

**NOW WITH  
PACKED  
DISK!**  
FOR YOUR  
• AMIGA  
• ST, &  
• PC  
It's crammed  
so tight...

# COMPUTER EXPRESS

Issue 153 • 12th October 1991 • £1.50

FIRST NEWS • FIRST REVIEWS • BEST BUYS • YOUR WEEKLY GUIDE

**ON YOUR  
TRIPLE  
FORMAT  
EXCLUSIVE**

**AMIGA**

• **TEXT PLUS**

Just waiting for the  
word – a great little  
text processor

**ST**

• **PERSONAL  
DATABASE PLUS**

Data store, text  
editor and label  
printer – this one  
has 'em all!

• **CALENDAR**

An interactive  
desktop accessory

**PC**

• **DUKE NUKEM**

Save the earth in  
this incredible  
shareware game!

**Inside: all you  
need to know**

## CD-ROM PCs: IS AMSTRAD NEXT IN LINE?



Tandy US has just launched this  
386 PC with built-in CD-ROM,  
Windows and SVGA graphics for  
only £1,600.

So when will Alan Sugar follow  
suit in the UK – and at what price?

**plus**

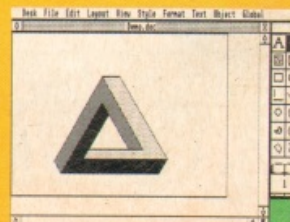
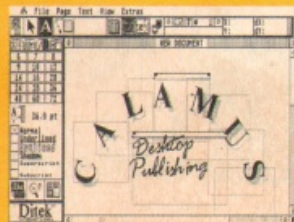


## THOSE NEW PCWs

**Inexpensive yes – but incompatible?  
Amstrad delivers a PCW shocker**

**and**

## WHICH IS THE BEST DTP PACKAGE FOR YOUR ST?



**IS IT CALAMUS?.....TIMEWORKS?.....OR PAGESTREAM 2?  
EXPRESS PICKS THE BEST ONE TO SUIT YOUR NEEDS**



**future  
PUBLISHING**

Your guarantee of value



**ALL PRICES INCLUDE VAT, COURIER DELIVERY**

**2 YEAR  
GUARANTEE**

## AMIGA GALACTIC PACKS

### GALACTIC PACK I

- AMIGA A500 COMPUTER
- WICKED 50 GAMES PACK  
50 great games to get you going!
- QUICKSHOT TURBO MICROSWITCHED JOYSTICK
- HIGH QUALITY MOUSE PAD
- TAILOR MADE DUST COVER

**£329.99**

**ALL OUR AMIGAS COME WITH THE  
FOLLOWING AS STANDARD**

- 2 YEAR GUARANTEE
- 1 mb DISK DRIVE
- TV MODULATOR
- 4096 COLOURS
- SPEECH SYNTHESIS
- AMIGA BASIC
- DIGITAL STEREO SOUND
- MOUSE
- CONNECTING CABLE
- USER MANUALS
- WORKBENCH 1.3
- NOTEPAD WORDPROCESSOR

### GALACTIC PACK II

- AMIGA A500 COMPUTER
- CARTOON CLASSICS  
Bart Simpson vs The Space Mutant  
Lemmings • Captain Planet  
De Luxe Paint III
- OFFICIAL A500 1/2 MEG UPGRADE
- ADDICTIVE HITS  
Rainbow Island • New Zealand Story  
Bubble Bobble
- WICKED 50 GAMES PACK  
50 great games to get you going!
- QUICKSHOT TURBO MICROSWITCHED  
JOYSTICK
- HIGH QUALITY MOUSE PAD
- TAILOR MADE DUST COVER

**£399.99**

## STEREO COLOUR MONITORS

PHILLIPS 8833/MK2

**£249.95\***

\*Free F19 Stealth Fighter

CBM 1084S

**£269.95\***

\*Free Silent Service II

## COMPLETE PERIPHERAL PACKS

### PACK 1

PROTAR 512K RAM Upgrade with clock • 40  
capacity lockable disk box • 20 3.5" DS/DD  
disks with labels • 3.5" disk drive cleaner kit  
**all for just £39.95**

### PACK 2

PC 880B intelligent disk drive • Protar 512K RAM upgrade  
with clock • 40 capacity lockable disk box • 20 3.5" DS/DD  
disks with labels • 3.5" disk drive cleaner kit  
**all for just £99.95**

## CONSOLE CORNER

ALL PRICES INCLUDE COURIER DELIVERY & 2 YEAR GUARANTEE

### CONSOLE SYSTEMS

Sega Master System.....£59.95  
Sega Master System Plus.....£79.95  
Sega Megadrive.....£129.95

### COLOUR PORTABLES

Atari Lynx.....£84.95  
Sega Game gear.....£99.95

We stock a wide range of software and peripherals for all of the above ring for details

**Future World**  
**computers**

8 450624 094032

John Gough & Sons Ltd  
100, Gough Street, London  
W1P 0AA

EXPRESS PICKS THE BEST ONE TO SUIT YOUR NEEDS



**PLUS A COMPREHENSIVE 2 YEAR GUARANTEE!**

## PRINTERS

All printers come with connecting cables free of charge

### STAR GOLD STAR DEALER

LC-20 MONO 9 pin Dot Matrix, 180/45 cps.

**£149.95**

LC-200 COLOUR 9 pin Dot Matrix, 185/45 cps.

**£214.95**

LC-24/200 MONO 9 pin Dot Matrix, 180/45 cps.

**£259.95**

LC-24/200 COLOUR 24 Pin Dot Matrix, 220/55 cps

**£309.95**

### CITIZEN PREMIER SUPER DEALER

120D+ MONO 9 pin Dot Matrix, 120/25 cps.

**£149.95**

SWIFT COLOUR 9 pin Dot Matrix, 160/40 cps.

**£214.95**

124D MONO 9 pin Dot Matrix, 144/48 cps.

**£209.95**

SWIFT 24 COLOUR 24 Pin Dot Matrix, 160/50 cps.

**£319.95**

## PRINTER STARTER PACK

• UNIVERSAL PRINTER STAND • QUALITY DUST COVER • 200 SHEETS OF PAPER  
**All for only £9.95**

## AUTHORISED PROTAR STOCKISTS

THE VERY BEST IN PERIPHERAL ADD-ONS

PROTAR 512K UPGRADE WITH CLOCK

Features compact 4 chip design, on/off switch.....**£29.95**

PROTAR 'VISTO' COLOUR MONITOR

Identical to Phillips 8833 MKII.....**£248.00**

PROTAR A500 HARD DRIVES

Features 8mb internal RAM expansion facility

A500 HD - 20 meg...**£279.95** A500 HD - 30 meg....**£349.95**

A500 HD - 50 meg.....**£429.95**

Configurations available up to 160 meg - please call for details

## POWER DISK DRIVE STARTER PACK

New PC880B intelligent disk drive featuring: Blitz Hardware, Virus Hardware, Anti-click, Thru-port, Isolating Switch • Ten 3.5" DS/DD disks with labels • 40 capacity lockable disk box • 3.5" disk drive cleaner kit

**Only £69.95**

# ORDERING MADE EASY



### BY PHONE

Simply call our Head Office quoting your Access/Visa number on  
**0234 218060 (5 lines)**



### BY CALLING PERSONALLY

Simply call into your nearest FutureWorld store where our fully trained personnel will be more than happy to deal with your requirements



### BY POST

Make cheques, Building Society drafts or Postal Orders payable  
FUTUREWORLD COMPUTERS LTD  
UNITS 25-27 SERGEANTS WAY  
ELMS INDUSTRIAL ESTATE  
BEDFORD MK41 0EH

Please write cheque guarantee card number on reverse of cheque to ensure same day clearance



### REMEMBER

**ALL PRICES INCLUSIVE OF VAT & COURIER DELIVERY**

### FINANCE

Finance available to suit your specific needs. Written details on request. Instant credit is available in all FutureWorld stores.

### PREMIER GOLD CARD

- 7 day money back guarantee if not completely satisfied
- 30 day exchange for new policy should a fault occur
- 2 year guarantee giving free collection and delivery service should a fault occur
- Exclusive Premier Gold Card with Personal Membership Number entitling you to special offers
- All this for only £19.95 per item purchased

### 2 YEAR GUARANTEE

For the whole guarantee period, warranty service will be completely free of charge

### TECHNICAL SUPPORT/ON SITE ENGINEERS

Being authorised service centres for AMSTRAD, COMMODORE & STAR, we are equipped to deal with the majority of queries

### FULLY COMPUTERISED ORDERING SYSTEM

This enables our telesales staff to provide up-to-the-minute stock information coupled with efficient dispatch

### FULL TESTING PROCEDURE

All computer hardware is tested prior to dispatch maintaining our motto:

*Simply the  
BEST*

YOUR NEAREST **FutureWorld** STORE



### BEDFORD

70 High Street Bedford Telephone 0234 217070



### NORTHAMPTON

1-7 College Street Northampton Tel: 0604 33996



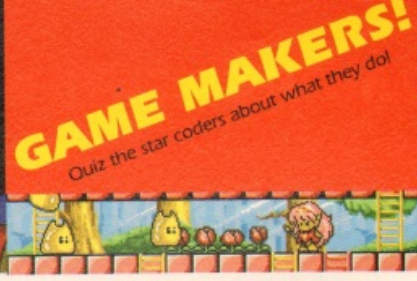
### WELWYN GARDEN CITY

16 Church Road Welwyn Gdn City Tel: 0707 390029





**EXHIBITORS!**  
Well over 150 Amiga companies!



# Discover the Amiga at its best!

Amiga Format presents the greatest computer show this year.  
Earl's Court II, November 15-17 1991: be there!

## Just look at what there is!

**Christmas hits** Ocean, Psygnosis, Mindscape, Electronic Arts, Virgin, Microprose, Gremlin, Mirrorsoft: all the leading software houses will be at the Show, with massive stands. This'll be your chance to see and **play the year's biggest games** - exclusive to the Show.

**CDTV City** what is CDTV? What can you do with it? What software can you buy? Discover what **the future of computing** holds in the Show's unique CDTV City.

**Christmas Shopping Mall** All the best games bargains are here!

**Multimedia Theatre** Commodore has attracted some of the biggest names in

computing to **demonstrate their stuff**. See what the Amiga is *really* capable of!

**Games Arcade** Set your **eyes on boggle mode**: you won't believe how many incredible games you'll be able to play.

**The game makers** Imagine hearing direct from the leading games' programmers: just how do they do what they do?

**And also...** Fistfuls of competitions. Hosts of celebrities and experts. Jaw-droppingly wonderful big screen video. Virtual Reality (virtually certain). Creche. And a **lot of noise**, that's for certain...

**Who'll be there?** Commodore, New Computer Express, Amiga Format, Amiga Power, Amiga Shopper, all the major games producers, a myriad of serious publishers, loads of bargain-offerers, lots of hardware developers and everyone into the world of Commodore.

## Faxbox

**Where** Earl's Court II,

**When** November 15-17 1991

**Times** 9am-5.30pm November 15-16;

9am-4pm November 17

**Cost** Adults £6, under 14s £4

(see the special Early Booker Offer)

**AMIGA** presents  
FORMAT



15 - 17 November 1991

**Commodore**

## EARLY BOOKER OFFER: SAVE TIME, SAVE MONEY

Be smart. You know this **World of Commodore** will attract tens of thousands of people. And you know what that means: queue City. So avoid all the foot-shuffling, hanging-around-for-ages start to the Show by booking your tickets early. And you'll even **save money!** Bit of a barg, really. Do it now, otherwise you'll only forget and then regret it later when you're really cold and you can't wait to get inside and - (Snip! - Ed)

**YES** I would like to have my tickets early, avoid all the queues and save £1.05 on every ticket, please.

**Name** .....

**Address** .....

**Postcode** .....

Number of tickets .....Adult (at £4.95 each)

.....Under 14s (at £2.95 each)

Total payment

Method of Payment (please circle) Access Visa Cheque PO

Credit Card number .....Expiry date.....

**CREDIT CARD HOTLINE 051 356 5085**

Please make all cheques payable to **WORLD OF COMMODORE**

Send this form to

**World of Commodore  
PO BOX 2, Ellesmere Port  
South Wirral, L65 3EA**

**WARNING:** This offer closes on 8.11.91  
If you don't want to cut up this magazine,  
photocopies are accepted. **NCE**

**You'll think  
Christmas  
has come  
early!**





## YOUR MACHINE

### AMIGA

• Make your text files more presentable with our Cover Disk special this week: **Text Plus**

- Wordworth, the latest in WP for the Amiga.....10
- Keep numbers under control with *InterSpread*.....17
- Smooth out jaggies with *Font Enhancer*. Find out what we think on page.....17
- Abandon the Amiga blues, Tech Tips solves your troubles...42
- Sampling is even better with the Audio Engineer upgrade.....53
- GVP guarantees to double...53

### ST

• **Personal Database Plus** on the Cover Disk is more than just that. It's a text editor and label maker tool. Plus keep track of those important dates with **Calendar**

- *Trackman 2*, is it sound? .....17
- *Protext 5.5*, new and improved again! Is it worth it?.....17
- Got your wires in a twist, solve your ST problems, by flicking to Tech Tips.....42
- When you're stuck for words, *Rhyme King's* on hand.....55

### PC

• With **Duke Nukem: Shrapnel City** on the Cover Disk this week, it's your mission to save the world

- The ISDN adaptor • 486 tower PC • Map Viewer • Code Translator: whatever your needs, the latest products are on this page.....10
- *LabelPro* - mailmerge labels at your fingertips.....17
- What's a mouse when it's not a mouse? It's *Unmouse* - we take a look at the latest PC products...18
- *FontMonger* helps you fix your fonts.....56
- Work in progress on the spectacular new *Tornado*.....56

### MACINTOSH

- The Mac goes East.....26
- CD-ROM prices take a tumble.....26
- Flatter your text with new fast-font service.....26

### CPC

- Software for speedway fans and why you should keep off the meths.....27
- Back to school with the *Fun School 4* and *Darkman* takes over where *Dick Tracy* left off...29

### C64

- Express takes a look at *Terminator 2*.....30
- Light up your life with the *Trojan* add-on.....31
- A round-up of the summer releases.....31

### SPECTRUM

- There's a club out there to suit you, be it *Music Writers Anonymous* or the new *Sam Coupé* adventure club.....33
- The sad demise of two *Specy* publications.....34

### CONSOLES

- Express reviews *Jerry Boy*.....34
- Yanks score a hit with the *Turbo-Grafx* adaptor.....34
- All the latest from the Konami collection.....35

# NEW COMPUTER EXPRESS

# CONTENTS

12 October 1991 • Express 153

## COVER STORY



• Tandy's MPC: huge support from major corporations

### TANDY BEGINS THE HARD SELL ON THE NEXT STAGE OF PC EVOLUTION

The multimedia CDPC gains massive software support - expect it here soon - page 9

## THIS WEEK

**News:** because it's weekly we print it first

- pages 4-7

### What's New

Get the most from BT's digital system with an ISDN adaptor, word processors, map making PC software and a dBase to C translator - page 10



• All around the world you've been looking for this for your PC

## COVER DISK 6

**Express software:** dying to get stuck into your packed Cover Disk? Turn to page 12 for all you need to know

## THE EXPRESS FEATURE



### ST desktop publishing

*Calamus*, *Timeworks* and *PageStream 2* - which one is best for you and your ST? - pages 54 & 55

• *Timeworks* is one of the best systems for handling large amounts of text. But does

## INSIDE INFORMATION

### The Amiga, ST & PC pages

Everything that's new on your machine's scene, plus the best previews and tips around - pages 49, 50 & 52

- **Pixel 3D** - the brilliant object converter for Amiga ray tracing programs



### Public Domain

The essential guide to the best in low-cost software - pages 54, 55 & 56

## Games Week

Hard hitting review of *The Blues Brothers* and terrific tips for *ELF* and *Brat PLUS*: the latest news - pages 60 & 61



• *Jake or Elwood? Fast, addictive gameplay, hilarious animation and, brilliant music*

## SHOPPING EXPRESS

16-bit reviews	17	CPC	27	Consoles	34
Letters	21	C64	30	TechTips	42
Mac	26	Spectrum	33	On-line	45



## Extra super paint package

One of the Mac's most ancient and revered paint packages, *SuperPaint*, has been given a facelift.

Publisher, Aldus, has released version 3 of the software and has incorporated a whole host of enhancements.

These include:

- Black and white, and colour support
- 16 million colours available to users of 8-bit monitors
- Texture fills
- Hot keys

Aldus even claims that users can attain "photo-realistic" projects. Not only has more technical wizardry been introduced to *SuperPaint*, Aldus' project manager, Cindy Taylor, also maintains that it is easier to use and that "users will benefit from a reduced learning curve."

System requirements are for a Mac Plus or up with 2Mb of RAM and a hard drive. It is also System 7 compatible.

Price in the United States is \$199. This looks as if it will maintain a straight sterling for dollar exchange when it eventually hits the UK next year. ■

### EXPRESS...

The Japanese are well known lovers of gadgets but this time they have gone too far for their own good. So many mobile phones are being purchased that NTT - Japan's largest telecommunications company - fears that all the numbers will run out by 1995.

...SNIPPET

## Cray computer proves 'green' ocean theory

British scientists using a Cray Supercomputer have discovered that oceans absorb more carbon dioxide than had previously been supposed.

The Cray, part of the £10 million Fine Resolution Antarctic Model (ERAM) project, showed that the Agulhas Current carries an enormous 1 billion mega-watts of heat absorbed from the atmosphere.

Data from the Cray disproved theories that water was warmed as it flowed from the Pacific, via South America, and into the Atlantic. Instead the heat comes directly from the atmosphere, showing that oceans are as good at controlling the greenhouse effect as trees are. ■

## Have Laplink will travel

Portable computing with laptops and notebooks is becoming more and more popular and with it comes a growth in peripherals.

The latest to hit this healthy scene is *LapLink Pro* from Travelling Software.

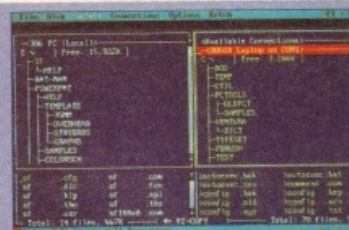
This piece of file transfer software is compatible with more than 60 Hayes-compatible modems, and enables users to transfer data to and from computers anywhere in the world.

For those of us too busy to bother with protocols, dialling commands and setups, the program is a real boon. It handles all this for you.

According to a spokesman for the company, once all these peripheral actions have been handled, "The user can then transfer the files and manage the disk drives of both the computers as though they were only a few feet apart".

An added attraction, according to Travelling Software's European sales and marketing manager, David Aldridge is "The fact that we have broken free from the cable only scenario and taken the modem route opens up a whole new dimension to portable computing with no limitations to PC file transfer."

The system also makes use of TS's



• *Laplink Pro* - opening up a new dimension in portable computing

Blackbird communication technology. This data compression function offers parallel transfer in 4 or 8-bit modes giving a claimed 20-60 per cent increase in speed over other comms systems.

*Laplink Pro* costs £125. For more information call 0753 831855. ■

## On-line system manager requested virus to be uploaded

# VIRUS ALERT ON COMPUSEVERE

Compuserve, the UK's most popular on-line system was subject to a virus uploaded on the request of one of its own forum managers last week.

The on-line system which has around 200 forum areas of special interest, was in no way to blame for the act of foolishness. And the virus, contained on a file call MOUSE.COM, did not actually make it into the public forum.

It was found in an American-instigated area called Virus Forum run by McAfee Associates in the USA.

### UPLOADING MISTAKE

According to Compuserve's UK general manager, Andrew Grey: "Rather foolishly, a forum manager asked for a virus to be uploaded. There were nine downloads from that area in the UK, but this is a forum dedicated to the study and eradication of viruses. The upload of the virus was a mistake and it doesn't change the benefits to be gained from the system".

Asked whether this could happen again, Mr Grey told *Express*: "This was the first time it has happened. The manager was taken into a

### HOW THEY EXPLAINED IT AWAY

This is an extract from the the message run in the Virus Forum on Compuserve in order to alert users to the virus drama. "IMPORTANT NOTE - PLEASE READ As a result of this error, we have decided to close down Library 0, the Suspect Virus upload library. Forum users may continue to submit suspected viruses for review through Compuserve Mail... This change will prevent this error from recurring. We regret that anyone may have downloaded the infected file in error."

meeting immediately, and has been told that such an action should not take place again".

### POTENTIAL DISASTER

The virus was in fact resident on the Virus Forum for nine days, from 9 to 18 September. In this time there were nine downloads.

Andrew Grey said: "Obviously it was not a wise thing to do. And had it been uploaded

to a MicroSoft or Adobe forum for example, it could have been an absolute disaster".

Because the virus, called Taiwan 4, only actually affects a file called AUTOCAD.EXE, the main system file for Autodesk's *AutoCad* computer aided design system, even if it had got into any of the public sectors it is unlikely to have done much damage.

However, the mere fact that the head of a specialists forum requested the uploading of a live virus to an international on-line system, does raise serious questions.

### WHO IS TO BLAME?

John McAfee, the American responsible for the forum, claims he was unaware that it was possible to download infected files from his own forum. McAfee also states that of the nine people who downloaded the file, only one contacted the sysop. The virus was not spotted by the sysop, but by one of the people who downloaded it and then contacted Scotland Yard.

Mr McAfee has taken all the blame on his own shoulders, and no blame whatsoever should be put on Compuserve. ■

## Shoot from the lip

"But recession is an opportunity for change, not a reason for it"

IBM UK's general manager, Nick Temple, proving that tautology is valid jargon after all.

"From our headquarters in Reading, Commlink has a firm vantage point overlooking the wider European arena".

MD of Commlink, Bruce Reid, setting up the jewel of Berkshire as the new European capital.

"In the leisure hardware market, Atari have slit their throats and hung themselves up to bleed."

Gremlin's Ian Stewart commenting on the ST. (from *Computer Trade Weekly*)

"Throw away the machines"

The gospel according to French obstetrician, Michel Odent as reported in the *Guardian*.

"Obsoleting an engine or transmission computer because of a software change will soon be history"

Dennis Florence of Chrysler adding to the English language with some verbing of his own.

## Trumped up!

American millionaire Donald Trump, who has been unlucky in love and finance over the last year, has had his ideal mate chosen for him. By a computer.

The marriage minded machine says that crumpled Trump's sweetheart would have the body of *Fabulous Baker Boy* star Michelle Pfeiffer, the eyes of Madonna and the bust of Dolly Parton. It did not manage to comment if she would also have the avarice of Scrooge McDuck. ■



US company blamed for down fall of the ill-fated PC2000

# AMSTRAD IS SET TO SUE AGAIN

In what looks more and more like a concerted bid by troubled Amstrad to claw back cash from its faulty PC2000 range, it is embroiled in yet another multi-million pound legal battle.

The new £80 million wrangle is with US company Western Digital, and comes just weeks after an £87 million suit was filed against US hard drive makers Seagate.

The latest case centres on Amstrad's contention that Western Digital had supplied it with WD384R hard disks which were not properly specified and caused Amstrad massive financial losses when it had to recall its PC2286 computers.

Western maintains that, because the drives were shipped in 1988 and Amstrad did not file any claim until 18 months after this, it will contest the suit.

The American company says it could counter-sue Amstrad for costs incurred trying to help Alan Sugar's company out of its problems.

## DISK QUALITY

Added irony comes from the fact that Amstrad claimed that Western's drives were not as good as those supplied by Tandon for the ill-fated PC2000. The disk drives that Western,



• Alan Sugar is trying to retrieve some of Amstrad's lost cash – and a lot of it. The PC2000 has caused Amstrad more financial problems than anything it has produced so far

which took over Tandon's disk drive operations in 1988, supplied were actually made by Tandon in the first place.

This case comes shortly after Amstrad set its sights on hard drive maker, Seagate (see Express 151) in a claim against £87 million worth of faulty STR277R hard drives which were fitted to Amstrad PC2386s.

Amstrad's only comment on the matter

came in the form of two terse press releases both of which finished with: "Amstrad has been advised by its attorneys not to make any further public comment about this litigation until it is successfully concluded".

## PC2000 BITES BACK

Amstrad is known to have large numbers of PC2000s littering its warehouses. These two claims on its US suppliers will go some way to recouping some of the lost capital invested in these machines. But more importantly for the company, winning the cases will raise its image in the public eye. At the moment Amstrad is keeping a low profile. The obvious reason underlying this is that if it loses one or both cases, the perception will be that it was responsible for the poor quality of the machines. However, if it is victorious, then the blame will be shifted across the Atlantic.

Although the money will be more than useful to the company which has just suffered a 54 per cent slump in profits from nearly £50 million to £20 million, it appears to be concentrating on its reputation. Having still not made a significant impact on the highly lucrative US market, these cases could prove highly significant for Amstrad in terms of public image. ■

## Atari up in arms about PD abuse

Atari has released a particularly peeved press release relating to its software appearing in the Public Domain.

UK software manager for the company, Bob Katz said: "Atari (UK) has threatened legal action against individuals or companies found to be illegally distributing its copyrighted software".

It is thought that the product which sparked off the rumpus was the *Neochrome* paint program. Versions 5 and 6 of this were released into the Public Domain following a disagreement between the author and the company. However, since then all versions of the program have been firmly Atari's copyright.

This made little difference to certain individuals who have cracked later version, and released them into the public domain as *Neochrome Master*.

Thirty companies have been contacted by Atari with regard to the problem. As yet no legal action has been taken. Apparently Atari is relying on the good intentions of PD libraries and other outlets to put a stop to the distribution of its copyrighted product.

As Bob Katz comments: "Atari unanimously supports the notion of Public Domain, but recent abuse of the system has forced the company to take action". ■

## Apple hits the High Street

Apple Computer UK is no longer content with its Apple Centres as the main way to get its message across to prospective buyers.

It has decided to set up an 'Applepoint' retail outlet in conjunction with one of its biggest outlets, Thames Valley Systems.

This first Applepoint, based in Slough, is the vanguard for an aggressive attack by Apple on the UK High Street market. Apple UK's director of channel development, the man responsible for liaison with retailers, Chris Calvert, confirmed this: "I look forward to other High Street Applepoint shops appearing over the next year".

Applepoints are already familiar sights in Europe. Essentially they are areas in existing shops where shoppers can pop in and try out Apple's range of machines including the Mac Classic, and the new computers which Apple is known to have lined up for release. ■

## That's all white son

• Meet Jimmy Whirlwind White at the World of Commodore show and pick up a few tips



The World of Commodore Show offers more than just a great chance to see the full Commodore range, meet *New Computer Express* journos and attend the biggest computing extravaganza in Europe. You could also get to meet Jimmy White.

Jimmy, who has confirmed his place in the snooker firmament, will be signing copies of Jimmy White's *Whirlwind Snooker* from Virgin games on Friday 15 November, you might also be

## Souness from the sidelines

You too can feel the humiliation of defeat by a team of amateurs like Kuusysi Lahti. You rant and rave like Graeme Souness from the sidelines as you play Zeppelin Games' *Graeme Souness's Vector Football*.

Programmed by ex-Domark boy Glyn Humphries, the game is already being touted as "more reasonable than any previous 3D footy game even if the players do have thighs the size of Anfield". High praise for a game which has not taken the overhead view à la *Kick Off*.

There are options for either one or two player



• Now you can sit on the sidelines and look at your boots as your team goes down to a bunch of amateurs from Finland

games in an eight team tournament. But best of all you can build and rebuild the stadium by adding or removing crowd barriers, stands, goal nets, pitch lines, corner flags and even the pitch patterns.

All the figures are drawn in vector style rather than sprites much like *3D Sports Boxing*. *Graeme Souness's Vector Football* is available for the ST and Amiga at a price of £24.99. ■

## EXPRESS...

Signbank is a new, computer controlled, banking system in Australia. It has been set up to electronically store customer's signatures. Nowadays, instead of moving copies of signatures from branch to branch, the whole thing is automated.

...SNIPPET

## Apple MacSki

Apple Computer has started an all-out media campaign to make its name in Russia.

The company has chosen as its slogan a phrase which would probably have been laughed out of every ad agency in the West as being too wordy. It is as follows: 'A solid US' family has serious intentions to live and work in the USSR'.

The ad will run in *Isvestia* among other news media, but will not appear in *Pravda* – the paper of the State. It will also appear on Russian television. ■



## The new age sage

Are you in need of physical and mental relaxation and do you have the desire to learn?

Well throw away all that ambient music and get ready to have your brain speeded up. A new way to accelerate your learning using respiratory bio-feedback and audio-optical signals has been discovered in London.

The brain absorbs information much faster during periods of deep relaxation and in this state the mind focuses only on the

information being presented.

The London Neuro Centre, famed for the Mind Machine, is now selling a new device called the SITA portable which relaxes you by monitoring your breathing patterns via sensors and then feeding them back to you.

Once a consistent breathing pattern has been registered a tape automatically begins playing educational material. Priced at £345 it is available from London Neuro Centre on 071 284 4769. ■

## YABBA DABBA DOO!

"Hey Fred!" "Yo Barney, what's up?" "We've finally made it on to the Sega Master System care of those guys at Grand Slam and Segal!"

Based on the famous Hanna Barbera cartoon characters the game is spread over four segments, which starts with a bit of home decoration for Fred. While trying to keep Pebbles in her pen, Fred must also keep hold of the elusive paintbrush.

Fred and Barney then visit Bedrock Super Bowl for the Bowling final. But the game is not over yet as Fred returns to find Pebbles has escaped. He must find and rescue her before she comes to harm. Released later this month *The Flintstones* costs £29.99. Contact: 081 655 3494. ■



• Stone-Age capers with the Flintstone crew on the Sega Master System

EC regulations force Amstrad to claim that PCWs are not expandable

# PCW BUS STOPS

Amstrad was forced to modify the design of its latest word processing workhorse, the PCW 9256 and PCW 9512 Plus to keep in line with the EC, *Express* can reveal.

To adhere to new regulations which come into effect in 1992 and concern computer emissions which interfere with radio signals, Amstrad has been forced into claiming that the machines are not expandable, when in fact they are.

It has also been forced to 'pretend' that the expansion bus at the rear of the machine, in fact a simple card edge which takes the RS232 interfaces and other peripherals available to the PCW, does not even exist. It is instead calling it a 'hardware test' port.

This has led to rumours that the new machines are totally incompatible with the previous 8000 series and the PCW 9512, both of which have fully exposed edge connectors.

### RUMOURS ARE RIFE

The confusion about compatibility problems arises from the fact that, although the new card edge is mechanically identical to that used in the preceding series, it is hidden deep within the back of the machines and is covered by a plastic plate.

This means that, without modification, older peripherals such as RAM-pack upgrades, and RS232 interfaces will not fit



• Amstrad's new PCW: rumours of expansion disaster are unfounded

the new machines.

Manufacturers such as SCA systems are maintaining that this will not lead to "horror stories" regarding the new PCWs.

Peter Mydlarz of SCA told *Express*: "The new expansion ports have had to be covered and hidden in order to comply with new EC rules. This does make them inaccessible to currently available add-ons. However, we will certainly be developing modified units to cope with this problem".

Locomotive, however, has run into a problem with its recently launched *LocoLink* PC-to-PCW connectivity package. The company's technical director, Richard Clayton, said: "There is a slight problem with the new port on the 9526 in

that, in order to abide by many of EC regulations especially in Germany, Amstrad has been forced to say that the PCW is not expandable. So it has covered the port. "It has also placed it low-down on the machine. This means that if you connect many of the old peripherals, such as LocoLink, they will touch the floor. Frankly though, because there are a variety of PD programs which can read 3.5-inch, 9 sector, CP/M disks on the PC, you probably don't require LocoLink on the new machines. However, if public demand is great enough, we will produce a compatible version".

### TESTING TIMES

According to sources close to Amstrad, the card edge is being termed as a 'hardware test' rather than an expansion slot.

The unnamed source also told *Express*: "It is well known that PCWs kick out RF (radio frequency) interference like no one's business. To cope with this the company has been forced into burying the port at the back of the machine, and also to cover it with the plate.

"Removing the cover is child's play. It looks like a fudge put on by Amstrad as a last minute thing rather than a pre-planned piece of design. It's only held on by a couple of screws and, once removed, the slot is immediately ready for use. The only problem I can see is that by doing this you

invalidate the warranty".

We called Amstrad to confirm this, and were told by Nick Hewer on behalf of the company: "No, this isn't the case as far as we know. Information isn't clear at the moment. But there appears to be no problem with warranties".

### OUT WITH THE OLD

However, all is not rosy in the garden for owners of the older machines.

With developers having to move over to the new machines, it will not be too long before it becomes economically unviable to make peripherals and dongles for the old PCWs.

This will have one major effect on owners of the old machines who wish to upgrade. They will have to buy the new PCWs or leave that format behind in favour of PCs.

This also applies to software. It is far easier, and cheaper, for software houses to duplicate the hugely popular 3.5-inch disk format – which is used on PCs, Amigas, STs, and Macs – than for the 3-inch – only used on the PCW, CPC and Spectrum.

With news that several unbranded 3-inch disk manufacturers have stopped trading, leaving only one producer of 3-inch disks remaining – Maxell – the position for the older PCWs looks more and more dubious. For further news on this see next week's issue of *Express*. ■

## A pocketful of LEO

UK-based DIP Computers, known for its hand-held machines, has produced a new MS-DOS compatible machine – the LEO.

Weighing just 310 grammes, the LEO has a variety of expansion options using four built-in ports. An optical interface using an infra-red link enables users to transmit data to a personal computer. There is also a built-in barcode reader and serial connectors for printers and modems.

Built-in memory cards mean the LEO can be supplied with a variety of memory configurations. Enabling expansion and easy maintenance these cards are available up to 8Mb. They can also be configured up to 640K as RAM memory with the remainder as a solid state DOS disk.

Power supply comes in the form of a rechargeable battery pack on which the LEO can run for up to 50 hours. For more information call 0483 301555. ■

### EXPRESS...

Next year's generation of Chrysler cars will have computers on board which will help to monitor fuel consumption, engine performance and transmission driveability.

The system will use Flash memory so that the chips can be upgraded to cope with any new technological advances which the company intends to introduce by 1995.

...SNIPPET

## Nintendo nurturing

If McDonald's can get away with a hamburger university, why on earth should Nintendo not set up a national curriculum for computer games?

No reason at all. This is why yet another school for Nintendo games designers has been set up in Japan.

A company called Enix, makers of *Dragon Quest* which has already sold 10 million units, is the master behind this class.

Called the Enix Game School, the establishment will produce 135 qualified programmers for the NES, Game Boy and Super NES machines each year.

In order to 'qualify' for admittance, students will have to pay out a vast 1.5 million yen (about £6,900, the same as a UK public school fee).

Nintendo and Enix will both gain new games and corporately loyal staff. ■



## COMMENT

The launch of the PCW six years ago was a move which earned Amstrad – rightly enough – the accolade of making computing accessible to the masses.

The all-in-one package, complete with printer, monitor and keyboard, hit its niche market at an aggressive price, and with ferocious accuracy.

Small wonder, then, that the company has decided to consolidate its success with the machine, and bring two new models on to the market.

The two new machines, the PCW9256 and 9512 Plus, demonstrate continued evidence of Amstrad's pragmatism – a trait which is largely responsible for the company's commercial success to date.

## COSMETICS

Differing mainly in cosmetic terms, the new models are simply a more streamlined, state-of-the-art version of their predecessors. The major departure from the original specification is the arrival of the 3.5-inch drive as standard – creating, effectively, a PCW version of the PC.

What this adds to the PCW is the ability (with the appropriate software) to transfer data from CP/M to MS-DOS format machines – without the need to invest in costly hardware upgrades.

## NEW PRODUCTS

The industry is responding with characteristic speed to Amstrad's obligation to conceal the 9256's expansion port. SCA Systems will have finished work on a special adaptor to allow immediate accommodation of add-ons, as the new PCW hits the High Street. Major software houses, such as Locomotive, have already upgraded their products to the new format.

## RIGHT FORMULA?

The PCW has suffered at the hands of the computer snob for years; with a lack of direct competition, it has, unfairly, been ranked alongside entry-level PCs, and has generally emerged scathed.

The new range of machines bears witness to the strength and popularity of the PCW – and builds on a longevity scarce enjoyed by counterparts in the PC market. The PCW formula was right in the mid-80s; today, there is no reason why it cannot be right as well. ■

By Sophie Lankenau, editor of 8000 Plus, the UK's most popular PCW magazine

## Hardware manufacturers' consortium creates new standard

# MULTIMEDIA PCs 'ARE THE FUTURE'

The official launch of the next stage in the PC evolution, Multimedia PCs (MPC), took place in the USA on Tuesday.

Tandy announced that it would be setting up specialised outlets to popularise its new machines. Its MPC models all have the company's CRD-1000 CD-ROM player built-in, and are based on the 80386sx and 80386 processors. They range in price for \$2,799 to \$5,499.

A consortium of 12 major league, PC-compatible hardware manufacturers has created a new standard which Tandy's Vice President, Howard Elias, described last week as "the future of personal computers."

His remarks were made at a forum in New York City last week where nine companies – including Microsoft and Broderbund – demonstrated multimedia products which will run on any PC conforming to the new standard.

## BASIC STANDARDS

The consortium, known as the Multimedia PC Marketing Council, has created a new trademark – MPC – which can be licensed by

developers of multimedia applications. The Council hopes that MPC will become a widely accepted standard, and that purchasers will look for the MPC logo before they buy.

Theoretically, any computer which conforms to the basic MPC standards will be able to run any MPC-branded application. The basic hardware requirements include a minimum 80286 processor, 2Mb of RAM, a colour VGA display, a CD-ROM drive and the ability to record and play back sound.

## BIG NAME BACKING

Numerous big-name companies are backing MPC, including Microsoft – whose Windows graphic user interface (GUI), together with some multimedia extensions, is included in the list of basic requirements.

US company Britannica Software has already produced MPC-compatible software: the entire *Encyclopedia Britannica* on CD-ROM, and companies like Broderbund and Maxwell Electronic Publishing also have MPC-compatible applications available.

While MPC does have its opponents – including industry giant IBM – the standard is already gaining acceptance, with companies like Philips and Zenith expected to produce MPC products in the near future. According to Howard Elias of Tandy, "we fundamentally believe that multimedia is a function of PCs. This is not a niche; this is the future."

However, Critics say that MPC is under-specified, and needs a more powerful basic configuration if it is to be of any real use. And some feel that Apple has a hold on the multimedia marketplace which is too strong to break.

## THE FUTURE OF PCS?

If it gains widespread recognition, MPC could become a major standard in the PC marketplace. Microsoft's involvement will certainly help it along, but ultimately the consumer will have to be convinced if MPC is to really succeed; numerous other attempts to create standard hardware configurations – such as the ill-fated MSX – have already shown that it is all too easy to fail. ■

## Elonex Ships PC-320X range



• A British 386 for under £1,000? Yes indeed. It comes with all the standard software and hardware, but there's also a neat maintenance deal thrown in

Elonex has brought out a new range of desktop computers with an 'all in one' motherboard design.

The £995 PC-320XM Slimline model features a 20MHz Intel 386SX processor with 16K cache, 1Mb RAM, 40Mb hard disk, 102-key keyboard and 14-inch colour Super VGA display.

All models come complete with the latest version of MS-DOS 5, Windows 3 and a Microsoft compatible serial mouse. The all-in-one motherboard features a Super VGA display adaptor, floppy and hard disk

controllers, and one parallel and two serial ports built-in.

RAM can be expanded to a total of 16Mb, cache memory can be upgraded to 64K. And an 80387SX maths co-processor can be added for heavy number-crunching applications such as computer aided design (CAD).

For the first year, on-site maintenance is available at £25, and is then charged at 8 per cent of invoiced costs for each subsequent year.

Contact Elonex on 081-452 4444. ■

## U can touch this

Following on from Psion's new Organiser (*Express* 151), ACS Data Limited has released its own hand-held computer, the TouchPC.

Called the TouchPC because of its touch-sensitive LCD display screen, the computer is a PC compatible based on a 9.54MHz V40 microprocessor. It features two serial ports, a parallel port, a BCR port (for barcode readers) and, with the addition of a 'cradle' to place the machine in, infra-red optical communications are possible for high speed data transfers without using wires.

The machine comes with a basic 640K of system memory, while an extra 1Mb is available using SRAM cards.

Data is stored using a Jeida 4 card drive which supports battery-backed SRAM, ROM, EPROM, EEPROM and variety of other formats. A Jeida 4 card



• A steady hand is all you need to operate ACS Data's TouchPC – it uses a touch sensitive screen to input information

drive is available for PCs to ensure data can be transferred between machines.

The cradle for the TouchPC also features an additional serial interface, a RS485 multi-drop network interface, parallel port and a PC keyboard port. Available in bulk in late December, the TouchPC will cost £850. A price for the cradle add-on has yet to be announced. Contact ACS on 061 873 8323. ■

## Attention all Monsters!

ST, PC and Amiga users are in for a treat from the Monster Klub.

This new organisation offers up to 30 per cent off recommended retail prices on software, hardware and accessories. And you don't even have to be a member to gain the benefits.

As an added attraction to *Express* readers, the first 10 people who quote this article when ordering ST or Amiga software will be given a copy of the highly rated *Monster Business* game. Monster Klub can be contacted on 0603 503382. ■



## NEW PRODUCTS



• The 486s are coming! The 486s are coming! And this tower system from Osicom is coming for under £7,000!

## I say, I say EISA

**PRODUCT:** 486 tower PC  
**NAME:** Executive TW486/33e  
**COMPATIBILITY:** PC

Amstrad may be trying to flog 286s again, and a 33MHz 386 might be the height of some people's ambition, but the real flavour of the month are PCs based on Intel's 80486 processor.

Osicom's new Executive version comes with 8Mb of interleaved RAM which is expandable to 64Mb, a 128K RAM cache, 330Mb hard disk, and it supports the highly popular Weitek maths co-processor. For communications with the outside world, and connectivity to hardware add-ons there are two serial ports and one parallel port. The unit also makes use of Extended Industry Standard Architecture (EISA).

Osicom seems to believe that the VGA-compatible tower unit is 'compact'. Well even a cursory glance at the photograph above should disabuse most users of this. What it lacks in height, it makes up for in width. Nevertheless, it is an impressive specified machine, ideal for networking and general business use.

**Price:** Entry level starts at £2,995  
**Availability:** Now  
**Target users:** PC users who require an upgrade to the latest technology

**Contact:** Osicom: 081-336 1282  
**Perceived competition:** Chipset, Aries, Tandon and a whole host of others.

## Lonely as a...

**PRODUCT:** Word processor  
**NAME:** Wordworth  
**COMPATIBILITY:** Amiga

The latest version of *Wordworth*, the word processor which has taken the Amiga world by storm, will be released on 21 October.

It has been subject to several major enhancements including the following:

- Font rotation, graphics support, PostScript driver for Adobe 35 font.
- Support for over 400 printers.
- Colour near letter quality printing
- Auto page numbering/page count.

**Price:** £129.95 (upgrade £25)  
**Availability:** Now

# WHAT'S NEW

New computer products are coming at you thick and fast. But being a discerning user, you don't want to deal with the pap. Read on for the facts...

## Dashing digital deal

**PRODUCT:** ISDN adaptor  
**NAME:** Pocket V24  
**COMPATIBILITY:** PC

BT's Integrated Services Digital Network (ISDN) is now starting to take a hold all over the country. In a few years time it will be the standard used in every home and office in the land.

So now is a good time to ensure that you and your computer are linked into the ISDN system.

Dataflex's adaptor is slightly smaller than a personal cassette player and connects to any RS232c-compatible machine via that very port. Essentially it enables a computer, using virtually any comms software to link into the super-fast ISDN and provide data transfer rates of 2400, 4800, 9600, and 19,200 bits per second when linked with V110 devices.

It makes use of industry standard, Hayes AT commands in order to make it

behave in a similar way to a quick modem.

The pocket-sized unit is powered by a PP3 battery, an optional power supply or by using pin 9 of the D-type connector.

Once fitted to your machine, the unit can provide fast data access, and when connected to a synchronous controller card, data transfer rates rise to an amazing 64K per second. The combination of BT's digital delight and your computer could well be one of the best moves you will make in the next year.

**Price:** £595  
**Availability:** Now  
**Target users:** All businesses using PCs  
**Contact:** Dataflex: 081-543 6417  
**Perceived competition:** None, as yet no other company has come up with a BABT approved system for ISDN.



• No, it's not a mouse at all. It's a handy little device which will enable you to get the most from BT's new digital system

**Target users:** Any Amiga user  
**Contact:** Digita International: 0395 270273

**Perceived competition:** *PenPal*, *WordStar*

## A real plus for dBase users

**PRODUCT:** dBase to C translator  
**NAME:** CodeTranslator  
**COMPATIBILITY:** PC

Now here's a slab of software for the real programming buffs amongst you. It combines two of the world's most popular programming tools in order to produce a powerful addition to your arsenal of computing armaments.

Basically, you can take applications created using the hugely successful dBase III language and turn them into stand-alone C applications which can be run directly from the command line with a minimum of fuss and bother.

What this means in terms of productivity is that the applications will run more quickly and with less memory usage.

Equally important is the fact that any programs created using this system can be distributed by you without incurring any royalty charges.

The *CodeTranslator* bundle does come with a hidden agenda however; you will also require *CodeBase* which costs an extra £190. However, if you buy the two programs before 31 December, The

Software Construction Company will throw in a copy of Borland's popular Turbo C++ programming language for free. This in itself is a worthy deal and one which should not be overlooked.

**Price:** £129 (it requires *CodeBase* 4.2 to run. This costs an additional £190)

**Availability:** Now  
**Target users:** Corporate market, especially companies with number intensive activities.

**Contact:** The Software Construction Company: 0763 244025

**Perceived competition:** No one else has produced such a translator.



• Cartography is an ancient art practiced by skilled artisans. But now you can get involved using a PC

## Map of the day

**PRODUCT:** Map making software  
**NAME:** MapViewer  
**COMPATIBILITY:** PC

Charts and maps have long been areas in which the British excel. Now, even if you are unable to draw, and have not got the faintest idea where Sterling is in relation to Bude, you could be producing high quality charts in a fraction of the time it would normally take you using conventional methods. *MapViewer* is a system which originated in the United States. It runs on PCs and is Windows compatible.

Creating maps is achievable in a number of ways. You can take basic elements from a library of map types, draw your own using a range of CAD (Computer Aided

Design) packages such as the industry standard *AutoCAD*, you can also layer different map types.

Data for map information can be imported from software such as *Microsoft Excel*, *Lotus 1-2-3*, and *dBase*.

You don't just get dull, one dimensional maps either. There are options for 3D versions, rotated maps, and multi-layered charts all of which are produced on screen in full colour.

All of this comes in a Windows compatible, What-You-See-Is-What-You-Get (WYSIWYG) bundle for ease of use.

**Price:** £200  
**Availability:** Now  
**Target users:** Anyone with an interest in map making. Any business with a view to expansion.

**Contact:** GeoMem Software: 0250 3290

**Perceived competition:** There is no competition to this standard.



# ATARI ST 520ST-E DISCOVERY XTRA PACK

RETURN THE COUPON FOR A  
**FREE!** COLOUR CATALOGUE

<b>HARDWARE:</b>	
512K 520ST-E + MOUSE	£329.99
<b>ENTERTAINMENT SOFTWARE:</b>	
ANARCHY - Arcade Game	£19.99
DRAGONS BREATH - Adventure	£29.95
INDIANA JONES - Arcade Adv	£19.95
SUPER CYCLE - Racing Game	£19.95
<b>PRODUCTIVITY SOFTWARE:</b>	
CONTROL ACC - Utility Software	FREE
EMULATOR ACC - Utility Software	FREE
FIRST BASIC - Programming	£49.99
NEOCHROME - Art Package	£29.99
ST TOUR - Tutorial	£4.99
<b>JOYSTICK CONTROLLER:</b>	
ATARI CX40 JOYSTICK	£4.99
<b>PLUS! FREE FROM SILICA:</b>	
TENSTAR GAMES PACK	£219.78
PRODUCTIVITY PACK	£104.97
<b>TOTAL VALUE:</b>	£834.54
<b>YOU SAVE:</b>	£505.54
<b>SILICA:</b>	<b>£329</b>

**PLUS! FREE  
HOLIDAY  
ACCOMMODATION**

**£329**

## ATARI 520ST-FM DISCOVERY PACK

**£279**

INC VAT + FREE DELIVERY + FREE TENSTAR & PRODUCTIVITY PACKS



### 1040ST-E FAMILY CURRICULUM PACK

The Family Curriculum Pack comes with a 1040ST-E computer and mouse plus 5 software modules (3 titles in each), one for every age range. The combination of education, creative and business software from Atari, plus the FREE entertainment and productivity packs from Silica, makes for a package the whole family can enjoy!

PLUS! FREE HOLIDAY ACCOM

1Mb 1040ST-E + MOUSE	£399.99
1. PLAY & LEARN	£76.59
2. JUNIOR SCHOOL	£58.54
3. GCSE REVISION	£55.54
4. BUSINESS COMPUTING	£159.85
5. CREATIVE COMPUTING	£134.97
<b>PLUS! FREE FROM SILICA:</b>	
TENSTAR GAMES PACK	£219.78
PRODUCTIVITY PACK	£104.97
<b>TOTAL VALUE:</b>	£1210.23
<b>YOU SAVE:</b>	£811.23
<b>£399</b>	

SILICA PRICE - INC VAT + FREE DELIVERY

**ATARI ST - MORE THAN JUST GREAT GAMES!**

**FREE! FROM WITH SILICA EVERY ATARI ST**

### TENSTAR GAMES PACK

The TenStar Games Pack is THE software compendium for Atari ST owners, featuring ten top titles with a variety of different types of games for you to enjoy. Each title is packaged in its own plastic case, with a colour sleeve and full instructions. The TenStar Games Pack is FREE! when you buy your ST from Silica Systems.

**FREE! WORTH: £219.78**



### FREE! SILICA SYSTEMS ST PRODUCTIVITY PACK

Every Atari ST from Silica comes with a FREE Silica ST Productivity Pack, worth over £100. This pack has been specially put together by Silica to help you to get to grips with the productive side of computing from day one. Each title has been tried and tested by tens of thousands of Atari ST owners, who have begun word processing with 1st Word and programming with Atari ST Basic.

1st WORD - from GST	£59.99
SPELL IT! - for use with 1st WORD	£19.99
ST BASIC - with tutorial	£24.99
<b>TOTAL RRP:</b>	<b>£104.97</b>



### FREE! 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Atari ST from Silica comes with a FREE 72 page, full colour brochure with accommodation vouchers. These vouchers entitle 2 people to stay up to 16 nights in one hotel (or any number of hotels to a total of 16 nights) with accommodation FREE (you could take up to six nights for four people, or other options). Choose from the 250 hotels featured in the catalogue. All you have to pay for are your meals (prices are listed in the brochure). Reduced rates in top London hotels and hotels in France are also featured.



## SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT COURIER DELIVERY:** On all hardware orders shipped in the UK.
- **TECHNICAL SUPPORT HELPLINE:** Team of Atari technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London & Sidcup branches.
- **THE FULL STOCK RANGE:** All of your Atari requirements from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your new Atari ST computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your ST, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

**MAIL ORDER HOTLINE**  
**081-309 1111**

**SILICA  
SYSTEMS**

<b>MAIL ORDER:</b>	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Tel: 081-309 1111
Order Lines Open:	Mon-Sat 9.00am-6.00pm	No Late Night Opening
<b>LONDON SHOP:</b>	52 Tottenham Court Road, London, W1P 0BA	Tel: 071-580 4000
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm
<b>LONDON (SELFRIDGES):</b>	1st Floor, 369 Oxford Street, London, W1A 1AB	Tel: 071-629 1234
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm
<b>SIDCUP SHOP:</b>	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Tel: 081-302 8811
Opening Hours:	Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm

To: Silica Systems, Dept NCE-1091 - 63, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

**PLEASE SEND FREE ATARI COLOUR CATALOGUE**

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

Postcode: ..... Tel: .....

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

ES&E - Advertised prices and specifications may change - please return the coupon for the latest information.



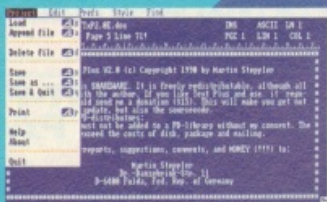
## COVER DISK 6

## COVER DISK 6

Variety's the name of the game on this week's *Express* Cover Disk;

from playing around with text and data to beating an evil megalomaniac!

## DISK CONTENTS

AMIGA  
Text PlusST  
Personal Database Plus  
CalendarPC  
Duke Nukem

A bit of variety never hurt anyone, and with the *Express* Cover Disk this week you get a lot of it. Amiga owners can load, edit and print text files to their hearts delight.

And for ST owners there are a couple of useful programs: *Personal Database Plus*, is much more than just a database as its name implies. *Calendar* is a handy desktop accessory that, unsurprisingly, acts as a calendar.

While Amiga and ST owners are playing around with dates and data, PC owners can play one of the best (if not *the* best) shareware games ever released for their machine!

## TRI-FORMAT TECHNOLOGY

All this software – for the three most popular 16-bit computers – is on a single 3.5-inch disk!

This is possible because of a special disk format developed for *Express* by Rob Northen Computing. The amount of disk space used for each machine changes from week to week, giving us the flexibility to allocate a large or small amount of space depending on whatever software deserves the most.

In effect, this means is that in one week a particular machine may have more space dedicated to it than in another. Don't worry though, the next week the situation changes completely.

## WHAT DO YOU WANT?

At *Express* we want to try and make the software on the disk the type of programs that our readers want. The only problem is: we don't know what that is! Do you want utilities? Applications? Games? A mixture?

Write in and tell us what you'd like to get; in general terms or more specifically. We'd like to know your thoughts. Send your views to: Cover Disk Feedback, *New Computer Express*, 30 Monmouth Street, Bath BA1 2BW.

## COVER DISK PROBLEMS

If you have a problem with the *Express* Cover Disk – that is it's broken, your machine has never been able to load it, or something else is seriously wrong with it – then send it along with an SAE to: *New Computer Express* Cover Disk Returns, Disk 6, Disk Copy Labs, Unit A, Westmarch, London Road, Daventry, Northants

NN11 4SA. A replacement disk will be headed your way soon after – just don't forget the SAE!

If, on the other hand, you have a problem with the software on the disk, then send a letter explaining what happened into us here at: Cover Disk Problems, *New Computer Express*, 30 Monmouth Street, Bath BA1 2BW. Apart from these problems, we're also interested in any hints or tips you may have to do with programs that have been featured on the disk.

Telephone enquiries regarding the *Express* Cover Disk should only be made on Fridays between 9.30am and 5pm. Because *New Computer Express* is a weekly magazine, there is simply no time to answer your calls outside those hours.

## CONTRIBUTIONS

We're always on the lookout for software to go on the Cover Disk. If you reckon you've written a program which you think is worth putting on the Cover Disk read the details in the box at the bottom of this page.

Then, fill in the form on the bottom of page 15 and send us a copy of the program along with as much information about it as possible. And if we use the program, we'll pay for it: up to a whopping £1,000!

## EXPRESS DISCLAIMER

While we strive to ensure that the Cover Disk is free of all viruses and that the programs on it work properly, *New Computer Express* does in no way accept any liability for any problems that may arise from using the disk or the programs on it.

## INTERESTED?

If you are a software house or run a Public Domain/shareware company and are interested in contributing software to be used on the *Express* Cover Disk, we'd like to hear from you now! Call Tim Howell, Cover Disk editor, on 0225 442244.

## EARN UP TO £1,000

We need your programs for the *Express* Cover Disk, whether they are utilities, games, applications or demos for any or all of the three supported formats – Amiga, ST or PC.

If you think you've written a program which other *Express* readers would find useful, interesting or just plain fun, then send it in! We're on the look out for any software for the Amiga, ST and PC, and if we use it, we'll pay for it – up to a maximum of £1,000!

As you all know, *Express* is a weekly magazine which means it comes out at least four times more often than the monthlies. So now you've got that many more chances to contribute your creation, earn some money and see your name in print.

## GUIDELINES TO FOLLOW

1 Please document the software as much as possible. We'll be getting heaps of programs and to have to work out how to use them all will take up what little time we have to put together a great disk.

2 Check for big mistakes in the program such as (any) bugs, errors, or file corruptions. If you find any, fix them and send the program in some other time. Just think: if it works, then we might even use it.

3 Check for little mistakes in the program such as misspelled words. This may take a little extra time, but it will look that much more professional.

4 Test everything before you send it in. If it's a duff disk then we won't be able to do anything with it, will we?

5 In the case of PC software, try to use CGA as well as EGA and VGA graphics, and even MDA (monochrome) if possible. Also, if the program uses a mouse, try to make it so that it is an option and not an absolute necessity. Basically, try to accommodate as many PC users as possible.

NB: Unfortunately we won't be able to return any disks sent in to us. Not even if you include a SAE. The monthly magazines can do that, but because we put out a disk every week there is simply no time to arrange anything along those lines.

Once you've done all that and filled in the form on page 11, send all your contributions to: Cover Disk Contributions, *New Computer Express*, 30 Monmouth Street, Bath BA1 2BW.



# AMIGA

COVER DISK 6

## AMIGA INFORMATION

**PROGRAM:** Text Plus  
**DESCRIPTION:** Text editor  
**DIRECTORY:** TextPlus  
**FILE (S):** TextPlus2.0E, TxP.Config, TxP2.0E.doc

### TEXT PLUS

Text files are an important aspect of computing on the Amiga – they can be used for menu screens, startup-sequences as well as anything else that requires a text file to run or make things more presentable. Normally, when something like this has to be done, unweildy Workbench commands have to be used.

Until now, that is. *Text Plus* will enable all these things to be done and more. In fact, with its printing capabilities it could even be used as a basic word processor, used by those who don't need all the features of a more advanced (and more expensive) program.

### LOADING TEXT PLUS

Before you do anything, write-protect the disk (by moving the notch in the top right of the disk so that you can see a hole through it) and then make a copy of it using the instructions in the Amiga Back-up Copy box elsewhere on this page. Always use your back-up copy whenever you load the program.

Once you have copied the disk, it's just a matter of inserting your back-up copy in your internal drive and waiting for the Workbench screen to come up. Then, once it has, double click on the Tri-Format Disk icon, and then click on the TextPlus drawer icon to see the program's files.

Double-click on the TextPlus2.0E icon to run the program.

*Text Plus*' documentation can be viewed by double clicking on the TxP2.0E.doc icon which will display it on-screen.

### USING TEXT PLUS

The documentation that comes with the program fully explains what it is capable of.

Using the program is straightforward. As soon as it is run it can load text, or you can create your own. To load a file, go to the File menu. Not only can you load files from this menu; you can also Delete and Save files from here.

The Print function is also found in the File menu. When you decide you want to print a file, select Print and a window will pop up, giving you a choice of how

you want to print the text, which largely depends on what your printer is capable of. These options include printing in Near Letter Quality (NLQ) as well as more standard standard fonts such as Pica and Elite. You can also print just certain pages, choose whether the pages should be numbered, and set the length of the paper you are going to print on.

### EDITING

Once you have loaded or input your text file, editing the file is also easy with *Text Plus*.

Blocks of text – that is, parts of the document that you have highlighted with the cursor – can be marked, enabling you to copy the highlighted text to another part of the document, delete the block of text, or print it out. If you so wish, blocks of text from other documents can be loaded into the document you are working on, which means you don't have to input the text all over again.

### PREFERENCES

The Preferences menu enables you to change a number of fundamental characteristics of the program. From this menu you can:

- set the length of the page
- set the width of the text
- turn the insert function on and off
- turn letter mode on and off – *Text Plus* can load files as either ASCII text or as special letter files created



• When you decide to print a document, this is the straightforward options menu that comes up

by the program. Files created by *Text Plus* have the file suffix '.TXP'.

- go to the position of a particular string of text
- go to a particular line number

### STYLE

The Style menu enables you to arrange and print text in a variety of ways. You can set the type style of the text, from a choice of Normal, Underlined, Bold and Italicised.

The way the text is formatted on-screen (and on paper) can also be set from this menu. Text can be aligned to the left or right of the page, or it can be centred or justified. There are also search and replace functions.

Effectively, *Text Plus* acts like a cut-down word processor. While it doesn't have features like a spelling checker or thesaurus, it's a perfectly capable of loading and printing all but the most lengthy and complicated of documents.

### WHERE IT CAME FROM

*Text Plus* was supplied by Vally PD which specialises in Public Domain and shareware software for the Amiga. The company has a wide range of titles, covering all areas of Amiga software.

For further information, contact Vally PD at: PO Box 15, Peterlee, County Durham, SR8 1NZ. Phone: 091 587 1195.



• Loading and saving files is easy with *Text Plus* – everything's displayed on-screen

## AMIGA BACK-UP COPY

- 1 Start your Amiga with your Workbench disk.
- 2 Take a blank disk and initialise it (instructions in your user manual).
- 3 Now enter the CLI, by double clicking on the CLI icon that is in your System draw on a standard Workbench disk.
- 4 Then enter the following CLI commands to set up our working environment (remember to press <RETURN> after each. NB The '!' character is found at the top right of the Amiga's keyboard, next to the Backspace key. Press SHIFT \ to get the character):  
MAKEDIR RAM:C  
COPY C: COPYIDIR/DELETE RAM:C  
COPY C: MAKEDIR/INSTALL RAM:C  
PATH RAM:C ADD  
PROTECT RAM:C RWE  
PROTECT RAM:C/COPY RWE  
PROTECT RAM:C/DIR RWE  
PROTECT RAM:C/DELETE RWE  
PROTECT RAM:C/MAKEDIR RWE  
PROTECT RAM:C/INSTALL RWE
- 5 Once you have entered the commands and the drive light has gone out, take out your Workbench disk and

put your *New Computer Express* Cover Disk in the internal drive (DF0:). To start copying, enter the following CLI command:

COPY DF0:#? RAM:

6 During copying, the machine will display a list of the files being copied. Once copying has finished, remove your Cover Disk and insert your newly formatted disk into the internal drive and enter the following commands:

COPY RAM:#? DF0:

DELETE RAM:#?

7 That's the first part of the Cover Disk copied. The next step is a bit more tricky.

Firstly, remove your copy disk and insert the Cover Disk into the internal drive. Enter the following:

DIR DF0: OPT D

The Amiga should then display a list of all the directories on your Cover Disk which will look something like the following:

c (dir)  
devs (dir)  
l (dir)

libs (dir)  
s (dir)

Write down this list onto a piece of paper (the 'dir' extension is not needed).

8 With your Cover Disk in the internal drive, each directory that was listed has to be copied individually from the Cover Disk onto your copy disk.

So, as an example, to copy the c directory you would enter:

COPY DF0:c ALL RAM:

9 Now, remove the Cover Disk and insert your copy disk and type:

MAKEDIR DF0:c

COPY RAM: ALL DF0:c

DELETE RAM:#? ALL

Now repeat stage 8 for all the directories on the Cover Disk master. (So, in the CLI commands above, replace each instance of 'c' with the name of the directory to be copied). Once all the directories have been copied you will have a successful copy of the Cover Disk.

10 The final step in backing up the Cover Disk is to install it to make it bootable:

INSTALL DF0:



## COVER DISK 6



## PERSONAL DATABASE PLUS

While its name implies otherwise, *Personal Database Plus* is more than just a database: it's also a text editor and label maker. The version included on the *Express* Cover Disk is a cut-down version of the full commercial program. Unlike other demos, though, this one will let you access all its functions and save data – its only limitation is that it can't hold more than 10 entries.

*Personal Database* is a popular database for the ST that was released as shareware. *Personal Database Plus*, however, is the upgraded version of the program, and it is not shareware. A copy of the full program costs £19.95, or £12.95 if you are a registered user.

## LOADING PERSONAL DATABASE PLUS

Before you go any further, make a copy of the Cover Disk using the instructions printed in the ST Back-up Copy box below.

*Personal Database Plus* will only run in medium resolution mode, so if you are not already in that mode, go to the Options menu, select Set Preferences and change the resolution.

To load the program, insert your back-up copy into your drive, click on the drive A: or B: icon, depending on which drive the disk is in, and then click on the ST icon to open its folder.

Click on PERS\_DB+.PRG to load the program.

## USING PERSONAL DATABASE PLUS

When the program first loads, its main menu screen will appear. All the programs main commands are accessible from this screen. Here is a breakdown of its functions:

## F1 – Add new data.

This is where a database can be started or added to. To duplicate a field from a previous record then press F1. Once each record is complete you can ADD ANOTHER entry, SAVE & QUIT to return to the main menu but keep the record in memory, and QUIT (NO SAVE) to abort the entry and return to the main menu.

## F2 – Scroll/Edit Data.

This enables you to edit and update the files in your database. You can use the arrow keys or the mouse to move around the database. The Edit option lets you alter or edit any of the data fields. To edit, use the following keys:

Cursor Up – Move to previous field

Cursor Down – Move to next field

Cursor Left/Right – Move left/right in field

Return/Enter – Move to next field

Clr Home – Move to start of field

Insert – Insert Space

Delete – Delete character under cursor

Backspace – Delete character to the left of the cursor

ESC – Clear field

F1 – Duplicate field from previous entry

F10 – Exit edit mode, save etc.

## F3 – Search utilities

This enables you to sort and output records in a number of ways. There are two main search option: SPEED FIND, which is fast but will search only one field, and

FILTER which will examine all the fields.

You can output the results to the screen, PRTR (LIST) will list all selected files to your printer, and PRTR (LBS) will enable you to select the format and positioning of labels. MAILMERGE will present you with a GEM indicator to select the required document you wish to use, and then presents you with another selection screen to enable you to decide what greeting and position for the date you require. DISK is for saving a data file of just the selected entries to disk.

## F4 – Set Defaults

This is where you set up your system according to printer type, label size and the address you wish to appear on mail merged documents. When you have made the selections you have the choice of whether saving your defaults so they are always there as set when you load the program, or using the current defaults without saving them. Abort will ignore the changes you have made.

## F5 – Text processor

Before printing mail merged documents, you need to save the documents to disk. You can use any ASCII file that has the extension .DOC as long as it is no longer than one page.

The text processor is a basic and easy to use processor, with all the commands visible at the touch of the HELP key. There is no automatic insert, but there is automatic word wrap and the size of tabs can be set. Other commands are:

Control + C – Centre text

Control + Y – Delete line

Control + U – Restore 'deleted' line

Control + I – Insert a blank line

Clr Home – Move cursor to column 1

Shift Home – Move cursor to line 1

Cursor keys – Control cursor

ESC – Exit edit mode.

To use the document in mail merge mode you must save it to a disk first.

## F6 – Load data file

When *Personal Database Plus* first loads there is no data file in it. This option will enable you to load a database from *Personal Database Plus* (.PDP), *Personal Database* (.PDB) or *Labelmaker* (.LAB). These are all programs available from Bay Computers. Some demonstration files are included on the disk.

## F7 – Merge data file

Loading options are the same as above, but this will merge your selected file with the one already in memory.

## F8 – Save data file

When you have built a database you will need to save it. This option will present you with the GEM selector to name the file. Use whatever name for the file that you wish, but make the extension at the end of the file .PDP.

## F9 – System

This will tell you what system you have, what version of

## ST INFORMATION

**PROGRAM:** Personal Database Plus

**DESCRIPTION:** Application

**FOLDER:** ST

**FILE(S):** PERS\_DB+.PRG, SAMPLE.DOC, TEST\_100.PDP, MANUAL.TXT, SYSTEM (folder)

**PROGRAM:** Calendar

**DESCRIPTION:** Desktop accessory

**FOLDER:** ST/CAL47

**FILE(S):** CAL47.ACC, CAL47.DOC, CALSHOW47.PRG, CALSHOW.DOC, CALSHOW.PTX, CSZAP47A.TTP, CSZAP47A.TXT

GEM, what TOS, if your printer is on-line, etc. This is more of a novelty than anything else.

## F10 – Exit program

When you've finished using *Personal Database Plus* this is the way to exit the program. It's a good idea to use this way of exiting the program instead of resetting, for example, as you are reminded if you have adjusted your data file and need to save the new version.

## FOR MORE INFORMATION

*Personal Database Plus* is produced by Bay Computers who can be reached at: 3 Teasel Walk, Morecambe, Lancs LA3 3QQ. Phone: 0524 831162. The full version of *Personal Database Plus* is available for £19.95.

## CALENDAR

*Calendar* lets you attach 'events' to any day of the year according to the date or what position a day holds within a particular month.

When *Calendar* loads, it reads the current date from the system clock and checks to see if any significant events are happening during the day.

If there is anything happening then *Calendar* will tell you; audibly if it loads as an ACC (that is, a desktop accessory).

Also on the Cover Disk is *Calshow*, a companion program to *Calendar*. This is an AUTO program that reads events from *Calendar* and displays the next 22 events on-screen.

*Calshow* can also be run as a TTP. When it is it has many functions, including printing out a list of upcoming events, saving the list to a disk file, specifying a cut off period (in days) for displaying events, specifying a maximum number of events to list, specifying the starting or ending date for the display, telling *Calshow* where to look for *Calendar*, and showing only significant events or all of them.

Another companion program is CSZAP47A.TTP. This can put a new cutoff value into *Calendar*. The normal value is ten days, so normally *Calshow* will display only the events happening in the next ten days. This can be changed by CSZAP47A.TTP.

There is documentation on the Cover Disk for all three programs, explaining how to use and install them.

## ST BACK-UP COPY

**1** Format at least one blank disk.

**2** Write protect the original *Express* Cover Disk (with the notch open so you can see the hole through the disk) and insert it into the drive. If you've got two drives, insert the Cover Disk into drive B. Double click on the drive B icon to open a window showing the contents of the Cover Disk. If you've only got a single drive a message appears asking you to put disk B in drive A. Just click on OK.

**3** Insert one of the blank formatted disks into drive A (removing the Cover Disk if you only have one drive).

Double click on the drive A icon and open up another window. You may be asked to insert disk A in drive A - you already have, so do nothing and click on OK.

**4** Highlight the ST folder in the drive B Cover Disk window and drag it into the drive A window.

**5** If you only have one drive, you're asked to insert disk A and disk B at regular intervals. Be careful not to mix the two disks up! Remember, Disk B is the original Cover Disk and disk A is the newly formatted blank disk.

**6** Don't try to use the standard Atari disk copy (dragging floppy A onto floppy B) function as it won't work.



## PC INFORMATION

**PROGRAM:** Duke Nukem  
**DIRECTORY:** PC  
**DESCRIPTION:** Game  
**FILE(S):** INSTALL.BAT, NCE\_PC.6

**Duke Nukem can only be installed on a hard drive**

**NOTE: MS-DOS must be loaded on your system before you use the Cover Disk**

The further you get in the game, the more often you will use the action key.

## HOOKED?

If you reckon *Duke Nukem: Shrapnel City* is a great game, you can obtain the other two games in the trilogy by contacting Precision Software Applications at: Tarnwood, 10 High Street, Tadlow, Nr. Royston, Herts SG8 0ES. Phone: 0767 23302.

The first *Duke Nukem* program, as featured on the Express Cover Disk, is shareware. The other two parts of the trilogy are available for £23.44 each (plus £2 postage and packaging), or all three games can be bought for £34.08 (plus £2 postage and packaging). As well as the games, you'll get a special 'Hints and Tricks' booklet, a secret mode password and several other bonus games.



• Keeping watch over the city, Duke takes a break from the furious fiery battles

## PLAYING THE GAME

You play the role of super hero Duke who's been called in on a special mission to save the world! Dr Proton, a brilliant nuclear scientist, plans to take over the planet and has created a large army of Techbots to help him. Your mission is to stop Proton and his army.

This is the first program in the *Duke Nukem* trilogy and is entitled *Duke Nukem: Shrapnel City*. In this game Duke enters a demolished city and has to find Proton's underground fortress.

In the second 'episode', entitled 'Mission: Moonbase', Duke follows Proton as he rockets to his secret base on the moon to plan his final attack.

And in the third and last part of the trilogy, called 'Trapped in the Future', Duke chases Proton into the future on Earth where their ultimate conflict takes place.

## KEEPING IN CONTROL

Duke's an athletic chappie and can flip, cling to ceilings as well as use his nuclear pistol to blast away Dr Proton's nuclear reactors. For further details on Duke's abilities, look at the program's built-in instructions.

*Duke Nukem* can be controlled by either keyboard or joystick. The keyboard controls can be re-defined to suit the player but as they stand they are:

**Left arrow** – move left      **Right arrow** – move right  
**ALT** – fire gun      **CTRL** – jump

The up arrow key is the 'action' key enabling Duke to:

- activate elevators, teleporters and time machines
- read notes or monitors
- open doors
- insert access cards, keys and other useful objects



• Our brave hero Duke battles against the evil forces of Dr Proton and his tin men

## DUKE NUKEM

The bounds of shareware gaming have been pushed even closer to commercial software with the release of *Duke Nukem*. The program's features confirm this: high speed animation, parallax scrolling, hundreds of screens, secret rooms and treasures, built-in hint mode and instructions, joystick and keyboard support...

*Duke Nukem* is another game produced by Apogee Software in the US which also brought out *Captain Comic* and *Commander Keen* which were featured on two previous Cover Disks. All of these games are published and distributed in the UK and Europe by Precision Software Applications (see address below).

## TO START THE GAME

Before you do anything with the Cover Disk, write protect it (by moving the notch at the top right of the disk so that you can see a hole through the disk). Next, it is important that you make a back-up copy of it – use the instructions in the PC Back-up Copy box below on this page.

## DE-ARCHIVING

To make things a bit easier for PC owners, we've made the de-archiving of the software an automatic process. Included on the disk are two files: INSTALL.BAT and NCE\_PC.EXE. Don't run NCE\_PC.EXE – it will try to de-archive itself back on to the Cover Disk which will be corrupted if it's not write protected.

Due to its size, *Duke Nukem* can only be installed on a hard drive; it simply is too big to fit on a floppy disk.

INSTALL.BAT is, as its name suggests, the installation program. To run it, just type INSTALL. It will come up with brief instructions explaining how to de-archive the programs to your hard disk. To install the program, simply type INSTALL C: or INSTALL D:, depending on how your hard drive is assigned.

What the program does is to de-archive the files to the other drive. In doing so, it will create its own directory and even provide a menu for you to run the software from!

## PC BACK-UP COPY

- 1 If you've only got a floppy drive-based system, format at least one blank disk. Otherwise use your hard drive.
- 2 Write protect the original Express Cover Disk (with the notch open so you can see the hole through the disk).
- 3 Use the XCOPY command to make the backup. If you have only one floppy drive, load XCOPY from the system disk from drive A:\ with the /S option to copy the files across. So, to copy the files across type: XCOPY

A:\PC\\*.\* B: /S. Then it is just a matter of swapping disks in and out of the drive until the Cover Disk is copied. Don't worry if you think you must have two drives – the XCOPY command will treat your single drive as both, or it will copy to the B:\ drive if, in fact, you do have two drives.

- 4 If you have a hard drive, put the Cover Disk in drive A:\, then type: XCOPY A:\PC\\*.\* C: /S to copy all the subdirectories to the hard drive.



## FANCY CONTRIBUTING? THEN FILL IN THIS

NAME: .....

ADDRESS: .....

TELEPHONE: ..... (day) ..... (night)

COMPUTER: Amiga Atari ST PC The name of the program is:

SIZE OF FILE(S): ..... K

TYPE OF SOFTWARE:

- |   |  |
|---|--|
| <input type="checkbox"/> Business application | <input type="checkbox"/> Technical utility |
| <input type="checkbox"/> Game                 | <input type="checkbox"/> Art program       |
| <input type="checkbox"/> Music program        | <input type="checkbox"/> Educational       |
| <input type="checkbox"/> Novelty              | <input type="checkbox"/> Other             |

BRIEF DESCRIPTION: .....

CHECKLIST:

- ☐ README.DOC file included on disk
- ☐ Printout of README.DOC (if possible)
- ☐ Disk is labelled with your name, address, phone number
- ☐ Disk is certified virus free

DECLARATION: This program is submitted for publication by *New Computer Express*. I have totally written it myself, and I agree to indemnify Future Publishing against any legal action that may arise due to copyright problems.

SIGNED: .....

DATE: .....



# PUBLIC DOMAIN

## GREAT SOFTWARE CAN BE YOURS FOR AS LITTLE AS ABSOLUTELY, TOTALLY, DEFINITELY, VERY NEARLY, JUST ABOUT NOTHING AT ALL. (HONEST)

Owning an Amiga, PC or ST now means that you can buy incredibly good software for little more than the price of a disk. Stunning games, utilities, demos, graphics, word processors and more can be found in Public Domain and Shareware software.

But (but! but!!) where do you start? How do you know which programs are completely wonderful and which ones should be re-formatted instantly? What's the best way to buy PD? And – whilst we're at it – just what is PD anyway?

For these answers and a whole trainload more, you'll need a new magazine called **PUBLIC DOMAIN**.

- Every issue is **packed full of reviews** – PD programs assessed for the Amiga, PC and ST.
- Every review is **screenshotted**. You can see exactly what you'll be buying.
- Every copy of PUBLIC DOMAIN comes with an incredible **program-packed coverdisk** – so you can get the very best PD for your machine every time.
- Every page is in **glorious full colour**, so you'll have unrivalled quality.
- And every edition of PUBLIC DOMAIN is backed by the full editorial resources of **Europe's most successful** news-stand computer magazine company, Future Publishing.

**PUBLIC DOMAIN** comes to you from the company that brings you Amiga Format, PC Format, ST Format, Amiga Shopper, PC Plus, Commodore Format, Your Sinclair, New Computer Express, Amiga Power, Amstrad Action, PC Answers, Sega Power and 8000 Plus; markets leaders all.

First issue on sale October 3rd at £2.95

**IF YOU WANT OUR ADVICE, BUY IT!**

**INCREDIBLE PACKAGE!  
MASSIVE MAGAZINE  
PLUS PROGRAM  
PACKED COVER DISK!**





# ON A SCREEN NEAR YOU...

The latest 16-bit software and hardware reviewed in bite-sized chunks

**PRODUCT:** Font Enhancer

**COMPATIBILITY:** Amiga

**FROM:** H B Marketing

**CONTACT:** 0753 686000



• Smooth out the jagged edges on fonts with Innovision's new Font Enhancer

As any *DPaint* user will tell you, reducing the size of a bitmapped font can often result in a serious loss in quality. This is OK for bitmapped images, but if you intend to use the fonts for video work, the results can often be far from satisfactory.

A new product just out is Font Enhancer from Innovision in the US. Designed specifically for use with its video titling package *Broadcast Titrer 2*, the Font Enhancer attempts to improve the quality and resolution of standard Amiga bitmapped fonts. It can also reduce these fonts to any point size lower than the source font, anti-aliasing the font to reduce the loss in quality. They are then saved out in *Broadcast Titrer* format.

Font Enhancer can also be used to create a family of font sizes all derived from a single Amiga font, thus making it ideal for reducing over-sized Amiga fonts into a complete range of useful sizes. Although the resulting fonts cannot be used directly with programs such as *DPaint*, a conversion tool included with *Broadcast Titrer* will convert them back to Amiga bitmapped font format. Unfortunately, this strips them of their anti-aliasing, making them almost useless. The quality of the enhanced fonts is very good, making the program

attractive to owners of *Broadcast Titrer 2*. However, its appeal is limited and would have been better if support for Amiga colourfonts had been built in. As it is, *Broadcast Titrer 2* owners are about the only people that will find it of any use. Definitely a missed opportunity. ■

## WILL IT WORK FOR YOU?

### FOR

- ▲ Smooths edges when reducing fonts
- ▲ Cheap way of adding fonts to *Broadcast Titrer 2*

### AGAINST

- ▼ Slows down when with larger fonts
- ▼ Enhanced fonts can only be used with *Broadcast Titrer 2*
- ▼ Cannot enlarge fonts

**COST:** £130 **VALUE:** Fair

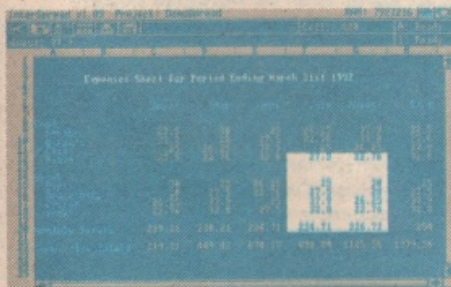
**COMPETITION:** None known

**PRODUCT:** Interspread

**COMPATIBILITY:** Amiga

**FROM:** CentreSoft

**CONTACT:** 021 625 3302



• Keep all those numbers under control with CentreSoft's new Interspread spreadsheet for the Amiga

It's all very nice being able to play all those wondrous Amiga games, but even the most playful Amiga owner must occasionally get serious. Whether you're managing your bank account or running a small business, your Amiga can help you keep those facts and figures under control.

One of the most useful business tools is the spreadsheet, a program that can take the drudgery out of working with large amounts of numbers. Several spreadsheet packages are available for the Amiga, the most recent being *InterSpread* from InterActivision. Having already produced a damned fine word processor (reviewed in *Express* 150), InterActivision's *InterSpread* could well be a winner.

Like all spreadsheets, *InterSpread* uses the now familiar grid format that was pioneered by *SuperCalc* on the PC. Each 'cell' within the grid can contain either a number, a string or a formula. With 30 million cells available, it's unlikely that you'll feel held back by this program. What's more, its user interface is an absolute joy to use, so all that power is easily controlled.

*InterWord* supports five mathematical operators including exponential involution (to the power of), multiplication, division, subtraction and addition. You

can mix and match these to produce some quite complex formulae. The program also supports a full macro facility, making complex operations considerably easier.

*InterSpread* may not be the most exciting program in the world, but it's certainly an exciting spreadsheet (if such a thing is possible!). Combining ease of use and power with a price tag anyone can stretch to, *InterSpread* is well worth investigating. ■

## WHAT DOES IT OFFER?

### FOR

- ▲ Very easy to use
- ▲ Cheap for what it has to offer
- ▲ Manual is excellent

### AGAINST

- ▼ Graphing functions are a little limited

**COST:** £50 **VALUE:** Excellent

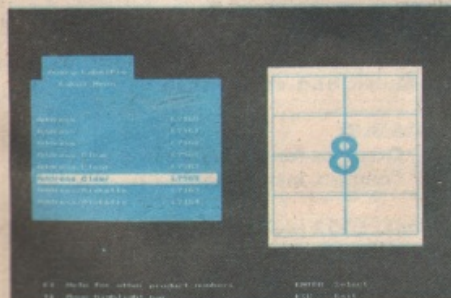
**COMPETITION:** Advantage, K-Spread

**PRODUCT:** LabelPro

**COMPATIBILITY:** PC

**FROM:** Avery Office Products

**CONTACT:** 0628 39911



• LabelPro - ideal for small businesses to use as a simple mailmerge program

Unlabelled disks, tatty address labels and the nightmare of mailmerging - if you have a laser printer, these could be problems of the past with Avery's new label printing software.

*LabelPro* is simple to install and easy to use. It can print a wide variety of labels and a library of clip art enables you to add a distinctive, personal touch.

The program is entirely menu driven, which makes designing a label a simple process. The type of label is selected first - there are 16 to choose from - and then the text and graphics are entered. A range of text sizes and fonts is catered for, and an excellent preview option displays your masterpiece before you commit yourself to printing.

Producing mailmerged labels is as easy as producing disk or video cassette labels. Instead of entering text, you tell *LabelPro* which database file to use, and then select the appropriate fields. *LabelPro* has its own simple database, but addresses can also be merged from *dBase*, *Microsoft Word*, *WordPerfect* and *Wordstar*.

The clip art library is limited, but any graphics in PCX or PCC (such as graphics from *DPaint* or PC

*Paintbrush*) format can be added to it. The initial printer set up procedure is cumbersome, but it does help you get the most from both printer and software.

*LabelPro* is ideal for small businesses that need a simple mailmerge program, and it may even save on stationery costs. But it is probably too specialised for home users.

## BONUS TO BUSINESSES

### FOR

- ▲ Simple and efficient
- ▲ All labels used by the program can be purchased from Avery

### AGAINST

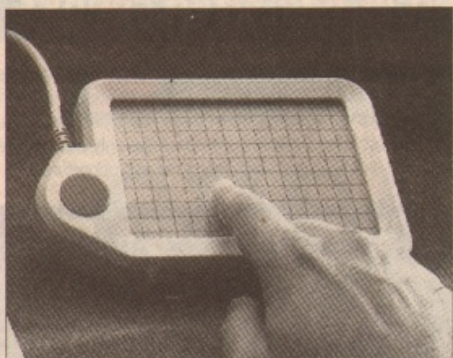
- ▼ Label sizes cannot be altered
- ▼ Only supports laser printers

**COST:** £110.45 **VALUE:** Fair

**COMPETITION:** None known



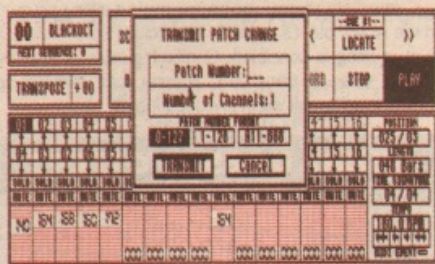
**PRODUCT:** Unmouse  
**COMPATIBILITY:** PC  
**FROM:** Picture Perfect (UK) Ltd  
**CONTACT:** 0264 333643



• For computer users on the move the Unmouse doesn't need a flat surface to work on

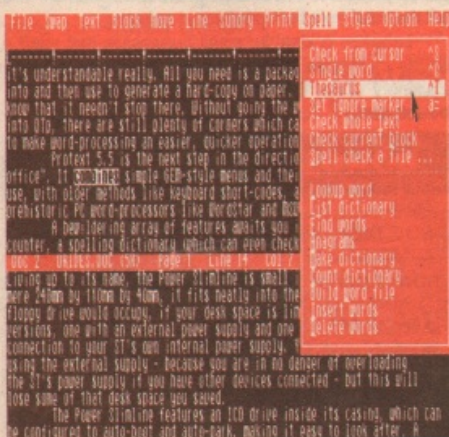
**PRODUCT:** Trackman 2  
**COMPATIBILITY:** ST  
**FROM:** Hollis Research  
**CONTACT:** 0481 28286

Desk File Edit Options MIDI Click Quantize Goodies CC:00:30



• Making music doesn't need to be a computer-generated headache. Trackman 2 does it the way musicians do it - simply

**PRODUCT:** Prototext v5.5  
**COMPATIBILITY:** ST  
**FROM:** Armor  
**CONTACT:** 0733 68909



• Prototext gets another facelift and comes back more stylish and more powerful than before

As its name suggests, the Unmouse is a mouse that isn't a mouse. It is a touch-sensitive tablet that provides mouse-like cursor control, without the need for loads of space on the desktop.

The tablet connects to a serial port on the PC, just as a mouse would, but it may need more electrical current than that supplied from the serial port. Cables are supplied which enable the Unmouse to commandeer some power from the keyboard.

The Unmouse drivers are easy to install, and the manual provides full instructions on how to alter the set up of Windows for use with the Unmouse.

Moving the cursor is simple - just move your finger or a stylus across the face of the tablet. It is a little difficult to get the hang of at first, but it soon becomes much easier than using a mouse for simple pointing.

The Unmouse has several modes of operation designed for different uses. The two basic mouse modes will probably be the ones that are used the most, but the absolute modes are excellent for precise drawing and pointing. In absolute mode a position on the tablet represents the same position on the screen. For example, if you point at the left-hand corner of the tablet, the cursor will jump to the left-hand corner of the screen. It takes a while to get used to, and it requires perseverance before you can get the best results from

For too long the price of MIDI sequencers has been astronomical, largely to recoup development costs from frustrated musicians who need them. But Trackman 2 is a MIDI sequencer created by a musician for musicians - with the emphasis on features, rather than price. For your money, you get a package which can turn a humble piano-basher into a virtual virtuoso.

Trackman 2's approach differs from most other MIDI packages in that it's laid out as a studio mixing desk. Instead of complex pattern lists, you have a simple 16 track desk, complete with volume sliders and solo/mute buttons. Each track can play or record on any MIDI channel, and can be tweaked, re-timed and re-recorded without affecting anything else.

For songwriting, Trackman 2 is superb. Its intuitive menu-operated features give you full control over a wide range of effects and editing functions. Tracks can be examined, instrument by instrument, and then altered using the mouse, or the MIDI keyboard itself. Even critical timing errors can be cured using a single keypress to line all the dodgy notes to the nearest beat, half-beat, or any other position.

You can record your tunes in different ways - Step-time writing (placing each note in position on a grid) stops those infuriating moments when your sense of rhythm goes, while real-time writing (where you play the

your graphics package. The trackball mode is similar to the mouse mode, except that the cursor will continue to move after you move your finger off of the tablet.

Laptop users, who use their computer on the move, will find the Unmouse particularly useful, because they will no longer have to struggle to find a flat surface for their mouse. The Unmouse is well worth a look if you haven't already bought a mouse. But if you do have a mouse, the Unmouse may not be a sufficient improvement to justify the cost. ■

## MORE THAN A MOUSE?

### FOR

- ▲ Easy to install
- ▲ More sensitive than a mouse
- ▲ Excellent for users on the move

### AGAINST

- ▼ May not be worth the investment if you already have a mouse
- COST:** £159.80 **VALUE:** Good

**COMPETITION:** Any mouse or trackball

tune live) can be set up to align the notes as you play.

Once your first instrument track is safely down, you can overlay more instruments, using each one as a cue for the newer ones, just like a real studio mixing desk. When you've got all your sounds, you can edit notes and bounce tracks around with fine precision.

Songwriting with Trackman 2 is about as easy as it will ever get. And you don't need to hock your drummer's kit to pay for it. ■

## IS IT SOUND?

### FOR

- ▲ As easy as falling off a stage
- ▲ Results can be obtained quickly
- ▲ Powerful features at a low cost

### AGAINST

- ▼ Doesn't show music on a proper stave
- ▼ Can't highlight the note playing

**COST:** £179 **VALUE:** Excellent

**COMPETITION:** C-Lab Notator, C-Lab Creator, CuBase, Steinberg Pro-24, Sequencer One

Most people take Word Processing for granted - all you need is a package which you can type into and then use to generate a hard-copy on paper. Simple. But Armor knows that it needn't stop there. Without going the whole hog and moving into DTP, there are still corners which can be 'smoothed off' to make word-processing an easier, quicker operation.

Prototext 5.5 is the next step in the direction of the 'paperless office'. It combines simple GEM-style menus and their inherent ease of use, with older methods like keyboard short-codes, as found in prehistoric PC word-processors like WordStar and MSWord.

A bewildering array of features awaits you in Prototext 5.5: a word counter, a spelling dictionary (which can even check as you type), a calculation evaluator (for writing sums which can be proved to work), a index and contents generator, an auto-saver (a real lifesaver), and even an anagram generator.

But all these features first appeared on Version 5 of Prototext, early last year - what's new for 5.5? A thesaurus, revised dictionaries and hyphenation commands, that's what. These new features form part of a much-improved system, one that's been tailored to fit its users. It's now possible to avoid those moments when you can't think of another way of expressing yourself - a simple key command gets the thesaurus working, looking for synonyms.

But that is by no means it. Prototext 5.5 also features

an improved count function, which can now alphabetically list the words you used in your document and indicate how many times they appeared. Business people will find the mail-merge improvements useful - Prototext 5.5 can read Prodata database files directly, making direct-marketing mailshots a doddle.

Whatever your requirements, Prototext 5.5 can handle them. It's powerful, well laid out, and easy to use. After just a short time using Prototext 5.5, you'll wonder how you ever did without it for so long. ■

## IS IT WORTH BUYING?

### FOR

- ▲ Clear concise menu operations
- ▲ Loads of high-powered features
- ▲ Quick and efficient to use

### AGAINST

- ▼ Occupies four double-sided disks
- ▼ Complex installation for hard drives

**COST:** £152 (£30 upgrade)

**VALUE:** Good

**COMPETITION:** 1st Word Plus, Write On, That's Write, Script



Send your order to :  
**CRAZY JOE'S**  
 DEPT. AS11  
 145 EFFINGHAM ST.  
 ROTHERHAM  
 SOUTH. YORKSHIRE  
 S65 1BL

Please make cheque / p.o.  
 payable to 'CRAZY JOE'S'

# Crazy Joe's

*We take you very seriously!*

**CREDIT CARD HOTLINE**  
 (0709) 829286  
**FAX ORDERS**  
 (0709) 878308  
**MINIMUM CREDIT**  
**CARD ORDER £3**  
**24 HOUR SERVICE**

## Amiga Public Domain Software

**KEY TO ABBREVIATIONS :** (2) = Number of disks in set; \* = 1 meg; \*\* = 2 meg; (2D) = 2 drives; (X) = Adults Only

### DEMOS / ANIMATIONS

296 Unicycle Animation \*  
 399 NewTek Demo 3 (2) \*  
 483 Elvira Demo  
 646 Predators Megademo (2)  
 744 Red Sector Cebit Demo  
 747 Popeye Meets The Beachboys  
 773 Shark Animation \*  
 825 Budbrain Megademo (2)(X)  
 853 Dragons Lair Demo \*  
 865 Coma Demo  
 895 Trip To Mars  
 897 Scoopex Mental Hangover  
 906 Madonna Cartoon Animation \*  
 954 Turtles Demo  
 1001 Station at Khern (3) \*\*  
 1033 At The Movies Anim \*\*  
 1105 Cronics Neverwhere Demo  
 1188 Fillet The Fish  
 1200 Raiders of the Lost Ark Anim \*  
 1229 Budbrain 2  
 1238 Evil Dead Demo (X) \*  
 1453 More Aerotoons \*  
 1540 Army .vs. Walker Anim \*  
 1541 Batman Animation \*  
 1551 Too Much 3D \*  
 1552 Magician Animation V2.0 \*  
 1560 Phenomena Enigma Demo \*  
 1628 Do The Bart, Man \*  
 1650 Cronics : The Total Destruction \*  
 1664 Silents : Blue House (2) \*  
 1667 More Classy Animations \*  
 1692 Basketball Animation \*  
 1701 Tron Animation (2) \*  
 1703 Total Respray  
 1704 Total Recount  
 1705 Total Restyle  
 1706 Total Retrial  
 1707 Decay : Simpsons Demo \*  
 1753 Life Of Brian (2)  
 1766 Laurel & Hardy (2)(2D) \*  
 1775 Total Confusion \*  
 1782 Carrott : The Chicken (2)(2D)  
 1784 Carrott : Insomnia (2)(2D)  
 1818 Darkness Megademo 2 \*  
 1820 Magnetic Fields Demos 92  
 1823 N-n-n-n-nineteen Demo  
 1833 Agatron Animations 33  
 1834 Agatron Animations 34  
 1837 Plasmutek Demo  
 1838 Global Trash Demo  
 1841 Anti-Lemmin' Demo (2) \*\*  
 1843 Phenomena Interspace  
 1844 Goldfire Megademo  
 1845 Timex Demos \*  
 1846 Enterprise Animation (2)(2D) \*  
 1850 The Wall (6)(2D) \*  
 1856 Betty Boo Anim / Slideshow  
 1877 AMOS 3D Demo  
 1881 Mike Tyson Knockout Disk  
 1885 Robocop Animation \*  
 1892 Shuttlecock Animation \*  
 1900 Silents : Ice Demo  
 1902 Tomsoft: Virtual World  
 1923 Star Wars Demo (2)(2D) \*  
 1928 Demo Dolly Pack 4 \*  
 1929 Vector Dance  
 1943 Windsurfer Animation (2) \*  
 1947 Mr Potato Head \*  
 1948 Mr Potato 'Chips Are Up!' \*  
 1950 Super Woman Animation \*  
 1956 Creature Comforts Demo

### GAMES

315 Return To Earth  
 496 Holy Grail Adventure \*  
 498 Wanderer  
 648 Star Trek (USA) (2) \*  
 680 Learn & Play (2)  
 727 Star Trek (Richter) (2)  
 768 Treasure Hunt  
 957 Pipeline  
 962 Drip!  
 987 Snakepit  
 991 Jeopard \*  
 1004 Games Disk 9  
 1113 Wet Beaver Games  
 1230 Dragon Cave  
 1245 Rings Of Zon \*  
 1408 APD59: Super Quiz  
 1411 APD62: Arcadia  
 1510 Pick Up A Puzzle (2) \*  
 1512 Picture It (2) \*  
 1517 APD110: Crossfire \*  
 1520 APD115: Balloonacy  
 1528 APD130: The Wooden Ball \*  
 1531 Simon Says / Space Maths  
 1532 APD137: Tile Trial \*  
 1533 The Jar \*  
 1539 Megaball \*

#### GAMES PACK

37 titles on 8 disks  
 including Asteroids, Sys, Tiles,  
 Bally 2, Pool, YachtC,  
 Invaders, H-Ball,  
 Fruit Machine, Block Off,  
 Shoot Out, Peter's Quest \*,  
 and many more!

**8 DISK SET ONLY £8.00**

1544 Seven Tiles  
 1558 Adventure Solutions (2)  
 1573 APD142: Pair Crazy  
 1577 APD146: Fruit Machine \*  
 1579 APD148: Demolition Mission \*  
 1580 APD149: Gobbit / Pontoon \*  
 1584 APD153: Missile Command  
 1591 APD160: Quizmaster \*  
 1608 APD178: Mastermind/Pair Up \*  
 1610 APD180: Dungeon Delver (2)  
 1612 APD182: Pixie Kingdom (2)  
 1668 Tomtespetet  
 1670 Wheel Of Fortune  
 1690 Hints Disk One  
 1700 Terror Liner 2 (X)  
 1711 Mental Image Games Disk 1  
 1715 Frantic Freddie  
 1720 Cabaret Asteroids  
 1746 Word Games Volume 1 \*  
 1747 Word Games Volume 2 \*  
 1748 Strategy Games \*  
 1749 Truckin' (2)(2D)  
 1780 Arcade Game Cheats 1  
 1790 Serene 2  
 1827 Scum Haters  
 1832 Pom Pom Gunner \*  
 1879 Sea Lance \*  
 1882 S.E.U.C.K. Simpsons Game  
 1883 Bionix II \*  
 1905 J Nicklaus Course Disk 1  
 1916 Air Ace II  
 1926 Napoleonic Warfare System \*  
 1945 Island of Nephotons Adventure  
 1949 Dungeon Master Companion

### MUSIC

052 Awesome Sounds  
 057 PSB : Suburbia  
 061 Definitive J. M. Jarre  
 087 Power Surge  
 109 Amiga Chart 3  
 166 Vangelis \*  
 187 Crusaders : Audio X  
 204 Sound Atax 2  
 237 Zee's Hip Hop Music  
 407 CD Player Demo \*  
 409 Crusaders : Freek'd Out!  
 418 Electric Youth (2)  
 497 Amiga Chart 5  
 552 Music Invasion 3 (2)  
 654 Powerlords : Power Musix 2  
 700 Digital Concert IV  
 713 Flash! - Queen  
 722 Beatmaster Club Mix  
 724 Technotronic Remix  
 746 Crusaders : Bacteria  
 824 Digital Concert V  
 858 Sonix House  
 866 Pan 3 Music Disk  
 914 Special Brothers Music 2  
 935 Madonna : Hanky Panky  
 940 Hooked On Sonix  
 941 Soundtracker Jukebox  
 969 100 C84 Games Tunes  
 970 The Comic Strip Remix  
 976 Scoopex : Beast Sonix

#### SOUNDTRACKER SPECIAL

Make your own music on  
 the Amiga! This pack includes  
 the programs, songs, modules  
 and instruments - enough to  
 get you started and  
 keep you going for hours!

**8 DISK SET ONLY £8.00**

986 Amaze : Revolutions  
 993 PSA Music Demodisk 1  
 1026 Digital Concert VI  
 1107 Stop Right Now! \*  
 1292 Crusaders Does Genesis  
 1630 Accession : Sun Wind  
 1685 Depeche Mode Music Disk  
 1694 Art Of MED Music Disk  
 1695 Seal : Crazy Remix \*  
 1698 SDFC : Sounds Dr Digital  
 1713 Spaced Out Vol. 1  
 1714 Spaced Out Vol. 2  
 1716 I Think We're Alone Now  
 1717 Everybody Dance Now  
 1718 Betty Boo : Doing The Do  
 1755 Amazing Tunes 2 (3) \*  
 1763 Aamond Gallant Knight (3) \*  
 1772 Taipan Music Disk (2)  
 1776 Crusaders : Sheet Music  
 1777 Beatmasters : Technology  
 1787 Magnetic Beats 2  
 1788 Magnetic Beats 3  
 1821 Academy Music Collection  
 1822 Brainstorm : Best Of Grubi  
 1824 SCR Musax 2  
 1828 Sgt Pepper Revisited (2)(2D) \*  
 1831 Vega Music  
 1921 Computer World Music 3 \*  
 1927 Here Comes The Hammer

### SLIDESHOWS

030 J.O.E. Slideshow 2  
 078 Vallejo Fantasy Art (2)  
 084 Mega Art Disk  
 163 NASA Slideshow  
 167 DigView Slideshow  
 171 Patrick Nagel Pictures  
 185 Escher Slideshow  
 238 TV Sports Basketball  
 282 Forgotten Realms  
 299 Roger Dean Slideshow  
 357 Max's Art Disk 1  
 411 Photofile Portfolio (2)  
 572 Utopia : Photomontage 1  
 573 Utopia : Photomontage 2  
 617 Neighbours Slideshow  
 725 Diggy Piggies (2)  
 742 Madonna Slideshow  
 767 Cinemaware Slideshow  
 776 Exodus Real 3D  
 814 Viz Slideshow  
 831 Utopia Cartoon Slideshow  
 832 Utopia : Photomontage 3  
 863 Scream Queens (2)  
 878 Sun Slide III  
 891 Creepshow  
 899 Madonna Slideshow 2 (2) \*  
 915 Apol's Digshow \*  
 931 Heroic Dreams  
 942 Garfield Slideshow  
 968 Gorezone Slideshow (X)  
 1044 Desert Island Slideshow  
 1051 Total Recall Slideshow

#### GLAMOUR DISKS

For a full list send a stamped  
 addressed envelope to :  
**BLUE MOON**  
 P.O. BOX 123  
 WATH-UPON-DEARNE  
 ROTHERHAM  
 S63 7DW  
 Please include a statement  
 saying you are over 18  
 (Blue Moon are not connected  
 with Crazy Joe's in any way)

1062 Golems Gate  
 1073 Fraxion Fantasy  
 1082 Annie Jones (Neighbours)  
 1085 Comic Slideshow (X)  
 1103 Girls Of Sports Illustrated  
 1210 Turtles Slideshow  
 1263 Crusaders : Richter (2)(2D)  
 1272 Nemesis : Prologue  
 1277 Fraxion : Divine Visions (2) \*  
 1279 Forgotten Realms '90  
 1475 Nemesis : Chapter 1 (2) \*  
 1480 The Age Of Slack  
 1523 Nik Williams Demo  
 1548 SkyWalker Digshow 1  
 1547 SkyWalker Digshow 2  
 1561 Demons Slideshow 3 \*  
 1666 Mages Staff  
 1708 Invisible World Slideshow  
 1719 Yabba Dabba Cartoons  
 1781 Reflections Ray-Traced  
 1835 Night Breed Slideshow  
 1849 Film Posters Slideshow  
 1876 Reflections Ray-Traced 6  
 1901 Leeds United Slideshow  
 1919 Debbie Harry S/show (2)(2D) \*

### UTILITIES

061 UEdit Word Processor  
 119 Amiga MCAD  
 180 PageSetter Clip Art  
 210 Icons!  
 258 Ultimate Bootblock Coll. (2)  
 346 TV Graphics (2)  
 353 Showiz 2.0 (SS maker)  
 410 DPaint Cartoon Brushes  
 442 DPaint Fonts Disks (4)  
 458 HAM Laird Utilities (5)  
 546 Iconmania!  
 571 Jazzbench  
 580 Dope Intro Maker  
 591 Business Card Maker  
 595 Amateur Radio Disk  
 632 MSH (MessyDOS)  
 642 C Manual  
 661 Programming Disk  
 682 Sound Applications (2)  
 684 Video Applications (2)  
 697 Graphics Management (2)  
 901 The Comms Disk  
 902 QED Text Editor  
 1071 NoisePlayer V3.0  
 1079 Prophecy : Coder Mag 1  
 1095 Database Workshop (2)  
 1097 DPaint / PageSetter Clip Art (2)  
 1099 Video Graphics (4)

#### HOME BUSINESS PACK

A suite of programs for those  
 who want to dabble on the  
 serious side of computing :  
 Nag, Bank'n, Journal, QBase,  
 Spread, Wordwright,  
 AmigaSpell, Inventory, MemoPad  
 and more!

**8 DISK SET ONLY £8.00**

1117 Genealogy \*  
 1225 Hardware Projects Mag  
 1228 ST Emulator (German)  
 1234 Tetra-Copy  
 1273 C-Light  
 1450 Virus Superkillers  
 1451 ElectroCAD  
 1452 AmiBase  
 1535 Master Virus Killer V2.0  
 1536 North C (packed)  
 1537 North C (unpacked) (2)  
 1545 SpectraPaint V3.0  
 1550 FlexiBase V2.0  
 1569 APD138: Language Tutor  
 1606 APD176: Database Master 2.0  
 1629 ZX Spectrum Emulator  
 1663 Dynamite Cut 'n' Paste Fonts  
 1858 Demolishers : 202 Utilities!  
 1878 Textplus Shareware WP  
 1880 DCopy & Utilities  
 1884 Equinox Intro Writer \*  
 1886 MED V3.1  
 1893 DICE V2.06A  
 1896 Desk Bench (3)  
 1906 PageSetter Clip Art (8)  
 1914 Slideshow Construction Kit  
 1942 Master Virus Killer V2.2  
 1951 King James Bible (3)  
 1954 Celtics Demo Maker  
 1960 RSI Demo Maker (English Doc)  
 1961 RSI DM Utility/Help Disk  
 1962 TSB 3D Vector Designers V1.1

These are just a few of the many disks in the library. For details of the others send 50p for our **CATALOGUE DISK** which also contains a **FREE** game!

#### PUBLIC DOMAIN PRICES

1 - 9 disks  
**@ £1.25 ea.**  
 10 or more  
**@ £1.00 ea.**  
 Price is per disk  
 NOT per title

#### BLANK DISKS, DISK BOXES & ACCESSORIES

BLANK DISKS	DISK BOXES
10 disks ..... £4.99	10 capacity ..... 99p
50 disks ..... £22.50	40 capacity ..... £4.99
100 disks ..... £39.99	50 capacity ..... £5.99
150 disks ..... £54.99	80 capacity ..... £6.99
200 disks ..... £69.99	100 capacity ..... £7.99

PLEASE NOTE PRICES MAY DIFFER FROM OUR SHOP PRICES

#### We now stock *Deja Vu*

Licenceware  
 Priced @ £3.50 per disk  
 (2 disk sets @ £5.50)  
 Full details of titles on  
 our catalogue disk

#### POSTAGE

UK, Channel Isles...**FREE**  
**OVERSEAS AIR MAIL**  
 Europe, Eire ... £2.50  
 Rest of World ... £4.00

Please note that payment  
 must be in Sterling



# RUTLAND COMPUTER SUPPLIES LTD

30 Buckminster Close, Melton Mowbray, Leics, LE13 1ET

## TOP QUALITY UNBRANDED DISKS

### AT DISCOUNT PRICES

3.5" DSDD disks inc. labels	39p each
3.5" DSDD coloured disks inc. labels	45p each
3.5" DSDD disks inc. labels	99p each
5.25" DSDD disks	25p each
5.25" DSDD coloured disks	39p each
5.25" DSDD disks	49p each

All disks are guaranteed 100% error free, packed with sleeves, labels + W/P tabs.

## STORAGE BOXES

### Lockable anti-static with dividers & keys

#### 3.5" BOXES

40 capacity	£4.60
80 capacity	5.10
100 capacity	6.10
120 capacity	7.10
Banx boxes to hold 80 3.5" disks	9.95
Posso boxes to hold 150 3.5" disks	14.95
Posso boxes to hold 70 5.25" disks	14.95

#### 5.25" BOXES

50 capacity	4.60
110 capacity	5.20
120 capacity	6.50

## CABLES

IBM PC cables 1.8m long	6.15
Centronics to Centronics cable 1.8m	9.50
2 metre joystick extension cable	4.95
RS232 Male-male, female-female,	
male-female	8.50
Joystick/mouse extension cable	3.95

## COMPUTER STATIONERY LISTING PAPER

11 x 9.5" 60gsm 2000 sheets	17.00
11 x 9.5" 80gsm 2000 sheets	20.00
A4 70gsm 2000 sheets	19.00
A4 90gsm 1500 sheets	20.00

## QUALITY COMPATIBLE RIBBONS

	1+	5+
Amstrad LQ3500/8256	2741FN	3.15
Amstrad 9512	2746FN	2.90
DMP2000/3000	2482FN	2.66
Brother M1009	2412FN	3.60
Brother M1509	2479FN	5.00
Canon 1156	2223FN	3.55
Citizen 120	2488FN	3.10
Citizen Swift 24	2939FN	3.90
Swift 24 colour	Original	17.00
Epson EX800	2774FN	3.35
FX800/LX800/MX/FX80	7273FN	2.95
MX100	2320FN	3.30
LX80/LX85	2454FN	2.15
LQ800	2477FN	3.10
LQ1000/1050	2478DN	3.70
LQ2500	2795DN	4.05
LQ2550	2877DN	4.05
NEC P2200 (+)	2844FN	3.30
Olivetti DM1/200	2843FN	3.65
Olivetti DM105	2863FN	4.75
Panasonic KXP110	2228FN	2.95
KXP1124, KXP1081	2904FN	
Star LC10	2864FN	2.65
LC10 colour	2861col	5.00
LC24-10	2868FN	4.10
LC24-10 colour	original	12.50
LC200	original	6.40
LC24-200	original	9.00
LC24-200 colour	original	12.50
LC200 colour	original	12.00

This is just a small selection of ribbons. If your printer is not listed - please ring for a price. Originals available on request.

All prices include 17.5% VAT. Post and packing £3.50.

3 day courier £6.50. Overnight £8.50.

All orders are despatched within 24 hours subject to stock availability.

INK JET AND LASER TONER CARTRIDGES AVAILABLE

## OFFICE HOURS

9.00am to 7.00pm Monday to Friday

10.00am to 12 noon Saturdays.

PHONE & FAX: (0664) 500878



# THE source for MODEMS

£69-  
for  
2400 bps  
(for limited period)

Our competitors come and go, but we still offer the best service, support and prices in the country. With every modem you get free high quality software, extensive pre sales advice and unlimited after sales support. Our low cost modems have a 1 year replacement warranty, with a manufacturers 5 year warranty to back that up too! We offer consultancy services too, and can advise on every aspect of data communications. Why not call us today to discuss your needs.

Tel: 0252 311332

Fax: 0252 311660

PERSONICS Unit 6 Orchard Road Farnham Surrey GU9 9LH

All modems are fully Hayes compatible with 300, 1200 & 2400, (V.21, V.22 & V.22bis), NVR, Tone & Pulse dial, AA & AD and include a loudspeaker. For Cix, Prestel, BBS's, CompuServe, GreenNet.

2400 bps Int £69.00

2400 bps Ext £149.00

2400 bps Int MNP5 £129.00

2400 bps Ext MNP5 £169.00

QUAD Ext MNP5 £179.00

Comfax 3 9600 Grp 3 fax £199.00

Personics are main suppliers for the Amber Logic Mistral range of modems. Fully approved, highly featured, fabulous modems from V.21to V.32bis (14400 bps!) - call for details.

EASIFLOW fan noise reducer £39.00 - free carriage.

FREE CATALOGUE and information pack - call, write or fax any time

Carriage (Overnight delivery) and VAT extra. VISA, ACCESS welcome



# MEMOREX COMPUTER SUPPLIES

Each Memorex product is subjected to the toughest quality control procedures in the industry. Every diskette is guaranteed to be 100% error free at the highest clipping levels. Exceeding all ANSI standards. All disks include labels and envelopes.

## MEMOREX BRANDED DISKETTES

1 Box 10 10+

3.5" DS DD 720K	£7.80	£7.40
3.5" DS HD 1.44Mb	£12.80	£11.90
5.25" DS DD 500K	£4.90	£4.60
5.25" DS DD 1Mb	£5.80	£5.50
5.25" DS HD 1.2Mb	£7.80	£7.40

## MEMOREX BRANDED COLOURED

(Yellow, blue, orange, red, green) 2 of each colour per box

3.5" DS DD 720K	£8.90	£8.10
5.25" DS DD 500K	£6.80	£6.20

## PLAIN LABEL DISKETTES

1 Box 10 10+

3.5" DS DD 720K	£4.50	£4.20
3.5" DS HD 1.44Mb	£6.60	£6.10
5.25" DS DD 500K	£3.80	£3.40
5.25" DS DD 1Mb	£4.10	£3.70
5.25" DS HD 1.2Mb	£5.70	£5.20

## PLAIN LABEL COLOURED

(Yellow, orange, red, green, white) 2 of each colour per box

3.5" DS DD 720K	£5.70	£5.40
5.25" DS DD 500K	£5.00	£4.80

## BULK DISKETTES

25 100 250 500

3.5" DS DD 720K	37	34	33	32
3.5" DS HD 1.44Mb	60	57	56	55
5.25" DS DD 500K	25	24	23	22
5.25" DS DD 1Mb	27	26	25	24
5.25" DS HD 1.2Mb	42	40	39	38

## BULK COLOURED

(Yellow, orange, red, green, white, black, grey)

3.5" DS DD 720K	41	40	39	37
5.25" DS DD 500K	34	30	29	28

## PRINTER RIBBONS

AMSTRAD	2	6	12
8256/8512/LQ3500MS	£4.10	£3.85	£3.50
8256/8512/LQ3500FA	£4.10	£3.85	£3.50
DMP2000/3000	£3.50	£3.20	£3.00
DMP3160/3250	£3.50	£3.20	£3.00
DMP4000	£4.50	£4.20	£3.90
LQ5000DI	£5.50	£4.70	£4.40
PCW9512MS	£3.50	£3.20	£3.00
BROTHER			
HR5	£3.30	£3.00	£2.80
HR15/20/25/35/40MS	£3.30	£3.00	£2.80
HR15/20/25/35/40FA	£3.50	£3.10	£2.90
M1009/1109/1209/1224	£3.50	£3.20	£3.00
M1409	£4.50	£4.20	£3.60
M1509/1709	£5.40	£5.00	£4.70
M1724	£4.70	£4.40	£4.20
CITIZEN			
1200/180E/LSP10/100	£3.20	£2.90	£2.80
HCP40	£3.30	£3.00	£2.80
HCP40 colour	£23.00	£21.00	£20.80
HCP45	£4.90	£4.50	£4.30
MSP10E/40/50	£2.70	£2.50	£2.30
MSP10E/40/50B/R	£2.70	£2.50	£2.30
MSP15E/25/45/55	£3.50	£3.20	£3.00
Premiere 35MS	£2.50	£2.30	£2.10
Premiere 35FA	£2.80	£2.50	£2.30
Swift 24	£3.30	£3.00	£2.80
Swift 24 colour	£18.30	£17.00	£15.90
EPSON	2	6	12
EX800/EX1000	£3.60	£3.30	£3.10
FX1000/1050/1000/1050	£3.50	£3.20	£3.00
LQ1000/LQ1050	£3.90	£3.60	£3.40
LX400/800/850	£2.80	£2.50	£2.30
MX/FX80/85/800/850	£2.80	£2.50	£2.30
LQ400/500/550/800/850	£3.30	£3.00	£2.80
LQ860/1060/2550	£4.20	£3.90	£3.60
PANASONIC			
KXP1080/81/82/83	£3.30	£3.00	£2.80
KXP1124	£3.30	£3.00	£2.80
KXP1180	£3.30	£3.00	£2.80
KXP3131/3151MS	£2.20	£1.90	£1.60
KXP3131/3151FA	£2.60	£2.40	£2.30
KXP1540	£4.50	£4.20	£3.90
KXP1592/1595	£3.30	£3.00	£2.80
STAR			
DP510/DP515	£1.60	£1.30	£1.20
GEMINI 10X/SG10/SG15	£1.60	£1.30	£1.20
LC10/NX1000	£2.40	£2.20	£2.10
LC10 colour/rainbow	£8.10	£7.50	£7.00
LC15/FR10/FR15	£3.30	£3.10	£2.80
LC2410/LC2415	£3.30	£3.10	£2.80
NB24-10	£4.70	£4.30	£4.00
NB24-15/NB-15	£5.10	£4.70	£4.40
NO10/NL10/NR10	£4.20	£3.80	£3.60
NO15/NR15/NX15	£4.60	£4.30	£4.00
PowerType MS	£2.20	£1.90	£1.60

## BRANDED ORIGINAL TONER CARTRIDGES

CANON/HP/WANG		
LPB-8/HP1	£58.00	£55.50
LPB-8II/HP11	£58.00	£55.50
LPB-4/HP11R	£58.00	£55.50
PPB-3/HP3Si	£112.00	£107.00
DATA PRODUCTS		
LZR 2600 pkd 6	£107.00	£97.00
LZR 1200 pkd 6	£118.00	£111.00
LZR 650	£40.00	£37.00
EPSON		
6000	£12.50	£12.00
IBM		
4216	£19.00	£18.00
4019E	£170.00	£160.00
3816 pkd 2	£69.00	£64.00
KYOCERA		
F8/10/22/3000	£23.00	£22.50
F18/3300	£33.00	£30.00
MANNESMANN		
MT 905	£23.00	£22.00
MT 910	£29.00	£28.00
RICOH		
30/4080/81/4150	£38.00	£35.00
6000	£12.50	£12.00

## DATA CARTRIDGE

TYPE	LENGTH	CAPACITY	1+	5+
DC1000	185"	20Mb	£12.90	£12.30
DC2000	205"	40Mb	£13.30	£12.90
DC2120	307.5"	120Mb	£17.60	£17.20
DC300XLP	450"	45Mb	£13.70	£13.10
DC600A	600"	60Mb	£15.80	£15.20
DC6037	150"	37Mb	£19.30	£18.80
DC6150	600"	150Mb	£18.20	£17.60
DC8250	1020"	250Mb	£22.30	£21.70
DC6320	620"	320Mb	£22.90	£22.30

## DISKETTE STORAGE

SIZE	SPECIFICATION	PRICE
5.25"	10 disk box	£1.10
5.25"	50 disk box with lock	£4.70
5.25"	100 disk box with lock	£5.30
3.5"	40 disk box with lock	£4.50
3.5"	80 disk box with lock	£4.90
3.5"	10 disk box	£1.10

## CONTINUOUS LISTING PAPER

PRODUCT	QUANTITY	PRICE
11 2/3 x 9.25 plain EPP	70GSM 500 sheet pack	£6.20
11 2/3 x 9.25 plain EPP	70GSM 1000 sheet box	£11.70
11 2/3 x 9.25 plain EPP	70GSM 2000 sheet pack	£20.90
11 2/3 x 9.25 plain EPP	80GSM 500 sheet pack	£6.70
11 2/3 x 9.25 plain EPP	80GSM 1000 sheet box	£12.70
11 2/3 x 9.25 plain EPP	80GSM 2000 sheet box	£23.30

## EURODATA

12a Adam & Eve Street, Quakers Yard, Market Harborough, Leicestershire, LE16 7LT. Tel/Fax: (0858) 433992.



Prices subject to change. E. & O.E.

All prices include VAT @ 17.5%.

Add £2.95 postage & packing. Cheques made payable to Eurodata.



# EXPRESS MAIL

**Express' Editor, Andy Storer, continues the debate on cover disks and asks whether PCs are really taking over the world in the liveliest letters pages in the weird and wonderful world of computing...**



## Cover swaps

Congratulations on your new "tri-format" Cover Disk.

Despite being on a tight budget, I am more than happy to pay a little extra for your magazine, for such ease of use disks, unlike other magazines that seem to expect one to be super human to extract information, to make a working copy.

However at the risk of wanting "Jam on it", so to speak: I am using an STE, 1 Meg and would have liked to have had *bBase II/China Challenge* issue 148 for the STE user.

I am more interested in such things as *bBase* and more serious things like chess, etc, and fancied the look of the *China Challenge*, (don't get me wrong) I also like playing games.

As someone 'new to computing', is there any way I could purchase some equipment to be able to convert information for this Amiga Cover Disk to work on an STE? (I know someone with an Amiga.)

Should the answer be no, then perhaps in the future you could "repeat" various items for the other users to have access to. Hoping you can help,

S J Long, Swindon, Wilts

**I'M AFRAID YOUR** request is a difficult one SJ and one which, if it could be resolved, would make its solver a great deal of money.

Put simply, programs designed to run on one machine just won't run on another, unless there's a specific version that's been written to conform to that machine's operating system. And, unfortunately, the software you mention is machine specific.

There is a 'half-way house' solution open to you, however. You could run the PC programs if you bought a PC emulator for your STE – something like the Vortex or AtOnce plug in boards that effectively turn it into a PC.

Alternatively, but rather more drastically, you may wish to sell your ST and buy an Amiga – this way you could then buy both ST and PC emulators and run just about all the software on the disk!



## Cover lover

It's times like this I'm glad I saw you in the shops. *NCE* has been a life-saver to me.

Nearly every computer mag comes out once a month which is no good as you get fed up sitting around like a wet weekend. Some mags are not fit to go in the shops, for example: I bought a *ST Fun* a few weeks ago costing me a fiver! I turned on the computer and found the worst game ever!

Another thing I can't stand are demos. Once you've played one level that's it. I wish to thank *NCE's* cover for bringing it to my sight

Sion Edwards,  
Holywell, N Wales

**ADOPTING HARRY ENFIELD** voice: 'I just couldn't believe it...this disk loads up and all it has is a game demo...what's that all about then?...I just couldn't believe it'.

Well, Harry, unfortunately, an agreement between all computer magazines and the European Software Leisure Publishers Association means that none of us can run full-length games anymore. Sales suffer and all that. So in the meantime, demos are all you're gonna get. We'll just make sure you get the best ones!



## PC power

Re: your *Figures of Fun* feature in *Express 150* – surely the moral of your report is that after 10 years the PC has finally become what IBM originally intended – a home computer.

John R Hudson, Huddersfield

**YEP THAT'S ABOUT** the size of it John – just a pity that none of IBM's own PCs have yet managed to become home computers though, isn't it? Is this the ultimate price of piracy?



## PC games

I read the debate on the "Sugar Baby" with great interest and agree with Simon Dullingham.

There are indeed other £1,000

PCs which offer exceptional value for money and good expansion if needed. In a recent interview of 386's the "Shopper" lab report gave "Best Buy" for performance to the Ti'ko PC 320, and no wonder!

Just a brief look at the specifications, including the excellent pro-designer video display, 20MHz and 43Mb hard disk, all for £1,099 plus VAT (£1,291 total, delivery free), would make anyone look twice. Come to that it was a surprise to see the Amstrad 386SX still rated as best buy because of the possible advantages of High Street prices against the set prices of direct supply.

This factor does need to be taken into account – good dealer services are (sometimes) worth having as are their occasional "offers".

The main drawback with PCs and games is lack of sound. I have a friend who has just made me weep with envy. He runs Microsoft's FS4 on his new 38MHz 386DX Vig III in 256 colours and sVGA. But flying a sim plane with an engine that sounds like a damp squib surely can't compare with the roar from a racing throttle on the Amiga 500.

The need to purchase a separate sound board and mini amp with stereo speaker adds another £170 to the overall cost of PCs. But it looks like Sugar has put this into his new Games PC as a sweetener to make us think.

It has been a snag in the development of PCs right through. Even when the first CPC came out, you could make music on it and even produce something like a voice synthesis. And look what the Amiga can do, and at such a competitive price!

And so the battle goes on. We're the lucky ones: it's up to them to deliver the goods! Thank you for your interesting pages. "Letters" and "Tech Tips" are the lifeblood of the magazine. And now we get a 50p disk too! Ever so Taaaa!

John Gray, Eastbourne

**I MUST CONFESS** I've been playing rather a lot of PC games recently – mind you I have one of those Ad-lib stereo cards so sound's not a problem.

It's increasingly dawned on me that the PC is the most useful machine around – all things told – if you have the dosh to transform it into something approaching a modern computer.



## Diskussions 1



Referring back to *Express 151* and the request for suggestions for the Cover Disk contents, I personally would like to see more productivity software, also graphic/drawing/animation programs which could include some of the better quality PD/Shareware offerings as well as demos of commercial releases.

As I do not class myself as an expert with my computer (Amiga) full tutorials of the programs included would be of great help and would allow users to get the most out of the disk.

I am sure there are many people out there who, like me, love dabbling with the software as we try to learn but are not yet experienced enough to decipher the somewhat brief and technical doc. files that are included.

With a little tuition achieving results, however simple, can be a very satisfying and rewarding experience for us beginners.

G Collinge, Bury St Edmunds

**YOU CAN BE SURE** we're aware of the documentation shortfall you refer to. We try and enclose as big a reference guide as is possible within the space available, but we can't always deliver enough. But this is often because the softwares' authors don't go into much detail either!



## Diskussions 2



The programs I would like most to see on 16-bit disks are tutorials to go with features, utilities and productivity software.

We can easily get games demos from the glossy monthlies like *Amiga Format*

Janice Charnley, Warrington

**CHEERS JANICE** – that's the kind of succinct positive response we're after. Here's a fiver...anyone else out there fancy some dosh in return for constructive criticism then just send it to 'Let's make it the best disk this side of Pluto', NCE, 30, Monmouth St, Bath, Avon BA1 2BW.



# LETTERS

## ON THE COUCH

This week's playful pro-active psycho modeller is KEVIN WRIGHT of ROMFORD, ESSEX. Romford, home of John Bull's bitter and er...Kevin Wright. Kevin just dropped a line to our resident shrink, Dr Clare Anthony, including the name of the machine he owned, his favourite software and the machine he most desired. He then sent the lot to: Leather Couch Clare, NCE, 30 Monmouth Street, Bath BA1 2BW.

Dr. Clare took off her silk gloves, opened the letter and...

OK Kevin - here we go my young sweetie, just rest your head on this pillow and let's get to it...

- MACHINE OWNED: Sega Megadrive
- FAVE SOFTWARE: *Sonic The Hedgehog*
- DESIRED MACHINE: Sega CD-ROM

My, my, my...you're one of the new generation of console cowboys aren't you? You say in your letter 'Help me Clare! Can you cure me?' - well it's a tall order Kevin. You see, advanced console obsessives are the most difficult subjects to deal with precisely because it's so hard to pull them away from the internal things.

One day, your son will come along to you and say, 'Daddy, I know when you were young you used to play with your Megadrive all the time, so why can't I have my Sega Direct Neural Implant this



Christmas. All my friends have their Nintendo Cerebral Response Devices and I'm sick of being left out'. Of course, he'll be crying while he's saying this and you won't have the heart to give him what he deserves - ie, a damn good kicking - so you'll fork out the £299 and never see him again for the rest of his life. Let's face it - is this how you want your kids to grow up?

We Freudians consider CD-ROM to be an important and essential logical device in the continuing development of the human psyche. So much so that our AI people are, at this very moment, developing *Sigmund Interactive*. It's simple to use and takes all major credit cards. It also makes *Eliza* look like Carl Jung.

**PROGNOSIS:** Go to your local pub and drink 15 pints of John Bull's bitter. Then stare mindlessly at the CD jukebox for six hours. On your way to hospital you will realise that this is a lot cheaper than buying a CD-ROM and provides great entertainment for other drinkers too.



## PC v Amiga

I couldn't let your article about PCs pass without comment.

My own experience of using PCs over many years has been that the machines are reliable and easy to use. I have had three Victors (CAD systems) running five days a week for six years without a hardware hitch.



## Write Now

Write and tell Andy Storer what you think! Reach him at: Express Mail, 30 Monmouth Street, Bath BA1 2BW. Sorry, no personal replies, even with an SAE and remember, only SOME letters win a fiver



## On-line mail

Own a modem? Then squirt us a letter. Express has its own area on Aspects bulletin board (061 792 0260) where you can leave mail and upload/download files.

We also have our own conference on CIX. Give this on-line service a ring on 081-390 1244 and talk to us direct! You can also leave E-mail for us on Prestel and Miconet @ 011112623, or on Telecom Gold @84:txt152

The backup from the builders has always been helpful with of course on site maintenance for the first year. They are beginning to look a bit old now and one of the monitors is on the blink.

However, for home use I bought a CBM 1500 with all the extras (hard disk, etc) in March. My oh my, what a contrast. A great machine, but service backup is hopeless!

In July the CBM monitor blanked. I took it back to the shop where I'd bought it to be sent back to CBM. I asked about an immediate replacement only to be told that there was no policy for lending out monitors to disgruntled customers.

I explained that I was in the middle of developing a program for work using Amigavision and the shop manager lent me his monitor. Thanks to him I completed the work, but as yet there is no sign of my monitor.

My point is that if a customer buys 'the lot' from CBM and the monitor breaks down, the whole thing is useless and perhaps I have a right to demand all of my money back. What's your view?

Of course, I enjoy working with the Amiga, but CBM is going to have to get its act together if it wants to keep its current market position.

I get the distinct impression that CBM is only interested in the dosh now and doesn't give a

## TEC-NOL Ltd (LEEDS)

The Horsforth Computer Centre, 249 New Road Side, Horsforth, Leeds LS18 4DR

Monitor/TV for Atari/Amiga with Free Cable  
Made by Samsung with Remote and 2 Year Warranty  
Only £169

Atari External Drive  
with built in PSU  
High Quality Steel Chassls, with Fuse,  
Power and Drive Light  
£59.00

### ACCESSORIES

Freedom Connection to make your joystick remote control .....£19.99  
High Density Disks 100 for .....£65.00  
with free disk box.  
Citizen Printers 120D+ with 2 year warranty .....only £130.00



Tel: (0532) 590020

Fax: (0532) 590018

We offer Free Delivery on all orders over £25.00. Orders below £25 please add £1.00 P&P. Please quote reference CEX2 when ordering.

### PC

3.5" 1.44Mb Drive .....only £40.00  
44Mb IDE Hard Disk .....£150.00  
Twin Joystick + Card .....£14.99  
Analog Joystick + Card .....£24.99  
1Mb SIMMS 70ns .....£35.00  
Soundblaster Card with Speakers,  
Joystick, Blaster Quest 5, FM Organ,  
Voxkit and Talking Parrot .....only £175.00  
Timeworks 2 DTP Software .....£159.99  
Express Publisher DTP  
Software .....£139.99  
Wing Commander 2 .....£34.99



ANALOGIC COMPUTERS (UK) LTD  
152 Latchmere Road  
Kingston-upon-Thames  
Surrey KT2 5TU

Tel. Mon - Sat  
8am to 9pm  
TEL: 081 546 9575  
FAX/TEL: 081-541-4671

### SPECIAL OFFER COMPUTERS Amiga/Atari

520 STE Discovery Extra Pack .....1 Meg .....£329.00  
1040 STE Family Curriculum Pack .....1 Meg .....£349.00  
Amiga 500 + Mouse + Modulator .....£299.00  
Amiga 500 Cartoon Classics .....£359.00

### AMIGA/ATARI DRIVES

1 Meg 3.5" internal (SONY) .....£49.95  
1 Meg 3.5" external .....£59.95

### AMIGA/ATARI PROTAR HARD DRIVE

"PLEASE CALL"

PHILIPS CM8833 MKII MONITOR & CABLE .....£235.00

PHILIPS 15" COLOUR TV/MONITOR With Remote Control  
+ Scart Cable .....£239.00

### ATARI MEMORY UPGRADES WHILE YOU WAIT!

1. 520 ST/STM/STF/STFM to 1 Meg .....£59.95  
2. 520 ST/STM/STF/STFM to 2.5 Meg .....£159.95  
3. 520 STE to 1 Meg .....£29.95  
4. 520 STE to 2 Meg .....£89.95  
5. 520 STE to 4 Meg .....£169.95

★ We specialise in Surface Mount Chips

512K RAM + Clock for Amiga 500 .....29.95  
Amiga/Atari Mouse .....19.95

### AMIGA and ATARI REPAIRS WITHOUT DIAGNOSTIC FEES • FIXED CHARGES FAST TURNAROUND

520/1040 (STFM/STE) .....£59.95  
Amiga 500 .....£49.95

POWER SUPPLIES for ST with 1 year guarantee .....£44.95

★ ALL PRICES INCLUDE VAT AND NEXT DAY DELIVERY  
★ NEW: WE PROVIDE PICKUP SERVICE FROM YOUR PREMISES  
FOR ONLY £5.00 + VAT. 1. TO REPAIR FAULTY COMPUTER.  
2. TO UPGRADE MEMORY.





monkey whether you go back again as there are plenty of new punters dying to part with their cash. Have I got news for CBM? Anybody got a bright new speedy PC for sale?

Graham Worth, Stockport

**I'M AFRAID THE KIND** of back-up service you're used to is only really found in the corporate sector where there are so many vendors doling out DOS-in-a-box that after sales are part of a package's market competitiveness.

Having said that, it does seem somewhat ridiculous to have had to have waited since July for a monitor to be fixed. I'd go up the wall.

I reckon you'd have a good chance of some kind of refund - you're covered under the statutory one year's warranty - why not try for one direct from CBM?



## Consolation

I own an Amstrad 6128 and GX4000. Firstly the GX4000 is a very good little console; it beats the NES and Master system into deep space and I am very pleased with the games I have got for it (*Burning Rubber*, *PANG*, *Navy Seals*, *Klax* and *Switchblade*).

*Express* and *Amstrad Action* (even though the people on *Express* do nothing but talk about Amigas and Macs) will probably agree with me, but why then does

everybody who has not seen my GX4000 think it's %&\*+, but all the people who have seen it have said it's very good?

Lastly, why do people slag off each others computers? Examples include C64 v Speccy v CPC/Plus and ST v Amiga v PC.

These arguments are pointless and all of you on *Express*

probably agree with me. But you on *Express* make things worse, why don't you call yourselves *New Mac Express* or *Amiga Express* because that's what you're slowly turning your magazine into.

If I brought one of these machines what would I do with it? The answer, no more than I would do on my Amstrad. Otherwise

congratulations on a brill mag. More 8-bit stuff please.

Marcus Durham, Farnham, Surrey

**IF YOU USE** your CPC mainly for playing games then a Mac is of no use to you. However, the benefit of buying an Amiga should be apparent - the games are better and there's more of 'em. ■

# WANTED!

## Your honest opinion of EXPRESS

■ To help us keep improving your favourite magazine, please fill in and return this form

### 1. How did you buy this issue?

- ☐ I subscribe
- ☐ Newsagent delivered it to my home
- ☐ Asked newsagent to reserve copy
- ☐ Bought it on planned shop visit
- ☐ Just happened to see it and liked it

### 2. Rate NEW COMPUTER EXPRESS in terms of value for money:

- ☐ Excellent! ☐ Good
- ☐ Reasonable ☐ Poor ☐ Ripoff!

### 3. Out of ten, how much did this week's cover make you want to look inside?...../10

### 4. How much does this issue appeal to you overall?...../10

### 5. How does it compare with previous issues you've seen?

- ☐ Much better! ☐ Slightly better
- ☐ About the same standard
- ☐ Slightly worse ☐ Much worse!

### 6. Rate out of ten this and any other computer magazines you read regularly:

NEW COMPUTER EXPRESS...../10

### 7. Out of ten, how useful did you find this week's main feature?

...../10

### 8. What do you like most and then least about this issue?

I most like .....

And I least like .....

Your name and address:\*

\* Leave blank if you wish - but we may want to send you details of exclusive special offers  
● No stamp needed if posted in UK.  
Return to: **NCE, Issue 153 Survey**, Future Publishing, Freepost, Bath, Avon BA1 2XF.

## CASTLESOFT

Prices include VAT and Delivery

### P.C'S

286 SVGA 40Mb HD 3i Disk, Mouse .....only £699!  
386 SVGA 40Mb HD 3i Disk, Mouse .....only £820!  
3 Button Super Mouse 2.....only £20!

### AMIGA

Commodore Amiga .....only £309!  
1 Meg Amiga .....only £335!  
1 Meg And 10 Games .....only £355!  
Amiga Cartoon Classics Xtra .....only £385!  
Amiga 1500 (inc £395 worth of software) .....only £680!

FED UP WITH A STICKY - OUT MODULATOR? TRY OUR COLOUR MONITOR/TV (with SCART lead).....only £179!  
suitable for ST and Amiga

### ATARI STE

**STE Discovery** (with ST Basic, 1st Basic, 1st Word, ST Tour Super Cycle, Anarchy, Starwrek, Dragon's Breath, Indiana Jones, Neochrome, Hotel Accommodation, Joystick, etc) **only £299!**  
**STE Discovery Xtra** (as above, with Art Tutor, Asterix, Trivial Pursuit, Pipe Mania, Live & Let Die, Onslaught, Driving Force, Rock & Roll, Rick Dangerous, Squeak, Chess Player) **Only £325!**

AMIGA/ST GAMES (ring for details) from only £5!  
JOYSTICKS.....ONLY £5!

QUALIFIED STAFF: HELPLINE: REPAIR SERVICE  
FREE LOCAL DELIVERY AND INSTALLATION

BEST VALUE IN U.K!

CASTLESOFT

LEVENMOUTH BUSINESS CENTRE  
LEVEN. TEL 0333 21243 (24 HOUR)  
CALLERS WELCOME



## BULK DISKS AT CRAZY PRICES

### 3.5 DSDD AT UNBEATABLE PRICES

50 for only £19.95 250 for only £75.00  
100 for only £34.00 500 for only £145.00

All certified 100% error free supplied with labels

**SPECIAL 200 DSDD 3.5" DISKETTES PLUS OFFER 2 x 100 CAP BOXES £69.95**

Banx boxes 90 capacity .....£8.95  
Universal printer stands .....£7.95  
Re-Ink the wonder product.....£12.95  
Amiga/Atari dust cover .....£3.95  
3.5" cleaning kit.....£2.95  
Mouse mats .....£2.95

3.5" HD 60p\*  
5.25" DD 22p\*  
5.25" HD 35p\*  
\* each

REMEMBER ALL PRICES INCLUDE VAT & P&P

100% PRODUCT SATISFACTION OR MONEY BACK

Callers welcome by arrangement

DIAL A DISC

6 Walsingham Road,

St. Pauls Cray, Kent, BR5 3BW

**Tel: 081-309 5556**





# ATARI

## ST Accessories

SM124 Mono Monitor	£139.00
External 3.5" Disk Drive	£69.00
Golden Image Hand Scanner	£169.00
Forget-Me-Clock II	£19.95
ST Monitor Switch Box	£15.99
STE Stereo scart lead	£12.99
STFM scart lead	£12.99
STE Stereo MKII 8833 lead	£12.99
STFM MKII 8833 lead	£12.99
Joystick/Mouse extension lead	£4.99
Replacement Mouse lead	£3.95
Mouse Mat	£3.50
Squick replacement mouse	£14.99

## PROTAR ST Hard Drives

We are official stockists of the latest in high quality / low price ST hard disk drives from Protar. All Protar hard disk drives come with a full 12 month REPLACEMENT warranty (no lengthy repairs!), a DMA through port, device number switching and superb disk management software.

★ **ST FORMAT GOLD AWARD WINNER** ★

★ **RATED AS "EXCELLENT" BY ST USER MAGAZINE** ★

★ **STE COMPATIBLE** ★

Progate 20Mb Hard Disk	£279.00
Progate 40Mb Hard Disk	£341.00
Progate 40Mb with Cache	£423.00
Progate 44Mb Removable	£611.00
Progate 60Mb Hard Disk	£437.00
Progate 60Mb Tape Streamer	£581.00
Progate 80Mb Hard Disk	£486.00
Progate 80Mb with Cache	£565.00
Progate 150Mb Tape Streamer	£793.00
Progate 160Mb with Cache	£922.00
Progate 440Mb with Cache	£1588.00

## STE Ram Kits

DIY 1 - 512k upgrade	£22.99
DIY 2 - 2mb upgrade	£89.00
DIY 4 - 4mb upgrade	£159.00

All STE Ram Kits come with instructions and DO NOT require soldering in most machines.

# COLOUR MONITORS

## PROTAR VISTO C14M

- ★ Colour 14 inch monitor
- ★ Stereo speakers
- ★ 600 x 285 pixel resolution
- ★ Improved version of Philips 8833 Mk2
- ★ Green screen switch
- ★ Free with STE, STFM or Amiga lead
- ★ 12 months REPLACEMENT warranty

**only £ 239.99**

## PHILIPS 8833 MK2

Philips 8833 Mk 2 also stocked complete with STE, STFM or Amiga cable and 12 months free on-site warranty.

**only £249.99**

# PRINTERS

## ACCESSORIES & RIBBONS

All of our printers come with a parallel cable to suit Atari ST, Amiga and all standard PC etc (other cables available at extra cost - ask for details). All printers carry a full 12 months warranty. We only sell genuine UK stock - we do not offer inferior "grey imports". Phone for prices on ribbons and accessories for the printers listed below.

## CITIZEN

★ 2 YEAR WARRANTY ★



**COLOUR KIT SPECIAL OFFER!** Our FREE colour kit offer with all Citizen Swift 9, 24 and 24X printers will continue only while stocks last. So hurry and order today to get your FREE colour kit worth nearly £ 40.00.

**PRINTER BUYERS SPECIAL OFFER!** We are offering, to all buyers of Citizen printers, the chance to purchase a CITIZEN PRINTER STARTER PACK. The pack comprises of : 3.5" disk full of printer drivers for the ST, Amiga & PC; 200 sheets of fanfold tractor feed paper; 200 fanfold tractor feed address labels; 5 tractor feed envelopes all for only £12.99 extra.

Citizen 120D + (9-pin, 144 cps draft, 30 cps NLQ)	£139.00
★ Citizen Swift 9 (9-pin, 192 cps draft, 48 cps NLQ)	£199.00
Citizen 124D (24-pin, 144 cps draft, 48 cps LQ)	£209.00
★ Citizen Swift 24 (24-pin, 192 cps draft, 64 cps LQ)	£299.00
★ Citizen Swift 24X (24-pin, 15" carriage)	£399.00

★ Denotes FREE COLOUR UPGRADE KIT

## Other Printers ....



Star LC200 Colour (9-pin, 180 cps draft, 45 cps NLQ)	£220.00
Star LC24-10 Mono (24-pin, 180 cps draft, 60 cps LQ)	£215.00
Star LC24-200 Mono (24-pin, 200 cps draft, 67 cps LQ)	£260.00
Star LC24-200 Colour (24-pin, 200 cps draft, 67 cps LQ)	£295.00
Canon BJ10CE Bubble Jet (ink jet, portable and compact)	£289.00
Hewlett Packard DeskJet 500 (ink jet, 3 pages per minute)	£399.00

## HP PAINTJET

- Colour Inkjet Printer
- upto 180 DPI full colour printing
- Colour & black cartridges supplied
- Friction & tractor feed
- ST, Amiga & PC compatible
- Plain paper + transparency supplied
- Parallel or RS232 interface
- Parallel lead supplied FREE

"EXCELLENT" rating  
from ST User October 91

**£ 785.00**  
INC VAT

# ATARI LYNX

The Atari Lynx is a superb; full colour, hand held, games; console using plug-in cartridge games. The Lynx can be used with either batteries or a mains power supply unit. All our Lynx machines come with instructions and are available with or without mains power supply unit and comlynx cable.

## GAME CARDS

Lynx Console Only	£79.99	Chips Challenge	£19.99
Lynx + PSU	£84.99	Electrocop	£19.99
Lynx + PSU + Comlynx	£89.99	Gates of Zendocon	£19.99
		Klax	£19.99
		Miss Pacman	£19.99
		Rampage	£19.99
		Road Blasters	£19.99
		Robo Squash	£19.99
		Shanghai	£19.99
		Slime World	£19.99
		Xenophobe	£19.99
		Zarlor Mercenary	£19.99
		Gauntlet 3	£23.99
		Blue Lightning	£23.99
		Rygar	£23.99
		Ninja Gaiden ★NEW★	£23.99
		War Birds	£23.99
		Paperboy	£23.99
		California Games	£23.99
		Paciland ★NEW★	£23.99
		Block Out	£23.99
		A. P.B. ★NEW★	£23.99
		Ultimate Chess	£27.99
Carrying Case	£14.99		
Carrying Pouch	£11.99		
Car Power Adaptor	£9.50		
Sun Visor/Scratch Shield	£6.99		
Mains Power Supply	£14.99		
Comlynx Cable	£7.99		

# AMIGA

## Accessories

Protar 512K ram upgrade + clock	£29.99
A501 512K ram upgrade + clock	£29.99
A500 15Mb ram upgrade	£99.99
A590 20Mb hard disk drive	£284.95
External 3.5" Disk Drive	£65.00
Squick replacement mouse	£14.99
Golden Image Hand Scanner	£169.00
Amiga Stereo Scart Lead	£12.99
Amiga 8833 MkII Lead	£12.99
Mouse Mat	£3.50

## A501 512K Ram Upgrade with Clock

We are proud to announce that we have further stocks of the genuine Commodore A501 512K Ram Expansion, which we are now offering at the even better, ultra low price of :

**NEW LOW PRICE**

A501 512K Ram with clock	£29.99
--------------------------	--------

## PROTAR Amiga Hard Drives

At last ... high quality hard disk drives for the Amiga A500. The new PROTAR range of A500 hard disks are destined to become The hard disk drive for the Amiga A500. These high quality hard disks are available in sizes ranging from 20MB to 160MB ... and just look at the specifications ...

- Perfect fitting to the A500
- Colour matched to the A500
- 5 times faster than the A590
- 1MB, 2MB, 4MB or 8MB internal ram expansion facility
- 1 year REPLACEMENT warranty
- 2 year warranty of Cache versions
- Auto parking & auto booting
- Ultra low power consumption from A500's own PSU
- Sub 24 millisecond access time
- Hard disk management software
- Separate PSU available when ram expansion is fitted
- High quality - made in Germany

Protar 20Mb Hard Disk	£279.00
Protar 30Mb Hard Disk	£349.00
Protar 50Mb Hard Disk	£429.00
Protar 50Mb with Cache	£529.00
Protar 60Mb Hard Disk	£542.00
Protar 80Mb Hard Disk	£599.00
Protar 100Mb with Cache	£639.00
Protar 160Mb with Cache	£939.00

Ram expansions for all Amiga Protar hard disk drives:

Protar 1MB internal ram	£58.00
Protar 2MB internal ram	£115.00
Protar 4MB internal ram	£245.00
Protar 8MB internal ram	£490.00
PSU for when ram fitted	£34.00

## Cartoon Classics software pack

We have limited stocks of the software pack which comes with the A500 Cartoon Classics. We are offering this excellent pack at the very low price of only £49.99. This is what you get :

★ Deluxe Paint 3	only
★ The Simpsons	<b>£49.99</b>
★ Captain Planet	inclusive
★ Lemmings	

TELESALES LINES OPEN 10AM TILL 12MIDNIGHT - 7 DAYS A WEEK - 0903 700714  
BEST PRICES - AS RECOMMENDED IN THE ST FORMAT BUYERS GUIDE - OCT 91



# ATARI STE PACKS

ALL ATARI STE PRICES INCLUDE VAT AND UK DELIVERY. ALL PRODUCTS CARRY A FULL 12 MONTH WARRANTY. PLEASE RING US BEFORE ORDERING TO CHECK STOCKS AND CURRENT PRICES.

**ATARI STE STANDARD PACK.** consists of the computer with mouse, tv lead, manual and all connecting leads etc. The Standard Pack is supplied with NO software.

**ATARI STE DISCOVERY A.** consists of the Standard Pack and First Basic, ST Tour, NeoChrome and 4 games (Dragons Breath, Super Cycle, Indiana Jones, Anarchy)

**ATARI STE DISCOVERY B.** ~~NEW~~ consists of the Standard Pack and First Basic, ST Tour, NeoChrome and 4 games (Final Flight, Sim City, 9 Lives, Planet of Robot Monsters)

**ATARI STE TURBO.** consists of Standard Pack and STOS, Hyperpaint II, Music Maker II, First Basic and 8 games (Indiana Jones, Dragons Breath, Blood Money, Impossible Mission II, HKM, Anarchy, Outrun and Supercycle).

**ATARI STE ARCADE.** ~~NEW~~ consists of Standard Pack and New Zealand Story, Chase HQ, Arkanoid II, Crazy Cars, Operation Wolf, Super Hang On, Super Cars, Skidz, Switchblade and Axels Magic Hammer.

**ATARI STE TENSTAR.** consists of Standard Pack and Asterix, Chess Player 2150, Drivin Force, Live + Let Die, Onslaught, Pipemania, Rick Dangerous, Rock n Roll, Skweek and Trivial Pursuit II.

**ATARI STE KUMA BUSINESS.** consists of Standard Pack and word processor K-Word 2 (incl. K-Spell Checker), K-Data database, K-Spreadsheet, K-Graph business graphics and Metacomco Basic Language.

**ATARI STE CURRICULUM.** consists of Standard Pack and also 3 levels of educational software (from 5 yrs to 50 yrs !!), a word processor, a spreadsheet, a database, HyperPaint and Music Maker II software.

512k	1mb	2mb	4mb
£289.00	£319.00	£349.00	£429.00
£299.00	£329.00	£359.00	£439.00
£299.00	£329.00	£359.00	£439.00
£309.00	£339.00	£369.00	£449.00
£309.00	£339.00	£369.00	£449.00
£309.00	£339.00	£369.00	£449.00
£319.00	£349.00	£379.00	£459.00
X N/A	£369.00	£399.00	£479.00

# AMIGA PACKS

ALL AMIGA PRICES INCLUDE VAT AND UK DELIVERY. ALL PRODUCTS ARE UK STOCK AND CARRY A FULL 12 MONTH COMMODORE WARRANTY. PLEASE RING US BEFORE ORDERING TO CHECK STOCKS AND CURRENT PRICES.



**ALL OF OUR 1MB A500 PACKS NOW COME WITH THE GENUINE COMMODORE A501 RAM EXPANSION WITH BUILT IN CLOCK.**

<b>AMIGA A500 BASE</b> A500 computer, mouse, tv modulator, manuals, Workbench software, all connecting leads etc. The A500 Base Packs are supplied 'bare' with no games software.	£299.00
<b>AMIGA A500 BASE 1MB</b> A500 computer supplied with genuine Commodore A501 512K ram expansion, mouse, tv modulator, manuals, Workbench software, etc supplied 'bare' with no games software.	£325.00
<b>AMIGA A500 ASTRA</b> A500 512k computer, mouse, tv modulator, manuals, Workbench, etc supplied with 10 great software titles (see A500 1MB ASTRA pack below for details)	£325.00
<b>AMIGA A500 1MB ASTRA</b> Amiga A500 computer, A501 512K Ram expansion with clock and battery back-up, mouse, tv modulator, manuals, Workbench etc disks, plus the ASTRA 10 games pack including the following games: Datastorm, Dungeon Quest, E Motion, Grand Monster Slam, Kid Gloves, Powerplay, RVF Honda, Shuffle Puck Cafe, Soccer and Tower of Babel	£350.00
<b>AMIGA A500 1MB CARTOON CLASSICS</b> Amiga A500 computer, A501 512K Ram expansion with clock and battery back-up, mouse, tv modulator, manuals, Workbench etc disks, plus the following top selling software titles: Lemmings, The Simpsons, Captain Planet and Deluxe Paint 3	£359.00
<b>AMIGA A1500 BASE</b> A1500 computer with 1MB ram, detachable keyboard, 2 x 3.5" 880k disk drives built in, mouse and all manuals. The Amiga A1500 accepts A2000 peripherals. The A1500 base pack is supplied with no software. Please note that the A1500 does NOT have a modulator.	£599.00
<b>AMIGA A1500 SOFTWARE</b> consists of A1500 base pack and the following software: Platinum Works, Deluxe Paint Version 3, Populous, Simm City, Battle Chess, Their Finest Hour (Battle of Britain) and 2 books	£655.00

IF YOU WISH TO ORDER WITH US, THEN PLEASE SEND YOUR CHEQUES, BANKERS DRAFTS, POSTAL ORDERS, CASH ETC TO OUR MAIL ORDER ADDRESS (PLEASE MAKE CHEQUES PAYABLE TO BEST PRICES) OR RING OUR MAIL ORDER HOTLINE (NOT AN ANSWERPHONE) ANY TIME BETWEEN 10.00AM AND 12 MIDNIGHT, 7 DAYS A WEEK, AND USE YOUR ACCESS OR VISA CARDS. OR ALTERNATIVELY PAY A VISIT TO OUR SHOP, CHIPS COMPUTER CENTRE, AND SEE OUR WIDE RANGE OF COMPUTER GOODS AND SOFTWARE.

**VISIT OUR SHOWROOM**  
CHIPS COMPUTER CENTRE, 53 RUGBY ROAD,  
WORTHING, WEST SUSSEX, BN11 5NB.

TEL : (0993) 700804.

OPENING : MON TO FRI 10AM TO 6PM SAT 9.30AM TO 5.30PM  
FINANCE / CREDIT FACILITIES (SHOP ONLY)

PART EXCHANGE CONSIDERED (SHOP ONLY)

NEW AND USED ST, AMIGA & PC EQUIPMENT ON DISPLAY

ALL TYPES OF SOFTWARE (BUSINESS / LEISURE / EDUCATIONAL)

REPAIRS UNDERTAKEN. TRAINING. INSTALLATION. ON-SITE WARRANTIES.



## MAIL ORDER ONLY

**BEST PRICES (DEPT NCE), 53 RUGBY ROAD,  
WORTHING, WEST SUSSEX, BN11 5NB.**

TEL : (0993) 700714.

OPENING : 7 DAYS A WEEK 10AM TO 12 MIDNIGHT  
ALL PRICES INCLUDE 17.5% VAT AND FREE DELIVERY (AVERAGE 4 - 5 DAYS).

PLEASE ADD £7.00 FOR NEXT WEEKDAY DELIVERY.

GOODS USUALLY SENT OUT THE SAME DAY WHEN

CLEARED PAYMENT IS RECEIVED BEFORE 2PM

PERSONAL CHEQUES REQUIRE 7 DAY CLEARANCE.

All prices include 17.5% VAT and free UK delivery unless stated otherwise. All prices / specifications / special offers subject to change without notice.

BEST PRICES MAIL ORDER - OUR TELESales LINES ARE OPEN FROM 10.00AM TILL 12 MIDNIGHT - 7 DAYS A WEEK !!!



# MACHINE SPECIFICS

## MACINTOSH

- Mass-media marketing with Mac in the USSR
- Fast fonts: the latest on-line delicacy
- CD-ROM prices coming down to earth at last

### APPLESKI

Following on from the news of the appointment of a Macintosh dealer in the Soviet Union (or what's left of it), Apple has started a mass-media marketing campaign in Soviet publications, according to on-line service NewsBytes.

The campaign is being co-ordinated by Intermicro, the aforementioned dealer, and has the somewhat confusing theme: "A solid US family has serious intentions to live and work in the USSR". Publications like *Izvestia* are carrying the ads, and the campaign will also include TV and radio commercials.

### ON-LINE FONTS

The Universal Fount Company has launched a 'fonts by modem' service, in an effort to make fonts more easily available.

The service operates through a number of resellers (normally high street 'instant printers', DTP bureaux, computer dealers and the like), who have a phone number and password to the UFC's on-line type library.

All the user has to do is walk into the shop and specify the fonts that they want. A few minutes later they walk out of the door with a disk.

So far the service has access to the Bitstream, Monotype and Adobe font

libraries, but negotiations are underway for four other major libraries to be included.

The service has had over 30 dealership applications so far, with more arriving all the time. For details of your nearest Universal Fount Company dealer, give the company a call on 0242 222308.

### 'CHEAP' MONITORS

Well, it all depends on what your understanding of low cost is. Heyden and Son has announced that the E-Machines ColorPage E16 monitor, a 16-inch affair that works with all colour-capable Macs (that is, all except the 'modular' machines such as the Classic,

SE and so on). It requires no extra interface for the Mac IIsi or IIfx, providing 256 colours at a resolution of 640 x 480 pixels.

The E16 will also work on the Mac LC, with the addition of an interface card, the snappily-named 1106 LC16. This interface card, which retails for £375 + VAT, will fit not only E-Machines' own 16-inch monitor, but also those from Sony, SuperMac and Apple. The ColorPage E16 sells for £1,195 + VAT, so the whole package for an LC is just £1,570 + VAT.

OK, so it's not exactly budget, but it's actually pretty good value for money, providing 70 per cent more viewing area than a standard 13-inch monitor.

## POSTCARD FROM AMERICA

If you sneak a peek at the World Expo calendar (sorry, no swimsuits), it's always Macworld time somewhere. There are up to 15 Expos a year worldwide! The premier spreads, with the monster crowds, are in San Francisco, Tokyo, and Boston.

Even this year's Boston Expo wasn't grand enough in this recessionary year, and many companies decided to stay home. The cost of a booth at these shows keeps rising. The smallest can cost more than \$25,000, when you add shipping, setup, personnel expenses - Ouch! So, there were holes where booths ought to have been.

There was hope that this Expo would overflow with trailblazing System 7-savvy software to make our mouths water and our pocketbooks open up. Unfortunately, most vendors are still shaking the bugs from their upcoming products. Users that have taken the Seventh step are buying RAM and updates for

applications they already own.

What people wanted to see, and couldn't, were the new flavours of Macintosh due out in late October and QuickTime multimedia system software extensions. QuickTime provides a standard way for software to compress sound and pictures, and handle time-based events, so everything happens when it's supposed to, letting us cut, paste, and use digitised movies in our documents. Desktop video cards, special videocassettes, and jumbo hard drives were pawed over by multimedia true believers. Is a word processor a word processor, if it can include little motion pictures, with digital sound, as illustrations?

Best demo incorporating food was in the Hewlett-Packard booth. The new colour inkjet DeskWriter C was printing on corn tortillas. You can have your cake, and read it too!

David Morgenstern

## FEED YOUR ST!

### MEMORY UPGRADES



VISA

#### HCS STE MEMORY UPGRADE KITS

STE kits come as either SIMM or SIP type modules. SIMM modules have edge connectors, SIP have pins. All types plug into 4 sockets under the top of the case. SIMM are the most common and are supplied by default, these will be swapped if necessary. Trade in is paid as a refund after you have upgraded your computer. All kits come C/W illustrated Instructions. 2+4 Mb come C/W FREE multitasking software.

STE KITS	NORMAL PRICE	WITH 512K TRADE IN	WITH 1024K TRADE IN
512K TO 1024K	£22.00	-	-
2 MEGABYTE	£80.00	£70.00	£60.00
4 MEGABYTE	£150.00	£140.00	£130.00

#### STF(M) MEMORY UPGRADE KITS

There are two basic types of upgrade. The low cost solder-in type which comes complete with sockets, capacitors, resistors and instructions, or, the much easier to install Xtraram Deluxe Kit which fits inside the computer to allow upgrading to 4Mb using simms like the STE uses.

Solder-in upgrade Kit to 1Mb.....£30.00

#### Xtraram Deluxe Quality SIMM UPGRADING SYSTEM

Populated to 1Mb.....£65.00  
 Populated to 2Mb.....£110.00  
 Populated to 4Mb.....£159.00  
 Fitting for above (exclusive of post).....£20.00

#### CHIPS

16 x 256K x 1 Dram Chips.....£24.00  
 16 x 1Mb x 1 Dram Chips.....£70.00

### HCS Computer Peripheral Supplies

2 year guarantee on memory!  
 14 day money back guarantee!

#### PC EMULATORS

PC Emulators sit on top of the microprocessor of the ST. When in use, they take over control of the processor. This allows Speed and a high degree of compatibility. PC Speed runs 4 times faster than a PC. The AT Speed 8.3 times. The AT Speed co-processor socket allows the extra chip to accelerate numerical calculations 5000% (five thousand!)

AT SPEED	SUPPLIED .....	£220.00	FITTED .....	£245.00
PC SPEED	SUPPLIED .....	£90.00	FITTED .....	£120.00
AT SPEED STE ADAPTOR	SUPPLIED .....			£25.00

#### MACINTOSH EMULATORS

Spectre GCR allows the ST to emulate the MAC using the ST's own processor (as used in the Macintosh). It simply plugs into the cartridge slot and the disk drive port. (It also has a through port to allow a second drive). It will run up to system 6. The version supplied will be the most up to date, supplied by GADGETS.

SPECTRE GCR	SUPPLIED .....	£250.00
128K ROMS	SUPPLIED .....	£70.00

#### DISK DRIVES

The double sided disk drive kit replaces the internal single sided drive in the STF. The PROTAR hard drives supplied are of the highest quality and are ST Format GOLD winners of 1991.

DOUBLE SIDED DISK DRIVE UPGRADE .....	£47.00
40MB PROTAR HARD DRIVE .....	£335.00
80MB PROTAR HARD DRIVE .....	£485.00

### HOW TO ORDER

PRICES INCLUDE VAT  
 Telephone orders and enquiries welcome on Tel/Fax 081 777 0751. Please make cheques/P.O's payable to:  
**HCS, 35 HARTLAND WAY, SHIRLEY, CROYDON CR0 8RJ**  
 Goods normally despatched within 2 days of receipt. Trade-in paid as a refund E & OE



according to E-Machines. More details from Heyden and Son on 081-203 5171.

## UPGRADED ART

Canvas 3.0, an upgrade to Deneba Software's professional drawing package, has just started shipping. It has been completely re-designed to incorporate System 7 support, and has been 18 months in the making.

The upgrade features over 100 new features, including Pantone colours, WYSIWYG, colour calibration for CMYK and Pantone, System 7-savvy features and TrueType and PostScript Type 1 font conversion to Bézier outlines.

Anyone who purchased Canvas 2.1 from 1 April this year onwards can upgrade free to the new version 3.0. Other users of previous versions of the program can upgrade for £89 + VAT, and the program itself sells for £295 + VAT.

For upgrades, call the Principal Distribution's upgrade hotline on 0706 831831.

For information on the program's availability and details of your nearest dealer, telephone 081-677 7631.

## CHEAP(ISH) CD-ROM

The CD-ROM is a superb way of shipping large volumes of information. Encyclopaedias, dictionaries, the Guinness Book of Records, fonts, detailed accounts of renal tumours in children... all are available in CD-ROM format (and often not by any other computerised means).

Indeed, Apple now sends its

developers all their material on CD-ROMs, meaning that they must have a drive.

The problem for Mac users is that, until recently, Macintosh CD-ROM players have all been extortionate prices compared with the PC equivalents. However, it looks as though that disparity may slowly be reducing, with an offer from Magnum Software of a drive plus Monotype font CD-ROM (which includes £480-worth of free fonts) for £499 + VAT. Or, alternatively, you can take the drive for the same price and get £100 off the company's 'Instant Art' CD-ROM. More details from Magnum on 0884 820240.

The company also produces a large collection of PostScript illustrations — chiefly maps. These are of extremely high quality, and are certainly worth investigating if you need that sort of thing. Prices are, for example, £95 for Europe, £95 for the world and £265 for the UK, the rest of Europe and the entire world. The maps can be directly imported into page makeup software such as XPress or PageMaker, and can be edited in programs such as Adobe Illustrator and Aldus Freehand. The company also supplies 200-plus symbols, based on the British Tourist Board recommended symbols, as a Type 1 PostScript font, EPSs or as PICT files. The symbols cost £59 for the collection in whichever format you require.

For more details, and a price-list, contact Magnum, again on 0884 820240.

Ian Wrigley

## CPC

- Life in the fast lane with speedway software
- Getting to grips with the man in the long brown overcoat in *Darkman*
- Happy days are here again with *Fun School 4*

## NOISE AND DUST

Any speedway fans out there? If so, you ought to know about ET Software, of Leamington Spa. ET is speedway mad, and is publishing no fewer than three speedway programs for the Amstrad. These are:

● *Team Championship*. This has you chasing the league title, working your way up through the heats, battling through fixtures and generally slogging your way to the top.

● *World League*. More of the same except that eight top countries and riders are taking part. You can elect to manage any of the countries.

● *Speedway Datafile*. This one's a bit different, not being a game at all. Instead, it's a way of keeping track of your favourite sport and personalities via a specially-designed database which can handle match reports, results, rider updates and more.

All three games cost £7 on cassette and £7.50 on disk. Or you can get the whole lot on disk for an all-in price of

£18.

Without having seen the programs I can't comment on them. They're none too cheap, but they are the only games for speedway strategy nuts I've ever heard of. Me? Give me GP racing any day. (The only time I ever went to a speedway meet I spent most of my day eating crunchy hot dogs and getting boiler clinker out of my eye.)

## DON'T TOUCH METHS

I've been told off by Steve Rae of London for my advice about cleaning tape heads.

"You advised readers to clean their computer tape-heads with a dab of methylated spirits on a clean cloth. DON'T!"

Oh.

"Go to your local chemist and ask for a small bottle of Isopropyl Alcohol, about 50p, and some cotton buds."

Oh.

Continued on page 29 ➤

## WATCH THIS SPACE EVERY WEEK! FOR COMPUTER SUPERDEALS FROM THE SUPERDEAL SPECIALISTS.

### COMMODORE

#### AMIGA A500 BASE PACK:

A500 computer, mouse, T.V. Mod., manuals, Workbench

£299.00

#### AMIGA A500 SCREEN GEMS:

As A500 base pack + A501 RAM Exp. + 4 great software titles + Deluxe Paint 2.

£389.00

#### AMIGA A500 CARTOON CLASSICS:

As A500 base pack + 512K RAM Exp. with clock, mouse, T.V and manuals, Lemmings, The Simpsons, Captain Planet, Deluxe Paint 3

£389.00

#### AMIGA A500 CLASS OF THE 90'S:

As Screen Gems but with 8 software titles, 10 disks, mouse mat, Resource File, Introductory Video.

£459.00

### ATARI

#### ATARI 520STE DISCOVERY PACK 2:

512K computer, mouse, manuals + all leads, 4 games + ST Basic

£315.00

#### ATARI 1040STE CURRICULUM:

1Meg RAM, Educational software, Word Proc., D.Base, Spreadsheet, Hyperpaint 2, Music Maker 2

£369.00

### BUSINESS MACHINES & PERIPHERALS

We sell a range of P.C.'s from Goldstar & Strand.

e.g. Strand 80286 VGA with Works V2.0 £789.00

Monitors from £118.00 (SVGA Mono).

Multi Scanning Monitors from £350.00

Printers from £118.00 (9 pin), £199.00 (24 pin)

Please phone for your specific requirements.

### ATTENTION BUSINESS USERS!

### BUSINESS MACHINES CAN PLAY GAMES AS WELL!!!

VAT: All prices are inclusive of 17.5% VAT

DELIVERY: Please add £5.00 for delivery within UK.

PAYMENT: Cheques/PO's made payable to

DATA CITI COMPUTER SERVICES

PERSONAL CHEQUES: Please allow 5 working days for clearance

GOODS NOT OFFERED ON TRIAL BASIS.

## DATA CITI COMPUTER SERVICES

UNIT 27, DARIN COURT, CROWN HILL, MILTON KEYNES, MK8 0AD

TEL: 0908 262210

Open Monday to Friday from 10.00am to 5.30pm, Saturday 10.00am to 1.00pm





# SUGAR LUMPS!

## AMSTRAD'S LOSS - YOUR GAIN!

This is your chance to pick up an **INCREDIBLE** deal on Amstrad 2000 series computers with VGA Displays!

### FREE SOFTWARE

We have secured a deal with a leading Software company to include:

#### TOOLWORKS OFFICE MANAGER

FIRST CLASS INTEGRATED BUSINESS SOFTWARE, featuring:

- ☆ WORD PROCESSOR ☆ SPELL-CHECKER ☆ SPREADSHEET ☆ DATABASE FILER ☆ FILE MANAGER

OFFICE MANAGER NORMAL RRP: £51.05 INC. VAT

Plus! Free with all Colour Models: 'TOP 10 SOLID GOLD GAMES'

	PC2086 S.D.	PC2086 SD/41Mb
VGA MONO	(254.47) 299.00	(424.68) 499.00
VGA COLOUR	(339.57) 399.00	(509.79) 599.00

Full specification Amstrad 2086 models, featuring 640K RAM, with MS-DOS 3.3, mouse and all manuals supplied.

Prices indicated within brackets are excluding VAT.

'286 VGA COLOUR FOR ONLY £699 inc VAT

Full specification PC2286 & PC2386 models, including MS-DOS 4.011, mouse and all manuals. All Colour Models are shipped with Hi-Res Colour monitors (0.29mm dot pitch). 2286 features 12MHz 80286 & 1Mb RAM; 2386 has 20MHz 80386 & 4Mb RAM.

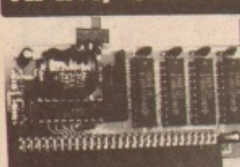
	PC2286 HD40	PC2386 HD65
VGA MONO	(509.78) 599.00	(899.00) 1056.32
VGA HI-RES COLOUR	(594.89) 699.00	(999.00) 1173.82

Tell your friends - tell the world - but move quickly; once we sell out you may never see such value again!

### ALL PC2000 MODELS INCLUDE FREE 12 MONTHS ON-SITE MAINTENANCE

2286 RAM Upgrade to 4Mb...£160.00	2286 Maths Co-Processor.....£75.20	External 5.25" Drive (360K) for all models.....£49.95
2086 Maths Co-Processor.....£99.00	2386 Maths Co-Processor.....£190.35	External 5.25" Drive (1.2Mb) for 2286 & 2386 models....£89.95

### AMIGA 500 512K RAM/CLOCK UPGRADE



**£28.99**

also available without clock for only £24.99

Direct replacement for the A501 Expansion • Convenient On/Off RAM Switch • Auto-recharging battery-backed Clock • Compact unit size • Ultra-neat design

### A500 1.5MB RAM EXPANSION (requires Kickstart 1.3)... ONLY £79.00

Kickstart 1.3 upgrade available from us for only £29.95

### CLEARANCE CORNER

All items covered by 12 Months Warranty

GOODS CONDITION: N = New S = Shop Soiled

Atari PC4 Dual Media & 65Mb VGA 286 with VGA Colour Monitor	£329 S
Amstrad PC1386 HD90 with 14" HRCD VGA Colour Monitor	£399 N
Amstrad PC2286 DD with Mono Monitor & 1 year on-site warranty	£449 S
Amstrad PC1640 HD20 with Colour Monitor	£349 S
PC-Compatible Monochrome Monitors	£60 S
Philips CM8852 Colour Monitor (with ST or Amiga cable)	£219 S
Philips CM8833 Colour Monitor (with ST or Amiga cable)	£189 S
Samsung MCH4335 VGA Colour Monitor	£225 S
Olivetti CWP-1 Complete Wordprocessing System	£269 N
9-Pin Printers (Mono & Colour)	from £50 to £120 S
24-Pin Printers (Mono & Colour)	from £125 to £240 S
Accounts Master (Accounting) [Dual Media]	£19.99 N
Paymaster (Payroll) [Dual Media]	£14.99 N
Infomaster (Database) [Dual Media]	£14.99 N
Supercalc 3.21 (Spreadsheet) [Dual Media]	£19.99 N

### 3 1/2" EXTERNAL FLOPPY DRIVES

Compatible with the ST or AMIGA



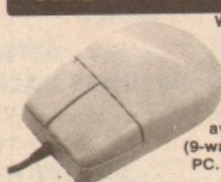
Very quiet • Slimline design • Cooling Vents • Sleek, high quality metal casing • Suits any Amiga or Atari ST • Full 1Mb Unformatted Capacity • Quality Sony / Citizen Drive Mechanism • Convenient On / Off switch on rear of drive • Long reach connection cable for location either side of computer

AMIGA VERSION ONLY **£51.99**

ATARI ST VERSION ONLY **£54.95**

### TRUEMOUSE

FOR THE ST, PC or AMIGA



WE GUARANTEE that this is the smoothest, most responsive and accurate mouse you can buy for your PC, ST or Amiga. Excellent performance, amazing low price! Versions available for ST/Amiga, PC Serial (9-way & 25-way), PS/2 and Amstrad PC. Please state which version you require when ordering.

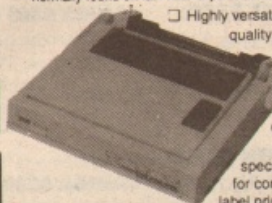
AMIGA / ATARI ST Compatible Version - **Only £17.95**

PC Compatible Version - State Serial, PS/2 or Amstrad PC when ordering **£22.99**

### CITIZEN PRODOT-24C Professional COLOUR Printer

#### A TRUE PROFESSIONAL PRINTER - AT A BUDGET PRICE!

Combining the presentational advantages of advanced COLOUR output with the superior quality of Professional 24-pin printing, the Citizen Prodott-24C represents excellent value for money! Handles sustained levels of output with ease, with its high speed and reliability. Features an amazing array of facilities normally found on far more expensive models, yet are supremely easy to use.



- Highly versatile, full featured professional letter quality printer □ Fast 200 cps output in draft, 66 cps in Letter Quality mode (5 true letter quality fonts) □ Full control from easy to use front panel □ 7 Colour output; Graphics resolution up to 360 x 180dpi □ Includes special ProDisk 24 menu-driven software for configuration, font customisation and label printing □ Fast set-up, with Parallel and Serial Interfaces, Tractor & Single Sheet Feed as standard

□ Complete with cable & 2 Year Manufacturers Warranty

Citizen Prodott-24C Normal RRP: £746.35 inc.VAT

**ONLY £269.00** including VAT, delivery and cable

Citizen Prodott-24C Automatic Cut Sheet Feeder only £89.95

### Evesham Micros SPECIAL OFFER - All STAR PRINTERS include 12 MONTHS ON-SITE MAINTENANCE

NEW! Star LC20 supercedes LC10, faster 180/44cps	£139.99
Star LC 200 9-Pin Colour, 4 fonts, 180/45cps	£209.00
Star LC 24-10 24-Pin multicolor, 180/60cps	£209.00
Star LC 24-200 24-Pin multicolor, 200/67cps	£229.00
Panasonic KXP11241 super-fast multi-featured 24-pin	£279.00

# Evesham Micros

### RETAIL SHOWROOMS

Unit 9 St. Richards Road  
Evesham  
Worcs WR11 6XJ  
☎ 0386 - 765180  
fax: 0386 - 765354  
Open Mon - Sat, 9.00 - 5.30

5 Glisson Road  
Cambridge CB1 2HA  
☎ 0223 - 323898  
fax: 0223 - 322883  
Open Mon - Sat, 9.30 - 6.00  
IBM Dealer • Corporate Specialist

1762 Pershore Road  
Cottledge  
Birmingham B30 3BH  
☎ 021 - 458 4564  
fax: 021-433 3825  
Open Mon - Sat, 9.00 - 5.30

ALL PRICES INCLUDE VAT @ 17.5% AND DELIVERY  
Same day despatch whenever possible. Express Courier Delivery (UK Mainland Only) £6.50

### MAIL ORDER DEPARTMENT

Unit 9 St Richards Road, Evesham, Worcs WR11 6XJ



Call us now on ☎ 0386-765500

Lines open Mon-Sat, 9.00 - 5.30. Fax: 0386-765354  
Technical support (open Mon-Fri, 10.00 - 5.30): 0386-40303



Send an Order with Cheque, Postal Order or ACCESS/VISA card details. Please allow 5 working days for Personal Cheque clearance.

Government, Education and PLC orders welcome  
All products covered by 12 Months Warranty  
All goods subject to availability.



"Meths leave behind a dirty residue and unless you're using a lint-free cloth, stick to using cotton buds. They're easier to manipulate in those awkward corners." Oh.

"I hate to sound pedantic but, believe me, I am right."

Don't you just hate it when other people are right? Thanks for putting us in the know, Steve. Just don't expect a Christmas card, that's all.

## THE DEVIL!

David Long has written in chasing a free plug for his Public Domain library, Demon PD. Well, David, you've got it. Now where's my fiver... oops, wasn't supposed to mention that.

The thing is, David's actually got quite a selection of software - 67 of the things, to be exact. Each 'selection' takes up one side of a disk, and the good news for tightwads everywhere is that one selection costs just 50p.

The software on offer covers the whole spectrum of stuff, from demos, to utilities to serious programs to games. What's more, if you want to see a full catalogue, that too comes on a disk. This one, though, won't cost you a penny, (You will have to supply a blank disk, though, and a stamped SAE).

You can get in touch with Demon PD at: 47 Hilton Avenue, Hall Green, Birmingham B28 0PE.

By the way, David is also flogging off printer ribbons for the Star LC-10/NL-80 and Amstrad DMP 2000 at £4 and £5 respectively.

## DARKMAN

Life is no bowl of cherries for *Darkman*. They have taken his manhood (don't like the sound of that), they have even taken his beloved Julie. 'They' being Durant and Strack. If you've seen the film, this will all make sense. If you haven't, well... just keep going anyway. *Darkman* has lost his face in an explosion (yuk) but, using a computer, he can disguise himself as anyone he chooses. And so, *Darkman* is out for revenge...

Anyway, the bottom line is that this is an Ocean conversion of a film that no-one saw. In it you take on the role of *Darkman* as he pursues his tormentors through six levels of scrolling platform action.

Now Ocean usually manages some

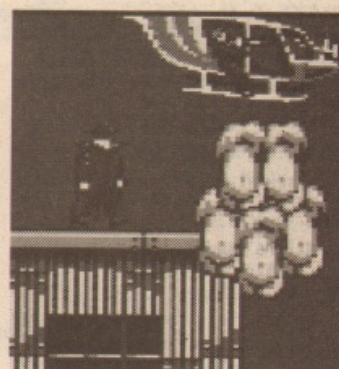
pretty damned fine games based on this simple formula (*Batman*, *Total Recall* et al) but this time the company has produced a bit of a dead duck. It's basically like *Dick Tracy* without a gun. Oh, and you've got a brown overcoat instead of a banana-coloured one.

Admittedly, *Darkman* looks good, and there's more variety than *Dick Tracy*, but it's still a bit of a bore.

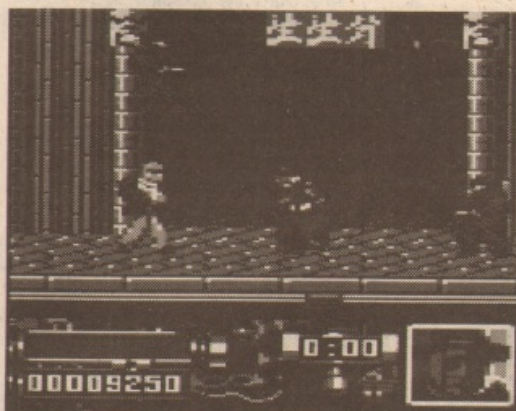
## MORE FUN AT SCHOOL?

Blimey, it doesn't seem long ago that *Fun School 3* turned up, and now *Fun School 4* is on the way...

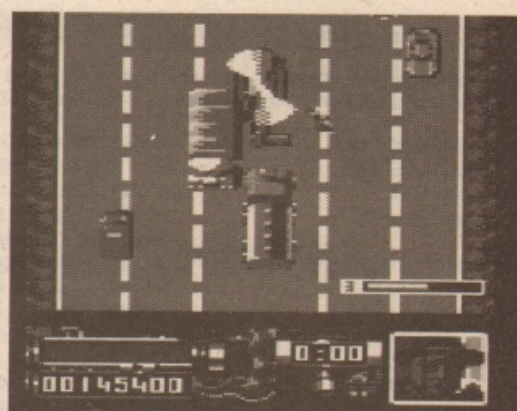
This new series follows the same  
Continued on page 30 ►



● *Darkman* level three: the best of the lot. Jump the platforms and dodge the grenades



● *Darkman* has good graphics, but lacks any real



● Level five's a change of perspective, hanging from a helicopter to stay alive

# TECHNOMANIA

## Commodore Amiga Cartoon Classics Pack

3 Great Games  
Lemmings (Psygnosis' Smash Hit)  
The Simpsons versus the Space Mutants  
Captain Planet and the Planeteers  
Also Deluxe Paint III (Electronic Arts Superb Art Package) and Commodore's A501 512K Ram Expansion

£359.99

## Commodore Amiga 1500

1 Megabyte of memory, two 3.5" disk drives and the following software:  
Toki, ELF, Puzznic, Home Accounts and The Works (Integrated word processor, spreadsheet and database)

£659.99

With Philips CM8833 Mk2 Colour Monitor

£889.99

## MONITORS

Commodore 1084S .....£259.99  
Philips CM8833 Mk2 (inc. cable, free copy of F19 and one year on site maintenance) .....£244.99

## PRINTERS.

(all printers include cable)

Citizen 120D+ .....£134.99  
Citizen 124D .....£194.99  
Citizen Swift 9 .....£194.99  
Citizen Swift 24 .....£284.99  
Optional Colour Kit for Swift printers .....£34.99

Seikosha SP1900AI (9 pin Dot Matrix) ..£124.99

Canon BJ10E.....£264.99

Star LC20 .....£154.99  
Star LC200 colour .....£229.99  
Star LC24-200 mono .....£259.99  
Star LC24-200 colour.....£299.99

## ACCESSORIES

Cumana CAX354 External Disk Drive .....£59.99  
512K memory upgrade with clock.....£31.99

Squick Replacement Mouse .....£14.99  
Naksha Mouse with Operation Stealth .....£26.99  
Golden Image Optical Mouse.....£36.99

Commodore A590 20Mb Hard Drive.....£289.99

Dataflyer 500 fitted with 52Mb Hard Drive .....£329.99  
Please phone for pricing of 105Mb, 210Mb and 420Mb hard drives.

VXL030 25MHz Accelerator Board for Amiga 500, 1500 & 2000 .....£259.99  
VXL030 40MHz Accelerator Board for Amiga...POA  
Maths-Processor (FPU) upgrades and up to 8Mb of 32 bit memory also available for VXL030.

KCS PC Emulator .....£224.99

Many other products available. Please phone for a price on your specific requirement.

All prices include  
17.5% VAT and  
Next Day Delivery  
on hardware



TECHNOMANIA,  
13 WELLBURN STREET  
DUNDEE, TAYSIDE DD2 2RR.  
PHONE: 0382 22323 FAX: 0382 400444



Please allow five working days  
for cheque clearance. Prices are  
subject to change without  
prior notice. Orders received  
by 3pm despatched same day.



# MACHINE SPECIFICS

principles as its predecessors - three packages, each aimed at a different age range, and each containing six sub-games. Even the 'presenters' of the three packages are the same - almost.

Yes, it's true. While Freddy the frog is still with us, and Teddy the bear, Robbie Robot has got the chop. It's all because of the results of a survey amongst eight and nine-year olds that revealed he just didn't have the street cred to cut it any more. Taking his place will be a new character, Sammy the Spy.

In FS4, the under-fives will get to learn all about art, maths, words, karaoke (eh?) and more from a Teddy decked out in Reeboks and baseball cap. Cool dude! Five to seven year olds get their old pal Freddie the frog back, this time teaching

them the delights of maths, sequences, word sorting and typing. Super-cool Freddie has a skateboard, by the way. Lastly, Sammy the Spy will be introducing the over-eights to geography, history and general knowledge. We don't yet know what ultra-cool fashion accessory Sammy's going to be sporting yet...

Fun School 4 will be out on the 16-bits towards the end of October (boo!) and on the CPC in early November (hurrah!).

Rod Lawton

Rod Lawton, editor of *Amstrad Action*, Britain's biggest and best-selling CPC magazine.

## CAPTAIN BLOOD CHEAT

This weird game from Infogrames may still be giving you a hard time, so here's a crafty little poke from Belfast's John Girvin. It gives you infinite time...

- |                                |                                  |
|--------------------------------|----------------------------------|
| 1'CAPTAIN BLOOD hack           | 80 addr=addr+1:GOTO 50           |
| 2 '(Special Action version)    | 90 **** LEAVE ALL LINES IN ***   |
| 3 'By John Girvin              | 100 DATA 13,21,00,60,11,94,98,01 |
| 4 'January 1991                | 110 DATA 92,0f,ed,0b,3e,c3,21,a0 |
| 5                              | 120 DATA be,32,16,bd,22,17,bd,c3 |
| 10 OPENOUT"d":MEMORY &5FFF     | 130 DATA 94,98,a4,48,4c,46,01,5b |
| 20 CLOSEOUT:MODE 1             | 140 DATA 21,af,be,22,4f,a5,21,00 |
| 30 LOAD "Iblood",&6000         | 150 DATA 00,22,4c,a5,c3,08,a5,dd |
| 40 addr=&BE80:RESTORE          | 160 DATA 21,fc,a7,11,ca,00,cd,8b |
| 50 READ byte\$                 | 170 DATA a7,21,c2,be,22,c4,8a,c3 |
| 60 IF byte\$="BLOOD" THEN CALL | 180 DATA 33,a8,af,32,0b,49,c3,00 |
| &BE80                          | 190 DATA 40,BLOOD,4A             |
| 70 POKE addr,VAL("&"+byte\$)   |                                  |

# C64

- Has the cartridge price slash come too late?
- Is *Terminator 2* just another wasted licence?
- The add-on from Trojan that'll light up your life

## CARTRIDGES DOWN

You may have read in *Express* 151 that Ocean has decided to drop the price of cartridges from £19.99 to £14.99, and no doubt other companies will do the same.

But, alas, I feel it is too little, too late. Why didn't the company listen to the consumers in the first place? Public opinion already underlines that existing cassette/disk games are expensive, so how is Joe Public supposed to afford £20 for one game?

Admittedly the new price is about right, but many publishers have lost interest in the cartridge revolution and it looks as though you, the consumer, will lose out. Again.

Our only hope is that software houses will re-affirm their interest and release some spectacular cartridge games at the right price.

## TOLD YOU SO

After my rather sceptical preview of *Terminator 2* a few issues back, I've been eagerly awaiting the game, just to

see if my assumptions were correct, and would you believe, they were.

Levels one, five and nine are out-and-out beat-'em-up sections, featuring huge main characters (made of six sprites a piece), not to mention taxing (and often tedious) gameplay. The games' structure means that energy is carried over from one level to the next - if you slip up on these sections, you're doomed.

Level four sees Sarah Connor traversing the corridors of the mental hospital killing anyone in her path, and likewise Arnie in the Cyberdyne lab in level seven. The beat-'em-up action is heightened slightly due to the ability to explore different areas.

Levels three and six are one of the major downers of the game - nauseating sliding-tile puzzles. They do not relate to the film at all, and can become unnecessarily frustrating to play.

Finally, levels two and eight are

Continued on page 32 >

### ATARI 520STE DISCOVERY PACK

Atari 520STE with double sided disk drive, mouse, owners manual, First Basic, Neochrome, ST Tour, Indiana Jones, Super Cycle, Dragons Breath, Anarchy, Atari CX40 Joystick.

ONLY £299.95

**PLUS FREE!** Our software pack comprising: Wordprocessor, Mailmerge, Database, Spreadsheet, Virus Killer, Your 2nd ST Manual, eleven great games, disk of desk accessories, five programs for small children.

### DISCOVERY PLUS PACK

Contains all the items in the Discovery Pack above, plus!! Vinyl computer cover, mouse mat, twin joystick extension lead, 10 blank disks, second Joystick

ONLY £319.95

Plus free! Our software pack comprising: Wordprocessor, Mail Merge, Database, Spreadsheet, Virus Killer, Your 2nd ST Manual, eleven great games, disk of desk accessories, five programs for small children.

### SPECIAL BONUS OFFER

Buy any Atari ST Computer from us and you can buy a ten game software pack containing: Asterix, Chess, Live And Let Die, Skweek, Onslaught, Pipe Mania, Rick Dangerous, Rock N Roll, Trivial Pursuit.

FOR ONLY £19.95

### MONITORS

SPECIAL OFFER PHILIPS CM8833 MK2 COLOUR MONITOR ONLY £239.95

INCLUDING CONNECTING LEAD

Atari SM124 Monitor .....£139.95

### ATARI 1040STE FAMILY CURRICULUM PACK

#### INCLUDES

Atari 1040STE, mouse, manual BUSINESS MODULE:- ST Word, ST Calc, ST Base

CREATIVE MODULE:- Hyperpaint 2, Music Maker 2, First Basic  
PLAY AND LEARN MODULE:- Prof Plays a New Game, Prof Looks At Words, Prof Makes Sentences

JUNIOR SCHOOL MODULE:- Answer Back Junior Quiz, General Knowledge Quiz, Spelling, Primary Mathematics.

GCSE REVISION MODULE:- Micro Mathematics, French-Mistress, Geography-Outh

ONLY £364.95

**PLUS FREE!!** A superb disk containing eleven great games.

### FAMILY CURRICULUM BONUS PACK

All items in the Family Curriculum Pack Above, Plus:- Vinyl Dust Cover, mouse mat, two Microswitched joysticks, 10 blank disks in a box  
ONLY £389.95

### VINYL DUST COVERS

Atari 520ST/1040ST	£5.95
Commodore Amiga 500	£4.95
Panasonic KXP1181	£4.95
Panasonic KXP1180	£4.95
Panasonic KXP1124	£4.95
Star LC10	£4.95
Star LC24/200	£4.95
Star LC200	£4.95
Citizen 1200	£4.95
Citizen Swift 9	£4.95
Citizen Swift 24	£4.95
Atari SM125/SM124 Monitor	£6.95
Philips CM8833/MK2	£6.95

### AMIGA 500 STANDALONE PACK

Amiga 500, Mouse, TV Modulator Manuals, Workbench etc, Deluxe Paint 2.  
£299.95

### CARTOON CLASSICS

Amiga 500, Mouse, TV Modulator, manuals, Workbench etc. 512K Ram Expansion with clock and Battery Back Up, Captain Planet, The Simpsons, Lemmings, Deluxe Paint 3

£349.95

Hurry!!! Limited stocks at this price

### PRINTERS

SPECIAL OFFER STAR LC200 PRINTER £149.95 INCLUDING CONNECTING LEAD

Panasonic KXP1180	£159.95
Panasonic KXP1123	£199.95
Star LC200 Colour (UK)	£209.95
Star LC24/200 Colour	£299.95
Citizen 1200	£139.95
Citizen Swift 24	£279.95
Citizen Swift 24 Col	£299.95
Citizen Swift 9	£199.95
Citizen Swift 9 Col	£219.95

ALL PRINTER PRICES INCLUDE CONNECTING LEAD

### DISK DRIVES

CUMANA CSA354 ST .....£79.95

CUMANA CAX 354 AMIGA DISK DRIVE £59.95

### MICE

Squik Mouse (AMI/ST)	£16.95
Contriver (AMI/ST)	£16.95
Golden Image (AMI/ST)	£18.95
Atari STD	£24.95
Amiga STD	£29.95
Naksha (AMI/ST)	£24.95

### SPECIAL OFFERS EXCLUSIVE TO READERS OF COMPUTER EXPRESS

#### COMMODORE CDTV

With Remote Control, Lemmings, Hutchisons Encyclopaedia.

ONLY £529.95

#### LIMITED STOCKS

#### CDTV TITLES

History, Science, Innovation	£24.95
Indoor Plants	£19.95
Business, Politics, Media	£24.95
World Vista	£29.95
American Heritage	£24.95
Electronic Cookbook	£24.95
Music Maker	£19.95
All Dogs Go To Heaven	£19.95
My Paint	£19.95
Classic Board Games	£19.95

#### LIMITED STOCKS

#### ACORN ARCHIMEDES 3000

Includes:- Archimedes 3000, Mouse, Manuals, Applications Software:- Draw, edit, paint, Maestro.

ONLY £549.95

#### HURRY! LIMITED STOCKS

#### JOYSTICKS

Zipstick Standard	£12.95
Zipstick Autofire	£13.95
Konix Speedking	£9.95
Konix Navigator Autofire	£12.95
Cruiser Black	£8.95
Cruiser Multicoloured	£8.95
Quickshot Python	£8.95
Quickshot Maverick	£12.95
Quickjoy Megaboard	£21.95

NEW!! NEW!! NEW!! NEW!! GAME MATE

Play all your favourite Sega Master System Games on your Sega Game Gear  
ONLY £34.95

### MAIL - CENTA

17 Campbell Street, Belper, Derby DE5 1AP. Tel: 0773 826830

Prices include VAT at 17.5%. Delivery charges are as follows:- Order value under £10.00, please add 50p. Order value £10.00 to £99.99, delivery free. Order value £100.00 and over, please add £5.00. Personal callers welcome at our retail shop but please bring this advert as some prices will vary. Closed Wednesdays. All items despatched same day if possible. Personal Cheques may require 7 days clearance. Proprietor Martin Bridges.





**Q. Which is the only Amiga magazine solely dedicated to using the Amiga as a serious computer?**

**A. Amiga Shopper**

**Q. Which Amiga magazine takes 16 pages of each and every issue to answer readers' questions?**

**A. Amiga Shopper**

**Q. Which Amiga magazine has monthly columns from some of the Amiga world's most respected writers?**

**A. Amiga Shopper**

**Q. Which Amiga magazine costs a third the price of the others, and gives you only the information you need?**

**A. Amiga Shopper**

**AMIGA  
SHOPPER**

**ONLY  
99p**

**LATEST ISSUE OUT NOW**



## MACHINE SPECIFICS



• **Terminator 2** lives up to our suspicions - it's terminally awful!

vertical scrolling sections. The former is a battle to out run the Mac truck on a dirt bike, the latter sees a helicopter in pursuit of our heroes in a SWAT van. In retrospect, they were the most enjoyable parts of the game.

*Terminator 2* is disappointing to say the least, and is ultimately a wasted licence. Many of the levels have been seen umpteen times before in games such as *Batman* and *Total Recall*. In fact

there are no innovative sections whatsoever.

It's a pity, because the music and sound effects are great and the graphics on each level are colourful and often superbly animated. Add to this some atmospheric inter-level screens, and you have an aesthetically pleasing bummer (to coin a phrase).

If you've seen the film and loved it, buy *The Making of Terminator 2* book - you'll save yourself a fiver, and probably have more fun.

### LIGHT FANTASTIC

Lightpens and light-equipment have been sparse on the C64 to say the least. In fact Trojan was the only company to release

such a peripheral. Quite strange, considering that custom lightpen locations are built into the hardware of the C64.

Well, the company has seen fit to release a substantially modernised lightpen, along with an innovative art package called *Pen-Master*. Alongside this is the Phazer, a light-gun which comes complete with some specially written games.

The Magnum light-gun, bundled with the C64 last year, barely excited me, but the Phazer looks set to be impressive. Both packages are due for release soon, but prices are as yet unknown. More next week.

Andrew Roberts

### RE-RELEASE ROUND-UP

There have been quite a few re-releases over the Summer months, some good and some bad. Here's an 'at a glance' overview of some of the better ones...

● **XYBOTS** (Hit Squad) - A generally very playable coin-op conversion, boasting some neat visual effects. This game certainly comes into its own in two player mode.

● **OPERATION THUNDERBOLT** (Hit Squad) - The final conversion was the second which Ocean had produced, due to some technical mix-up. It lacks the atmosphere, and the graphics are a little bland, but it's great fun nevertheless.

● **CABAL** (Hit Squad) - One of the

better *Rambo* games around, this static screen shoot 'em down is very hectic, aesthetically gorgeous, and sports some brilliant 3D programming.

● **SHINOBI** (Mastertronic) - A competent conversion of the best martial arts games. The 3D sections are somewhat jerky, but the sheer depth of the games makes up for it.

### EASY DRILLING



• You can drill with ease thanks to our handy poke

Yep, it's another listing for the Virtual Worlds compilation, lovingly sculpted by Martin Pugh. If you haven't bought it yet, do - it's one of the best around. Anyway, you know the score; type in the program, SAVE it just in case, then RUN for infinite shields and energy.

0 REM \*DRILLER TAPE CHEAT\*

1 FOR X=533 TO 577:READ

Y:C=C+Y:POKE X,Y:NEXT

2 IF C=5085 THEN POKE

157,128:

SYS533

3 PRINT"DATA ERROR"

4 DATA 169,34,141,40,3,169,2,141,41,3,32,86

5 DATA 245,169,11,141,206,1,96,72,77,80,169,240

6 DATA 141,108,100,141,221,113,141,57,100,141,229,111

7 DATA

141,97,119,141,192,111,

76,235,2\*

FREE  
CATALOGUE

## The 'World's Best' just got better!

### General Shareware Volume 2

You have an idea of the software you want - but can you find it? - NO. Why can't you get a set of demo programs to try? - Well, now you can.

There are over 12,800 files to try on this software collection in areas as diverse as Wordprocessing, games, spreadsheets, programming, databases and many more.

Programs for you to try in the comfort of your own surroundings and, when you've found the program you want, simply send the author the cost and in return you'll receive the most recent version of the software and any other files or documentation that may be necessary - OFTEN AT A MUCH LESSER PRICE THAN EQUIVALENT COMMERCIAL SOFTWARE.

If ever you needed a reason to buy a CD-ROM drive - this is it! Look at these other features too:

- Search for files by filename, category or description and decompress direct to disk!
- Incorporates a complete BBS. Run your own BBS in minutes.
- Unique sound blaster file collection.
- Windows section now contains over 440 files.
- Audio track describes installation and a tutorial.

This is the Micro Haus General Shareware Disk Vol 2. All files current as at 1 Sep 91.

Please note: All cheques and correspondence should be addressed to Micro Haus Ltd

### Ordering Information

Tel: (0452) 371707

Fax: (0452) 610022

Write: PO Box 149  
Gloucester  
GL3 4EF

We accept payment by  
cash, cheque, Visa and  
Mastercard.

The price for Volume 2 is:  
UK - £88.00 inclusive  
EEC - £80.00 inclusive



## The Best CD-ROM Bundle Available

Searching for the best **Only £320**  
way into CD-ROM?  
Then look no further! **+ VAT**

For a limited period only we are able to offer the GenStar 2000 External drive and SIX free software titles for the incredibly low price of £320 plus VAT and delivery.

The software titles included are:

- Mammals - A multimedia extravaganza of picture and sound
- Illustrated Encyclopedia - THE learning tool for all generations
- World Atlas - The globe at your fingertips
- Times and Sunday Times - The Gulf War edition
- Information World Review - Featuring the SimpleFace system
- Micro Haus General Shareware Volume 1

The final disk is the Micro Haus General Shareware Volume 1, a world class product which enjoyed huge success in the CD-ROM arena. Containing 10,000 files, it features some of the best Shareware and Public Domain software ever to be published. It is probably the best method of reviewing software on a 'try before you buy' basis.

**Six Free Titles!**



# SPECTRUM

- Make Music - Metronome routine and Writer club
- New SAM Coupé adventure club
- Two Spectrum publications bite the dust

## MUSIC ANONYMOUS

Attention Speccy musos! If you're scoring a sonic masterpiece with the help of the superb music creation utility, *Music Writer*, here's a club, that you'll want to be seen at.

Die hard composer folk can find solace and fellow addicted users with the formation of Music Writers Anonymous. This is a new club set up by author Gary Rowlands for everyone using *Music Writer*. MWA provides, free of charge, a swap shop for your MSC and compiled music files.

There's no membership fee and sets of around eight songs are being made available for a very reasonable £1 on tape and £3 on disk.

Sounds like a good idea to me. Contact: G. Rowland. PO BOX 49, Dagenham RM9 5NY for more details.

## TICK TOCK

On a similarly musical note (and pathetic pun) here's just the thing for Spectrum owning musicians. The very clever Calum Benson of Hamilton supplied me

with the following excellent little program.

It's a three line metronome that's easily amplified through a hi-fi and provides as many Beats Per Minute as you want.

Simply enter the number of beats required when prompted.

```
1 INPUT "BPM:";BPM
2 OUT 254,16 : GOSUB 3 : OUT 254,0 : GOSUB 3 : GOTO 2
3 FOR I=1 TO 11200/BPM : NEXT I : RETURN
```

Calum says "astute readers will soon notice how to have alternating border colours if they feel so inclined and any other improvements will probably require modification to the delay loop (line 3) but as it stands, 11200 is as accurate as makes no difference."

Thanks for sending it Calum. Have you got a short(ish) Speccy routine that the rest of us would find useful? Send it in to Robin Alway, Spectrum Column, *New Computer Express*, 30 Monmouth Street, Bath BA1 2BW. Ta.

## NEW PD SOURCE

News of the decidedly good variety! A new Spectrum Public Domain library has come into being.

Chief librarian of Propac PD, Alex Kinch has already got some pretty well stacked shelves with around 70 titles at last count covering areas as diverse as games, communications, programming and cocktail making. By the time you read this he should have lots more though, including the now deceased Speccy Sector's collection.

Like all good PD librarians of course he wants more and won't rest until he gets it! Have you got any programs you would like to be available cheaply to fellow Spec chums, without copyright restrictions and basically, be of interest to lots of people? Write to Alex Kinch at 153 Pickhurst Rise, Bromley, Kent BR4 0AG or phone him on 081 777 6241 (After 7pm weekdays and anytime weekends.)

Propac's first catalogue should be out soon and I wish them good luck and look forward to sampling some good PD soon.

## SAM UNITED

As far as I know there's only a few adventure style games available for the SAM so it's perhaps a tad surprising to hear about a SAM Coupé adventures club.

If anything it shows the enthusiasm of founder members Phil Glover and Dave Whitmore. The aim of the club,

Phil tells me "will be to stimulate and encourage adventuring on this fine machine".

Due to the, ahem, slight shortage of Coupé specific adventures, any suitable Speccy games that run on the SAM will be mentioned in the club's disk magazine that the adventurous pair have already started writing.

Before officially launching the club however, Phil wants to see if any other people are interested in this venture. As he says "Even if there are only half a dozen of us, it will be worthwhile. At least we could moan about the lack of software at the moment!".

SAM adventurers interested in this idea would do well to contact Phil Glover at 43 Ferndale Road, Hall Green, Birmingham, West Midlands B28 9AU.

## GOODBYE ENIGMA

The rumours of a few months ago are now unfortunately fact. *Enigma Tape Magazine* is deceased.

Here's Jon Rose, on behalf of the ETM team to tell you why: "I am writing to you to let you know of the untimely death of *Enigma Tape Magazine*. It passed away peacefully a few weeks ago and no flowers should be sent. Donations to the above address.

"Seriously, Graeme has gone off to college, Hamish is working on a new project. I'm going to try my hand at some more general writing work and the rest

Continued on page 34 ►

## Don't buy a High Resolution Monitor

until you've checked out **The Monulator**, an incredible new software utility which turns **any** TV or colour monitor into a genuine mono monitor capable of displaying **every single pixel** of the ST's superb High Resolution screen.

**Run the wealth of ST monochrome software, using your existing TV or monitor, with no loss of display quality!**

All ST professionals agree that a high resolution monitor is essential for serious use. The Monulator is a direct replacement for the Atari SM124 monitor in a complete, easy-to-use package. No special hardware is required. What's more, The Monulator has features the SM124 can only dream of (for example, a green screen mode!)

Compatible with: Calamus... Cubase... Proflight... Calligrapher... Signum... Dynacal... Hyperpaint... WERCS... Degas Elite... Steinberg Pro24... Word-up... DevpacST... QuickST... BeckerCAD... MegaPaint... The list goes on...

The Monulator is also compatible with the entire Atari ST range, from the 520 STFM to the Mega STE!

### Attention Users of PD/Shareware Mono Emulators

Does your current mono emulator run slower than a soporific snail? Are you fed up with having to decide everything at boot-up? Can your eyes take much more of the fuzzy icons and unreadable text? **MORIARTY SOFTWARE has the answer: THE MONULATOR!**

The price? Look through this magazine and you won't find an SM124 monitor for less than £120. A software monitor comes a little cheaper. The complete Monulator package, including documentation, postage and FREE Technical Support, costs just £19.95 (Overseas add £1)

Available direct from MORIARTY SOFTWARE,  
1 CEDAR CLOSE • LANGLEY GREEN • CRAWLEY  
WEST SUSSEX RH11 7SB • Tel: (0293) 539215.

Credit card orders to Goodmans International on (0782) 335650.  
For further information please send a decent-sized SAE.

ST Format rated 87% Latest release now Version 1.8



## NBS PUBLIC DOMAIN

NBS

Shareware & Licenceware for the Amiga

NBS

1 CHAIN LANE, NEWPORT, ISLE OF WIGHT, PO30 5QA  
TEL: (0983) 529594 FAX: (0983) 821599

### GREATEST DEMOS

D 033 TOMSOFT: TRIP TO MARS  
D 074 VECTOR TUNNEL  
D 091 FILLIT THE FISH  
D 153 PUGGS IN SPACE  
D 190 RSI CEBIT plus more  
D 225 HORIZON MEGADEMO  
D 259 PHENOMENA ENIGMA  
D 261 SIMPSON'S DEMO  
D 295 TOMSOFT: VIRTUAL WORLD  
M 269 ALCATRAZ MUSIC  
M 316 LSD: DON'T PANIC

### AMAZING GAMES

G 107 STAR TREK (2 disks)  
G 133 GAMES COMPO 1  
G 142 GAMES COMPO 3  
G 170 MEGABALL Breakout  
G 175 CUBULUS Rubic puzzle  
G 179 LLAMATRON  
G 187 SUPA SKODA CHALLENGE  
G 195 POM POM GUNNER

Sorry, no descriptions for the above disks, but they are a selection of the very best in PD for the AMIGA. Full catalogue available. Please send SAE, or include £1.00 for Cat. Disk.

### UTILITIES

U 225 AMIBASE Database  
U 233 UEDIT Wordprocessor  
U 611 MED v3.11b  
U 616 AMIGA FOX Basic DTP  
U 619 MESSYSID Amiga to PC  
U 629/30 COMMS Compilation  
U 641 to U 655 CLIP ART  
Massive 15 disk collection  
U 645 24 PIN PRINTER FONTS

U 610 VIRUS TRACKER £1.50  
Beginners guide to virus and how to detect them safely!!  
inc. NUKE the new virus killer

Also available: FISH, AMOS, T-BAG Glamour selection. Commercial Software, Blank disks, accessories, Cables, ribbons etc.  
MODULATOR EXTENSION KIT £10.99  
Moves that awkward modulator!

NBS Public Domain £1.25 per disk  
Two free with every 10 ordered!

Please make cheque/PO payable to NBS, or phone in with your order. Access and Visa welcome.

**NBS - Not the cheapest, but still the best!!**



# MACHINE SPECIFICS

of the *ETM* team have gone off to do their own thing. Can I take this opportunity to thank, on behalf of all the team, all those people who bought the mag and said such decent things about us and also all those people on the 'proper' mags (yourself included) who gave us such great reviews. Goodbye and thanks for all the fish (!)."

Sniff. *ETM* was undoubtedly one of the best Speccy publications. It will be sorely missed.

## ...AND CRASH

Farewell then *Crash*. Newsfield's

bankruptcy means the end of the long running Speccy mag that at one time was the best selling computer title in Britain.

*Crash* was an important organ in its heyday; scrupulously fair when reviewing games, catering for the broad base of the Speccy owning community and encouraging reader interaction whenever possible. Although those days were long gone, *Crash* still sold in reasonable numbers and it would be nice to see the title relaunched by another publishing house. If that doesn't happen though, may it rest in peace.

Robin Alway

## POKE IN THE EYE

Only a few pokes and cheats for you this week but you can get hold of a whole tome full more of the things from regular column sneakster, Alan Johns (42 Aytoun Drive, Erskine, Renfrewshire PA8 6DE).

His new Multiface poke and cheat book is out now and costs £5 plus A4 SAE (or £1.50).

Knowing Alan's poking abilities intimately it's sure to be pretty authoritative.

Here's something to be going on with though:

*Untouchables* - 28766,201 - No timer

*Tornado ECR* - 54179,0 - Lives

*Helter Skelter* - 36936,0 - Lives or -42194,33 - Lives

*Robocop 2* - redefine keys as MUSTULE. When playing hold down GTI to skip a level

*New Zealand Story* - Type FLUFFY PHILIP for lazars and lives.

## THE UNTOUCHABLES



● If you've run out of time, then our *Untouchables* poke is the answer

# CONSOLES

- Yanks come up trumps with Turbo-Grafx adaptor
- Experience life as a big, blue blob in *JerryBoy*
- A dazzling cornucopia of games from Konami

## TURBO CHARGED

There have been a number of adaptors for consoles in the past so you can run certain games on different machines, but unfortunately, there hasn't an adaptor made which can run American Turbo-Grafx-16 games on the PC Engine.

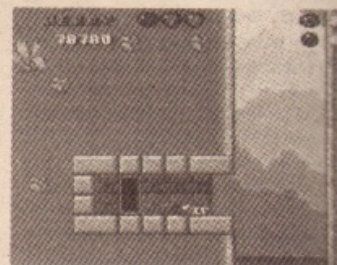
However, the lucky Yanks can have it the other way round, as you can now pick up an adaptor to run Japanese cards on your American machine for about £65.

So, if you're thinking of buying a PC Engine, consider a Turbo Grafx-16!

## SILLY PUTTY

The strangest game this week comes from Epic/Sony called *JerryBoy* for the Super Famicom. You have been turned into a bright blue blob by a nasty magician and must travel across the land to find the evil sod so you can return to your former self.

The blob can slide around, jump, squash himself or elongate, stick on to walls and ceilings, and when located, fire balls and bombs. Up against you are



● *Jerry Boy* - to avoid lava you have to launch yourself and stick to the right wall

some very dangerous hazards including negotiating be-spiked sewers, traps, icy slopes, plus mice, birds, bugs, penguins and various other creatures - however, like *Mario*, you can jump on to them, and squash them, although certain nasties really must be avoided such as the moving flames.

Reach the end and you must face the enemy boss. The first is a large

# COMPUTER REPAIRS AND UPGRADES



## ● COMMODORE ● ATARI ● AMSTRAD ● SINCLAIR ● IBM ●

- Commodore registered, Amstrad authorised
- Fixed prices on many machines.
- Most computers should be repaired 24hrs from booking in
- Over 3500 square foot engineering complex at your disposal
- First class technical advice available from over 20 technicians/engineers

Amiga 500.....	£44.95	→ (£25 additional premium if disk drive unit or keyboard are not repairable and require complete replacement)
Atari 520 STFM.....	£15.00	→ Diagnostic fee plus quote (Typically £45.00)
Commodore 64.....	£29.00	
Spectrum 48K.....	£21.00	
Spectrum +2.....	£29.00	
Spectrum +3.....	£35.00	
Spectrum 128K.....	£24.00	
Amstrad 464.....	£32.00	
Amstrad 6128.....	£36.00	
IBM/Clone.....	P.O.A.	
Other Machines.....	P.O.A.	

## PREMIUM SERVICE

To utilise our premium service simply send or hand deliver your machine to our workshop address below, enclosing a fault description and daytime telephone number plus payment, and we will do the rest. Please add £5.00 if you require 24hr to your door courier or else contract parcel post will be used.

(W.T.S. reserve the right to refuse machines which are in our opinion beyond economic repair - Handling charge may be applicable)

**TEL: 0582 491949 (4 lines)**

**W.T.S. ELECTRONICS LTD, Chaul End Lane, Luton, Beds., LU4 8EZ.**



chicken, which charges for you. *Jerry Boy* is certainly a very different game, fairly playable, and quite difficult at that.

## BOMB OF A GAME

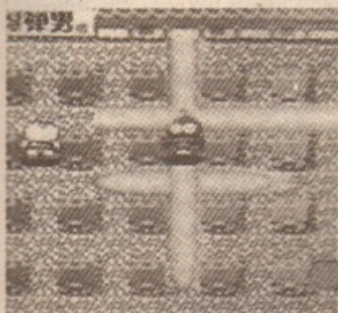
The super duper PC Engine game from Hudson Soft, *Bomber Man*, has been snapped up by Irem, and will be hitting the arcades real soon.

Unfortunately, the multi-player game is only two players, but there are two other computer opponents to battle against, so it's not that bad. Irem has beefed up the graphics, but all the playability of the engine game remains.... I can't wait!!

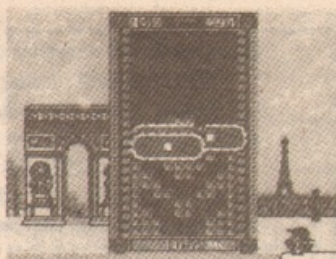
## MORE FROM KONAMI

Latest from the games expert company Konami for the 8-bit Nintendo will be a conversion of Atari Games' strategy arcade game, *Rampart*.

If you haven't played the coin-op, it's



● Sharpen up your skills of precision with the *Bomber Man*

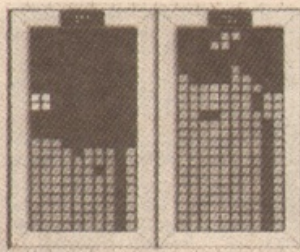


● Bomb until your heart's content in *Tetris 2+ BomBliss*

goes like this. You have a castle with a wall around it, and can place a number of cannons inside. If you are playing with another player, they have the same too. You then have a cursor and have a few seconds to target your cannons at the opposition's surrounding wall, to cause as much damage as possible. Then, you have a few seconds to fill in the gaps of your damaged walls by the computer dishing out *Tetris* like shapes. If you don't completely surround your castle, then it's game over.

*Rampart* should be available in Japan early November. Also from Konami will be *Konamic Golf* for the Game Boy, again available in early November, and this looks like a Golf game really worth getting. Although it's basically just a top-down view over the course, control of hitting the ball is based on their coin-ops, where you can set your stance, change which club you want to use, etc.

*The Russians are Back* the biggest



● *Tetris 2: Two player action* as on the Game Boy

game to to hit Japan on the 8-bit Nintendo in October is bound to be the release of *Tetris 2* comprising *BomBliss*. The game again is by those crazy Russians, who incidentally don't live in the USSR, but in the USA working for Ascii, so weren't affected by all the going ons that've been happening in their home country.

*Tetris 2* is basically the same as the original, but more like Game Type B on the Game Boy version, as you have a lot of random blocks at the bottom of the

column, and you must clear them. However, as time goes on, more random blocks appear pushing you higher, so you have to work even harder.

*BomBliss*, as you might guess from the title, is *Tetris* with bombs. It's like the above, but some blocks contain pink squares (bombs) and when a line is created with them in, they explode, taking out blocks around them.

If bombs are close to exploding bombs, they will also go off causing a chain reaction, so some strategy is required to position any shapes with bombs carefully.

The game includes a two player option, a construction kit, and more, and will be released by Bullet Proof Software.

## GAME MUSIC

Here in the UK, we all know the likes of Rob Hubbard and Martin Galway as the best computer musicians in the business, but right over there Japan, there's only one real mega musician - and that is Yuzo Koshiro.

Anyone who has heard the fantastic music on Megadrive games, *Super Shinobi* and *Bare Knuckle*, or *Actraiser* on the SuperFamicom will know this guy has talent.

Well, by the time you read this, Yuzo will have two music CDs out. One is called 'BareKnuckle', and the other is 'Synphonic suite from Actraiser', both featuring music from the game. Both are on the Alfa label, so check out your local music importers.

Onn Lee

## MEGATIPS

Outrun on the Megadrive is fairly easy to complete, so how about some obstructions?

First get into the high score table, and enter 'ENDING', and you'll get boardings in the roads with the gamecredits!

# COMPUTERS IN WEST YORKSHIRE

## FREE COMPUTER!

When you buy our 1000 game PC shareware pack for **£169.00 + VAT** we will give you the following: a brand new PC200, PC compatible (12 month warranty) with mouse, MS Dos 3.3 and manuals, Gem, TV modulator etc. Everything you need!

## TRADE-IN DEALS!

We have new and used PC systems available for trade-in against your existing computer. Telephone for up to date details of systems from **£150.00** upwards.

## 15000

## PROGRAMS!

We can supply software for the most obscure of machines on disk. Telephone for details

## WORD PROCESSING SYSTEMS!

Branded PC Wordprocessing systems (refurbished). Everything you need to revolutionise your home or office inc. free telephone support. **Just £250.00 + VAT**

## CONTACT OLIGRAM TECHNOLOGY

# 0977 617077

(Open Late)

Oligram Technology is part of the Olivetti PC User Group. Owners of all PC's can now avail themselves of technical helpline services and software support. Send for list



# EXPRESS SALES

## ◆ ST

● **MULTISYNC MONITOR.** Sony "Trinitron", super VGA/EGA/CGA, 0.26 Dot, similar to NEC 3D/Taxan 770+ only better. Brand new, never used. £350. Tel: 081668 6077. Croydon.

● **TRIANGLE** Elite double sided external drive, with built in track counter. First £120 will secure. Ideal for all your disk backup needs. Citizen 1200 printer, not working. Good DIY job. £55 o.n.o. Phone 0563 40129.

● **ST WARGAMERS** fanzine "Hidden movement". Send £1 for issue one to P. Raeburn, 360 Windmill Road, Ealing, London, W5 4UR.

● **ST PD** from £1 per disk! For the latest + disk catalogue send £1 to £25 Windmill Way, Reigate, Surrey, RH2 0JB.

● **TOTAL PD.** For the ST. Send a SAE for your free catalogue to: 27 Stanmer Villas, Brighton, East Sussex, BN1 7HQ.

● **ATARI STFM.** lots of software! Joysticks and mouse, monitor lead. Also ST/Amiga Format from issue eight. All £250. Telephone 0279 726638.

## P.O.V.

Compacted demos from Europe's top demo packers. Latest releases from POV plus other ATARI ST pd at realistic prices. Only £1.50 per disk.

Send £1 for disk catalogue to:

**TOWER PD. PO BOX 40.**

THORNTON-CLEVELEYS, BLACKPOOL  
LANCASHIRE. FY5 3PH.

● **ST ORIGINALS.** Italy 90, GFA Basic V2, many more. £10 each. Magazines and cover disks, half price. ST Format, ST Action, The One, Zero, ST/Amiga Format. Also 520STFM. Good condition. £200 to secure. Phone 0563 40129 after 6pm.

● **ATARI STFM.** three joysticks and loads of software and add-ons. Very good condition. All for £199 o.n.o. Plus Star SR10 printer worth £200, for you £40. Phone Adam 0932 243186. Walton on Thames.

● **ATARI ST 1/2 meg external drive.** £60, plus Epson MX80 9 Pin DMP full working order. £60. Tel Newquay 0637 850117.

● **SIGNUM 2.** £80. Word Up by Neoccept. £40. TOS 1.4 ROM set (six chips). £40. Abacus books (ST) various. Phone for details from £8. Tel 0322 662747 ask for Pete.

● **BATMAN CAPED CRUSADER.** Atari ST disk. New/unwanted: welcome any small sensible offer. (SAE enquiries). Letter replies only sorry no phone callers. Charles Trager, 7 Grantley Street, Glasgow, Scotland, G41 3PT.

● **ATARI STFM** one meg drive, two joysticks, mouse, 70 games, utilities, good condition. Sell for £220 o.n.o. or swap for PAL Famicom with games. Phone Steve on 091 5810364 after 5pm.

## RAGNAROK SYSTEMS

31 RIVERSIDE  
EGHAM SURREY  
TW20 0AD.

286/16 COLOUR VGA PC.....£2689  
386SX/16 COLOUR VGA PC.....£2785  
386/25 COLOUR VGA PC.....£2940

3.5" BULK DISKS  
20x ..38p ea  
50x ..37p ea  
100x ..35p ea

AMIGA A500 BASE PACK £295.00  
AMIGA A500 CARTOON CLASSICS £249.99  
AMIGA A500 CLASS OF THE 90's £429.00  
ATARI 520 ST-FM DISCOVERY £262.99  
ATARI 520 ST-E DISCOVERY XTRA £289.99  
ATARI 1040 ST-E FAMILY CURRICULUM £349.99  
SEGA MEGADRIE £117.99  
SEGA GAMEGEAR £92.99

• JOYSTICKS  
• MICE  
• PRINTERS  
• RIBBONS  
• CABLES  
• UPGRADES

SOFTWARE -- PC, ATARI, AMIGA UPTO 30% OFF RRP

**0784 435568**

ALL PRICES INCLUDE VAT & DELIVERY

● **ATARI 520STFM** 1 meg drive, loads of games, demos, magazines etc, together with mouse and joystick. All in good condition, only £199 o.n.o. or exchange for anything Atari Lynx related. Phone Trevor after 6 on 0438 742998.

● **ATARI 520STE.** 1 meg memory upgrade, all manuals, mouse, basic language disk, 1 meg drive, all cables inc Panasonic KXP1180 9Pin Dot-Matrix printer and cable. Sell for £520 o.n.o. For more information call 081 681 1940 after 7.30pm.

### ★ MONITOR AND GAMES★

Philips CM8833 excellent condition, hardly used, £150. Games good selection £50 the lot.  
Tel Alan (after 7 pm) 0203 33-3334

● **ATARI 520STFM.** good condition, single sided internal disk drive. Joystick, mouse, some games etc. All for £170. Phone 0733 79112 after 4pm.

● **ATARI STFM.** 1 meg RAM, 2-disk drives, Philips colour monitor, over £600 worth of software, books, magazines and accessories, only £450 o.n.o. Phone Shane on (0638) 665194

● **ATARI 1040 STFM.** SM124 mono monitor, 14" colour portable monitor, external drive, business software, games, disks and box, joystick. £495. Call Chris on 0285 821543. (Will separate).

● **ATARI 520STFM.** 1 meg colour monitor, mouse, joystick, software, magazines, disks. All boxed, mint condition. Andy 0893 543775 (eves).

● **UPGRADE** your 520 STE to one meg. Two 256K Simms for sale. £23 including fitting instructions p+p. Phone 0268 543180.

● **ATARI ST PD** software. Nearly 600 titles available. Prices from 90p For your copy of our custom written catalogue disk, send 50p to: N. Klee, Jennix PD, 66 Abbey Road, Strood, Kent, ME2 3QB

● **HARD DRIVE** 42 meg cased PSU etc. ready to run, supra software 2400 backed clock included, £280. Supra 2400 modem as new unused, boxed. £100. Phone after 6pm. 058283 3411.

● **WANTED** ST contacts to swap PD and programming hints and tips. 100% reply to all. Write to William Cartmill, 1 School Road, Rathfield, Co. Down, Northern Ireland, BT34 5QA.

● **LATTICE C** version 5 plus K and R book on Ansil C. £50. Condition as new. Phone Leicester (0533) 665874.

Cumana A500 external drive -- the best! £59

STE SIMMS 1meg £30 1/2meg £17

3.5" Disks 880k GUARANTEED error free 31p

A500 upgrades 1/2 meg £22 with clock £27

ENTERPRISE DISKS LTD

9 EAST SILVERMILLS LANE EDINBURGH EH3 5BG

Please add £2.90p p&tp per order. Same day dispatch

## ◆ AMIGA

● **AMIGA OWNERS:** There has been a new group of PD libraries formed called "Real PD", which means that this library follows a set of instructions to have 100% quality service. To join, ask member for form. Tel (0529) 303351.

● **DEVPAC 2** Ver 2.14 machine code assembler/disassembler cost £59.99. Will sell for £30 including p+p and recorded delivery. Data! serial lead. £5. Also PD swappers wanted. Tel Tim (0283) 65797 (after 6pm on weekdays).

● **TWO AMIGA DTV** books. £12 inc postage. Paul 0332 41630 after 6.30 PS that's £12 for both, not £12 each.

● **AMIGA A501** Ram clock expansion £20. Amiga Basic Inside and Out, plus disk £10. Amiga Transformer, PC Emulator, complete with instruction manual £10. Phone Paul Bolton (0204) 55105

● **AT-ONCE** AT Emulator for sale. Good condition. Brilliant for all PC software on the Amiga. Ring James soon for bargain at £150 o.n.o. on (0730) 64145. No longer needed. Also DMP 4000 printer. £70 o.n.o.

● **AMIGA 500.** 2Mb RAM, 2nd drive, Star LC10 printer, books, games, blank disks, joystick, stereo lead, version 1.3, six months old. £580. Tel: Richard (0271) 865690.

● **AMIGA 500 +1/2 meg upgrade.** Cumana 3.5" drive, A590 hard drive + lots of software, mouse, joystick. All less than 6 months old. £600. Call (0553) 769914 after 5pm.

● **A500.** meg, 2nd drive, hardware copier, joystick, spare power pack, computer desk, three books, software, disk box, magazines, disks, cost over £1000 asking £600. Buyer collects. Tel: (0325) 465711.

● **AMIGA A500** version 1.3 1/2 meg upgrade, external drive, colour television Serial cable, joystick, £400 of software including Shadow Of The Beast, Falcon UMS II, Devpac II, Deluxe Paint book. £450. Phone (0395) 273386.

● **AMIGA** software, Monster Pack Of Infestation, Shadow Of The Beast, Nitro, £8. Obitus and t-shirt, £9. Obitus, £7. Awesome, £6. Menace, £3. Atomino, £7. Armour Geddon, £10. Tel: 0245 352538. Norman. Also manual for basic etc.

● **AMIGA 500** 1 meg memory, second disk drive, AT Once PC Emulator, plenty of games, plus Kindworts, also IBM boot disks available £600 ono. Telephone Ashley (02302) 4986 home or (0234) 224308 work (Bedford area)

● **ATARI ST** 4Mb RAM internal drive plus Star LC200 colour printer and software still boxed, as new. £550 o.v.n.o. Phone 0705 825163. Joystick, mouse and paper included.

● **MEGA ST.** 2.5Mb RAM, complete with SM124 mono monitor and SM1224 colour monitor, sound expander board fitted, some software, excellent condition. £765 o.n.o. Contact Jim on 021 474 3050 (evenings).

● **SPECTRE GCR.** £300. Reflex Graphics card, £200. Vidi ST, plus Vidi RGB, £85. Multiface, £20. Blitz, £10. Daatascan A4. £400. Phone after 6 or weekends. Paul, Derby. (0332) 41630.

● **16 BIT** Sega Megadrive including all leads and joypad. JAP version, £90, also external disk drive for ST, £40. Phone 0889 583057 ask for Wayne.

● **CZ2305** casual keyboard, fully midi compatible. 1000's of sounds, 100 voices, 20 rhythms memory etc. Wonderful instruments, boxed as new. £75. (49 keys). Tel Woking (0483) 764857.

● **HARD DISK** ATARI SH205 20 meg plus PD software. £215. Seagate ST238R, 20 meg hard drive for use with host adaptor. £79. Compilation, £8. Speedball 2, £10. Tel: 0277 (Brentwood), 226621.

● **ATARI 520STFM** with DS/FDD, 512K RAM, manuals, magazines, serious, books, disks, etc. Worth £1200+. Sell for £300 o.v.n.o. Tel (0582) 607150 after 4pm and ask for Michael.

● **ATARI ST** games for sale. Batman, Strider, Toobin, Rick Dangerous. All boxed originals, £5 each. Triad Vol 2, £10. Speedball without box, £3. Tel 0773 747987 or the lot for £25.

● **JENNIX PD\*** (over 600 Atari titles) prices from £1, superb cat-disk, easy to use. Call Nick (evenings) on 0634 723659.

### ★ DO YOU WANT DEMOS? ★

We have got demos! Megademos, Mastersound Demos, Vector Demos, Cuddly Demos. For an amazing catalogue disk just send a blank disk to: **State 808 PDL, 3A Old Lanark Road, Carlisle, Scotland ML8 8HW**

● **ATARI 1040 STFM.** Star LC10 printer, 'Microsoft', word processor, VIP Spreadsheet, 'Mini Office', presentation graphics, plus games, software, introduction to Midi Programming (book). All equipment in original packaging £390. Phone Jon on 0843 41102 after 6pm.

● **20MB** hard drive for Atari ST. £150 PFM. £10. Various original games. £10 each. Yamaha Tape Sync. £50. 256K expansion card for PC/XT. £15. Phone 0225 333789.

## STATE SOS PDL

The best source for Atari ST demos - we sell only the best ST demos on the market - inc demos by TLB, TCB, TEX, OVR, ULM!! We also specialise in Soundtracker... Also amazingly cheap!

Small selection.....NCE 01 - The Cuddly Demos, NCE 02 ULM Mega Demo, NCE 03 - The Stupid Demo Demo (great!!) NCE 04 - So What Demo, NCE 05 - What A Heck Demo, NCE 06 - The Delirious Demo II, NCE 07 - The Masterful Demo.

Surely you need a better PDL?

For a detailed explanation send a blank disk for a brilliant disk catalogue to:  
**3A Old Lanark Road, Carlisle, Scotland ML8 8HW.**

● **ATARI ST** with joystick and few games. Quick sale. £145 or swap for Amiga A500, plus cash. Phone 081 882 5953 anytime.

● **FOR GREAT VALUE** Atari ST PD. Send £1 for the Power PD disk catalogue. 25 Windmill Way, Reigate, Surrey, RH2 0JB.

● **GAMES FOR SALE.** For details send SAE to 274 Mackets Lane, Halewood, Liverpool, L25 9RT or phone Andy on 051 428 4930.

● **ATARI 520STFM** for sale. £900 worth of software, good condition, 1 year guarantee, only £350 o.n.o. Top games titles like Lemmings, Turrican 2. For more details ring Ali on (0274) 725636. Buyer collects.

● **ATARI ST** software. Timeworks DTP, £35. Swiftcalc, £13. Datamanager Professional, £16. All with full instructions. Tel: Jim 0232 794812.

● **ATARI ST** Eprom programmer/ROM drive fits in to cart port and can act as hard drive. Cost £180. Sell for £90 o.n.o. Tel: Pete 0322 662747.

● **ATARI SOFTWARE** Timeworks DTP. £35. First Word Plus v3.2. £25. Superbase Personal, £15. Degas Elite, £10. Scrabble, £10. Phone Port Talbot. 0639 884603.

● **WANTED** Amiga hard drive, also public domain for sale, over 1200 disks at 69p per disk. Send £1 for list on disk to Chris, 23 Stanwell Close, Wincobank, Sheffield, S9 1P2 or Tel 0742 422000 anytime.

● **AMIGA 500** half meg upgrade, A590 20 meg hard drive, loads of software, manuals, modulator, £500. Ring Tom on 08642 677632 between 5-11pm. Please o.n.o. Will sell separate.

● **A590** 20 meg hard disk, fully populated with 2 meg or memory, good working order. £275 o.n.o. Tel: (0272) 644934 (Bristol).

● **AMIGA A500** 3Mb +2nd drive, + sound sampler + sound blaster + software, inc D-Paint, Fanta Vision, KSpread, Superbase, Personal + games and PD. £550. Phone 0264 365784 after six. Ask for David.

● **AMIGA PD** 50p. catalogue disk 75p. Programmes required for library in return for payment. SAE to M. Daniels, 13 Churton Road, Rhyl, Clwyd, LL18 3NB, or tel 0745 343044.

● **DR BUTCHER** is back. Wanting Amiga contacts. Send lists to Station House, Llanelli Hill, Waunavon, Near Abergavenny, Gwent, NP7 0PU.

## Sharow Electronic Supplies

COMPUTER SALES - REPAIRS

Access/Visa most welcome

Phone us on 0765 607887 anytime



# EXPRESS SALES

● **WANTED** Amiga 500, must include power pack, modulator and mouse, pay around £140. For details, Richard Barton, 6 Charles Avenue, Southport, Merseyside, PR8 3ET or phone 0704 74172 evenings.

● **AMIGA PD** 99p a disk inc P+P. Also PD swaps welcome. Mega drive carts gameboy, Lynx carts wanted and for sale. Freeway PD, 4 Tarmount Lane, Shoreham, Sussex, BNH 3 6DA. Phone 0273 440491.

● **REAL TIME** colour digitiser, framestore and joystick. The quality "Superpic" by JCL Business Systems. Cost £500 new, sell for £250. Amiga 1081 colour monitor, similar to Philips 8853, but mono sound. £115. Mike, evenings. Leicester LE5306.

● **AMIGA 2000**, 2nd floppy, WB1.3, 10845 monitor, D-Point 3, Digipaint 3, books, magazines + miscellaneous, other software. £650. Buyer collects. Tel: 081 748 6008.

● **AMIGA 1Mb**, 2 mice, joystick, much software, books, magazines, leads, 60 disks, £300 o.n.o. Phone Mark. 650493. Buyer collects S. Wales.

● **DIGIVIEW GOLD** v4.0. £60. Fifty blue DS/DD 3 1/2" disks: £20. Write to: Paul Strong, 20 Coolgardie Road, Ashford, Middlesex, TW15 1ES.

● **AMIGA A590** 1/2 meg memory upgrade Cumana disk drive, Naksha and Commodore mice, mouse mat, four player adaptor, joystick, Deluxe Paint II, 40 games, Work Bench, TV modulator. Phone 0734 423449. Anytime £600 o.n.o.

● **FOR SALE** (or swap) 3Mb (1Mb Chip) A500, 60Mb A590, extra drive + other stuff, swap for a B2000 with 40Mb HD. Phone Neil Mcrae on 031 463 6274. Between 7pm and 9pm. Monday - Friday.

● **SAMPLER** for Amiga, boxed includes hardware and software, good condition. I will sell for £15. Phone (0705) 582729. Ask for Marcus after 6pm.

● **MASTER SOUND** sampler, still under guarantee. £20. Roland D-5 Midi Synth Multi Timbral with sampled drums. £350. 0623 861158.

● **ALSO CDL** 5 meg RAM 20 meg hard disk, Fatter Agnus, £850. Lots of extras. Tel: 0253 724607 (Blackpool).

● **AMIGA PD** 99p a disk inc P+P. Also PD swaps welcome. Mega drive carts gameboy, Lynx carts wanted and for sale. Freeway PD, 4 Tarmount Lane, Shoreham, Sussex, BNH 3 6DA. Phone 0273 440491.

**C.M.D.**  
UNIT H (DEPT CE)  
PURDON IND. EST.  
GLASGOW G11 6AB

**SPECTRUM, AMSTRAD, COMMODORE**

THE LARGEST & RAREST TITLES.  
SEND LARGE S.A.E. FOR LISTS

**SCOTLAND'S NO.1**  
FOR ALL YOUR COMPUTER NEEDS!

◆ PC

● **AMSTRAD PC3086** 3.5" twin disk drives, b+w monitor, 3.3 MS/DOS new model, excellent condition. £475 o.n.o., also deskmate package on 5.25" disks with manual suitable for any IBM compatible model. £40. Tel 0922 33183.

★ **ROM SHAREWARE** ★  
10,000 PC titles to choose from. Prices from £1.50!! Call for free catalogue disk. 0292 671638 6pm-10pm.

● **AMSTRAD PPC 640D** portable twin drive, includes mains adaptor, modem, case, manuals, Sage review 3 and other software. £330. Offer considered. Phone 0308 862426 (evenings). Ask for Robin.

● **AMSTRAD CPC6128** computer with colour monitor, plus over £200 of games software, bargain at only £300 complete o.n.o. Also many extras unable to list please write for details to Jonathan Hawkins 155/2 RAF Halton, Aylesbury, Bucks, HP22 5PG.

● **FED** up with your Amiga? I'm fed up with not having one. I'm willing to swap my entire Batman Comic, Graphic Novel collection for you A500. Write to S. Johnson, 2 Angel Close, Dunfield, Cheshire, SK16 4XA.

● **AMIGA PD** disks from under £1 each. Loads available, deems, games, musics, graphics, serious, etc. Send SAE to: J. J. Meachen, 59 Lee Road, Harwich, Essex, C012 3SB.

● **AMIGA A500** and lots of software for sale. £250. Phone Angus on 0847 63476.

★ **THE DISK ISSUE FIVE** ★  
Send £1.50 for the latest demos, reviews and utilities!  
S. Lord, 6 Stubbing Brink, Hebden Bridge, West Yorkshire HX7 6LR.

● **AMIGA** video post production kit. A500 +1.5 meg upgrade, external drive, Roogen Genlock. All peripherals, software etc. Call Chris on 0285 821543. £475.

● **SERIOUS SOFTWARE**, £10. Kindwords 2.0., Home Accounts, X-Copy 2. £15 each. Devpac, Rulbyrter. Phone Gan. (0734) 391552 evenings.

*Absolutely ALL hardware, software, games and consoles wanted for cash or exchange. Absolutely NONE refused (also vast selection on sale)*  
*Bring or send by post with S.A.E. for cash to:*  
**Music & Video Exchange**  
**(Top Floor) 64 Notting Hill Gate, London, W11**  
**Tel: 071 727 3538**

**FREE SVGA Colour Monitor + Keyboard**

**£1599**

Vexel NoteBook 386SX-16  
60meg Hard Disk  
1.44m Floppy  
1meg Ram  
VGA BackLite LCD  
Price £1599 + Vat (PP Free)  
Total £1878.83

**GIVEN FREE IN PRICE**  
DrDos 5  
Carry Case  
Ext. Monitor Cable  
Ext. Keyboard Cable  
DrDos Laptop Cable  
SVGA 0.28 dot Col. Mon.  
Extend Keyboard  
1 Year OnSite

**EXECUTEC**  
20A Eastcheap, Letchworth, Herts. SG6 3DE  
Tel: 0462 482755 Fax: 0462 482756

● **AMIGA B2000** plus AT Bridge Board, 40Mb HD 3Mb RAM, 2x31/2" drives plus 51/4" PC drive, hand scanner and parallel switch box. Offers around £1100. Contact Tony on 0582 21673.

● **AMIGA A500** 10845 stereo monitor, extra disk drive, joystick, disk boxes, over 150 disks containing utilities, games and basically any applications, too many to mention. Worth new, £1300. Absolute bargain at £500, no offers. Reading 0734 566487.

● **AMIGA SOFTWARE**, Monkey Island, £15. Prince Of Persia, £15. Manchester United Europe plus Boxing Manager, £17. (Jett). Cyberball, £10. M1 Tank Platoon, £13. Conqueror, £10. Dragons Breath, £10. Emlin Hughes Soccer, £10. All boxed originals. Telephone 021 427 7431.

● **WIN 365 AMIGA** PD disks! Send for free PD catalogue and you will be entered in to our draw. We sell the cheapest PD anywhere in the universe! Contact Perspective PD, 6 Clover Close, Cumnor Hill, Oxford, OX2 9JH.

● **RECEIVE AMIGA PD** before anyone else! Perspective PD have contacts in Holland, Germany, Australia and The U.K. See the newest demos from all over the world! Contact Perspective PD, 6 Clover Close, Cumnor Hill, Oxford, OX2 9JH.

● **MAXX CONTROL** yoke for the Amiga perfect for Flight Simulator, £45 o.n.o. Also jet instrument trainer fully customisable. Boeing 727 Sim for practising instrument flying rare item, £50 o.n.o. Phone Steve Windsor. (0753) 864382.

● **CBM A500** 1 meg upgrade. CM8833 Philips monitor, lots of software and accessories. Cumana extra drive. £500 the lot. Phone 0322 863656.

● **AMIGA 2000** + 1.5Mb 48Mb hard drive, 10Mb PD and shareware, boxes, leads, manuals, plus some commercial software. £1150 o.n.o. Ask for Justin on 081 332 0960 after 7pm.

● **AMIGA PD** to swap, over 500 disks, your list for mine. 100% replies. Simon Cliff, 3 Croft Street, Farsley, LS28 5HA.

● **A590\*** 20 meg hard drive for sale. As new, 6 months old. Quick sale needed to pay for B2000 hardcard. Phone David, 0709 586741 5pm to 9pm or weekend with offers around £180. Deliver in S. Yorkshire.

● **CBM AMIGA A500** with half meg upgrade, and over £1200 worth of games, demos, magazines, inc Turbo Challenge, Indy 500, Xenon 2, Rainbow Islands. Sell for £405, offers welcome. Tel 021 447 7005. All mint condition.

● **CBM AMIGA A500** with half meg upgrade, and over £1200 worth of games, demos, magazines, inc Turbo Challenge, Indy 500, Xenon 2, Rainbow Islands. Sell for £405, offers welcome. Tel 021 447 7005. All mint condition.

● **AMIGA A500** plus 1/2Mb EXP, 2 x joysticks, external floppy disk drive, over £600 of top software, inc Speedball 2, Falcon, Sim City, Populous, many more, all original boxes. £599. Tel: 06267 74795.

● **VIDI AMIGA** Digitiser with Vidi Chrome and Scart lead worth £120. Sell for £50 or £80 with ten Amiga originals games and two joysticks, hardly used and immaculate condition. Phone Mark on 0509 844166 after 5pm.

● **AMIGA PD** exchange. Would you like free software? Then send SAE to Paul, 2 Poltisko Terrace, Penryn, Cornwall, TR10 8PL.

● **ORIGINAL** Amiga software, hardware, books, magazines. SAE for lists. Chris, 3 Albion Terrace, Latham Road, Litcham, Kings Lynn, Norfolk, PE32 2QQ.

● **PODSCAT** Graphics Tablet, boxed with Stylus, pen and Aprodram Amiga software was £255, accept £140 o.n.o. Rob after 6pm. 0277 260587.

● **AMIGA** the best hard disk back up system byte and back £5. SupraRAM 2000 8Mb card populated 2Mb, new boxed guaranteed. £150. Amstrad SM2400 modem nearly new, boxed. Totally reliable with software. £150. Tel: 0692 402927.

● **AMIGA A500** with upgrade, external drive, joystick. Publishers Choice software plus games, extended guarantee. Phone 0543 577819. Staffordshire. £420 o.n.o.

● **ORIGINAL** games. £10 each. Xenon-2, Bloomey, Shadow Of The Beast, Wings, Lord Of The Rising Sun, Chrono Quest, Populous. Phone Gan (0734) 391552 evenings.

● **ORIGINAL** games, £5 each. Batman, Marble Madness, Teenage Mutant Queen, Xenon, Zoom, Tangwood. Phone Gan. (0734) 391552 evenings.

● **COMMODORE A1040** disk drive, £35. Miniscribe SCSI hard disk, £50. Datachat v23 modem, £20. Miniamp 2 speaker, £12. Phone Gan (0734) 391552 evenings.

● **AMIGA 500**, 1 meg + clock, 2nd drive, Philips monitor, Digiview Gold, Sound Sampler, Midi I nterface, Music-X, loads of games, joystick. £800. No offers. Phone (0942 604434).

● **AMIGA PD** 60p a disk. Send £1 for list, and details. Simon Johnson, 138 Guildford Street, Grimsby, South Humberside, DN32 7PW.

● **A590** hard drive for sale. £180 o.n.o. 8 months old. Upgraded to A1500 so no longer required. 20 Megabytes. David (0742) 671655. 5pm-10pm.

● **WANTED** CPC664 computer body for special project. Write giving price required to Mr J. A. Stokes, 7 Ryles Crescent, Macclesfield, SK11 8DD. Tight budget.

● **SPECTRUM +3/2A** printer cable, only £4. Atari II for Spectrum +2, just £5. Roll of approximately 200 tractor feed disk, labels £5. Phone Peter on 031 441 7952.

● **ATARI XL/XE**: Loads of original cassette games for sale from 50p, write or phone for list. Jason Wheelhouse, 10 Sandwith Road, Todwick, Sheffield, S31 0JP. (0909 771707).

● **+3 DISK UTILITIES**: Dice v3.0, £6. DMS V1.1, £6. +3 diary +database, £6. SP7 tape to disk £6.50. Game Hackers 1, £6 all: on disk, originals, latest version, inc p+p, extensive manuals, less than half price D.B.2. £6. See Kobrahsoft adds in most Specty magazines. (£24 the lot). Tel Robert 081 770 3687.

● **SPECTRUM 48K** in Sega keyboard, all leads, PSU and manual with VTY modem, a bargain at only, £63. Phone Trevor Speight on 0942 42314 (office day) or 061 790 5865 after 6.30pm.

● **C64** contributor needed for a new C64 Fanzine anything considered send articles to: C. C. Wilson, 13 Estreham Road, Streatham, London, SW16 5NT. All contributors will be rewarded.

**RED DRAGON SHAREWARE**  
3 OAKLEA COURT, RHYL, CLWYD, LL18 4NP TEL: 0745 338094

\*Free Catalogue on request \*Same day dispatch on orders \*Free advice on all computer matters  
5.25 Disks £1.60, 3.5 Disks £1.90 Payment by Cheque or Credit Card (Telephone orders accepted)  
**SPECIAL OFFER PACKS OF 10 IBM DISKS** 5.25 @ £12, 3.5 @ £14.00 Apple Mac 10 disks pack @ £14  
Hundreds of other disks available for IBM, Atari ST, and Apple Mac  
Shareware is not free, please register if you find the program useful

**Win 3 Applications Pack**  
Checkbook, Almanac, Active Life, Word for Win Macros (2D), Parents, Recipe maker, Noteman, CardFile Utils (2D), Credit Win, Loans Tracker.

**IBM BUSINESS PACK**  
Page Financial Controller (2D), Wampump, PC Write Lite, CheckMate, AsEasyAs, Simply Labels, Easy Project, UK STD Codes, Contacts Manager.

**Apple Macintosh Intro Misc. Pack**  
Biplane sheet, 2 education disks, desk accs graphic prog., anti virus util, word pro utils, laser fonts, plus 2 games disks, loads and loads of prog in total, too many to list.

**Win 3 Utils Pack**  
Screen Peace, Navigator, Bigdesk, Zip Manager, Command Post, Aporia, WinCLI, Win Easy Menu, Folders, Winfiles, plus many, many more.

**IBM Art & Graphics Pack**  
City Desk, Letterhead, PC Illustrator Mapmaker, DanCad, Draft Choice, Free Press, Painters Apprentice, Optics, Graphics Work Station.

**IBM VGA Graphics Pack**  
VGA Paint, VGA Cad, Desktop Paint, SPLOT, VGA Demos (2D), VGA Games (4D) - Mahjong, Bananoid, Shooting Gallery, VGA Jigsaw.

**Win 3 Graphics Pack**  
Paintshop, 2,000 Icons (2D), IconDraw, BMP Mono Clip Art (4D), Screen Capture, Calendar for Corel Draw, GCP, Icon Manager, Gif2Icon, WinFern.

**Win 3 Games Pack**  
Pack of 10 disks with 35+ Games inc: Chess, Backgammon, Xword, Checkers, Cubic, Hextris, Brick, WinPoker, Gravity, Taipei, etc.

**IBM Adult Pack**  
10 Disks of Miscellaneous Programs for the over 18's only. Mixture of Pinups, Animations, and Adult Games.

**On-line** A breakthrough in MULTI-PLAYER entertainment  
Got a modem - Join instantly!  
Playing now,

the award-winning adult space fantasy **FEDERATION II**  
Flying now the Multiplayer 3D combat flight simulator **AIR WARRIOR**.  
COMING SOON....The original, the legendary, the classic **MUD**  
**FREE** Membership as a special introductory offer.  
**LOG ON NOW TO FIND OUT MORE CALL 081-539 6763**  
642a Lea Bridge Road London E10 6AP



# EXPRESS SALES

## COMPUTERS

For probably the best prices and deals on Home and Business Computers, Acorn, Archimedes, Atari ST's, Lynx, Commodore 64's, Amiga's, Amstrad, Star, Citizen, Canon, Panasonic, Sega Consoles, Goldstar. Plus printers, disk drives, monitors, memory upgrades and accessories etc. Great deals on PC's.

\* FAX M/C's \* ANSWER M/C's \* PHONES \*  
Joysticks from £4.99 Blank disks 5.25", 3.5" 3"



### SGM ELECTRONICS

19 Charles Street, Wigan, Lancs, WN1 2BP  
Tel: (0942) 321435 Fax: (0942) 821273  
Mon-Thurs 11.00am - 9.00pm  
Fri - Sat 11.00am - 7.00pm or later  
Repairs to most makes of computers

● **ANYBODY** want back issues of PC Leisure (1-6). Send large envelope with appropriate postage to Raymond U., 52 Garndon Way, Oxtun, Birkenhead, Wirral, L43 2NP. Also PC games for sale. £3 to £5. Send SAE for list.

● **WANTED**, manuals, books, help and advice on using an RM Nimbus PC2 with twin 3.5" floppies running MS-DOS 3.10. Anything appreciated inc very cheap serious software and hardware add-ons. Phone Garry. (0455) 840454.

● **AMSTRAD PC COMPUTER** 2086D 30 meg HD 2 x 3 1/2" floppies mono VGA monitor keyboard, mouse, Windows manual. Very good condition. £625 o.n.o. 0462 684995.

● **OLIVETTI** Prodest PC1, 20Mb hard drive, 3.5" floppy, colour monitor + expansion box. £400. Call Joe on (0268) 527320 evenings and weekends only.

● **COMMODORE CLT 286** notebook 286 with PC with 20 meg hard drive and 1 meg RAM only £950 o.n.o. Phone 0582 769152 eves/weekends.



### Never buy another printer ribbon!

Save hundreds of pounds per year and always get a perfect printout, in black or with any of our coloured inks. Universal Electric MacInkers (cartridge or spool) cost £80.00 and will handle multiple printers with add-on kits, and we have dedicated models for certain printers for just £50.00, also, just in, the new MaxiPrint. Manual Universal unit which will handle virtually any cartridge ribbons without add-on kits for £40.83!

from £40.83

We support over 24,000 printer brands, and have a complete range of colour, heat-transfer (for T-Shirt printing), and indelible inks. Colour, multicolour, heat-transfer, and unlinked cartridges & refills supplied - Ask for our free catalogue.

Most ribbon re-inking services use our MacInkers, and over 130,000 have been sold since 1982.



## MGA SoftCat

(0797) 226601 Fax: 226721

41 Cinque Ports St., Rye, E. Sussex TN31 7AD

(PRICES EXCLUDE VAT & p&p extra) E & OE



● **CPC - HGH**, with green screen, plus modulator, £150 + games. All boxed, worth £400+. Accept, £170 o.n.o. 29 Dixon Lane, Wortley, Leeds. (Peter).

● **PC HACKERS PACK** 100's of unprotects virus kit assembler/disassembler copier disk tools etc, only £15 for 11 full 5 1/4" disks, plus £1 p+p. 37 Devon Place, Newport, Gwent, NP9 4NW. Tel: 0633 259847. Not for piracy.

● **PC SHAREWARE/PD** £1 disk + p+p. 2000Mb available. Top titles: choose programs to fill disk. Send 2 first class stamps for easy menu driven catalogue disk to: 37 Devon Place, Newport, Gwent, NP9 4NW. Tel: 0633 259847.

● **A REG** Toyota Celica the game, the real thing. £1500 o.n.o. or swap for the right 386 PC. Phone 0225 333789 after 7pm. Don't miss this great opportunity.

★ **ZENITH SUPERSORT 286** ★  
Laptop. 20Mb HD, 640K backlit LCD,  
Nicads, charger with MS-DOS 5 installed.  
£500 no offers.  
Phone Dave 081-661-1057

● **WANTED** Archimedes computer any condition will collect. Also need reasonably priced laser printer. Telephone 0332 830140. For instant cash.

● **"IBM-PC"** Motherboard for sale, 286 20MHz 1Mb RAM. £150. Call Paul. 0602 206382.

## 8-BIT

● **BBC B**, issue 7, Watford ROM/RAM board, dual 40/80T disk drive, RGB monitor, view, logo, basic editor, £235. Caernarfon. (0286) 3887.

● **CBM 128D** including colour monitor, printer, cables, serious software and games. £200 o.n.o. Also MPS1230 printer. £60.

● **BBC B** 32K home computer, few disks, external Cumana disk drive. Shift lock key missing, hence only. £75. Dave 091 4301719.

● **8-BIT** Atari stuff wanted. Cheap, broken, swap etc. Graham Whittle, 37 Westfield Road, Bilston, West Midlands, WV14 6EW.

● **AMSTRAD 6128** plus Multiface games inc Turrican Rainbow 1, Strider, 2 joysticks, books, 30+40 magazines. £380. Phone (0732) 057671.

● **AMSTRAD CPC464** computer, ND1-1 3" disk drive, some software, books, many magazines. Cost £450+. Sell £210. Tel: 0244 375836.

● **GEOPUBLISH** DTP package for Commodore 64/128 latest version, unused plus Geos 1.3. £18 p+p included. Also Neos, Commodore Geos, mouse with cheese graphics software and mouse driver for Geos. Mint condition. £18 p+p included. (0625) 827033.

## R.J. COMPUTERS SPECIAL OFFERS!

Tweety Boards (stereo sound for the Atari STFM) Drivemaster (switch between 2 external drives) £12.50 each	Atari 1040 STE Family Curriculum Pack £375.00 520STE Discovery Extra Pack £312.00	Star LC200 £235.00 (inc cables) Amiga 1 Meg Classic Pack £305.00
--	--	---

We stock many items at competitive prices. Postage £5 large or £1 small items. Prices include VAT

30 Westbourne Road, Downend, Bristol. Telephone 0272 566369

● **SPECTRUM +2**, PSU, manuals, over 100 pounds worth of games, joystick, £100 the lot. Phone after 8pm. (0227) 720598.

● **MASTER 41** 5 1/4 inch disk drive good condition. Commodore 64 and/or cassette deck, Star NL10 printer C64, action replay cartridge. Offers please for any bits. Tel: 0689 823688.

● **SPECTRUM +**, excellent condition, still in box, portable television, 2 data recorders, over £1000's worth of software, Light Pen, worth over £500. Will sell for £200. Phone 0908 643189. Ask for Andrew.

## PRINTERS

● **FREE!** Colour printer when you buy my Amiga (one meg) and monitor. Over 250 disks, Cumana drive, two mice and joysticks, magazines, games, manuals. £650 o.n.o. Buyer collects. (0244) 200031.

● **CITIZEN** Swift 24 Pin printer, Dot Matrix ribbon inc, 4 black ribbons, pus centronics. £200 includes postage. Tel: 0909 771707.

## ARROW PD (formerly Scotsoft International)

6 Kents Orchard, Perry Street, South Chard, Somerset, TA20 2QB

### PD SOFTWARE FOR THE ATARI ST(E) RANGE

"THE ULTIMATE COLLECTION" £4.99

4 disk collection containing the Opus Spreadsheet, DB1 database, Gemini desktop and much more - 4 D/S disks

ST FORMAT "GOLD" (93%) May 91 - "What a collection!" NCE 125

Send an s.a.e. plus a blank disk or £1 now for disk catalogue detailing 450+ disks of the best PD!

● **FOR SALE** to fit CPC464 Silican disk, £75. 256K memory expansion, £55. 6128 Rom, £30. Phone 0983 882197.

● **AMSTRAD CPC464** colour monitor with software, magazines and desk. £160. Buyer collects. Phone (0282) 862610.

● **C64+4** boxed games, joystick, datasette etc, also C64 bits, datasette adaptor, joysticks. Offer or exchange + cash. BBC Master. Colin 0704 533397.

● **MAXAM II** Macro Assembler CPC/PCW not used. £20. Tel: 0457 763817.

● **LQ3500** printer, boxed. Good condition, hardly used. Bargain offer, only £150. Also original Amstrad disks cassettes, many titles. Separate prices or whole lot, very reasonable. Phone evenings/weekends. 0245 491827.

● **9 PIN** Dot Matrix printer, NLQ, graphics, Serial and Parallel Interfaces, suits most computers. Lead made Foc. £60 o.n.o. Good quality print, suits most computers. Phone 0425 754816 after 6pm.

● **FOR SALE** Amstrad 2160 printer, any demo. £50 o.n.o. Bedale 0677 423540.

## BAY COMPUTERS

QUALITY SOFTWARE FOR THE ATARI ST

FOR HOME & BUSINESS USERS

SEND £1.50 FOR OUR DEMO DISK

3 Teasel Walk, Morecambe. Tel: 0524 831162

● **RE-RUN** user group, for all 8-Bit computer owners. Send SAE for details to: Re-Run, 1 Northholme Close, Grays, Essex, RM16 2NX.

● **FREE!** Helpline for CPC range. No problem too small. Write to Chris, 6 Frank Street, Great Horton, Bradford, BD7 3BT. Enclose SAE.

● **FLEET STREET** Editor Publishing little used. £20. Tel: 0457 763817.

● **"PET 8032"** computer complete with MPP1351 D Matrix printer, CBM8050, dual disk drive. £50. Tel: (0202) 531926 days. Bob or Mark.

● **CITIZEN** Swift 24 Pin printer, plus 4 ribbons and cable, £199, includes postage and packing. Tel: 0909 771707.

● **PANASONIC** KXP 1124 24 Pin printer, boxed. Two ribbons. £160. Atari mouse, unused. £15. Tel: 081 422 9099.

● **STAR LC10** b+w printer for sale, includes stand, ribbons and paper, excellent condition, boxed with manuals. £100. Ring Andy 091 385 2216.

● **WANTED** Spectrum compatible printer. Write V. S., 62 Louis Street, Leeds, LS7 4BN.

## Upgraded from C64 to PC or AMIGA ?

● Use your old C64 printer ● Read your old disks

Our interface cable and software connects C64 peripherals to any IBM PC Compatible or Amiga except the A1000 - Attached via parallel printer port.

● Use MPS, DPS, VIC, Star, Brother, Seikosha and Citizen printers

● Epson graphics output on dot-matrix printers ● C64 Not required

● 1541 file transfer program ● Fully MS-DOS/AmigaDos compatible

Standard "Ami-64-Link" £35.25 "CBM-PC-Link" £35.25 (State disk size)

Budget "Ami-64-Link" £23.50 Prices include VAT and delivery

\* Budget locks Amiga during printing, no performance lost with Standard

York Electronic Research (0904) 610722  
The Paddocks, Jockey Lane, Huntingdon, York YO3 9NE

● **WANTED** 48K Spectrum and 3 1/2" DSDD disk drive with interface, please write to K Snowden, 6 Glebe Terrace, Dunston, Gateshead, Tyne And Wear, NE11 9NQ.

### \* COMMODORE C64C \*

Night Moves Pack, Datasette, joystick, KCS Power Cartridge, approx 30 games (9 months old) £100.  
Phone David 051-708-0610

● **STAR LC10** colour 9 Pin printer with cable. 1 year old, very good condition, selling to upgrade to laser printer. £140 needed. Contact Matt Drakard at Milton Keynes. 0908 670816 after 6.30pm or leave message anytime.

● **STAR LC32-200** (mono) printer 24 Pin. Seldom used, include new ribbon and Parallel cable, owner emigrating. Phone Gan (0934) 391552 evenings.

● **BBC B** computer, £120. Olivetti JP101 spark jet printer. £80. Buyer collects. Phone 081 472 4335.

● **AMIGA** compatible printer wanted, must be cheap (around £60). Condition not important, just as long as it works. (0323) 26790.



# EXPRESS SALES

## MONITORS

- **VGA** mono monitor, 13" as new condition. £45 +p+p. Sell colour plus VGA monitor, as new condition. £115 +p+p. Lotus 123 version 2.1 complete. £80 +p+p. (0322) 662747.
- **"WANTED"** faulty Atari, Hi-Res mono monitor, dud tube, might do if price is right. Can collect, 30 miles. Brighton. 0273 416004. Call Ernie.
- **WANTED** CTM 644 colour screen will exchange for GT 65 green screen plus tape, or cash. Carl, 16 Hellside, Penyford, Chester. 0244 544498.
- **ARCHIMEDES** monitor. Amiga, ST, PC compatible, H/V stretching, H/V positioning, green screen option, fully boxed. £195. 0964 613027 evenings. Oliver Marshall.
- **WYSE 650**, VGA colour monitor, cost. £500. will accept £300. Call Paul 0602 206382.
- **SWAP** realistic 200 channel AM/FM radio scanner for colour monitor, preferred Philips 8833. Will collect if possible. Cash adjustment. Tel: 0639 844105.

## CONSOLES

- **ATARI** Lynx being sold by a completely mad person who only wants £110 for the lot, includes PSU Comlynx, three games, headphones and two sets of batteries plus recharger. Phone Peter on (0733) 233314. Quick sale needed.
- **MEGADRIVE** games for sale. Thunder Force II and Alex Kid, £20 each. Batman, Hangon and Battle Squadron, £25 each or swap Famicom, Final Flight and Mario, £35 each or swap, offers welcome. Tel: 0773 747987.
- **HAND HELD** PC Engine GT +II top games. £300 or swap for Amiga or Famicom games + cash or offers. Tel: 0773 747987.
- **PAL** super Famicom, + games. (good sound PAL version). As new, mint condition, only £180. Also remote control car, new £55. Write to: R. K., 4B Currents Lane, Harwich, Essex, CO12 3DE.
- **SEGA** Game Gear with Shinobi, Mickey Mouse and mains adaptor. £100. Phone Steve. 0892 662698.

## TOMSOFT P.D.

RSI Demo maker package (6 disks) only £6  
Disks for 90p (+ 50p P&P)

All great titles including..... CHUBBY BROWN, JAZZ BENCH  
LUMBERJACK SONG (2 DISKS)  
For further information  
send 50p (+50p P&P) for  
catalogue disk to....

**TOMSOFT P.D.**  
31 Trevelyan Court,  
Caerphilly, S. Wales  
(Cheques & Postal orders made payable to: G. Callaghan)

Or call  
**0222 862890**

- **FAMICOM** (monitor) and Megadrive Scart for sale. Will part exchange. Offers? Nicky Lee, 20 Fairway, Risborough, Bucks, HP17 9DH. 08444 2859 evenings.

- **WANTED** expert cartridges software version 4.1 and last version of expert utility disk for C64. Tel: Steve 0253 852208. (Blackpool) evenings.

- **AMIGA** software: Speedball 2, £8. F-19 Stealth Fighter, £12. Kick Off 2, £8. Shadow Warriors, £6. Pro-Tennis Tour 2, £10. Ring Faisalon. (0422) 369918.

- **"ALL"** your old C64 disks software wanted anything bought, send details and how much you want for it to Zeons Lair, 4 Garden Close, Penrith, Cumbria, CA11 7LD. No pirated stuff please!

- **SEQUENCER** one (ST), £40. Gajits Companion (Amiga), £40. Quartet (Amiga), £20. Ten assorted Amiga games, £25. Phone Jeremy on 061 969 2991.

- **PC SOFTWARE** Amstrad Accounts Master, £15. Amstrad Pay Master, £15. Money Manager PC, £15. Phone Robin after 6pm on 0228 32150.

- **AMSTRAD CPC** games for sale, new and second hand. Phone (0782) 658708. Also Atari Lynx, £55 o.n.o. Phone (0782) 659106.

- **BBS** host software for basic Master to run your own Viewdata BBS for details ring Genus BBS on: 0226 340425 24hrs. Viewdata key \*host#, when online for information.

★ **SEGA GAME GEAR (UK)** ★  
Shinobi, Mickey Mouse, Woody Pop,  
Rechargeable batteries with charger,  
Mains adaptor £150.  
Phone David 051-708-0610

## SOFTWARE

- **25 AMIGA**, boxed and original games for SAE, new titles, amongst these. SAE M. E. Dale, 9 Bedford Street, Scarborough, North Yorkshire, YO11 1DB.

- **ABSOLUTE BEGINNER** wants cheap C-64 software on disk. Contacts badly wanted to get passion going! 41 Spingmill Street, Bradford, BD5 7EE.

## Vally PD

PO Box 15, Dept NCE, Peterlee,  
Co Durham, SR8 1NZ, Tel: 091 5871195 9am-9pm.

Over 2700 disks in stock inc Fred Fish 1-540, Tbag 1-54, Snag, Amigos, Slipped Disc, Panorama, Amicus, Tairun, Scope, the Amos Library & the Amos Licenseware & our own library! All are priced the same except Amos PD which will be £1.50, & Deja Vu Licenseware which will be £3.50 (standard price). Orders despatched 1st class post on BRANDED disks!

Demos & Animations:	Business & Serious Utils	Games & Leisure:
001 Juggler & Weiking	465 Quickbase Xspelli+ Text Editor	583 Flashover: More than 200 levels!
091 Chaos Rock: super fractals demo!	600 C64 Emulator - with some prog!	705 7 Tiles: Great future sport game!
040 Phenomena Engine: Fabulous!	636 Clight: Excellent ray tracer!	909 Wizzys Quest: Arcade adventure
1000 Global Tresh: Superb demo!	771 Ultimate Icon disk: Good disk!	969 Zeus: great block puzzle game!
1054 Goldfire Oblique Infinity: good!	987 Superkillers: Kills 172 viruses!	1014 AS1 Tanx Rollerpede etc!
1093 Plasmutech: Best plasma demo!	992-SKing James Bible: On 4 disks!	1057 AS2 Missile Command Bally etc.
1119 Tomsoft Virtual World: An epic!	1007 Messydis III: Now text filtering!	1011 AS3 Megaball & Drip!
1120 PWC Alpha Omega: Amazing!	1071 PC Emulator: with CGA graphics!	1109 Liamatron: Fab J Minter game!
1122 Antilemmings: Superb but smg!	1102 AS Label Printer: All on 1 disk!	1155 Mental Image: Gridrunner etc!
1127 Silents Ice: Excellent new demo!	1132 600 Business Letters: Easy letters!	1226 AS4 Jumper Gornoku Cracker +
1144 Quartex Substance Really good!	1147 Amibase: Nice relational dbase!	1227 Cubulus: Super puzzle game!
1317 Tamech Hyper: Unusual demo!	1199 Dynamic fonts II: Fab cut outs!	1263 AS5 Go Looby Retaliator + Raid
1330 Arctex Digital Innovation: Fab	1200 DTP prog: Now in English!	1264 AS6 Weirtnx Dhill Slier Pacman
1402 Ram Rat II: Rocky music disk!	1208 ST & Spectrum Emulators + more	1450 Atac: Atac. Remake of old game!
1414 Devils No Reality: Great effects!	1350 Text Plus V3.0 + Amigaspell!	APD 954 Hobbs Games: 4 game pack!
1425 Astronomy Slide: Nebulae stars+	APD132 Family history dbase*	APD 971 Wizzards Domain: Adventure!
1490 Agency Mega game preview!	APD176 Database master: 1mg*	APD 992 War Of The 4: Adventure!

## MODEMS

- **MIRACOM** Miracle WS-3000, V22 Bis modem. For use with, ST, Amiga, PC etc. £350 as new, I'll sell it for £200. So phone Ben on (021) 704 4603. Comms software supplied. The modems in good condition.
- **DOWTY** Quattro modem SB2422 v21 v22 v22Bis immaculate condition, with Comms software for Amiga only. £135 o.n.o. Phone Danny. 0582 604082.
- **HELP WANTED** with using N Comm. I have problems downloading Archived files, books on Amiga Dos and Comms wanted. Swap my Akai video for good modem, or part exchange for fax machine, hard drive. Steve 0782 612393.
- **DESIGNER** modem v21/23, auto answer, call monitor, also contains lead and software with use on Amiga A500. £50. 081 805 7749 evenings.
- **INFORMATION** wanted, modems, hard drive, just general help. On disk or listings. (Amiga). Steve, 26 Reeve Road, Holy Port, Mladenhead, Berkshire, SL6 2LS.

- **GAME GEAR** for sale with two great games. Shinobi and columns, stereo speakers. Boxed, only three months old. £95 o.n.o. Tel 859 0386.
- **PC ENGINE** titles for sale/swap Gunhead, Outrun, Splatterhouse plus 15 more titles. £14 each. Write to Shokat, 9 Blantyre Terrace, Edinburgh, EH10 5AD.
- **OFFICIAL** Nintendo Gameboy (boxed) with Game Light £50. Double Dragon, mint condition. £15. Tel 081 691 7456 after 6pm. Ask for Kimwen.
- **MEGADRIVE** eight games growing collection, two joypads, plays all carts, ten months guarantee, plus stereo speakers. Sell complete system for £350 o.n.o. or swap for Famicom or basic Neo-Geo. Tel: 0533 877567.
- **ATARI** Lynx for sale includes power pack, comlynx cable and headphones, games include Rygar with box and instructions and Slime World boxed and instructions. Genuine excuse to sell Lynx. £90. Phone Reading 571909 better be quick.
- **GAMEBOY** boxed as new with all accessories, 100% reply, perfect condition, including headphones, 2 player lead, Tetris, soft padded carry case and boxed Super Mario Land, worth £95. Sell for only, £65. Ask for Steve on (0732) 840586.

## WANTED FOR CASH!

PC's, Amiga's, ST's, Monitors, Printers & Faxes.  
Collection/Delivery arranged.  
Computers always in stock.  
Cheapest prices in the country.

Call 051 2280827 (Computer swap service available).

## COMPUTER REPAIRS

★ **FREE ESTIMATES** ★  
All makes & models repaired and serviced - including printers & monitors  
For further details call

**Hawkwell Electronics,**  
Southend-on-Sea. 0702 207593 (24 hrs)  
Amstrad registered repair centre

## MIKE JERVIS

## 16 bit Computers

19 Portree Drive, Rise Park, Nottingham.  
NG5 5DT. Telephone (0602) 274369  
**SERIOUS AMIGA SOFTWARE  
AT FRIVOLOUS PRICES**

All prices include VAT and Postage

Callers Welcome



Bars & Pipes Professional complete with Tool Kits A&B, Multi  
Media Kit and Internal Sound Kit.....**£300.00**

Small Business Accounts Extra .....**£76.50**

K-Roget .....**£20.00** Deluxe Paint 3 .....**£53.50**

Small Business Accounts Cash ..**£53.50** A.M.A.S.....**£64**

Art Department Professional.....**£115** Prodata .....**£49**

K-Comm2 .....**£20** Pen Pal.....**£65.00**

Sterling Service Bulletin Board .....**£73.50**

Quarterback Tools .....**£44.75** Quarterback .....**£32**

Wordworth .....**£80.00** Protex 5 .....**£90**

Video Titler 3D .....**£89.50** Vista .....**£51.50**

Pro Video Plus .....**£153.50** Distant  
Suns .....**£45** GPTerm .....**£50**

Amigavision.....**£76.50** DOS to DOS .....**£24.50**

The above is only a small selection from our extensive  
stocks of hardware, software and peripherals.



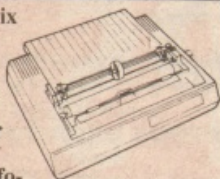




# MAJOR STOCK CLEARANCE

## 24-PIN PRINTER

80 column 24-pin dot matrix printer made by SIEMENS. Superb letter quality print at 45cps. and draft print at a fast 135cps. Friction & tractor feeds allow single sheets and perforated paper. Standard Centronics interface allows this printer to be used on virtually all micros. Front panel controls. Fully IBM & EPSON Compatible. Uses standard ribbons. Complete with full English Manuals.



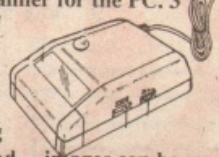
**£149.95**

plus VAT & Carr £187.00

## PC HAND SCANNER

includes free Microsoft "Windows"

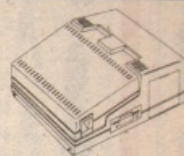
Top quality hand-held scanner for the PC. 3 resolution levels, 400/300/200 dots per inch selectable. Scans line art & halftones. 16 grey levels make it ideal for scanning photographs. Scanned images can be saved in various formats for use in most popular Desk Top Publishing packages. The package comes complete with scanner, 8-bit interface card, driver software & full English manuals.



**£69.95** plus VAT & Carr £84.95

## 286 PORTABLE/40Mb

Mains powered laptop running at 16MHz. 1Mb RAM expandable to 8Mb. 1.44 Mb 3.5" Floppy Disk drive & 40Mb Hard Disk. 1 Serial & 1 parallel port, 2 empty expansion slots. Hi-Res gas plasma screen with external EGA Port. MS-DOS 4.01 & GW-BASIC. Full UK Specification



**£799.95**

plus VAT & Carr £950.00

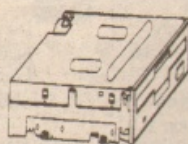
Send for full Spec. sheet.

## FLOPPY/HARD DISKS

### Floppy Disk Drives:-

Brand New, uncased

5.25" 360k £25.50p  
5.25" 1.2 Mb £35.00p

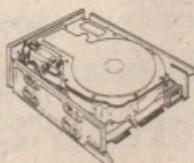


### Hard Disk Drives:-

Brand New, uncased

5.25" H/H 42Mb. 30ms. MFM. Made by CDC £110.00p

5.25" H/H 90Mb. 18ms. ESDI I/F (supplied). Made by CDC. £249.95p



Please add VAT & £5.00 Carriage.

## PC/XT UNDER £250

Complete system including Monitor

**£249.95**

Plus VAT & Carr £305.00p



Check these features at this price:-

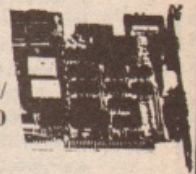
- \* 8088 Processor running at 4.77/8 MHz.
- \* 512k RAM expandable to 640k on-board
- \* 1 5.25" Floppy Disk Drive (space for 2nd. drive)
- \* 101 key keyboard. Made by EPSON.
- \* 12" High quality monochrome monitor.
- \* Serial & Parallel Ports. Reset Button.
- \* Small footprint unit. (Fits into the smallest space)
- \* 2 Empty expansion slots. (Standard 8-bit IBM-type)
- \* Space for Hard disk as well as 2 floppy disks.
- \* MS-DOS 3.3 & GW-BASIC 3.2

### OPTIONS:- (Prices include VAT)

- \* 14" CGA Colour Monitor (replaces Mono) £110.00
- \* 128K additional RAM £19.95
- \* 5.25" 360K 2nd. Floppy Disk Drive £49.95
- \* 3.5" 720K 2nd. Floppy Disk Drive £59.95
- \* 32Mb. 3.5" Internal Hard Disk Drive £149.95
- \* 42Mb. 5.25" Hard Disk Drive £169.95

## PARADISE VGA CARD

8-bit Half length VGA Graphics card with standard 15-pin "D" connector. Suitable for PC/XT & AT & PS/2. 800X600 resolution & 132 column support. Software drivers on 5.25" disks for all popular programs, including WINDOWS, AUTOCAD, etc. Complete with full manuals.



**£42.50** Plus VAT & Carr £55.00p

16-bit card available same price

## SOFTWARE SALE

For the IBM PC XT/AT & Compatibles

**WORDSTAR 1512** Word-Processor

badged for Amstrad £13.00 plus VAT

**SUPERCALC 3.1** Spreadsheet badged

for Amstrad £13.00 plus VAT

**ACCOUNTS MASTER** Accounting Pack

badged Amstrad £13.00 plus VAT

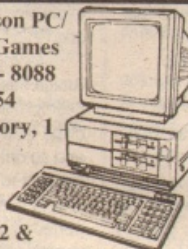
**MICROSOFT "WINDOWS"** ver. 286 or 386

£25.00 plus VAT

All software is supplied on 5.25" Floppy Disks. Please add VAT & £5.00 carriage per software order.

## EPSON XT/COLOUR

Best buy this Christmas. Epson PC/XT with Colour Monitor & Games Port. Look at these features:- 8088 Processor running at 4.77/9.54 MHz. 512k expandable memory, 1 Parallel & 1 Serial Port, 1x5.25" 360k floppy disk drive, 8-bit expansion slots, 84-key keyboard, MS-DOS 3.2 & GW-BASIC, & 14" CGA colour monitor.



Complete Colour system

**£299.95**

Plus VAT & carriage £367.00p

## PC MONITORS

We have large stocks of the following monitors to clear. Brand New & Boxed **VIGLEN 14"** Paper White, reversible. Tilt & Swivel Base & Data Cable. Suitable for desktop & portable computers. £50.00 plus VAT (£58.75) **SAMTRON 14"** CGA Colour Monitor with data cable & tilt & Swivel Base. £110.00 plus VAT (£129.25)

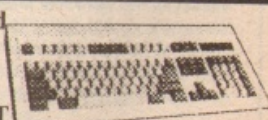


FROM  
**£50.00p**

Carriage £12.00 per monitor

## PC KEYBOARDS

102-key keyboard made for and badged **TATUNG. PC/AT** & XT compatible (self-seeking). Standard straight-pin connector. Adjustable feet for ease of typing. 10 function keys are located across the top. A real bargain at this price. Don't delay your order.



**£25.50**

Plus VAT & Carriage £35.00

Access

VISA/ACCESS orders welcome. Prices & specification subject to change without notice. All Transactions are subject to our standard conditions of Sale, available upon request. All prices exclude VAT unless indicated otherwise. All goods Brand New unless expressly stated otherwise. Your statutory rights are not affected.

VISA

## UK HOME COMPUTERS

UNIT 22, Cheney Manor Ind. Est.  
Swindon, Wilts. SN2 2PJ.

(0793) 695034



## TECH TIPS



## TECH TIPS

So you've bought second-hand to save money, but you can't even get your machine to flicker... We show you how to get your phoenix flying again...

## HELP Mystery Modem

I have read the Tech Tips section for some time now, and I have a question for you. I recently obtained a Prism 1000 modem from a car boot sale for the sum of £3. On the back is a 5-pin DIN plug. I was wondering if you had any information on the connections that would need to be made to wire it to an Atari Mega ST2. Any other information you could supply about this item would be appreciated (especially Prism's address).

I hope you can help me with this matter, as I feel that other ST users could benefit also.

Darren P Goodwin, Rotherham

THE PRISM 1000 dates back to the early 80s, and I think it was a Sinclair specific device, although I am not certain on this point. Unfortunately the makers of Prism modems, OEL, ceased to be a viable concern back in 1985. Unless the modem has a standard 25-pin D connector, then I would not advise trying to connect it to the Mega 2ST as it is likely to be unbuffered output.

Frankly, the 5 pin DIN socket sounds more like the power supply socket than anything else. However, I am sure that somebody out there will have a manual for the Prism 1000 modem that they no longer require. If so could they send it in to Express and we will pass it on to Mr Goodwin.

You would be better off getting a new modem such as a Pace Linnet. I have seen several adverts in the computer press for these starting at around £40. Details on VTX 5000 modems can be had from B G Services which seems to have cornered the market for this particular product. B G Services is on 081 3970763.

## HELP Comms question

I'm fascinated by that page you print from time to time with all the "bulletin boards" on it. I fancy the idea of using my Amstrad to have a go, but I have three questions:

- 1) What exactly is a bulletin board?
  - 2) What equipment do I need to use one?
  - 3) What do all those codes like 'V21' mean in the list?
- I'd appreciate some answers before I spend a fortune!

John Barley, Pontypool

COMMS IS INDEED A FASCINATING AREA, but beware, it can become addictive and you'll find yourself "on-line" at all hours of the night! Anyway, to your questions.

1) A bulletin board is a system for leaving messages and having "conversations" over the telephone system using a computer. You ring the number and using your computer you can read the messages, reply to them, and leave your own. Plus there are usually dozens (if not hundreds) of PD programs on these boards which you can copy ("download" in the parlance) to your machine. Each board has a very different style, because of the people who use it and the preferences of the person who runs it, called a "sysop". Some only cater for one machine or specialist interest, but many welcome all.

2) You need a modem (the device which converts computer signals to sound so they can be sent by phone), some cables to connect it to your PC, and software on your PC to drive it. You need to make two decisions before buying a modem: should it be internal or external, and how fast it should be.

Internal modems sit on an expansion card and slot away neatly inside the PC. External ones come in their own box, requiring cabling, and need their own power supply. External modems are more expensive because the box and power supply need to be added, so unless you intend to use the modem with several machines, go for an internal one.

The question "how fast should it be?" is probably better phrased "how fast can you afford". Modem speeds are measured in baud, and they come in 300, 1,200, 2,400 and 9,600 baud varieties. Don't buy a 300 baud unit; they are breathtakingly slow and will cripple you with boredom and excessive phone bills. 1,200 baud is a useful minimum, but 2,400 is better and is the common "home" speed. 9,600 baud modems are still too expensive for most, but prices are dropping.

The software issue is easier. Many modems are supplied with a comms program, but if they aren't there are

many excellent shareware programs such as *Telex* and *ProComm* which cost very little and are available from PD libraries. For home use, a commercial comms program is overkill.

And finally 3) The numbers are codes which tell comms enthusiasts what modem speeds to use when dialling the bulletin boards. They were developed to try to make comms simpler and to cut away the jargon, but unfortunately they have only succeeded in adding an extra layer of confusion to the newly initiated. There are dozens of codes but the commonest are:

V21 - 300 baud

V22 - 1,200 baud

V22bis - 2,400 baud

If you buy a 2,400 baud modem then you can use any board which has one or more of these codes.

## HELP Guidelines

I've designed our Guides newsletter using *Avagio* as I do every month, before sending the disk to a friend so she can print them on her laser printer. But this month I hit a problem; because of a large number of pictures in the document it's 400K big, and won't fit on a floppy. What can I do?

Catherine Consett, Norwich

WELL YOU COULD UPGRADE your disk drive to a 3.5-inch 720K drive, but I guess that isn't a very helpful answer. You have two choices. You can use the DOS BACKUP command to copy the file on to two disks, then RESTORE it at the other end, or more elegantly you can shrink the file using one of several file compression programs. My favourite is *PKZip*, which is shareware and available from any library. It should have no problem getting a DTP document to shrink enough to fit on a disk. By the way, have you tried "Saving As..." the document to a new name? With several DTP programs this can shrink the file quite dramatically as the new copy is written to disk more efficiently. I don't

know if this works for *Avagio*, but it's worth a try.

## HELP DIP switch

I've recently bought a second-hand printer without manuals, and I can't figure out the DIP switch settings.

The printer is a Brother M-1109 dot matrix, and I know I am using the correct printer driver, because I had one of these printers before. I also know that the printer works, because I've seen it work on another (non-Amiga) system.

What I'd like is for someone with one of these printers and an Amiga to write in and let me know what the switch settings should be.

PA Bellamy, Sheffield

I'M AFRAID I'M NOT FAMILIAR with this printer. Are there any readers out there who can help?

## HELP Fat or thin?

I keep hearing all of this talk of Fat and Thin Agnuses, Chip and Fast RAM, and God only knows what else. Can you please explain to me what it all means, and how I can find out exactly what I have inside my Amiga 500?

R Small, Bromley, Kent

THERE SEEMS TO BE A LOT of confusion on this subject. I'll begin by explaining the difference between Fast and Chip RAM.

As you are no doubt aware, the Amiga has, as well as its 68000 microprocessor, a number of custom chips which deal with graphics, sound and so on. The chip most directly concerned with graphics is the Agnus chip. It is an intelligent beast, and performs by accessing to memory directly, without the aid of the microprocessor. But whereas the microprocessor can access all of the Amiga's memory, Agnus is much more limited in the memory it can 'see'.

For most Amigas, the Agnus can address half a megabyte. This memory is known as Chip RAM, since it is available to the custom chips. Obviously, the more Chip RAM you have, the better, since it means you can have more and bigger pictures, longer sound samples



## Saving typing

A quick one from Alan Gerrard in the wilds of Dorset. If you find you are forever typing:

```
dir /w |more
```

in packed directories, create a batch file with just that command in it and name it LIST.BAT or whatever and put it in the DOS directory. Then just typing LIST will save your fingers wear and tear. Of course this can be extended to any command you use frequently.

Paul Johnson, Stevenage, Herts



Battlechess ST vs Amiga **HELP**

I have an Atari 1040STFM and my neighbour has an Commodore Amiga 500. We don't fight or argue about the merits of our respective machines as we are both more than satisfied with what we have got!

We both have copies of *Battlechess* for our machines, and we have noticed that there is an option where a player can be controlled by either computer, human or modem.

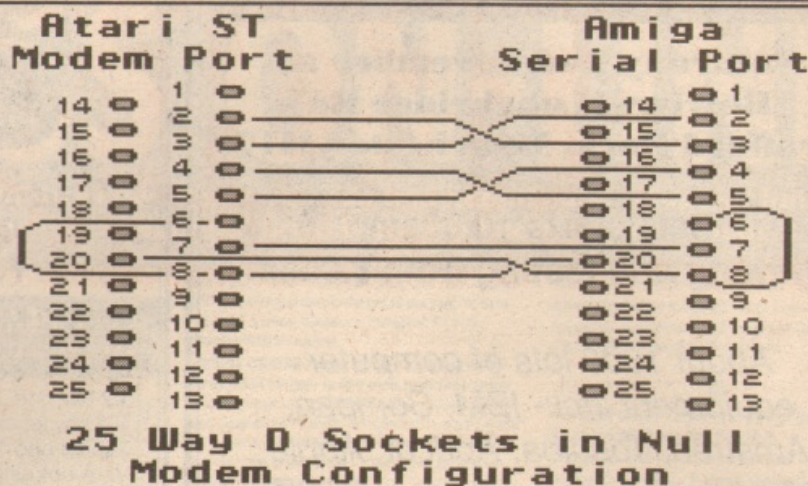
Does this mean that we can connect our computers together via modems so that we can play against each other? Or even get the two machines against each other? Then we will see if My Computer Really Is Better Than His Computer, won't we?

Can we link up for other games besides *Battlechess*?

Chris Hollister, Bristol

**AH, YES**, an interesting contest in the offing here. You certainly can set up the machines to play each other in *Battlechess* and you don't need to buy modems as long as you don't mind being in the same room, or make up a long lead. You simply need two 25 way D sockets and a length of screened multi-core cable, to make up an RS232 lead called a "Null Modem".

Connections are as follows, Atari end to Amiga end. See the diagram (above right).



**25 Way D Sockets in Null Modem Configuration**

CP 1991

• 25 way D sockets and some screened multi-core cable are all your need to make a 'Null modem' to connect an Atari ST to a Commodore Amiga 500

Pin 2 to pin 3  
Pin 4 to pin 5  
Pin 8 to pin 20  
Pin 20 to pin 8

Pin 3 to pin 2  
Pin 5 to pin 4  
Pin 7 to pin 7

At both ends link pin 6 to pin 8 with a small loop of wire. This type of lead can also be used to transfer

data and files between the two machines using suitable comms software. Electronic bits available from your local Maplins or electronics store, cost about five pounds in total (depending on the length of cable you use). If you have not got a Maplins store in your area, the new Maplins mail order catalogue is available at WH Smiths. Maplins mail order no. 0702 554161.

and smoother, more complex animations.

When Agnus accesses Chip RAM, it prevents the processor from doing so at the same time, and this causes programs to run more slowly. Therefore, processor accesses to RAM which is not Chip RAM occur more quickly. Such RAM is called Fast RAM.

Commodore has released a number of different Agnuses in the Amiga's short history. Each of them has a serial number printed on its face. The earliest was the 8361. After that came the Fat Agnus, numbered 8371 (and the 8370, which is the American equivalent). All of these can access half a megabyte of Chip RAM.

More recently, Commodore has started fitting Amigas with the Fatter Agnus (no. 8372a) which can access 1Mb of RAM. There is yet another model, currently available only for Amiga 3000s, which can access 2Mb of RAM.

You can find out how much Chip and Fast RAM you have by entering the Shell and typing 'avail'. You will be told how much of each type of memory is available, and also how much there is in total.

However, you may very well have a Fatter Agnus and yet only 0.5Mb of Chip RAM. This is because A500s are shipped without a circuit board modification being made which lets the Fatter Agnus see the other 0.5Mb (assuming that you actually have that much physical RAM). If this is the case, you can get an authorised Commodore service engineer to make the alteration.

If you only have 0.5Mb of Chip RAM but suspect that you have a Fatter Agnus, you can either open your Amiga and look at the chip's serial number (thus invalidating your warranty), or get hold of a public domain utility called VectaCheck which will do the rummaging around inside for you and tell you which Agnus you have.

**HELP** Second-hand trials

I have an Amiga 500 with a 0.5Mb expansion in the trapdoor. Having bought a second-hand copy of *X-Copy Professional* and *Cyclone 3*, and being under the impression that these would enable me to use IBM and ST format disks, I set about buying a large quantity of PC software from a computer market. I've tried many of times, but I cannot get any of these programs to copy or work. Have I wasted my money, or is there something I'm doing wrong?N

Fredrick Masterson, Victoria, London

**ALTHOUGH YOU MAY BE ABLE** to read PC and ST format disks, you will not be able to run any programs written for these computers. In general, programs have to be written specifically for a target computer, since computers all work in different ways and obey different instructions.

The only way you will be able to get any use out of your PC programs on the Amiga is to buy one of the several PC emulators.

**HELP** Second Drive

I am thinking of getting a second drive to use with my STE. Is there a real advantage to having two floppy drives? Can I connect more than two floppies to the STE? Do I have to use the Atari own brand drive to avoid voiding my warranty, or is it safe to use other manufacturers drives?

Is it safe to use a drive powered from the joystick socket? My friend says that it can cause the computer to overheat. Are all

external drives double-sided, or do I have to ask specifically?

John Wilson, Derry City, NI

- 1) YES THERE IS** an advantage to using two floppy disk drives, increased data transfer rates when moving files between disks and you can use drive B as a data drive when using applications such as word processors and graphics/art packages whilst keeping the program disk in drive A. Some programs such as *First Word Plus* require you to keep the program disk in the drive at all times.
- The Atari ST is limited by its hardware to two floppies.
- Any brand of drive can be used as long as it is ST compatible. This will be clearly stated in advertisements and in the box.
- Several drives are available that are powered from the joystick port, and whilst I have not heard of any problems caused by this I would not recommend it. There is usually only a £5 to £10 price difference to models with their own power supply.
- All commercial drives on the market are double-sided.

There are several companies advertising in *Shopping Express* which can supply you with drives at very reasonable prices.

**HELP** In a fix

I'm writing to verify what can be wrong with my Atari 520STFM. I bought it about a year ago, second hand. The problem is when I initially switch on the computer, it makes a high pitched ringing sound, the power light does not come on, neither does the disk drive light.

I've heard different stories as to what it could be, but nothing

professional. I would be grateful if you could tell me what is wrong and if it is fixable?

Malcolm Nical, Aberdeen

**IT CERTAINLY SEEMS** that you have some problems with your machine. It could be one of several things, ranging from the sound chip to the power supply. I would advise you to contact a professional Atari repair centre, as it is not wise to investigate the inside of your machine if you are not sure what you are doing, and it is unlikely that you will be able to effect a repair yourself.

In fact some repair shops won't even touch a computer if they think it has been tampered with. Evesham Micros provides a fixed rate Atari repair service for £65, which is as reasonable a rate as you can get. Evesham can be contacted on 0386 765500.

## Clocking in

**HELP** I would like to program my Amiga so that it displays the system clock every time it boots up. How do I go about it?

Patrick Baker, Redcar, Cleveland

**AS WELL AS BEING AVAILABLE** as an icon, the clock can also be run from the Shell, which is exactly what needs to be done in this case. You must modify your startup-sequence (using an editor such as ED), adding the following line before the 'loadwb' command:

```
run <nil>:nil: clock
digital1=240,0 24hour seconds
date
```

The run command is used so that the clock becomes a background process, otherwise Workbench would not load until the clock had been stopped. ■



# Computer Auction

**Saturday 2nd November at  
Bowlers, Longbridge Rd  
Trafford Park, Manchester M17**

**Sale starts 10.00am.  
Viewing and testing from 8.00am**

*About 1000 lots of computer  
equipment incl:- IBM, Compaq,  
Amstrad, Toshiba, Apricot, Apple  
Macintosh etc, monitors, printers,  
disks, modems, software,  
consumables, home  
computers etc.*

**For your catalogue ring  
Computer Connections on  
0254 813316**



*For the best in  
Educational Software*

Subjects
French, Spanish
German, Italian
Science, History
Geography
English Words
Spelling
Arithmetic
Football, Sport
First Aid
General Knowledge
England, Scotland
Natural History

*Kosmos are specialist  
producers of Educational  
Software designed to help  
you enjoy learning from  
your computer. Versions  
are available for most  
popular home & business  
computers. Many of our  
programs even allow you to  
add your own lesson  
material.*

**Write or telephone for a  
FREE 20-page BROCHURE**  
of our Educational & Leisure  
software  
Please state your computer type

Kosmos Software Ltd, FREEPOST (no stamp needed in UK)  
DUNSTABLE, Beds. LU5 6BR  
Telephone 05255 3942 or 5406



# Sudbury Electronics

**771 Harrow Road, Sudbury, Wembley, Middx  
Telephone: 081 908 1888  
Fax: 081 904 8002**

## 288/12 MHz System

1 meg memory  
40 Mb hard disk drive  
1.2 Mb and 1.44 Mb floppy drives  
102 key keyboard  
2 serial and 1 parallel ports  
VGA colour monitor ..... **£650.00**

## 386/25 MHz System

2 meg memory  
90 Mb hard disk drive (18 M/S)  
1.2 and 1.44 floppy drives  
102 key keyboard  
2 serial and 1 parallel ports  
0.28 DPI SVGA monitor  
SVGA card with 1 meg on board ..... **£1099.00**

## 386/33 MHz system

4 meg memory  
64K Cache  
120 Mb hard disk drive (18 M/S)  
1.2 and 1.44 Mb floppy drives  
102 key keyboard  
1 serial and 1 parallel ports  
SVGA 0.28 DPI monitor  
SVGA card with 1 meg on board ..... **£1290.00**  
Above Spec but with 90Mb hard disk ..... **£1200.00**

## 466/33 MHz System

4 meg memory  
256K cache  
120 Mb hard disk drive  
1.2Mb and 1.44 Mb floppy drives  
102 key keyboard  
1 serial and 1 parallel ports  
Super VGA 0.28 DPI monitor  
SVGA card with 1 meg on board ..... **£1650.00**

**Other systems configurations available.  
Please phone for prices.**

Siemens 3100 24 Pin high quality dot  
matrix printer ..... **£160.00**

High quality 102 key keyboards made by  
Bull with I.B.M. P.S.2 Adaptor ..... **£27.50**

High quality 102 key keyboard made by  
Epson AT/AT auto switching keyboards ..... **£15.00**  
VGA colour monitors (0.31 DPI) with  
VGA card ..... **£185.00**

**Lots of other bargains for the PC Builder and  
Electronics enthusiast.  
Add 17.5% VAT  
to all prices**





# EXPRESS ON-LINE

Want to know where you can find like-minded computer fans?  
Switch on to Express' On-Line for the latest in User Groups...

## EXPRESS IS NOW ON-LINE!

Join the Express conferences on ASPECTS (061-792 0260) and CIX (081-399 5252)

## NEW ARRIVALS

### User Groups

- **AMIGA JUSTICE** - Free PD exchange, SAE to 73, Oaklands Rd, Cricklewood, London NW2 6DD
- **AMOS USER GROUP** - Regular newsletter, advice, PD, free from: 22 Ceylon Place, Eastbourne, E Sussex. Tel: 0323 26790
- **BYTES** - Amiga users and PD group, 295 Peniel Green Rd, Llansamlet, Swansea. Tel: 0792 772745

- **FREEWAY CONSOLE CLUB** - megadrive Lynx, Game Boy, Game gear, Famicom, cartridges bought, sold, swapped. New and used, also hardware. Tel: 0273 440491 (day) or 0903 767030 (evenings). Ask for Alex.
- **ICPUG** - For all Commodore computers. Free PD, Write to ICPUG, PO Box 1309, London, N3 2UT

## User Groups

### A

- ACORN ARCHIMEDES Archive**, 18 Mile End Road, Norwich NR4 7Q
- THE ADVENTURE 8 STRATEGY CLUB** - Interested in Adventure, strategy RPG, simulations, helpines, solutions covering all formats? Please send SAE to The Adventure 8 Strategy Club, 17 Sheridan Road, London E12 6QT.
- AMIGA HELP CENTRE** - A group to help novices. For CLI help disk and registration send £10 to Simdev, 29 Avon Square, Hemel Hempstead, Herts.
- AMIGA HELPLINE SERVICES** - Free club for young and old. Send SAE to G Keenan, 21 Skirsa Place, Glasgow, G23 3EE.
- AMIGA PUBLIC DOMAIN EXCHANGE GROUP** - Free PD for a low lifetime membership. Send SAE for information to 34 Paston Road Munoesley, Norwich, Norfolk NR11 8BW.
- THE AMIGA TEAM** - A group to help novices. Help given in programming - Assembly, BASIC, C, Logo, Pascal and CLI. For registration and introduction pack send £10 to 11 Beech Grove, Northallerton, North Yorks, DL6 1JY

- AMSTRAD BUSINESS USERS** - Amstrad Professional User Club, Enterprise House PO BOX 10, Roper St, Pallion Ind Estate, Sunderland SR4 6SN. Tel 091-510 8787
- AMSTRAD CPC USERS** - Tony Baker, United Amstrad User Group, 26 Uplands Crescent, Fareham, Hants PO16 7JY. Tel 0329 234 291
- AMSTRAD CPC HOME USERS** - Steve Williams, WACCI, 9 South Close, Twickenham TW2 5JE. Tel 061-898 1090
- AMSTRAD LOCAL GROUPS** - Amstrad Groups Federation, 4 Sutton Road, Gorton, Manchester
- AMSTRAD PC SOFTWARE** - Colin Smith, Colbar, 10 Penwood close, Westbury, Wilts BA13
- AMSTRAD PCW** - Bob Ellis "Rowan" 100 St Peters Close, Moreton-on-Lugg, Hereford HR4 8DW. 0432 761 860
- AMSTRAD PCW CLUB** - Meets monthly in Ealing, London W7 and welcomes experienced PCW users and beginners. Details from Tony Brown on 081-841 3666.
- AMSTRAD 1512/1640/PPC** - PC Independent User Group, The Computer Advice Centre 87 High Street, Tonbridge, Kent. Phone 0732 771 512
- AMSTRAD BUSINESS USERS** - Amstrad Professional User Club, Enterprise House PO BOX 10, Roper Street, Pallion Industrial Estate, Sunderland SR4 6SN. Telephone 091-510 8787
- APPLE II USERS** - tel 051 9284142.
- APPLE MACINTOSH** John Lewis, Macintosh user group, Macintosh House, 11 South Parade,

Summertown, Oxford OX2 7JL

- APPLE SYSTEMS** - Irene Flaxman, Apple 2000, PO Box 3, Liverpool L21 8PY.
- ARABIC COMPUTING** - Rich Lackey, Arabits, 9 Bellview road, Worthing, West Sussex BN13 1EY
- ATARI ALL MACHINES** - Colin Hunt, BaPAUG, Wimborne Road, Oakdale, Dorset BH15 3EF
- ATARI AND ST PC EMULATOR SUPPORT CLUB** - SAE to 153 Parrock Street, Gravesend, Kent, DA121ER
- ATARI BUY AND SELL SOCIETY** - Atari hardware bought and sold. Anything new, anything old, many a bargain looking to be sold or gisa ring to sell watu got. 0495 272092.
- ATARI ST** - Paul Glover, The ST Club, 9 Sutton Place, 49 Stoney Street, Nottingham NG1 1LX. 0602 410241
- ATARI ST/STE HELPLINE** - We can scan, digitalise and provide loads of clip art. SAE to Nist 53, Lenaghan Park, Belfast, BT8 4JB
- ATARI ST USERS ASSOCIATION** - provides support for all Atari ST/E users. Help and advice given. Quarterly club magazine and disk. Also exclusive PD library for members. For further information write to ASTUA, 18 Poplar Close, Biggleswade, Beds

### B

- BBC MICRO** - BEEBUG, 117 Hatfield Road, St Albans, Herts AL1 4JS. 0727 40303

**BATPUG** - Turbo Pascal user group also open to other PC Pascal programmers. Costs £10 per-year. Write to 12 Clegg Avenue, Cleveley's, Blackpool, FYS 9BJ. Send an SAE for sample.

**BRIDGE CENTRE AMIGA CLUB** - A club not just for Amiga users but anyone who wants to become familiar with the Amiga. All age groups welcome. Games, music and educational software. PD software £1. Membership £3 a year and an additional 20p every Friday. Come to our meetings at the Bridge Centre, Haddington, East Lothian, Scotland every Friday.

### C

- C USERS GROUP** - Francis Glassborow, 64 Southfield Road, Oxford OX4 1PA. For everyone interested in the C and C++ programming languages. Publishes a bi-monthly newsletter.
- CD ROM** - UK CD-ROM User Group, High Wings, Salem, Treforys, Abertawe 0792 844 370
- CHESHIRE 16-BIT USERS CLUB** - Amiga, ST, PC, Arc at Radley Common community centre, off Poplars Avenue, Orford, Warrington, Friday nights. All welcome. £1 admission.
- CHESSMASTER 2100 USER GROUP** - IBM and compatible computers. Send formatted 3.5-inch disk plus large SAE for details to 16 Mansfield Road, Kingsley, Warrington, Cheshire WA6 8BZ.
- CID** (Computers and Integration for the Disabled) is a registered charity. Write to Gordon, Chelsea Road, Inverurie, Aberdeenshire, ABS 9QZ or tel 0467 24202
- CLERGY/MEDICAL EDUCATION** - Mr T Jones, FREE-ED Shareware/PD 85 Stoke Road, Taunton, Somerset TA1 3EL. Tel 0823 321 481
- CLUB AMIGA** answers your questions on software and hardware on its 24 hour helpline. Join now. Send £5 to Club Amiga, 5 Bowes Lea, Shinye Row, Tyne and Wear DH4 4PP.
- COBOL LANGUAGE** - Allen Reavie 22 Mourneview St, Portadown, Northern Ireland. BT62 3AW
- COMMODORE AMIGA** - UK Amiga Users Group, Contact 144 Charles Street, Leicester LE2 00D. Telephone 0533 510066 voice; 0533 517615
- COMMUNITY COMPUTING** - Community Computing Network 2nd Floor, 35 Pink Lane, Newcastle, NE1 5DW. Tel 091-261 0317
- COMPUNET** - write to Independent Compunet Club, 148 Furzehill Road, Boreham Wood Herts. WD6 2DX
- CONFERRING** - Compulink, suite 2, The Scantuary, 23 Oakhill Grove, Surbiton, Surrey KT6 6DU Voice 081-390 8446. CIX BBS 081-399 5252
- CPM & MSDOS Users Group** - 42 Birkbeck Road,

Wimbeldon, London SW19 9NZ. Tel 081-543 0824

**CRYPTOGRAPHY & CODES** - Mike Barlow, American Cryptogram Association 5052 Chestnut Avenue, Pierrefonds, Quebec HBZ 2A8 Canada

### D

- DATAEASE USER GROUP** - High-Tech House, 10 Blackfriars Street, Norwich, NR3 1SJF
- DISABLED** - Jeff Hughes, Special Needs User Group, 39 Eccleston Gardens, St Helens WA10 3BJ 0744 24608
- DRAGON** - Paul Grade, National Dragon Users Group, 6 Navarino Road, Worthing, Sussex or tel 0903 207585

### E

- ECONET** - Michael Ryan, Econet User Gp, Balkeerie Cottage, Eassie by Forfar, Angus DD6 1SR
- EDINBURGH AMIGA USER GROUP** - For more details write to Neil McCrae, 37 Kingsknowe Road North, Edinburgh EH14 2DE or phone 031-443 6234 Monday to Friday 7-9pm.
- EIGHT-BIT BACK-UP** 8-bit user group for all. 25p plus SAE. to: 8-bit back-up, 1 Northolme Close, Grays, Essex.
- EINSTEIN PD USER GROUP** - Help and advice for all Einstein users. Over 100 disks of PD software. Send SAE to SW Knowles, 23 Howldsworth Rise, Arnold, Nottingham, NG5 8HZ
- ELITE PLAYER GROUP** - Swap hints, tips, etc. Fanatics welcome. Beginners welcome. Write: Ian Hurst, 7 Perrybrook Walk, Ashton in Makerfield, Wigan, Lancs WN4 8TR.
- EMULATE** For Amiga, Amex. Monthly newsletter. Write to Pat 12b Northbrooks, Halrow, N Essex
- ENTERPRISE** - William Creaser, 6 Provident Street, Shaw, Oldham, DL2 8AQ. Independent Enterprise User group. Tel 0706 881382
- ENTERPRISE** - Tim Box, Independent Enterprise User Group, 50 Holderhurst Avenue, Finchley, London N12 0HX. Tel 081-346 8032
- ENET** (like Econet) - T K Boyd, Enet (Amcom) User Gp, Seaford Cottage, Petworth, West Sussex
- EUG** - The Acorn Electron User Group. "The ELK is not dead yet!" Send large SAE for details to EUG 134 Great Knightleys, Basildon, Essex ss15 5HQ.

### F

- FORTH Language** - Douglas Neale, FIG (FORTH Interest Group) UK, 58 Woodland Way, Morden, Surrey SM4 4DS

## Let all the world know

Do you run a user group or bulletin board? Do you publish a fanzine? Let the world know about it through *Shopping Express*. Fill in this form and send it to us at: Express On-line, 30 Monmouth Street, Bath BA1 2BW.

(Tick as applicable) ☐ Group ☐ BBS ☐ Fanzine

Your name .....

Address: .....

● Write your ad in block capitals on the grid below using one word per box.




# USER GROUP LISTING

**FREEWAY CONSOLE CLUB** - Mega Drive, Lynx, Gameboy, Game Gear, Famicom cartridges bought, sold and swapped. Both new and used. Also hardware. Telephone 0273 440491 (day) or 0903 767030 (evenings) and ask for Alex Craven.

**GENEALOGISTS** - Computer Group, Society of Genealogists, 14 Charterhouse Buildings, London EC1M 7BA. 071-251 8799

**GENERAL HOME MICROS** - Steve Winter, Chic Computer Club, PO BOX 121, Gerrards Cross, Bucks SL9 9JP 0753 884473

**GEOS USER GROUP** - for C64 and 128 owners. Disk based magazine. Send blank disk to GUG (UK) 110 Deansway, Woodloes Park, Warwick CV34 5DQ

**GUG (UK)** - GEOS User Group for C64/128. Also non-GEOS PD library. Send disk and return postage for GEOS, SAE for non-GEOS to GUG (UK), 110 Deansway, Woodloes Park, Warwick CV34 5DQ

**GROUND FLOOR USER GROUP** - support for all serious users of PC, ST, Amiga and PCW. Meets monthly in Calderdale, West Yorkshire. Further information from Jaa on 0422 844991 days or 0422 845789 eves.

**HOUSING ASSOCIATIONS** - Caroline Maries, Micro Users Ltd, Beaver Housing Society, 23 Lewisham High Street, London SE13. Tel 081-318 1126

**HEALTH WORKERS** - Sue McKendrick, Healthlink, 164 Windsor Rd, Ashton-in-Makerfield, Wigan WN4 9ES. Voice: 0942 712 385

**IBM PC USER GROUP** - PO BOX 360 Harrow HA1 4LQ. 081-863 1191 BBS 081-863 6646

**JOMAC USER GROUP** - Spectrum and Amiga tips and jokes sent every month. Write with SAE to Jomac's, Filey Grove, Rhodes Street, Hull

**JUPITER ACE** - John Charter, Jupiter Ace Forth User Group, 17 Spring Wood Close, Dunston, Chesterfield S41 8BS. Tel 0246 237555

**LOCAL AUTHORITIES** - Local Authority Micro User Group, John New, Borough Engineer's Dept, Municipal Offices, North Quay, Weymouth, Dorset DT4 8TA. Tel 0305 785101 ext 272

**LOTUS PRODUCTS** - Lotus User Group, 79-80 Peascoe St, Windsor, Berks SL4 1DH. Telephone 0753 841686

**LYNX** - R B Jones, Lynx User Group, 39 Ashton Close, Needingworth, St Ives, Cambs

**LYNX DISK USER GROUP** - J Koushappas. 172 Pasteur Gdns, London N18. Tel: 081 807 3859.

**MEMOTECH** - Phil Eyres - Memotech Owners Club, 23 Denmead Road, Harefield, Southampton SO2 5GS. Tel 0703 585106

**MID CORNWALL COMPUTER CO-OP** - Alan ST. 8 Victoria road, Roche, St Austell, Cornwall PL 26 8JF. Telephone 0726 890473

**MIDI MUSIC** - Spectrum music machine/MIDI user group. Magazine on tape, plus programs and lots more. For more details contact Sean Sanderson on 05242 62258

**MSX SYSTEMS** - write to Keith Neal, MSX Link, Austerby House, 80 Austerby, Bourne, Lincolnshire PE10 9JL

**MUG USER GROUP** - If you either play or run a multi-user game then write with details to the MUG User Group, 4 Garden Close, Penrith, Cumbria, CA11 7UD.

**NEW BUG COMPUTER CLUB** - Support for all machines. Meets weekly at Oxclose Multi-Purpose Centre in Washington each Tuesday at 7pm. All welcome, visitors 50p

**NEWBRAIN** - Ron Bury, NewBrain Support Grp, 70 Cranberry Lane, Darwen, Lancs BB3 2HL. Tel 0254 771891

**NIMBUG** - write to 13 Belle Vue Ave, Gosforth, Newcastle-upon-Tyne NE3 1AH. Tel 091-285 7806

**NORTHERN IRELAND AMIGA USERS** - Send £2 for disk-based newsletter. Tips, news, reviews etc. NIAU, 98 Crebilly Road, Ballymena, County Antrim BT42 4DS.

**NW ARCHIMEDES USER GROUP** - Meets every Friday at Citizens Advice Bureau, next to Spectrum arena in Birchwood, Warrington. Ring Paul on 051-426 3915 after 6pm

**OBSOLETE COMPUTER CLUB** - Established 1990 to preserve and support Pre 1986 micros. Applications in writing to Mr S Walters, 42 Achilles Road, London NW6 1EA stating system details, date and history. All systems, micros and minis.

**OLIVETTI PC1/PCS USER GROUP** - Help with all aspects of these machines. Tel 0977 617077 or write to 68 Queen Elizabeth Drive, Normanton, W Yorks

**ORIC ENTHUSIASTS** - The contact point for all Oric support. 8 Staley Hall Road, Stalybridge, Cheshire SK15 3DT. Tel: 061-303 7369.

**OSBORNE/CPM/MSDOS** - write to Jeremy Browne BOOG, 102a Aldershot Road, Fleet, Hants GU13 9NY. Tel 0252 621745 voice or 626233 BB

**PAGESTREAM USERS GROUP** - All Atari/Amiga owners of Pagestream send large SAE to PUG, 70 Offerton Lane, Stockport, SK2 5BS.

**PC INDEPENDENT USER CLUB** - Helpline service, bi-monthly journal, shareware/PD, local meetings, bulletin board. £29-£50 pa (£36 businesses, £19 students) Free 30 day trial 0732 771512

**PHILOSOPHY APPLE** - G Haines, Chinese Room Club, 43 Cornwallis Gdns, Hastings, East Sussex TN34 1LX. Tel 0424 714 102

**POSTSCRIPT USERS GROUP** - JP McKeown, 3 Padn Moran, St Mawes, Cornwall TR2 5BA.

**PRESTEL** - Andy Leader, ClubSpot 810, Church Farm, Stratton St Michael, Norwich, Norfolk, NRQ15 2QB

**PSION ORGANISER** - Mike O'Regan, IPSO, 130 Stapleford Ln, Beeston, Nottingham NG9 6GB. Tel 0602 735482

**PUBLIC ADVERTISING LIBRARY** - For Speccy owners. Two free C90 tapes when you join, as long as you send an adventure game original. We have some adventures available but we want more. For more info send an SAE now, to Alec Carswell (PAL), 16 Montgomery

Avenue, Beith, Ayrshire, Scotland, KA15 1EL

**PUC'S ATARI PORTFOLIO USER GROUP** - Offers newsletters, technical assistance, Talkback feature, software/hardware updates and hot news. Tel 0635 73662.

**QUANTA, QL AND THOR USER GROUP** - The Corner House, Loxley, Warwick, CV35 5JT. Tel: 0788 842543

**R-BASE** - write to Mrs Tansy Beal, R-Base User Group c/o Room A2044 BBC Woodlands, 80 Woods Lane, London W12 0TT. Telephone 081-576 7187

**RE-RUN USER GROUP** - 8-bit user group. User support, newsletters and PD library. Send stamp and 10p for information to User Group, One Northholme Close, Grays, Essex. RM16 2NX.

**RESEARCH MACHINES** - Steve Rochford RM National User Group, George Stephenson High School, Southgate, Killingworth, Newcastle NE12 0SA. Tel 091-268 2002

**REVELATION (PICK)** - write to Malcolm Frame, UK Revelation User Group, 136 Saint Albans Road, Watford WD2 4AE or Telephone 0923 35515

**SANYO MBC-550** - M H Syed, Wistaria, 53 Acacia Grove, New Malden, Surrey KT3 3BP. Tel 081-942 9009

**SCHNEIDER EURO PC** - Alex Kefford, SEPUG, 11 Crabtree Road, Three Bridges, Crawley, West Sussex RH10 1NF

**SCIENTIFIC PC USERS** - write to Tim Bunning, SPCUG PO BOX 17, Retford, Notts DN22 6BQ Tel 0777 709009

**SERIOUS GAMER** - Flat C, 43 Colvestone Crescent, London E8 2LG. Telephone 071 241 5446.

**SERVICES USERS** - write to Squadron Leader G Howson, Services Personal Computer Association, Stk Eng 15a HQSTC RAF High Wycombe, Buckinghamshire

**SHARP USERS CLUB** - Contact Andrew Ferguson, 11 Harcourt Close, Henley-on-Thames, Oxon RG9 1UZ. Tel 0491 574850 evenings only.

## COMPUTER TECHNOLOGY FAIRS THOUSANDS OF BARGAINS FOR ALL.

For 8, 16 & 32 Bit Computers  
+ Games Consoles.

### SHOW DATES

Brighton 20th October  
Corn Exchange, Church Street

Southampton 3rd November  
Guildhall, Civic Centre

Manchester 1st December  
Whitworth Hall,  
Manchester University

Birmingham 12th January 1992  
Solihull Conference Centre

THE UK'S TOP DISCOUNT DEALERS WILL BE  
PRESENT, SELLING SUCH GOODS AS:

- New and used systems • Spare Parts • D.I.Y. Parts • Memory Upgrade • Simms • Sipps • D-Rams • Boards • Disk Drives • Hard Drives • Mice • Books • Blank Disks • Joysticks • Printers • Faxes • Keyboards • Monitors • Public Domain/Shareware • Disk Boxes • Disk Labels • VGA Cards • Cables • PC Motherboards • 286/386SX • 386DX • 486 • Controller Cards • Mouse Mats •

JUST SOME OF THE MACHINES & SOFTWARE CATERED FOR:

- IBM • Compaq • PCs in general • Amiga • Atari • Amstrad • Spectrum • C64 • Sega Megadrive • Master System • Nintendo • Plus many others.

Show Time from 10am to 4.00pm.

Admission adults £2.50, children/OAP £1

STALLS  
AT ALL  
SHOWS

£45 - FOR 1  
£85 - FOR 2  
£120 - FOR 3

STALL HOLDERS TEL/FAX  
JENNY ON  
0273 607633  
OR WRITE TO:  
C.T.F. 16 MANOR ROAD,  
BRIGHTON, SUSSEX,  
BN2 5EE



## THE PLACES TO BE...

**SHREWSBURY AMIGA USER GROUP** - 1 Haughmond Court, Featherbed Lane, Harlescott, Shrewsbury, SY1 4NJ. Please enclose an SAE.

**SOLINET BBC** - User Group supporting SWR and Solidisk products. Magazine on disk. SAE 41 Westbrook Drive, Rainworth, Mansfield, Notts NG21 0FB

**SOLITUDE MOUNTAIN** - Friendly Amiga user group. Send blank disk or 50p to 565 Heathway, Dagenham, Essex

**SMART SYSTEMS USERS** - write to Francis Barton, Basement Holy Rosary church, Louis Street, Chapelton, Leeds LS7 4BP. Tel 0532 629202

**SOUTH 16 AMIGA USER GROUP** - the UK's number one Amiga user group. For more information send SAE to South 16, PO box 16, Southampton, SO9 7AU. Now!

**THE SOUTH EAST ESSEX USER GROUP (SEEUG)** - Two computer graduates wish to form ST group for local enthusiasts. Interested? Call 04022 24702 or 081 598 8998.

**SOUTHERN AND DISTRICT. PC** and ST user group. Tony Lowes 61A Broadway West, Leigh on Sea, Essex SS9 2BX

**SPANDEFANG SOFTWARE** - 68000 AC Coders magazine. Send £2 for sample to 4 Cambridge Terrace, Harrogate, North Yorkshire, HG1 1PN. Atari, ST, IBM PC. 3.5 inch disk included in price.

**SPECTRUM PLUS 3 USER GROUP** - monthly magazine. 57 Lovers Walk, Dunstable, Bedfordshire, LU5 4BG

**SPECTRUM DISCOVERY CLUB** - magazine on disk for the Opus Discovery Disk Drive and the Sam Coupe. BD Mumford, 57 St Saviours Road, West Croydon, Surrey, CRO 2XE

**ST USER GROUP** - Send an SAE for a news letter to ST User Group, Ben Dobson, 1 Ryedale Way, Selby, North Yorkshire YO8 9PB.

**STOURBRIDGE ATARI USERS' GROUP** - for 8-bit Atari computers. Send SAE to LK Taylor, 99 Bredon Road, Stourbridge, West Midlands, DY8 4LA. Telephone 0384 379575

**SUPER FAMICOM PENPALS CLUB (SFPC)** - Growing club for ST owners. All new games reviewed. Write to: P Jess, 58 Legacurry Road, Ravarnette, Lisburn N Ireland.

**SYNCSOFT** - Exclusive 64 computer information. £2.95 to join, including p&p. Make cheques to Synsoft and send them to 9-10 Morland Gdns, Southall, Middx UB1 3DY

**SYRACUSE ARCHIMEDES DISK MAGAZINE** - out

now only £4.99. Includes the mag disk plus two disks of public domain software. Send to Asta Wythene House, 10 Alastair Crescent, Prenton, Wirral, L43 0UR.

### T

**TAS (DATABASE)** - Neil Hegarty, TASUG C/O Solutions for You, 1st Floor, 2 Lytton Rd, New Barnet, Herts EN5 5BY. Tel 081-441 1133, BBS 081-449 4171

**TEXAS** T199/4a - Peter Brooks, International TI User Group, 96 Banbury road, Oxford OX2 6JT. Telephone 0865 510822.

**TIUGUK** - TI99/4A user group UK for S/W on disk, tape and module. Offers magazine and help. Write with SAE for more details to Peter Walker, 24 Bacons Drive, Cuffley, Potters Bar, Herts EN6

**TURBO** - SAM Coupé user group. 6 newsletters and mags a year, PD library £10 a year. SAE for Info: TURBO, 8 Healet, Lakeside, Tamworth, Staffs B77

### U

**UNIX USERS** - UKUUG Secretariat Owles Hall, Buntingford, Herts SG9 9PL. Tel 0763 73039 /73255 (fax)

### V

**VENTURA PUBLISHING** - VPU (Ventura Publisher User group) Linda Liddell VPU c/o LLA Lound House, Forncett St Mary, Norfolk, NR16 1JP. Tel 0508 41580

### W

**WAKEFILED AND DISTRICT AMIGA USERS** - interested in forming a local Amiga users' group? Contact Eddy on 0924 361101.

**WATFORD INDEPENDENT** - Commodore Product User Group. Meetings 3rd Wednesday in month 7.30-10.00am at St Thomas Church Hall, Watford. Large PD library available to members. Details from Y2 Computing, Watford, 0923 50161

**WORDPERFECT** - Michael Norman, Wordperfect User Group (UK) Dove Barn, Manor Farm, Wootton Woodstock, Oxon, OX7 1DX. Tel 0992 850500.

**WORDPERFECT** - Dr Ian Barton, A Perfect World, High Rigg, Alma Rd, Tideswell, Derby SK17 8LS. Tel 0298 871 925

**THE WOOLMOOLOO CLUB** - If you like Jean-Michelle Jarre then join the club. Write to Bryan McPhail, 14 Wentworth Square, Kilwinning, Ayrshire, Scotland KA13 6RQ. Please state NCE 131.2.

### Desktop Cad '91

Tue 5 - Thu 7 Nov

As above.

### Open Systems '91

Wed 6 - Fri 8 Nov

Olympia, London, Info: 0784 472200.

### All Micro Show and Radio Rally

Sat 9 Nov

Bingley Hall, Stafford. Info: 0473 272002.

### Computers in the City

Tue 12 - Thu 14 Nov

The Barbican Centre, London. Info: 081 868 4466.

### World of Commodore Show

Fri 15 - Sun 17 Nov

Presented by the Amiga Format team. Earls Court, London. Info: 0462 420785.

### The Next Generation: Computing with Light

Thu 21 Nov

Lecture at King Edward VI College, Totnes. Info 0803 863821.

### Vision and Reality

Thu 28 - Fri 29 Nov

Multimedia conference, Jaarbeurs, Utrecht, Netherlands. For more info: +31 (0)70 3560666.

### South Wales Computer Fair

Sun 1 Dec

The Afan Lido, Port Talbot. For info call: 0792 310865.

### Making the Difference

Now - Tue 31 Dec

Science Museum, Kensington, London. Info: 071-938 8080

### Charles Babbage's Impact on Modern Computing

Wed 23 Oct

The Science Museum, London at 17.30. Info: 071-938 8196.

### Image Processing '91

Tue 29 - Thu 31 Oct

Birmingham NEC. Info: 081-868 4466.

### System Builder

Wed 30 - Thu 31 Oct

Sandown Exhibition Centre, Esher, Surrey. Info: 0822 614671.

### Computer Animation Festival

Thu 31 October - Fri 1 Nov

To accompany the Computer Graphics '91 Conference. Marble Arch Odeon. Info: 081-868 4466.

### Computer Graphics '91

Tue 5 - Thu 7 Nov

Alexandra Palace, London. Info: 081-868 4466.

## Complete Systems Auctions Next Auctions

28th Sept....Warwick Racecourse  
19th Oct.....Haydock Racecourse  
2nd Nov.....Cheltenham Racecourse

## Catalogues - £1.00

For further information or details of private treaty deals please call our Auction Hotline on

# (0384) 67885

## THE COMPUTER TECHNOLOGY FAIR

at

THE CORN EXCHANGE  
CHURCH STREET  
BRIGHTON

### SUNDAY OCTOBER 20th

DOORS OPEN 10 AM - 4 PM

ADULTS £2.50 CHILDREN / OAP £1.00

Hardware - Software - Floppy Disks - PC - Amiga  
Atari ST - Atari 8 Bit - Commodore - Amstrad  
Spectrum - Nintendo - Sega - Hard Disks - Disk Drives  
P.D. Libraries - Disks - Second User Equipment  
Joysticks - Sam Coupe....

In fact ANYTHING (well nearly!!) you could ever want for your computer.

BARGAINS GALORE ACROSS ALL FORMATS



## COMPUTER JOBS

### PROGRAMMERS

We are looking for PC and Amiga programmers to work on a number of projects, including games and educational software. We are particularly interested in hearing from programmers with experience in 'C' as well as in 68000/8X86.

Freelance contracts are available for immediate start, or at a later date.

Please write to:

#### CREATIVE MATERIALS LIMITED

Attn: Maria Taylor  
28 Church Lane  
Prestwich  
Manchester M25 5AJ

PLEASE NOTE: We cannot deal with telephone enquiries relating to this advert.

**Future**  
PUBLISHING

### Production editor

Salary according to experience

- Founded in 1985
- Now over 220 staff
- Market leader in computer titles
- Exciting launch plans
- Britain's fastest-growing publisher
- 17 national magazines including Amiga Shopper, Amiga Format, Amiga Power, New Computer Express, PC Plus, Classic CD, Mountain Biking UK, Needlecraft

Amiga Shopper is the leading magazine for serious users of the Amiga computer; no games here! We intend to lift the production standards of the magazine above the other run-of-the-mill computer titles, so we need a production editor who gets things done.

Superb subbing skills are essential; much of the work involves turning contributors' offerings into cogent English. Extracting copy from recalcitrant authors requires a strong personality. The ability to find a way out of an impossible situation would be useful, as would an eye for a striking headline.

We work entirely on Macs: DTP experience is essential. No prior knowledge of Amigas is required, so Amiga tech-heads with no publishing experience need not apply.

Please write with CV and details of current salary to the editor, Stuart Anderton.

Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath BA1 2BW

**Future**  
PUBLISHING

### TELEPHONIST

SALARY TO £ 8,000

- Launched in 1985
- Now over 220 staff
- 17 national news stand magazines
- Market leader in computer titles
- Exciting launch plans
- Britain's fastest growing publisher

Due to the promotion of one of the current postholders we are seeking an experienced, enthusiastic person to join our team and assist in operating a very busy 24 line, 220 extension Monarch Switchboard.

If you are someone who is flexible, enjoys a challenge and can work under pressure we'd like to hear from you.

Hours of work are 8.30am to 5.30pm with 20 days annual leave, profit share and pension scheme.

If this sounds like what you're looking for, contact Annie Chalmers, Human Resources, for an application form, or write to us at the address below.

Future Publishing Ltd., Beauford Court, 30 Monmouth Street, Bath, BA1 2AP. Tel: (0225) 442244

### DO YOU WANT TO BECOME A PROGRAMMER?



Established 1968

#### Move across to the rewarding world of IT

We have a series of short and long term training programmers in Computing and Information Processing.

- \* C & G 424/425 Certificate in applications programming.
- \* C & G 418 Computer Programming & Information Processing.
- \* Evening courses in DBASE, WP, Spreadsheet Analysis.
- \* Evening courses in Pascal, BASIC & COBOL.

Contact Central London College on 071-580 4596.

TRAINING FOR YOUR FUTURE



- RamScan upgrades Audio Engineer
- Silica announces the doubling of guarantee periods on GVP products
- 386 ATonce PC Emulator is heading for the shelves!
- Be ready to enter the third dimension with Pixel 3D

## AUDIO UPGRADE

If you're looking for the best in Amiga sound sampling technology, then there can be only one choice - RamScan's Audio Engineer.

Released last year to critical acclaim, Audio Engineer has rapidly established itself as the number one Amiga sampler. Even now, other developers are only just starting to catch up with what is generally acknowledged as the number one in Amiga sampling technology.

Not wanting to be outdone, RamScan have announced the launch of version 2 of its renowned sampling software. The Audio Engineer sampling hardware (expertly engineered by GSoft) has remained unchanged, but RamScan has considerably upgraded the Audio Engineer software to distinguish it from the rest of the pack.

According to UK distributor HB Marketing, the new program will also be sold as a stand alone system without the GSoft hardware through Aegis/Oxxi.

Selling under the name AudioMaster 4, both products are available from HB Marketing which is on the other end of 0753 686000.

Anyway, here's what it has to offer -

**4 Times Oversampling** - Now here's a first for an Amiga sampler. Audio Engineer 2 now supports 4 times oversampling, a feature which is probably more at home on a CD player than a sampler.

This new feature significantly enhances the sound quality of recordings made at lower sampling rates by substantially reducing the aliasing distortion normally associated with samples grabbed at lower sampling rates. In many cases, this will allow you to sample at much lower rates whilst retaining respectable sound quality. With this powerful capability, longer samples can be grabbed with less memory.

**Time/Pitch Bend** - Wow. Now this



• Look out for a major upgrade to RamScan's Audio Engineer real soon. Offering four times oversampling and time stretch facilities, AudioEngineer has once again established itself as the Amiga number one

is impressive. Audio Engineer 2 now has the ability to alter a sound's pitch and duration independently.

If, for example you have a sample that plays for 20 seconds, Audio Engineer 2 can stretch the sound to last for 25 seconds without altering the pitch of the sound. It's also possible to make the pitch of the sound higher or lower without altering the duration of the sound.

The applications for this feature are enormous. Imagine, for example, you're using Audio Engineer to add sampled music and sound effects to a video you're working on and the sample you have lasts 5 seconds less than you actually want it to. With Audio Engineer, you can stretch that sample with ease - the only professional samplers that I know that can do this are the Akai S1100 and the infamous Synclavier (and they cost many thousands of pounds!).

**Realtime Pitch Bend** - Another first for an Amiga sampler is real time pitch bend which allows you to alter the pitch of a sample as it is being recorded or played back in real time. Most professional samplers support this, but Audio Engineer is the first Amiga

sampler to do so.

**Audio DJ** - A new bonus program that comes with Audio Engineer 2 is Audio DJ. The program allows you to load up to 180 samples into your Amiga (memory permitting) and then play any sound simply by clicking on it with the mouse pointer.

Not only can it be used as a preview tool for your samples library, but it also serves as a real time effects panel for DJ's and anyone else who should require such a facility.

And the rest - Add to all these new features Realtime Zoom (just like Audition 4), Telephoto, On screen calibration, progress meter, automatic hardware filter, digital filtering and a lot more besides

## GVP GUARANTEE X 2

Silica are well chuffed with themselves at the moment. Not only have they recently picked up exclusive distribution rights to Great Valley Products' wide range of absolutely brilliant add-ons, but they're rapidly becoming the number one supplier of Amiga related products in the UK.

To mark the occasion, Silica (in conjunction with GVP) have announced that as from now, all GVP products bought through Silica carry a two year guarantee - which is a year more than the previous guarantee period.

If you're in the market for such things as hard drives, processor accelerators and such like, you won't go far wrong with GVP. Indeed, I'd go so far as to say that GVP products are probably the best you can buy.

In particular, GVP do a particularly nice line in hard drives for both the A500 and the B2000 (A1500). Its series 2 hard drives for the 2000 are not only some of the most advanced available for the Amiga, but also the fastest. Why not check them out for yourself?

To find out more about GVP

products and the rest of the Silica product line, give Silica a call on 081 309 1111.

## HARD DISK HEAVEN

Hard disk owners looking for a reliable way of backing up their drives may be interested in a new product which is being distributed in the UK by HB Marketing (☎ 0753 686000).

Called MR BackUp Professional, the program not only allows you to back up your drive to floppy disk, but also to any SCSI-compatible device including tape streamers and DAT drives. What's more, it's damned cheap - just £50 to you.

## 386 ATONCE SOON

Staying at Silica, the company recently revealed to me that a '386-based version of its successful Vortex ATonce PC Emulator is in the pipeline. Soon to be released on the ST, the Amiga version of ATonce386 should follow soon after.

Vortex had originally intended to release both the Amiga and ST versions almost simultaneously, but it has encountered problems trying to get the '386 to work with the Amiga. According to Silica's press officer, Andy Leaning, the simplicity of the ST's architecture makes it much easier for the '386 to work, but he hopes that the Amiga version should not be far behind. At the present time, no firm details are available, but I'll bring you more as soon as I hear it.

If you can't wait that long, then the '286 version of ATonce is still available. It's a very nice piece of kit indeed which will allow your Amiga to run PC software alongside Amiga software thanks to the joys of Amiga multitasking.

And, as always, I'll bring you a full review as soon as those nice people at Silica send me a review sample.

☎ For more information give Silica a bell on 081 309 1111 for more.

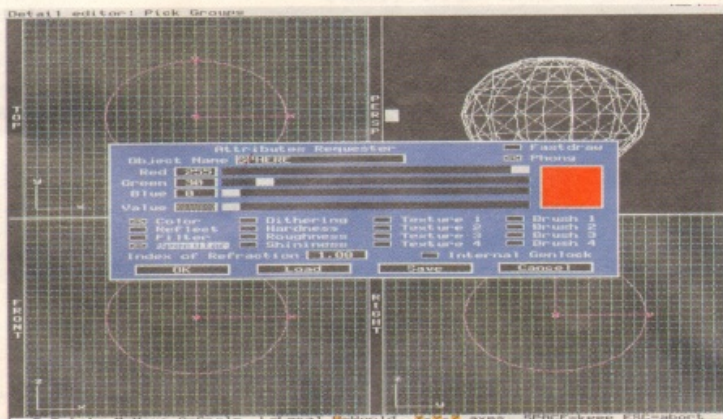
Jason Holborn

## PIXEL 3D OBJECT CONVERTER UPGRADED

Also new from HB Marketing is an upgraded release of Pixel 3D, the absolutely stonking object converter for ray tracing programs.

Just like the original, the program allows you to convert objects between a variety of different programs including Sculpt, 3D Professional, Turbo Silver, Imagine, VideoScape and even AutoCAD (the PC CAD program). AutoCAD supports extend to saving only, but it's nice to have it nonetheless.

New features include the ability to view the object being converted in wireframe, solid, shaded or photo mode (ray traced, I suppose), the ability to convert bitmapped images to 3D objects (which is handy for digitised logos, text



etc), line straightening algorithms (reduces the amount of points in an object), colour defined extrusion, normal extrusion and beveling and much more besides.

I'll be bringing you a review of this powerful package next week, so stay tuned.

If you can't quite wait that long, then phone HB yourself on 0753 686000. Don't forget to tell them Express sent you!

• See objects in a totally new light with the Pixel 3D Upgrade which will enable you to view and edit images from a number of popular ray-tracing graphics packages



# ST

- The word processor is mightier than the pen and the new upgrade of *Protext* is the mightiest of all
- Are you stuck for a word? *Rhyme King* can help
- Which software company is helping out new bands?

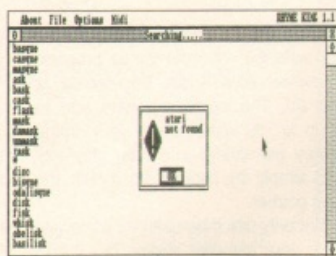
You're probably sick to death by now of reading how wonderful the new version (5.5) of Arnor's *Protext* is, so I won't wibble on about it for too long. Having said that, I have to admit that all the praise it has been getting is justified.

For anyone who wants a word processor to write text in bulk, perhaps for import into another program, *Protext* is the program to go for. It doesn't mess about with fonts, WYSIWYG (what you see is what you get) and all that nonsense; it doesn't even use GEM (except for the menus and the file selector). This approach is a little daunting at first, especially for those newer ST owners that have been weaned on a diet of GEM, but once you're used to it you'll never look back.

Version 5.5 fixes the only major problem with *Protext*, the lack of a thesaurus. Some people wouldn't be seen dead using one, but any right-minded soul will know how useful they can sometimes be – even more so if it's on hand at all times.

The thesaurus works in the same way as the dictionary, being loaded from disk as needed, so memory space isn't wasted. It has 43,000 entry points (ie things you can look up) and 827,000 responses, which is, er, quite a lot really. It's point-and-click; any of the listed responses that take your fancy can be clicked on to obtain another list of words (and so on ad infinitum if you're not careful).

There are some more minor changes. The spell checker will now detect if you've used the same word twice twice in a row (not such a silly mistake as you may think) and checks that each sentence begins with a capital letter. The word count option has been expanded to give you some stats about your copy, such as the average word and sentence length, the number of different words used and even a complete list of every word used together with its frequency.



• Whaddaya mean, Atari not found? There are plenty of words that rhyme with Atari. Ferrari, for instance. And – um – dairy (almost)

Automatic hyphenation (something that, strangely enough, seems to be more common with desktop publishing programs) has been incorporated too. This can help reduce the amount of blank space in justified text by splitting long words at appropriate places. Naturally this will only be useful if you're planning to print from *Protext* itself, but it does work well.

A new conversion format has been added. You now have the option of converting to RTF (Rich Text Format). This is used by a lot of Apple Macintosh software (the most prominent one probably being Microsoft Word), so if you use a Mac at work and write on your ST at home, for instance, this could save you a lot of time trying to transfer files between the two.

The on-line Help option has been revamped and the info is now displayed inside a 'homemade' scrollable window. Any highlighted word in the text can be clicked on to find out more help for that particular command. At last, the on-line help is really useful, especially for finding out about those more esoteric commands when the manual is propping up next door's greenhouse.

The only disappointing thing about *Protext* 5.5 (apart from its need for 1MB of memory) is its price – £152.75. Even the upgrade from version 5 is £30. But if you can afford it *Protext* is the word

## UNBELIEVABLE (EXCEPT IT'S NOT)

Microdeal is fit to burst with excitement, all because its Replay sampler was featured running on an ST on Channel 4's *Sixtiesomething* at the beginning of September. And the demonstrators? None other than those cheeky chaps with the strange shorts and vacant-voiced vocalists, EMF.

But then Microdeal is used to fame. Apparently its sampler has been used in videos by King Bee (er, who?) and – yes! – Paula Abdul. Perhaps it has something to do with the fact that its (rather rashly-stated) policy is to give away free products to known and up-n'-coming artists. Doubtless St Austell is about to be invaded by thousands of 'not quite made it yet' artists all claiming their free gear.

Of course, this is further proof (as if any were needed) that the ST is the computer to own if you're even faintly interested in music. Or EMF.



• *Protext* 5.5 was used to write this very page! Spooky, huh? (Well, no, perhaps not.) The thesaurus is in full swing here

processor to buy; it's lasted for over five years and it's not about to become redundant now.

Arnor is at 611 Lincoln Road, Peterborough PE1 3HA. ☎ 0733 68909. (Incidentally, try going to the Help menu, choosing About Named Subject and typing in 'Stylewriter'.

## NOVELTY ISLAND

Go on, admit it. How many times have you been stuck for a rhyme? That embarrassing moment when you just can't think of anything. What fits with 'transubstantiation'? How can you make 'orange' work? There's one thing you need – a rhyming dictionary.

And, as it happens, BSA Dataware can do you one cheap with no questions asked. Its program *Rhyme King* will find combinations beyond your wildest dreams. Just type in the word you want to find a rhyme for, wait a couple of seconds and a whole list is displayed.

It doesn't just handle straightforward rhymes, either. You can search for alliterative words (ones which have the same initial letter ie people, pepper, piper), consonance rhymes (where the final consonant stays the same but the vowels differ ie people/ripple) and assonance rhymes (only the final vowel sounds rhyme ie meet/seen/greed).

Most of the time the program works well, but occasionally it'll throw up something that you can't help but laugh at, or that you've never heard of. Enter 'oblique' and it gives 'communique' as an option; 'omelette' gives 'novelette' (nearly, but not quite) and 'harass' spews out 'trass'. What the hell is trass?

It has a valiant go with 'orange', the only unrhymable word in the English language (so they say), but only manages 'lozenge' or 'challenge'.

BSA says the program is aimed at lyric writers, poets and rappers. Unless you fit into one of these categories you're unlikely to find much use for *Rhyme King* (apart from a laugh or two) especially as it's £20.

BSA Dataware, 44 Hordern Road, Wolverhampton WV6 OHF.

Ed Ricketts

## ARE YOU BORED OF YOUR KEYBOARD?

If you owned a Spectrum before your ST you may remember that some games (*Elite* for example) came with a keyboard overlay to cover up that horrible placemat-style exterior. Been yearning for overlays for the ST ever since upgrading? Step right this way...

An outfit called Silverbird Computing is producing just the product you're looking for. Its founder, Mel Noonan, was so frustrated by all the commands he had to remember when playing his flight sims he decided to set up a company specifically to produce overlays. They simply fit over any ST keyboard and have spaces for you to write in the commands of each key.

I'm not entirely convinced of the value of these overlays. In the end, they serve the same purpose as having the manual open in front of you. Because the keymap is separate from the keys, instead of actually fitting around them, you still have to divert your attention from the keyboard to find the command you want.

The overlays are available in packs of five for £6 inclusive, from Silverbird Computing, 47 Barton Road, Beds LU5 6LG. ☎ 05255 2614.



• Can't find that vital key? Then read the flippin' manual. Or get one of these dead sexy new keyboard overlays and end up doodling all over it as you wait for *Flames of Freedom* to load

Ed Ricketts is a games reviewer on ST Format, the essential magazine for all Atari ST owners.



# PC XT NOTEBOOK

- **BUILT-IN CGA DISPLAY**
- **WEIGHS ONLY 3¾lbs**
- **3 HOUR BATTERY LIFE**
- **1 YEAR ON-SITE WARRANTY**

## SPECIFICATIONS

- 80C86 10MHz PROCESSOR
- BUILT-IN 3½" 1.44Mb DISK DRIVE
- 1Mb RAM
- SOFTWARE - RESIDENT: MS-DOS 3.3 IN ROM
- SOFTWARE - SUPPLIED: GW-BASIC 3.22, MICROSOFT WORKS 2.0
- REAL-TIME BATTERY BACKED CLOCK
- 80 KEYS - EMULATING 101/102 KEY ENHANCED KEYBOARD
- HIGH CONTRAST LCD CGA DISPLAY
- RESOLUTION: 640x200 PIXELS
- SERIAL, PARALLEL & VIDEO PORTS
- LED INDICATORS FOR POWER, FLOPPY DISK & BATTERY LOW
- POWER - MAINS & BATTERY: 4 RECHARGEABLE NI-CAD CELLS, POWER MANAGEMENT GIVES APPROX 3 HOURS OPERATING TIME
- DIMENSIONS (WxDxH): 11"x8½"x1"
- WEIGHT: 3¾lbs
- OPTIONAL: ADDITIONAL RECHARGEABLE BATTERY PACKS

The super-compact Philips PCL 101 Notebook, takes up less surface area than an A4 page, weighs just 3¾lbs, is just over 1" thick, yet only costs £449. The PCL 101 is fast (10MHz CPU) with 1Mb RAM and a 1.44Mb, 3½" standard floppy disk drive.

The easy to read LCD CGA screen measures just 3½"x7½" and displays crisp, clear characters and sharp graphics at CGA resolution (640x200 pixels). The keyboard has 80 full size, full travel keys with 12 separate function keys, emulating a full-size industry standard keyboard.

Industry standard serial, parallel and external monitor ports, are all included. Power can be supplied from the mains via an auto-sensing, multi-voltage adaptor and charger, or by a Ni-Cad battery pack that snaps flush into the main body case. With its sophisticated power management, the battery lasts for about 3 hours (and takes 4 hours to recharge). The PCL 101 offers automatic audio 'battery low' warnings, to help ensure that you never lose any valuable data.

PHILIPS



## PACKAGE INCLUDES

- MS-DOS 3.3
- GW-Basic 3.22
- Microsoft Works 2.0
- PSU/Battery Charger
- Protective Pouch
- 1 Year On-Site Warranty

# £449

REF: NBC 7101 +VAT = £527.58

# 286 + 386 PC AT NOTEBOOKS

Commodore



- **BUILT-IN VGA DISPLAY**
- **20Mb HARD DRIVE**
- **6 HOUR BATTERY LIFE**
- **1Yr ON-SITE WARRANTY**
- **WINDOWS 3 + MOUSE**
- **TEXTURED CASING**

In stylish grey casing with a non-slip, textured finish and using the very latest technology, Commodore's 286-LT and 386sx-LT Notebooks are available from Silica at incredibly low prices.

Both models have a 20Mb hard disk, 1Mb RAM, expandable to 5Mb RAM using two 2Mb RAM cards, a 3½" 1.44Mb floppy disk drive and industry standard parallel and serial ports to allow connection to a wide range of printers, mice, modems and LAN adaptors.

Bright, backlit LCD screens display VGA graphics at 640x480 resolution, with a port to plug in a colour VGA monitor to show the graphics full potential.

These compact Notebooks weigh just over 5.9 lbs (7 lbs with battery) and measure 12¼"x10"x2". They can be powered from the mains, via the multi-voltage mains adaptor, or by their own batteries, which can be recharged while in use, or independently in approximately one hour. Commodore's Powersave feature increases battery life to up to 6 hours and, along with optional rechargeable battery pack, gives you continuous PC power on the move!

## SPECIFICATIONS

	286	386
● PROCESSOR	286	386sx
● CLOCK SPEED	12MHz	16MHz
● LANDMARK (MHz)	11.5	21
● 1Mb RAM EXPANDABLE TO 5Mb	●	●
● 2Mb RAM UPGRADE	£299	£299
● 20Mb 23ms HARD DISK DRIVE	●	●
● VGA GRAPHICS - Res: 640x480	●	●
● 3½" 1.44Mb FLOPPY DISK DRIVE	●	●
● PARALLEL, SERIAL & VGA PORTS	●	●
● UP TO 6 HOURS BATTERY LIFE	●	●
● 1 YEAR ON-SITE WARRANTY	●	●
● WINDOWS 3.0 + MOUSE	●	●
● MS-DOS 4.01 + GW-BASIC	●	●
● 80387sx CO-PROCESSOR UPGRADE	—	£279

## 286 WITH 20Mb HDD

# £999

+VAT = £1173.83

40Mb HARD DRIVE VERSION - £1199

## 386sx WITH 20Mb HDD

# £1199

+VAT = £1408.83

40Mb HARD DRIVE VERSION - £1399

## SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT COURIER DELIVERY:** On all hardware orders shipped in the UK.
- **TECHNICAL SUPPORT HELPLINE:** Team of technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London shop & Sidcup branch.
- **THE FULL STOCK RANGE:** Your PC requirements from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your new Notebook computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Notebook, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest FREE LITERATURE and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE  
**081-309 1111**

**SILICA SYSTEMS**

**MAIL ORDER:** 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-309 1111  
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-308 0608

**LONDON SHOP:** 52 Tottenham Court Road, London, W1P 0BA Tel: 071-580 4000  
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Fax No: 071-323 4737

**LONDON (SELFRIDGES):** 1st Floor, 369 Oxford Street, London, W1A 1AB Tel: 071-629 1234  
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Ask for extension 3914

**SIDCUP SHOP:** 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-302 8811  
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

To: Silica Systems, Dept NCE-1091-70, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

**PLEASE SEND FREE NOTEBOOK LITERATURE**

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

Postcode: ..... Tel: .....

Which computer(s), if any, do you own? ..... 70A

E&OE - Advertised prices and specifications may change - please return the coupon for the latest information.



## PC

## OS TWO TWO

IBM should, as you read this, have released a beta version of OS/2 2.0 that runs Windows applications in standard mode and includes the WorkPlace Shell. If the code in this latest release is without major bugs, sources believe the company may ship the final version by the end of the year.

However, other insiders contend that IBM will have to struggle to meet that deadline. Some users questioned whether IBM will have time to incorporate the APIs from Windows 3.1 by then, given that both programs are expected in roughly the same time frame.

At a user group meeting last week, Microsoft chairman Bill Gates said: "We think [Windows binary compatibility on OS/2] will be a difficult challenge that IBM won't achieve."

## FONT FIX

Baffled by the multitude of fonts and font formats? Ares Software may be your saviour. It plans to introduce a Windows utility that lets you convert files between major font formats.

Scheduled to ship in December, the \$99.95 *FontMonger* converts between Adobe PostScript Type 1 and Type 3, Microsoft TrueType, Nimbus Q, Bitstream and Hewlett Packard Intellifont.

The program exports fonts in Encapsulated PostScript, Adobe Illustrator and Windows Metafile formats, allowing you to modify font outlines in a Windows graphics application, such as *CorelDRAW!* or *Illustrator*. You can also combine characters from multiple type families into a single font that can be accessed from the keyboard.

The program relies on algorithms to convert sophisticated 'hinted' fonts, such as Type 1 and TrueType.

"*FontMonger* doesn't map TrueType hints directly into Type 1 hints," said

## WHEN A 286 CHIP JUST ISN'T ENOUGH

Having observed all the praise heaped on the new Amstrad PC5286 'games machine' by software houses and media alike I can keep quiet no longer.

Come on guys! Although the idea is basically sound the inclusion of a 286 as the central processor is typical of the penny pinching attitude at Amstrad. Just how much cheaper is a 286 chip over half-decent 386 nowadays, eh? Not a hell of a lot, I'll tell you.

For the majority of the better game releases now appearing on the shop shelves a 386-spec machine is the minimum standard for comfortable gaming. *Wing Commander 2*, *Secret Weapons of the Luftwaffe*, *King's Quest 5* and *Falcon 3.0* are prime examples.

Laughably, the fact that US Gold's *Links* is being included in the pack will give

- Will Amstrad's new 286 Games PC be powerful or fast enough to run today's PC games?
- Digital Integration's new swing wing flight sim
- Beta OS/2 2.0 set to emulate Windows
- Befuddled by fonts? Then you need *Fontmonger*



• The new Amstrad's PC5286 'games machine' - ready for the real world?

the game away in a jiffy. *Links* plays relatively slowly on my 20Mhz 386. On Amstrad's paltry 16Mhz 286 it'll crawl. For God's sake Amstrad, take a look out the window once in a while, eh? That's where you'll find the real world!

Ernie Brock, vice president of Ares Software. "It analyses the font and then generates the appropriate set of hints itself. It has a whole set of algorithms for finding out where the hints should be placed." ☎ Contact Ares Software on 0101 415 578 9090.

## WINDOW STEAMER

WordPerfect and Microsoft are stepping up the Windows word processor pace as both companies struggle to get their Windows products out of the door. Microsoft originally expected to ship *Word for Windows 2.0* by the end of the year, but the company now plans to ship the upgrade during October.

WordPerfect has repeatedly said that it plans to ship *WordPerfect for Windows* in October.

Winning the race to market won't mean much, according to analysts: "The major customers are going to wait to see

both before standardising on either one," said Jeff Tarter, editor of *SoftLetter*, in Watertown, Massachusetts. Neither company, however, may make the October ship date, sources said.

WordPerfect posted a notice earlier this month on the CompuServe beta testers' forum saying it was postponing the release of the next beta. WordPerfect didn't give a date for the next release. According to sources, although the Microsoft upgrade looks good, it still needs more work and might not be ready until the end of the year.

☎ Contact Microsoft on 0734 500741.

## V.1 ENGINE

*WordStar for Windows 1.0* will resemble a page-layout program owing to its use of portions of NBI's *Legacy* word processing engine. The program employs a frame-based page layout techniques and includes precise

typographical controls, table generation tools and a variety of graphics tools. It will also have Bitstream's Facelift font rasteriser and 15 Bitstream fonts built in.

Offering keystroke compatibility with *WordStar 6.0* and *WordStar 2000*, the package also features a vertical palette sporting multiple text tools. You can import more than 50 types of files, which retain their formatting.

WordStar hopes to ship the package within the next several weeks.

☎ Contact WordStar 081-643 8866.

## NEW IMAGE

Macros, image processing, document management and networking capabilities have been added to *Legacy* in an upgrade effort to lure users away from *Ami Pro 2.0*, *PageMaker* and *Ventura Publisher*.

*Legacy 2.0's* macro editor enables you to automate document creation. You can open multiple macros simultaneously with the on-line debugger. The \$495 software, which the company hopes to ship in mid-November, will include 20 macros and 28 templates.

The image processing capability, which supports 256-colour and grey-scale images, lets you edit bit-mapped images. You can, for instance, resize an image without changing the proportions, crop it and control features such as brightness and contrast. The upgrade also lets more than one user open the same file simultaneously. You receive a message that the file has been opened by more than one user, and only the first user's changes are saved in the original file. All other changes are saved elsewhere.

Other new features include floating frames that move only when the text to which they are anchored moves and an interactive grammar checker that checks changes as soon as they are made.

☎ Contact NBI on 0101 303 938 2628.

## 'VISUALLY SPECTACULAR' FAST JET FLIGHT SIM



After a quiet period flight simulation aficionado Digital Integration is busily working on a new fast-jet sim based on the Tornado - one of the heroes of the Gulf War.

The game will pit the player against the Iraqis, featuring a variety of missions including a campaign. The structure of the campaign has yet to be decided but each mission will, reportedly, include realistic planning and attack modes. A mission's results will affect the next and



interaction with ground forces will be included. Deception tactics may be added in the air and on the ground.

According to Digital Integration: "All of the buildings, structures and so on are from diagrams, plans and photographs (eg hardened aircraft shelters). The emphasis in *Tornado* is on realism. You can fly down valleys and along rivers. There are railways, highways and so on.

"There are over 30 different aircraft including: Su-17



(Fitter), Mi-26 (Halo - large transport helicopter), Il-76 (Soviet AWACS) and Tu-160 (Blackjack). Enemy airfields have been taken from photographs of Iraqi installations."

DI is very confident about *Tornado's* visuals: "Nothing approaches *Tornado* visually - and that includes *Falcon 3.0*. We've seen it recently and we see nothing to worry about with that product." *Tornado* is due out in early 1992.

☎ Contact Digital Integration on 0276 684959.



# CAREER OPPORTUNITIES

with a leading computer distributor

## SDL ARE APPOINTING PRODUCT MANAGERS

To join their purchasing team. Specialists are required to cover each of the following product areas.

**PC & Peripherals**  
**Atari ST**  
**Commodore Amiga**

Each Product Manager will be responsible for:

Developing existing manufacturers accounts and keeping abreast of product developments.

Attending appropriate product shows in the UK and overseas and sourcing new manufacturers and products.

Negotiating buying terms, warranty and supply conditions.

Preparing initial sales and marketing literature.

Assessing stock requirements, placing orders and maintaining stocks at optimum levels.

Developing promotions, offers and incentives with manufacturers.

Monitoring development of product lines and instigating action when required.

You must be successful and self-motivated with good computer skills and market understanding.  
Able to work at a fast pace with strong oral and written communication abilities.  
A comprehensive salary and benefits package awaits successful applicants.

Applicants should write with a full CV  
and current salary details to:

**David West - Personnel Manager,**  
**SDL, Unit 10, Ruxley Corner Industrial Estate,**  
**Edgington Way,**  
**Sidcup,**  
**Kent, DA14 5SS (Tel No: 081-309 5000)**





## DESKTOP PUBLISHING

DABBING  
IN DTP

DTP on the ST has taken many revolutionary steps towards publishing perfection, but there are so many packages out there, how do you go about choosing one? Nial Grimes shows you what they do, how they do it and which one's best for you

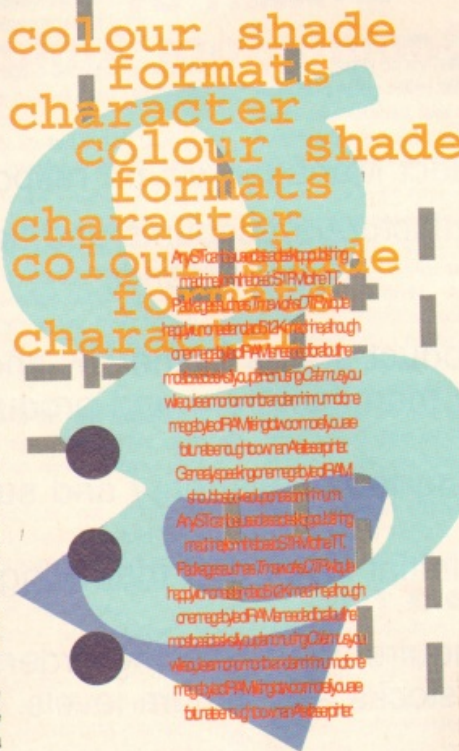
Of all the industries affected by the arrival of the modern computer, the publishing industry has surely seen some of the most drastic changes. Work which would have at one time taken a whole team of typesetters days to complete can now be carried out by a handful of skilled computer operators in a matter of hours.

The release of computers such as the Atari ST, with its fast processor and excellent high resolution display means that anybody with the inclination can be involved in the DTP revolution. But with such a bewildering amount of packages on the market, all claiming to offer the ultimate in ST desktop publishing, what equipment do you need and what makes a good DTP package? More importantly, which package should you choose?

## SYSTEM REQUIREMENTS?

Any ST can be used as a desktop publishing machine, from the basic STFM to the TT. Packages such as *Timeworks DTP* will quite happily run on a standard 512K machine, although one megabyte of RAM is needed for all but the most basic tasks. If you plan on using *Calamus*, you will require a mono monitor and a minimum of one megabyte of RAM, rising to two or more if you are fortunate enough to own an Atari laser printer. Generally speaking, one megabyte of RAM should be looked upon as a minimum.

Acceptable results can be obtained from even the humblest dot matrix printer, but if your aim is anywhere near professional results, a laser or inkjet printer is a must. A good inkjet printer, capable of giving near laser



quality results can now be bought for very little more than the price of a reasonable quality dot matrix.

Other equipment such as a hard disk can prove useful but one or two floppy drives, depending on which software package you intend to use, will usually suffice.

## FEATURE PACKED?

A good question to ask yourself before buying any software package is what you are actually going to use it for, possibly writing down a list of your requirements. This is even more important as far as desktop publishing is concerned as there are so many features on offer: Full colour separation, text rotation, vector fonts – the list goes on. It is always worth remembering that features you will not use are not worth paying for. Similarly, stinting on features which you will need is a false economy.

## WRITE ON TARGET

If your application is largely text based, the type of fonts used by the package will be of vital importance. There are currently two types of font system in use: 'bitmap' and 'vector'.

Bitmap fonts work by storing a bit image of every letter and point size needed for both screen and printer. Some packages have the ability to magnify smaller fonts to give two sizes for every bitmap. This produces the jagged edges, or 'jaggies', synonymous with the bitmap system. DTP packages such as *Timeworks DTP* use Atari's GDOS to produce bitmapped fonts.

The more modern 'vector' or outline fonts, rather than storing a bitmap, use a mathematical description of the characters. This means that fonts can be scaled to any size without loss of detail and can in many cases be rotated, bled and distorted to give some astounding effects. As only one description is needed for each letter, vector fonts use very little precious memory. Packages such as *Calamus* and *PageStream 2* use vector font technology to produce a stunning screen display and hard copy.

Most ST desktop publishers (and indeed all packages on review here) allow text to be edited within the program. However, if you are likely to be editing a large amount of text, a built-in text editor such as the one found in *Calamus* is a definite advantage, particularly when the screen update is slow.

## PICTURE THIS

Being able to combine text with graphics is one of the main attractions of desktop publishing, so it is quite likely that the graphics capabilities of the various packages will play a big part in your decision. If you are planning on using graphics produced with an art package the question is whether they can be directly imported and, once imported, can they be edited? There is nothing more annoying than having to quit your desktop publisher to make a small change to some graphics.

**PRODUCT: Calamus DTP COMPATIBILITY: ST (mono), 1Mb reqd FROM: Signa Publishing CONTACT: 0252 370066**

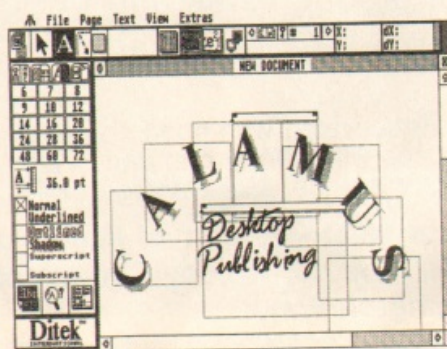
*Calamus* has long been considered to be the pinnacle of ST desktop publishing, boasting its own custom vector font system and a whole host of other features not seen on the ST prior to its release.

Rather than relying on GEM menu's, *Calamus* uses a complex set of icons to accomplish most operations. This has the disadvantage of taking a while to learn but, once learnt, it is doubtful whether you will find yourself asking 'if only I could...'

*Calamus* places emphasis firmly on effects. If complex layout is a stipulation, you will not find a better package. Text can be rotated to any angle with an accuracy of a tenth of a degree, shadowed or even given a raster percentage to produce shading.

For straightforward text a 'piping chain' idea is used and while complex, you cannot help thinking that for plain text the same task could be accomplished by *Timeworks* in half the time. Screen update is reasonably fast, but for speedy manipulation a built-in text editor is provided which can 'suck' text out of a frame to be edited at any time.

Everybody likes a quick result from their efforts and it



• *Calamus* uses a complex set of icons to accomplish most of its operations

is in this area that *Calamus* excels. A full page of text and graphics can, in most cases, be printed in under a minute on a suitable laser or inkjet printer. It makes a change to see speed limited by the printer instead of the snail's pace

we have come to expect from GDOS.

Lack of PostScript support is not the deficiency it may seem at first, as *Calamus* can produce results similar to those you would expect from Postscript on practically any laser printer.

Although often criticised for its complicated user interface *Calamus* remains a very usable system. Complicated it may be, underpowered it is not.

## FOR

- ▲ Vector fonts
- ▲ Lightning print speed
- ▲ Advanced effects such as shadowing and rotation

## AGAINST

- ▼ Price
- ▼ Memory intensive
- ▼ Confusing at first

**COST £225**

**VALUE: Good**



**PRODUCT: Timeworks DTP COMPATIBILITY: ST FROM: Electric Distribution CONTACT: 0480 496666**

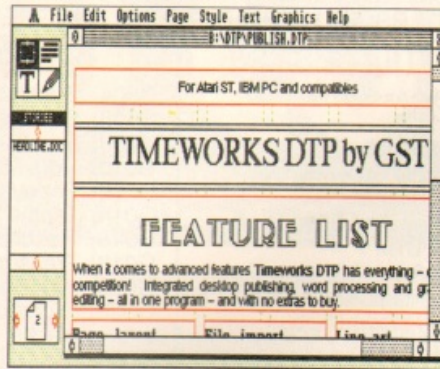
When it was released just over three years ago, *Timeworks DTP* was considered to be somewhat of a revolution. Costing just £99 it was the first truly affordable DTP package, having more than a passing resemblance to the industry standard *Ventura Publisher*.

*Timeworks ST* is ported from the PC version, meaning it sticks rigidly to the GEM environment and uses GDOS to provide on-screen and printer fonts, the main disadvantage of using GDOS being the speed at which it operates.

Using a style tagging system, *Timeworks* is one of the best systems for handling large amounts of text at any price. Anything from a paragraph to a whole book can be given its own style name and details. Piping text from frame to frame is simplicity itself making *Timeworks* ideal for catalogues, price lists, manuals and other text based applications.

Graphics capabilities are not quite up to the standard of text handling. While an ample range of drawing and editing tools are available, the system fails to perform when it comes to printing, often missing out graphics when several pictures are contained on one page. To be fair this problem only occurs under certain circumstances, but if your application is graphical you might be well advised to look elsewhere.

A good range of graphics and text import facilities are provided, covering the standard *First Word Plus*, *Word Writer*, *GEM Paint* (IMG) and *Gem Draw* (GEM) as well as



• Easy to use and intuitive, *Timeworks* is a good option for the newcomer to desktop publishing



## FOR

- ▲ Price
- ▲ Excellent text handling
- ▲ Postscript support

## AGAINST

- ▼ GDOS means 'jaggies'
- ▼ Some printing glitches

**COST £99.95 VALUE: Super**

## LOOKING GOOD

Probably the most important feature of any DTP package is its user interface. All packages on review use the GEM system to varying degrees. *Timeworks* relies on simplicity as its strength while *Calamus* provides an icon for every feature you are ever likely to use and many more besides.

In a way, the decision will depend on which DTP packages you have used before. Those weaned on frame based packages such as *Ventura* might prefer the *Calamus* frame system, finding *PageStream*'s point and click interface annoying, and vice versa.

If your local computer shop is not able to give you a demonstration, the public domain is filled with demo versions of commercial packages, including at least two of the those on review here. These provide an excellent way to ascertain whether a package suits your needs and are usually available directly from software houses or from most reputable PD libraries.

## PERFECT PUBLISHER

It is impossible to pinhole any package as the ideal desktop publisher. The best desktop publisher is one that suits your needs, however most packages aim at a particular market and certain guidelines can be given:

## THE HOME USER

If your aspirations go no further than the parish newsletter *Timeworks DTP* will provide the ideal solution running on any ST and producing good results. The simplicity is second to none and even those new to the whole concept of DTP should have no problems.

## THE SEMI-PROFESSIONAL

*PageStream 2* offers a huge range of features for a relatively low price and will probably handle any application you are prepared to throw at it. Once again *Timeworks* makes a strong bid if your application is very text oriented, but given the choice *PageStream 2* is a far more flexible system.

## THE PROFESSIONAL

Up until recently the professional arena was more or less sewn up by *Calamus*. The release of *PageStream 2* offering colour separation, PostScript support and a host of other features has blurred this definition somewhat.

If colour is needed there is only one choice - *PageStream 2*. Both are capable of producing excellent results and will handle even the most demanding applications. ■

## INTO PRINT

No printer? - You needn't feel left out. There are literally hundreds of bureaux just dying to turn your ST format files into printed masterpieces. These range from high street shops capable of giving you acceptable, laser quality results to typesetting outfits which can offer a professional 1200dpi copy (similar in quality to the page you are reading now!)

### Recommended contacts:

Signa Publishing Systems Ltd.  
☎ 0252 370066

Files accepted: *Calamus* (registered users only)  
Quality: 1200dpi.

### The ST Club

☎ 0602 410241

File Accepted: *PageStream*, Fleet Street 3,  
Publishing Partner and *Timeworks DTP*.  
Quality: Laser 300dpi.

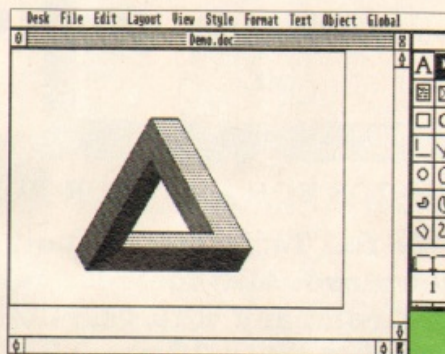
**PRODUCT: PageStream 2 COMPATIBILITY: ST FROM: Silica Systems CONTACT: 081-309 1111**

*PageStream* has had a rather turbulent history; early versions while being well specified were plagued by bugs. Later versions cured most of these and *PageStream* has developed a good reputation for itself as a solid entry level desktop publisher.

Version 2 is now upon us and claims to offer not only huge improvements over *PageStream 1* but also over Macintosh DTP packages! Certainly, a look at the specification list will put paid to any theories that the ST is underpowered as a desktop publishing machine, but can it live up to the claims?

One of the main improvements is in font handling. *PageStream 1* used vector fonts for printed output but the screen display could hardly be described as inspirational. Version 2 cures this and outline fonts are now displayed on screen to give true representations of the characters as they will appear in print.

No longer is finding professional quality fonts a problem as *PageStream 2* will quite happily import both PostScript and Compugraphic fonts, as well as its own unique outline format. Ten fonts including the standard



• *PageStream 2* claims to offer not only huge improvements to *PageStream 1*, but also over Macintosh DTP packages!

Times & Helvetica are supplied as standard.

Graphics handling is exceptional: not only can

graphics be edited within the program but *PageStream 2* supports just about every format ever produced for the ST and many more besides. Not only can these graphics be imported but can, with a suitable printer, be colour separated to give a full colour copy!

*PageStream 2* is an excellent package and puts behind it any problems previous releases may have had. Output looks great on any printer from dot matrix to laser and in the words of the advert, will not leave you wondering "where's the MAC?".

## FOR

- ▲ Colour support
- ▲ Outline fonts
- ▲ Excellent import facilities

## AGAINST

- ▼ Sluggish at times

**COST £199.95 VALUE: Best buy**



**69p****SPECIAL OFFER AMIGA PD****69p**

YES IT IS TRUE PD FOR JUST 69p - OFFER ENDS 31/12/91  
 HERE IS A SMALL SELECTION FROM OUR VAST RANGE  
 OVERSEAS ORDERS ADD 25p A DISK FOR EUROPE 60p R.O.W.

ENQUIRIES TEL:  
 0424 712349

\*= 1MB  
 (2)= No of disks

**DEMOS**

D113) Silents Scroller  
 D115) Utopia Cartoon Slides  
 D117) Bunsen Burner  
 D119) The Link Megademo  
 D122) Ghost Pool  
 D124) Scoopex Seven Sins  
 D126) Disney Slideshow  
 D128) Sleeping Bag Demo  
 D130) System 5 Demo  
 D132) Alpha Flight Megademo 2  
 D134) Share And Enjoy 46  
 D136) Thames TV Demo  
 D138) Vision Megademo  
 D140) Fast Cars Slideshow  
 D142) Mobed  
 D145) Kefrens Wall Demo  
 D147) Beast 2 Preview  
 D149) Treacl  
 D151) Share and Enjoy 47  
 D153) Simpsons Mini Mega (XXX)  
 D155) Glass World Animation  
 D157) Congaman Animation  
 D160) Anarchy Scratch Pack 39  
 D162) Bugs Bunny Anim\*  
 D164) Smurf +Cokeman Anims\*  
 D166) Juggette Animation

**UTILITIES**

P02) A68K Assembler  
 P04) North C  
 U001) Jazzbench  
 U004) Visicalc Spreadsheet  
 U006) Intro Maker  
 U008) Sidney And Friends  
 U011) XLS Disk 1  
 U013) Clip Art  
 U015) The Magicians Utilities  
 U017) Steel Moon Utilities  
 U019) CADV  
 U021) Super C Disk  
 U024) Red Devil Utils 4  
 U026) Amibase V3.76  
 U031) Bootbench  
 U033) C-Light 1+2  
 U035) System Checker  
 U037) Tetra Copier  
 U053) Text Plus Wordprocessor  
 U056) Wordwright Wordprocessor  
 U058) Running Man Update  
 U060) Mag Media Disk Utilities  
 U063) Pendle Europa Utils  
 U065) Fonts  
 U067) ICPUg Printer Utilities  
 U069) XLS Best Of PD 3  
 U100) RSI Demo Maker

**GAMES**

G004) Breakout Construction Set  
 G006) Star Trek (2)  
 G008) Drip \*  
 G010) Quiz Master 2  
 G012) Popeye  
 G014) Tennis \*  
 G016) Flaschbier  
 G018) Treasure Hunt  
 G020) Wet Beaver Games  
 G022) Workbench Games And Hacks  
 G024) PD Games Compilation  
 G026) Movie Games  
 G028) Eatmine  
 G030) Return To Earth  
 G032) Klondike  
 G034) Trek Trivia  
 G036) Pipeline  
 G019) Battleforce  
 G021) Arcade Games  
 G023) Star Trek The Next Gen.  
 G027) Hack  
 G029) PDOM Games  
 G031) BIP  
 G033) Stoneage  
 G035) Jeopardy  
 G041) Frantic Freddy  
 G045) Llamatron

**DISK  
 CATALOGUE  
 50p**

CONTAINS DETAILS  
 OF ALL OUR DISKS  
 AND IS UPDATED  
 FREELY WITH  
 EVERY ORDER.  
 INCLUDES 2 FREE  
 GAMES + A DEMO

We also stock APDL,  
 Amicus, T-Bag and  
 Fred Fish Disks.

All orders dispatched  
 within 24 hours.

Buy now while the  
 price is so low

Please add 50p postage  
 + packing to all orders.

PLEASE MAKE ALL CHEQUES AND POSTAL ORDERS TO S.P.D.

**S.P.D. 62 MANOR ROAD, HASTINGS, E.SUSSEX, TN34 3LJ**

**"FLOOD"**

The Unique Multi-User Conference System

**0839 770007**

(Baud Rate v21, 23, 22, 22bis, 32, 42, MNP 1-5)

Do you fancy your chances as a

**SUPER SLEUTH**

Use your powers of deduction to

**WIN**

**A COMMODORE CD TV!!!**

Test your ingenuity and solve the mystery of  
 "DER GOLDENE HERR (C)"

All baud rates supported up to 9600.  
 8 databits no parity 1 stop bit.

- No Registration fees
- No Extra On-Line Charges
- No On-Line Restrictions
- Multi-User Chat Facility (chat with other users)
- Multi-User On-Line Entertainment

**THE SERVICE FOR ALL YOUR NEEDS**

Special areas include full Technical Support for CAD users.

Free symbol libraries to download. Also included full technical support for Superbase 4 (Tm) from THE company with years of experience in D.M.L.

Multi-lines supporting up to 20 users 24 hours a day.

(For live help with your logging on problems ring 0839 770044)

All calls charged at 36p Cheap Rate and 48p all other times.



# THE PD COLUMN

For variety, quality and value for money, PD Libraries offer all computer users some of the best software around - James Leach takes a pick from the PD grapevine and brings you the juicy news

If you like watching demos on your ST, but can't be bothered to wait for the disk to finish reading all the data, it's now possible to buy the best demos on video. PPD Public Domain has a range of what it considers to be the best ST demos on a **Videmo**. It comes on VHS format, and all the demos fit neatly on to one cassette. This costs £5, but PPD will happily make up an individually tailored video cassette for a little extra charge.

Alternatively you can buy a **Videmo** separately on floppy disk for £2 each. If you've got a decent monitor, I imagine that running the actual demos will always be preferable to watching a video of them, but it's nice to know that if your ST goes wrong you can still get your sound and graphics fix via your telly.

## IS IT A DISK-RACE?

Another issue of **The Disk** from Stephen Lord has magically appeared in the PD Column office. **The Disk** is a magazine-on floppy for the Amiga, and it's now up to issue 5. Stephen seems to be cramming more and more on to each successive issue.

One instantly noticeable feature about the text files on **The Disk** is that they're in a new easy-to-read format. This is done by a useful little program called **sMovie**, which will display ASCII files in this large and easy-to-read font (and you can choose any font, size or colour, so it's flexible in the extreme). All the tips, hints and stories on **The Disk** are viewed using **sMovie** and it works



• Once again **The Disk** is a veritable Aladdin's cave of Amiga programs

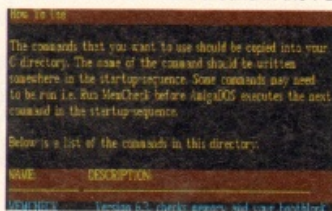
brilliantly, and gives **The Disk** a unique style as well.

Also on **The Disk** is a demo called **Drakpak 24**. It's a cyberpunk-style wander around a deserted installation somewhere in space, and is very enjoyable if you're into the genre. Music, in a separate file on **The Disk** is provided by the increasingly famous Daniel Rigby. It takes the form of a couple of Jean Michel Jarre tunes (everybody seems to use Jean Michel Jarre! I'll award a prize to the first person to send in a good version of an Ice T track), and the quality is better than much of the music you hear on other demos.

You'll also find a file of **New C commands**, so if you want to make

rainbows on your Workbench or add stars to your CLI then you'll find all you need here. There is a whole set of commands to add to your C directory.

Also included is a comprehensive review of **Electro CAD**, a neat Workbench clock, a concise and pretty unbiased look at what's around in the PD



• It's flexible, it's easy to read and it's all on **The Disk**

world, a section of humorous stories (not necessarily computer related) and a program called **Record** which, once activated, keeps a track of all your mouse and keyboard activity, stores it in a file and lets you play it back, giving the impression that your Amiga is either possessed or being operated by the invisible man. Great for scaring the elderly and breaking the ice at parties.

Issue 5 of **The Disk** is great value at £1.50. It's easy to use, there is a lot crammed on to it and it isn't too technical, so everybody from beginners upwards can use it.

## WIN THE POOLS!

Something I've not seen as PD before is a Pools-beating program. Adam Squibb of Gosport in Hampshire has written one for the ST. It's called **Formfinder v1.0** and, put quite simply, tells you which horse is likely to win a race. Of course, you must first input all the horses, their previous records and when they last ran, then you stick in the odds (as printed in any paper) and the computer churns out who it thinks will win.

Even though I don't know much about horse racing, I found **Formfinder** easy to use and indeed won over £8 million with it and bought myself a Testarossa. Actually I haven't managed to verify the degree of accuracy of the program, but as it's shareware, you can't really go wrong.

The PD version doesn't contain facilities for printing, loading and saving data, and it only allows a maximum of 10 runners per race. All the calculations it makes are, however, as accurate as it can be. If you'd like the full **Formfinder** program with all the above features you must register with Mr Squibb (a process which costs £10). This gets you a later version (up to v1.5) and full written documentation (even though the README.DOC that comes with the shareware version seems pretty comprehensive to me).

## THE FOOD OF LOVE

Amiganuts, no stranger to the Column, has sent in a **JPM Sound Music Disk** (for the Amiga, naturally). Included on it are versions (and very good ones too) of **Lessons In Love**, **Guaranteed**, **Amiganuts Power** (a bit customised, that one) and the perennially popular **Things That Make You Go Hmmm**.

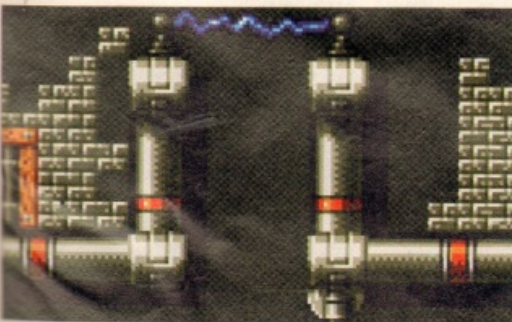
Also available from Amiganuts is a pair of eight-channel music disks. These are packed with loads of tunes, and more than make up for in variety what they lack in graphics and quality.

Mentioned before, but updated, is **AmiBase Professional**. This database is actually licencedware, costing £10. It's a lot, but the program is comparable to those you'd find costing four times as

## CARING AND BARING

The good news for ST demo fans is that the vying for supremacy is still going on. All the one-upmanship (see PD Columns *passim*) means, of course, that the user ends up with demos which are often better than he or she would have believed possible.

After **The Lost Boys** did their **Ooh Crikey What A Scorcher** megademo (my all-time favourite), **The Care Bears** (not totally English, as I previously stated, but predominantly Swedish) has returned to the fray with **The Cuddly Megademo**. It follows a similar format to **Ooh Crikey**, in that you must steer a spaceman-type character around a big scrolling screen to land him on platforms where he can access each demo. Instead of whizzing star-fields, **The Care Bears** have gone for very large sprites. One



• The **Overdrive** megademo will make your ST go weak at the knees



• ST demos don't come any cuddlier than this, thanks to the Swedish **Care Bears**

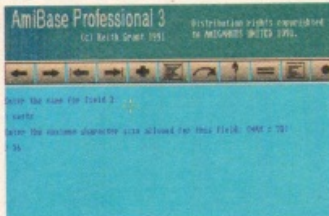
demo features a sprite approximately a third the size of the screen wobbling around. Very impressive, lads, but why don't you stick it into a best-selling game format?

Another piece of coding is vying for the title of 'Best Demo'. It's from **The Phalanx**, and is called the **Overdrive Megademo**. The graphics are pretty, but the sound is really rather exceptional. There's a great demonstration version of the new **Sync Soundtracker**, which makes it well worth getting hold of if you're into ST sounds.

Both these demos are available from the State 808 Public Domain Library. It deals mainly with demos, and has strong contacts with all the major coding crews, so if you're looking for the cutting edge, get in touch with State 808 PDL.



## PUBLIC DOMAIN



• Got lots of data to store? **Amibase Pro III** could be your saviour

much in the shops. **Amibase III** is on two disks and contains a utility which will happily convert all previous **Amibase** documents and files to work on the new version. Disk B also has full instructions and examples, so the lack of a big manual isn't really a problem. What remains to be seen is whether something costing £10 and distributed through PD libraries will actually sell in significant numbers.

**Amibase** joins **OctaMed version 2**, another program which is distributed by Amiganuts at a price between full and budget. **OctaMed** costs £20.

## CODE AND LONELY

**ACC** is the Amiga Coders Club. This organisation periodically puts out a disk packed with goodies for both the beginner and the experienced coder. **ACC 16** is available from Amiganuts now as another piece of licencedware. It costs £3 until January when the price goes up to £4 and has many examples of neat code which you can adapt or rewrite to do anything from widening the useable screen to its limits to changing the colours and mixing with lightning speed.

It isn't for beginners, though, so be warned.

And finally from Amiganuts comes a disk filled with Amiga utilities. It's called **Eko-Ranger**, it's shareware this time and it has utilities which allow you to examine your disks, fiddle with graphics, convert IFF files, look after your files, check your entire system and repair disks. There is a whole lot more, including the valuable **Universal Virus Killer**. If you're serious about your Amiga computing, then contact Amiganuts for this disk. It's excellent value and you won't regret it.

## PICTURE THIS...

**Picture Puzzle** from Advantage PD is a PC implementation of those little plastic puzzles that you give to small children to keep them quiet on long car journeys. You have to slide round blocks, on a grid until you make up an image (there's no



• Eko Util has more utilities than mortal beings rightly deserve

box to consult if you're not sure what the image should actually look like when it's finished, but a small display can be called up which does give you an idea of the completed scene).

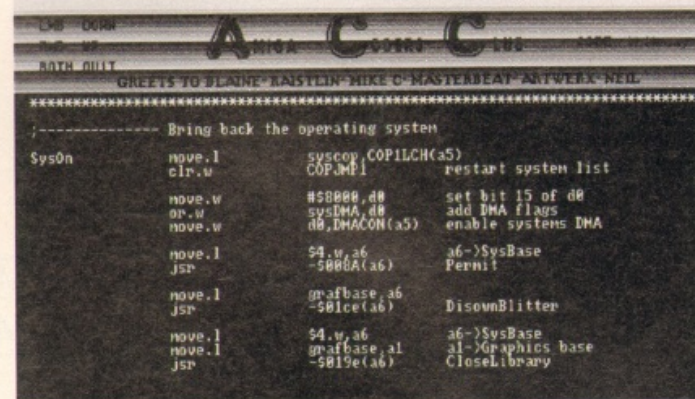
Instead of using an empty square to shift the blocks into (like the plastic puzzles) you can only swap two adjacent squares. This makes it both easier and harder. You still have to shuffle every



• Eko's music disk hath charms to soothe the savage beast, probably

piece right round the grid in order to get two vital tiles next to each other.

There are loads of options available. You can set the size of the grid of squares from two by two (a tad easy, this one) right up to hundreds (somewhat impossible). All you need is a PC which can support colour graphics and a mouse. Unfortunately the cursor keys won't work with **Picture Puzzle**.



• Hardened Amiga coders can wallow in ACC 16 if they so desire

## YOU'RE WANTED!

So you've got a Public Domain Library? You've got lots of programs? You're getting a good reputation? Fine, but if all your competitors are getting reviewed in **James Leach's PD Column**, shouldn't you be as well?

Send in all your Public Domain shareware, freeware or licencedware and you'll get into the spotlight and into the PD Libraries A-Z. All your competitors are.

## PD LIBRARIES A-Z

You've read the column, so now you want to know where you can get hold of the software. That's where the Express PD library listing steps in...

**8-BIT PUBLIC DOMAIN** - Spectrum, BBC, Amstrad CPC and ZX81 public domain software. Stamp and 10p for list: 1 Northolme Cl, Grays, Essex, RM16 2NX.

**17-BIT SOFTWARE** - PO Box 97, Wakefield, West Yorkshire WF1 1XX. Tel: 0924 366982.

**ADES PD LIBRARY** - All PD is less than £1. Some free. SAE for great details. Address 15 Deanes Close Dovercourt Essex CO12 4SH.

**ADDP** - For the cheapest Amiga PD around, some even free. Send SAE for details or disk for lists. 15 Deanes Close, Dovercourt, Essex CO12 4SH.

**ADVANTAGE** - 54 Bath Road, Cheltenham, GL53 7JH. Tel: 0242 224340.

**AERIAL SHAREWARE** - IBM PC compatibles. Catalogue on a disc (free, state size). 7 Valehead, Monksheaton, Whitley Bay, Tyne & Wear NE25 9AY5.

**AKORE SHAREWARE** - 7 Fishergate Point, Lower Parliament Street, Nottingham NG1 1GD. Tel: 0800 252221.

**ALDRO AMIGA PD SWAP CLUB** SAE and blank disk for details. Lists growing every day. Send to: 24 Water Meadow, Quebeley, Gloucester GL2 6XR4.

**ALPHA PD** - Amiga PD, monthly update of cat disc, £1 per disc. 22 Ceylon Place, Eastbourne, East Sussex BN21 3JF. Tel: 0323 267905.

**AMAZING AMIGA PD** - Over 500 disks, simply send extra blanks to cover costs + SAE for list to D Hopkins, 70 High St, Delabole, Cornwall PL33 9AH5.

**AMIGA ANSWERS** - Integrated programmers PD library and problem solving service £1.50 for cat and programmers utility disk. 11 Mill Hill Rd, Norwich.

**AMIGA GOLD** - Good quality PD at favourable prices. Write: 6 Churcher Cl, Gosport, Hants PO12 2SL5.

**AMIGA NON-RIP OFF PD** - For good Deans send disks + postage to Mark, 50 Victoria Ave, Sleaford, Lincolnshire NG34 7LN.

**AMIGA PD BREAKTHROUGH** - You've tried the rest, now try the best PD from 18p per disk. Swift dispatch of all orders. Contact Darryl, 12 Kent Avenue, Ross-on-Wye, HFD8 9XQ, NOW!

**AMIGA PD - 2 megs free PD, we are giving away free Amiga PD, send a 2nd class stamp for the info-pack to: 16 Hermist, Monksheaton, Whitley Bay, Tyne and Wear NE25 9AN.**

**AMIGANUTS UNITED** - 169 Dale Valley Rd, Hollywood, Southampton SO1 6QX.

**AMIGA SOFTWARE EXCHANGE** - Small and friendly games group, adventures, sims and arcade. SAE for info to 13 Bourville Lane, Birmingham B30 2JY6.

**AMOS PD** - 0942 495261.

**ANDRIKKOS PC LIBRARY** - PC Megapack: 14Mb compacted Shareware, £16. Cheque/PO or SAE for list: Andy Kyriacou, 17 Parkhurst Rd, London N22 4JQ.

**ANGLO AMERICAN SHAREWARE** - £1 a disk. Over 2,000Mb of top Anglo-American titles. Send two first class stamps for menu driven catalogue disk to 37 Deven Place, Newport, Gwent. Tel: 0633 259847.

**ARCH ANGEL PD** - Over 230 disks of Archimedes software. Send 75p for catalogue/demo disk to 9 Chancel Court, Pinhoe, Exeter, EX4 8QE.

**ARCH PD** - 200+ disks of Archimedes PD. Send £1 or SAE and disk to Arch, PO 109, Ferry Rd, Hullbridge, Essex. S55 6EL.

**ARROW PD formerly Scotssoft** - ST PD. Send an SAE and blank disk or £1 to 6 Kent Orchard, Perry Street, South Chard, Somerset TA20 2QB.

**ASGARD PD** - New programme (Amos) 'The Cat Machine' - build your own Cugat library £1.50: 20 Langdale Drive, Flanshaw, Wakefield WF2 9EW. Tel: 0924 3611015.

**ATARI ST DEMO SPECIALIST** - Range of POV, megademos, singles, music modules, slideshows, utilities. £1 for catalogue disk. Unit 1, Johnson's Shopping Centre, 29/31 Bond St, Blackpool FY4 1QB.

**BASOFT PD** - Original PD plus the best of the rest. SAE to BASOFT, 357 Church Rd, Basildon, Essex SS14 2EV. £1 per disk. New disk catalogue in exchange for blank disk.

**BATTLEAXE PD** - Amiga only. £1 a disk and digitising service, 80p for cat with free samples: 25 Kingswood, Thorpe Marriot, Norwich NR8 6UN. Tel: 0603 261065.

**BEGINNERS' PD** - ST PD starter disks. Two available. Over ten programs. £3 the lot. Write to James Thoroughgood, 114 Sandringham Way, Frintley, Surrey, GU16 5YF. Also send suitable SAE. No cheques.

**BBB (BIG BAD BRIAN'S) PD library**. 35-inch only from £1. Send formatted disk and SAE for catalogue to BBB, 35 Grange Ave, Hull HU6 8LP.

**BENETHEE** - PC PD. 11 Loughborough Road, Leicester LE4 5JL.

**THE BEST PD** at best prices. Checked and virus free. £1.50 for demo disk, cat, and membership card. Chris Bayliss, 38 Grantham Dr, Bury, Lancashire BL8 1XW.

**BOOT UP PUBLIC DOMAIN** - Amiga Public Domain. Only £1 per disk. Send 75p for catalogue disk to Carol Wellington, 30 Sunnings Lane, Upminster, Essex RM14 2DQ.

**BROADSWORD PUBLIC DOMAIN** - Atari ST PD. 70p per disk. Send disk plus SAE to Flat 4, Moreton Court, 212 Dover Road, Walmer, Deal, Kent CT14 7NB. Over

350 disks.

**BUDGE UK** - 5 Minster Close, Rayleigh, Essex SS6 8SF.

**BURMAN'S PD** - Amiga PD for 40p. For a cat disk, demos and a game send stamp + disk: Burman's PD, 41 Pinner Park Gdns, Harrow, Middlesex, MA2 6LQ.

**BYTEBACK** - 6 Mumbly Close, Newark, Notts NG24 1JE. Tel: 0636 79097.

**BYTES** - Amiga PD software, over 1000 disks, call now for cat: 295 Peniel Green Road, Llanamlet, Swansea, SA7 9BJ. Tel: 0792 772745.

**C'S PD LIBRARY** Sam Coupe PD Software. Send SAE and disk (or 80p) for disk catalogue to: CMS PDL, Donald Drive, Chadwell Heath, Romford, Essex.

**CALEDONIA PDL** - 250 Oldtown Rd, Hilton, Inverness IV2 4PT. Tel: 0463 225736.

**CAPRICORN COMPUTERS** - 35 Warwick Rd, Olton, Solihull, West Midlands B92 7HS.

**CHEZRON SOFTWARE** - 605 Loughborough Rd, Birstall, Leicester LE4 4NJ.

**CHRISTIAN COMPUTER CONCEPTS** - Christian PD/shareware. 5.25-inch. Ian Hurst, 7 Perrybrook Walk, Ashton in Makerfield, Wigan WN4 8TR.

**CIRCULAR PD LIBRARY** - 14 Morrison Drive, Lennoxton, Glasgow G65 7BA.

**COLONIA PDL** - PD swap shop! Amiga and ST. Over 350 titles. One for one. Swap free. For list write to 4 Eastfield Street, Lincoln LN2 5ES.

**CRAZY DIAMOND PD** - For the ST. Send SAE and blank disk for catalogue and free PD to 58 Hillside Rd, Sudbury, Suffolk CO10 6SA.

**CRAZY JOE'S** - Amiga PD, catalogue disk 50p. Tel: 0709 8292965.

**DATA PD** - For Amigas and Amstrad CPCs. For disk-based catalogue and sample programs send £1 (Amiga) or £2.50 (CPC). Cheques/POs to T Kingsmill, 202 Park St Lane, Park St, St Albans, Herts AL2 2AQ.

**DELTA C64/128 PUBLIC DOMAIN** - SAE. Delta PD, 39 Station Rd, Claydon, Ipswich, Suffolk IP6 0HS.

**DELUXE AMIGA** - Exclusive review of Terminator 2 in issue 1. Send a £1 cheque/PO to Antony Grace, 2, Fuzzlefield Crescent, Reigate, Surrey RH2 7HQ.

**DISCOVERY PD** - Coming soon. For Atari ST. Wide selection and excellent after sales help. Disks £1-1.50. Disk catalogue 50p. Write to J Thoroughgood, 114 Sandringham Way, Frintley, Surrey GU76 1.

**DISC** - Stephen Lord, 6 Stubbington Brink, Hebban Bridge, West Yorkshire HX7 6LR.

**DRAGON PD** - Programmers wanted for Amstrad, CPC 6128 PD library. For more info, write to: Dragon Road, 415 (flat) Whitehall Road, Bristol, BS5 73P.

**DSD SOFTWARE** - ST users interested in art, graphics, pictures? then contact the PD library that specialises in them: 5 Leinster St, Runcorn, Cheshire WA7 1ER.

**DW SOFTWARE** - For the Amstrad CPC, send for free list: 62 Lascelles Ave, Withernsea, N Humberside, HU19 2EB.

**EUROPA PD** - ST PD All disks D7S from 75p, send blank disk or £1 cheque/PO to 1 Hindmans Rd, East Dulwich, London SE22 6.

**DYNAMIX PD** - PC, Amiga and C64 Public Domain. All new and best titles. For free details contact 132 Springwood, Llanedeyrn, Cardiff CF2 6UF. (SAE).

**EAST MIDLAND PUBLIC DOMAIN LIBRARY** - 54 Watnall Road, Hucknall, Nottingham NG15 7LE.

**ED'S FREE PD** - Public Domain for the Atari ST. Send your list for mine. 1-4-1 basis. EJ Carter, 184 Hatters Lane, High Wycombe, Bucks HP13 7LY.

**EDLIB** - Interactive, educational and productivity compilations of PD for Amiga. £1.50. All regular PD only 89p. Graphics Master 1 + 2, graphic image manipulation PD software: £3. Contact Edlib, Scotland Farm, Stockwood Rd, Brislington, Bristol BS4 5LU.

**ELMSOFT** - PO Box 17, Loughton, Essex IG10 2EE.

**ESSEX SHAREWARE LIBRARY** - Beginners pack of the best of PC shareware. Ten disks £14.99.

**ESSEX/PO to Essex Shareware**, 221 Branksome Avenue, Stanford-Le-Hope, Essex.

**FORMFINDER** - (ST) from Adam Squibb 11 Beaulieu Place, Peel Common, Gosport, Hampshire, PO13 0QP6.

**FORTISS PD** - Amiga PD. Watch the magazines for our advert or send £1 for catalogue disk to Fortiss PD, PO Box 2, Earl, Shilton, Leicester LE9 8LU.

**FREAKS PUBLIC DOMAIN LIBRARY** - Disks filled from a huge range. Ribbons re-linked, recycled packaging, send stamp for catalogue to FREAKS, 29 Leap Valley Crescent, Downend, Bristol BS16 6TQ.

**FREEWAY PD** - For the Amiga. Loads of titles for only 99p including p&p. Send disk for list. Freeway PD, 11 Elizabeth Place, Somting, Sussex BN15 9J3.

**FUTURE PD** - Amiga PD only, 60p a disk, send £1 for list & demo to: 138 Guildford St, Grimsby, South Humberside DN32 7PW5.



## PHONE NOW FOR FREE CATALOGUE

WE HAVE OVER 1600 TITLES LISTED  
Games, Demos, Utilities, Music, Adults Only and many more  
0432 341879

## GAMES

0670 Monopoly  
0595 Caverunner  
0843 Metagalactic Games  
1043 Letrix  
1020 Master of Town  
0849 Holy Grail  
1382 Terror Lines II (18)  
0126 Star Trek A 1 meg  
0127 Star Trek B 2 drives  
0128 Star Trek C Game  
1389 Star Trek Next Gen  
1446 Return To Earth  
0853 Golden Fleece  
0856 Xenon 3  
0936 Auto Bahn 3000+

## UTILITIES

0671 Rim Database  
0631 202 Utilities  
1208 D.B. Wiz  
0333 Voices 8  
0065 Demo Maker  
0654 Video Applications A  
0655 Video Applications B  
1508 Ami Base  
1162 Home Utilities  
0857 Clip Art  
1078 Essential Utils 2  
0659 Essential Utils 1  
1146 Icon Magic  
1151 C-Light

## DEMOS

1117 Budbrain Megademo  
0439 Fantastic Demos  
0587 Brainwave  
0559 Deadly Pursuits  
0993 Hellish Megademo  
1337 Sam Fox  
0933 Mike Tyson 1 meg  
1355 Techno Flight  
1142 Amaze  
1460 Do The Bart Man  
1591 Flimboos Quest Demo  
0454 Dragons Megademo  
0469 Beastie Boys Demo  
0593 Thunder Birds Demo

## ANIMATIONS

0014 Walker Anim 1 meg  
0015 Walker 2 Anim 1 meg  
0538 Dragons Lair 1 meg  
1103 Iraq Demo  
1095 Batman Movie 1 meg  
0155 Space Ace Demo  
0196 Puggs in Space Demo  
0524 Juggler Etc  
0927 Swinging Frog Anim  
1079 5 Ways to Kill a Mole  
1100 Bruce Lee Demo  
1201 Another 5 Ways to Kill a Mole  
1214 Madonna Anim 1 meg  
1123 Robocop Digi Movie  
1169 Millenium Animation

Games Galore 1-4 (4 Disks Set) £4.00. Huge Range of Adults Selection on Catalogue.

This is just a selection of our range. All P.D. is £1.25 per disk. Buy 10 pick 2 FREE.

Send P.O.'s or Cheques to P.M. Rowe. Add £1 P&P. Over £20 FREE.

## P.M.R. SOFTWARE

### P.O. BOX 147, HEREFORD, HR2 7LS

RING NOW FOR OUR FREE 1600 TITLE CATALOGUE. ALSO IN CATALOGUE JOYSTICKS, DISKS, STORAGE BOXES, EXPANSIONS, EXTERNAL DRIVES + MUCH MORE. 0432 341879. 24 Hour despatch on cleared funds.

## AMIGANUTS UNITED

169 DALE VALLEY ROAD, HOLLYBROOK,  
SOUTHAMPTON, SO1 6QX.

Worldwide distributors of the dedicated Amiga Coders Club disks.  
European distributor for the world famous T.BAG disks from Merlin Software

THE (1mb) EIGHT CHANNEL MIDI COMPATIBLE Octamed V2 now contains full notation, including an editor with notation printing, 5-7 channel modes for high quality, non-CPU stressing audio/split channels, sixteen track display for MIDI use plus a host of other new MIDI features. Includes latest V3.20 of the PD four channel Med which is also encoded into the program. Bargain at £20.00 European countries, (£25.00 for non-European), inc VAT but not post/packing. Payment in pounds sterling only. Overseas, send a bankers order/Eurocheque etc. (Credit card orders will not be accepted). **IMPORTANT NOTICE TO ALL REGISTERED PURCHASERS OF OCTAMED V1** If you return your original Amiganuts disk, containing V1, you can have V2 for half price, (ie £10.00 Europe). Remember you must return your original V1 copy. **EVERY ORDER FOR V2 WILL BE ENTERED INTO THE OCTAMED V2 FREE PRIZE DRAW**

1st Prize: Golden Image Hand Scanner

2nd Prize: LCD Colour TV 3rd Prize: £50.00 FREE progs.

MASTER VIRUS KILLER V2.2 It recognises The destructive Saddam Virus.....£5.00  
BUG-BASH: Kill the bugs, clean up the trash in the garden a great kids game.....£3.50  
877: 1 ACROSS 2 DOWN A fully fledged crossword program (data disk no1 is supplied FREE) for only.....£6.00 Data Disks 2,3,4 and 5 now ready at.....£2.50 each  
1068: MOD PROCESSOR V1.92. Make picture and/or music progs, adjust pic height/width this version will load the new 8 channel Octamed music and is excellent.....£3.50  
1139: THE ADVANCED SCREEN DESIGNER, (a boon to all you programmers out there).....£3.50  
1161: INTUIMENU V3: The easy way to execute your programs. Treat yourself!.....£4.50

INTO CODING? - Want to learn? The Amiga Coders Club is for you! ACC 1/4 is the first four compressed issues of an excellent series for coders. Even if you are new to the Amiga, if you want to learn Assembly, using Devpac (or our own new ACC special Assembler disk), this is the club for you! ACC 1/4 (compressed) £1.50. The Amiga Coders Club disks are packed with source, hints, tips, advice from many of the well known coders that are on the Amiga scene today. Issue numbers 5 to 16 are now available. PLEASE NOTE (excluding the Compressed Introductory Disk (ACC 1/4) and NO:12 The price for each issue of the ACC disks is only.....£3.00  
ACC 12 is our birthday issue, it is a 2 disk set, and therefore, the price is.....£6.00  
Amiga Coders Club Special. Here is a low price Assembler package for all you coders out there in Amigaland (see review in last months Amiga Format).....£5.00

If you would like to get hold of the Amiga Coders Club disks as soon as they are published, why not send £33.00 and ask to go on the ACC mailing list now! We will send you each issue as soon as it's ready (applies to issue 14 onwards). Please note that issues released prior to ACC 14 must be purchased separately. You can now also take out a years subscription for the USA T.BAG disks, (applies to issue 50 onward), simply send £33.00 and we will send you each issue well in advance of them becoming available from any other supplier. (Note that issues 50 to 56 are ready now and will be sent upon joining). Issues released prior to T.BAG 50 must be purchased separately @ £2.00 each. (Subscription orders from non-European Community, please add extra £6.00 for postage)

**MIKE SIMPSON'S A-GENE V3.28**  
(full version) is now available directly from us. Price: Europe **£15.00**, Rest of World **£20.00**. Simply the best Genealogy prog.

**AMIBASE PROFESSIONAL III** is here!  
The additions to this new two disk version database make it a must have. Also contains a program to convert files made with previous versions of Amibase. It is excellent. **£10.00 EC - £15 R.O.W.**

Excluding the T.BAG, none of the above programs are Public Domain. Prices include V.A.T. but add the following to your order for return postage: - All EC Countries (inc. UK), add 50p - Europe (non EC) £1.00 - Rest of world add £2.00.  
Final 1991 catalogue is ready, send for your copy now! £1.00 (includes post/pack)

**GARFIELDS PD** - £1 a disk, inc P+P and 50p for cat disk: 40 Penrhos Cres, Rumney, Cardiff CF3 6PB

**GARNER DESIGNS** - Spectrum PD, 57 Lovers Walk, Dunstable, Bedfordshire LU5 4BG.

**GOODMAN PDL** - 16 Conrad Close, Mer Hay Estate, Longton, Stoke-on-Trent, Staffs ST13 1SW. Tel: 0782 335650

**ICPUG** - Free PD for Commodore, IBM/PC compatibles. Wrie: ICPUG, PO Box 1309, London N3 2UT

**IMG CLIP ART** - GDOS fonts for sale or swap. For catalogue send blank disk plus SAE or £1 to E Renner, 62 Broxholme Lane, Doncaster.

**IMAGE ART ST PD LIBRARY** - Hundreds IMG Picts. Calamus Fonts and more. SAE £1.50 for catalogue. Image Art, 19 Brenda Rd, Tooling Bec SW17 7DD

**JACKSON'S PD SPECTACULAR** - Amiga PD, 22 Victoria Court, Clifton Rd, Worthing, Sussex.

**JASE PD** - PD software, £1.25 a disk. Write: 9 Broadfield Sq, Enfield, Middlesex EN1 3PA or call 081 8057749 (6.30pm)

**JAY-DEE'S PD** - For Amiga catalogue, send disk and SAE to: 389 Scally Rd, Newby, Scarborough, N Yorks YO12 6TG

**JENNIX PD** - Celebrating our second birthday in style. For the best ST PD around, the most competitive prices and the best service talk to us. Send 50p for catalogue disk to Jennix PD, 66 Abbey Road, Strood, Kent. Tel: 0634 723659

**JPDL** - Atari ST PD. Double-sided disks supplied if possible. Blank disk and SAE or 70p to: J Kiener, 120 Wigginton Road, Tarnworth, Staffs B79 8RW.

**KEANSOFT PD** - ST PD for sale. Send SAE and blank disk for copy of latest catalogue. Write to Keansoft PD, 42 Lords Croft, Clayton-Le-Woods, Nr Chorley, Lancs PR6 7TP.

**KEY'S PD** - Amiga £1 disk. K Larkin, 12 Hathaway Court, Chertson Rd, Gillingham, Kent ME8 0ES.

**L & D PD** - Amiga PD from 35p per disk. Monthly competition to win PD of your choice. Also a new digitising service is available. For info send SAE and disk to L & D PD, 10 Hornbeam Green, Pontefract, West Yorks WF8 2DX.

**LAPD** - Worldwide reputation for quality PD for the ST. Thousands of programs available. Disk catalogue only £1.00. Credit cards accepted. Telephone 0773 605010 or 0773 761944.

**LARD PD** - Only 95p per disk. Amiga only. For catalogue write to Lard PD, 41 Craven Road, Hemsworth, West Yorks WF9 4SB. Endorse SAE.

**LEMMING SOFT** - Amiga demos to swap. over 300 disks, List keeps growing by day also want two meg demos write to: John Simmons, Flat 45, 2 Silversmere Road, Sheldon, Birmingham, B26 3XA.

**MASTER PD** - Amiga PD to swap and sell. Send SAE and list to A Hines, 44 School Lane, Easton Bray,

Bedfordshire, LU6 2DT 100 per cent reply.

**MERSEY SHAREWARE** - PC Shareware. £1.50 per disk (3.5/5.25). SAE for list. Any title obtained. Phone with details of requirements. 17 Ullet Road, Liverpool L17 3BL. Tel: 051-733 1178

**MERTON PD** - Cheap ST PD. Send £1 or blank disk for catalogue with SAE (cheques payable to T Huq) to: 10 Grasmere Avenue, London SW19 3DX.

**MMPD** - Atari ST PD games, 75p a disk, SAE for list: 41 Lodgers Green, Eastfield, Scarborough, N Yorks YO11 3LB

**MONSTER CABLE** - Free ST PD, honest! Just the price of a stamp. Puts all others ST PD libraries to shame. Send SAE for more info to M Sandhu, 25 Welbeck Road, Maidenhead, Berkshire SL6 4EB

**MYSTIC MERLIN PD** - Suppliers of Amiga software to PD libraries, animations and digitising: 74 Conniburrow Blvd, Central Milton Keynes, MK14 7DA. Tel: 0908 692829

**NEURAL IMAGES PD** - Send an SAE to: Flint Walk, Throston Grange, Hartlepool, Cleveland. TS26 DTE for your free PD Disk. No catches!

**NBS Public Domain** - have changed their address to: 1 Chain Lane Newportle Of Wight PO30 5QA

**NIGHTSHIFT** - 8 Bertelin Road, Beaconside, Stafford ST16 3JJ

**NWPD** - Amiga PD. For cat send blank disk and SAE to 24 Damien St, Longsight, Manchester M12 4GW

**OWN PC CLUB 7 SHAREWARE** - 73A East Street, Blandford Forum, Dorset DT11 7DX. Send blank disk plus stamp for catalogue. 25p each prog.

**PAD PD AND SHAREWARE LIBRARY** - For Amiga users. SAE for details: PAD Public Domain Library, 41a Saint Augustine Street, Norwich, Norfolk, NR3 3HF.

**PARADISE COMPUTERS (GLOBAL)** - 9 Westfield Crescent, Brighton, East Sussex BN1 8JB.

**PAWS PD** - Lichfields only PD library. Disks £1. Swaps welcome. Send a SAE for list to: Anthony Cooper, 14 Purcell Ave, Lichfield, Staffs WS13 7PJ.

**PC SHAREWARE** - £1.25 a disk, for list SAE to: M Martin, Flat 1, 28-34 New Rd, Portsmouth, PO2 7RB

**PC SHAREWARE/PDL** - £1 disk and P&P. 2000 MB/AVA. Top titles. Chose programs to fill disk. 2 floss stamps for menu cat disk, 37 Devon Pl., Newport, Gwent.

**PD ST** - Club games, utilities, demos from 19p. 95 Elton Rd, Sandbach, Cheshire CW11 9NF. Tel: 0270 762520

**PD for the ST** - No connection with 'South West PD'. The South West Software Library, PO Box 562, Wimbome, Dorset, BH21 2YD

**POWER PD** - Amiga PD at 35p a disk, cat disk with free PD 70p: C Jackman, 3 Albion Terrace, Letcham Rd, Litcham, Kings Lynn Norfolk. Tel: 0328 701622

**PROPHECY PDL** - ST PD. Send SAE and disk or a cheque for £4.50 to Prophecy PD, 390 Coudsdon Rd,

Old Coudsdon, Surrey, CR5 1EF. Competitive prices. **REAL PD** - Amiga PD libraries - wanna join real PD? For more info write to Mark, 50 Victoria Avenue, Sleaford, Lincolnshire NG34 7CN

**PD SOFTWARE for the ST**. Only the best programs. Get into our library. Send 50p, or blank disk + SAE 95, Elton Road, Sandbach, Cheshire CW11 9NF

**PKPD SOFTWARE** - For 600 titles available from £1.50 Tel: 05033 71385

**PPD PUBLIC DOMAIN** - (st shareware and videos) 24 Marlborough Road, Ramsgate, Kent CT11 9BU

**RICHARD KIRK PD** - Atari ST PD £1 or 45p per disk. Send disk plus SAE for catalogue to R Kirk PD, Copes Farm, Withington, Leigh, S-O-T, Staffs ST10 4PN.

**RIVERDENE PD** - 30a School Road, Tilehurst, Reading, Berks RG3 5AN.

**ROBOT PD** - 2 Trent Rd, Oakham, Rutland LE15 6HF. **SAINT JOHN'S SCHOOL LIBRARY PDL** - ST PD software sale or swap: St John's School Library PDL, c/o Mark Ash, 54 Beaconsfield Road, Sittingbourne, Kent ME10 3BB Tel: 0795 425653 after 4pm.

**SCOTBASE PDL ASSOCIATION** - Affordable Shareware for PC users. Blank disk and SAE for catalogue and details to: Rosie, 63 Springboig Road, Glasgow G32 0DB.

**SELECT PD** - For the ST. From 35p a disk. Send £1 coin for disk catalogue to RC Newman, 22 Hall Road, Letchingham, Cheltenham, Glos GL53 0HW

**SHAREWARE ELITE** - Over 1,300 shareware disks for PCs. Send blank disk and SAE for catalogue to 25 Cades Parc, Helston, Cornwall. Tel: 0326 564164.

**SHAREWARE KING** - PC shareware, support, membership, discounts. SAE and blank disk to C Smith, 10 Penwood Close, Westbury, Wilts, BA13 3LW. Tel: 0373 865263.

**SHAREWARE/PDL** - Windows, clip-art and GIF shareware for the PC. Send disk and SAE for list to T Wishart, 3 Berwick Rd, Port Glasgow PA14 5QN

**SHAREWARE UNLIMITED** - Hire /buy latest PD programs in unzipped format. Free offers. Details: 081 551 3571

**SHIELDSOFT PD** - Now from only 50p per disk. Catalogue disk 75p. For details SAE to M Daniels, 63 Churton Rd, Rhyl, Clwyd LL18 3NB.

**SINGER PD** - 62 Manor Rd, Hastings E Sussex TN34 3LJ.

**SOLENT SOFTWARE** - Atari ST. 53 Rufus Gardens, Totton, Hants SO4 3TA.

**THE SOURCE PD** - For the ST. Compacted demos disks. £1.50 each. Write to: 7 Shearwater Lane, Norton, Stockton, Cleveland TS20 1SH.

**SOUTH LINES PD** - Amiga PD, 95p a disk, cat 50p: 10 Linden Rise, Bourne, Lincs, PE10 9TD. Tel: 0778 393470

**WARPDRIIVE** - Amiga PD 89p +60p P+P, ring for free cat:

110 Burton Ave, Balby, Doncaster, DN4 8BB. Tel: 0302 859715

**SOUTH WEST PD** - PO Box 562, Wimbome, Dorset BH21 2YD.

**THE ST ADVENTURER'S PD LIBRARY** - Catalogue disk just 50p. Write to John R Barnsley, 32 Merrivale Rd, Staffs ST17 9EB.

**ST ICE PDL** - Send disk or £1 for great catalogue with programs included. Quality disks, viruses checked. All disks £1.80 incl. P&P. Write to 7 St James' Close, Kettering, Northants NN14 5HB.

**STAR PD** - Atari ST PD library fast 'n' friendly! Disk and SAE for free PD and our disk-based catalogue: Star PD, 1 Solva Rd, Clase, Swansea SA6 7NX.

**STATE 808 PDL** - Atari ST demos, art packages and soundtracks. Cheaply priced. Send blank disk to: State 808, 3A Old Lanark Road, Charkley, ML8 4HW.

**START COMPUTER SYSTEMS** - Dept A, Barbican House, Bonnersfield, Sunderland SR6 0AA. Tel: 091-564 1400.

**STUPID FLOWER PD** - new library for ST users. SAE for free catalogue to SFPD, 3 Read Mead, Glastonbury, Somerset BA6 8ON or call 0458 35027. Ask for Matt.

**TANK PD** - disks only 60p (members), 75p (non-members). Hundreds of titles. Send blank disk and SAE to: 4 Chandos Road, Redland, Bristol BS8 6PE.

**TOWER PD (ST)** - For POV and other Atari ST PD software. £1.50 per disk. Send £1 for disk catalogue to PO Box 40, Thornton-Cleveleys, Blackpool FY5 3PH

**TOWER TOP PDL** - The Coragen Corporation, 4 Cardigan Close, Blechley, Milton Keynes MK3 7EJ.

**TRUST PD** - 18 The Park, Southawram, Halifax, HX3 9QY. Tel: 0895 53521.

**VENUS SHAREWARE** - IBM Shareware: Amateur radio, technical, engineering, education, Windows utilities and more. Tel: 0252 837860 for free catalogue.

**WARLOCK PD CLUB** - New Amiga club and library all tested and virus free. No fee. Tel: Mark on 0582 761723. 2 Marland Avenue, Harpenden, Herts AL5.

**WINDMILL SOFTWARE** - SAE and 50p or disk for ST catalogue to P Raeburn, Windmill Software, 360 Windmill Road, Ealing, London W5 4UR.

**WIZBIT PD LIBRARY** - New Mac PD library. Disks £3. Around 100 disks available. Into pack £1 from Wizbit PD, 38 Greenbank Gardens, Edinburgh EH10 5SN.

**WORSOFT** - Michael Andersson, Tjardalsgrand 11, 18341 TABX, Sweden.

**XT SHAREWARE** - PD - For PC, from £1 5.25 disks and £1.20 3.5" - PD software for the C64. Send 35p stamp: 12 Castlegate, Penrith, Cumbria for free catalogue on disk. Free software.

**ZOMBIE PD** - Latest ST disk cat available. No charges! Send blank disk + SAE and your list to 41 Buckingham Avenue, Penwortham, Preston, Lancs.





# Games Week

Outgoing, outspoken, but never outclassed, Stuart Campbell's reviews, tips and news tell you what's best for you and your machine

## STAR RATINGS

- ★★★★★ = Sean Connery  
 ★★★★★ = Roger Moore  
 ★★★★★ = David Niven  
 ★★★★★ = George Lazenby  
 ★★★★★ = Timothy Dalton

## DIZZY IN MY HEAD

Just in case you're not completely sick of hearing about Code Masters' little egg hero Dizzy, here's one last little snippet.



- Dizzy tries desperately to avoid hippy convoys in Magicland

On top of this Christmas' coming compilation, the Codies finally release the hugely popular fourth adventure of the ovoid chap, *Magicland Dizzy*, on 16-bit formats in a couple of weeks' time.

The cartoon-graphics-and-puzzle-solving style is exactly the same as before, but this effort is the most accomplished of the lot. If you take the proper charts as your yardstick (ie all prices together), then this is my top bet for the Christmas No 1.

## NO, REALLY...

Honestly, Empire's conversion of the Taito coin-op follow-up to *Qix*, *Volfied*, is just about finished now, seriously.

Empire's programmers have been literally taking the arcade machine to pieces in order to dissect every last bit of information out of it, in an attempt at the truly definitive coin-op port.

Early impressions suggest that they might just have managed it, too, but keep watching this space for monthly updates until the game finally hits the streets in time for Boxing Day (well, probably).

## THE MOMENTARY RETURN OF... HERE IT COMES AGAIN!

This week: Games Which Don't Have Any Connecting Factor At All!

The budget scene is as lively as it ever was in the run-up to the Christmas boom, and this month has seen the rebirth of two all-time classics from the Hit Squad.



- Shooting Yourself In The Foot Lesson One - put out a Batman sub-game better than Chase HQ

*Bubble Bobble* (\*\*\*\*), the predecessor of *Rainbow Islands*, is possibly the best two-player arcade game ever, and on all formats the micro conversion is excellent, although without a lot of the coin-op's secret bonuses and so on. The Amiga and C64 versions are particularly worthy of note (the Speccy version suffers from a lack of music, which is pretty inexcusable on the 128K machine but there you go), but on every format this is a truly great game. The only problem with it is that the one-player game is a bit lacking, but at this price, no-one should let it stop them from owning a copy of this superb game.

Also from the Hit Squad comes *Batman - The Movie* (\*\*\*), which was Ocean's third (I think) attempt at a game featuring the caped crusader. It was also the first in what became a long line of formulaic movie licence games made up of small sub-sections relating to various parts of the film, but if you can forget for a moment that this is the game whose success is responsible for *Nightbreed*, *Total Recall*, *Darkman* and *Terminator 2*, then you'll find a conversion here that's

really pretty spiffing.

The platform sections were designed with a little more thought than you tend to see these days, and the driving sub-games are more than a match for many dedicated racing jobs, and generally it captures the movie's atmosphere admirably.

The label lets itself down somewhat with this month's other release, *Dragon Ninja* (\*). It's a copy of the coin-op which (on 16-bit versions) looks remarkably close to the real thing, but the programmers have somehow forgotten to include the 'jump' feature which makes things tricky to say the least.

The ST version also suffers from incredible slowness, and while the 8-bit ports are a touch more playable, they look awful. Even if you're the world's biggest Ninja fan (or indeed the world's biggest dragon fan), don't bother with this one. (All the games sell at £7.99 for 16-bit versions and £3.99 for 8-bits).

## TOP 10 ALL FORMATS FULL PRICE

THIS WEEK	LAST WEEK	TITLE	PUBLISHER	MACHINE
1	1	J White's W'wind Snooker	Virgin	ST AG
2	7	Silent Service 2	Microprose	AG OT
3	2	Man United Europe	Krisalis	SP CO AM ST AG OT
4	4	Rainbow Collection	Ocean	SP CO AM ST AG
5	5	Rodland	Storm	SP CO AM ST AG
6	3	Thunderhawk	Core Design	ST AG
7	RE	Flames of Freedom	Rainbird	ST AG
8	9	Cruise for a Corpse	US Gold	AG
9	6	Dizzy Collection	CodeMasters	SP CO AM
10	RE	Speed Ball 2	Mirrorsoft	CO ST AG OT

ST = Atari ST AG = Commodore Amiga PC = IBM PC or compatible SP = Spectrum  
 CO = Commodore 64 AM = Amstrad OT = Other.  
 Chart compiled by Gallup. © European Leisure Software Publishers Assoc.

## BEG, BORROW

### THREE WHEELERS

This week sees the software world rocked by the simultaneous release (more or less) of not one, not two, not four, not seventeen, not... (Get on with it - reader's voice), but three games all with a strong driving theme. Gremlin shows up with the long-awaited *Lotus Turbo Challenge 2*, MicroProse weigh in with its technically stunning *F1 Grand Prix*, and US Gold adds to the burden on the already-groaning shop shelves with the third game in the trillion-selling *Out Run* series, *Out Run Europa*. While the three are indeed all driving games, they all take radically different approaches to the theme.

### BEG

F1 GRAND PRIX • MicroProse

This effort goes for the Indy 500 line, with polygon graphics and a serious simulation feel. A single race in *F1 GP*, using the shortest option available, is still likely to

take you a good 20 minutes to complete, and this might deter the fast-action fans amongst you, which would be a terrible shame because this is a terrifyingly good game.

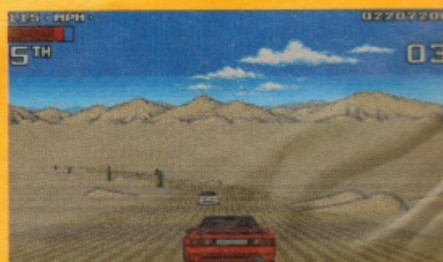
All the tracks are crammed with graphic detail, but everything still moves alarmingly quickly, and the minutiae of F1 racing have been captured to a level that's almost train spotter-like. Flag men, pitstops where you even get your windscreen wiped with a chamois, drivers pushing their broken-down cars off the track in the middle of the race, the whole deal, as well as everything Indy 500 fans would expect in the way of action replays, camera angles, etc.

Geoff Cramond, author of the frankly over-rated *Stunt Car Racer*, has really gone to town this time, and while he was there he's bought a driving game which is a dead-on certainty to achieve well-deserved legendary status within minutes.

### BORROW

LOTUS TURBO ETC • Gremlin

*Lotus Turbo etc* is a sequel to the popular *Lotus Turbo Esprit Challenge* with a number of dinky new features added, such as the chance to drive two separate Lotus



- You'd never guess, but this is the desert level



## COPYCAT CORNER

Fanatical disciples of this column may also be familiar with my scrawlings for NCE's sister mag *Amiga Power* (the best-selling Amiga games magazine in the country, fact fans). If so, they may just remember a review of a game called *Challenge Golf* which I wrote in Issue Four of said organ. Imagine their surprise, then, to open this month's *CU Amiga* and see that very same review, practically word-for-word, reprinted on pages 24-25 in their so-called 'Readers Reviews' section (courtesy of one Peeyush Durani of Romford). Now I know imitation is the sincerest form of flattery, but to my mind this is taking things just a little bit too far.

Games Week says: Thanks for the charming compliment to my journalistic qualities, everyone, but do your own slugging next time.

## PLAYING TIP

ELF • Ocean • Amiga and ST

This funny little platform arcade adventure with the rather over-fussy graphics didn't do much for me when it was released a couple of months ago, but if you're a fan, you'll probably find this wee cheat quite handy. All you do is type 'CHOROPOO' at any time and you'll suddenly have 99 pets. Quite what use 99 pets are going to be, is a question only Elf fans will be able to satisfactorily answer.

## THE BLUES BROTHERS

Titus • Amiga and ST • £25.99 £12.99 ★★★★★

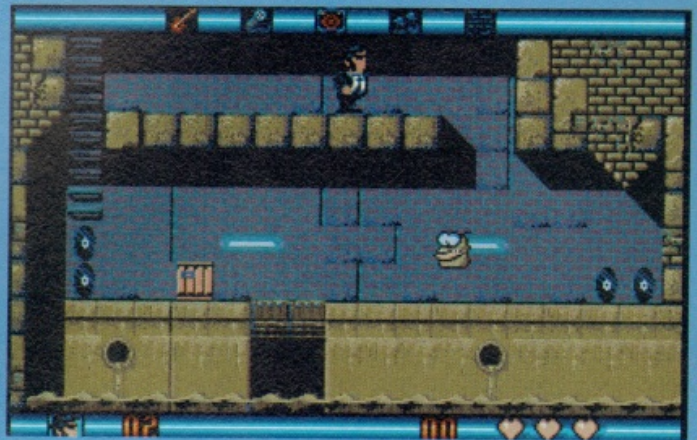
Titus. *The Blues Brothers*. What a combination, eh? A couple of fat old rockers and the software house responsible for some of the most appalling software ever to disgrace any machine anywhere in the world ever (*Crazy Cars*, *Crazy Cars 2*, *Dick Tracy*, *Fire And Forget*, that really duff one about the speedboats, the list is endless).

I approached this game with all the enthusiasm of a BMX Bandits fan going to a Guns'n'Roses gig, but (regular readers won't be in the least surprised to discover) I was to be proved utterly wrong by one of the most completely excellent games it's been my pleasure to review since I started this column.

*The Blues Brothers* is a very console-esque platform arcade romp, distinguished by fast, addictive gameplay, hilarious animation, excellent music and gorgeous cartoon graphics.



• Prison security - who needs it?



• No. 2 in a continuing series of sewer-based screen shots - Blues Bros

In look, feel and play it's something very close to perfect, and if you're a committed fan of Jake and Elwood (which I'm not by any stretch of the imagination) you may well form the opinion that this is the best game you've ever played.

There isn't anything particularly devastating in the design or anything, but the level of execution in every area is just wonderful, and it makes this game so enjoyable to play that I actually came into work early several times this week just to

sneak in a few quick games.

You might notice that I'm not giving you much specific detail about the actual game here, but there's a reason for that. A simple review is easy to dismiss, but pop into your friendly local software shop and take a look at this game for yourself. If you can walk back out without buying a copy of your own, then make your next stop a psychiatrist, because there's something wrong with your head.

TOP 10

ALL FORMATS BUDGET

THIS LAST WEEK WEEK TITLE		PUBLISHER	MACHINE	
1	2	Bubble Bobble	Hit Squad	SP CO AM ST AG OT
2	1	New Zealand Story	Hit Squad	SP CO AM ST AG
3	7	Dragon Ninja	Hit Squad	SP CO AM ST AG
4	3	Batman the Movie	Hit Squad	SP CO AM ST AG OT
5	4	Shinobi	Mastertronic	SP CO AM ST AG OT
6	5	Indiana Jones - Last Crusade	Kixx	SP CO AM ST AG OT
7	NE	Turbo Outrun	Kixx	SP CO AM AG
8	6	Cabal	Hit Squad	SP CO AM ST AG
9	NE	Shadow of the Beast	Sizzlers	ST AG
10	10	Monnwalker	Kixx	SP CO AM ST AG OT

ST = Atari ST AG = Commodore Amiga PC = IBM PC or compatible SP = Spectrum  
CO = Commodore 64 AM = Amstrad OT = Other.

ST = Atari ST AG = Commodore Amiga PC = IBM PC or compatible SP = Spectrum  
CO = Commodore 64 AM = Amstrad OT = Other.



BRAT • Imageworks • Amiga

To skip a level in this 'interesting' *Lemmings*-inspired scrolling maze thing, hold down 1, the full stop key, the slash key and the asterisk.

Stuart's Top Tip Of The Week - do it twelve times in a row and save yourself a lot of grief.

## AND BURN SPECIAL

### BURN

cars (the Esprit and the Elan), the ability to have up to four players at once through a modem link-up, and a wide range of weather conditions for drivers to race through.

The most pleasing improvement for me, though, is the use of the full screen in one-player mode, which lends the whole thing a much grander and more impressive air. *Lotus 2* shares its predecessor's immense playability, but the only significant difference between the games in play is the environmental element - beautifully-realised snow makes the cars slide around, fog and darkness affects your visibility, desert sand slows cars down, and deviating from the road in the swamplands can result in your vehicle sinking into a marsh.

Now while I'm a great believer in the old maxim 'If it ain't broke, don't fix it', I'm far from convinced that Gremlin has done enough in *Lotus 2* to make it worth buying if you already own the original. If you don't, then don't miss this, but otherwise see it first.

### OUT RUN EUROPA • US Gold

OK, so 'burn' is a bit of a strong word for this acceptable enough little game, but in the light of the competition *Out Run Europa* looks like a relic from a bygone age. The *Out Run* connection is an extremely tenuous one, as this game puts you in a whole series of vehicles from a motorbike to a jet ski, and the action takes place all over the continent, even including the Channel!

The game looks very pretty, with small but detailed graphics and a fair turn of speed, but it suffers from the twin flaws of being irritatingly difficult and almost uncontrollable. You don't get anything like the realistic handling of *Lotus 2* and particularly *F1 GP*, and as your bike or whatever careers ridiculously across the narrow tracks, you spend more time crashing than riding. You also can't go faster than some of the enemy vehicles, which causes some really annoying moments when they



• As you can see, *Out Run Europa* is pretty, but not exactly 1991 state-of-the-art

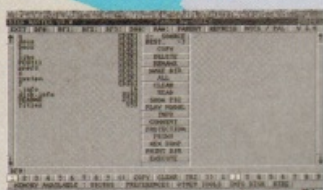
bash you around the road or even completely obscure your bike from view, and generally the overall design leaves a lot to be desired. It's almost a decent game, but in this market it's going to be completely crushed.



## PREVIEW

# THIS DISK'S SO BRIGHT YOU'VE GOTTA WEAR SHADES!

## AMIGA



• Using icons, **Diskmaster** makes disk operations easy

## ST



• These are more than just pretty patterns – **Colourspace** is a complete psychedelic experience!

## PC



• **Infoplus** displays your computer's configurations on-screen

**ST owners, prepare yourselves! On the Express Cover Disk next week we bring you a whole new psychedelic experience with Llamasoft's amazing Colourspace light synthesizer. With it you can create dazzling graphic patterns that affect your senses like no other piece of software.**

For the Amiga we have **Diskmaster**, an essential utility that makes previously complex disk operations almost second nature. It's partnered with **FastDir**, a handy easy-to-use CLI tool which speeds up the accessing of files.

PC owners are also well catered for. **Infoplus** is an impressive program which enables you to check every nook and cranny of your computer to see how it's set up. And for the game freaks out there we have **Jumpman Lives**, an incredibly addictive platform game.

**DON'T FORGET ABOUT ALL THE LATEST NEWS, REVIEWS, PREVIEWS AND VIEWS ON EVERYTHING THAT'S HAPPENING IN THE WORLD OF COMPUTING!**

**GET READY NOW – THERE'S ONLY SEVEN DAYS TO GO!**

**BUT MAKE TRIPLE SURE YOU GET YOUR COPY!**

Complete this form and hand it to your newsagent

TO THE NEWSAGENT:

Please reserve me ..... copy/copies of *New Computer Express* every week, beginning with issue 154, out on 17th October.

NAME .....

ADDRESS .....

POSTCODE ..... PHONE NO ..... DAY ..... EVENING .....

To the newsagent: *New Computer Express* is published by Future Publishing and is available from your local wholesaler. Send back all your Future shop save coupons for entry in a free draw to: Annie Gronow, Future Publishing, 30 Monmouth Street, Bath BA1 2BW.

EDITOR • Andy Storer  
NEWS EDITOR • Tim Smith  
PRODUCTION EDITOR • Julie Tolley  
PRODUCTION ASST • Alison Harper  
COVER DISK EDITOR • Tim Howell  
FEATURES EDITOR • Matthew Squires  
ART EDITOR • Angela Neal  
GAMES REVIEWER • Stuart Campbell

## CONTRIBUTORS

• Jason Holborn • James Leach  
• Rod Lawton • Paul Rigby  
• Ian Wrigley • Haydn Fitz-Williams  
• Ed Ricketts • Robin Alway  
• Andrew Roberts • Neil Jackson  
• Jason Saunders • Onn Lee

## CIRCULATION DIRECTOR • Sue Hartley

AD MANAGER • Mike Jennings  
SENIOR SALE EXEC • Tim Partridge  
AD EXECUTIVES • Charlie Nicholls  
• Siobhan Kennedy-Hall  
AD PRODUCTION • Frances Wasem  
AD TYPESETTING • Terry Mackereth  
PRODUCTION TECHNICIANS  
• Simon Windsor • Chris Stocker  
• Jerome Clough  
PUBLISHER • Steve Carey

ABC audited circulation January-June 1991: 20,214 copies per week

We regret we cannot enter into any personal correspondence. Technical enquiries should be addressed to Tech Tips at the address below.

While every care is taken in the preparation of *New Computer Express*, Future Publishing cannot be held responsible for the consequences of any errors that may occur.

• Subscriptions: The Old Barn, Somerton, Somerset (0456) 74011

• Printed by Redwood Press, Melksham, Wilts

• Distributed in UK and Eire by Future Publishing (0225 442244), rest of world by Comag (0895 444055)

© Future Publishing Ltd 1991

30 Monmouth Street, Bath BA1 2BW

## CONTACTS

Tel: 0225 442244 Fax: 0225 480325

E-mail: ASPECTS: 061 792 0260

CIX @ astorer

GOLD @ 84-TXT152

PRESTEL @ 01112823

## Your guarantee of value

This magazine comes from Future Publishing, a company founded just six years ago, but which now sells more computer magazines than any other publisher in Britain. We offer:

Better advice. Our titles are packed with tips, suggestions and explanatory features, written by the best in the business.

Stronger reviews. We have a cast-iron policy of editorial independence, and our reviews give clear buying recommendations.

Clearer design. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs, etc.

More reader interaction. We draw strongly on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group.

Better value for money. More pages, better quality: magazines you can trust.

**future**  
PUBLISHING

Home of Britain's finest computer magazines.

New Computer Express

Amiga Format • ST Format • PC Format

Amiga Power • Amiga Shopper

PC Plus • PC Answers • 8000 Plus

Public Domain • Amstrad Action

Sega Power

Commodore Format • Your Sinclair



# THE GALAXY

RANGE OF COMPUTERS  
Classic simplicity  
Superior technology

**286/386/486**  
**SUPPLIED READY TO USE**  
**24 HOUR DELIVERY!**



SYSTEM	MONO	M-VGA	C-VGA	VGA + 0.28dot pitch	S-VGA 0.28 dot pitch	SPECIAL SYSTEMS			
						S-VGA + 1Mb Video RAM	NEC3D Non-interlaced	NEC4D 16" non-interlaced	NEC5D 20" non-interlaced
286 12MHz	£536	£582	£709	£736	£772	£786	£996	£1474	£2188
286 16MHz	£551	£596	£724	£751	£786	£801	£1011	£1488	£2202
386SX 16MHz	£665	£711	£838	£865	£901	£915	£1125	£1602	£2316
386SX 20MHz+CACHE	£711	£756	£884	£911	£946	£961	£1171	£1648	£2362
386 25MHz	£782	£828	£955	£982	£1018	£1032	£1242	£1719	£2434
386 33MHz+CACHE	£868	£914	£1041	£1068	£1104	£1118	£1328	£1805	£2519
486 25MHz+CACHE	£1396	£1442	£1569	£1596	£1632	£1646	£1856	£2334	£3048
486 33MHz+CACHE	£1518	£1564	£1691	£1718	£1754	£1768	£1978	£2455	£3169

These are  
actual CPU  
speeds not  
landmark  
speeds

#### SPECIFICATION

All Galaxy Systems are supplied ready assembled. They are thoroughly soaked-tested and set up with any software options purchased and feature as standard.

- Modern style case
- Quality Motherboard
- AMI BIOS
- 1MB Fast RAM (expand.)
- Hard Disk Controller
- Parallel Printer Port
- 2 Serial Ports (mouse etc)
- Game Port
- HD Floppy (3.5 or 5.25)
- HDD, Turbo & Power LED's
- Reset Button
- Turbo Switch
- LED Speed Readout\*
- 102 Keys Keyboard
- Video Card/Monitor
- 40MB Hard Disk Drive

\* Not available on slimline case

**ONE-YEAR  
ON-SITE  
WARRANTY**

If any of these features are not required please phone for possible price reduction.

**WE WILL TRY AND BEAT ANY PRICE FOR THE SAME SPEC!**

HARDWARE OPTIONS		SOFTWARE OPTIONS	
Additional Floppy Drive	+£43	MS-DOS 4.01	+£49
Hard Disk up to 80MB	+£143	MS-DOS 5.0	+£69
Hard Disk up to 125MB	+£199	MS-DOS 5.0 (upgrade)	+£57
Hard Disk up to 211MB	+£429	MS-Windows 3	+£49
Add. Memory per MB (286)	+£38	MS-Windows 3 plus mouse	+£79
Add. Memory per MB (386/486)	+£44	MS-Works	+£112
Internal Tape Backup Unit	+£219		
Mini Tower Option	+£10	☆☆☆☆☆	☆☆☆☆☆
Full Tower Option	+£95	<b>TRADE</b>	<b>DEALERS</b>
Microsoft Compatible Mouse	+£20	<b>ENQUIRIES</b>	<b>REQUIRED</b>
Mouse with Software, Mat and 'House'	+£26	☆☆☆☆☆	☆☆☆☆☆



**GALAXY**  
COMPUTERS



PETERBOROUGH



**ALL PRICES ARE EXCLUSIVE OF VAT AND CARRIAGE**

**SALES  
HOTLINE**  
FAX 0733 897227

**0733 68899**

Delivery is usually within 48 working hours from receipt of cleared funds. Prices and specifications subject to change without prior notice. Goods offered subject to availability and conditions of sale. Our standard terms and conditions apply at all times. Errors and omissions excepted.

Unit 21, "The Computer Works," Second Drove Ind. Est.  
Fengate, Peterborough, Cambridgeshire PE1 5XA.





# RUGBY

## *The World Cup*

Every four years the World's major Rugby playing nations battle it out over a four week period to see which team will lift Rugby's Greatest Trophy.

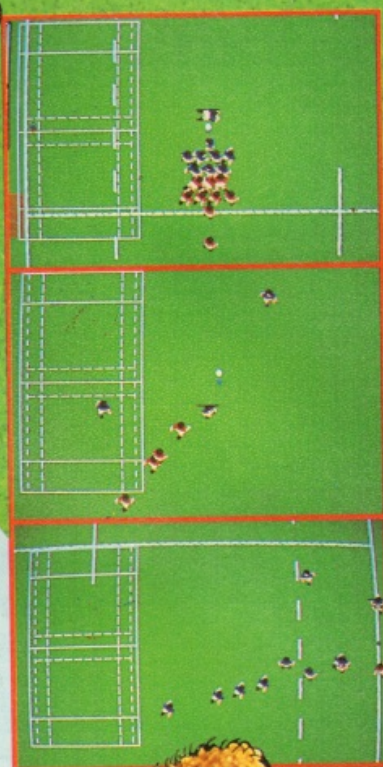
This simulation brings you the heart-pounding excitement of the moment:-

- The sweat and hustle as you grapple for the ball in the scrum.
- The tension as you wait for the throw-in in the line out
- The nerve-wracking moments just before you take a penalty kick.
- The skill and reflexes you'll need to play the fast-moving passing game.
- The jubilation as you score the match winning try.
- The combination of accurate detail and phenomenal gameplay make this a true simulation of one of the greatest team sports.

Take on the best and make your national team-Champions of the World.

### DOMARK

Software, Artwork and Packaging  
© 1991 Domark Group Ltd. Published by  
Domark Software Ltd, Ferry House,  
51-57 Lacy Road, London SW15 1PR  
Programmed by



AMIGA SCREENSHOTS

