

THE GREAT NEW PACKAGE FOR AMIGA OWNERS

AMIGA

FORMAT

ISSUE 3 • OCTOBER 1989 • £2.95

COVERDISK 3



XENON 2

PLAYABLE DEMO OF THE SHOOT-EM-UP OF THE YEAR

PLUS

COMMS PACKAGE, ART GALLERY,
MUSIC DEMO, WORKBENCH HACKS



MUSIC ALERT!

SOUND SENSATION FROM MUSIC X

NO AMIGA SUPERDISK?
DEMAND ONE FROM YOUR NEWSAGENT NOW!

DIGIPAIN 3 • ADVENTURES • EDUCATION • VIDI AMIGA



BATMAN is a shadow in the darkness, as elusive as a dream. High above the seamy streets of GOTHAM, he is a criminal's nightmare. The only hope for a desperate city – **BATMAN**.



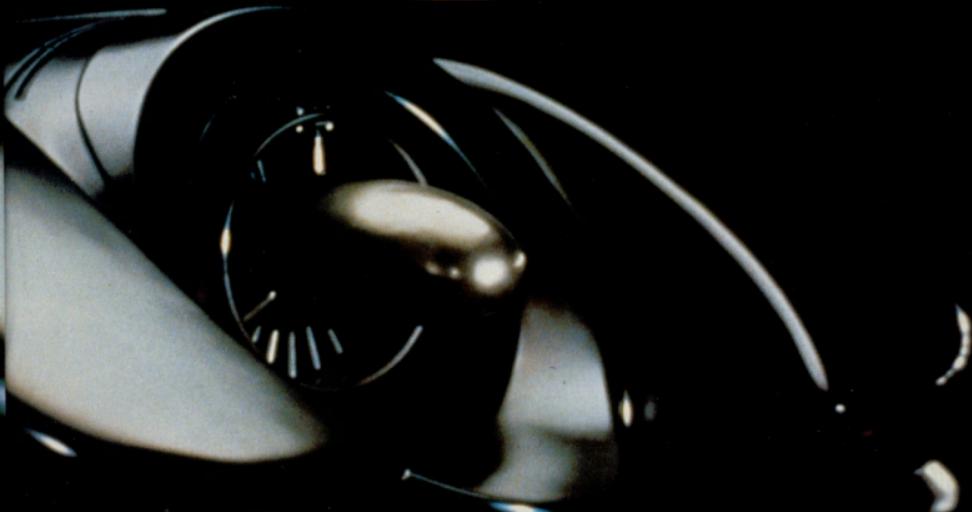
AMSTRAD
£9.99
COMMODORE

SPECTRUM
£9.99
SPECTRUM

ATARI ST
£19.99
ATARI ST

AMIGA
£24.99
AMIGA

TM



ocean

TM & © 1989 DC Comics Inc.
All Rights Reserved.

Ocean Software Limited · 6 Central Street · Manchester · M2 5NS
Telephone: 061 832 6633 · Telex: 669977 OCEANS G · Fax: 061 834 0650

REGULARS

NEWS	6
PREVIEWS	16
GRAPHICS	25
MUSIC	20
PD UPDATE	75
WORKBENCH	91
GAME BUSTERS	99
LETTERS	123
GURU	130



■ In Previews: Knight Force, out soon from Titus.

EDUCATION 107



FITTING KICKSTART 89



ADVENTURES 83



DIGI PAINT 3 28



ROMBO VIDI AMIGA 119

AMIGA FORMAT ISSUE 3 OCTOBER 1989

PUBLISHED BY FUTURE PUBLISHING LTD 4 Queen Street, Bath, BA1 1EJ. 0225 446024. FAX us on 0225 446019

© FUTURE PUBLISHING 1989 No part of this magazine may be reproduced without our permission.

EDITOR Bob Wade **PRODUCTION EDITOR** Damien Noonan **REVIEWS EDITOR** Andy Smith
TECHNICAL EDITOR Jason Holborn **ART EDITOR** Trevor Gilham **DESIGN ASSISTANT** Sally Meddings
Contributing Editors Jon Bates (Music), Brian Larkman (Graphics)
Contributors Steve Jarratt, Graeme Kidd **Advertising Manager** Jennie Evans
AD PRODUCTION Louise Cockroft **Publisher** Greg Ingham
Subscriptions/MAIL ORDER The Old Barn, Somerton TA11 7PY Tel: 0458 74011

PHOTOGRAPHY Ashton James, Bradford-upon-Avon COLOUR ORIGINATORS Swift Graphics Ltd, Southampton PRINTERS Chase Web Offset, Gillingham DISTRIBUTORS SM Distribution, 6 Leigh Court Road, Streatham, London SW16.



■ The Amiga Format team, except for Jennie Evans
Left to Right: Andy Smith, Bob Wade, Sally Meddings
Jason Holborn, Trevor Gilham, Damien Noonan.

XENON II, MEGABLAST

Probably the best shoot-em-up in the world, and this month's playable demo

ACCESS!: excellent and beautifully-presented communications

package • **DEMO CORNER:** chillin' music demo created by www.thesoundfactory.com

especially for Amiga Format • **DPAINT CLIP ART:** for

conjunction with our *DPaint* tutorial - **WORKBENCH HACKS**: two more fun hacks. **ROBBIE**: Wall Hack.

HACKS: two more fun hacks • **POPDIR:** Workbench dictionary utility

directory utility.

59



10

MUSIC EXPLOSION 20

SET TO CHANGE
FACE OF MUSIC
ON THE AMIGA...

**AFTER ALL THE DELAYS,
MUSIC X FINALLY
ARRIVES: AND LOOKS
SET TO CHANGE THE
FACE OF MUSIC MAKING
ON THE AMIGA...**

REVIEWS

MUSIC X	20
ROMBO VIDI AMIGA	30
DIGI PAINT 3	28

SPECIALS

EDUCATION	107
ADVENTURES	83
DESKTOP PUBLISHING ..	65
FITTING KICKSTART	89

GAMES

FORMAT GOLD
F16 COMBAT PILOT 42
STRIDER 36
WATERLOO 55
XENON II 52

REVIEWED

ALIEN LEGION	45
ASTAROTH	56
DOMINATOR	40

FIENDISH FREDDY 49

FRIENDS FREDDY	45
GEMINI WING	50
JACK NICKLAUS GOLF	39
OIL IMPERIUM	45
ROBOCOP	43
SKATE OF THE ART	40

COMPETITION

WIN £800 OF TV, VIDEO

WITH 4000 OF 'EM, VIDEO
AND JOYSTICKS33

THEATRE OF DREAMS

Manchester United Football Club have been much in the news lately for their expensive signings. Now they are making news on the Amiga as well, because of a game based on the club's exploits.

It is still early in production but promises a true-to-scale representation of Old Trafford/Theatre of Dreams, produced on a scrolling area 15 screens in size. There's a lot of competition around for footie games at the moment: can Man Utd make it to the top of the league?

A COMPANY OF KITS

The Disc Company has announced two new compilations of programs called the Home Office Kit and the Starter Kit.

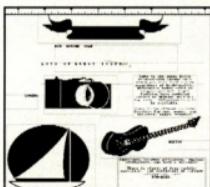
The Home Office Kit comprises a word-processor, DTP program, spreadsheet and database: all the essentials for working at home. The Starter Kit is aimed at first-time users looking to explore the potential of the Amiga and is made up of a word-processor, an art package and three games.

The word-processor in both kits is *KindWords* 2.0, which has a 100,000-word spelling checker and a 470,000-word thesaurus. The DTP program is *PageSetter* 1.2, which has previously been bundled with *KindWords* in the Publisher's Choice package, reviewed in last month's DTP special.

The spreadsheet is *Maxiplan* 1.9 which has Lotus 123 compatibility and graphics capability. The database is *InfoFile*, ready equipped with 10 templates for databases for a video library, club membership manager and so on. Handy for the beginner.

The art program in the Starter Kit is *Fusion Paint* and the three games are *Crazy Cars*, *Super Ski* and *Miniature Golf*.

Both packages are excellent value for money, the Home Office Kit costing just £149.95 and the Starter Kit only £69.95. The Disc Company don't have a UK office so check out their advert in this issue for more details.



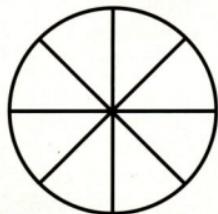
PageSetter and **KindWords** are just two of the programs available as part of the Home Office Kit.



INSIGNIFICANT CHASE

It has been a long wait but the Amiga version of *Trivial Pursuit* - *Genus Edition* has arrived. Like the other computer versions it makes use of graphics and music for some of the trivia questions, to enhance the classic yuppie board game.

There are over 3,000 questions, all of them utterly pointless as is only right and proper. Out now from Domark at £24.99.



The yuppie game of the '80s makes it to the Amiga.

LONDON VIDEO ACCESS

If you have not been able to make head or tail of any of the articles about using Amigas in video and yet are interested in knowing more, perhaps you need the advice and assistance of London Video Access.

The LVA is a centre for artists working in video and has recently acquired two Amiga 2000s. This is so that, as well as providing cheap facilities and distribution for artists and independent video producers, they can give help to artists working in computer graphics.

For more information on the LVA facilities and courses, contact Clive Gillman on 01 734 7410 or write to him at 23 Frith Street, London W1V 5TS.



YET ANOTHER DIGITISER!

New from Power Computing is Videon, a full-colour digitiser. Videon is a powerful software/hardware combination that allows you to digitise images from any colour video source without having to purchase a separate RGB splitter. Videon employs digital filtering to allow the most detailed grabs possible.

Using a special bypass system, Videon allows you to view both the source video signal and the final grab on screen simultaneously, therefore avoiding the need for constant swapping of leads. Screen resolutions supported include high, medium and low in both standard or overscan mode.

Unfortunately, our review model turned up too late for this month's issue, but look out for the next issue of Amiga Format for a full review. For further info, contact Power Computing on 0234 273000.

ALL GENNED UP

MAXIgen is a new genlock/coder providing 'broadcast quality' (the 'in' term in Amiga video) output. It's not cheap though, weighing in at £750.

So what do you get for your money? Twin RGB and composite video output channels, video-only mode, Amiga graphics-only mode, key on background mode, key on foreground mode, burst switch and enough technical detail to explode all your diodes. More details from Applied Systems and Peripherals on 0724 280222.

FLYING EYE TO CAIRO

Logotron have come up with a novel promotion for their new game *Eye of Horus*. The game is an arcade adventure based on Egyptian myth and programmed by Denton Designs - responsible for games like *Where Time Stood Still* and *The Great Escape*. What better way to promote it than to send a lucky competition winner to Cairo, the capital of Egypt?

Each copy of the game will contain an entry form and, as well as the first prize of a week's holiday in Cairo for two, there are five runner-up prizes of ancient Egyptian tarot. The game should be out by the end of the month and the competition will close on 29th December. More from Logotron on 01 359 3594.



RETURN OF THE TRILOGY

The original Star Wars film is over 10 years old now, but the trilogy of films is still as popular as ever. So, it would seem, are the games that first appeared in the arcades and then as conversions from Domark, because they are being released as a compilation.

The first two games - *Star Wars* and *The Empire Strikes Back* - are vector graphic shoot-em-ups, while *Return of the Jedi* is a diagonally-scrolling shoot-em-up in the Zaxxon mould. All three games are available at just £24.99 from Domark. Tel: 01 780 2222.

FANTAVISION

As a result of the deal signed with Broderbund in the US, Domark have released the graphics program Fantavision. It was first reviewed back in ST/Amiga Format Issue 7, where it received a warm welcome, particularly for anyone new to animation.

Its main use is to create animated sequences via a process called 'tweening' which avoids the usual animation process of drawing every single frame in a movement. Fantavision is priced at £39.99 from Domark/Broderbund on 01 780 2222.



Animate away with Fantavision.

BRITISH MUSIC FAIR

The biggest thing to hit the British Music Fair, besides the heatwave, was the *MusicX* stand (see review). Now under the wing of SDL distributors, who have opened a special music division, it was a colourful stand which had monitors at every conceivable angle and position.

There was no showing from Commodore, but other Amiga programs were on the MCM stand. Here the complete range of Dr T programs for the Amiga was on show, and MCM are promising *Master Tracks Pro* from Passport Systems in a week or two's time. Conspicuous by their absence were the Evenlode team who are launching several new programs, including the long-awaited *Steinberg Pro 24* for the Amiga. Soundbits were there, however, demonstrating the Comus range of sequencers (as reviewed last month) and demonstrating the new *ProScore* scoring package for £229.

GETTING DOWN TO BUSINESS

Arnor software have announced the impending release of *ProData*, a database management system to complement their popular word processor, *Protext*.

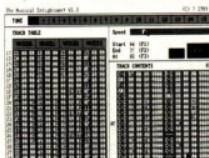
ProData will be available on several systems including both the PC and ST, and therefore (like *Protext*) provides complete data compatibility between these different makes of computer. You could for example, create your database on a PC, add records on your friend's ST and then use the finished system on an Amiga. Among *ProData*'s list of facilities are record filtering, password protection, macros, foreign language compatibility, file management and others. Arnor are on 0733 68909.



MUSICAL GURU

For many years, the infamous *Sound Tracker* utility has ruled supreme as the choice for programmers wishing to create scores for their creations. UGA Software, who are probably better known for their work within the Amiga PD scene, have produced *Musical Enlightenment*, a package that looks set to give *Sound Tracker* a run for its money.

Musical Enlightenment provides powerful tools to allow the creation of tunes using a pattern based system similar to that used so well by *Sound Tracker*. As well as song creation, the program also includes complete sample manipulation tools to aid the creation of that perfect patch. UGA hope to release *Musical Enlightenment* in December for the impressive price of only £15. For further information, contact 17 Bit Software on 0294 366982.

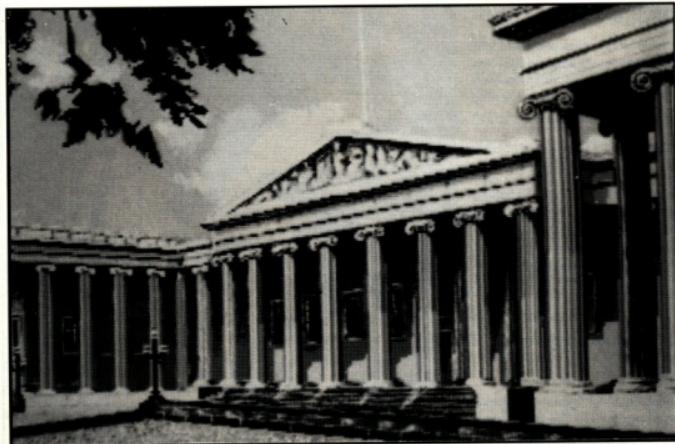


ANOTHER ABACUS BOOK?

Yes, it seems that not a single month goes by without Abacus Software releasing new products for the Amiga. This month sees the release of Abacus's latest book for boggins *Amiga Graphics Inside & Out* and for those of you worried with viral infections, Abacus have produced a disk/book combo in the shape of the *Virus Protection Toolkit*.

Amiga Graphics Inside & Out provides an in-depth look at the Amiga's powerful graphics system from a BASIC, C and Assembler standpoint. The book describes the individual elements of the Amiga's graphics system such as ViewPorts, RastPorts, screens and windows. For programmers, the book looks at new ways of accessing the graphics-related libraries and custom chips from the three major languages to produce HAM displays, colour patterns, screen and window dumps, blitter objects, copper lists and forth.

Abacus's *Virus Protection Toolkit* is a complete Virus-busting package that provides an insight into how viruses work (including commented source code), what problems viruses cause, how viruses lodge themselves into the Amiga system and how to cure your Amiga of viral infection.



Devil dogs and the British museum - only Electronic Arts know the connection.

BARKING AGAIN

Last month's eerie note, which we received in the post reading "The Hound of Shadow is upon you and you bear his mark", was not followed by voodoo doggy dolls, but by an application form for membership of the British Museum reading room and a photo of same, circa 1920.

It's one of the better publicity stunts flying around at the moment, publicising Electronic Arts' game *Hound of Shadow*. Watch this space for next month's chilling instalment. There's bound to be one.

COLLECTING CLIP ART

Anyone experiencing a clip art shortage is about to have their problem solved by seven disks of the stuff from Photofile.

It's mostly aimed at DTP users because it is all mono: but since all the clip art is in IFF format it can be used in just about any art program as well. The clip art is a collection imported from other machines and digitised on the Amiga itself. There are hundreds of pictures on the seven disks and the whole lot costs £35 from Photofile, PO Box 49, North PDO, Nottingham NG5 6SR. Tel: 0602 261498.

Photofile also operate a digitising service, producing pictures in enhanced HAM, halfbit, high-res and lo-res formats. More details on that can be got from the same number or from Issue 12 of ST/Amiga Format which carried a feature on them.

LIGHT BOXING

LightBox is a new tool for animators that has a very specific purpose: creating cel animations. It's aimed at the serious animator and comes from R&DL Productions, creators of *AProDraw*.

The program allows you to see three animation cells at a time: current, previous and following, if there is one. They can be run or stepped through, drawn on, cut and pasted and path-of-motion lines can be drawn for reference. It's a hi-tech tool for an art form that still uses fairly old-fashioned hand-drawn methods.

LightBox is available from HB Marketing, Brooklyn House, 22 The Green, West Drayton, Middlesex UB7 7PQ. Tel: 0895 444433.



PC SHOW

Don't forget folks: the PC SHOW takes place on 30TH SEPTEMBER + 1ST OCTOBER at EARLS COURT.

Variable Dither -
Computed internally at 30 bits per pixel (over one billion colors). Gives you over 100,000 apparent colors on screen.

Unmatched.

Sophisticated.

Flexible Text Rendering -
Allows for anti-aliased fonts, Rainbow Fonts and Transparent Fonts and more.

Revolutionary.

User-Controllable Transparency - Allows real time control of the amount of transparency and the location of the light source.

Unlimited.

Transfer 24 - Digi-Paint 3 comes with Transfer 24 image processing software to give you support of all Amiga resolution modes and the same advanced image processing found with NewTek's best-selling Digi-View Gold Video Digitizer.



Super BitMaps with Auto-Scrolling - Real-time scrolling on up to 1024 pixels high or wide image with full overscan display.

Flexible.

Colorize - Play Ted Turner and add color to black-and-white images or change colors on already colored images.

Powerful.

Texture Mapping with Anti-Aliasing - Gives you super-fast warping and stretching of any image.

Intuitive.

100% Assembly Language - Makes Digi-Paint 3 the fastest HAM paint program ever!

The Ultimate Paint Program: **DIGI-PAINT 3**

For more information call NewTek at 0101-913-354-1146

Digi-Paint 3, Digi-View Gold and Transfer 24 are trademarks of NewTek Inc.

NewTek
INCORPORATED

QUESTIONNAIRE RESULTS

The last issue of ST/Amiga Format, our 'parent' magazine, contained a questionnaire so that we could find out exactly how to make this the best possible magazine for you. We printed some of the comments from them in Issue One and now we have the analysis, and the results of the competition.

The five lucky winners of a subscription to Amiga Format are: James McFadden, Monaghan, Ireland; Graham McLean, Cuckfield, West Sussex; AP Hovasse, London NW6; MD Weaver, Crowthorne, Berks; Paul Best, Bath, Avon.

The forms were revealing and very helpful. Sadly there was no surprise about gender: a mere **2% OF YOU ARE OF THE FEMALE** persuasion. Computing, it seems, remains a male bastion.

You're a mature bunch as well. **82% ARE OVER 17**, while the biggest chunk of 42% is in the 17-24 bracket. The fact that so many are old enough to work also shows up in the salary levels. **32% EARN MORE THAN £10,000 A YEAR**, so there is plenty of disposable income there for spending on hardware and software.

The top three newspapers were the **DAILY MIRROR** at 14% and the Sun and Daily Mail at 10%. Fourth most popular was the first of the non-tabloids, The Guardian, at 7%.

No doubt about which of the Amiga models is most prevalent - **95% HAVE A500S**, but only 3% have A1000s and 2%

A2000s. 35% also have another make of computer, so obviously a lot of people wanted to hang onto their old machine when upgrading to the Amiga.

Nearly everyone (**91%**) **HAS A JOYSTICK** and four other items are out there in large numbers - 54% have a monitor, 53% a printer, 46% a second drive and 41% a memory upgrade. The memory upgrade is the most popular intended purchase for the next year with 49%, then comes a second drive at 44%, hard drive at 38% and printer at 35%. On the software side 94% own games, 83% an art program, 54% a word processor and 40% a music program.

No surprise about what Amigas are used for - **56% FOR LEISURE**, 33% for creativity and only 12% for business.

The vast majority spend up to **£40 A MONTH ON COMPUTER GEAR** and over the next year the average planned spend is £346 on hardware, £140 on games, £77 on creative software and £67 on serious. That is over £600 spent per person next year, a massive amount of money.

When it came to rating the most popular sections there was only one possible winner, **THE DISK**. Also scoring very highly were **WORKBENCH**, software and hardware **REVIEWS, SPECIALS, PD, NEWS** and **SCREENPLAY**.

LOOK

ALL WITH 1 YEAR WARRANTY

AMIGA 3½" DISC DRIVE

■ 880K Formatted Capacity ■ Throughput to allow connection of other drives
 ■ Enable/disable switch to allow loading of memory greedy programs ■ Slimline design ■ Meets all European/British safety standards ■ Has very long data cable
 ■ Compatible with Amiga 500/1000/2000 and PC1 ■ 12 Month Warranty ■ Very quiet reliable industry standard drive mechanism ■ Already used by Commodore of Finland

£79.95

INCLUDING VAT + P&P

ATARI STFM/PCI 3½" DISC DRIVE

■ Internal power supply to European safety standards ■ 1 megabyte capacity ■ Complete with all cables to connect to STFM and PCI ■ Reliable industry standard mechanism ■ Power on indicator.

£89.95

INCLUDING VAT + P&P



Send your order now to:-
 Old Kingsmoor School, Railway Street
 Hatfield, Cheshire SK14 8AA.
 Tel: 04574 66555/67761/69499
 Fax No.: 04574 68946.

EXTERNAL DISC DRIVES FOR YOUR ST OR AMIGA FROM THE VIDEOVAULT

ALL WITH HIGH QUALITY JAPANESE MECHANISMS

AMIGA 5¼" DISC DRIVE

■ Standard 5.25 media ■ Enable/disable to switch drive on/off ■ 1.3m cable
 ■ Rugged metal slimline case ■ Compatible with all Amigas ■ Can be used with Bridge Board on A2000 ■ Transformer on A500, A1000

NOT FOR USE WITH PC1, PC1 DRIVE

PART NO. C-572-PCN

£99.95

INCLUDING VAT + P&P

ATARI STFM ONLY 5¼" DISC DRIVE

■ Internal PSU ■ 1 megabyte capacity ■ Rugged metal case ■ Quiet operation ■ All cables for direct connection ■ Power on indicator ■ Meets all European safety standards

£119.95

INCLUDING VAT + P&P

TELEPHONE: 04574 66555

Please supply me with Disc Drives for my

Amiga 3½" Drive **£79.95**

Atari STFM/PCI 3½" Drive **£89.95**

Amiga 5¼" Drive **£99.95**

Atari STFM ONLY 5¼" Drive **£119.95**

all above prices include P+P and VAT.
 (Overseas orders add £10.00 post charges).
 Please send payment by cheque, Access/Visa or postal order.

NAME

ADDRESS

SIGNATURE

I authorise you to charge my Access/Visa card no.

XENON II

MEGABLAST

XENON II: MEGABLAST

XENON II: this time it's war!

The Xenites are back and have thrown time itself into turmoil, only you can save the day – not to mention the universe!

BATTLE through five VAST, graphically UNCANNY levels, DESTROYING wave after wave of EVIL aliens with the DOZENS of POWERFUL WEAPONS at your disposal.

XENON II: HARD, fast COIN-OP QUALITY destructive action with a HOT soundtrack to match... a mind blowingly accurate David Whittaker rendition of the 'Bomb The Bass' Megablast.

XENON II: It's out of this world!

XENON II: It's a Megablast!

XENON II: it's a Bitmap Brothers game!

Available Soon on Atari ST, AMIGA & PC.



Screen shot from Amiga ST Version.



© 1989 MIRRORSOFT LTD
© 1989 THE BITMAP BROTHERS
MEGABLAST written by Tim Simenon
Produced by Simenon/Gabriel
Appears courtesy of Rhythm King Records
Published by Rhythm King Records



MIRRORSOFT
Irwin House
118 Southwark Street London SE1 0SW
Tel 01-928 1836 Fax: 01-583 3494



SUBSCRIBE

NOW TO AMIGA FORMAT

**YOUR MAGAZINE
DEDICATED TO YOUR
MACHINE**

Only £29.95 for 12 action-packed issues, a saving of £5.00 from the cover price (and we even pay the postage for you!)

Ring 0458 74011 NOW, quoting the order code AM100 and having your credit card handy or use the order form on Page 120. Why not order some of the latest and cheapest products from The 16 Blitz at the same time!

Remember our unique guarantee: we will refund the cost of all unmailed issues, if you are not completely satisfied with our subscription service.

- ★ Hotline Number 0458 74011
- ★ Order Form on Page 120
- ★ Be sure you get your copy before the newsagent sells out
- ★ Get our regular quarterly "UPDATE" of extra-special savings on products that we didn't quite manage to squeeze in the magazine!

ONLY

£29.95

FOR 12 ACTION-PACKED ISSUES

THE COMPLETE PACKAGE FOR COMMODORE AMIGA OWNERS

AMIGA
FORMAT

UNLEASH THE POWER

HOW VIDEO CAN TRANSFORM YOUR AMIGA

NO AMIGA SUPERDISK?
DEMAND ONE FROM YOUR NEWSAGENT NOW!

880K OF PROGRAMS

NEW ZEALAND STORY

PLAYABLE DEMO OF THE ARCADE SMASH

PLUS • ART GALLERY • UTILITIES •
WORKBENCH HACKS • ANIMATED DEMO

14 PAGES OF GAMES / MAC EMULATOR / WIN A £2,000 COIN-OP

★ Computer shopping is fun at the Computer Shopper Show!



Yes, for three exciting days in November, Computer Shopper will turn Alexandra Palace into the world's greatest computer show. Everything you need for business and leisure computing will be available under one roof - with experts to help you make the right choice!

The Computer Shopper Show is your chance to meet the dealers with the bargains, the manufacturers with the latest machines - and to take away the things you buy on the day!

Auctions, demonstrations, competitions . . . everything that you've ever wanted from an exhibition will be happening at the Computer Shopper Show - the only show for the direct buyer and the ultimate computer shopping experience!

And, with Computer Shopper you know you'll save money!

Why not start right here! By ordering your tickets in advance you will save £££s! Simply complete and return the coupon with your payment or telephone the Credit Card Hotline on 051-357 2961 to place your order.

Prestel or Microlink

To place your order by Prestel, Key +89, then 614568383. Microlink users should key 72MAG 001. Please quote your credit card numbers and your full name and address when you place your order.

SAVE £££S WHEN YOU BUY OUR TICKETS IN ADVANCE!

Yes! Please send me my tickets for the Computer Shopper Show.

Adult tickets at £3 (Save £1!) _____
 Under 16s tickets at £2 (Save £1!) _____
 Family tickets - admits up to 2 adults and 2 children - £9 (Save £5!) TOTAL _____

I would like to pay by -

Cheque made payable to Database Exhibitions Ltd
 Credit card Access Visa Expiry Date _____

No. _____

Signed _____

Name _____

Address _____

Postcode _____

Please return your completed order form to -

The Computer Shopper Show Ticket Office, Database Exhibitions Ltd, PO Box 2, Ellesmere Port, South Wirral L65 3EA.

A810

The Computer Shopper Show

Alexandra Palace, London
10am-6pm Friday, November 24
10am-6pm Saturday, November 25
10am-4pm Sunday, November 26

- ★ Over 250 stands serving every major make and model - the ultimate computer supermarket, packed with pre-Christmas bargains and offers.
- ★ Incorporates the Amstrad Computer Show, the Atari Computer Show, the Electron & BBC Micro User Show and much, much more!
- ★ On-site car parking for hundreds of cars - ideal for taking away your computer bargains on the day!
- ★ Excellent public transport network with courtesy coach link to the local British Rail station.
- ★ Special show features and entertainment to make your shopping experience fun!
- ★ Special discount tickets for under 16s and family groups.

Sponsored by **COMPUTER SHOPPER**

DATABASE EXHIBITIONS

Organised by

TELEPHONE HOTLINE

Place your orders for tickets by calling

0 5 1 - 3 5 7 2 9 6 1

GET LOST . . .

In the world of Creative Computing at Sabretech....

The South's Premier Computer Music Centre !!!

(We also stock a large selection of the latest Graphics Utility and Games Software all at competitive prices !)

PHONE OUR HOT LINE ON 01 760 0274



HARDWARE

	RRP	SABRE
A500	399.99	365.00
A500 Inc 512k Memory Expansion Card	529.00	460.00
A500 Inc. Color Stereo Monitor	699.99	629.99
A500 Professional Music Pack	PLEASE RING
20 Meg Hard Disk (Commodore A500)	399.99	359.00
3.5 Disk Drive (High Quality ON/OFF/PORT)	119.99	89.99

MUSIC SOFTWARE

	RRP	SABRE
Adrum	39.95	32.50
Aegis Audiometer II	69.95	56.50
Aegis Sonix II	57.50	46.50
Deluxe Music	69.95	55.50
DRTS KCS	199.95	162.50
Dynamic Drums	59.95	42.50
Dynamic Studio	69.95	59.99
Future Sound	89.95	84.99
Instant Music	34.95	19.99
Music Box	228.85	189.99
Pro Sound Designer	79.95	71.50
Soundscape Pro Midi Studio	139.95	106.50
Syntha	79.95	75.00
Studio Magic	69.95	59.95
Music Public Domain Disks (Midi/Samplers etc)	3.00

COMPUTER MUSIC HARDWARE

ROLAND

	RRP	SABRE
CM-64 Multi-Timbral Sound Module	789.00	699.99
CM-32L Multi-Timbral Sound Module	369.00	329.99
CM-16 Multi-Timbral Sound Module	445.00	399.99
CF-10 16 Bit Mixing Controller	129.00	115.99
MA-12C Monitor Speaker (12 Watts)	105.00	89.99
MD-64/32P Sound Library Cards	45.00	39.99

CHEETAH

	RRP	SABRE
MK5 Midi Master Keyboard	149.95	135.99
MK5 V Midi Master Keyboard	274.95	239.99
MD16 16 bit Digital Drum Machine	299.95	264.99
DP5 Electronic Power Play Drum Kit	139.95	154.99
MS6 Multi-Timbral Sound Module	299.95	264.99

All Prices Inc. VAT & Postage
within UK Mainland

All goods subject to availability
(Prices correct at time of going to press).

AMIGA A500

SPECIAL OFFER

HIGH QUALITY

512K MEMORY EXPANSIONS

Includes:

Battery Backed Clock

On/Off Switch

51 meg PD Disks

Pocket Calculator

VAT & Postage

For Only £109.99

*Cheques and Postal Orders made payable to:
Sabre Computer Discount Centre
Units 74/75, Inshops,
68-74 Church Street, Croydon,
Surrey CR0 1RB*

**" If in Doubt Check us out " ... We Are Open Mon - Sat
9.00am to 5.30pm. Or Phone Us Now On 01 760 0274**

DISCOUNT SOFTWARE

FROM MJC SUPPLIES

WORD PROCESSING

PROTEXT V4.2

This must be the most powerful word processor available for the Amiga. Excellent speed and wide range of features make it the only WYSIWYG. Includes Mail Merge and Spell Checking.

RRP £99.95.....Our Price £64.95
Useable demo disc available - £7.00

FILER AND OFFICE

Two utilities for Protext only. Filer is a data manager ideally suited to Mailing List applications for use with Protext's mail-merge routines. OFFICE gives all the features of Filer but adds calculation, graphs and invoices.

FILER RRP £24.95OURS £17.95

OFFICE RRP £34.95OURS £24.95

Also available:

Kind Words 2.....39.95

Micro Text.....15.95

SPREADSHEETS

Digitalc.....26.95

K-Spread II.....49.95

Home Accounts.....20.95

Personal Tax Planner.....28.95

PRINTERS

All printers listed have a ten-inch (A4) carriage, are Epson compatible and accept cut sheet or continuous paper. The relevant printer cable is also included free of charge. Delivery is 7-10 days from date of cheque/credit card clearance. For "Discover" add £5 extra.

CITIZEN 120-D

Cheap Epson FX-80 compatible giving a range of text sizes and effects in draft mode, limited sizes and effects in NLQ.

E139.95

PANASONIC KXP-1081

Good print and build quality, very reliable. Offers all the draft mode sizes and effects of the FX-80 compatibles in NLQ as well. Best Value.

E159.95

STAR LC-10 COLOUR

As well built and reliable as the Panasonic. Four different typefaces all available in the full range of sizes and effects. Well worth the little extra.

E174.95

STAR LC-10 COLOUR

24 pin version of the LC-10. Has 5 typefaces, all usual sizes and effects, two extra effects (Outline and Shadow) and excellent print quality.

E269.95

EDUCATIONAL

Each Fun School has 8 educational

programmes on 3.5" floppies.

Fun School 2 (2-6 years).....13.95

Fun School 2 (6-8 years).....13.95

Fun School 2 (8-12 years).....13.95

The "Discover" range have 6 games per disc.

Discover Alphabet (6+ yrs).....15.95

Discover Numbers (6+ yrs).....15.95

Discover Maths (10+ yrs).....15.95

COLOUR MONITOR

PHILIPS CM8833

This excellent monitor gives superb stereo sound as well as good definition for text and graphics. Price includes cable and two day (after payment clearance) courier delivery.

£230.00

ACCESSORIES

A500 Dust Cover.....3.95

MC-1000 Monitor Cable.....6.95

A500/2000 Printer Cable.....6.95

Quickshot Turbo Joystick.....10.95

Competition Pro 5000 J.S.....12.95

3.5" Disk Head Cleaner.....5.95

A501 Memory Expansion.....139.95

PROGRAMMING

K-Spela (assembler).....34.95

Hicsoft Disk View.....39.95

Hicsoft Basic (inc. Book Amiga Basic)

Inside & Out - with stocks last).....59.95

GFA Basic 3.....49.95

Metacomo Pascal.....68.95

BOOKS

Amiga For Beginners.....10.95

Kickstart Guide.....12.95

AmigaDisk Ref. Guide.....14.95

Amiga Tricks & Tips.....12.95

Amiga Basic Inside & Out.....18.95

Advanced Amiga Basic.....16.95

The Language of K&R.....20.95

Pascal Beginners Guide.....6.95

SOUND

Digi Paint.....41.95

Phantavision.....29.95

Photon Paint II.....68.95

Deluxe Paint II.....54.95

Deluxe Paint III.....59.95

GRAPHICS

Digi Paint.....41.95

Phantavision.....29.95

Photon Paint II.....68.95

Deluxe Paint II.....54.95

Deluxe Paint III.....59.95

SOUND

AMAS-Sampler & Interface.....74.95

Aegis Sonix.....44.95

Music Studio.....24.95

All prices include Postage, Packing & VAT. Please send Cheques/PO's to:

M.J.C. SUPPLIES (AF), 40A Queen Street, Hitchin, Herts SG4 9TS
Tel: (0462) 420847, 421415 or 32897 for enquiries/Credit Card Orders



Evesham Micros

All prices include VAT/delivery

AMIGA ACCESSORIES

A501 RAM/clock expansion for Amiga 500	£119.00
MiniGEN Genlock adapter	£95.00
Contriv Hi-Res Mouse, includes Mouse Mat & Pocket	£22.95
ITT CP3228 16.5" FST TV/Monitor inc. rem/cont & cable	£229.00
Philips CM8833 colour monitor suitable for Amiga 500	£229.00
Philips CM8852 monitor as above, but higher resolution	£259.00
Philips TV Tuner AV7300, use with any composite monitors	£74.95
Word Perfect	£149.95
Superbase Personal	£69.00
Superbase Professional	£179.00
Super-Plan	£74.95
A500 Dust Cover	£4.95

A-MAX MACINTOSH EMULATOR

An AMIGA COMPUTING Gold Medal winner - allows Amiga to emulate a Mac Plus in order to run Apple Mac and Mac Plus software. Mac disks can be read directly in when an external Mac Drive is connected to the cartridge hardware. Runs at least as fast as a Mac Plus and includes the Apple IIgs, Macintosh, MacPaint, MacDraw (V1&2), MacWrite, Pagemaker (V1.2) plus all versions of System. A-Max without 2 x Mac 128K ROMs .. £129.00 A-Max with 2 x Mac 128K ROMs .. £249.00

3.5" EXTERNAL DRIVES using Citizen drive mechanisms



- Suits Amiga 500 or Amiga 1000
- Top quality Citizen drive mechanism
- On / Off switch on rear of drive
- Throughport connector
- One megabyte unformatted capacity
- Slimline design
- Very quiet
- Long cable for location either side of computer
- Full 12 months guarantee

Ultra low price!
£74.95
inc.VAT and
delivery

3.5" Disks

10 Bulk packed DS/DD 3.5" disks with labels, fully guaranteed	£11.95
25 bulk disks as above	£13.95
10 disks as above with plastic case	£13.95
25 disks as above, with 40 capacity lockable storage unit	£34.95
Kodak DS/DD 3.5" disks, top quality storage media. Box of 10	£17.95

How to order from Evesham Micros

Phone us with your
ACCESS or VISA
card details on :
0386-765500



vortex system 2000 hard disks

Now available - Vortex 'System 2000' hard disks, offering versatile high-capacity storage, suitable for use with the Amiga 500 and Amiga 1000. The units are of a high specification, with a formatted capacity of over 42Mb and an average access time of 45MS. The system consists of a hard disk base unit, cables and an Amiga interface module, with utilities software including an autoboot facility and a hard disk backup utility.

System 2000 40Mb Hard Disk package £529.00

PRINTERS

All prices include VAT/delivery & cable

LC
10



star

We use and recommend Star printers due to their offer of unique combination of features, print quality, reliability and value. Make the sensible decision - get it right with a Star printer at our special all in. prices

Only £179.00

Colour version also available,
Only £229.00

Prices include 2 extra
black ribbons free of charge.

Hugely successful 9 pin printer, the Star LC10 provides 4N1Q fonts (with 96 print combinations) at 36cps and 144cps draft. Has a large 4K buffer and 1B/parallel interface built in, includes a comprehensive front panel operation and features paper parking, allowing single sheets to be used without removing tractor paper.

Star LC24-10 multifont 24pin printer, amazing new low price £239.00
Star SF-10DJ / DC cut sheet feeder for LC-10 / LC24-10 £64.95

Star NB24-10 24 pin printer 216/72 cps, including cut sheet feeder and 2 extra ribbons £499.00

Star TX-15 good value wide carriage 9 pin printer £329.00

Panasonic KXP-1100 good value 9pin 10" printer £169.00

Panasonic KXP-180 super value 9pin 11.7" carriage £395.00

Panasonic KXP-1124 good new multifont 24pin £319.00

Panasonic KXP-36 cut sheet feeder for KXP1124 £109.00

Epson LX400 (wide) 9pin 10" 180/25cps £179.00

Epson FX-890 24pin 9pin 10" 180/25cps £249.00

Epson EPX-2000 cut sheet feeder for LX800 / LQ800 £74.95

NEC P2200 budget 24 pin 168/56cps £319.00

Citizen 120D budget 9pin 10" 120cps £139.00

Citizen HQP-45 bargain value wide carriage 24pin £399.00

Mannesmann-Tally MT-81 9pin 130/24cps £149.00

Now available - Our New Low-cost 5.25" External Floppy Disk Drives

We are now supplying the new, good quality RFS42C 5.25" floppy drive compatible with the Amiga. Quiet in operation, the unit is colour matched to the Amiga, and has a throughport connector. The drive is capable of a number of configurations including 40/80 track switching and 360/720K format, giving full 'Transformer' compatibility.

Only £114.95
including VAT & delivery

OMEGA projects MIDI INTERFACE

Good value, low cost compact MIDI Interface, completely compatible with all music software currently available that uses MIDI capabilities. Connects to the serial port, the unit features diagnostic display, indicators to enable the user to locate the source of a fault. Supplied with 30" serial connector lead, full user instructions.
ONLY £29.95

DOUBLE TAKE! PYE TV/MONITOR (MODEL 1185)

High quality medium resolution colour TV monitor now available to suit the Amiga. Features teletext, full infrared remote control, SCART connector, composite video, two line, three line, phone output connectors, 39 tuner, presets, external aerial connection and two line aerial connection. Supplied with connection cable.

ONLY £269.00
price includes
VAT, delivery
and cable

All prices include VAT and delivery. Express Courier delivery £5.00 extra.

Send cheque, Postal Order
or ACCESS/VISA card details

Evesham Micros Ltd
63 BRIDGE STREET
EVESHAM
WORCS WR11 4SF

0386-765500

fax 0386-765354

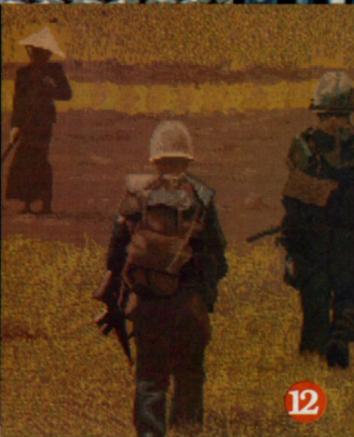
telex 333294

Govt, educ. & PLC orders welcome
Same day despatch whenever possible
All goods subject to availability, E&OE.
Open to callers 6 days, 9.30-5.30

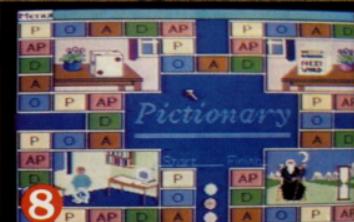
Also at: 1762 Pershore Rd., Cotteridge, Birmingham B30 3BH Tel: 021 458 4564



SWEET RAIN PURE RIVERS CLEAN SEAS



CREW TIME SCORE



1 FAST LANE

Artronic will soon be releasing this car-driving sim based on C1 category sports cars, which has been designed with a great deal of help and assistance from C1 specialists Spice Engineering. The object of Fast Lane is to win the sports car racing drivers' world championship title by competing against 20 other top drivers in a series of races at such circuits as Suzuka, Le Mans, Brands Hatch and Dijon.

2 DYNAMITE DUX

Coming soon from Activision is this wacky coin-op with an unlikely pair of heroes, Bin and Pin, who only happen to be ducks. Well, anything goes in coin-op land and just to prove it they'll be fighting against such nasties as Sumo Pigs and Boxing Crocodiles! Based on the Sega arcade machine, it's a horizontally-scrolling beat-em-cum-shoot-em-up with bags of playability.

COMING ATTRACTIONS

EARLY NEWS AND PICTURES OF THE GAMES YOU'LL BE PLAYING

3 KEEF THE THIEF

Electronic Arts will soon be releasing this tongue-in-cheek role-playing adventure which features stunning graphics, loads of music and bags of humour. There's magic, combat (arcade-style, with the action viewed through the player's helmet visor) and plenty of thieving to be done. But if you

fancy your RPGs a little more serious, you'll soon be able to get your hands on

Sword of Twilight, a fantasy RPG with arcade elements. In the game there are eight parallel worlds joined by a magical road. Seven evil Shadowlords (aren't Shadowlords always evil?) have infested the worlds and only the player's homeland is holding out. To save the day you'll have to seek out seven enchanted swords and return them to their original rock.

5 MYSTERY OF THE MUMMY

For those of you who fancy playing detective, you'll soon have the chance with Rainbow Arts' next release, *Mystery of the Mummy*. It's an adventure game in which a series of baffling murders linked to an African mummy are keeping the whole city in suspense. The game is menu-driven and features some 60 digitised pictures of original charcoal drawings.



Screen 14.04.1942

5

3

look Tel Hande, by exit rmv
entr scrch lock use other cast mix fight
Do What?

You are standing in grim stone halls marked by the scars of ancient battles, stains from the blood of the vanquished, and in several places the phone number of someone named Dixie.

6 TIME

From Empire comes Time, an animated adventure which takes the player on a hectic and dangerous journey from a space-age future to some of the most exciting eras of the past. There are over 100 locations and some 60-odd characters to interact with (each can be viewed as either a fully-animated face or as a side-on figure).

Also from Empire is a footy sim endorsed by Tottenham Hotspur's Paul Gascoigne. Gazzza's Super Soccer will feature a full range of League and Cup matches and a host of shots and options to choose from. Footy fans, get your boots on!

8 PICTORIARY

Domark will be following up the immensely successful *Trivial Pursuit* (the Amiga *Genus* edition is also

due for release real soon) with the launch of *PictureN*. The game is played in a similar way to charades, only on paper. Instead of acting out a word or title, you and team mates must try to guess the various words by sketching clues to each other. Get your pencils sharpened!

9 RAINBOW WARRIOR

Greenpeace, the international environmental pressure group, has joined forces with MicroProse to bring us the official Greenpeace game. The game brings its audience into contact with some of the key environmental campaigns of our time. Issues covered include the destruction of the ozone layer, nuclear power, the dumping of radioactive waste, untreated sewage discharge into the sea, the slaughter of seal pups and the continuing whale hunt. You

play the part of a Greenpeace campaigner, determined to protect wildlife and stop the pollution and destruction of the natural world.

10 CROSSBOW - THE LEGEND OF WILLIAM TELL

Coming from Screen 7 is this animated adventure in which you play Tell and aid him in his search for his son (the one he shot the apple off the head of). The action takes place in and around Tell's village, in surrounding settlements and in the towers and dungeons of Tell's arch(ery) enemy Gessler. String up your bow and shoot those poison arrows.

11 THE UNTOUCHABLES

Ocean will soon be launching their interpretation of the critically-

acclaimed movie starring Sean Connery. You control five *Untouchables* through six different stages of (mostly) shoot-em-up action culminating in a roof-top shoot out. It's not all blasting action, though, as there are distinct strategic elements that have to be considered. There are even more strategic elements in *Lost Patrol*, where you have to guide a platoon of G.I.s from behind enemy lines in Vietnam back to your own lines and safety – but beware, one of your group may prove to be a bit of a rat.

13 KNIGHT FORCE

This twenty-five-level, five-stage horizontally-scrolling beat-em-up features some impressive backgrounds and plenty of sword-wielding action as you try to rescue the princess Tanya who's been captured by the evil sorcerer Red Sabbath.

A FASCINATING COMPANY



WHETHER YOU'RE RUNNING A SMALL BUSINESS, A LOCAL CLUB OR A BUSY HOME :
THE HOME OFFICE KIT INCLUDES EVERYTHING YOU NEED FOR EFFECTIVE MANAGEMENT.

KindWords 2.0



The ideal Word-processor for impressive, accurate business communication.

InfoFile



A powerful database which can store all your information. An inclusive set of ready-made file formats helps you get down to business from day one.

PageSetter 1.2



An incredible DTP system to produce professional brochures, newsletters etc...

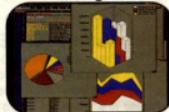
CaleFonts & Artists'Choice



Over 35 purpose-designed professional fonts.

A fabulous clip-art library of over 200 graphics.

Maxiplan 1.9



The best selling Amiga user magazine spreadsheet award winner.

HOME OFFICE KIT

GET ORGANIZED
WITH THE BEST HOME
PRODUCTIVITY KIT
AVAILABLE FOR
YOUR AMIGA

£ 149,95
inc.VAT

Both kits are available from: Addons: Southampton; SDL: London 01-300 3399; GEM: Harlow 0279-412441;
HB-Marketing: West Drayton 0895-444433; Amiga Centre: Edinburgh 031-557 4242 or Microdealer: Milton Keynes 0908-74000.
For Further Information contact The Disc Company: Paris 33-1 45 53 10 53. BP 435.16, F-75765 Paris Cedex 16.

FASCINATING COMPANY



THE DISC COMPANY PRESENTS THE PERFECT COMPANION FOR YOUR AMIGA :
THE STARTER KIT, A COLLECTION OF SUPERB GAMES AND ENTERTAINMENT SOFTWARE
WHICH WILL BRING OUT THE BEST IN YOU AND YOUR COMPUTER.

KindWords 2.0



Simply, the world's best selling Amiga word-processor with a 100,000 word British Dictionary and 470,000 word Thesaurus.

FusionPaint



An easy to use paint package that allows your imagination to run wild.

Miniature Golf



Select your course, your clubs and don't forget to shout "Fore!!!"

Crazy Cars



Stunning graphics take you on a hair-raising ride through America.

Super Ski



All the thrills without the spills! Compete in the downhill race, slalom and giant jump.

STARTER KIT

MAKE FRIENDS
WITH YOUR AMIGA.
INTRODUCE IT
TO THE PERFECT
PARTNER.

£ 69,95
inc. VAT

Both kits are available from: Addons: Southampton; SDL: London 01-300 3399; GEM: Harlow 0279-412441;
HB-Marketing: West Drayton 0895-444433; Amiga Centre: Edinburgh 031-557 4242 or Microdealer: Milton Keynes 0908-74000.
For further information contact The Disc Company: Paris 33-1 45 53 10 53. BP 435.16, F-75765 Paris Cedex 16.

It's very rare for one single music package to turn the world of music on its head: but, as **JON BATES** discovers, one has just hit the market that looks set to do exactly that.

MUSIC X PLOSION

FIRST THINGS

Although *Music X* will run on an A500, it is ideally recommended that you have at least 1 megabyte of RAM to go at. The reason for this is that as you have more modules of the program called into memory, the storage length left for your music is diminished: at full stretch, the program will take up nearly 400K, which leaves not too much in the way of memory. What in fact will happen is that modules will be overwritten in the memory and can't be called back in. Cleverly, the program will disable the Workbench to make extra room if it is stuck, and there is an option to recall the Workbench too.

After several months of build-up and previews where we couldn't get our mitts on a finished version, Amiga Format is able to bring you the first review of the fully-completed UK version of a program that should clean up the competition as far as the musical aspect of the Amiga is concerned. Ladies and Gentlemen, for the risible sum of £199 plus VAT, I give you *Music X*.

Why should you purchase it? Well, usually music software falls into one of several categories. It can be either a sequencer, a voice programmer, a sampler, or some sort of MIDI interpreter. With *Music X* you have all these in a single package which takes full advantage of the multi-tasking capabilities of the machine. It is the first package specifically designed for the Amiga: the others are programs crossed over from less capable machines.

Let's take a run round the various departments of this program – to be honest, each one is worth a review in itself, but we'll compress a little to get all the details in.

SEQUENCER

THE FRONT END

This is the main page that the program defaults to. The upper window contains the familiar tape recorder icons of Pause, Record, Play and Stop with Fast Forward and Back. Topping this are Begin – which is in effect jump to zero – and End, which is a very useful feature that locates the last two bars recorded if you wish to add on extra bits or continuations. It is the first time I have seen this

feature, and jolly useful it is too. There are four Cue buttons which can be set at any point within the piece that you fancy. I would have liked to have an ultra-fast wind plus the ability to fast forward while the piece is playing.

Recording is dead easy; hit Begin to start at zero and then record. It gives you a two bar count-in, alterable, and away you go. Anything you play is stored in a record buffer and will be only kept if you decide to place it in the sequencer list in the bottom half of the screen. There are 250 tracks for you to put sequences into and so it is highly unlikely that you will run out of space.

One thing the manual doesn't mention is to watch the available memory space counter. If it counts down while you are recording you know the information is going in. I would have liked some sort of indicator to tell me that MIDI data was actually going into the Amiga.

If you are trying several versions of the same part, you can compare the stored version with the version just recorded by hitting Preview which plays back the record buffer. Once the part is fixed in the sequencer list, a full report on its status is listed. Bar length, memory size, MIDI channel, what time code it is using, name and whether it is playing the internal voices or MIDI external voices are all reported on.

A little bit of explanation about the last sentence. *Music X* is able to read several external time codes – more of which later – so it is useful to know whether it is using Relative or Absolute time code. (That's also why there are two time clocks, one in bars and beats and the other in minutes seconds and frames for SMPTE video code.) The internal voices are treated as 16 MIDI channels and the Ex1 sign means that it is on normal MIDI. There is provision for more than one circle of MIDI instruments to be added at a later date. Any system can be turned on and off, although not while it is playing.

The tempo is set from the slider and if you want to alter the number of beats per bar this is pretty well catered for by a copious amount of time signatures. Oddly enough, for a program so geared up for video work, when you change the



tempo it does not alter the time or bar elapsed counters. Once the piece starts to get under way, the top right hand window shows the sequences that are playing at any given bar. This is a non-active window.

As well as the screen there are drop-down menus and windows that appear when various functions are clicked. In any page or module it is the far left menu that gets you from one module or function to the next. All important decisions throw up a safety prompt to avoid the red face of losing your entire work, and there has been some thought to the program in that you can suspend operations to free up the serial port for other applications, and then return to it without having to reboot.

On the sequencer page the output channels can be set, but all input channels are set from the filter page. The sequencer will punch in and out either automatically, from setting the bars, or manually. Oddly enough, you set the bars from a drop-down menu but set the



The front-end page, to which the program defaults, is the main sequencer screen. Sheer power at your fingertips.



function from a window. Perhaps a complete window for this would have saved time in racing around from screen to screen; it also takes a little while for the program to locate the bar you want to record or play from.

Sequences can be copied, merged, over-recorded or overdubbed, and certain types of events extracted. Remember this is not yet the edit page: this is just the front-end sequencer functions. As mentioned before, it is very competent at synchronization. It will respond to its own internal clock, external MIDI clock, internal Video clock (which runs at the same frequency as SMPTE), has software corrections, and can be used as a near as dammit guide for timings against video), the new MIDI time code which some video uses, and good old SMPTE timing code although for this you will need external SMPTE reader hardware. It will also sync up with drum machines and other sequencers to any given point by using the MIDI song position pointer. By now you should be



■ The Event Editor presents the details of the part as a data stream.

getting the idea that Music X will synchronize to virtually everything and anything including your bedroom alarm clock and microwave.

SEQUENCER

THE EDIT

On pressing Edit we move into a different screen. There are two types of editor: a graphic display called, slightly confusingly, a Bar editor; and a typical data stream editor called an Event editor. The Bar editor is so called because everything is shown in bar graph form; the Americans call musical bars 'measures'



■ The Bar Editor offers a simpler but less accurate graphical presentation.

so at least they won't be confused. Notes are represented by oblongs of different colours for different MIDI channels and the vertical bars refer to the velocity and aftertouch. All these are overlaid on a grid and the whole thing scrolls from left to right. To the far left of the window is a vertical piano keyboard by which you are supposed to be able to work out the pitch. Personally I found it pretty superfluous as notes were not highlighted; editing was best done by ear. The graphs can be expanded or contracted in size for macro overview or fine editing. The first thing to sort out is the grid ♦

EASY START

One of the nice things is that the program can be run as a stand-alone music sequencer without any need for external MIDI devices. Since it can play back four samples simultaneously and swap them around quite quickly, it makes an ideal starting point for anybody who hasn't any MIDI-equipped instruments. After getting used to the program, you can save your pennings and add MIDI gear to it bit by bit. The program does not come with an interface for MIDI, but this is not going to set you back too much: obviously any interface will run, and so it is up to you to shop around for the cheapest.

FROM EASY TO ADVANCED

The manual goes a long way to explaining the workings of the Amiga for novices and the operation of MIDI, plus a little towards the construction of music, although not in great detail. There is an advanced user's section for assembling songs in different ways and instructions to ensure that the program will boot up with the modules you use all the time ready installed.

size. This is quite important as it is from the size of the grid that the quantize values are set up. There is a complete range of musical note values including options for irregular timings such as five and seven beats to the bar, or even to the crotchet for snazzy things like quintuplets and septuplets which may occur in more extreme solos. This, again, is a first for Music X.

Quantization itself is well thought out, if a little away from the normal way of working as set by other programs. It will only quantize on notes once they are in the memory: there is no auto quantize while recording. Having set the grid size to which the strict beat should conform, you can then quantize the notes to within a certain percentage either side of that norm. It can be told how far in front or behind to start quantizing and the percentage amount of exactness can also be specified. Not only will it correct the point at which the note starts, but you can also choose whether or not you want the whole note to be moved, the whole note to be moved and the end point quantized, or simply the start of the note moved.

Quantization can also be applied to velocity and aftertouch, and within this there is a 'scaling' type of module which will allow you to increase or decrease the velocity and/or aftertouch over a specified area. If you leave them but add a random factor, then I found that you could give things like drums and especially hi-hats a great degree of human feel while leaving the main accents evident. On the aftertouch front, by the way, the program will accept and work on both 'channel aftertouch', which affects all the notes played at any one time, or the more sophisticated 'polyphonic aftertouch' which only works on the note so pressed. I found the methods of using these important features very easy to get used to and after a few hours of experimentation I was surprising myself with the results.

Actual editing is done via the pointer with the usual options: add, move, delete, mark, cut and paste. Notes can be lengthened or shortened by dragging on them. The notes sound when you click on them, although I found it was a

pain in the proverbial that this did not happen in delete mode, and so it was all too easy to cut out important notes. There are also limited record facilities in the edit mode, and you can hear a sequence back either on its own, or with the rest of the sequences.

I found, though, that the screen kept scrolling after you hit the stop button - which made life a little difficult when trying to locate a point exactly - and there didn't seem to be any way to manually scroll through the part at your own speed and hear the notes, although you can turn the scroll function off.

reserved for the sequencer playback page, was set as an event command insertable anywhere in a track or sequence. Maybe I missed the point but it is usually something that you use when comparing all the parts together. Its uses within a track are reasonably limited and it might have been easier to have it as a recordable event on the sequencing page. Tempo alterations, program changes, and indeed the whole gamut of MIDI operations are supported and editable in the sequencer. Apart from one or two minor niggles I found this very easy to use.

KEYS WHERE YOU WANT

Most of the functions in any of the departments of the program can be run from either the mouse, the keyboard or in some case the keyboard of your MIDI instrument: keys can be assigned various functions, so that you are not constantly running around from keyboard to keyboard, losing both your mouse and your temper simultaneously in the process.



■ The Roland D-50 is just one of many synths supported by voice protocols.

For some reason my grid and quantize sizes didn't seem to be remembered when I reloaded a song, although every other peripheral throughout the whole program was. The Event editing is the same as the Bar, but in scrolling data-stream format, which is pretty good for fine alterations to various notes. Not every action is duplicated and there are going to be some functions, like marking off areas, which are better done in the graphic 'Bar' editor. Maybe an abridged data-stream editor window would have been of use, particularly when coupled with the graphic editor.

Transposing sequences is achieved through something called Play Sequences, which is the method of song assembly used. However I could not find a way to perform either part or global transpositions of without having to resort to this slightly odd method of assembling tracks, which I felt to be a major omission. I also felt I could have done with a window that would have allowed me to visually assemble sequences to play consecutively without being affected by the bar numbers.

One thing I failed to understand was that Solo, which is usually an option

SEQUENCER RECORDING

To set up the recording, there is a filter page which maps out the MIDI information coming in and routes it to wherever you want, extracting information that may or may not be wanted. Information can also be sent to places that other sequencers can't reach! In other words, you can translate messages into other forms: so pitchbend could become modulation, or aftertouch become pitchbend.

It will also accept and work on many channels simultaneously and remap them however you wish. One useful thing here is the sliding filter that works on aftertouch and pitchbend. Quite often you will find that the sensitivity of one instrument is not matched by the sensitivity or programming of a particular voice on another instrument, so pitchbend of a semitone can become pitchbend of an octave, depending on the synth and the program for that voice.

The filter is a quick way of getting round that problem, although it does have a few quirks in that the filter tended to highlight the steps in the pitchbend, and when tested with fast data from vicious pitchbending it tended to jam up.

MIDI Filter: Filter Type		MIDI Filter: Filter Type	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
Event Type		Renap	
Note	5	8	11
Channel Aftertouch	4	7	10
Poly Aftertouch	6	9	12
Program Change	3	1	15
Control Change	2	5	16
Fret Bend	1	4	13
SEL ALL	2	3	6
RENAP		Filter	
ENABLE		100	
9		100	
8		100	
7		100	
6		100	
5		100	
4		100	
3		100	
2		100	
1		100	
6		100	
5		100	
4		100	
3		100	
2		100	
1		100	
10		100	
9		100	
8		100	
7		100	
6		100	
5		100	
4		100	
3		100	
2		100	
1		100	
11		100	
12		100	
13		100	
14		100	
15		100	
16		100	

■ Left: the clever filter that allows control over note attributes.

MIDI Filter: Filter Type		MIDI Filter: Filter Type	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
Event Type		Renap	
Note	5	8	11
Channel Aftertouch	4	7	10
Poly Aftertouch	6	9	12
Program Change	3	1	15
Control Change	2	5	16
Fret Bend	1	4	13
SEL ALL	2	3	6
RENAP		Filter	
ENABLE		100	
9		100	
8		100	
7		100	
6		100	
5		100	
4		100	
3		100	
2		100	
1		100	
10		100	
9		100	
8		100	
7		100	
6		100	
5		100	
4		100	
3		100	
2		100	
1		100	
11		100	
12		100	
13		100	
14		100	
15		100	
16		100	

■ Right: via the sample page, serious sample editing is made easy.



■ Left: the library page can collect MIDI information from 16 different instruments.

MUSIC-X File: Untitled.Filter

Channel: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Event Type Renap Filter

Note 5 ENABLE 100

Channel Aftertouch 4 7 9 10 11 12 13 14 15 16

Poly Aftertouch 6 9 11 12 13 14 15 16

Program Change 3 1 5 16

Control Change 2 5 13 15 16

Fret Bend 1 4 7 8 11 12 13 14 15 16

SEL ALL 2 3 6

PORAMENTO ON 100

PORAMENTO OFF 100

OMNI ON 100

OMNI OFF 100

VIBRATO ON 100

VIBRATO OFF 100

POLY MODE 100

MONO MODE 100

ALL NOTES OFF 100

RESET CONTROLS 100

LOCAL ON 100

LOCAL OFF 100

Keyboard Map: OFF 1 2 3 4

Data Echo: RE-OUT INTERNAL

There are also controls to set instruments into the various modes and knock off hanging notes and vibrato: something which the main sequencer didn't appear to do when stopped in mid sequence with a hanging note. The eventual destination for the channel can be either internal or external voices.

Accessible from this is the rather clever Keymap Editor which gives you a choice of setting up four Keymaps. These can turn your master keyboard into a multi-timbral controller with different areas of the keyboard assigned to different channels, so that bass in the left hand and piano in the right are easily possible: or you can set any keys you want to trigger off various commands such as program change, muting track, solo track, or starting and stopping the recording process. All very clever. You can even get one note to play a sequence at that pitch so it can become a one finger bass line which in itself can be re-recorded on a separate sequence! Keymaps are stored when data is saved.

SAMPLING

The samples page is a list of the samples loaded in to the program at the moment. Music X will accept and store in both IFF and Sonix formats. It gives all the relevant details regarding the sample - highest notes, range, memory size and tuning - and the channel to which it is assigned. More than this, in the lower right-hand corner is an envelope editor for reshaping the sounds of the samples and retuning them.

It is a pretty comprehensive editor with a 16-stage envelope for the sound with variable sustain point. It is also conscious of the amount of memory that samples use and to this end it can throw away the largest octave, which will also be the lowest octave, of sounds if you are not going to use them, and thus free up a little more space for another sample. Altogether a very comprehensive and useful adjunct to the sequencer.

It is this page that will probably get a lot of use if you buy the program without having any MIDI equipment. There is a reasonable variety of samples available with the program but a quick scout about the public domain catalogues and our giveaway disks should turn up some

useful samples. Music X will only run four samples simultaneously but these can be swapped judiciously to give a really big sound to a track you're working on.

LIBRARIAN

If you are working with external MIDI instruments, one of the things that you might need is a device to store all the instrument data that is contained in them. This means that the set-up for any song you perform can be stored as part of the Music X program and then sent to each instrument in turn, when you return to that song after working on something else. To do this there is a module called a Librarian which at its basic stage will collect and store voice information from the synths in batches of 16 at a time.

Now, although most instruments will perform the systems exclusive voice dump required for this, the codes required to persuade them to this are different for not only each make, but usually each type, of synth or tone module. Music X comes with protocols - that's the commands to send and receive data - already built in, for the DX7, 100 and 21, Casio C2100 and Roland D50.

It does also have the possibility for you to create your own protocol which can be called in to work with your own synth. Here the manual goes into very helpful details on how to set these up and tactfully tells you that no-one has ever got it right first time. It is not the fault of the program, it's just that synth manufacturers are not always straightforward in the manner in which they present this information: it's usually those back pages of the manual littered with details of status bytes and checksums.

Added to this there are three excellent visual editing programs for the DX21/100, TX81Z and D50. These themselves are usually about £50 each so you can work out the value of these programs for yourself. More will be available later, and that in itself is one of the many strengths of Music X. Since the program is modular - it calls sections into the memory as it needs them and, if the RAM capacity is up to scratch, then that is where they stay - these modules can be updated by Micrillusions later and offered to existing Music X owners. Theoretically this means that the pro-



■ Patch data editors will be available for many synths: cheaper than ROM!

gram should not go out of date and any updates should be available at discount prices. I also envisage that a user group would be useful, as information regarding samples, voice protocols and editors would save a lot of time.

Data for the actual sequences created can be saved in three formats: Music X file, standard MIDI file which enables it to be loaded into other compatible sequencers, and the Amiga SMUS file. There is an additional utility program that will do the conversions. Since it stores in MIDI file it can also be loaded into scoring packages such as D'T's Copyist or ProScore from Comus.

Part from one or two minor queries and a channel that refused to work on one song initially, Music X passed every test with flying colours. It is the most comprehensive and competent music package for its price that I have seen anywhere. If the price tag had been double, it would still be worth it. Don't waste time, check it out now. ■

THINGS TO COME

Thanks to Music X's modular design, even as we speak Micrillusions are working hard on add-on modules (pages if you like) that will further enhance this powerful program. First off the blocks is a range of patch editors which will sell at the unbelievable price of £10 each. Roland D110 and Korg M1 owners will be the first to receive editors for their keyboards with many others to follow.

The first major additional page to arrive will be a real-time score editor which Micrillusions hope to finish in time for a January release. Future modules planned include a drum pattern composer/editor and a powerful 'Arrange' page which will allow easy construction of songs. All add-on modules will be available for £50.



MUSIC X
£199 +VAT ■ All Amigas ■
SDL (UK) Ltd, Sidcup, Kent.
Tel: 01 300 3399



■ Left: the keymap editor allows set-up for four keyboards.

■ Below: there's plenty of power to manipulate patches.



COLOUR SCANNING

for the Amiga 2000!

ASDG's Professional ScanLab colour image input system for the Commodore Amiga 2000 personal workstation, comes complete with all of the hardware (including internal and external cables) and software necessary to control the Sharp Electronics JX300 or JX450 24-bit-per-pixel colour scanners.



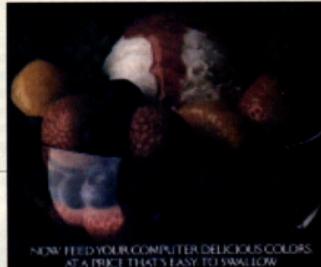
ASDG's ScanLab offers advanced colour processing features such as:

- * Variable resolution from 30 to 300 DPI.
- * Colour correction including independent control over red, green and blue.
- * Edge emphasis and smoothing.
- * Colour conversions from 16 million to 4096 or fewer.
- * Read & write images in any Amiga format.
- * Four colour process separations which are among the best yet produced on a personal or micro computer.
- * Scan in 1, 3, 8 or 24 bit modes.
- * Real time scrolling over extremely large images.
- * Two, four & eight to one reductions.
- * Can be used with Gold Disks ProPage program for full colour DTP with 16.7 million colours output. Using our ReSep utility.
- * Fully compatible with all Postscript printers.

ProScanLab Board & Software £900 inc.

Sharp A3 Colour Scanner & ProScanLab £7500 inc.

Sharp A4 Colour Scanner & ProScanLab £3000 inc.



Now FEED YOUR COMPUTER DELICIOUS COLORS
AT A PRICE THAT'S EASY TO SWALLOW

Others Make Claims ASDG Delivers.

The Dual Serial Board.

Fast, Compatible, Complete!

You know about ASDG's hard-won reputation for quality and reliability in their hardware and software products.

But did you know that it takes more than just a board to provide a complete serial expansion solution. It takes:

- * A completely compatible "serial.device" driver.
- * Powerful, but easy to use, DOS handlers to allow total control over the expansion serial ports, even from the CLI!
- * A way to use existing programs, written to use "serial.device", on any expansion serial port without modification.

Only ASDG's Dual Serial Board provides all of these important features.

Only £219.95

ASDG's Dual Serial Board Features

- * Uses IBM PC-AT standard connectors to reduce external cabling costs.
- * Reliable operation from 110 to 115,200 baud, including 57.6K baud for maximum speed RS-232C transfers to Postscript compatible printers.
- * Full XON/XOFF and CTS/RTS handshake support.
- * Installs in 5 minutes or less.
- * Comes with Public Domain and Shareware communications programs to allow immediate board compatibility.
- * Compatible with: Access, AZComm, VT100, DNet, TSSNet, ATalk III, ProPage, Superbase Pro, Y2's Ruby Term/View and every other program written to use "serial.device" or "SER:".
- * Supports DOS and CLI use with multilevel defaults.
- * Allows use of all serial ports simultaneously.

For further information please contact either of the following!

ASDG Incorporated

925 Stewart Street
Madison, WI 53713
U.S.A.
Tel: 0101 608 273 6585
Fax: 0101 608 271 1988



ASDG (UK)

Jersey Supreme Works
538 -546 Whippendell Road
Watford, Herts's
England, WD1 1QN
Tel: 0923 818079
Fax: 0923 817417

THE MANY FACES OF PAINT

In the first of Amiga Format's professional tutorials, Graphics

Editor **BRIAN LARKMAN** brings you the DIY guide to creating your own masterpieces with the Deluxe Paint series, covering the many, changing faces of this remarkable program...

MATCHING PALETTES

One great advantage of commercially-produced clip-art is that usually all of the clips in each set are produced using the same palette, so there are no problems when mixing them together. If you need to bring in clips from another picture, check first that there are already colours in your palette that are similar to those in the clip. It is then just a matter of remapping the brush colours to suit.

If there are no suitable colours then the remap will look rather odd. In that case try to regain one or two colours from the palette - using Less Colours in *PixelMate* if you have it - or by merging two similar shades if not. This job is made much easier using Stencil in *DP2* or *DP3*, and at least a bit simpler in *DP1* by making the colour to be discarded very bright and using magnify and fill.



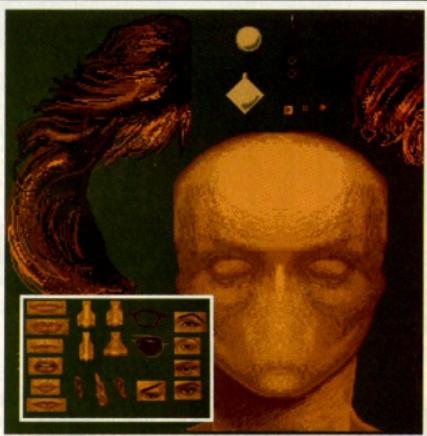
Deluxe Paint is probably the single most widely-owned piece of Amiga software, after Workbench, having been bundled until recently with all A500s sold. In spite of its major flaw - wasting a fifth of the available screen - most Amiga artists have used it at one time or another.

The original *Deluxe Paint* (*DP1*) has been upgraded, first to *Deluxe Paint II* (*DP2*) and now to *Deluxe Paint III* (*DP3*): but apart from abandoning 200-line NTSC for the European 256-line PAL display all the original, basic features remain, though most have been improved. So let's see how to get the best out of these first. Playing with the enhanced tricks of *DP2* and *DP3* will come later.

Cheating

The primary reason for using any computer graphics package is to make it easier to create 'for real' the image in your mind's eye. The quickest way to achieve this is to cheat, by taking a ready-made picture that is close to what you want, and modifying it to suit. Even for an experienced artist this method can save a lot of time: though for a novice it is still important to practice creating from scratch, simply as part of the learning process. We shall examine these basic skills at a later date.

Two ways of 'cheating' are available: digitising and clip art.



■ The pieces of clip art, supplied on this month's Coverdisk, all ready for you to start work producing a new Mona Lisa.

The equipment required for digitising, including a video source as well as a digitiser, can be expensive: but it makes the task very easy, as we shall see in a later instalment. For now we must make do with cannibalising other people's artwork!

Changing Faces

Clip art can be obtained from a broad range of sources. Disks full of complete screens and smaller

brushes are both available from Electronic Arts and Aegis, as well as from most PD libraries. If you are serious about computer art it is worth collecting as many of these as possible.

Even if the whole picture is of no use, one part - an eye or nose, a lick of flame, a hub-cap - may be handy at some time. So build up your own collection of directories of bits ready for later use. You may even find that the

AGEING: USING SMEAR

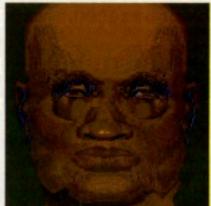


Like "Ambivalent", the transition shown in "Ageing" is designed to be viewed as an animation. It is primarily an exercise in the use of Smear techniques, though cut and paste and scaling of features were also used extensively.

As the human body gets older, the elasticity of skin becomes reduced so that our faces generally lose the firm look of youth and become either wrinkled or sagging. Apart from the wrinkles around the eyes, and the enlargement of nose and mouth, the general effect of ageing in this illustration is conveyed by sagging of the facial muscles. This effect is quite simple to produce using Smear.

In the first three frames the

features are gradually thickening. This was achieved by expanding the features and the neck. The fourth frame shows the start of sagging. A clip was cut of a section of the jaw line (using Polygonal Brush Selector



in *DP3* or by cut and paste and erasing the excess then cutting again using *DP1*).

Once Smear is selected, this brush can only affect the pixels beneath it, dragging them in the direction the brush moves, and to a lesser extent, those pixels nearby. The effect of sagging is achieved by dragging the brush from its original position, down and out from the jawline. The fifth frame is an extension of this process, applied to the chin and eyelids as well as the jaw. The effect is so horrific I am surprised that the Editor has allowed you to see it. You can tell that most of the Format team is quite young, not yet worried about sagging flesh! Wish I could say the same!

“AMBIVALENT”: USING SCALING



palette used for a picture is useful just on its own, so save small brushes of any colour combination that particularly appeals, named appropriately: 'summer landscape', 'hellfire', 'flesh tones', 'pastels', 'rainbow' etc. This can save a lot of time in the early stages of a picture.

This month the Amiga Format Coverdisk includes some exceptional clip art from the Electronic Arts 'Art Parts: Vol 1' disk 'Faces' directory. The basis of this month's tutorial is employing these examples to demonstrate how best to use clip-art, concentrating on two of the main techniques for mixing and modifying clips: **scaling** and **smearing**. So if you have DPaint, you can use the program and our Coverdisk to practice the techniques as we run through them.

The range of tools provided by Deluxe Paint for modifying clips or brushes has grown with each subsequent version of the program, but nevertheless the initial set is quite adequate for most purposes, and most of them are used in the accompanying illustrations.

Scaling

Only rarely is a particular clip exactly the right size and orientation to fit in your picture. By scaling – changing size and proportion, flipping horizontally or vertically, mirroring or rotating, bending and shearing – the clip you have can be transformed into the one you want. In fact, one of the great joys of computer painting is that any component need only be drawn once and then re-used in many different situations. The same nose can be made fatter or thinner, bigger or smaller, straight or crooked, with just a few clicks. The illustration "Ambivalent" shows how subtle use of clipping and scaling can transform an image.

Smearing

Often, a picture can be transformed by the slightest modification; a tiny upturn in the corner of a mouth can give a straight face an enigmatic smile – or a leer! The major tool for this sort of work is Smear. With Smear selected you can push the pixels under the brush in much the same way that oil paint can be smeared with your finger. Smear only uses the colours under the brush, without adding colours: so with careful use major distortions can be produced without changing the basic texture of an object. The transformations in "Ageing" were produced mostly by smearing. ♦

The transformation of a woman's face into a man's is an exercise in the use of the tools in the *Deluxe Paint* menu. It is designed to be animated in DP3 in Ping-pong mode. The male and female faces at either end of the sequence were produced purely using the clip-art supplied in the Faces drawer of the DP3 Art Disk, without any modification. The 'inbetween' images were composed using the same clip-art, modified to suit.

The idea of transforming one face to another over five frames means that as well as the features, the actual shape of the head needs to change from one frame to the next. In this sequence, the first three heads are all versions of the female head, with the lower jaw cut, stretched vertically progressively in the second and third frames, then re-pasted to align. The fourth frame is the male head, with the lower jaw modified using the Brush menu tool Rotate/Shear so that the top of the clip is unchanged but the bottom is moved to the right to match the jawline in (3). The process is then repeated on the right side.)

For convenience, the five images were all loaded as animation frames in DP3 so that the spare screen could be used for loading and modifying clips 'on the fly'. Using DP1 the clips of the features – eyes, ears, noses and mouths – need to be modified in advance, as shown in 'Ambivalent Bits', then pasted alongside the relevant blank 'head' ready for alignment.

It must be admitted that the hair transition as presented here

would be quite difficult to align well using DP1 as the clips are too large to include at the sides ready for alignment. They would have to be modified by eye as a final stage. Using DP3 all five frames were resident in memory and alignment was simple. Even in DP2 the use of Background mode on the Effects menu would make alignment and modification quite easy.

AMBIVALENT DP1 PROCEDURE LIST

The sequence of actions for producing the Ambivalent transition accurately using DP1 would be:

A. Load Heads clip, cut female head, clear the screen and paste it to the centre.
B. Load Ambivalent-Bits, cut

and paste the (1) bits and save.
C. Lengthen the jaw, cut and paste the (2) bits at the sides and save.

D. Lengthen the jaw, cut and paste the (3) bits at the sides and save.

E. Cut and paste the (4) bits (at the sides), load Heads clip to Spare screen, cut male head.

F. Copy main screen to spare then paste brush aligned to the head on the main screen (use the 'head' brush to remove the lower part of the previous head using the right 'erase' button of the mouse.)
G. Modify the jaw using Shear, and paste in position (comparing jawline with that on spare screen) (use 'j' key to flip the screens.) SAVE.

H. Load Heads clip to spare screen, cut male head, paste aligned with head on main screen.
I. Load Bits to spare, cut and paste the (5) bits to the main screen (at sides), SAVE.

J. Load screen (1) and copy to spare.

K. Load screen (2) and paste the bits from the sides to align with those on (1) using 'j' key to flip. SAVE.

L. Repeat with (2) and (3), (3) and (4), (4) and (5).

AMBIVALENT BITS

FROM THE TOP:

1 The initial set of female features. Ears are not included because they were only slightly enlarged for each change.

2 Eyebrows needed to be gradually faded out, so Shade from the mode menu was used to lighten them. (A colour from the 'hair' range in the palette was selected so that only 'hair' colours were lightened. In DP2 and 3, Stencil might have been used.) The darker, wrinkled shading above the final eye was pasted into position. (In DP1, paste down a spare copy of the whole eye and paint it in background colour all but the required bit, then cut and paste. In DP2 & 3 use Polygonal brush selector.) The whole



■ Each feature of the face changes over five frames, so the process used was to place the start and end clip at top and bottom of the screen and then transform progressively from the first extreme to the last, cutting and pasting whichever bit was closest to what was suitable at that stage.

mouth (1) was stretched slightly wider. The final nose (5) was squashed vertically to match (1) and highlights added by hand.

3 The final eye clip (5) was used at this stage complete with wrinkles and bags, but the darkest areas and the worst of the wrinkles lightened using Shade as

described in (2) above. The centre section of the first eye (1) was then cut-and-pasted onto it so that the pupils aligned. The mouth is in two sections: the top lip is the same as in (2), the bottom lip is from (5) coloured by hand to match (2). The nose is just a vertically squashed version of (5).

4 This eye is exactly that from (5) with the darker areas lightened to lessen the wrinkles. The mouth is still in two sections: the lower lip as in (5), the upper lip is from (3) but squashed vertically to match (5) more closely.

The nose is just a slightly squashed version of (5).

5 The final set of male features taken direct from the Faces drawer.

DPAINT TUTORIAL

CONTINUED



COSMETIC SURGERY

Almost invariably, clip-art is best assembled starting from the back and working forward. Two heads are provided in the Faces drawer, male and female, loaded together as a low-res picture. One of these is picked up as a brush, the screen cleared, and the brush pasted centre-screen. Eyes and noses are loaded as another picture, on the spare screen. To assemble one image this process - picture on main screen, clip-art pictures loaded to spare - works perfectly well. If several images are going to be worked on and aligned for animation, a bit of juggling is required, especially in *DPT*.



■ Begin building a face, working from the back. The head is an obvious first step, but the hair will need to be behind the ears so it can go on now too.



■ Placing the important features on the face is easy.



■ Our complete masterpiece.

One of the first developers to realise the potential of the Amiga's 4096-colour HAM mode were Newtek, with their *Digiview* digitiser and *Digipaint* HAM painting system. *Digipaint* in particular was a revelation, because it was the first commercial paint program for a cheap micro that allowed really realistic painting: smooth gradations of colour, transparency, even lighting effects could be painted in what seemed a really easy, free way. Then along came *Photon Paint*, with its easy interface and texture mapping, and *Digipaint* seemed to disappear. A combination of poor marketing in Britain and preoccupation with their *Video Toaster* (will it ever appear in Europe?) has resulted in Newtek losing the HAM painting initiative. *Digipaint* 3 is clearly intended to regain a place at the top, but it may be too late!

Old Dog, New Tricks

Digipaint 3 is similar to the original in many respects (version 2 never made it to Europe) but the interface and many of the tools are completely redesigned. The changes are definitely an improvement, providing a slick interface and many interesting and innovative tools. Nevertheless, some of the new 'tricks' are included at the expense of the old ones. For instance, there is now no airbrush - astonishing in itself on a package of this sophistication - yet the old airbrush in combination with shading produces the best cloud effects of any paint program on the market. Similarly files can no longer be saved with comments: *Digipaint* 1 was virtually the only Amiga program that included this excellent facility.

Featuring...

Enough of criticism: what can the system do? A detailed description of the more exciting new features must wait till next month, when the DIY tutorial will be a comparison of *Digipaint* 3 and *Photon Paint* 2 - how they compare in the features stakes and how-to-do-in either program - a working review!

DIGIPAIN 3

First impressions of the latest version of Newtek's popular HAM painting system: expect a full review next month...

Meanwhile, perhaps a list of the most striking features will give you an idea of what *Digipaint* 3 is capable of.

The tools include:

- A form of 3D texture mapping onto any shape you can draw, with anti-aliasing for smooth results (but not true 3D surface mapping).
- Transparency control operating on all other tools and features.
- Cut and paste with any of the



■ A photographic image digitised and reworked in *Digipaint*.

drawing tools, including picking up the result of an irregularly-shaped special effect.

- Easy to understand modes: colourize, lighten, darken, texture map, blur, 'rub-through' etc.
- Real-time auto-scrolling on Super Bitmaps up to 1024 by 1024 (contact with any edge initiates the scroll in a smooth, controllable way).
- Eight times magnification with

realtime scrolling (but rather clumsy operation and no zoom).

- Text rendering using any of the effects and modes.
- Patterned or random dithering calculated at 30 bits per pixel.

Other features include:

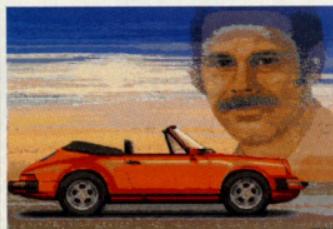
- 68020 support.
- 3D painting with X-Specs 3D (if you can get any!)
- ARexx compatible for software control of all features.
- Loads any size and displays overscan and severe overscan.
- Manual with limited guided tour and tutorials (no index).

The features that are missing are rather surprising:

- No fill of any kind (except filled shape tools).
- No airbrush.
- No free rotation.
- No stencil.

First Impressions

Overall, the program seems rather better in use than this initial reaction review might imply. Most of the tools that are missing are usually fairly easy to simulate using other techniques, though no fill may be a bit limiting at times, and free rotation is almost essential. Some people will find the lack of an airbrush a problem. The special effects are very good and compare well with those in *Photon Paint*, though maybe not with *Photon Paint* 2 which definitely has more features. Nevertheless, you can have lots of fun with this program. More next month... ■



■ These images demonstrate *Digipaint*'s use of Transparency and Texture Mapping to varied effect.



More High Quality Software Tools from HiSoft...

HiSoft BASIC

The BASIC language has come a long way since its humble beginnings in the early 1960s and the AmigaBASIC interpreter supplied with your computer is witness to this transformation. However, although AmigaBASIC is good, you can do even better ... with HiSoft BASIC.

HiSoft BASIC is a complete, fully up-to-date, integrated BASIC development system with the massive advantage of having a compiler built in so that you can transform your programs to super-fast machine code as easily as running an AmigaBASIC program.

Features

- Fully AmigaBASIC compatible so that you can use all the programs you have already written and all the publicly available ones ... immediately.
- Modern, structured programming features like: long IFs, multi-line functions, sub-programs, REPEAT, WHILE, DO, CASE etc.



- No limits: no program size limit and no limits on the size of any variable (except by memory).
- Full recursion in both sub-programs and functions with local and global variables, arrays as parameters etc.
- Integrated editor with English error messages.
- Link your BASIC code with C and assembler for total flexibility, speed and power.
- Compatible with Microsoft QuickBASIC 3 on the PC.

Manual

HiSoft BASIC comes with a professional 350-page ring-bound manual which contains a full tutorial and, for a limited time, we are supplying the Abacus book *AmigaBASIC Inside & Out* plus its examples disk (a total value of at least £25), absolutely free of charge!

Price

HiSoft BASIC Amiga £79.95 inc.

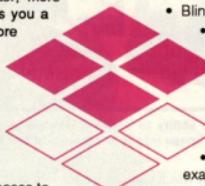
Lattice C ver 5

We are delighted to be handling the best range of C programming tools currently available on the Amiga.

Lattice C and Lattice C++ are now widely regarded as the ultimate C compilers - no others give you faster, more efficient programs ... and no other product gives you a more complete programming environment or a more impressive set of features:

Features

- Fully standard Amiga Compiler, with many ANSI features, including ANSI preprocessor, const and volatile keywords and function prototypes.
- Powerful source level debugger to speed up debugging, without slowing you down, with access to all of your variables and full control over your program's execution.
- Support for all 68000 series processors including the 68030 and 68882.
- High performance global optimiser using state of the art techniques not previously seen on the Amiga, including moving calculations out of



loops, automatic assignment of variables to registers, elimination of unused code and variables.

- Full set of programmer utilities to increase the flexibility of your development environment.
- Blink overlay linker, the standard Amiga linker.
- Pre-compiled header files give increased speed by eliminating repetitive analysis.
- Many built in functions to allow generation of inline code increasing the speed of your programs yet further.
- Fully re-entrant and multi-tasking compiler, plus facilities to build resident modules.
- Comprehensive two volume manual with many examples and sample files.

Requires

- Lattice C 5 runs on the A500 up but will certainly benefit from 1Meg of RAM and, for large programs, a hard disk.
- Lattice C++ needs 1.5Mb memory and a hard disk.

Price

Lattice C 5.02 £229 inc., Lattice C++ £299 inc.

HiSoft Devpac ver 2

We've said enough in this ad, let's hear what the press have to say about Devpac Amiga:

Editing, assembling, debugging and even program execution from the same place - not fantasy but something offered by Devpac. Fast assembly speed, powerful directives for optimising code, extensive conditional options, symbolic debugging ... Devpac has it all plus a lot more. It's packed with features and has everything machine code program developers could want.



With release 2 of Devpac Amiga, HiSoft has greatly enhanced its already excellent 68000 development system, making it quite indispensable for the serious programmer.

Transactor 5/89

Price: Devpac Amiga 2 £59.95 inc.

HiSoft
High Quality Software

The Old School • Greenfield
Bedford • MK45 5DE

Fax (0525) 713716 • Tel (0525) 718181

Access & Visa Orders welcome

ST/Amiga Format 12/88

DIGITAL DELIGHTS

A great new real-time video digitiser provides
JASON HOLBORN with hours of fun.

The Amiga certainly isn't short of its fair share of video digitisers. In fact, one of the first hardware add-ons to arrive for the machine was a video digitiser, in the shape of the now legendary Digi-View from Newtek. So what's so special about another digitiser?

From a specification point of view, Vidi doesn't offer anything that hasn't been done before. What is astounding about Vidi is the price: just under £100 for a real-time digitiser is quite simply an astonishing breakthrough.

The digitiser unit plugs directly into the parallel port of an A500. Unfortunately, using it on either an A2000 or an A1000 requires the additional purchase of either an extension cable for the A2000 or a gender changer for the A1000. The box features a phone socket for the video signal input and two knobs to control the brightness and contrast. Unlike most other units, Vidi also includes a lead to connect your computer up to an appropriate video source.

Frames

A digitiser is only as good as its supporting software, and so the quality and ease of use of the bundled software is all-important. Surprisingly, the bulk of the Vidi software was written in HiSoft BASIC, but don't be put off: it's a powerful piece of code and a fine example of the quality of HiSoft's product.

The software allows you to continuously grab and display frames at a maximum rate of four frames a second. During frame grabbing, Vidi stores the most recent sequence of frames in memory, which can later be easily flicked through using either the onscreen controls or an impressive 'Select Frame' option which displays all frames at once by

employing a cameo representation of each frame.

If you have extra memory, Vidi can utilise this to store as many frames as memory permits. This is achieved by storing frames in Fast memory and then using the 68000 to rapidly copy them into Chip memory ready for display by the custom chips. As an example of memory usage, a 1 meg Amiga can store 22 frames with ease.

Window On The World

One particularly unique feature of Vidi is the ability to define a rectangular window which you can either

employ from just about any programming language to allow you to control the digitiser hardware from within your own programs. Using it, you could even rewrite the Vidi software if you really wanted to!

Vidi Verdict

Its price and grab speed are very much Vidi's ace card against Digi-View, its most obvious rival. Anyone who has used Digi-View will know that although it can undoubtedly produce some astounding results, the time taken



Using the ability to define a window in a grabbed frame and then grab a new image into it, a mouse and the Kick Off trophy are inset.

to grab even a single, mono frame is horrendously slow: up to 10 seconds, to be precise. Compare this to Vidi's 50th of a second!

Most users don't have access to luxury items such as video cameras and so digitising directly from a video recorder will probably be Vidi's main use. The basic Vidi unit has been specifically designed with these users in mind, therefore allowing the best possible results from even the simplest of digitising set-ups. Although the basic Vidi unit will only grab in mono, the quality of the dithering techniques used gives the impression of a much larger colour scale. Where

to grab even a single, mono frame is horrendously slow: up to 10 seconds, to be precise. Compare this to Vidi's 50th of a second!

Programmed Pixels

For the ambitious among you, Vidi also includes a disk-based library

of the 'animate' option allows a simple animation to be constructed from grabbed frames in memory.

The 'animate' option allows a simple animation to be constructed from grabbed frames in memory.



quality is concerned, Vidi produces some of the best results I've seen on any digitiser, at any price.

Bringing Vidi up to a comparable specification to Digi-View raises the price to about the same level as Newtek's unit, but the combination of real-time grabbing and superior results makes Vidi the choice for the pixel fiend on a tight budget. For the price, there is currently nothing to touch Vidi Amiga.

Vidi Upgrades

Vidi Amiga is available in several configurations. The basic unit, which retails for £99.95, is a 320 by 200, 16-colour real-time grabber, probably best suited to users producing graphics for display on both NTSC and PAL Amigas. Surprisingly, because Vidi locks onto its input signal, the unit can be used to grab from both PAL and NTSC video sources. A PAL version costs an extra £15. This is the same as the basic unit but allows 320 by 256 pixel resolution frames to be grabbed.

A top-of-the-range Vidi allows you to capture images in full colour (including HAM) for only an extra £20. Like Digi-View, colour Vidi uses red, green and blue filters and therefore requires a separate video camera to use it to its full. It doesn't allow true real-time grabbing of colour composite images because three separate mono frames have to be grabbed and then combined to produce the final colour image.

If you buy the most basic Vidi unit, Rombo will upgrade it to either of the above specifications for only the difference in price (£15 for PAL, £20 for colour). ■

VIDI AMIGA

£99.95 ■ All Amigas ■

Rombo Productions ■

Tel: 0506 414631



ATHENE

COMPUTERS
0705 511439

LOWEST
PRICES
PC1
EXPANSION BOX
£99 + VAT

SAME DAY
DESPATCH

AMIGA B2000
WITH XT BRIDGE BOARD,
20MB HARD DRIVE, 1064S
COLOUR MONITOR
£1,390 + VAT

PROFESSIONAL
SERVICE

AMIGA A500
+ GAMES PACK
£389 inc

ALL COMMODORE
PRODUCTS UK
SPECIFICATION
240 VOLTS

AMIGA A500 1.3
MONITOR 1064S RAM
EXPANSION
£599 INC

AMIGA HARDWARE

A500 + TV Mod £330 inc
A500 + Games Pack £349 inc
A500 + 1084(S) High Res Colour Monitor £578 inc
A500 + A501 RAM £488 inc
A500 + 8833 Philips Colour Monitor £548 inc

AMIGA EXTERNAL DRIVES

AF 880 3.5 Drive £89 inc
FR302C 3.5 Drive £85 inc
Cumana CAX 354E £99 inc
A1010 3.5 Drive £115 inc
MD C30 3.5 Drive £85 inc
NEC 3.5" Drive £85 inc

AMIGA ACCESSORIES

A501-512K Ram £129 inc
Mouse Mat £4.95 inc
Amiga Dust Cover £4.95 inc
TV Modulator £21.95 inc
Steel Monitor Standard
Amiga 520ST £15.95 inc
Steel Double Monitor
Stand Amiga ST £25.95 inc

COMMODORE C64

C64 Hollywood Pack £149 inc
C64 Home Entertainment Pack £199 inc
1541 C11 5.25 C64 drive £145 inc

A500/A2000 MONITORS

Philips CM8833 High Res £229 inc
1084(S) Stereo High Res ..£239 inc

SEE US AT
THE COMPUTER
SHOPPER SHOW NEXT
TO COMMODORE
(STAND C3 & C5)
ALSO AT NOVOTEL

A2000 HARDWARE

A2000 + IBM £899 + VAT
A2000 + 1084(S) Monitor £1598 inc
+ bridge BD + 20Mb Hard disk
A2000 + 1084(S) £1199 inc
For DTP/CAD Configurations
All systems Formatted
Amiga 2000 A 2058 8Mb Mem
Expansion card fitted with 2 Mb Ram
A2084/A2092 - Autoboot Amiga 20Mb
Hard drive Internal (Amiga)
Video Card - Flicker Fixer Phone
14 inch High Res Colour Monitor FST
A2000, A2620, A2090, A/2092
Video card 21" FST HRCM Phone
A2000, A2620, A2090/A/2058
Video card 14" HRCM Phone
For further selection please phone

A2000 ACCESSORIES

20Mb Hard disk £399 inc
Amiga or Mados
XT Bridge Board £399 + VAT
AT Bridge Board £675 + VAT
INT Genlock £179 + VAT
8Mb Ram/B with
2Mb Ram £649 + VAT
2nd Drive 3.5 £75 + VAT

DRIVES

CPPS A590 20Mb £395 inc
Hard Disk
Vortex A500 Hard disk £499 + VAT
A590 20Mb + 2Mb Ram
Hard Disk Call for Price
Cumana CSA 354 £99 inc
Cumana CDA 358 £199 + VAT
Cumana IMB 5.25 £115 + VAT
External 2nd drives from £85 inc

COMMODORE PC40 AT's

Include V.G.A. Adaptor, 1Mb Ram
1.2 Mb Drive

PC40 111 Single Drive
V.G.A. mono £1149 + VAT
PC40 111 Single Drive
V.G.A. Colour Monitor £1369 + VAT
PC40 111 40Mb Hard disk
V.G.A. mono £1419 + VAT
PC40 111 40 Mb Hard disk
V.G.A. Colour monitor £1579 + VAT
PC40 111 40Mb Hard disk & 40Mb
Tape streamer mono £1629 + VAT
PC40 111 40Mb Hard disk & 40Mb
Tape colour monitor £1839 + VAT

COMMODORE DESK TOP PCS

All XT's at 3 speeds 4, 7, 8, 10
Mz supplied with AT-E 102
keyboards & Dos

PC10 111 Single Drive
mono monitor £485 + VAT
Single drive C.G.A.
colour monitor £599 + VAT
Single drive E.G.A.
colour monitor £799 + VAT
PC 10 111 Dual drive mono monitor
Dual drive C.G.A. monitor £659 + VAT
Dual drive E.G.A. monitor £789 + VAT
PC20 111 20Mb Hard disk
mono monitor £689 + VAT
20Mb Hard disk
C.G.A. Monitor £839 + VAT
20Mb Hard disk
E.G.A. monitor £949 + VAT

PHONE 0705 511439

24hr delivery

Athene Computers

Dept. AF

The Media Centre
16 Stoke Rd. Gosport
Hants. PO12 1JB

LASER PRINTERS

Citizen Overture £1299 inc
HP Laserjet 2 £2099 inc
Star Lazer 1Mb mem £1695 inc
Epson CP3500 CALL

STAR PRINTERS

Star LC10 Mono £148.95 inc
Star LC10 Colour £194.95 inc
Star LC24-10 £310 inc
Star LC10 CBM 64 £179 inc
Star LC10 Colour CBM 64 £199 inc
Star ND15 Wide Carriage £433 inc
Star NR10 £357 inc
Star NR15-Wide Carriage £412.55 inc
Star NB24-10 £453.87 inc
Star NB24-15 £524.15 inc
Wide Carriage £550.27 inc
Newstar FR, XB in stock

COMPUTER SUPPLIES

3.5 Bulk Sony/JVC
50 Disks only £44 inc
3.5" Branded Sony
10 Disks only £14 inc

Call for Qty discounts.
Most Brands Supplied.
Storage Boxes, Mouse Mats,
Cleaning Kits etc.

Amiga PD Lib
over 500 titles
£2.50 per disc

Delivery Charges

Next day £10 inc
4 day £5 inc
Computer Supplies
Free by Post



WIN WITH POWERPLAY

Powerplay have been making joysticks for themselves and other people for many years. Their long experience has produced the very successful Cruiser stick and now the new Crystal. To mark the launch of the new stick they are not only giving away 20 of them, but have offered a magnificent first prize of a Panasonic TV and video.

The Crystal is a robust, microswitched stick with twin microswitch fire buttons, suckers on the base and an autofire on the Turbo version. It's an excellent addition to Powerplay's previous stick, the Cruiser, which is not only stylish but has an adjustable sensitivity control.

The first prize is a 14" Panasonic TV (TC1480) and video (NVL 20) worth over £500. 10 runners-up will receive a red Crystal Turbo joystick and a further 10 winners will get a standard red Crystal.

QUESTIONS

1. How many pins/holes are there on the standard joystick socket/plug?
a) 9 b) 7 c) 5
2. How many microswitches are there in a Crystal joystick?
a) 2 b) 32 c) 6
3. Apart from plugged into a computer, where else might you find a joystick?
a) In an aeroplane
b) In an Indian temple
c) On the dodgems at a fun fair

RULES

Employees of Future Publishing and Powerplay are not allowed to enter. The judges' decision is final. No correspondence will be entered into.

HOW TO ENTER

Write the answers on the back of a postcard or stuck-down envelope and send it to: POWERPLAY COMPETITION, Amiga Format, 4 Queen Street, Bath BA1 1EJ. The entries should reach us by October 16th and don't forget to include your name, address and phone number on the postcard.

OVER £800 OF TV, VIDEO AND CRYSTAL JOYSTICKS
UP FOR GRABS FROM POWERPLAY



Open the door to the unknown,
Open the door to Carfax Abbey and you
will surely meet OOZE.

As Ham Burger You are heir to
something evil and sinister on a
frightening and exciting journey into the
world of ghosts and demons.

OOZE - Creepy Nites is not just a new
horror Adventure from Dragonware.

OOZE - Creepy Nites is a satirical homage
to the genre that sets a new standard
of Computer game excellence.



**STUNNING GRAPHICS
NERVE TINGLING SOUND
EFFECTS**

For the
AMIGA, ATARI ST, PC and Compatibles
and soon also for ARCHIMEDES.

SOFTWARE SUCCESS MARKETING

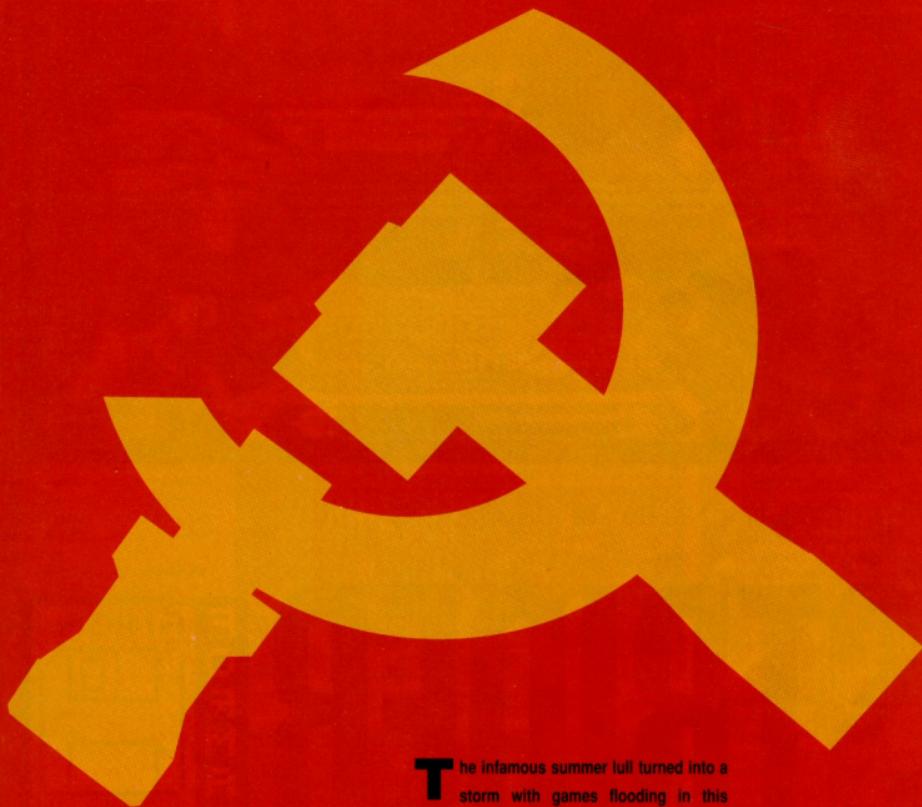
Alban House, 24A White Pit Lane,
Flackwell Heath, Nr High Wycombe,
Bucks HP10 9HR

DRAGONWARE PRODUCTS - MERIMPEX Ltd

Am Schrägen Weg 2, 9490 Vaduz,
Principality of Liechtenstein
Tel.: ..75 283 68, Fax: ..75 206 56



SCREEN PLAY



The infamous summer lull turned into a storm with games flooding in this month as software houses make a break from the tradition of holding the 'big' games back for 'surprise' launches at the PC Show. Of the games that have arrived, there's a small army of coin-op conversions ready to march into the shops. One of the hottest is the US Gold version of the Capcom hit, *Strider* - check out the review. But if arcade action's all a bit too mindless, fast or hard for you then you'll find there are plenty of other goodies on the next thirteen pages to make your mouth water.

STRIDER GLASNOST OBLITERATED



F16 COMBAT PILOT 42 ROBOCOP 43 XENON 2 52 WATERLOO 55



US GOLD £19.99 ■ Joystick

STRIDER



Russia and the Russian army are going to look very different seventy years from now, or so Capcom and US Gold would have us believe, with this conversion of the highly successful coin-op.

It's the eternal struggle of Good versus Evil again, as you take on the persona of Strider Hiruy (Hurrah!) to do battle with The Lord (Boo! Hisst!) and his wicked minions in various parts of deepest, darkest (and sometimes coldest) Mother Russia.

After being dropped off in Red Square, you must guide Strider across platforms

destroying KGB agents with your trusty sword (which moves so fast it's just a blur) before they fire at you. As well as moving left-to-right, you also have the ability to jump straight up, leap left-right (doing a rather gymnastic somersault in mid-air), crouch and slide (which looks a lot like an American baseball player sliding for a base). Using these moves you have to jump chasms and leap from platform to platform, destroying the guards and taking out any ground-based or flying installations that happen to get in your way.



■ Now you can stay out of the firing line to let the drone do the work.

RATINGS EXPLAINED

GRAPHICS

Good graphics are an important part of any game: if the power is there, it should be used to the full. Both still and moving graphics come under scrutiny in this rating, but remember, graphics alone do not make a game...

SOUND

With stereo capabilities the last thing you want to hear are Spectrumeque beeps, right? Title tunes and effects all add atmosphere to a game and good sound can greatly increase your enjoyment.

INTELLECT

How much real thought do you have to put in to play the game? Just because a game's mindless doesn't mean it's bad, but a game with a high Intellect rating says immediately you'll need to think to gain maximum enjoyment.

ADDICTION

How easy is a game to pick up and play? How much sheer fun will you get from it? Will you keep coming back? Important questions, answered by the Addiction rating.

OVERALL

A percentage mark that takes into account all the ratings, plus added extras like price, packaging, documentation...

THE TEAM

Andy Smith, left, who was with ACE right from Issue One, is a 'twelve-hours-a-day' games fan and one of life's natural gamesplayers. He loves any type of game, be it a shoot-em-up, strategy game, arcade adventure... Bob Wade, right, started reviewing with Personal Computer Games and has worked for Zzap!64, Amstrad Action and ACE. There's no-one in the business with a better idea of what makes a game.



■ The athletic Strider pulls off an excellent back-flip to get to the pod. But will it provide a drone or an extra-long sword?



■ This time it's a sword, which is bound to be jolly handy for dealing with those hard-to-kill end-of-level guardians.



■ Stage Three is set in the snowy wastes of Siberia, and the mid-level guardians are in the form of mechanical animals!



■ These robots should learn never to turn their backs on a mean sword-wielding dude like you! Things are looking bad for them.

playable, addictive and exciting game. Arcade fans who like their games spiced with plenty of action and rushing around are certainly going to enjoy this. It's no great mental exercise, but the immense playability is guaranteed to bring a smile to the face of every arcade action fan.

'Red Andy' Smith

Mid- and end-of-level guardians make an appearance, and discovering how to polish them off will pose you a couple of problems. You could try to make life easier by picking up a couple of extra weapons: such as a drone, carried onto the screen by an airborne alien who releases it if you destroy him. This drone then circles round you and fires boomerang-like shots that can be used to take out hard-to-reach baddies.

The drone will also run along a platform occasionally, clearing a path for you. Other extra weapons include an extended sword, which gives you a limited number of huge, far-reaching swipes.

Make it to the end of the stage and defeat the end-of-level porky big 'ard monster, and you're transported to the icy wastes of Siberia for the next round where you'll have to fight off blood-thirsty dogs and the occasional mechanical gorilla. In the second and third rounds (for the third round, you're in a jungle in the southern lowlands, which are infested with boomerang-lobbing nasties) the action is pretty much the same: leap around the platforms, select the correct routes to take and destroy the end-of-level guardian.

Should you manage all this without losing all three lives (for each life you can take three hits, but any hit causes the removal of any extra weapons previously collected), and complete each stage of every level within the time limit (well, you didn't think things were going to be easy, did you?) it's back to Moscow to face the Grand Master of the Red Army.

GRAPHICS AND SOUND

One of the main attractions of a coin-op is its graphics, and, obviously, home users want graphics as close to the original as possible. Thankfully, *Strider* comes very close. Not only does it retain the impressive coin-op background graphics and sprites, but the smooth and fast animation remains too.

Sound is also good: the standard coin-op jingles are fine and effects throughout are satisfying, although the digitised speech is not the best ever heard.

JUDGEMENT

This is good stuff. Capcom did the biz with the original and USG have done the biz with the conversion, producing an enjoyable,

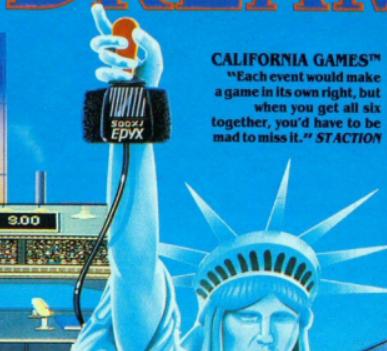
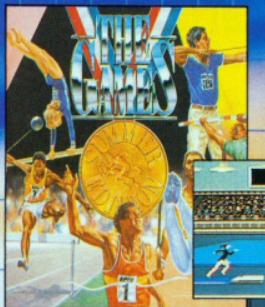
GRAPHICS	8
SOUND	8
INTELLECT	2
ADDICTION	8

OVERALL 91%



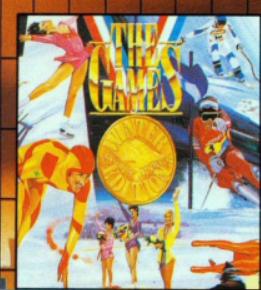
SHARE THE AMERICAN DREAM

THE GAMES SUMMER EDITION™ "It's a winner – a game that certainly won't be left on the shelf for long." *TG ACTION*



CALIFORNIA GAMES™

"Each event would make a game in its own right, but when you get all six together, you'd have to be mad to miss it." *ST ACTION*



THE GAMES WINTER EDITION™ "All events are well presented and the graphics are good. It's great fun especially when played with a group of people." *ST ACTION*



IAN NAYLOR 88



IMPOSSIBLE MISSION II™ "The classic design has been retained but improved upon with better graphics and game play." *ZZAP!*



GAMES SOFTWARE QUALITY BEYOND
YOUR WILDEST DREAMS

Epyx 

Distributed by—
U.S. Gold Limited, Units 2/3 Holford Way,
Holford, Birmingham B6 7AX.
Tel: 021 625 3388.

All games available on
ATARI ST, AMIGA & IBM PC

THE GAMES WINTER EDITION £19.99

THE GAMES SUMMER EDITION £24.99

CALIFORNIA GAMES £24.99

IMPOSSIBLE MISSION II £24.99

ACCOLADE £24.95 ■ Mouse

JACK NICKLAUS' GOLF



■ The first hole of Jack's Greatest 18 is introduced by the world-famous golfer himself.



■ The overhead view shows a problem: a lake lying between the tee and the green.



■ The drive is successfully played and sits nicely on the fairway.



■ At the new ball position it's 214 yards to the pin, which calls for a 4 wood to be employed.



■ The shot was straight, but short; however, a pitching wedge will get you on the green.

GRAPHICS	5
SOUND	2
INTELLECT	5
ADDICTION	6
OVERALL 78%	

A golfing legend, winner of more major championships than anyone else, much demanded course designer and all-American hero: the Golden Bear. A golf game can't come with a much better endorsement than Jack, but does it live up to his reputation?

Three courses are available: Castle Pines in Colorado, Desert Mountain in Arizona and Jack's Greatest 18. The Greatest 18 are culled from some of the most famous courses in the world, such as St Andrews, Augusta, Pebble Beach and Royal Lytham.

One to four players can take part, any or all of whom can be computer controlled. There's a choice of several opponents of varying ability, including Jack himself, who is of course incredibly good. There is also a choice of game type: 'stroke play' or 'skins.' In skins the players play for prize money on each hole, the prizes increasing as they go along. Stroke play is the usual score-per-stroke, with the overall score plus or minus par kind of system.

Before playing each hole you are given an overhead view of it, which can be called up again while playing. You also get Jack's words of wisdom on the hole. Then it's off to the tee, where the view is from behind the player, looking towards the green and the pin.

The club is selected from a driver, two woods, eight irons, two wedges and a putter. Once the club is chosen and the shot aimed,

the tricky part of swinging the club has to be done. This is a matter of timing mouse clicks to initiate the swing, to stop the power bar going upwards and then to stop it going down (for the accuracy). Misting clicks will result on the upswing in shots going long or short and on the downswing in the ball hooking or slicing.

The computer players do everything automatically and slowly too. A lot can be learnt from watching them, particularly if you have a similar shot to play. There are various factors affecting a shot - windspeed and direction, sand, slopes and rough. On the putting surface there are only breaks to cope with, but the aiming of putts is very tricky.

If you are not happy with your performance you can always go off to the driving range and the practice green, or even practice on a few individual holes.



■ A dangerous tee shot awaits because of the overhanging trees on the right. Why not aim left and slice the ball back towards the pin?



■ A good chip from the edge of a well-protected green gives you a chance to hole that putt for another par.

GRAPHICS AND SOUND

The courses are picturesque, with trees, bunkers and lakes making up some lovely views. The only problem is the terribly slow speed at which the graphics are drawn. The view is redrawn for every shot so there is a lot of hanging about waiting for it.

The sound is limited but what is there is good: some excellent sampled speech at the beginning and realistic hitting and bouncing noises during play.

JUDGEMENT

The slow speed of play is annoying but not terminally so: just chill out, relax and take your time playing. The three courses are challenging and dangerous and the opponents provide good competition. It's a game you will be playing for years to come: as long as the old back injury doesn't flare up again... **Bob Wade**

SYSTEM 3 £19.95 ■ Joystick

DOMINATOR

It's comforting to know that some things will never change: the Queen's speech on Christmas Day, Amstrad returning record profits for some quarter or other and Earth being attacked by hordes of nasty, slimy aliens.

No-one's yet produced a game based on the first two, so this must be a game based on the latter. The aliens in question are a touch nastier and slimier than the average two-headed, green-skinned jobs though, because they would actually like to eat Earth and its inhabitants! What's needed is someone to jump into a spacecraft

and fly right into the mouth of the boss alien, to blast away at its vital organs. Fancy the job?

In case you hadn't guessed, it's a multi-stage, horizontally and vertically scrolling shoot-em-up (scrolls vertically for the first stage, horizontally for the second and so on). The idea is to survive each level by shooting at and destroying the waves of flying aliens (and ground installations later on) and avoiding crashing into the host monster's insides. Survive to the end of the level and you have to take on a guardian before moving to the next stage.

As you'd expect, there are

extra weapons to collect including rear guns and a time-based auto-fire facility, plus extra lives and smart bombs. The weapons are collected by flying over weapon icons that appear periodically. Fortunately, any extra weapons you do collect are carried from stage to stage, but if you lose one of four lives, you lose the weapons.

GRAPHICS AND SOUND

The backgrounds are well drawn and menacing, but the sprites are dull and uninspired. The collision detection is ever so slightly off, and on more than one occasion you'll be

shouting "That was nowhere near me!" As for sound: well, it's just as bad. The title music is fine but the effects are mediocre and surprisingly slow. Destroy a wave of aliens then stop firing, and for a moment you will still hear shooting. *Dominator* will not be remembered for graphics and sound.

JUDGEMENT

Some would argue whether there's room for yet another shoot-em-up in the marketplace anyway, and others would argue that there's always room for a game that offers a good blast, especially if it has new features.

What there isn't room for is a game with no new features, that doesn't offer a good blast and has limited lasting interest. *Dominator* certainly qualifies on the last three. *Andy Smith*

GRAPHICS	4
SOUND	2
INTELLECT	1
ADDICTION	3
OVERALL 28%	



■ Sneaking through the first stage while trying to avoid being grabbed by those large 'arms' that shoot out from the sides.



■ Make it to the end of the stage and there's the end-of-level guardian to be destroyed before you can progress any further.

LINEL £19.95 ■ Joystick

SKATE OF THE ART

Twenty stages of viewed-side-on skateboarding action. Controls are limited: scoot (for speed), lean back, lean forward and flip are the ones you'll use most as you move left-right across the screen at great speed, jumping obstacles and shooting up and down ramps.

Though there are twenty of them, the levels are all short and it's simply a question of remembering which moves come in which order and hitting the fire button at just the right moment to get through them. Should you misjudge a jump, however, you go sprawling

across the road and have to restart the level with one of your initial five lives gone. Make it through the stage and you are rewarded with a 'flip' bonus, decided by how many jumps you did, plus a time bonus, decided by how quickly you finished.



■ Flipping in the Underground.

Skate of the Art, so far from being state of the art, is basic stuff indeed. Although it looks all right, it is simple in design and quite frustrating in gameplay. Even hardened 'boarders' out there will find their interest evaporating quickly with this one. *Andy Smith*

GRAPHICS 6 / SOUND 5 / INTELLECT 2 / ADDICTION 3 / OVERALL 38%

FIRST micro

HARDWARE & SOFTWARE

SPECIALISTS

NEW! SHOWROOM
13 LANSDOWNE RD
BOURNEMOUTH
DORSET



EXC. VAT (0202) 24927/813176 £5 – DELIVERY

AMIGA A500

+ FREE £220 SOFTWARE

INCLUDING:- • PURPLE SATURN • HOSTAGES
• INTERNATIONAL SOCCER • WINTER OLYMPIAD
• SPITTING IMAGE • STARGOOSE • BACKLASH
• QUADRAGON • ELIMINATOR • 20 P/D GAMES
• FANTASTICK F3 JOYSTICK
• TV MODULATOR

£315

AMIGA A500/

1084(S) MONITOR

£416

AMIGA B2000/

1084(S) MONITOR

£1049

INC ACCESSORIES



AMIGA EXTERNAL DRIVES

Cumana Cass 354E £79
AF880 £78
RF302C £74
Supra 20mb H/disk £499

* All drives 1mb + on/off switch *

AMIGA ACCESSORIES

A501-512k RAM £109
TV Modulator £22
Mouse Mat £4.39
Amiga dust-cover £6.89
3.5 135TP1 DS/DD £9.99

SPECIAL OFFER
COMMODORE/1084(S)
NEW PRICE £199

A2000 HARDWARE

A2000 + 1mb RAM £869
A2000 + 1084(S) monitor + bridge BD + 20mb H/disk £1369
A2000 + 1084(S) £1049
20mb hard disk £299
XT bridge BD £299

A500/A2000 MONITORS

1084(S) High res monit. £209
Philips CM8833 High res. £199
1901 C64-colour ... Call
1900 C64-Mono £119

PRINTERS

Star LC10 (P) 130CDS. £139
Star LC10 colour £189
Star LC24-10 (24 din) £269
Citizen 120D. £105
Commodore MPS 1230 £119
Panasonic KXP1124 (24 pin) £149
Panasonic KXP1081 £149
Epson LX800. £158
Epson LQ500 £250
Epson FX850 £409
Epson FX1050 £382
Epson EX800 £369
Epson EX1000 £419

AMIGA A500

INCLUDING:-

- MOUSE • WORKBENCH
- UTILITIES • MANUALS
- BASIC • TUTORIAL
- TV MODULATOR

£289

AMIGA B2000/ PHILIPS 8833

INCLUDING:-

- MOUSE • WORKBENCH
- BASIC • UTILITIES • MANUALS
- XT BRIDGE BOARD
- 20Mb HARD DISK

£1299

AMIGA B2000

INCLUDING:- MOUSE • WORKBENCH
• BASIC • UTILITIES • MANUALS

£799

COLOUR PRINTERS

Citizen HOP40 £352
Epson EX1000 £543
Hewlett Packard Paint Jet £689*
NEC P6+ £569
NEC P7+ £589
Star LC10 £195
Xerox 4020 £949

LASERS

Citizen overture £1199
HP Laserjet II £1825

BUSINESS SW'ARE

SALE £
AEGIS Sonix £39
Animated Images 3D £99
City Desk. £69
Deluxe Video £49
Deluxe Music £49
Delux Paint £49
Digiview Gold £99
Home Accounts £19
Mailshot Plus £39
Maxiplan A500 £69
Music Studio £23
Organiser II £49
Page Setter £89
Page Flipper Plus £24
Photo Paint £49
Photo Video £99
Ring

Professional Page £175
Pro Writer 2 ... Ring £69
Publisher Plus £69
Sculpt 3-D £122
Sculptbase 3-D £63
Superbase II £59
Superbase Personal £44
Superbase Professional £169
TV Show/Text £79
Word Perfect 42 £169
'Works' £69
Zumafonts £25

Only £137.00



Hugely successful 9 pin printer, the Star LC10 provides 4 NLO fonts (with 80cpi), 10cpi, 80cpi and 144cpi draft. Has a large 4K buffer and a parallel interface built in. Includes a comprehensive front panel operation and features paper parking, allowing single sheets to be used without removing tractor paper.

LC10

ALL PRICES EXCLUDE VAT

CREDIT CARD MAIL ORDER
AND EXPORT HOTLINE

(0202) 24927

(0202) 813176

OPEN MON-SAT 9am-5.30pm

All prices and manufacturer's specifications
subject to change without notice.

To: First Micro, 13 Lansdowne Rd, Bournemouth, Dorset BH1 1RZ

I wish to order _____

My computer is _____

I enclose cheque/PO for £ _____

inc VAT.

Or charge my Access/Visa No. _____

Exp. date _____

<input

DIGITAL INTEGRATION £24.95 ■ Keyboard and Mouse or Joystick

F-16 COMBAT PILOT



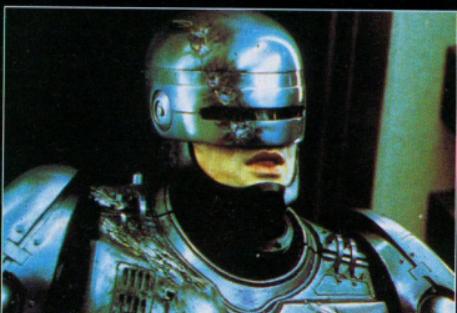
■ Flying low and fast in a dogfight mission. There's an enemy in range and targeted so prepare to let loose with one of those AMRAAM missiles, then get out of there quickly...

OCEAN £24.99 ■ Joystick

ROBOCOP

Unlike most film tie-ins, the computer versions of Robocop were developed at the same time as the Data East coin-op, so Ocean had a choice: to either make a game purely based on the film (something like *Platoon*) or to make a straightforward conversion of the coin-op. In the end, the game has wound up closer to the arcade machine rather than as a pure, original interpretation of the film.

The game is set in the Detroit of the future, where the police department is being run by a corrupt private company called OCP.



If you didn't want to be a fireman when you grew up, chances are you wanted to be a jet fighter pilot. And for all but a very few of us, a combat flight sim is the closest we'll come to realising our ambitions.

DI's offering, based on the popular General Dynamics' F-16C, has Mirrorsoft's excellent Falcon - based on the same plane - to contend with, so the new game will have to be good to compete.

For a start, there are four basic games: training (always a good place to start), separate missions (five in all), a campaign game and a dogfight option.

Training allows you to experiment with the plane, practice landings and even gain familiarity with the weapons. Once confident, try the separate missions which you need to complete in order to be able to take part in the campaign game. These missions include a

The company has big plans to robotise the police network, but a small setback with the prototype machine (ED 209) means they have to re-think their plans, eventually coming up with the idea of a half-human, half-robot cyborg.

All they need is a volunteer body donor. A young cop called Murphy just happens to fit the bill after being badly shot up in a vicious attack. OCP robotises Murphy and puts him on the streets without completely erasing his memory, and he soon goes rogue and sets about hunting down the gang who nailed him.

It's a multi-stage 'strolling' shoot-em-up, with the player controlling Murphy as he wanders about his business of upholding the law. Baddies appear at first-floor windows and on the street and the general idea is to either shoot them or clock 'em on the jaw with a titanium-packed punch.

They shoot back, every hit they score reducing your energy until it runs out: game over time. Fortunately there are extra fire power symbols and extra energy that can be collected by smashing

scramble scenario, in which the idea is get airborne ASAP and down some aggressive enemy MiGs, and an air-to-ground one in which you have to tackle an enemy tank battalion. Other scenarios include reconnaissance, runway bombing and bombing missions deep in enemy territory.

Complete every mission and you're allowed to join one of eight squadrons fighting a campaign game, in which the plan is to defend the country against an invading enemy force. You decide the missions and where to hit the enemy in order to hurt him most, and to help in the fight you can send up to four other aircraft on separate missions against other targets. Wipe out the enemy force and you'll be promoted to another squadron where things begin to get somewhat tougher.

The only way to get to the campaign game, though, is to complete each mission and save the results to disk (creating a

pilot's log). If you've had enough of the solo stuff, connect up a couple of machines with a modern cable

and take on a human opponent in a gripping dogfight that will really keep you biting those fingernails.



■ Even with electronic ground control assistance, landing's no picnic.



■ Taxing onto the runway ready to take off for a night mission.



■ Check the mission and select your weapons accordingly...

GRAPHICS AND SOUND
Everything is viewed from within the cockpit – never from a position outside the cockpit, so you don't see an external view of the plane – in fast, colourful 3D with options to let you see what's happening behind and to either side. Though the instrument panel is laid out in a standard fashion you are able to switch the position of some of the instruments to suit, which is handy. Sound is great, and though most of it's limited to the drone of the engines, it is well done.

JUDGEMENT
There's plenty of action to suit the combat-hungry and the attention to detail will please and delight the flight purists. Once you get into the campaign game or take on a human you'll find yourself playing for hours at a stretch and coming back to it time and time again. As DI keep proving, when it comes to simulations – especially ones involving aircraft, – they're very hard to beat. *Andy Smith*

GRAPHICS	8
SOUND	5
INTELLECT	5
ADDICTION	8
OVERALL 94%	



■ RoboCop patrols the streets of downtown Detroit, shooting punks he meets on the streets and who fire from first floor windows.

through marked crates. Collect the symbol and your gun suddenly has things like three-way firing or super-big shots. Sadly, the extra weapons only last for a set number of shots: use them sparingly.

Reach the end of each stage and there's an end-of-level guardian to be destroyed before progressing to a bonus stage where you can practice your shooting or have a bash at putting a photofit together. For each level

the object remains, effectively, the same, to work your way through the stage and destroy the end guardian. All that really changes is the setting: in the junkyard, inside the drugs factory and so on.

GRAPHICS AND SOUND

The title and in-game tunes are all right but not brilliant, and the same can be said for the spot effects and the occasional burst of digitised speech. The back-

ground graphics and sprites are good and the whole thing is smoothly animated. Just about the standards expected from a coin-op inspired game.

JUDGEMENT
It's a nicely put together platform shoot-em-up which fans of the film will be well pleased with. As a game in its own right it stands up, but it's not terrific and you'll complete it sooner rather than later.

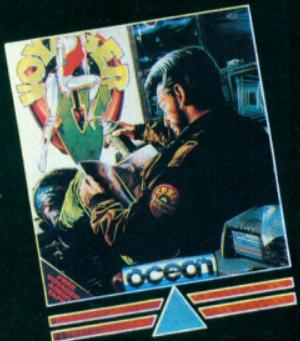
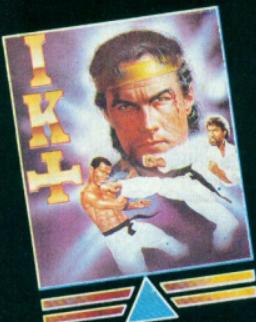
From then on, the only real reason to keep playing lies in constant attempts at improving your score. *Andy 'Half-Human' Smith*

GRAPHICS	8
SOUND	7
INTELLECT	2
ADDICTION	7
OVERALL 73%	



■ OCP's first attempt at a robot cop (ED 209) is the first end-of-level guardian, and a mean one too! So shoot him in the head!

A POWERFUL PACK OF FOUR



IGHT ELIGHT FORCE



IK+

They called International Karate 'the greatest Karate beam 'em up yet' (Commodore User). And who are we to argue?

But ARCHER MACLEAN has come up with a stunner: A third fighter. An amazing animated background. New moves (including double head-kick and a spectacular backflip). Re-mixed music by ROB HUBBARD. And balls!

© 1987 Archer Maclean.

© 1987 System 3 Software Ltd.

BATMAN - THE CAPE CRUSADER

D.C. Comics' famous super hero Batman breaks onto the micro screen in a Wham! POW! Arcade adventure as you engage the forces of evil in Gotham City. Start in the Batcave and move on through the world of fun and excitement as you face the trickiest customer of all... the Penguin. Save some strength for the battles ahead with the dastardly Joker however, or you'll miss the thrilling climax!

TM & © DC Comics Inc. 1988. All rights reserved.

VOYAGER

In 1977 Voyager II was launched - inviting all life forms in the Universe to visit our planet. Get ready - company's coming. Like Snayles - man to Earth after completing a 50 year sentence of "investigative exploration" is not a man you'd wish to meet. After half a century of solitude, he's bored and hungry. On Earth the gate crashers are about to arrive - they are the ROXIZ, but Snayles has got other ideas - no-one, but NO-ONE is going to spoil his home-coming party!

© Ocean Software Ltd. 1989.

R-TYPE

Deep in the cosmos, the ultimate terror... The Bydo Empire - evil, horrific and insatiable. As its terrifying creatures roar the cosmos, the last stand of the Pilots Earth - a desperate battle has just begun. As pilot of the R-9 fighter plane, it is your mission to crush these interstellar monsters using every scientific weapon at your disposal. Only skill and reactions stand between brilliant victory - and the devastation of Man...

...At last, the arcade sensation bursts to your home screen with several stunning new features. Screen rotation, the ultimate in thrilling gameplay.

R-Type™ ©1987 IREM Corporation.

Licensed to Electric Dreams

ATARI ST AMIGA

£24.99

DISK

ocean

Ocean Software Limited • 6 Central St

Manchester • M2 5NS

Telephone: 061 832 6633

Telex: 66997 OCEAN G • Fax: 061 834

A one-to-four player money-making game based on the glamorous life of an oil company tycoon, where time is money.

Playing solo, the first thing to do is decide which company to head and then think about how to spend the juicy five million dollars you're given at the start of the game. Buy a yacht? Pay your Poll Tax? But five 'very, very big ones' don't get you too far: in fact, they just about buy you permission to drill in one of the eight available regions of the world. Fortunately you'll have enough change to set up a derrick and a storage tank.

By this time it'll probably be the end of the month (game time) and as the game runs in monthly turns, that means the other companies get to make their moves.

Now you're in business. The field is producing and it's time to sell some of that black gold and turn it into greenbacks. The price of the oil depends on supply and demand and can range from about \$3 per barrel to over \$20. But selling it isn't always easy; you have to get it to market by entering one of the arcade sub-games, in which you have to build a pipeline from a before the computer builds one

RELINE £24.99 ■ Mouse and Joystick

OIL IMPERIUM

from c-d. Complete it, and the cash starts rolling in, allowing you to think about setting up new rigs and more storage tanks. Then it's a case of increasing your profits and becoming rich.

This is all well and good when things are going smoothly, but accidents happen and occasionally you'll be informed that either your storage tanks have blown up or some oilfield is on fire. For the latter case you can send in fire-fighters — there's no guarantee they'll put it out — or play another arcade sub-game where you run around planting explosives to seal the burning wells. And if you want to get nasty you can hire saboteurs to do some evil deeds aimed at your



■ Hurrah! It's a gusher! All you need to do now is sell the stuff.

competitors, or hire investigators to protect yourself.

GRAPHICS AND SOUND

Sound effects are limited but are OK as are the infrequent, but jolly, tunes. The graphics are fine, everything is well drawn and the animation in the sub-games is satisfactory. It's not a visually or aurally stunning game, but then it's not designed to be.

JUDGEMENT

Initially, *Oil Imperium* is good fun. The computer players are tough but not as devious as real human players and if you play with a couple of friends you'll have a great

time. There are several games to play — different victory conditions but even so it soon becomes boring and after a couple of good sessions you'll find the gameplay very repetitive. Nicely done and highly enjoyable in the short term, but lacks the detail to keep your interest up. *Andy Smith*



■ Keep the red dot in the centre to avoid smashing the drill head.

GAINSTAR £24.95 ■ Joystick or Keyboard

ALIEN LEGION

Eek! Guess what? Aliens have invaded and only you can save the world from misery and damnation. In the guise of Captain Cosmose, you must work your way through this horizontally-scrolling platform cum shoot-em-up blasting away at the little alien baddies and avoiding their shots. Moving around is mostly left-right with short and long

jumps to enable you to hop between platforms or across gaps. Every hit the aliens make reduces your energy bar, which can be topped up by grabbing potions.

Not a bad game, it looks and sounds all right and it'll take a while to work through four levels: but it's simple and adds nothing new to this genre of game. *Andy Smith*

GRAPHICS	7
SOUND	5
INTELLECT	5
ADDICTION	7
OVERALL 66%	



■ Run along the platforms, shoot the aliens, collect the energy potions: you know perfectly well what the drill is by now...

GRAPHICS 5 / SOUND 5 / INTELLECT 2 / ADDICTION 6 / OVERALL 52%

THE AMAZING AMIGA ..

COMMODORE AMIGA 500



Pack Includes:
A500 CPU, Mouse, P.S.U., T.V. Modulator, Very First Tutorial, Workbench 1-3, Basic, Extras and Manuals.

PLUS POSTRONIX BONUS PACK

WORTH OVER £250 which includes 10 Blank Disks, Disk Storage Box, 10 Excellent Games, Mouse Mat, Mouse Bracket (Mouse Holder) Deluxe Paint.

£399.00

+ £5.00 post and packing

AMIGA 500 PLUS DISK DRIVE

Instruction Manuals, Extra Disk, Workbench 1-3, The Very First Tutorial, T.V. Modulator, Photon Paint, Mouse PLUS additional Amiga Compatible Disk Drive and 10 Blank Disks.

£449.00

+ £5.00 post and packing.

AMIGA 500 + 1084S

STEREO/COLOUR MONITOR

(including the Amiga 500 deal)

£649.00

+ £10.00 post and packing



MPS 1500C



MPS 1200P

MPS 1200P

The Commodore MPS1200P printer presents the state of the art in dot matrix printers, with all the features of a printer that would cost much more. The MPS1200P is designed to be like three printers in one. It can act just like an Epson FX printer, or with the flip of a switch, it can act just like an IBM Graphics Printer with IBM Group II-1 character set (Danish/Norwegian character set) support. It can also print all the characters available with the Amiga in the Amiga configuration. The MPS1200P is capable of all the printing functions you would expect, as well as some additional features you may not expect.

MPS 1500C COLOUR PRINTER

A. TECHNICAL CHARACTERISTICS

PRINTING TECHNIQUEImpact dot matrix (9-needle print head).
DRAFT MODEmatrix: 9 vertical dots (5 + 4) horizontal dots; - print speed: 120 char/s, at 10char in TABULATION SPEED2 char/s.
PRINTING DIRECTIONbi-directional, with optimised head movement
PRINT PITCHES10 char/in to 24 char/in programmable from line, and in SET-UP mode
LINE FEED1/6in (4.23 mm), 1/8 (3.17 mm) and 7/72 in (2.4 mm); - n/216 in and n/72 in.
CHARACTER SETASCII characters and special characters.
MAX. PRINT LINE LENGTH40 top 192 characters, according to print pitch selected.

£229.99

+ £5.00 post and packing

£199.99

+ £5.00 post and packing



1084 HIGH RESOLUTION COLOUR MONITOR

1084S STEREO/COLOUR MONITOR

£259.00

Compatible with PC, Amiga, C64c, C128
+ £5.00 post and packing



AMIGA 1010 DISK DRIVE

Amiga 3.5" external drive. Capacity 880K

PLUS FREE DISK

STORAGE BOX &

10 BLANK DISKS

£149.99

+ £5.00 post and packing

A501 RAM PACK

£149.99

+ £5.00 post and packing

CABAL



The coin-op sensation that throws you deep into enemy territory with little more than a low-powered, single shot repeater for protection. With superior marksmanship and lightning reactions you can increase the odds – in your favour.

Capture enhanced weaponry, including grenades, and now you can really make your mark! ... that is, until you come face to face

with the enemy gunships, tanks and submarines. Equip yourself for some stunning arcade action, load up and FIRE!!!

Ocean Software Limited
6 Central Street · Manchester
Telephone: 061 832 6633
Telex: 669977 OCEANS G
Fax: 061 834 0650

ocean

SPECTRUM	£8.99
COMMODORE	£9.99
AMSTRAD	£9.99
ATARI ST	£19.99
AMIGA	£24.99

Roll up! Roll up, for yet another game set inside the Big Top! Our eponymous hero, Fiendish Freddy, may be a wazz in the ring, but he's no financial magician, and now the fascist bully-boys from the bank want the \$10,000 they lent him back, and they want it back by tonight. There's only one thing poor Freddy can do: make the money by taking part in six circus events, to earn dollars rather than points when he is judged at the end of the event.

Event Number One is High diving. Climb to the first board, the lowest, jump off and go into a tuck until a prompt tells you what stunt



■ Knife throwing: pop the balloons before the timer runs out and try not to stick too many in the spinning girl...

to perform (sitting in the Lotus position, standing like King Tut and so on) on the way down. Then you must press fire and move the joystick to the correct position to perform the stunt, before returning to the tuck and wiggling the joystick in an attempt to stay on target to enter the pool. For each height of board you perform successfully, not only do you climb to the next board, but the pool also becomes smaller: right down to cup size.

Event Two: unicycle juggling. Ride left-right and catch and juggle the objects thrown by your seal assistant. Occasionally a rival clown will lob bombs and rockets at you which have to be caught and lobbed off-screen before they

FIENDISH FREDDY'S BIG TOP OF FUN

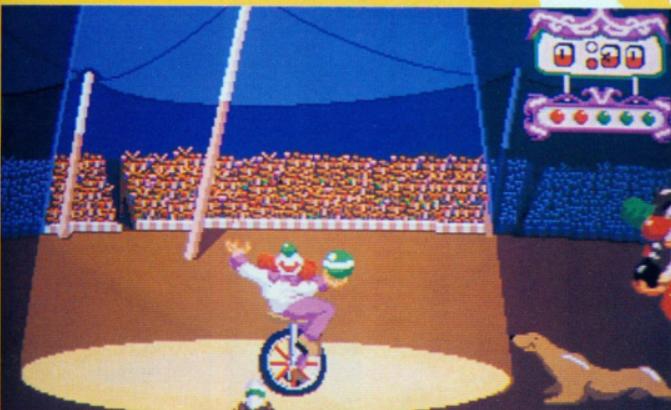
MINDSCAPE £29.99 ■ Joystick

explode. This clown character is a nasty piece of work because he does his best to disrupt you during every event, so beware!

Event Three: trapeze. Swing from trapeze to trapeze by timing your release. There are paper hoops and flaming hoops to jump

through as well, so timing is all-important.

Event Four: Knife throwing. Fling daggers at balloons pinned to a revolving wheel; which just happens to have a girl tied to it! Pop the balloons and miss the girl and you get a fresh set of knives,



■ Unicycle juggling: catch the bombs and rockets before they land and explode.



■ This fine figure of a lunatic prepares to high dive into a sponge.



■ Thankfully it's wet, so he'll have a soft landing.

a new set of balloons and a shorter time limit.

Event Five: High wire. Balance your way from one end of the rope to the other by some athletic and skillful joystick wiggling. Sixth and finally: Human Cannonball. Position the landing target (the distance depends on how much gunpowder you allow your assistant to load before that awful clown comes and messes things up), enter the cannon then launch yourself when the cannon is at the right (hopefully) angle. And there you have it. Fail to earn the approval of the judges and the ten grand, and it's curtains for the circus.

GRAPHICS AND SOUND

Sound first: the jolly circus-like tunes will really start to get on your nerves after a while, which is a shame because the effects that are there are good: there's just too few of them. The graphics are great, the animation is lovely, the characters have a humorous cartoon quality and the overall look of the game is impressive.

JUDGEMENT

What's not so impressive is the gameplay. Each event is simple to play and the tedious amount of disk swapping (three disks total make up the game) gets on your nerves sooner rather than later. FF's BTOT ends up being another cobbled together collection of slightly better than average games which look loads better than they actually play, and once you've seen all the various screens you'll tire of it quickly. *Andy Smith*

GRAPHICS	8
SOUND	6
INTELLECT	3
ADDICTION	6
OVERALL 59%	

VIRGIN MASTERTRONIC £19.99 ■ Joystick or Keyboard

GEMINI WING



■ Mutant millipedes and other creepy crawlies make dive-bomb attempts as you make your steady way through Stage One.

The SoonDay Spirit newspaper has a good deal to answer for: not only are its endless 'Mutant Martians Turned My Son Roger Into A Hatstand' stories of a, shall we say, dubious nature, but now it's managed to upset the rest of the Universe with a particularly insidious example of the dubious art of hack journalism.

So, what do you when you're an alien with a grudge? You invade Earth and attempt to destroy it, naturally. Which is just what the rest of the sentient universe has decided to do. But guess what?

They hadn't figured on you being a pilot in the crack Gemini Wing space fighter squad.

Thus the scenario is set for this vertically-scrolling shoot-em-up involving one or two players. Duck, dive, bob and weave your way through stage after stage of invading aliens, dealing death to anything that happens to get in the way of your forward-firing lasers. Quite apart from the flying nasties, there are ground-based worm-like aliens that join in the hail of fire, so get in quick to destroy them before they obliterate you.

To make life a little easier you can pick up the occasional extra piece of fire-power called a Gunball, which some aliens drop when they're destroyed. Fly over these to collect them, after which they trail behind your craft until used. In a particularly tight spot, hold down the fire button and a Gunball is activated, functioning rather like a smart bomb. The effects, however, vary: for example, you have the Spiralling Circle of Death which explodes and takes out any aliens it hits as the discs fly away from your ship; then there's the awesome Windscreen Wiper of Death (a lovely, lovely name) which shoots out from both sides of your ship and destroys any aliens that get in its way as it cuts a swathe up the screen.

At the end of each stage there is an end-of-level guardian to dispose of before starting out on the next, more difficult, level. Just like its coin-op parent, Gemini Wing offers the player the chance to continue the game when all lives are used up, although only three restarts are allowed.

GRAPHICS AND SOUND

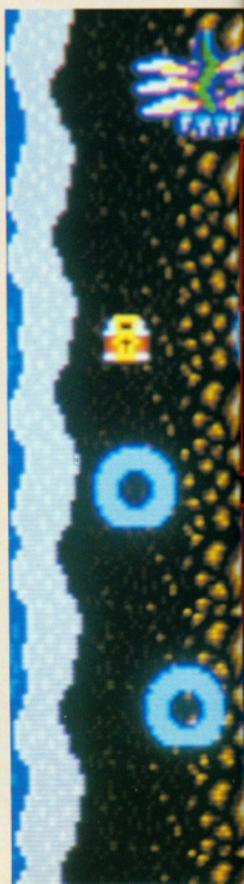
Colourful sprites that are smoothly animated and well-drawn back-

grounds conspire to make the game look good. Sound is good too, with arcade jingles throughout and occasional spot effects.

JUDGEMENT

Yet another vertically-scrolling shoot-em-up. All the bits are there – extra weapons, guardians and so on – but there's little that's at all new (the trailing Gunballs are nice but not revolutionary). It's about as difficult as you'd expect from a conversion (with the classic unreasonably difficult Stage Three) but the simultaneous two-player option increases the fun for a while. *Andy "Flash Gordon" Smith*

GRAPHICS	8
SOUND	8
INTELLECT	1
ADDICTION	7
OVERALL 68%	





SHADOW OF THE

BEAST



**SUPERB
FREE 'T' SHIRT**

**ENCLOSED IN
EVERY GAME**

**ORIGINAL
UNIQUE ROGER DEAN
DESIGN**

THE BEAST IS AMONG US

This is it - A whole new dimension in computer games

50 frames per second arcade quality scroll

350 screens - 132 unique monsters

13 levels of parallax scrolling

900K of emotive music

2Mb of graphics compressed in two disks.

A TRULY MASSIVE GAME FOR THE AMIGA 500, 1000 & 2000

PSYGNOSIS - GAMES PEOPLE PLAY

Screen Shots from the Amiga version

AMIGA £34.95/ATARI ST COMING SOON



MIRRORSOFT £24.99 ■ Joystick

XENON 2



■ Catch the bubble to gain some cash and that 'Z' for a smart bomb.

There's only one thing wrong with gaining a reputation (dubious or otherwise), and that's having to live up to it.

The Bitmap Brothers certainly have a reputation to live up to: a very good one, after the high standards they set with their earlier releases *Xenon* and *Speedball*. These darlings of the press (have



■ The first end-of-level guardian.

you ever noticed how it's almost impossible to flick through a computer mag without seeing them in pop star pose at some bash or other?) have decided that gamers want a good ol' blast, and reckon they can deliver the goods with *Xenon 2: Megablast*.

'Megablast' is actually the name of your ship in this five



■ In the extra weapons shop.

stage vertically-scrolling shoot-em-up where it's just you against the Xenites. You remember the Xenites, don't you? Well they remember you, from the original Xenon game, and they haven't forgiven you either: which is why they've planted five time bombs throughout history that need destroying. And yup, you're just the person for the job.

Your journey through the game follows the path of evolution with the aliens for each stage reflecting the period: from simple creatures dating back to prehistoric times up to and including metallic nasties from future space. As you would expect, almost everything is aggressive so it's best to blast everything that moves and anything that doesn't, too. Initially you're armed with a front-firing gun, but extra weapons can be collected by shooting and collecting power-up symbols that occasionally appear on screen. By far the best method though is to collect the small bubbles that appear on screen after certain aliens or waves of aliens have been destroyed. Why? Because these bubbles are actually money that can be spent in the weapons shops that lie halfway through and at the end of each level.

There's an impressive array of weapons available, from things like side-shot and rear-firing cannon to missile launchers and lasers. And, as you might expect, the more destructive the weapon, the more it costs: so keep going after those cash bubbles!

And those extra weapons are going to come in very handy once you come across the end-of-level bosses!



■ Side shots are needed here!



■ Destroy this chap and the pod on top spews out masses of aliens.



■ Buy Nashwan power and you get 10 seconds of total destructive power. Shame it's only 10 seconds!

later in the game, mid-too) of-level guardians. But beware: you may find you've just splashed out on a porky rear cannon to find the next level crawling with aliens that cling to the sides of the scenery, so life can seem a little unfair at times.

There are a couple of things going for you, though. Every time you lose a life you restart with all the extra weapons you'd collected and there are a couple of 'continue game' options too. And to make a nice change, the scenery doesn't kill you no matter how often you bash into it.

GRAPHICS AND SOUND

Well, with the intro and in-game music written by Bomb The Bass, it should be, and is, good. The effects are fine too, though not as impressive. As you must have

GRAPHICS	9
SOUND	9
INTELLECT	3
ADDICTION	9
OVERALL 93%	



■ Approaching a meeting with the second end-of-level guardian.

seen from the demo of the game on this month's Coverdisk, the graphics are terrific. Not only are they well-drawn and colourful, but everything in the game moves quickly and surprisingly smoothly. A winner in the graphics and sound departments.

JUDGEMENT

The age-old problem: it's just another shoot-em-up, some would say, and there are plenty of them around already. So what makes

this stand out? The gameplay. It's fast, furious, addictive, tough, playable and it sounds and looks fantastic. Xenon 2 has everything a shoot-em-up needs and more besides, making it arguably the best of its type to appear to date and a definite 'must purchase' for anyone who doesn't mind wasting the odd hour or two enjoying some mindless blasting. A word of advice though, make sure your joystick has very rapid auto fire: life can be hell otherwise. *Andy Smith*



■ Another guardian, this time with a very dangerous extending claw!

Virgin
Games

P R E S E N T S

©1988 SEGA ENTERPRISES LTD.

SHINOBI



Available on

AMIGA @ £19.99
ATARI ST @ £19.99
CBM 64 CASS @ £9.99
CBM 64 DISC @ £14.99
SPECTRUM 48/128 @ £9.99
SPECTRUM +3 @ £14.99
AMSTRAD CASS @ £9.99
AMSTRAD DISC @ £14.99

VIRGIN MASTERTRONIC LTD.

2-4 Vernon Yard - 119 Portobello Road - London W11 2DX

This game has been manufactured under license from Sega Enterprises Ltd., Japan, and
"SHINOBI", "SEGA", "for SEGA" (for "SEGA") are trademarks of Sega Enterprises Ltd.

Produced by The Sales Office Ltd.



PSS £24.99 ■ Mouse or Keyboard

WATERLOO



To wargaming fans, the name Dr Peter Turcan may, as yet, be unfamiliar. But ST and PC fans have experienced Peter's earlier work *Borodino*, a wargame based on the conflict between Napoleon and the Russian Prince Kutusov. Now Amiga owners have the chance to re-fight one of Napoleon's most famous battles in this one or two player simulation.

Most wargames give the player an unrealistic view of the battlefield: failing in the attempt to recreate history because they invariably allow the player to see things that the historic commanders were unable to. *Waterloo*, however, is the closest a wargame has come to sticking a player in the commander's boots.

You view the game through the eyes of either Napoleon or Wellington, and issue orders to your subordinates - who in turn issue orders to their subordinates - based on what you see from your position on the battlefield and messages received from runners. To familiarise yourself with the game system and the battlefield you can view the action through the eyes of other commanders on the field, or from major landmarks.

The orders you're able to issue vary in complexity from vague commands like: 'Lobau, give support to Reille' (leaving the computer to decide how Lobau can best give his support to Reille) to things like: 'Lobau, form a defence line from the east flank to Frichermont linking with D'Erlon'.

Once you've decided which orders to issue (eight per turn, each turn representing fifteen minutes of real time, the battle lasting from 11.30 am until 9.30 pm), the orders are sent by messenger to their destination. Obviously, the further away this is, the longer it's going to take for the orders to get through (if they do at all, because riders are just as prone to getting themselves killed as anyone else) so things can become very confusing: just as the battles were.



View: It looks like the sandpit, with a light infantry regiment of Alten's division in line formation. The range is about 1/2 mile south.

■ Looking south from Wellington's headquarters. Time to issue some orders.

GRAPHICS AND SOUND

Forget sound, it's not important. The 3D display however is great. It takes a short while for the screen to update, but that's survivable. A short animated sequence of the cannons firing, which is optional, is a nice touch, but for the majority of the time you're looking at blocks representing the units.

JUDGEMENT

If you're looking for a wargame that's fast, simple and easy to play then look elsewhere: but if you're looking for a wargame that provides real challenge, will keep you playing for hours on end and which takes time to play well, then this is for you. The game system is easy to get to grips with but it's not for your casual browser.

Andy Smith

GRAPHICS	7
SOUND	N/A
INTELLECT	8
ADDICTION	8
OVERALL 92%	



■ Of course, by the time the orders get there it may be far too late...



■ The stick-men graphics may not be brilliant, but they do the job.

HEWSON £24.99 ■ Joystick and Spacebar

ASTAROTH

In a series of catacombs, deep below ground, Astaroth, the Angel of Death, rules over a fetid underworld domain. Surrounded by the vile minions she has summoned up to protect her, she is free to satisfy her evil will.

No-one has dared to face this she-devil. Until now. A single, lone man, Ozymandias, has decided to enter Astaroth's forbidding lair to defeat the demons.

The catacombs are represented by a series of interconnecting flick-screens, which are entered via left and right, top and bottom. Ozymandias walks and can jump, but has no immediate defences save for ducking from flying bats and harpies which inhabit the carved tunnels. Only forward planning and quick reactions can save him from the variety of beasts which inhabit this world: contact with Astaroth's underlings serves only to rid Ozymandias of his mind powers, shown by a shrivelling brain icon. As each brain disappears completely, so a life is lost. Five lives later, Astaroth has won.

As Ozzy makes his way through the labyrinth, he can collect up to nine mind powers which are stored in bell jars in different locations within the catacombs. The powers confer upon Ozymandias different abilities, such as levitation (to float up to higher floors); pyrokinesis (creates fireballs); night vision (enables him to see in those rooms which are in darkness); and so on. Specific mind powers are needed to defeat Astaroth's three Guardians - the Sphinx, the three-headed Hydra and Marilith Demon - and only once all nine have been collected can Ozzy attempt to face the Angel of Death in combat.

GRAPHICS	7
SOUND	5
INTELLECT	5
ADDICTION	4
OVERALL 41%	

and has obviously been included in an effort to increase sales through sensationalism. The accompanying soundtrack is pleasant enough, but is too up-beat to serve as an atmospheric accompaniment to the task at hand.

JUDGEMENT

The Amiga isn't being pushed very hard, technically: since Astaroth lacks any scrolling, the sprites are pretty small and the animation minimal. However, while the CPU sits there twiddling its electronic digits, the game still manages to provide poor collision detection and poor, slug-like movement for the main character. Not impressive.

This lack of speed makes avoiding the many obstacles initially tricky and ultimately infuriating, while the simple search 'n' collect gameplay is only marginally spiced up by the addition of progressive mind powers. Astaroth is a jaded old game concept tarted up with graphics of a sensationalist nature to add some much-needed interest. Bit of a sheep in wolf's clothing, really.

Steve Jarrett



■ (Above) Contact with the green bell jar, above, provides Ozymandias with the power of levitation: the results of which are shown in the picture (Right).

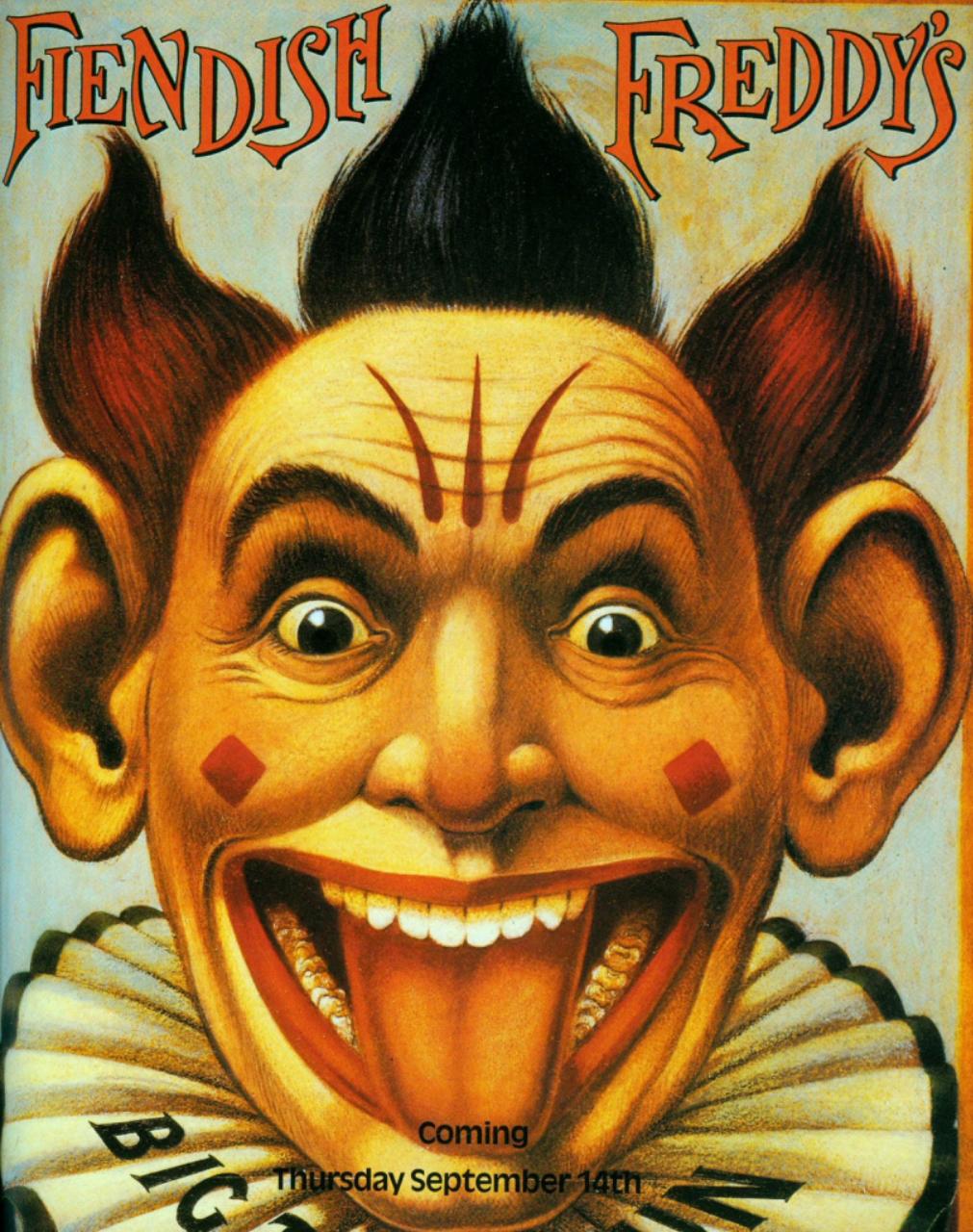
GRAPHICS AND SOUND

Peter Lyon's morose graphics are undoubtedly very good, even though they have been unashamedly ripped off from HR Giger's Necronomicon designs. Ignoring artistic plagiarism, however, it must be said that the phallic and vaginal symbolism is far from tastefully done - especially since it plays no part in the game



■ Now, what does that pillar on the left look like? I ask you! The symbolism is quite obvious...

FIENDISH FREDDY'S



Coming

Thursday September 14th

BIG TOP O' FUN

Available for Amiga, ST,
IBM and compatibles,
Commodore 64,
Amstrad and Spectrum.

Mindscape International Limited, PO Box 1019, Lewes, East Sussex BN8 4DW. Tel. (044 486) 545 / 547

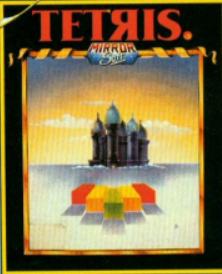


THE BEST OF THE BEST

TRIAD



V O L U M E • 2



ST Amiga Format - Gold Disk Award
"Menace will have you hooked for hours on end. The addictive 'just one more game' feeling hits you every time."

ST Action
"This game is non-stop action all the way - miss it at your peril."

Page 6
"Menace is a superb game which is impressively presented. Menace excels in terms of playability. It is a highly addictive game with enough variety for you to keep wanting to come back for more."

Sinclair User - 10
"The most original and playable game in an age."

Atari ST User - 9
"Tetris is one of those horribly addictive games that gets you saying 'Just one more game'."

Zzap - 94%
"One of the all-time computer classics . . . it's perfectly simple and simply perfect."

C + VG
"If you're after an addictive and action packed exploration game, buy Baal."

Atari ST User - Star Game
"What a brilliant game - surely Psygnosis' best to date! The graphics have to be seen to be believed and the scrolling is excellent."

ST Action
"A brilliant mixture of fine artwork, taxing strategy and all out arcade action, this game will really put you on the edge of your seat."



Have we got a hot one for you this month! **JASON HOLBORN** takes you through the contents of this month's amazing *Amiga Format* Coverdisk.

DISK EXTRA

XENON 2

PROGRAM: BY IMAGEWORKS
FILES: XENONII, XENONII.DOC



The aliens with the attitude problem are back... and this time they're bringing their little alien buddies along to wreak havoc throughout the universe. Yep, those Xenites were mighty annoyed when you kicked their butts in the first instalment of the Xenon saga, and this time around they're out for one thing... your head on a stake (or fork if a nice piece of steak can't be found).

Those devilish Xenites have been planning your downfall for over a thousand years after their humiliating defeat at the hands of your predecessors. Now the very fabric of time is in danger from their fiendish plans. Those das-

tardly chappies have planted five time bombs through history. Unless these time bombs are defused, the explosion will cause life, the universe and everything to

■ Blasting away with the laser 'cannon' you bought in the shop as you continue the level.



£800

We must be insane! But it's true: we want to give you money! All you have to do is write a super-hot program for the Amiga and, if we decide to use it on the

UP FOR GRABS! *Amiga Format* Coverdisk, you could be living it up in style! SEE PAGE 63 FOR DETAILS.

XENON 2

Try your hand at the game every 16-bit computer owner has been talking about. After the immensely popular *Xenon* and the highly acclaimed *Speedball*, the Bitmap Brothers come up tops with another game to redefine the leading edge in arcade action.

ACCESS!

Ok, we admit it. We've been neglecting you communications buffs lately and so to make amends, we have a powerful communications program for your perusal that features more bells and whistles than a fairground organ.

WORKBENCH HACKS

Enough of this seriousness... these disk pages are getting far too serious... and they're not even faintly suspect. *Amiga Format* presents another dose of the very best in silly software.

POPDIR

Question: when is an empty disk a full disk? Answer: when you try viewing a disk from Workbench that contains files that don't have icons. With PopDir, you can discover those hidden files that other Workbench utilities cannot reach.

AMIGA FORMAT DEMO



Thanks to those nice chaps at 17 Bit software, *Amiga Format* has its own demo, produced especially for us to share with you on our Coverdisk. Load it up and pump up the volume!

DPAIN TUTORIAL



You've read the article, you've played with the paint package, now try your hand at facial architecture with our selection of clip art files.

ALWAYS MAKE A COPY OF YOUR DISK!

DISK NOT WORKING?
Then see page 62-63, fast!

POPDIR

PROGRAM: PUBLIC DOMAIN
FILES: POPDIR, POPDIR.DOC

When the WIMP-based computer was first devised, it seemed to be the solution to every new computer user's problems: complete control of every aspect of a computer without ever having to get too technical. Unfortunately, that original dream never quite materialised and even today, with machines as powerful the Amiga, the new computer user is still often held back by a plethora of technicalities.

One of the most common complaints of first-time Amiga users is that, from Workbench, only files on a disk that have icons are visible. If a file doesn't have an associated 'info' file, then it is completely hidden from the Workbench user. To combat this, *PopDIR* was devised. *PopDIR* will allow you to display the complete contents of any given directory, therefore unveiling those hidden files before your very eyes.

As well as this very useful task, *PopDIR* also has a secondary, and potentially even more useful role: it's a virus killer. Many of you may have heard of the IRQ virus, a particularly nasty little beast that attaches itself to an executable file and therefore cannot be killed by the usual boot-block checkers. *PopDIR* has an extra option 'IRQ Check' that, when it displays the contents of a directory, will also check every file within that directory for the deadly IRQ virus.

Getting Going

You can load PopDIR by double-clicking on the PopDIR icon. When PopDIR has loaded, it will 'iconise' itself by placing a small icon near the top left-hand corner of the screen. To start PopDIR running, just click once on this icon and the program will spring to life. Full instructions on PopDIR's uses are available within the PopDIR drawer.

■ The *Amiga Format Demo*, kindly programmed especially for us by... well, you can see their names... includes a goodly-sized chunk of some extremely enjoyable music as well as the fine graphics.

AMIGA FORMAT DEMO

PROGRAM:
BY 17BIT SOFTWARE

After the phenomenal success of the swinging frog demo from Issue One's Coverdisk, we've been searching hard for a worthy follow up to that classic demo. This month's demo was written specifically for us by those talented chaps Allister Brimble and Rico Holmes, who will be instantly familiar to any of you who purchase PD disks from 17 Bit Software.

Allister and Rico have produced a vast amount of quality

music and graphics which can be found in abundance within 17 Bit's huge range of demos, and Allister's work has featured several times within our very own PD Update section.

Both Allister and Rico are looking for freelance work producing graphics and music for the Amiga. If you're a software house and you'd like to contact either Allister or Rico, check out the documentation on the disk for further details.

Getting Going

You can load our Amiga Format demo by clicking on the MUSIC icon on the Workbench. The program is crunched and so don't be alarmed when the screen display starts to shake. This is just the demo decrunching itself ready to run.

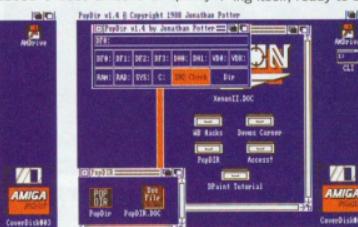
DPAINT CLIPART

PROGRAM: BY
ELECTRONIC ARTS
FILES: CLIPART.001,
CLIPART.002, CLIPART.EXAMPLE

Thanks to those awfully nice people at Electronic Arts, you can try your hands at the techniques described in our DPaint



■ The clipart bits and pieces



■ Having loaded the Coverdisk via Workbench, just click once on the *PopDIR* icon at top left to bring the program to life.

- Choose the directory to be viewed from either the presets or by typing the full pathname into the string gadget.

■ **PopDIR** is now up and running in full effect. Here, we are also checking for the presence of those elusive IRQ viruses.

STRYX



- ★ **Ultra smooth 8 way scrolling**
- ★ **Designed with small fully animated characters from Garvan Corbett, the artist who brought you the classic hit Barbarian**
- ★ **Multi-directional free format weapon usage**
- ★ **Large playfield for even more action.**

You're really up against it this time. Those revolting robots have finally upped and turned their horribly powerful weapons on their kind human masters. Someone's got to stop it before it all gets out of hand. I mean, you just can't have bloodthirsty Cyborg assassins roaming the streets of Dome City and expect the citizens to put up with it. Who on earth is going to sort out the mess? You guessed - you get the job.

Fortunately, you are just a little bit on the special side. You are Stryx, the product of Project Alpha Secure, the meanest fighting, smartest thinking machine ever invented. Half-man, half-robot, you are the business, the only one who can stop those wicked Cyborgs.

You'll have to work hard, though, blasting hordes of the revolting creatures (such a sad waste of scrap metal) and rescuing the keys to the Lifeforce.

So, Stryx, you'd better get your jet pack on for some high level robot stomping through the immensely complex underground world of the Dome cities. It's a tough assignment, and time is running out.

AMIGA/ATARI ST £19.95

Screen Shots from the Atari ST Version



PSYBLAZE



PSYGNOSIS
FREEPOST
LIVERPOOL L3 3AB
UNITED KINGDOM
Tel: 051-709 5755



PSYGNOSIS
GAMES PEOPLE PLAY



QUIT READ CAPT ASND XUP XBUIN XBUOUT CHAT SPELT LACE

■ The Access! serial port set-up page.

► Amiga Format. Thanks to EA, we've been allowed to give you a selection of the clip art from EA's excellent *Deluxe Paint 3* package, which you can use in just about any paint package that supports the IFF file format (which is just about every Amiga paint package under the sun! More details of this below.)

Getting Going
To be able to take advantage of these clip art files, you'll need to have access to an IFF compatible paint package. If you don't have a suitable package, but would still like to play with the clip art, check out the PD libraries, which include several high-quality paint packages that will more than fit the bill. For



USING THE DISK

Backing Up Your Disk

For a number of reasons, it is rather important to make a backup copy of the Coverdisk as soon as possible. Copying the disk may sound like a complicated task suitable for technobuffs only, but it is surprisingly simple provided you read the following instructions carefully:

1. First, turn on your machine and load Workbench. Once the Workbench screen appears and the disk-drive light goes out, remove your Workbench disk and insert our cover disk.

2. Next, click once on the Coverdisk icon and then press the right mouse-button and the Workbench menus will appear. Now, while keeping the right mouse-button depressed (you can cheer it up afterwards!), move the mouse pointer over to the 'Workbench' heading and a menu will drop down. Move the mouse

pointer over the 'duplicate' menu option and then press the left mouse-button.

3. After a few seconds' disk access, the Workbench DiskCopy tool will be loaded and run. Now just follow the on-screen prompts and your Amiga Format Coverdisk will be copied to a backup disk. When the machine asks for the destination, insert your blank disk into the drive. Further instructions can be found in the user's guide that comes with your Amiga.

Before using your Amiga Format disk, you should make a back-up of the master disk as soon as possible. This is very important!

further info on the use of the clip art, check out the DPaint tutorial on Page 25 onwards.

ACCESS!

PROGRAM: PUBLIC DOMAIN
FILES: ACCESS!, ACCESS!.DOC

Calling all you Comms kids. Thought we'd forgotten you, didn't you? Not us matey, we've got an extra special treat for all you comms enthusiasts in the form of Access!, probably the best PD comms package in existence.

Access! is a powerful communications package that includes everything you'd expect from a full-

price commercial comms package. The program features all the standard communications features such as fully configurable baud rates, multiple file transfer protocols, multiple phonebooks... and that list continues.

I must admit that the one thing that attracted me to Access! was not the wealth of features, but its presentation. Presentation is one area of software design that tends to be sadly neglected these days, and so it's always nice to find a package that is not only powerful, but also looks nice.

Even if you don't have a modem, Access! can still be a valuable addition to your collection

is included with every program. To run any of the programs on this month's Coverdisk, all you have to do is follow a very simple procedure. Unless specified differently within the Disk Pages, just double-click on the program's icon on the Workbench and the program will load and run. Full details on how to use the programs once they have run are included with the Disk Pages and also as a documentation (text) file accompanying the program.

To display a documentation file, just double-click on the appropriate .DOC file to be viewed and a window will open containing the file's contents. Pressing the space bar will advance a page at a time.

Is Your Disk Faulty?

We have done our best to check that the programs on the Amiga Format Coverdisk are simple to use, error-free and have no known viruses. However, we cannot normally answer telephone queries on using the software, and we do not accept liability

PUBLIC APOLOGY

M.D. Office Supplies would like to take this opportunity to apologise to all its competitors.

We shall with immediate effect supply direct to the public,

Computer discs, Storage boxes, etc. AT BELOW WHOLESALE PRICES

CHECK OUT OUR NEW LOW LOW PRICES

3.5" DISCS & BOXES

25 3.5" DS-DD 135 TPI with 40 Capacity Lockable Storage Box	£22.95
35 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box	£31.95
45 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box	£37.95
55 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box	£40.95
65 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box	£44.95
75 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box	£49.95

OUR 3.5" DISCS ARE **VERY CAREFULLY SELECTED** TO GIVE YOU 100% ERROR FREE PERFORMANCE. EACH DISC IS OFFERED WITH OUR 100% MONEY BACK GUARANTEE AND SUPPLIED WITH LABELS

STOP PRESS - STOP PRESS - STOP PRESS - STOP PRESS

For all you bulk buyers out there we have some unrepeatable
FIRST COME - FIRST SERVED OFFERS

3.5" DSDD 135 TPI 100% error free top quality discs

100 DS DD 135tpi.....	£59.99	350 DS DD 135tpi.....	£179.00
200 DS DD 135tpi.....	£114.99	500 DS DD 135tpi.....	£249.99
250 DS DD 135tpi.....	£134.99	1000 DS DD 135tpi.....	£489.99

SPECIAL PRICES ON PRINTERS

Star LC10 Mono	£179.95
Star LC10 Colour	£230.00
Star LC24-10 24 pin	£329.95
Panasonic 1081	£169.00
Panasonic 1180	£199.00
Epson LX800	£189.00
Epson LQ500	£309.00

All Printers supplied with lead

BUYING A LASER?

Then give us a ring for the best prices in town

SPECIAL NEW PRODUCT LINE

We have now got a professional quality combined keyboard and mouse mat with special anti-static lead.

A beautiful accompaniment to your computer system and offered to you for only

£24.99

ACCESSORIES

Deluxe Mouse Mat	£2.49
3.5" Head Cleaner	£1.99
Atari Printer Lead	£4.99

You want it - Well we've got it

For your Mouse to perform correctly and precisely it needs to be regularly cleaned. We have got the ultimate mouse cleaner specifically designed to do a proper professional job for only

£5.95

Trade enquiries welcome

Tractor Feed Labels

3.5" Pack of 100	£7.99
3.5" 2 x Pack of 100	£12.99
3.5" 3 x Pack of 100	£18.99

**CHECK OUT OUR AMAZING
NEW PRICES**

**The Best Costs Less at
M.D. OFFICE**

M.D. OFFICE SUPPLIES

**18 CRESCENT WAY, FARNBOROUGH, KENT BR6 9LS
TELESALES HOTLINES: 0689 61400**



All prices include VAT and Delivery UK only. E/OE
Education & Trade Enquiries Welcome

PUTTING COLOUR ON THE PAGE

Continuing his travels
in the world of Amiga
DTP, **GRAEME KIDD**

looks at two packages

that offer full colour separation facilities. Real Power User stuff, but
first a quick lesson on colour printing methods...

PRINTING RAINBOWS

Getting full colour images to print on paper is partly an art, mostly a science, and couldn't be done without just a little bit of magic. And until recently, it was also a very expensive process – using traditional methods, it can cost several hundred pounds to prepare a single colour page for the printing press.

The basic theory behind the techniques used to print colour magazines such as Amiga Format is straightforward enough, and applies to most full colour print jobs. By mixing three coloured printing inks in different combinations it is theoretically possible to make any colour you want and put it on a page. Cyan, Magenta and Yellow are the inks you need, and in the trade they are referred to as 'Process' colours. (Similarly, using Red, Green and Blue light it is possible to create and display any colour in the world – that's how a colour monitor or TV screen works.)

There's one little refinement to the basic concept of mixing Process inks. Even though the theory about combining Cyan, Magenta and Yellow to produce any colour you like holds true, the black achieved by mixing the three colours isn't very convincing when it is printed. Quite early on, printers discovered that a much better finished result could be achieved if they deviated just a little bit from the pure theory of colour: most full colour printing involves using a fourth Process ink – Black.

Printers make room for some Black ink by removing just a little bit of Cyan, doing away with just a touch of Magenta and getting rid of the tiniest amount of Yellow. They also use their Black ink to print black areas of an image and to generally crisp up the appearance of the printed picture. While there are complicated algorithms in use for generating the black component of an image, doing it right involves the use of little magic...

When it comes to printing a colour page, four different printing plates are needed, and the paper has to come into contact with each of them in turn so that the Cyan, Magenta, Yellow and Black inks can be applied. It's a tricky job getting the four Process colour images to align perfectly with one another,

Colour separation and printing can transform pages beyond recognition

- here's how...

but that's the printer's job. As a publisher, it's your job to provide the printer with four pieces of film for each page so the printing plates for Cyan, Magenta, Yellow and Black can be made.

Getting the mix right

Now would be a reasonable time to go and fetch a magnifying glass –

it'll make things much clearer in a moment. (Don't worry, we won't be needing the washing up liquid bottle and sticky-back plastic today.)

Think about all the colours there are in a photograph, and about how the zillions of shades in a complicated scene blend smoothly into one another. Obviously, a printer can't mix every individual colour there is in a picture and print a solid representation of the image on paper. It'd take years, or even decades to print a single issue of Amiga Format that way, even if it were possible.

It's time for the printer to perpetrate a con job.

If you look closely at any colour picture printed in this magazine, you'll see that it is made up of lots of little dots. With the aid of your magnifying glass, you'll see that the

four Process colours are not in fact mixed together at all on the page, but are printed as dots of differing sizes arranged in a regular rosette pattern. This is where the con lies. Your eye views this arrangement of coloured dots, and at normal magnification is fooled into mixing the colours for the printer. You do all the hard work needed to achieve those subtle shades!

Take a close look at one of the subtle colour tints our artists have put on a page, or examine some text that has been printed in one of our Art Editor's favourite colours, and you'll see how two, three or four Process colours can be combined. Magazine Art Editors can create any colour they like for text and tints by specifying percentage mixes of the four Process colours – don't forget, 0 is a percentage too.

Creating the illusion

The expensive element of traditional full colour printing is colour reproduction, the bit that can cost several hundred pounds per page.

In the days before DTP, you had no option but to prepare black artwork with an overlay on which you specified the colour mixes for

■ **Yellow, magenta, cyan and black – the four colours which when overprinted, produce a full colour picture.**



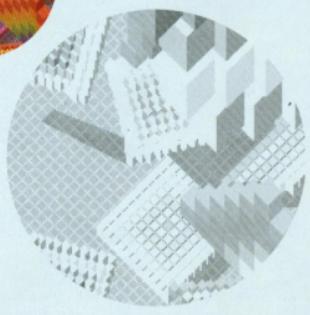
YELLOW



MAGENTA



CYAN



BLACK



TREBLE H COMPUTING



AMIGA SOFTWARE

African Raiders	£13.50
Balance of Power 1990	£16.50
Battlechess	£16.50
Bio Challenge	£16.50
Circus Attractions	£13.50
Falcon F16	£19.50
Falcon Mission Disk	£13.50
Fed. of Free Traders	£20.99
Forgotten Worlds	£13.50
Grand Monster Slam	£16.50
Gretsch Hockey	£16.50
Hawkeye	£13.50
Kick Off	£13.50
Kult	£16.50
Lords of the Rising Sun	£19.50
Mayday Squad	£13.50
Millennium 2.2	£16.50
Microprose Soccer	£16.50
Personal Nightmare	£20.99
Populous	£17.50
Powerdrome	£17.50
Robocop	£16.50
RVF Honda	£17.50
Skweak	£13.50
Sorceror Lord	£16.50
Spherical	£16.50
Targhan	£16.50
Tech	£16.50
T.V. Sports Football	£19.50
Weird Dreams	£16.50
3D Pool	£16.50

PRINTERS

STAR LC10 mono inc. Cable	£189.99
STAR LC10 colour inc. Cable	£229.99
CITIZEN 120/D inc. Cable	£139.99
EPSON LX800	£189.99
STAR LC24/10 inc. Cable	£324.99

All prices include VAT. Please send Cheques/P.O. Made payable to:

TREBLE H COMPUTING
DEPT AMF, CROMER HOUSE,
CAXTON WAY, STEVENAGE,
HERTS. SG1 2DF

★ CREDIT CARD HOTLINE: 0438 361738 ★

FAX: 0438 740 794

If you do send cash please send it Registered
All Goods are sent First Class/Registered.
Please add £3.00 for outside U.K.

Large orders ie. Amigas, ST, Monitors etc. are always sent by courier.
Please add £8.00 if you require next day courier delivery on other items.

All prices are correct at time of going to Press and are subject to change without prior notice.

PRINTERS	MONITORS
Commodore 1084S	£259.99
Philips 8833	£229.99

DRIVES	
Cumana 1 Meg 3.5" with on/off	£94.99
NEC 1 Meg 3.5"	£89.99
Vortex 40 Mb	£499.99
Amiga 500 Mb	£24.99
A590 20 Mb (with optional RAM Upgrade)	£369.99
Amdrive 50 Mb	£489.99

**TOP QUALITY
3 1/2" DS/DD
GUARANTEED
BULK DISKS**

NEW PRICES

10	£7.95
25	£17.50
50	£33.50
100	£65.00
200	£128.00

PRICES INCLUDE LABELS
Add £5.50 for 80 Cap. Disk Box when ordering Disks
or £4.50 when ordering 50 or more Disks

The word is PROTEXT...

Now available - Version 4.2 of Arnor's acclaimed word processor

PROTEXT is very fast! Unlike the majority of Amiga word processors PROTEXT scrolls very quickly and redraws the screen in next to no time. We have achieved this by developing our own screen handling routines - much faster than the standard ones.

PROTEXT uses the Amiga 'WIMP' interface fully and supports pull down menus, use of the mouse for cursor movement and block copying and window resizing. PROTEXT makes full use of Amiga Preferences settings and is fully compatible with the Amiga's multi-tasking operating system.

Protext is the result of 4 years of development. Unlike the majority of competitive programs Protext is 100% British and is being developed further all the time in response to the needs of British users. Registered users are always informed when upgrades are available.

"Protext really is the best text processor on the Amiga"
ST/AMIGA FORMAT 2/89

"Protext - the real joy comes only from using it. I can say without any fear of contradiction it is the best word processor available at the price, in my view, at any price in fact."
AUI 3/89

A brief summary of some of Protext's features ...

Background printing edit/create further files while printer is busy
Box manipulation move, copy, or delete any box as well as blocks
Configuration set over 50 options to your own preferences using our menu driven configuration program
Dictionaries add/delete words to/from supplied 70000 word English dictionary. Create your own dictionaries.
Disk utilities copy files, erase, rename, type, create directory, change directory, remove directory, catalogue files
Exec files store sequences of commands in files for easy use
File conversion flexible file conversion utility for other WP files
Find & replace very powerful and fast with many options.
Foreign languages 10 built in keyboard languages. Easy to use accented letters: à á ç ö ù ê ë ã õ õ etc.
Formatting auto-reformat; reformat para, block or whole text.
Headers & footers up to 9 lines of text, different even/odd headers and footers, auto page numbering, footnotes.
Help string any sequence of letters together on a single key e.g. "yours sincerely". Load and save macro key files. Special recording mode as you type.
Keyboard macros ideal for drawing lines (incl. corners) around text
Line drawing variable in half lines, including 0, ½, 1, ½, 2, 2½, 3 works with any parallel or serial printer. Wide range of printer drivers supplied, incl. lasers and 24-pin printers; or create your own drivers or edit ours.
Printer support bold, condensed, double strike, elite, italics, enlarged, pica, NLQ, subscript, superscript, microspacing, proportional spacing, any other printer fonts

Program mode suppresses formatting; auto-indent; set tab stops
Proportional text will print proportionally spaced, right justified text
Quick dictionary dictionary held in memory is very fast
Ruler lines any number of ruler lines to define document layout, left/right margins and normal/decimal tab stops
Spelling checker check whole text from disc or memory, or as you type. Suggests alternative spellings. Works with foreign languages
Symbols full character set available on screen. Character symbols may be redefined
Time and date time shown on screen. Insert time or date into document
Tutorial files help you to start using Protext
Two file editing two documents in memory, copy text between them
Typewriter mode direct printing for envelopes etc.
Underline retrieve text deleted in error
Word count quick count at any time, whole text or just a block
Word puzzles anagram and crossword solving features
Wysiwyg on-screen bold, underline, italics
Mail merge
The most comprehensive mail merge program available. Use it for labels personalised "standard letters", club membership lists, and much more:
* read data from files from any database or spreadsheet program
* ask for variables from keyboard
* include file for printing
* conditional printing and repeat-until loop constructs
* numeric calculations and string expressions including substrings
* commands to write information to a separate file
* operators +,-,*,/,<,>,<=,>=,=,<,>,NOTIN

Protext is a professional word processor

If you want a fast efficient program for processing words, get PROTEXT

Latest News and Announcement

Version 4.2 is now available. Enhancements include:-
* Revised and improved 300 page manual and index
* Current date and time are available as single key strokes
* Improved memory allocation and smaller program makes better use of your memory.
* Scroll Lock function pauses after displaying a screenful of text
Upgrade price from v4.1x :- £15.

COMING THIS AUTUMN

"PROFILE" - the Arnor Database for PC/ST/Amiga.
(People have been waiting years for this)

Prices

	IBM PC	Atari ST	Amiga
Protext v4.2	£99.95	£99.95	£99.95
Protext Filer	£24.95	£24.95	£24.95
Protext Office	£34.95	£34.95	£34.95
German Dictionary	£19.95	£19.95	£19.95

Demonstration discs available - please phone



Releasing your micro's potential...

ARNOR

Arnor Ltd (AF), 611 Lincoln Road, Peterborough, PE1 3HA. Tel: 0793 68909 (24 hour)

All prices include VAT, postage and packing. Access/Visa/cheque/postal order.

Fax: 0793 67299 Prestel: 016848009

► tint boxes and coloured text. You'd leave white spaces on the artwork where you wanted colour pictures to appear on the printed page, then send the artwork and overlay off to a repro house with the pictures. The repro house would duly return a set of four films from which the plates to print the page were made. They'd also send you a bill.

This traditional method is still the only way to achieve perfect results with pictures unless you want to spend hundreds of thou-

sands of pounds on repro equipment. In order to capture the image in a photograph, separate it into the four Process colours and output it to film ready to be incorporated into the films for your page, a repro house will use a scanner. They will have paid a quarter of a million pounds or more for their scanner, which explains two things: first, why repro houses have to charge you serious money, and secondly why an Amiga, Macintosh or PC based DTP sys-

tem can't match the perfect results of the repro man.

With colour DTP it's possible to save money by doing some of the repro house's work – producing sets of film that have the tints and colour text, then leaving the colour separation of pictures to the man with the #1/4 scanner. If acceptable rather than perfect results are your goal, or if DTP with colour separations provided via a video camera or desktop scanner means you can afford to use colour, then

full colour DTP is for you.

Whatever your motivation, the Amiga offers the cheapest route into full-colour DTP work, and even though an Amiga can match the power of vastly more expensive PC and Macintosh systems, it has largely been ignored by UK printers and publishers. Next month, we'll be taking a look at people out there in the real world using Amigas for commercial DTP work, meanwhile check out Professional Page and Page Stream...

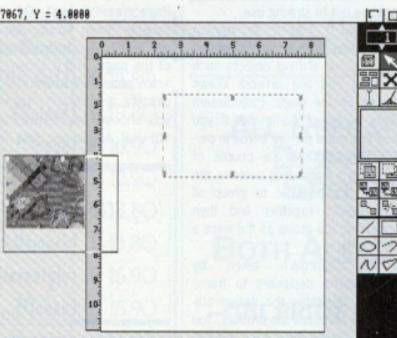
PROFESSIONAL PAGE

Gold Disk's slogan, which appears on the cover of Professional Page manuals, is 'Advancing the art of desktop publishing.' It is certainly justified so far as the Amiga is concerned: Gold Disk has been at the leading edge of Amiga DTP for some while now, and has advanced Professional Page itself through version 1.1 to the current v 1.2. The software has a pedigree: it has been in use for a couple of years, and the refinements in the latest version take account of requests and suggestions from users.

In many respects, Professional Page mirrors the method of working adopted by PageMaker, the classic DTP program that got the ball rolling on the PC and Macintosh. The basic concept models the traditional working methods of the paste-up artist. Documents are assembled as if they were physically placed on a designer's table, so the frames that are used to hold text or images can be picked up, moved off the page and 'parked' on the tabletop until they are needed.

Everything you might need to control layout and typography is offered via the pull-down menus

X = -3.7867, Y = 4.8888



■ Emulating the traditional approach taken by pasteup artists – here a picture is being dragged from the drawing board onto the page.

and toolbox icons, with no omissions. While hyphenation is controllable via dictionaries in English, French and Spanish, with Professional Page you are expected to check your spelling at the subediting stage rather than in the document.

The work area can be viewed in five magnifications, including actual size and 200%, and a cunning page preview gadget in the

toolbox shows a schematic of the entire page when it is too large to fit on the Amiga screen. Move a cursor over this tiny representation and you can jump to any area of the page without having to scroll around hunting blindly. A neat touch, which is complemented by a hand-move tool that allows the work area to be shifted around on screen. By default, the display is in interlace

mode (recommendations are made in the manual as to less flickery monitors), but it can be toggled to the more stable Amiga resolution...

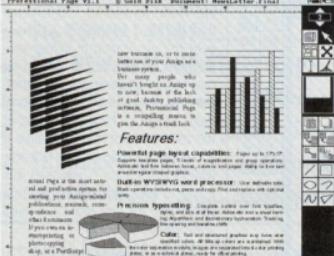
Frames, or boxes as the manual prefers to call them, can be linked together in chains so that a story can flow through several locations on a page or in a document. To make life easier when your nose is firmly against the layout board, two tools allow you to move automatically from the current location to either the previous text box in the chain or the next one. Following the flow of a story is therefore a doddle.

A set of six basic drawing tools are kept handy by the side of your paste-up desk, and a basic selection of line and fill types are offered, which can easily be set to virtually any colour. For the benefit of those with more sophisticated illustrative needs, version 1.2 now supports Gold Disk's Professional Draw package, and also handles high resolution bitmap graphics, so there's plenty of scope for getting sophisticated images onto your pages.

In essence, Professional Page is a powerful and quietly competent DTP package with a friendly interface. It is typographically excellent, and justifies the 'Professional' tag. What makes Professional Page a stunning Amiga product, but one that stands up very well to top of the range PC and Macintosh packages – is the degree of control it offers over the creation of colour separations.

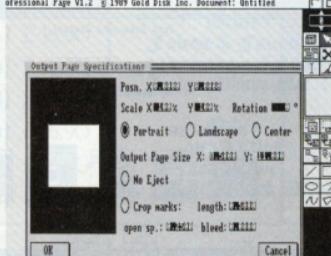
Originally, Professional Page only supported PostScript devices: it was intended to be a serious publishing tool from the beginning. The program learnt to deal with dot matrix printers with V1.1, but has always existed to ♦

Professional Page V1.1 © Gold Disk Document: Newsletter Final



■ The interlace display mode allows your work to appear on screen in high resolution. Monitor flicker may make this mode uncomfortable to work in.

Professional Page V1.2 © 1989 Gold Disk Inc. Document: Untitled



■ Part of the PostScript control process offered by Professional Page – screen angles and resolutions for the four Process colours can also be controlled when full colour work is being output

cope with the sophisticated output needed to produce professional colour work:

The Print to PostScript submenu offers all the options you need to consider when preparing output for a laserprinter, remote typesetting bureau or for subsequent import by another PostScript-compatible program. When preparing full colour separations you can specify the resolu-

tion of the screen used to create the dots, and can also control the angle at which the screens are output to film. Mono, three colour and four colour separations can be made and you even have control over undercolour removal and grey component replacement (which has to do with the 'magic' process whereby real Black is introduced as a fourth colour into an image which could theoretically

be printed using only Cyan, Magenta and Yellow. Colour PostScript is also supported.

Gold Disk have designed and written Professional Page to be an integral part of integrated Amiga-based publishing operations. As such, it fits into a range of publishing products produced by Gold Disk themselves and other Amiga suppliers. PageStream, when it appears, is

unlikely to knock Professional Page off its perch. Put simply, Professional Page is currently THE package if you want to use an Amiga to produce high-resolution pages and colour separations. ■

PAGESTREAM

Silica Systems, the people behind the UK version of PageStream, believe it will be the ultimate Amiga (and ST) DTP system. They may or may not be right, even though it will take a remarkable product to push Professional Page and its track record off the top slot it currently enjoys.

Amiga PageStream is in the last throes of programming, and the original American manual is currently being rewritten by native English speakers. This all means that your humble reviewer has not yet received a finished copy of PageStream and indeed, has not had the pleasure of reading an accompanying manual. The advanced preview copy supplied to us by Silica is certainly impressive, and if everything works as it should do in the released version, then Silica certainly have a challenger...

Romping around inside the preview software in the absence of documentation revealed the user-friendly nature of PageStream: anyone with a reasonable experience of DTP software should be able to get up and running without reference to the lovingly Anglicised manual. As might be expected, the system is designed to work on the basis of an old DTP favourite, frames, which accept text or graphics once they have been drawn on the page.

Roundabout

One of the more cunning aspects of PageStream lies in its frame handling facilities. Sure, you can shuffle a frame full of text around a page or even move it from page to page, but you can also rotate it. Cunning? Certainly, and what's more, you can rotate a frame in three planes: rotating it and about its centre on the page, or, via the 'slant' and 'twist' options, on each of the two planes at right angles to the page. With a bit of creative effort, the distortions to the contents of a frame

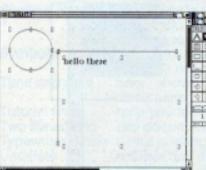
produced by the rotation function could be put to striking use.

When it comes to moving frames and their contents around the page, or shifting objects such as rules and line artwork drawn directly on the page, PageStream offers a 'group' command. If you have just got a picture frame in perfect alignment with a couple of rules and a frame that contains the caption, it's possible to group all four objects together and then manipulate the group as if it were a single object.

The approach taken by PageStream's designers to frame handling illustrates the design attitude that underlies the product. You get the feeling that each feature that you would expect to find in a worthwhile DTP package was examined in detail and then embellished or enhanced before it was incorporated into the PageStream concept.

The page view facilities, for instance, offer all you could possibly want. From the pull-down View menu, you can choose to view a document at actual size, 50% reduction, 200% magnification, or with either the full width of the document or the full page on screen.

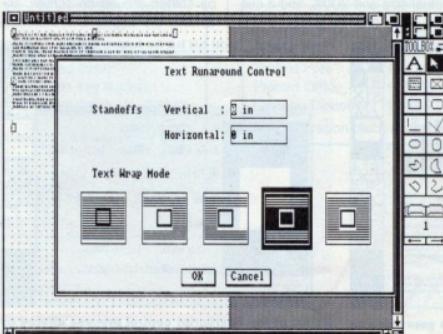
Fair enough, you might think, but PageStream doesn't stop there. A variable zoom facility allows you to get really close to a selected area of the page, and a show/set user scale option allows you to work at virtually any default magnification you choose. Impressive, although not vital. And in our Beta Test pre-



■ Grouping objects - the circle graphic, rule and text box containing the words 'Hello there' can now be moved as a team.

view copy, too much fiddling with the view menu tended to make the system hang... but this is a Preview.

The dictionaries for hyphenation and checking spelling can be edited, and a reasonable level of control over the hyphenation procedure is offered. Neat little touches abound. While you can achieve text-



■ Fun with text runaround - for straightforward jobs, PageStream offers a choice of automatic runaround methods.

wrap around seriously complicated objects by fiddling around with a polygon tool, five automatic approaches to wrapping text around a regular shaped object are offered on a Runaround submenu. Objects can be moved and automatically aligned with one another on the page via a submenu. And the range of text styles offered is impressive: mirror, upside down, single underline and double underline are amongst the options. It'll be interesting to really get to grips with all these facilities when the final version is complete...

Design Benefits

Obviously, PageStream's designers have had the benefit of their own and other people's hindsight, and they have specified a product which looks and feels friendly. When the programming and manual re-writing effort is complete, PageStream will indeed be a powerful and useful package, providing everything currently offered in the Beta version can be made to work in the final release.

Silica promise that import/export modules/drivers will be continually written to allow new output devices to be driven by the software and to provide inward compatibility with Amiga users' favourite text and image generating software. A more detailed PostScript/colour separation output module would be the first on my request list - in the absence of the manual, it would appear from the Beta version of PageStream that the level of control you have over the generation of colour separations is minimal. If producing four-colour separations is important to you, then Professional Page looks to have the edge at the moment (not least because it is immediately available). Clearly, when PageStream is released it is going to give Professional Page a good run for its money - we'll keep you posted... ■

PAGESTREAM

(Beta version)

£171.35 inc VAT ■ 1 Meg
recommended ■ Silica Systems
01 309 1111

XENON TECHNOLOGY

71, Wadham Road, North End, Portsmouth, Hampshire, PO2 9ED

0705 670878

** AMIGA **



1. FALCON II-MISSION DISK (Mirrorsoft)	£ 14.90
2. ROBOCOP (Ocean)	£ 16.90
3. XENON II-MEGABLAST. (Image Works)	£ 19.70
4. RED HEAT (Ocean)	£ 16.90
5. BATMAN (Ocean)	£ 16.90
6. GEMINI WING (Virgin Games)	£ 13.80
7. INDY & LAST CRUSADE.....(US Gold)	£ 13.80
8. SHOOT 'EM UP CONST. KIT ... (Palace)	£ 19.80
9. BEACH VOLLEY.....(Ocean)	£ 16.90
10. KICK OFF (Anco)	£ 12.90
11. BALANCE OF POWER 1990... (M/soft)	£ 18.80
12. XYBOTS..... (Domark)	£ 13.80
13. HONDA RVF750 (Microstyle)	£ 16.90
14. DRAGON NINJA.....(Ocean)	£ 16.90
15. SLEEPING GODS LIE.....(Empire)	£ 16.90
16. POPULOUS..... (Electronic Arts)	£ 16.90
17. NAVY MOVES (Dynamic)	£ 16.90
18. RICK DANGEROUS (Firebird)	£ 16.90
19. PHOBIA (Image Works)	£ 16.90
20. KNIGHT FORCE.....(Titus)	£ 16.90
21. SILKWORM (Virgin)	£ 13.80
22. KULT..... (Infogrames)	£ 16.90
23. SKWEEK (Loricels)	£ 13.80
24. THE DUEL, TEST DRIVE 2... (Accolade)	£ 16.90
25. F16 COMBAT PILOT (D.I.)	£ 16.90
26. THE NEW ZEALAND STORY (Ocean)	£ 16.90
27. FALCON (Mirrorsoft)	£ 19.90
28. WICKED (Electric Dreams)	£ 16.90
29. THUNDERBIRDS (Grandslam)	£ 16.90
30. BLOOD MONEY.....(Psygnosis)	£ 15.90

→ Commodore A501 512k Ram/Clock £ 134.80

→ Commodore A590 20MB Hard Disk..... £ 357.80

→ 10 DS/DD (800k) Blank Disks..... £ 7.99

CREDIT FACILITIES

Terms: 100% down and nothing more to pay!

**ALL RELEASED SOFTWARE
DISPATCHED AT THE
SPEED OF SOUND!**

BOTH ACCESS & VISA TAKEN

-FULL PRICE LISTS SENT ON REQUEST-

All orders are sent by First Class post within 24 hours (subject to availability).

New titles are sent day of release.

All prices shown are inclusive of VAT, postage and packaging (please add £1.35 per item overseas).

Please make cheques or postal orders payable to **"XENON TECHNOLOGY"**.

All items are fully guaranteed and if you experience any problems just let us know and it will be replaced immediately.

→ SPECIAL OFFERS →

Order
Falcon & Falcon 2
and receive a **FREE**
Amiga Mouse Mat.

Order
any 3 titles
and receive a **FREE**
Amiga Dust Cover.

Order
any 8 titles
and receive
10 **FREE** Blank Disks.

Order
any 8 titles
and receive a **FREE**
Konix Navigator J/S.

Compact Discs are also available from

Xenon Technology.

For a full list send an S.A.E.

→ Konix Navigator Joystick	£ 9.20
→ Ram Delta Joystick.....	£ 8.80
→ Zip Stick Joystick (Autofire)	£ 13.80

A selection of special deals only available from

FLOPPY DISK DRIVES

3.5" 880K POWER DRIVE PC880 ONLY £69.95
INCREDIBLE!

"New from Power House * Break throughs in design and construction coupled with a brand new 3.5" drive unit from Epson - world leaders in peripheral technology - comes the PC880 manufactured in the UK at a price that smashes those of our competitors. Each drive is fully guaranteed for 12 months and comes complete with instructions, through port and isolating switch.

FREE!

Disk Box with 10DS
Diskettes with every
Power Drive



5.25" IBM™ FORMAT COMPATIBLE DRIVE

(RRP £139)

This fully switchable 5.25" 40/80 track drive can be used to read and write PC formats as well as normal Amiga formats.



A500 HARD DISKS

TRIANGLE TURBO 46MB HARD DISK £499 (RRP £549)

Based on GVP technology this top of the range autobooting (1.3 KS) hard disk comes with lightning fast 28ms SCSI drive, with built in PSU and fan all in a matching cream case. Easy install software and manual are provided. These drives also include an option to install 2MB of inexpensive 1x1MB fast ram to increase the Amiga's memory.



Optional 2MB ram expansion £229

COMMODORE A590 20MB HARD DISK

£379 (RRP £399)

Matching autobooting (1.3KS) Amiga 20MB 60ms XT drive with the ability to expand the Amiga's memory internally using 4*256 dram in 512k (4), 1MB(8) and 2MB steps(16)

Optional 4*256 dram for above £18 each

Call us
now for a price
on an
A500 system!

AMIGA B2000

Power House are the UK Amiga 2000 specialists with most products available at highly competitive prices and on display in our showroom, including video digitisers, genlocks, accelerators and emulators. Phone us now for a complete B2000 system quotation. A500 Systems are also available.

GVP Autobooting Hard Card 46MB (28ms) £499 (rrp £549)
GVP Autobooting Hard Card 102MB (11ms) £949 (rrp £999)

Order
HOTLINE
0800 581 742
Free Call

PRINTERS
We are the

Specialists



WE ARE OFFICIAL

PLOTTER AGENTS

Star LC10	£155
Star LC10 Colour	£199
Star LC 24-10	£299
Star XB 24 - 10	£499
Star XB-24 - 15	£649

Star +Pack	
extra ribbon +	
1000 sheets of	
microper paper	
and Amiga cable	£16

Microper Paper	
1000 sheets	£12
	inc post

HP Paintjet	
Colour	£899
HP Desk Jet +	£699
(We stock HP consumables!)	

HP Laserjet 2	
Compatible	£1699
Qume LCS Crystal	
Laser (LCD)	£2899

(Postscript compatible ideal for
Pro Page)

All prices
inc. VAT & Delivery
Overnite Delivery
£7.50

A500 MEMORY & VIDEO

512k Expansion with clock £85 (rrp £99)
1.5MB Spirit board populated 512K £249
1.5MB Spirit board unpopulated £189
Minigen Genlock £99 (rp £115)
Processor Accelerator £139
Super Pic £429
JUST IN - G2 Video Centre £649

3.5"/5.25" MULTIDRIVE £239

The King of Amiga disk drives with combined 5.25" and 3.5" units. Special circuitry allows IBM™ format disks to be recognised and the 5.25" drive is 40/80 track switchable. Multiple switching means that this drive can be set up in any configuration of drive numbers.

AX
Disk Magazine
Bi-monthly
£12.95

3 disks full of Amiga goodies in this highly professional disk based magazine. Fantastic demos, clipart and PD goodies.



To subscribe now, phone
0234 273000 for details

- 2MB Ram Card for above drives add £299 to hard card cost.
- Sky quest 44MB Removable Drive & Controller & 2MB Ram £1249
- GVP 68030 card + Memory £1999
- 25mhz Processor card with 4MB auto configured 0 wait state 32bit ram and software (makes Sculpt 4D & similar go like Concorde!)
- Microway Flicker Fixer £299 (rrp £399)
- Digitisers, Genlocks + Ram Cards available

B2000's
from
£849!

INPUTTING

Power House DIRECT!

Special prices
Free Delivery
Next Day Delivery
£7.50



VIDEON NEW! £249

Videon is a state-of-the-art PAL video digitiser for all models of Amiga computer. Videon digitises directly from any still PAL source in any of the Amiga's screen modes including high res and HAM. Video

is complete and requires no filter wheels or similar devices.

Extensive image processing facilities and the high quality of digitisation makes Videon the natural choice for professional or amateur.

FREE
Video Magic
worth
£79.95



Order
HOTLINE
0800 561 742
Free Call



SOFTWARE & BOOKS

Power are the specialists in serious software & books for the Amiga enthusiast at prices that are rarely matched by our competitors. Large stocks of the latest versions and an extensive showroom display avoids disappointment.

RED HOT PRICES

ART & GRAPHICS

Typically 30-40% off rrp

Animagic	£69
Amiga Clipart	£29
Comic Setter	£35
Deluxe Paint 3	£59
Deluxe Photolab	£48
Digipaint 3	£49
Digiview Gold	£99
Elan Performer	£39
Express Paint 3	£69
Fantavision	£28
Interchange	£49
Interfont	£79
Intro Cad	£39
Kara Screen Fonts 1	£49
Kara Screen Fonts 2	£49
Movie Setter	£48
Photo Paint 2	£69
Pixmate	£35
Pro Video Plus PAL	£169
Sculpt 3D	£69
Sculpt 3D Animate	£99
Sculpt 3D XL	£99
Sculpt 4D Junior	£149



LANGUAGES ETC

Devpac	£38
Hisoft Basic	£55
Lattice C v5	£160
Lattice C++	£250
Manx C Dev	£163
Sonix	£45
Sonix Sound Trax 1	£25
Sonix Sound Trax 2	£25

A full range of Amiga books is also available from stock - ask our tele-sales assistants for details

POWER HOUSE DIRECT

Power House, the direct sales arm of Power Computing Ltd - Leaders in peripherals & software - is the natural choice for the Amiga enthusiast. Highly competitive prices, a wide choice, fast computerised service and the backing of a £2M+ 5 year old company are just some of the reasons for tele-shopping at Power. Large stocks, friendly reception and "If it don't work we give you a new one" are a few more!



"The Extensive Power House Bedford Showroom open Monday to Saturday 9.30am - 6.00pm Thursday & Friday 8.00pm

Power Computing Ltd, Power House,
44A Stanley Street, Bedford MK41 7RW
Orders Only 0800 561 742 Free Call
General Enquiries & Orders
0234 273000 (5 lines)
Technical Support
(Mon-Fri 3pm - 5pm only) 0234 267237

Order by Mail receive bonus gift of 2 free
diskettes - Posted orders only

Name _____

Address _____

Postcode _____

Telephone _____

System owned _____

credit card no _____

expiry date _____

signature _____

I would like to order _____

Make cheques payable to
Power Computing Ltd

I enclose a cheque / PO for £ _____

Please send me the
Power House Catalogue

M.A.S.T.

TECHNICAL EXCELLENCE

COMPACT LOW POWER AMIGA COMPATIBLE PERIPHERALS
ENGINEERED TO WORK TOGETHER FROM THE CREATIVE PEOPLE
AT MEMORY AND STORAGE TECHNOLOGY.

THE ULTIMATE EXTERNAL FLOPPY DRIVES

UNIDRIVE™ £79.95



- Super Slim Line
- Very Low Power
- No Clicking
- May be Switch Disabled

TWINDRIVE™ (TwinDrive has two switches) £149.95

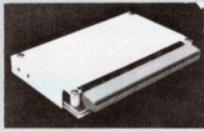


- Quality Fujitsu Mechanism
- Powered from Amiga™ or optionally available
- Pluggak only £10.00
- Removable Cable
- Robust Beige Metal Casing
- Hinged Dust Cover
- Plus £5 Carriage VAT included

MICROMEIGS™

This Internal 512K Card is a Direct replacement for the A501 By using 1 Meg DRAMs, Micromegs is only half the size of the A501 and uses a fraction of the power. Naturally, it includes a Battery backed clock and Int-Switch, the powerful S/W switch that allows you to run Auto Booting 512K Software. No fumbling under the computer trying to find the Amiga logo to turn the Amiga on. **Why buy Micromegs?** We are committed to providing the latest technology at the most competitive prices. Micromegs was the first internal 512K expansion card to use the low power 1Meg DRAMs. Our existing and planned product range will breathe new life into the Amiga. Micromegs is a company that will be looking forward to compatibility, high performance, one year's warranty and a back-up service second to none. MICROMEIGS with a battery backed clock and Int-Switch costs just £99.95 inc VAT plus £5.00 for 1st Class Registered Post.

MINIMEIGS™ 500/1000 TWO MEG RAM



- Auto Configure
- Low Power
- 1 Meg DRAMs
- RAM Tachometer
- Auto Configure LED
- Very small 3" x 5.25" x .625"
- Zero Wait States
- Compatible with A501

PHOTO OF A500 VERSION

Populated to 512K	£179.95	1 Meg.....	£279.95
2 Meg	£179.95	Factory Upgrade per 512K	£99.95
Plus £5 Carriage			

★ ★ NEW ★ ★ THE MAC ENTERTAINMENT PACK ★ ★ NEW ★ ★

MAST announce the "Amiga-a-Tosh" Macintosh compatible 3.5" Flopy Drive for use with Macintosh Emulators on the Amiga. Run Macintosh system disks directly with AMAX. "Amiga-a-Tosh" even features software disk ejection!

Complete with special cable and 1 Year Warranty for **ONLY £199.95 inc**

We also have the AMAX Macintosh Emulator available with or without the 128K ROMs. The basic AMAX is £134.95 inc. and the ROM set (2 128K ROMs) are £199.95 per inc pinc

The complete AMAX/Amiga-a-Tosh/ROM package is available at the very Special price of £499.95 inc

Limited Quantities of all of these items are available ex stock. Please add £5 for each order to cover P&P.

★ ★ NEW ...NEW...BOING MOUSE ... NEW...NEW★ ★

At last an alternative to the existing Mouse! The Boing 'Optical' Mouse is the highest quality professional mouse you can use with your Amiga. There are no moving parts and the 200 dpi sensitivity is twice that of the standard Amiga mouse. The buttons have superior tactile and audio feedback. There is a third button for A2024 software and XWindows and the pack includes a large mouse pad with non slip backing. Compatible with ALL Amiga computers. Special Introductory price **ONLY £79.95 inc**. Highly Recommended for all Art/Design Packages.

★ ★ NEW...NEW...GENLOCK SYSTEM...NEW...NEW★ ★

THE AEGIS/RENDALE "GENLOCK" SYSTEM FOR A500/1000/2000

The 8802 Professional Genlock with Aegis Video Titter (RRP £109.95) FREE! The complete pack for Video Titter, Promotional Videos and much, much more for just £275.00 inc VAT & PP

SPECIAL NOTE: All of the above are now regular stock items. Since M.A.S.T. (UK) Ltd., started trading, over 90% of all orders received were despatched within 24 hours. It is still, however, advisable to telephone for information on availability and to allow up to 21 days for delivery.

Please note that cheques have to be cleared prior to despatch of goods. Access, Visa and overseas orders welcome. B.F.P.O. customers please deduct 12% from all prices

G.T.S.

SOFTWARE EXCELLENCE

★ ★ ANNOUNCING... "GTS CLUB' 89" ...ANNOUNCING ★ ★

THE PUBLIC DOMAIN CLUB FOR AMIGA ENTHUSIASTS

Since the early days of the Amiga George Thompson Services have made available to Amiga Owners all over the world the latest P.D. disks from the U.S.A and Europe. Couriers deliver material on a weekly basis to our offices where they are first carefully checked for virus, catalogued and then released to the duplicating rooms for labelling and copying onto top quality Sony DS/DD disks.

As a member of this very Special Club you will not only benefit from lower P.D. software prices but also discounts on M.A.S.T and other hardware peripherals. Send only £15.00 annual subscription now and you'll receive by return:

- ★ Our Double Library Disk Pack detailing the contents of 100's of PD disks
- ★ The latest issue of JUMPDISK the best selling magazine on a disk in the world.
- ★ A new and unique two disk animation from the U.S.A titled "Wavesail".
- ★ £5.00 PD Discount Voucher
- ★ Regular PD News Sheets
- ★ The opportunity to purchase M.A.S.T and other hardware at very special prices. For example-

★ Minimegs 512K (A1000/A500) External Memory Expansion Units at £159.95 inc VAT + £5 post/handling. SAVING £20!

★ MAC Emulation Pack, including "Amiga-a-Tosh" drive, AMAX and 128K ROM's, only £44.95 inc VAT. SAVING £50!

★ Micromegs, the original and reliable internal 512K memory expansion unit at only £94.95 inc VAT + £5 P&P.

★ The DOUBLE - Unidrive + Micromegs for only £169.95 inc VAT + £5 P&P. SAVING OVER £10!

To become a member of "GTS CLUB' 89" just send a Cheque (with Bank Card details on reverse) P.O or place a credit card order using Access/Visa and we will despatch your very Special Pack to you immediately!

We are George Thompson Services,
Unit 1, Dipped, Brodick, Arran, Scotland KA27 8RN.
Telephone (077 082) 212 - '89 Club only.

★ ★ JUMPDISK ★ ★ JUMPDISK ★ ★ JUMPDISK ★ ★ JUMPDISK ★ ★

SPECIAL OFFER FOR THE OCTOBER ISSUE ONLY!

Have you experienced JUMPDISK. The worlds best selling magazine on a disk? No! Then as a taster we will send this issue to you for the very special price of £6.99 inc. We believe it's one of our best. Programs include DISKOPTI - Access disks faster with this optimizer. EUROPE - Learn about the countries, cities and flags of Europe the easy way. JPCLOCK - The ultimate clock for the Amiga? COLORPAD - An effective but simple Colouring Book for young children.

ACCORDION - Play the game of this original Solitaire card game. FROG/PUSH - Arcade favourites. PLUS Music, Puzzles and Articles that include News Features, Tips and Tutorials.

★ ★ DOSLAB ★ ★ £14.95★ ★

Learn how to use the CLI and Amiga dos the easy way. No heavy manuals, just let the Amiga do the teaching with this interactive two disk set.

★ ★ HOME BUSINESS PACK ★ ★ £19.99★ ★

Our best selling 8 disk pack includes a Word Processor, Spell Checker, Database, Spreadsheet, Appointment Scheduler, Home and Business Accounts and more

★ ★ THE MEGA GAMES PACK VOL II ★ ★ £19.99★ ★

Now holding the number one position in the Public Domain Top Ten. This 7 disk pack includes Adventure, Arcade, Logic, Card, Puzzle, Board and Role Playing Games, Even a Flight Simulator

Please note that these games are all recent releases

★ ★ INTRODUCING PUBLIC DOMAIN PART II ★ ★ £19.99★ ★

This 9 pack disk serves as the perfect introduction to Amiga PD. We have carefully selected one of the most popular disks from the Fish, Amicus, SACC, FAUG, TBAG, AMUSE and TBYB Libraries and added the latest version of our two disk PD library pack. There are many hundreds of quality PD disks in our collection and this new pack will give you the opportunity to see why everyone is talking about PD

★ ★ NEW...NEW...£8.99...DESIGN FACTORY...£8.99...NEW...★ ★

This 3 disk set includes the finest PD programs we could find for design work. If it's CAD, FRACTALS or MANDELBROT you are interested in this pack is just what you are looking for. Highly Recommended.

★ ★ NEW...NEW...£39.95...EXPRESS COPY...£39.99...NEW...NEW★ ★

Acclaimed by the critics as possibly the best Hard Disk Backup Program available. Features: Speeds of up to 1MB per minute. Backup Disks have the same directory structure and file attributes of the original files and can be used normally, up to four disks may be pre-loaded at a time, multitasking...the list goes on

WE ARE GEORGE THOMPSON SERVICES. Our Address is: DIPPEN, BRODICK, ARRAN, SCOTLAND. KA27 8RN. (077082) 234.

Please send a cheque (with your Bank Card No Expiry Date on reverse), A.P.O or just telephone your Access or Visa Card details to us before 1pm, and we will despatch your order immediately.

MEMORY AND STORAGE TECHNOLOGY, INC.

M.A.S.T. (UK) LTD.
UNIT 1 DIPPEN,
BRODICK, ARRAN,
SCOTLAND. KA27 8RN
(077 082) 234

M.A.S.T. U.S.A.
3881-E BENATAR WAY,
CHICO, CA 95928
(916) 342 6278

M.A.S.T. AUSTRALIA
19-21 BUCKLAND ST
BROADWAY NSW 2007
(02) 281 7411
FAX: (02) 281 7414

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

The complete guide to
PD starts here!

COMMS UTILITIES

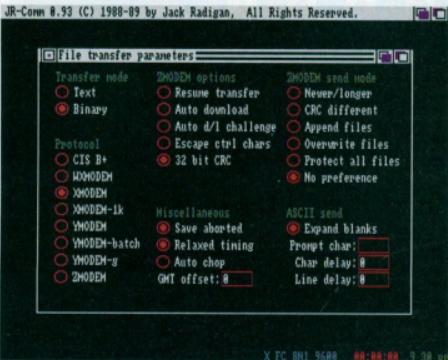
17Bit Disk 444

This month's Coverdisk has an extra special treat for all you comms kids out there, in the form of the excellent PD communications program, Access! Our Coverdisk comms program was taken from Seventeen Bit's excellent comms utilities disk (thanks 17Bit!) which as well as Access!, also includes the even more powerful JRComm and CompuNet software.

JRComm is a complete VT100 terminal emulator that provides almost 100% emulation of the IBM ANSI terminal standard. The program supports just about every communications protocol under the sun including XMODEM, YMODEM, ZMODEM, Kermit and ASCII. For those of you with super-duper high-res monitors, JRComm will allow you to run in high resolution overscan with a 132-column screen.

The other major comms package on the disk is the CompuNet software written by those clever chaps at Ariaide Software in London. The software was written specifically for use with the CompuNet system and is a very posh multi-colour, multi-window affair. The software is shareware and you are therefore charged

**■ Comms
freaks can
get a
peak at
the won-
ders of
IBM ANSI.**



£20 for it as soon as you decide to join Cnet. Of course, if you don't join Cnet, then you don't have to pay.

ICONS

Fish 213

Last month's Coverdisk icon editor, Icon Meister, certainly turned out to be rather popular with all you Workbench hackers. From the various letters and phone calls we received, the ability to create eight-colour icons seemed to be the most favoured part of the program but there was only one problem: unless you had a program such as Hi-Tension's IconPaint, you couldn't display your eight-colour icons in all their glory.

Well, the search was long and hard (fnarr fnarr!) but we eventually came up tops with a PD program to do the job very nicely. The program itself is called Bitplanes and is included with many demonstration icons which collectively live on Fish Disk 213 under the name 'icons'. The Bitplanes program must be copied onto your boot disk and inserted into your StartUp-Sequence just before the line 'LoadWB'. All you have to do is to tell it how many bitplanes you wish to allocate to the Workbench screen and it will do the rest (you'll need three for an eight-colour Workbench).

SOZOBON C

Fish 193

C compilers are terrible expensive things. Version 5 of Lattice's offering could set you back as much as £250 for the basic system. With these high prices the hard-up C programmers are in for a hard time. ♦

Workbench release. 734864 free memory



• Luckily, there are programming language authors out there that are willing to allow their wares to be sold for the price of a disk. Sozobon C is a complete C development system, with a Unix-like front end, that is available on several machines including the ST and PC. The Amiga version produces source code that is compatible with the PD assembler, A68K (available on Fish Disk 186).

If you are just starting out in C programming and you haven't yet decided whether or not the C programming language is for you, then a PD C compiler is your best bet. With Sozobon C, if you decide that C isn't your cup of tea, then you've only lost £3: if you buy Lattice C and then tire of it, then you've lost £200 upwards.

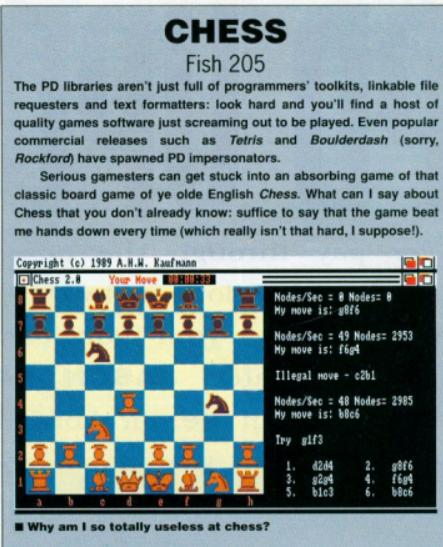
MACKIE

Fish 161

Hotkey macro programs are to be found in abundance within the public domain, but none are as versatile as Mackie. Mackie is a neat little utility that adds a system hotkey to your Amiga which can be defined to carry out any number of functions when used in conjunction with other keys.

To set Mackie up, you have to create a '.mackierc' file that sits in the 'S' directory of your boot disk. This file contains all the definitions for the various hotkeys that come into action when they are used in conjunction with the 'Help' key.

Defining your hotkeys is very simple. For example, if you wanted a new CLI window to appear when you pressed the space bar with the Help key depressed, you would enter: space CLI "NewCLI". If a CLI window is already open, this will be 'popped to front': otherwise Mackie will create a new one. This is particularly useful for those of you who are programmers, who will no doubt have experienced the frustration of losing files in the RAM disk when your program manages to lock up the machine.



Another use is that if you have a collection of programs which you use quite regularly from Workbench, you could set Mackie up so that with just a single key combination, any program would be instantly loaded and run. Now that's useful!

As well as being a good hotkey macro utility, Mackie also includes a definable screen blank with a difference. Instead of the usual black screen, after a user-definable amount of time Mackie will blank the screen and then start a fun little line-drawing demo similar to the 'Lines' demo on your Workbench disk.

SETPREFS

Fish 157

Finding PD programs for inclusion within PD Update is a difficult business. Every time a program crops up, we have to ask ourselves 'Would our readers really find this

useful? Well, judging by the amount of letters we've received asking for such a program, we're sure that you'll find that SetPrefs is just what you've been looking for.

SetPrefs is a useful little



Workbench utility that allows you to build up a library of Preferences settings which you can switch between instantly without having to reboot your machine. The program affects all Preferences settings, not just the Workbench screen

colours, so you can instantly change system attributes such as the printer configuration by just double-clicking on an icon.

FIXHUNK

Fish 197

There certainly are some sloppily-written programs floating about. Anyone who owns an Amiga with a memory expansion will know how annoying it is to use a program that hasn't been written to work within an expanded memory environment. The symptoms are easy to spot: a blank or corrupted screen display, white noise where a sound sample should be playing or even just a Guru.

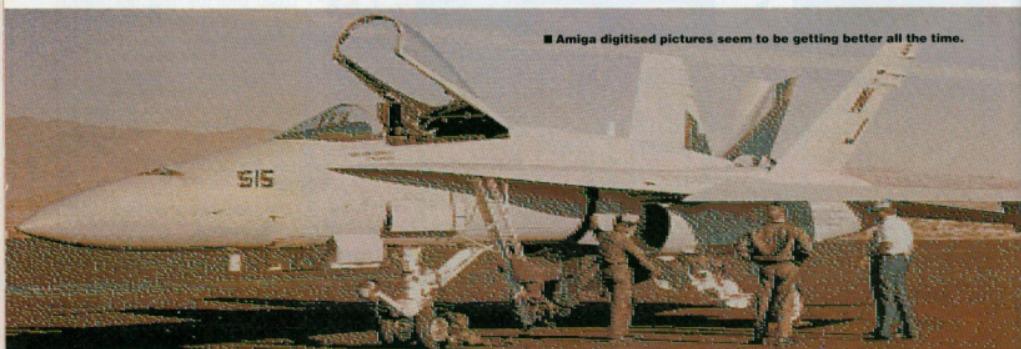
Amiga object files are made up of distinct 'hunks' which contain specific types of data. Hunk types include DATA, BSS, CODE and DEBUG. When using a program that accesses the custom chips, all DATA hunks must be forced into the first 512K of memory (chip memory) if the program is to function correctly. Many Amiga programmers will be familiar with the popular Atom utility that was included in the Amiga developer packs, but unfortunately this isn't PD and so Fixhunk was written. Fixhunk modifies an Amiga object file so that all DATA and BSS hunks are loaded into Chip memory and CODE hunks are loaded into fast memory (if it is available).

PD TEN DEMOS

GTS Title

- 1 **Mega Games Pack 2, Disk 6** *AR Warrior*
- 2 **Star Trek**
- 3 **Fish 196**
- 4 **TBAG 31**
- 5 **TBAG 16**
- 6 **3D Extravaganza**
- 7 **Fish 175**
- 8 **TBAG 28**
- 9 **TBYB Dungeon Master Demo**
- 10 **TBAG 29**

■ Amiga digitised pictures seem to be getting better all the time.



Public Domain Software for the Amiga

from £3 per disk all inclusive

* Over 500 disks!

* Membership not necessary

* Fast Service

We have one of the largest collections of PD software for the Amiga in the UK. We currently stock:

- FISH 1-220
- ANCUS 1-26
- SLIPPERY DISK 1-40
- FAUGI GOMTIX 1-75
- PANORAMA 1-71
- AUGE 1-25
- T-BAG 1-31

All the above are £3 each + 1 FREE when you order 10

2 catalogue discs available at £5 which give details of the above collections

We can supply the **Top Ten PD** and the **Top Ten Demos** as featured in Amiga

Format at the **SPECIAL PRICE of £2.50** each!

* JOIN THE CLUB! Interested in joining our user club? Write or phone for details *

Our own special selection £4.00 each

- APDL #6 CLI HELP
- APDL #7 LANGUAGES
- APDL #8 LOGO - FORTH
- APDL #9 AMIGA DOCTOR
- Life saving programs!
- APDL #14 BEST ARCADE GAMES
- APDL #15 BEST ROAMING GAMES
- Backgrounds, Cursors, Yahoo's, etc.
- APDL #17 BUSINESS COLLECTION
- Editor, Spreadsheet & Database
- APDL #18 GAMES
- Keep track of your data
- APDL #20 ADVENTURES Vol 2
- APDL #21 A graphic adventure & several text adventures
- APDL #43 COMPILER ASSEMBLER AND LINKER
- APDL #44 WORD PROCESSOR
- APDL #45 DRAW & DESIGN
- APDL #45 PUZZLE & STRATEGY GAMES
- APDL #48 MAGNIFICENT FORCE II
- APDL #50 MUSIC
- APDL #52 FRACTAL GENERATORS
- APDL #53 UNKNOWN 5 DEMOS
- Superb eye-popping demos with great music
- APDL #54 TAPUIN COMMAND
- APDL #56 CHEZ SOLACE SHAREWARE
- EXPERT PROGRAMMING. Some of the best shareware programs on easy-to-use menu driven disc.
- SPECIAL Selection (1 MB) Superb PD game for those with 1 MB of 3 discs £10.00
- Write or phone for a FREE list

THE AMIGA PD LIBRARY

Dept. AF3, 140 Rushdale Road, Sheffield, S8 9QE
PD Hotline 0742-588429 (9 am-9 pm)

AMIGA PUBLIC DOMAIN FROM BLITSOFT

With the growing popularity of the **AMIGA**, the public domain scene has expanded rapidly, along with the amount of suppliers. We offer a wide range of software tailored to suit your needs.

OPTION 1 - For the PD collector:

A Quarterly fee of £5.00 provides:

- (i) **ALL** disks at £1.25 each - Disk & P+P inclusive !!
- (ii) Our **PD CATALOGUE** of over 1000 titles **FREE**.
- (iii) Use of our **DISK SWAP** scheme and help with PD problems

OPTION 2 - For the occasional PD buyer:

A small once-only £5.00 membership fee provides:

- (i) Our two self-booting catalogue disks - Updated FREE.
- (ii) PD CATALOGUE of over 1000 titles **FREE**.
- (iii) One **FREE DISK** with every three full priced disks.
- (iv) Use of our **DISK SWAP** scheme and help with PD problems.

ALL disks are £2.50 for OPTION 2 members - but remember buy 3, get 1 **FREE** !!

We specialise in **Amiga** software, but can also stock **FISH**,

& are the official distributor of **TAPUIN** games.

All orders sent first class the day after receipt of order. Option 1 customers send initial payment and we will contact you to make the arrangement.

Send Cheque or postal order and details of your preferred option to:

BLITSOFT

6 DORNEY PLACE, BRADWELL COMMON,
MILTON KEYNES, BUCKS, ENGLAND, MK13 8EL.

Matrix Software Hire

The cheapest way to play them all.

Top games titles for Amiga, Commodore, Spectrum and Amstrad.

Please state system

S.A.E. Details from:

Matrix Leisure Club, Dept AM,
271 Stansted Road, Bishops Stortford
Herts CM23 2BT

SEVENTEEN BIT SOFTWARE

LEADING SUPPLIERS OF
QUALITY AMIGA PD
SOFTWARE

AMAZING PD

SOFTWARE PACKS !!

QUICKSTART III PACK...

Three discs packed with utilities, games, music and demos plus issue six of our very popular disc magazine to act as the ideal introduction to the PD scene, plus the bonus of **FREE** membership to 17Bit and access to our massive library of top-notch PD software. Quickstart III is just £5!!

THE AMIGA FORMAT PACK...

This special PD pack comprises of five discs, the first is the Utility disc featured in the Quickstart pack, the second is a special art-disc featuring some superb ray-traced images, an excellent music disc, a disc of Star-Trek animations plus our disc-magazine and membership for just £10!!

DISC-MAGAZINES...

17Bit produce what is regarded as the best value-for-money disc-magazines available, and at just £1.50 per issue you can see why! Subscribe to 8 issues now and get free membership for just £10, truly remarkable value for money! Watch out for **NEWSFLASH**! the new European disc-magazine coming very shortly to the UK via 17Bit of course!

NOTES:

All PD packs are guaranteed free of any viruses (killer included with the pack) and will work on 1.2/1.3 Amigas in 512K.

A full catalogue of ALL the 17bit PD discs is available on request for just £2

(on disc). The range of PD discs is open to members only.

You can order by post with a cheque/postal order/credit card or over the phone with Access/Visa (24 hours - Answerphone after 5.30).

Seventeen Bit Software

PO BOX 97

1st Floor 2-8 Market Street,
Wakefield WF1 1XX

Telephone 0924 366982

(24 Hours)



DEMOS CORNER

The demos scene has been rather uneventful this month, probably as a result of the summer sun causing programmers to desert their machines in search of the ultimate tan. However, we still managed to pick a couple of beauties among the endless list of scrollly, sound-tracked demos.

MAHONEY & AKTUS MUSIC DISK 2

Disk 426

Music disks containing compilations of music are very popular with demo collectors: one look at our exclusive Demos Chart will confirm that! The Mahoney and Kaktus music disk is a sizeable collection of music composed by those affluent continental composers of the same name.

Both Mahoney and Kaktus are fans of such greats as Jean Michel Jarre, Depeche Mode (brilliant!) and Jan Hammer which is more than evident in many of their compositions. Once you've grown bored of listening to the music, you can sit back and admire the impressive visuals that accompany every song: every trick in the programmer's book is employed to provide some astounding effects.

INTROS

Disk 422

Like them or hate them, those scrollly demos that exist in such abundance on the Amiga are still very much alive and kicking. If you've never seen an intro program, they usually consist of some scrollly text with flashy graphics wizzing about the screen

tiresome. It is therefore always nice to find a disk of intros that offers something new, be it a nice new effect that has never been used before or a completely original music score that doesn't use a single Sound Tracker preset. Intros, Disk 422, features several such intros that, in one way or another, offers demo watchers something new. The



■ This marvellous Porsche is, like the ones below, from Fish 196.

to the beat of another 'sound-tracked' music score.

It's easy to be impressed by the first couple of intro programs, but once you start getting into double figures, the same old scrolling effects can soon grow

best of all the intros on the disk is a demo by Depeche which has a very novel scrolling text mechanism, adding a new meaning to the expression 'rolling credits'. Check it out and you'll see what I mean!

HAM PICS

Fish 196

What's this? A demo that doesn't originate from 17Bit Software? Yes, it's true, the Fish disks aren't just good for serious programs: they also contain some very good demos.

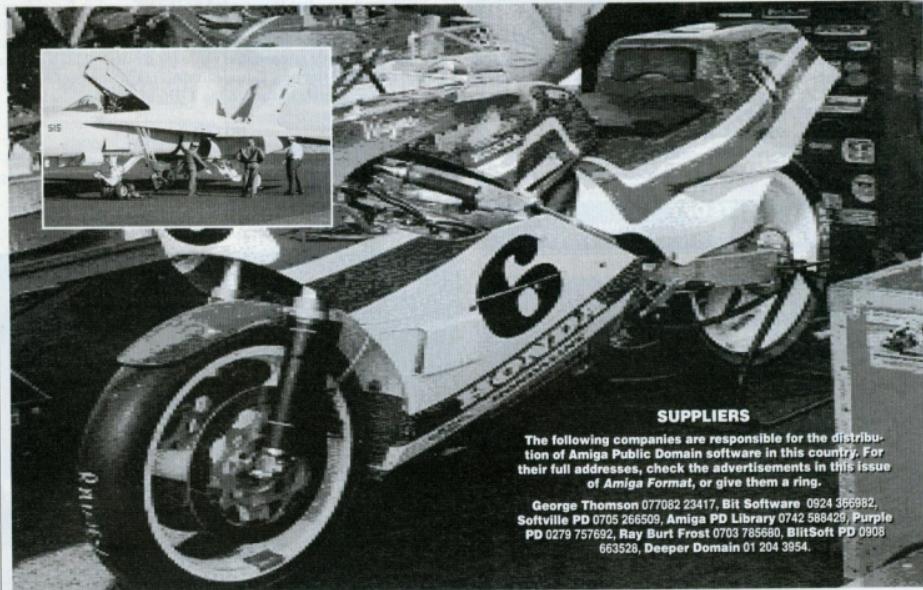
We've all seen those infamous HAM (hold and modify) picture disks, but these HAM pictures are beyond belief. If you've ever wanted to find the definitive collection of digitised pictures to impress your Grannie Gertie when she pops round, then look no further than Fish Disk 196: they really are of photographic quality.

The original pictures were scanned at a resolution of 4096 by 2800, 36 bits per pixel on an incredibly expensive Eikonix 1435 slide scanner and then cropped, gamma corrected (?), scaled and then converted to IFF compatible files. Digi-View eat your heart out!

INTROS TOP TEN

17Bit Disk Nos throughout

- 1 Supreme Sounds 1
- 2 Mahoney and Kaktus Music Disk 2
- 3 Quadlite 64 Demo
- 4 Intros 19
- 5 Titan Trax
- 6 Intros 20
- 7 Intros 18
- 8 Sonix 18
- 9 Supreme Sounds 2
- 10 17Bit Art Vol. 1



SUPPLIERS

The following companies are responsible for the distribution of Amiga Public Domain software in this country. For their full addresses, check the advertisements in this issue of Amiga Format, or give them a ring.

George Thomson 077082 23417, Bit Software 0924 356982, Softville PD 0705 266509, Amiga PD Library 0742 588429, Purple PD 0279 757692, Ray Burt Frost 0703 785680, BitSoft PD 0908 653528, Deeper Domain 01 204 3954.

OOD's AY Portfolio



30 MEGABYTE A500 HARD DISK

Real power for your Amiga A500, connects directly through parallel expansion bus. Ultra-reliable, built-in power supply model to match your Amiga A500.

MEGA STORAGE AT ONLY £399

Also available 50 mb version £475
(includes 1 yr. replacement warranty FREE, optional 2 yr. available)

COMMODORE A590 20Mb HARD DISK FOR AMIGA A500's

Autoboot on Amiga
(1.3 Kickstart only)
Sockets for 2Mb RAM
expansion
DMA

NEW LOW PRICE!
£379

ORTEX 40 MEGABYTE HARD DISK

NEW concept in disk storage
Amiga A500/1000
(others available)
Throughport
On/Off isolator switch

NEW LOW PRICE!
£499

WOODS SUPERSLIM 3.5" DRIVE

Throughport

NEW LOW PRICE!
£74.95

UNAMA DISK DRIVES

CAX 354
3.5" 2nd Drive

£94.95

10 FREE BLANK DISKS
(Worth £10.95)

CAX 1000

5.25" 2nd Drive

£129.95

10 FREE BLANK DISKS
(Worth £9.95)

**SAVE MONEY
SAVE DATA!**

24HR ORDER LINE - 0773 836781

VISIT OUR SHOWROOM

Please call to see us where our full range of advertised products AND MORE is on sale. We will be only too pleased to demonstrate any item of hardware or software and a host of peripherals and accessories.

**REMEMBER WE ARE NOT JUST
ANOTHER MAIL ORDER COMPANY**

All prices are what YOU PAY, and there are NO HIDDEN EXTRAS. VAT & Postage are included and are correct at time of going to press.

& O.E. Offers subject to availability and are currently advertised prices.



PRINTERS

All printers in our range are dot matrix and include the following features ...

Standard centronics parallel port for direct connection to Amiga, PC's, ST, Archimedes etc. Tractor and friction paper feeds and FNET connector cables.

CITIZEN 1200

Very reliable low cost printer, interchangeable interfaces available for RS232C or Serial type for C64 etc. £149.95

COMMODORE MPS 1230

Manufactured by Olivetti, built in dual Centronics and 64 type serial interfaces. Connects to C64/128/16/4+ and Amiga etc. £139.95

STAR LC10 MONO

Multiple font options from front panel, excellent paper handling, C64/128 version available. £179.95 £169.95

STAR LC10 COLOUR

Colour version of the popular LC10, allowing the effect of full colour on screen dumps (requires colour printer driving software). C64/128 version available. £209.95 £199.95

STAR LC 24 10

24 Pin version of the popular LC series with exceptional letter print quality. **NEW LOW PRICE! £249.95**

All our Star printers are full UK spec, which are specifically manufactured by Star Japan for sale in the UK only. Please be aware that European spec Star printers are being artificially imported against the wishes of Star Micronics UK. These printers do not carry a Star UK warranty, and will not be serviced by them should the need arise. These may be unreliable due to mains supply incompatibility. UK spec printers may be recognised by their three pin UK type mains plug which is moulded to the mains cable.



DEALIN' DIEGO'S DYNAMITE DEAL ON STAR PRINTERS !!!

This month Diego has shot holes in the prices of the STAR Printer range! At only £179.95 for a Mono LC10, a remarkable £209.95 for the COLOUR version and £249.95, you'll SAVE EVEN MORE!!!



MONITORS

PHILIPS CM 8833 STEREO

(Higher spec than 1084S)

Full 14" High Resolution Stereo Colour Monitor

- Twin Speakers
- High Contrast Tube
- Scart Euro-Connector fitted as standard
- Green screen switch for enhanced text mode
- RGB/AI, TTL, composite video and stereo audio inputs

● Can also be used as TV with tuner or VCR

● Supplied with tilting stand

● Compatible with most micros

● With FREE lead for computer of your choice

● Only from Harwoods.

1 year replacement warranty
for major faults

£229

COMMODORE 1084

Full 14" High Resolution Colour Monitor

- RGB/AI, TTL, composite video and audio inputs
- Scart Euro-connector fitted as standard
- Supplied with cables for A500, CGA PC, C16-64-128
- Can also be used as TV with tuner or VCR

£209

SOFTWARE

AWARD MAKER PLUS

£39.95

Creates certificates and awards in a variety of styles, then prints out in black or colour, landscape or portrait.

PROFESSIONAL PAGE V1.2

£229.95

The ultimate in full colour Amiga DTP packages.

WE STOCK A VAST RANGE OF SOFTWARE - TOO MUCH TO LIST HERE - AT COMPETITIVE PRICES

FOR A WHOLE RANGE OF COMPUTERS AND GAMES CONSOLES. PHONE US NOW!!

AEGIS VIDEO TITLER

£99.95

Used with Gerdels, e.g. Minigem etc.

THE WORKS

£79.95

Integrated w.p., mailmerge, spreadsheet, pro database, multicolumn graphics etc.

WORKBENCH 1.3

£14.95

Latest version of Amiga OS.



GORDON HARWOOD HARWOOD HARWOOD
Computers
OFFICIAL COMMODORE BUSINESS CENTRE

GORDON HARWOOD COMPUTERS

DEPTA M F 69-71 HIGH STREET

ALFRETON - DERBY - DE5 7DP

Tel: 0773 836781 Fax: 0773 831040

To help us process your order, please quote your number along with the address block
Department code shown in the address block



ASHCOM

**0530 411485****0530 411485****NEW****Original ASHCOM
RAM Expansion****ONLY
£89.95**
(Limited Stock)**NOW AVAILABLE
AT YOUR LOCAL
COMPUTER STORE****Only from ASHCOM, 10 The Green, Ashby-De-La-Zouch, Leicestershire, LE6 5JU****Telephone: (0530) 411485****MAKE YOUR AMIGA EARN**

Yes making money with your Amiga becomes incidental when you know how. Your micro is, if only you knew it, a gold mine. The size and make is irrelevant. Make the initial effort **NOW** by starting your own

HOME BASED BUSINESS*This may be the most important move you will ever make!*

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:

HOME BASED BUSINESS

31, PILTON PLACE (AF3)
KING AND QUEEN STREET,
WALWORTH, LONDON SE17 1DR

**£8.00 per 10 DS/DD disks**

When you are buying disks you obviously want the best, disks that will last a lifetime and disks that you can use time after time, trouble free.

Our disks specified here are unbranded and manufactured by Verbatim to the highest degree, they are completely 100% error free, with a full lifetime guarantee which means full replacement or moneyback.

We won't settle for anything less than high quality for our systems and neither should you, and as we now supply thousands nationally within both the professional music and computer industries, it seems they won't settle for anything less either.

All disks are despatched same day and include VAT, P&P and also come with user labels. If you are serious about your computer then you should be serious about your disks too. Quantity discounts are also available.

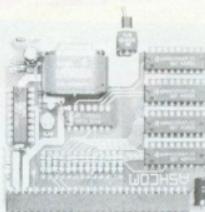
£15.80 - 20, £23.80 - 30, £29.80 - 40, £36.80 - 50, £70.00 - 100

You should consider us first before trying anyone else as we know you won't regret it. All trade, government and educational establishments welcome for the best prices. Phone now or send your order with cheque/PO for immediate despatch to:

*joy of life arts, 45 elswick, skelmersdale,
lancashire WN8 6BX, telephone: 0695 24732*

**512K RAM Expansion
with Clock for Amiga 500****Features:**

- ★ RealTime Clock with High Capacity NICAD Battery Backup
- ★ Memory Disable Switch
- ★ Low Power Consumption.
- ★ Latest Technology 1MBIT RAMS
- ★ Low Chip Count for High Reliability
- ★ Direct Replacement for A501 Expansion

**ONLY £99.95**

All prices include VAT and Delivery. British made.

Trade Enquiries Welcome

**PUBLIC DOMAIN
who do you get yours from?**

There are many PD libraries around but do they offer you...

- ★ Huge collection, thousands of programs on over 800 disks
- ★ Same day service - 1st Class post - GUARANTEED
- ★ Knowledgeable staff on hand (no 'phone after six and ask for fred!)
- ★ Three years experience collecting and distributing PD & Shareware to Amiga owning customers all over the world.
- ★ FREE 30 page catalogue, S.A.E. (22p stamp) and state AMIGA clearly and we'll send one by return.

UGA COLLECTION

This outstanding collection of disks is being distributed EXCLUSIVELY in the UK by us. They all Auto-boot and are menu driven.

USONI TO USONE - Full of Sonix tunes**UMUS1 to UMUS10 - Full of great music****UINT1 to UINT12 - Full of the best graphics****UANIM1 to UANIM4 - Full of animations****UTILITIES - Seven disks full of all those****great utilities you can't find anywhere else!****FRED FISH COLLECTION****We've got 'em all - up to FF220****BALIG COLLECTION****Not to 75 in stock****PANORAMA COLLECTION****Not to 71 in stock**

Plus of course our own famous SOF disks collected from around the world for you. So good that other libraries sell them at a profit. Currently up to SOF23!

PRICES

- 1 - 5 disks - £3.00 each
- 6 - 10 disks - £2.75 each
- 11 or more - £2.50 each

BUY TEN and choose another FREE

All prices are inclusive of Post/Packing/
VAT/Disk/Labels
Cheques/PO's payable to Softville

24 Hour orderline on

0705-266509**STARTER PACK - £1.50**

Choose ANY FIVE PD disks, FIVE unbranded blank disks, and a Library case to hold them

AMIGA INTRO DISK - £1.50

Ful of sample programs
VIRUS KILLER DISK - £1.50
Detects/Kills all virus's

SOFTVILLE

55 Highfield Avenue,
Waterloo, Hants. PO7 7PY

IMAGINARY WORLDS

Venture on a journey of exploration through the fantasy worlds of the latest adventure games with **NICK WALKLAND**

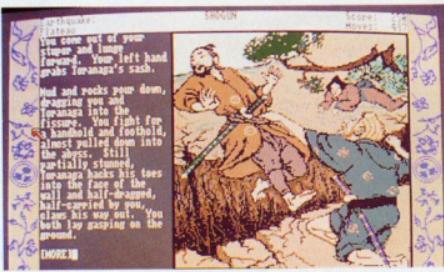
SHOGUN

Come to terms with the strange ways of a new culture, making your way to the very top in Infocom/Activision's feudal Japan

Ayyeee!! Toranaga sama! Yes, time to put on your favourite silk kimono, warm up the saki, and boot up Infocom's *Shogun*.

First the novel, then the TV 'mini series', now the computer game. Hardened hack'n'slashers may be disappointed to learn that the game isn't a run'o' the mill karate game and doesn't even offer the chance to slaughter hundreds of Ninja (well, maybe one or two). It is the adventure game of the best-selling novel and it sticks pretty much to the original format.

In the year 1600, European rivalry is ferocious and based upon religious differences. The Catholic nations of Portugal and Spain have spread their spheres of political and religious influence to the Far East. Their bitter rivals, the 'heretic' English and Dutch traders, are trying to get in on the act. The arrival of the Dutch ship 'Erasmus' piloted by Englishman John Blackthorne brings an interesting situation to the tense balance in Japan where the ruling samurai



■ On shaky foundations: earthquakes causing severe problems.

lords are vying for individual power. Quite intriguing.

The basic aim of the game is simply to survive this strange culture, earn respect and become a high-ranking Samurai. Etiquette is king: forget to bow and it's as good as 'bye-bye head!' *Shogun* hardly classes as a real adventure game in the traditional sense, but more like living parts of the life of John Blackthorne via the individual scenarios which make up the game. Producing *Shogun* as many mini scenarios does cut down the enjoyment somewhat because you're stifled in choice of action and movement. For a few scenarios, movement is limited to one and only one area in which you have to make the right decisions to get the full points. Very restrictive.

As for graphics, the pictures are adequate, not great. Some do seem to convey the image of Japan as they are intended to do 'in the exquisite style of Japanese court painters...' There does seem, however, a great difference in quality of the graphics: some would hardly be adequate on a C64. The graphics are few and far between, though, which does offer a more digestible break-up of the text so that it doesn't really distract.

The amount of puzzles is negligible, yet the toughness of the game is high due to the day-to-day problems you face in this different culture. The game even seems to get easier as you progress further, which again is unusual. The main problem created by the mini scenarios is that they are linear: you must get past one to move on to the next, and can't try something

else as you would do in a conventional adventure.

The game, though, has plenty of atmosphere and feel to it, and the textual descriptions are up to

the usual high Infocom standard. Anyone who has seen the TV programme or read the book will enjoy this different approach, although without any prior knowledge of the storyline you could have difficulty getting the gist of what's going on. The scenarios do jump around, so it's easy to lose yourself on what's going on in the outside world. I still can't see the point in some characters who are mentioned and then seemingly forgotten about.

In my opinion, *Shogun* is the first real 'interactive fiction' work by Infocom. It is an enjoyable read and play, but it is more of an experience in style than a really good adventure. There aren't many games in which you get urinated upon! As it stands it is worth a go, but for myself it's a question of "Sayonara Anjin-San!" ■

GRAPHICS	7
SOUND	4
INTELLECT	7
ADDICTION	7
OVERALL 76%	



■ You've got them dancing feet.



■ Ooh-err! Rampant about-to-be-goings-on in the bathtub.



■ Mugshot of Rodrigues, the Portuguese pilot. And rather an ugly mug he is too.

ZORK ZERO

Infocom/Activision take a step back in time to the days before the Zork series.

There are Zorks and there are Zorks, but now there is the latest Zork which is the first *Zork: Zork Zero*. Confused? Well, I certainly was. After the famous Zork trilogy came the innovative *Beyond Zork*, and now the game which acts as a prequel to the originals has arrived. Bigger it certainly is: but is it any better for that?

Zork Zero begins with a prologue set over 90 years before the start of the game proper. Megaboz the Wizard kills the royal family and sets a curse on the Great Underground Empire. One of your ancestors witnesses this and it's thanks to him that you have the vital piece of information which gives you an advantage above all the other glory (and treasure) seekers. So off you tramp, collecting



■ Jester is being helpful for a change, but he still doesn't like losing to clowns like you.

the necessary objects, travelling the massive Underground empire, facing some angst-creating puzzles, playing games and facing the soon-to-be infamous Jester.

Remember the Wizard in *Zork II*? Well, the Jester must be his predecessor: he appears to give tricky puzzles and hindrances. Yet he also offers help and gives you useful items. Life is one big joke to ■

Ladbroke Computing International

"The Country's Leading 16 Bit Specialist"

YOU CAN'T AFFORD TO SHOP ELSEWHERE

LOOK AT THESE PRICES (INC. VAT)

Imports has given years of full support to Ami users from their premises at 33 Ormskirk Road Preston. Now from their Mail Order premises they can offer this second to none "service to users countrywide. All Software/Hardware (in stock)

100% tested prior to purchase to ensure that returning customers are fully satisfied.

All hardware is supported by our site engineers so that quick turn around on all repairs is guaranteed. There are no hidden extras WYSIWYG. ALL PRICES INCLUDE VAT.

All prices are correct at time of going to press and are subject to change without prior notice. Please for latest prices, information advice we are always happy to help.

Amiga Upgrade Boards

512 K RAM Extension Boards

Available with or without calendar/clock.
Plugs easily into A500 slot (no soldering).
Switch provided to switch RAM in / out.
Battery backed calendar/clock retains
time/date on switch off.
Amazing low price.

without clock. (unpopulated) £17.99
with clock. (unpopulated) £29.99
without clock (populated) £107.99
with clock (populated) £119.99

Amiga Modulators £24.99

PC XT bridge boards £599.99
PC AT bridge board £1148.99

Phone for Amiga software catalogue.

New Low Price Printers

LC 10	£169.99
LC 10 Colour	£219.99
LC 2/4/10	£299.99
LC 500	£319.99
LC 500 D	£349.99
LM 804 (Laser)	£1299
price for others. All printers come complete with Parallel cable.	



Peripherals & Dust Covers

disk care kit	£5.99
CD Tablets	£5.99
Computers	£3.99
A4	£4.99
A3	£8.18
Disk Drives	£4.99
LC 2/4/10	£2520
Hard Disks	£4.99
Printer ball (ST-Amiga)	£24.99
Printers	£7.99
100 disk box	£9.99
Others	phone
price for others. All products such as Colbalt hand scanner or without OCR, Sigma 2, Auger OCR for ST	

Repair Centre

All Atari trained engineers can repair all hardware, including Amigas, in minimum time at competitive prices. We can arrange Pickup for prompt delivery to ourselves for £11.50. Next day courier return £8.00

UPGRADES EX-STOCK

20 STFM (fitted) £119.99 Board + 1 Mg upgrade(fitted) £149.99
20 STFM (kit) £89.99 Board + 2.5 Mg upgrade(fitted) £299.99
upgrade fitting service £25 Board + 4 Mg upgrade (fitted) £499.99
Please check machine configuration before ordering. All fitting prices quoted for machines not previously supplied. With the STFM upgrade board can be progressively upgraded to a maximum of 2.5 MB. Due to complexity of the installation we must install and upgrade the board for you. All upgrades and repairs are for 3 months parts and labour guarantee. Pre 1988 ST's can only be upgraded to 2 MB. Please for our Amiga upgrade board with or without clock, populated or unpopulated.

Software

At Least 20% discount off all 16 bit games software.

E.G.	Minimum Discount	
	RRP	Our Price
	£19.99	£15.99
	£24.99	£19.99
	£29.99	£23.99
Maximum Discount		
	£19.99	£6.99
	£24.99	£9.99

Send SAE for full software catalogue.

Phone for best prices

Free delivery (Mainland UK only) on orders over £40, for orders under £40 add £2.50.

A4 Flatbed Scanner £499.99

Ladbroke Computing's A4 Flatbed scanner is a great value flat bed scanner which scans at a resolution of 200 dpi. Bring high quality scanning to your home for Desktop Publishing etc. Phone for details.

Hard drives

Vertex 40MB(ST & Amiga)	£499.99
Magfile 30 (ST)	£474.99
Magfile 60 (ST)	£599.99
Supra 30MB (ST)	£474.99
Third Coast 65 MB (ST)	£574.99
(Amiga)	£629.99
Others	phone



Monitors

Philips 8833 Colour Monitor	£499.99
The 8833 has stereo sound capability perfect for the Amiga.	
Philips 15" Monitors	
Philips 15" Remote, Scart, Tv with 40 timer preset.	
Monitors, deduct £10 if bought with Computer phone for TV's.	
All monitors come with scart to ST/Amiga etc.	



New Low Price High Quality Disks

All our disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

Disk drives

Cumana 1Mg Drives(Amiga & ST) ... £89.99
Cumana internal 1Mg Drive(ST) (kit or fitted) £149.99
Please note ST's case may need cutting for Amiga 1Mg Drive, disable switch & through port £19.99
Aliba 1Mg Drive, disable switch & through port £24.99



Special Offers

Sony Laser printer & 1 Megabyte RAM as standard, 8 resident fonts
HIP, IBM, Epson, Diablo, minidisk, Professional £599.99
Star FR-10 9" pin professional £399.99
Star FR-15 15" 9 pin professional £514.99
Star XB-2/10 24 pin professional £514.99
Star XB-15/15" 24 pin professional £699.99
All 300+ Professional printers come complete with 12 months on site warranty (UK Mainland) - Phone for further information.

All Atari trained engineers can repair all hardware, including Amigas, in minimum time at competitive prices. We can arrange Pickup for prompt delivery to ourselves for £11.50. Next day courier return £8.00

Upgrades Ex-Stock

20 STFM (fitted) £119.99 Board + 1 Mg upgrade(fitted) £149.99
20 STFM (kit) £89.99 Board + 2.5 Mg upgrade(fitted) £299.99

upgrade fitting service £25 Board + 4 Mg upgrade (fitted) £499.99
Please check machine configuration before ordering. All fitting prices quoted for machines not previously supplied. With the STFM upgrade board can be progressively upgraded to a maximum of 2.5 MB. Due to complexity of the installation we must install and upgrade the board for you. All upgrades and repairs are for 3 months parts and labour guarantee. Pre 1988 ST's can only be upgraded to 2 MB. Please for our Amiga upgrade board with or without clock, populated or unpopulated.

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
1	£8.99	£6.50
10+box	£9.99	£7.50
100	£79.99	£60
100+box	£82.99	£65

Sony Branded 3.5" D/S Boxed x 10 £10.99
Sony Branded 3.5" D/S Boxed x 100 £99

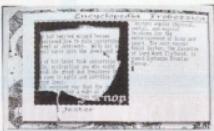
All disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 T

► this guy, but you'd love to punch him in the mouth when he turns you into something that would not be out of place as a really nice pair of alligator skin shoes!

On your travels through the Great Underground Empire not only do you have to deal with the Jester but also some murderous problems. These puzzles are reminiscent of the original Zorks and often just as tough. A nice break is the use of visual puzzles or games such as Tower of Bozor or the Zorkian card game, Double Fanucci. These can be played as a by-the-by once they've been solved, simply for a bit of light entertainment.

The landscape in Zork Zero is quite huge, set in the time before the 'White House' which is the familiar starting point in the originals. In fact, many of the open ends eventually get explained by the end – an added incentive to play through to the end. The abode of the 'curses' original victim – Lord Dimwit Flathead the Excessive – contains everything from a massive underground lake, a 400 storey office and a closet large enough to sleep an army.



■ **Scouring the Encyclopedia Frobozzica: I wonder why the jester didn't like his portrait?**



■ **Flattened slime monster and sundry other squished creatures. Is this really art?**

Excessive indeed, making the Underground Empire finally appear to be 'Great'.

Graphics are minimalized in this particular Infocom 'graphic' game, limited to the occasional graphic depiction of the games, the portrait and pictorial descriptions in the Encyclopedia Frobozzica. Not a full-blown graphic adventure, the text is

enhanced by only a pretty border, so it retains the old feel of the older Zorks. However, it features the same rich, flowing text found in any classic Infocom adventure, and the graphics do actually enhance the game without spoiling the flow.

Zork Zero holds your attention, but never really pulls you in completely. Atmospherically, the old Zork is there, but seemingly dated: where are the other characters? Just a few scattered beings are present, who are solely an extension of the puzzle without trace of intelligence. This isn't a major flaw, as the game returns with a fantastic parser, on-screen mapping, and the incredibly useful mouse-controlled movement compass. It's so much friendlier than other Infocom games, and so damn good to look at, even without pictures. ■

GRAPHICS	8
SOUND	9
INTELLECT	8
ADDICTION	9
OVERALL 92%	

graphic adventure game is enjoyable, although it is slow in places with frequent disk loads. Every action causes the green light and 'dwirr' to occur, which is just about acceptable because you'll be busy scouring the windows for your next choice of action. Quick movements around the landscape are a problem; even more so if some object is moving or some sound effect is in action.

The sound effects are very well sampled and clear but, as usual, there is never enough. To make up for this I have this unexplainable



■ **A warning for people who play on railway lines.**

urge to smash every window and mirror in the game or wait around in the train station for the unforgettable 'Aw Abooooooaaard'!

Graphically the game is good – colourful, concise and clear – anything too extreme could make the game unplayable with the mouse control. In fact everything within the graphic window can be manipulated, obviously with varying results. Mobsters, cacti and clear stumps all have the same intelligence and are treated the same, but it simplifies the game to such an extent that the computer does the work.

Deja Vu II isn't mind warping in the typical puzzle adventure sense, but death trouble occurs via the simplest of decisions: getting on the wrong train, walking around without your clothes, hitting passers-by. Commonsense things really, but easily overlooked in this adventure.

Altogether, Deja Vu is a really good and enjoyable romp. It's not a traditional tough text adventure, which will give it a wider appeal. Pretty pictures, good sound, it's easy to use, requires no typing skills and there isn't a bug-eyed monster in sight. An adventure for lazy nights – slouch back in a comfortable chair, put the mouse on your lap and get engrossed in the criminal underworld of Deja Vu II. ■

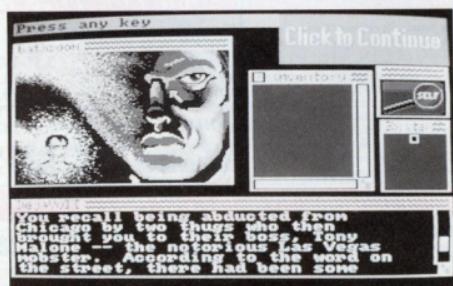
DEJA VU II

LOST IN LAS VEGAS

When the boys from the Mob decide to interview you over the head with a brick, Icon Simulation/Mindscape leave you dazed

Life sure is tough. One minute you're snacking in Chicago, the next you're abducted, grilled by a Vegas mobster and then beaten senseless. Fun times.

Your task is simply to raise a mere 100,000 in pretty green within seven days or face the consequences. We've heard it all before, but the buttonheads following you are pretty mean sonovabitches and will rather pull out their own finger nails than let you survive. The odds aren't in your



■ **Bringing back memories of the night before.**

favour, matey. Can you sort out the real clues from the dross? If so, you may avoid the cold metal against your head and live to tell the tale back in Chicago.

The sense of Deja Vu hits you from the onset – very reminiscent of the original. I almost thought

they'd sent me the first by mistake. The gameplay is identical, the same mouse-controlled action which, once you get used to it, is so easy. Click on the action and double-click on the object: what could be simpler?

Wandering around this true



■ **So you thought you could escape the Mob?**

GRAPHICS	9
SOUND	4
INTELLECT	8
ADDICTION	5
OVERALL 82%	

ARTHUR

The legend of the Sword in the Stone is brought to life by Infocom/Activision.

The land and times of King Arthur have always been a popular basis for computer adventure games, going right back to the Spectrum's heyday. And why not? They have always proved extremely popular and it seemed only a matter of time before those masters of the genre, Infocom, got involved.

Fortunately, Arthur isn't one of the communal everyday quests for the Holy Grail or a happy 'big lads' chat' around a Round Table. In this version of the perennial favourite, you play the part of Arthur (as the title suggests) before he is invested King or, indeed, before Excalibur is even drawn from the stone.

The aim of Arthur, therefore, is to claim your birthright as King of England by drawing the sword, and challenging the possible usurper, King Lot. Of course, life tends to be a touch more difficult: side quests, problem characters, troublesome creatures, swamps and riddles from the usual Infocom devious nature. All in order to gain various kingly virtues of Wisdom, Experience and Chivalry to prove to Merlin that you are ready and able to be once and future King.

Arthur isn't completely alone and helpless in his quest. Merlin



■ Black knights always act cocky, but they seem to regret it later.



■ The moment of truth: are you able to draw Excalibur?



■ A cosy little get-together with that friendly chap, King Lot.

you are likely to come across. Also you have a magical torch which oh-so-handsomely shows a hint menu. This can come in useful if you're in a dire situation, but the temptation is always there for you to take a peek at a problem you could have solved normally in a few seconds.

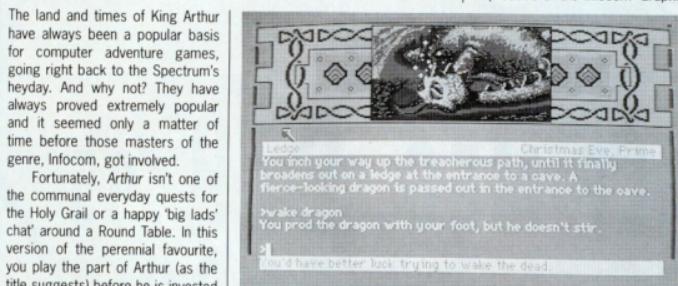
Graphically, Arthur is the most impressive of the Infocom 'Graphic

game rather than put pen to paper at every move.

Arthur isn't one of the toughest Infocom adventures, but then it has its moments. A few puzzles are quite brain-tickling, but these are few and aren't especially devilish. Others problems are quite tough, but most are blatantly obvious.

Atmospherically speaking, however, Arthur is supreme. You feel drawn deep within the story and have a deep desire to return to the computer. The final drawing of the sword will leave you elated, yet with a tinge of loss. You don't want the game to finish - and why should you? Arthur would have many more adventures ahead of him. It's a shame ours ends as Arthur becomes King.

Live the legend, become the boy Arthur and claim your birthright. I can guarantee hours of pure enjoyment. ■



■ Some drinking partners, those dragons are! It's pathetic really...

has given him certain powers to transform into several creatures - an Owl, a Salamander, a Turtle, a Badger, and an Eel - all of which have their respective powers which are easy to apply to the situations

range with pretty, if small, still pictures in every location. These aren't the ultimate, but they certainly enhance the game's feel; and if you're a die-hard text only fan, these can be switched off. On-screen mapping is an extra bonus if, like me, you'd prefer to play the

GRAPHICS	9
SOUND	7
INTELLECT	9
ADDICTION	7
OVERALL 89%	

GOLD RUSH

"Go West, young man!" is the cry from Sierra On-Line

"GO WEST YOUNG MAN!" was the cry in this 'true to life historical simulation' and '3-D animated adventure game.' Sounds too good to be true doesn't it? So warily I set off, trekking as a famous 49er, or even a 48er as in this game...

You start the game after an irritating prologue in Brooklyn as a 'young city slicker' looking for excitement and Big Money by striking it lucky in the Gold Rush Country. Deciding how you're going to travel is one of the choices which will enhance the adventure - you can go cross-country on wagons and steamers, cross over at Panama or sail around Cape Horn. This choice is actually the highlight of the game - playing each individual expedition hoping it will be better than the previous one.

The graphics are crude, the animation is not particularly smooth and the gameplay is tediously slow, even in 'fast' mode. It is obvious, however, that the game's authors had researched the game, and planned each graphic screen, (which have to be individually loaded) which would be fine if it



■ Life sure is lonely in the great outdoors: camping in the wild with the seasoned veterans.

worked. The game's control interface is unhelpful and confusing at best, and the written descriptions are a nonentity. Puzzles are few and general common sense can reach through these - else you will die an inglorious death. The non-player characters appear solely to be information givers, inept to do anything else except, perhaps, ignore you.

In reality, it seems a travesty to release such a slow, crude and basic game to Amiga owners who should rightly expect something better - in either graphics or game-

play. The game looks like it was created for a 12-year-old American kid studying American history - it even feels like educational software and not something to play for sheer enjoyment. Go West You... No thanks, I think I'll remain a city slicker, I won't have to go through all that again. ■

GRAPHICS	4
SOUND	3
INTELLECT	2
ADDICTION	5
OVERALL 38%	

THE CHEAPEST

AMIGA MEMORY UPGRADES AVAILABLE

SEE US AT THE PC SHOW
(27 SEPT - 1 OCT)
EARLS COURT, LONDON)
STAND 2538

A500 HALF MEG £79.95

A500 TWO MEG £399.00

A1000 TWO MEG £399.00

A2000 TWO MEG £369.00

**(EIGHT MEG BOARD POPULATED TO TWO MEG
LARGER UPGRADES AVAILABLE. CALL FOR DETAILS**

£369.00 £399.00

**ALL PRICES INCLUDE V.A.T.
POSTAGE & PACKAGING.**

Send cheques to:Dept AF
Memory Expansion Systems Ltd.

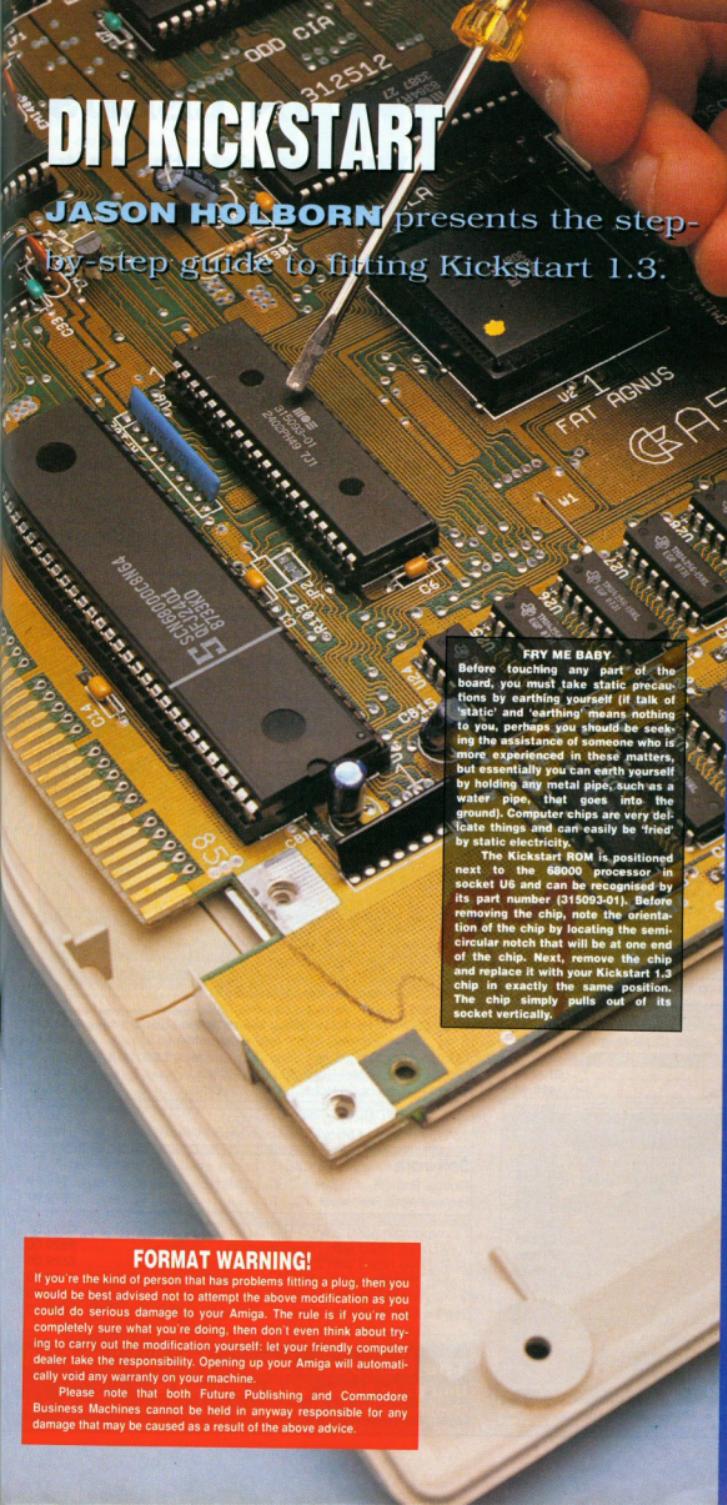
Britannia Buildings, 46 Fenwick Street,
Liverpool. L2 7NB
(051) 236 0480



(051) 236 0480 • 24 Hour Sales
(051) 227 2482 • 24 Hour Fax

DIY KICKSTART

JASON HOLBORN presents the step-by-step guide to fitting Kickstart 1.3.



FRY ME BABY
Before touching any part of the board, you must take static precautions by earthing yourself (if talk of 'static' and 'earthing' means nothing to you, perhaps you should be seeking the assistance of someone who is more experienced in these matters, but essentially you can earth yourself by holding any metal pipe, such as a water pipe, that goes into the ground). Computer chips are very delicate things and can easily be 'fried' by static electricity.

The Kickstart ROM is positioned next to the 68000 processor in socket U6 and can be recognised by its part number (315093-01). Before removing the chip, note the orientation of the chip by locating the semi-circular notch that will be at one end of the chip. Next, remove the chip and replace it with your Kickstart 1.3 chip in exactly the same position. The chip simply pulls out of its socket vertically.

FORMAT WARNING!

If you're the kind of person that has problems fitting a plug, then you would be best advised not to attempt the above modification as you could do serious damage to your Amiga. The rule is if you're not completely sure what you're doing, then don't even think about trying to carry out the modification yourself: let your friendly computer dealer take the responsibility. Opening up your Amiga will automatically void any warranty on your machine.

Please note that both Future Publishing and Commodore Business Machines cannot be held in any way responsible for any damage that may be caused as a result of the above advice.

Hands up who hasn't upgraded their Amiga to Kickstart 1.3! Hmm, just as I thought: quite a few of you. Well, Amiga Format, in conjunction with those nice chaps at Commodore Technical Support, now provides the complete guide to installing the new Kickstart 1.3 ROM in your Amiga 500. If you do wish to carry out this modification, the Kickstart ROM is available from HRS on 021 789 7575 (part number 315093-02).

To identify which version of Kickstart your machine has installed, turn on your machine without a disk in the internal drive and wait for the 'Insert Workbench' prompt to appear. Underneath the hand holding the disk will be a number identifying the Kickstart release. If it says '1.3' then you already have Kickstart 1.3 within your machine.

DISMANTLING YOUR MACHINE

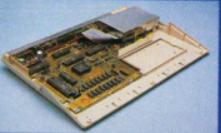
The first thing you must do is unscrew and then remove the cover from your machine. Be very careful not to lose any of the screws, because these will have to be replaced once the installation is complete.



Next, unplug the cable that connects the keyboard to the main board while noting the orientation of the connector (if the keyboard connector is plugged back in the wrong way, your machine will fail to work).



Finally, unscrew and remove the silver shield that covers the board and you're ready to get down to the serious business of replacing the ROM.



Once Kickstart 1.3 is sitting snugly in its chip holder, replace the shield, the keyboard (don't forget to make sure that the keyboard connector is plugged in the right way round!) and casing.

Now comes the moment of truth: once you've plugged everything back in, turn on your machine without a disk in the internal drive and wait for the 'Insert Workbench' screen to appear. If everything has gone OK, the hand should have '1.3' beneath it. If your machine fails to display this initial screen, turn everything off and seek the assistance of a qualified engineer. ■

T.C. COMPUTERS

at: 12a Barnards Way, Charlton Heights
Wantage, Oxon OX12 7EB

* NEW AMIGA PACKS *

Amiga A500 Pack 1.....	£349
Amiga A500 Pack 2.....	£379
Amiga A500 Pack 3.....	£439
Amiga A500 Pack 4.....	£449
Amiga A500 Pack 5.....	£469
Amiga A500 Pack 6.....	£579
Amiga A500 Pack 7.....	£599
Amiga A500 Pack 8.....	£669
Amiga System 500 Pack 1.....	£749
Amiga System 500 Pack 2.....	£845

Commodore C64 Hollywood Pack	£140
Commodore C64 Entertainment Pack	£179

Atari ST 520 New Super Pack	£149
Sinclair +2 incl. Games & Joystick	£129
Sinclair +3 incl. Games & Joystick	£179

GO TO T.C. COMPUTERS



All Prices Include VAT

OXFORDSHIRE'S PREMIER COMMODORE DEALER

IT'S A PITY HE DIDN'T...



LIVE IN LEEDS ?

Why not visit the only
dedicated Amiga and ST
dealer in town?

We specialise in DTP, CAD, MIDI,
Graphics, and business applications.
Together with the full range of Amiga
and Atari Computers, Star Printers,
Genlocks Midi Keyboards, Interfaces,
Second Drives and more.

MUSIC X NOW IN STOCK (REALLY !)

So for a better service, products
range and the keenest prices call

Miditech

**MIDITECH, THE COLOSSEUM,
COOKRIDGE STREET, LEEDS LS2 3AW**

0532 446520

Access & Visa Welcome

MAIL ORDER AND TRAINING PACKAGES AVAILABLE

POST
FREE

THE COMPUTER STORE

CALLERS
WELCOME

SUMMER SALE

A500 + Kickstart 1.3 + 8 Games + Joystick	£379
1 Meg Amiga Pack (as above plus Ram expansion)	£459
1 Meg Amiga Pack (Ram expansion with Clock)	£469

These are new machines with full Commodore UK warranty
mouse/modulator etc. and **FREE** courier delivery.

Next Day Courier Delivery to UK Mainland Only £5

A500 Second Drive - Quiet NEC Mechanism Able/Disable Switch - Through Port	£79.95
Commodore A501 Ram Expansion	£129.95
1/2 meg Ram expansion (With Clock)	£99.95
1/2 meg Ram Expansion (Without Clock)	£89.95

We can supply almost any computer book

Amiga Basic Inside and Out.....(Abacus).....	£18.95
Amiga C For Beginners	£18.45
Amiga DOS Inside and Out	£18.45
Amiga DOS Quick Reference	£13.95
Amiga Disk Drives Inside and Out	£27.95
Amiga Systems Programmers Guide.....(Abacus).....	£32.95
Discs for Abacus Books	£13.95
Advanced Amiga Basic	£18.95
Amiga DOS Reference Guide.....(Compute).....	£14.95
Amiga Machine Language Guide.....(Compute).....	£21.95
Amiga DOS Manual (2nd Ed.).....(Bantam/Commodore).....	£22.95
C Programming Lang. 2nd Ed.....(Kernigan/Ritchie).....	£24.95

Caspell's Ribbon Refresh

Re-Ink your Fabric Printer Ribbon. 160ml Can	£7.95
This will Re-Ink around 30 Ribbons Save Pounds!	

3 1/2"
DSDD

**ONLY
80p
EACH**

**3 1/2"
DSDD**

Best Quality Guaranteed Disks New LOWER Prices

3 1/2" DSDD with 1 for 1 guarantee (each)	75p
3 1/2" DSDD with 1 for 1 guarantee (50)	£7.00
3 1/2" DSDD with 1 for 1 guarantee (100)	£72.00
3 1/2" DSDD Branded with 2 for 1 Guarantee (10)	£12.95
3 1/2" 2 Meg Branded with 2 for 1 Guarantee (10)	£24.95
Disc Box Holds 40 x 3 1/2" Discs	£4.99
Disc Box (Lockable) Holds 80 x 3 1/2" Discs	£7.99
Disc Box (Lockable) Holds 100 x 3 1/2" Discs	£8.99

Printer Lead 1.8m long (PC/ST/Amiga)	£6.99
23 Way D Socket (make your own monitor lead)	£3.95

Software

Deluxe Paint III... Protex Word Processor	£69.99 £79.99
Commodore A590 20MEG HARD DRIVE	£399.00
A590 Drive Fitted with 1 meg memory	£529.00
A590 Drive Fitted with 2 meg memory	£629.00
1 Meg of Memory for A590	£159.00
2 Meg of Memory for A590	£299.00
256 x 4 CMOS DRAM 120ns	£25.00

The Computer Store Tel: 021-770-0468

Unit 82 In Shops, 2-8 Greenwood Way
Chelmsley Wood Shopping Centre, Birmingham B37 5TL

WORDS OF KINDNESS

I have collected over 70 extra fonts and placed them on two disks and have successfully been able to use them with the majority of my software. Unfortunately, I cannot find a way of incorporating these extra fonts into my favourite word processor, *Kind Words* 2.

I have tried assigning the logical device 'FONTS:' to my fonts disk, but *Kind Words* still continues to use its own default fonts. Please help.

D OAKLEY
MIDDLESBROUGH

Kind Words 2 uses special, custom printer drivers and 'Super Fonts' which (supposedly) give the best possible print quality on even the naughtiest of printers. Unfortunately, this means that you can only use the fonts that are included with the package.

If you do want a similar program to *Kind Words* that does allow you to use extra fonts, check out the far superior program *ProWrite 2* which is available from the Amiga Centre Scotland (031 557 4242).

File Edit Layout Font Style

KindWords - Read Me For New

1 18 28 38

News About

Thank you for purchasing *KindWords*. We strive to develop the best possible software. We value your comments and suggestions. You can call our technical support department should you have any problems or suggestions to improve *KindWords*. You can call our technical support number listed on your warranty card.

We will distribute upgrades to registered users containing improvements and new features as they come available. Therefore we ask you to send us the enclosed warranty card.

512K Memory

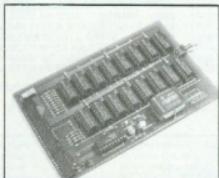
Though *KindWords* does run under 512K memory, we recommend you expand to 1 meg of memory. With the added SuperFonts, larger dictionary, and new electronic thesaurus more memory is required to fully utilize the features of *KindWords*.

■ Does anyone know how to use standard Amiga fonts with *KindWords*? If it is possible, please get in touch and tell us!

LOADSAQUESTIONS....

I have owned an Amiga 500 for a year now and during this time I have accumulated some questions that I would appreciate some answers to:

1. A few months ago, there were various reports of a new virus that



■ Is there a virus lurking within your RAM expansion?

WORKBENCH

It's Enormous! You thought three pages of tips and tricks was too good to be true, but as from this issue, **JASON HOLBORN** presents a whacking four pages of the very best tips, tricks and advice.

supposedly lived in the battery backed clock. Is this possible?

2. Is it possible to use the functions written on the front of some of the keys on the numeric keypad (NumL, PgDn, PrtSc, ScrL etc)?
3. Before buying an Amiga, I

mentation, I found a reference to a System Z virus. Is this in any way linked to the System Z virus killer that writes itself to bootblocks?

A HARDING
NORWICH

1. The simple answer is no. The minuscule amount of RAM used by the battery backed clock would make writing such a virus impossible.

2. Those funny little functions are in fact for use with the A2000 bridgeboard PC Emulators (don't ask me why the A500 has them!) When in Amiga mode, these functions have no effect whatsoever.

3. Unfortunately, the BBC Emulator cannot read BBC disks directly. However, it includes built-in software to allow you to port files across by connecting a lead between the Beeb's RS-423 and the Amiga's serial port.

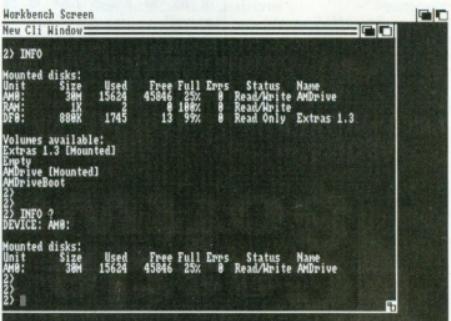
4. You shouldn't have any problems using your Technics keyboard with the Amiga. MIDI is only a standard communications protocol between musical instruments

and is (largely) manufacturer independent. If an instrument claims to support MIDI then it will (for 'will', read 'should') work with all Amiga MIDI software. For MIDI applications, Music Studio isn't the most suitable software, why not check out Music X? (Read the review on Page 20.)

5. The System Z 'virus' that is trapped by VirusX is in fact the same bootblock that is output by the System Z virus killer. Although VirusX treats it as a virus, it doesn't seem to do anything harmful (correct me if I'm wrong!)

GIVE ME SOME INFO

When using my Amiga for programming, I often find that I need to know how much disk space is available on a particular disk in my drive. At the moment, I have to load up the RSLClock program that was published on the cover disk of *ST/Amiga Format*'s second issue. Unfortunately, I don't really want to have to load this program every time I want such a mundane piece of information. Is it possible to write a machine



■ Using the INFO option in CLI to assess the free space on a disk.

► code program (I have Devpac 2) that would tell me what I want to know?
P STEVENSON
BISHOPS STORTFORD

You're making life very difficult for yourself. All Amiga Workbench disks have a little CLI command called 'INFO' which will tell you everything you want to know. To use it, just type INFO and press return and the command will tell you the amount of space used/available on all drives connected to the system.

FONTS FROM BASIC

Could you please tell me how to use fonts other than the standard Topaz system font within my own AmigaBASIC programs. I've tried everything including the method used by NotePad, but nothing seems to happen.

T BRICE
NORWICH

To use different fonts within your BASIC programs, you'll have to call the operating system routines. The Amiga font handling routines are held within the disk-based library 'diskfont.library' which resides within the LIBS: directory of every self respecting Workbench disk. As well as this library, AmigaBASIC also needs access to diskfont's 'bmap' file which will have to be created using the 'ConvertFD' program in the Basic demos drawer on your Extras disk. To use these routines, use the source code stub below:

DEFING a-Z

```
LIBRARY "graphics.library"
LIBRARY "diskfont.library"
DECLARE FUNCTION
OpenDiskFont LIBRARY
DECLARE FUNCTION OpenFont
LIBRARY
```

```
FontName$ =
"diamond.font"+CHR$(0)
PointSize = 20

FontAttr(0) =
SADD(FontName$)
FontAttr(1) = PointSize *
65536
```

```
FontPointer =
OpenDiskFont(VARPTR(FontAttr(0)))
IF FontPointer = 0 THEN
  PRINT "Unable to Open
Font."
  GOTO Abort
END IF

CALL SetFont(WINDOW(8),
FontPointer)
```



■ Enhance your AmigaBASIC screens is made (at least relatively) straightforward with our 'Fonts from Basic' routine below.

```
PRINT "Now in Diamond
Font"
CloseFont(FontPointer)

FontAttr(0) =
SADD(("topaz.font"+CHR$(0)
))
FontAttr(1) = 8 * 65536
FontPointer =
OpenFont(VARPTR(FontAttr(0
)))
CALL SetFont(WINDOW(8),
FontPointer)
PRINT "Back to Topaz 8"

Abort:
LIBRARY CLOSE
```

DIGITISER DELIGHTS

I am very interested in buying a video digitiser for my 1 MB Amiga 500, and after reading Michael Nash's letter in Issue One, I decided to look into the digitising scene a little further. I have a budget of around £150 which will hopefully cover the digitiser hardware and the DigiView Gold that you recommended seems to be the best bet. However, could you please answer the following questions.

1. Do I need to buy any extra hardware to allow me to digitise colour images from a video recorder?
2. Can you digitise images from video tape while the tape is playing, or do the images have to be paused?
3. If you have to use a black and white video camera for digitising 'live' images, does this mean that I have to use black and white video tape to grab images from?
4. I have a movie camera which



■ A typical digitising set-up, composed of an Amiga, a video camera, a digitiser and a lead.

ning, you'll need a real-time digitiser which grabs its images at one fiftieth of a second. Because of the very slow nature of DigiView, you'll have to pause the image for at least ten seconds.

3. While it is possible to digitise both colour and black and white video images from tape, best results are achieved when digitising from old black and white films.

4. If you can display a still from a Super 8 movie on the projector screen, then grab it from there.

TELL ME SOMETHING I DON'T KNOW PAL!

Have you got a problem with your Amiga that needs answering? If the answer is 'yes' then look no further than the Workbench Helpline for the answer. Obviously we can't enter into personal correspondence, but if you've got any questions, then we'll try our utmost to answer them as fully as possible within these pages. Send your troubled words to:

Workbench Helpline,

Amiga Format, 4 Queen

Street, Bath BA1 1EJ

uses Super 8 film. Is there any way of using this camera to digitise real life images other than converting the 8mm film to VHS format?

J WARNER

BATH

1. To be able to digitise colour images from video, you'll need a rather expensive piece of hardware called a composite signal decoder which basically splits a composite video signal into its red, green and blue components. Unfortunately, we haven't heard of anyone selling such a device for use with home video recorders.

2. To digitise while the tape is run-

TOTALLY RAD!

Using the Workbench RAD device to imitate a full 880OK floppy disk.

While on the subject of Mountlists (refer to the tip 'CORRUPT DISK SHOCKER' if you don't know what I'm talking about!), those of you with more than a megabyte of memory can speed up disk copying by expanding the Workbench 1.3 'RAD' device to a full 880OK (same as a floppy disk).

To do this, load the Mountlist file into Ed using the command ED DEVS: MOUNTLIST. Next, locate the mountlist entry for RAD: and, in particular, the line that reads 'HighCyl = 21'. Change this line to read 'HighCyl = 79' and then save and quit the editor. Finally, type MOUNT RAD: and you now have a recoverable (and bootable if you have 1.3 Kickstart!) extra disk drive that can be used in the same manner as any normal floppy drive.

MP SAUNDERS
DORSET



■ Instead of a second drive, use RAD!

Hobbybyte Busbyte Computer Centre

10 Market Place, St. Albans, Herts.
St. Albans (0727) 413967/56005

Unit 1G, Arndale Centre, Luton, Beds.
Luton (0582) 4571954/1128

AMIGA ACCESSORIES

BBC EMULATOR	£39.95
C64 EMULATOR	£69.95
AS50 MODULATOR	£23.95
AMIGA RAM EXPANSION	£115.00
AMIGA RAM EXPANSION	£99.95
DIGITISING PACK with Camera, Digitview Gold 3.0, cables	£39.95
PRO SOUND DESIGNER GOLD	£69.95
MIDI INTERFACE MM3000	£24.95
CASIO MT 240 KEYBOARD	£19.95
MODEM PACK, AD/AA HAYES V21/23	£249.99

FANTASTIC REDUCTIONS ON AMIGAS

AMIGA 2000 AND ACCESSORIES (ex VAT)

AMIGA 2000, Mouse, Workbench, Basic, Utilities, Manuals	£799
AMIGA 2000, 1084S MONITOR, 3.5" AND 5.25" DRIVES AND BRIDGE BOARD (giving PC compatibility), 1.3 KS if specified	£1099
AS ABOVE, PLUS AMIGA/PC DOS 20 MB HARD DRIVE	£1348
AS ANY ABOVE, BUT ALSO WITH THE WORKS	£50

Note that special prices are available for other Amiga configurations also

A2058 8 MB RAM EXPANSION, POPULATED TO 2 MB	£449
270f/4-2088 XT BRIDGE BOARD WITH 5.25" 360 KB DRIVE	£250
A2286 AT BRIDGE BOARD WITH 5.25" 1.2MB DRIVE	£559
SPECIAL - A5060/2092 20 MB PC/AMIGA DOS HARD DISC	£249
* NOW AVAILABLE * - A2090/A2092 20 MB AUTO BOOT HARD DISC	£479
A2094/2094 40 MB AUTO BOOT HARD DISC	£750
A2306 INTERNAL GENLOCK	£187
A2350 BROADCAST QUALITY GENLOCK/FRAMEGRABBER	£545
A2032 PAL COMPOSITE VIDEO CARD	£69
A2010 INTERNAL 3.5" DRIVE	£105
A2620 68020 CO-PROCESSOR	£1045
14" HIGH RES COLOUR MONITOR (Needs video Card & Cables)	£579
CABLES FOR HRCM	£29
VIDEO CARD FOR HRCM (FLICKER FIXER)	£299
CHERRY DIGITISING PAD AND DRIVER	£499

Prices inc. VAT

AMIGA 500 PACKS:

GAMES PACK

Inc. Modulator, 24 games on 4 discs: Arcade, Adventure, Board and Shoot-em-up games, Sports	
Inc. Modulator, plus 8 additional games on 2 discs: the following: Asteroids, Asteroid War, Roger Rabbit, Power Play, Mercenary, Alphamax One, No Excuses, Znaper, Nebulous, Star Ray, Harrier Command, Art of Chess, Amegas, Spritz Paint	£799 inc VAT
Also with 8833 monitor AND LC10 colour Printer	£749 inc VAT
AIR MILES PACK	
Inc. Modulator, 24 games on 4 discs: Arcade, Adventure, Board and Shoot-em-up games, Sports	
Inc. Modulator, plus 3 additional individually boxed games, Spritz Art PACK AND 500 AIR MILES (Paris or Amsterdam) is £99 inc VAT	£99 inc VAT
Also with 8833 monitor AND LC10 colour Printer	£799 inc VAT

PROFESSIONAL PACK

Inc. Modulator, 24 games on 4 discs: Arcade, Adventure, Board and Shoot-em-up games, plus: A501 RAM Expansion and Dragons Lair	£799 inc VAT
Also with 1084S/8833 monitor AND LC10 colour Printer	£938 inc VAT
EXPANDED PACK	
Inc. Modulator, 24 games on 4 discs: Arcade, Adventure, Board and Shoot-em-up games, plus: A501 RAM Expansion and Dragons Lair	£799 inc VAT
Also with 1084S/8833 monitor AND LC10 colour Printer	£938 inc VAT

AMIGA 500 HARD DISC DRIVE £385 inc vat

COMMODORE	MONO	COLOUR	ECG	SELL
PC-AT/386	RRP SALE	RRP SALE	RRP SALE	RRP SALE
PC10 SINGLE DRIVE	549	494	699	599
FREE 24 HR ON SITE MAINTENANCE WITH THESE CBM MACHINES				
PC10 DOUBLE DRIVE	599	534	749	659
PC20 WITH 20MB HARD DISC	799	689	969	839
PC20 WITH 32MB HARD CARD	849	779	999	899
PC40 AT SINGLE DRIVE	1299	1065	N/A	1549
PC40 AT 20MB HARD DISC	1299	1065	N/A	1899
PC40 40MB HD/40MB T/STRMR	1949	1586	N/A	2199
PC60 386 512KB SINGLE DRIVE	1249	1029	1399	1159
PC60 2.5MB SINGLE DRIVE	1999	1649	2149	1779
PC60 40MB HD/40MB T/STRMR	2699	2229	2899	2394
PC60 40MB HD/40MB T/STRMR	2699	2229	2899	2494
PC60 WITH 80MB HARD DISC	2549	2099	2749	2269

AMIGA SOFTWARE SPECIALS

Paint Pro II	£62.95	Dragon Lair	£29.95
Paint Pro III	£62.95	All books 10% off	
Transformer	£19.95	BEST PRICES ON ALL	
X CAD Designer	£82.95	SOFTWARE - WE CAN	
X CAD Professional	£329.95	NOTICE - WE CAN	
Publisher's Choice	£73.95	BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
		ADVERTISED PRICE	
		SOFTWARE - WE CAN	
		NOTICE - WE CAN	
		BEAT ANY GENUINE	
</			

SOFTWARE EXPRESS

For
AMIGA and ATARI
(021) 643 9100



YOU KNOW . . .

that Software Express publish the highly successful
"Dungeon Master Editor",
for the Amiga and Atari ST.

YOU MAY NOT KNOW . . .

that we are also the LARGEST Amiga and Atari Specialist
in the Midlands and Southwest

dealing in PC's, Mega ST's, Amiga Desktop Publishing, Scanners,
Lazer, Digitizers, Calamus, Epson Emulators, Databases, Word
Processors, and not forgetting Games

Late Night Opening Thursday - 7pm

MIDLANDS

212-213 Broad Street,
BIRMINGHAM, B15 2JP

Tel: (021) 643 9100

For the best in
Service & Support,
visit our
Regional Branches

SOUTH

9 Exeter Street, (The Viaduct),
PLYMOUTH, Devon, PL4 9AQ

Tel: (0752) 265276

Track Computer Systems

Track are Specialists in
Hard Drives, Serious Software
and the Highest Degree of Customer Care.
Call Us For Service Beyond The Sale

We give Track Money Off Vouchers With EVERY order

Amiga Hard Drives

		Commodore 1084s	
Amdrive 30 Mb	£399	Phillips CM8833	£240
Amdrive 50 Mb	£475	Star LC10 Colour	£225
Commodore A590 20Mb	£399	Star LC10	£169
Vortex 40 Mb	£573	External Floppy Drive	£95
Track Drive 80 Mb	£790	Combitec 8Mb populated 2Mb	£599
Supra 30 Mb	£699	B&W Scanner Inc Software	£229
Supra 60 Mb	£1199	Greyscale Scanner inc Software	£344
		Digi View Gold V3	£129.95
A2000 Drives		Polaroid Palette	£1650
Impact POA		Control Centre fits over A500	£49.95
Hard Drive Controllers		512K RAM (very fast) Expansion	£149
Track Controller (inc case) SCSI	£169	Xerox 4020 Ink Jet Printer	£1400
		Superpic	£599

Hardware

Full range of hardware for all formats
Please call for our extensive Brochure

We pride ourselves on our excellent service

Please call into our shop or phone us anytime for sales or
advice. Our trained staff will be only too pleased to help.

HOW TO ORDER TRACK PRODUCTS

Make Cheques, Postal Orders, Bankers Drafts payable to Track Computer Systems
All prices are fully inclusive of VAT & postage. We also offer credit, please phone.

LINES OPEN UNTIL 9pm WEEKDAYS

0773 531991 0860 639081

FAX 0773 765721

Track are recommended Computer distributors

TRACK COMPUTER SYSTEMS, SYSTEMS HOUSE,
28 BRAEMAR AVENUE, EASTWOOD,
NOTTINGHAM NG16 3JY

Callers Welcome for special opening offers
at our new shop

Blacksmiths Yard, Sadler Gate, Derby DE1 3PD

Protex	£86.91	K Spread 2	£52.13	Deluxe Productions
WP Library	£199	Maxiprint Plus	£131	Small Business Set
BeckerText	£98	PrintMaster	£69.95	Deluxe Photo Lab
Kind Words 2	£104	Professional Page	£216	Superbase Page III
Prowrite	£104	Publishers Choice	£89.91	Deluxe Page III
AM Disk Maker Plus	£78.22	Animator/Images	£99.00	Deluxe Video II
BAD Disk Optimizer	£78.22	Text Master	£55.00	Deluxe Video
BBC Emulator	£43.43	Comic Setter	£43.43	Deluxe Paint IVD Print 1
Butcher	£69.52	Small Bus Accs Plus		
Calligrapher 1.05	£26.98	Sculpi 4D Junior		
CG Master	£78.22	Digital Paint II		
Cygnus Ed Prof	£78.22	Image Flipper 2 (Pal)		
Diskwick	£69.52	Movie Setter	£66.83	Retrieval II
Dot to Dot	£78.22	Pro Video Plus (Pal)	£217	Zoetrope (Pal)
Draw	£78.22	Pro Video Plus Font Set 1	£86.91	Interfront
External Floppy Drive	£78.22	Pro Video Plus Font Set 2	£86.91	Microfile
External Hard Drive	£78.22	Sculpi 3D Animlate (Pal)	£109	Data Retrieve Prof
External Hard Drive	£78.22	Text Master	£68.63	Microfile File Plus
External Hard Drive	£78.22	The Director Toolkit	£213	Argis Draw 2000
External Hard Drive	£78.22	Text Master	£217	Professional Draw
External Hard Drive	£78.22	Virus Infection Protection	£60.83	Pro Board
External Hard Drive	£78.22	XT-View Direct	£60.83	Pro Net
External Hard Drive	£78.22	XT-View Direct 3D	£60.83	Pro Print
External Hard Drive	£78.22	XT-View Graphics Master	£60.83	Mac X
External Hard Drive	£78.22	XT-View Wipe Master	£60.83	Minigen
External Hard Drive	£78.22	CG Calc	£43.43	PASE

Full demonstration facilities available
Hardware & Software

To enable YOU to make the RIGHT decision.

New MiniMAX Ram expansion for A500...Features Clock/calendar S12K expands to 128Mb
MiniMAX S12K £244 1Mb £323 1.5Mb £429 2Mb £573

EVERY PRODUCT NOT IN STOCK
IS USUALLY AVAILABLE NEXT DAY

Acquisition 1.3 rrp £249 Track Special
Professional Page, Clip Art, Template
£349 Track Special £212
Offer applies while stocks last

SPECIAL

GURU'S GUIDE

When your Amiga crashes, it might be nice to know why.

The Amiga is undoubtedly a wonderful machine. Not only can it produce better sound and graphics than the vast majority of comparable machines, it can also crash far more impressively than most. You don't just get a 'Bus Error - core dumped' message or even a couple of meaningless bombs appearing on the screen: the Amiga crashes in style matey.

But just what do those seemingly meaningless Guru Meditation numbers really mean? Are they just the product of a tortured mind or can they really be of help to the average user? It must be said that Guru Meditation numbers aren't really a great deal of use to the average user, but if you're a programmer, then you'll find them immensely useful.

Guru meditation numbers have a general format which once you've learned how to decode them, a wealth of information will be revealed to you. The format for the code is **xxxxzzzz.pppppppp**, where 'xx' is the particular part of machine that has caused the crash, 'yy' tells you the error class, 'zzzz' tells you exactly what happened (eg. RAM out of memory etc) and 'ppppppp' tells you the starting address of the task that caused the crash (there's no escape from the Guru!) Below is a list of the more common error codes.

XX NUMBERS (System ID codes)

- 00 68000 CPU Trap
- 05 Math Library
- 07 DOS Library
- 09 Icon Library
- 10 Audio Device
- 13 Keyboard Device
- 14 Trackdisk Device
- 15 Timer Device
- 30 Bootstrap
- 31 Workbench
- 81 Exec Library
- 82 Graphics Library
- 83 Layers Library
- 84 Intuition Library

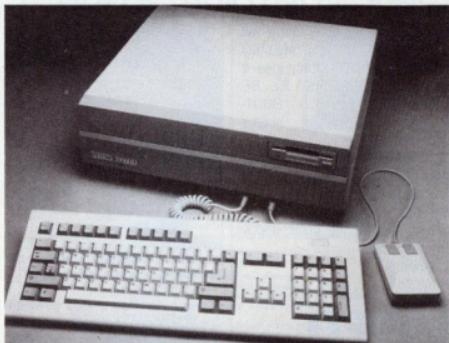
YY NUMBERS (Error Classes)

- 01 Not Enough Memory
- 02 MakeLibrary Error
- 03 OpenLibrary Error
- 04 OpenDevice Error
- 05 OpenResource Error
- 06 I/O Error

ZZZZ NUMBERS (Error Codes)

- Exec
 - 0001 CPU Trap Checksum
 - 0002 ExecBase Checksum
 - 0003 Library Checksum
 - 0004 No Library Memory
 - 0005 Corrupted Free Mem List
 - 0006 No interrupt memory
- Graphics
 - 0001-5 Copper Error
 - 0006-A No Memory
- Intuition
 - 0001 Unknown Gadget
 - 0002-5 No Memory
 - 0006 Item Box Error
 - 0007 No Memory for new screen
 - 0008 No memory for AllocRast()
 - 0009 Unknown system screen
 - 000A No memory for add gadgets
 - 000B No memory for open window
- OS
 - 0001 No memory for startup
 - 0002 Taskend failed
 - 0003 Packet failure
 - 0004 Unexpected packet failure (Oo-err!)
 - 0005 FreeVec() failed
 - 0006 Disk block sync error
 - 0007 Corrupted bitmap
 - 0008 Key already set
 - 0009 Bad checksum
 - 000A Disk Error
 - 000B Key out of disk range
 - 000C Foul Overlay

- Trackdisk
 - 0001 Seek Error
 - 0002 Error Wait
- Boot
 - 0001 Bootsector Error



■ The A2000 'CPU unit' and keyboard, with the infamous 'telephone-cable style connecting lead'. Which is always too short...

A2000 KEYBOARD TRICK

If you just can't get that keyboard far enough, try this little tip.

External keyboards are all very nice, but why do computer manufacturers always make the connecting leads so short? Thankfully, you can extend the length of the A2000 keyboard very cheaply and, best of all, without ever having to snip a single wire.

The A2000 (and the B2000) keyboard uses a five-pin DIN type connector to connect to the main system box. This five-pin DIN

socket is the same connector used by many audio, video and MIDI devices and so an appropriate lead shouldn't be too hard to find. What you'll need is a lead that has a male five-pin DIN connector on one end and a female five-pin DIN on the other end. This should then be connected between the Amiga and the keyboard. I know, the comment 'Why didn't I think of that before' springs to mind!

A FREE VIRUS KILLER!

Yes, you may already own this entirely FREE bootblock checker!

Calling all Workbench 1.3 owners! Did you know that your all new improved Workbench disk includes a freebie virus checker/killer? You didn't? Then read on...

It isn't really surprising that you haven't found this little gem as the manual writers at Commodore have done their utmost to hide the fact by using the smallest possi-

ble font size that their typesetter can manage.

The virus killer is built into the CLI 'Install' command which is used to construct boot blocks on floppy disks. To use it, you must first enter the CLI and then type **INSTALL DFO: CHECK**. The 'Check' option tells AmigaDOS to compare the bootblock of the disk currently within the internal drive with a standard 'clean' ♦

bootblock. If the bootblock appears suspect, then Install will return 'MAY NOT BE STANDARD V1.2/V1.3 BOOTBLOCK', else it will return 'APPEARS TO BE STANDARD V1.2/V1.3 BOOTBLOCK' if everything seems clean and healthy.

If Install thinks that the boot-block is suspect, all you have to now do is to type 'INSTALL DFO:' and the potential virus will be sent to live on the great floppy disk in the sky.

C CANNON
ROMFORD

VIDEO VISUALS

There's only one way that Kylie Minogue is ever going to get on our Amiga...

So you've got yourself an Amiga plus monitor and access to a video recorder: how would you like a free TV thrown in to the bargain? Read on, matey.

What you'll need is a pair of leads with phono connectors on one end and the appropriate connectors on the other end to connect to the 'Video Out' and 'Audio Out' sockets on your VCR. First of



Kylie Minogue could be appearing on your Amiga soon!

all, just connect a lead between the VCR 'Video Out' socket and the 'CVBS/L' connector on your 1084 and then do the same with the 'Audio Out' and 'Audio' connector on the VCR and Monitor respectively. Once everything is connected up, pull down the front panel on the 1084 and press in the little button labelled 'CVBS/RGB'. Now when you play a tape on the VCR, the picture will be displayed on your Amiga monitor. If the video display seems to become corrupt when you turn on the Amiga, try unplugging the SCART lead that connects the Amiga to the monitor.

If you also have an aerial lead plugged into the VCR, while a tape is not running you'll be able to watch Neighbours on your 1084 (which is hopefully the nearest we'll ever get to having a Neighbours program running on the Amiga).

NATALIE FINN
FROME

COLOURFUL CRASHES

Screen colour can be informative.

Many of you may have noticed that when the Amiga is first on, the screen cycles through shades of grey before the 'Insert Workbench' prompt finally appears and the Caps Lock light flashes. This rather strange process is called a 'self-diagnostic' and is basically the Amiga testing all its various bits and pieces to make sure everything is working OK. Owners of the A1000 even have an extra diagnostic when the machine is first turned on: the Amiga actually plays a little tune before booting Kickstart from disk!

If your machine is OK, the sequence will be: dark grey, light grey, white and then finally the Insert Workbench requester pops up. If something goes wrong with your machine, the screen will turn to a certain colour to indicate a particular fault. Here's a guide to those kickstart colours:

Green - Chip RAM Failure

Yellow - 68000 trapped before Guru initialised

Blue - Error in PAD (custom chip error)

Red - ROM failure

PATRICK DOWNES
PONTYPRIDD

50 BIG ONES JUST FOR YOU

Workbench just keeps on growing. As a result, we need you to send us your tips and tricks. If you've got any trendy little tips that you think would be of use to your fellow Amiga owners, then why not jot them down and send them into Workbench: you could win yourself £50 for your troubles. Send your tips to:

Workbench, Amiga Format, 4 Queen Street, Bath BA1 1EJ.

£50 IS WAITING FOR YOU!

CORRUPT DISK SHOCKER!

Not just disk first aid: this is more like open heart surgery.

It really is very annoying to insert a disk into a drive only to get a 'Validation Error' prompt pop up every time. Usually, you can save the disk by either using the Diskdoctor utility or by reformating it from scratch. Sometimes, however, a disk can be so badly corrupt that it won't even reformat and so it usually ends up in the bin.

But, as it happens matey, there is a way of partially getting around this by messing around with the Workbench Mountlist to create a custom device that only uses those tracks that come before the corrupt tracks.

First of all, format the corrupt disk using the 'Format' command and note down the track number that causes the format to fail. Now type ED DEVS:

MOUNTLIST to load the Mountlist file into the CLI text editor, Ed. Once Ed appears, search through

the file for a Mountlist entry for a device called 'DF2:' which will look something like the entry below:

```
/* Mount a 5.25" disk drive to be
mounted as DF2: */
```

```
DF2: Device = trackdisk.device
Unit = 2
Flags = 1
Surfaces = 2
BlocksPerTrack = 11
Reserved = 2
Interleave = 0
LowCyl = 0 ; HighCyl = 39
Buffers = 20
BufMemType = 3
```

Firstly, change the 'Unit = 2' line to read either 'Unit = 1' (if you have two drives) or 'Unit = 0' (if you have only one drive). Next, change the line 'HighCyl = 39' to read 'HighCyl = nr', where 'nr' is the number of the last track that the Format command was able to successfully format before encountering the corrupt tracks (take one away from the track number that you wrote down). Finally, type MOUNT DF2: and then format the corrupt disk using FORMAT DRIVE DF2: NAME "Empty". Now, whenever you wish to access the disk, you must refer to it as DF2: regardless of which drive it is in.

MP SAUNDERS
DORSET



2 William Clowes Street
Burslem
Stoke-on-Trent
ST6 3AP
Tel 0782 575043

Castle Software

AMIGA SPECIAL OFFERS

R Type	9.95
Wicked	9.95
Dominator	9.95
Time Scanner	8.95
Real Ghostbusters	8.95
Vindicators	9.95
Pacland	8.95
Pacmania	8.95
Garfield 1	8.95
Garfield 2 Winter Tale	9.95
Phantom Fighter	8.95
Pioneer Plague	4.99
Running Man	9.99
IK+	9.95
Bismarck	9.95
Annals of Rome	9.95
Return of the Jedi	9.99
Peter Beardsley Soccer	7.99
Hyperdome	5.99
Phantasm	5.99
Academy	5.99
Artura	5.99
Foundations Waste	5.99
World Tour Golf	7.95
Bards Tale	7.95
Marble Madness	7.50
Outrun	7.95
Vigilante	9.99
Power Struggle	5.99

UNDER A
TENNER!
SELECTION

TRIAD
Starglider,
Barbarian,
Defender of the
Crown
RRP £29.99
Sale price
£9.95

AMIGA TOP TITLES

F16 Combat Pilot	15.95
Barbarian II	16.95
Bloodwyche	16.95
Xenon 2 - MegaBlast	16.95
Falcon	19.95
Falcon Mission Discs	13.95
Populous	17.95
Populous Data Discs	7.95
Leisure Suit Larry 1	11.99
Leisure Suit Larry 2	19.99
Police Quest 1	11.99
Police Quest 2	19.99
Space Quest 1	11.99
Space Quest 2	11.99
Afterburner	9.99
Krystal	12.99
Battle Tech	14.99
Portal	7.95
Trained Assassin	16.95
Bubble Bobble 2	16.95
Wierd Dreams	16.95
Kennedy Approach	15.95
Kick Off	13.95
Microprose Soccer	15.95
Ultima 5	15.95
3D Pool	15.95
New Zealand Story	16.95
Rick Dangerous	15.95
Indy Jones + Last Crusade	16.95
Forgotten Worlds	16.95
Scorpion	16.95
Millenium 2.2	16.95
Elite	16.95
Honda RVF	16.95
Sleeping Gods Lie	15.95
Kult	16.95
Conflict Europe	16.95
Waterloo	16.95

FANTAVISION
£25

AMIGA NOT TO BE MISSED

Teenage Queen	7.95
Techno Cop	6.99
Hostages	9.99
Legend	9.99
Captain Blood	7.99
Mini Golf	6.99
Zany GOLF	14.99
GB Air Rally	5.99
Three Stooges	8.99
King of Chicago	8.99
GFL Football	4.99
Champ Golf	5.95
Vixen	2.99
Armageddon Man	2.99
Fernandez Must Die	6.95
Faery Tale Adventure	8.95
Tracers	3.99
Ebon Star	2.99
Galactic Invasion	2.99
Romantic Encounters	5.99
Fire Power	6.99
Better Dead Than Alien	5.99
Shanghai	4.99
Wanted	3.99
Lombard Rally RAC	14.99
Nigel Mansell's G. Prix	5.99
Deja Vu	8.99
Star Goose	6.95
Backlash	5.95
Craps Academy	5.95
Solitaire Royal	6.95
Prison	9.99
Strike Force Harrier	6.99
Robbeary	4.99
Thexder	2.99
Action Service	3.99
Roger Rabbit	7.99
Indoor Sports	4.99
ISS	5.99
Rocket Ranger	18.99
Lords of the Rising Sun	19.99
Grand Prix Circuit	17.99
Deluxe Paint 3 (1 meg)	54.99

AMIGA SPECIAL OFFERS

EDUCATIONAL

Fun School 2, under 8	12.99
Fun School 2, 6-8	12.99
Fun School 2, over 8	12.99
Postman Pat	7.95

Division 1	5.95
Football Manager 2	9.99
Soccer Supremo	6.95
Test Drive 2	19.95

HARDWARE

1 meg Expansion	£89.95
External Drive	£89.95
Star Mono Printer	£169.00
Star Colour Printer	£199.00
Philips Stereo Monitor	£249.00

Please phone for
availability
All prices
include VAT.

All orders under £6 please add 75p towards postage and packing.
All orders over £6.00, postage and packing free.

GAMEBUSTERS

There's no need to cry, there's no need to hit the bottle or kick the cat! Just count to ten, take a few deep breaths and then turn to Gamebusters to see just how you're supposed to get past that monster and on to the next section.

KULT

Here's how to solve those five ordeals (if you think you should!)

1. DE PROFUNDIS

You will need the rope for this ordeal.

Enter the room and wait for a hook to lower from the ceiling. Latch your rope onto it and hang on until the monster reappears, then click on the monster and drop onto it and wait until it carries you to the other side of the room where you can collect your skull.

2. THE TWINS

You will need the goblet for this ordeal.

Go through the door to the left of the serpents into a room called 'The source'. Inspect the statue in the fountain. Press the eye of the statue and water will pour from the statue: fill your goblet. Now return to the room with the serpents and pour the water into the left serpent's mouth. Take the die that floats to the surface and throw it (it usually comes up a two), remember the number then drop it into the mouth of the second serpent and the other door will open, so go through it.

Then lift the number of hands that was shown on the die and

press the head: if you lift the correct hands the small partition will open and a symbol will be revealed. Go back into the source and examine the six cubes beneath the fountain, lift the lid of the one with the corresponding symbol to receive the skull.

3. THE WALL

You will need the dagger for this ordeal.

Enter the room and press the third mark on the floor, then press the first mark followed by the second. The sliding doors should now be together: if they aren't then repeat the process using different combinations. Once the doors are together go through the left hand door. Stand on the step and put the dagger in the slot on the knight, the wall will flip over revealing a passage on the right: go down it and put your hand in the hole to receive a skull.

4. IN THE SCORPION'S PRESENCE

You will need the fly for this ordeal.

Firstly you need to pray to the large black statue, then go through the door in front, crawl up to the mistress and give her the fly. Refuse her offers of kisses etc and feed the fly to the blue spider.

5. THE NOOSE

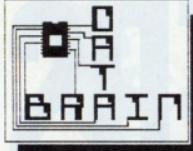
You don't need anything for this ordeal.

Enter the room and use solar eyes if it's dark. Grab hold and climb the left rope up onto the platform. Pull the lever to kill the Poormouth (who plays no part) and examine the hollow in the platform to get the skull. Then pull the lever again and take the left hand rope before exiting the room. Bingo!

GARY CROOK
ROYSTON

Take the red spider and put it into the mouth of the large statue and a door will open. Go past the man who appears and take the skull.





DATABRAIN Ltd
52 Idlecombe Road
Tooting
London
SW17 9TB

01-672-4791

9am - 8pm 7 Days a week

HARDWARE

A500 with Modulator	£377
A1084s Colour Stereo Monitor.....	£282
A500 + A1084s.....	£610
A501 Half Meg Expansion.....	£130
A2000 + A1084 Monitor	P.O.A
Amiga 1010 External Drive	£135
NEC 3.5" External Drive	£85
Senator 3.5" External Drive	£90
NEC P2200 24 Pin	£389
Amiga MPS1500C Colour Printer	£275
Epson LX800.....	£280

SOFTWARE

Due to the ever expanding range of software for the Amiga, space does not allow us to mention every package available. Below is just a SMALL SAMPLE of our software prices. If the item you require is on the market, then we can supply it and at a competitive rate.

Battlehawks 1942	£18
Millenium 2.2	£18
Dungeon Master (1 meg required)	£18
Dragons Lair (1 meg required)	£32
Elite	£18
Sword of Sodan.....	£18
Publishers Choice	£89
Publisher Plus	£78
Shakespeare	£112
Superbase Personal 2	£72
Superbase Professional	£181

Whatever the item, either leisure or business we can supply it. We provide full support whenever possible and if we can't then we know a man who can. We never forget that you are the most important person in the company and we will help you get the most from your Amiga and the software that makes the Amiga the machine of today and tomorrow. All our staff are in the process of being trained by Commodore to enable us to provide the service that you expect and deserve. We constantly look at new ways to improve our service and so we are prepared to 'Bundle' items together in any combination that suits you and your pocket, please phone for details on these and any item you require.

Remember, WE ARE HERE TO HELP YOU.

DATABRAIN Ltd 01-672-4791

All our prices include VAT. Please phone for carriage rates.
COLLECTIONS BY APPOINTMENT, please phone.

Are you new to the Amiga, finding it difficult to harness the power of this amazing computer ?, then what you need is help from the largest group of Amiga enthusiasts in the world.....



Members receive:-

- ★ Excellent discounts on software
- ★ Technical support and on line help
- ★ Superb hardware reductions
- ★ A bi-monthly newsletter of over 60 pages!
- ★ Access to a PD library of over 300 disks
- ★ Use of the groups Amiga only bulletin board
- ★ Discounts on books



AMIGA



DON'T HESITATE - JOIN NOW and start to appreciate what Amiga computing is all about.

For further details write, enclosing a stamped addressed envelope to:

**The U.K. Amiga User Group,
66, London Road,
Leicester. LE2 0QD.**

Or Telephone :
Leicester (0533) 550993

A SMALL SELECTION FROM OUR WAREHOUSE

Hardware & Peripherals (Offers while stocks last) RRP WAVE

64C Connoisseur's Pack inc: 64C, Neos Mouse, Software etc	249.99	132.99 A
Amiga 500 inc. Free Modulator & Workbench 1.3	499.99	329.99 A
Amiga 500 Miles Better Pack inc: 500 Free Amiga Miles	499.99	419.16 A
Amiga 1000 + A1050 256K Ram Expansion + A1081 HR Colour Monitor (a basic monitor will be missing, very limited stocks)	1151.75	599.95 A
Amiga 1081 HR Colour Monitor, Stereo Monitor, Amiga/PC	1099.99	259.10 A
Commodore A1010 3.5" External Drive - A500/PC Parallel	286.35	88.99 B
Vortex System 2000 40MB ext Hard disc inc PSU, FAN, UTIL	573.85	482.03 A
Cumana CAX354 3.5" Bot DS 1meg drive - Amiga	99.95	84.96 C
MGT Lifetime 3.5" Drive inc Lead to Amiga	148.45	126.74 A
PL-2 Lead, Printer Centronics Parallel - Amiga	14.95	6.98 F
Star LC10 Parallel F4T NLO Printer	85.00	155.01 A
Star LC10 Parallel F4T NLO 24 Pin Printer	343.20	206.20 A
Star LC2410 Parallel F4T NLO 24 Pin Printer	458.85	321.20 A

ARE YOU A PUBLIC SECTOR COMPANY, EDUCATION AUTHORITY, LOCAL COUNTY COUNCIL, GOVERNMENT DEPARTMENT, ETC, THEN TO OBTAIN WHAT MUST BE THE BEST COMMODORE PC & AMIGA PRICES, PLEASE CALL AND ASK FOR OUR DISCOUNTS, THIS IS THE ONLY WAY

FOR OUR TRADE PUBLIC SECTOR DIVISION PRICE LIST

Kempston/Contriver AG10 Replacement Mouse - Amiga

29.95 25.46 E

Computer Labels 89mm x 36mm 1 across Box 1000

9.20 6.44 D

X-Card Discs & Software

X-Card Designer (Req 1mb Ram) - A500/1000/2000	113.85	85.39 C
Manx Aztec C Compiler Developer C68K V3.40A - Amiga	299.00	209.30 C
Fun School 2 (state ver. by 6/8 yrs-6 yrs/over 8yrs) A500	19.95	12.97 F
Commodore Enhancer Workbench V1.3 & extras 1.3 + Book	14.99	11.99 E
James Associates BBC Emulator - A500	49.99	39.49 D
Verbatim 3.5" DS/HD 135TB Bulk Discs PK25	62.50	20.63 D
UY-D500 DL Lockable Storage Box holds 80 3.5"	23.77	7.13 D

**DO YOU WANT TO SAVE MONEY,
THEN SEND FOR OUR TRADE PRICE LIST
STATE FOR WHICH PRODUCTS AND ENCLOSE 3 19P STAMPS**

CAPTAIN CAVEMAN BBB NOW ON LINE 4PM TO 9AM 0229-473609
Eng. Mainland post & ins.: (A) £5.75 (B) £4.60 (C) £3.45 (D) £2.30 (E) £1.15 (F) 58p
(ANC) 3 Day 10.35 Next Day £13.80, COD+ £2.30, Max UK post chg £6.90 per 20kg £5.00.

All Prices Include VAT. All sales subject to our Trade Terms of Trading.

W.A.V.E. (Trade Dept. AF 1089)

Walney Audio Visual & Electrical Distribution
1 Buclechle Street, Barrow-in-Furness, Cumbria, LA14 1SR
Tel: 0229-870000 (6 lines) Hours: Mon - Fri 10.00-15.00

SLEEPING GODS LIE

Maps and hints on how to get through the first three lands courtesy of the people behind the game, Oxford Digital Enterprises.

1. In the hut, pick up the pebbles and bowl, and head through the north door. Head north to meet the old man. Pick up any ammunition you find and then head through the east exit. Head south and find the molehill which will contain your back door key. Exit west and enter southern Caila, find the pool and fill your bowl.

Go back to eastern Caila and head south until you see two trees close together - give the water to the trees and they'll let you pass into northern Taira. In the north corner you will find the bandit leader. Shoot him and take the map. Go to the eastern exit and you'll enter western Caila which contains a peasant's hut. Inside you'll find some mouldy cheese which you can feed to the mouse creatures who'll then let you pass.

Find the two-headed creature at the north end of western Caila and once you've killed it pick up the Circlet of Concentration which it will drop. This reveals a narrow path in the south east corner of

northern Taira (the hermit will tell you about the pass if you take the map back to him). The pass takes you through to southern Taira where a magic tree will transport you to the next kingdom.

2. In the first landscape you will meet Prince Gregor who will follow you about the kingdom. Travel east or south to one of the next landscapes (by going through one of the closely spaced trees at the east or south boundary), and you will find the entrance to the dwarven caves at the southern bound-



BATMAN

Fancy infinite energy? Then simply type in this listing.

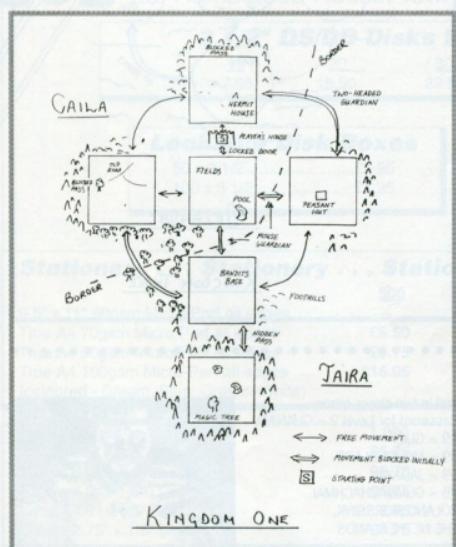


```

10 DIM CODE%(255)
20 FOR N=0 TO 151
30 READ A$ :A$=VAL("5H"+A$)
40 CODE%(N)=A
50 NEXT N
60 CHEAT$=VARPTR(CODE%(0))
65 CALL CHEAT
70 REM TYPE IN THIS LISTING AND SAVE IT FOR FUTURE USE
80 REM INSERT BATMAN DISK AND RUN THIS PROGRAM
90 REM GAME SHOULD LOAD AS USUAL BUT WITH INFINITE LIVES
100 DATA 41FA, 0014, 43F9, 0007, FE00, 2F09, 707F, 22D8
110 DATA 51C8, FFFC, 4E75, 70FF, 2C78, 0004, 4EAE, FEB6
120 DATA 2200, 5280, 6700, 00A6, 4BFA, 014E, 3AFC, 0400
130 DATA 429D, 3AC1, 93C9, 4EAE, FEDA, 2AC0, 2A8D, 2B4D
140 DATA 0008, 589D, 4295, 4BFA, 00F0, 1ABC, 0005, 3B7C
150 DATA 0030, 000A, 41ED, 0038, 2B48, 0006, 41FA, 00C0
160 DATA 7000, 7200, 43FA, 00CA, 4EAE, FE44, 4A80, 6600
170 DATA 005C, 700C, 99CC, 6118, 7002, 49F9, 0007, 0000
180 DATA 610E, 45EC, 01FE, 47FA, 0026, 613A, 4EBC, 000C
190 DATA 43FA, 00C2, 22FC, 0000, 0400, 22CC, 4299, 7230
200 DATA 93C1, 3340, 001C, 3341, 0012, 4EEE, FE38, 2057
210 DATA 217C, 5354, 4152, 06CE, 317C, 5400, 06D2, 45E8
220 DATA 01CC, 47FA, 000A, 34FC, 4EF9, 248B, 4E75, 43F8
230 DATA 0560, 2F09, 22FC, 1038, 1281, 32BC, 4E75, 45F9
240 DATA 0007, 060A, 47FA, 0004, 60DC, 4278, 00EC, 223C
250 DATA 038E, 05A2, 203C, 11FC, 0000, B0FC, 4D28, 6706
260 DATA 223C, 0374, 0596, 2180, 1000, 31BC, 303C, 1006
270 DATA 4841, 2180, 1000, 31BC, 4E71, 1006, 4ED0, 7472
280 DATA 6163, 6864, 6973, 6B2E, 6465, 7669, 6365, 0000

```

MARK LAWRENCE
BASILDON



VIGILANTE

Get onto the high-score table and enter your name as **GREEN CRYSTAL** to enable the cheat mode; then you can increase your lives by pressing F1 and skip levels by pressing F8.
DAMIAN PENNEY
LIVERPOOL



CYBERNOID

II

To gain infinite lives simply type **NECRONOMICON** on the title screen.
TONY COOPER
WORTHING

NAVY MOVES

The access code for Part Two is 786169
CHRIS BAKER
POLEGATE

KICK OFF

When playing against a friend and you score a goal, shout 'YEAH!' really loudly and punch the air. This is very effective for upsetting your opponent - well it works against my dad!

PAUL ROSS
STUBBINGTON

CHARIOTS OF WRATH

A simple tip to gain infinite lives. When first instructed to press the fire button, push the joystick forward. On the first breakout screen you have to collect all the diamonds to complete the screen. On the second breakout screen there are some dummy diamonds, so don't worry about collecting them all.

JAMES GOWE,
LONDON

ary of both these levels.

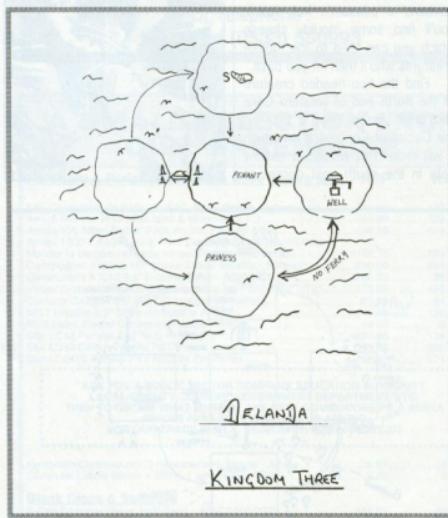
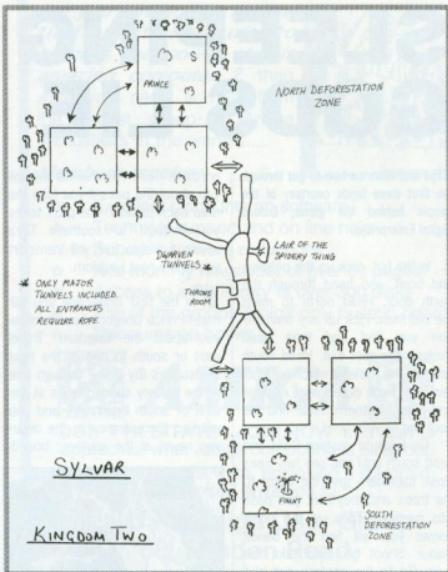
In order to climb down you will need a lantern, which will be dropped by a dwarf that you need to kill by the entrance. Go down into the caverns and head south. In the second cave you will find the spider's lair. You need to get inside to pick up a rope which you will need when you come to exit. Just off the next large cave to the south, you will find the Throne Room which contains the prince's crown.

Now go back and give the crown to the prince who will give you some gold in return, then go back through the caves to their southern exit and in this landscape you should find a molehill which contains the Belt of Lung Capacity which, when combined with poison darts, makes the blowpipe a very useful weapon. Go south and you'll find a fountain in southern Sylvar which will transport you to the next kingdom.

3. DELANDA

There are five islands on Delanda, and you have the advantage of being able to see them in the distance. Note that every time you shoot a seagull it will drop two gold coins. The first thing to do is approach the ferryman and take the ferry to the southern isle (island 2). Kill one of the druids and pick up his golden sickle and then take it to the mistletoe tree at the centre of the island, where you can get some mistletoe. Find the dying peasant and see what he has say.

Go to the west through the two stones (island three - which requires the mistletoe for transport) and go to the ferryman at the south and be transported to the fourth island. Here you will meet the princess who will give you a ring which will prove useful later on in the game. You will also find here the Sandals of Water Walking which allow you to walk to any island you wish. Go east to island five and find the vial which you need to take back to the dying peasant - it will fill up with blood. Then go back to island five and the well will transport you to the next island.



SPHERICAL

Here are some codes for you.

Password for Level 9 = RADA-GAST
 19 = YARMAK
 39 = ORCSLAYER
 59 = SKYFIRE
 75 = MIRGAL

And in two player mode:
 Password for Level 9 = GHANIMA
 19 = GLIEP
 39 = MOURNBALDE
 59 = JADAWIN
 75 = GUMBACHACHMAL
 ROLAND MORSSCHAL,
 THE NETHERLANDS



S.D.C., 60 Boston Road, London W7 3TR

Other branches at: 309 Goldhawk Road, London W12 8EZ

18 Market Square, Leighton Buzzard, Beds.

★ Unit 33-34 Rumford Shopping Hall, Market Place, Romford Essex

★ 675 Holloway Road, Archway, London, N19

OPEN TO THE PUBLIC 10am-8pm 6 DAYS

BATMAN

THE MOVIE OR CAPED CRUSADER
ONLY £14.99



BUY BY
PHONE

RING -01-741 1222
01-995 3652
0525 371884

PRICE PROMISE

If you wish to purchase any product from our list and find that you can buy the same product cheaper from another mail order company, simply enclose the lower amount, stating the name of the other company and where you saw the advert (it must be a current issue). Price Promise does not apply to other companies "Special Offers".



ENQUIRIES

RING
01-567 7621

CHART TOPPERS

OUR
PRICE

SAVING

A-Max	99.99	35.00
A-Max (with R.O.M'S)	209.99	40.00
A.P.B.	12.99	7.00
Action Fighter	15.99	9.00
Astarnoth	15.99	9.00
Barbarian	15.99	9.00
Beach Volley	14.99	10.00
Castle Warrior	15.99	9.00
Chariots Of Wrath	15.99	9.00
Chessmaster 2000	15.99	9.00
Dominator	14.99	5.00
Dynamite Dux	17.99	7.00
F16 Combat Pilot	15.99	9.00
Falcon	21.99	8.00
Falcon Mission Disk	12.99	7.00
Grand Prix Circuit	17.99	7.00
Honda R.V. F. 750	15.99	9.00
Indiana Jones & The Last Crusade	14.99	5.00
Journey	21.99	8.00
Kingdom Of England	15.99	9.00
Last Ninja	17.99	7.00
Leisure Suit Larry 2	21.99	8.00
Licence To Kill	12.99	7.00
Monopoly Deluxe	12.99	7.00
Mr Heli	15.99	9.00
Populus: Promised Lands	7.99	2.00
Powerdrome	17.99	7.00
Predator	17.99	9.00
Rainbow Island	15.99	9.00
Rainbow Warrior	15.99	9.00
Rick Dangerous	21.99	8.00
Robo Cop	14.99	10.00
Shoot-em-up Con Kit	21.99	8.00
Skweek	14.99	5.00
Sleeping Dogs Lie	14.99	10.00
Soccer	14.99	10.00
Space Quest III	17.99	7.00
Spherical	14.99	5.00

OUR
PRICE

SAVING

Star Wars Trilogy	15.99	9.00
Stunt Cars	15.99	9.00
Super Wonderboy	17.99	7.00
Targhan	15.99	9.00
Test Drive II (The Duel)	17.99	7.00
Trivial Pursuits Genius	12.99	7.00
Vindicator	12.99	7.00
Voyager	14.99	10.00
Wangler	12.99	7.00
Xenophobe	15.99	9.00

OUR
PRICE

SAVING

Action Service	3.99	16.00
Alien Syndrome	7.99	12.00
Backlash	4.99	15.00
Billiards	4.99	15.00
Bio Challenge	12.99	12.00
Bombuzal	8.99	11.00
Captain Blood	5.99	19.00
Crash Garrett	3.99	16.00
Crazy Cars II	15.99	9.00

OUR
PRICE

SAVING

Dungeon Master	15.99	9.00
Empire Strikes Back	9.99	10.00
Flintstone	4.99	15.00
Growth	2.99	17.00
Hellbelt	4.99	15.00
Hotball	6.99	13.00
King Of Chicago	7.99	22.00
Kristal	12.99	12.00
Lords Of The Rising Sun	20.99	14.00
Manhunter In New York	12.99	12.00
Operation Neptune	9.99	10.00
Pacmania	7.99	17.00
Peter Beardsties		
Int.Soccer	7.99	12.00
Purple Saturn Days	9.99	15.00
Return Of The Jedi	9.99	10.00
Sky Fox	5.99	19.00
Soldier Of Light	7.99	12.00
Space Quest II	12.99	12.00
Speedball	15.99	9.00
Spidertronic	6.99	13.00
Star Wars	9.99	10.00
T.V. Sports Football	19.99	10.00
Teenage Queen	8.99	11.00
Triad	9.99	20.00
Wanted	4.99	15.00
War In Middle Earth	12.99	12.00
Warlocks Quest	3.99	16.00
Willow	6.99	18.00
World Class		
Leaderboard	6.99	3.00

BEST OF THE BEST

Battle Chess	17.99	New Zealand Story	14.99
Battletech	14.50	Outrun	6.99
Bloodwyrm	15.99	Populous	17.99
Caravan Command	15.99	ARC Lombard Rally	14.99
Champ (The)	15.99	Race Driver	14.99
Dark Side	15.99	Red Heat	14.99
Dragon Ninja	14.99	Renegade III	14.99
Escape From Drill...	12.99	Rocket Ranger	17.99
F.O.T.	21.99	Run The Gauntlet	14.99
Frigate Brigade	15.99	Shards	12.99
Forgotten Worlds	14.99	Stonecold	12.99
Foundations Waste	6.99	Stratospin	21.99
Garfield Winters Tale	15.99	Talk To The Animals	15.99
Gemini Wing	12.99	Temple Of Flying Saucers	15.99
Gunship	15.99	Thunderbirds	10.99
Kill Off	15.99	Time Bandit	7.99
Kult	15.99	Trained Assassin	15.99
Micropose Soccer	15.99	Vigilante	10.99
Millenium 2	16.99	Xenon II - Megablast	21.99
Navy moves	17.99	XYbots	12.99

STORY SO FAR I ONLY £15.99	
Beyond The Ice Palace + Ikarai Warriors + Buggy Boy + Battleships	
PRECIOUS METAL ONLY £13.99	
Captain Blood + Arkanoid II + Xenon + Crazy Cars	
Premier Collection ONLY £17.99	
Exolon + Nebulus + Netherworld + Zynaps	

COMPUTER HITS TWO ONLY £9.99	
Tetris + Golden Path + Black Shadow + Joe Blade	
TRIAD ONLY £9.99	
Starglider + Barbarian (Psygnosis) + Defender Of The Crown	
S.D.C. ORDER FORM	

OUR
PRICE

SAVING

STORY SO FAR 3 ONLY £15.99	
Thunderbirds + Bomb Jack + Space Harrier + Live & Let Die	
SOCcer SQUAD ONLY £14.99	
Hotball + Peter Beardsties' Soccer + Football Manager II	
AMIGA FORMAT, OCTOBER.	

Name.....

Address.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

SWORD OF SODAN

How to get very nearly, but not quite, to the end of the hack and slash-em-up - after all, you didn't expect us to give the whole game away did you?

Level 1 - At the city's gates. To defeat the four guards, wait until they are pointing their staffs in the air and then jump into them doing over-head chops. Do this for all four guards and you should get through with most of your strength left.

Level 2 - Between the city's walls.

When the first spike goes down, jump over it, and jump again as soon as you land. Wait for the spike to go down again and jump over that one and jump again as soon as you land. Kill the guard using the same method as in level one - at the end of the level, make sure you don't stand between the clumps of spikes because they'll kill you instantly and the wizard will take great delight in laughing in your face.

Level 3 - In the city streets.

To kill the axemen, duck and low chop. Keep moving forward and using this method and you shouldn't get hit. Jump over the barrels and at the end of the level keep overhead chopping the giant and you should decapitate him without taking a hit.

Level 4 - In the heart of the forest.

When you meet the two thugs, just duck and low chop and they should jump into your sword. At the end of the level use one power shield when fighting the scorpions because to kill them you must hit the claw on the end of their tails.

Level 5 - In the land of the dead.

Jump over the rolling heads and duck and low chop to kill the zombies. Watch out for zombie spit when you are standing up. The zombies gradually need to take more hits to destroy them as you go through the level.

Level 6 - The foyer of the castle craggamoar.

There are two holes on this level, so watch out! To defeat the wizard use one shield and jump into him and use a combination of overhead chops and low chops. Keep doing this until he dies then walk off and onto the next level.

Level 7 - Descend the stairs. Walk forward a couple of steps then stand still and overhead chop, you should kill both the birds. Once they are dead, walk forward and as soon as you get the wizard into view use a magic zapper to kill him off and proceed to the next level.

Level 8 - In a passage deep. Jump over fireballs as they come. Keep walking forward on this level. Keep an eye on the top of the screen as blocks come down to crush you. When the fireballs stop, spikes will come to take their place so watch out for these as they kill you instantly. Keep moving at all times! When you come to the lava, there are three blocks you must jump onto to get past it. Timing is critical, so learn the pattern of movement of the blocks. Once over, there are more fireballs to jump and acid drops from the ceiling to avoid. Take your time dodging the acid drops or you'll get hit. At the end of the level you must hit the teeth of the statue to get past.

Level 9 - In the catacombs. Walk forward and kill the four birds by overhead chopping them. When you come to the caterpillar-like creature, jump through it. Get the potion and you will be riding the beast. Walk backwards through the caterpillar and the beast will eat it and will be able to jump. Then walk forward. When you get trapped between two walls, water will start to rise, keep on jumping and the water will go back down and the walls will disappear. Keep on walking and you will come to a red wall, stab the red lines and when the rock on the top of the wall flies off - overhead chop it. You'll have to hit the rock three times and the wall will disappear, and carry you through to the next level.

Level 10 - The foyer of the castle craggamoar.

Just the same as level 6.

Level 11 - At the wizard's tower.

Destroy the dragon-like creature by chopping it in the gut. When you get to the wizard jump into him and overhead chop. Keep doing this and you will be safe from his magic. After about eight chops the wizard will fire tons of blue fireballs at you...
Mark Beckett, Plymouth.

COR!

50 SMACKEROONIES!

All of us would like some free software, so here's how to earn yourself a voucher worth £50 to spend on those latest block bustin' games. If you have any maps, tips or pokes for recent games, then get them written down and sent to: Gamebusters, Amiga Format, 4, Queen St, Bath, BA1 1EJ. This month's lucky winners are: Gary crook, James Gower and Mark Lawrence

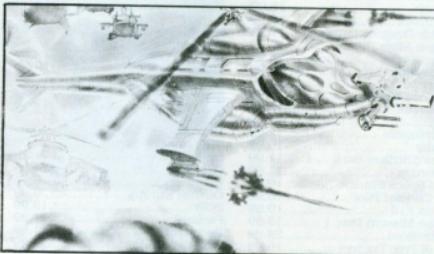
SILKWORM

There are two versions of Silkworm on release. The only difference is that they have different cheat modes because one magazine revealed the cheat mode before the game was even released! (The plonkers!)

Version one - hold down the help key and keep it pressed while pressing fire on the joystick to start the game. You will now have infinite lives and can move through the levels by pressing the numeric keys 1 to 0 and the minus key.

Version two - if you have the latest version of the game then attempting the above will reveal the following message: 'Congratulations, you have found the cheat mode....unfortunately it has been ZZAPPED!' If this happens go to the control selection page and type 'scrap 28' and then start the game. The effect is the same as above.

DAN MARCHANT
LONDON



THE KRISTAL

Try these tips and make your life a little easier.

1. When fighting an opponent, move to the left of the screen and keep your finger on the fire button and the joystick up (head chops), and you should defeat him within minutes.

2. Defeat all the opponents in each planet then save the game (it will make it easy for you to complete the game) e.g. each time you start a new game load the saved game and then you don't

have to fight any more opponents.

3. Here are the items that you can take from some of the characters.

Kring = 25 Skrings
Princess = Ring of Belz
Gloop = Invitation
Beggar = Pommel
Hippy = Flow
Strell Noto = 25 Skrings
Aunt Polly = 5 Multipep tabs
Mervin = Transmitter
CHRIS WEST
EGHAM

PREMIER MAIL ORDER

TITLE	PRICE	TITLE	PRICE	TITLE	PRICE	SPECIAL OFFERS AT £3.99 EACH
3D Pool	11.99	Galdregons Domain	12.99	Realm of Trolls	16.99	NAME
4 Soccer Sim	11.99	Garfield	9.99	Rebels in The Dark	11.99	Alien Strike
4x4 Off Road Racing	11.99	Garfield Winter	12.99	Red Heat	15.99	Challenger
Advanced Ski Simulator	11.99	Garden Escape Drill	11.99	Renegade 1 or 2	15.99	City Defence
Afterburner	11.99	Golden Palace	11.99	Return to Genesis	11.99	Fortress Underground
Airball	11.99	Grand Prix Sim 2	11.99	Rick Dangerous	15.99	Jump Jet
Airborne Ranger	14.99	Guerrilla War	14.99	Road Blasters	13.99	Mike The Dragon
A-Max	134.95	Guild of Thieves	16.99	RoboCop	15.99	Phalanx 2
A-Max with Rom.	249.95	Gunsip	14.99	Rocket Ranger	19.99	Quantox
Alien Legion	16.99	Hawkeye	12.99	Rolling Thunder	16.99	
Amiga Gold Hits 1	16.99	Helter Skelter	9.99	Run the Gauntlet	15.99	
APB	12.99	Heroes of the Lance	16.99	Running Man	14.99	
Archipelagos	16.99	Highway Hawks	11.99	RV Honda	14.99	
Arkabot 2 Revenge	14.99	Holywood Poker Pro	16.99	Saints 3 Chess	11.99	
Arnabotyle	14.99	Horizon	9.99	Savages	14.99	
Baal	14.99	Hot Football	9.99	Scorpion	14.99	
Ball of Power 1990	14.99	Hunt for Red October	14.99	Scrabble Deluxe	13.99	
Ballistix	11.99	Hybris	19.99	Sentinel	11.99	
Barbarian 2 Pal	14.99	Ikari Warriors	14.99	Shadowgate	14.99	
Barbarian Pal	11.99	Indy Jones Action	13.99	Shoot em up Con Kit	19.99	
Bards Tale 2	17.99	Indy Jones Adventure	16.99	Silent Service	14.99	
Batman Caped Crusader	15.99	Ingrids Back	11.99	Silkworm	12.99	
Batman The Movie	16.99	Int Karate +	16.99	Skate or Die	17.99	
Battlehawks 1942	16.99	It Came from Desert	19.99	Skateboard	14.99	
Bear Valley	16.99	Jet	16.99	Steering Gods Lie	14.99	
Bionic Commando	8.99	J Nicknau's Golf	15.99	Space Harrier 2	16.99	
Blastoids	14.99	Jet	26.99	Spaceracer	11.99	
Blazing Barrels	14.99	Joan of Arc	16.99	Speedball	11.99	
Blood Money	16.99	Joe Blade 2	9.99	Starfleet 1	19.99	
Bloodwyrm	16.99	Kind Words 2	34.99	Starglider 2	14.99	
Bombuzal	14.99	Kings Quest 4	21.99	Stealth Fighter	16.99	
California Games	16.99	Kristal	17.99	Steve Davis World Snooker	12.99	
Capone	19.99	Leaderboard Birdie	16.99	Street Racer	14.99	
Captain Blood	14.99	Legend of Djeli	16.99	Street Racer Pro	14.99	
Car Command	14.99	Legend of Sword	14.99	Street Fighter	9.99	
Chessmaster 2000	16.99	Leisure Suit Larry 2	19.99	Strike Force Harrier	9.99	
Chronoquest	18.99	Licenses to Kill	12.99	Strip Poker 2	9.99	
Chuckie Egg 2	18.99	Last Duel	10.99	Stunt Car Racer	15.99	
Colossus Chess X	15.99	Led Storm	13.99	Super Hangon	16.99	
Corruption	14.99	Legend of Djeli	16.99	Superbase Personal	59.95	
Cosmic Pirate	14.99	Legend of Sword	14.99	Superman	14.99	
Crazy Cars 2	14.99	Leisure Suit Larry 2	19.99	Sword of Sodan	14.99	
Cyberoid 2	11.99	Licenses to Kill	12.99	Talespin	17.99	
Daley Thompson '88	14.99	Last Duel	10.99	Tangled Tales	14.99	
Damoelies	1.99	Lords of the Rising Sun	19.99	Tech	13.99	
Duke	1.99	Manhattan Dealer	9.99	Teenage Queen	11.99	
Denaris	16.99	Maria Whittaker	9.99	Test Drive 2 The Devil	21.99	
Dominator	13.99	Mayday Squadron	12.99	Theatre Europe	14.99	
Double Dragon	11.99	Menace	12.99	Thunderbirds	16.99	
Dragon Ninja	15.99	Microprose Soccer	14.99	Thunderblade	16.99	
Dragonscape	15.99	Millennium 2.2	16.99	Tiger Road	17.99	
Dragonslair 1 meg	29.99	Mortville Manor	15.99	Time and Magik	12.99	
Driller	14.99	Motor Massacre	13.99	Times of Lore	14.99	
Dungeon Master	15.99	Navcom 6	16.99	Titan	14.99	
Eliminator	13.99	Navy Moves	16.99	Tracers	14.99	
EMI	1.99	Neanderthal	17.99	Trecksuit Manager	11.99	
Emmanuelle	11.99	New Zealand Story	16.99	Triad	18.99	
Empire	19.99	Operation Hormuz	12.99	Triv Pursuit New Begin	12.99	
Empire Strikes Back	11.99	Operation Neptune	14.99	TV Sports Football	17.99	
Espionage	11.99	Operation Wolf	14.99	Typhoon Thompson	11.99	
Euro Space Shuttle	16.99	Outrun	8.99	Ultimate 4	14.99	
F16 Combat Pilot	16.99	Outrun Europa	9.99	Ultimate Golf	13.99	
Falcon F16	19.99	POW	19.99	UMS Scenario 1	8.99	
Falcon Mission Disc 1	13.99	Pacland	11.99	UMS Scenario 2	8.99	
Fantavision	29.99	Pacmania	1.99	USA Military Sim	14.99	
Fed of Free Traders	19.99	Parleybox	14.99	Vermintor	14.99	
Final Command	19.99	Peter Beardsley	12.99	Victory Road	14.99	
Fish	1.99	Phantom Fighter	13.99	Vigilante	10.99	
Flight Sim 2	26.99	Phobia	14.99	Vindicators (Domark)	12.99	
Flt Disc 7 or 11	13.99	Pioneer Plague	14.99	Virus	12.99	
Flt Disc European	13.99	Platoon	14.99	Virus Killer	18.99	
Flt Disc Japan	13.99	Police Quest	16.99	Voyager	15.99	
Flying Shark	14.99	Police Quest 2	16.99	W C Leaderboard	8.99	
Foot Man 2 Exp Kit	8.99	Pool of Radiance	16.99	W Gummy Hockey	19.99	
Football Director 2	11.99	Precious Metal	15.99	War in Middle Earth	14.99	
Football Manager 2	11.99	Prevent Collection	14.99	Waterloo	14.99	
Foundations Waste	8.99	Prison	11.99	Weird Dreams	14.99	
Frightnight	11.99	Purple Sation Day	14.99	Xenon	14.99	
Frontier (EPT)	14.99	R Tyde	16.99	Xenon 2 Megablast	15.99	
Fun School 2 (6-8)	15.99	Raffles	14.99	Xybots	12.99	
Fun School 2 (over 8)	15.99	Raider	11.99	Zak McKracken	16.99	
Fun School 2 (under 6)	15.99	Reach For The Stars	16.99	Zany Golf	16.99	
Galactic Conqueror	14.99	Real Ghostbusters	16.99			

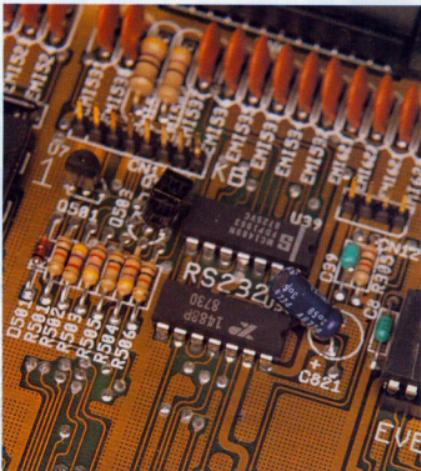
Please send cheque/PO/Access/Visa no and expiry date to:
**Dept AF10, Trybridge Ltd, 8 Buckwinc Square,
 Burnt Mills, Basildon, Essex SS13 1BJ**

Please state make and model of computer when ordering. Postage and packing included in UK on orders over £5.00. Orders less than £5.00 and Europe add £1.00 per item.
 Elsewhere please add £2.00 per item for Airmail. These offers are available mail order only.
 New releases sent on day of release. Tel orders: 0268 590766

ELECTRONIC ARTS SPECIAL OFFERS

NAME	AMIGA
Archon Collection	8.99
Arctic Fox	8.99
Bards Tale 1	8.99
Battleches	16.99
Deluxe Music Con Kit	49.99
Deluxe Paint 3	49.99
Deluxe Photolab	49.99
Deluxe Print 2	49.99
Deluxe Production	89.99
Deluxe Video	49.99
Formula 1	16.99
Fusion	9.99
Interceptor	16.99
Marble Madness	8.99
Populous	16.99
Populous Promised Lands	8.99
Powderwave	16.99
Skyfox 2	8.99
Test Drive	19.99
Word Tour Golf	8.99

LEARNING TO LIVE WITH COMPUTERS



As the computer ceases to be a privilege for the few and begins to truly become widely accessible, **DAMIEN NOONAN** investigates the computer in the classroom and the Amiga's role in education.

Somewhere in Dorset, 9.30 on a rainy September morning. A crucial breakthrough is about to be made in the field of computer-controlled robotics. As the programmers look on, a small, wheeled robot inches with great precision across a smooth floor. It pauses exactly on a marked station, then turns through an angle of 90 degrees: repeats this

manoeuvre three times to come to rest precisely where it started.

The experiment is declared a success, and excitedly the programmers discuss their achievement, the delight obvious on their faces. Although this is no world first, no giant step for mankind, to them the satisfaction is intense: because these programmers are six or seven years old, working in

“You wouldn’t teach children without telling them how to use a pencil and paper, would you? Not just yet, at least”

a primary school, and they have just written a computer program that works. Many of us would be pleased to be able to do the same: but can’t, because we were educated in the days when, unless you were being trained to work with these arcane devices, knowledge of them was considered obscure and irrelevant.

Nowadays, even more so than ♦



BUT IS IT ART?

These pictures were produced on an Amiga B2000 by a student at an art college in Leeds. Paul Cowen is studying for a Higher Diploma in Graphics at one of an increasing number of colleges in this country that allow students to work on computers, and choose the Amiga to do it with.

The illustrations, with their interesting and original water-colour-like style, were all produced using *Photon Paint*. Paul was honoured with high commendation for these pictures in a competition run by Macmillan books, and his pictures were displayed as part of an exhibition at the ICA earlier this year: a distinction made all the more remarkable by the fact that they were the first computer-generated pictures ever to be entered in the competition.

Paul's more recent work in a different style has been commissioned for use by a skateboard magazine. We wish him well with future projects.



With school dinners, it really is chips with everything. Every school in the country by now possesses or has access to a computer: most Universities and places of further education could probably not function without them. Kenneth Baker's infamous National Curriculum has a place for them. The educational market is now possibly one of the key tar-



gets for computer sales. But the important thing is this: that as the educators themselves become educated, they are beginning to realise that the computer is not just a box of tricks, a buzzword, or a messianic changer of the whole of society. Rather, it is a cross between a useful tool and a useful medium, just like a pencil and a piece of paper. And you wouldn't teach children without telling them how to use a pencil and paper, would you? Not just yet, at least...

Many of us know that computers are used in schools. Fewer of us know exactly how they are used, or why. The aim of this article is to discover why computers are used in education, from the basics of primary school level right up to the most advanced research at Universities: and to find out where the Amiga fits in.

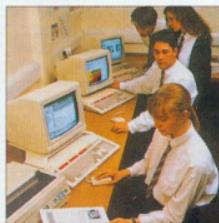
One thing that almost everyone knows is that the BBC, now

“How long will it be before the BBC loses its grip, and will another machine ever replace it in a position of monopoly?”

an aged machine, has over the last ten years or so enjoyed a unique stranglehold over schools, and the primary school market in particular. Having been dominated by the dear old Beeb for so long, this market has developed an inherent conservatism, much of which is software dependent. At the same time as, and often in tandem with, the producers of BBC software, teachers have learnt what they need to best bring out children's abilities and

develop their computer literacy as well. A good deal of this software has become 'industry-standard' for teachers, so much so that buying of software is centralised at LEAs and training courses are geared towards particular programs. Beating the Beeb will not be easy. But the reasons are, in many ways, far from being retrogressive or reactionary.

The positive side is that teachers would be reluctant to move away from the BBC because so much of the software written for it has proved so very useful. It has been developed in response to the learning of the educators to provide much more than even the



■ The Archimedes is already making inroads into schools.

Even now, schools are buying BBC Masters, but 8-bit technology is now way past its sell-by date. The two questions are simply how long will it be before the BBC loses its grip, and will another machine ever replace it in a position of monopoly? Whether any single machine will ever gain the dominance of the BBC is very much in doubt. Currently, there are four main contenders in the race to bring less-than-primitive technology into the classroom: RM, with the Nimbus, Acorn with the Archimedes A3000, Apple with the Macintosh, and, of course, Commodore. The Atari ST has never really been a competitor in this field.

Acorn still has one major ace hidden up its corporate sleeve: the name BBC. The A3000 is already being touted to schools as "the new

early proponents of the computer in education would have imagined. The most fascinating thing about computers in education is how much more you can do with them than anyone ever realised...

The field of education is, for simplicity's sake, usually broken down into three main areas: primary (roughly five to eleven years of age), secondary (twelve to sixteen) and further education (colleges, universities and the like). This tends to gloss over certain other areas, such as preschool and special needs, but you can't have the world in five pages.

The primary school scene is in many ways the most interesting. The software developed for use with the BBC has already set the pace, with some remarkable ideas. The impression we often get of 'educational software' is of weak variations on painting, spelling and sums: generally about as much fun as times tables ever were. None at all.

Primary school children can hope in the near future to have a computer in each classroom, but currently they tend to be lucky to use one for a few hours each

BBC micro" and "the latest and most powerful addition to the BBC family", taking full advantage of schools' familiarity with the Acorn range. The Archimedes is already proving to have a high profile; "top of the computer wish list for both primary and secondary schools", according to Acorn. And at least one teacher I spoke to already perceived the A3000 as being a transition phase from the old BBC to that desired Archie. The sound of wool coming firmly down over eyes was almost painful.

One thing that the Archimedes and the Amiga both share is a BBC emulator, intended to smooth the path of upgrades for Beeb-owning schools. The Beebulator for the Amiga was developed by Ariadne with

THE HEART OF THE MACHINE



■ The 4D heart scan system.

Surely the most advanced work currently being undertaken using the Amiga is a project to develop a 4D ultrasonic imaging system to display a complete picture of the human heart. This work is being carried out at Imperial College, London, a university famous for scientific research.

The innovators behind the project are software expert Doctor Habib Talhami, Harold Wilson, developer of the ultrasound transducer used in the project, and a cardiologist from a leading London hospital. In real time the system will scan and build an image of the heart from ultrasound signals. The whole thing will be ready for use in many thousands of hospitals within two or three years, replacing older 2D systems for analysis of the structure of the heart and of blood-flow within it. The Amiga is being used for the benefits brought by its graphic capabilities and the PC compatibility provided by an AT Bridgeboard.

week. The children normally work in groups of two or three, which fits in well with the current educational trend for discussion and mutual problem-solving within small groups. A logical problem in an adventure game, for instance, can provide a good opportunity for a discussion amongst classmates and hopefully a reasoned conclusion: although heated arguments aren't necessarily seen as

a bad thing, so long as they stop short of one kid flushing another's head down the toilet.

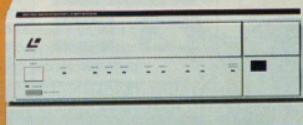
The general rule of thumb seems to be that you should never underestimate the adaptability of children. The major uses of a computer in a typical primary school are surprisingly advanced, even from the age of five. A prime example is Logo, a simple programming language which even

Commodore's encouragement and support as part of their developing strategy to sell to schools. Although it is a remarkably fine product, the problem with it is that it is unable to run any BBC software that is not written in Basic, which really means everything that is of any use.

So how to compete? Well, one point for competition is obviously price. Currently, a BBC Master with colour monitor will cost a school in the region of £550: a similar A3000, around £700. The Amiga A500 is available to schools for £599.

But price is not the only factor in competition. What counts is essentially the same group of factors that influence any other potential computer buyer: performance for the price, flexibility and the availability of decent software.

The Amiga is already years ahead in many of the areas that schools will use computers for, such as paint packages, computer-aided design, word-processing and DTP. It allows technical knowledge to be developed using a whole range of different operating systems and programming languages. It can offer opportunity for innovation in such esoteric subjects as 3D animation and video. And with the push from Commodore to develop in areas of traditional primary school computing support, such as the Amiga Logo, it can take the Beeb on its own ground.



BEATING THE BEEB



16 BIT CENTRE

ALL PRICES INCLUDE VAT AND COURIER SERVICE

CALLERS AND MAIL ORDER WELCOME

Open 9.00am to 6pm
Monday to Saturday

NEW

CREDIT TERMS
NOW AVAILABLE

Example - Amiga
A500, £15.03 per month over 36
months with a 10% deposit of £34.00

COMMODORE A501
RAM EXPANSION
with clock
ONLY £115.00

AMIGA A500
ROM + WORKBENCH 1.3
Mouse, Modulator, Leads
ONLY £349.00

PRINTERS

Star LC 10 Colour	£199.00
Star LC-10 Mono	£159.00
Star LC-24/10	£299.00
Citizen 120D	£139.00
NEC P2200	£299.00
Epson LQ-500	£299.00
Citizen Swift Colour (24 pin)	£349.00

All printers supplied with 1.8M lead
worth £7.99

HARDWARE

Amiga B2000, ROM 1.3	£950.00
Philips AV7300 TV Tuner	£69.00
Futuresound 500	£79.00
Amdrive 50M Hard Disk	£465.00
Cumana 3.5 inch Disk Drive	£99.00
Minigen	£105.00
Philips 8833 stereo monitor including lead	£219.00
Commodore 1084 monitor including lead	£199.00

Please phone for other hardware prices

SOFTWARE

The Works	£73.00
Lattice C V5	£165.00
Publishers Choice	£79.00
Falcon Mission Disk	£16.50
Deluxe Paint III	£65.00
XCad Professional	£250.00

Superbase Professional	£159.00
Kind Words V2	£39.00
Workbench 1.3	£14.95
Audiomaster 2	£55.00
Aquisition 1.3	£150.00
Professional Draw	£115.00

JOYSTICKS

Euromax Pro	£11.50
Zoomer	£28.00
Quickshot II Turbo	£9.95
Konix Navigator	£12.99
F5 Fantastick	£5.00
Crystal Turbo	£13.95

BLANK DISKS

3M DS/DD Box of 10	£12.95
Sony DS/DD Box of 10	£12.95
Unbranded DS/DD 10	£9.45
Unbranded DS/DD 50	£45.00
Unbranded DS/DD 100	£79.00

AMIGA PACKS

Amiga A500 + A501 DPaint III	£499.00
Amiga A500 + Philips 8833 Stereo Monitor (no modulator)	£549.00
Amiga A500 + The Works	£399.00
Amiga A500 + Tenstar Pack, Sonix, Photon Paint	£399.00

All Amigas include Mouse, Power Supply, Manuals, Modulator, Workbench 1.3 and Kickstart 1.3.
Unless stated otherwise

16 BIT CENTRE

Unit 17, Lancashire Fittings Science Village
Claro Road, Harrogate HG1 4AF
Tel (0423) 531822/526322



the youngest children use to control a robot 'turtle', to learn the concepts of geometry and to print 'Spirograph'-like patterns.

Graphics and paint packages allow the children the fun of colourful creativity: while word-processors, with fonts that resemble the teacher's clear, unjoined-up handwriting, mean that they can print their efforts and illustrate them to make picture-books.

"The computer does not work best when it is stashed away... instead, it is made available in ways that are relevant"

Some word-processors are capable of organising pieces of a story into an interactive adventure game, and adventure games themselves are very popular, specially written to provide a variety of linguistic, logical and mathematical problems to provide a challenge for the children.

Databases are another significant use, but once the relatively mundane subjects of information storage and retrieval are covered, the possibilities for stretching the imagination and encouraging interpretive thought are a shade limited. Which is far from true of other software. Perhaps you have to see it to believe it, but programs in use in the primary schools are constantly entertaining and pleasing, and the satisfaction as well as learning derived by the children is obvious. When the Amiga is supported by programs of this standard, preferably as direct translations of packages that teachers are already familiar with, it will stand a good chance.

The primary school is a unique case, because of the way in which it demands programs that have been developed specifically to meet its needs. It is specific, and conceptual. By the time children reach secondary school, their knowledge has developed to the extent where the Amiga in its familiar guise with its familiar applications is at the right level: the skills which the children are expected to develop are essentially those which they will be expected to use when they reach the outside world. Less conceptual, more practical. The computer, as it is in many training situations, is

THE PRIMARY PROJECT

One major focus for the attempts Commodore is making to break into the educational market with the Amiga is, quite naturally, that stronghold of the BBC, the primary school. There are roughly 25,000 primary schools in this country, which represents a substantial market, catering for children up to the age of eleven. The problem for Commodore is simply how to gain the confidence of this market. Their answer is the Primary Project.

The Project has supplied Amiga 500s free or at cut-down prices to about 20 schools across the country. The idea is that teachers can then begin to appreciate the benefits of this machine, and offer their criticisms as

well as a certain amount of praise. Any shortcomings the machine has are likely to be in the amount of software available which complements or reproduces things already in use on another computer, so Commodore will use the criticisms to direct its further exploits into developing software to respond to the needs of the market.

The positive reactions, meanwhile, will no doubt be used as the basis for a campaign to encourage other schools to buy the Amiga, following the successes of their counterparts with the machine. Eventually, a report on the findings will be published, but currently the Project, which has been running

since the beginning of the year, seems to have made good headway. Responses from teachers have been enthusiastic: the Amiga has been used mainly with paint packages such as *DPaint II* and word-processors such as *Kind Words*, which also includes basic DTP.

Teachers have said that the Amiga forms

a great discussion-point – discussion being one of the key-words of modern primary education – and has encouraged expression and enthusiasm in the children. The Primary Project has been extended to cover more schools, and looks set to be a great success. More news is expected soon.



■ The Amiga in use during the Primary Project.

essentially a simulator. Word-processors are becoming commonplace as a tool in schools, and desktop publishing systems are rapidly making a place for themselves. An obvious use for a computer is in the art department, to exploit the potential for entirely new ideas beyond the capability of normal media and the flexibility and relative cheapness of a virtual medium: if it doesn't really exist, it can't cost money. Desktop video and animation work are a logical next step, and again the Amiga is more than flexible enough to support these more advanced roles.

One lesson that is slowly being learnt from the fine example set by primary schools is that the computer does not serve best when it is stashed away and compartmentalised. The awareness of secondary schools that their pupils are much closer to the job market has tended to encourage them in the belief that computer

"We are now already into a phase where the daily use of computers is becoming the norm."

Peter Talbot



PETER TALBOT



■ Peter Talbot celebrates an Olympic deal with Tessa Sanderson.

"In this business, you don't get two chances... We're going to be very aggressive" says Peter Talbot, National Sales Manager for Local Government and Education at Commodore UK. He doesn't mean, however, that he plans to physically threaten potential buyers into taking the Amiga: he simply has a positive attitude.

When he joined Commodore in June 1987, the firm had no idea who would want to buy their machines. After a six-month evaluation, they realised that the education market was one of the most volatile markets, and decided to concentrate their energies there. With the imminent demise of the BBC, there was "a need for something to fill the vacuum."

In April '88 a three-year plan, the Education Initiative, was launched to sell the Amiga, concentrating on three areas. Firstly, to find a network of educationally aware dealers; secondly, to ensure favourable pricing; and thirdly, to encourage the development of any software that would be needed, after discussion with LEAs and schools.

Although plans for the increasing decentralisation of power are leading to a more flexible market as "independent schools" come into existence - "schools are now so much more commercially aware" - generally buying decisions are made at County level. A number of counties, for instance Lothian and Somerset, already order the Amiga in quantity. The Amiga is often bought for art and design roles, and though the DES itself has acknowledged the machine's performance and value in this field, the government will not provide money for Amiga as long as they see it as being relevant to just one discipline.

And for the future? Well, rather than find a gimmick, like the BBC association which made Acorn's machine a standard, Commodore will continue to "make it clearer to more people" how good the Amiga is by "doing more of what we do now". We are told to expect exciting announcements soon, at the PC Show. "Watch this space," says Peter.

studies should be a separate, serious subject, carried out in a room set aside for just that topic, where the pupils can learn applicable programming skills. Instead, the rational approach, encouraged by the relative cheapness and availability of modern machines, is to make computers available to all pupils in ways that are relevant to the individual subject under study.

Meanwhile, in universities, polytechnics and further education colleges the situation again reverts to an extreme. In this context, the uses of the computer are very often in pioneering research and development roles, so the work they are being made to do is entirely unique and very advanced. Here, quite naturally, the Amiga is making its mark

in many of the ways that you would expect from its performance in fields of an advanced nature.

In particular its strengths in the graphics department and in multitasking make it ideal for the presentation of graphics-based information, as in the Imperial College heart project. The variety of operating systems gives it another strength, being exploited by such projects as the UNIX networking environment currently in use at Nottingham University. Many, many colleges now use the Amiga for the teaching of art and design, as Paul Cowen's work illustrates so well.

Sooner or later, the technology has to hit the fan. The users of computing in education are currently way ahead of their masters as they apply the solutions they have developed in response to their own needs. The new National Curriculum attempts to grasp the concept of Information Technology, but so far seems to fail to quite comprehend it. As the government comes under fire for slashing the IT budget from £13.8 million to £8.28 million, they fight back with plans to train all teachers in computer use and claims that they intend to direct money away from Computer Studies use and retarget it towards individual sectors of the National Curriculum.

Are they getting the message that the computer is not an object to be studied, but a tool to be used, and an increasingly unavoidable one at that? Let's hope so. We shall see. ■

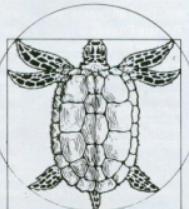
ROBOTS, TURTLES AND SUBROUTINES

Logo is one of the most fascinating examples of the use of the computer in primary schools. Currently under development for the Amiga, it is a complete programming language originally implemented on the BBC.

Logo introduces children to the concept of program instructions by allowing them to order a 'turtle' to move around the screen. Alternatively, this turtle and its ways can be made more visual by using a small robot turtle which moves around the floor. Initially, the instructions it will receive are to turn by a certain angle and then proceed a certain number of steps. On the computer screen a line is drawn by the turtle as he moves, so before long the turtle is drawing simple shapes: for instance, he might be ordered to walk forward ten steps and then turn 90 degrees. If this is then repeated three times, he has drawn a square.

Already, the concepts introduced in a totally painless way to the children are fundamental maths. Vectors and angles are all learnt about by five and six year olds in such a way that they grasp the concept rather than simply learn the name. But before long, the children are learning to combine operations into procedures and define a procedure by its own name: our four separate square-drawing movements above, for example, can be combined into a procedure called 'square'. Syntax and spelling must all be correct, or the computer returns that it doesn't understand. They are learning the logic of programming and the fundamentals of computer literacy.

Soon increments and global variables are introduced, sub-procedures can be called in, saved, erased or edited and some quite complex programs are being written. Text entries and displays are made, colour can be used: eventually, even the soundchip can be programmed, with envelope parameters set to create voices and voices of varying pitch assigned to be played from the computer keyboard. All in all, Logo is remarkable, adventurous and enjoyable. Maybe you wouldn't expect children under ten to be able to program: but they can, and they enjoy it too.



SUMMER SPECIALS

5 1/4" DISKS AND BOX OFFER

25 5 1/4" DS/DD + 100 Cap Box	£11.62
50 5 1/4" DS/DD + 100 Cap Box	£16.50
75 5 1/4" DS/DD + 100 Cap Box	£22.50
100 5 1/4" DS/DD + 100 Cap Box	£28.50

All Disks 100% Certified and Guaranteed.
All Boxes Inc. Lock & Dividers.

DATA SWITCHES

2 Way 36 PIN Cent	£14.50
2 Way 25 PIN D-Type	£12.00
X-Over 36 PIN Cent	£19.22
X-Over 25 PIN D-Type	£18.22

All Metal Case with Rotary Switch.

CABLE ACCESSORIES

25F-25F Gender	£7.00
9F-25M AT Gender	£7.00
25 Way Mini Tester	£8.50
25 Way Mini Jumper	£8.50
25 Way Null Modem	£7.00

PRINTER STANDS

2 Piece Universal	£7.95
1 Piece 80 col.	£9.95

3 1/2" DISKS AND BOX OFFER

20 3 1/2" DS/DD + 80 Cap Box	£20.00
40 3 1/2" DS/DD + 80 Cap Box	£34.50
50 3 1/2" DS/DD + 80 Cap Box	£40.00
70 3 1/2" DS/DD + 80 Cap Box	£54.00

All Disks 100% Certified & Guaranteed 13 Ipi.
All Boxes Inc. Lock & Dividers.

DATA SWITCHES AUTO

5 to 1 Parallel	£75.00
5 to 1 Serial	£75.00
8 to 1 Parallel	£95.00
8 to 1 Serial	£95.00

All With Manual Override

UNINTERRUPTIBLE POWER SUPPLIES

350 VA Slimline 10/22	£287.50
400 VA 5/15	£298.00
550 VA Slimline 7/15	£350.00
800 VA 5/15	£556.00
1000 VA 5/12	£625.00

Transfer Time <4 milliseconds • Overload Protection
Line Surge Protection • Noise Attenuation
British Standard Output Sockets • 6 feet Power Cord with Plug
• Load times full/half load
Protects your Computer system from Power Problems, no
more Loss of Data due to Power Failure.

DISK BOX SPECIAL

Inc. Locks & Dividers

3 1/2" 50	Capacity	£5.25
3 1/2" 80	Capacity	£6.50
3 1/2" 100	Capacity	£6.95
5 1/4" 50	Capacity	£4.95
5 1/4" 100	Capacity	£6.50

DATA CABLES

IBM 35m-36m	2 mtr.	£7.25
Cent 36m-36m	2 mtr.	£8.25
RS232 25m-25m	2 mtr.	£7.25
RS232 25m-28m	2 mtr.	£7.25
BBC 26 idc-36m	2 mtr.	£4.50

PRINTER BUFFERS

256K 1 l/p to 1 o/p	£140.00
256K 1 l/p to 2 o/p	£156.00
256K 2 l/p to 1 o/p	£159.00
256K 2 l/p to 2 o/p	£190.00
256K 4 l/p to 2 o/p	£256.00

All Buffers are Parallel Only.

ACCESSORIES

A4 Anglepoise Copy Holder	£13.00
14" Tilt & Turn Monitor Stand	£12.50
5 1/4" Head Cleaner & Fluid	£2.50
3 1/2" Head Cleaner & Fluid	£3.00
Copy Floor Stand	£10.00

ALL PRICES INCLUDE VAT & P&P. UK & BFPO ORDERS ONLY

M
C
S

Cheques & Postal Orders to:-



24 Hours Orderline: 0597 87 784

Manor Court Supplies Ltd

DEPT AF10, GLEN CELYN HOUSE, PENYBONT, LLANDRINDOD WELLS, POWYS, LD1 5SY

EDUCATION AND GOVERNMENT ORDERS WELCOME

AMIGA HARDWARE OFFERS

• RAMSOFT PACK A

AMIGA A500, 512K MEMORY, 1 MEG INTERNAL DRIVE, TV MODULATOR, KICKSTART 1.3, WORKBENCH 1.3, TUTORIAL AND EXTRAS DISKS, MOUSE AND MOUSE MAT, 10 TOP PD GAMES OR 10 BLANK DISKS AND LABELS

£359.00



• RAMSOFT PACK B

THIS PACKAGE AS ABOVE
PLUS!!
10 STAR PACK VALUED AT OVER
£240, PAINT PACKAGE AND FOR
A LIMITED PERIOD, SLAYGON &
FINAL MISSION.

£379.00

• RAMSOFT PACK C

AMIGA A500
KICKSTART 1.3
WORKBENCH 1.3
MOUSE & MAT
10 TOP QUALITY PD GAMES
PHILIPS CM8833 MONITOR

£544.99

ACCESSORIES

CUMANA 3.5 INCH DRIVE

£99.99

KONIX NAVIGATOR JOYSTICK

£12.95

QUICKSHOT II TURBO JOYSTICK

£9.95

PRINTERS

SEIKO/SIKA SP-180 + LEAD...£136.99

CITIZEN 120-D + LEAD...£136.99

STAR LC16 MONO + LEAD...£186.00

STAR LC16 COLOUR + LEAD...£286.00

Why not call in our showroom where

experienced and helpful staff can help solve

your problems! Our showroom address is:-

Unit 1, 160 Drake Street, Rochdale, Lancs

or call us (0706) 435131.

Between 9.00am & 5.30pm

BOOK PROGRAMS ON DISK!!!

Available for all PCs (except compatibles) and Amiga (D) £9.95. Please note disks can be bought without the book! Send Cheques to: Manor Court Supplies Ltd, 160 Drake Street, Rochdale, Lancs, OL6 9JX England.



24 hour despatch on all stock items subject to cheque clearance.



All offers are subject to availability, and may change at any time. E & OE.

RAMSOFT OF ROCHDALE

(Formerly 16-Bit Software)

AMIGA & ST BOOK

AND HARDWARE SPECIALISTS



Amiga DOS Quick Reference (Abacus)...	£9.95
Motorola 68000 Programmers Ref Man (Motorola)...	£9.95
Amiga Theory & Design (Abacus) (Tab)...	£9.95
Amiga for Beginners (Abacus)...	£9.95
Kickstart Guide to the Amiga (Arladine)...	£9.95
Kids and the Amiga (Computer)...	£9.95
Elementary Amiga BASIC (Computer) (D)...	£9.95
Amiga Machine Language (Abacus) (D)...	£9.95
Amiga DOS Reference Guide (Computer)...	£9.95
Amiga Tricks and Tips (Abacus) (D)...	£9.95
Inside Amiga Graphics (Computer) (D)...	£9.95
Amiga C for Beginners (Abacus) (D)...	£9.95
Amiga Applications (Computer) (D)...	£9.95
Amiga DOS - Inside & Out (Abacus) (D)...	£9.95
Advanced Amiga BASIC (Computer) (D)...	£9.95
Computer Viruses - A High Tech Disease (Abacus - NEW!)...	£9.95
Amiga Users Guide to Graphics, Sound, Telecom (Bantam)...	£9.95
Becoming an Amiga Artist (Scott - Foreman - NEW!)...	£9.95
Amiga Machine Language Programming Guide (Computer) (D)...	£9.95
Using Deluxe Paint II (Computer)...	£9.95
Learning C - Graphics on Amiga & Atari ST (Computer) (D)...	£9.95
Amiga BASIC - Inside & Out (Abacus) (D)...	£9.95
Amiga Microsoft BASIC Programmers Guide (Scott Foreman)...	£9.95
Inside the Amiga with C (Same)...	£9.95
Amiga BASIC Manual (Bantam)...	£9.95
Programming the 68000 (Sybex)...	£9.95
Amiga Disk Drives - Inside & Out (Abacus) (D)...	£9.95
Programmers Guide to the Amiga (Sybex)...	£9.95
Amiga Programmers Handbook, Vol 2 (Sybex)...	£9.95
Amiga Programming (Computer) (D)...	£9.95
Amiga Games (Computer) (D)...	£9.95
Amiga Games - Inside & Out (Abacus) (D)...	£9.95
Amiga Machine Language (Abacus - NEW!)...	£9.95
Amiga BASIC - Inside & Out (Abacus) (D)...	£9.95
Amiga C for Advanced Programmers (Abacus - NEW!)...	£9.95
Amiga System Programmers Guide (Abacus) (D)...	£9.95

PLEASE NOTE 16-Bit Software has now expanded a great deal, and now trades under the new name of Ramsoft. We can now offer 48hr delivery on all stock items. If the item you require is not advertised please call us on the office number. We can have all items requested, at our showroom within 24 hours. (Subject to Availability).

THE FIVE CLASSICS
Compiled from the all time greats! Every one is an absolute must for Amiga owners!

16BLITZ

* All our prices include Carriage and Vat.



ELITE from Firebird.
The essential addictive ingredients of a great game.
Order Code AM104 RRP £24.99
The 16 Blitz Price £17.99

960
16 BLITZ
Order Code AM103
RRP £24.99 The 16 Blitz Price £17.99



DENARIS

Buy now at the cheapest prices in town, from your favourite and most reliable magazine!

DENARIS from US Gold.
The arcade action is completely addictive.
Order Code AM101 RRP £19.99
The 16 Blitz Price £13.99

VIRUS
From Firebird RRP £19.95
The 16 Blitz Price £13.99
Order Code AM105



NEBULUS
from Hewson. "This game can't be praised highly enough for its originality, absorbing and totally lasting challenge." Order Code AM102 RRP £19.99 The 16 Blitz Price £13.99



HOW TO ORDER
Just make a note of the name and the order code of each of the products you want and order them either by calling our credit card hotline or look for the order form on page 112 and fill in the details.

CREDIT CARD HOTLINE
0458 74011

SUBSCRIBE NOW
to Amiga Format
at the remarkably low
price of only £29.95,
see full details on page 58

HI6BLITZ
THE LATEST AND GREATEST PRODUCTS
AROUND FROM YOUR RELIABLE
SUPPLIER...
AMIGA FORMAT

**THE ALL
AMERICAN
AMIGA FORMAT
BASEBALL SHIRT**

It comes in white and black with
Amiga Format in white and black with
centre back and left breast. Styled in
the USA, wear your shirt with pride.
Choose between two sizes, Medium and
Extra Large and pay the remarkable low price of
only £6.50

Medium Order Code AM106
Extra Large Order Code AM107



HOW TO ORDER
Just make a note of the name
and the order code of each of the
products you want to order
then either call our credit
card hotline or look over
the page and fill in
the details.

A

VIDI AMIGA
from Rombo Productions.
Full Review issue 3 Special.
Launch Price, **Save £10**
from the RRP of £99.95 16 Blitz
Price £89.95 Order Code **AM114**



CREDIT CARD
HOTLINE
0458 74011



AMIGA FORMAT
GOLD WINNER
STRIDER from US Gold.
RRP £19.99 16 Blitz Price
£14.99 Order Code **AM112**



XENON 2
from Mirrorsoft. Cover Disk issue 3 RRP
£24.99 16 Blitz Price £18.99 Order Code
AM113



We insist you look after your valuable Amiga Format magazines. This jazzy white and black binder holds twelve issues and makes them feel safe and secure from being cornered and spills! Watch your collection grow for only £4.95 Order Code
AM108, or why not buy TWO for only £9.00, Order Code **AM109**

ATARI ST and AMIGA

Sixteen Bit Superdeals from the Sixteen Bit Specialists !

CUSTOMERS PLEASE NOTE! When comparing prices remember ours include fast delivery by courier.

NEW !!

520 STFM Power Pack

£359.00

Inc. VAT and Next Day Delivery

Power Pack includes:

- ★ 520 STFM 512K Keyboard with Built-in 1 Megabyte disk drive and TV Modulator
- ★ Over £550 worth of games software, including OutRun, Gauntlet 2, R-Type, Space Harrier, Super Onan and 16 more Top Games
- ★ Organiser Business Software including WORDPROCESSOR, SPREADSHEET and DATABASE.
- ★ First BASIC and First Music Utility Software
- ★ FREE JOYSTICK AND FREE MOUSE MAT WORTH £4.95
- ★ All leads, manuals PLUS MOUSE and free mains plug!

REMEMBER! Many ST's do not come with BASIC - ours come with ST BASIC REV D by Metacomco.

520STFM Explorer Pack

£279.00

- ★ Explorer Pack Includes 520STFM 512K Keyboard with built-in 1 Megabyte Disk Drive and TV Modulator
- ★ 1 FREE Game, ST Tutorial and METACOMCO Basic worth £25.00
- ★ All Leads, Manuals PLUS MOUSE and FREE Mains Plug!

1040STFM Midi Music Pack

£439.00

- ★ Includes 1 megabyte keyboard plus Pro 12 Midi Music Software

1040STFM Business Pack

£439.00

Business Pack includes:

- ★ Atari 1040STFM Keyboard with 1 meg memory and 1 meg built-in disk drive plus TV modulator
- ★ £385 worth of Business Software including MICROSOFT WRITE word processor (£150), SUPERBASE PERSONAL Database (£60) and VIP PROFESSIONAL Lotus 123 Spreadsheet clone (£150). Metacomco Basic (£25.00)
- ★ All leads, manuals and mouse.

MEGA 1 BUSINESS PACK

£529.00

Features:

- ★ Separate Keyboard and System Unit
- ★ All the Software included with 1040 STFM Business Pack.
- ★ Blitter chip installed for faster graphics

Inc SM124 Mono Monitor..... £628.00

ACCESSORIES

Quickshot II Turbo Joystick.....	£9.95	Branded Memorex 3.5" DS DD Disks
Competition Pro 5000 Joystick	£13.95	Box of 10.....	£13.95
Competition Pro with Autofire	£14.95	Memorex Disk Box
Konix Speedking Joystick	£11.95	For 40 3.5" Disks	£8.95
Red Mouse Mat with Amiga logo	£5.95	Amiga 1/2 Meg Expansion	£19.95
Plain blue Mouse Mat	£4.95	Control Centre Atari or Amiga	£39.95
Contriver Amiga and ST Mouse with FREE Holder and Mouse Pad	£20.95		

PRINTERS

Star LC24-10 24 pin incl. lead ST/Amiga	£279.00
Star LC10 including interface lead for ST/Amiga	£169.00
Star LC10 colour including interface lead for ST/Amiga	£219.00
Citizen 120D including interface lead for ST/Amiga	£159.00
SEIKOSHA 80 COLUMN PRINTERS - AMAZING PRICES	
Seikosha 9 pin NLO including interface lead for ST/Amiga	£139.00
Seikosha 24 pin LQ including interface lead for ST/Amiga	£259.00

CREDIT CARD ORDERLINE = 0908 78008 (Mon - Sat 9am - 6pm)

To order either call the orderline above with your Credit Card details OR make a cheque or P.O. payable to Digicom Computer Services and send it with your order to the address below. Callers are also most welcome at the address below

DIGICOM

Unit 36, Wharfside, Fenny Stratford, MILTON KEYNES MK2 2AZ
All prices include VAT and delivery by courier

Amiga A500 Games Pack

£389.00

Inc VAT and Next Day Delivery

NEW LOW PRICES!

Game Pack includes:

- ★ Amiga A500 512K Keyboard with Built-in 1 Megabyte disk drive.
- ★ Free TV modulator worth £24.99 allowing you to use the Amiga with a normal TV.
- ★ £230 worth of Games Software, including BUGGY BOY, MERCENARY, BARBARIAN, WIZBALL & six more games.
- ★ PHOTON PAINT or SPRITZ GRAPHICS PACKAGE worth over £50.00.
- ★ FREE MOUSE MAT worth £4.95
- ★ Amiga BASIC, Amiga EXTRAS 1.3, Workbench 1.3 PLUS the Amiga Step by Step Tutorial.
- ★ All leads, manuals PLUS MOUSE and mains plug!

Amiga A500 StandAlone

£369.00

- ★ Amiga A500 as above but without the £230.00 worth of Games Software

NEW !

Amiga A500 Business & Games Pack

£459.00

includes everything in our Amiga Games Pack PLUS a Comprehensive Suite of Business Programs including, Scribble II WORDPROCESSOR, Analyze II Spreadsheet and Organise Database.

AMIGA 1 MEG!

£499.00

Announcing the new Amiga 1 meg-an A500 system with fitted 1 megabyte memory expansion and clock card PLUS TV Modulator AND DRAGON'S LAIR a six disk 1 meg megagame!

AMIGA 1 MEG +

£519.00

Our Amiga 1 meg + also includes the £230 worth of games software normally given with our A500 Games Pack.

EXTERNAL DISK DRIVES

Atari SF314 1 Megabyte	£139.00
Amiga A1010 1 Megabyte	£139.00
Cumana 1 Megabyte Atari or Amiga	£99.95
NEC 1 Megabyte Amiga	£89.95
Atari Megafile 30 Hard Disk	£449.00
New! Commodore A590 20 meg hard disk	£369.00

MONITORS

Commodore Amiga A1084 Stereo colour Monitor inc lead	£269.00
Atari SC1224 Colour Monitor inc lead	£249.00
Atari SM124 Mono Monitor including lead	£104.00
Philips CM8833 stereo colour monitor inc. lead for ST or Amiga	£229.00



FORMAT LETTERS

Yet again, a few of your many letters manage to escape the Origami treatment. All new offerings are welcomed by BOB at 4 Queen Street, Bath, BA1 1 EJ. Write now!

CANNON'S BROADSIDE

I have just had the overwhelming misfortune of reading your second attempt at producing an Amiga only publication, what a load of old dross.

I realise you probably a bunch of spotty adolescents trying to earn as much money as you can with the barest minimum of effort because it shows in the publication, as you came from ace you must be used to catering for deadheads and children whose blinkered outlook can see no further than the latest game.

If I wanted all the latest game reviews I would buy *ace* or the one but I do not want games reviews I want insight into the complex versatile machine I own issue 2 is just the ace comic with amiga format printed on the front.

What's the matter with you, you won't last long by padding out the magazine with double page game reviews and adverts and printing those letters you get from those who seem to be devoid of a conventional education I mean this months workbench you filled nigh two pages with questions that could have been answered simply by reading the supplied manual and the tips came from those who have read the supplied manual.

The letters page seems to be solely for those wishing to display their prowess as sycophants and the coverdisc's demo was a straight port over from a 48K spectrum i hope!

All in all a waste of £2.95 this month seems to me that you have bitten off more than you can chew just like "your amiga" magazine a very informative magazine with the right balance until it went monthly now it's a 5th rate ace clone only 45p dearer and as "amiga computing" has just strapped a disc to the front cover and it has the right balance looks like your going to lose out unless

you shape up a bit sharpish.

CHRIS CANNON
ROMFORD, ESSEX

I have printed this letter with all the grammatical and punctuation errors left in. Mr Cannon is obviously correct about at least one of our readers being "devoid of a conventional education". We usually like to finish letter replies with a gag: we'd be happy to fit yours personally.

SPEAK TO ME

Does anyone remember the speech synthesizer kit in Issue 8 of *ST/Amiga Format*? You do! Did you find the box didn't work when you finished building it? Not me. Being a PCB inspector it worked first time. My question is does anyone have any decent programs for it? I am a bit short on how now. So could you print some in the magazine, as I'm sure many people would agree the

synth is a cheap but excellent piece of hardware.

DEAN WATSON,
ANDOVER, HANTS

We would love to print them, so send some in if you've got them.

FOUL PLAY?

Being a keen computer user and a keen football fan, I was delighted to see two companies, Anco and Microprose, release football games on the Amiga. Undecided as to which to buy, I turned to your reviews of the games concerned in the August issue. It was obvious which one you preferred and so I purchased Kick Off from your mail order department.

A quick read of the rather lightweight instruction pamphlet whetted my appetite and so I booted the program up. After a few games it was obvious, to my disappointment, that this is not

the amazing simulation that both your reviewer and Anco claim. There now follows a list of my complaints:

1. The presentation is very user-unfriendly from the start. For example, in a single game the user is referred to as 'Joystick 1'. Surely an option for the user to define his own name would be better?

2. Having a large roster of referees with different characteristics is a good idea, but surely part of this option is that you can note the style of each ref and plan your tactics accordingly before each game. If, however, you lose the toss before the match, the computer does not inform you of the game's referee.

3. Some of the referees are very extreme, sending a player off after two fouls. This means that in a long match many players will be sent off. In one match that I played, all ten of the computer's outfield men had been given their marching orders by the second half! I can't name the ref as I lost the toss (see point 2). Needless to say, I had to abandon the match when the computer was awarded a throw in and there wasn't a player to take it!

4. The, in places, inaccurate manual states that when a penalty is taken, the directional arrow "freezes giving the keeper a ... fighting chance to save." In one-player mode this does not happen when the computer takes a penalty. Presumably this means that the player does not have a chance of saving it.

5. The extremely high speeds at which the top level players play the game renders the scanner redundant when it would be most useful - taking your eyes off the field to look at the scanner results in at best a loss of possession. And in the league option, the colours of the West German, Brazilian and Dutch teams have ♦

PRIZE WINNER

LET'S DO THE TIME WARP

My main reason for writing is the infuriating review-date/release-date time/space vortex. In my case the world spins something like this:

- 1 See fantastic review in September issue of mag.
- 2 Ring to order game.
- 3 Told game is not out for at least a month.
- 4 Wait a month, game not out yet.
- 5 See even fabbo-er review of new game in October issue of mag. Decide to get that instead.
- 6 Go back to 2.
- 7 Move month on one and continue indefinitely.

The result is severe frustration, and a seriously retarded software collection.

MARTIN THOMSON
WINSFORD, CHESHIRE

Due to a hole in the space-time continuum I am afraid this letter was received 23 years before it was written and clearly does not refer to the current situation. Your T-shirt and binder will be dispatched via Tardis and reach you some time in the year 2037.

all, have to make a living. What is wrong, in my opinion anyway, is the prices that some individuals are charging. I have seen anything from a not unreasonable £1 per copy, to a ridiculous £3!

If these sort of charges continue then a lot of the authors who quite happily offer their hard work to the PD/shareware community will soon stop doing so. Why, after all, should they give their programmes away to people like myself, only to see them offered at a later date for ridiculously high prices.

I respectfully ask the cowboys to stop and consider what the implications of their over-charging are. It is certain that if this continues, the supply of PD/shareware for the Amiga is going to dry up.

So to those Amiganuts who, like myself, run PD/libraries on a non profit-making basis, I say keep up the good work, but to the get-rich brigade I say, stop trying to screw the Amiga loving community NOW.

RAY BURT-FROST
SOUTHAMPTON, HANTS

NO INTELLECT, NO INTEREST

I must say that I am slightly disappointed with issue one of *Amiga Format*. Games Reviews – it's nice to have so many games reviewed but you're not giving enough space for each one. By 'not enough space' I mean that the pictures are too large and there isn't enough writing for each. For example, a whole page was given over to a Kick Off players' guide and yet the review was only 60 lines long. OK, it's 66 including Graphics and Sound but half of the space in the review was an oversized picture and the title.

ST/Amiga Format always gave a double page for a Format Gold game. This included handy boxes for each section, not just Graphics and Sound. Circus Attractions, for example, received 56% and yet it got more space than Kick Off (91%). Circus Attractions had another annoying oversized picture at the top. Journey (82%) only got just over this amount of space for the entire review.

You also reviewed 16 games, which only covered 14 pages. In my view, you should give a double page for all Format Gold games, a page for games of over 70% and half a page for the rest. You would have needed only 17 pages using this method. If people write in and say that that's too much room, it's only just over an eighth of the magazine.

Games Ratings. What is the point of an intellect rating? We've always survived with a few sentences about it before. And why get rid of lasting interest? I got the impression that ACE was obsessed with it. It's not related to addiction as you pointed out in your reviews. For example, read the last few sentences of *Mayday Squad*, *Gunship*, *Rampage* and *Skewball* and compare that with the addiction rating.

Why not use Graphics, Sound, Addiction and Lasting Interest? It gives a good impression of the game overall. For example, *New Zealand Story* is very addictive, but I got bored of it after several days (the demo). *Faery Tale* is almost the reverse of this. Also, I'd like to know why you didn't include the sound for *Journey* just because there wasn't any on an unexpanded A500. Many A500 owners now have one megabyte since the prices have fallen so much. Oh, and bring back the sliding scale!

D DRODGE
LYRINGTON, HANTS

Over to Reviews Editor, Andy Smith...

Generally, we do try to give as much space as possible to the better games but unfortunately things don't always work out as hoped. The pages are planned and allocated during the month and therefore we don't always know at the start what is going to come in. Games often arrive at our offices late in the schedule when there's little space left to give to them – that's just the way things go sometimes.

The Intellect rating is designed to enable readers to check, at a glance, just how much thought power is going to be needed to play the game. To play some games properly can take a lot of effort on the player's part (Balance Of Power springs immediately to mind) and we feel this is something the reader should be made aware of. As for lasting interest, we are giving the matter serious thought and may well change the rating system.

All of the games are played on a basic A500 simply because it's the basic machine and we must therefore cater for people who don't have and can't afford upgrades.

HEAR, HEAR, NOT SEE

Just a general letter, mainly about your coverdisk. It is the best out at the moment, though the only things I like on it at the moment are the playable level of a new game and some of the utilities.

The workbench hacks are a bit of a waste of disk space.

I think it could be improved by putting on music and music demos. These entertain more than your swinging frog demo, which is nice but I only watched it twice.

The still pictures prove my point even more. No one will look at a picture for more than 30 seconds, no matter how good it is. A good tune though (especially with graphics – even better if you can participate eg Demons are Forever by Doc and Sunrider's latest demo) could last five minutes and you might listen to it any number of times if it's good. Music and Graphics are better than twice the number of graphics – sound is sorely lacking from your disk.

KARL DRINKWATER
MANCHESTER

PS Yours is still the best Amiga mag in most respects!

Uncanny, isn't it? No sooner do you ask for a music demo on the disk, than glory be and save us, hey presto, one appears. And yes, there will be more. I don't agree about the graphics and animations though, they are nice to look at, can be used as part of tutorials, they inspire creativity and most importantly – people like them.

PS Thank you, it's much appreciated. Are you one of the 'sycophants' Chris Cannon was writing about? We don't think so...

ITALIAN'S NEUTRAL

I recently bought *The Duel: Test Drive 2* for my Amiga 500. The game is brilliant and I really enjoy it but I found that sometimes the car I was driving would lose a gear, the engine only revving as if in neutral when I changed into this gear. When I crashed however, the broken gear was restored. Sometimes it is even more than 1 gear that goes... I have had as many as three broken gears on the Ferrari, left with only 1st and 5th. That's not much use to anyone!

STEPHEN COWIE
ANGUS, SCOTLAND

Typical shoddy European workmanship. Get yourself a nice British car like the Lotus, even if it does have an engine noise like a lawnmower on a cattle grid.

US USER'S UK YUK!

As an American based in the Midlands, I have come to love the great programs put out by English and European software companies like Psygnosis and the Bitmap brothers, but not all is per-

fect in paradise. Here are the facts: I have an American A500, dual disk drives and an A501 1 Meg memory expansion. I do not mind some squashed screens due to the system being NTSC based, but I am enraged with the fact that several pieces of software will not work on an expanded US or UK Amiga. So, after complaining directly to several UK and foreign suppliers, I forward this list of programs that will not work on a US expanded Amiga:

Dragon's Lair, Readysoft Inc, 1 Meg UK version

Gauntlet II, US Gold, UK version

Operation Wolf, Ocean, UK version

Batman, Ocean, UK version

R-Type, Electric Dreams, UK version

Keep up the great work *Amiga Format*, and yes, everything you have offered on your disks works fine!

KEVIN S CHRISTLEY
BRACKLEY, NORTHANTS

INFINITE MONKEYS

After reading the August issue of *Amiga Format* and the tips on *Lords of the Rising Sun* from Simon Liu, I remembered reading almost exactly the same thing, word perfect, in another mag. Simon Liu must have great psychic powers.

K PHILLIPS
MUNDELSIDE, NORFOLK

Plagiarism is one of the most pitiful things. Perhaps Simon Liu sat an infinite number of monkeys at an infinite number of typewriters until they produced the *Lords of the Rising Sun* tips? Who knows? Simon Liu does, so perhaps he would care to explain. We look forward to receiving his letter.

MARKED SERIOUS

Serious reviews – why not give each a mark out of 10? I'm sure many people would like to compare packages. The reviews are excellent though.

D DRODGE
LYRINGTON, HANTS

Marks out of 10 seem terribly arbitrary for serious reviews because they differ so much. There are so many considerations of price, documentation, intended use and so on that affect a buying decision that a rating out of 10 is too simplistic. In order to sum up these complex issues, a full review is required. After all, we are talking about software and hardware that often costs more than £100, not something you should buy on the strength of one mark. ■

FREE! TENSTAR PACK WORTH OVER £229!



FREE! - AMEGAS - by Players



FREE! - ART OF CHESS - by SPA



FREE! - INSANITY FIGHT - by Microdeal



FREE! - MERCENARY COMP - by Novagen



FREE! - BARBARIAN, ULT WARRIOR - by Palace



FREE! - TERRORPODS - by Psygnosis



FREE! - BUGGY BOY - by Elite



FREE! - THUNDERCATS - by Elite



FREE! - IKARI WARRIORS - by Elite



FREE! - WIZBALL - by Ocean

Commodore AMIGA



ONLY
£3.34
PER
WEEK
RETURN COUPON
FOR DETAILS

£346.95
+VAT = £399

INCLUDES
FREE UK
DELIVERY

£3.34

WEEK

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided double density floppy disk drive. It can be connected directly to a wide range of monitors, or to a domestic TV set via a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No.1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers.

E&OE

WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider buying it from Silica Shop. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a full range of support, including a technical helpline and expert advice and help when you need it. There is ONLY ONE company who can offer you the largest range of Amiga related products in the UK, a full time Amiga support helpline and in-depth after sales support, including free newsletters and special discounts. This is Silica Shop. We have been established in the home computer field for ten years and can offer you the best customer service, knowledge, advice and understanding which is second to none. Here are just some of the things we can offer you.

THE FULL STOCK RANGE: The largest range of Amiga related peripherals, accessories, books and software in the UK.

AFTER SALES SUPPORT: The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

FREE NEWSLETTERS: Mailed direct to your home as soon as we print them, featuring offers and latest releases.

FREE OVERNIGHT DELIVERY: On all hardware ordered from Silica Shop customers within the UK mainland.

PRICE MATCH PROMISE: We will normally match our competitors' offers on a same product same price basis.

FREE TECHNICAL HELPLINE: Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

PHOTON PAINT PACK

A500 Computer £399.99
TV Modulator £24.99
Photon Paint £69.95
TenStar Pack £229.50

TOTAL RRP: £724.43

LESS DISCOUNT: £325.43

PACK PRICE INC VAT £399

1084S MONITOR PACK

A500 Computer £399.99
1084S Colour Monitor £299.99
Photon Paint £69.95
TenStar Pack £229.50

TOTAL RRP: £999.43

LESS DISCOUNT: £350.43

PACK PRICE INC VAT £649

FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500). This pack is not required for use with monitors. Secondly, we are giving away a copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least), so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK, worth £229.50 purchased at Silica Shop. This pack features ten top Amiga games, which have a combined RRP of nearly £230! Return the coupon for details.

E&OE

FREE TENSTAR PACK

When you buy your Amiga 500 from Silica Shop, we want to give you some spectacular free gifts. This is a really good deal possible. That is why we are giving away the TENSTAR GAMES PACK, worth nearly £230, absolutely free. Every A500 purchased from us includes the pack, which comes in its own casing with instructions.

TOTAL RRP: £229.50 INC VAT

DO YOU OWN AN AMIGA?

If you already own an Amiga computer and would like to be registered on our mailing list as an Amiga user, as shown, we will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as soon as we receive your details. Please return the coupon below to our Sidcup branch and begin experiencing a specialist Amiga service that is second to none.

SILICA SHOP:

SIDCUP & Mail Order: 01-309 1111
1 New, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 8pm - 10pm

LONDON: 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 8.30am - 6.00pm LATE NIGHT: THURSDAY 8pm - 10pm

LONDON: 01-629 1234 ext 3914
59 Old Bond Street, 1st floor, Oxford Street, London, W1A 1AB
OPEN: MON-SAT 8am - 6.00pm LATE NIGHT: THURSDAY 8pm - 10pm

To: Silica Shop Ltd, Dept AMFOR 1089, 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
PLEASE SEND ME FREE LITERATURE ON THE AMIGA

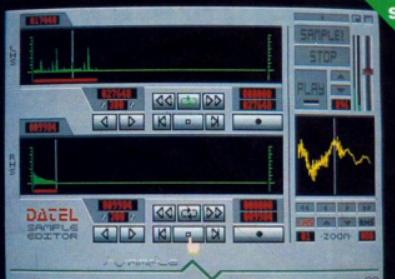
Mr/Mrs/Ms: Initials: Surname:

Address:

Postcode:

If you already own a computer
so, which one do you own?

DATTEL ELECTRONICS



STEREO SAMPLING



AMIGA PRO SAMPLER STUDIO + DATTEL JAMMER

- ▼ A top quality stereo sampling system at a realistic price.
- ▼ 100% machine code software for realtime functions.
- ▼ HiRes sample editing.
- ▼ Realtime frequency display.
- ▼ Realtime level meters.
- ▼ Files saved in IFF format.
- ▼ Adjustable manual/automatic record trig level.

ONLY £79.99 PLEASE STATE A500/1000/2000

MIDIMASTER



- ▼ Full Midi Interface for A500/1000/2000 (please state model).
- ▼ Compatible with most leading Midi packages (including D/Music).
- ▼ Midi In - Midi Out 25 - Midi Thru.
- ▼ Fully Opto isolated.

ONLY £34.99

A TOTAL MIDI MUSIC PACKAGE

UNBEATABLE VALUE PACK - THE YAMAHA SHS 10 FM MIDI COMPATIBLE GUITAR-STYLE SYNTHESISER, THE ACTIVISION MUSIC STUDIO SOFTWARE PLUS THE MIDIMASTER INTERFACE TO CONNECT TO YOUR COMPUTER SYSTEM



FREE MIDI CABLES

* R.R.P. over £175

DATA ACQUISITION UNIT



ONLY £99.99

PLEASE STATE A500/1000/2000

TO COMPLEMENT THE SAMPLE STUDIO THE DATTEL JAMMER GIVES YOU A 5 OCTAVE KEYBOARD TO PLAY & RECORD YOUR SAMPLED SOUNDS

FEATURES:-

- 4 track sequencer up to 9999 events.
- Tempo & Beat controls.
- Mixer Controls on instruments.
- Load & Save sequence.
- Works on standard IFF file sounds.



VIDEO DIGITISER

- Turn your Amiga into a sophisticated measuring instrument capable of measuring a wide range of data inputs.
- Sample & display events from microseconds to hours - with amplitude from millivolts to 50 volts.
- Hardware/Software package with very high spec. including: DIGITAL SCOPE DISPLAY - 2 channel Timebase. Manual or continuous display. Timebase 500ms/div to 20us/div accurate to 5%.
- 6 bit flash conversion gives 2 million samples/sec.
- PLOTTER DISPLAY
- Timebase range 1 sec to 10hrs per plot.
- All features found on units costing thousands of pounds.

PRINTER LEADS

- 25 pin 'D' to 36 way Centronics parallel lead. 1.2m length.
- A500 or 1000, please state.

ONLY £8.99

SAVE OVER

£75*

YAMAHA SHS 10 FM SYNTESISER KEYBOARD

- Superbly styled guitar-type keyboard with shoulder strap.
- Top quality brandname.
- 2.5 octave keyboard.
- 25 built-in instrument and rhythm choices.
- Uses FM synthesis.
- Full MIDI standard.
- ACTIVISION MUSIC STUDIO**
- A full feature MIDI Recording Studio.
- A multi channel sequencer with realtime input and full editing facilities.
- Completely menu driven - full Mouse control.

Very simple to use.

MIDIMASTER INTERFACE

- This unit connects your computer to any MIDI instrument.
- Fully Opto isolated - MIDI IN, OUT, MIDI THRU.
- Just plug in and go.

FREE CABLES

- 3 metre long MIDI Cables - completely FREE!! (normally £6.99).

FOR ONLY
£99.99
NO MORE TO BUY!!

DATTEL ELECTRONICS

EXTERNAL 3.5" DISK DRIVE

▼ Slimline extra low profile unit - only 6" long!

▼ Top quality fully compatible drive mechanism.

▼ Throughport allows daisy-chaining other drives.

▼ A superbly styled case finished in Amiga colours.

▼ 1 meg uniform formatted capacity.

▼ Good length cable for positioning on your desk etc.

ONLY £129.99 TWIN DRIVE

ADD £5 FOR COURIER DELIVERY IF REQUIRED

EXTERNAL DRIVE SWITCH

▼ DF1 & DP2 controlled.

▼ Switch in/out of external drives.

▼ Save on memory allocated for drives not currently in use.

NEW LOW PRICE ONLY £69.99
SINGLE DRIVE



STEREO BOOSTER SYSTEM

▼ Boost the output of your Amiga in glorious stereo.

30W + 30W power amplifier.

5 band graphic equalizer.

▼ Complete with cables for A500/A1000/A2000 models.

▼ Slimline colour matched metal case with built-in mains power unit.

▼ Headphone socket.

ONLY £59.99



REPLACEMENT MOUSE

▼ High quality direct replacement for mouse on the Amiga.

▼ Teflon glides for smoother movement.

▼ Rubber coated ball for minimum slip.

▼ Optical system counting - 500/mm.

Special offer - free mouse mat + mouse house (worth £7.99).

ONLY £29.99
COMPLETE

512K RAM EXTENSION CARD



▼ Available with/without calendar/clock option.

▼ Simply plugs internally into A500 slot.

▼ Switch in/out with switch supplied.

▼ Fitted in minutes - no soldering etc.

▼ Accepts 41256 DRams (zero K fitted).

▼ With calendar/clock onboard time/date automatically booted.

▼ Battery backed to retain time/date.

ONLY £19.99

FOR STANDARD CARD TO ACCEPT 512K

ONLY £34.99

FOR VERSION WITH CLOCK/CALENDAR

NB THESE PRICES ARE FOR BOARDS WITHOUT RAM CHIPS. PHONE 0782 744707 FOR RAM PRICES. PHONE FOR LATEST FULLY POPULATED BOARD/RAM PRICES.

▼ Features a built-in self-testing function.

▼ Can read codes EAN, UPC, Interleave 2 of 5, Code 39, CODABAR.

Comes complete with wand, ready to go.

▼ Features a diagnostic indicator.

ONLY £189.99

GENISCAN GS4500 AMIGA



▼ An easy to handle Handi Scanner featuring 105 mm scanning width & 400 dpi resolution enables you to reproduce graphics & text on your computer screen.

▼ Adjustable switches for brightness & contrast.

▼ A powerful partner for Desk Top Publishing.

▼ With Geniscan you have the ability to easily scan images, text & graphics into the AMIGA.

▼ Printout for Epson compatibles.

▼ Powerful software allows for cut & paste editing of images etc.

▼ Save images in suitable format for most leading packages including DELUXE PAINT etc.

▼ Package includes GS4500 scanner, Interface & Scan Edit software.

▼ Unmatched range of edit/capture facilities simply not offered by other scanners at this unbeatable price.



SPECIAL OFFER

COMPLETE WITH DELUXE PAINT II & DELUXE PRINT FOR ONLY £189.99
INCLUDING HARDWARE/SOFTWARE

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BY PHONE



0782 744707

24hr Credit Card Line

BY POST



Send cheques/POs made payable to "DatTEL Electronics"

FAX

0782 744292

UK ORDERS POST FREE
EUROPE ADD £1
OVERSEAS ADD £3

PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS
AND SUBJECT TO CHANGE WITHOUT NOTICE

CALLERS WELCOME - Please reserve goods by telephone prior to visit.

DATTEL
ELECTRONICS

DATTEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND.

SALES ONLY
0782 744707

TECHNICAL ONLY
0782 744324

GURU'S MEDITATION

CULTURE CORNER

And now a poem

(printed solely at Mr Smith's behalf)

Englebert VonTooter possessed a computer
Of quality exceedingly fine.
In yellow pyjamas, he sat with two llamas
And guzzled down raspberry wine.

But each day at noon, with a boiled egg and spoon
He would stare in despair at the screen.
For then he would wonder, why every blunder
Would appear in a naff magazine.

Until one fine day, a magnificent day.
As he nibbled his toffee ice-cream,
It appeared like magic, and now life wasn't tragic:
He had found the top of the team.

"Amiga Format!" Englebert cried,
"It's shown me the way to success!
And as I sit here with my blue frothy beer,
I can forget all the pain and the stress.

"Yes every month, as I munch down my lunch,
I can learn from that wonderful 'zine."

It's true to say, enterprises pay:
He's a millionaire on the scene.

Young folk out there, heed the words he once aired
Amiga Format's the way to success!
Look through the pages, take them in stages:
For computer entertainment it's best!

By The Honourable Miss GILLIAN MARGARET MCCAFFERTY (21).

Send us a fiver if you don't want any more of these prints.

COMPETITION WINNERS Here are the lucky winners of the Gauntlet II comp run in issue 1. The lucky winner of one stonking Gauntlet II comp-in is Alastair Kent from Raverside, Nottingham. The 20 runners-up, who will receive a US Gold sweatshirt and game of their choice are: Neil Barnes, Ranhill, Mereyeads; R. Tonge, New Richmond; Jo Potts, Bognor, Cheshire; Lorraine Smith, Bourne, Nottingham; Nigel Pearson, Tarneg, West Midlands; Alan Kancirovsky, Barnoldswick, Lancs; Richard Walker, Sedgley, West Midlands; Stephen Hughes, West Brom, Tipton; Guy Hall, Merton, London; Johnnie Kinnear, Morayshire; James Peacock, West Lothian; Deborah, Richard Jones, Walsley, Middlesbrough; Clive Evans, Penn, West Midlands; Nicholas Barnes, Cheadle, Bexleyheath; Neil Baxter, Bury St Edmunds, Suffolk; Alex Riggs, Kirby Cross, Essex; Glyn Martin, Gresley, South Humbershire; Nigel Ingsby, Nigent, Ferrers, Northants; Stephen Vickerman, Bournmouth.

CAPTAIN WHINGE

"...pish and nonsense it's probably the best operating system ever devised, personally I've never managed to crash it, not once, ever, at all, and even if it did crash I've got every single guru meditation number memorised and know exactly what to do about it, take 000000238967428365!(*&%\$*)(_*^* it's a dodge, just stick a finger in your left ear and do back flips while singing last year's budget deficit figures to the theme tune from Neighbours and everything's hunky-dorey in no time, and as for complaints that it's too difficult to understand Amiga DOS, if some people aren't prepared to have the chip manual implant surgically inserted in their cranial cavity, what do they expect, so I finished my lecture with a quick summary of the joys of..."

OH DEARY, DEARY ME

Medium-sized-bodge count for Issue Two: two. Grovelling apologies for saying on Previews that Fallen Angel was from Rainbow Arts when it is in fact from Screen 7. Humble atonement as well for stating that Rick Dangerous was £29.99 when it is in fact £24.95.

It is also a matter of great regret that the word 'suppository' was not inserted into this issue.

THE THIRD ONLY FUNNY COMPUTER JOKE...EVER... EXCEPT FOR THE LAST TWO IBM have designed a new computer called the Ronald Reagan. It has no memory and no colon.

* All complaints to ANDREW COONEY from WOKINGHAM for that.

THE LADS GAVE 110%, JOHN

A cunning plot has resulted in the Future Publishing Kick Off International Squad receiving a defeat at the hands of the Electronic Arts All Stars. The squad consisted of Smith, Noonan, Wade and Campbell (from New Computer Express, for it is he).

All four arrived on time for the contest but there was no sign of the EA team. After waiting for a while a strategic decision was taken to retire to the nearby hostelry by the name of Hatchetts and imbibe vesselfuls of the fluid served there, known as beer. One hour later the EA team arrived, distinctly sober and raring to go.

The result, sadly, was inevitable: a defeat by 4 games to 3, with one match drawn. Take our advice: don't drink and Kick Off, it can severely damage the ego. A re-match is being organised, revenge will be had.



To prove we are not bad losers, here is the victorious (and sober, matey, the cheating ratbags) Electronic Arts team. From left to right: Rupert Easterbrook, John Roberts, Scott Probin and Kevin Shrapnel.

ADVERTISER'S INDEX

ACTIVISION	Inside Back Cover	DIGICOM	121	MEDUSA	108	SELEC	115
AMIGA PD LIBRARY	77	EVESHAM MICROS	15	MEGASAVE	97	SILICA SHOP	127
APPLIED VISIONS	24	FIRST MICRO	41	MEMORY EXPANSION LTD	88	SOFTSELLERS	111
ARNOR	68	GEORGE THOMPSON SERVICES	74	MIDITECH	90	SOFTWARE EXPRESS	94
ASHCOM	82	HAMMERSOFT	122	MINDSCAPE	57	SOFTWARE SUPERSTORE	122
ATHENE	32	HAMMERSOFT	81-84	MIRRORSOFT	11	SOFTVILLE PD	92
BEST SOFT COVERS	115	HOME SOFT	29	MJC SUPPLIES	14	T.C. COMPUTERS	90
BLITZSOFT	77	HOBBYTE COMPUTING	93	NEWTek	9	THIRD COAST	114
17 BIT SOFTWARE	77	HOME BASED BUSINESS	82	OCEAN	106	TONIC AUDIO	103
16 BIT CENTRE	112	H.S.V.	103	PLAY PAGE	97	TREBLE H COMPUTERS	67
CALCO	115	IMAGERY	124	PREMIER MAIL ORDER	106	TRACK COMPUTER SERVICES	94
CASLE SOFTWARE	98	JOY OF LIFE ARTS	52	POWER COMPUTING	72 - 73	UK AMIGA	100
COTSWOLD COMPUTERS	124	LADBROKE COMPUTING	85	POSTRONIX	46 - 47	US GOLD	Outside Back Cover, 38
COMPUTER STORE	90	LINE	34	PROLOGUE	61, 51, 56	OUTDOOR VAULT	10
DATABASES	100	NEWTON MEDIA	97	PURPLE PD	79	VIRGIN	54
DISPLAYS EXHIBITIONS	13	MANOR COURT SUPPLIES	116	QUASOFT	123	WAVE	100
DATAPLEX	124	MANDARIN SOFTWARE	93	RAMSOFT	116	WESTONING SOFTWARE	108
DATEL ELECTRONICS	128-129	MATRIX SOFTWARE HIRE	77	SABRE 16	14	WORLDWIDE	108
THE DISC COMPANY	18-19	MAZE TECHNOLOGY	97	S.D.C.	104	WTS	124
DELTA PI	103	M.D OFFICE SUPPLIES	64	SENLAC	124	XENON	71

WHO YA GONNA CALL?



CALL 0734 753267

 Activision

The Computer Game

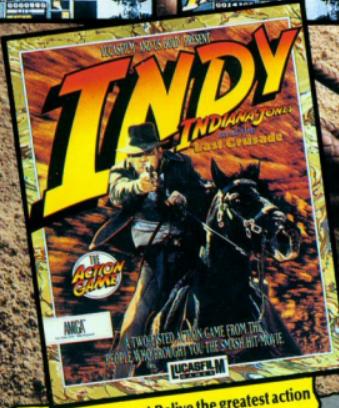
© 1989 Columbia Pictures Industries Inc.
All Rights Reserved.

**The Man with the
Hat is back!**

INDY

INDIANA JONES™
and the
Last Crusade

SCREEN SHOTS FROM VARIOUS FORMATS

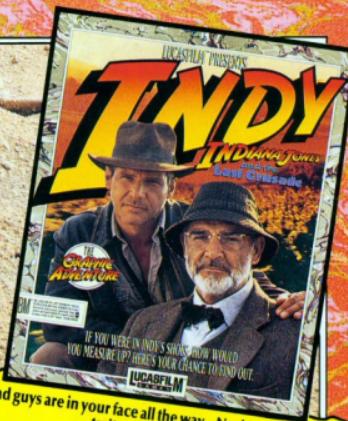


Whip those bad guys ... as only Indy can! Relive the greatest action scenes from the greatest Indy movie of them all. It's red hot, slam bang action in true Indiana Jones style!

- Capture the Cross of Coronado.
- Overcome a savage rat attack.
- Fight your way out of a giant Zeppelin.
- Survive the deadly tests of the Grail Temple.
- ... and much, much more!

CBM 64/128 & AMSTRAD £9.99/C14.99 • ATARI ST & CBM AMIGA £19.99
SPECTRUM 48/128K £8.99 • IBM PC & COMPATIBLES £24.99

U.S. GOLD LIMITED, UNIT 23
HOLFOORD WAY, HOLFOORD
BIRMINGHAM B6 7AX. TEL: 021 825 3380



The bad guys are in your face all the way—Nazis, mercenaries, traitors and spies. Not to mention everything the Luftwaffe can throw at you. If you can, you just might earn a higher I.Q. (Indy Quotient) than the man with the whip and the hat.



SCREEN SHOTS FROM VARIOUS FORMATS

- Visit dozens of locations not seen in the movie.
- Over 100 sound effects ... plus movie theme music.
- Comes with Henry Jones clue packed Grail Diary.

**And this time
he's bringing
his Dad!**

ATARI ST & CBM AMIGA £24.99 • IBM PC & COMPATIBLES £29.99

LUCASFILM™
GAMES

LUCASFILM™
INDIANA JONES™
INDY AND LUCASFILM GAMES ARE
TRADEMARKS OF LUCASFILM LTD.
ALL RIGHTS RESERVED.

RETROMAGS

Our goal is to preserve classic video game magazines so that they are not lost permanently.

People interested in helping out in any capacity,
please visit us at www.retromags.com.

No profit is made from these scans, nor do we offer anything available from the publishers themselves.

If you come across anyone selling releases from this site, please do not support them and do let us know.

Thank you!

