

ONLY
£1.85

ATTACK!

THE CRUCIAL AMSTRAD CPC READ



SCREENTEST
OVER
20
GAMES
REVIEWED

GRAAB

IMAGE PROCESSING

WE SHOW YOU HOW TO DO IT, WHAT YOU NEED AND WHAT TO EXPECT



TRICK OR TREAT?

HALLOWEEN HORROR
GAMES SPECIAL

PLUS Q&A • BUSINESS • PD • TUTORIALS • PROGRAM LISTINGS • REVIEWS • NEWS

NOVEMBER 1992
ISSUE 6 £1.85



MJC

COMPUTER SUPPLIES

Suppliers of Discount Software since 1984

HOW TO ORDER:
All prices include VAT & delivery
Please allow 5 days for cheque clearance.
Send cheques or postal orders made payable to:

MJC SUPPLIES (ATT)
Unit 2, The Arches, Icknield Way,
Letchworth, Herts, SG5 1UJ

Or telephone with Access or Visa debit
and credit cards on:

0462 - 481166

Overseas Customers: write for quotation
Educational Bodies, Local Authorities, Govt.
Departments: send written order
FAX US ON 0462 670301

CF2 DISKS

5 for	£8.95
10 for	£15.95
20 for	£29.95

DESKTOP PUBLISHING

STOP PRESS SOFTWARE

A superb page layout program allowing text and graphics to be printed on the same page. Contains a number of text fonts & clip art. Create leaflets, posters etc. (CPC6128 or 6128+)
MJC PRICE £34.95

STOP PRESS & AMX MOUSE

As above but is supplied complete with the AMX mouse making the program easier and quicker to use.
MJC PRICE £64.95

EXTRA! EXTRA!

Two disks of extra fonts and clip art for use with Stop Press
MJC PRICE £14.95

*** SPECIAL OFFER *** STOP PRESS SOFTWARE

PLUS

EXTRA! EXTRA!

ONLY £44.95

or

STOP PRESS & EXTRA EXTRA
PLUS
AMX MOUSE AND INTERFACE
£74.95

CPC AMX MICE & INTERFACE

We now have CPC mice and interfaces back in stock

CPC MOUSE & INTERFACE £34.95

(Plus owners please call)

RIBBONS

Printer	Quantity		
	1	2	5
CMP 2000/3000	3.00	5.50	12.00
Perseus & XYP1061/1101	3.95	7.00	15.00
Okidata 1200	3.95	7.00	15.00
Star LC-10 Mono	3.95	7.00	15.00
Star LC24-10	4.95	8.00	20.00
Panasonic KXP 1124	2.95	7.00	15.00
Star LC-10 Colour	5.95	11.00	-
Star LC200 Mono	5.95	11.00	-
Star LC200 Colour	10.95	18.95	-
Star LC24-200 Mono	4.95	9.00	-

HEAT TRANSFER RIBBONS

Citizen 120-D Mono	4.95	13.00
Panasonic 1051/1100 Mono	7.95	15.00
Star LC-10 Mono	5.95	13.00
Star LC-10 Colour	11.95	23.00

COURIER DELIVERY

Available on any order.

Prices start at £3.00

please ask for further details

SERIOUS DISKS

PROTOTYPE

Amor's excellent print enhancer - a must for all Protex users (NOT CPM)
MJC PRICE £21.95

Protex.....	19.95
Prospex.....	17.95
Promerge.....	17.95
Multi Spreadsheet Plus.....	29.95
Masterfile 3 (Database).....	29.95
Mastercalc 128 (Spreadsheet).....	25.95

COLOURDUMP 3

After a lot of feedback on ColourDump 2, we are now pleased to announce the latest version of the best Colour screen printing program for the CPC range. REQUIRES STAR LC-200 OR COMPATIBLE 9 PIN COLOUR PRINTER. Improved use with Advanced Art Studio. WIF automatically read in palette file and set screen mode to ensure your page is the same as your screen. Uses compressed or uncompressed files. Bigger print outs. In addition to the original 13cm x 9cm image, a large print out at approximately 22cm x 15cm is available at single or double density.

Use Multiface screens. A conversion routine is supplied to allow most Multiface screens to be used.

NO OTHER COLOUR SCREEN DUMP OFFERS SO MUCH.

6128 - only

COLOURDUMP 3 £16.95

Stardump.....	14.95
Stockmarket (share analysis).....	CALL
Money Manager (home accounts).....	21.95
Nirvana disk copier.....	14.95
Maxim Assembler.....	19.95
Mex Office 2.....	14.95
Advanced Art Studio (128k).....	17.95
Advanced Art Studio & AMX Mouse.....	49.95

GAMES DISKS

COMPILATIONS

Capcom Collection.....	17.95
Max Pack.....	17.95
Movie Premier Collection.....	14.95
Soccer Stars.....	13.95
Super Heroes.....	14.95
Super Sega Collection.....	17.95
T.N.T.....	13.95
Virtual Worlds.....	15.95
Gary Lineker Collection.....	16.95

Alien Storm.....	12.95
Battle Command.....	11.95
Captain Planet.....	11.95
Colossus Chess 4.....	6.50
Double Dragon 3.....	11.95
F10 Combat Pilot.....	7.95
Galactic 3.....	12.95
Hudson Hawk.....	11.95
Jimmings.....	15.95
North and South.....	12.95
Paperboy 2.....	11.95
Ph Fighter.....	11.95
Pittsworth & Co.....	6.50
Robozone.....	11.95
Ridland.....	11.95
Sim City.....	12.95
The Simpsons.....	11.95
Smash TV.....	11.95
Space Crusade.....	11.95
Thus The Fox.....	11.95
WWF Wrestlingmania.....	11.95

EDUCATIONAL DISKS

For more information on the Educational programs ask for the MJC Educational Supplement.

Learn to Read with Prof (age 4-9 years)
Part 1: Prof Plays
A New Game..... 14.95
Part 2: Prof Looks at Words..... 14.95

LCL SOFTWARE

LCL Primary Maths (3-12).....	9.95
LCL Micro Maths (11-GCSE).....	9.95
LCL Micro English (9-GCSE).....	9.95
LCL Mega Maths (A-level).....	9.95

KOSMOS SOFTWARE

French Mistress 12 to adult.....	15.95
German Master 12 to adult.....	15.95
Spanish Tutor 12 to adult.....	15.95
Italian Tutor 12 to adult.....	15.95
Answerback Junior Quiz (6-11 yrs).....	10.95
500 general knowledge questions.....	10.95
Factiles (require Answerback quiz).....	
Arithmetic (6-11 years).....	7.95
Spelling (6-11 years).....	7.95

NEW! TRIPLE R SOFTWARE
Four programs per package
Picture Book (2-5 years)..... 14.95

Fun School 1 - 10 programs per disk	
For 2 to 5 years.....	6.95
For 6 to 12 years.....	6.95
Fun School 2 - 8 programs per disk	
For 2 to 6 years.....	7.95
For 6 to 8 years.....	7.95
For 8 to 12 years.....	7.95
Fun School 3 - 6 programs per disk	
For 2 to 5 years.....	11.95
For 5 to 7 years.....	11.95
For 7 to 12 years.....	11.95
New - Fun School 4 - 6 programs per disk	
For under 5 years.....	11.95
For 5 to 7 years.....	11.95
For 7 to 11 years.....	11.95

ACCESSORIES

DKT 64k Memory Expansion (484).....	39.95
Multiface 2 Plus (for CPC).....	CALL
Multiface 2 Plus (Plus models).....	CALL
E bit printer part (inc. lead).....	24.95
CPC to Parallel printer lead.....	9.95
CPC Plus to parallel lead.....	6.95
464 Keyboard/Monitor Ext leads.....	7.95
6128 Key/Monitor Ext leads.....	8.95
NEW 6128+ Key/Monitor Ext leads.....	7.95
FD1 Disc Drive lead (664/6128).....	7.95
464/6128 Monitor/keyboard dust covers.....	7.95
464/6128 Plus dust covers.....	8.95
(please state exact machine - call/manual)	
Quickjoy Printer.....	9.95
Competition Pro 5000.....	13.95
Together Joystick.....	19.95

CPM BASED

Protex CPM.....	39.95
At Last Plus.....	24.95
Supercalc 2.....	26.95
Resort Pascal 80.....	36.95
Hauff C Compiler.....	36.95
Linky Crash course Typing.....	18.95
Linky Two Fingers Typing.....	18.95

PRINTERS

All prices include cable, ribbon, VAT, postage & packing, courier service available, add £5
FEEL FREE TO CALL FOR ADVICE

9 PIN PRINTERS

STAR LC-20

Star's new replacement for the popular LC-10 is sure to be a winner

£159.95

PANASONIC KXP-1170

Replacement for the very popular KXP-1162. Still offers 4 NLG fonts and fast printing. Very good quality text for a 9 pin printer

£159.95

PANASONIC KXP-2180

A new 6 pin colour printer from Panasonic. Offers 7 colours and 6 different fonts. Very good quality printing for a 9 pin printer

£214.95

STAR LC-200

The latest colour printer from Star. Not only very fast but offers new page handling features. Best value for money. All printing colour graphs or requires extra software. Please call before ordering

£219.95

24 PIN PRINTERS

When ordering graphics from 24 pin printers results will be affected without extra software. Please call before ordering

STAR LC24-20

Excellent value budget 24 pin printer offering 5 letter quality fonts and additional effects such as word size, outline and shadow

£209.95

PANASONIC KXP-1123

Panasonic's entry level 24 pin, plug & letter print quality over the Star range, but with 4.0 inch and lower letter

£219.95

STAR LC24-200

The replacement for the popular LC24-10, with the same 5 letter quality fonts, shadow and outline effects. Much quieter than the LC-10 and has improved paper handling.

£259.95

PANASONIC KXP-1124i

Replacement for the excellent 1124, offering excellent fast quality, build quality, paper handling and control panel. New letters shadow & outline effects, 4.0 fonts and a new super LG font

£279.95

STARJET SJ48 INK JET

A new ink jet printer from Star. Offers excellent print quality plus virtually no noise. Supports up to 24 pin and IBM emulation

MJC PRICE £259.95

CASSETTE SOFTWARE

Fun School 1 (2-5).....	6.95
Fun School 2 (6-7).....	6.95
Fun School 3 (over 7).....	6.95
Fun School 4 (8-9).....	6.95
Fun School 4 (9-11).....	6.95
Fun School 4 (11-13).....	6.95
Mini Office 2.....	8.95
Maxim 464.....	15.95
Protest 464.....	15.95
Carters 464.....	15.95
Advanced Art Studio (128k).....	15.95



Card holders can order now on: **0462 481166**



BrunWord

Elite ROM Module £125

This is the ultimate addition to a 6128 computer. Word processor, spelling checker, 33,000 word dictionary, relational database, 9 pin print enhancer, 24 pin 'type setting' routines and 10 superb fonts, all programmed into one high capacity ROM (256K bytes). Massive memory, small size and includes our latest innovations, the As You Type spelling checker and our System 2 simplified printer control.

We fit the ROM into a small ROM board and give it a thick coat of protective resin, making a neat module which plugs directly onto the expansion socket of the CPC6128 or 6128 Plus. The price includes our 8 bit printer status port.

Great Power

Plug on the module, switch on, type IBW and the whole system is immediately ready for use. Type into the word processor, if the computer beeps, press <F3> and ask for help, transfer the correct spelling and resume typing. Use the database to print labels, search for an address, transfer it to the word processor and print it out, all without a single disc operation to slow you down.

Exciting Features

The Elite ROM has a host of exciting features including 5 high quality high speed screen dumps for 9 pin and 24 pin printers. These are special routines using the 8 bit printer status port and they print incredibly fast compared to desk top publishers. Every dot of ink on this page, including the drawing, the large 'BrunWord', our name & address, credit card symbols and Teddy, was printed in one operation using the BrunWord Elite ROM module and an Epson LQ1070 printer (wide carriage LQ570).

For simple layouts, System 2 can be set to Auto-formatting which enables micro spaced printing to be used without any layout instructions even when using proportional fonts.

Any Printer ?

All ROM modules work with any Epson compatible printer. All 24 pin printers can make full use of BrunWord Elite. Older designs of 9 pin printers (Amstrad DMP2160 etc) are limited to whole space justification but modern 9 pin printers (Star LC10 etc) can use micro justification.

Free ROMDOS

If you have a second 3.5 inch disc drive then you need KDS ROMDOS. We can supply this programmed into your ROM at no extra cost. (Not 6128 Plus). BrunWord ROM solves the frustration of disc drive confusion by always using whichever drive has the disc in it. Using a 3.5 inch disc drive with BrunWord ROM is simplicity itself and the ROM manual now covers our 'undocumented' command which enables a 3.5 inch disc to import and export text to a PC.

Remember.... No ROM box is needed.

BrunWord 6128 £30

Complete word processing package (disc) with word processor, spelling checker, 30,000 word dictionary and card filing programme. Type HUN "BRUNWORD" to load the word processor, spelling checker and the dictionary. BrunWord 6128 out performs all other word processors for the 6128. A fast screen response, extensive editor commands and the 4000 words per minute spelling checker, make it a joy to use. On the disc is a tutor file which takes even a complete beginner straight into word processing and demonstrates the powerful editing and formatting features of BrunWord. The 40 page manual includes step by step instructions to produce and print a simple letter.

6128 ROM Module £46

The same as BrunWord 6128, without the card filing programme, but supplied as a ROM module, with free ROMDOS (not Plus) and our fabulous As You Type spelling checker. (6128 Plus - add £12). Don't forget.... no ROM box to buy!

Info-Script ROM £79

The Info-Script ROM module is a complete data processing package, including all the features of the 6128 ROM. Even with 1000 names and addresses loaded into memory for instant reference, you can type a 10 page document in the word processor and your spelling will still be checked while you are typing. Stop anytime, use the database to search for a reference (typically taking 1 second for the search) and return to your typing. You could, if you wish, leave a marker in your text and transfer the data. Each programme remains just as you left it, with instant access. Can be upgraded to the full Elite ROM.

Comparisons

We have tested BrunWord 6128 and Protext with the same file of 3366 words.

The first test was to compare the scrolling speed of the screen, using line by line scrolling. This is a vital performance test as the CPC6128 tends to be naturally slow at this task. BrunWord scrolled 40% faster than Protext.

Protext was the fastest to justify but used a simple process that added spaces at the centre of each line, giving the middle of the text a bulging appearance. It did not display as it went along and so needed a separate operation to see the result. BrunWord displayed as it justified and produced a balanced appearance.

Our simulated typing test achieved 218 words per minute. Both BrunWord and Protext had no trouble at this speed.

The spelling test checked all 3366 words. BrunSpell took 52 seconds and needed no disc changes. Prospell took 8 min 24 sec and needed 8 disc changes.

The find and replace in Protext is confused by words starting with a capital letter so it always requires two separate operations. BrunWord is more sophisticated and automatically handles both variations in one operation.

Quotes

"It's totally brilliant..... carries on the extreme user friendliness of Brunning Products to a very high standard..... I have one of these little gems plugged into the back of my CPC right now..... The BrunWord ROM has performed in an exemplary fashion on all fronts."

Chris Knight (ACU Editor) - ACU August 1991.

"....(BrunWord) in itself is quite uncomplicated and easy to use. That's the beauty of the system - you can just sit down and start typing..... the fastest most efficient spell checker anywhere..... Info-Script is a formidable piece of software engineering. The fact that it's instantly available from BrunWord makes you realise just how powerful this whole package is..... The BrunWord ROM is a truly excellent product."

Rod Lawton (AA Editor) - AA September 1992

"Two weeks ago today I received my copy of BrunWord 6128 and would like to say how delighted I am with it. Although I am a qualified touch typist, I expected to take ages to get used to my first professional word processor and could not believe that only after a few short hours, I was using BrunWord as if I had had it for years, it is so well thought out and user friendly. I often have very difficult documents to type, lots of centring, underlining, indentations and numbered paragraphs. Four days after receiving BrunWord I typed eleven letters, an agenda and a set of complicated minutes in just two evenings."

Miss Veronica Petter (Bristol) 20th Aug 1992.



"The Gun Girl"

Delightful line drawing by Chris Rothero, Dart. Scanned by agreement.

Send cheque/PO/Access, Visa, Connect number to:-

Brunning Software

138 The Street,
Little Clacton, Essex, CO16 9LS.
Telephone (0255) 862308



BrunWord 6128 with BrunSpell (on 3in disc) . . £30.00
BrunWord 6128 ROM Module with BrunSpell . . . £46.00
464 ROM Module, BrunSpell & disc connector . . £59.00
Info-Script ROM Module, BrunWord & BrunSpell. £79.00
Elite ROM Module, BrunSpell & Info-script . . £125.00

*** You must state 'Ordinary' or 'Plus' ***

464 ROM cannot be supplied with Plus connector

All prices are inclusive for UK. Overseas orders sent insured air mail - Europe add £2.50 + Rest add £7.50

CPC

ATTACK!

SPECIALS

18 THE STEVE DENSON INTERVIEW

Steve Denson, of SD Microsystems, talks exclusively about his company's future developments.

20 IT'S PARTY TIME

The second European Demo Meet took place in France recently. Our roving coder CharleyTronic was there.

34 IT'S DEMO TIME

Continuing with our CRTG rundown and a short piece of code demonstrating overscan screen set-up.

11 IMAGE PROCESSING

Grab It, Process It and Output It. We show you what you need, how to do it and provide lots of useful advice.

24 SCREEN TEST

Over 20 games reviewed in this mammoth game section

Welcome to CPC ATTACK!

Hallowe'en may be next week, it may be in a month's time. It all depends in which week during October you read this, the November, copy of Attack!

Why do we sell the November issue in October, the December issue in November and the January issue in December (Okay...that's enough!)? Simple really. This month's issue, for example, will also be on the shelves during the first week of November - until the December issue comes out. If it was sold from the first week in November, it would be on the shelves during the first week of December. But would many of you buy a November edition in December? Probably, but many newsagents wouldn't give you the chance.

The European Computer Trade Show (Autumn) is being held at the very time we close the magazine - editorially - and, from news from there, the CPC isn't fairing too badly. You'll have to wait until next month for a report from our roving reporters.



REGULARS

8 NEWS

Read all about it. The latest developments in CPC land.

36 PUBLIC SECTOR

Homebrew Software gets our attention along with the regular news and a special PD review

42 POKES, MAPS & TIPS

The pages with the best tips, advice and pokes in the world.

45 PROGRAM LISTINGS

There's plenty of proggy for budding programmers to dissect and use.

50 Q&A

Oodles and oodles of help and advice with reviews of Soft-Lok and Video Master.

56 LETTERS

Fun and games. Read about the Amy Puzzle Game Flasco No.2! plus lots more enquiries.

58 NEXT MONTH

Find out from us what to expect, when to expect it and why you shouldn't miss the next issue.

SERVICES

44 SUBSCRIPTION

Don't miss a copy...get it delivered at no extra cost.

49 SPECIAL OFFER

You'll always pick up a great bargain on this page.

53 CLASSIFIED

Wants, sells and swaps in the buyers' section. Also, superb CPC Attack! program offers.

40 MINI OFFICE 2

A complete review on the package that's proved to be the peoples' choice.

Meet AMY STRAD

Check out the games pages for a spectacular in CPC gaming. There's loads of games reviewed and tested this month and promise of more to come - soon.

The wicked words:

EDITOR

Pat Kelly

TECHNICAL EDITOR

Rob Scott

SUB-EDITOR

Paul Hales

CONTRIBUTORS

Vic Barnes, Richard

Fairhurst, Richard

Wildey

The hardcore art:

ORIGINAL DESIGN

Steve Hicks

DESIGN

CONTRIBUTOR

Maurice Clarke

ILLUSTRATOR

Stuart Harrison

The groovy ads:

AD SALES

DIRECTOR

Alan Talbot

AD MANAGER

Liz Edgar

Getting it all

together:

PRODUCTION

CONTROLLER

Rachel Dixon

The management:

GROUP EDITOR

John Taylor

PUBLISHING

DIRECTOR

Wendy Palmer

CIRCULATIONS &

SUBS MANAGER

Yvonne Taylor

DEPUTY MD

CONSUMER

MAGAZINES

& MARKETING

SERVICES

Ray Lewis

MD CONSUMER

MAGAZINES

& MARKETING

SERVICES

Peter Welham

CPC ATTACK!,

Floor 3, Greater London House, Hampstead Road, LONDON NW1 7QQ

Tel: 071 388 3171

Fax: 071 387 9518

PRINTED BY

BPCC, Colchester.

SPECIAL THANKS

To all the backroom boys who helped out and to everyone else that knows us.

© HHL Publishing 1992

No part of this magazine can be reproduced without prior written permission from the Publisher.

CPC Attack! is not an official Amstrad publication. Views expressed herein are not necessarily those of Amstrad plc.

Is there something we should know? Need help on technical matters or games? Want to get something out in the open? Then you need a contact.

You can be certain of getting your enquiry answered within the magazine if you address your letter to the right person or department. We can't personally reply to enquiries, either by telephone or post, but, you can reach us by writing to, or faxing the listed departments at:

CPC ATTACK!, HHL Publishing, Floor 3, Greater London House, Hampstead Road, London NW1 7QQ
or FAX: 071-387 9518

P.S. If you have a problem with any advertising company in the magazine, you can always call our advertising department as long as it's between normal working hours. They are always available to help with your problems.

CPC Q&A

Always ready to answer your problems, the technical help section is crammed with helpful advice, tips and readers' problems. If you have any advice or handy tips to offer, send them in - prizes awarded for every tip published.

LETTERS

If you ever feel the need to express yourself, want to tell the world how wonderful you are, how crap a program is or if you wish to join in the topical forum, then get scribbling.

SUBMISSIONS

We are always on the look out for interesting and topical articles for publication. If you have a special set-up, or know of a special utility, you could write an article about it for CPC ATTACK! You could become a regular contributor, earning lots of money for your work.

PROGRAM LISTINGS

Listings and 10-Liners are superb learning ground for would-be programmers, and they also provide excellent utilities and games. In CPC ATTACK!, all listings are treated as submissions and, as such, contributors are paid real cash. Please remember to include a disc or tape with the listing on it!

AMY'S PMT

Whether you want to give pokes, maps, tips (and cheats) or want to get some, this is the place to do it. Lotsa prizes to be won each and every month for the best submissions published.

CLASSIFIED

Not only for getting rid of your old equipment and grabbing a great bargain, but also for CPC contacts and user groups. The best way to sell your product.

COMPETITIONS

Lots and lots of COMPO's. That's what we'll be striving to offer. You can win quite easily, but you'll have to get your entry into the correct hat! Any competition wrongly addressed goes straight into the dustcart.

Don't put any letters or tips into a competition submissions as we don't open them other than to check if a winner's answers are correct.

CPC ATTACK! DIRECT

If you want to place an order, or have any problems with the service then please write, or call 071-388 3171 and quote CPC ATTACK! DIRECT.

SUBSCRIPTIONS

The subscription department is in a totally different office at a completely different location. If you want to subscribe or notify of a change of address you can send off your details to the address below:
CPC ATTACK! SUBSCRIPTION,
HHL Subscription Department, Lazahold Ltd., PO Box 10, Roper Street, Pallion Industrial Estate, Sunderland SR4 6SN.
TEL: 091-510 6737
FAX: 091-510 0155

SOFTWARE CITY

CALL US ON:
0902 25304



SOFTWARE CITY

P.O. Box 888

Wolverhampton WV1 1TP

TEL: (0902) 25304 FAX: (0902) 712751

BUDGET TITLES

1st Division Manager	£3.99
2 Player Soccer Squad	£3.99
3-D Pool	£3.99
3-D Tennis	£3.99
Acc 1 & 2	£2.99
Action Fighter	£3.99
Airburner	£3.99
Airbourne Ranger	£3.99
Altered Beast	£3.99
Arkanoid 1 or 2	£3.99
Badlands	NEW £3.99
Barbarian 2	£3.99
Batman the Caped Crusader	£3.99
Batman The Movie	£3.99
Boxing Manager	£3.99
Bubble Bobble	£3.99
Bubble Dizzy	£3.99
Bully's Sporting Darts	NEW £3.99
Cabal	£3.99
California Games	£3.99
Castlemaster	£3.99
Championship Golf	£3.99
Chase H.Q.	£3.99
Chuckie Egg 1 or 2	£3.99
Colossus Bridge	£3.99
Colossus Bridge (Disc)	£7.99
Colossus Chess 4	£3.99
Colossus Chess 4 (Disc)	£7.99
Commando	£2.99
Continental Circus	£3.99
Cricket Captain	£3.99
Cup Football	£3.99
Daley Thompsons Decathlon	£3.99
Daley Thompsons Olympic Challenge	£3.99
Daley Thompsons Olympic Challenge (Disc)	£4.99
Double Dragon 1 or 2	£3.99
Dragon Ninja	£3.99
Eed The Duck	£3.99
Erlyn Hughes Int. Soccer	£3.99
F-1 Toronado	£2.99
F-16 Combat Pilot	£3.99
F-16 Combat Pilot (Disc)	£7.99
Fantasy World Dizzy	£3.99
First Past the Post	£3.99
Football Boss	NEW £3.99
Football Director	£3.99
Footballer of the Year 2	£3.99
Frogmen Worlds	£3.99
Fun School 2 (U6 or 6-8 or 8+)	£3.99
Gauntlet 1, 2 & Deeper Dungeons	£4.99
Ghostbusters 2	£3.99
Ghosts and Ghosts	£3.99
Go for Gold	£3.99
Golden Axe	£3.99
Graham Gooch Match Cricket	£2.99
Grid and Fella	£3.99
Gunslap	£7.99

BUDGET TITLES

Hard Drivin'	£3.99
Heroes Of The Lance	£3.99
Hideous	£3.99
Impossible	£3.99
Indiana Jones Last Crusade	£3.99
International Karate+	£3.99
International Manager	£3.99
Italia 1990	£3.99
Jack The Nipper 1 or 2	£2.99
Jaws	£2.99
Jimmy's Soccer Manager	£3.99
Kenny Dalglish Soccer Manager	£2.99
Last Ninja 2	£3.99
League Football	£3.99
Lotus Esprit	£3.99
Magicaland Dizzy	£3.99
Man-Utd	£3.99
The March	£3.99
Matchday 2	£3.99
Microprose Soccer	£3.99
Midnight Resistance	£3.99
Mini Office	£2.99
Monty Python	£3.99
Moonwalker	£3.99
Multi Player Soccer Manager	£3.99
Myth	£3.99
Narco Police	£3.99
The National	£3.99
New Zealand Story	£3.99
Nigel Mansell Grand Prix	£2.99
Nightbreed (Arcade)	£3.99
On The Bench	£3.99
Operation Thunderbolt	£3.99
Operation Wolf	£3.99
Outrun	£3.99
Paperboy	£2.99
Pegasus Bridge (War Game)	£3.99
Poncy 2	£2.99
Postman Pat 1 or 2	£2.99
Postman Pat 3	NEW £3.99
Powerdrift	£3.99
Pro Tennis Tour	£3.99
Professional Footballer	£3.99
Pun Games	£2.99
Puzznic	£3.99
Quattro Adventure (Dizzy Etc.)	£3.99
Quattro Cartoon (Little Puff)	£3.99
Quattro Coin Ops (Fast Food Etc.)	£3.99
Quattro Combat	£3.99
Quattro Fantastic (Pub Trivia Etc.)	£3.99
Quattro Skills (Int. Rugby Sim Etc.)	£3.99
Quattro Sports	£3.99
Rainbow Island	£3.99
Rambo 3	£3.99
Renegade 1 or 2	£3.99
Rick Dangerous	£3.99
Robocop	£3.99

BUDGET TITLES

Ragby Coach	£3.99
Scoby Doo and Scrappy Dog	£3.99
Scottish League Football	NEW £3.99
Seymour Goes to Hollywood	£3.99
Shadow Of The Beast	£3.99
Shadow Warriors	£3.99
Silent Service	£3.99
Silkworm	£3.99
Skate Wars	NEW £3.99
Snooker Management	£3.99
Soccer Rivals	£3.99
Space Harrier 2	£3.99
Star Wars	£3.99
Steve Davis Snooker	£2.99
Strider	£3.99
Striker Manager	£3.99
Stryker in Crypt of Trogan	£3.99
Strut Runner	NEW £3.99
Stunt Car Racer	£3.99
Super Cars	£3.99
Super Off Road Racer	£3.99
Super Seymour	£3.99
Switchblade	£3.99
Sword and Sorcery	£3.99
Sword of Samurai	NEW £3.99
Target Renegade	£3.99
Testmaster Cricket	£3.99
Toyota Celica	£3.99
Treasure Island Dizzy	£3.99
Treble Champions	£3.99
Turbo Outrun	£3.99
Turrican 1 or 2	£3.99
Vendetta	£3.99
Viz	£4.99
Wonderboy	£3.99
World Class Leaderboard, Leaderboard & Tournament	£4.99
World Championship Boxing Manager	£3.99
World Cup	£3.99
Yogi's Great Escape	£2.99
Zoids	£3.99

SOFTWARE CITY SPECIALS

3-D Construction Kit	NEW £4.99
Back to the Future 2&3	NEW £3.99
Cyberworld (Caas)	£1.99
European Super League (128K)	£3.99
European Super League (Disc)	£4.99
Hero Quest	NEW £3.99
Kick Off 2	£4.99
Pitfighter	£3.99
Lords of Chaos	£4.99
Man Utd Europe/I Khan Squash	£3.99
Rodlands/Double Dragon 3	NEW £4.99
Rugby Manager	£1.99
Tetris	£2.99
World Class Rugby	NEW £4.99

COMPILATIONS

MEGA SPORTS
SUMMER GAMES 1 & 2, WINTER GAMES, GAMES
SUMMER AND WINTER EDITIONS
DISC £14.99

ADDICTED TO SPORTS
PRO TENNIS TOUR, ITALIA '90, RUN THE
GAUNTLET
CASS £9.99

4 GAMES PACK 3
LEAGUE CHALLENGE, SURVIVORS,
BATTLEFIELD & SUPERKID IN SPACE
CASS £3.99

LINEKER COLLECTION
G.I. SUPPER SKILLS, G.I. HOTSHOTS, G.I.
SUPERSTAR SOCCER & ITALY 1990
CASS £7.99 DISC £16.99

TWO HOT TWO HANDLE
GOLDEN AXE, TOTAL RECALL, SHADOW
WARRIOR & SUPER OFF ROAD RACER
CASS £10.99 DISC £13.99

4 MOST WORLD SPORTS
GRID IRON 2, BASEBALL, ICHI MATA JUDO &
BASKETBALL
CASS £3.99

MULTIMIX 5
MONTY ON THE RUN, JACK THE NIPPER 2 & AUF
WIEDERSEHEN MONTY
CASS £4.99

SOCCER 6
TREBLE CHAMPIONS, EUROPEAN CHAMPIONS,
WORLD SOCCER LEAGUE, EURO BOSS, WORLD
CHAMPIONS & TREVOR BROOKING
CASS £7.99

4 MOST BALLS, BOOTS & BRAINS
SOCCER CHALLENGE, SOCCER BOSS, RUGBY
BOSS & AUSTRALIAN RULES FOOTBALL
CASS £3.99

SOCCER STARS
KICK OFF 2, GAZZA 2, MICROPROSE SOCCER &
EMILYN HUGHES INTERNATIONAL SOCCER
CASS £8.99 DISC £12.99

NINJA COLLECTION
SHADOW WARRIOR, DOUBLE DRAGON &
DRAGON NINJA
CASS £7.99

DIZZY'S EXCELLENT ADVENTURE
DIZZY DOWN THE RAPIDS, KWIK SNAX, BUBBLE
DIZZY, DIZZY PANIC & DIZZY AND THE YOLK
FOLK
CASS £7.99

KIDS PACK
POSTMAN PAT, SOOTY AND SWEEP, POPEYE 2,
COUNT DUCKULA, THE WOMBLES & SUPERFED
CASS £8.99

MAX PACK COMPILATION
TURRICAN 2, ST DRAGON, SWIV & NIGHTSHIFT
CASS £11.99 DISC £17.50

THRILLTIME GOLD 1
PAPERBOY, GHOSTS AND GOBLINS, BOMBJACK,
BATTY & TURBO ESPRIT
CASS £5.50

AIR/SEA SUPREMACY
SILENT SERVICE, CARRIER COMMAND,
GUNSHIP, P47 THUNDERBOLT & F15 STRIKE
EAGLE
CASS £13.99 DISC £17.99

MOVIE PREMIER
TEENAGE MUTANT HERO TURTLES, GREMLINS
II, BACK TO THE FUTURE II & INDIANA JONES
CASS £10.99 DISC £13.99

CAPCOM COLLECTION
STRIDER 1 AND 2, GHOULS 'N' GHOSTS,
FORGOTTEN WORLDS, UN SQUADRON, DYNASTY
WARS, LED STORM & LAST DUEL
CASS £12.99 DISC £17.99

SUPER HEROES
LAST NINJA 2, INDIANA JONES L.C., STRIDER 2 &
SPY WHO LOVED ME
CASS £5.50

GRANDSTAND
WORLD CLASS LEADERBOARD, PRO TENNIS
FOUR, CONTINENTAL, CIRCUS & GAZZA'S SUPER
SOCCER
CASS £10.99 DISC £13.99

ADDICTED TO FUN
BUBBLE BOBBLE, RAINBOW ISLANDS & NEW
ZEALAND STORY
CASS £7.99

DIZZY COLLECTION
DIZZY, FAST FOOD, FANTASY WORLD DIZZY,
TREASURE ISLAND DIZZY & MACCLAND DIZZY
CASS £7.99

FIST OF FURY
DOUBLE DRAGON 2, SHINOBU DYNAMITE DUX
NINJA WARRIORS
CASS £10.99

HOLLYWOOD COLLECTION
ROBOCOP, INDIANA JONES LAST CRUSADE,
BATMAN THE MOVIE & GHOSTBUSTERS 2
CASS £10.99 DISC £13.99

VIRTUAL WORLDS
DRILLER, TOTAL ECLIPSE, CASTLE MASTER &
THE CRYPI
CASS ONLY £5.50

FULL PRICE

	CASS	DISC
Addams Family	£8.99	£12.99
Bonanza Bros	£8.99	£11.99
Crete 1941	£9.99	£10.99
Double Dragon 3	£8.99	£10.99
Dynablasters	£10.99	N/A
Football Director 2 (128K)	N/A	£7.99
Football Manager 3	NEW £7.99	£10.99
Fun School 3 (U5 or 5-7 or 7+)	£8.99	£11.99
Fun School 4 (U5 or 5-7 or 7+)	£8.99	£11.99
G-Loc	£8.99	£12.99
Hero Quest + Witchard Data Disc	£8.99	£12.99
Lemmings	£10.99	£13.99
Liverpool	NEW £7.99	£13.99
North and South	£8.99	£11.99
Quaran Europa	£8.99	£11.99
Shre People	£7.99	£10.99
Sm City	£8.99	£12.99
Simpsons	£7.99	£10.99
Smash T.V.	£7.99	£10.99
Space Crusade	£7.99	£10.99
Space Gun	N/A	£10.99
Terminator 2	£7.99	£10.99
Titus the Fox	N/A	£10.99
WWF Wrestlemania	£8.99	£10.99

ORDER FORM AND INFORMATION

All orders sent **FIRST CLASS**
subject to
availability. Just fill in the coupon and
send it to:
Software City, P.O. Box 888
Wolverhampton WV1 1TP

...ment with other directors as to r
...ments would be planned. The ne
...nt will signal a change at Europres
...oming out at a faster rate. Hopefully
...the CPC.

...nge of mid-performance dot matrix
...launched by Mannesmann Tally. Th
...is MT150 series, available in both 9
...and narrow carriage. The 9-pin prin
...row carriage) and MT151/9 (wide) w
...rs are the MT150/24 (narrow) and th
...ide). A printers are based around th
...eature LCD (liquid crystal display) o
...rices are, £469, £539, £599 and £68
...They are a bit pricey, but their top
...ps (200cps being the normal) and h
...load capability of 600 pages per da
...need of some heavy duty print pro
...ct Mannesmann Tally on 0734 7887

...Systems have released Page Print
...CPC's with disk drive. Aimed at
...users, it has the ability to print full
...pages, with up to a 30% reduction i
...The quality, even in DRAFT mode
...and as well as the normal Epson pr
...re are Bubble Jet, and Seikoshu prin
...In! Couple that lot with 24 pin print
...you have what could be the best prin
...d. While its printing, you are even gi
...to show how printing is progressing,
...ata throughput. The READY light th
...n my computer is receiving DATA st
...ge was printed!! It's so good, it mak
...MicroDesign JUST for the printing q
...s it that HE Haxwell, from Goldmark
...developing a MULTIFACE screen pri
...y, STARDUMP, is anything to go by,
...stinking little utility. More news wh

SOFTWARE CITY

CALL US ON:
0902 25304



SOFTWARE CITY

P.O. Box 888

Wolverhampton WV1 1TP

TEL: (0902) 25304 FAX: (0902) 712751

REGISTERED OFFICE: I.J.A. Software Ltd, 2nd Floor Offices,
Hampton Walk, Queen Square, Wolverhampton WV1 1TD

STS Software, a new software company, has released six new packages that look set to revolutionise the CPC market. STS was formed when seven computer buffs decided to turn their hobby into an occupation. Boasting among them, three machine coders and two graphic artists, STS looks to mean business. Among the programs released a

STS SOFTWARE HITS THE CPC!

Charley's Comms ROM

aud rate
ata word
ardware handshake
ineout
end break
ON control
ocal echo

has the following features:
• Data Transfer at a reliable 4800 bits/second
• YMODEM and YMODEM

CPC654 and CPC6128 compatible.
• Fully menu driven
• Scrolling communications software

PRO-EXT



£15.00 • Disk only • Expanded CPC's with disk drive
Pro-ext is a superb program, that bridges the gap between word processors and DTP packages. It enables PROTEXT users to import clip art and special fonts into their text, to create pages that give the impression that they were created on a DTP system, but without the hassle that normally accompanies DTP. Features include:

- Import Stop Press or PowerPage clip art
- Supplied with 8 fonts (more to follow!)
- Choice of printing size
- Pages can be printed in Draft or NLQ (Near Letter Quality)
- CPC 6128 or expanded CPC464-disk drive or 664 with 128k RAM
- User definable ruler lines
- Includes powerful font designer
- Supports EPSON 9 pin printer emulation
- Create Hi-Res headlines from within Protext!

XEXOR

£20.00 • Disk Only • Disk-based CPC

This HAS to be the ultimate disk utility. It's definitely the best we've seen. Reviewed just over a year ago, XEXOR was highly recommended. STS have bought the rights, and now this amazing disk utility is available in Britain for the first time. Among its

CHARLEYS C
£24.99 • ROM
Charleys C
complete Al
communica
EPROM
that

GO FAL

The All For
once again
locations f
for adults
customers

Oct 3

4

10

17

18

24

Nov 1

6

7

Dec 5

BUDGET TITLES		
1st Division Manager.....	£3.99	
2 Player Soccer Squad.....	£3.99	
3-D Pool.....	£3.99	
3-D Tennis.....	£3.99	
Ace 1 & 2.....	£2.99	
Action Fighter.....	£3.99	
Afterburner.....	£3.99	
Airbourne Rurget.....	£3.99	
Altered Beast.....	£3.99	
Arkanoid 1 or 2.....	£3.99	
Badlands.....	NEW £3.99	
Barbarian 2.....	£3.99	
Batman the Caped Crusader.....	£3.99	
Batman The Movie.....	£3.99	
Boxing Manager.....	£3.99	
Bubble Bobble.....	£3.99	
Bubble Dizzy.....	£3.99	
Bully's Sporting Darts.....	NEW £3.99	
Cabal.....	£3.99	
California Games.....	£3.99	
Castlemaster.....	£3.99	
Championship Golf.....	£3.99	
Chase H.Q.....	£3.99	
Chuckie Egg 1 or 2.....	£3.99	
Colossus Bridge.....	£3.99	
Colossus Bridge (Disc).....	£7.99	
Colossus Chess 4.....	£3.99	
Colossus Chess 4 (Disc).....	£7.99	
Commando.....	£2.99	
Continental Circus.....	£3.99	
Cricket Captain.....	£3.99	
Cup Football.....	£3.99	
Daley Thompsons Decathlon.....	£3.99	
Daley Thompsons Olympic Challenge.....	£3.99	
Daley Thompsons Olympic Challenge (Disc).....	£4.99	
Double Dragon 1 or 2.....	£3.99	
Dragon Ninja.....	£3.99	
Edd The Duck.....	£3.99	
Emlyn Hughes Int. Soccer.....	£3.99	
F-1 Tomado.....	£2.99	
F-15 Combat Pilot.....	£3.99	

and capabilities seen under

protocol detection
protocol types
ort enabling
ss the serial
write their own
ns programs,
even bulletin
systems!
T52 Terminal
Emulation
• CPC
464+disk
drive,

Centre,
District 12
Centre,
ariggs,
ersmith
ristol
acecourse
s Centre,
ycle
2
Esher,
ycle

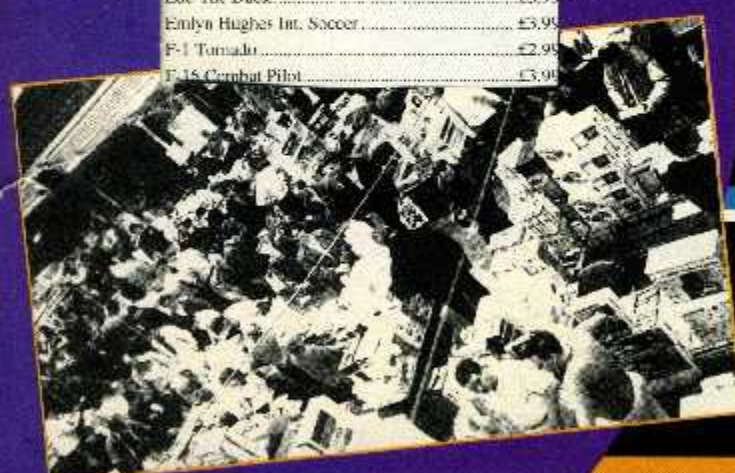
Streetfighter 2, the popular CAPCOM coin-op and SNES console game will be released for the CPC around Christmas, courtesy of US Gold.

Alternative are about to unleash a long list of CPC releases in the run-up to Christmas. Their major title will be Suburban Commando, based on the Hulk Hogan film. Also coming from them is Doctor Who. As the Doctor, with K-9 and the U.N.I.T 1

GAMES

forces, you must defeat the evil Daleks and other mutants. *Popeye 3* was to be reviewed this month, but will not be ready for another two weeks. Unlike the previous *Poyeyes*, this is based on wrestling. No doubt spurred on by the success of games such as WWF.

Codemasters' cute bouncing character, *Seymour*, is coming back in the long awaited sequel *Wild West Seymour*. Released alongside this is *Slicks* the racing game, not *Flicks* as reported in last issue. I blame BT myself.



excellent specs are:

- Command Line driven, with optional menu control
- Supports ALL the extra RAM that your CPC has on it, including DK'Troniks Silly-Disks.
- Unique "BRAIN FILE" copier, allowing even previously uncopyable disks to be backed up with ease.
- FULL Directory Editor
- Disk editor, works even on protected disks
- File Editor
- Allows areas of the disks to be written to files, and vice versa
- CUT and PASTE areas of disks
- Software side switching - examine the other side of a 3.5" disk, without even flipping the side switch on your disk drive!
- Compatible with all CPC's, including the PLUS range.

SOUNDTRAKKER

£20.00 • Disk only • Disk-based CPC

SoundTrakker is another import. Easily the best music

creation system on the CPC, it allows the simple creation of tunes, and is more flexible than either of it's two rivals.

- Features include:
- Simple menu driven operation
 - Sixteen definable instruments
 - Sixteen chord capacity
 - Hardware Envelopes for the best in sound quality
 - User friendly sequence editor
 - Real time recording option - records as you play!
 - Copy/Load/Save sequences
 - Tune compiler
 - Once completed, tunes can be compiled to anywhere in main RAM
 - Tunes can be interrupts driven, or called every frame flyback
 - User friendly help screens

Look for full reviews on the **WHOLE STS** range very soon and remember, you read it in **CPC Attack** first!!!



Popeye 3 in the intergalactic wrestling contest. As Earth's sole representative, he'll have to win matches to prove to aliens that Earth people aren't easy. Otherwise, the planet will be invaded.



Titus are launching a new budget label. Called **Fox Hits**, its first releases include **Crazy Cars 2**, **Fire & Forget 1 and 2**, **Wild Streets** and finally **Offshore Warrior**. All-in-all a good set of games by the sound of it.

Titus are to release **Crazy Cars 3** at full-price in September. The game is 'looking fantastic' according to Titus. Another game is also due before Christmas. It will be a platform game, featuring the usual high graphical standard we've come to expect from the Frenchies.

SNIPPETS

- News reached us that the AOK fanzine is officially closed. Please don't send any more mail to the fanzine as it is costly to return. Subsequently, proBASE from AOKsoft will no longer be available.
- Robert Masson from Nottingham is hoping to release a new fanzine very shortly. Robert is naming his fanzine **Extreme** and promises us a copy for review as soon as it is finished.
- Europress Software, publishers of **Fun School** and **Mini Office 2**, have a new MD. The previous MD left after a disagreement with other directors as to how future developments would be planned. The new announcement will signal a change at Europress, with more titles coming out at a faster rate. Hopefully they won't forget the CPC.
- A new range of mid-performance dot matrix printers has been launched by Mannesmann Tally. There are 4 printers in this MT150 series, available in both 9 and 24-pin and wide and narrow carriage. The 9-pin printers are MT150/9 (narrow carriage) and MT151/9 (wide) while the 24-pin printers are the MT150/24 (narrow) and the MT151/25 (wide). All printers are based around the same design and feature LCD (liquid crystal display) control panels. The prices are, £469, £539, £599 and £689 respectively. They are a bit pricey, but their top speed is rated at 450cps (200cps being the normal) and have an average workload capability of 600 pages per day. If you are in need of some heavy duty print processing power, contact Mannesmann Tally on 0734 788711.
- Goldmark Systems have released **Page Printer** for Expanded CPC's with disk drive. Aimed at Microdesign users, it has the ability to print full Microdesign pages, with up to a 30% reduction in printing time. The quality, even in DRAFT mode is outstanding, and as well as the normal Epson printer support, there are Bubble Jet, and Seikosha printer drivers built in! Couple that lot with 24 pin printing ability, and you have what could be the best printer utility around. While its printing, you are even given a status bar, to show how printing is progressing, and has quite a data throughput. The READY light that flickers when my computer is receiving DATA stayed off while the page was printed!! It's so good, it makes you want to buy MicroDesign JUST for the printing quality! - Rumour has it that HE Haxwell, from Goldmark Systems, is developing a MULTIFACE screen printer. If his last utility, STARDUMP, is anything to go by, this should be a stonking little utility. More news when we have it!

NEWS

AVATAR exclusive - MS800 on ROM

ROM PRODUCTS and SERVICES

NEW ROMON/OFF SWITCH £7.95

Connects to the CPC's expansion port. Switches all external roms On or Off. 464 owners; unfortunately it also turns your disc drive rom off so your drive won't work when the switch is in the OFF position.

EPROM PROGRAMMER £30

This is the Holy Grail of CPC eprom programmers. It can program 9k, 16k and 32k eproms of 12.5 and 21 volt voltages. It is supplied with software on both rom and disc together with full details on how to use 2 rom programs in one 32k eprom on the CPC - effectively doubling the CPC's rom capacity.

Also included are a ready to blow PD games rom file, utilities to turn your basic and machine code programs into suitable rom files and full instructions on how to lay out a program for blowing into an eprom.

Other features are: - program all or any part of an eprom; blank test; rom to rom copy; verify rom; fully menu driven. Programs a very wide range of eproms including CMOS types and does most in 105 seconds.

BLANK EPROMS

16k and 32k new 3.50 each or 5 for 15.00
32k used and erased 1.00 each

ROM SOFTWARE

PROTECT	30.00	MAXAM	30.00
PROPELL	25.00	MAXAM 1.5	25.00
PROMERGE	25.00	BCPL	20.00
UTDFA	25.00	MS800	9.95

32k RAMROM £13.95

32k of RAM that thinks it's TWO 16k ROMs. Each 16k can be loaded with, and behave like a rom program as long as the computer is on. Ideal for writing, editing and testing rom programs without the need to blow eproms. To avoid rom crashes, onboard links set each 16k block to your choice of rom Slot. These switches control the loading, serial parallel rom slots and give you rom when in parallel mode.

Alternative use can be made on the 32k of ram but it will NOT operate as a Dktronics ram pack.

*There's a pricier eyed yellow ramrom to the rom...Oll!

6128 UPGRADE ROM £24.95

If you own a 464, have a disc drive and 64k ram bank, then all you need is this rom chip to convert your machine to a 6128. Supplied with full fitting instructions of several different fitting methods.

DISC DRIVE PRODUCTS

ABBA SWITCH £12.95

Swaps the internal A and the external B drives around so that the A becomes the B and vice versa. Easily fitted to the 664 or 6128 (not Plus). Works with any external drive. NOTE MS800 is the only high capacity system that recognises and uses its discs in drive A.

3rd DRIVE SWITCH £12.95

Allows 2 B drives to connect to the 664 or 6128. The switch selects which one will be active. As switching a DK with the computer turned on, the switch allows B to B copying. Suitable for any sizes of B drive.

In the Spotlight

WE NOW SUPPLY A CABLE TO CONNECT 2 DRIVES TO SIREN'S DISC INTERFACE.

CABLE ONLY £9.95

or FREE IF ORDERED WITH 3 1/2" DISC DRIVE

DUAL CHANNEL RS232

The HS-S1 dual channel RS232 is virtually the same circuit as the now extinct Pace RS232 since they were designed by the same person. The two main differences between them are that the HS-S1 doesn't have a rom slot on board so rom software must be fitted to a separate romboard and that the HS-S1 has TWO serial ports where the Pace version has one.

We supply the HS-S1 with all the comms software you'll need on disc.

RS-S1 RS232 £39.95

MS800 owners can have the rom version for £5.50. Proof of ownership is needed.

3 1/2" DUAL-MODE DRIVE

NOW ONLY £79.95 inc. p&p

Includes MS800 disc & rom FREE! and 10 discs - FREE!

MODE 1 - operates as a standard B drive storing 180k on each side of the disc

MODE 2 - stores up to 800k per disc when used with MS800 Ramdos, Romdos or Todus.

Our ultra quiet, super small (only 1" high plus its little rubber feet) drive can store up to 600k per disc without the need to use its side switch when used with Ramdos, Romdos or Todus. To allow the extra Dual mode feature and to use the best high capacity formatter available, we fit the side switch as standard. The drive is supplied with everything you need to use it on your CPC. You need buy nothing else.

Suitable for 464, 664, 6128 and Plus machines. Please state your computer model when ordering. The drive is NOT suitable as a 1st drive on a 464. This drive must never be given water to drink after midnight - no matter how hardell are its pleadings.

ROMDOS (rom only) £9.95

NEW DRIVE ADAPTERS NEW

These adapters allow your CPC's external drives to work on other computers. They just plug into your drive's cable - no modifications are needed. They can be left connected to the other computer and the drive moved at will.

CPC - PCW	£11.95
CPC - PC (1519/1640)	£12.95
CPC - ATARI ST	£10.95
CPC - AMIGA	TEA
CPC - other PCs	Please enquire

MISCELLANEOUS

PLUS TO EDGE WIDGET - £8.50

50 way adapter that allows the older CPC peripherals to connect to the newer PLUS machines. Only one adapter is needed - not one for each peripheral. An adapter isn't needed for 8" disc drives.

*Where there's a will there's a way!

Hardware and Software too *Wow!*

The BONZO COLLECTION

BONZO SUPER MEDDLER £13.75

Transfers a very large percentage of games from tape to disc. Includes many varieties of Speedlocks. Produces stand-alone transfers. Includes a large database of verified transfers (getting larger all the time).

BONZO BLITZ £13.75

Transfers all known varieties of SPEEDLOCK tapes onto disc, producing stand-alone copies. Very large database of verified transfers.

Includes BONZO'S DOODAH - 4 adventure games.

BONZO'S FLASH PACK £9.75

Well over 60 FSX additions to Basic that can be used in your own programs are stand-alone, i.e. Flash Pack does not need to be present to run the programs containing Flash commands!

BONZO'S BIG BATCH £9.95

Fast, flexible DATABASE, superb FOOTBALL, POOLS, PREDICTOR and SCREEN & SPRITE DESIGNER all rolled into one low cost package.

MAXIDOS £13.75

THE MOST COMPREHENSIVE and EFFECTIVE DISC UTILITY AVAILABLE FOR THE CPC

Fully compatible with Ramdos, Romdos, CPM and Amadoc. COPY files/dirs; RESURRECT erased files; VERIFY discs; FAST FORMAT in Amadoc/Ramos/Romdos; CAT includes erased files and can include alias length, etc; IDENTIFY format; change USER AREAS; system; read only files, etc etc etc. OPTIMISER speeds up your disc accesses by up to 50%; FILE MAPPING; SECTOR EDITOR; outputs to the printer; ... too much!

SPECIAL OFFER

10% DISCOUNT ON ALL SOFTWARE when buying 2 or more items
The items need not all be software

BONZO NEWSLETTER

S.a.o. to Martin Cassins, 100 Cottingley Approach, Cottingley, Leeds LS11 0HH, for full details.

MS800 disc or rom 9.95 - both 14.95

MS800 is the ONLY high capacity disc system that produces stand-alone discs; that is compatible with ALL software; that recognises and uses its high capacity discs in drive A (ABBA switch users, please note); that works on ALL CPCs - including the Plus machines; that doesn't occupy a single byte of computer memory. The single byte that it doesn't occupy is located at... sorry - just joking, but it's true. It doesn't use any memory at all!

Once formatted an MS800 disc carries the information needed to change the CPC to its own format and it does it without using any of its storage capacity. You can even send 800k discs full of programs to your friends and they can use them! The MS800 program is used only for formatting and for copying to/from MS800 discs. Permission is also given to include MS800's COPY utility with MS800 discs when discs are passed to friends.

Since MS800 doesn't use any memory, it is compatible with all software and it is the ONLY one that is. Even awkward programs like Stop Press and Multifuse II are catered for by MS800's unique 4 sided disc collar.

Choice of formats including CPM 64 or 128 directory entries; COPY utility (Ramos/Romdos don't have one) and a BONZO utility to help many transferred games to run from the B drive.

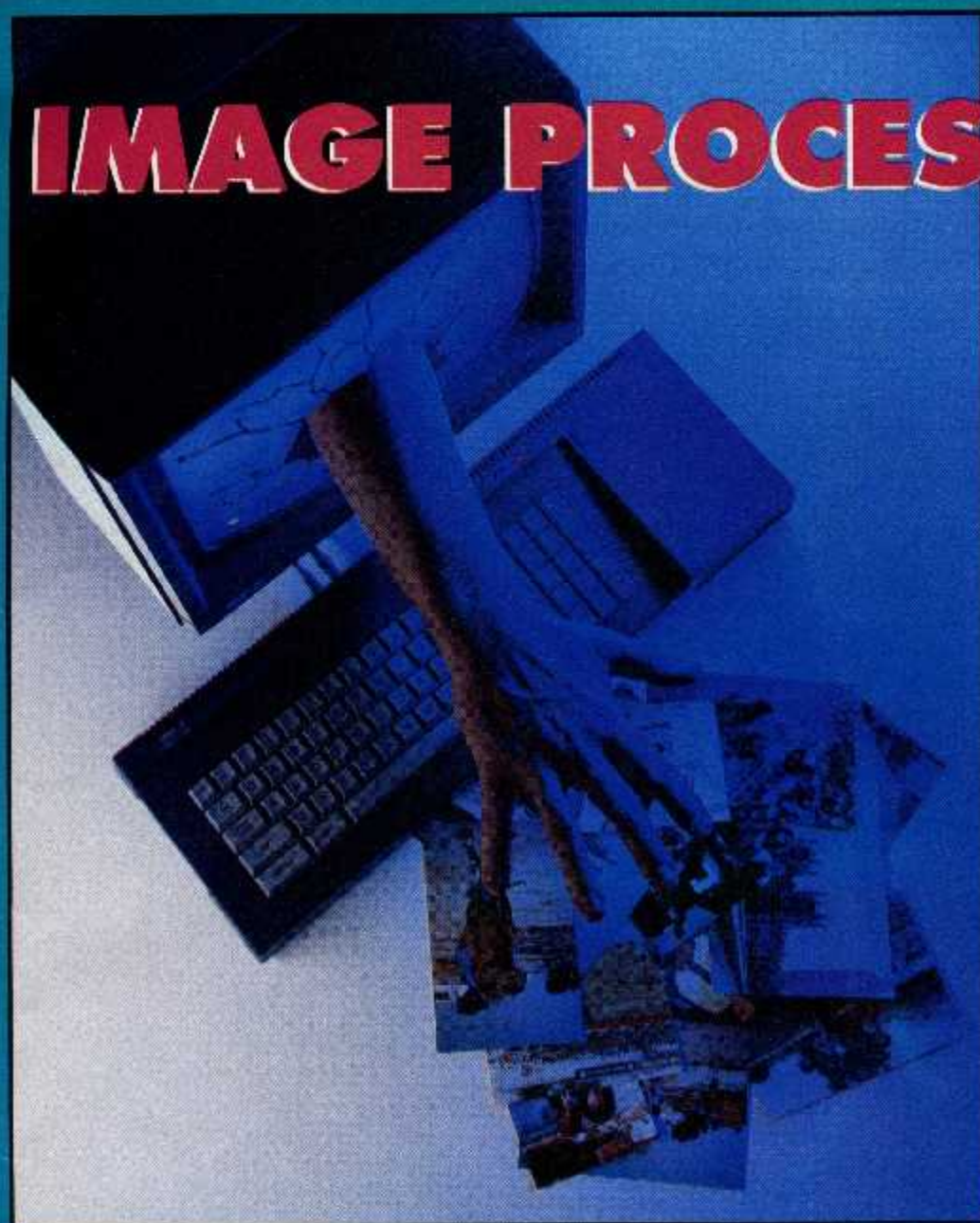
In other words... it's bit* by brilliant! So there!

AVATAR

39 CROSSFELL ROAD, LEVERSTOCK GREEN,
HEMEL HEMPSTEAD, HERTS, HP3 8RG
Telephone: 0442 251705

**MOST MAJOR
CREDIT CARDS
ACCEPTED**

IMAGE PROCESSING



Veni venci Vidi
- we came, we saw and we digitised a few pictures.
Richard Wildey presents the definitive guide to **Image Processing** through three stages; **Input:** how to get the images into your CPC. **Processing:** What to do with them once they're there and **Output:** how to get the images back onto paper or video.

INPUT

There are two ways to get images from the outside world into your monitor and neither of them involve opening it. These are scanning and digitising.

SCANNERS

Scanning and scanners work on the principle that when a beam of light is shone onto an object, a piece of paper in this case, the darker parts will reflect back less light than the lighter parts such as a white background. This information is sent back to the computer and transferred into pixels

which are then plotted on your monitor.

Scanners usually come in two forms; hand held, which is dragged across the page you wish to scan, and larger flat-bed scanners. These flat-bed scanners give much better results, but are vastly more expensive. The only commercially available scanner for the CPC, made by Dart Electronics, comes under none of these descriptions. It cleverly clips onto the printer head of a DMP printer and scans an inserted sheet by feeding the paper while moving the head from left to right at a constant speed, thus, giving the CPC information on the colour of the pixel (black or white) and

where it should be plotted on the screen.

Another scanner was invented for the CPC, the circuit diagram and information to build this scanner was printed in a book called "Easy Add-on Projects for the Amstrad CPC 464, 664, 6128 and MSX computers. (BP171)". Published by

Bernard Babani costing £2.95. This scanner was a cheap alternative and could be constructed by amateur electronic fiends. It, like all projects in the book, worked through

the printer port. It did work, but turned out to be rather impractical for scanning a picture of any quality. Built in a paper cup the scanner had to be dragged, by hand, along a straight line at a constant speed, then, after each line had been scanned, the cup had to be moved down the picture an exact amount and

SCAN PRINT COPY AREA COPY / BLANK 1/2- STOP SCREEN 1 2
LAND/DATE - SCROLL AREA - CLEAR AREA 8 - FEED SPEEDS
BOOK/PT/11 - NO TEXT 8 - MERGE 1 & 2



Here's one I did earlier! The Dart Scanner options menu allows extra, but simple, functions such as basic cutting, pasting and adding text.

another line scanned. A time consuming process with none-too-spectacular results.

The Dart Scanner is a much more professional affair. Sold at the high price of £69.95, it

certainly should be. So, what do you get for your money? As well as a thin, photocopied manual, the scanner comes with its own software which is, in principle, a very basic

art package that has the facility to scan. Images can be scanned at a magnification of 1 (life size), 2 (double size), 3, and 6. An A4 page is scanned in two halves, but the software allows for this. It is possible to have two screens in memory at once, one at &4000 and

The slow, but well presented, zoom mode. The section magnified is shown in the left-hand corner while the magnified version is in the centre.



Richard Wildey's Top Ten Scanning Tips

- 1 Never use original artwork, always photocopy first. This not only protects any images you may not want ink on, but turns greyscale into black and white.
- 2 Remove the printer ribbon as ink tends to get on the paper.
- 3 Tape or glue the paper down on cardboard to stop it rippling with the movement of the printer head.
- 4 Make sure the printer head is as close to the paper as possible by using the switch on the far left of the printer.
- 5 Go over faint drawings in a black felt-tip or marker
- 6 Scan pictures twice, storing one each in the space for pictures 1 & 2 then use the merge function.
- 7 Slightly better results are possible when images are scanned in a dark room.
- 8 People who don't have a DMP printer can use the Dart Scanner with a large lump of blue-tack.
- 9 If you're not using a DMP, you may need to stick your paper on to tractor feed printer paper.
- 10 If you want to make the Dart Scanner fully Art Studio compatible type the following:

LOAD "DARTSCAN"

```
710 SAVE "I"+IIS+".scr",b,&4000,&4000
711 ' Art studio PALette saver by R.Wildey
712 POKE &8809,2:POKE &860A,&FF:POKE &880B,&19
713 FOR p=&880C TO &8817:POKE p,&4B:NEXT
714 FOR p=&8818 TO &88D8:POKE p,&54:NEXT
715 SAVE IIS+".pal",b,&8809,&EF,&8809
```

SAVE "DARTSCAN.BAS"

The program will now save screen files out with the extension .SCR and also an Art Studio PAL file.



Setting up the variables for the Dart scanner just before scanning a page.

the other at &c000. These can be flicked between, or merged, at any time, though zoom mode will delete one of the screens.

The software has been written for the DMP 2000 printer, but with slight alterations to the BASIC program, documented in the manual, other DMP models are supported. These are the 2160, 3000 and the 3160.

The hardware is housed in a white box the size of a

take into account different colours; only black and white is supported. The brightness will need to be altered differently for colour images or the scanned image will be too faint.

DIGITISING

The other form of image that may be transferred to your CPC is a digitised picture from a television, video or

Vidi's main menu. The main screen updates the images at 6 frames per second, while below the contrast and brightness, as well as the vertical and horizontal position of the picture, can be controlled



household matchbox. This plugs into the expansion port and has a wire leading to the scanner, which has its own light source powered by the 5 volts from the expansion port. The interface has a dial which controls the brightness of the scan. This is changed according to the colour of the original image. The scanner works in mode 2 and does not

camcorder. The only available piece of hardware that allows you to do this is Rombo's Vidi Digitiser. This has been around since 1986 and, like the scanner, costs £69.95.

Vidi decodes the signal from any composite video output, stores it into its internal 16k RAM then dumps it into your humble CPC, where it is then displayed on the screen. It

can digitise anything that outputs composite video and not only videos can be digitised. For example, digitising Amiga screens, as in David Carter's PD slide shows, can be achieved via a video. Though for a better picture without the interference, owners of an Amiga Genlock can have 1st generation



Upon loading, Vidi gives you the choice of running its own software or a series of RSKs.

Richard Wildey's Top Ten Digitising Tips

- 1 Tune in your television as best you can
- 2 To digitise in MODE 0, a still picture is needed. Either grab the test card or put your camcorder somewhere stable.
- 3 Don't use Vidi with Disc Demon (on ROM) as it crashes when trying to save!
- 4 The set inks are best, but if you want to define your own, INK 0 should be the darkest, INK 2 the brightest and INKs 1 and 3 in between with 3 being the lighter of the two.
- 5 When digitising from television, try to video it first and advance frame by frame to get the best picture. This also means you can experiment with contrast and brightness
- 6 Try digitising cartoons, they come out really well.
- 7 If you have an old version of the Vidi disk, change the program as below, enabling it to work on Stop Press:


```
195 a$a="OVERLAYS.OVT"
200 IERA,@a$:SAVE a$b,&2600,&780
```
- 8 If the picture you receive on the monitor is divided with jagged lines or broken in half, then it's probably the connections to your CPC. Try cleaning the edge connectors with an ink rubber.
- 9 Users of Romdos can use the program below to make the Vidi Software compatible.


```
10 'Vidi LOADER FOR RAMDOS/DRIVE B
20 'Initialises ALL ROMs plugged in
30 ' (c) 1991 Rob Scott
40 '
50 MODE 1:MEMORY &7FFF:LOAD"Vidi.BIN"
60 POKE &8008,0:POKE &8009,0
70 POKE &800A,0
80 CALL &8000

SAVE "Vidi.BAS"
```
- 10 If you get no image but a pale blue screen you've forgotten to plug the Vidi in!

composite video output, giving a purer Amiga image on the CPC, but obviously in

Amstrad resolution and colours. Should you want pictures of



Once a screen has been grabbed you can enter sub menus, this is the filing menu.

your own face, either sign a contract with the BBC (perhaps you'll have more luck with B Sky B!) or else, it is possible to link up the Vidi to a camcorder's composite output. There's the basis for a whole new television series, "You've Been Digitised", well maybe not.

Vidi's software, available on disk, comprises two programs. The first is a menu-driven system which allows you to grab full screen images. The second is a series of RSX commands which can be used from BASIC in conjunction with your own programs.

The hardware is neatly packed inside a black box. Upon opening (not that I would do anything like that of course as it invalidates the guarantee) a whole bank of chips is found. These include a 6845 CRTC which is also found in the CPC, as it controls the screen - check out the Demo column if you don't know what it is.

The Vidi plugs into the expansion port and then into

The following RSXs are now available:

VRANK	VRONBER	VRERT	VRLEEM
VRON	VRORV	VRORV	VRORV
VRCEJ	VRORR	VRTEM	VRINK
VRMODE	VRORL	VRORR	VRORR
VRSET	VRORR	VRORR	VRORR
VRORR	VRORR	VRORR	VRORR
VRORR	VRORR	VRORR	VRORR
VRORR	VRORR	VRORR	VRORR

ready

Vidi's RSXs allow you to create your own package as well as other effects - several demo programs are supplied.

the "Video out" socket on a video with a phono lead or a Euroconnector lead (available from Rombo). Once wired up and the software booted, images instantly appear on the CPC screen at six frames per second. The software is very flexible and will allow the contrast and brightness to be modified, though both these can also be altered with the hardware as well as the screen MODE. Best results are obtained in MODE 1 & 2, as MODE 0 requires a still image. Colours are not displayed on screen until an image is grabbed, but a grey scale display will suffice. There are enough RSXs given to write customised Vidi programs, if the standard grabbing program is not suitable.



The picture after it's been digitised in MODE 0 with Vidi. The camera had to be kept still, as did the original artwork.



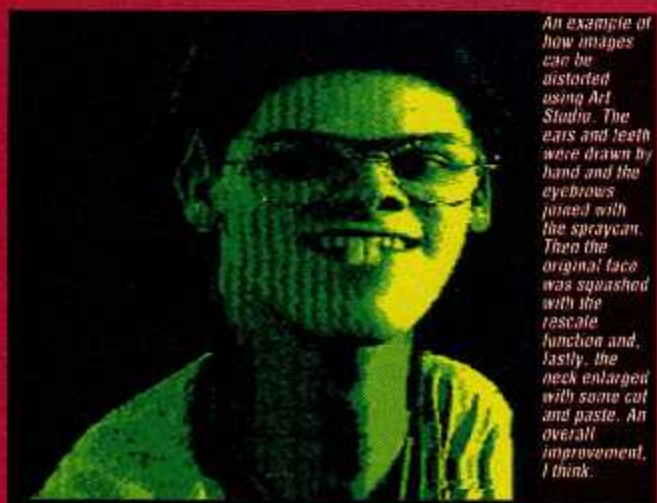
A few hours later with the help of OCP Advanced Art Studio, Pens, in conjunction with the "Protect inks" function, were used to remove some of the unwanted colours and details. Once all the basic colours were changed to the correct inks, shading and details, all drawn in "Magnify" 4, were added.



The image is printed out, but could have easily been output into a DTP layout for use in a newsletter or Amzine!



"Smile Please" This image was digitised in Mode 1, with the default Vidi colours - probably the best combination.



An example of how images can be distorted using Art Studio. The ears and teeth were drawn by hand and the eyebrows joined with the sprycan. Then the original face was squashed with the rescale function and, lastly, the neck enlarged with some cut and paste. An overall improvement, I think.

PROCESSING

Scanned or digitised images are usually not of a particularly high quality and will need tidying up. Luckily, the software for the Dart Scanner and the Rombo Vidi both save images as standard 17K screen files, which can be displayed using the following short program:

```
10 REM Set up Mode 0,1 or 2
20 MODE 1
30 REM Load the file
"SCREEN.BIN" in at &c000,
the start of screen memory
40 LOAD
"SCREEN.BIN",&C000
50 REM Wait for a key
60 CALL &BB18
```

These files are compatible with most, if not all, CPC art packages including OCP Art Studio. Vidi also has the choice of saving chosen inks with an Art Studio ".PAL" file.

The scanner does not need this as it uses MODE 2 and the pens chosen will most probably be: 26 (bright white) for the background ink 0 and pen 0 (Black) for the image in ink 1. I have included an amendment to the BASIC Dart Scanner software (see Top 10 scanning tips) to save ".PAL" files. This, obviously, can be improved with a yes/no option etc., but the main part of the program is there.

Load the image into an art package and trim round its edges, removing any unwanted areas. This could be done from the scanner software, but it is much quicker and easier to use a proper art package. Advanced Art Studio or, if you're on a low budget, the German PD program G-Paint, is the best choice. A round up of all currently available art packages was published in

issue 2 if you want further help on which to choose.

Once the image is on screen why stop at tidying the picture up, why not give a victim (sorry - model) fangs or else, for example, you could digitise characters, removing parts of their anatomy and paste them onto someone else.

Obviously, the CPC doesn't support sophisticated stretch features (as seen with Rob's photo in Issue 4), but with some cunning use of the cut, paste and re-scale functions some good effects can be obtained. CRL's Image System has distort features which have the ability to elongate and fold corners of a chosen rectangle in four different directions. The Image system, though, does have the disadvantage of only working in MODE 0. Screens can also be distorted using the PD programs

Spherescreen and Wavyscreen, both of which give the effect of rippling the screen or wrapping it around an invisible ball.

The main use of image processing is, probably, for use in desk top publishing. Included with Vidi is a file which can be used to customise Stop Press.

Once initialised, the scanner option in Stop Press displays the current input image, but, unfortunately, the update is slower than when using the full Vidi package. Otherwise, scanned images must be loaded into DTP packages as screen files, but can then be saved as clipart and is ready to be used in fanzines or leaflets.

Simple animations can be created from video using a screen swap, either from your own program or from the Vidi RSX. As screens are 17k, only short animations are readily available unless compressed screens are used. The Vidi software can support reduced screens, allowing longer animations to be created. Several sample programs are given to help create these effects.

OUTPUT

You'll probably want to show off your creation after it has been input and processed. As mentioned above, both the Dart and Vidi save out standard screen files, which can be compressed using a Public Domain compressor, such as the famous SQ23, and put into a slide show.



This image was digitised from the Amiga using a Genlock. This has not been touched up in any way, yet the background remains perfectly white.

If the image is in MODE 2 format, sections of the screen can be saved as cutout files for use in DTP. Both Vidi and the Dart Scanner come with built in screen dump routines if hard copy is required. The screen dump supplied with the Vidi is widely regarded as the best screen dump routine around. There are others in the public domain such as Poster Print, which prints screens over a large number of sheets of paper, but it uses a lot of printer ink. For those looking for the more professional effect, the Glaswegian company Subtle Changes print Micro Design pages on laser printers for a fee of £1 per page. They only output MicroDesign pages, so clipart and screens will need to be converted to ".DR" files.

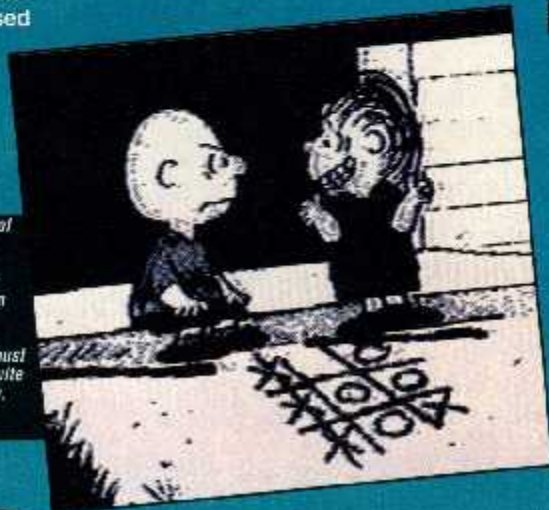
Images can be saved onto video and personalised videos can be made (useful if

you can't think what to get granny for Christmas.) CampurSoft's new Videomaster, which is reviewed in this Issue (see Q&A), will soon be sold with its own video titling system. This includes various display routines and the facility to have scrolling messages.

There are lots of useful applications for using images. For instance, signatures could be scanned and placed on letters (ain't that forging - Ed.). If you are a programmer, you could write a database featuring digitised pictures.



D'management grabbed straight from television with Vidi.



An example of a screen digitised in Mode 2 from the TV. When using this mode, the brightness must be altered quite considerably.

CONTACTS

Vidi DIGITISER
£69.99
ROMBO Productions
6 Fairbairn Road,
Kirkton North,
Livingston EH54 6TS
Tel: 0506 414631

DART SCANNER
£69.99
Dart Electronics
Unit B5,
Culton Works,
School Road,
LOWESTOFT,
Suffolk NR33 9NA
Tel: 0502 513707

VIDEOMASTER,
CampurSoft,
16 Slatefield Street,
Gallowgate,
Glasgow G31 1UA
Tel: 041-554 4735

Subtle Changes,
041 422 1601

Easy Add-on Projects for
the CPC and MSX
computers (BP171),
Bernard Babani LTD,
The Grampians,
Shepherds Bush Road,
LONDON W6 7NF



Amy scanned with the Dart scanner, the original was photocopied, from the magazine, to derive a grey scale image.

A rough, but recognisable, image scanned in magnification x6.



The Blues Brothers. This album sleeve wasn't photocopied and I paid in image quality for not doing so. As the writing was yellow, a dark contrast was needed, but to pick up the faces, a lighter contrast was required - this scan is a compromise.



SIREN SOFTWARE



HOW TO ORDER:- Credit card orders, please telephone 061 724 7572 with your credit card details or fax them to us on 061 724 4893. Cheques/Postal orders should be sent to Siren Software, Wilton House, Bury Rd, Radcliffe, Manchester, M26 9UR. England. All credit card orders are despatched same day.

ROMDOS



ROMDOS *XL* is the ultimate in disc operating systems for the Amstrad CPC computer. Not only does this incredible system offer 800K of disc storage on a 3.5" disc drive WITHOUT the need for any manual side select switches, but it now offers the following features which are all available with a single command!

- YOU DO NOT HAVE TO LOAD ANYTHING FROM DISC FIRST, EVEN FOR FORMATTING OR FILE COPYING.
- Disc formatting options allowing 800K disc space with 128 or 256 directory entries
- File copying from A to B, B to A, A to A or B to B. Single files, all the files on the disc or selected files can be copied simply and easily!
- Single, multiple or batch file Erasing.
- Directory Editor allowing files to be Unerased, Renamed, Erased, Change User Area, Set to Sys, Dir, R/O & R/W.
- Romdos *XL* can be turned off by using the command 'IDosoff' without resetting the computer.
- Filecopying will support all disc formats.
- The only disc operating system to provide full 800K per disc on line under Amscos & CPM!

Available now with full easy to follow instructions:-

ROMDOS *XL* (must be plugged into a rombox) £29.99

ROMDOS *XL* CARTRIDGE (plugs onto back of computer) £44.99

ROMDOS *XL* & SIX SOCKET ROMBOX (save £5.00) £49.99

Update your existing ROMDOS, RAMDOS or MS800 to ROMDOS *XL*. Please phone!

6128+ owners. The cartridge version is for 464/6128 only.

3.5" DISC DRIVE

Our stylish 3.5" disc drives are the only ones available that will enable you to use 800K per disc without the need to change any manual side select switch.

Other drives on the market will only allow you to access 400K at a time, whereas our superior disc drives come complete with either RAMDOS or the new ROMDOS *XL* that allows a full 800K to be accessed even under CPM!

Our disc drives come complete with an external power supply and can easily be connected to another computer by simply changing the connecting lead.

Our disc drives use a top quality SONY mechanism that is world renowned for reliability and performance.

Included with the disc drive is the power supply cable to connect it to the computer, a full 15 page user manual and a disc of software that includes RAMDOS, a RAMDISC drive program, SECTOR EDITOR, DIRECTORY EDITOR, FAST FORMATTER etc.

The drives are also available with ROMDOS *XL*.

PRICES....

Disc Drive with RAMDOS£74.99

Disc Drive with ROMDOS *XL* cartridge£99.99

Disc Drive with ROMDOS *XL* & Rombox.....£109.99

Please specify which computer you own when ordering.

PLEASE ADD £5.00 POSTAGE AND PACKING

3" Blank Disc (packet of 10) £17.50

3.5" Blank Discs (packet of 10) £10.00

★ RS232 INTERFACE ★

NEW RS232 Serial Interface will allow you to connect your CPC to a serial printer, Modem or another computer for transferring data. Built in ROM Software features Terminal & Prestel Emulation and UP/DOWNLOAD etc. Please telephone for further details.

AVAILABLE NOW PRICED £59.99 (plus £2.00 P+P)

464/464+ DISC DRIVES

We are now selling the 3.5" disc drive with our own DDI-1 interface. The package includes, 3.5" disc drive, DDI-1 interface, power supply, cable and software.

★ **FREE MULTIFACE II** for transferring all your cassette software onto disc. This is the only disc drive that is currently being produced for the 464. Available now priced £159.99 (Plus £5.00 Postage and Packing)

FREE! FROM SILICA

NEW!

ATARI ST



When you buy your new Atari 520, 1040 or Mega ST-E computer from Silica Systems, we will give you an additional £324.75 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of ST computing and help you to get off to a flying start with your new ST. Plus, with every ST and TT, we will give you 15 nights holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

TENSTAR PACK:

ASTERIX	£24.99
GUESS PLAYER 2100	£24.99
DAVYD FORCE	£19.99
LIVE AND LET DIE	£24.99
DASLAUGHT	£19.99
PIPE MAMA	£19.99
RICK DANGEROUS	£24.99
ROCK 'N' ROLL	£19.99
SKWEEK	£19.99
TRIVIAL PURSUIT	£19.99

16 NIGHTS HOLIDAY HOTEL ACCOMMODATION
Every Atari ST from Silica comes supplied with a free 77 page colour brochure with accommodation vouchers. These will let 2 people to stay up to a total of 16 nights in any of 250 hotels with accommodation FREE. All you have to pay for will be your meals (prices are listed in the brochure).

PRODUCTIVITY PACK:

1st WORD	£59.99
Word processing package from 200	
SPELL IT	£19.99
Spell checker for word processing	
ST BASIC	£24.99
Basic programming language with tutorial	
TOTAL VALUE:	£324.75

WORTH NEARLY £360!



520ST-E START PACK

The perfect introduction to home computing

PLUS! FREE GIFTS FROM SILICA
(SEE PANEL ON LEFT)

HARDWARE:

520ST-E Computer	£299.99
10" Monitor, Internal PSU, 1MB floppy Disk Drive	
SOFTWARE - ARCADE CLASSICS:	
Missile Command - Shoot 'Em Up	£9.99
Crystal Castles - Platform Capers	£9.99
Super Break Out - Wall Demolition	£9.99
Battle Zone - 3D Tank Battle	£9.99
SOFTWARE - PRODUCTIVITY:	
First Word - Word Processor	£59.99
Neochrome - Art Package	£29.99
ANI ST - Animation Package	£29.95
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£784.63
Less Pack Saving:	£525.63
SILICA PRICE:	£259.00

FREE BROCHURE! RETURN THE COUPON FOR A FREE COLOUR ST BROCHURE

520ST-E DISCOVERY XTRA



HARDWARE:

520ST-E COMPUTER	£299.99
10" Monitor, Internal PSU, 1MB floppy Disk Drive	
SOFTWARE - ENTERTAINMENT:	
ESCAPE FROM ROBERT MONTEITH	£18.99
Final Flight	£19.99
NINE LIVES	£24.99
SIM CITY	£29.95
SOFTWARE - PRODUCTIVITY:	
CONTROL ACCESSORIES	FREE
EMULATOR-PROCESSOR	£12.99
ST TOUR (available for the ST)	74.00
FIRST BASIC (basic programming language)	£49.99
NEOCHROME (word processing package)	£49.99
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£830.63
Less Pack Saving:	£561.63
SILICA PRICE:	£279.00

1040ST-E FAMILY CURRICULUM



HARDWARE:

1040ST-E COMPUTER	£349.99
960 to 10.5" 68000 CPU, 1MB RAM, Mouse, TV Monitor, Internal PSU, 10MB Disk Drive	
SOFTWARE MODULES:	
PLAY AND LEARN	£75.58
Junior School Leaver	£58.54
OCSE	£50.64
BUSINESS	£159.85
CREATIVE	£134.97
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£1210.23
Less Pack Saving:	£861.23
SILICA PRICE:	£349.00

1040ST-E MUSIC MASTER



HARDWARE:

1040ST-E COMPUTER	£349.99
960 to 10.5" 68000 CPU, 1MB RAM, Mouse, TV Monitor, Internal PSU, 10MB Disk Drive	
SOFTWARE:	
MUSIC MASTER	£136.20
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£824.74
Less Pack Saving:	£525.74
SILICA PRICE:	£349.00

£259

MEGA ST



- 16MHz 16-Bit 68000 Processor
- 2 1/4" 1.44Mb Double Sided Disk Drive
- 12MB RAM Versions
- 47Mb Hard Drive Versions Available
- 4096 Colour Palette
- Stereo 8-Bit PCM Sound Output
- FREE Silica Productivity Pack
- FREE TenStar Games Pack
- FREE 16 Nights Holiday Accom.

ATARI TT



- 60MHz 32-Bit 68030 Processor
- 3 1/4" 1.44Mb Double Sided Disk Drive
- 24-96Mb RAM Versions
- Stereo 8-Bit PCM Sound Output
- 4096 Colour Palette
- Built-in 68882 Maths Co-Processor
- Up to 1280 x 960 Resolution
- VME - SCSI Expansion Ports
- Expandable to 512Mb RAM
- Hard Drive Expansion Options
- FREE 16 Nights Holiday Accom.

RAM	DISK DRIVE	PRICE
0	2 1/4"	£588
47	2 1/4"	£985
	Hard Drive	£1097

RAM	DISK DRIVE	PRICE
24	3 1/4"	£1169
48	3 1/4"	£1462
96	3 1/4"	£1874

ALL PRICES INCLUDE VAT - FREE OVERNIGHT COURIER DELIVERY IN THE UK MAINLAND

SILICA SYSTEMS OFFER YOU

- FREE OVERNIGHT DELIVERY: On all hardware orders shipped in the UK mainland.
 - 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 081-309 1111.
 - SHOWROOMS: Demonstration and training facilities at our London & Sidcup branches.
 - THE FULL STOCK RANGE: All of your requirements from one supplier.
 - FREE CATALOGUES: Will be mailed to you with offers and software/peripheral details.
 - PAYMENT: By cash, cheque or 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 and 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 Fax No: 261-259 0095
 (No Late Night Orders)
LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA. Tel: 071-580 4800
 (Opening Hours: Mon-Fri 9.30am-6.00pm Sat 10am-5.00pm)
LONDON SHOP: Sellinotes (1st Floor), Oxford Street, London, W1A 1AB. Tel: 071-629 1234
 (Opening Hours: Mon-Fri 9.30am-6.00pm Sat 10am-5.00pm) Extension 7911
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 1111
 (Opening Hours: Mon-Fri 9.30am-6.00pm Late Night Friday 10am-2am) Fax No: 081-309 0017

To: Silica Systems, CPCAT-1192-79, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A BROCHURE ON THE ST RANGE

Mr/Mrs/Miss/Ms: Initials: Surname:

Address:

Postcode:

Tel (Home): Tel (Work):

Company Name (if applicable):

Which computer(s), if any, do you own? 79B

ESTD 1978. Advertised prices and specifications may change. Please refer to our catalogue for the latest information.

THE SD MICROSYSTEMS INTERVIEW

SD Microsystems started about 7 years ago, writing software for the Sinclair Spectrum and QL computers. When the CPC 464 was released in 1984, SD realised that here was a machine that combined the power of a 'real' micro, with the budget pricing associated with Amstrad. The rest, as they say, is history.

CPCA:
So, what would you say your main objectives in today's market are?

SD:
Well, basically, we're still proving time and time again that the CPC has the power and flexibility to hit PCs where it hurts. No other 8-bit computer has quite the same specifications, or combination of hardware as the CPC. Quite simply, the CPC is unbeatable!

CPCA:
How do you feel the CPC market has changed over the past 5 years or so?

SD:
Well, obviously the games side of things has taken a bit of a knock, which is strange considering that when the Plus range of CPCs were released, they were marketed exclusively as games machines. It just seems to have gone full-circle

CPCA:
So, what advantages does SD have over any other CPC software company?

Steve Denson, from SD Microsystems is a man with a mission - to prove to CPC owners that the CPC can be as good and as versatile as a £3000 personal computer. This, says Steve, is SD's main philosophy.

SD:
We have been supplying the Amstrad market for over five years now, with serious software, not only for home, but also for business use as well. Our functional 'no frills' approach means that we can offer high quality products at low prices, providing a real alternative to

serious hardware as well?

SD:
Yes, our 3.5" disk drive package has been selling for over 2 years and has been phenomenally successful. The drives used have TEAC mechanisms and the power supplies are in fact Amstrad PPC ones.

CPCA:
Don't you think that's somewhat overdoing things on the power?

SD:
We could very easily use the cheaper plug type supplies, but the PPC ones have served us so well in the past few years, in terms of reliability, that we like to stay with what we know!

CPCA:
There's quite a big market at the moment for CPC 3.5" disk drives, with each vendor offering different software packages with their drives, what does SD have to offer?

SD:
With our drives, we supply some free 800k of software that will work with the user's own BASIC programs, many commercial packages and all the programs in our current software range. We also include a disk manager and a 3 to 3.5" file copier, so that data can be archived onto high capacity disks. Also, new to our range is the Rancam Access filer. This normally retails for £14.99, but is supplied free with our drives. And, on top of all that, we give five free disks which is something that no other supplier does. After all, there's nothing more annoying than getting a nice new disk drive only to find that you've got to fork out another £10 for a box of disks so that you can use it.

CPCA:
You seem to be quite heavily biased towards business packages for the CPC. Is this part of your policy towards proving that the CPC can do the job as well as the PC can?

SD:
Basically, yes. Products like General Ledger 6128 and Stock Accounting use the full memory on a CPC 6128 or 6128 Plus. This means that on General Ledger, you can have up to 300

transactions per file, which can be entered in at any order and then sorted into date order. The program then records all



complex and costly PC systems. Our customers range from the average home user to companies with turnovers exceeding £1 million!!

Our advice service costs nothing for 60 days after the purchase of the product. Thereafter, we offer a Support Scheme which offers continued advice, upgrades where applicable, discounts on other S.D products and an occasional news sheet. The support scheme costs £12.00 a year, which is very good value for money, considering the support received.

CPCA:
But, as well as supplying serious software, don't you also support some



receipts and payments, including automatic posting of monthly standing orders. A special split-screen data entry routine is used so that all the account headings are on view during transaction input. Although the income/expenses categories are pre-set, most can be altered to suit the user. You can choose from a wide range of data reports, such as Bank or Cash statements, VAT Input/Output summaries, Profit and Loss accounts, Trial balance, NET worth, plus, of course, FULL general ledger listing. You can also choose the accounting period, eg: Month, Quarter, or Year, and there is also built-in support for producing cumulative figures from previous files to show the financial results for the year up to date, or to the year-end.

CPCA:
Okay, that just about covers cash trading accounting, but what about small businesses who need to keep track of their stock, as well as their dosh?

SD:
 Funny you should mention that (we can even read minds! - ed.), but to compliment General Ledger, we have produced Stock Accounting 612B, which is a fully integrated stock control, invoicing and sales ledger system. Invoices are produced from the users' own product/price list with stock level adjustment, and customer account updating performed automatically. This means that there is absolutely no need to enter each program to alter the data - a real time saver! The program can handle up to 750 items of stock, each with a 9 digit product code, which is more than enough for most small businesses.

It stores 99 main customer names and addresses, you only need to type these in once (just as well really - ed.). On top of all this, Stock Accounting will print out full or selective stock or re-order lists. You won't find a

better implemented system on the CPC!

CPCA:
What do you have at the other end of the scale? Maybe something a little less daunting for the home user?

SD:
 Our package, Home Finance, helps you to keep track of home finances. Up to 30



different accounts (ie, bank, credit cards, savings and expenses) can be set, with up to 150 transactions per file. Any combination of accounts can be shown on statements, which are displayed in standard bank statement format. Also included is a printer report option and, to get you started, a demo on the disk.

CPCA:
Whew! Turning to matters musical, one of your latest products is BooTracker, which is a musical soundtrack creator.

SD:
 When we received BooTracker, which was written by a young chap who is a musician, we liked it because, in keeping with our policy, here was a package, written by a musician, for potential musicians. Who better to write a soundtracker?

It is definitely one of the most flexible around, especially where timing is concerned. The other well-known soundtracker lacked flexibility in the timing department and the music files produced were a tad long. I mean, 14k for a 5 minute tune is ridiculous - BooTracker files are only 8k long. BooTracker tunes

can be interrupt driven, which means that they can play in the background without affecting the what is being worked on. For instance, you could have "Land Of Hope and Glory" playing while typing a letter on Protext.

CPCA:
We reviewed Picasso a little while back, how is that selling?

SD:
 Not badly at all. There wasn't a decent commercial art package released since 1986 and that was Advanced Art Studio. With Picasso, we were able to make use of new programming techniques to give more flexible image manipulation. Originally, it amazed me that no one had released anything that anywhere near rivals AAS. We hope to set the record straight where that is concerned. You can do more with a screen on Picasso than you can with any other system on the CPC. Another Advantage of Picasso is that it runs in 64k!



CPCA:
Okay, so you support small businesses, large businesses, home users, and budding musicians, what about a little something for the programmer?

SD:
 We have a programmer's toolbox, called Multi Code, which adds RSX extensions onto Amstrad BASIC. Included, is a front end graphics window, which is ideal for professional style menus, simplified PEN, WINDOW and BOX drawing commands, FADE screen commands, screen dump commands for text or graphics,

pixel or character scrolling in ANY direction, as well as Double height text printing. Sideways printing and transparent text. The main code is also relocatable and occupies only 6k of memory. These are just a few of the commands available.

CPCA:
As mentioned earlier, Random Access filler is being released. What exactly is it?

SD:
 RAF is a simple database that uses random access disk techniques. This means that files can be disk-based, instead of being stored in RAM. This gives the user the ability to have larger files than would otherwise be possible. It's not designed to be the best database in the world, but it does the job okay....

CPCA:
And what does the future hold for the CPC, as far as you're concerned?

SD:
 Obviously, at this moment in time, we don't want to give too much away, but our next product is the Front Runner

Desktop System. Basically, it is a MAC-style desktop WIMP system, which gives the user full control over all the standard filing and disk operations that would normally take various utilities. It will copy disks and files, as well as having Unerase and Rename functions and even supports file 'folders' instead of having cumbersome user areas.

It features many other functions normally associated with a WIMP system and all from within a friendly icon-controlled environment. As long as the CPC is prosperous, we shall continue to support it and I think it's going to be viable for some time to come....

All of SD's products can be obtained from :

SD MicroSystems,
 P.O Box 24, Holbeach,
 Lincs PE12 7JF
 Tel: (0406) 32252

The first European Demo Party, a meeting of the top demo-writing talent from all over Europe, was held at Black Mission's house (in Germany) during July 1991. Such an event couldn't just be a one-off, and so plans were made for a second meeting, this time in France, in the last weekend of July 1992. The place: a medium-sized hall in Reims, north-east France. Your intrepid correspondent set out from the heart of England on a 36-hour trek to get there. Rule one: never use French railways if you can help it..

All the gen on the second European Demo party from our man in France, CharleyTronic.

IT'S PAR

The French scene, obviously, was very well represented. Logon System were present en masse, as were various members of Paradox, 5KB, fanzine editors, and representatives of other groups. Many members of the German scene were also present, such as Cadjo Clan, HJT, and a particularly strong contingent from Bengal Switzerland's only three demo-writers (Asterix, TMP and Warlock) turned up, as did Elmsoft (from Austria): unlike last year, nobody from Denmark or Norway made an appearance, but Britain was represented for the first time.

Everybody present was issued with a smart, laser-printed badge, proclaiming their pseudonym and the group to which they belonged. This made putting faces to the famous names seen in many a demo much easier. In addition, many people wore specially designed T-shirts, ranging from those with simply a name written on in ink, to the spectacular works of art on Logon System's clothes. By the end of the meeting, a few previously blank T-shirts had also been decorated with the signatures or logos of everyone present.

There wasn't an incredible number of new demos released at the meeting. A few, such as the Castle Demo (produced a week earlier at a German meeting) surfaced, but, in general, previews (such as that of the 5KB demo 3) were thicker on the ground. One interesting snippet of information is that Logon System (the French coding team), programmers of the famous "The Demo", are working on "The Demo 2", and the "Shadow of the Beast", part of which (by

Overflow) was on display for a short time to the general amazement of everyone. Parallax effects? Colours and modes mixed together on one screen? You got it!

This isn't to say that new releases weren't to be found, though. A music demo by Weee!, probably the most famous CPC musician, was on display - the difference being that it used the DMA sound features of the CPC Plus for superb effects, such as a sample of the words "Cadjo Clan" in a

has a host of amazing features, such as the ability to compile decent length tunes down to only 4k of executable code, its support for hardware envelopes, and the feature for generating "arpeggio" effects so that a chord of two or more notes is heard on one channel: undoubtedly the best CPC sound-tracker available. CPC Attack! will be the first to bring you more news when it hits these shores.

At this meeting, as well as the last, Pang - the console game where you have to shoot floating balls, splitting them into smaller ones which must also be hit - was a

favourite with everyone. This year, though, it was overshadowed by the launch of "Zap!Balls - The Advanced Edition", a follow-up to the PD game "Zap!Balls", by Austria's Elmsoft Game Service. A Pang clone, the Advanced Edition is almost certainly the best game ever written for the CPC. That's right, the CPC, not the Plus! Amazing sprite techniques and special effects programming (ever wanted to see the Amiga Juggler on your CPC?)

combine with superbly effective gameplay to bring a real stunner of a game. Again, when it arrives in Britain, CPC Attack! will bring you more details.

The hardware at the meeting was a matter of great interest. There were 22 computers in all: obviously the majority were CPCs (and a few Plus machines), but there wasn't also the old Amiga, ST and even a Megadrive, which were used for playing shoot'em'ups and ogling 16-bit demos (to which CPC demos are getting ever closer). Of course, to us, the CPCs are the most interesting machines, and this was true at the meeting as never before. If you thought you knew what a CPC looked like, take a



BNC's (slightly customised) 6128.

deep Mid-Atlantic voice. The sound features of the Plus may be less obvious than the graphics features, but something like this shows that they are just as much of an improvement. Weee! also promised a sound-tracker (music editing program: see the article last month) for the Plus range to use the DMA feature.

Staying on the subject of music, a sound-tracker for the standard CPC range was on display, written by BSC. "Sound-Trakker"

PARTY TIME



Tuck Inf

look at these beauties. A bright white machine, covered in graffiti? No problem. Or how about BMC's 6128 (although you could barely tell the difference), a conventional design - for a PC! Three units, a keyboard, a CPU unit (with four disk drives), and a monitor. The CPU was plastered with numerous switches, for drive switching and the like and sideways ROMs were an essential part of the design as well.

In contrast to these German machines, the French computers were much less adventurous. Even a ROM-board was a rare sight from the land which has brought us many of the best CPC demos ever produced, the main add-ons being dkTronics 64k expansions (for the 464s), second disk drives (unlike on our side of the Channel, the French go in for 5.25 drives much more than 3.5 ones), and the infamous Le Hacker cartridge, a French version of Siren Software's Hackit. In conjunction with the French assembler "DAMS", Le Hacker provided a standard French coding tool which had the advantage of never requiring reloading - a quick flick on for Le Hacker, reset, and DAMS is ready to be entered by a simple CALL from Le Hacker. The assembly time makes even the de luxe British combination of Protext and Maxam 1.5 look a little bit sick. By the way,

before you start flooding the CPC Attack! offices with demands about how to get hold of DAMS, brace yourself: it's no longer in production...

Any 6128 owners out there looking to upgrade to a more powerful machine, such as an Amiga perhaps? Forget it. Thanks to a technological breakthrough by a German firm, it's now possible to upgrade

from a normal CPC 6128 to a 6128 Plus, requiring only a GX4000 (which can be picked up pretty cheaply these days) as a donor for the ASIC brain chip. There's no difference between this and a "real" CPC Plus (except that you don't get the speakers in the monitor), and to prove it, a number of cartridges were up and running at the meeting, together with a short BASIC demo of the extra colours in operation. The only problem? As ever, the price: £150 is the charge for this service. When keen bargain-hunters can pick up 6128 Plus machines with colour monitors for around £200, the price of the upgrade (added to the price of a GX4000) looks a little less keen. However, it

remains an interesting upgrade path, and another smack in the face (ouch) for those who said that, like accessing the Plus's extra features from outside a cartridge, it couldn't be done.

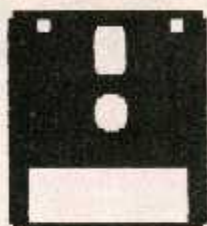
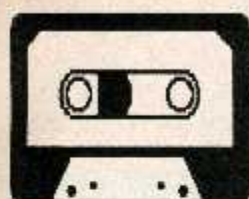
Beaver over a steaming 6128 in the corner were French fanzine bigwigs Neofyt and Zalko, who (with help from Niki, the organiser, and your correspondent) were working on the official fanzine from the meeting. This contains a list of the people present at the meeting, together with a short comment (French and English translations) from everyone. Most people paid tribute to Niki's undoubtedly excellent organisation, not forgetting those (particularly amongst Logon System) who praised the virtues of hard rock music. One problem: how do you translate "Doom Metal" into French?

Finally, the meeting was also a good place for the assorted coders to let their hair down, stuff themselves silly with the plentiful French sticks, crisps and (of course) Coca-Cola, and engage in various lunatic acts. One word of warning: if you're travelling in France at the end of July next year, and you see a Renault 5 heading your way, with people waving out the windows, swerving all over the road, it might be advisable to pull over and wait until it's passed...

Logon System are a CPC Programming team, aren't they?



SOFTLOK V2.2



THE NEW STANDARD IN SPEEDLOCK TAPE TO DISC UTILITIES. OVER TWO YEARS IN DEVELOPMENT, SoftLok V2.2 GIVES OWNERS OF 128K TAPE AND DISC CPC'S A SUPERB HIGH QUALITY UTILITY FOR THE TRANSFER OF SPEEDLOCK PROGRAMS.

- ▶ EASY TO USE
- ▶ FULLY MENU DRIVEN
- ▶ ON-DISC MANUAL WITH PRINT TO SCREEN OR HARDCOPY OPTIONS
- ▶ OVER A HUNDRED VERIFIABLE TRANSFERS
- ▶ FREE HELP-LINE SUPPORT
- ▶ PRODUCES STAND ALONE TRANSFERS
- ▶ UNIQUE INTELLIGENT HEADER READER

PRICE: 14.99 inc P & P.
CHEQUES AND POSTAL ORDERS TO:



CampurSoft

16 Slatefield St,
Gallowgate, Glasgow
G31 1UA

WARNING: THIS PROGRAM IS NOT TO BE USED TO CONTRAVENE COPYRIGHT LEGISLATION

This advert was produced using MicroDesign Plus and a nine pin printer



WoW SOFTWARE ADVENTURES FOR THE 464 & 6128



NEW ADVENTURES

ADVENTURE	AUTHOR	CASSETTE	DISC
SIMPLY MAGIC	M & J TREWHELLA	£2	£4
CRISPIN CRUNCHY	M & J TREWHELLA	£2	£4
TIME	M & J TREWHELLA	£2	£4
CRISPIN CRUNCHY & TIME & SIMPLY MAGIC	M & J TREWHELLA	3 GAMES ON 1 DISC	£6
CRS QUEST (Four Parts)	P & T STITT	£5	£7
YARKON BLUES	JASON DAVIS	£2	£4
YARKON BLUES II (Two Parts)	JASON DAVIS	£2	£4
THE SMIRKING HORROR	JASON DAVIS	£2	£4
YARKON BLUES & II & SMIRKING HORROR	JASON DAVIS	3 GAMES ON 1 DISC	£6
THE TALISMAN OF POWER	CHRIS BURY	£2	£4
POWER CURSE (Two Parts)	ADRIAN CONN	£3	£5
ESCAPE FROM PRISON PLANET (Two Parts)	PETER CLARK	DISC ONLY	£5
HOUNDS OF HELL (Two Parts)	PETER CLARK	DISC ONLY	£5
(Both Above Games - 464 or 6128 or PCW)	PETER CLARK	2 GAMES ON 1 DISC	£7
THE ANGELICUS SAGA (Two Parts)	M & MJ CREWEDSON	£2	£4
THE ANGELICUS ANSWER	M & MJ CREWEDSON	£2	£4
THE ANGELICUS SAGA & ANGELICUS ANSWER	M & MJ CREWEDSON	2 GAMES ON 1 DISC	£6
HELVERA - MISTRESS OF THE PARK	BOB ADAMS	£2	£4
GRUE-KNAPPED	BOB ADAMS	£2	£4
HELVERA & GRUE-KNAPPED	BOB ADAMS	2 GAMES ON 1 DISC	£6
MAGICIAN'S APPRENTICE	SIMON AVERY	£2	£4
PRISON BLUES	SIMON AVERY	£2	£4
TOTAL REALITY DELUSION	SIMON AVERY	£2	£4
DANGER! ADVENTURER AT WORK!	SIMON AVERY	£2	£4
DANGER! ADVENTURER AT WORK TWO	SIMON AVERY	£2	£4
GERBL RLOT OF '87	SIMON AVERY	£2	£4
CHOOSE ONE OF THE ABOVE SIMON AVERY GAMES ON DISC AT £4 AND ADD ONE OR MORE GAMES AT £1 EACH FOR EXAMPLE: ...		5 GAMES ON 1 DISC	£9
A THIEF'S TALE (Three Parts)	SIMON AVERY	£4	£6
A THIEF'S TALE & ANY 3 SIMON AVERY GAMES		4 GAMES ON 1 DISC	£8
ADVENTURES OF ZEBEDEE GONIC (Disc Version 'Save to Tape' Only)	DARREN THOMAS	£2	£4
MEILIN (Two Parts)	MICHAEL HUNT	£3	£5
BEYOND THE DARK MIRROR	RCD ENTERPRISES	£2	£4

THE TAXMAN COMETH (464 or 6128 or PCW)

STEVE CLAY

DISC ONLY

£4

NEW GAMES FOR CHILDREN

THE LAST SNOWMAN (PERSONALISED)

M & MJ CREWEDSON

£2

£4

THE BIG TOP

RONNIE SLATER

£2

£4

RE-RELEASED ADVENTURES

CRYSTAL THEFT

PAUL WILSON

£1.50

£3.50

THE TRIAL OF ARNOLD BLACKWOOD

COLIN HARRIS

£2

ARNOLD GOES TO SOMEWHERE ELSE

COLIN HARRIS

£2

THE WISE AND FOOL OF ARNOLD BLACKWOOD

COLIN HARRIS

£2

ANGELIQUE A GRIEF ENCOUNTER

COLIN HARRIS

£2

BRAWN FREE

COLIN HARRIS

£2

5 GAMES ON 1 DISC

£8

THE CASE OF THE MIXED-UP SHYMER

SANDRA SHARKEY

£2

£4

LOST PHIRIOUS PART 1 - THE CASHIYA

NEL SCRIMGEOUR

£1.50

LOST PHIRIOUS PART 2 - THE PLANETS

NEL SCRIMGEOUR

£1.50

LOST PHIRIOUS PART 3 - FALKRIHAWY

NEL SCRIMGEOUR

£1.50

3 GAMES ON 1 DISC

£3.50

BLACK KNIGHT (Two Parts)

MANDY RODRIGUES

£3

£5

ATALAK

MANDY RODRIGUES

£2

£4

BLACK KNIGHT & ATALAK

MANDY RODRIGUES

2 GAMES ON 1 DISC

£6

PROJECT X - MICROMAN

TIM KEMNION LEMMON

£2

£4

CITY FOR RANSOM

JOHN PACKHAM

£2

£4

PANIC BENEATH THE SEA (Two Parts)

JOHN PACKHAM

£3

£5

PROJECT ANNIHILATION

JOHN PACKHAM

£2

£4

CITY FOR RANSOM & PANIC BENEATH THE SEA

JOHN PACKHAM

2 GAMES ON 1 DISC

£6

RANSOM & PANIC & PROJECT ANNIHILATION

JOHN PACKHAM

3 GAMES ON 1 DISC

£7

FLOCK (Two Parts)

DAVID OYA

£2

£6

COLDITZ ESCAPE (Two Parts)

FRANK FRIDD

£3

£5

VIDEO WORLD (Two Parts) ('Save to Tape Only')

GRAHAM FERRY

£2

£5

ALL PRICES ARE INCLUSIVE OF FIRST CLASS POSTAGE WITHIN THE UK. PLEASE ADD £1 TO COVER ADDITIONAL POSTAGE FOR OVERSEAS MAIL.

CROSSED CHEQUES/POSTAL ORDERS PAYABLE TO: JG PANCOFF
Address: 78 RADIPOLE LANE, WEYMOUTH, DORSET DT4 9RS
Telephone: 0905 784155 1pm to 10 pm

GRAFIX
6

SONIX
6

GAMEPLAY
6

DIFFICULTY
8

59%

CODEMASTERS
• £3.99



SCREENTEST

This month, as always, Richard Wildey reviews the latest crop of releases and, as a special treat for Halloween, picks out seasonal games in the feature Trick or Treat.

24 DJ PUFF	59%
25 STUN RUNNER	61%
25 DOUBLE AGENT	76%
26 FIRST DIVISION MANAGER	84%
26 EMLYN HUGHES INT. SOCCER	73%
26 TOUCHDOWN	60%
29 BADLANDS	69%
FIGHTING SOCCER	73%
KICKOFF	74%
KICKOFF 2	93%
MAN UNTD	85%
30 TRICK OR TREAT	
CAULDRON	72%
BUBBLE GHOST	69%
JACK THE RIPPER	60%
THE ADDAMS FAMILY	94%
BRIDE OF FRANKENSTEIN	42%
GHOSTS'N'GOBLINS	68%
CAULDRON 2	69%
MICKEY MOUSE	70%
THE MUNSTERS	68%
SLIGHTLY MAGIC	60%
32 PSYCHO SOCCER	86%

Little Puff is little no more. In fact, he's grown up and is living on an island with his friends...life just couldn't be happier for DJ - as with all cute and fluffy Codemasters adventures.

Of course, something bad has to happen. Well there wouldn't be much point to the game if nothing did! The evil Captain Kripp has stolen Puff's complete CD collection and it's your job, as DJ Puff, to rescue them. To do this, you'll need to bounce you way though four different levels, each with five compact discs to collect.

Once you have found the CDs, you must make you way to the hidden exit which is otherwise blocked off. Once through the exit, you're transported to a bonus level where letters, which spell out 'EXTRA', are scattered about ready for the taking, though the same obstacles as found on normal levels are present. Each level is different with its own graphics, though level one has the most awful combination of colours



That red disc, in to the left of the little green dragon (you), is one of the five discs needed to complete the level.

DJ PUFF

ever seen on the CPC, but it makes a change from the usual Spectrum port graphics, I suppose. Level two, on the other hand, is

easier on the eye with a darker shade and a prehistoric feel.

The gameplay is a bit like Rainbow Islands, though nowhere near as fast and polished. The creatures include Douglas the Snail (shouldn't that be Brian?), jelly babies, and spear chucking natives. All can be blown up with bombs, providing you've picked them up or, of course, fried (talk about bad breath!).

It won't be long before you find yourself smashing the keyboard out of frustration. The keys are not as responsive as they could be and, on occasions, you'll find yourself losing two lives in a row with no means of escape.

I'm not quite sure what happened to the "Ravin' Music" Codies yap about in the inlay card, but there is a little lullaby of a tune that plays throughout. DJ Puff is a run-of-the-mill game, too sluggish to warrant a higher score but it's tough

enough to keep most happy for a long, long time.



One of the bonus levels. The bottom panel shows (from left to right) your score, number of lives, letters for the bonus, number of discs to be collected and number of bombs.



Level 2: Whoops! Don't hit those birds or any moving creatures for that matter.

HIT SQUAD • £3.99

Race your futuristic bobsleigh through winding tunnels and twisting roads at speeds of up to 900 miles per hour. Well, to be more honest, it's more like 9 miles per hour!

Each of the 24 levels is a course of tunnels and roads which you must complete in a set time limit. With other vehicles coming toward you head-on progress isn't easy, but most can be shot. Some, however, are indestructible and must be avoided or a nasty collision ensues. In the tubes, you can roll 360 degrees to fly over obstacles, but during the road sections they must be avoided or destroyed.

Along the courses are green stars and orange rectangles which should be picked up, by driving over them, to give

extra bonuses. The rectangles provide extra speed while the stars provide shockwaves which annihilate everything in their path as well as displaying the fastest route to complete the track.

The only way you'll pick these up is if you happen to be in their path because you can't move from left to right fast enough and if you do try, you'll end up hitting someone!

Stun Runner at maximum speed can be quite fast and playable though, much of the time, you'll find yourself crawling along a snail's pace after being hit by a craft that's just clipped your

wingmirror. The graphics are decent and the flashing tunnel hypnotic if you play for too long. The tune played in between levels is worth listening to, but for some reason the

programmers forgot to turn it off during the next level load, so, the tune is stuck on one note which plays continuously though the



Stun Runner, a race against time to complete a track of tubes and roads.



In the tunnels, you can bank the sides and rotate 360 degrees, but will the Stunrunner get back onto the flat in time to collect the green star?

loading! This is very irritating and if any tape load error occurs you won't hear it! In the arcade, two aspects drew people to the Stun Runner machine. One was the speed

and the other was the console design - you sat on a craft, similar to a jetski, which swung from left to right. The CPC version has neither of these, just 24 levels of much the same roads and tunnels, and so isn't appealing in those respects. After a short while, the game

loses all its appeal, but on budget isn't a complete waste.



Before each race you are shown a map of what is to come and are also given a little racing tip.

The adventure column may be gone, but we still support adventures. Here is the first adventure reviewed in this section

TARTAN SOFTWARE • £4.95

Contact: 61 Bailie Harrie Crescent, Montrose, Angus, Scotland, DD10 9DT

Double Agent, written with the PAW, is an excellent example of what it can do in the right hands (paws!). It is a text-only adventure where you control two secret agents who can be toggled between at any time. Each agent has its own attributes; one is more intelligent than the other (eg. Agent 1 can't read or use a computer!) etc.

Objects can be passed between

each agent when they meet in the same room. What makes this adventure better than most is its quality. It learns and remembers as you play which reduces repetitiveness. For example, once the method of how to open a door with a passcard is worked out, you

Control between the two agents can be changed by pressing (1) or (2). It couldn't be simpler.



need not do it again. From there on the game tells you that, "the door is closed, but I know how to open it." And it opens it!

Another novel idea is in the collection of objects. If you examine a table and find a book, it is likely that you'll take the

book. Instead of typing EXAMINE TABLE, GET BOOK you need only type EXAMINE TABLE, the parser will then reply, "You see a book, do you wish to take it yes or no?"

Double Agent is a wonderful adventure game with a £50 prize to whoever completes it first. I know I'm certainly going to try!

DOUBLE AGENT

GRAFIX: n/a SONIX: n/a GAMEPLAY: 7 DIFFICULTY: 7 76%

Codemasters • £3.99
0926 814131

In **First Division Manager**, you're boss of a team with pretty lousy players. It is your job to fight your way to the top of the league and win the cup. To do this you'll need to buy, sell and train players.

These, and other options are chosen via a cursor system in which you click on various options from a main screen. This then takes you into sub-menus where a wide variety of additional options are available. Click on the telephone and a list people you may wish to ring appears. The scout offers to sell information on other teams at high prices which

are available for sale if the price is right. After you choose your team and formation, the game can be viewed from overhead with running commentary so that those players that need extra training and from the opposition which are worth buying can be spotted. This is one of the best management sims I've played in a long while.

The sound bounces along as if it should be in a Dizzy game and the graphics are of a high standard.

1st DIVISION MANAGER



Just one of the menus which can be selected from the main screen.

can be haggled. Other people in your phone book include the physiotherapist, bank manager and the transfer manager.

The transfer market is one of the best in any management sim - all players

Strike Force Design •
£4.95 (tape) • £14.95 (disk)

Mail order only: PO BOX 40,
Sunderland, Tyne & Wear. SR2 8DF

Touchdown! is Strike Force Design's first release for the Amstrad. Written entirely in BASIC, this American football management simulation relies on the strategy side of the game and not the action.

The game is designed to be played over a long period and the team you select on first loading the game, is the team that you'll play with all season - which will require a few sessions to complete. When you have finished playing you "Lock up and go home." This automatically saves your current statics, ready for when you next boot up.

Before each match, you're presented with an option screen from which you can execute a number of commands such as spying on the opposition, gain advice and view league tables and fixtures. Having done this, you move on to the match.

The games are played using offensive and defensive plays, each with its own advantages and disadvantages which are well explained in the manual. Unfortunately you don't see

The match screen: watch the man running about on the field and get told who's doing what in the box below, GOAL!

Touchdown • £3.99
0268 541126

Emlyn Hughes, re-released under the new **Touchdown** label, involves both management and arcade skills including a large variety of options which allow the alteration of player's names and their various skills.

Not only does this allow you to customise each team, but it also helps to alter the skill levels when playing against the computer. A two player



The WIMP driven menu screen from which all options are selected.

mode is available, but it requires a joystick splitter.

The gameplay doesn't allow you to pick team formations and the game is a tad slow. Included in the control is a momentum aspect which may make the game more realistic, but also makes it frustrating

EMLYN HUGHES
INTERNATIONAL SOCCER

difficult to control a player at times - especially if he has just been tackled and needs to turn around quickly.

The action is viewed from the side instead of the birds-eye view employed in most of today's soccer games.

There's a range of moves including headers and backheaders.

The graphics and spot sound effects are both quite good except for the half-time whistle which sounds like a dying mouse.

Overall the game is enjoyable though the managerial

side is very limited since you can't buy and sell players at international level. Despite these points, if you enjoy football simulations then I'd recommend it now on budget.

The match is viewed from the side and not from above!

GRAFIX 8 SONIX 4 GAMEPLAY 7 DIFFICULTY 6 73%

graphical action, but a small running commentary scrolls in a window.

The disk version is reviewed here, but the tape version is a cut



The match screen: the plays possible are listed and the left & right hand columns with an overhead view of the field in the centre.



Select your option from here before each match.

down (presumably to save on loading) version and is £10.00 cheaper. A good simulation strictly for American football fans.

GRAFIX 2 SONIX 1 GAMEPLAY 5 DIFFICULTY 8 60%



SOMETHING **N E W**

Bigger, bolder,

Ruffa, tuffa—

In other words, sukka,

THE ONE AND ONLY DOMINATOR

(And still frightfully radical actually)



Attack TOP 50

GAME	COMPANY	PRICE -CASSETTE -DISK	RATING
1 LEMMINGS	PSYGNOSIS	£15.99 £19.99	98%
2 PRINCE OF PERSIA	DOMARK	£10.99 £16.31	97%
3 SMASH TV	OCEAN	£10.99 £15.99	96%
4 RICK DANGEROUS	KIXX	£3.99	95%
5 RAINBOW ISLANDS	HIT SQUAD	£3.99	94%
6 TURRICAN II	KIXX	£3.99	94%
7 SWITCHBLADE	GBH	£3.99	94%
8 CONTINENTAL CIRCUS	TROMX	£3.99	94%
9 THE ADDAMS FAMILY	OCEAN	£10.99 £15.99	94%
10 NORTH & SOUTH	INFOGRAMES	£9.99 £14.99	93%
11 HUDSON HAWK	OCEAN	£10.99 £15.99	93%
12 TURRICAN	KIXX	£3.99	93%
13 TITUS THE FOX	PALACE	£10.99 £15.99	93%
14 KICK OFF 2	ANCO	£10.99 £16.99	93%
15 STRYKER	CODEMASTERS	£3.99	93%
16 WWF WRESTLEMANIA	OCEAN	£10.99 £15.99	92%
17 G-LOC	US GOLD	£10.99 £15.99	92%
18 F-16 COMBAT PILOT	DIGITAL INT.	£6.99 £10.99	92%
19 RBI BASEBALL	DOMARK	£10.99 £17.99	92%
20 IMPOSSAMOLE	GBH	£3.99	92%
21 IK+	HIT SQUAD	£3.99	92%
22 SPACE CRUSADE	GREMLIN	£10.99 £15.99	91%
23 TERMINATOR 2	OCEAN	£10.99 £15.99	91%
24 PLOTTING	OCEAN	£24.99 (cart)	91%
25 MAN UNTD EUROPE	KRISALIS	£11.99 £16.99	91%
26 OP THUNDERBOLT	HIT SQUAD	£3.99	91%
27 POWERDRIFT	HIT SQUAD	£3.99	90%
28 CHASE HQ	HIT SQUAD	£3.99	90%
29 PRO TENNIS TOUR	HIT SQUAD	£3.99	90%
30 HEROES OF THE LANCE	KIXX	£3.99	90%
31 SUPERCARS	GREMLIN	£9.99 £14.99	89%
32 STUNT CAR RACER	KIXX	£3.99	89%
33 CASTLE MASTER	HIT SQUAD	£3.99	89%
34 ROBOCOP 2	OCEAN	£24.99 (cart)	89%
35 PUZZNIC	HIT SQUAD	£3.99	88%
36 LICENCE TO KILL	HIT SQUAD	£3.99	88%
37 BATMAN - THE MOVIE	HIT SQUAD	£3.99	88%
38 NAVY MOVES	HIT SQUAD	£3.99	88%
39 LOTUS ESPRIT TURBO CHALLENGE	GBH	£3.99	88%
40 HERO QUEST	GREMLIN	£9.99 £14.99	88%
41 SHADOW WARRIORS	HIT SQUAD	£3.99	88%
42 SIM CITY	INFOGRAMES	£9.99 £14.99	87%
43 ROBOCOP	HIT SQUAD	£3.99	87%
44 NEW ZEALAND STORY	HIT SQUAD	£3.99	87%
45 DRAGON NINJA	HIT SQUAD	£3.99	87%
46 ESCAPE/ROBOT MONSTERS	HIT SQUAD	£3.99	86%
47 GHOSTBUSTERS II	HIT SQUAD	£3.99	86%
48 OUTRUN EUROPA	US GOLD	£11.99 £16.99	86%
49 GAUNTLET II	KIXX	£4.99	86%
50 BARBARIAN 2	OCEAN	£24.99(cart)	86%

Badlands is a Super Sprint variant with guns - the other cars can be destroyed with missiles. Badlands, like Super Sprint, is an over-head view driving game with all the action taking place on a single screen.

Three armoured cars, including the one or two you can control, drive round a series of different courses collecting spanners by driving over them. These can be traded in at the end of each race for power ups such as turbo, tyres, missiles, shields and speed. Turbo gives faster acceleration, Speed boosts maximum speed, Tyres allow better cornering and so on. These extras are not necessary on the first few races, but as progression is made, opponents become tougher.

Missiles have the power to destroy and firing without them slows down the cars. They are really unnecessary and spanners are best spent on other things such as speed and tyres.

Each level has its own backdrop, drawn in the high resolution MODE 1. These zones which include The City, The Desert and The Oil Refinery, change with every level. There is no difference in gameplay between each of the levels, they are just graphically different.

In addition to normal hazards, such as twisting and turning roads and the two other cars, who incidently, don't have the power to shoot back at you, there are other obstacles to impede your progress. Large spikes come up from the ground at certain intervals, these are supposed to stop you, but more often than not can be driven through. Water puddles slow you down while oil patches send cars into uncontrollable skids. Oil drums with helicopter-like propellers (mines, I think!) kill you if driven into, though they can be exploded with a single shot.

With all this carnage it is just as well that there's an unlimited number of lives. Once killed, a helicopter flies in from the right and deposits a replacement at the same spot on the track.

This all sounds very familiar and a quick look at the back of the packaging reveals that it is by the same team that programmed Super Sprint. But, is this an improvement? Yes. The gameplay is better with faster moving cars and better collision detection. The graphics aren't as good though. The warfare adds a lot to the game, especially when playing in two player mode.

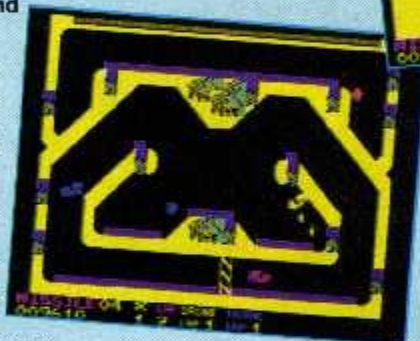
The game's main drawback is that it only has eight different tracks, none of which are very tough to complete though some are a bit confusing. The bridges are not defined well enough and in the first few games I found myself driving into walls when trying to go under bridges.

The game starts with an excellent foot tapping title tune, but the game sound is limited to the screeches of wheels, brakes and the drone of engines. A good game but if you're after this sort of game you're better off with Super Cars or Championship Sprint (Super Sprint and its level designer)

Check your position against the other drama cars in the results screen.



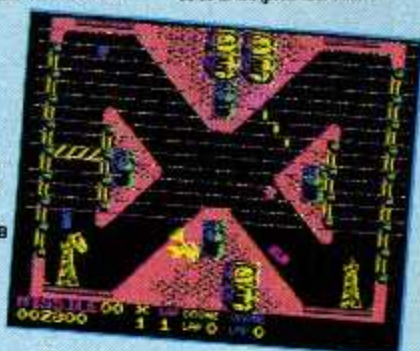
Race around the track bearing the blue and yellow cars. Easy in the first few levels, but it slowly gets harder.



The Oil refinery - another level. Your number of completed laps, spanners and missiles are logged below the main display.



Select your add-on by turning the steering wheel to highlight the chosen extra, but make sure you do so in the given time limit!



After a crash, the track helicopter flies in a replacement car where the incident occurred, wasting precious seconds.



BADLANDS

Hit Squad
• £3.99

TRICK OR TREAT

With Hallowe'en only a few weeks away, Richard Wildey digs up some of those spooky games that have cropped up over the years and discovers which are trick and which are treat

Horror film licences would seem like a good source for a spooky game. Though very few spin-offs have occurred, the biggest was Friday the 13th, but that one is best forgotten. With all the Nightmare's on Elm Street, I'm surprised no-one has tried to write a game around that. How about it Ocean?

Of all the film licences, one of the best for the Amstrad is The Addams Family, which scored a massive 94% in issue 3. However, The Addams Family wasn't the only family to fit into this spooky category - Alternative's Munsters certainly had a few bizarre members. On such a spooky subject, the question must be which game had the cutest ghosts? Was it Bubble Ghost, The Addams Family or the old Gremlin game Mickey Mouse? "Mickey Mouse?" I hear you cry, "What's that got to do with Hallowe'en?" Poor old Mickey is sent to rescue Merlin's magic wand and, in doing so, is attacked by hoards of mad ghosts and other evil ghouls. Bubble Ghost

was a ghost with more huff'n'puff than the big bad wolf. In the game, you blew a bubble, from room-to-room, keeping it away from large spikes and other sharp objects which would pop it on contact. If you liked the ghosts in the The Addams Family, I suggest you go up the chimney for a surprise. That should keep those who haven't got the game guessing!

LOVEABLE HAG

Cauldron and its sequel were probably the most famous games to dabble in witchcraft. In the first, you play a loveable hag who flies around on her broomstick in a quest to collect six magic ingredients which, when mixed, rids an evil pumpkin from the land. In Cauldron II, the roles are reversed - you become the bouncing pumpkin jumping from platform to platform. Both of witch (sorry, which) were excellent games for their time.

The other Hallowe'en double-act must be Ghosts'n'Goblins and its sequel Ghouls'n'Ghosts. The later, as is the tendency with games, unlike movies, was the better, with more ghost-zapping action than before.

Back in 1987 CRL started to

produce a series of horror adventures including Dracular, Jack the Ripper and Frankenstein. Each of those was censored and given a 15 rating. At the time CRL denied it was all hype, but was it? Why were they rated such? Both Jack the Ripper and Frankenstein were good adventures, but the digitised pictures added nothing more to the gameplay. The serious adventurer is more interested in what games have to offer in content and puzzles, not in gory pictures of severed heads. Lurking Horror is good example of this. Should these adventures have been censored with a 15 rating? The quality of digitising on the CPC is such that nothing too disturbing was ever shown. Young children should not have played these games because of the graphics, but were they really necessary?

None of the old CRL adventures is available now and the only way you can pick them up is second hand. Some old adventures can now be bought from new companies such as WoW Software who have taken it upon themselves to find the original authors and buy the distribution rights.

WHO YA GONNA CALL?

If all this mention of things that go bump in the night has you hiding under the duvet, clutching your teddy bear and hot water bottle, then fear not, for there has been a few Ghostbusters too.

The original oldie Ghostbusters, released back when the CPC was a mere toddler, was, unlike the film, a bit thin on the ground, though I do remember playing it for hours on end and I've still got my old account number floating around somewhere. I never did work out how it remembered your number, any ideas?

Years later Ghostbusters 2 appeared, but this time from Ocean (now available on Hit Squad) as opposed to Activision, who released the original and have long since given up on the CPC (Grrrr!). Ghostbusters 2 did the film some justice, a real tough game to beat, but worth trying all the same.

In between these came Ghost Hunters and The Real Ghostbusters. Ghost Hunters, from Codemasters, was a sort of cross between Super Robin Hood and Operation Wolf. The Real Ghost Busters, based on the cartoon, the book, the comic, the plastic figures and all the other merchandising that went with it, was a fairly mediocre game, offering nothing special.

Enough of these ghosts, what about the evil lord of darkness himself, Dracula? Gremlin once released a game called Vamoire's Empire in which you played the mad vampire-hunter Doctor Van Helsing who is trying to rid the world of Count Drac and his fellow creatures of the night.

Competition

In keeping with the haunted theme, Ocean have supplied 20 copies of The Addams Family and Alternative have supplied 50 tapes of The Munsters to give away. To get your grubby mitts on the games of the two strangest families around, write the answer to this question on a postcard or the back of an envelope:

Who are the tallest members of each The Addams Family and The Munsters?

The first 20 correct entries plucked out of the CPC Attack! official

So what are all these games like? We've reviewed ten old and new to give you a taste of what you should be playing on the 31st.

94%



THE ADDAMS FAMILY

We haven't changed our view since Issue 3. An excellent game with an addictive quality that more games should have. Instantly recognisable tune and brilliant graphics.



69%

CAULDRON 2

This time you're a space-hopper-like pumpkin. Not as playable as the original, but still a fun game with the same top notch graphics and sound.



72%

MICKY MOUSE

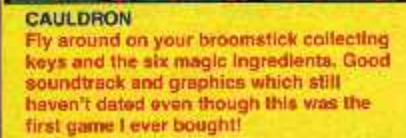
Flatten Frankenstein and spray spectres with your magic water-pistol in a fight to save Merlin's magic wand, stolen by the Ogre King. A fun game, though the graphics are a bit blocky and the title tune very odd.



70%

BRIDE OF FRANKENSTEIN

A tedious arcade adventure that has you waddling around trying to find you husband. Boring game with blocky graphics and dull music.



CAULDRON

Fly around on your broomstick collecting keys and the six magic ingredients. Good soundtrack and graphics which still haven't dated even though this was the first game I ever bought!



69%

BUBBLE GHOST

In Bubble Ghost, save your bubble from certain disaster by blowing it away from spikes and such like. An original idea which worked well, albeit a bit tough.

GHOSTS'N'GOBLINS

The classic arcade game Ghosts'n'Goblins has you running around chucking swords at zombies and flying knights. Great in its time, but looking a little dated now.



68%



60%

JACK THE RIPPER

Prove your innocence for the Whitechapel murders in CRL's over 15e' adventure. Good adventure in two parts with gruesome digitised graphics.



68%

THE MUNSTERS

Control various members of the Munster family in Alternative's tough spin-off of the old TV series of the same name. Nice graphics with bold, large sprites and an instantly recognisable soundtrack. A playable game, though it will take a lot of practice to perfect.

Competition hot will win: The Addams Family on tape or disk (please specify) and next 50 will win a copy of The Munsters on tape. All entrants will receive a copy of the Alternative produced magazine, "GAS".

Send all entries to: Creepy Compo, CPC Attack!, HHL Publishing, Greater London House, Hampstead Road, London NW1 7QQ or FAX on 071-387 9518

The same old rules apply (as always) and the closing date is 20th of November 1992. P.S. All games offered as prizes are new.



60%

SLIGHTLY MAGIC

Slightly Magic was released recently as part of Codemaster's Cartoon Collection. Control Spike and solve puzzles in a bid to rescue Princess Croak. Much like most of Codemaster's cartoon stuff. Good game with flickery sprites.

FIGHTING SOCCER



This is the only football game on the CPC that has music accompanying the matchplay, which doesn't, surprisingly, slow the game down. There's no management, just arcade matches and you can forget references to other normal overhead football games, with sprites only a few pixels square, too. Fighting Soccer has large, bold sprites that get even bigger when objects, such as the ball and players, move higher - upwards toward the front of the screen. This is possible because of the use of fewer sprites as

only five-a-side soccer is played. Games can be played against the computer or another human, as with most football simulators, though with the two player option, players can play on the same side. There is no chance of losing players as a small map, at the side of the pitch, keeps track of each. The time and score are also shown on the display panel.

Each match only lasts 3 minutes, though this

should be long enough for a couple of goals to be scored - not necessarily on your side though! Matches can become confused at times, with the ball being transferred from one player to another in an instant, but even so, Fighting Soccer is still one of the best games in the pack.

KICK OFF 2

In this sequel, Anco decided to go for the more colourful but chunkier MODE 0 graphics. Movement is smooth and speedy. Not as fast as Italy 1990, but faster than the original KickOff. One minute you'll be running along chasing a player, he'll stop and you'll end up in the car park tackling a



Fighting Soccer is only five-a-side, but has the playability of other football games with full squads.



PSYCHO SOCCER

NOVEMBER 1991 • £14.99
OVERALL RATING: 88%

MANCHESTER UNITED

Manchester United is the only management game of this compilation and, as a bonus, it also has an arcade matchplay sequence. These matches are not a patch on those of the other three games, being rather slow with poor quality graphics, but are okay for a kick around.

The management section, on the other hand, is very good, with a stonking tune that plays throughout, and is graphically impressive. The section is totally cursor controlled with icons.

These are clicked upon to view players attributes, alter training, buy and sell players and all the things you can do in most managerial games.

The main drawback, though, is that twice the gameplay means twice the loading - even on 128K machines. You have the option to play just the arcade matches if you don't fancy football management, but you don't have the choice of manager-only play.

Mini. The controls certainly take a bit of getting used to.

A map of some sort (as there is in the 16-bit versions) would have helped gameplay a great deal. As is, you're sometimes left randomly moving character that you can't see in an attempt to get back on the screen. The game's option has improved on the original. Most settings can be varied; wind, time and team tactics to name a few. Leagues and Cup setups can be chosen as well as one or two player 'friendly' matches.

On the down side, sound is limited to a rather pathetic whistle and the keyboard controls are fiddly. The best game in the compilation, even if does look a bit dated.

If you're prepared to sit through all the loading and rewinding then this, no doubt, is up to the standard of the others.

Select your option with the cursor from this main menu screen in Manchester United.



KICK OFF



Kickoff doesn't look up to much, but it plays quite well.

is fast and smooth with players being easily controllable. The control method is the same as with all the other games in this pack; you control the footballer nearest the ball, when the ball is nearer another player, control is automatically transferred to him. Simple!

Again, as in the other games, choice of one or two players is available and league tables/position can be saved to disk or tape.

Sound is poor with only bouncing ball and high pitched whistle effects. The difficulty can also be set for those who feel the opposition is just too good. Playable but not as good as its sequel.

At first sight, KickOff doesn't look like it's worth all the hype originally given to it back in 1990 when it was first released. However, what it loses graphically, with it's Spectrum-type colours and flickering sprites, it certainly makes up for in gameplay. Its multi-directional scrolling

Last month, we looked at the first seven CRTC registers (numbered 0 to 6) and discussed how they were accessed: as a quick refresher, each register is selected by sending the register number to port &BC00 (for example, OUT &BC00,1) followed by the value to set to port &BD00 (such as OUT &BD00,48). We also mentioned the numerous compatibility problems between different models of CRTC. Now, if you're sitting comfortably, we'll launch into the remaining registers:

**REGISTER 7:
VERTICAL SYNC
POSITION (USUAL
VALUE 30)**

In the same way that the "Horizontal Sync Position" (register 2) controls the horizontal position of the screen on the monitor, this register controls its vertical position. Setting it to a higher value (such as 32) will move the screen up the monitor (it's easier to see the results of your experiments if you set the border to a different colour), whereas a smaller value, funnily enough, moves it down. An effect used by demo-makers in the past to give the impression of a larger screen than usual is to draw some graphics towards the top of the screen, with a scrolling message at the bottom, and move this down the monitor using register 7. This places the graphics in the centre of the screen, and makes the demo seem as if it is using an enlarged screen to generate the scrolling message at a low position.

**REGISTER 8: INTERLACE
MODE AND SKEW
(USUAL VALUE 0)**

This register has two functions. Its main function is to select or deselect "interlace", a term which will be familiar to Amiga owners: if selected, it causes the screen to be displayed at a very slightly different vertical position every other frame flyback. This means that, by switching between two screens (say, one at &C000 and one at &4000), an extra-high resolution screen - up to 640 by 400 - can be obtained with a refresh frequency of 25 Hz (i.e. 25 different images every second).

IT'S DEMO

TIME

Attack!

**CharleyTronic continues
with an explanation of the
CRTC, the CPC's very own
Quantel Paintbox!**



MACHINE CODE TUTORIAL

Unfortunately, on a colour monitor, the image usually fades too quickly for it to persist while the second scan (from a different address) is displayed. However, green screen monitors

are more persistent (as you will know if you have seen a green screen switched off after a hard day's coding!), and so this effect is more useful on such screens. Interlace is selected by setting bit 0 (i.e. sending 1 to this register), and turned off by resetting it (send 0).

The other function of this register, which involves bits 4 to 7, is known as "Blanking Delay Bits". These are used on some systems to compensate for the delay in transferring data from screen memory to the CRTC. However, the good design of the CPC means that these aren't needed on our machine.

**REGISTER 9:
MAXIMUM SCAN LINE
(USUAL VALUE 7)**

This determines the number of pixel lines in each character line: the normal value of 7 indicates that each character is 8 lines high, so a value of 1 would tell the CRTC to only display 2 lines. Although it may seem fairly useless to alter this register, it does have some purpose. For example, change the border colour and then set it to a small value (0 or 1). You will see that the screen repeats itself on the monitor and so, by writing a scrolling message on the lines that are displayed, it will be repeated up to seven times on the monitor. With clever use of rasters, it would be possible to have it in a different colour each time!

**REGISTERS 10 AND 11:
CURSOR START/END
(USUAL VALUES 0)**

These are provided for the

option of a hardware-generated cursor on the screen. Although a "CURSOR" line is provided on the expansion port, such an option is not supported as standard and, without a fair amount of mucking about, it's difficult to achieve: besides, the excellent software cursor support in the firmware makes this largely irrelevant. Not a register of much use to demo-writers.

REGISTERS 12 AND 13: START ADDRESS (USUAL VALUES: 48, 0)

Now here's something a bit more interesting! This pair of registers controls the origin address of screen memory. The first ten bits (that is, all eight bits of the least significant register, register 13, and bits 0 and 1 of register 12) are used to control the offset in a particular screen block, from 0 to 2046. These ten bits can be used to generate a value between 0 and 1023, which is doubled to find the offset. So, for example, to scroll the screen left by two bytes, or one MODE 1 character (assuming that it hasn't already been scrolled), send a value of 1 to register 13. This can be done from BASIC by `OUT &BC00,13: OUT &BDC0,1`. Beware, if the operating system causes the screen to scroll after this command has been issued (e.g. by a "Ready" message), then the screen will be put back to what it should be!

Even more interesting revelations come to light by exploring the remaining bits of register 12. Bits 4 and 5 select which 16k block the screen will be situated in: setting both of them to 0 selects the block from &0000 to &3FFF, whereas setting both to 1 selects the standard arrangement of &C000 to &FFFF (hence the usual value for register 12, 48, which is 00110000 in binary): for &4000 to &7FFF, set bit 5 to 0

THE CODE

Only a short piece of code this time, to set the screen up to an overscan format with memory from &0000 to &7FFF: it's intended for use in your own demos, code starting at &8000. This is a good example of how the different registers of the CRTIC are used, and it is compatible with all models of the chip. The "crtc:" subroutine could also be useful in your own demos!

`org &8000`

```
ld bc,&0130: call crtc ;48 columns wide
ld bc,&0385: call crtc ;&85 left hand fine positioning
ld bc,&0233: call crtc ;51 left hand coarse positioning
ld bc,&0724: call crtc ;36 top positioning
ld bc,&0522: call crtc ;34 line screen
ld bc,&0C0D: call crtc ;&0000/&4000 block, 32k screen memory
ld bc,&0D00: call crtc ;screen memory setting continued
```

`ret`

;Set CRTIC register B to C (corrupts AF,B)

```
crtc: ld a,b
ld b,&BC: out (c),a
```

;OUT &BCxx, register selection

```
inc b: out (c),c
ret
```

;OUT &BDxx, value to send

and bit 4 to 1 and for the one remaining possibility of &8000 to &BFFF, bit 5 goes to 1 and bit 4 to 0. The bad news for those of you with 128k (or even more) is that the CRTIC is connected directly to the base memory chips, and so even if you have selected some sort of bank switching arrangement, the CRTIC will continue to display a screen from the first 64k.

Even more? Register 12 has one remaining function to be dealt with, which is the size of screen memory - the CPC usually has 16k of screen memory. Setting bits 2 and 3 of register 12 to zero (or, in fact, just ensuring that either of them is 0) will keep this in operation.

Set them both to 1, though, and the CRTIC will let you access a mammoth 32k of screen memory. When combined with appropriate settings in the CRTIC registers dealing with the dimensions and position of the screen, this lets you obtain "overscan" (i.e. an enlarged screen with no border) fairly easily!

When 32k screen size is selected, two screens (mapped in the normal way) are displayed on the monitor, one after another. These two screens must follow consecutively on from one another: so, if your screen origin (bits 4 and 5) is set at &C000, then memory between &0000 and &3FFF (wrapping around 0) will be used as screen memory, too. This poses the problem that there is a significant amount of important code from &0000 to &003F, which will be displayed as "graphics" on the screen. A better solution, then, is to set screen memory up, starting at &0000 (and hence flowing through &4000 to &7FFF), and

use the screen offset (register 13, and bits 0 and 1 of register 12) to move the origin past this data.

REGISTERS 14 AND 15: CURSOR REGISTER (USUAL VALUES 192 AND 0)

To bring us down to earth with a bump, two more virtually useless registers. These two are designed to define the position of the hardware cursor, but as mentioned above, this isn't supported as standard on the CPC.

REGISTERS 16 AND 17: LIGHT PEN

These registers are read-only and are loaded with the current address being displayed by the electron beam when the "LPEN" line on the expansion port is pulsed. This is designed so that a light pen can detect the electron beam passing, send back a signal and the current screen address (and hence position) can be read from these registers. However, the fact that not all CRTICs are capable of reading registers means that this method is of little use for interfacing light pens.



This month, we deviate slightly from the usual format, as Rob Scott takes an in-depth look at some of the homebrew programs available

PUBLIC SECT

Homebrew programs are those written by enthusiasts who wish to sell them, but not at over-inflated commercial prices. The quality of these programs generally tends to be better than those available in the Public Domain, though in some cases, not good enough (or perhaps too different!) to be sold in bulk by a software house.

The same copyright rules apply as to a game produced by any large company such as Ocean, so don't assume that because homebrew software is cheap, that it is PD - it isn't!

Our first dealings this month are with Pipeline Software, publishers of two excellent games, called Dais'cin with Death, and Rune Magik.

DAIS'CIN WITH DEATH • £4 DISK ONLY • PIPELINE SOFTWARE

In Machine Code (no Sprites Alive, or compiled BASIC here!), is well presented with a useful Redefine keys option, which for homebrew software is rare, and indeed a very nice touch. The graphics tend to flicker and are

Rune Magik is a cross between Dais'cin With death and Firebird's Thrust.



RUNE MAGIK • £4 DISK ONLY • PIPELINE SOFTWARE

Rune Magik is another Gilbert collect-em-up! This stars our stumpy hero, as in the previous game. This time, instead of being set in rooms, Rune Magik takes place over a maze of caves (much like those in Firebird's Thrust 2) which you wander around collecting objects. This game is much the same as Dais'cin with Death, though, with a larger playing area and therefore better value for money.

RATING:

70%

Pipeline Software also undertakes the publication of other homebrew games and utilities. If you have any of your own, then you could do a lot worse than drop Robin a line at the address at the foot of the page.

CLOAKER • A Swinbourne

Cloaker is a war game for one or two players. Your mission is to gain control of an alien planet by winning 5 sectors. If one-player mode is selected, the player plays against the GPC.

At the start of each sector, you are given 5000 credits, with which weapons and armour may be bought. The players' weapons are selected from the weapons menu, from which the degree of protection can also be chosen. A Gun represents an ordinary army; the Armour gives some protection from attack, and the Tank offers the protection of Armour, plus some fire-power.

After weapons have been selected, the sector screen displays a landscape of Alien squares and neutral squares. Taking turns with the other player, armies can be deployed into these neutral squares.

The actual warfare begins



Dais'cin With Death - a sort of homebrew Manic Miner style game.

The first thing to come into my head when I saw this was how very Manic Minerish it was. You control a small man who jumps across large gaps onto moving platforms, etc., in an attempt to obtain the key to the exit of each level. The game, all written

not of particularly high standard, but apart from this it's obvious that Robin Gilbert is a very proficient programmer.

RATING:

65%

IC CTOR

TOWN QUEST • £2.00 + DISK + SAE • Dune Programming

This BASIC adventure game was written by young programmer Danny Taylor, who is a big fan of adventure games and the inspiration for this one was derived from Bard's Tale, Miracle Warriors and Fighting Fantasy.

The storyline goes something like this: Many years ago, the land of Murdinia was a peaceful and beautiful country, inhabited by Humans, Elves, and Dwarves who lived in harmony and shared the land between them. One day, a young

magician's apprentice was experimenting with magic while his master was away (why is it that apprentices always seem to do this?), when he came across an old dusty book, hidden in a chest full of ancient artifacts. He opened the book and all the pages were blank, except one. This single page contained a chant which was not labelled and was like nothing the young man had ever seen before. So, in his curiosity, he read it out loud to see what would happen. This proved to be a big mistake because, unknown to him, the magic chant had freed an evil warlock who had been banished forever into the bleak dimension of limbo...

You play the part of one of one

after the initial set-up, with the aim to capture target squares before the enemy. If you decide to attack an alien square the screen will change to display the battle. This is where your army starts depleting!

The graphics in the games are pretty good, easily up to the standard of Laser Squad and, for anyone interested in

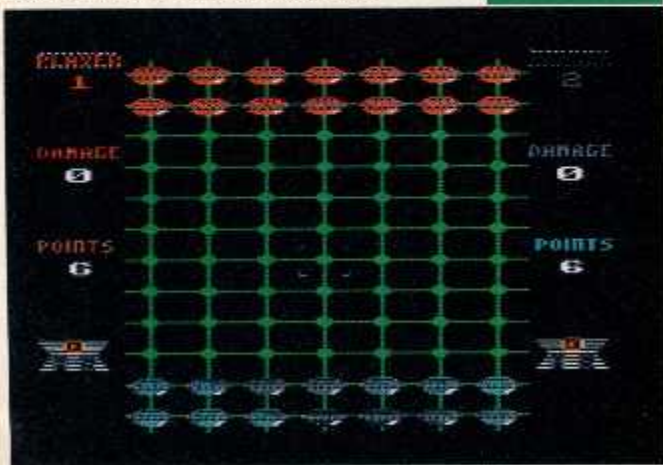
Angela Swinbourne's Cloaker challenges you to take control over a whole planet...phew!!

the more specialised field of strategic wargames, the game is well worth a look.

There are more wargames in the series, but Cloaker is well thought out and full marks must go to Ms. Swinbourne for the work put into creating it. If strategy is the name of YOUR game, then this is for you.

RATING:

70%



Angela Swinbourne
11 Vicarage View
Redditch
Worcs
B97 4RF

Artificial Intelligence
19 Lee Street
Liversedge
West Yorkshire
WF15 6DZ

Domain PD
44 Echline Grove
South Queensferry
EH30 9IU

GDPD Library
49 Woodville
Barnstaple
North Devon
EX31 2AY

Gnasher PD
36 Sweetmans Road
Shaftesbury
Dorset
SP7 8EH

CONTACTS

Pipeline Software
9 Brynglas Terrace
Pyle
Bridgend
Mid Glamorgan
South Wales
CF33 6AG

Dune Programming
18 Buttmarsh Close
Woolwich
London
SE18 7JA

Robot PD
2 Trent Way
Oakham
Rutland

Signal Software PD
83 Longleate
Great Barr
Birmingham
B43 6PY



Town Quest is a cross between Bard's Tale, Miracle Warriors and Fighting Fantasy.

hundred skilled warriors sent out into the wilderness by the resistance movement to kill the Evil Warlock. When Town Quest is run, a menu appears, in which the instructions, Credits, general information or play can be chosen.

Either Human, Elf or Dwarf can be chosen as the character of the warriors, each has its own strengths and weaknesses and the outcome of the game is somewhat dependent on the chosen character and whether you like fighting the various monsters. It is quite safe to say that Town Quest has more monsters in it than seen in any other game.

The main screen is divided into 3 windows. The first displays status as Skill, Stamina, IQ, Current Level, Attack damage, Gold, Experience, Food, Maze Level, and monsters killed. The second window is the responses menu, where information about the current situation is displayed. The third window shows the map, from which progress can be observed.

Town Quest is nicely presented and it is obvious that a great deal of time and care has gone into its creation. The only minus point is its lack of speed, but apart from that, a good game!

PD REVIEWS

ALYSSA GDPD SOFTWARE - AND OTHERS!!

Alyssa - the game database (a database for games. Ed.) was written by Julian Cassin. "It is not Public Domain, but version 1.6 may be freely distributed by Amstrad users for their own personal use", says the introduction at the beginning of the help file.

This excellent utility falls into the category of "almost PD". It was designed for games

This PD database's speed and flexibility has to be seen to be believed!

players - collectors and cataloguers to efficiently organise and store information about their collections. It is 128k disk only as it uses the extra RAM for data storage. The copyright message gives the impression that the author likes Tiffany!

The main options available are displayed in the main menu. The EDIT sub-menu presents further options, including APPEND, which adds a new record to the database file; EDIT, which, erm... edits an existing record; BROWSE, to view records, without editing; SEARCH, which searches the whole database file and

Includes wildcard options; PACK deletes selected records from the database file; INVERSE inverts all TAGged and UNTAGGED files and last, but by no means least, is the NEW option, which clears the current database.

The FILE sub-menu allows you to CATALOGUE a disk, LOAD/SAVE/MERGE files, and also included is a COMPARE option, which compares two database lists! Disk drive support includes 3.5" accessing - even under ROMDOS!

The PRINT sub-menu, has options to print to screen, file or PRINTER, define the print

mode and definition of start and stop record numbers.

The SORT sub-menu hides a very powerful sorting routine, which is one of the fastest available. You can sort by SIZE, TYPE, MEDIA, NUMBER and NAME.

The XANY sub-menu comprises the kind of options and external support that makes this program so very good. From this menu it is possible to issue external ROM commands (RSX's), chain external subroutines, display the memory map and status info and display information about Alyssa.

There's nothing adverse I can say about this program. The quality of the programming is superb, the SORT routines are fast, and it's neatly presented. Definitely goes straight into the CPC Attack! top ten of PD software!

RATING:

93%

GDPD were the library that donated this program to us. Run by Dave Lawson and Ged Layton, GDPD are rapidly expanding at the rate of roughly four per week and currently have around 50 selections. They can supply software on 3" or 3.5" disk, in normal or MS800 formats. Each side costs 35p, making them one of the cheapest PD libraries on the Amstrad scene.

NEWS

Alan Scully, formerly of Scull SL library has left the CPC scene for good. Word has it that Scully has sold his Amstrad equipment, and departed to pastures new. Scull SL has been renamed Domain PD, and is being run by Graeme Chesser. The copying fee is £1.00 for 2 sides of a disk, and you no longer have to subscribe to the Scull disczine. Readers of Artificial Intelligence Fanzine can get 25p off Domain Orders.

Two new libraries open this month. The first is Signal Software PD. SSPD can supply you with top quality PD software on either 3.5" or 3" disk, or even tape. The copying charge is £1.00 per side. The second is Gnasher PD, run by Matthew Parfitt who sent in a disk stuffed with programs, most of which he wrote himself.

Robot PD have released PowerPage128, the 128k version of

the best DTP program available. PP128 features a very fast zoom mode, no disk accessing, (due to extensive use of the expanded memory), RAM-based headline fonts and Pull-UP menus! All this and much much more.

Artificial Intelligence - The A5 CPC Fanzine is a year old today. Published every other month, it contains 32 pages of the latest news, gossip and reviews. Tim Blackbond, editor of AI is renowned for his somewhat strange sense of humour and AI is full of it (humour that is!). It costs £1.00 plus an A5 SAE. If you send a disk with your order, AI will fill both sides with some rather nice exclusive PD programs. Tim asked us to point out the very important fact that each issue has a different coloured cover!

Presto PD, run by Matt Gullam has re-organised his PD library. This was to get rid of some of the less useful programs, in order to provide a better quality of service. Spanning over 100 sides of PD software, the PD is available on 3 and 3.5" disk and costs 25p per side. As well as running a PD library, Matt also edits a monthly fanzine, Presto News, dealing with all aspects of the CPC which can be obtained by sending 75p and an SAE.

ONLY POOLS AND HORSES

FOOTBALL BOXFORM The ONLY pools program written by a GENUINE EXPERT who has been employed as such by Littlewoods. He KNOWS how to help you win. He can't guarantee you'll become a millionaire (if he could he'd be one himself) but he can GREATLY IMPROVE YOUR CHANCES OF WINNING ON THE POOLS OR FIXED ODDS. The program consistently forecasts 50% more draws than would be expected by chance. A.P.U. mag. A RECORD UNMATCHED BY ANY OTHER PROGRAM OR POOLS EXPERT. Homes, always, draws shown in order of merit. True odds for every match. Covers League & non league. Australian Pools program included in the price.

SUPER PLANNER THE BEST PERM GUIDE OF ALL TIME. Details of OVER 400 ENTRIES of LIT, TV and newspaper perms. ALL CHECKED IN SECONDS by your computer.

RACING BOXFORM Fast and profitable. "Quite remarkable results... strike rate of 64.3% averaging 3/1 per winner". B.S.U.G. mag. Price includes HANDICAP WINNER 1000 winners every year - 26% at 5/1 or better.

PRICES (tape or disk) £19.95 for one; £29.95 any two; £39.95 all three.

FOOTBALL TOOL KIT Football Boxform, Super Planner, Littlewoods Elock Perms Planner & a program to work out bets. £34.95

RACING TOOL KIT Racing Boxform plus 5 further programs which enable you to keep your own records, produce and amend form and time ratings, work out almost any bet. £34.95

SPECIAL OFFER Both tool kits £52.95

Please make cheques or Postal orders payable to:
BOXOFT (CPC), 66 Albans Meadow, Boston, South Werrill LA4 9SD
Tel: 051 336 2668



AMSTRAD REPAIRS

SICK OR POORLY AMSTRAD DON'T DESPAIR CALL TODAY FOR A SPEEDY REPAIR

- Fixed price repair on Amstrad models **CPC 464** £35.00
- Highly skilled and experienced engineers **CPC 6128** £40.00
- 90-day warranty on repair **OTHERS** POA
- 7 day turnaround
- Technical support help line (If disk drive is beyond repair there will be an additional charge of £25 for replacement)
- Send your computer today enclosing payment or phone

TEL 0733 390707 E.R.C.

UNIT 31 • WORKSPACE HOUSE • 28/29 MAXWELL ROAD • PETERBOROUGH PE1 7JE

AMSTRAD GAME CARTRIDGES FOR 6128+/464+/GX4000

TITLE	BOXED WITH INSTRUCTIONS	UNBOXED NO INSTRUCTIONS
Klax.....	£24.99	£14.99
Pro Tennis Tour.....	£24.99	£14.99
Batman.....	£24.99	£14.99
Operation Thunderbolt.....	£24.99	£14.99
Barbarian II.....	£24.99	£14.99
Navy Seals.....	£24.99	£14.99
Robocop II.....	£24.99	£14.99
Pang.....	£24.99	£14.99
Switch Blade.....	£24.99	£14.99
No Exit.....	£24.99	£14.99

Special offers: 10 Unboxed games (all different) £100.00

Amstrad GX4000 Games Consoles with free game £59.99
Amstrad Paddle Controller £9.99

Amstrad MP3 Modulator/IV Tuner, for use with CTM644 monitor.....	£29.99
Amstrad CPC464 cassette mechanism with tape head and motor.....	£29.99
Amstrad 464 head alignment tapes.....	£9.95
Tape Head De-Magnetizer.....	£9.99

Prices include VAT, postage and packing

All orders by return: Cheque/Visa/Access
Trade-In-Post, Victoria Road,
Shifnal, Shropshire TF11 8AF

Tel/Fax (0952) 462135



STRATEGY SOFTWARE

Wargames for the Amstrad CPC

- The First World War** - WW1 - Conflict between central powers and Triple Entente.
Disk £9.99 Tape £9.99
- The Eastern Front** - WW2 - Conflict between Soviet Union and Germany.
Disk £9.99 Tape £9.99
- D Day** - WW2 - Invasion of occupied France by Allied Forces.
Disk £9.99 Tape £9.99
- Battle Of The Bulge** - WW2 - Last major German offensive in the west.
Disk £9.99 Tape £9.99
- The Fall Of France** - WW2 - Invasion of France and Low Countries by Germany.
Disk £9.99 Tape £9.99
- Compilation** - Contains 4 wargames which are: The Final Conflict, Kursk, The Clash of Armour, Cannae 216BC and Operation Barbarossa.
Disk £9.99 Tape £9.99

State machine type. Prices include postage. Overseas add £2.00

Cheques/Postal Orders Payable to Strategy Software
STRATEGY SOFTWARE (AT), 32 Albert Street, Seaham, Co Durham SR7 7LJ

Pipeline Software

Original CPC software & firmware tutorial guides



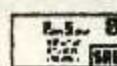
Original disc based programs for the CPC. From only £2 each! Arcade, adventure, strategy, serious applications and compilations.

FREE programming advice for all programmers!!



Assembly language tutorials & the CPC firmware, only £3 each! Average package 20-25 pages, packed with top tips!

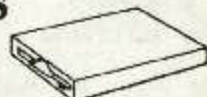
For complete lists, send a SAE to Robin Gilbert, at:-



Pipeline Software (CPC), 9 Brynglas Terrace,
Pyle, Bridgend, Mid Glamorgan, CF33 6AG.

SD MICROSYSTEMS

3 1/2" DELUXE DRIVES FOR THE AMSTRAD CPC RANGE



the 'MAXI' only £84.95 (includes power supply unit).

- Side switch allows maximum compatibility. Operates as a standard B drive under CP/M or Amstrad and with all high-capacity (800K) software.
- Top-quality slimline TEAC unit - simply the best. Just 7" x 4" x 1" high.
- Ideal second drive for the 6128 or 464 with DDI. Quiet and economical.
- FREE 800K software and 3" to 3.5" file copier plus a pack of 5 discs!
- Complete package includes all cables/connectors. Just plug in and go!
- FREE power'n' RANDOM ACCESS filter. Also available separately at £14.95
- Adaptor for 6128 PLUS £5.00 extra. *Extra discs at £7.50 per ten.

Serious Software for the CPC:

Stock/Accounts £39.95 Integrated 6128 stock control and invoicing.	Page Publisher £24.95 Fast DTP Package for 6128/expanded 464.
General Ledger £29.95 Simplified business book-keeping on the 6128.	Picasso Art £14.95 A powerful Wok 1 screen designer and printer.
CPC-PC Transfer £19.95 We also offer data conversion from £5/disc.	Picture Disk 1 £12.50 100s of quality clip-art graphics for Page Publisher or Stop Press (state).
New! BooTracker £14.95 Make music with this advanced Soundtracker!	Picture Disk 2 £12.50 Volume two of extensive clip-art library.
Home Accounts £14.95 Handles bank/cash/credit cards/savings etc.	NEW! Front Runner £14.95 Apple Mac-style front-end with a superb set of ICON-driven utilities for easier management of your Discs and Desk-Top by Joystick or Keys.
Disc-Base £12.50 Fast, automatic indexing of all your discs.	

All software is supplied on disc and runs in 64K unless otherwise stated.
PCW Business software and computer consumables also available (SAE list)
UK Delivery per order: £1.00 software. £5.00 drives. £7.50 courier.

When ordering, please state computer and printer type.

Send cheques, POs or Stamped SAE for current catalogue: (DEPT ATTACK)
SD Micros, PO Box 24 Holbeach Lines. Tel: 0406 32252

MINI OFFICE 2

Despite its name, Mini Office 2's real forte is domestic usage such as keeping household accounts, writing personal letters, maintaining an address book (and the Bridge Club membership list), printing labels and graphics, and even accessing electronic mail. MINI OFFICE 2 can handle them all - but how well does it really perform? Vic Barnes gives it a test

2 DATABASE

The database module is as good as many individual programs which have been marketed for the same price as the entire MINI OFFICE 2 package! Its only drawback is that it doesn't give much flexibility when printing the contents of a file.

Perhaps the most interesting feature of the database is its ability to carry out calculations. This enables the keeping of stock files, sales records, club subscriptions and even profit and loss accounts. The mathematical routines will also work out averages! Many 'full-blown' databases often allow only addition and subtraction. A simple, but remarkably effective marker system allows the selection of individual records, or groups of records.

The database and WP work together to allow simple mail merging, although this is not actually a module in itself.

Once again, the embedded commands are used for importing the appropriate fields, from the data file, into the WP text

and much care is needed. Spaces should be left in the document for the imported information or text will be over-written. This is not too much of a problem as you will mostly import names and addresses onto the top of the document, on lines of their own.

With intelligent use, the mail merge feature is a valuable bonus and will save an enormous amount of keyboard work.



Entering records could hardly be easier. There are 20 fields available for each record and a maximum of 250 records to a file. Five parameters must be filled in when entering data into each field of a record. These are: Alpha, which requires to know if data is alphabetic or numeric; Decimal - field contains numeric data to two decimal places; Date - this one is obvious; Integer - the field will contain only whole numbers; Form - the field's numeric data will be calculated according to the formula entered.

1 WORD PROCESSOR

The WPmodule in Mini Office 2 is obviously not in the Brunword or Protext class, but will comfortably fulfil most domestic and small business requirements. Don't ask it to do anything really complex because it is pretty basic, though it does have more power than is at first apparent.

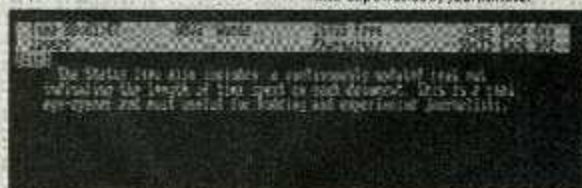
Most text handling features such as full justify, word-wrap, centring, spooling, cut and paste, and mail merge are available. You can even 'embed' various print effects in the document, but these must be used with extreme care. Underlining certain words and phrases proved to be the big problem.

Mini Office 2's system of embedded commands requires the use of the

function key <f1> to prefix a decimal, ESC code. This effect must also be switched off with a similar code, both of which can be quite long, taking up a fair bit of space. These extra spaces show up on screen and can seriously effect formatting (and printout) if not used with extreme caution.

Other features worth mentioning include the ability to change the monitor colour display. There isn't a combination you can't use, or try out. This feature is so good I now use one of those discovered in MINI OFFICE 2 for my Protext display!

The status line also includes a continuously updated read-out indicating the length of time spent on each document. This is a real eye-opener and most useful for budding, and experienced, journalists.



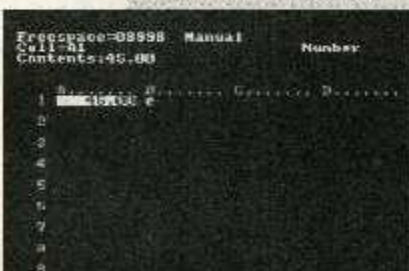
3 SPREADSHEET

I cannot imagine any small business, or individual user, requiring a more sophisticated spreadsheet than that included in MINI OFFICE 2. 'What if?' calculations are possible as well the obvious, instantly accessed 'profit and loss' account.

A generous matrix (grid) is allowed, but the exact size is set according to the type of information to be entered. One of the most natural formats is to enter the months of the year as columns (on the top line)

and various debits and credits as lines (down the side), rather like a graph. Formulae can be entered in selected cells to give individual totals, gross and net totals, averages and VAT, etc.

Obviously, for printing purposes the nearer you can configure the grid to A4 format the better. If you have so many categories this is impossible, fear not, MINI OFFICE 2 allows you to select required sections for printing. This makes it possible for even a maximum-size spreadsheet to be printed on a series of single sheets.



Amending and entering information is quick and comprehensive with the use of 18 mnemonic 'hot keys'. These cover every input operation you're likely to need, such as (D)uplicate cell; (A)mend at cursor; (C)alculator; enter (S)tring; (D)epos cell; (L)ock cell; (U)ppate, etc, etc.

4 GRAPHICS . . .

Saving to a Graphics Data option in the spreadsheet, and printing it via the graphics module, is the main purpose for including this in the package.

Graphic printouts of such professional looking diagrams as pie charts, graphs, and bar and line charts are easy with MINI OFFICE 2. Mind you, it won't do much else, so don't junk that pencil and ruler just yet!

Mini Office 2 only makes provision for 9-pin dot matrix machines and has emulations for Epson FX850 and DMP-1 printers. You can print your data with 24-pin, all-singing, all-dancing, high-tech, super machines but your pie chart will be tall and skinny and line charts and bar charts will not be exactly as you would wish: they

should be better.

There is one other option. According to the manual it should be possible to scale graphs. Although the manual doesn't explain very clearly how to do this, it is possible to juggle ratios and get an acceptable 24-pin printout of a pie chart.

To create diagrams, data must be entered from the spreadsheet into a special file. The Graphics module will then access this file and print the results. It's therefore important you stick rigidly to the parameters detailed.



6 LABEL PRINTING

Essentially, this is for multiple printing of labels from addresses already contained in the MINI OFFICE 2 Database. Obviously, individual labels can also be printed.

This program should solve most problems, but without tractor-feed labels, difficulty may be experienced.

Designing a label for style and content is a doddle: simply enter the database field you wish printed, one per line. Strangely, the mail merge inverse codes are not used, instead each field is preceded by the hash sign, eg. #01 prints field 1.

Printer control codes can also be entered and this will let you select font style, italics, bold and/or proportional etc. Your finished format should not

exceed 38 characters wide by 18 deep when printed. You can elect to use a default format if this suits you better, but be careful because this selection results in as many fields as possible being printed on each label.

During the course of printing you are advised how many labels are left and how long this will take - quite useful if you've got a heavy date and 932 labels to go!

MINI OFFICE 2 will allow you to print from 1 to 7 labels across a sheet. You can also edit the data if you wish and even try a single label test before closing your eyes and going for broke!



5 COMMUNICATIONS

This module enables you to link your CPC with another computer, or hook up to MicroLink, or Telecom Gold and enjoy the benefits of electronic mail and other exciting services!

All this is possible if both computers share the same protocol. Luckily, you don't need to configure the CPC for this because MINI OFFICE 2's communication menu will stem the tears and provoke a smile. It does all the work while you sit back and wait to chat.

The easiest way you can reap this harvest is by owning a modem and an RS232C serial interface.

However, if you only wish to communicate with Junior's Apple Mac a simple lead

between the two will do the trick.

Mini Office 2 controls not only protocol, but also Buffer Options and Display Options. The former is worth learning thoroughly because it will save considerable time by making the most efficient use of the link and its memory configuration. There will also be a worthwhile saving on your telephone bill.

The Display Option controls how you receive data and the method of viewing, or printing. It also separates the screen into two halves - one half for displaying the data received and the second for transmission data. If the other computer does not echo back your transmission, selecting an Echo Option will display 'local echo' (your own data).



RATING
88%

DOCUMENTATION:
EASE OF USE:
VERSATILITY:
VALUE FOR MONEY:

POKES MAPS & TIPS

Yo! Welcome to the pleasure dome

GAMEOVER 1 & 2

Simon Peters of Somerset has sent in the GAMEOVER 1 & 2 passwords. GAMEOVER password is 10218 and GAMEOVER 2 is 84187.

VINDICATORS

The passwords to the other levels are OPPENHEIMER & ENOLAGAY

F-16 COMBAT PILOT

At the beginning of your game enter your callsign as MORTS TRESAD (Desert storm backwards) and you will be able to do the final mission without completing the other missions first. Thanks to Adrian Smith for that one.

ENDURO RACER

Reduce you speed to 0 then hold down keys 0,1,4,5 and right arrow. Now you can go full speed without hitting anything.



TURRICAN

Adrian Smith lends a helping hand on Turrican. Press "H" to pause the game and hold down the keys V O N together to get 99 of everything and by pressing [ESC] you can skip a level.

3 WEEKS IN PARADISE

After you've died hold down the keys K A T H for infinite lives.

DELIVERANCE

Emma Hall has sent in a tip for infinite lives on this game, hold the keys I,L,I,K,E on the title screen.

GEMINI WING

Anyone stuck on this shoot'em'up? well

Robert Guy has supplied all the level passcodes for us.

LEVEL	PASSWORD
1	THESTART
2	EYEPLANT
3	WHATWALL
4	GOODNITE
5	SKULLDUG
6	BIGMOUTH
7	CREEPISH



MULTIFACE POKES

(T) FINAL FIGHT
1F31 xx xx Credits
1F36 xx xx Lives
(Player 1)
1F37 xx xx Lives
(Player 2)

(T) FLIMBO'S QUEST
7724 00 Infinite lives

(T) POSTMAN PAT
1923 00 Infinite lives

(T) SEYMOUR/HOLLYWOOD
61C8 00 Infinite lives



(T) TIME SCANNER
1211 00 Infinite balls

(T) 720 DEGREES
9528 00 Infinite credits
80B8 00 Infinite Tickets

(T) RICK DANGEROUS 2
9F99 C3 Invulnerability

(T) NEBULUS
85EF 00 Infinite lives

(D) LOOPZ
2A6F A6 Infinite lives

(D) LASER SQUAD
4652 00 Infinite money

(T) RYGAR
2C38 A7 Infinite lives

(T) STAR WARS
4515 00 Infinite shields

(T) UNTOUCHABLES
0FD2 A7 Infinite time

(T) TROLL
5461 00 Infinite lives

(T) POPEYE 2
1767 00 Infinite bonus

(T) MYSTICAL
1E3F 00 Infinite lives

(T) R-TYPE
927B A7 Infinite credits

(T) RENEGADE 3
4DDF C9 Infinite lives

(T) TOMBSTONE
90C3 00 Extra energy

(T) VIGILANTE
5816 A7 Infinite lives

(T) PROHIBITION
0FB2 B7 Infinite hide
time
0B69 B7 Infinite lives

CORRESPONDENCE



JACK THE NIPPER 2 [NV1]
Robert Guy of Sunderland wants some tips Jack the Nipper 2, "All I can do is make Tarzan fall off his rope" he says.

NAVY MOVES [NV2]
Peter Tuck needs a Multiface poke for for the tape version of Navy Moves.

HELTA SKELTA [NV3]
Lastly, Simon Cobbler wants the passwords for the last three passwords Helta Skelta.

Thanks to everyone who sent in your cheats to me this month, especially to **DARREN CONNER** who sent in his life's work on hacking with a multiface, so a prize goes to you. Please send me a wish list of games for your prize, but as always keep it to about £25. The Correspondence pages are being supported well but we need more MAPS.



PRINCE OF PERSIA

On level one, instead of going to get the sword first go right to the first guard and with a well timed jump you can go straight through him, then on level two you will have your sword. I've tried and it works, nice one Adam Newton of Cheshire and Matthew Segneur who also found that one.

DOUBLE DRAGON 2

Matthew Jones of Northants. If you've got a group of bad guys in front of you hold your joystick in the "flying kick" position and they'll all be knocked over then every time they try and get back up they'll be knocked back down.

ALIENS

Matthew Segneur has sent a playing tip for Aliens which goes as follows: If one of your characters hangs around for too long or accidentally shoots at nothing when the proximity meter is sounding, press a character selection key as quickly as possible and the alien will continue to parace around the room instead of attacking.

LOTUS ESPRIT TURBO CHALLENGE

Gremlin's Lotus Esprit Turbo Challenge has been well and truly beaten by David Carmichael, Brain Smith and John Willis. The race guide for tracks 10 - 32 (1-9 are already given to you.) below shows

the direction each bend you come to, R= Right turn, L=Left turn and S/(R or L)= "S" bend starting with a left or right turn.

Track

- | | |
|----|---------------------------------------|
| 10 | S/R,R,R,R,R,L,L,S/R,R |
| 11 | R,S/R,R,R,R,L,R |
| 12 | R,R,R,L,R,L,R,R,R |
| 13 | S/R,R,R,R,S/L,L,R,S/R,R |
| 14 | R,L,L,S/L,R,S/L,R |
| 15 | All left turns! |
| 16 | L,R,R,L,R,R,R |
| 17 | L,R,R,L,R,R,L,L,R,R |
| 18 | R,S/R,R,S/R,L,R,R,R,R,S/L,R |
| 19 | R,R,R,R,R,L |
| 20 | S/R,R,S/R,L,R,R,R,R,S/L,R |
| 21 | All rights turns! |
| 22 | L,R,S/R,L,R,R,R |
| 23 | R,L,L,R,R,R,R |
| 24 | S/R,S/R,L,L,L,R,L,R,
L,L,L,R,R,R,R |
| 25 | R,S/L,S/L,R,R,R |
| 26 | R,L,R,L,R,R |
| 27 | R,L,R,R,R,R,L,R,R |
| 28 | L,R,R,L,L,L,S/R,L |
| 29 | R,L,R,R,L,R,R |
| 30 | R,L,R,R,L,L,R,R,L,R |
| 31 | R,R,L,R,R,L,L,R |
| 32 | L,L,S/L,R,R,L |



SUBSCRIBE!



DID YOU MISS ANY OF THESE ISSUES?

IF YES

MAKE SURE YOU DON'T MISS ANOTHER
Subscribe **TODAY** and get every issue delivered to your door
PLUS 3 MORE FREE!

IF NO

YOU OBVIOUSLY KNOW WHAT YOU WANT!

SUBSCRIPTION FORM

CPC 1192

HOW TO ORDER:

Just fill in the order form and send it with your remittance made payable to HHL Ltd to: HHL Subs Dept (TG), Lazahold Ltd, PO Box 10, Roper Street, Pallion Industrial Estate, Sunderland SR4 6SN. For ease of payment we can offer subscribers a variety of ways to pay, details of which are outlined below

NAME

Mr/Mrs/Miss/Ms
(delete as appropriate)

ADDRESS

POSTCODE

Please send me 12 issues of CPC ATTACK!

UK residents - £22.20 for 12mths

Europe Airmail - £35.20 for 12 months

Rest of the world Airmail - £50.70 for 12mths

1 I enclose a cheque (or postal order) made payable to HHL Ltd.

2 OR please debit my Access/VISA Card no.

Expiry date _____ Date _____

Signature _____

3 ALTERNATIVELY Access/VISA card holders may order their subscription by calling (091) 510 2290 during working hours. Please ask for CPC Attack! Subscription Department and have your card to hand.

4 SHOULD YOU WISH TO PAY BY DIRECT DEBIT

Please complete the following details

Your Bank _____

Address _____

Originator's No: 724657

a) Please write the full postal address or your bank branch in the box above

b) Name of account holder _____

c) Account number _____

Banks may refuse to accept instructions to pay direct debits from some types of account

d) Sort code _____

e) Your instructions to the bank and signature:

I instruct you to pay direct debits from my account at the request of Headway, Home and Law Ltd.

The amounts are variable and may be debited on various dates.

I understand that Headway, Home and Law Ltd may change the amounts and dates only after giving me prior notice

I will inform the bank in writing if I wish to cancel this instruction.

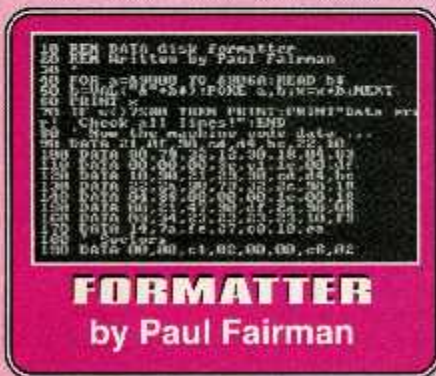
I understand that if any direct debit is paid which breaks the terms of this instruction, the bank will make a refund.

Signature _____

Date _____

ATTACK!

LISTINGS



FORMATTER
by Paul Fairman

Why put up with slow CP/M, when this handy utility will format your disk in 30 seconds

This neat little program will format a disk-to-DATA format within about 30 seconds. Paul supplied it in Hexloader and assembly language, for those readers who possess DEVPC or MAXAM.

```

10 REM DATA disk formatter
20 REM Written by Paul Fairman
30 '
40 FOR a=&9000 TO &906A:READ b$
50 b=VAL("&" + b$):POKE a,b:x=x+b:NEXT
60 PRINT x
70 IF x<>7580 THEN PRINT:PRINT"Data
  error! Check all lines!":END
80 ' Now the machine code data ...
90 DATA 21,0f,90,cd,d4,bc,22,10
100 DATA 90,79,32,12,90,18,04,83
110 DATA 00,00,00,3e,c1,1e,00,df
120 DATA 10,90,21,29,90,cd,d4,bc
130 DATA 22,2a,90,79,32,2c,90,18
140 DATA 04,86,00,00,00,1e,00,16
150 DATA 00,21,47,90,df,2a,90,06
160 DATA 09,34,23,23,23,23,10,f9
170 DATA 14,7a,fe,27,c8,18,ea
180 ' Sectors
190 DATA 00,00,c1,02,00,00,c6,02
200 DATA 00,00,c2,02,00,00,c7,02
210 DATA 00,00,c3,02,00,00,c8,02
220 DATA 00,00,c4,02,00,00,c9,02
230 DATA 00,00,c5,02
240 CALL &BC0E,1:PRINT"Insert disk to
  format and press SPACE":CALL
  &BB18
250 CALL &9000:REM call m/c
  
```

For the very brave among you, here follows the source code. This code was written for Devpac assemblers, but can be typed into

This month, among our code-mungus collection of rebellious routine, we have a disk formatter, a CATalogue printing routine, a dump-tastic screen dump routine, an unusual simulator, and a game called Heart Attack!

MAXAM by removing the ENT\$ in line 20, and not using any line numbers

```

10 ORG #9000
20 ENT $
30 ;disc formatter
40 ;written on DEVPC gen3
50 LD HL,COMMAND
  ;pointer to command name
  ;(ctrl+f)
60 CALL #BCD4
70 LD (FARCALL+0),HL
  ;store far call address
80 LD A,C ;ROM select address
90 LD (FARCALL+2),A
  ;store ROM number
100 JR FOUND
110 COMMAND:
120 DEFB #03+&80
  ;BIOS select format
130 FARCALL: DEFS 3
140
150 FOUND:
160 LD A,#C1
  ;SELECT DATA FORMAT
170 LD E,0 ;REFERS TO DRIVE A
180 RST #18
  
```

```

;EXECUTE COMMAND
  WITH THE
190 DEFW FARCALL
  ;FARCALL
200 LD HL,COMM ;
210 CALL #BCD4 ;
220 LD (CALL+0),HL
230 LD A,C
240 LD (CALL+2),A
250 JR YES
260
270 COMM: DEFB #06+&80
280 CALL: DEFS 3
290 ;ABOVE SAME AS OTHER
  EXAMPLE BUT SETS
300 ;RST#18 TO "BIOS
  FORMAT TRACK"
310 ;INSTEAD OF "BIOS
  SELECT FORMAT"
320 YES:
330
340 LD E,0 ;DRIVE A TO FORMAT
350 LD D,0 ;TRACK TO BEGIN
  FORMATTING AT
360 LOOP:
370
380 LD HL,HEADER
  ;ADDRESS OF FORMAT
  INFORMATION
390 RST #18
  ;BIOS FORMAT TRACK
  CALL
400 DEFW CALL
  ;WITH POINTER TO
  COMMAND
410 LD B,9
420
430 TRACK:
440 INC (HL) ;INCREASE TRACK
450 INC HL
460 INC HL
470 INC HL
480 INC HL ;MOVE POINTER
490 DJNZ TRACK
500 INC D ;NEXT TRACK PLEASE
510 LD A,D ;LOAD TRACK INTO A
520 CP 39 ;DOES IT = 39 (IE
  FINISHED)
530 RET Z ;IF SO THEN STOP
540 JR LOOP
  ;CONTINUE UNTIL
  TRACK 39
550 ;BELOW GIVES
  SECTORS ETC
560 HEADER:
570 DEFB 0,0,#C1,2,0,0,#C6,2,0,0,#C2,2
580 DEFB 0,0,#C7,2,0,0,#C3,2,0,0,#C8,2
590 DEFB 0,0,#C4,2,0,0,#C9,2,0,0,#C5,2
  
```

```

10 Screen Dump
20 (c) Michael Beckett
30 For CPC ATTACK!
40 SAVE BEFORE RUNNING!
50
60 MEMORY &94FF
70 PRINT "Please wait..."
80 addr=&9500:st=addr
90 FOR a=1 TO 20
100 READ a$,c$
110 cs=0
120 FOR byte=1 TO 24 STEP 2
130 b=VAL("&" + MID$(a$,byte,2))
140 POKE addr,b
150 addr=addr+1
160 cs=cs+b
170 NEXT
180 IF cs<>VAL("&" + c$) THEN 460
190 NEXT
200 CALL &9500

```

SCREEN DUMP by Michael Beckett

Send your screen to your printer with this great little type-in.

This screendump program will dump the graphic contents of a CPC screen to any Epson compatible printer. To use it, type in the listing, SAVE it, and then RUN. To dump a screen to printer type **SCRDUMP,x** where x is the quality (1 is draft, 3 is high quality).

```

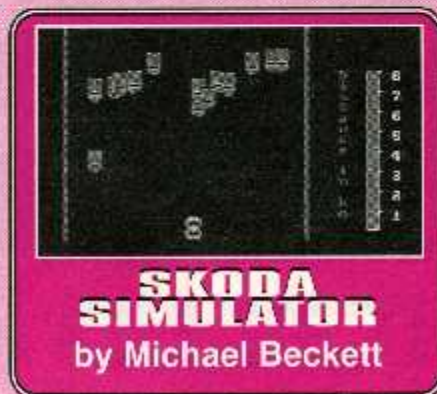
10 Screen Dump
20 (c) Michael Beckett
30 For CPC ATTACK!
40 SAVE BEFORE RUNNING!
50
60 MEMORY &94FF
70 PRINT "Please wait..."
80 addr=&9500:st=addr
90 FOR a=1 TO 20
100 READ a$,c$
110 cs=0
120 FOR byte=1 TO 24 STEP 2
130 b=VAL("&" + MID$(a$,byte,2))
140 POKE addr,b
150 addr=addr+1
160 cs=cs+b
170 NEXT
180 IF cs<>VAL("&" + c$) THEN 460
190 NEXT
200 CALL &9500
210 PRINT "To use, type !SCRDUMP,x"
220 PRINT "- where x=1 (draft) to 3 (high quality)"
230 PRINT "(Press SHIFT and @ to get a !)"
240 PRINT
250 NEW
260 DATA 21e795010995c3d1bc0e95c3,5F2
270 DATA 169553435244554dd000f53e,47C
280 DATA 0132e695f1fe01200bdd7e00,524
290 DATA e603b7280332e69521d495cd,5CF
300 DATA 6195218f01e53ae69547cd91,5E6
310 DATA 95cd6b9510f83e0acd2bbde1,648
320 DATA 06062b10fdcd09bbfbc280a,501
330 DATA 7cfeff20dc7dfefd20d721df,7E4
340 DATA 957efeffc823cd2bbd18f6c5,783
350 DATA e53aeb95b7281621d995cd61,651
360 DATA 9521ec95017f027ecd2bbd23,50F
370 DATA 0b78b120f63e0dcd2bbde1c1,5EC

```

```

380 DATA c9c5e5af32eb95dd21ec9511,764
390 DATA 0000017f02c5d5e506060e00,31B
400 DATA d5e5c5cdf0bbb728023e01c1,6D8
410 DATA a9874fe1d12b10ec79e1d1c1,744
420 DATA dd7700dd23b7280332eb9513,4FB
430 DATA 0b78b120d0e1c1c90a1b3311,4F8
440 DATA ff1b2a047f02ff0c1b400a0a,343
450 DATA 0aff00000000000000000000,109
460 PRINT "Error in line";250+(a*10)

```



SKODA SIMULATOR by Michael Beckett

What's the difference between a Skoda and a porcupine? The (censored...Ed!)

It's every Skoda drivers nightmare: driving down the road, minding your own business, when suddenly you are faced with thousands of Reliant Robin vans all jittering towards you at top speed (5 miles per hour?). Of course, you could just pull over and wait for the vans to pass, but that wouldn't make much of a game would it? Instructions: Guide the Skoda from left to right with the Z and \ keys

```

10 Skoda Simulator
20 (c) Michael Beckett
30 For CPC ATTACK!
40 SAVE BEFORE RUNNING!
50
60 DEFINT a-z
70 SYMBOL AFTER 32
80 symb!=HIMEM+1
90 GOSUB 850
100
110 MODE 1
120 INK 0,0:INK 1,26:INK 2,21
130 INK 3,10:BORDER 0:PEN 2
140 LOCATE 13,3:PRINT "SKODA SIMULATOR"
150 LOCATE 13,4:PRINT "-----"
160 PEN 1
170 LOCATE 12,7:PRINT "By Michael Beckett"
180 LOCATE 9,23:PRINT "Press SPACE to start..."
190 PEN 3
200 LOCATE 4,12:PRINT "Use Z and \ to move left and right"
210 WHILE INKEY(47):WEND
220
230 CLS
240 a$="Distance in km "

```

```

250 PEN 3:PAPER 0
260 FOR a=1 TO 15
270 LOCATE 32,a+9
280 PRINT
MIDS(a$,a,1):SPC(2):CHRS(143)
290 NEXT
300 PLOT 542,254,1:DRAWR 0,-240
310 DRAWR 18,0:DRAWR 0,240
320 TAG
330 km=8
340 FOR a=252 TO 32 STEP -30
350 PLOT 560,a:DRAWR 6,0
360 PRINT km; *
370 km=km-1
380 NEXT
390 TAGOFF
400 FOR a=1 TO 25:LOCATE 4,a:PRINT CHRS(133)
410 LOCATE 28,a:PRINT CHRS(138):NEXT
420 PEN 2
430 LOCATE 33,3:PRINT "SKODA"
440 LOCATE 31,4:PRINT "SIMULATOR"
450
460 a=0
470 CALL &8000,@a
480 IF a=1 THEN 670
490
500 CLS
510 a$="WELLDONE"
520 FOR a=1 TO 8
530 addr!=symb!+8*(ASC(MIDS(a$,a,1))-32)
540 FOR b=0 TO 7
550 b$=BINS(PEEK(addr!+b),8)
560 FOR c=1 TO 8
570 x=((a*8)-6) AND 31)+c
580 y=(b+3)-10*(a>4)
590 SOUND 1,800-(x*y),3,7
600 PEN y/3 MOD 3+1
610 IF MIDS(b$,c,1)="" THEN LOCATE x+2,y:PRINT CHRS(143)
620 NEXT
630 NEXT
640 NEXT
650 x=200:GOTO 710
660
670 a$=" GAME OVER"
"x=150:y=230:c=1:GOSUB 760
680 FOR a=1 TO 100 TO 1000 STEP -2:SOUND 1,a,1,7,,,30:NEXT
690
700 x=136
710 a$=" Press Space"
":y=60:c=2:GOSUB 760
720 WHILE INKEY(47):WEND
730 GOTO 110
740 END
750
760 w=LEN(a$)*16+16
770 FOR a=y-36 TO y+2 STEP 2:PLOT x-2,a,0:DRAWR w+4,0:NEXT
780 PLOT x,y,c:DRAWR w,0:DRAWR 0,-32:DRAWR -w,0:DRAWR 0,32
790 TAG
800 MOVE x+8,y-10
810 PRINT a$;
820 TAGOFF
830 RETURN
840
850 PRINT "Please wait..."
860 MEMORY &7FFF
870 addr=&8000
880 FOR a=1 TO 53
890 READ a$,c$
900 cs=0

```

```

910 FOR byte=1 TO 20 STEP 2
920 b=VAL("&" + MID$(a$,byte,2))
930 POKE addr,b
940 addr=addr+1
950 cs=cs+b
960 NEXT
970 IF cs > VAL("&" + cs) THEN 1010
980 NEXT
990 RETURN
1000 '
1010 PRINT "Error in line";1020+(a*10)
1020 '
1030 DATA 3DC0DD6601DD6E00E5CD,
53E
1040 DATA 1280E177233600C92100, 32D
1050 DATA C011648206C87D12137C,3A3
1060 DATA 1213CD26BC10F5214882,3C4
1070 DATA 060ECD238110FB2114C3,388
1080 DATA 224682AF323F823E5032, 34C
1090 DATA 4082CD0DBDE53428222,
47F
1100 DATA 44823E1E3241823E47CD, 369
1110 DATA 1EBBC486803E16CD1EBB,
49D
1120 DATA C48F803A3F82B7C03A41,
4C0
1130 DATA 82571EB6217581CDC880,
4D9
1140 DATA 214882060EE5C5CD9880,48E
1150 DATA C1E1232310F5CDFD80CD,
604
1160 DATA 19BD18C72141827EFE07,41C
1170 DATA C835C92141827EFE32C8,520
1180 DATA 34C956235E7BFEC73008,44C
1190 DATA E521CC81CDC880E13434,
5B1
1200 DATA 7EFEB4C05F2B563A4182,
4CD
1210 DATA 47057A90FE0530063E01, 2CE
1220 DATA 323F82C9CD2381210782, 3D7
1230 DATA E501648226006B29094E, 2DD
1240 DATA 234626006A09545DE17E, 312
1250 DATA 234E2332E480D50600ED, 3F2
1260 DATA A00C10FBD17AC6085730,
457
1270 DATA 087BC6505F7ACEC0570D,
464
1280 DATA 20E6C9214082357EB7C0,
4DC
1290 DATA 36502A46823600233800, 207
1300 DATA 2BCD26BC2246827CFEC7,
505
1310 DATA C07DFEC4C03E02323F82,
4F2
1320 DATA C9C5CD468179C62AD62A,
58B
1330 DATA FE2A30FAC60977237987,
4BB
1340 DATA FE503804D62818F8473E, 41D
1350 DATA 1E907723C1C9E5D5ED5B,
5D4
1360 DATA 42822A44820605CB1CCB,371
1370 DATA 15CB1ACB1310F60603D5,
3BC
1380 DATA ED5B4482B7ED52EBE110,
5E0
1390 DATA F4ED534282224482434C, 46F
1400 DATA D1E1C9051100100F8000, 330
1410 DATA 00740FE200004F0F2F00, 1F2
1420 DATA 005FFFAF00006E006700, 2E2
1430 DATA 004C002300007FFFEF00,2DC
1440 DATA 00270F4E0000470F2E00, 108
1450 DATA 00470F2E0000270F4E00, 108
1460 DATA 003FFFCF00004C002300, 27C
1470 DATA 004C002300003FFFCF00, 27C
1480 DATA 00070F0E0000610F6800, FC

```

```

1490 DATA 031300000000000071FF, 186
1500 DATA E8FFFFFFFFFFFFFFFF,
9DF
1510 DATA FFFFFFFFFFFFFFFFFF7F,
976
1520 DATA FFEF37FCE470F2E8C00,502
1530 DATA 13CE0037AF0F5FBFFDF,
4D2
1540 DATA 57FFAE11FF8800F60003, 495
1550 DATA 120000000000000000, 12

```



Nothing to do with tough goggles - print your disk catalogue the easy way.

Here's a little utility that a lot of CPC owners have been begging for - no, not a Kim Basinger Simulator... come to think of it!...but this neat utility will dump the disk CATalogue to a printer.

It'll work on ANY format disk (including ROMDOS) and works by intercepting the screen print routine, redirecting it to the printer. If you want to print the CATalogue in condensed form (very handy!), then just type in the following line before running the program :-

```
PRINT#8,CHR$(15);(return)
```

To send the CATalogue to the printer, just type IHCAT and press RETURN.

```

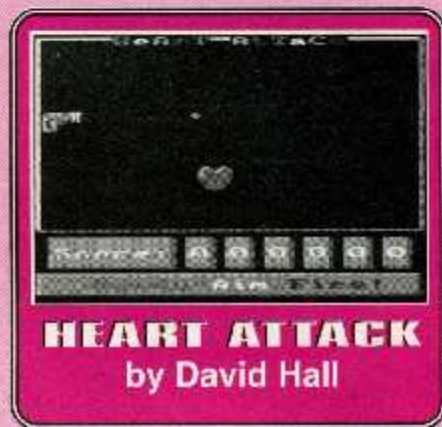
10 ' HARDCAT
20 ' (c) Michael Beckett
30 ' For CPC ATTACK!
40 ' SAVE BEFORE RUNNING!
50 '
60 MEMORY &8FFF
70 PRINT "Please wait..."
80 addr=&9000:st=addr
90 FOR a=1 TO 10
100 READ a$,c$
110 cs=0
120 FOR byte=1 TO 24 STEP 2
130 b=VAL("&" + MID$(a$,byte,2))
140 POKE addr,b
150 addr=addr+1
160 cs=cs+b
170 NEXT
180 IF cs > VAL("&" + cs) THEN 350
190 NEXT
200 CALL &9000
210 PRINT "To use, type IHCAT"
220 PRINT "(Press SHIFT and @ to get
a!)"
230 PRINT

```

```

240 NEW
250 DATA 217590010990c3d1bc7090c3,
5D3
260 DATA 0e90217d98010000227990ed,
3ED
270 DATA 437b903a5abb2a5bbbf5e53e,
5F5
280 DATA c3325abb215e90225bbb117d,
4DF
290 DATA 90cd9bbce1225bbb11325abb,
705
300 DATA 217d98ed4b7b900bcd09bbfe,
613
310 DATA fcc8cd2ebd38f57ecd31bd23,
705
320 DATA 0b78b120eb3e0ac331bde52a,
547
330 DATA 799077232279902a7b902322,
448
340 DATA 7b90e1c9484341d400000000,
455
350 PRINT "Error in line";240+(a*10)

```



Can you shoot the hearts in time? Only your joystick knows for sure.

David Hall, from Manchester, has come up trumps with this great little game. The idea of Heart Attack is to shoot as many hearts as you can in the allotted time! Instructions: Joystick up/down controls the gun, fire...erm...fires it!

```

10 ' HEART ATTACK by David Hall
20 ' (c) Spring 1990
30 '
40 ' * Set up display *
50 INK 0,0:BORDER 0:INK 5,15:MODE 0
60 INK 15,0,6:INK 14,6,26:INK 13,26,6
70 SPEED INK 15,15:PAPER
0:CLS:x=8:y=6
80 a=32:c=2:INK 9,0:b=624:d=6:e=10
90 GOSUB
420:x=28:y=48:a=44:b=200:c=11
100 d=3:e=5:GOSUB 420:FOR m=1 TO
6:x=188+64*m
110 b=40:GOSUB
620:NEXT:x=8:y=104:a=290
120 b=624:c=1:d=12:e=0:GOSUB
420:x=16
130 PEN 4:PAPER 10:LOCATE
4,24:PRINT
TAB(4)"Wait!":GOSUB 480
140 y=108:a=282:b=60:c=9:e=9:d=9
150 GOSUB 420:PAPER 5:PEN
4:LOCATE 2,21
160 PLOT 16,388,0:PRINT

```

```

"Score":PAPER 0
170 c=3:a$="HeArT"+CHRS(9)+"AtTaCk"
180 n=1500:LOCATE 5,1:FOR t=1 TO 12
190 PEN c:c=c+1:IF c=7 THEN c=3
200 PRINT MID$(a$,t,1);NEXT:PAPER 10
210 PEN 4:LOCATE 4,24:PRINT "FIRE to
begin!"
220 GOSUB 570:PAPER 10
230 LOCATE 2,24:PRINT SPACES(18);
240 PEN 3:LOCATE 4,24:PRINT "Ready";
250 SOUND 1,98:SOUND 2,99:FOR t=1
TO n
260 NEXT:PEN 4:PRINT " Aim ";:SOUND
1,68
270 SOUND 2,69:FOR t=1 TO
n:NEXT:PEN 6
280 PRINT "Fire!":SOUND 1,38:PAPER 0
290 * Start Machine Code *
300 LOCATE 1,1:CALL 10000:PAPER 10
310 * Game Over *
320 LOCATE 2,24:PRINT SPACES(18)
330 PAPER 0:PEN 13:LOCATE 4,7
340 PRINT "Clint Eastwood":PEN 14
350 LOCATE 5,11:PRINT "you ain't !!"
360 FOR t=10 TO 100:SOUND 1,t,2:NEXT
370 IS=INKEYS:IF IS<>" " THEN 370
380 CALL &BB18:PLOT 12,108,0
390 FOR t=1 TO 139:DRAWR 612,0
400 MOVER-612,2:NEXT:PEN 4:GOTO
140
410 * Box drawing routine *
420 MOVE x,y:FOR t=1 TO 2:DRAWR0,a,c
430 DRAWR b,0:DRAWR 0,-a,d:DRAWR -
b,0
440 MOVER -4,2:NEXT:MOVER 12,0,e
450 FOR t=1 TO a/2-2:DRAWR b-12,0
460 MOVER -b+12,2:NEXT:RETURN
470 * Read data *
480 l=32000:FOR p=1 TO 2:READ a$
490 FOR t=1 TO 30 STEP 2
500 POKE
I,VAL("&"+MID$(a$,t,2)):l=l+1:
NEXT:NEXT
510 l=10000:FOR p=1 TO 74:y=0:READ
a$,chk
520 FOR t=1 TO 24 STEP 2
530 s=VAL("&"+MID$(a$,t,2)):POKE
l,s:y=y+s
540 l=l+1:NEXT:IF chk<>y THEN PRINT
"Error in line";640+p*10:END
550 NEXT:RETURN
560 * Instructions *
570 WINDOW 2,19,3,18
580 PEN 3:PAPER 0:LOCATE 1,3:PEN
3:PRINT " Shoot as many of the
hearts as you can (Game ends if
you miss one)!"
590 PEN 4:PRINT:PRINT " You get 3
points per heart"
600 PEN 10:PRINT:PRINT " Use a
joystick (up,down + fire)"
610 WHILE INKEY$<>"":WEND:WHILE
INKEY(76):WEND:CLS:WINDOW
1,20,1,25:RETURN
620 * Machine Code & Graphics *
630 DATA01000020030000f0300000100006
400
640 DATA 000f050000010000c800000f050
900
650 DATA CD3927AF325C4E32484E3234,
998
660 DATA4E2132C2222A4ECD7327CDC1
,1266
670 DATA 27CD3F2806640010FD3A5C4E
,950

```

```

680 DATA FE1720EBC921204E06063630
,1002
690 DATA 2310FB3E04CD90BB3E05CD9
6,1326
700 DATA BB211509CD75BB21204E0606
,914
710 DATA7ECD5ABB3E09CD5ABB2310F
4,1456
720 DATA C921254E347EFE3A20DF3630
,1196
730 DATA 2B18F53E49CD1EBB20173E48
,1058
740 DATA CD1EBB28272A2A4ECD29BC
7E,1223
750 DATA FEC3201C222A4E18172A2A4
E,872
760 DATA 0613CD26BC10FB7EFEC3200
8,1338
770 DATA 2A2A4ECD26BC18E42A2A4E1
1,1024
780 DATA 27290E12E506081A77231310
,570
790 DATA FAE1CD26BC0D20F0C93A344
E,1580
800 DATA FE0020233E4CCD1EBBC8CD0
D,1299
810 DATA 292A2A4ECD26BCD26BC110
8,1090
820 DATA 001922364E3E0132344E3235,
537
830 DATA 4E18203A354E3C32354EFE43,
885
840 DATA 282B2A364E2322364E232306,
534
850 DATA 047EFE002024CD26BC10F611,
1162
860 DATA B7293E0332B2272A364E0E04,
748
870 DATA CDB0273E0832B227C9AF3234
,1235
880 DATA 4E11872A18E4CD2128CD0129
,1049
890 DATA CD6527CD6527CD65273E0332
,1150
900 DATA 4B4EC93A484EFE01284B3C32
,1042
910 DATA 484E324B4E324D4EED5F473E
,1023
920 DATA 143CFE4B28F910F95FED5F47,
1461
930 DATA 3E1A3CFE9628F910F9472100,
1210
940 DATA C0CD26BC10FB1600190E1622
,1007
950 DATA 524E06087EFE0020CF2310F8
,1092
960 DATA 2A524ECD26BC0D20EA22494
E,1097
970 DATA C93A4B4EFE0120183A4D4EF
E,1190
980 DATA 1720083C324B4E32664EC9C6,
955
990 DATA 02324D4ED6021819FE032804,
773
1000 DATA FE1720263A4D4EFE00200A3
2,906
1010 DATA 484E3A4B4E325C4EC92A494
E,975
1020 DATA 4F47CD29BC10FB11D729CD
B0,1505
1030 DATA 27214D4E35C93A664E3C326
6,931
1040 DATA 4EFE8220063E17324B4EC92
A,1031
1050 DATA 494E0616CD29BC10FB11D72

```

```

9,1153
1060 DATA 0E16C3B027210A7DCDAABC
21,1210
1070 DATA 147DC3AABC3E2032037D3E
0F,1047
1080 DATA F521037D3532067D21007DC
D,1003
1090 DATA AABCF13D20EEC9C3C3C3C
3C3,2106
1100 DATA C3C3C3C3C3C3C3C3C36161
86,2083
1110 DATA 0C0C0C0C0C24240C0F0F0F0
F,204
1120 DATA 0F25340D0F0F0F0F0F25340D
,294
1130 DATA 0F0F0F0F0F25340D1E0F0F0F
,252
1140 DATA 0F25340D2D0D3C3C3C34340
D,472
1150 DATA 2D0D2D87C361610D2D0D698
7,938
1160 DATA C3C3C30D2D0D2D4BC3C3C3
0D,1374
1170 DATA 2D0D69C3C3C3C30D2D0D69
C3,1314
1180 DATA C3C3C30D2D0D69C3C3C3C3
0D,1554
1190 DATA 0E0F69C3C3C3C31C0F1E69
C3,1287
1200 DATA C3C3C3963C3CC3C3C3C3C3
C3,2025
1210 DATA C3C3C3C3C3C3C30050A000
B0,1781
1220 DATA F000F0CC0044880000000000
,888
1230 DATA 000000000000000000000000
00,0
1240 DATA 000000000000000000000000
00,0
1250 DATA FFFF0000FFFF0055BF6EAA
55,1661
1260 DATA 9DDDA555EF388447BCCAA
FF,1942
1270 DATA 7BCCDDEE64CCFFBFD9C
CCC3F,2224
1280 DATA E6CCDDBFE6CCCCF3CCCC
DDBF,2547
1290 DATA E6CCCCCCCCCDBFE6C
CCCC,2504
1300 DATA CCCCDEEE6CCCCCCCCC
CDDEE,2576
1310 DATA CCCCCCCCCCDEEECC
CCCC,2499
1320 DATA CCCCDD55CCCCCCCCC
CCAA55,2193
1330 DATA CCCCCCCCCC55CC
CCCC,2295
1340 DATA CCCC5500EECCCCCDD
D0000,1853
1350 DATA ECCCCCCCCDD000055CC
CCC,1972
1360 DATA CCAA000055CCCCC55
0000,1445
1370 DATA 00EECCCCDD0000000055EE
DD,1411
1380 DATA AA000000000055AA00000000
0,425

```



TWO GREAT OFFERS

Plus A FAST RACK DISPENSER

FREE

NEW

CRACKER 2 turbo plus

The CPC spreadsheet with Super Graphics

A powerful spreadsheet (with contextual on-line help) that checks for errors as you key data in. Can also produce a wide range of graphs from your information.

- Supports 52 columns by 255 rows
- Comprehensive, automatic error-checking as you enter data or formulae
- Graph styles, including scaled output
- Database features for list management
- Creates Worksheets up to 48K

£38.95

NewWord 2 CPC

The classic WordStar look-alike word processor

A complete word processor that includes spellchecker and conditional mailmerge. Commands are compatible with the classic WordStar standard.

- Classic WordStar3 familiarity with extended help
- WP, mailmerge and spell correction included

£58.95

Touch'n'Go

Typing Tutorial - 24 Hours to keyboard mastery

Keyboard skill: learn the right way and quickly. Touch'n'Go provides a self-paced system of learning touch typing, using a method that is simplicity itself.

£17.95

Send your cheque/postal order made payable to HHL Publishing - Today!

CPC ATTACK, Dept: MKCN

Greater London House, Hampstead Road, London NW1 7QQ

FREE
Fast
Rack
Dispenser

This handy Fast Rack Dispenser holds 3.5in and 5.25in disks and attaches easily to your monitor - valued at £5.99

Free with every order!

CPC ATTACK

DEPT: MKCN

GREATER LONDON HOUSE
HAMPSTEAD ROAD, LONDON NW1 7QQ

Name _____ (CAPITAL LETTERS)

Address _____

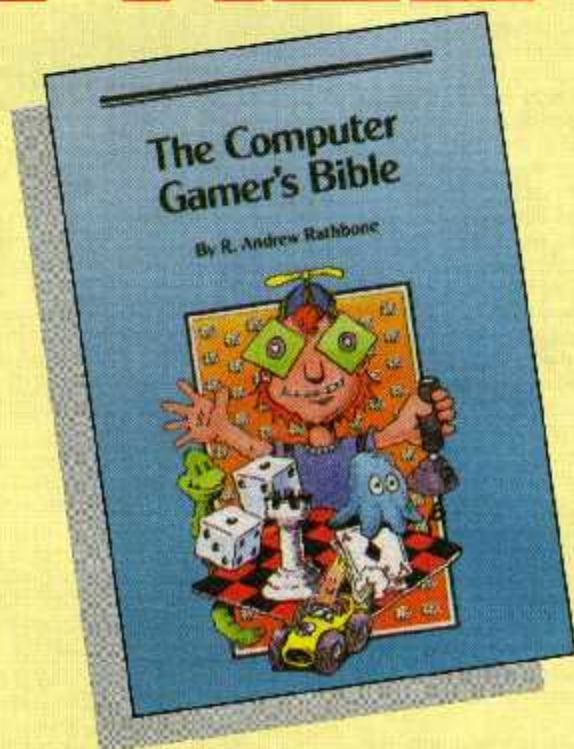
Post Code _____

DESCRIPTION	QTY	AMOUNT
CRACKER 2	£38.95	
NEWWORD	£58.95	
TOUCH'N'GO	£17.95	
POSTAGE AND PACKING	3 00	
TOTAL ORDER	£	

HOW TO ORDER Simply send your cheque/postal order made payable to HHL Publishing with this order form.

Allow 28 days delivery from receipt of order. Offers UK and Eire only.

IT'S A WINNER IT'S FANTASTIC AND YOURS ENTIRELY FREE



Everybody has a computer game stashed among their programs. In fact, games are amongst the top ten of all software sold. The 180 page *Computer Gamer's Bible* covers everything from how to install a sound card to how to find a hint for an adventure game. Interviews with programmers, history of games, answers to technical problems and written in a simple, easy-to-understand style. A real must for all gamers and it's yours - FREE! All we ask is that you pay £3.00 postage and packing.

Simply send your Cheque/Postal Order made payable to HHL Publishing - Today!

The demand has been fantastic and we are extending this offer until the 30th November 1992. So hurry!

CPC ATTACK BOOK OFFER

DEPT MK, GREATER LONDON HOUSE, HAMPSTEAD ROAD, LONDON NW1 7QQ

CPC ATTACK BOOK OFFER

DEPT MK,

GREATER LONDON HOUSE, HAMPSTEAD ROAD, LONDON NW1 7QQ

PLEASE SEND ME THE COMPUTER GAMER'S BIBLE

Name _____ (CAPITAL LETTERS)

Address _____

Post Code _____

I have enclosed my Cheque/Postal Order for £3.00 postage and packing, made payable to HHL Publishing.

Allow 28 days delivery from receipt of order.

NEED HELP?

As we said before, most questions we get may appear to be easy peasy, but we can deal with hard ones too! (Q&A, or missag). If you need any type of technical advice then get scribbling. The address is:

Q&A,
CPC Attack,
HHL Publishing,
Floor 3,
Greater London House,
Hampstead Road,
London
NW1 7QQ
or FAX: 071-387 9518

Please DO NOT PHONE
as we are busy bunnies

In this month's Q&A, Rob Scott answers your queries, offers advice and reviews products

APPLICATIONS Q&A

Q
I have bought an Amstrad CPC6128+ and I would like to know a bit more about the 3.5" disk drive that is available for the 6128+:

- 1 - Do the disks that are used in the drive store 800k, or are they a special kind?
- 2 - What is MS800?
- 3 - If I bought a 3.5" disk drive, would I be able to get games, word processing packages and educational software on 3.5" disk, and if so would they be cheaper or more expensive?
- 4 - What are RAMDOS and ROMDOS, what do they do, and what is the difference between them.
- 5 - What is the best word processor available for my computer?
- 6 - Would I be able to type in a 10,000 word essay?
- 7 - I have Mini Office 2, and when I write maybe ten or so pages I have to save them, because at the top of the screen it says "overwrite". Why is this? Please help me with my questions.

Patrick Danaghy, Llistress

A
Whew, okay, to start at the beginning.....

- 1 - The disks that are used in a 3.5" disk drive are the industry standard 720k disks, as used by PCs all over the world, so are available just about everywhere.
- 2 - MS800 is a 3.5" disk operating system marketed by GVL Microform, and various other companies. It enables you to store 396k per side of a 3.5" disk, so you need a disk drive with a side switch to use it. A better alternative is ROMDOS, which is available as a cartridge or a ROM to plug into a ROMboard, which will give you up to 796K and 256 directory entries on a 3.5" disk, WITHOUT a messy side switch!
- 3 - No games software house produces software on 3.5" disk. The main reason for this is that virtually all CPC games are

heavily protected, and wouldn't run from a 3.5" disk drive B anyway. Some smaller companies produce software on 3.5", and most P.D libraries will supply in either AMSDOS, MS800 or ROMDOS formats.- 4 - RAMDOS is a disk operating system in a similar vein to MS800, except that it will store 796k per disk, WITHOUT needing a side switch. ROMDOS is the ROM version of RAMDOS.
- 5 - Hmm, the best word processor available for what you want is either Protex, available from Arnor, or a public domain CP/M Word processor called VDE. VDE has the advantage of being able to handle larger documents, but is nowhere near as user friendly. Protex has great speed and is so easy to use a child of six could operate it!
- 6 - The limit of words that can be entered depends on the length of each word - obviously. About 8000 words can be typed into PROTEXT on ROM. VDE will handle much larger documents, almost double the length of Protex. Protex on ROM has capacity for 39,000 characters, while the disk version can store a maximum of about 22,000. VDE can handle larger documents over 60,000 characters.
- 7 - I think you are getting a bit confused with the exact meaning of the word "overwrite". It in fact refers to the typing mode being used. Overwrite means that if you move the cursor over an already typed word, and type in more characters the typed in characters will replace the already typed ones. The opposite to overwrite is "insert", in which the typed-in characters are inserted to the left of the

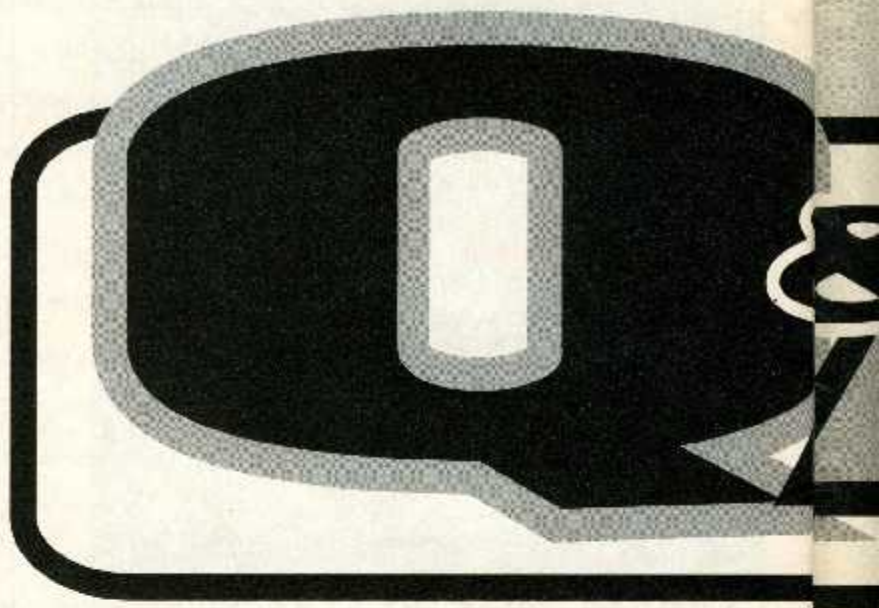
cursor, and push the previously typed in words to the right. It has nothing to do with available document memory, although Mini Office 2 is too limited for any decent use. VDE comes highly recommended, although PROTEXT is easier to use. You pays yer money and takes yer choice. And why not?

issue I tried the raster demo, and located it at &7000 rather than &8000. It didn't seem to mind being located there, but I got an "invalid number" error on the line "RLOOP: ld

a,(ix)"
Can you please tell me if these errors should occur and if they are if there is a way to overcome them.

Philip Light, Horsham

A
Ahem...firstly, the demo listing



Q
I received the ACU assembler a couple of weeks ago and after trying a few small programs, I tried typing in the demo in the June issue (The scrollie!). The first thing I noticed was that the demo was stored at &8000 onwards, which happens to be where the assembler code starts. Then I tried to locate it at &7000, only to find that it does not support the command DEFM, which on some assemblers appears to be DEF\$. When I got my next

for the rasters was incorrect, because along with the missing raster colour table, the DEFW count was incorrect. Also the I suspect that the ACU assembler is not the best example of a decent assembler, although not having seen it, I couldn't say for sure. If you are really serious about learning machine code, you will need an assembler like MAXAM by ARNOR, which as well as being the standard in assemblers, is also very flexible. Arnor can be contacted on (0733) 68909.

PROGRAMMING Q&A

Q A few months ago I bought an Amstrad 64k Microcomputer. I have read the manual that came with it. It was helpful in as much as it got me started, but I still don't know so many things. Thus, may I put the three following questions to you :-
1 - What are pokes. In the manual it states, and I quote "Provides direct access to the computers memory and loads the (integer expression) in the range 0-255 directly into the address stated. Not a command to be used by the unwary." That doesn't really help me at all.
2 - I have often seen the CALL sign in some programs. Could you tell me what it is and what it does?
3 - According to what I have heard, all computers have a memory. My CPC has 64K of memory can you explain what these means?

Nora Lees, Birmingham

Address	Content
0000	00
0001	00
0002	00
0003	00
0004	00
0005	00
0006	00
0007	00
0008	00
0009	00
000A	00
000B	00
000C	00
000D	00
000E	00
000F	00
0010	00
0011	00
0012	00
0013	00
0014	00
0015	00
0016	00
0017	00
0018	00
0019	00
001A	00
001B	00
001C	00
001D	00
001E	00
001F	00
0020	00
0021	00
0022	00
0023	00
0024	00
0025	00
0026	00
0027	00
0028	00
0029	00
002A	00
002B	00
002C	00
002D	00
002E	00
002F	00
0030	00
0031	00
0032	00
0033	00
0034	00
0035	00
0036	00
0037	00
0038	00
0039	00
003A	00
003B	00
003C	00
003D	00
003E	00
003F	00
0040	00
0041	00
0042	00
0043	00
0044	00
0045	00
0046	00
0047	00
0048	00
0049	00
004A	00
004B	00
004C	00
004D	00
004E	00
004F	00
0050	00
0051	00
0052	00
0053	00
0054	00
0055	00
0056	00
0057	00
0058	00
0059	00
005A	00
005B	00
005C	00
005D	00
005E	00
005F	00
0060	00
0061	00
0062	00
0063	00
0064	00
0065	00
0066	00
0067	00
0068	00
0069	00
006A	00
006B	00
006C	00
006D	00
006E	00
006F	00
0070	00
0071	00
0072	00
0073	00
0074	00
0075	00
0076	00
0077	00
0078	00
0079	00
007A	00
007B	00
007C	00
007D	00
007E	00
007F	00
0080	00
0081	00
0082	00
0083	00
0084	00
0085	00
0086	00
0087	00
0088	00
0089	00
008A	00
008B	00
008C	00
008D	00
008E	00
008F	00
0090	00
0091	00
0092	00
0093	00
0094	00
0095	00
0096	00
0097	00
0098	00
0099	00
009A	00
009B	00
009C	00
009D	00
009E	00
009F	00
00A0	00
00A1	00
00A2	00
00A3	00
00A4	00
00A5	00
00A6	00
00A7	00
00A8	00
00A9	00
00AA	00
00AB	00
00AC	00
00AD	00
00AE	00
00AF	00
00B0	00
00B1	00
00B2	00
00B3	00
00B4	00
00B5	00
00B6	00
00B7	00
00B8	00
00B9	00
00BA	00
00BB	00
00BC	00
00BD	00
00BE	00
00BF	00
00C0	00
00C1	00
00C2	00
00C3	00
00C4	00
00C5	00
00C6	00
00C7	00
00C8	00
00C9	00
00CA	00
00CB	00
00CC	00
00CD	00
00CE	00
00CF	00
00D0	00
00D1	00
00D2	00
00D3	00
00D4	00
00D5	00
00D6	00
00D7	00
00D8	00
00D9	00
00DA	00
00DB	00
00DC	00
00DD	00
00DE	00
00DF	00
00E0	00
00E1	00
00E2	00
00E3	00
00E4	00
00E5	00
00E6	00
00E7	00
00E8	00
00E9	00
00EA	00
00EB	00
00EC	00
00ED	00
00EE	00
00EF	00
00F0	00
00F1	00
00F2	00
00F3	00
00F4	00
00F5	00
00F6	00
00F7	00
00F8	00
00F9	00
00FA	00
00FB	00
00FC	00
00FD	00
00FE	00
00FF	00

Each memory location can hold a number between 0 and #ff. In a CPC464, and also a CPC6128 (main memory). 64k memory actually means 65536 memory locations. That is because a "K" of memory is in fact 1024 bytes (or memory locations), and 1024 times 64 is 65536. For instance the Video (screen) memory starts at &c000. If you wanted to place a

beginner some time to use up 39k of BASIC memory, so you don't have to worry about running out or anything like that! The CALL command is used to access machine code routines from BASIC. You can do things using CALL commands that

would take longer to do in BASIC. For instance the following commands can be used in your own programs.

```
CALL 0
:reset the CPC!
CALL &BB00
:reset the keyboard manager
CALL &BB03
:clear the keyboard buffer
CALL &BB1B
:wait for a key to be pressed
CALL &BC02
:reset the screen to default inks
CALL &BD19
:wait for frame flyback (same as FRAME on :6128
CALL &BD37
:reset the CPC to tape mode!
```

and that's only a few of the many CALLS available to the BASIC programmer! If you are really interested in discovering what lies inside your CPC, then pick up a copy of The PRINT OUT firmware guide from Thomas Defoë, 8 Maze Green Road, Bishops Stortford, Herts, CM23 2PJ. It costs £4.00.

Q What is the difference between LEFT\$, RIGHT\$ and MID\$. As far as I can see you can use MID\$ to do exactly the same job, as LEFT\$ and RIGHT\$. There doesn't seem to be any point to having the extra commands.

Greg Pullar, Newcastle

A For all intents and purposes MID\$ can be used instead of LEFT\$ and RIGHT\$. I can't think why the Amstrad should need the other two, maybe they were put in to retain compatibility with other BASICs that didn't use MID\$. Not, perhaps, as useless as it may at first seem.

A A "POKE" can mean one of two things. The first meaning of it is a program written for a game that provides the user with infinite lives or time etc. The second term, which is the one that you are interested in, is a bit more complicated. So this explanation will cover the answers for questions 1 & 3. A 64k computer's memory is made up of 65536 memory locations. To help you understand this better I have done a memory map of the Amstrad CPC series of computers

dot on the screen, try typing POKE &c000, &FF < return >. You have just programmed the Screen memory directly. It is not advisable to go around poking the memory indiscriminately, otherwise you could crash the computer. It is not important to know HOW to program these memory locations. If you are programming in BASIC, which is the Amstrad beginner's programming language, then you could type in a program of up to 39000 characters long, and still have enough memory left over for some machine code. Basically, it would take a

Q How do I do a FOR...NEXT loop in machine code. I need to be able to do something like

```
FOR a=0 to 200:print "Hello":NEXT a. I have tried everything I can think of, but I am not exactly a machine code expert. Please help.
```

John Fellows, Wigan

A Okay, counting in machine code is DEAD easy! The following routine will do exactly what you require.

```
xor a
:;set counter to zero
.count push af
:;preserve AF register (used for counter)
ld hl,string
:;address of text to print
call print
:;call routine to print string
pop af
:;get counter back again
inc a
:;counter = counter +1
cp 200
:;is it 200?
ret z
:;yes, then return
jp count
:;otherwise back round for .next loop
.print ld a,(hl)
:;get the next character in the string
or a
:;is it zero? (end of text marker)
ret z
:;return if end of text marker found
call &bb5a
:;print the character in A register
inc hl
:;get the next character in string
jr print
:;and back round loop
.string db"Hello...",&00
```

Q I have tried typing in the listing in the Demo Time column in issue 3 and as soon as I try to run any of the demo, all I get is a SYNTAX ERROR IN 10 message. Am I doing something wrong? Is there something blindingly obvious that I'm missing out on here?

James Markham, Hove

A Hmm...you sound like you have a severe case of

← misunderstand it here. The listings printed for the demo column are in fact assembler listings, and must be typed into a good assembler, such as MAXAM in order for them to work.

Q
I am writing a BASIC printer dump routine, designed to work in all three screen modes. I am having problems with discovering the current mode, which I need to find out before the screen is printed. Is it possible from BASIC, and if so please, please show me how.

Richard Davis, Swansea

A
It's not really possible from BASIC as such. You will need to type in the short machine code program below. MERGE it into your BASIC program. When you need to find the screen mode, use a GOSUB 99999, to access the routine. The screen mode will be returned in the variable "scmode". The program works by using the SCR_GET_MODE firmware command, which gets the current screen mode, places it into the A register, and the routine then POKES it into &BF07.

```
10 FOR a=&bf00 TO &bf07
20 READ b$:POKE
a,VAL("&"+b$):NEXT
30 CALL
```

```
&BF00:scmode=PEEK(&bf07)
40 RETURN
50 DATA
GD,11,BC,32,07,BF,C9,00
```

Q
I have been learning machine code for about 2 months now, and have written a small routine, that copies the screen RAM to and from &4000 to &c000. The only trouble is, it is quite slow compared to some I have seen. Can you tell me why, and possibly advise me of a better (faster) way to do it?

```
.movup
ld hl,&4000
ld de,&c000
ld bc,&4000
.move
ld a,(hl)
ld (de),a
inc hl
inc de
dec bc
ld a,b
or c
jr nz,move
ret
.movdn
ld hl,&c000
ld de,&4000
ld bc,&4000
jp move
```

David Castale, Richmond

A
Believe it or not, the CPC already has built in commands to copy area of memory, many, many times faster than the above routine ever will. The LDIR command takes 3 parameters:

HL points to the data source address
DE points to the data destination address
BC points to the length of the data to be copied

So, your routine can actually be rewritten as :-

```
.moveup
ld hl,&4000
ld de,&c000
ld bc,&4000
.move
ldir
ret
.movedn
ld hl,&c000
ld de,&4000
ld bc,&4000
jp move
```

Q
Where can I get an EPROM programmer from? What ones are the best, and how much do they cost?

Simon Davis, Cheshire

A
You don't have much choice on the EPROM programmer front I'm afraid. The only one currently available is the JM one, available from

AVATAR, who can be contacted on 0442 251705, and costs £30.00 including P&P.

Q
I am working on a program that relies on CATALOGuing a disk in order to determine the format of the disk in drive A. What I don't want is the CATALOGue to be displayed. Is there any way I can do this, without resorting to complicated machine code programming.

Phil Tucker, Salisbury

A
The most satisfactory method is to POKE the firmware print routine with a return instruction. Put the following subroutines at the end of your program. To disable the CATALOGue printing use GOSUB 10000. To re-enable CATALOGue printing use GOSUB 10040
10000 REM disable CATALOGue printing to screen
10010
ret=&c9:ncm=&cf:prchar=&bb6
a
10020 POKE prchar,ret
10030 RETURN
10040 REM enable CATALOGue printing to screen
10040 POKE orchat,norm
10050 RETURN

TECHNICAL Q&A

Q
I have a Multiface 2 backup device and when I press the red button the machine just hangs. It only happens sometimes and is very annoying because I have to physically turn my machine off, wait a while and then switch it back on again. Is this a fault in my Multiface, or is my CPC getting a bit old?

Kevin James, Oundle

A
You'll be pleased to know that there's nothing wrong with either your CPC OR your Multiface 2. The problem tends to lie with power up surges and other related interference. A Multiface is a very powerful piece of hardware, but it gets a bit confused sometimes! The reason seems to be that the RAM inside it gets corrupted

and the vectors, which tell it where to pass control to when the RED button is pushed, sometimes lose their information. To overcome this, if you hold down the SPACE bar while pressing the RED button, this will reset it to its default state and all will be fine. Failing that, try cleaning the good 'ol edge connectors.

Q
I know it may sound stupid, but what is a ROM and if I buy one, where do I put it in my CPC? Are there any spare slots inside or something?

David Knaw, Luton

A
A ROM is a chip that can be used to store programs, sort of like a solid state disk. Each chip can store either 8 or 16k Bytes depending on its type. The great things about EPROMS is that they take very little space in memory and are always ready to use. Your CPC even uses EPROMS to store the operating systems for BASIC and AMSDOS and, in theory, it is possible to attach up to 252 external ROMs to a CPC, although the Power Supply would probably die before you even reached half that figure. To use EPROMS, you will need a ROMBOARD, which is a device that plugs into the Expansion port of your CPC.

These cost around £30.00 and generally have 8 sockets, although you can't use socket zero or socket seven for putting normal EPROMs into.

Q
I have a CPC 6128 machine, and want to add a tape player to it. Do I need a special one, and what lead do I use to connect it to my computer?

Dave Walsh, Humberside

A
The CPC 6128 can use any fairly good quality mono tape recorder, preferably with a tape counter for convenience. The lead you require is a 5pin DIN to 2.5mm and 2 x 3.5mm jack plugs. The same lead was used for the BBC micros, so ask for

TECHNICAL Q&A (Contd)

one of them and you won't go wrong.

Q
Can you, or perhaps a reader, help me with a circuit diagram to enable the RGB output to be converted to composite video? As with my own, most VCRs will not accept RGB signals and, as I do NOT wish to use the MP2 modulator, I will need to convert the signal to composite myself.

R.E Jones, Kent

A
The gadget you require is called "The VideoMaster", available from Campursoft. This widget will do exactly what you need to do, and costs around £35.00.

Q
I have had an Amstrad CPC6128 for 5 years now

and, over that time, I have been building up my knowledge of computers from scratch to now understanding BASIC. I use programs such as Advanced Art Studio, Stop Press and Extra Extra and Protex. I also own a number of games. Recently, from reading the Addon-guide, I discovered that a colour modulator is available and, as I don't know anything about them, I would be very grateful if you could enlighten me.

James Hickey, Preston

A
The MP series of modulators, from Amstrad, are no longer available. This is by no means a shame as they were complete and utter crap. The screen was un-viewable in anything but MODE 0 and they had a tendency to get rather hot. The

nearest thing you'll get to the MP modulators nowadays is the VideoMaster. See above letter from RE Jones, and associated reply.

Q
I have a CPC 6128, a Multiface 2 and a DK'Tronics speech synthesiser, which I used with a 464. Is it possible to connect the synthesiser using a through connector on the Multiface and will it be compatible with my 6128?

C.A.Grocott, Salford

A
The only difference between the 464 & 6128 speech synthesiser is the casing: the 6128 has an additional hole for the printer cable, should you have one.

Therefore, you won't have any problems using the Speech Synth on your 6128 machine.

Q
In Q&A you recommended the Amstrad/Disk/Interface Cable FD24B & Reversiboard GD37s. I wrote to Maplins, but they said "both items had been discontinued." Can any reader sell me these items? Perhaps someone has upgraded to a bigger, although not necessarily better, machine, can sell me theirs. I enclose my address, should any readers be able to help me.

Jim Garsides, 24 Station Road, Airdrie, Scotland ML6 7BZ

A
Okay you lot, anyone feeling helpful can write to Jim at the above address.

Q
I have a CPC6128 and a Canon Bubble Jet BJ10e. When I bought the printer, I was told that it was Amstrad and IBM compatible.

After experiencing problems, I contacted Canon who told me that I should have been sold a BJ10-ex. The 'x' in 'ex' means that it is Epson compatible and will thus work correctly with my CPC. Neither the retailer nor Canon will accept my old printer in exchange for the BJ10ex.

Do you know of a hack who might be able to devise a suitable program to drive my BJ10e.

John Dorza, London

A
Firstly, The BJ10e is only IBM Proprinter3 and BJ compatible. This means that you cannot use it to its full capabilities on your CPC. This shouldn't however mean that you can't use it at all. In fact, using a word processor like Protex, you should be able to print documents quite happily, although you won't be able to use any 'special effects' such as double height and underline. The best thing to do is try using the printer. Switch it 'on-line', type PRINT#8,"testing - testing". The text should appear on the printer. If it does then all is well, if it doesn't then the printer may not be in IBM mode. In which case, alter the DIP switches, under the front cover, as per instructions in the manual for IBM compatibility.

Q
I have just purchased a second-hand Panasonic KXP1081 printer, but I am having trouble with printing

PRINTER Q&A

things out. The manual instructs: LPRINT "This is a test. This is a test". When I type this BASIC command into my CPC, all I

get is a Syntax Error. Is there an equivalent command on my CPC that does the same as LPRINT, or are the printer and computer mutually exclusive?

David Cotteridge, Basingstoke

A
The trouble with printer manufacturers, is that they seem to forget that computers other than PC's exist. The actual command to send data to the printer is PRINT#8,"This is a test. This is a test".

Q
I have an ancient Amstrad DMP2000 printer and, recently, it has taken to missing the middle out of all my characters. Is it trying to tell me something (like that I'm gonna have to fork out for a new printer), or is it something my software is doing? I have a CPC 6128, Protex on ROM, and ROMBO romboard, a 3.5" disk drive and ROMDOS.

Bill Watts, Grangemouth

A
By the sound of things, your printhead has probably come to the end of its life. Failing that, maybe the print head driver IC has died. If the head has gone it won't be worth your time and money repairing it, because it alone costs £80.00. The Driver chip is a lot cheaper, and any decent electronic repair shop should be able to assist you.

PRODUCT REVIEWS

SOFT-LOK Campursoft • £14.99 • 041-554 4735

The latest version of SOFT-LOK, the Speedlock tape-to-disk transfer program, Version 2.3, has been released by Campursoft. Hailed as the very latest generation of Speedlock tape-to-disk copiers, it took two years to write. So what's so good about it then?

The DETECT utility automatically discovers which Speedlock version a particular program contains. Also, a tape protection analyser, exclusive to Soft-Lok, takes the tedium and guesswork out of tape-to-disk work as it instinctively detects which protection is being used.

Okay, with both protection and Speedlock version now

known, the appropriate transfer routine can be chosen from the menu. That done, a disk, with enough free space for the transferred game, is inserted and a filename given. The tape runs through as normal and, at

the end of the load, will be transferred to disk.

Soft-Lok runs on expanded machines only, making full use of the extra RAM, in so far as it is used for manipulating the game data. This has the disadvantage of occupying more disk space, but has the advantage of transferring games that are longer than the

standard 42k, which accounts for about 70% of current games.

Soft-Lok does not set up the screen inks for any transfers, because, "As the loading screen is only visible for something like 15 seconds, it seemed a bit pointless for something that is essentially cosmetic." Fair enough.

Soft-Lok is very easy to use, far easier than the only other tape-to-disk Speedlock transfer utility currently being advertised. It does the job extremely well, and has a very high success rate. Definitely recommended.

SoftLok uses a neat little outlined box to select menu options.

STS SOFTWARE 92 PRESENTS SOFT-LOK v2.3

SOFT-LOK V85

SOFT-LOK V86

SOFT-LOK V87

SOFT-LOK V88

SOFT-LOK V89

SOFT-LOK V90

SOFT-LOK V91

HEADER READER

VERSION DETECT

INSTRUCTIONS

THIS PACKAGE IS DESIGNED TO TRANSFER A LARGE PROPORTION OF THE B.P.A. SPEEDLOCK GAMES TO DISK WITH MINIMUM FUSS. IT WILL ONLY WORK ON A 128K MACHINE WITH DISK

RATING

92%

VIDEO MASTER Campursoft • £34.99 • 041-554 4735

The VideoMaster from Campursoft was one of issue 3's main items of news. It's been marketed as the first real alternative to the MP modulators, which were completely abysmal and no longer available. The VideoMaster will enable the CPC to display a picture on a monitor via Composite Video sockets or on TV via a Video Recorder's composite input, enabling the CPC screen to be recorded onto videotape - ideal for video titling!

Not all Video recorders or Televisions have composite input, but some modern TVs and VideoRecorders are blessed with SCART sockets (one of those long oblong ones!), for which Campursoft can supply a lead.

Setting up the unit couldn't be easier. One lead plugs into your CPC DIN socket, one plugs into

the 12 volt line of the CPC Monitor - CPC464 owners will need a special power supply in order to use the VideoMaster, which costs an extra £9.99 from Campursoft.

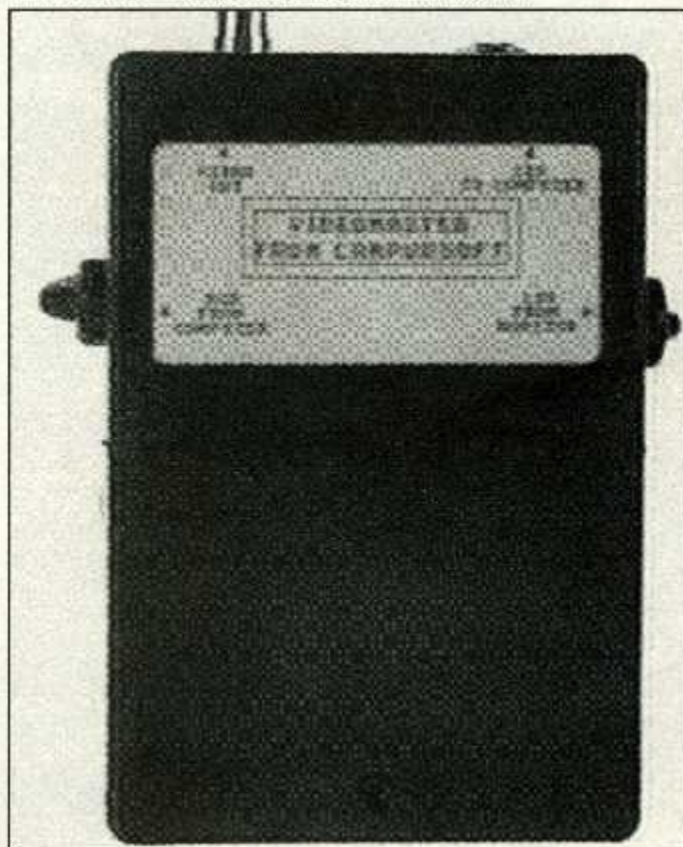
The other connector plugs into a Video Recorder or Television. The AUX channel must be set for a full colour screen to be displayed. The outstanding quality of the picture must be seen to be believed! It's far, far better than anything the MP modulators could ever hope to produce - you can actually read text from a mode 2 screen!

VideoMaster's instructions are clear and precise, and, the only strange thing about it, was that the occasional screen is displayed in mono. There is no apparent explanation for this and this phenomenon has occurred with the MP modulators as well. Even a phone call to Amstrad could not illicit an answer. It's just one of those things. Aside from this the VideoMaster is an excellent piece of kit, and a worthy addition to any serious CPC owner.

RATING

95%

Monitor quality graphics from your video?
Now available using Campursoft's VideoMaster.



LETTERS

Gotta letter? Then get it in!

Letters,
CPC Attack!
HHL Publishing,
Greater London House,
Hampstead Road,
London NW1 700

or fax:
071-387 9518

AMSTRAD HELPS OUT

While reading the September issue of CPC Attack!, I noticed that Steve Martin from London was having trouble getting the cartridges for his CPC6128+. If your readers would like to purchase any of the cartridges available at this time for the GX4000, CPC464+/6128+, they can obtain them directly from our spares by phoning 0277 209508. The list of cartridges available is: Klax, Tennis Cup 2, Tin Tin, Wild Streets, Robocop 2, Op Thunderbolt, Copter 271, Crazy Cars 2, Pro Tennis Tour, Barbarian 2, Fire and Forget, Switchblade and Batman.

I hope this will help your readers.

Andy Smallbone,
Amstrad Technical Support

Gee, thanks for the help. It's good to know that there is still some support for our readers out there.

RIVETING READ

I recently bought my first copy of CPC Attack! (September) from my local newsagent. I would like to congratulate you on a riveting read and, with a few renovations here and there, I think that it could be the best.

To start with, how about sticking a covertape on the front of the magazine and secondly, how about paying £10 or £20 for letters of the month starting with mine!

Congratulations, I will be buying CPC Attack! every month without fail.

Rob Monk,
South Humberside

We had great debates about a covertape before and decided that it was not worth it. A covertape would drain our resources so much that it would not be practical to do so. Even by raising the coverprice to £2.50, we would still make less money than we do at present and would probably have to drop 8 pages of editorial to recover losses - leaving a measly 60 page issue. Unthinkable!

As for prize letters of £10 or £20. We will give £25 for any prize submission whether a letter, picture (art drawing) or a program listing. Not everyone will win a prize (as you have unfortunately discovered), but the best reward is seeing your work in print - isn't it?

THE PUZZLER

While reading the letters pages in a previous issue of CPC Attack!, I noticed a letter from a certain Hugh Janus from Harrow, regarding a piece of software called Amy's Puzzle game which had been released on the cover of CPC Attack! However, I am a subscriber to CPC Attack! and have never received any piece of software whatsoever on the cover of my magazine. I would be grateful if you could explain this to me as I am very displeased to find that I may not be getting my money's worth.

M.J.Pacione,
Milton Of Campsie

When we first received your letter we thought you were a wise guy (like Hugh Janus - Huge what? we ask!), but since you're from Milton Of Campsie we think not!

Amy's puzzle game was not a piece of software, but is a piece of hardware. In fact, it is the cheapest and most compact hard disk available for the CPC. Price and size have limited its storage capacity to 4 bits (half a byte - a nibble). There are 16 permutations available by placing the shiny metal bits in, or out of, the storage locations. Once the memory has been written, it will stay in that position (store) unless wiped clean (cleared - deleted - formatted).

MORE CART GAMES

First of all, I think *CPC Attack!* is an excellent read and great value. I particularly enjoyed *The Dungeon*.

There are many things I would like to ask:

1. Why don't the best games, such as *Lemmings* and *Prince of Persia*, get put onto cartridge? It could mean that the top games could have top sound and even better graphics. I'm sure that you would find a giant boost in the sale of cartridges and PLUS machines.
2. In issue 1, your review on *Lemmings* gave it a score of 9 for sonix. Doesn't sonix mean sound? If it does, well *Lemmings* on the 464 has no sound so how can you give it a score of 9?
3. I'm considering purchasing *Pro Tennis Tour* on cartridge. What are the differences between the cart and the tape version apart from cost?
4. In issue 2, you reviewed *G-Paint*. Does it require a mouse?
5. Aren't there any decent games based on the Olympics or something similar on the 464?
6. What would you say is the best footie game at the moment. Is it *Kick Off 2*, *Microprose Soccer* or some other game that I've missed?

Neil Foster
Northallerton

1. The best games didn't make the cartridge because the carts do not sell well enough. Companies who invested in producing cartridge games lost money and eventually gave up trying. Maybe the games weren't good enough, but they were not popular.
2. The review was based on a 128k disk copy. The review did not state that 64k users would not have sound - we should have made that more apparent.
3. The graphics are better on the cart version. The tape version is so good it made our Top 50 and is available for £3.99. The cartridge version will cost a lot more, so you really do want to check if the extra cost is justified. Personally, I don't think it is - no matter how good the graphics are. See 'CART GAMES HERE' - give Amstrad a call and find out!
4. *G-Paint* doesn't require a mouse.
5. Yes, some from Hit Squad (061-832 6633) are: *Hyper Sports*, *Daloy Thomson's Decathlon*, *Supertest* and *Olympic Challenge*. From Kixx (021-625 3388) are: *The Games*, *World Games*, *Winter Games*, *Summer Games* and *Super Sports*. All these games are tape-based and will only cost £3.99.
6. The best footie game (see Top 50) is *Kick Off 2* which has 100% arcade action, but *Man United* also has a management element, while *1st Division Manager* (see review in this issue) has 100% strategy. *Psycho Soccer* (see review) is a new compilation and may satisfy your needs.

PD SUPPLIES

You reviewed some PD software in your September issue, but didn't say which libraries supplied the programs; *Rambase 3*, *PD Planner*, *G-Paint* and *Formatter*. Can you supply a contact address for these?

Gordon Dutton,
Dorstone

We don't usually specify which libraries supply individual programs unless we are supplied by them. Most libraries, listed in the contact panel each issue, can supply any piece of PD, so any of those listed should be able to help you. A problem with the libraries is, because they are part-time businesses, they do not sit behind the phone all day. You'll have to write, get information back from them (possibly by phone) then make your order.

A COVERTAPE REQUIRED

Could you please put a covertape on the front of the magazine. I think more people would buy it if you did. I also think that Pat Kelly is the funkiest person of all times!

Gregory Waddington
(age 9),
Bradford

Sorry, Greg, but no can do. If we put a covertape on we'd lose money - even if we charged £2.50. Anyway, with the state of play on the CPC scene we'd soon find that we had nothing worthwhile to justify the extra 65p that you'd have to pay. And you could just be right about your last remark, methinks!

ROMDOS TO BLAME!

As author of the *StarDump* 24-pin printer program I feel that I must write to thank you for such an excellent review in the September issue of your magazine.

However, your review mentions that the program will not run with ROMs enabled. I fail to understand this as it runs in all my machines with 6 ROMs on at the same time. The program does not care how many ROMs are on as it would simply claim memory from them.

I suspect the problem occurs only with ROMDOS and my 8-bit port driver. ROMDOS uses workspace other than that below HIMEM, probably using the space from &BE00 to &BE3F which is where my 8-bit drivers sit. If this is the case then my driver would overwrite some part of the disk system and cause the problem mentioned.

Finally, congratulations on the revamping of the magazine. Some of it is not to my taste, but I realise that you must appeal to the widest possible readership.

H.E. Haxwell,
Hatfield

I think that the review was fair, but welcome your comments. As you point out, ROMDOS compatibility was not checked during testing. This will cause an inconvenience for a few users who will have to switch their ROMDOS ROM off before using *StarDump*.

TAKING YOU BEYOND REALITY
and back again

CPC

Attack!

NEXT MONTH

DECEMBER ISSUE:
On sale on (or around)
5th November 1992

STS SOFTWARE

They're big, they're bad and they're coming to a CPC near you. But, who are they? Find out next month!

MIND YOUR LANGUAGE

Oops, it was meant to be in this issue, but worry not. Next month, it's a definite feature.

ECTS SHOW REPORT

At the show there were over 50 CPC games pencilled in for release – read all about it.

COMPLETE CONTROL

Again, pencilled in for this issue, we just couldn't make it, but next month all is revealed.

REVIEWS

Burstin' with all the latest releases and hottest news. You'd be a fool to miss out.

PLUS all the regular features you've come to love. We have Q&A, we have news, we have Public Sector, we have Program Listings and finally we have a special announcement. Be square if you're not there!

NEWSAGENTS ORDER FORM

Dear Newsagent, I'd be a fool not to miss what's going down in CPC Attack! next month. Please order me ___ copies.

(PS You should get one yourself too, if you wanna be in the know.)

My Name is

My Address is

..... Post Code

• Newsagent: You can obtain CPC Attack!
from your local wholesaler.

FREE CATALOGUE

COMPLETE & RETURN THE COUPON BELOW FOR A FREE 64 PAGE COLOUR AMIGA CATALOGUE

FREE! FROM SILICA



When you buy your new Amiga computer from Silica Systems, we will give you an additional £369.73 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of computing and help you to get off to a flying start with your new Amiga. Plus, with every Amiga from Silica we will give you 16 nights FREE holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

16 NIGHTS HOLIDAY HOTEL ACCOMMODATION
Every Amiga 500 and 600 from Silica comes supplied with a free 72 page colour brochure with accommodation vouchers. These vouchers are valid for up to a total of 16 nights in any of 250 hotels with accommodation (T&Cs). All you have to pay for are your meals (prices are listed in the brochure).

ARCADE ACTION PACK:
10 Superb entertainment titles:
ASTERIX £24.99
CHESS PLAYER 2150 £24.95
DRIVIN' FORCE £24.95
LIVE AND LET DIE £19.99
ONSLAUGHT £24.99
PIPE MANIA £24.99
RICK DANGEROUS £24.99
ROCK 'N' ROLL £19.99
SKWEEK £19.99
TRIVIAL PURSUIT £19.95

PRODUCTIVITY:
PHOTON PAINT 2.0 £89.95
The recommended paint package
GFA BASIC V3.5 £50.00
A complete book: reference
TOTAL VALUE: £369.73

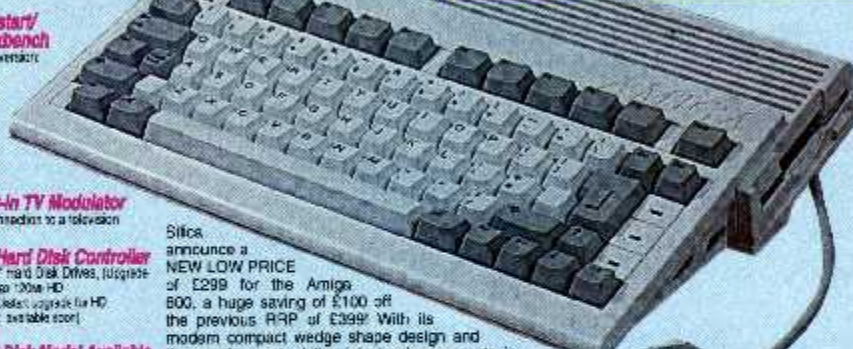
WORTH NEARLY £370!

AMIGA 600 - NEW LOW PRICE!

£299

INC VAT - (1Mb RAM - No Hard Drive)

- NEW! Compact Design**
38cm x 21cm x 7cm
78 Key Keyboard
- 3 1/2" Internal Floppy Drive**
- 1Mb RAM As Standard**
10Mb RAM Maximum
- Kickstart/Workbench**
Latest version v2.05
- Built-in TV Modulator**
For connection to a television
- IDE Hard Disk Controller**
For 2 1/2" hard disk drives, upgrade kit to max 10Mb HD also includes upgrade kit for HD support (separate cost)
- Hard Disk Model Available**
With 20Mb 2 1/2" Hard Disk Drive
- Smart Card Slot**
Built-in as standard
- Trapdoor Slot**
For optional plug-in Chip RAM and battery backed disc
- 2 x Joystick/Mouse Ports**
Easy access - located on right side of AMIG, in front of disk drive
- Composite Video Output**
Full colour composite video output for connection to most monitors
- 1 Year On-site Warranty**



Silica announce a **NEW LOW PRICE** of £299 for the Amiga 600, a huge saving of £100 off the previous RRP of £399! With its modern compact wedge shape design and the employment of the latest advancements in Amiga technology, it represents the very best investment for home computing. It has all the power of a first class games console with a full range of entertainment software available, as well as being a true home computer with business and education software and an extensive range of peripherals and accessories.

The Amiga 600 uses state-of-the-art surface mount technology, for maximum reliability and features a 3 1/2" floppy disk drive, mouse, TV modulator and smart card slot all as standard. The innovative smart card slot accepts games, ROM or RAM cards (from 1Mb up to 4Mb) and will take advantage of many future new developments. The very latest version of the operating system, Kickstart/Workbench v2.05 is used in the Amiga 600 and its enhanced chip set facilities include improved graphics resolution, increased garlock support and the facility for up to 2Mb of chip memory. The Amiga 600 is fully compatible with the A670 CD-ROM Drive and Interface which will give it access to a full range of CDTV titles and audio CDs. The Amiga 600 is available from Silica in several configurations (see below) including a specially upgraded 2Mb RAM version.

FREE GIFTS FROM SILICA SEE PANEL TO LEFT

PERIPHERALS FOR AMIGA COMPUTERS

AMITEK RAM BOARDS (FOR AMIG 500)

SLIMLINE DISK DRIVE

Upgradable RAM board available with 0K, 512K and 1Mb of RAM. Built-in battery backed disk. Plugs straight into the Amiga 500's trapdoor. No soldering required - 2 year guarantee.

15mm Super Slimline colour compensated 3 1/2" floppy disk drive. Draws power from the Amiga and includes the set for connection of additional drives. 1 year replacement guarantee.

RAM UPGRADES

CODE	DESCRIPTION	RRP	SILICA PRICE
AM 200	AMITEK 2K Populated	£26.95	£27.95
AM 300	AMITEK 3K Populated	£34.95	£35.95
AM 400	AMITEK 4K Populated	£50.00	£50.00
AM 500	AMITEK 512K Board	£24.95	£25.95
AM 600	AMITEK 1Mb Board	£39.95	£40.95
AM 700	AMITEK 2Mb Board	£54.95	£55.95
AM 800	AMITEK 4Mb Board	£79.95	£80.95

EXTERNAL DISK DRIVES

CODE	DESCRIPTION	RRP	SILICA PRICE
AM 000	SLIMLINE 3 1/2" 1Mb - 1500	£79.00	£84.95
AM 001	SLIMLINE 3 1/2" 1Mb - 1500	£79.00	£84.95
AM 002	SLIMLINE 3 1/2" 1Mb - 1500	£79.00	£84.95

PRINTERS

CODE	DESCRIPTION	RRP	SILICA PRICE
AM 010	EPSON 8000 1500 1500 1500	£149.95	£159.95
AM 020	EPSON 8000 1500 1500 1500	£149.95	£159.95

COLOUR MONITORS

CODE	DESCRIPTION	RRP	SILICA PRICE
AM 030	ORIGAMI 15" 1500 1500 1500	£149.95	£159.95
AM 040	ORIGAMI 15" 1500 1500 1500	£149.95	£159.95

ROM UPGRADE

CODE	DESCRIPTION	RRP	SILICA PRICE
AM 050	ORIGAMI 15" 1500 1500 1500	£24.95	£25.95

AMIGA 500 STANDALONE



HARDWARE

- 512k AMIGA 500 COMPUTER £299.99
Inc. 1Mb 3 1/2" Disk Drive, Mouse Controller, Power Supply, Workbench 1.3 & Manuals
- 512k RAM EXPANSION TO 1Mb RAM £24.95
- A520 TV MODULATOR FREE

PLUS! - FREE FROM SILICA

- PHOTON PAINT V2.0 £89.95
- ARCADE ACTION PACK £229.78
- GFA BASIC £50.00

TOTAL PACK VALUE: £694.67
LESS PACK SAVING: £395.67
SILICA PRICE: £299.00

ORIGINAL AMIGA 500 WITH SILICA 11-KEY NUMERIC KEYPAD

£299

INC VAT - Ret. AMIG 501.0

AMIGA 600 CONFIGURATION OPTIONS

NEW! FROM SILICA

2Mb RAM OPTION WITH CLOCK BATTERY BACKED!

	1Mb Hard Drive	2Mb RAM	1Mb RAM	2Mb RAM
1Mb AMIGA 600 + MOUSE	£299.99	£299.99	£299.99	£299.99
1Mb RAM UPGRADE	N/A	£60.00	N/A	£60.00
2 1/2" HARD DISK	N/A	N/A	£299.00	£299.00
DELUXE PAINT II	£79.99	£79.99	VARIABLE	VARIABLE
"MYSTERY" GAME	VARIABLE	VARIABLE	VARIABLE	VARIABLE
1 YEAR ON-SITE WARRANTY PLUS! - FREE FROM SILICA				
PHOTON PAINT V2.0	£89.95	£89.95	£89.95	£89.95
ARCADE ACTION GAMES PACK	£229.78	£229.78	£229.78	£229.78
GFA BASIC INTERPRETIVE V3.5	£50.00	£50.00	£50.00	£50.00
TOTAL PACK VALUE:	£749.71	£809.71	£868.72	£1028.72
LESS PACK SAVING:	£450.71	£460.71	£519.72	£579.72
SILICA PRICE:	£299	£349	£449	£499

CDTV COMPUTER SYSTEM SAVE £200!

UPGRADE YOUR AMIGA 500 FOR ONLY £399

We are pleased to announce a very special trade-in offer to Amiga 500 owners who are keen to take advantage of the extra benefits offered by Commodore's multimedia innovation, the CDTV.

Amiga owners who return their working Amiga 500 computer (with Kickstart V1.2 or 1.3), mouse, power supply and manual to Silica, can claim a £200 discount off the price of the new Amiga CDTV Computer System. This new system (normal RRP £599) is fully compatible with all Amiga software. In addition, it provides access to a vast range of CDTV titles. CDTV works much like a standard Amiga 500 or 600 but has many additional features including a compact disc drive that can hold up to 550 megabytes of information per disc as well as play audio discs to a very high quality. CDTV comes supplied with the latest infra-red remote control handset, giving you full control of your system from the comfort of your armchair.

TRADE-IN OFFER

CDTV SYSTEM £599
AMIGA 500 TRADE IN -£200
YOU PAY £399

INC VAT - Ret. AMIG 1250



- FEATURES INCLUDE:**
- Full Compatibility with Existing Amiga Software
 - 16Mb Chip RAM
 - CDTV Player
 - Plays Audio CDs & CD + Graphics Discs
 - Full QWERTY Keyboard
 - Auto Monitor Reset & Parallel Ports as on the Amiga
 - 800K 3 1/2" Disk Drive
 - Mouse Controller
 - Infra Red Remote Control
 - Workbench 1.3 & Manuals
 - Welcome CD + Caddy

SILICA SYSTEMS OFFER YOU

- FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
 - TECHNICAL SUPPORT HELPLINE:** Team of technicians experts at your service.
 - PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
 - ESTABLISHED 14 YEARS:** Proven track record in professional computer sales.
 - £12 MILLION TURNOVER (with 80 staff):** Solid, reliable and profitable.
 - BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available 081-309 0888.
 - SHOWROOMS:** Demonstration and training facilities at our London & Sidcup branches.
 - THE FULL STOCK RANGE:** All of your requirements from one supplier.
 - FREE CATALOGUES:** Will be mailed to you with offers + software and peripheral details.
 - PAYMENT:** Major credit cards, cash, cheque or monthly terms.
- Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may require additional peripheral 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 almost 14 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. Fax: 081-309 0888.

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA. Tel: 071-580 4000. Fax: 071-523 4737.

LONDON SHOP: Sofridges (1st floor), Oxford Street, London, W1A 1AB. Tel: 071-629 1234. Fax: 071-629 1234.

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX. Tel: 081-309 8811. Fax: 081-309 0017.

To: Silica Systems, CPCAT-1192-80, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A 64 PAGE AMIGA COLOUR CATALOGUE

Mr/Mrs/Miss/Ms: Initials: Surname:

Company Name (if applicable):

Address:

Postcode:

Tel (Home): Tel (Work):

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

800

EXCISE - Approved prices and special features may change. Please return the coupon for the latest information.

CHEETAH

JoySticks from the CharacteriStick range



ALIEN 3

ALIEN 3 TM & © Twentieth Century Fox Film Corporation



**BART
SIMPSON**



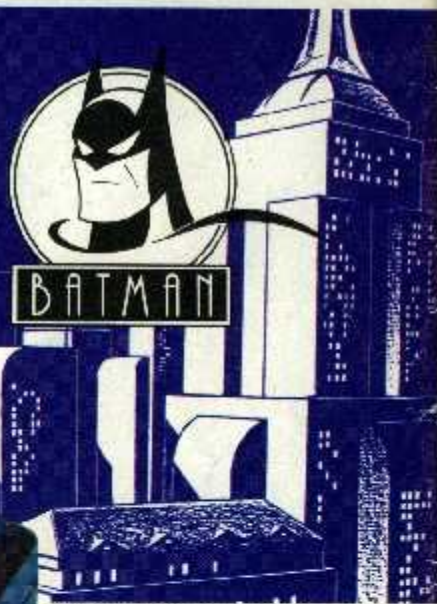
CHECK
IT OUT,
MAN!

THE SIMPSONS TM & © 1992 20TH C. FOX F.C.
All Rights Reserved.



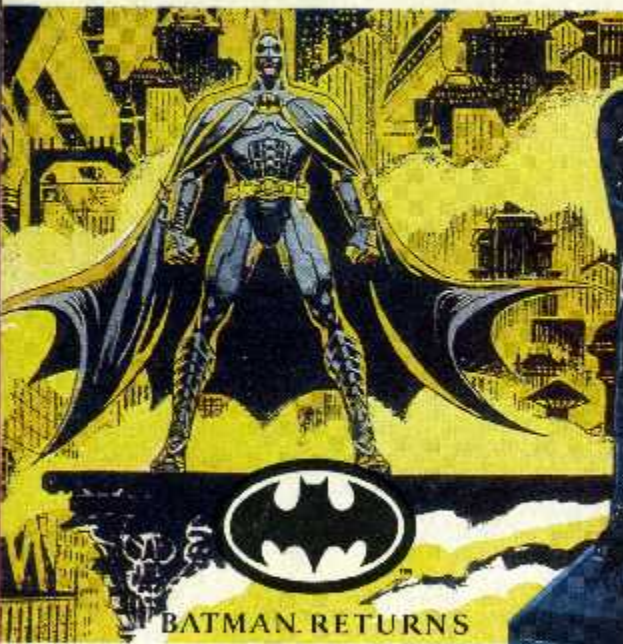
**TERMINATOR 2
JUDGMENT DAY**

TM & © 1992 CAROLCO All Rights Reserved. Unauthorised Duplication is Strictly Prohibited.



BATMAN

TM & © 1992 DC Comics Inc. All Rights Reserved.



BATMAN RETURNS

TM & © 1992 DC Comics Inc. All Rights Reserved.

CHEETAH
the most innovative
joystick company in the world

Versions compatible with

- Nintendo NES (£14.99)
- Sega Master System (£12.99)
- Sega Mega Drive (£14.99)
- Sinclair Spectrum +243 computers
- Commodore computers and video game systems (£12.99)
- Atari computers and video game systems (£12.99)
- Amstrad computers (£12.99)
- Older computers may require inter-faces and/or adaptors - not included.

CHEETAH INTERNATIONAL LTD
Cheetah House, Bedwas Business Park,
Bedwas, Gwent NP1 8DU
Tel: 0222-867777 Fax: 0222-865575

Features include

- Officially licensed products
- Highly sensitive light touch fire buttons
- Full 8 directional control
- On-table or in-hand operation
- Heavy duty base with strong stabilising suction cups
- +24-3 selector connector
- 12 month warranty
- Prices include VAT, postage and packaging
- Dealer enquiries welcome
- Cheetah products available from branches of:



High Street stores and all good computer shops, or direct from Cheetah.