall with three levers.

These levers operate the last barred gate – it is the outside two that need pulling. You can then travel up the last corridor and be met by Medusa. It would be a very good idea to use the "brain wash" potion again and then go and kill her.

Be extremely careful though because around the next corner is her pet drogon who will take some killing. Finish him off and then strengthen your team? You will now need to be wearing the monk's robes – after this transport there is no going back! Kill the monk and then use the transporter.

You will arrive in a very long carridar which is guarded by three powerful manks, if you've got the potions to recharge your team's psychic energy then now would be a good time to do it.

After this you will confront Krogh himself, so protect your team of adventurers and use the anti-Krogh spell, hit as often as you can with any weapon you can, because he has many hit points (the magic sword takes off 720 points) and with any luck you should survive having killed him.

The defeat of Krogh means that your adventure is at an end and Ishar is sadly long aone and completed. Have no fear though because Ishar 2 is out now and no doubt your thirst for adventuring will continue.

 A big, big thank you goes to David Wing for supplying Gamer with this full solution to Isnar He gets a lorrylood of free software for his trouble.

# 'Ere, do ya want some free games?

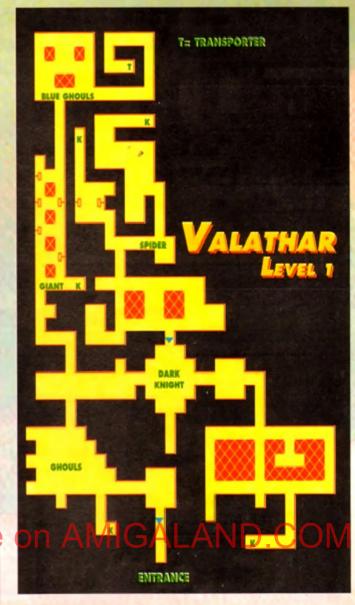
Can you complete games in less than a nana-second? Are you a computer games God? Well, if you answered yes to these questions then why not write to us chaps at Gamer, so we can share your supreme intellect with all those other hapless gamers?

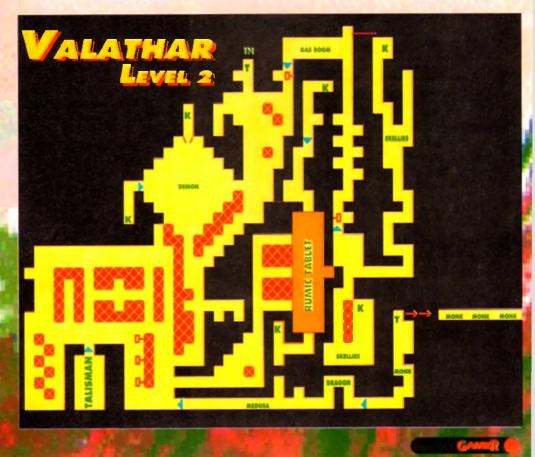
If your solution is used in the mag we will quite happily send you some software, but better than that you will receive a highly limited edition Gamer badge to impress your friends and family with

We will accept the solutions sent in any media, such as computer printouts or even the actual text file on a disk. If possible a couple of maps would be immensely helpful, but make sure we can make sense of them.

Write to us and together we'll making the gaming world and happier and more peaceful place. Send your stuff to:

Gamer - It's the best mag ever and Japplaud it, at Amiga Computing, Europress Enterprise, Adlington Park, Adlington, Macclesfield SK10 4NP







# THE CENTRE OF TEC

# WTS ELECTRONICS LTD, CHAUL END LANE, LUTO



# Amiga 1200 Packs

- 32-bit 68020 Full power
- On site warranty
- Two Python joysticks
- Free Paint package software
- Mouse mat
- A1200 Standalone £269 A1200 with 20M8 £350 A1200 with 40MB £399 £439 A1200 with 60MB
- A1200 with 80MB £459 A1200 with 120MB £529
- £599 A1200 with 200MB



# Amiga 4000 Packs

AGA Chip set

Seasonal Sale • Seasonal Sale • Seasonal Sale • Seasonal Sale • Seasonal

- 68030/40 processor
- Co-pro option
- 2MB/4MB RAM
- A4000 030 with 80MB HD & 2MB
- A4000 030 with 80MB HD & 4MB £999
- A4000 030 with 120M8 HD & 4MB £1099
- A4000 040 with 120M8 HD & 6MB £2139

£899

# A500 Plus

 Amiga 500 Plus Cartoon Classic pack

**SVGA Monitors** 

14"/20" Super high resolution colour display.

# A1200/A600 Hard Drives



- Easy to install upgrade kits
- · Full instructions and cables where necessary
- All drives supplied with formatting instructions and software
- Free fitting available phone for details
- 20MB HD Upgrade Kit
- 40MB HD Upgrade Kit
- 60MB HD Upgrade Kit 80MB HD Upgrade Kit
- 120MB HD Upgrade Kit
- 200MB HD Upgrade Kit

Amiga 500 Hard Drives

**High Quality GVP Hard Drives** 

	A500	A1500
120MB	£429	£382
500MB	£989	£942
1GB	£1189	£1142

# **Monitors**



- Philips 8833 MKII Monitor £219
- Commodore 1084s
- Professional IBM compatibility Complete with cable
- £194 | Full UK warranty

  - Tilt & swivel stand

## £135 Internal Hard Drives for A500 £169 · Easy to install - Full instructions £189

- ICD technology
- Pro Internal 20MB hard drive £175 • Pro Internal 40MB hard drive £245
- · Pro Internal 80MB hard drive £325
- £375 Pro Internal 120MB hard drive
- Pro Internal 200MB hard drive £475
- A570 CD drive £149

# When purchasing with

an Amiga deduct £10 from above pricing

£5 Dust cover for the above

## A1200 SVGA Monitor (Displays high £228 productivity modes)

- A1200 SVGA+ Monitor (Displays all modes £389 high and low)
- A1200 SVGA plus 20" Monitor (Displays all modes ideal for DTP,CAD etc.) £1044

## A1200/A600 Upgrades A1200 PC1204 4MB • clock (Co-p

- £178 ProRam 2MB PCM-CIA A600/A1200 £118
- £172
- ProRam 4MB PCM-CIA A600/A1200
- ProRam 1MB A600
- A1200 Real Time Clock

£39

£95

£269

£329

# Workstations

£36

£36

- Ergonomically sound
- Facilitates up to three external floppy drives
- Made in the UK
- Strong and robust
- Aesthetically pleasing
- Keep your desk neat and tidy
- Supplied complete and assembled with
- free mouse mat
- £36 A500 Workstation
- A600 Workstation
- A1200 Workstation
- Workstation Coverall dust covers



- 100 Capacity lockable disk box
- Squick mouse

- Zi-Fy speakers
- Trackball controller
- Mini Office package

# **Peripherals**

- Mouse mat
- TDK high quality DSD (10) disks £9.99
- Jet Fighter joystick £13.99 Apache joystick £6.99
- Screen Beat speakers £29



- £5.99
- £13.99 £1.99
- Computer Mall DSD (10) disks £6.00
- Python joystick £9.99 Zipstick joystick £14.99
- £39 A500/A600/A1200 Dust cover s £4.99
- £24.99 £14.99 Control pad lovstick A500 Modulator £36.00
- Vast range of leads Please call

# Scanners



- Allows image processing in a useful and
- unique fashion
- Comes complete with operation manual One of the fastest growing applications for home and professional users
- · High specification coupled with cost effective pricing
- Power Hand Scanner • 64 greyscales 100-400 DPI
- Thru'port to printer
- Fully compatible with Delux Paint 4, etc.
- Advanced software
- Power Hand Scanner v3.0 Power Hand Scanner Colour
- £105 £229

# Pro ROM Swapper



- Swap between Kickstart chips
- Fits A500, A500+, A600,A1500 Auto swapping via keyboard control
- Flexible cable allows the swapper to work in conjunction with
- accellerators etc. Simple to fit - full instructions
- Pro ROM Swapper
- Pro ROM Swapper + 1.3ROM £37

£18

- Pro ROM Swapper + 2.04ROM £40
- Workbench 2.04 plus manuals£49

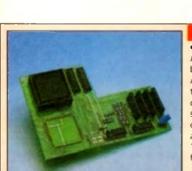
£54.99

# HNICAL EXCELLENC



N, BEDS, LU4 8EZ TEL (0582) 491949 (6 LINES)





# Pro Agnus 2MB

 Provides a full ZMB of Chip Memory for the Amiga 500 and A1500/2000 • Designed and built in England . Supplied with 8375 Obese Agnus . Includes 2Mb Memory on board in the form of low power Zips . Allows the processing of elaborate animation and sound sampling . Provides the same max, chipmemory as the A3000/A600 &500+ . Increases addressable memory space from 9MB to 10MB . Complete with full instructions and flying leads . British made

 Pro Agnus 2MB (Free fitting available - Phone for details)



# **A500** Memory Expansions

# A500 Pro-RAM 0.5 Meg. Upgrade

- Allows 1MB software to run
- · Chip memory compatible
- British made
- Without clock
- · With clock

£19

A500 Pro-RAM 1.5 Meg Upgrade

· Gives a full 2MB of memory

£74

£16

A500+ 1MB Meg Upgrade

£29.95

# High Current Power Supply



- Allows the addition of peripherals without damage to computer or power
- Why risk damaging your expensive kit when one simple investment will ensure total peace of mind now and for the future

# Switch mode design Full crow bar projection

- British made
- A600 Power supply unit A500 Power supply unit
- A590 Power supply unit
- A1200 Power supply unit
- A2000 Power supply unit

£44.95 £54.95

£44,95

€99.95

£44.95

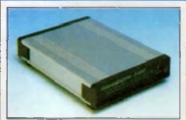
# Cumana 3.5" External Drive



- High Quality
- · Renowned and proven reliability
- Top notch specification
- Anti-click
- Long moulded cable
- Slimline design

- Cumana external drive
- Cumana external drive + 100 capacity disk box
- Cumana external drive
- + 100 disk box + 20 blank disks
- A500/A500+
- Internal replacement disk drive

# Supra Modems



- Utilise hundreds of PD Bulletin Boards
- Communicate with fellow computer users
- Cuts down on telephone bills by using fast efficient baud rates
- 100% Haves compatible Tone pulse Auto Dia VA to Wissy
- £59 Standard RS232 Interface
  - Programmable number storage
- £62 Free Coms software
- £68 Supra 2400 Modem £89
  - Supra Fax Plus (0-9600 BPS)
  - £148
  - £358 Supra v.32 BIS (Fax Modem)



- WTS have sole distribution rights from Americas biggest Commodore chip distributor
- Workbench 2.04 Kit

£78

- Kickstart 2.04 £24 • Kickstart 1 3 £26
- Kickstart ROM Swapper £18
- Fatter Agnus 8372 £49 Obese Agnus 8375 £54
- £29 High Res Denise
- 1MB x 9 Simms (3 chip) £29 1MB x 4 Zips £14
- 8520 CIA £13

# SALES HOTLINE 0582 491949 (6 LINES), 0480 471117 (24HR), FAX ON 0582 505900



Credit Card ordering by phone is easy. Simply phone our sales hotline quoting your credit card number., expiry date, name and address and the products you wish to order and we'll do the rest. Alternatively write the above details on your letter when ordering by post.



When ordering by post in cheque form please write your cheque card quarantee number on the reverse of the cheque and send along with your order. Postal Orders are also accepted.



NO DELIVERY CHARGES TO UK MAINLAND, MINIMUM ORDER AMOUNT £15.00.

Should you wish your order to be sent by courier service please add £5. This method includes Comprehensive insurance.



WARRANTY: One year return to base (excluding chips). ONE YEAR EXTENDED WARRANTY: Available on all products (excluding chips) at 10% of purchase price when ordering.

WHERE TO FIND US!

**Head Office** WTS Electronic Ltd Chaul End Lane Luton 0582 491949

**Computer Mail Bedford** No.16 Downstairs The Harpur Centre Bedford 0234 218228

Computer Mail St. Neots No.6 **Priory Mall Shopping Centre** St. Neats 0480 471117

**Computer Mail Hertford** 49 Railway St. Hertford 0992 503606

**Computer Mail Dunstable** 84 High Street North Dunstable Bedfordshire 0582 475747

All prices quoted or products stocked are subject to stocking levels and availability. WTS cannot be held liable or supply reimbursement for force majeure, or items, which are out of stock due to demand or low stock at its suppliers which may result in delayed delivery or non-delivery, payment with order, please allow 28 days for delivery. WTS reserve the right to ammend prices, revise packs, specifications and or substitute product without prior notice at any time without fability upon itself.

sonal Sale • Seasonal Sale • S

# UNIVERSAL COMPUTER 3

L ORDER 47 Oxford St. Whitstable Kent CT5 1DB

47 Oxford St. CALL OUR HOTLINES Whitstable Tel: 0227 773177

Fax: 0227 771076

DEMANGERS mon/fri.9.00-7.00 sat 9.00-5.30

FREE HOTEL ACCOMMODATION for two, with any standard AMIGA purchased

# The Best Value & Service Direct To Your Home

# AMIGA A1200

# The Amiga A1200 is the 90's AMIGA

68020 Processor operating at 14MHz, AGA Graphics Chip set gives you a palette of 16.8 MILLION Colours, so 256,000 colours on screen at any one time. The A1200 comes with 2Mb of Chip RAM as standard, and a 1 Year on site maintenance warranty FREE.

A 32BIT HOME COMPUTER

# **U.C.S. PRICE £359.99**

# AMIGA A1200 COMIC RELIEF Pack

This A1200 comes to you with a free copy of Sleepwalker software worth: £25.99. £10.00 will be given to comic relief for every pack sold.

# U.C.S. PRICE £365.99

# AMIGA 1200HD

A1200-40MBHD	£516.99
A1200-60MBHD	£552.99
A1200-80MBHD	£564.99
A1200-120MBHD	£634.99

# **ZOOL S/WARE PACK**

This amazing offer available with any amiga purchased, includes: Zool, Striker, Pinball Dreams & Transwrite normal retail price £127.92

U.C.S price £8.99

# AMIGA A600

The Amiga A600 Standard Pack Amiga A600 with single drive, 1Mb Chip RAM, Built in TV Modulator, Mouse & Manuals, Workbench 2.4 1 Year on site warranty.

# U.C.S. PRICE £189.99

# A600 WILD, WEIRD & WICKED Amiga A600 as above With four

excellent Titles: Deluxe Paint III, Formula one Grand Prix, Putty & Pushover.

# U.C.S. PRICE £284.99

A600HD Epic Hard Drive Pack Amiga A600 standard pack, With four Software Titles: Dpaint III, Trivial-Pursuit, Epic & Rome. + An Int. Fitted HARD DRIVE.

With 40MB Hard Drive..... £36999

# AMIGA 500+

A500 plus Cartoon Classic Limited number please phone A500+ 1Mb RAM, TV Mod, Workbench 2.4, Mouse & Manuals.

U.C.S. PRICE £194.99

# AMIGA 4000-040

# The ULTIMATE AMIGA

68040 blistering Processor 25Mhz, AGA chip set, 256,000 colours from 16.8 million, flicker free display, 3.5/1.76 MB 3.5"drive, Cross Dos, WB. 3 2Mb Chip Ram (32Bit) 4MbFast Ram (32Bit), 120Mb HD. 1 year on site Warranty...

U.C.S. PRICE £1975.99

# AMIGA 4000-030

68030 Processor-25MHz AGA Chip set as above. 4 Mb of RAM (32Bit) . WB.3 1 year on site Warranty

80MBHD-2+2 U.C.S. PRICE £1058.99

120MBHD-2+2 U.C.S. PRICE £1158.99

# **AMIGA 3000**

# The superb AMIGA 3000

52 Mb Hard Drive, 68030 Processor 25MHz, 3.5 880K FD, spare drive bay 512K 32Bit ROM, 4 Zorro III slots 52 Mb Hard Drive.

1Mb Chip, 1Mb Fast RAM. £877.99 Above with 105MBHD.....£959.99

# **MONITORS**

1960 multi-sync	£377.99
Commodore 1084 S	£189.99
Phillips 8833-col	£199.00
Commodore 1084 ST	£189.99
Commodore 1940	£289.99
Commodore 1942 multi-sync	£280 00

# HARD DRIVES

# Commodore A590 20Mb

20Mb Hard Drive with sockets for up to 2Mb Fast RAM, ext.SCSI interface autoboots with Workbench 1.3+, builtin Fan, £174.99

GVP. Series II HD8+ Hard Drives
The A500-HD8+ provides the ultimate
in hard disk performance for the Amiga
500/+ simply the best...
GVP A500-HD8+ 42Mb....

GVP A500-HD8+ 80Mb.... £349.99 GVP A500-HD8+ 120Mb.... £399.99 GVP A500-HD controller £174.99

GVP IMPACT SERIES II hard drives, with game switch, SCSI port, Int.RAM expansion up to 8Mb FAAASTROM SCSI Driver and a full 2 year Guarantee.

# **GVP Series II 1500/2000**

GVP 42Mb HD & Ram card GVP 80Mb HD & Ram card GVP120MbHD & Ram card GVP controler & Ram card GVP controler & Ram card

> ALL UCS PRICES INC. VAT. FAST UK DELIVERY. SAME DAY DESPATCH.

# VIDEO TITLING & EDITING PACKS

# **BUDGET PACK**

A500+ CartoonsClassic Ext Disk Drive Rocgen+ Genlock Scala or Videostudio 3

UCS Price £473.99

# **SEMI-PRO PACK**

AMIGA A1200 Ext Disk Drive Rocgen+ Genlock Scala 100

UCS Price £649.99

# SEMI-PRO-PLUS.

AMIGA A1200-80MBHD Rocgen+ Genlock Scafa 100 DPAINT 4 AGA

UCS Price £1090.00

# PRO PACK

AMIGA A4000-030-80MBHD Scala VS 1.13 Pro Vidio Director (Edit Controler) DPaint 4 AGA. GVP Genlock.

UCS Price £1670.00

HOW TO ORDER

HOW TO ORDER
ALL MAJOR CREDIT CARDS ACCEPTED

We offer same day despatch for credit card orders placed before 5pm, or send cheques, bankers draft, postal orders To UNIVERSAL COMPUTER

SYSTEMS 47 Oxford st. Whitstable, Kent, CT5 1DB. Please allow 7 working days for personal/business cheques to clear. Send your Nane & address, along with your daytime Telephone number (if possible) and your order requirements, please phone and ask we will undoubtably baye it appailable. with your daytime Telephone number (if possible) and your order requirements. BY PHONE, phone our order hotlins with your credit card number, address

& order requirements. AND WE WILL DO THE REST.
POST & PACKAGING Please add £1.00 per item of software & small periph. Add £5.00 per item for large Peripherals & Hardware

please phone and ask, we will undoubtebly have it available. All offers are subject to availability, All prices are subject to change, but are correct at time of going to press.

# FREE P.D. SOFTWARE With any order over £100,00

.EPOA

# **PRINTERS**

## CANON CANON BJ 10SX Portable... £289.99 CANON BJ 200 Desk Top..... CANON BJ300DT/(80column) ...£345.99 ...£374.99 ....£479.99 CANON BJ330DT/I30 " " )..... CITIZEN

	2 1 1 1		PR T	
CITIZEN	Swift	200	colour	£214.99
CITIZEN	Swift	200	mono	£186.99
CITIZEN	Swift	240	colour	£262.99
CITIZEN	Swift	240	mono	£249.99
	EIK	OS	HA	
CELLICONI		0.0	4	6300 ()

SEIKOSHA	
SEIKOSHA SL95 colour	£209.99
SEIKOSHA FP 1900PLUS mon	£109.99
STAR	
STAR LC 100 colour	£164.99
9 PIN colour with paper parking, 8 fonts	
and DIP switches.	
STAR LC24-100	£184.99
D. C. Darley D. C.	

24 PIN PRINTER with compressed data-	
mode, 10 fonts, 16k huffer	
STAR LC 20	£129.99
STAR LC 200 colour	
STAR LC24-200 colour	£269.99
STAR LC24-200 mono	
STAR XB24-200 colour	£379.99
STAR SJ48 bubble jet	£209.99

# MICE & TRACKBALLS

Roctec Mouse	£13.99
	£17.99
Alpha Data (Optical Mouse)	£83.99
Mega Mouse	
Mega Mouse	£12.99
AlfaOptic Optical Mouse	£31.99
	£47.99
Optical Pen Mouse	£39,99
Crystall Trackball	£35.99
	£14.50
NEW 400 Dpi Mark 2	£16.99
•	

# **JOYSTICKS**

Cheetah Bug.	£12.99
Competition Pro 5000	£13.99
Cruiser (Black)	£POA
QuickJoy Jetfighter	£11.99
QuickJoy 137 F Python	£9.99
QuickJoy 137 F PythonQuickJoy 155 Aviator	£25.99
QuickJoy TopStar	£20.99
Freewheel.	£25.99

# **MEMORY**

# A500/500+

POWER Ram Exp.UNITS	
8Mb pop to 2Mb	£125.99
8Mb pop to 4Mb	£189.99
8Mb pop to 8Mb	£289.99
TRAPDOOR EXPANSIONS	
A500	
A500/ 512K with clock	£25.95
A500/ 512K without clock	£21.95
A500 plus	
A500+ IMb	£32.99
A600	7111100-0177
A600 IMb with clock	F.4.4 95
PCMCIA	
A600/1200 PCMCIA card 2Mb	£115.05
A600/1200 PCMCIA card 4Mb	
A1200 Trap-Dun Exp.	
Microbotics	
MBX Bare Board no FPU	£118.99
MRY 14MH7-68881, 0MR	£179.99
MBX " " 4MB MBX " " 8MB	£289.99
MBX " " 8MB	£389.99
MBX 25MH2-68882, 0MR	£280 00
MBX " " 4MB	£389.99
MBX 4MB MBX 8MB	£489.99
MBX 50MHz-68882- 0MB	£389.99

JMR

8MB.

£489.99

£589.99

OOLDEN IMAGE	
Alfa Scan Hand scanner	£119.99
Alfa Scan Plus H/Scanner	£139.99
Alfa Scan OCR (inc. ocr.S/W.).	£269.99
POWER	
Power Scanner Mon.v3 A500/+	£107.99
Power Scanner Col. A500/+	£224.99
Power Scanner Col. A1500	£224.99
FLAT-BED	
Epson Flatbed 6500	£749.95

# ROM SHARERS

A600 Rom Sharer	£28.50
Rom Sharer Kickoff	£16.95
2.0 Rom	POA
	POA
1.3 Rom	PO.

# **ACCESSORIES**

# LEADS & CABLES Amiga 8833 Mk.2 .... Amiga Multisync. .... Amiga Scart. .....

DIL DI D	
Disk Drive Extension	£9.99
JoyStick Long Extension	£5.99
Midi Midi 2M.	£3.99
Midi Midi 4M	£5 00
Modulator Extension	60 00
Mouse & Lastin Cat	- 45.00
MIOUSE & JOYSTICK EXI.	3.99
Mouse & Joystick Splitter	■£18.99
Mouse & Joystick Ext. Mouse & Joystick Splitter.	4.00
	£7.99
Bits & Things 14" Monitor Dust Cover	
Dill of Links	4= 04
14" Monitor Dust Cover	£5.99
14" Tilt & Swivel Stand	£15.95
A500 Dust Cover,	£3.99
A600 Dust Cover.	£3.99
Anti Glare Screen Filter	£14.99
Control Centre A500/+	£38.99
Control Centre A600	£35.95
Lockable Disk Box 100cap	£8.99
Lockable Disk Box 80cap	
Lockable Disk Box 40cap	£5.99
Mouse Mat.	£3.49

Control Centre A600	£35.95
Lockable Disk Box 100cap	£8.99
Lockable Disk Box 80cap	£7.99
Lockable Disk Box 40cap	£5.99
Mouse Mat.	£3.49
Stereo Speakers,	£14.99
DISKS	
Branded Box of 10	£9.95
Unbranded Box of 50	£26.99
MUSIC	
GVP Digital Sound Studio	£44.95
Stereo Sampler	£20 00

# **GENLOCKS**

GVP	
GVP G-Lock Genlock	£331.95
ROCGEN	William .
ROCGEN Plus	£144.99
ROCGEN Rockey	£279.99

# SUPER A1200s

A1200- 6Mb-80MbHD-14MHz.

UCS PRICE £849.99

A1200-10Mb-80MbHD-14MHz

UCS PRICE £949.99

A1200- 6Mb-80MbHD-25MHz

A1200-10Mb-80MbHD-25MHz

A1200- 6Mb-80MbHD-50MHz

A1200-10Mb-80MbHD-50MHz UCS PRICE ET 149,99

# SOFTWARE

APPLICATION S/W.	
Wordsworth 2	£87.99
Excellence 3.	£54.99
PenPal.	£35.99
Final Copy 2. The Publisher.	£69.99
The Publisher.	£36.99
Home Accounts 2.	£37.99
Mini Ofice Pro	£37.99
Hyper Book.	£49.99
CanDo V2.	£99.99
Amos.	£36.99
Amos Pro	£44.99
Amos Compiler.	£19.49
Directory Opus IV.	£49.99
Quarterback.	£42.99
Quarterback Tools V5.	£59.99
Cross Dos + V5.	£21.99
Pro-Midi Interface.	£17.99
VideoMaster.	£44.99
D.Paint IV AGA	
Scala	£74.00
	£165.00
SCIUIICI Z	£58.00
Video Studio 3	£114.99
Mini Studio	£50.00
Video Director	£120.99
Vidi 12 AGA	£POA
Vidi 12 Real Time	LPOA
Cine Morph	
And the state of the state of the state of	

Many more Titles in stock Please phone



## ORDER FORM

Name.....

Address	
	C
1	C
	E
	C

UCS PRICE 1949.99

UCS PRICE £1049.99

UCS PRICE £1049,99

£5,00 Next Day Delivery

Despatch

old

We will try to beat

PAYMENT I Enclose cheque/PO for

CREDIT CARD... ard Type..... ard No.....

xp. Date .....ard Holder Name & Address..... Postcode.....

Home Tel. 

> for the above amount.

Signed.....



n previous issues I've mentioned that it is possible to remote control the Amiga using ARexx. In this issue we will look at ARexx programs that allow you to call up your Amiga from a distance, using a modem and another computer, and make it do useful tasks (no, you don't have to take your Amiga to a disused airfield...).

There are several areas in which the remote control of a computer could be useful. One of these is the collection of data that has to be relayed back to a base machine; another is the remote operation and monitoring of equipment.

There is also the more traditional use of a "bulletin board", which may serve several users as a common forum. All these require the host computer to act on the basis of information it receives externally.

In our overview, we will provide an outline of how ARexx scripts may be used for remote control with a terminal program, but we will not give any specific scripts (other than examples), as these will vary with different user setups

You can use the ideas demonstrated here as a skeleton for your own custom requirements.

Before we go any further, please note that you should be familiar with three different subjects before you try operating your machine from a distance.

# Basic knowledge

Along with a reasonable understanding of ARexx, you will need a command of AmigaDOS (no pun intended), and a grasp of the bare essentials of communications, including the hardware involved.

You don't have to be an expert, but you should know the difference between the parallel and serial ports, and what a baud rate is.

Since this article is about ARexx automation, we cannot give the other two subjects anything but he bifferest attention. I do not recommend a project like this for absolute beginners! On the other hand, it is not too difficult, and you can learn a lot about your machine by doing it.

There is a certain satisfaction in connecting up two machines successfully, and even if you only do it at an elementary level, it will give you an understanding of the principles involved, and demystify the whole field.

The requirements for a system like this are, firstly, two computers, with modems and terminal programs. The second computer need not be an Amiga; it could be a portable, an old 8-bit or a PC - anything really - but it must have a serial port that can support a modem.

If you are making a direct connection between the machines, then the port should be RS232 or compatible. You should check this, especially if you are using an old 8-bit machine. If you are in any doubt whatever check

System:

CD and minimum of the state of the

A simple system setup

with a local comms expert.

We also need an ARexx-compatible terminal for the Amiga. This is the key to our setup, and we consider some suitable terminals below.

Our basic system is illustrated in Diagram I. Incoming signals from the modem arrive at the Amiga's serial port, and are received by the terminal program. The terminal itself is controlled by a script program (ARexx or otherwise), which does the actual processing of the incoming signals.

There are two loops in our program. First is an endless loop that waits for valid incoming signals; these could be things like the phone ringing, or the establishing of a connection.

Secondly, once the connection is established, we need a loop to process the commands that the Amiga receives. In addition to the above, you might want some form of password control.

There is one more important point to consider. When the

# MRACES

terminal is waiting for a call, we want it to continue waiting, no matter how long it takes! However once it answers a call, we require some sort of safeguard, that will allow it to shut down and go back into the "waiting for a call" loop.

This can be achieved by forcing a shutdown if there has been no activity for a certain length of time. We can then assume that the connection has been broken, and we should hang up. We therefore have to program two different reactions to prolonged periods of inactivity (this is the meaning of the two lines SET TIMEOUT and RESET TIMEOUT in our pseudo-code below).

The following pseudo-code shows a very simplified implementation:

LOOP 1 (wait for any signals)
If incoming signal is valid THEM
SET TIMEOUT
AMSWED PHONE
CHECK PASSWORD(Break out it wrong)
Start processing:
LOOP 2
SEND A PROMPT
WAIT FOR INCOMING LINE
... Process incoming lines(commands)...
(Break out it command is "BYE" )...
END Loop 2
MANG UP
RESET TIMEOUT
ENDIF
END Loop 1

For instance, suppose you have a hypothetical hardware device connected to your Amiga which makes coffee! Normally this device is activated by a CLI command, or an ARexx program called "coffee maker". The terminal could

# What you'll need..

To experiment with these ideas you'll need:

- An ARexx-compatible Amiga terminal: NComm, VLT, Term or Termil. All are available in the Fred Fish library.
- The fifo.library distribution, if you want to use VLT's pipes. It is available on Fred Fish 588
- A second computer, and a modem for each computer. The second machine need not be an Amiga.
- A null modem for initial experimenting.

# AREXX

then be programmed to run the "coffee maker" program whenever it received a special command, eg "Make Coffee". You could then ring home, and have your coffee ready by the time you arrive. Of course, this is a trivial example, but it gives you the general idea.

Even if you do not have two modems, but you do have two computers, and you want to experiment with some of these ideas, you can do so using a so-called "null modem".

This is simply a cable for connecting two compatible serial ports, where the lines for sending and receiving data are switched around or 'reversed'.

# Terminal software

A suitable wiring diagram for connecting the serial pons of two Amigas is shown on this page. Alternatively, you can buy readymade null-modems off the shelf at your local electronic hobby/components shop. Make sure that they are compatible with your machine.

Finally, we get to the most important bit, the terminal software that will be running on the Amiga. As we have already seen, this program will perform the following functions:

- · Monitor incoming information.
- · Run our ARexx program that knits everything together.
- · Relay our commands to the system.

It will also probably run unattended for a lot of the time, so it should be reliable. There are a number of very good terminal programs available on the Amiga. Among them I would list NComm, VLT, Term and TermII. Most of them are available

- An Amiga user is more likely to know ARexx, and does not have to learn yet another new syntax.
- ARexx is integrated with the system, so that you can control other programs that are multitasking on the Amiga, even from a remote location. This is probably the most powerful of the available features.

If you use ARexx as the script language, you also have the advantage of its excellent passing facilities: for instance, in the example we mentioned above, it would be easy to handle a command like "Make Coffee with two sugars"!

ARexx also allows us to implement support for bulletin board systems (BBSs) at many different levels.

We now look at a simple code fragment for the NComm terminal. It checks the incoming data for the

string SERVICE PLEASE followed by a carriage return.

If it is found, the user is prompted to enter a command, which the program then repeats in uppercase. If the command "EXIT" is entered, then the terminal goes back to waiting for "SERVICE



# yoursichisteameend.com

under the shareware system and can be found in the Fred Fish library.

All of the above programs are well featured, and have good reputations. My personal favourite is VLT, because it allows sophisticated use of redirection pipes, which permit the running of a remote CLL It is also free. It has, however, caused me some troubles with transfer protocols that I have not yet sorted out.

# Script language

The most popular terminal is probably NComm, which is well known, stable and cheap, and is probably the best bet for a beginner. Try to ensure that you are using the latest version. My apologies if there are any other good terminal programs I have not mentioned. There could well be!

Most good terminal programs have some kind of script language for the purposes of automation. These languages control the input and output to the serial port, and other terminal-related functions, like downloading, uploading, protocol, speed settings, and so on

They also have basic looping and decision (IF) control structures. On the Amiga, most of these script commands have a parallel ARex version

What, then, is the advantage of ARexx? Why not just use the regular script language? There are several reasons:

- ARexx is an established language, with powerful control structures and versatile commands. No matter how good a scripting language is, it will probably be more awkward and limited than ARexx.
- ARexx can provide access to facilities that a terminal language is unlikely to have, including numerical computation.

PLEASET, NComm uses two commands for the serial port, WAIT and SEND.



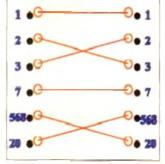
A code fragment like the above gives the simplest view of the communication possible between two machines. If you link up the two computers with a null modem, you can try this for yourself.

You can also use this as a test to make sure that the two termi-

nal settings are synchronised - refer to your terminal's documentation.

Next time we will go into some of the more technical details, including remote control over the phone and an overview of BBSs.

> Wiring for an Amiga null modem



Alex Gian tells
how to use your
Amiga by remote
control. It's
all down
to ARexx,
of course...

# 

Δ	11 A 11 A 11 A 11 A 11 A 11 A 11	
П	AUTHORISED DEALER FOR * AMIGA	
	Amiga 600 Wild, Weird & Wicked Pack (Add £15 for Zool Pack)	219.00
$\Delta$	Amiga 600 Base Pack	189.00
П	Amiga 500 Plus	199.00
ш	PRINTERS	
Α	Star LC-20	
	Star LC-100 Colour	
	Star LC-200 Colour All printers	
	Star LC24-100 include a	
Δ	Star LC24-20 Mkii parallel cable	
п	Star LC24-200 Colour	259.00
	Star StarJet SJ-48 Bubble Jet MONITORS	219.00
A		
	Philips 8833-II + Game	
	Commodore 1084ST inc Swivel Stand AH n	nonitors 189.00
	Commodore 1940 Dual Sync Stereo 0.39 Dot include: Commodore 1942 Dual Sync Stereo 0.28 Dot	Amiga leads 279.00
$\Delta$	DISK DRIVES	378.00
	Addup 3.5" External Drive Slim Metal Passthru - On/Off	in&n £2) 54 95
-		
Λ	A500 or A2000 Internal 3.5' Drives Amiga A590 20Mb Hard Drive Larger drives	189.00
	GVP A500 42 80Mb Hard Drive available	289/379
	GVP A2000 42/80Mb Hard Drive MISCELLANEOUS	
Δ	A600/1200 Smartcard FASTRAM 2/4Mb	(free p&p) 129.00/199.00
	MBX1200z 32-bit RAM + 14MHz 68881 4Mb with Clock	(free p&p) 289.00
11	MBX1200z 32-bit RAM + 25MHz 68882 4Mb with Clock	
A	ROM Sharer + ON-BOARD SPEAKER! Keyboard Switched	(Iree p&p) 29.95
$\Delta$	A4000 32-bit SIMMs - 2Mb/4Mb CHIPS	(free p&p) 99 00/159 00
П		
	Kickstart V2.04 ROM for A500/2000	
Α	Kickstart V1.3 ROM for A500/2000	
	Super Denise 8373 (For New Graphics Modes)	
	1Mb Fat Agnus 8372	
	CIA Chip 8520	
$\Delta$	68882 FPU 25MHz	(tree p&p) 119.00

ALL PRICES INCLUDE 17.5% VAT, CARRIAGE 57. Prices subject to change without notice. E & OE

# Amiga 4000/30 120Mb £1039

80Mb Version £949

Uses 68030 CPU 2Mb Chip Mouse + Workbench 3 + Manuals Add £85 for 2Mb Chip & 2Mb Fast

# Amiga 1200 New Low Price £289

A1200 80Mb £489 - A1200 120Mb £569

# Amiga 600/1200 Internal Hard Drives

85Mb £215 \* 127Mb £289 \* 209Mb £475

Including Cable, Software & Full Fitting Instructions Add £23 for Fitting Service & Warranty Retention

# Amiga 386SX 25MHz Bridgeboard £199

This new fast Commodore Bridgeboard uses your existing Amiga floppy drive and is supplied complete with cables, MS-DOS 5 & Manuals

Optional 1.44Mb PC 3.5" FDD in 5.25" Frame £69

(All A4000/600/1200 Prices include Home Maintenance)

# Delta Pi Software Ltd



П

8 Ruswarp Lane, WHITBY, N. Yorks YO21 1ND TEL/FAX: 0947 600065 (9am - 7pm)

АПАПАПАПАПАПАПАПАПАПАПАПАПАП



П

Δ

П

 $\Lambda$ 

П

 $\Lambda$ 

Ħ

П

П

# Hi Quality Version Available on AMICALAND COM

★ FREE ESTIMATES ★
 ★ NO STANDARD CHARGES ★
 ★ MOST REPAIRS 48 HOUR TURNAROUND ★

\* 3 MONTH WARRANTY \*

\* COLLECTION/DELIVERY ARRANGED \*

\* FREE TECHNICAL HELPLINE \*

# FREE SPARES CATALOGUE

We have produced a complete spares listing for the A500, which includes all parts from Shift Keys to complete Motherboards!!

# PLEASE CALL FOR DETAILS



MONITOR REPAIRS
WE NOW REPAIR ALE
AMIGA COMPATIBLE
MONITORS

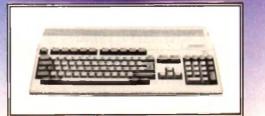
INCLUDING COMMODORE 1084 & THE ENTIRE PHILIPS RANGE. ASDO POWER SUPPLY ASSO MODULATOR £29.95 **A500 ROM SWITCHER** £24.95 A600 ROM SWITCHER £22.50 £29.95 SKICKSTART ROM £23.00 HIGH RES DENISE £22.50 f9 95 624 (Y) 8520 CIA £25.00 5719 GARY £13.00 £19.95 £32.00 **PAULA** 68000 PROCESSOR £5.00

ALL OTHER CHIPS AVAILABLE

A500 KEYBOARDS £45.00 A600/A1200 HARD DRIVES FROM JUST £99.95 FITTED!

WE WILL COLLECT FROM YOUR DOOR TODAY!

IF ADVISED BEFORE 10am & IN UK MAINLAND



FREE FITTING ON UPGRADES, ROMS & ROM SWITCHERS

# HAWKWELL ELECTRONIC SERVICES

MOUNT BOVERS LANE, HAWKWELL, HOCKLEY, ESSEX SS5 4JB.

ORDERS & ENQUIRIES SOUTHEND-ON-SEA 0702 207593 Mon-Sat 9am-7pm. TECHNICAL HELPLINE SOUTHEND-ON-SEA 0702 207274 Mon-Fri 9am-6pm
CALLERS WELCOME Monday-Friday only 9am-5pm

ith the huge array of renders and ray tracers flooding the market, picking the right package has become increasingly difficult; a factor that's been compounded further by the degree of excellence inherent within all the recent releases.

In a nutshell, the choice boils down to differences between ease of use, realism and animating potential. Obviously there are other factors such as speed and flexibility, but the big three tend to sway the average buying decision.

In this month's column the aim is to side-step the technicalities and concentrate on practical application - hopefully targeting the perfect solution to your particular videographic

# Imagine2

To be honest I must admit to being biased towards Imagine courtesy of prolonged use. However considering I've had the opportunity to twiddle extensively with every package on the market it's perhaps a testament to the staying power of this truly excellent program.

However if we put the back-slapping aside it must be said that Imagine2 isn't without its faults, most obvious of which is the program's fairly poor anti-aliasing.

In addition, the accompanying manual is also something of a disappointment which potters along in a narrative rather than informative style making comprehending this already complex and somewhat idiosyncratic package even more

However even with these drawbacks Imagine2 offers a

primarily due to the added flexibility offered by Imagine's Cycle editor.

However it must be stressed that Real Classic is by no means basic when it comes to animation and when this is combined with the best anti-aliasing on the market, the program's appeal for corponite applications is pretty hard to ignore.

# Caligari 24

Due to the three pages devoted to Caligari 24 in the main mag, a detailed analysis would be a bit silly. However a quick "in a nutshell" overview might be useful.

Unlike the other packages, Caligari is a renderer, not a ray tracer. This simply means objects will reflect the sky and the ground but not other objects in the scene.

In practice, the end result is that real world emulation doesn't match up to the others - but to be fair that isn't what Caligari is intended to do. In short, Caligari is the ultimate corporate anim generator. Courtesy of the program's relatively basic rendering and mapping options, it will never match up



# Iultiple choice

degree of modelling, mapping and animating freedom that can only be matched by Real3D v2 - a program which is at least three times as expensive and much more difficult to

Another bonus for Imagine is its ever-increasing third-party support which includes the excellent Understanding Imagine? reference manual, which for around £20 will solve the aforementioned manual problem instantly

In a nutshell, Imagine2 is probably best described as perhaps the ultimate enthusiasts' package capable of startling animation and photo-realistic imitation of the real or virtual worlds.

However be warned that there's a rather steep learning curve that demands dedication - but in return can provide award-winning results

# Real3D Classic

Formerly known as Real3D Turbo - prior to the release of Real3D v2 - Real3D Classic was the main contender against the onslaught of Imagine 2. Being a convert from Real 3D to Imagine 21 can see the relative benefits of both systems.

Although both are employed by professionals with equal relish I'd say that Imagine2 would be more to the taste of the purist who wants believability and doesn't mind investing time and effort to get it, while Real Classic provides a somewhat easier method of producing very high quality corporate logo material, which although excellent lacks the subtlety of a similar Imagine

The primary cause of this slightly artificial look is Real's dependence on primitives which tend to lend to a slightly Legoesque look to the final image or anim - a factor which isn't helped by the relatively basic mapping options that don't allow the multiple maps of Imagine, Aladdin 4D or Real3D v2.

Animation is again slightly lacking in comparison to Imagine

when it comes to clever images

However that's probably a fair price to pay for the best modelling and animation environment on the market. If you're purely interesting in graphics that will animate beautifully but always look computer-generated, Caligari is the perfect combination of case of use and power animation.

# Aladdin 4D

Although very respectable as an all-rounder, it must be said Aladdin doesn't really justify its rather inflated asking price of £255 - a figure which is roughly double that of both Imagine2 and Real 3D Classic

In addition to the financial insult, modelling is fairly basic in comparison to its counterparts with the most damning blow being struck by the totally lack of freeform editing - which again is offered by both of the above.

On the animation side it's pretty much the same story with good but certainly not spectacular results which lack the intuitive touches offered by Caligari and to a lesser extent Real and

Having said that, Aladdin isn't without strong points, with the most notable being the generation of gases; a feature which can produce very impressive static and animated images.

However as seems to be case throughout Aladdin, there is a compromise - which in this case takes the form of very slow rendering.

Continuing in an animated vein, it must be stressed that mapping isn't one of the program's faults thanks to an unlimited number of textures, which can be morphing and animated as and when required.

All in all the bottom line points to a pretty good package which unfortunately suffers badly when it comes to value for money when compared to the majority of the opposition.

**Paul Austin** attempts to lead the chronically confused through the veritable minefield of renders and ray tracers

# AMIGA BLITTERS OF TAMIGA (DEPT. AC) 40 COLLEY HILL, BRADWELL, MILTON KEYNES, BUCKS. MK13 8EL



E&OE

Credit Card orders attract

Electronic Micro-Processor Level Amiga Native Task

Amazing MODEM deall US Rebotice Sparteter Fan/Modem V.32 bis 14400. Fully BAST approved! 4189.9511

THIS REVOLUTIONARY BOARD IS NOW AVAILABLE AND IS RECEIVING ELLENT PRESS. JUST LOOK AT THE FEATURES

- Multiple emulations from the one board (reduces cost and saves on Zorro slots!).
- Currently shipping with the most sophisticated MAC emulation available.

  Mac emulation boasts full colour (16 standard, 256 AGA, 1.6 Million with
- RETINA, with other graphics card support to follow) and if multi-tasks! Supports Hard Drives (via on-board SCSI or AmigaDOS partitions), MAC 800K (via SYBIL), MAC/IBM 1.44Mb IBM 720K, EMPLANT and AMAX formats.
- Support for AppleTalk/Serial ports, Printers, Modems, Midi etc
- Supports SyQuest, Any AmigaDOS device (DH0:, RAD:, VD0: etc.), Scanners etc
- Emulation speed is comparable to the real machine and compatibility is excellent
- The IBM 386/486 emulation is under development, with Atari ST/Falcon, C64/128 SNES/SEGA (among others) all planned in the future.
- Currently supports any Zorro bus Amiga (A500/A1000 via suitable Zorro bus adapter such as Slingshot, with A600/1200 PCMCIA version to follow:
- Requires 68020/30/40 with 4Mb RAM recommended. (The MAC emulation requires 256K MacH/x/cx/SE30 ROMs)
- The EMPLANT can also provide 2Mb battery-backed static RAM!
- Additional features being added all the time. We provide full UK support and free Mac upgrades. A UK support BBS is imminent.

EMPLANT DELUXE - £349.95 (Includes AppleTalk/Serial ports/ SCSI Interface) SYBIL HARDWARE - £59.95



Commodore 386SX-25 B-Board Commodore 486SLC-25 B-Board £199.95 Trifecta LX 2000 (IDE/SCSI-2) £129,95 Trifecta LX 500 (IDE/SCSI-2) £194.95 GT6500 Epson Flathed Scanner (249 95 GT8000 Epson Flatbed Scanner £999 95 £234.95 Power Scanner Colour (A500/+) Power Scanner Colour (A2000 etc) £229.95 Video Backup System £59.95 GigaMem £99,95 £124 95 TypeSmith £119.95 Clarity 16

## AMIGA COMPUTERS

Please call for the latest configurations/ prices of any Amiga Computer. We will shortly be able to offer almost any configuration of drive/memory size for the A4000/030 from 80Mn to 240Mb.

# SUPER-CARD AMI II

The ultimate disk back-up system. The original and best system, often copied but never equalled. Complete with V4.0 software. Versions for all Amiga's (Please state type when ordering). If you are looking for a powerful and upgradeable system, look no further. Optional utilities disk available at £19.95 (£9.95 with system). £39.95

**NEW AMIGA MONITORS** 

Two new monitors for the new range of Amiga's. Both have tilt/swivel base & stereo speakers. 1940 (With .39 dot pitch) £289.95 1942 (With 28 dot pitch) £379.95 MICROVITEC Cub Scan 1440 The best monitor in for the price! Displays all modes, auto sizing & fantastic picture quality! \$434.95

# HIGH DENSITY DRIVES

You no longer need an A4000 to use high density floppies. ANY Amiga with WB 2.04 or higher can use these units. HiDex floppy drives feature CBM's approved high density mechanisms and a full 1 year warranty. They perform as 880K drives and support all A4000 compatible applications. They come in a sturdy. complementary coloured metal case. Available NOW!

EXTERNAL MODEL £124.95 INTERNAL MODEL #104.95

> Please state 2000/3000 for internal.

24 HOURS FAX ORDER/QUERY LINE

HOURS: MON-FRI 9.30 to 5.00 SAT 9.30 to 12.30



ORDER/INFORMATION LINE CALL (0908) 220196



(0908) 220196



tWe reserve the right to reject machines which, in our opinion, are beyond repair. Normal charge applies)

his article concentrates on Amiga speech. The demonstration program converts Ascii text files into words spoken out loud by the computer.

This is a two-stage process. First the text is translated into unique sounds or "phonemes". During the second stage each phoneme is narrated as an audible sound by the Amiga.

The Amiga phoneme notation has symbols to represent each possible unique sound (part of a word). These phonemes are similar in principle to those used by linguists in the study of phonetics.

There are separate symbols for each vowel, consonant, and any special modification resulting from other sounds in the syllable. The symbols used by the Amiga phonemes are restricted by the use of the Ascii character set, and made up of capital letters and numbers.

# Haphazard translation

The disk-based Translator library consists of the routine Translate() which reads text and outputs the corresponding phonemes.

Some words are not pronounced as they are spelled; the results can be incorrect for the less common anomalous words. For example, the Amiga pronounces "could" to rhyme with "wood", but pronounces "pearl" to rhyme with "heel".

The Amiga does not contain phonemes that are not present in American speech, and translation from non-English text can be a bit haphazard.

The narrator device is a program package, constructed to

# **PROGRAMMING**

monotone (robotic) mode.

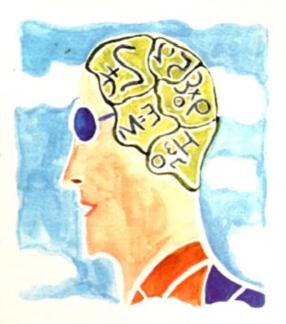
As with any audio request, it is possible to vary the volume, pitch, and sample frequency of the sound. In addition, the rate, or number of words per minute can also be varied.

If these parameters are not specified in the write request block, the Amiga defaults to a male voice speaking at full volume in natural mode at a pitch of 110, a sample frequency of 22,200, and a rate of 150 words per minute.

These defaults, and the range of each parameter, can be obtained from the header include files narrator.i.

It is necessary to specify which combinations of sound channels are to be used, and how many combinations. The demonstration program uses four possible twochannel combinations.

For each write request it is also necessary to specify the address and length of the input buffer containing the phonemes.



# Speak to me di Quality Version Available on AMIGALAND.COM

allow the Amiga to express itself verbally. A device communicates with the program using a IOStdReq structure, or input/out-put request parameter block, containing a reply port for the message from the device.

The parameters for the desired function are entered in the structure, then the device operation is started with the SendIO() or DoIO() function.

The narrator has its own extended IOStdReq, the narrator\_rb. For the demonstration program the device is opened first, and then the message port and 1/O block initialised. The Exec Support Library functions CreatePort() and CreateStdIO() available to C programmers were not used.

The device is opened using the OpenDevice() function with a pointer to the name of the device, and a pointer to the L/O structure. The L/O structure contains a reply port – this reply port should be set up as a message port, with no flags, and should have a signal bit allocated.

# Narrator structure

The SigTask structure member must be the pointer to the current task, and the message list header should be initialised with NewList(). The I/O structure node should be given a pointer to this reply port (\_mn\_ReplyPort), and the total length of the extended I/O block (mn\_Length).

Programming is similar to that for other devices. The read request can return the relative width and height of a mouth producing the current sound, into an extended narrator structure, or mouth rb.

The write request will result in an audible sound for each phoneme in the data buffer. It does this by either sending a write request to the audio device, or programming the audio registers directly.

Two separate audio channels are used to make the sound. The narrator device contains sound samples for each phoneme, for male and female voices speaking in natural (inflected) or

A non zero return code from the write indicates an error, there is useful list of the codes in the header files, and the structure member, io\_Actual, gives the position of the offending phoneme in the buffer.

For Assembler programmers, there is no handy formatted print routine, so a programmer would have to provide his own. Also the user would need to be prompted for the text file name, instead of using an extra argument on the command line.

# Library routines

The narrator device, the Narrator input block and the message port would be opened and used in exactly the same way as for the C program. Translating the text into phonemes, and speaking the result, would be done by the same Library routines as in the C program.

Computer speech can be useful for educational programs aimed at young children who would not be able to read text from the screen. Visually handicapped people who work with computers also need the Computer speech facility, and speech can also be used to enhance multimedia computer-based training.

Computer speech can be very valuable to enable some handicapped people communicate with the rest of the world; they can input via the keyboard or graphics pad, and the computer can speak the words for them.

Aniga speech featured in earlier Amigas, but not in later versions because the disk space was needed for other features. The translator library and narrator device can be found on upwards-compatible assemblers and compilers like Devpac and SAS Lattice C.

Due to pressure of other commitments, I will not have enough free time to write any more Programming pages. I have very much enjoyed writing for Amiga Computing, and I wish AC staff and readers all the best for the

Margaret

Margaret Stanger
has some useful
advice on how to
teach your Amiga
to answer back!



Do you want to overlay computer graphics or titles onto your videos? If so, you will need a Genlock. Rendale Genlocks are built to a very high standard, and are used widely in the professional environment.

62 Tenter Road, Moulton Park Business Centre, Northampton, NN3 1AX, England.

Tel: (0604) 790466 Fax: (0604) 647403

# THE GENLOCK PEOPLE

# RENDALE 8802 £139 -

The Rendale range of Amiga Genlocks begins with the 8802. This is a Genlock, which, when attached to an Amiga computer and a suitable video system, will allow you to mix video and computer graphics. It offers all the functions that you need, such as:

- \* RGB feed through, allowing for a preview monitor.
- \* High quality output video, which in default mode provides video with overlaid computer graphics.

# RENDALE 8802 FMC £178 -

It can be supplied with a device which will allow you to fade between computer graphics and the video source, and also a mode control unit so that you can move between Amiga only, video only, background mode and keyhole modes 1 & 2.

# RENDALE SUPER-8802 £499 \rightarrow

The Rendale Super-8802 is a development of the basic 8802 unit, it performs the same functions, but has the added capability of also working with Super-VHS signals. The unit will allow the user to cross fade between the Amiga and video signal. In addition, some basic wipe patterns are provided, and also a fade to black option. Mode control is also provided via hardware.

# NEW! RENDALE FMC £45-fitted

# 8802 FMC Unit

This is a brand new piece of kit which will improve the capabilities of the popular Rendale 8802 Genlock. This unit allows you to cross fade between the Amiga and video signals, so that you can gently fade computer titles in and out. Also, the ability to switch between the various modes offered by the 8802 is provided. The required mode is selected by a push switch, giving smooth, flicker free transformations.

The FMC unit does need to be soldered into the 8802, we can do this at our factory if required.

# 8802 UPGRADES £45 -

# UPGRADE PATHS

Rendale Genlocks are designed to be flexible, and the ability of your Genlock to grow with your system was deemed to be of paramount importance in our design process.

As a consequence, existing 8802 users can follow one of two upgrade paths. The fade and mode control unit (FMC unit) can be purchased independently, and fitted to your 8802 genlock by our engineer. We would only require your unit for around two days.

The other upgrade path is the move from a purely composite 8802 to the Super-8802. This can also be done simply, although we do have to perform the upgrade work at our factory. We would only require your unit for around two days.

he release of the long awaited mid-range Amiga has been the event many a serious muso has been longing for since the terrifyingly expensive A4000 hit the streets

Although this new machine has no obvious link to music it does provide a platform - which the serious user can firstly afford, and more importantly expand upon.

Although the A1200 has great potential as a first step, the lack of Zorro slots does present a flexibility problem which only an ageing 1500 can really provide a cure for.

On the other side of the coin comes the aforementioned A4000/040, a machine with all the flexibility and speed you could ask for but slapped with a price tag that simply doesn't justify the investment - if your exploits are primarily musical.

Enter the new A4000/030, housed in exactly the same box as its bigger brother but boasting an 030 CPU as opposed to an 040. For most musical endeavours the effect of a slower CPU will be negligible while the expansion slots offered by the desktop design means that you won't be left out as the technological advance marches ever onward.

Apart from the infinitely more attractive price tag and easy expansion the new machine also offers a potentially unlimited

upgrade path - at least as far as the CPU is concerned. Like the A 1000, the existing CPU sits astride a daughter board which when you decide to upgrade could be easily popped out and swapped with an 040 or perhaps 060 replacement.

However even with its advantages, this apparent dream machine isn't without its problems - most notable of which is the lack of a monitor as part of the £1,000 asking price.

In addition in its standard form there's no FPU provided - which means heavy number crunching applications such as ray tracing suffer quite badly.

On top of that you only get 2Mh of RAM as standard, which isn't very much considering the potential of the machine. However it must be said there is a silver lining in the form of an 80Mb hard disk enough for the average muso.



# The as standard - which should be more than next generation...

Hi Quality Version Available on AMIGALAND.COM The DSP returns

After the rumours surrounding the release of a DSP – digital signal processor - within the A4000, and the subsequent disappointment as it falled to appear, I've become very sceptical about the entire subject.

However according to a confident of the Commodore

hierarchy the aforesald chip is already up and running and more than ready to make its debut in the autumn.

As yet it's still unclear how existing machines will be upgraded but the most likely option will be to add the chip to the existing CPU daughter board – perhaps through a trade in offer. It's even being rumoured that

the AAA chipset is destined for launch in the spring of next year, boasting a DSP as standard along with true 24-bit graphics all based around an 060 processor.

Even more bizarre are the whispers of an A5000, which according to industry gossip will boast a RISC-based CPU alongside a pentium chip – which of course powers a killer PC that will consummate a harmonious marriage between the two machines.

A Commodore spokesman went on to add: "Yes I have indeed smoked pot.

"But of course I didn't inhale any."

"But of course, I didn't inhale any..."

Paul Austin looks at the latest releases and upgrades in the Amiga music scene

# Upgrades a-go-go

# Blue Ribbon bug fix

With the profusion of hardware and software releases in recent months, the inevitable barrage of upgrades are well on the way, with perhaps the most notable being an array of add-ons and updates to Bars & Pipes Pro2.

Although still in the pipeline, the first update has already arrived offering an assortment of minor bug fixes. However the aforesaid fix will not be sent out automatically, so if you're an existing user and feel the need for the update contact the new Blue Ribbon technical support on 081-332 6959.

All upgrades and postage are free of charge - all you need do is drop the coil

In addition to the bug fix, Blue Ribbon are in the process of releasing a new collection of tools designed directly for Media Madness, as well as additional standard tools for the program's Midi exploits.

# SunRize samplers

On the harder side of life, rumour has it that SunRize are in the process of developing a cheap and cheerful variation on their rather pricey 16-bit direct-to-disk sampling system. Although nothing is confirmed the plan seems to revolve around removing some of the subtleties of the original such as SMPTE support and maybe the built-in DSP.

The end result will be a basic but quality product which should retail around the £300 mark. As ever things may change dramatically as time passes but if you're in the market for an affordable direct-to-disk system it may be worth contacting Meridian Distribution for more details.

As existing users may be aware HB Marketing - the original suppliers of the SunRize range - are now no more. As a result Meridian have taken on sole distributors of both the 12 and 16-bit samplers - and will no doubt follow suit with the new cut-down 16-bit system when available.



# Don't miss out on these super

# CoverDisk offers

# **CINEMORPH MANUAL**

You've got the program and you've read the tutorial, all you need now to make the most of last month's CoverDisk product is the manual containing over 50 pages of tutorials, tips and instructions. Now you can really start using CineMorph to the full.

Order code: ASC4420 Price: £14.95



# GET SEQUENCING!

The CoverDisk version of CineMorph was complete except for one major feature, Sequence Morphing, which allows you to transform one moving sequence of frames into another. The upgrade includes the full version of CineMorph and manual.

199.95

Order code: ASC4422 Price £24.95

# **IMAGE FX INPGRANDE**

ImageFX is reckoned by most users as being an invaluable tool for image processing.

Now we can offer you this powerful program at a special upgrade price of £149.95, saving you £100 from the RRP.

# IMAGE FX v ART DEPARTMENT PRO

Just look at all the built-in features Image FX gives you, for no extra cost

IMAGE FX 1.03 ART DEPARTMENT PROFESSIONAL 2.1.5



\* Price based on CoverDisk upgrade offer

Image processing is serious business, and serious business calls for value and power, so ImageFX holds nothing back. Look over all these integrated features:

JX-100 scanner support • regionalised processing • virtual memory • edge feathering ● complete painting tools ● brush handling ● real-time WYSIWYG preview AA/AGA support (as well as most popular 24-bit boards) colour transparencies ● dual image buffers ● separate RGB masking ● alpha channel ● CMY/YIQ operation ● Undo/Redo ● YUV/YIQ operation. ImageFX is truly integrated image processing... a reality here and now!

Normal RRP: £249.95 Price: £149.95 Order Code: ASI2000

Please note that Image FX requires a minimum of 3Mb of RAM.

Pleas	e send me:	Please deliver my goods to:
	CineMorph manual at £14.95	Name:
	CineMorph upgrade at £24.95	Address:
L	ImageFX upgrade at £149.95	
	1 wish to pay by:	18
	Cheque (enclosed)	
	Credit card	Postcode:Phone number:
	Card number	Allow 28 days for delivery  Doc Ref:1345
	Expiry date /	Tick this box if you do not wish to receive promotional material from other companies

These effers are evalishin from all good GVP dealers. Alternatively, you can till in the order form and sood it to: Silien Systems, ClasMarph Offer, 1-4 The Mows, Notherley Boad, Sidoup DA14 4BI

systems. Considering the often tetchy nature of telephones in general, and computer communications in particular, I was half prepared to spend an entire day struggling with baud rates, phone line initialisation, voltage disparities, and so on, but PhonePak provided a pleasant surprise by way of its smooth, trouble-free installation.

After only half an hour or so, the first time user should be well on his or her way to setting up their first infuriatingly nice computer receptionist.

This is achieved via the VFX control panel and its built-in Operator script language. The user creates mailboxes (in reality these are sub-directories on hard drive), then proceeds to the Switchboard screen to form the links between them and group them into systems.

Each mailbox has its own particular characteristics, its own greeting and other system messages, and its own status. Mailboxes can be either message receiving (in which case the user specifies a maximum message length when creating the mailbox) or the information-only variety, which do not record a caller's messages (message length set to zero).

# **SWITCHBOARD**

Routes from one mailbox to another are also set in the Switchboard screen, and as there are up to four digits to play with, each mailbox can theoretically have as many as 9.999 links to other boxes.

The user need only specify which number is to be keyed in and chek on the mail box to which the caller will be transferred, making it easy to quickly set up the links for a complex chain.

Each mailbox can be set as IN or OUT at any time, so that during busy periods it is possible to shut certain boxes off or, if PhonePak is controlling an internal phone system, close down certain extensions.

In this case it is possible to set a default

# **Hello? Operator?**

PhonePak's built in power comes in the shape of the Operator script language which can be used for just about every operation one might want to carry out with a telephone, with the obvious exception of the 3am phone call. I mean, try getting an Amiga to throw the phone across the room and out the window.

Operator scripts are called from the transfer function which can either be set when a mailbox is created or when the user updates the box.

Typing a string of commands might sound an old-fashloned and clumsy way to control a modern piece of telephonic electronics, and it is, but the flexibility which Operator brings to PhonePak makes this exercise in tedium worthwhile. Commands cover everything from making a line off or on-hook, waiting for dial tones, dialling numbers, playing messages, and so on, and the manual is full of examples of how this power can be utilised.

Paging a person who isn't at his or her desk is one excellent example. Using a script which plays a ring tone to the caller while playing a sample along the lines of "Call for you!" from the Amiga's monitor or TV speakers, then waiting for a certain length of time before playing an apologetic sample and hanging up should demonstrate how much flexibility there is in this system.

PhonoPak Schadulon

route which a call will take if a mailbox is closed, so that the caller hears a "sorry, too busy to bother with you" recording instead of the usual answering message.

All system messages, assuming the user doesn't want to use the pre-recorded American voice, can be recorded (sampled) directly from the phone attached to PhonePak into any mailbox list of system messages, so any and all sorts of customisation is possible.

Samples from other sources can, of course, be used, so the prospect of Bogey answering the phone with the line "Spit it out, wise guy" is all too terrifyingly real.

Music, either as background or for hold

tunes, can be incorporated as long as it is in standard IFF 8SVX format, so no two PhonePak systems

PhonePak systems language is

Stout of Sound redious, but flexible

A drawback with and effective

The script

A drawback with such messages is that when a system uses many different samples the strain on a

small hard drive can begin to show. The default messages supplied with PhonePak won't leave much change out of 1.5Mb storage, but some of these will never be used and can be deleted.

Storage space really begins to bulge when more than one mailbox in a system contains long sampled messages. Using the control panel, owners can move samples across from mailbox to mailbox, but it would have been better if this sort of duplication could have been avoided.

A simple assign to order the Amiga to look in a set directory for all samples would have been a more

economical solution to the problem.

Setting up an answering phone syslem, which would enable the owner to phone and listen to its

or her messages, record the voices of anyone who phones, and have a separate sub-system for busi-

ness calls would be a simple matter.

From the initial mailbox, a sample offering two choices (business or private) filters off the messages into their relevant majlboxes, while a third option leads to a box with no message facility and a simple message giving more information about the user's business.

# SAMPLES

So long as the user ensures all samples match the routes he or she has created in the Switchboard screen (pressing "1" really does take you to the business mailbox) there should be few problems.

In many ways, the advantages of putting messages into the correct mailbox is a god-send. Password protection – a four-digit dial tone can be assigned to each mailbox – makes it impossible for one family member to listen to the other's calls, and the business messages can be kept separate from everything else. No more playing through interminable messages from the kids' friends in search of that important call from the boss!

In terms of flexibility and power to handle the user's demands, PhonePak is hard to beat, but there are drawbacks. A hard drive is an essential, and setting up the more complex or advanced features can be a pain.

The manual section covering faxes is, as

10000000			:51	AM		
	Janua	ary		1	978	
Sun	Mon	Tue	Wed	Thu	Fri	Sat
- 1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17		19	20	21
22	23	24	25	26	27	28
29	30	31				

Faxes can be sent immediately or scheduled to arrive in the early hours (hel hel)

mentioned, well nigh incomprehensible and split over three different chapters, though this will hopefully be fixed when the planned manual rewrite takes place.

When the price of £209 is taken into account and weighed against the cost of a fax and answering machine, PhonePak becomes a realistic option for businesses or

those who work at home.

Bringing with it as it does the power to automate information systems, answering services, paging, faxes, and call transfers, there is precious little else for it to do except perhaps put its human counterpart (the receptionist – less efficient but friendlier and more flexible)

out to seed.

(OTEN A DOOD VELA LO





Phoneral Sufficient Cities to Could to your shifteeffick to open
(Hearter)
Is anning

Switchboard enables the creation and management of whole systems

# Fax needs fixing

The way PhonePak handles faxes is probably its weakest link, in software terms at least. In common with Supra fax moderns, it utilises either a straight import of Ascil text and IFF graphics or a faxprinter in the shape of the PPakFax printer driver, but the resemblance ends there.

When printing from any program which uses the faxprinter, a high definition image of the printed page is saved in a mailbox of the user's choice, but the awkward way of attaching a phone number to the fax when printing it causes frustration. Most fax users will create a fax then scribble the number on it before shoving it in

the fax machine rather than sit with an address book open in front of them all day.

Finished faxes are sharp and detailed, but the software by which they are created and despatched could do with some extra work. Given that faxes with voice messages attached are one of the supposedly hot new items for these systems, the clunky fax function is a bit of a disappointment, though not exactly catastrophic in extent.

# CLR LICENCEWARE



1 disk titles = £3.50 2 disk titles = £4.50 3 disk titles = £4.99

(Number of disks shown in brackets)

# CLR **EDUCATION**

COLOURING PAD

ACHORD

T.A.M.I.

NIGHT SKY

WORDS & LADDERS

BASICALLY AMIGA

LETS LEARN

**ALPHABET TEACH** 

HOME BREW

**FAST FRET** 

KINGS & QUEENS

**THINGAMAJIG** 

WORK & PLAY

PLAY IT SAFE

**BIG TOP FUN** 

JIGMANIA

CHESS TEACHER

MIND YOUR LANGUAGE

SPEED READING

CHORD COACH

C.A.T.T.

teries of the Tarot (3)

**FUN WITH CURRY** 

PREHISTORIC FUN PACK

PEG A PICTURE

UNDERSTANDING AMOS

SNAP

each kids shapes (1)

# CLR ENCYCLOPEDIAS

The following disk based encyclopedia: cover a range of interesting subjects.
Using a combination of lext, diagrams, drawings & photographs each little is entertaining as well as educational.

DINOSAURS (2) GEOLOGY (2) SOLAR SYSTEM (3) SOLAR SYSTEM 2 (3) FRESHWATER FISHING (2) ECOLOGY (3) MESSERSCHMIT BI109 (2) SPITFIRE YOUR FIRST PONY (2)

# CD ROMS

CDPD1-£19.95 CDPD1-£19.95
Fred Fish 1 to 660 etc.
CDPD2-£19.95
Scope, JAM & more Fish etc.
DEMO CD-£19.95
Packed with demos etc.
17 BIT -£39.95
An instant P.D. library on this
brilliant 2 disk collection

# SEASOFT

The Logical Choice

# NEW-OctaMED Pro V5-NEW

Brilliant new version of this famous 8 channel music editor with a totally new look-PULL DOWN MENUS, ON-LINE HELP, FULL MIDI SUPPORT WITH UP TO 64 TRACKS, SAMPLE EDITOR, SYNTHESISED SOUND EDITOR, STANDARD TRACKER OR TRADITIONAL STAVE NOTATION DISPLAY, etc etc - (Requires Kickstart 2 or later)

£30-00

V4 - £22.00 Manual (V3/V4) - £8.50 V4 & Manual - £30.00

# AM/FM

for the serious Amiga musician Issue 13 now out

£2.50

ACC

**AMIGA CODERS CLUB** 

hints, tips, tutorials & source

codes for all you assembly

language programmers

£3.50 per issue

(issues 1 to 12 also available)

# **AMFC**

Converts many standard music files to OctaMED format

£10.00

# A-GENE V4.34

The latest version of the best genealogical database for the Amiga is now available from Seasoft

£15.00

# AM/FM SAMPLES

13 disks packed with high quality samples

£2.50 per disk

# SOLAR SYSTEM

Brilliant follow up to the highly successful CLR disk based encyclopedia

£4.99

# OVER 2000 DISKS OF QUALITY P.D. AVAILABLE

including:-

# GAMES

**ASSASSINS** COLLECTION

NOW UP TO 88 CALL FOR COMPLETE LIST

**ASI 56** 

em Engle Extr

AS 59 st, GX200. Le

ASI 61

Pipeline 2, Mazeman, Up 'n' do ASI 64

**ASI 65** 

ASI 66

Amastermind etc. Cow Wars

Seige of the Beast, E-Type 2, Vector ASI 68

**ASI 69** 

like, Poker, Celestial Ceas **ASI** 70

Wangle, Tetris Digital

Tetris Pri ASI 71

ASI 73

entration, Challenger ASI 74

Crazy Pipes, Bomb Jacky, Chute ASI 75 S Colours Diamond Thief

FRED FISH

1 to 880

Double Se ASI 76

s, Cubus. The Gerbgame Gnu Che ASI 77

acy, Cliff Hanger, Descender

MED V3.21 (1) OctaMED V2 (1)

OctaMED V5 (1)

OctaMED MODULES (5)

DESK-TOP GUIDE TO ELECTRONIC MUSIC (2)

CATALOGUE DISK £1.25 (inc P&P)

FREE!

with your first order

# *A1200 ONLY*

AGA TETRIS/UTILITIES (1)

HOLAGA DEMO (1)

UCHESS (1) s remoram - needs at least 4

SUPER HAM PICS (6)

ave a growing collecti e call for latest details W.B.3 BACKGROUNDS

WINBLENDER (1)

PD PRICES - PER DISK

1-4 disks - £1.50 5-9 disks - £1.25 10-24 disks - £1.00

25+ disks - £0.90 Unless otherwise stated all titles featured in this advertisement work on A500 (1Mb), A500+ A600 & A1200

A64 EMULATOR (2)

A-BASE (1)

A-GENE (1)

AMIGA FOX (1)

# ASTRO 22 (1)

C-MANUAL (12)

the Amiga

D-COPY 2 (1).

KICK 1.3 (1)

those original A500 proge

A SOD - A 600 A 1200 KICKSTART 2 (1)

M-CAD (1)

MESSY SID 2 (1)

NORTH C (2)

NUMPAD (1) keypad to an A600

SID 2 (1)

ve directory utility

TEXT PLUS 3 (1)

V-MORPH (1)

PC TASK 2 (1)

ACC 1-4 (1)

to 4 on a single P.D. AMOS PRO UPDATER (1)

EASY CALC (1)

T-BAG

1 to 77

Please add 50p P&P to P.D./Licenceware orders & £1.00 if your order includes other Items. Send orders to:

# SEASOFT COMPUTING

(Dept AC), The Business Centre, First Floor, 80 Woodlands Avenue, Rustington, West Sussex BN16 3EY or telephone



NORRIS

PHASE 2

X-SYSTEM

TRUCKIN-ON

**DRAGON TILES** 

MOTOR DUEL

FUTURE SHOCK

ALL GUNS BLAZING

BULLDOZER BOB

great puzzle ga
PARADOX

SONIC SMARTIE HEAD

SPLODGE THE ESCAPE

MBRIUM adventure game (1)

SCAN 29

STELLAR ESCAPE

JUNGLE BUNGLE

FLOWER POWER

STOCKING FILLERS

MARVIN THE MARTIAN

WHITE RABBITS

TIME RIFT

# CLR

VIDEO TITLER

FISH INDEXER

TYPING TUTOR

**ALPHAGRAPH** 

**WORD FINDER PLUS** 

**PLAY N RAVE** 

player (2) **POWER ACCOUNTS** 

keep track of your bank account (1) CALC V1.3 spreadsheet (1)

STOCK CONTROLLER (1)

EPOCH (1) X-STITCH LITE (1)

INVOICE MASTER (1) HARD DRIVE MENU (1)

PRINTER FONTS LC10/20 (1), LC200 (1) 24 PIN PRINTERS (1), CANON BJ (1)

# CCESSORIES

(£1.00 P&P)

PYTHON 1 jayalick - £9.99 ZIPSTICK joystick - £12.99 MOUSE MAT - £2.99 HEAD CLEANING KIT - C2.99 MONITOR COVER - £4.99 A500 DUST COVER - £2.99 A600 DUST COVER - \$2.99 A1200 DUST COVER - \$ 3.99 PRINTER STAND - \$4.99

PRINTER LEAD (1.8m) - £3.99 PRINTER LEAD (5.0m) - £6.99 4 PLAYER ADAPTOR - ES 99 JOYSTICK EXTENDER - £4.99

M/J SWITCH MANUAL - £9.99 M/J SWITCH AUTO - £12.50 ALFA DATA MOUSE - £12.95 100 DISK LABELS - £1.50 1000 DISK LABELS - £10.00

1000 T.FEED LABELS - £12.50 DISKS

3.5" DSDD GRADE A - 50p 3.5" DSDD BRANDED - 60p 3.51 DSDD TDK - £7.00 for 10

DISK BOXES 3.5" x 10 - £1.25 | 3.5" x 40 - £4.50 3.5" x 100 - £6.99

3.5" x 80 BANX - £11.95 3.5" X 150 POSSO - £19.99

es call to confirm price and availability

9.30am to 7.00pm Mon-Fri (to 5pm Sat)

VISA

ou've probably never really used the drawing capability of Amos before, which can be used for all manner of things, like this example which is a quick and easy way of creating a title for your programs:

> Paper 0 Bo: 0,0 To 319,100 Bo: 2,2 To 317,98 Locate ,4 : Centre "Amos ALMANAC" Locate ,6 : Centre "by Phil South" Locate ,12 : Centre " Snouty (c)1993 "

It draws a couple of boxes, with a two-pixel gap between them. and it then positions a few lines of text with the last line overlapping the box at the bottom.

Simply type your program's title and your name into the Centre print strings, and you're away. You can go further with this kind of thing:

```
Curs Off : Flash Off : Cls O
Ink 2 : Bar 0,0 to 319,100
Ink 6 : Bar 2,2 to 317,98
Locate ,4 : Centre "Amos is Way Cool"
Locate ,6 : Centre "Did you know that!"
Locate ,10 : Pen 0 : Centre " Amiga Computing "
```

This time instead of using the box we've used a bar, with one bar smaller than the other to make a border. You could make it 3D like so-

```
Curs Off : flash Off : Els O
Paper 7
Ink 2 : Bar 0,0 To 319,100
Ink 8 : Bar 2,2 To 319,100
Ink 7 : Bar 2,2 To 317,98
Locate ,6 : Centre "Title"
Locate ,6 : Centre "by <insert name"
Locate ,10 : Pen 0 : Centre " oddsoft (c)1993 "
```

Make one bar form the highlight on the top and left, and nother form the student bytom and vight 1953, po 0.0 to \$19,000, then the next one west that from 2

Finally the last one in a medium shade over both the others, leaving a two-pixel gap all around the outside to show the highlights and shadows.

Patterns make a splash too:

```
Curs Off : Flash Off : Cls O
Ink 2 : Bar 0,0 To 319,100
Ink 8 : Bar 2,2 To 319,100
Set Pattern 5 : Ink 8,7 : Bar 2,2 To 317,98
Locate ,4 : Centre "Yes indeed"
Locate ,6 : Centre "A patterned fill"
Locate ,10 : Pen 0 : Centre " and no aistake "
```

Note that in order to get the Amos patterns, you must have the MOUSE.ABK file loaded into a bank, as this contains all the patterns. You'll find it in your Amos\_SYSTEM drawer on the Amos disk

Ink and paper colours must be set to suit the background that the pattern is going on. If you wanted to edit the patterns, you can do so in any sprite editor like SpriteX.

Plotting and line drawing are something else again. You can use plotting single pixels to produce anything from starfields and fractals to ray-traced images - all you need are the algorithms. Polygons are easy to handle in the same way as boxes and bars:

```
Curs Off : Flash Off : Cls O
Paper 7 : Ink 7
Polygon 0,20 To 20,0 To 299,0 To 319,20 To 319,80 To 299,100 To 20,100
To 0,80 To 0,20
Polyline 0,20 To 20,0 To 299,0 To 298,1 To 20,1 To 1,20
Ink 8
Polyline 319,20 to 319,80 to 299,100 to 20,100 to 21,99 to 299,99 to
318,80 To 318,20
Locate ,4 : Centre "Who is this"
Locate ,6 : Centre "Polly anyway?"
Locate ,10 : Centre " Unaware (c)1992
```

So experiment with all the various combinations of these commands to produce lively backgrounds for your text. Note also you can draw simple shapes to grab as BOBs too, if you want to create a simple game that people can type in, without the need for IFF graphics.

Moving on, the Amos mailing list is still alive and kicking - I'm getting about 10 or 20 messages a week in my electronic mailbox on CIX

Subjects in recent weeks include how to do plasma (it's not easy, in case you're wondering), how to password-protect your Amos programs by disabling the interrupts, and someone even asked about reading text in formats other than Amiga. Most of the questions get answered, but more than anything it's thought provoking If you're not a member of the Amos mail-



# The plot thickenscom

ing list, join as soon as possible! Simply log on to your BBS and send a message via external mail on Internet to:

# Amos-list@access.digex.net

with the word SUBSCRIBE ME in the text. And you're away...

Next time you log on there will be a stream of text. To send messages to the stream just use the same address. To unsubscribe you just send a message to that effect. No costs are involved, just the cost of your message service - CIX or whatever

Phil South looks at drawing techniques and the Amos mailing list, plus all the latest news

# Amos news

# Where's Dave?

David Lazarek was the person to contact in order to buy things like Ctext, TOME and so on if you lived in the USA. The Amos mailing list says he no longer does this, so it looks as though we may have to look to the UK for these things. It's not known if he still handles the updates from Amos Classic to Amos Pro, but this is doubtful as at least one person has reported that it has been nine weeks since he sent his money in and David has not responded in any way. If you live in the US and need a contact for buying Amos goodies from the UK get in touch with Michael Cox:

Email Work: mcox@access.digex.com Email Play: aj639@cleveland.freenet.edu

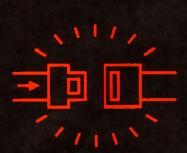
# Amos AGA delayed

François Lionet, says he has been pressed to get the Pro Compiler finished, which has forced him to delay Amos AGA until September. He wants it to be a complete upgrade, not a quick

# Mastering Amiga Amos 2

The second edition of Mastering Amiga Amos is out now. This book is a companion to the Amos manual, giving you a load of examples to type in and hints and tips on all aspects of coding using the Amos system, from beginners to advanced

For more details about this and other Bruce Smith Books call (0923) 894355.



LADIES
AND
GENTLEMEN
PLEASE

YOUR
SEATBELTS
WE ARE
ABOUT TO







D

dobe

Vpe

I

Due to new EEC taxes on floppy disks, and various other cost increase we have had no option but to increase our prices. BUT – the first 50 customers quoting this Ad reference (AC9) will receive a £2.00 Fontil discount voucher.

# 400 CG fonts – 8 volumes Each volume includes 50 fonts

complete with installation instructions

only £15.00 per volume
Sultable for use with Pro Page 3,0/4.0, Pro Oraw (all versions),
PageSetter 2.0/3.0, Wordworth 2.0; Workbench 2.0/3.0, ProWrite 3.0,
Dpaint 4.1 & v4.5 AGA. OpalVision, ScalaPro.

# 600 Type1 fonts - 12 volumes Each volume includes 50 fonts

complete with installation instructions

only £12.50 per volume 2.1/2.2, Art Expression, FinalCopy 2(rel.2), The Publishe

Softlogik Typesmith Demo
Try before you buy - only £2.99

# EPS Structured clipart

3 Volumes - each over 100 clips on 6 full disks

only £16.00 per volume SPECIAL OFFER - £42.00 for all 3 volumes

Sampler Disk – £4.00 – packed full of examples of our Type 1 fonts, CG fonts, ProDraw & EPS clipart (includes £2.00 FontShop discount voucher)

Payment by: VISA/ACCESS/MASTERCARD/EUROCHEQUE Cheques (with Bank card No. and Expiry Date on reverse) or Postal Order Enquiries please send 9x6 inch S.A.E. for printed Type & Clipari examples Post UK - FREE, Europe £1.50 per vol. Rest of World £2.50 per Vol.

Fonts Dept (AC9)

22 Sincil Street, Lincoln, LN5 7ET Tel: 0526 398403 Fax: 0522 546131



lab<del>le on AMIGALAND.CO</del>M

# Computers



ompugraphic

# PUBLIC DOMAIN LIBRARY TELEPHONE (0602) 444501



All Public Domain is copied onto Branded Disks which are certified 100% error free. For Disk Casiogue please send a S.A.E. and 2 first class stamps. Telephone orders Mon-Sat 9am-5 30pm, Key: | >= No. of Disks. This is only a small selection from our library, we currently have over 2,500 disks in stock

# DEMOS

Keirens 'Desert Dream' (2)
Keirens 'Dane'
Keirens 'Dane'
Spaceballs 'State of the Art'
Spaceballs 'Maystare'
Vomit 'World of Confusion'
Anarche Synitetic Delights 'P fart everi
LSO 'Iseas on E's' (2)
Alpha & Omega (3)
Mad Elks 'Technological Death'
Stizza Denno 2 (4)
Alchemy 'Ragge' (2)
Scoopes Plans 2 Unlimited (2)
Iethe' 'Black Bost'
Chip Dip 2
Techno Team 'American Natives'
Melon ' How to Skin a Cat'
Sanity 'World of Commodore'

DISK PRICES & POSTAL RATES

GAMES
We stock the entite Assassins
turnes collection from 1 to 110

# UTILITIES

VMorph V2 Beta False Fast Memory Rom Monitor V2.7 (KS3 OK) Kickstan V2 Smalatus North C (2) Amilbase V3.76 Relotick 1.3 Test Engine DCOPY 3 600 Business Letters Alcatraz Legial Tools Spectrapaient V3.0 Magnum V1.4 Messysid V2

# **HOW TO ORDER**

By Credit Card or By Post Please make cheques, with bankers card number or postal orders payable to:

"VISAGE COMPUTERS"

PLEASE NOTE:- WE HAVE NEW PD ARRIVING DAILY, PLEASE CALL FOR LATEST DISKS

# ANIMATIONS

Cryphobumens "Revelations" RWO Slideshow Schwartz "Quality Time" (4) SMb Schwartz "Bait Masking" 2Mb Dolphin Dream No Speed Limit (3) 2Mb

# L.S.D. L.S.D. LEGAL TOOLS

The best utility packs on the Amiga, we have 1-110 in stock

# L.S.D. 'SIMPLY THE BEST' DEMO PACKS

As the name suggests, these contain all the best intros from all the top groups. We have 1-40 in stock

# FRED FISH

Ve currently have in sto 1 ish disks 1 to 890

VISAGE COMPUTERS (DEPT AC)

18 STATION ROAD, ILKESTON, DERBYSHIRE DE7 5LD
TELEPHONE (0602) 444501

stationery pack consists of the "forms" that a business would use from day to day. The three most common forms are the letterhead, business card and compliment slip.

The design stage of even a small project like this is labour intensive, creative process for which a copy shop would charge upwards of £40.

Some will do a plain text design for around £10, but why let them make up something drab when you create something that will sparkle?

In the first of these two articles, we'll take a look at the preparation required and note a few guidelines. The first point to look at is the overall image.

By "overall image" I mean a combination of a number of elements which convey a message about the company they represent, which will include the name of the company, a simple graphic perhaps, and the address details.

Many clients will give you a rough sketch or a vague concept of what they want in the way of company image, but taking that and converting it in to something tangible is going to require thought.

As the designer, the responsibility will be on you to ensure that the image the stationery projects gives the correct impression to the type of customer your client is trying to attract.

Even if your client tells you what they want, and you do what

# **PUBLISHING**

ness like a fashion house or shop.

It wouldn't help a jewellery firm if the image its letterheads projected gave the impression that it was a building contractor! Above all it must readable – and keep it simple.

We are surrounded by images which represent the way company logos have progressed over the years, so to get a feel for how modern logos are being designed, look at every advertisement you can find.

Try to use a simple two-colour image – not necessarily black and white, it could be red and green, or blue and pink – but it would be best if you designed it in a structured drawing package so that it can reproduce smoothly at high resolution.

Drawing it in a bitmap painting program and "auto-tracing" it is a route to disaster unless the graphic is very simple indeed – structured drawings created in



# Doing the business

they want, and then when they see it they decide that what they want isn't really what they want, it will be your fault.

How do you avoid this? You can't. The best thing is to point out to your client that the estimate you have given them for the job is to do it one time if they want prisings they with cost more.

Once you have invented this company image it will be used on all the pieces of stationery, with only the size of the items changing.

Think carefully about what elements, or "page furniture" as it is often called, you are going to mix and match.

Designing a company logo is a big job, often the most timeconsuming task in the creation of a stationery pack. The logo could be in some typeface, or it could be a graphic, or it could be a combination of the two.

Take a look at a catalogue of fonts and find one that will suit the type of company for which you are designing – a stencil font for a packaging firm, a delicate script font for a jewellers or perfumery, a serif font for a more traditional business like a solicitor or doctor, a modern sans-serif font for a forward looking busithis way tend to contain more points that the PostScript output device can handle.

Keep in mind that detailed graphics can often be distracting – there's a danger that if the image is too detailed or convoluted it will make the person lessking at it feel tiAl of bland emotions that will reflect on the image of your client.

The last piece of furniture to discuss is the text for your client's address. Over the three pieces of stationery you will have a number of pieces of text that will have to be added. It is important they fit in, so choose your fonts carefully.

To a certain degree, the rules discussed above for choosing a font for a company logo apply to choosing a font for the address, phone number and so on.

If you want to use normal, bold and italic styles, make sure you use those styles of the same font. Mixing three or four fonts for the company details will only result in those details being difficult to read.

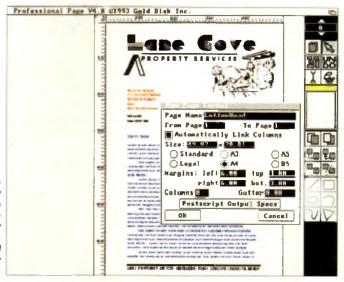
Design concepts clear in our heads, next month we will get down to actually producing the stationery.

Ben Pointer helps
to brush up your
publishing skills by
showing you how
to create a
stationery pack



A typical stationary pack can consist of many items, but we will concentrate on looking at the design aspect of three of the most used pieces: business card, letter head and compliment slip

Make sure to leave room within your letterhead design for the addressee and the letter itself. Fairly large margins all round will look better than smaller ones



# ACCESSIO

Amigamaniac have been around for some time now, offering Amiga owners the chance to save money on computer software & hardware simply by becoming a member of their club. For a small annual membership fee you not only saved money, but also received a bi-monthly publication. Well, the people behind the

club magazine have been very busy indeed, and now produce a monthly magazine that contains news of the latest Amiga products, software & hardware reviews, some very interesting articles, tutorials, letters, and some brilliant competitions.

Additionally each issue also carries a coverdisk, sometimes even two.

Onto the important news, the latest issue of

Amigamaniac is available now (No.6), and contains some excellent material. The main feature concentrates on the future of CD, with opposing views from different

# A NEW MAGAZINE

From The Publishers of Amigamaniac

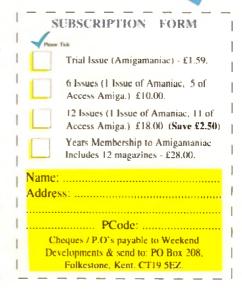
people in the industry. Products reviewed include Personal Paint, Amiback Tools, Wordworth 2 AGA, Studio, Typesmith, and hopefully reviews of both GVPs' DSS+ Sampler & Technosound 2, but this only touches the surface of the content because there is too much to list here.

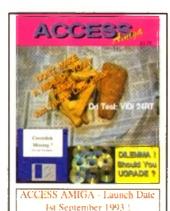
Educational reviews also feature strongly

in this issue, as do a good selection of books. On the tutorial front 'Printed Matter' deals with getting the best out of your Desktop Publishing program & printer. All plus a coverdisk which features a demonstration version of Wordworth 2 AGA by Digita International. The new publication (Left) will be even bigger, and will feature some glorious

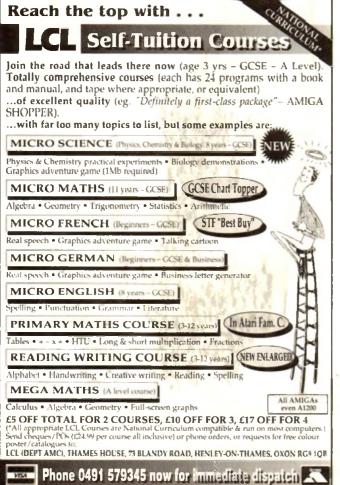
colour. Exclusive to both magazines is Super Snake who appears in a humourous comic strip & some of the animation

disks that are produced. Details of how to get hold of Amigamaniac are below. If you do decide to subscribe rest assured that you will get value for money, the publishers Weekend Developments are putting the finishing touches to a new semi-colour magazine called 'Access Amiga' (Price £1.75), this is included in the prices on the coupon which has been printed for your covenience, plus you can cancel your subscription at any time and a full refund will be given for any outstanding issues!



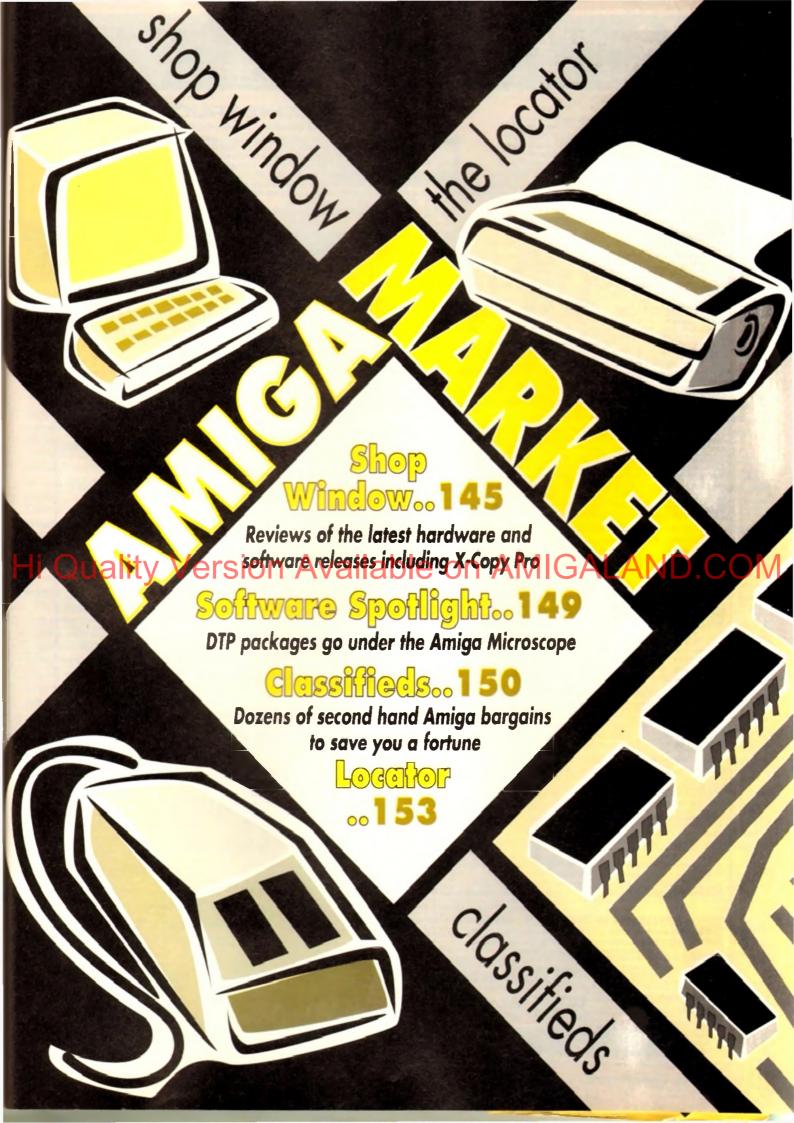


Hi Quality Version Available on AMIGALAND COM









# WINNERS OF THE 1992 AMIGA SHOPPER TOP TYPEFACE AWARD

# Bilmapped Clip Al

EMC Volume 1 EMC Volume 11 5 Disks - £14.00 - Bitmapped Clipart 5 Disks - £14.00 - Bitmapped Clipart EMC Volume 15 EMC Volume 22 8 Disks - £22.00 - Bitmapped Clipari 5 Disks - £14.00 - Bitmapped Clipari EMC Volume 28 5 Disks - £14.00 - Bitmapped Clipart

Yory High Quality Bilmapped Clip Ad

EMC Volume 34 5 Disks - £14.00 - IFF Animals1

**EMC** Volume 35 5 Disks - £14.00 - IFF Animals2

Tropical Fish, Fish, Farm Animals and loss or Fuel Design 8 Disks - **£22.00** - *IFF Transport*Officer Care, Care, Bosts, Shoe, Erigineering Tools and Trains **EMC** Volume 36

гов, Classic Cars, Cars, Bosts, Shys, Erigineering Tools and T. 5 Disks - £14.00 - IFF Business
Office, Buşeness Pocola, Protectpains, Printers and Funny Bu 
5 Disks - £14.00 - IFF Fantasy1
Kreghts, Bustings, Wespons, Dragons, Băttey, Men and Worn EMC Volume 37 ers and Funny Business EMC Volume 38

- 5 Disks - £14.00 - IFF Fantasy2

rs. Skule, Warnors, Sea creatures, Writes, Wuldes, and Greek Gods EMC Volume 39

ters. Skulle, Warmors, Saa creatures, Wrines, Wards, and Greek Gods

5 Disks • 114.00 • IFF Bonders

t corders covering Animats. Women, Mes. Objects, Praces and Natural.

6 Disks • 16.50 • IFF People

en. Women, Working, Furniers, Groups and Fahrdus People.

5 Disks • 114.00 • IFF Natural

all Planta. Trees, Scenery and Carden Planta.

3 • 5 Disks • 114.00 • IFF Sports

bowing, Motor Sports, Termis, Gof, Water Sports, Ball Games and Running.

4 • 6 Disks • 114.00 • IFF Sports

bowing, Motor Sports, Termis, Gof, Water Sports, Ball Games and Running.

5 Disks • 114.00 • IFF Various1

Books, Churches, Preess, Hetory, World Mage, Hetlone Humour and Places.

5 Disks • 114.00 • IFF Various1

at Christman, Valentines, Xmas Borders, Santas, Seighs and Wreetha. **EMC** Volume 40 A sturning collection of our EMC Volume 41
Roys, Girls, Men. Wo

Bables, Boys, Girls, Men. 1985 EMC Volume 42

**EMC** Volume 43 EMC Volume 44

EMC Volume 45 **EMC** Volume 46

1 Crinathna, Valentines, Xmas Bordent, Sentas, Seighs and
5 - 5 Disks - £14.00 - IFF Various2
cong, Muse, Mittany, Rescue, Zodae, Survival and Silhousthee
7 - 5 Disks - £14.00 - IFF Humour
chana, Idoda, People, Frut, Krds, Dentista and Fish EMC Volume 47

# Type I Fonds

or Pagastroom, Publisher and Final Copy2 release 2 only - 5 Disks - £14.00 - 67 Type 1 Fonts EMC Volume 4 EMC Volume 5 EMC Volume 6 - 5 Disks - £14.00 - 63 Type 1 Fonts - 5 Disks - £14.00 - 63 Type 1 Fonts - 5 Disks - £14.00 - 68 Type 1 Fonts - 5 Disks - £14.00 - 68 Type 1 Fonts - 5 Disks - £14.00 - 78 Type 1 Fonts - 5 Disks - £14.00 - 79 Type 1 Fonts - 5 Disks - £14.00 - 56 Type 1 Fonts and Utils. - 5 Disks - £14.00 - 80 Type 1 Fonts **EMC Volume 7** EMC Volume 16 EMC Volume 17 EMC Volume 27 EMC Volume 29

# Ch Toulable Fonts

EMC Volume 8
EMC Volume 9
EMC Volume 10
EMC Volume 23 - 5 Disks - £16.50 - 61 CG Scalable Fonts 5 Disks £16.50 64 CG Scalable Fonts
5 Disks £16.50 57 CG Scalable Fonts
5 Disks £16.50 58 CG Scalable Fonts
5 Disks £16.50 64 CG Scalable Fonts
5 Disks £16.50 66 CG Scalable Fonts
5 Disks £16.50 71 CG Scalable Fonts **EMC** Volume 24 EMC Volume 25 EMC Volume 30 - 5 Disks - £16.50 - 60 CG Scalable Fonts

# Professional Traw Fonts

EMC Volume 18 EMC Volume 19 - 5 Disks - £16.50 - 60 PDraw Fonts 5 Disks - £16.50 - 63 PDraw Fonts
5 Disks - £16.50 - 50 PDraw Fonts EMC Volume 20

# Ecopsulated Postscript Clipart

EMC Volume 12 - 6 Disks - £16.50 - EPS Clipart - 6 Disks - £16.50 - EPS Clipart - 6 Disks - £16.50 - EPS Clipart EMC Volume 13 EMC Volume 14

Micr. Funts and Cliptus for Pagestream Haras

EMC Volume 2 - 6 Disks - £16.50 - PC ClipArl
gen buy scanoe structured clipat and imp clipat. Computers. Borners. Animals and Art

EMC Volume 3 - 2 Disks - £ 6.00 - Pagestream Fonts
34 Pagestream formal tonts, competible with all versions of Pagestream gem tuty scalling 3 - 2 EMC Volume 3 - 2

EMC Volume 21 - 6 Disks - £16.50 - PCX Clipart s, Cata, Computers, Old Line Art, School, Scient

"NEW Volume 32 - 6 Disks - £16.50 - IMG ClipArt
Loss of HIGH QUALITY Animals. Frowers, Food, Carloon Characters, Plants, Insacts and Drinto

\*\*NEW Volume 33 - 6 Disks - £16.50 - IMC Clipart
Lots of HIGH QUALITY People, Christmas, Books, Buildings, Sports, Electronics and Tra

Have you thought about purchasing either Pagestream or TypeSmith? Want to see if these programs are suitable for you Well what are you waiting for? Here's your chance, try the

Pagestream2 Demo Disks £6.99

# OPALVISION UPDATE DISKS £6.99

These disks contain all the very latest Opalivision programs, direct for Centaur Developments USA. The disks are updated constantly so you are assured of receiving all the latest Opalivision Software!

# AWARD CONSTRUCTION KIT

...the package is excellent..." Amiga Computing - August 1993

ACK offers Amiga users the ability to easily create customised awards and certificates. ACK comes complete with 6 headline fonts, 8 body text fonts, 5 seals and 11 borders along with 50 pre-defined award styles. All of these can be edited and mixed to suit your individual needs. ACK also offers the ability to save frequently used user styles.

The program will work on any Amiga and has an excellent 'point and click' user interface which has intentionally been designed to be simple to use. ACK is a modular programme, which gives users the ability to add new fonts and styles easily from additional ACK data disks, which will be available soon.

ACK is available exclusively from E.M.C., and for a special introductory period the program

Including VAT and UK postage/packing European please add £3.25 for reg. airmail postage Rest of World- please add £5.00 for reg. airmail postage

# THE MAGAZINES HAVE SAID...

Amiga Computing in issue 52 said

E.M.Computergraphic are the FIRST and FOREMOST Font

distributors in the UK"
they then placed us at...No.1 in the TOP 10 of the Amiga hardware/software chart!

Ian Wrigley from Amiga Shopper in issue 16 said...

"...I must say that I'm quite impressed..."

Amiga Format in issue 36 said...

...E.M.Computergraphic have an enormous amount of expertise in the tricky area of fonts and can provide professional help and advice to customers

Amiga Format Special Edition said.

...the best value rescalable fonts available anywhere...there's no cheaper way of getting quality fonts"

CUAmiga in the issue of September '92 said...

...you couldn't do much better than taking a look through the sets offered by E.M.C.

Amiga Shopper January 1992 gave Safari Fonts and EMC. "The Top Desktop Publishing Typeface Award For 1992"

Pat McDonald from Amiga Format in issue January 1992 said...

The best person to talk to about fonts, in the UK at any rate is

Eriol at E.M.Q"

Amiga Mart November 1992 said

"EMC's emergence into the cut-throat retail area has come none too soon, their service and technical backup is second to none."

# (OMPUTER SAFARI **Desktop Publishing Typefaces**

NEW SAFARI DISK 25

£14.99

TRIMAGULUS MovieStarSans Movie Star Spur ATYCORNUS

ATYCOAMUS OUTLINE

Safari fonts are now also available in compilation packs:

SERIOUS, SCRIPT, FUTURE, DISPLAY AND STARFONTS

For more information on EMC's PD/Shareware library and Computer Safari Fonts, including prices and printed typeface sheets PLEASE send us a SAE





Typesmith Demo Disk £3.50

# E.M.COMPUTERGRAPHIC

Credit Cards Welcomed - £10 min. order

8 Edith Road, Clacton, Essex. CO15 1JU Tel: 0255 431389 Fax: 0255 428666





Disk backup cartridge and software Supplier: Siren Software Phone: 061-724 7572 Price: £39.99

n the past the phrase X-Copy has been enough to send a shiver down the spine of even the most manly software developer. However, in an attempt to come clean – or at least clean-ish – the latest version of the X-Copy compendium boasts a commendable collection of tools in among the parrot droppings, pieces of eight and hardcore copiers.

At the forefront of the non-copiers comes the Xlent file manager, which although basic nevertheless offers an easy method of copying, moving, renaming and deleting files and directories.

As far as a straight comparison is concerned, XLent is blown away by PD and shareware offerings such as SID II and TDM, but having said that, both of the above will cost at least couple of quid each, plus the inevitable wait for delivery – whilst XLent is more or less a freebie and more than adequate for basic disk management.

Next stop on the utility trail is the XPress hard disk back-up utility. Again there are more powerful packages out there but unlike XIent you'd need to spend serious cash on commercial software such as Quarterback or Ami-Back to gain any real benefit.

Like its commercial counterparts, Xpress offers a variety of subtle options including definition of multiple back-up devices, DF0: DF1: and so on.

In addition there's the usual selection of beeps and flashes for disk changes plus the essential verification, with the highlight being the ability to set an archive option which when applied allows you to restore only the files which have been altered since the last back-up.

Continuing in a selective vein it's also possible to select and

# RECEPTION PROPERTY

X-Copy is the best known Amiga backup cartridge system, so does the new Professional version live up to the reputation?

de-select individual files and directories prior to backing-up.
Better still a variety of filters can also be applied which will
automatically choose files according to archive, data of pattern
yet another feature which is usually only found on commer-

Following up the impressive Xpress comes a rather curious utility entitled X-IT. a program which offers the fairly unique ability to encrypt floppies.

Quite why the average punter would want such a facility is a mystery, but if you feel the need to hide sensitive information or more likely dubious graphics, X-IT offers a solution.

The program actually works by copying the files from one disk to the next but during duplication a variety of encryption options make the copy impossible to read without first

decrypting back onto another disk.

However in order to restore a disk to its original state you must first have the password plus the original parameters used during encryption. These include settings such as the cylinder presets, bit rotation, reverse track, and whether or not the sides of the disk have been swapped.

Needless to say with such thorough precautions hacking into the disk is impossible without the password and presets. But be warned, if either the password or presets are misplaced there's no way to

Arrhhh... Jim lad, it be X-Copy Pro: "All that software for just £39.99, It's a crime!" retrieve your secret software from the floppy.

Last on the utility rundown comes an old favourite entitled QED – a text editor which older Amiga fans will know from the PD where it's still going strong. Perhaps the best description would be functional rather than spectacular – nevertheless its still a big improvement on the rather lacklustre Commodore offerings.

As the old guard will we be well aware, X-Copy – in its various forms – has been around almost as long as the Amiga itself.

Now available in the latest "Professional" revision, Cache have given the package a facelift with some glamorous new graphics plus the odd new function.

On the duplication side the program retains the usual collection of four copying formats including Doscopy, Doscopy+, Barneosy+ and Nibble.

In descending order. Doscopy does exactly as the name suggest — but faster — while Doscopy+ works similarly but attempts to correct any errors on the original disk during duplication.

The rather oddly titled Bamcopy+ is an even faster and achieves its impressive speed by ignoring unused areas of the disk.

#### **Duplication**

Finally Nibble provides a rather plodding but effective copier which will back up some protected disks but more importantly duplicate floppies from other machines such as the IBM, Atari, Acorn and Archimedes...

On the utility side there's a reasonable selection of tools including, optimise, format, Qlormat, Erase, install, and Speedcheck, Checkdisk, Drives-on and Killsys.

As you are probably aware. Optimise will simply rearrange the data on the disk to provide the best possible performance and access time – never use on commercial software. Format and Oformat emulate AmigaDOS formats but take less time to do it. Erase does exactly what you'd expect and simply scrubs the disk clean of all data.

Speedcheck is again self explanatory while Drives-on will allow you to add external drives to your system without the need for a reboot, and finally killsys is just another name for Close Workbeach.

On the copying side all the usual options are covered including start and end track adjustment, side selection, whether or not to use a sync during duplication as well as a toggle to copy into RAM or onto the selected floppy/s.

As far as an opinion is concerned its hard to complain about a product that's fast, flexible and reliable as well as boasting the rare ability of work on all revisions of AmigaDos including Workbench 3. Finally we're arrived at the black sheep of the X-





Copy collection, namely Cyclone. Unlike all the other programs Cyclone is unique in its need for external help in the form of a special dongle which fits between the external drive and its input.

Needless to say Cyclone has only one aim in life – and to achieve it five copying formats are provided plus yet another speed checker and disk wiping function.

#### **Stringent**

With the assistance of the special dongle you'd expect that the copying of commercial software would be a breeze. However nothing is ever simple and in the case of Cyclone backing-up such software requires a completely clean high density disk.

And even with this fairly stringent criterion adhered too, the program will only guarantee a reasonable degree of success when duplicating from originals. In fact this dependency on originals is in keeping with Cache's claim that the package is designed solely to make backups of protected software for their original owners.

In fact the cheap stapled manual that accompanies the software states that under EEC law the original owner is allowed to make one copy of any commercial release as long as it is strictly for his or her own use.

Leaving the legal aspects aside it must be said that the X-Copy & Tools is not only a nice collection of powerful copiers and useful utilities but a vertiable bargain at fust (39.99)

#### Order v2.51

Relational database Supplier: South Hams Software Phone: 0752 880906 Price: £19.95

Order is a database which just refuses to die, despite the fact that on its first release it seemed to suffer from a number of major handicaps. Its author, however, has persevered with it and refined the program in several areas.

Hand disk installation has been introduced and vastly improved, and in the latest version there is the inclusion of relational report fields, adding a great deal of flexibility to the way in which users collate and export their data.

The main database program itself has been split into a user's and a developer's section so that the creation of databases can be kept in a module of its own. This is a sound move and makes the process of setting up a database that much easier by concentrating the user's mind on the job at hand.

Once a project (database) is up and running, complete with its multiple reports, forms, and so on, it can be accessed via the user module – an ideal way to create standalone information systems. Ideal, that is until the presents an Order database to



Not graphically inspiring, perhaps, but quite powerful

the public. This package has never suffered much from speed problems, and at its present price is very good value for money, but it is still encumbered with an ugly, non-Amiga, unintuitive interface of the kind most PC owners had to suffer before the advent of Windows.

Steps have been taken to improve things, and Order is now no worse off than, say, Prodata in this respect, but it is still a point worth bearing in mind if considering a burchase.

For £20 you'll get a database which can handle a great deal of data and which has some surprisingly powerful feafures; just don't expect too much of the user interface.

## Invoice-It!

Supplier: Legendary Design Technologies Inc.
Phone: 0101 519 753 6120
Price: £TBA

If you're self-employed or run a small business then you would've realised by now that for the business to run smoothly you need to have your accounts in order. Invoicing can be right pain at the best of times and also a slow and tiring process.

Most people who do a lot of invoicing know that the process can be speeded up and made more efficient by using a computer. The problem lies in the software, because decent productivity software for your Amiga can be hard to find.

As if by chance, what should arrive in the post this month but Invoice-It!, an inexpensive and powerful invoicing program that promises to give you more than just an invoice package.

Invoice-It! is entirely designed with the self-employed and those who run small businesses in mind. It has been developed to be friendly and easy to use, yet still powerful at the same time.

Invoice-It! allows the user to enter and track invoices and also includes powerful reports normally found in much more expensive software of this type.

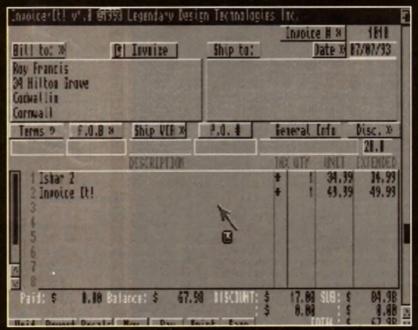
Invoice-It! can work as a stand-alone program or you can interface it with other application programs you might own. For example, you can use it with on of Legendary's previous products, Address-It!

All reports that you generate can be sent to disk in Ascii format. This will allow you to import the information into a wordprocessor or spreadsheet for generating more comprehensive reports or sales graphs.

Legendary Technologies are based in Canada, so you will first have to set up the program to run using

the British tax system. Once this is done, though, you will be free to start invoicing; the change is only minor and won't take long.

Now to start your invoice. You can enter information virtually in any order, although it is recommended that you start at the top and work your way down otherwise you're likely to get confused. The first thing to

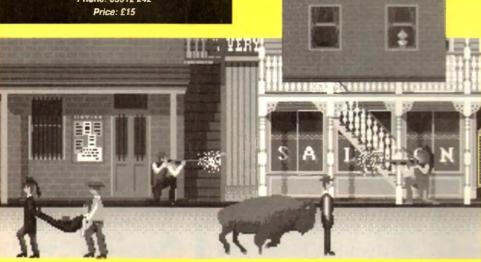


Although the money is counted in dollers here, there is an option to use £ signs instead!

# Shop Window

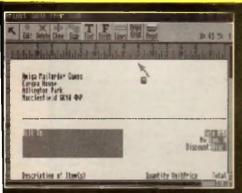
#### Western Movies I & 2

Animation clip art on two disks Supplier: Diskotech Phone: 05912 242 Price: £15



We've seen several attempts to make money from DPaint animations, some more successful than others, but this collection is a little bit different.

Rather than put together a disk full of disparate animations high are supposed to be realistic Diskotech have gone for a



Invoice it! has simple to use layout tools

fill out is the "Bill To" fields. Here you have 4 lines by 40 characters to type who the invoice is billed to. Here you'd put the name of the company, the address and so on. The rest of the invoice is just as easy to fill out. Anyone with a basic knowledge of invoicing is likely to pick up the program with ease.

This is due to the fact that Invoice-It! is extremely easy to use and for such a comprehensive package everything is very straightforward. It's literally packed with features such as a ready available calculator and the option to print out mini-statements and the unique ability to actually design your continued layout on blank paper or pre-printed forms.

Invoice-Iti is a really good invoicing package and is a lot better than some of its more expensive rivals. It is the perfect solution to your accounting and invoicing worries.

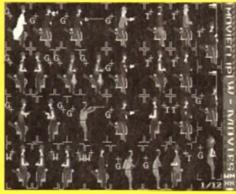
Watch out! Behind you!

cartoon approach. Western Movies holds dozens of animations crammed full of animbrushes ready to be cut out for use the movie. Each separate example has a single extra frame containing crop marks to make exact cutting and pasting easier, but this sort of operation is a doddle without such aids.

A quick browse reveals the presence of cowboys, Indians, cavalry, wagons, horses and a variety of backdrops showing town and desert scenes. The mixture is excellent, and includes figures shooting from horseback and from foot, men running, walking, riding, and jumping fences – even bandits shooting over their shoulders at some pursuing posse.

By just clipping and pasting in DPaint it is possible to quictly run up an animation including anything from a classic Indians vs cavalry shoot-out to a high noon duel. Memory is the only real restraint on the user, but as the individual brushmaps are often quite small, even IMb users should see some action.

Well drawn and offering plenty of fun, the Western Movies collection is good value for money at its present price. It is, of course, useless if you're not a fan of the Wild West, but those frustrated cowboys among us will let rip a yee-haaaa at the thought of trying their hands at an Amiga spaghetti western.



More animbrushes than you can shake a Winchester at

#### Powerbase v3.30

Non-relational database Supplier: Amivision Software Phone: 0922 414731 Price: £14.95



Powerbase offers easy VCR-style controls

In great contrast with Order v2.51, Powerbase is a program designed with ease of use in mind, and though it sacrifices certain more complex and powerful features such as relational data fields. Powerbase manages at the same time to be easy and meany.

Controlled to a great extent by VCR-style buttons, the program has more in common with Mini Office or Superbase than more traditional databases like Order, but this doesn't mean it cuts corners on advanced features.

For example, the user can specify many different types of data field including the usual date, time, and numerical data, but in addition there is an IFF data type so that pictures can be attached to records and calculation across fields is possible. The latter feature is surprising not only in its inclusion, but in the fact that it is so very quick.

Searches are equally fast, and the filtering options are extensive, enabling data filtering using the standard Boolean-style filters (LIKE, EQ< and so on).

These are common enough that many database users will find them familiar, but I would have liked a simple linear fast find option for those one record searches in the quest for the elusive phone number.

There can be few other gripes about this package, though, and when the user discovers how feature-packed it is, the grin of delight will surely be wide. The usual form and report editing functions are available, but in addition Powerbase offers table and page record layouts for numeric or large record viewing respectively.

Top this off with well thought out printer control, on-line help, and the facility to create one's own macros, and this has to be about the best value user-friendly database on the Amiga.

Not as many power features as some other programs, perhaps, and it won't allow relational operations, Powerbase is



nonetheless well worth a look, especially as a free demo is available if the interested user sends a blank disk to Amivision.

Quick, easy, powerful

# ECTAFONT

VV UNIQUE 24 HOUR CUSTOMER HELPLINE

STARBURST

POWERLINER

AMY NORMAL

ENVISION CHINESE

BIT BIBIONIS

CLEWEUL.

BONUS DISKS for orders over £15:00

PIC n MIX from over 60 Disks in

ADOBE/COMPUGRAPHIC

Format. Each Disk contains 12 Fonts and costs a paltry £3:00

Please send a large SAE with a 36p Stamp for a comprehensive printout of all Fonts. Also state which programs you will be using

> (Dept.AC) 84 Thorpe Road, Hawkwell, Nr Hockley, Essex SS5 0702 202835

UNIQUE DISK PICK n MIX

STEELWOLF

BEEROUSE HEADHUNTER

BLADES

hairpin

MEDUSA

Special Prices for BULK BUYERS

#### Plants For All Seasons

mution manager for gardeners and botanists. Includes a ry, address and book databases. Requ 2MB RAM and 2 disk drives minimum, £39.95

#### The Video & Film Librarian

		_
ACCOUNTS	IBM PC Keyboard	854
Accounts Master (PC) C19.74	Patasonic KXP1081 Prior	16.58
Cashook Counciler £54.78	Star LC24-10 Primer	10.58
Home Accounts (bendle) 19 \$7	DATABASES	
Personal Finance Mag. 1987	HomeBase	[[457
BOOKS	Jeuge Freder	£99,95
Amga 3D Gfs Pry Basic 114.95	InfoFile	£14.57
Aniga Asin Lags Pre 112.94	InfoMaster (IBM PC)	£19.74
Amiga Basa Manual £4.95		
Aniga C For Adv. Prg. 424.95	Clear	
Arriga Deskaop Valee 114.95	Ccear	u
Artiga Desktop Val Power [18 95		
Arriga Erhancer L3 Mrt £4.95	Markhat Plan	129.61
Amea Graphics I/O C2495	Organiser (MSS)	£59
Amiga Prog. Handbook 119.95	Produca (Amor)	[34.95
Azorga Printers 140 £19,95	DTP	
AmericaDOS Dobland Gd 19.95	Gold Disk Type, Decor	£3481
Get The Most/Armga 92 14 95	Grild Dirk Videa, Denir I	EANORS
Get The Most Amera 91 (2.95)	EDUCATION	
Inside Amiga Graphics £14.95	Dinovasa Discovery Kit	£19.74
TeX For The Impatien £19.95	Motey Matters	£13.63
The Best Tracks And Tips 118 95	Picture Book	£13.63
The Home Computer Book 10:85	Primary Mathy Counce	\$15.60
CABLES	Tarpet Mathy	11161
Too many in lot, pieze call!	GRAPHICS	
CAD	An Department 1	(39.95
InteCAD Plus ±64.56	Clipbi	11974
COVERS (Deluxe Buff)	Deline Paint 3 Bindle	014.57
14 Inch Monnockeyboard 17 05	Delace Paint 3 Full	(24.91
For 1084 & RE33 Monitors - £7.52	Gright Starter Kir	(10.95
1. feet 1 (11)	Loss Ballet	CT 00

#### The Music Librarian

roduct, track, mail, dictionary, and book records. Am record of Roserto 2MB RAM and 2 disk drives minimum, £39.95

#### The Plant Image Bank

_				
861	Sculpt 3D XI.	(10 K)	Epon LXNO Labr	0.88
16.58	Special Plants	£14.57	Epica LX100/RX10 Bi.	CK
25.58	HARDWARE		Epoca LXHY86 Gate	£1.89
	Ocean For 3.5" Drives	£176	NBC Pe (P6et) Branded	(6.58
(1437)	Cleaner For 5.25" Drives	El 36	Panasonic KX-P1124 U.	(3.29
£99,95	Comp Pro Xira Joyetek	£12.69	Star LC/X B24-10/15 Br.	£164
0457	Cross Over Boses	E14.57	Star EC/A B24-10/15 Cir.	111.75
47.9()	Flicker Master Scient	gq g7	Star LC 10/NA 1000 Clr Bo	611
		_	Star LC10/NX 1000 Br	£136
	rce Lis	ø	Stat LC10/NX 10001 Univ.	£329
MA.	ice Lu	ı	Star LC'200 Branded	45.64
_		_	SOUND	
129.61	Monitor Station 14 Inch	111.22	SIIDI Synergy	19 67
£191	National ASSO Scanner	659 69	Seamencer Date	£39.61
(34.95	Qual take Warmater	LR 93	South 2	(19.95
	Rendale XMC Genhack	149 642	Studio Mark	19.87
£2481	ROM ShareSwitched	£14.95	UTILITIES	Local Control
EANOR	INTEGRATED		B A D. Dod Optimize	(24.9)
	The Works Platinum 2	£29.61	Byte N Back HD Backup	£9.87
£19.74	The Works Bundle 2	019.74	Disk Durettery Manager	£9.87
en ea	MULTIMEDIA		Doctor Ami Atalyser	01451
(13.63)	AmigaVision	C9.61	Secretary Scheduler	C491
£15.60	CanDo 1	(79.9N		Paal
11161	PROGRAMMING		VIDEO	eto e i
	AMOS ID	\$14.57	TV Show & Test Tiding	E961
(39.95	AMOS Creator	£19.74	Vid Amp PAL Dipter	£39.95
£19.74	GFA Base Interpreter	79.92	Vidi Arrica C.C. Solition	£69,56
014.57	RIBBONS		WORDPROCESSO	
(219)	CBM MP5 1230 Cold	£3/29	Escellence 2 (MSS)	149 K2
(19.95	CBM MPS 1500 Easter	(4.24	Final Copy (Sult wood)	£29.61



Professor VI (NH)

149.83

Phone: 0983 551496

plied Research Kernel, Corve Farmhouse, Corve Lane, Chale Green, Isle Ol Wight, PO38 2LA, U.K.

DISCOUNT MAIL ORDER COMPUTER SUPPLIES THIS IS ONLY A SMALL SELECTION OF OUR STOCK - SO IF YOU CAN'T FIND WHAT YOU WANT BELOW - PHONE

Home Accounts/Ell/Tolo/Puzzzoc Amiga 4000 030/120 MB Hard Drive Amiga 4000 040/120 MB Hard Drive £1999 Many other 2000/4000 configurations available

<b>VIDEO DIGITISERS &amp; ENHANCEM</b>	ENTS
Opalvision 24 Bit Graphics card & video system	2009
Opalvation Frame grabbet/Genlock module	PHONE
Oralizator Roaster	DIMONE
Opalvision Scan rate Convertes (De-interlaces)	PHONE
Opalvision Guad Input production switcher	PHONE
Scale Presentation system entiwere	£159
GVP Impact Varion 24 Bit Colour	£969
Harlemain 1500 Frame Buffer	€879
Harlequin 2000 Frame Buffet	€959
Harlegnen 3000 Frame Buffer	£1039
Hariscrum VLAB/per for Amica 500/600/1200	
Harlegum VLAB Real Time YUV Digitises	€299
Haringum MS P3400 Gentock/Demder/Rnc-det	Malti
standard/Linear plus dicital kevet (197 rack)	£2429
Harlegue TV Paint 32 Bit Graphics Package	£799

standard/Linear plus digital keyer (19' rack)	£2429
Harlsonie TV Paint 32 Bit Graphics Package	£799
ACCELERATORS	
SOLID STATE LEISURE	
A5000 68029/66881 16 67MHz/1168 Ram	£149
A5000 68020/68881 16 67MHz/2MB Ram	£179
A5000 68020/68881 16 67MHz/4MB Ram	£249
85000 68030/68882 25MHz/1MB Ram	£275
85000 68030/68882 25MHz/2MB Rum	
95000 68030/68882 25MHz/4MB Ram	
85000 68030/68882 25MHz/8MB Ram	£559
E5000 68030/68882 33MHz/1MB Ram	£358
B5000 68030/68882 33MHz/ZMB Ram	£406
B5000 68030/68982 33MHz/4MB Ram	£485
B6000 68030/68882 33MHz RME Ram	0865
GVP G-Force 680308 C/68862 25MHz/1Mp Ram	1389
GVP G-Force 68030EC/66882 40MHz/4Mh Ram	£679
GVF G-Force 68030/6/18/2 50MHz/1M: Rom	1907

GVP G-Force 68040 33MHz/ZMB Ram	£1279
GVP A530 Combo 68030EC 40MHz/1Mb/42Mb H	
GVP A530 Combo as above but with 90MB HD	1559
GVP A530 Combo as above but with 120MB HD.	£650
FUSION 68040/28Mhz 4MB Ram	£1149
Commodore A2630/2MB	£309
Commodore A2630/4MB	£369

		1	HARD	CARDS	
GVP	Impact	Sersee	2 HC8 -	No Hard Drive	£115
GVP	bupact	Series	2 HC8+	42Mb Hard Drive	£279
GVF	Impact	Sener	3 HC8+	BOMD Hard Drive	£329
CVP	Impaci	Series	2 HC8+	19ths. Hard Person	6406
GVP	Impact	Section	2 HC8+	213Mb Hard Drive	£539

HARD DRIVES	
GVP Serven 2 HD8+ No Hard Drive (A500)	_£169
GVP Server 2 HD8+ 42Mb Hard Drive (A500)	_£309
GVP Series 2 HD8+ 80Mb Hard Drive (A500)	£439
GVP Sames 2 HD8+ 120Mb Hard Drive (A500)	_£509
QUANTUM 42MB Hard Drive (No Controller)	£209
MAXTOR 120MB Hard Drive (No Controller)	£350
MAXTOR 213ME Hard Drive (No Controller)	£585
ICD Ad SCSI Frame (1500/2000)	£75
MICROBOTICS Hard Frame Card (1500/2000)	£129
ROCTEC Rocmate external Hard Drive case . P.5	E89
A570 CD Rom Drive - Fred Fish & Sim City Disks	£239
A590 2000 Hard Drive/OMB RAM (2MB Canacat	r) £189

RAM EXPANSION/BOARDS/SIMMS	
GVP Series 2 RAM 8/0 Mb populs ad	£95
GVP Series 2 RAM 8/2 Mb populated.	£139
SIMM 32-1MB 60ns Bain upgrade (A530/GF-(30)	£65
SIMM 32-4MB 60ms Ram upgrade (A530/GF-030)	€159
SIMM 32-1MB 40ns Ram upgrade (G-Porce 040)	
SIMM 8 Bit/1ME 80pt (HC8+/HD8+/RAMS)	£29
SIMM 9 Bit/4MB 80th (HD8+)	
SMARTCARD For A600-1200 - ZMB	
SMARTCARD For A600/1200 - 4ME	£179

All prices include VAT and full warranty. Postage £8 (up to 6 items). Credit/Debit Card Orders 081-546 4522. 9am - 8pm 7 days Cheque/Postal Orders to:

Millenium Micros, 30 Fernhill Gardens, Kingston, Surrey KT2 5DL





# **Professional Page 4.0**

In its latest version, Gold Disk's Professional Page is an extremely powerful package offering both flexibility to the advanced user and ease of use to the beginner.

Its ARexx-based Genie functions make possible the automated design of pages and quick control of box and text effects, and its direct hot links to ProDraw, the Article Editor (a bundled text editor), and ProCalc give it an integrated power, albeit mostly with Gold Disk products.

Drawbacks include the program's sometimes less than intuitive keyboard short-cuts and its strict adherence to boxes, which can restrict design flexibility a little.

In addition, ProPage continues to rely exclusively on CompuGraphic fonts, despite the abundance of excellent Adobe Type I shareware fonts, and although Gold Disk have tried to address this problem with a font converter utility, the conversion process will not work with fonts which have .PFM files, insisting instead on the AFM files found in official (and expensive) Adobe fonts.

These grumbles aside. ProPage 4.0 is a powerful top-end Amiga DTP package which always deserves long and thoughtful consideration before the user plumps for a package. For AGA users, it has to be the only choice, offering full support for all new screen modes and full on-screen 256 colour previews of any graphic.

This month's concise roundup concentrates on DTP packages, from the cheapest to the most expensive and sophisticated

THE RESERVE OF THE PARTY OF THE

# Hi Que Supplier Silica Systems Price: £249.95

## PageStream 2.22

SoftLogik's ugly duckling has, over the last year, swanned its way to the top in the battle with ProPage due to several bug-fixing revisions and a totally new look and feel with v2.2.

In terms of features, little now remains to choose between the top packages, but in certain areas, PageStream has a definite edge.

User friendliness is the program's first advantage, Version 2.2 has been thoroughly designed with a Workbench 2.04 look and feel, leading to very intuitive keyboard controls – everything does what you'd expect it to do – and clean, simple requesters. All these design shenanigans, though not a big issue with prospective buyers, tends to really hit home once the package is used for any length of time.

PageStream is also rather more flexible than its main rival in the range of fonts and artwork it will accept. Both CompuGraphic and Adobe Type I fonts are instantly usable, and the package has a font converter to enable the use of Apple Macintosh non-standard Adobe fonts.

When purchased with the Hotlinks Editions package. PageStream has instant Dynamic Data Exchange capabilities to match those offered by ProPage's ARexx Genies, with the added advantage that the system is open-ended.

Hotlinks has still to be taken on board by other major software houses, but if it does take off, PageStream's support for it will give the SoftLogik product a whole new dimension.

Supplier: Meridian Distribution Phone: 081-543 3500 Price: £199

# Avaigs seton /

An old, non-PostScript program for the amateur user, PageSetter 2 is restricted to simple documents and has few of the powerful features found on the high end packages.

It is affordable and easy to use, but for anything other than low quality fanzines or the ubiquitous parish newsletter it is a DTP no-go.

PageSetter is best looked upon as a purchase for those wishing to dabble in DTP or who want better layout options than those offered by their wordprocessors. A good introduction to Amiga DTP but not a package with which to make your fortune.

Supplier: Silica Systems
Phone: 081-309 1111
Price: £50

## PageSetter 3

The first AGA-compatible DTP package, PS3 offers a ProPagelike interface with the basic DTP tools and a very colourful display. The result is a slick, easy to use package capable of a variety of simple DTP tasks.

Though not one for the professional or those looking to produce multi-page documents, PageSetter 3 should be perfectly adequate for the needs of most home and enthusiast users.

Supplier: First Computer Centre Phone: 0532 319444 Price: £42.99

# PostScript fonts

# Agfa starter pack

The first commercial release of Agfa format fonts on the Amiga, the starter pack contains 12 high quality fonts ranging from the sober Times Bold to the more inebriated Branding Iron. The typefaces are clean and well formed at all sizes and have a touch of class missing from many shareware fonts.

For the price, the user could buy many more shareware examples, but professional users might be happier with a smaller, but better quality, font library.

Supplier: Megatype Phone: 0759 58988 Price: £32

## EM Computergraphic

The range of shareware PostScript fonts offered by EMC has expanded rapidly from a good selection of SoftLogik-style fonts exclusively for use within PageStream to a large collection of Type I and CompuGraphic fonts for use in all packages. The quality can vary, but as each five-disk selection costing only

£12.50 can contain dozens of typefaces, there are usually plenty to suit all tastes.

Some exceptional general purpose fonts can be found among the usual one-off occasionals you'd use for one party invitation and never look at again, and when the minimum £60 asking fee for an official Adobe or CompuGraphic font is considered, it is well worth paying £12.50 for only one font you actually like.

In addition, the company stocks the Safari range of fonts, including the excellent Star Trek font collection – an absolute must for all Trekkies.

Supplier: E.M Computergraphic Phone: 0255 431389 Price: £12.50 per volume

# George Thompson Services

The GTS range of fonts is not as wide as that offered by EMC, but the quality of what is on offer is every bit as good. The 37 fonts available on the first GTS font pack, available in CompuGraphic or Adobe Type I format, can be used within all the major DTP packages, and contains a couple of useful standard fonts as well as the more whack occasional typefaces.

More font packs are on the way as the shareware fonts war heats up, so the next few months should be a good time for Amiga DTP users.

Supplier: George Thompson Services Phone: 0707 664654 Price: £9.99



- ◆ 2000HD Monitor 3Mb 1.3/2.0, £350, External 286Mb SCSI HD, £250, Action Replay III 1500/2000, £25,4Mb 32BIT Simms, £60. Tel 081 845 8065
- ◆ Amiga 1500 2.05/1.3 6Mb Philips Monitor, Rocgen+Genlock, Act.Replay Mk III, £600. Tel 0924 240518
- ◆• 170Mb fully loaded Hard drive with case+ PSU GVPSCSI Controller, £350, Tel 0924 240518
- ◆ Populus and Under Pressure, £15. Burndale, Sands Road, Hunmanby, Gap, N.Yorks, YO14 90W
- ◆ 40Mb Hard drive + controller 1500/2000 £150, Tel. Adrian: 0252 511201
- Amiga contacts wanted! Peter Norin. Bjorkgatan 35, 82060, Delsbo, Sweden.
- ◆ GVP 52 Meg Hard drive (A500+), £200. Tel 0483 726885
- ◆ A2000 ECS £400, A500 IMb CHIP,£150, VXL030 40MHZ 2MbRAM, 2400, GVP HD + 82Mb Quantum 2Mb RAM Fastrom Upgrade. £300, AT Bridgeboard, £150, CM8833 Monitor. £150, Hardframe SCSI £75. Tel: 0524 417687.
- 200 Amiga PD disks for sale. Tel 0745 334035.
- ◆ Swap CDPD1 for any CDTV title. Tel 0254
- ◆ A1200+box set+ Wing Commander+ Desert Strike, £299.Tel, 0903 770012
- ◆ IDE 2.5in 20MB H/D. Install 3.0 disk, instructions (50 Tel: 0235 868303.
- ◆ A500+, 2Mb RAM, Power 2nd Drive, Action Replay Mkill boxed, £150 o.n.o. GVP A530, 120Mb HDisk, 2Mb 32BIT RAM, boxed £600 o.n.o. All Y.G.C. Everything £700. Tel 0752
- 343119 ◆ Amiga 500 5Mb RAM 80M6H/D 030,40MHZ Accelerator K.S.2.0 Flicker Fixer, £750, Tel: 0847 820008
- ◆ Wanted, Miracle Keyboard Teaching System for Amiga, Tel: 0603 407150

# 

s long as your ad is five words or less, it's absolutely free! Should you want more space, you'll find unrivalled value-formoney – for instance, 25 words cost just £10.

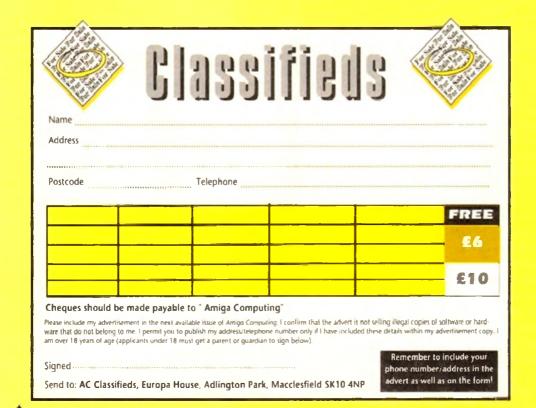
Fill in the form on this page and send it to us with your payments (if applicable) – and remember to include your telephone number!

- ◆ Wanted R/C Aerochopper Flight Simulation System for Amiga. Tel 0603 407150.
- ♦ Wanted urgently: BBS numbers. If you run a BBS or know of any please send numbers and details to: Paul Fawcett: 2 Coronation Gardens: Staindrop; Darlington; Co. Durham; Dl2 3JZ.
- ◆ A500 owner seeks cheap accelerator (68020/30) Tel, Phil: 0392 78616
- ◆ Amiga Al500 complete System 52Mb Quantum 2Mb RAM 1081 monitor. Free Easy Amos included total package. Tel. Mark: 0452 855558, after 6pm
- ◆ A500 1,3/2,04, GVA 52Mb,HD, £400, Tel: 0509 91 4800
- ♦ Wanted R.C Simulations Mouse Yolk for Flight Simulator 2, Tel: 0603 407150.
- ◆ Amiga 1500+ monitor 52mbHD 3mb RAM Amplifier speakers, £850. Tel: 0253 394364.
- ◆ GVP AS00-HD S2Mb RAM, £250. Tel Neil: 0850 211087

- ◆ A1200 +Zool AGA £300.ong BATTLE ISLE £10, TEL: 081 954 9531,3
- ◆ P.D contacts wanted: Frits: 26 Waterloo Road: Huddersfield: HD5 0AF
- ◆ Bodega Bay RRP £299 only £150. Tel, Lance: 081 294 1276
- ◆ A4000 contacts wanted. Giorgio Piazza, Via Vecello No.21, Monza(MI) Italy.
- ◆ Wanted, Cabaret Plus Superpic software, Tel. Juan C. Souto: Spain: 928 683339.
- Superpic Digitiser Genlock and software. £400, Tel: 081 764 0298.
- Amiga A\$00, Megabyte Perfect, en top games, V.P. (185. Tel. 08), 3637796.
- ◆ A2000 WB1.3 2 Drives UP Pop. 2Mb RAM Microway Flicker Fixer, £400. Tel: 0494 765324.
- Help needed with Pagestream and Canon BITOEX Tel, Steve 0284 725306
- ◆ For sale CDTV, keyboard 11 CDs £330 o.n.o. Tel: 0782 328305.

- ◆ AS00 (IMB ) + games £165, A590HD ( +IBM ) £185, Tel: 0726 67189.
- ◆ VIDI digitiser £40 cost £179. Scroller £25 Tel, 081 3032151.
- ◆ Wanted 1.5Meg Upgrade for A500. Will pay (30, Tel: 0203 466216
- ◆ A570CD with Sim City, CDPD, CD-Remix, boxed with guarrantee. Three months old, £135 o.n.o. Tel: 0602 395147.
- ◆ GVP 52Mb Hard drive, 2Mb RAM 500/+. Tel 0709 867029(evenings).
- A600, Joystick, 6 months old, £180. Tel:0252 871269
- ◆ Miracle Keyboard Teaching system, new and unused, £250, Tel: 0689 873431
- Wanted DR.T Copyist, or Copyist Apprentice. Tel: 0243 543545.
- ◆ For sale, Scala 500(as new) £50 plus other software, Tel 0923 854248.
- ◆ A1500 WB2 5Meg, two 52Mb Hard drives. Philips monitor manuals, utilities, year old. £775. Tel: 0332 571177
- ◆ GVP 52 Mb HD with 8 meg memory KCSAAT Emulator, £475 ono. Will split, Tel 0493 663246
- ◆ A2000 30Mb H.D 3Mb RAM Bridgeboard manuals, £200, Tel 0227 793430.
- ◆ Amiga software games, books, D-Paint III, Amos.etc. Tel 0273 728369.
- Amiga contacts, all kinds of swaps. Chris W. 281 Bolton Road, Radcliffe, Manchester,
- ◆ CSA-MMR Accelerator 68030 68882 512K SRAM £210, Tel: 0424 851612.
- ◆ Amiga 1200, 80 meg disk, games, scanner etc. Tel: 0732 823025
- ◆ A 200 contacts wanted 100% reply. 104 Sheldon Close, Hull, HU7 4RX.
  - ♦ 2 meg Amiga 500+, 100+, disks £250 ono Tel: 021 3535586
  - ◆ Amiga contacts wanted. Steven: 565 Heathway, Dagenham, Essex, England, RM9 5AZ.
  - ♦ Vidi Amiga 12 (AGA) in-built sampler £70. Tei Iulian: 0742 438542.
- ◆ Super pic frame grabber Colour Video digitising, new. £150 ono. Tel: 0614379477.
- ◆ Canon LBP-8A | Laser printer, £400 ono. Tel-Scott, 0744 37621.
- ◆ Amiga 500, Star LC-10 printer, Workbench 1.2. Digi Paint' program, over 30 games, Dust covers, £350 ono, Tel: 068 481387
- ◆ A4000/040 6Mb/HD120Mb with Multi-scan Monitor and software, £1999 ono, Tel. 0480462776 ◆ P.D contacts wanted! John Svendsen, P.O Box
- 6765, Rodelokka, N-0503 Oslo, Norway. ◆ Wanted Flexi Dump 2 for Amiga 1200
- urgently must be cheap. Tel: 081-7154355

PLEASE NOTE: We can only accept classified advertisements from bona fide private sellers/buyers. We reserve the right to - and will - refuse to print any advertisement from any company or individual masquerading as such. Don't waste your time and money!



An incredibly addictive and detailed formula one simulation for 1-4 pla

Watch the races as they unfold with three levels of highlights. Crashes, some pile unfailures, make pitstops, weather changes, fastest & record labs. Four independent levels of difficulty. Accurate and detailed graphics of the teams, circuits els.

15 teams, 9 cars per team, 50 drivers with varying skills, complete engine & tyre continu

Choose tyre compounds, tune your engines, change wing settings, even train your pit orwal Qualifying, 16 accurate championship circuits, news section, realistic sound by their selection. games, weather forecasts, statistics saved, latest FISA rules, full drivers and constructions championships (redesigned).

includes full 1993 season. Details can be easily updated each year Incredibly addictive, produced by true formula one fans

The most realistic formula one simulation, guaranteed

#### Just £14.95!

includes instruction manual

Vactly updated from 13, details and A1200 co

PLEASE MAKE CHEQUE/POSTAL ORDER PAYARLE TO-S. RENNOCKS

Dept. AC, 1 Cherrington Drive, Great Wyrley, Walsall WS6 6NE

#### AMIVISION SOFTMANT PRESENT

### 

up to 10,000 records with 1Mb, field types, filtering, label printing, searching, sorting, etc

- Complete word utility (crossword/anagram solving + loads more) 36,000

- Personal organiser (diary, address/telephone book, automatic Menu Power - Create menus for your disks (add an IFF picture to the background

Disk file organiser, copy/delete move rename files, make new directories Disk Power etc. with ease

#### SPECIAL INTRODUCTORY OFFER SAVE £15 - ORDER NOW FOR JUST £24.95!!

FREE CATALOGUE AVAILABLE UPON REQUEST
ALL INCLUDE INSTRUCTION MANUAL AND ARE COMPATIBLE WITH A 1 200
PRICES ARE FULLY INCLUSIVE. OVERSEAS ORDERS PLEASE ADD £1,50

PLEASE MAKE CHEQUE/POSTAL ORDER PAYABLE TO:- 5. RENNOCKS.

Dept. AC, 1 Cherrington Drive, Great Wyrley, Walsall WS6 6NE

## LOWEST PRICED TOP QUALITY RIBBONS, INKJETS, TONERS & DISKS

Printer Ribbons									
MACK America 1977 2000 2000 1977 1225/15/12/1 (1)5/00 1977 1225/15/12/1 (1)5/00 12001/27/05/04/1 24/9	1.66 2.85 2.85 3.90 2.85	24 165 351 270 375 270	51 128 129 129 138 129 129	104 175 3.11 2.40 3.36 2.30	Parasania K.V.   123/1124   140 Parasania K.V.   123/1124   140 Parasania K.V.   124/1130   592 Parasania K.V.   124/1130   542 Star E.C.   102/1130   542   E.C.   102/1130   E.C.	1.46 2.89 5.75 2.79 3.00	25 531 274 548 214 285	5-11 254 5-34 1-34 2-45	<b>金属四点四角</b>
Commodure NPS 12391230 Epon LOIM From LOANS STRENGES Epon FXATA RANGE TALXED	4.50 4.10 3.45 2.90	4.35 3.95 3.30 2.75	4.15 3.75 3.10 2.55	3.95 3.56 2.98 2.35	Star LC24-10/200 Taxan Kaga KP810/815/910/915 COLOUR Collour Swift 24	2.86 3.14 1.011 1.281	271 299 2t	2.51 2.79 5t	1.11 1.59 1.04 12.00
Tableson Maria 1951 195	3.36 3.12 3.90 3.03 3.17	3.21 1.97 3.75 2.88 3.02	3.01 1.77 3.55 2.68 2.62	2.81 at 1.67 3.36 2.49 2.62	Citizen Swift 24 Panasonic KXP2 (2V218) Star LC10/20/100 Star LC200 Star LC24-10/200	12.81 10.65 6.00 9.78 9.63	1236 10.48 5.85 9.63 9.48	12% 1828 5.65 9.41 9.28	12,06 9,88 5,35 9,03 8,86
Ring for Ribbons Not Listed.									

#### Ring us and WE WILL BEAT all other Ribbon prices

#### 3½" Disks & Disk Boxes DS/DD DS/HD 100 10 Disks E5 £8 25 Disks £12 Cap. £18 €22 50 Disks £32 Disk 100 Disks £40 £60 Box 250 Disks £XX £145 €5,99

500 Disks £168 £285 All Disks Certified 100% Error Free and INCLUDE FREE Labels.

### Miscellaneous Items

Roll 1000 31" Disk Labels	8,99
3½ Disk (Summing Ref.	2.99
Parallel Printer Calds (1.3m)	3.99

#### Inkjets, Ink Refills & Toners

Commidere MPS1270 Cartridge HP Deskjet Cartridge (Danish Ca HP Deskjet Trl-Colour Cartridge HP Thinkjet (Daistjet Cartridge

Inkjet Heffile (Twin Packs) for Canon BJ-10/20, BJ300, 119 Deskjet, Available in Black, Cyan, Magenta, Yellow Rist, Blue, Brown, Light Green and Durk Green. I Pack £11.00, 24 Packs £10.60 en, 54 Packs £9.95 en.

HP Lauriet IVIII Toner Curtridge HP Lauriet HP/HP Toner Cartridge

#### Ring For Inkjets & Toners Not Listed.

CPU & Monitor Dust Cover	5,49
Maniter Dust Cover	4.99
80 Column Printer Dust Cover	3.99
Amiga 500 Dust Cover	3,99
Amiga 600 Dust Cover	3.99
Manne Mat	2.99

#### All Prices INCLUDE VAT (@ 17%%) & UK Delivery

0543 250377

Ring us or send cheques to:

0543 250377

Owl Associates Ltd, Dept 103, Owl House, 5 The Brambles, Lichfield, Staffs WS14 9SE



### **BOOKS FOR THE AMIGA**

C: A Dobhand Guide 3rd Ed	£16.95	Mastering Amiga C (d) £19.5	15
Amiga Gamer's Guide	£14.95	Mostering Arriga Printers (d)	25
Inside Amiga with C	£16.95	Mastering Amiga System (d)	15
Corish's Computer Games Guide	£14.95	Amiga ROM Kemal: Libraries	15
Amiga for Beginners	£12 95	Amiga ROM Karnol Devices £24.9	15
Amiga BASIC Inside & Out	£18 95	Amiga Hardware Ref. Manual	15
Amiga Machine Language	£14.95	Arriga Interface Style Guide	15
Amiga 3D Graphics in BASIC	£16.95	Arrigo DOS: Dobhard Guide £14.9	15
Amiga Intern (d)	£32 95	Get the Most from Your Amigo	15
Amiga C for Beginners	218.95	2 Companion Disks for above	O
Mastering Amiga Workbench	£19 95	Mastering Amiga Assembler (d)	15
Amiga DOS Inside & Out [d]	£19.95	Becoming on Amiga Artist	15
Best Amiga Tricks & Tips (d)	£24 95	Amiga Game Makers Manual £16.9	15
Amiga Printers Inside & Out (d)	529 95	Amige BASIC Dabhand Guide 215.9	5
Amiga Desktop Video Power (d)	\$24.95	Life Workbench 2 Book \$14.9	5
Using Arexx on the Amiga (d)	£29.95	Program Design Techniques£16.9	5
The Amiga DOS Manual 3rd Edinon	£21.95	Commercial Games Prog. Guide £9.9	5
Kids & The Amiga 2nd Edition	£15.95	Amiga World Amiga DOS 2 Companion £22.9	15
Amiga Graphics Inside & Out	129 95	Arrigo Microsoft BASIC Prog. Guide£10.0	ю
Amiga Desktop Video 2nd Edmon	218.95	Amigo DOS Raf Guida 2nd Ed (WB   2)C5 0	ю
Amiga ROM Kernal Includes	£32 95	Amiga Hardware Ref. Manual 2nd Ed. £10 0	Ю
Amiga Made Easy	£12.95	Artiga Desktop Video (Computet) 210 0	10
Little Red Workbench 1.3 Book	£14.95	Montering Arrigo Areux 521.9	5
Intuition Practical Guide	£14.95	A600 Insider Guide £14.9	5
Official Amiga Vision Handbook	\$20.95	A1200 trader Guide £14.9	5
Mastering Amiga Beginners	£19.95	Amiga Five-Five-O £9.9	/5
Mastering Amiga DOS 2 Val 1 (d)	\$21.95	Adventure Gomen Manual £12.9	5
Mostering Amiga DOS 2 Val 2	219 95	Amiga Real Time 3d Graphic £14.9	5
Mastering Arriga DOS 3 Vol 2	£21.95	Computers and Chaos - Amiga Ed £14.9	5

Prices include postage in U.K. Europe and £1 per book. Airmoil outside Europe add 25% Access & Visa cards accepted. Tel. Few 0706-71-9028. Cheques/Postal Orders payable to DTBS. Descriptive catalogue available on request. Orders normally processed within 24 hours.

SPECIAL OFFER TO AMIGA COMPUTING READERS: 10% discount on orders over £35. You MUST quote Dept ACOP to discount. Orders no welly processed on Price match was will match any lower prices allered in this issue

DTBS (Dept AC09), 18 Norwich Avenue, Rochdale, Lancs OL11 5JZ NEW SHOWROOM now open - 413 Manchester Bood, Bochdole OL11 3PG (flore to check opening he

# ALL AMIGA PUBLIC DOMAIN SOFTWARE

UTILITIES	GAMES
Text Engine V4.0	Lemmingoids
Epoch V	Tetris Gameboy
C Manual V3 – 12D	Numerox
V Morph	Donkey Kong
WB2 Litils - 14D	Chess.Aga - 4Mb
Kick 1.3	Star Trek - 2D
Amos Updates 1.36 - 2D	Crazy Sue II
CPPD Utilities - 13D	Soccer Cards
DPaint 3 Tutonal	Super Prix
Anti Virus Disks	Heltzone
Amos Pro Update 1.1	Klaktris
Clip Art Disks - 9D	21 Games
Ham Lab 2 (WB2+3 only)	Roulette
Hard Drive Utlks	Super Pacman 92
Set Up Disk	Leedings
PC Task (WB3)	GPPD Games - 90
Amiga Tutorial	Wizzys Quest
CLI Tutorial	Parachute Joust
Lyapunov	Airmania
Comms Pack-2D	Kids Disk Packs
Edword V2.2	Amos Coin Drop
Label Designer	Chess Tutor
Messysid 2	Pick a Puzzle - 3D
D Copy V2.0	Liamatron

J Peg 24 Bit Pics – 9D Gulf War Anim – 2Mb Anti Gameboy Anim **WWF Slides** Dolphin Dreams Anim Star Trek Anims - 5D Dracula Animation CPPD Demos - 9D Med V3.21 Jesus on E's - 2D Spaceballs – 1Mb Chip Samples Disks – 5D At the Movies 2 - 4D Walker 1+2 (1+2 Mb) Unsporting (2Mb) Puggs in Space Alcatraz Odyssey - 5D Sword of Tipu Sultan Cinemorph Demo Perfect Sound - 4D Music Modules ~ 6D Coyote 2 (1.5Mb)

Lemming Revenge 2Mb-2D

Just a small selection of disks - 100 s more available Send two 1st class stamps to receive catalogue disk with all the latest titles

\* Ask about Special A1200 Disks \*

Disk prices £1.25 per disk with free postage - no hidden charges Please make Cheques/Postal Orders payable to Chris Price Telephone Chris on 0283 516736 - 7 days a week - 9am to 10pm or write to:

CPPD, 3 Dunedin Crescent, Winshill, Burton upon Trent, Staffordshire DE15 OEJ. Tel: 0283 516736

IDEAL FOR BUSINESS USERS OR FOR CATALOGUING RECORDS, CDS VIDEOS, BOOKS, GAMES, STOCK, ADDRESSES, RECEIPTS, ETC.

ORDER v2.51

THE BEST VALUE FOR MONEY AMIGA RELATIONAL DATABASE

minutes \* As simple or complex as you like \*

on MASA to

SAM HIGHER CHARGE STREET STREE

CHRIST ANY BATARASE, IN AND LIGHT WORTH ACCESS ANY BATARASE, IN AND LIGHT WORTH HOUSE CHARTER ON SERVER WATER BRUSE! ACE done with with the Citic of a perior ASIM LIVES IN distance to prime serving IN IN A Name or of long data.

Name to the state of the state

Japiticalen (1.9), Test hugding Position Mac Our past Investor Time Com terrests, Come de 1984 (1884, Additional III ; Printe A Time

1 MEG/1 DRIVE ONLY REQUIRED

PRICE £19.95

Includes Recorded P&P Add £3 00 outside UK

SOUTH HAMS SOFTWARE

(0752) 880906 Sum – Sym Aeyslay or

TOTING DATA

DEPTH OF THE PROPERTY OF THE PROP

REPORTS

ACCESS ANY DISTANCES CONTROL OF THE STATE OF THE

Barell Front reports, as with factors SLAW (TOTAL) COLUMNS on several reports (ag visco

RELATIONAL REPORT FIELDS now included DEMO £1.50

SOUR FROM IT SUCK AND PROBLECTS (Opinion)
NAMES DEST INSTALLATION (ADD.
ACC. SINCE PROBLECTS DOM: INSTALLATION (FREE)
ACC. SINCE DO VINCON (BROOK) TEST) (FREE)
200 PAUL SUSPIL REFERENCE MARINANA (VINCON)
200 PAUL SUSPIL REFERENCE MARINANA (VINCON)
200 PAUL SUSPIL REFERENCE MARINANA (VINCON)
200 PAUL SUSPIL REFERENCE
200 PAUL SUS

Ance and the reason (BABER TEXT) (FIRE)
 200 PAGE LIGHT REPERT NOT MARRIAN on
 ALL AMERICAN IN STREET THE STREET

REVIEW COMMENTS

A Sy Jurgest with the left of powin, DRSR operators processing to 4 release.

- There will design a male will find particularly processing much will find CRES the particulate.

- They have passed as a will be 5 to more comwork if a good was far movey

- PACK OVERAS planger than fat I

- "With Enters of Street Water" - JA Farmer Jame Wit

Any Fastures Or Enhancements You Require (Within Resear) Will Be Included in The Heat Research

#### KT's P.D. (SOFTWARE) THE FAST AND FRIENDLY LIBRARY

DEMOS

SPACERALIS -MEN TEX 3 - (2) FED SECTION - (2) TRON - (2) BLOSPANN NEGRI - (2)

REFLET CENO +
ALCATRAZ MEGA + CI
MATI LEMMINT + CI

GLOBAL TRASH + CEMEN DOWNLOAD 22 PORCY PIG +

PERFLS MEGA: 10 DEND 2 HOY AGA MAYDAY:

Telaphone: 0702-5425-16-anytime

METTERS DESIGN DREAM 21 ALPHA & CHAGA 2 TO MODES SENSATION (2) & SUS ON EY (2)

BELEWORLD GIDCS

BLIZZARO + LL TIMATE STAN THEK (2) + CACSSARE + BALLOONACY + ALL ROLANDER CRICKET +

All Disks Footage

I 80p | IN Orders 60p |
Paroper - 20p per disk

each | Wern! - 40p per disk

SOCCER CARDS 49 MCROMARKET 49

AMOS PPLIT I +

П

FOR THE AMIGA USER 500 ● 500+ ● 600 ● 1200

MUSIC UTILS MIGADEUS -FILLET THE FISH + GULF WAR + AT THE MOVIES + A CIENE +1
AS GENUTILS +1
DCOPY +1
COMMANIA +1
PRINTSTUDIO +1
OPTICOMMS 7 +1 AMERICA NEC MARIE NO COMMENTAL NEC MARIE NO COMMENTAL NATIONAL NATIONAL NECESSARY NATIONAL NA AMIGA RECIPIER of COX 13 of COX BLISNESS LETTERS of MOSEPLAYIR 4.

BRUNDI MUSE BOIL 2.

PRO SOUND SAMPLES 1.

RT MODILES 1.

ECR 2. DRUM LOOP SAMPLES KTY MUSIC DISP

BATHMY IN MANCEYFES? SPECTRAPAINT TEXT ENGINE 4 4Y
DISK LOG 97
KIDS DISK 4Y
ENGINEERS KIT 47
EASYCAL C 47
SUPERSOUND 2 49

GLEF CONFLICT -SCHMARTZ 3 AMMS -1 BUSY BEE & TRÉE FROG MR POTATO HEAD -DONALD DUCK -DOLPHIN DREAMS -

ANIMS

(1) The of DNes | Lie ensemble | Lie

#### MICROLAND BULLETIN BOARD SYSTEM

0891 990 505 To Download 0483 725 905 To View

Amiga shareware including files from the Fred Fish Collection plus lots more to download at V32bis, V32, V22bis, V22, V23, & HST 8 data bits, no parity

Why wait for your software when you can download now direct to your computer. Microland offers high speed connections and most files are compressed to minimise the cost. Check it out on 0483 725 905 at normal call charges. So much shareware you are spoilt for choice

Over 30 file areas including Animations, ARexx Files, Badge Killer Demos, Business, Clocks and Calculators, Commands, Database Directory and Disk Utilities, Display Hacks, Education, File Utilities, Forts, Fractal and Mandelbrots, Games, Graphics, Icons, Libraries, Programming, and Communications, Area 1 contains file lists for all areas to hely you dishlay ou are looking for Protocols xmodem, ymodem, zmodem, kermit, sealink, and uucp.

Calls to 0891 990 505 charged at 36p per minute cheap rate, 48p per minute all other t Trevan Designs Ltd. PO Box 13, Aldershot, Hants, GU12 6YX.

### Amiga-64-Link

on . or postal orders, to NTn P.D. (Software). All orders send fell Class the same day. CREE DISKS, Order any loss dashs from above and channe has bue

■ Links C64 peripherals to Amiga parallel port
 ■ C64 Not required

HOR TO CHOCK Please make chouses pays so . or postal context to NTs F.D. (Software)

Catalogue Disk at 50p, or FREE with your first order KT's P.D. (SOFTWARE), AC, 25 THE DRIVE, ROCHFORD, ESSEX SS4 IQQ

#### Connects C64 printers to the Amiga

- Supports MPS, DPS, VIC, Star, Brother, Seikosha & Citizen printers
- Graphics output on dot-matrix printers
- Works with all software

#### Transfers C64 disk files to the Amiga

 File transfer programs Read/Write text, binary & program files Standard "Ami-64-Link £35.25 Prices include VAT and delivery "Ami-64-Link" £23.50 Budget stops multi-tasking during printing

York Electronic Research (0904) 610722 The Paddocks, Jockey Lane, Huntington, York YO3 9NE

#### on AMIGALANI uality Vargion

#### \* AMIGA PD – ALL models ALL versions

The .



P.O. Box 672 South Croydon Surrey CR2 9YS Tel: 081 657 1617

 Collection Public Domain and ShareWare - fully tested, documented and virus free!

Don't get let down! We are the BEST CLUB IN TOWN!

The LATEST in PD and SHAREWARE! PLUS! Free help & advice by post or telephone - anytime.

Written Help! sheets.



- \* Edited & Printed docs.
- Disks made for YOU.
- \* Free virus updates
- \* 1-3 FULL disks £1.50 4 plus £1.25 each

UNIQUE 'Pick Your Own Programs' REAL VALUE - Try Us!

\* FREE MEMBERSHIP \* INFORMATION PACK & CATALOGUE DISK only £1 \* FREE VirusChecker & SysInfo - the latest \* FREE Utilities

# FREE PD SOFTWARE

Amiga - PC - All Commodore Call (081) 346 0050

Write to P.O. Box 1309 London N3 2UT Independent Commodore Products Users Group



#### Are You Missing Out on the VERY BEST User Group?????

Exclusive famastic special club offers, and discounts. Thousands of New Contacts. Free Help & Advice, Second-hand Hardware, Software and Cartridges Bought/Sold. Latest product information and nember reviews. Plus the best Fanzines/diskzines and Millions of P.D./Shareware titles at unbelievable member only prices. Exclusive

Find out what you're missing by sending a SAE for our FREE intro pack to:



Plus BRAND NEW!!! Membership in A Box Packs with

> Full Membership subscription 4

(Details/Newsletter/M/ship Card PD/Shareware Selection+

Audio Introductory Tape+ £15.00 Club Vouchers +

3 Yrs RRP (24.95 Offer £19.95 5 Yrs RRP £39.95 Offer £29.95

#### C.C.C. [AC], P.O. Box 121, Gerrards Cross, Bucks SL9 9JP (0753) 884473

Trade/Dealer enquiries welcome. Plus FRFF publicity for new software/fanzines. Contact us NOW! ocks last a FRFE discount ticket (worth £1,00) for any All Formals Show to all c \*\*\*\* And a FREE advance admission ticket (worth £4 00) to any new members quoting RFF AC \*\*\*\* Yes making money with your AMIGA becomes incidental when you know how! Your AMIGA is, if only you knew it, a gold mine. The size and make is irrelevent Make the initial effort NOW by starting your own HOME BASED BUSINESS. This may be the most important move you will ever make!

MAKE YOUR AMUGA EARN!

REMEMBER: You'll never get rich by digging someone else's "ditch" Anyone in the country, including YOU, can become very rich in a relatively short period of time just by doing a few basic things! It's more rewarding than playing games. The benefits are many and varied. Full or part time

FOR FREE DETAILS SEND S.A.E TO:-







31 PILTON PLACE (AMC49), KING AND QUEEN STREET, WALWORTH , LONDON, SE17 IDR

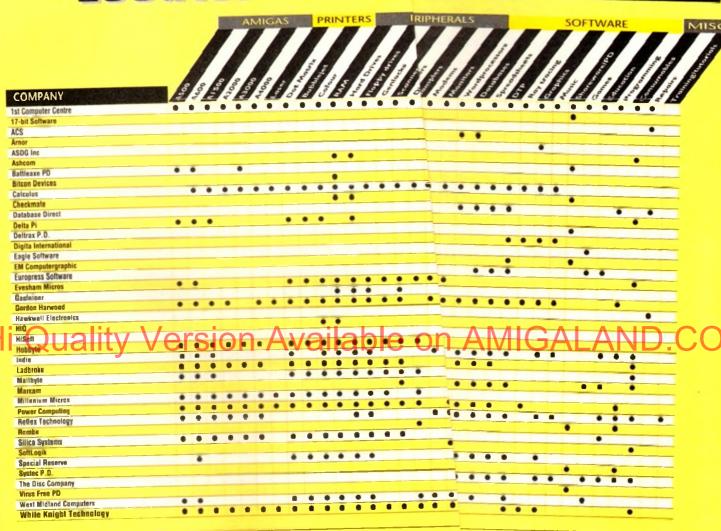


Amiga Market September 1993



# Locator

our at-a-glance guide to shopping through the pages of AC. All our advertisers, all their products, andıll in an easy to find format. Your Amiga Market Locar makes finding that bargain infinitely easier.



st Computer Centre		ADVERTISE	RS' INDE
Antic		Diskovery PD68	Homebased Business
Applied Research Kernal		E.M. Computergraphic 144	I.C.P.U.G.
Arnor		ECU89	Indie Direct Mail
Battleaxe PD		Epic Marketing42	Kew =
Biggin Computer Systems		Europress Direct	KTS
Bitcon Devices		Europress Software	Ladbroke Computing
Blue Ribbon Soundworks		Evesham26, 27	LCL
C.C.C		Fonts140	Marçam
C.P.P.D.		Futuretech32, 33	Millenium
Care Electronics		Gasteiner80, 81	Mindscape International
Combe Valley Software		Gordon Harwood10, 12, 39, 40, 41	New Horizon Computers
D.T.B.S.	151	Graphics Assembly Ltd142	Owl Associates
Daze Marketing	111	HCS154	Pathfinder PD
Delta PI Software		Handisoft154	PD Direct
Deltrax PD	94, 95	Hawkwell Electronic Serv130	PD Soft

Homebased Business	2, 154
I.C.P.U.G	152
Indie Direct Mail	4,5,6
Kew = II	152
KTS	152
Ladbroke Computing	46
1CL	-142
Marçam	···134
Millenium	48
Mindscape International	45
New Horizon Computers	39
Owl Associates	1
Pathfinder PD	7

Power Computing20, 21,	IBC
Quantum Software	
Rombo	
Seasoft Computing	
Selectafont Company	
Silica Systems19, 61, 71	
South Hams Software	
Special Reserve52	
Strictly PD	
Trevan Designs Ltd	
United Public Domain82,	
Universal Computer Systems126, 1	
Virus Free PD	
Visage Computers1	
Weekend Developments1	
White Knight Technology28, 50,	51
WTS Electronics124, 125, 1	32
ork Electronic Research	

# FAST AMIGA REPAIRS

Upgrades + Engineering requirements

SAME DAY SERVICE

£34.99 + parts (comps in by 11am)

> NORMAL SERVICE

£24.99 + parts (Typically 24 hrs)

Central London

#### Low Cost memory upgrading

A500/A500+

to 1mb £17.50

A500+

to 2mb £29.99

A600 (w.clock) to 2mb £34.99

Door to door pick up + delivery anywhere in the U.K. Also Monitors + Hard Drives

ENGINEERING 144, Tanner St., Tower Bridge, London SE1 2HG Tel. 071-252

### **Does Your Amiga Pay its Way?** Well at last it can. And yours too!

If you thought computers were an expensive luxury, think again, for now you can turn that humble Amiga into a dynamic earning machine. Millions of people already have; many of them earning part-time for truly massive profit margins. We've collected the very best opportunities for you to profit from too.

collected the very best opportunities for you to profit from too.

Dozens of ideas, hundreds of openings, all neatly condensed into our manual: "50 Easy Ways to Make Money with your Personal

> Computer". Price £14.95 New release. Only available from:-







31 PILTON PLACE (ACN4), KING AND QUEEN STREET, WALWORTH , LONDON, SE17 IDR

CREDIT CARD ORDERS: 071 701 8490

#### COMPUTE-A-RACE+ THE FINAL EDITION

WILL I NEED REGULAR UPDATES?

Cheques/P.O. payable to HANDISOFT (Mail Order ONLY) Handisoft, 37 Hearsall Lane, Spon End, Coventry, CV5 6HF

#### £199.99 A500+ Stand alone A500+ Cartoon Classics + Zool 6199 99 A500+ Cartoon Classics + Zool + 2Mb A600 'Lemmings' + Zool £239.99 A600+ Zool £199.99 A1200 Comic Relief + Zool £399.99 A4000-030 inc 80Mb HD £999.99 A570 CDTV ROM Drive + Sim City £149.99 If you cannot see what you want - PLEASE PHONE NOW DISK DRIVES External Dual Drive P124 99 External Drive PC880E £56.95 External Drive PC880B £72.95 Roctek Drive £74.95 Internal replacement for A500/A500+ £44.99 Internal replacement for A1500/A2000 £49 99 **DISKS & LABELS** 3.5" Disk Labels 1 pence each 3.5" Flopov Disks £21.00 £36.95 x 200 £168.95 3.5' KAO Disks (X10) £7.99 £399.99 Citizen Swift 240 Colour £424.99 Mono Citizen 120D+ C124 99 Seikosha SP1900+ Мопо £119.99 Please add £10 for printer starter kit Please phone for any more details on printers £14.95 East Mice (290doi) £4.95 Material Mouse Mat Seal-n-Type Keyboard Covers for A500/A500+/A600/A1200 £14.95 Cheetah Bug Joystick Many more joysticks are available - PLEASE PHONE



56 Oaklands Lane **Biggin Hill** Kent TN16 3DP

TEL/FAX 9am-6pm

out of hours ansaphone for your convenience.

Please make cheques payable to BIGGIN COMPUTER SUPPLIES including cheque card number on the reverse of the cheque Allow 5 working days for cheque clearance.
Parcel post adds \$3.00 P&P
Courier £6.00
Prices subject to change

All goods subject to availability

#### **EXPANSIONS**

MBX1200 A1200 isn't complete without one!!	1
14MHz, 68881 co-pro	£144.95
25MHz, 68882 co-pro	£214.95
32 Bit RAM memory for MBX1200	
1Mb SIMM	£72.95
2Mb SIMM	£132.95
4Mb SIMM	£229.95

NEW PC1204 for A1200 includes 4Mb of 32 bit memory. battery backed clock, fits very easily and does not Invalidate your warranty.

MBX1200 does not invalidate your warranty in any way

A1200 4Mb with clock As above with 20MHz 68881 co-pro. £295.00 As above with 25MHz 68882 co-pro. 6319.00 As above with 33MHz 68882 co-pro. £329.00 As above with 40MHz 68882 co-pro. £339.00 As above with 50MHz 68882 co-pro. 2389.00

#### HARD DRIVES

2.5" IDE internal hard drives for A600 and A1200, comes complete with fixings, cable and install software

60Mb		£194.99
80Mb		£229.99
	114111111111111111111111111111111111111	
	THAT I THE TANK THE T	
2   ZIMID		.1439.99

#### OTHER MACHINES ON OFFER

Sega Megadrive	£129.99
Amstrad PC7286, includes VGA Monitor	
Amstrad PC7386, includes VGA Monitor	
Amstrad PC7486, includes VGA Monitor	

All Amstrad PC7 series include MS-DOS v5 and Lotus 3

Amstrad MEGAPC, includes built-in Sega Megadrive, Ad-Lib sound card VGA Monitor with built-in stereo speakers, MS-DOS v5 and Lotus 3.

All the above for only ...



Power Computing's innovative 4MB 32-bit memory expansion for the Amiga 1200 is now available. The PC1204 includes these many features:

Zero Wait State - Unlike some other expansions the PC1204 never leaves the processor waiting around for data, which means that your A1200 can run at its maximum speed.

Ultra Fast FPU - An optional maths co-processor speeds up intensive calculations. A 50MHz chip will speed up operations by up to fully times.

Real-Time Battery Backed Clock Allowshiles to be date-stamped with the correct time and date so that you know exactly when they were created.

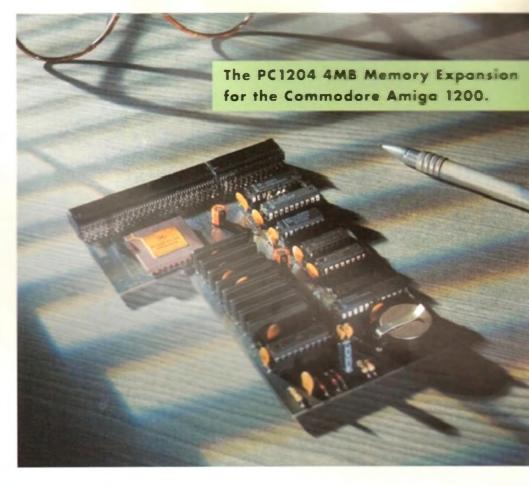
Low Power - High density RAMs means low power consumption.

Easy To Fit - Fitted in minutes without the need to remove the computer's case.

Optional FPU Disable Switch - Disable the FPU instantly for software that will not run with a maths co-processor installed.

1		Power PC1204	A leading competitor
ı	Speed Vs standard A600	å gå times füster	4.79 times faster
١	Speed Vs standard A1200	2 19 times loster	2,17 times faster
ı	CPU MIPS	2.96	2,93

PC1204 4MB with clock, no FPU Processor PC1204 4MB with clock, 20MHz 68881 FPU £219.95 PC1204 4MB with clock, 25MHz 68882 FPU £279.95 PC1204 4MB with clock, 33MHz 68882 FPU £289.95 PC1204 4MB with clock, 40MHz 68882 FPU £299.95 PC1204 4MB with clock, 50MHz 68882 FPU £339.95







Power Computing's XL 1.76MB Drive\* for an Commodore Amiga is now available. The XL Drivincludes these many features:

Formats to 1.76MB - Using high density distribution can fit a massive 1.76MB on each distribution and arrive.

Acts as a standard drive

Amiga disk and the drive behaves like any off Amiga drive.

Fully compatible - Will read and write data we ten on an Amiga 4000 internal high density drives

Compatible with PC disks Also come write high density PC disks using a suitable device device

Compact size - No larger than a standard floppy disk drive.

High quality design - Uses a high quality san high density mechanism.

Comes complete with disable switch and through port



XL Drive £99.95

Requires Kickstart 2 or above "Requires Workbench 2.1 or above

48Hr delivery £2.50, 24Hr delivery £4.50

Parcel Post delivery £1 [Orders under £50 & UK mainland only]

Specifications and prices subject to change without notice

All Trademarks acknowledged. VAT included



Power Computing Ltd
Unit 8 Railton Road Woburn Road Industrial Estate
Kempston Bedford MK42 7PN

Tel 0234 843388 Fax 0234 840234

# AIGA 12 Ver 2



The all new Vidi-Amiga 12 (Ver. 2). You may think our existing Vidi-Amiga 12 is a hard act to beat. but when you look closely at our newly designed ergonomic interface and interactive menu system you will surely agree that the impossible has been achieved !.

is now faster, smoother and even easier to use than before. It has specification levels unmatched by any other product, at any price !. With full A1200 and AGA chipset support. A summary of the specification is listed below... Many improvements have been as a direct result of customer feedback.... Thank You.

the best selling Digitiser in the World Rombo, the makers of...

Composite, S-Video or SVHS inputs.

320 X 200 NTSC 320 X 400 NTSC Digitise in 320 X 256 PAL 320 X 512 PAL

\*262000 HAM-8 \*4096 HAM \*256 COLOUR

\*128 COLOUR \*64 COLOUR \*64 EHB MODE

\*32 COLOUR \*16 COLOUR \*8 COLOUR

14 | QOLOUR\/ e r se cotour \/ a i | HAM-e(\*)) r

320 X 256	320 X 200	640 X 512
320 X 512	320 X 400	704 X 240
384 X 283	384 X 200	704 X 283
384 X 566	640 X 240	704 X 480
640 X 256	640 X 400	704 X 566

SUPPORTS FULL OVERSCAN/ INTERLACE/ HI-RES MODES

- 'SWIPE & PLAY ANIMATION WORKSTATION.
- \*LOAD & SAVE 12 & 24 BIT IFF FILES.
- **\*LOAD & SAVE IFF ILBM & ANIM FILES.**
- **"CUT & PASTE BETWEEN FRAMES.**
- \*TIME LAPSE REMOTE GRABBING.
- \*IMPROVED COMPLEX ALGORYTHM.
- \*ADVANCED ERROR DIFFUSION.
- \*USER DEFINABLE WINDOW.
- "FLIP IMAGES ON X OR Y AXIS.
- \*DYNAMIC MIX DOWN PALETTE.

- 'NEGATIVE
- \*SHARPEN **"QUANTISE**
- \*SILK
- \*MOSAIC \*THRESHOLD
- "SMOOTH
  - EDGE DETECT **PSYCHEDELIC**
- \*EMBOSS
- \*BLUR
- "CUT
- \*PASTE
- FRAME SELECT

TEL: (44) 0506 414631

FAX: (44) 0506 414634

Rombo Productions Ltd. Baird Road, Kirkton Campus. LIVINGSTON EH54 7AZ









