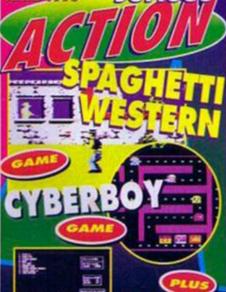
ISSUE No. 115 APRIL '95 £2.99

> BRUNWORD ELITE MKII ROM MODULE



CPC 464, CPC 6128, CPC 464 Plus

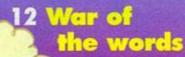


- Software at a snip! Grab yourself a CPC bargain!
- Get the most out of your Vidi Digitiser!
- Latest PD news and reviews!

PLUS: BASIC & MACHINE CODE PROGRAMMING, FANZINES, READER ADS, COMMS

MSTRAD

APRIL '95 ISSUE 115



100

The big three CPC word processors slug it out. That's Protext, BrunWord and Tasword. Angela Cook was there to maintain the peace and evaluate the performances.

Software at a snip!

Canny CPC users know where to get the hard- and software they want and for a good price, too. David Crookes cuts out the confusion and frustration and leads you to the sources of the best CPC bargains.



17 Who are you? (The 1995 AA reader survey

More reviews? Fewer Techy Tips? Less machine code? We ask the questions. You give us the answers, honestly, accurately and in your own time. We learn more about you. So you get a customised magazine and as if that's not reward enough - you could win a Jiffy Bag of software, too! FREE Now, is that fair or wot?



20 COMPETITION!

Let your CPC bear the brunt of your word processing burden with the BrunWord package. BrunWord is a byword for quality word processing and you could win the Elite Mark II ROM Module - if you enter our quick Competition! Turn to page 20 now!



On your covertape...

Spaghetti Western

Get a Clint in your eye when you turn sharp shooter in an all-time classic. Never mind pumping iron, it's bullets you need to shift!

Cyberboy

you handle it?

An a-maze-ing race wasting ghosties and popping pills in 'probably the most difficult Pacman game you've ever played.' Can

Aah-n't they cute? Don't be fooled.

The Ultimate **Sprite Searcher**

Graphically challenged? Show what you mean by adding pictures to your plots. Designed for disc users but tape types can use it, too. Whether you have 128K, 64K or the multiface 128K or 6K versions, no matter! Make your programs action-packed and image-



Turn to

Regulars

- 3 What's happening CPC news. Also, 'at home' with AA and AA readers on the Internet.
- Reaction Letters, even the odd sentence.
- 5 Serious action! We've got it taped. For you.
- 7 Amscene Directory The AA guide to who's who and where. Want to be in the know? Start here.
- 15 Classifieds

You've got it, someone, somewhere, wants it. You want it? Someone's got it.

20 Competition!

A BrunWord Elite Mark II ROM Module needs a new owner. Could it be you?

24 Back issues

Indispensable and inexpensive. If you missed out the first time all is not lost.

Serious stuff

10 Basically BASIC

File fiesta. Three types of CPC files.

16 Assembly line

Richard Fairhurst goes loopy - all in the interests of CPC research, of course.

19 Hardware

You can screen and screen until you're sick, using a Vidi Digitiser. Richard Wildey calls the shots.

21 Techy forum

Is the heat on? Richard Fairhurst can advise. Need to improve your connections? Richard can help.

Leisure zone

Public image

Does Finger Print make its mark? Do Rambase v4.6 and Dave's House count for anything? Keith Woods is the judge.

Further reading

News and reviews from the CPC 'zine scene, Also, 'A Rough Guide to Pictures'.

AA116 on sale: Thursday, 20 April 1995



ABC 15,168

Jul 93 - Jan 94

What's happening...



Hard core? Hard stance

Worried about the proliferation of WATCHING-8 pornography among PD libraries or

commercial software outlets? Then ask if your library is a member of Watchdog-8 or PSD (Professional Standards for Distribution).

Watchdog-8 is a new voluntary scheme for the software industry. It is run by the people at Prism PD but is 'unbiased' and independent of that company says a spokesman. It is based on the PSD, the largest official watchdog for the all format computer industry. The PSD works alongside Trading Standards and with the computer crime divisions of county constabularies and with New Scotland Yard.

The PSD aims to remove the spread of

pornographic software in two ways: to make sure that mail order companies clearly label material that isn't suitable for children so there are 'no unpleasant' surprises in the post' said a spokesman; and to pass to the police, details of companies suspected of dealing in child pornography, for example.

To join Watchdog-8 software companies complete an application form. If all is in order, the company making the application receives a logo to use on its stationery.

PSD John Dudley # 01621 778778. Watchdog-8, 13 Rodney Close, Rugby CV22 7HJ. http://www.futurenet.co.uk/ this is the front page of the Future Publishing WWW site with links into the home pages of all the Future magazines.

You can also find your way to the home page of AA reader K.E.W Thacker at

http://www.cm.cf.ac.uk/User?K.E.W/Amstrad or that of AA fan 'blup'.

(If you are bemused by the above information refer back to 'Get the message', AA105.)

TURE MUSIC'S

THE MIDI. ELECTRONIC MUSIC & RECORDING SHOW

The sound of music...

Want to make music, sweet, sweet music? Then come along to MEMS billed as: 'the ultimate event to learn what's hip 'n' happening in the world of music and sound technology... and an ace place for computer fans, too."

At MEMS, you'll find demos and displays from the world's leading kit manufacturers and also from the distributors.

The dates are Friday, 21 to Sunday, 23 April and the place, Olympia in London. Tickets cost £5 in advance or £8 on the door, but Amstrad Action have secured five to give away to

readers!. All you have to do is tell us which tube line Olympia is on.

But hurry to get the winners' tickets to them on time we need to receive your answers by Monday, 10

Ticket hotline # 01369 707888.

Compo winners

I want a game winner(s) are: Dave at Demon PD: Jordan Low, Angus; I Russell, Inverness; Stephen Rich, Harpenden; James Pinnias, Spitsby. (Sorry James, had a few problems with your writing!- Ed)

Richard Fairhurst wrote Fluff and he also writes for Amstrad Action.

The Image Conscious winner is E Johnson, Tamworth. The answer is BARRY.

The Alternative Competition winners are: (15 titles) P Adams, Bristol; (5 titles) J Slater, Peterborough: (5 titles) Alasdair Stewart. Ardler by Blairgowrie; (5 titles) Gary Andrews, Larne.

WACCI for free

CampurSoft is offering a free copy of WACCI to new customers buying software. No minimum purchase is necessary.

DES you or DESn't you?

CampurSoft is offering two free DES programs to DES ROM owners. Send a disc, SAE/Jiffy Bag and state whether you want the screen grabber Camera or the tracking sector editor Disc Editor. (The latter is very powerful and isn't suitable for beginners.)

No waiting

The eight socket (you can upgrade to a 15 socket version, later) ROMbox from CampurSoft enables instant access to your program/programs so not only does it save you time but it reduces wear on your hard drive, too.

A ROMbox is a program encoder on a chip so you only need to access your disc when saving or loading a particular datafile, Note that to work with a ROMbox all CPC Plus

machines require a peripheral adaptor (not available from CampurSoft). Price £35 plus £2 p&p. CampurSoft 10 Mcintesh Court, Wellpark, Glasgow G31 2HW = 0141 554 4735 Fax = 0141 227 4486

3-inch discs for sale

Original Maxell and Amsoft 3-inch discs for sale, £25 (incl p&p) for ten discs. CampurSoft has received a new consignment. Numbers are, however, limited to ten discs per person. From CampurSoft. (For contact information see above.)

Coming to a PC near you World Wide Web is the

liveliest, trendiest place to be on the Internet (that source of information and opinions that disbelievers treat with the scepticism some doctors reserve for complaints of PMT or ME.)

While you can't access it with your CPC the floods of e-mail received since we published the AA Internet address show that many of you use college resources to taxi along the Information Superhighway. The official AN site is at

http://www.futurenet.co.uk/ However, if you start at

her I would down I heard ment at many attention to a AMSTRAD

ter J :-- J mer J AA is on now the Net! See 'Coming to a PC near you', left.

Amstrad Action Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW 01225 442244 Fax 01225 446019 E-mail aa@futurenet.co.uk



NOTE: Please do not ring the office for advice. We can only answer your questions through the pages of the magazine. Please send written enquiries to one of the addresses above.

Editor Karen Levell Production Editor Rebecca Lack Art Editor Rob Pengilley

Ad Sales Executive Rob Bennett Publisher Simon Stansfield Joint Managing Director Greg Ingham Chairman Nick Alexander Production Clair Booth/Jayne Owen
Ad Design Cherry Coad
Circulation Manager Jon Bickley

© Feture Publishing Ltd 1995 Amstrad Action is an independent publication. The pany producing it has no connection with Amstrad plc. We cannot guarantee to return material submitted, nor can we enter into personal correspondence. We reserve the right to edit any material submitted for reasons of space and clarity.

Contributions are only accepted on the basis of full assignment of copyright to Future Publishing. All letters nitted are assumed to be for publication. We take care to ensure that everything we publish is accurate, but cannot be liable for any errors or omissions. No part of this publication may be reproduced in any form without.

Amstrad Action recognises all copyrights contained within this issue. Where possible we have acknowledged the copyright holder. Please feel free to contact us if we have failed to recognise your copyright – we will be happy to correct any oversight.

Printed in the UK by William Gibbons and Sons Ltd. Willenhall, West Midlands WV13 3XT.

Write to us at: Reaction, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or you can e-mail us at aa@futurenet.co.uk putting 'reaction' in the subject line.

Web feat

I wrote to you suggesting you create your own AA home page. Now you have and I've had a look at it (see 'Coming to a PC near you', page 3 - Ed). I think it is very good, quite amazing, in fact. Especially all the pictures. So how about covering the following topics...

- ftp-sites with amstrad cpc-software,
- o information on how to link a cpc to a pc
- information on the newest and best cpc-emulators and their use? blup@ezinfo.vmsmail.ethz.ch

Slowly, slowly please. I was rubbish at foreign languages at school and this looks nothing like English to me. All those letters without vowels, the ampersand... Seriously though, blup (that's gotta be foreign or you'd be Herbert or Rodney), thank you. Though I'm afraid it's Rob, the Art Editor who takes credit for the pictures and the Futurenet On-line Editor who put it on to the Web site.

If you look at the Amscene/Directory on page 7 you'll see we have added a new section with information about ftp-sites for cpc-related issues. If anyone knows of any more, please write in. AA

Perhaps blup can help with the next one - the ch at the end of his e-mail address tells me he's in Switzerland which is 'abroad' so ...

German-ating ideas?

I go to Germany every summer for my holidays and it would be nice to buy some German games. If you do get games abroad do they still use the name Amstrad? Alasdair Stewart, Dundee

It's okay, we're covered

Why not lose more AA-produced pages and replace them with sample fanzines photocopied on to A5 paper and included as a supplement? This would result in a decent-sized magazine, provide free advertising for fanzines and user groups and reduce AA's production costs. I prefer the covertage in its current form - a complete game plus demos/utilities more than justifies the £2.95 cover price. Mark Payne, Redditch

Mark, thanks for your concern about our production costs! We are happy to publish details of fanzines

and user groups - in fact, any useful CPC info - in our Directory on page 7 which readers can help keep up-to-date by notifying us of changes or omissions.

And, Mark, you asked where to find to buy or swap games. Our reader ads slot is the place. This month it's on page 15. You could probably trade your mother, not just your Music Maker package! Though if you go to MEMS (see page 3) you might be inspired to keep the MM package. Can't youch for your mother, though! AA

Going up

I buy your rad mag when I get the money. I've got a 6128 and a GX4000. And I've tons of questions to ask you...

- 1 AA is IR£4 here in Ireland. Will this price be going down?
- 2 Is Trading Post the best place to get carts from? They only have 10.
- 3 Do no software houses make games any more? You didn't review any in AA112.
- 4 I missed a few good issues. Have you had the hardware project so the GX4000 can be plugged up to a cassette recorder?

1 You may have the best beer and very sexy accents but you also have 21% VAT on magazines (zero-rated in the UK). Anyway, Peter you've been bending the truth. I am reliably informed that AA costs IR£3.92 not IR£4. Shame on you! And as for going down. Sorry. From this issue AA costs more (wherever you buy it) - 4p in the UK, so around 7p in Eire. 2 Carts are hard to get hold of. Try Wizard and Computer Cavern (see Amscene Directory, page 7). 3 It's down to independent stuff, I'm afraid. 4 AGGGGGGGHG! AA



STRA

	(0125 4219			• SOFT\ t Friendly Servi		1 11000	01257) VISA (21915
ATEGY/	SIMULATION CASS .DISK	Accessories	£34.95	BUSINESS/UTILITIES	EDUCATION	Disk	PRINTERS All printers listed below are suitable for

Colossis 4 Endge Colossis 4 Chess Football Manager II Football Manager II Football Manager III Football Manager World Cup Managely Managely Managely Cluedo, Scrabbli WCup table 90 (Not CPC+ Soccer Mania	£2.99 £2.99 £12.95	£7.93 £6.99 £6.99 £6.99 £2.99 £12.95 £6.99
ARCAD	E	
Chart Attack	CASS	Disk
Dizzy Collection	\$8.50	
Dbl Drag II + Rodland Double Dragon	25.92	£12.95
Dream Team	26.99	10.99
G · Loc Hanna Barbera Collection	100 110 711	
Honna Barbera Collection	\$4.99	04.00
Loopz Collection Midnight Res + Nightbreed	5000000	
Mystical	100000	99.62
Migh	13.75	27.99
Peperboy II		\$12.95
Prehistorik II	\$9.50	
Rodland + Dbi Dragon II	20 60	112.95

ights, Bridge, Bligs

Super Couldron Super Space Inv + Pit Fighter Turtles The Coin Op	
SPECIAL OFFE All Disks Boxed Wife	
Benenza Bros Incredible Shrinking Spher Memy Pythen Monspoly Wild Shreets Galactic Games Pop Up Back to the Future II Light Corridor Sporting Triangles	£2 99 £2 99 £2 99 £2 99 £3 99 £3 99 £4 99 £4 99

	Accessories	
ı	ANX Mouse & Interface	\$34.95
ı	MP1F/2F 464/6128 to Scort TV	\$19.99
ı	Cable 6128 to FDI 2nd Drive	\$7.95
ı	Coble Megadrive 1 / CTM 644 Mon	20.00
ı	Cable Megadrive2/CTM644 Mon	\$12.99
ı	Coble Megadrive 1 / CM 1 4 Mon	99.99
ı	Cable Megadrive2/CM14 Mon	£14.99
ı	Cable Aniga/Atori/Spectrum Phone	
ı	Cassette Lead (with REM Conn)	£3.95
1	Disk Drive Belt	\$2.99
ı	Disk Drive Cleaner 3*	£5.95
ı	Disk Drive 3.5" + Randos 6128	\$79.95
ı	Disks 3" Ex Gones	10.014.99
ł		10: 64,99
٠		.0: \$6.99
1	Inkjet Refill Conon/HP/Cit Blk	66.83
ı	Inkjet Refill Colour	\$11.99
1	Kboard Ext teads 464	28.95
1	Khoord Ext leads 6128	\$9.95
ı	Kboard Sr. 464+/6128+	\$9.95
ı	Mouse Nat	\$2.99
ı	Printer Cable CPC 1 Mir.	\$8.95
ı	Primer Coble CPC 1.5 Mb	\$9.95
1	Printer Cobie CPC 2 Mtr	29,012
1	Printer Coble CPC - 2 Mir	E7.95
ŀ	Joyatck Splitter	\$2.99
J	Joystok Extension Lead	\$4.99
1	Rábon Reirk	\$12.95
1	Sowen Filter Mesh Coll/Mono	\$14.95
1	System Disk 6128+	211.95
1	System Disk 6128 (Sides 182)	29.95

Form

Mos

2m

Advanced Art Studio 6128
Adv Art Studio + Col Dump3
Sesic Idea (Basic Tutorial)
Colour Dump 3 (Col Scr Dump)
Crash Course Typing Tut 6128
D.E.S. ROM Version £24.99
Discology (Disk Unity)
Mastercolc 128 (128k) £27.95
Masterfile III (128k)
Maxom Assembler/Disassembler£23.95
Microdesign + DTP for 6128£29.99
Microdesian + AMX Mouse
Microdesian Extra
Microdesign Maps UK £14,99 Microdesign Maps World £14,99
Microdesian Maps World
Mini Office Original Cass Only
Money Manager (+PCW)
Parados Rom £14,99
Proprint
Protect Disk \$21.95
Protext CPM (6128) \$51.95
Prospell \$20.95
Protype (Print Enhancer) \$23.95
Routeplanner (New) £19.95
Soft Lok Tape to Disk Transfer \$14.99
Taxword 6128 \$24.95

er angro + wor syrings	- MAX-77	Pun School II 6-8	23.99	
idea (Basic Tutorial)	£14.99	Fun School II Ba	23.99	
r Dump 3 (Col Scr Dump)		Fun School II 8+ Fun School II 8+	10.95	213.95
Course Typing Tut 6128	E20.95	Fun School 4.7-11	10.95	£13.95
ROM Version £24.99	\$14.99	Playdays 3-8E		
ogy (Disk Utility)	99.82	Shoe People 4-6	25 00	
reals 128 (128k)	£27.95	Lets Play with Words 4-8		012.05
rcalc 128 (128k) rfile III (128k)	. 629.95	Fun with Words 7-	FR 50	C11 05
m Assembler/Disossembler	\$23.95	Read Right Away 1 5-8		
design + DTP for 6128		Read Right Away 2 69	20 05	012.05
design + AMX Mouse	259.99	Read Right Away 3 7+		
design Extra	\$14.99	Seter Spelling 9+	20 05	012.05
design Maps UK	\$14.99	Lets Play Numbers 4-8	12 05	012.05
design Maps World	\$14.00	Lets Play Money 4-8		
Office Original Cass Only		Primary Maths 3-12	24.05	C24-05
Monnoet (48CW)	624.05	Fire with blumbers 7	PR 50	P11 04
es Pore	014 00	Fun with Numbers 7- Torget Moths 6-13	20.20.	012.06
Pi-4	093.04	Many Made 15 C	24.04	024.05
CEN IA12EL	261 06	French Witness 11-	24.70	014.05
Com (V124)	200.05	Common Markey 11		C14 04
- Brist Edward	222.06	Seerick Total 11		C14.05
e (Frint Enrancer)	C10.0F	approved to the first of the	24.00	COV 05
Digititer (PAPA)	231.00	Mega Moths 11+ \$\circ\ \text{X} \\ Mega Moths 15+ \$\circ\ \text{French Mistress 11+} \\ German Master 11+ \$\text{Sponish Tutor 11+} \\ Micro English 8-Ad. \$\circ\ \text{Granny's Garden 6-10 6128} \\ Granny's Garden 6-10 6128	24.92.	£24.73
ok sope to prisk transfer	224.05	Onanny's Gereen 6-10 (61/26)	-	2000.05
000120	224.93	Dragon World 6-10 (6128) Glant Killer 9-14 Answer Bock Quiz 6-11		272.02
er gror sosword)	220.93	Gright Killer V-14		213.73
Disk Utility I	£14.99	Answer book Guiz 6-11		F117.A2

in School I Un 5, 5-8, 8+ E in School II Un 6

£3.99

BUL	GEI CASSE	1152 £1.9	y, 3 FOR £	5.00, 5 FOR	27.50		
Ving Min	Action Pack	Andy Cop	Aussie Ryles	Bully Dom	Covernania	Cl. Arcedia	
Arcodia 3	Count Duckula	Cricket let	Dandy	Edd Duck	Endaone	Frenc Son	
mula G.htx	Gome Over	Game Over II	G.Goods Crick	Grid from II	Gun Boat	Gurlighter	
word Duck	Huxley Pig	Indoor Socoer	bet Ninja Rab	J.Wilson Comp	K. Dolgleish	Joes .	
on forc	Moster Cress	N.Mansel GP	Night Gunner	Pagasus Bridge	Popeye	Popeye 2	
teon For	Postman Pat 2	Postman Par 3	Pro-Mrt Blka	Funch & Judy	Q10 Tankbust	Rolly Sim	
	Rugby Boss	Run for Gold	Scoolly Doo	Soccer Boss	Sooty Sweep	Space Rider	
v Spy	Spin Dizzy	Spiritre 40	Str Force Harr	Super Ted	Thomas Tank	Top Car	
p Door	Theate Europe	Tr Suit Mnagr	Trap Door	Turbo Bike	Dares Winsil	Xonograms	
	Mara Liffar A	weinbla Plance	Carrie Albarrantive	s When Ordering			

AT TO GOT 2 ON 20 GOT 6 ON 10 27

use with AMSTRAD CPC, CPC+ When ordering please state co STAR LC90 9 Pin Mono \$139.95 STAR LC100 9 Pin Mono/Colour ...£169.95 Inc. Calour/Mano Ribbon + Colourdump 31 STAR LC240 24 Pin Mono ...£169.95 All prices include cable & delivery

PRINTER RIBBONS						
Quantity:	1	2	5			
DMP 2000/3000	£3.75	\$7.00	£16.25			
CITIZEN 1200	£3.95	E7.50	\$16.25			
LC10/20/100	\$3.75	67.00	£16.25			
LC24-10/20/200						
KXP1080/81	23.75	\$7.00.				
KXF1124	23.75	\$7.00.	\$16.25			
10(92123/2124						
LC10/100 Colour	28.95	£17.50				
LC200 Mono		29.50				
LC200 Colour	£12.95	\$25.00				
Other printer	ribbons	please	phone			

RIBBON REJNK \$12.95 INKJET Refill Block £8.99 .Col £11.99

JOYSTICKS ANSTRAD JOYPAD CHEETAH Bug KONIX Speedking KONIX Novigotor ZPSTICK Super Fro JOYSTICK SPUTTER JOYSTICK EXTENSION

BUDGET CASSETTES £3.75 EACH

10 Pinbol Freddy Hordes

Mark

Popeye 3 Red Arrows

Spag Wester Tin Tin Moon

CPC 464, CPC 6128, CPC 464

Serious **Tether your** horse and hold on to your Statsons as sharp

shooting Richard Fairhurst explains this month's AA tape.

SPAGHETTI WESTERN

Zeppelin Software

Do you feel lucky, punk?

This month, it's your chance to be Clint Eastwood in Spaghetti Western, a game recently voted one of the all-time mag Commodore Format. So

plug in your joystick, limber up that trigger finger and get ready to pump bullets through the outlaws - which, unsurprisingly, is the general aim of this game.

It's not quite that easy, of thrown at you, which sap your energy on contact. And even on level 1, the outlaws have a knack of taking pot shots at you and ducking behind windows only to

> be replaced by an innocent civilians whom you're not meant to shoot: partly because you'll be penalised for it.

and partly because you'll waste valuable

Your stock of bullets is displayed at the bottom of the screen, as a bar representing your current energy level and a count of just how much cash your fistful of dollars' contains.

You gain the dosh by shooting outlaws and, oddly enough, picking up the bags with a dollar sign on them. While, to pick up an object, press Fire! and move the joystick down - there are bombs and new magazines (no, not like

AA) full of ammo to pick up, too.

elves and

rellows.

Moving the joystick left moves your player



distress flares

he's wearing?

left. Moving it right... You get the general idea.

To jump (handy to avoid balls thrown at you), move the joystick up and in the opposite direction to the way you're walking. So if you're going right, move the joystick up and left.

CYBERBOY

Sheepsoft/STS Software

Pacmar: old hat, right? Move around the maze, avoid the ghosts, eat the pills, collect the bonus

points. No problem. Today's CPC generation demands something more. Cyberboy's programmer, Paul Fairman, came up with the following twist from the depths of his rather warped mind:

In this game you can get out your laser and. well, waste the ghosts.

Despite this, it's still probably the most difficult Pacman game you've ever played. Control is by joystick or redefinable keys.

Sentinel Software

Programmers are programmers, and graphic shall meet. Which is a bit of a problem when you've finished your latest eight-level scrolling 'A' and

still firing full stops at the aliens.

Using TUSS, as it's more commonly known, you can get around this by, er... pinching graphics from other people's programs. There are four versions accessible from the TUSS

loading menu: 128K, 64K, and the special 128K and 64K for Mutliface users.

HARRICH CHE

So firstly load the program from which you want to pinch some graphics into memory which is option 2 on the program menu in the

MINERAL STREET normal versions. However, if you have a Multiface you can select one of the special Multiface versions and then load a game in the normal manner. Pressing the red button at any point

then kicks TUSS into action. Next, you need to search through memory for some graphics. To do this select the screen mode in which the game plays and then select option 3. Cursor up and down to move through memory. When you come across something that looks like jumbled-up graphics rather than a complete mishmash of game data and code, use cursor left and right to get the right width.

Use the SHIFT and cursor keys for final adjustment, and then exit to save the sprite using option 9. There are tons of other options for you to play about with and even an RSX sprite driver so you can use the graphics easily in your own programs (to reprint the TUSS manual would take up the whole magazine).

It's designed for disc users, but tape folks can use it. Load a Multiface version from the TUSS menu (press a key immediately that you see 'Press PLAY then any key'l, or load an unprotected game file first, followed by a special version of the program such as MEMORY &17FF LOAD "game filename", &1800. Insert side B of the covertage, wind it to near the end, and type LOAD "TUSS8800.64K", &8800; CALL &8800





THE ULTIMATE PRITE EARCHER

artists are graphic artists, and never the twain shoot-em-up and the spaceship is still a capital

Loading instructions

Insert side A of the tape, type ITAPE if you're a disc drive owner, and then press CTRL and ENTER. The tape menu loads. Using cursor keys and ENTER to select you can transfer the contents to disc and load any program.

If you want to transfer the files to disc, you need a blank disc formatted to data format.

Loading troubles?

If your tape comes up with 'Read error a' or 'Reac error b', our duplicators, Ablex, are the people to contact.

Write to them at Ablex Audio Video Ltd, Harcourt, Halesfield 14, Telford, Shrops TF7 4QR, enclosing your tape, your name and address, a description of the problem, and what CPC you use.

If the covertape loads okay but you're still having problems getting it to actually do what it's meant to, don't shout at Ablex, instead write to Covertape Clinic, Techy Forum, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us on aa@futurenet.co.uk putting 'covertage' in the subject line.



Keith Woods turns brickie, moonlights as a drug dealer and offers a suggestion to the guilty among you - if you are expecting the cops to call, encrypt your data!

SERIOUS

Rambase v4.6 By John Farlie and Barrie Snell (128K only)

According to the most recent AA information, today's most typical Amstrad Action reader is male, between 30 and 40 years old, and runs a business on his CPC. At the back of his wardrobe is his old 70's tux which he still thinks looks good on him and which he'd wear if only his wife would let him."

If you're one of the multitude that fit this description (well, maybe apart from the tux bit), then one of the programs you're most likely to find useful is a good database. Unfortunately, commercial databases (like everything else) are hard to come by, but it probably won't surprise you to know that



Rambase v4.6: full of features, free of bug

there's a program in the PD which is almost as good as any that will set you back, say, £20

Rambase was first released many moons ago as a fairly ordinary database. However, over the years various users have been adding features to overcome problems they've encountered, to make Rambase one of the most fully-featured and bug-free programs available in the public domain today.

As well as all the usual data handling features which you'd expect to find in any reasonable database, Rambase includes very powerful sorting, searching and field management options.

Most powerful is the sorting option, which allows you to sort any part of the file you want on any

Where to go

Get Rambase v4.6 from King Arthur's Domain, West Sussex BN11 3NQ =/fax 01903 206739 without needing to sort the whole file. Almost every imaginable field management option is included, giving you the ability to add, delete, change or even combine fields with the minimum of fuss. Added to this, you can choose where to insert new records in a field, merge files or tabulate the file to produce a compact table with a variable column width.

To take one example of Rambase's frightening versatility, there's an option that allows it to double as a label printer. Within this you find another large range of options which offer you a choice of output sizes, lines and typefaces. Clearly, if you can think of a useful feature for a database, chances are somebody's already included it.

The wonder is that with the addition of all these extra features. Rambase has still managed to maintain its ease of use. Everything seems to have been added with practicality alone in mind. Hence the program doesn't look very exciting, but though it lacks any frills, it's got all the thrills imaginable (if entering and sorting data can be thrilling).

The only big problem with Rambase is that because it's written in BASIC, it's very slow, especially when you use the sorting option. However, if you've got the patience to put up with this, you'll do well to find a better database than Rambase v4.6.

Finger Print

By The Twins

The great thing about the PD, I always say, is that it caters for all sorts of minority interests through programs that wouldn't be commercially viable.

Finger print: a data encryption s

Finger Print caters for one such section of our community - criminals.

Finger Print is like any other decent address manager, except for one slight difference: it saves your data in code so, as it proudly proclaims on the title screen, if the cops call they won't be able to access your underworld address book... To decrypt your data, you enter a special code!

The encryption service won't be much use to most people (we hope), but the actual address book itself is 0% about as good as any.

EDUCATIONAL

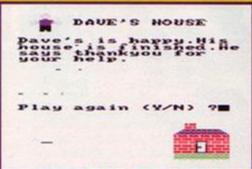
Dave's House

By Tom Neill (Dwarfsoft)

Dave's a builder, but God only knows how he got the job, because he can't even remember how many bricks he needs to build a house. Thankfully, however, you can help him out by solving a few simple sums.

Basically all Dave's house involves is getting your child to solve a few simple addition problems. As they get them right, they watch Dave's house reach for the skies, but if they get one wrong Dave can't finish the job and loses his cheery grin.

And, erm, that's it. No, there are no different skill levels, no, you can't do anything other than addition and no, there are no other challenges for



The house that Dave built - with your help

your offspring to meet. All this little game does is to pick two numbers between one and 30 and ask the child what their sum is. Even this is of little use, as the game is only really testing them, rather than teaching them. The kids either get the sum right or wrong - there's no 'try again' option.

What Dave's House sets out to do it does beautifully. Trouble is, it does so little it's hardly worth bothering with.

GAMES

Drug Baron and Doom By Tom Dean (Impact)

Tom Dean's long standing disczine Impact has never been the most popular of CPC magazines, probably because some of the prose it contains won't suit most tastes. It does have one notable distinction, however, which is that the Editor, Tom Dean writes much of the free software which is included himself.

> Drug Baron and Doom are two of the more interesting games Tom has produced recently...

Doom

The CPC has traditionally been supported by many good quality PD adventures from the likes of Simon Avery or Rob Buckley, but unfortunately this is no longer the case.

Doom will do little to cheer up poverty-stricken PD adventure fans, as it's everything an adventure



game shouldn't be: the parser hardly seems to exist, the storyline fails to excite, it's written in BASIC (so it moves slowly), and the room descriptions are approaching Gertrude Stein-like minimalism. Plus, Tom's, erm, unique sense of humour makes the odd appearance, with the game taking to calling you a creep! Well, if that's your attitude, I'll play something else...

Who are you?

who reads AA and what (is it possible to

the competition, first, of course!

improve on brilliance?) we can do to fill it with

what you want to read about. You could win a

lot of software... but you have to take part in

If you think this is slander, turn to pages 18 and 19. We're doing another survey to find out



Flat, no sparkle, just like the coke.

Drug Baron

If you have aspirations to become a criminal and do devilish things like using Finger Print, you might like to practise your dirty dealings with this management simulator.

The idea is you start off with a load of money which you use to buy either cannabis,

heroine or cocaine. You then sell your weed to your local students through your dealers with the long blonde hair, and hope you make a profit.

Unfortunately, it's all a bit too easy. All you need to do is buy the right amount of each drug and use the right number of dealers and then watch the money flow in. It's hardly that easy in the real world (is that the voice of experience? – Ed).

This game might be more fun if you had vendettas with other barons, or were on the run from the cops. As it is though, it'll hardly keep you

NEXT MONTH:

In the last few months it seems that all of the PD's most prominent games programmers have moved on to other ventures. One man that's not going anywhere else, though, is Britain's David Hall, who, with a bit of luck, will, next month, herald the return of the famed (ahem!) Public Image mini-interview with news of his latest production.

Look out also for reviews of the most recent monitor programs for techy freaks and the latest production from the creators of Ghoul's Writer. In short: don't miss it!

amused for more than ten minutes.

And, oh yeah, and remember, that winners don't use drugs. Just say no!

Doom

30%

40% Drug Baron

Amscene

directory

Clubs

United Amstrad User Group (UAUG), 26 Uplands Crescent, Farcham, Hants PO16 75Y © 01329 234291

Comms

Genesis, the Shit generation comp.sys.amstrad.Bhit

e-mult: roussin@genesis8.frmug.fr.net (BBS with CPC software established October 1994, 24 Mb of programs including CPCEMU and CPE emulators (on PC and

= 0033 1 39 50 54 11.

Aspects (on-line address) 0161 792 0260

FIDO 2:320/220 File requests welcomed

CIX = 0181 390 8446 (on-line address) 0181 390 1255/1244

CompuServe # 0800 289378

Delphi Internet = 0171 757 7150

Direct Connection v 0181 317 0100

Fanzines

After Dark £1.50 • 41 Westmorland Ave, Newbiggin by-the-Sea, Northumberland NE64 6RN

Amszine - Gayton, Lancside Road, New Mills, Nr Stockport SK12 4LU = 01662 744862

CPC Mania, \$1.50
DMP Software

89 Wolverhampton Road, Codsall,
Welverhampton WVB 1PL

The Eliminator
1 4 Station Road, Riccall, York, North Yorks
704 601
Cheques payable to J.R.Nayfor, Or send 50p.

PD Power 13 Rodney Close, Bilton, Rugby CV22 7HL

PD Libraries

Besic PD
3 Beacon Lane, Whipton, Exeter, Deven, EX4 8BD
Cassette only library. Dealing only in BASIC.

3.5 ech discs available.

GD PD Software

4 Connaught Avenue, Mutley, Plymouth
PL4 78X

PL4 7BX
25p per disc. Free selection form the listings for four or more selections ordered.

Image PD
Darren Dodds, 15 Elmwood Drive
Ponteland, Newcastle NE20 9QQ
Also provides a deglising service.

Jamo PD * 01676 533467

King Arthur's Domain, Brympton Cottage, Brunswick Road, Worthing, West Sussex BN11 3NQ v/fax 01903 206739

PD Fun - Duncan Tissard, Folly Farm, Cold Ashton, Chippenham, Wilts SN14 SJR Apakry of no sensus software.

Prism PD 13 Rodney Close, Bilton, Rugby CV22 7HJ

Robot PD 2 Treat Road, Oakham, Rutland LE15 OHF

RSPD Robert Sparrow, 40 Dee Court, Hobbayne Road, Hanwell, London W7 3RQ

Sheepsoft
298 Holton Road, Barry, South Wales,
CF63 4HW = 01446 700730

Hardware

Datel = 01782 744707

Microform (Fax no.) 01772 703131

Romantic Robot = 0181 200 8870

STS 298 Holton Road, Barry, South Wales CF6 6HW = 01446 700730

Indie Software Companies

CompurSoft
10 McIntosh Court, Wellpark, Glasgow
G31 2HW = 0141 554 4735

CPC Southwest

4 Connaught Avenue, Mutley, Plymouth
PL4 78X

Crystal X Software 11 Vicarage View, Redditch, Worcs B97 4RF Stellar Outpost, £2.99 (tape), £3.99 (disc). Cheques payable to A Suintenance.

DMP Software

89 Walverbumpton Road, Codsall,
Wolverhampton WV8 1PL
Good SAL for Catalogue.

Pacific Software

> 37 Trimingham Drive, Bury, Lancs BLB 1JW
Technically minded fateine.

Radical Software, Brympton Cottage, Brunswick Road, Worthing, West Sussex BN 1 3NQ =/fax 01903 206739

SD Microsystems = 01953 483750

Sentinel Software
41 Enmore Gardens, East Sheen, London
SW14 BRF e.mail: cs94rrw@Brunel.ec.uk
STS tribs and a lew original products.

Siren Software = 0161 7965279

Mail Order

Trading Post = 01952 462135

Trojan = 01554 777993

Wixard Games =/fax 01723 376586, = 01723 503299

Services

Merlin-Serve, Brympton Cottage, Brunswick Road, Werthing, West Sussex BN11 3NQ 2/fax 01903 206739 Games for sale from 50p. Swaps: Will boy unwanted CPC staff

Software suppliers

OJ Seftware = 01257 421915

Computer Cavern = 01628 891101

STS 298 Holton Road, Barry, South Wales CFO 6HW = 01446 700730

Tranics North

10 010 6177 253 766

10 PO Box 7419, Garbutt, Queensland,
Australia, 4814
Large acceler of software and CPC lits.

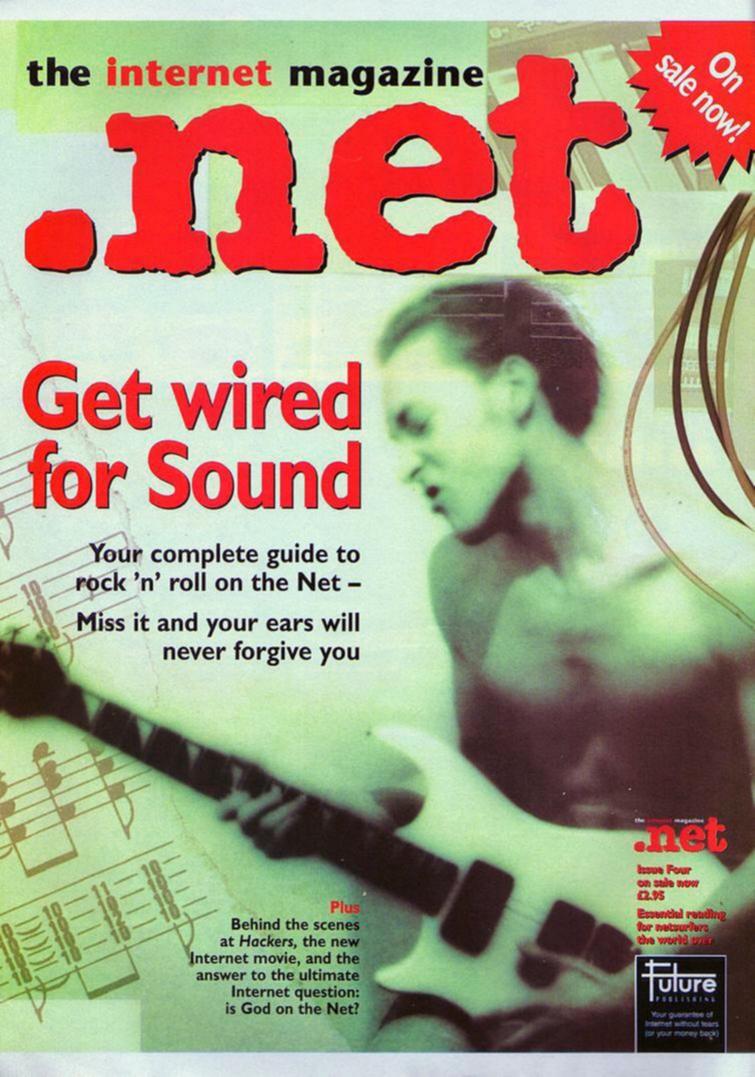
Upgrades/ Repairs

HEC 47-49 Railway Road, Leigh, Lancs WN7 4AA 01942 261866

User Groups

UAUG (United Amstrad User Group)

WACCI = 01244 534942



FULLIGIANS.

David Crookes thumbs the pages of another fanzine and thumbs his nose at its prose, presentation and and purpose, and advises on clip art.

News

The fanzine Another World ("the ultimate disczine for serious users") has closed its doors because, according to its editor, Richard Avery, it took too

much of his time and not many people bought it anyway.

We never actually saw a copy but, by all accounts, it was good, which makes it all the worse Another World Section for Section Anni

AW, now gone to another place. Sadly.

that sales were low. However, Richard reassures us that he hasn't left the CPC scene and will continue to write PD programs.

Richard Avery, 35 Mariborough View, Cove, Farnborough, Hants GU14 9YA.

Derek Payne of CPC Mania fame has asked us to give his 'zine a plug. It costs £1.50.

Derek Payne CPC Mania, 89 Wolverhampton Road, Codsall, Wolverhampton WV8 1PL

REVIEW

Eliminator

Price: 50p EDITOR: J R Naylor ADDRESS: 14 Station Road, Riccall, York, North Yorks YO4 6QJ

How can you eliminate a fanzine reviewer in fewer than 20 seconds? Without using forceful means?

- You publish a fanzine with only ten, single-sided pages and fill them with nothing but rubbish.
- You proudly claim that your fanzine is "better than the rest" and justify this by saying it is brilliant because "our graphic capabilities are good" (which means they use some pretty pictures which should make the mag worth, ooh, hundreds of pounds). Not only this but you emphasise the fact that you have lots of fonts and reckon that this statement means the fanzine is so priceless that it should appear on the Antiques Roadshow in a few years time.
- You include a cheat page and decide not to print

any cheats. And, get this: the reason why this page is, well, empty in our review copy (we've been

assured there will be cheats in

will be cheats in the reader copies) is that the Eliminator crew think AA will nick them. Right. To make a good impression on a reviewer, you don't insinuate he's a thief, do you?

If Eliminator were anything but a fanzine, it would be a self-destructing bomb. A bomb with a time limit of around

half a minute and that definitely doesn't mean that the mag is dynamite.

So you turn the page to take a gander at the contents and what do you find? An impressive list of

articles and a promise of "ultimate pleasure." Well each to their own, I suppose. Anyway, to the reviews...

There are three scintillatingly, superlative pieces of opinion on Titus The Fox, Street Gang Soccer and Cavernania. All the reviews are

CHEAT PAGE!

THE CHEATS HAVE SEEN TAKEN FROM THE AN PREVIOUS COLUMN TO THEM THAT YOU WILL NOOT THEM HE DO PROMISE THAT THE FACE WILL SE PACKED WITH CHEATS IN THE READER SISLE!

...proves to be a

doesn't deliver.

'cheatscape', and

Eliminator makes claims...

bardechi karevnen until tidap

ELININATOR FRAZINE

FOR YOUR

AMSTRAD CPC !

THIS MONTH WE TELL YOU HOW WE FOUGHT BACK FROM THE NEVER ENDING PITS OF DOOM! WE HAVE REVIEWS.

CHEATS
COMPETITIONS
THE CHARTS
TUTORIALS
AND MUCHANISHMORE

BETTER THAN THE REST!

short and tell you hardly anything pleasurable or worth reading.

Then you turn to the only other page of any real note, the news section. This just tells you why

A rough guide to pictures

Some fanzines decide to have wall to wall text as opposed to brightening things up with a few pictures. However, if you do want drawings then this is where clip art is an absolute god and the reason why some fanzine editors worship this sort of pics.

The balance between clip art and text has to be struck to avoid an excess of one thing over another. Like a lot of other 'zines, Eliminator, (reviewed on this page) has too much clip art and this has an undesirable effect because it smacks of laziness. Anybody can produce a fanzine like the one below left in under an hour and people begrudge paying for something like that.

But how do you go about making your own clip art?

It's easy. All you need is a good art package and a copy of Powerpage. Draw your image in MODE 2 using your art package and, once you're happy with the result, save

it as a screen file. Load this screen into Powerpage and, using SHIFT and COPY, draw a box around the area of the screen you want to be clip art. Don't press SHIFT and COPY twice, though, as this will permanently keep the box on screen.

Once you have a box around the image, you need to call up the Block menu and choose the clip art option. The program asks you for the name of your clip art and then saves it as a .CUT file.

Hey presto! A piece of clip art ready to use.

Eliminator closed and subsequently re-opened (makes you wonder why they did the latter, though). That's it, I'm afraid, besides a competition, a survey and something about starting a letters page (which will end up full of complaints, I'm sure).

And despite the lavish claims of a good-looking 'zine, the editor has only produced an average offering. Lots of fonts are used but unfortunately this just creates a scrappy effect.

The size of the text is far too big and this forces the amount of words to a page to zoom down rapidly, decreasing

the value for money. Still, if you're virtually blind, at least you'll be able to read it.

The clip art is of a very good quality, though. Shame it's used only to waste space.

On the other hand, the 'zine's blank sides come in dead handy for scribbling notes on, but, save your 50p and go halves on a lottery ticket because then at least you've got a chance of gaining a little "ultimate pleasure."

Content: 10% Appearance: 45% Overall: 35%

Basically

Are 'files' a) something you send prisoners in a cake?
Or, b) a method of storing information? Angela Cook and Rob Buckley answer in a multiple choice format.

There are three types of files on the CPC:

- programs written in BASIC or Machine Code, which are normally called by using the RUN*FILENAME* command;
- binary data, which is just a long list of data in byte format. This is normally used to save: (1) the Guatemalan spotted tree frog, or (2) graphics and game information. An example of this is how to load and save a screen. To save a full screen out type:

SAVE FILENAME, b, &COOO, &3FFF.

To call it back on screen,

LOAD'FILENAME', B, & COOO

 another method of storing data – in a more ordered and readable form than a straight block of data, and that is what this article concentrates on.

Over the past few months you have been using: 1 Oxyspot cream. Or;

2 strings and variables, and seeing how these might be used in a database, word processor and even an adventure game. However, once the computer is switched off you have lost all the information.

Thankfully, the CPC being as fantastic as it is, gives you a saving ability. Try typing this - though be

Nine reasons NOT

to be a programmer

2 You must grow your hair really long (What's

3 Your jeans develop holes within days of you

4 All programmers must blush when the

5 When you go to parties, everybody avoids

you, and you have to sit in the kitchen telling anybody who passes about your latest

6 Everything you do becomes revolutionary.

the toilet" or 'It's a new style of parking I've

8 Old ladies take pity on you and offer you

7 Your face erupts like Mount Vesuvius.

9 You must make up a meaningless

programming pseudonym for yourself...

For example, 'It's a brand-new way of going to

1 You are contractually bound to wear a

Metallica T-Shirt.

wrong with that? - Simon).

learning Assembly language.

opposite sex are mentioned.

compression routine.

designed, Officer!"

their seat on the bus.

sure to have a disc or tape to hand (with both the Record and Play buttons pressed down).

18 INPUT"What is your name";Name\$
28 OPENOUT"Name.INF":PRINT#9,Name\$:CLOSEOUT

Run this, and when the ready prompt appears, reset the machine (for a 'soft reset' hold down CONTROL and SHIFT, press ESCAPE), rewind the tape and type:

10 OPENIN"Name.INF":input#3,Name\$:CLOSEIN 20 PRINT#3,Name\$

All you have done here, is to save a piece of information. However, you can store whole lists of information all in one file, and then call them back when needed, though you need to call them back in the correct order. For example:

18 OPENOUT
"DATA":PRINT#9, NAME\$, ADDRESS\$, POSTCODE\$, RECORD:
CLOSEOUT
28 OPENIN

"DATA":PRINTWS, POSTCODES, RECORD, NAMES, ADDRESSS: CLOSEIN

When you run it, this program causes an error, since you have tried to:

I bounce on the keyboard. Or;

2 read back the data in line 20 in the wrong order. In other words, the INPUT#9 in line 20 should be followed by the same data format: string, string, string and number.

The correct line is:

20 OPENIN"DATA": INPUT#9, NAME#, ADDRESS#, POSTCODE#, RECORD

You may notice that if you enter a line which has used a comma, (,) whatever came after it has been lost. This is due to the way that BASIC handles inputs, and to get around this, you have to replace both PRINT#9 and INPUT with new commands.

Firstly, replace all PRINT#9 with WRITE#9, INPUT#9 and INPUT with LINE INPUT#9 and LINE INPUT respectively. This is demonstrated in the short listing below.

10 OPENOUT"Demo" 20 WRITE#9,"

(This is a simple line, with a comma in it!')

38 CLOSEOUT

48 OPENIN"Demo"

SB INPUT#9, AS: PRINT AS

68 CLOSEIN

78 OPENIN "Demo"

88 LINE INPUT#9, AS: PRINT AS

SO CLOSEIN

Here's a small program that lets you enter a name and telephone number, and continues until you tell it to: 1 stop. Or: 2 do the hoovering.

18 OPENOUI"Tele"

20 LINE INPUT "Name"; Name\$:LINE INPUT "Telephone Number"; Tele\$

30 WRITE#9, Names, Teles

48 INPUI"Enter another (Y/N)";q8:if q5="g" or q5="Y" then 28 58 CLOSEOUT

Once you have entered all your names, you can use this little program to search through and pick the right number, by entering the name required.

10 OPENIN"Tele"
20 LINE INPUT"Please enter

name";NS:NS:UPPERS(NS)
3B IF EOF THEN PRINT"Name & Number

no found":CLOSEIN:END

40 LINE INPUT#9, NAMES, TELES

SO IF N\$=UPPER\$(Name\$)THEN PRINT"The number required

is ":Tele#:CLOSEIN:END

68 GOTO 38

In line 30 you use a function called EOF, which is short for End Of File.

When this becomes true it means you have read the last piece of information in the file and you close the opened file and end the routine.

Note that trying to read past the end of a file results in an error. AFRICASE JAN AMERIKAN SAFATA AMERIKAN SAFATA

Type righting

Check the program is correct using TypeChecker. See AA113, page 17.

NEXT MONTH:

How to write your own ecologically-incorrect game... How about 'International Seal Culling' or 'Super Badger Baiting'? Now that's worth £3 of anybody's money. All that's left to say, is that the first person to send in the correct answers to the above questions, will win: 1 an all-expenses paid trip to the Caribbean. Or;

2 nothing.

on mannel Al susming A silve I

Amstrad Games Cartridges for the 6128+/464+/GX4000 * No Exit * Operation Thunderbolt * Switch Blade * Navy Seals Pro Tennis Tour * Klax * Robocop II * Barbarian II * Pang * Batman The Movie All games are unboxed/without instructions at a special price of £9.99 All Ten Games At A Special Offer Price of £74.99 Amstrad 6128+/464+/GX4000 Enforcer Cartridge for the Trojan Phazer Gun Amstrad Burnin' Rubber/ Loco Basic Cartridge£19.99 £14.99 Amstrad 6128+/464+ Instruction Manual Amstrad 464+ Computer with Stereo Mono Monitor£125.00 Amstrad 6128+/464+ keyboard membrane Amstrad Paddle Controllers (6128+/464+/GX4000)£2.50 Amstrad 6128+ Computer & Mono Stereo Monitor£160.00 Amstrad CM14 Colour Stereo Monitor£125.00 Amstrad MM12 Mono Stereo Monitor£65.00£65.00 Amstrad 464+ Computer Console Amstrad 464 and 6128 General Amstrad LP1 Light Pen and software for the 464 Amstrad 464 Light Gun and games cassette (5 Games) Amstrad 6128 Light Gun and games disk (5 Games).....£15.49 Amstrad GT65 Green Screen Monitor£65.00 Amstrad 464 Cassette Tape Head Alignment Kit£9.99 Amstrad Printer Lead (34 Way Edge Connector to Centronic Plug)£9.99 Amstrad JY2 Joystick Amstrad 464 "Teach Yourself Basic" Tutorial Guide with 2 Cassettes£9.99 Part 1 Part 2 Amstrad 464 Circuit Boards complete P/N.Z70375£34.99 ...£5.99 Amstrad 6128 Cassette Leads.....Pack of 10 £15.00 3" Disks (ex. software) Amstrad Action Binders (Holds 12 copies of A.A) Choice Blue or Red £4,99 £4.99

TRADING POST VISA

VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF TELEPHONE/FAX (01952) 462135

NATI HOTES NEGA REJACE HORISH & SOUTH PLATOAYS 4-EMS PRO SIG SIM. SHADOW OF THE BEAST SICE ARMS. DAY, NOLASTIAN EXPERISTURIORES (A MOST MEGA MERCES, CE, PE A MOST MEGA MERCES, CE, PE HORNOLASTIAN SINCE TO CONTERRIDO Y HABERST 4 MOST CHIT MOST SINCE LON WHOODER MOSTS AR BORRE BANGER CE 00 AR SOUND FAMOUR A SOUND FAMOUR CE 00 CAPTANT PAMEL CE 00 CONTURE MISS CE 00 CONT CREATE MASTER 62:30 PRO TENNES 62:30 AUST BALLS BOOTS - BRANS GRAHAM GOOCH 67:30 QUATTED RACERS 62:30 AUSSE BULESRUGH BOSS SOCCER GRAHD PRIX SIM 67:30 UNRESCRIBANT 60:30 CHALLENGE SOCCER BOSS SUPER SPORTS US BASKET MASTER/CRICKET INTI-KENTUCKY INT TENNIS £2.50 KENNY DAGUEH MANAGER RACING CHAMP SPENT £2.50 DIZZY DOWN THE RAPIDS £2.99 DIZZY PANIC £2.99 MAGIC LAND DIZZY £2.99 MANORESTER UNITED IN EUROPE.... . 62.50 MOTOR CYCLE 500 . £2.50 WWF ... SALE OFFER ANY 3 FOR 65-00 AMEDITATION CASSETTE COMPILATIONS Any 2 for 63.00

CASSETTE COMPILATIONS AND S TOP 1 1 HOT 1 HANDL AND S AND S TOP 1 2 HOO'S WARRONS TOPAL BLOAD SHOO'S WARRONS TOPAL BLOAD OWAR ATMAX ADDISONAL BROOM OF HE SAID SHED LASS SALON OF HE SAID SHED

MODERANCIL ORDUS Y GROSS
ON OF RISS AND ASP
ORACITY WAS INCUSTRATED ASP
ORACITY WAS INCUSTRATED ASP
ORACITY WAS INCUSTRATED ASP
ANAMERIST GROSS
OF THE PROPERTY OF THE PROPERT

POPDE 1,2 + 3
POWER UP
ADERIO BEASTRUNGOW SEANOX
OUTOWASK HIGH TRESSOR
BANGOW SEANORUSEL BORKE!
NEW TELANO STORE
PORTS COLLECTION
1.09
PORTS COLLECTION
1.00
PORTS COLLECTION
1.

420

CASSETTES OUR CHOICE MIXED TITLES 10 FOR £5.00

10 FOR £5.00

10 FOR £5.00

| Modern Street Commission Condition
| Modern Street Commission Commission Condition
| Modern Street Commission Commission Commission Commission
| Modern Street Commission Commission Commission Commission Commission
| Modern Street Commission Commission Commission Commission Commission
| Modern Street Commission Commission

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PROME CALL RESERVES YOUR ORDER.
CHEQUES - POSTAL ORDERS MADE PATABLE TO WIZARD GAMES
Please and on SAE for full lists, Creation CL.00 yes from P.-P. Design CS and under AND 50° P.-P.

DISC DRIVES

3.5" Second disc drives for the CPC464/664/6128.

Top quality 'Panasonic' 3.5" drive mechanism, includes Power Supply, Connecting Cable, Full 16 page manual, Ramdos, Ramdisc + many more utilities. Format 800K per disc just like a PC, Amiga, Atari ST etc. The complete PLUG IN & GO solution, Ramdos is not + compatible.

SUPERB LOW PRICE, ONLY

ROMDOS XL



Superb high capacity disc operating system available on ROM or complete in its own ROMBOX! Nothing else compares with these features:

- Built in disc formatter
- · Built in file copying/erasing
- Full 19 page printed manual
- Very simple to use.
- Uses no user memory
- Auto detects format
- Built in Sector/Directory Editor 464/664/6128 compatible

ROM VERSION ONLY £14.99

Complete IN ROMBOX only £24.99

ALSO AVAILABLE.....

3.5" Discs Only £7.50 for 10.

Single Socket ROMBOX only £14.99

PC-TRANS, Transfer files from a CPC to a PC and vice versa. Only £24.99

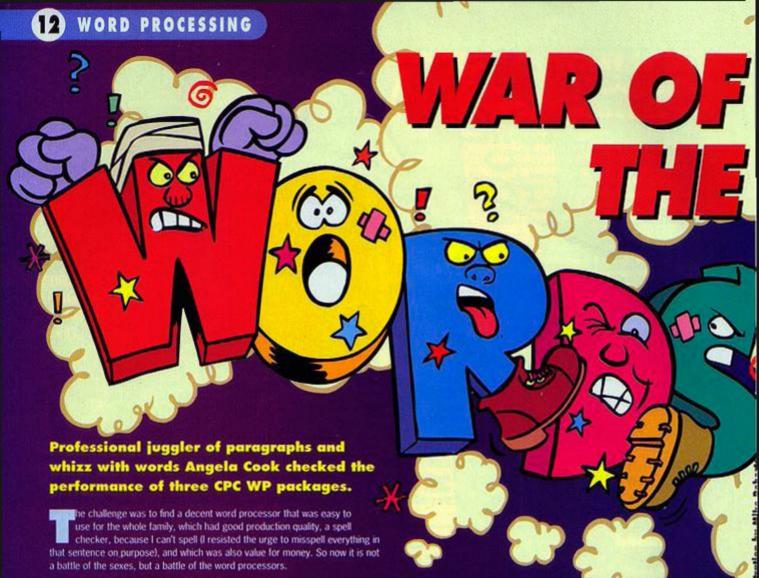
RS232 Serial Interface. Can be used to connect the CPC to another computer, modem, serial printer etc. Ideal for use with Amstrad NC100/200 (connecting cable available priced £9.99). Includes built in Rom software.

NEW LOW PRICE £29.99.

Please add £5.00 postage and packing to all disc drive orders. Other orders please add £1.00. All major credit cards accepted. Immediate despatch for credit card orders.

Siren Software, 178 Bury New Road, Whitefield, Manchester M45 6QF

> Tel: 0161 796 5279 Fax 0161 796 3208



Meet the contestants

The three main contestants are:

- · BrunWord (reviewed in AA114);
- · Protext (what WACCI are always raving about) and;
- Tasword (because it came highly recommended from a friend).

Tasword

In most people's views, Tasword has been one of the lesser word processors, being shadowed by giants such as Protext and BrunWord (remember to turn to page 20 for your chance to win a copy of the BrunWord Mark II ROM Module – Ed).

...it is not a battle of the sexes, but a battle of the word processors

A while back, when Tim Norris was Acting Editor.
Simon Forrester was still Staff Writer, AA had more pages, MJC Supplies was still around, and there was a chance of Street Fighter II being released on the CPC (AA91), Tasword 464 was plonked on to the Amstrad Action countains.

Tas-it approval

Very nice of Tasman Software that was, it gave an insight into what Tasword 6128 would be like. Now that I have it, the first thing that struck me about

Tasword, was what a delicious screen it had. It was orderly, not confused, and the overall design appealed to me. You can choose your own colours for a start. Also, there is a window (an area of text) at the top of the screen, which gives you some of the explanations of keypresses available. You can scroll through this, or opt to see the whole lot in one go. You can also have tell to make record for more test on screen.

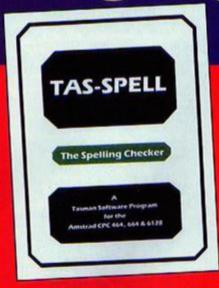
Tasword also has a handy little system, whereby, if you have caps lock on, the status bar at the bottom of the screen is also in upper-case, and so on.

Tasword is extremely easy to use and, like both BrunWord and Protext, comes with a tutor file to teach you the controls and also how to use the package quickly and easily.

One thing I never realised until recently is that Tasword puts a hard return at the end of each line.

I am definitely of the view that Tasword is a giant after all

This makes it difficult to transfer to other word processors (not that you would want to – Tasman Software) or DTP packages (desk top publishing, such



as Stop Press, Micro Design or Richard Fairhurst's PowerPage 128).

Another thing which pleased me on Tasword, is the menu option for loading, saving and other things. This is extremely well executed, and simple: one of the many good points of the program. However, you can't fit all that much in memory, so your documents are limited to how much is left in RAM after Tasword has taken its cut. Protext on disc also suffers, but the ROM version doesn't, nor does

Where to go...

Arnor Ltd (Protext, £29.38, disc only.) Lincoln Road, Peterborough PE1 3HA = 01733 68909/fax 01733 67299 INTERESTING FACT: Arnor produced the AMSTRAD NC-100 and NC-200 software (except the spreadsheet and game). Brunning Software: (BrunWord ROM Mark III Module, £63) 138 The Street, Little Clacton, Clacton-on-sea, Essex CO16 9LS # 01255 862308, 9am-5pm INTERESTING FACT: a PCW version of BrunWord was begun, but never finished. CampurSoft: ProPrint (Protext enhancer), £14.99 disc ROM £24.99) 10 McIntosh Court, Wellpark, Glasgow G31 2HW

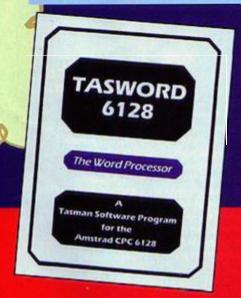
0141 554 4735/fax 0141 227 4486 INTERESTING FACT: there are a things afoot... Tasman Software: (Tasword 6128, £29.95, Tas-spell, £24.95, both disc only), Springfield House, Hyde Terrace, Leeds LS2 9LN

0113 2438301 INTERESTING FACT: AMSTRAD approached Tasman to produce Amsword even before the

464 was released. NewStar Software Ltd (NewWord, £49.95 excl

VAT) Kenwood House, Waltham Road, Boreham, Essex CM3 3AX

01245 465505/fax 01245 465515



BrunWord because it's also only available in ROM. I always had the impression that Tasword was a cheap piece of software that didn't really justify its existence. Now I am definitely of the view that Tasword is a giant after all, and that it is comparable to both Protext and BrunWord, with almost as many good quality features. The only thing which lets it down, is of Tasman Software, and even he groaned: "Ohhh yes."

A bit of a bad spell

This spell checker sucks. It recognises a misspell word, but won't suggest an alternative. If you CHANGE your word, you then have to go back into the speller to carry on, as you do in BrunWord. The 'dictionary' comes on a disc, 464 one side, 6128 the other. Get the wrong side in, and you've had it, you just can't get back to your work: you have to re-do the lot.

By all means invest in Tasword, but forget about Tas-spell. I feel sure you could get a PD equivalent which suggests words for you.

Word associations

Okay, so obviously Tasword, Protext and BrunWord are not the only word processors available for the CPC. Look out, also, for... Mini Office II

Mini Office is, technically speaking, an integrated package, and among other things contains a word processor, it's not all bad.

Mini Office II is quite a good all-round package, should you see it second-hand (check out the AA classifieds section on page 15), then it might be worth grabbing it.

MicroScript

MicroScript isn't worth the space it occupies. It's only worth is the rush you get when you pull the plug out. None of the keypresses have anything to do with their function. Perhaps I am being a bit tough on it (it is ten years old after all), but I don't think so. WordStar was running on the 64K Cortex machine a few years before, and Amsword was around at the same time!

Microword

Microword is a program that acts a bit like WordStar, under CP/M V3.0. It uses some of the WordStar commands. In fact, I have found that most word processors are based on WordStar (Perhaps this is because WordStar was one of the first word processors, and was pretty darned good in them days too).

Microword also has a rather crude database, but it shows that somebody did give some thought to its design.

NewWord 2

NewWord 2 is a PCW-based program which is similar to WordStar (perhaps not surprisingly, as it was programmed by the same people). NewWord is a more polished version though, and has overcome some of the difficulties found on WordStar. It is a pretty powerful program, and relatively easy to get used to.

run Word

Since I wrote about the BrunWord Elite ROM Mark III (AA114, page 18), it has been updated. For the full lowdown read that review but here is an update on the new features

BrunWord is extremely fast and efficient. The self-contained ROM modules are even better because of the extra resident memory, which is equal to having a silicon disc hitched on the back of your keyboard. Obviously BrunWord offers all the normal controls you would expect from a good word processor, for example:

- justify;
- · columns
- marking text:
- out and paste;
- o delete word or sentence;
- embedded control codes; and the list goes on...

Spell check it out

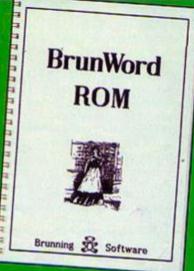
The spell checker is an essential part of any word processor: what is the point of having one if it can't spell, or can't at least tell you when your spelling is wrong?

The good thing about Info-Script, is that you don't have to leave the program

BrunSpell, the BrunWord spell checker is extremely fast (unlike Protext's Prospell - see overleaf). BrunSpell has over 33,000 words in memory, and the option to make up a custom dictionary, in which you might save your name and address, or any words which you use, and are not already in the dictionary, such as, *Pneumonoultramicroscopic silicovolcanoconiosis*, which is

English Dictionary. So if you are using those types of words, you want to be able to save them; which you can do in all dictionaries

the longest word in the Oxford



One of the things that BrunSpell has over Prospell, is that you can choose to TRANSFER the correct word, so you don't have to type it yourself.

Info-Script

This is the BrunSpell database. Here you can redefine your records to how you want them, for example to include as many fields as you see necessary, and you can also display all of the records at one time, if you want to

You can also zap your records into the BrunWorld word processor for your letter or whatever it is you are writing. The good thing about Info-Script, is that you don't have to leave the program to do it, so there's no hassle with having to save everything, and so on.

About the size of it

BrunWord has lots of fonts of all different sizes and shapes. An 8 Bit Printer Status Port comes with the package. You plug printer port hole. This acts as a communicating device for your printer. One of the best features is the Script font, which links characters like 'o' and handwriting. This gives a unique and excellent effect, and one which adds prestige to your work.

Protext

I have been using Protext for a number of years, so I am reasonably accustomed to it, but still have never read the manual. It sits at the bottom of my drawer in case someone near me doesn't know what to do.

A wise lady once said to me:

*There are some people who just cannot learn from manuals.

and she's right. Some manuals are written in the expectation that you have a degree in scientific notation, while others are so ambiguous that you want to forget about the

"Some people just cannot learn from manuals"

program straight away. Therefore, I am pleased to be able to report, that the manual of Protext (and its accompanying software modules) is not in the least bit like either of these examples.

Instead, the Protext manual is thoughtfully written, easy to understand, and has both an index and helpful glossary: something which the BrunWord and Tasword manuals lack.

Protext has a tidy screen and is available for green or colour monitors, alternatively you can define your own colours.

A la mode

Protext has several modes. For example, press ESCAPE to enter command mode, then type your command. Here's where it gets a little tricky.

If you are a new user of Protext (or BrunWord and Tasword), you won't know all the commands straight away. So, while in command mode, just type HELP, and, to and behold, a list of commands appears, which let you know what to type to do what you want to do.

The other main modes of Protext are document, in which you type your award-winning book, complaint letter or whatever; program mode, in which you can type

Protext Super fast

> your own program, then use it in BASIC

As with all word processors, it is easy to jump from one end of your document to the other. You can also cut and paste using block markers; set your margins; make a page jump: everything is done with in-built control codes which are simple to remember in Protext, (as indeed they are in Tasword and BrunWord).

You can also SET PRINT options. Whether you want continuous printing, Near Letter Quality, page numbers, headers, footers, page length, margins, and so on, defining what you want printed, as you can in BrunWord and Tasword.

Protext on disc is fine. It is Protext after all: the foundations of one of the best CPC word processors available. It does not have all the fancy

While in command mode type HELP and list of commands appears

commands of other versions for other formats, and does not come with a spell checker or mail merge, as the CP/M version does.

With the CP/M version of Protext, you must make up a working version of it at the beginning, but once you have gone through this long and tedious process, it is done, and you can get on with your Protext life. For the extra few guid you have to spend on this one (£4.95 to be exact). you might as well get it, because it offers many more advantages over the first version.

Protext ROM

The Protext ROM (read only memory) is a chip, in the same fashion as a game cartridge, and has to be the best of all the Arnor versions.

It sits in a little black box at the back of your keyboard waiting for you to call upon it's services. Mind you, the spell checker and so on costs extra.

What is a word processor?

Simply put: a word processor is a glorified typewriter. With a typewriter, the symbol on the key you press is what comes out on paper. You have to get everything right, or you go through reams of paper. Don't believe what the adverts tell you either, a typed job application with correction fluid all over it will not get you the job. A word processor, basically, allows you to edit (change or correct) any part of the text you want, to store and save your files and retrieve them again.

> With a decent word processor you can add fonts (different styles of writing), add enhancements such as bold, italic and underline and change the

size of writing and so on.

So, get a word processor and throw away the typewriter.

In the beginning...

I use Protext. To write my articles for AA I start by bashing out a rough article on the CPC, then use 2In1 (£19.99 from CampurSoft) to transfer it to Protext on my PC. I then edit it for a few more days, spell check it several thousand times then ASCII save (American Standard Code for Information Interchange) it to disc, and hurtle it in the general direction of AA Towers. (Why don't you do the whole thing on the CPC? - AA readers) Because last time I did that it crashed all the computers at Future Publishing! Happy? (Deathly silence from the AA readers.)

Pro-active

Protext A PCW User's Guide, £14.95, excl p&p. by Protext expert Rob Ainsley (who once edited, and still contributes to AA's sister mag. PCW Plus). ISBN 0-632-02564-6. This book is good for the CPC, too. Computer Bookshop Ltd, 50 James Road, Tyseley, Birmingham B11 2BA = 0121 706 6000.

Get word-wise

This month you could win BrunWord ROM Mark II – simply turn to page 20 to find out how. But that's not all, correctly answer a simple question next month and you could win a copy of Tasword or Protext

Reader a

FOR SALE

Many Amstrad tape games for sale. Old classics. SAE to David Barnsby, 10 Churchill Road, Earls Barton, Northants, NN6 OPQ. CPC 464 colour monitor, 3-inch disc drive. 64K RAM pack. DMP2000 printer. All manuals, joystick, blank tapes, discs, Protext discs, spare ribbon, £200 ono.

01435 864915 (eves).

Box of 40, CPC 3-inch discs, all with games on them £6C. = 01709 896821 (eves).

Amstrad colour CPC6128 and loads of disc and tape software, ROMs, books and hardware. SAE for list. John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH.

CPC464 keyboard, £30. Memory expansion £20. G.A.C. £10. Cassette games from £2. 464 manual £10. Interested? 31 Oriel House, Blackcat Close, Chelmsley Wood, Birmingham B37 5DG.

CPC EMU runs Amstrad software on an IBM-PC. Requires 386SX33, VGA, HDD. David Cantrell # 01424 221015 (eves, Mon-Thurs).

Magazines: AA (56), ACU (20), CWTA (8), binders. Software: MicroScript, MasterCalc, MicroPen, DEVPAC, Screen Designer. All with manuals. Books: Amstrad Omnibus, disc system, databases. = 01942 211053.

Games galore, far too many to mention. Loads of special offers. SAE to Alasdair Stewart, Appin Cottage, Ardler by Blairgowrie, Perthshire PH12 8SY

Amstrad CPC/6128 and colour monitor with dot matrix printer. Includes Mini Office II on dsic. Games include Lemmings, Myth, Rodland, Dizzy and more. Also blank discs. Everything £100. ₩ 0191 3722557.

Amstrad 464 Plus and colour monitor, more than 50 games. Excellent condition. Only £100.

6128 Plus, 464 CPC Plus, CTM 644 colour monitor. Joysticks, games, £120. No offers. HB Jenkins, 59 Hermitage Road, Dartmouth, Devon TQ6 9TD # 01803 835403

Spectrum games for sale. For list write to c/o 94 Langford Road, Mansfield, Notts NG19 6QE CPC6128 colour, second drive, modulator, RS232 and control interfaces, mouse, Multiface, 2 joysticks, 50+ games, tapeplayer, DRGraph, DRDraw, DRCBasic, DRPascal, Supercalc2, AA20-99, manuals, books, £175. Bayliss # 01734 782642.

Blank 3-inch discs. 30 for £15. Also Multiface II £15 Jonathan # 01502 518773 (after 3.30pm). CPC464 with green screen, monitor, manual, joystick, 20 copies of AA with covertages. £80 O.N.O. # 0181 845 2037.

CPC 464, colour monitor and keyboard. 80 plus games, 2 joysticks, 18 plus copies of AA. Desk optional. Valued at £350 but will sell for £250. Bargain! Edward Gibbs, Fair acres, Goudhurst Road, Marden, Tonbridge, Kent TN12 9JY. 01622 832115.

Games for sale. All on one tape. All less than £1 each. SAE for further details to Dan Brook, 8 Baguley Drive, Unsworth, Bury B19 8HS. Games and PD on tapes for CPC464. SAE for list to Gart Smethers, 13 Meadow Close, Cononley, W Yorks BD20 8LZ.

CPC6128 with colour monitor, 3.5-inch drive, DMP 2000 printer, cassette player, software (Protext, MasterCalc etc.), adventure games, lemmings, Hero Quest ad more. Magazines (AA and covertages, manuals and books. £250

Soft 968 £22, Laser basic (tape) £12, Laser compile (disc), £9, Elite Gold (tape) £9, and

more. Kevin Heywood 18 Sinclair Ave, Banbury Oxon OX16 7DW.

Amstrad colour CPC128, loads of disc/tape soft/hardware, ROMs, books. SAE: John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH. I need a ROM Board with Protext and ProSpell. □ 01288 321348 Paul (after 6pm).

CPC 464 colour, 6128 chip, DD1 drive, multiface 2, DKTronics add-on memory, manuals, games. £100. Buyer collects or pays postage. Phil Andrews, Steppes Cottage, Kimbolton, Hereford HR6 OHD.

CPC 464 colour multiface II, joysticks, Lightpen, AA covertapes, 43 games, Mini Office 2 Assembler, Vientext, Amsoft Software, 6 years' worth of AA/ACU magazines, blank tapes, computer desk, original

packaging/documentation. £150.

CPC 6128 colour monitor, TV tuner, joystick, £150 also serious software books and games eg Masterfile, Tasword, Utopia etc. £7 each,

Games all boxed originals. Approx 50 on tape and on disc. £35 together. Also available separately. Peter = 0161 485 1854.

43 Amstrad Actions, 23 cover tapes, 29 ACU's and 13 WACCL's. £50 the lot, or make an offer. Gary # 0181 806 8234.

Disc and cassette compilations/single games for CPC464, 80 games. £35 incl p&p. C Rees, 66 Miskin Road, Mid Glamorgan, CF40 2QW. CPC6128 mono, comprehensive outfit, 3.5-inch drive, FD1, ROMbox, ROMs, 256K Rampack, Multiface, modulator, mouse, RS232 interface, professional software, manuals, extras £120 or separate. Brewer = 01344 4879489.

Any PD software (disc-only) for PD library. Will return 1/4 of all contributions. Alex, 30 Gritstone Road, Matlock, Derbys DE4 3ED.

Elite for Amstrad CPC 464 cassette only. Will

give you either Ikari Warrior or Batman. Ben = 01488 682354 (5pm-9pm).

Games on discs. Also tape to disc copiers and adventure games. Will buy or swap. I have lots of games on disc and tape. Bill Buchanan, 65 Carr Barn Brow, Clayton Brook, Preston PR5 8LD = 620381. Sim City, Super Cauldron, Double Dragon 1. Also selling some games. Help for Prehistoric 2 would be appreciated. Meirion · 01222 709289. Manual for Amstrad printer DMP 2000, F Paul, 15-6 Murrayborn Grove. Edinburgh EH14 2PG

Tapes only for 464. Any quantity but must be reasonably priced. S Collinson, 60 North Parade, Sleaford, Lincs.

Wanted on cassette Elite for CPC464, GAC manual, Swap (Heroquest, Space

'Bazaar' but true - if you want it, come and get it! The AA bargain basement is open for business.

Crusade) or buy. Lee Cleary, 20 Acacia Avenue, Maltby Nr Rotherham, S Yorks S66 8DS. For music machine, software only wanted for Amstrad 6128. On disc. Please help. Chris Bollas. PO Box 10010 Athens Greece EPYX SuperCycle, on Amstrad CPC 6128 disc. Will pay cash or swap for one of hundreds of games (carts/discs/tapes/spectrum). James # 01256 880557 (after 4pm). Sim City for 6128+ Patrick = 65562. (Northern Ireland.) The Program patients for Amstrad 6128. Mr/Mrs Butler = 01334 478817 Amstrad manual for DMP 3250 printer. HJ Smith, 8 Elgin Road, Southampton, Hants SO15 1JP # 01703 639918.

SER GROUPS

Established user group. Non-profit making. Superb range of services. PD, discounts, advice, contacts, second-hand hard/software. SAE to CCC(AA), Box 121, Gerrards Cross, Bucks SL9 9JP ≈ 01753 884473.

Free PD! Send disc/tape PD (not from AA covertape) for free PD. Eagle PD, 21 Dane Bank Ave. Crewe, Cheshire CW2 8AE. Original software preferred. Prompt returns. Free software! 25p stamp and disc/tape to Maybrook Software, 95 Humberstone Road, Luton LU4 9SR for free covertape, log and program list.

Urgent! Penpals wanted. Aged 16 and over. M/F. Any computer type. Swap games or chat. Barbara, 5 Cloughview Doagh Road, Ballyclare, Co. Antrim, N Ireland BT39 9EP.

AMS'	TRAD	ACT	101	1	7
FREE	READ	ER .	AD	FO	RM

Want some software? Want to get rid of something? You're in the right place. Fill in the details in the box below - one word to one box - and send it to: Reader Ads, Amstrad Action, 30 Monmouth Street, Bath Avon BA1 2BW.

Your name				
Your addres	ss .			
IEZ H				
		Post	codo	
For sale	Wanted	User grou	ps 🗆 Servi	ces 🗆 Other
MERO				
			1754	

Assembly

Richard Fairhurst is going round and round in loops this month - professional loops, you understand.

I always hated physics at school – particularly those lessons where the teacher just waffled on about theory non-stop for 40 minutes. Anyone who made it through these without dying of boredom would leave the classroom with a burning conviction that Lessons Should Be More Fun.

Let them suffer!

When I left school, and all this ceased to be a problem, such idealism changed into: No! Let 'em suffer like I had to! So you won't be surprised, after this rather roundabout explanation, to learn that this month's 'Assembly line' is (almost) all theory.

Last time, you saw how simple it was to get the firmware to CALL a routine every 50th of a second. This, in fact, is a crucial principle for anyone who writes programs which involve rapidly-updated screen display: arcade games, demos, and even certain utilities.

You probably know that when you see animation on your CPC or television, it's just an illusion: a number of frames are displayed in such quick succession that the brain sees them as continuous movement. As with (non-American) TVs and all other displays on inexpensive computers, the CPC displays 50 of these frames per second. It makes sense, then, to achieve the smoothest and most consistent rate of animation, to synchronise your program's operation with these frames. To

generate a new picture every
50th of a second is ideal.
If you are moving large sprites around the screen, though, this may be

A plug for the gap!

* Richard Fairhurst is the author of RoutePlanner, the route guide, £19.95 from Sentinel Software, 41 Enmore Gardens, East Sheen, London SW14 8RF e-mail: CS94RRW@brunel.ac.uk unfeasible, and a 25Hz (generates 25 pictures per second) system is preferable – so you have a new picture every other frame. It's important to have a constant rate of display, otherwise the animation just looks tatty.

You could do all of this by setting up an interrupt, as you did last month. It's much simpler, though, to have the main program running on a loop which executes 50 times per second itself...

Moving pictures

To do this, you need to start executing each pass of the loop when the electron beam which 'draws' the image of each frame on to the monitor is at a fixed

point on the screen. Fortunately, the CPC is capable of testing for this, using the firmware call at &BD19. Call

this, and processing stops until the electron beam is at 'frame flyback'. This is the stage between drawing two frames, when the beam is flying back from the bottom of the screen (having just firished drawing the previous frame), ready to start again at the top for the next frame.

Using this method, careful coding and use of delay

loops ensures you can predict where on the screen the electron beam is at any point in the execution of your main loop. This is a Good Thing...

Say your program is printing a sprite half-way down the screen, and the electron beam is passing this position at the time. You are then changing the graphics on the screen at the same time that the electron beam is trying to display them: the main cause of flicker in arcade games. Being able to print sprites before the electron beam has to display them avoids such unsightly effects.

This month's homework

With this knowledge, your homework for this month is to have a go at converting last month's timer program to run on a 50Hz (50 times per second) loop.

Get rid of the interrupt code in the 'on' and 'off' routines, since you're not using that method now, and replace them with a loop consisting of...

.loop call &BD19 call rout .ir loop

This simply waits for

frame flyback (which, as you know, only occurs once every 50th of a second), calls the timer routine, and loops. As it is, this will carry on forever, even when the timer has hit zero and the border has turned red. Try adding some code to stop either when a key is pressed, or when the timer has reached zero.

Most commercial game releases, along with 99% of demos, are coded in this way as are those utilities, especially, which require a WIMP system. The main loop in RoutePlanner*, for example, runs on a similar system to this. It calls the routine to move the pointer according to the user's input, and then does anything else it needs to do at the time, such as draw a line on the map.

It's the custom

A demo would move the scrolling message left by one byte, animate sprites and call the music-playing routine in a loop like this. Music-playing routines are invariably designed to be called this way. However, when you reach the level of fluid animation required in demos and arcade games, you're not going to be using the firmware – custom

sprite routines are the order of the day...

Instead of using CALL
&BD19, game coders hit
the hardware directly to
find out when frame flyback
is and the firmware's standard
interrupt, which carries out tasks
such as keyboard scanning and sound
generation, is turned off. This means you have to
write your own routines to do exactly this – never
the most enviable of tasks, especially with CPC
technical documentation so hard to come by these
days. But wait! Do we see a saviour in the guise of a
Next Month: box approaching...?

NEXT MONTH:

Using this 'professional' (yes, we get the message) frame-based principle, next month you write a very amateurish game. You will be delighted to know (you will, honestly, when you see how complicated it is) that you use the AA keyboard routine, which you can copy out and use in all your future endeavours.



surve

We want to find out exactly what you like and what you'd like to see in AA. Just complete and return the questionnaire. You will help decide what goes into AA and you could win games galore, too....

hings change rapidly in the AA scene and so every now and then we need to check up on what you want from your main source of CPC-related information.

This is, indeed, one of those nows, and, as it were, thens.

We need to know all about you (okay, about your CPC habits, at least) so that we can make sure that AA is providing you with what you want from a CPC magazine. And, as the magazine is lot smaller than it used to be, it's even more



important that every page counts. That's why it's vital that you take part in this survey.

As if that weren't enticement enough, we're encouraging you even further...

Three survey replies will win their senders 10 games each!

Tell us what you want in AA.

PAI	27	1
WHO	ARE	YOU?

1	Ho	w	old	are	you?
<i>m</i>		MA:	· write	941.90	,,

2 Are you male (M) or female (F)?

3 In which part of the country (or world) do you live?

South East

South West

Midlands

East Anglia

Wales

North East

North West

Scotland

Northern Ireland

Other (please specify)

4 What do you do with your days? Are you...?

At school

At college/university

At work

Unemployed

Full-time mother/father

At Her Majesty's pleasure

			7
N.	VIII AV	E Tors	4

MACHINE SPECIFICS

5 What type of Amstrad have you got?

6128 664

464

6128 Plus

464 Plus

6 How long have you had it? ___

7 Was it new or second-hand and where

did you get it from?

8 Do you use it for anything other than playing games? If yes, please, specify

9 How many hours do you spend using your CPC per week on average?

10 What other computers or consoles do

you own?___

PART 3

SOFTWARE

11 How many games do you own?

Fewer than 10

10-30

31-50?

51-100?

More than 100?

12 Do you own software mainly on:

Tape?

Disc?

13 Other than games what software do you use regularly? Please specify particular

14 Where do you get your software?

Play your part in the AA revolution and you could win some software, too. Simply send your questionnaires (or a photocopy) to: Reader Survey April 1995, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW before Wednesday, 26 April, 1995.



PART 5

19 Do you know what 'comms' means?

Yes/No

Yes/No

Yes/No

(If not, or to refresh your memory, see 'Get the message' AA105.)

If yes, are you interested in the Information

Superhighway?_

Do you own any of the following:

Modem Yes/No Comms software Yes/No

B 10 10 0000 17 10

Do you use it with your CPC? Yes/No

Do you use a service provider?
Which?

Or do you link up through...?

Work Yes/No

College

What do you use comms for?

PART 4 HARD FACTS

15 Which computer magazines do you read regularly?

16 How much money do think you will spend on your CPC (hardware and software) in the next six months (estimated to the nearest £10)?

PART 6

THE MAGAZINE

20 How interested are you in the various sections of the mag? Please give a mark from 0-10.

Covertape

Letters

Directory

Public Domain

Fanzines

Hardware features

Serious software features

Cheats and pokes

Reader ads

Competitions

Techy Forum
BASIC tutorials
Machine code tutorials
Interviews with CPC personalities (users/developers)
21 What would you like to see on the
covertapes?
22 What would you like to see features on?



7	What	other	hardware	do	VOIL	own:
20		oure.	- Idiana	~~	,	

Disc drive? Cassette deck?
Scanner? Multiface?

Printer? Hard drive?

Other (please specify)

18 Are you planning to buy any of the above in the near future? If yes, please specify...

PART 7 ADVERTISING

23 Do you ever order software/hardware from the adverts you see in AA

Yes

No

24 If the answer to 23 was yes, how would you rate the level of service you have received from the companies involved?

Very good

Good U

Poor Ury poor

Comments:

25 And finally, your name and address (so we can send you a prize if you win!)

Post code _____

reed of digitizers

How do you get pictures from the TV on to your CPC screen? Richard Wildey is worried about your images.



From the main menu you can alter settings.

A digitiser is a piece of hardware that allows you to grab images from the television and display them on your computer screen. The only available piece of equipment on the CPC that lets you to do this is the Rombo Vidi Digitiser.

Pass the source

Originally released in 1986 by Rombo at a cost

£69.95 the Vidi was an instant crowd puller at computer shows. Unfortunately Rombo no longer make the digitiser after selling the design to Avatar. Avatar has since gone out of business leaving a source for such equipment dry. So, if you are after a digitiser check the classifieds sections of AA or fanzines such as WACCI*

The Vidi comes with software to complement the hardware which comes packed neatly inside a black box that plugs into the expansion

port. A phono lead then goes from the Vidi's video in socket to the video out connection in the video or camcorder. A phono lead is supplied but if it's missing, because you bought the hardware second hand, for example, try electrical or video shops for replacements.

On a screen near you

Once connected, the software beams images into your CPC at a top speed of six frames/sec.

A hunting ye will go

*See Amscene Directory on page 7 and 'It's a snip' on page 23 for contact details and further ideas for tracking down CPC-related hard- and software which isn't readily available. Without going into too much detail, the Vidi works by decoding the signal from any composite video output into binary and then collating this in its own internal 16K RAM. From here the Vidi sends this data into memory location &4000 of your CPC and then displays it on the screen. While the screen is displayed the process is repeated.

Anything you want

The Vidi can digitise anything that gives a composite video output. So you can hook up a video camera, VCR or another computer.

Connecting a computer via a video can lead to interference. For the best results connect a Genlock to give the correct form of output, thus giving you an image of what would appear on the Amiga on the CPC screen, obviously in Amstrad resolution and colours.

The Vidi software comes in two forms:

the principle one is a menu driven system that

allows you to grab full screen images;

the second is a series of RSX commands that are usable from BASIC in conjunction with your own programs.

Many example programs are supplied with the Vidi Digitiser together with help on the RSX's, to give you a fair idea of how to maximise the potential of this innovative and also fun-to-use software.



Use the Vidi to grab screens from the TV.

Choose the Vidi program or the RSX's.

VIDI Digitiser Software. Version - 2.8
The following RSXs are now available:
URANK URANK URAN UCLEAR

MALL VI

UCOMUER UCRAR UPOCE USCAM USCAM USPRITE UCOPY UTEM UPAPER USEK UNINDO UCLEAR UDUMP UTINK URLAD USET UXPOS

Ready

Add the Vidi to your programs with RSX's.

ever. The design of the supplied Vidi software is for the standard CPC palette so you need to convert the colours manually.

Use the facilities

To use the Plus's extra facilities you must access the extra features as explained in 'Getting the most out of your Plus', AA112, page 20, or use the terrific, PD, BASIC. If you prefer to stay away from the programming side the art package Smart Plus allows you to use the extra colours with ease.

Go and get it!

Smart Plus, £13 95 from Radical Software, Brympton Cottage, Brunswick Road, Worthing, West Sussex BN11 3NR = 01903 206739. B-ASIC, PD, from all good PD libraries. Check out the Amscene Directory on page 7 to find relevant addresses.

unfortunately, won't do. A MODE O screen with 16 colours, alas, doesn't look much like the original image as the colours are not correct. Attempted is a grey

Grabbed Images are in all the CPC's resolutions.

To obtain the best picture use the four colour MODE 1 or monochrome MODE 2. Grabbing an

images in MODE 0 requires a still picture, so

unless you have a camcorder and tripod you

need to grab the test card. A video on 'pause',

New resolutions

scale, but with the CPC's palette it just doesn't work unless you have a green screen monitor where you effectively have 27 shades of green. What you need is a larger palette. Owners of

the CPC Pluses can now take the time to feel smug as the range of colours gives you 16 intensities of each available colour.

This means you can use excellent shading effects to give you some of the best CPC art

Next month:

See how they run... Why do you need a mouse? Richard Wildey squeaks up.

Finelin

Brun Word's

Last month Angela Cook professed the MBrunWord word processing package 'excellent'. Enter our competition and you could decide for yourself - free!

User-friendly - 90% Finetypproduction quality 20% arri Spell shocking - 97% Design # 90% sdmnopgratuv Overall - 95%

> These were the scores that Angela Cook warded the BrunWord word processor in AA114. Even Olga Korbut would have been hard pushed to produce a better sett tont

> Excellent, not only as a home package but also in an all-round business capacity, were the accompanying words.

The BrunWord Elite Mark II ROM Module (without ROMDOS) retails for £63.

The BrunWord Elite Mark IL ROM Module is:

- a self-contained plug-on unit, so
- you don't need to splash out on any hidden



the 'How to win' hox. extras that up the cost.

You can:

BrunWord

. use the BrugWord Mark II on any of the CPC range of computers, for example the CPC6128, CPC464, 6128 Plus and 464 Plus.

The BrunWord Elite Mark II ROM Module: checks your spelling as you are typing using

the Info-Script spell checker! What else can we say? Beyond telling you

how to enter the competition, that is...

How to win the BrunWord

Just answer the question below, write the answer on a postcard or back-of-an-envelope and send it to: Wordy-wise, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail it to aa@futurenet.co.uk (putting 'April compo' in the subject line). Your entry must reach us before Wednesday, 26 April 1995.

And the question is... Who wrote:

Twas brillig and the slithy toves Did gyre and gimble in the wabe All mimsy were the borogoves And the mome raths outgrabe.

NOTE: For more information on the BrunWord Elite Mark II ROM Module and any other versions of Word, see AA114, 'The last word?', page 18 or stact: Brunning Software, 138 The Street, Little Clacton, Clacton-on-sea, Essex CO16 9LS = 01255 862308 (9am-5pm).

MICROSYSTEMS

(DEPT A), PO BOX 24, ATTLEBOROUGH NORFOLK NR17 1HL. (01953) 483750. SOFTWARE (3" DISC), SUPPLIES, HARDWARE.

BrunWord ROM Modules

Immediate despatch on receipt of cheque.

Elite ROM Mk 3 £79

The BrunWord Elite Mark 3 ROM module is identical in appearance to the Mark 2 but hidden within is a huge chip with 512K of memory. It is equivalent to having 32 individual ROMs. The Mark 3 ROM has all the features of the Mark 2

ROM has all the features of the Mark 2 and a number of exciting additions.

A script font gives the appearance of neat handwriting, but some characters such as o a d g c require different linking depending on their position. We have designed a series of fonts that are modified as necessary to achieve a really need flow to the lines of text.

good flow to the lines of text.

The Mark 3 ROM contains 23 fonts, including four intelligent script fonts, a new series of modern over square fonts, smaller versions of CHELMER and smaller versions of CHELMER and CLACTON, and large fents for posters. Add a number of other improvements, and the Mark 3 ROM is fentastic value for money.

Ouotes

"It's totally brilliant.... carries on the extreme user friendliness of Brunning Products to a very high standard... Chris Knight (ACU Editor) - ACU Aug 1991.

quite uncomplicated and easy to use.... the fastest most efficient spell checker anywhere.... Th BrunWord ROM is a truly excellent product." Rod Lawton (AA Editor) - AA Sept 1992

*BrunWord is excellent, not only as a home package, but also in an all-round business package capacity. Angela Cook - AA March 1995.

ostage:- UK add £3, Europe add £5, Rest add £7.
128 Nos add £15, 464 add £10, ROMDOS (some if required) tree.
I possible isserve your order by phone before sending chapse IPO.

Brunning Software

138 The Street, Little Clacton, Clacton-on-sea, Essex, CO16 9LS. Telephone 01255 862308

Elite ROM Mk 2 £63

Word processor, spelling checker, 33,000 word dictionary, relational database, 9 pin print enhancer, 24 pin 'type setting' routines, 10 superb tonts and high speed screen dump and box drawing routines for 9 and 24 pin printers, all programmed into a 256K ROM. The ROM is so fast that it checks the spelling while you are typing and the price includes our 8 bit printer status port. Supplied as a plug on module, no ROM box is needed.

BrunWord PC £55 Powerful and so very fast. Has most of the features of the Elite ROM module and many new features. With YDISC (£10 extral) it can directly read 3.5 inch CPC discs with data, system, D1 or D2 format. Ask for free booklet.

Text and Picture label/letterhead maker. Colour version now available....£15.00. PAGE PUBLISHER.....£25.00 The ultimate DTP package for 128K CPCs. PICTURE DISCS 1 & 2...£12.50 (EACH) Clip-art for Page Publisher/Stop Press. DISC-BASE......£12.50 Automatic disc organiser and file finder HOME ACCOUNTS.... ..£15.00 Comprehensive personal finance package. GENERAL LEDGER 6128...£30.00 GENERAL LEDGER 6128...£30.00 Computerised small business cash-book. Many Other Programs Available Including Our Budget Software Range From Only £5. CF2 DISCS, PER PACK OF 5....£11.50 PRE-FORMATTED. WHILE STOCKS LAST. 3.5" 720K DISCS PER 10....£5.00 CLEANING KITS (3"/3.5"/5.25")...£4.00 LOCKABLE DISC BOX (3" OR 3.5")...£5.00 PRINTER CABLE 464/6128.....£7.50 PRINTER CABLE PLUS/PC......£5.00 MOUSE MAT...£2.50 MOUSE HOUSE...£2.00 COMPUTER LABELS, PLAIN PER 100: DISC (3" OR 3.5") £2.50 ADDRESS..£2.00 RIBBONS, DMP 2000/3000/STAR LC10 £3.00 NEW! 3" DRIVE REVIVER KIT £10.00 Drive Belt, Cleaner, DIY Instructions.

NEW! SUPER LABELLER...£12.50

COLOUR PRINTING PACKAGE. £199.00 Seikosha SL-96 24 pin with tractor feed. colour/mono ribbons, cable. Superb NLQ. 3.5" DISC DRIVE PACKAGE...£79.95

TEAC second drive unit for the CPC range with side-switch, PSU, cables, software. POST/PACKING: PLEASE ADD 21.00 PER ITEM (SOFTWARE OR SUPPLIES) £5.00 (HARDWARE) SEND CHEQUES/POS/ACCESS/VISA DETAILS OR AN S.A.E. FOR OUR 12-PAGE CPC CATALOGUE, PCW AND PC PRODUCT RANGE ALSO AVAILABLE. JOIN OUR MAILING LIST FOR FUTURE SUPPORT

FORUM

Richard Fairhurst remains unsunk by heat, tries to avert an art attack, and proves he is an expert on PCW-CPC connections.

QUESTIONS AND ANSWERS



Exciting topics no. 283

I have been advised to write to you to help me find a good stock management program in the public domain.

What I need is a program that can handle 5000 items, probably in a series of files, with facilities for stock number, stock quantity, stock reorder level, stock reorder quantity, catalogue number references for suppliers, catalogue numbers for sales purposes, cost reference and sales reference and a tabulate facility across the page for any of the fields to be printed in any order.

I was told that if anybody knows of such a program it would be Richard Fairhurst, so, can you help me please? Roy Everett, Braintree

There's nothing quite so sophisticated as a stock management program available, I'm afraid. Well, there is one (Stock Control by Scott Giddins), but it's really rather simplistic for your needs.

I'd recommend using a really good database: Rambase 3 (see page 6) is your best bet if you have 128K, or PowerBase 2 if you only have 64K.

This might be a bit awkward in some circumstances, for example, removing one item from stock necessitates a whole 'Edit' action – but it's the best you'll get.

Feel the heat

A few weeks ago my 6128 suddenly stopped working, so I went down to the local electronic repairs place (they usually do videos) and they charged me A\$40 to get it working again.

They said the Z80 had blown, which sounds pretty major, but fine, I can afford such repairs. Yesterday it did it again, and

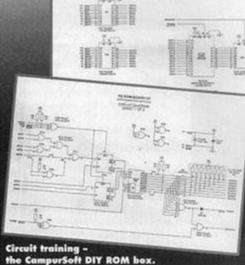
repairs. Yesterday it did it again, and when I opened the case it sure felt pretty hot. I bought a new one, cheap, from the local electronics superstore, but I don't

want to bother with this again, so what can I do to stop it happening once more?

Scott Roberts, New South Wales

You could try going back to your repair shop and asking for some money back because their original shoddy repair didn't last, however, they might not be co-operative. Anyway, get hold of some heat sink paste (such as Unick, see bottom left) from an electronics shop, and find a bit of heat sink (the metal part which removes heat from electronic equipment) – try a disused transformer or Spectrum.

Stick this on to the top of your Z80 with the heat sink paste (being careful not to lick your fingers, it is fairly toxic), make sure that it's not touching the metal of any chip legs, and wait for this to dry. Your CPC should then be back in full working order.



Only re-connect
My little brother broke the connector
on our disc drive. Thinking it was useless
we gave away all our discs including CP/M
(doh!). Is there a replacement file or disc
copier available, preferably PD? I have a
formatter. Would a ParaDOS ROM be a suitable

PCW

Part 1

1 Because of the limitations of having a cassette player on my 464 Plus, I was wondering if it would be possible to transfer the disc drive from an Amstrad PCW 8256 and plug it into the 464 Plus. If so, how could it be done?

2 Would it be possible to make the printer from the PCW compatible with the 464 Plus?

3 Would I need to install the disc drive interface which I think you gave instructions for in AA91? I don't mind if a little soldering is in order. Jason Barber, Thetford

1 The mechanism of a PCW 8256 drive is the same as that in an Amstrad FD-1, so, yes, it is possible.

You'll need a 5V power supply as well, though. 2 Sorry, no: PCW printers are dumb creatures which have most of their output controlled directly by the PCW's operating system, whereas a printer hooked up to a CPC needs to have a built-in program to tell it how to draw letters and such like on the page.

3 Yes. Remember that you only have an FD-1 equivalent, too,



Rate of transfer: to and from a PCW, left and below.

rather than a fully-fledged DDI-1 with 464 interface.

Part 2

My daughter and son-in-law run a small business from home using a PCW 8256.

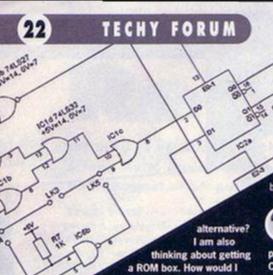
I visited them for Christmas, and took a few of my 6128 discs, hoping that there was some way of getting them working for the children – but no joy.

Is there any way I can convert the word processor to a CPC to load a game like Monopoly?

Also, I read the comms article back in AA105, but the PC emulator is not applicable. George Hales, Coventry The PCW Plus team (we share an office) will be warning us off their turf at this rate!

With regard to Monopoly, and indeed any program run from BASIC, the answer is, sadly, no. For example, how would a PCW run a colour CPC game? Neither is it realistic to perform any surgery on the PCW to turn it into a CPC.

However, if you have any CP/M software on either computer – it will usually be PD – such as the word-processor VDE – it should be freely interchangeable between the two machines. You might even like to try and impress upon your daughter that second-hand CPCs are very good value at around £30 these days!



connect it with my DDI-1 plugged in? Is the Protext ROM still available, from Arnor or any other supplier?

Do you recommend the DES ROM? (Please say yes, as I want to show this to my mum.)

Is it possible to build your own ROM box? I am a very good instruction follower, although an electronics novice.

My final batch of questions...

I am thinking of getting a 3.5-inch disc drive. If I get ParaDOS, will this format 800K? Which drive do you recommend? Would it be possible to use an Amiga's external drive and still use it for the Amiga? John Herbert, Harlow

There are plenty of PD copiers available - you could be forgiven for thinking that the PD scene never comes up with much else, in fact. Try the German utilities Disc'o'Magic or the slightly unreliable Crime. Alternatively, ParaDOS on ROM does all this and much, much more,

A ROM box comes with a through connector, so you simply slot your DDI-1 in behind it. Protext is still available, try OJ Software (# 01257 421915). DES is a very good buy for

CPC novices and those who find using the standard RSXs to perform disc operations tricky, although advanced users won't find much use for it.

Get ParaDOS, and (if you send an A4 envelope) instructions on how to build your own ROM Box (see pic above and on page 21) from CampurSoft, 10 Mcintosh Court, Wellpark, Glasgow G31 2HW # 0141 554 4735:

Most 3.5-inch drives are pretty much identical, although it's best to get one with a side switch on it,

try the SD Microsystems model, for example (# 01953 483750). ParaDOS does format to 800K. Amiga external drives are basically the same as CPC 3.5-inch drives, but the cabling needs a bit of soldering before it will work on a CPC.

Perplexing printer I bought my son a new, ex-catalogue 6128 Plus. He decided he wanted a printer to go with the unit so we purchased a

Citizen ABC-24 which Dixons told us was compatible with the 6128 Plus.

When we got the printer home, we realised that the easy-start disc supplied with the printer was of the 3.5-inch variety, so we decided that we would get an add-on 3.5-inch

With the help of Amstrad Action, we decided on one sold by Siren Software. However, I still cannot play the instruction disc on it. So, try as I might, I am stuck with a printer which I can't get to print anything other than the demo sheets, and by using PIP, which only prints as I type, digit for digit.

I really do need some advice before I smash the whole blasted thing up. RJ Angell, Cheshire

I don't like

to tell you

this, but



As easy as... except it's not.

There's no way this disc will work on your 6128 Plus, even if the disc size is the same. However, you'll be pleased to know that printing from your Plus is in fact very easy.

As you have obtained some success from CP/M's PIP command, it seems that the printer is plugged in correctly with the right lead. So let's say that you want to print the words 'Hello world'. Switch on your printer and 6128 Plus, select Amstrad

Covertape clinic



Art breaker

I have a 464 Plus. When I load the 464 version of your covertape program (AA107) Picasso, the program loads okay, but the screen definition is poor. When the crosshairs are moved to the menu icons the menu bar appears at the top of the screen but the text is unreadable.

I bought this as a back issue. Campbell McDougall, Renfrew

The 464 version, confusingly, is intended only for original CPC 464 users who don't have a fill routine built into ROM, unlike all CPCs since. Load the 6128 version (the same goes for 664 users, by the way), and you should be okay.

BASIC, and type PRINT#8, "Hello world." The sentence should appear on the printer. You can do the same with any sentence you like and word processors like Protext and Tasword should also print happily to your Citizen.

To get effects like bold and italics, though, you need to set the printer into Epson-compatible mode - check the printer manual for how to do this. Sadly, graphics printing on 24-pin printers, like yours, is generally not well catered for by CPC programs, so you'll have less luck with Stop Press, Advanced Art Studio, and the like. You'll still find the 3.5-inch disc drive useful, especially now that 3-inch discs are nigh-on impossible to buy at reasonable rates.

TOP TIPS

Secret code

If you've tried to list any of the recent covertape loaders you might be puzzled to find a tiny program consisting of one machine code CALL and a RUN statement. A cursor-controlled menu replete with AA logo can hardly be crammed into two lines of BASIC, can it? And, as for the transfer to disc routine...

The covertape menu, unsurprisingly, is actually written in machine code. There's no other way of doing the tape-to-disc code, and it makes for a friendlier display. However, there are reasons for wanting it to be a BASIC program: one example is that loading BASIC

programs (as some covertape programs are) from a machine code menu would be well-nigh

The solution, then, is to have a BASIC program CALLing a machine code routine Usually, this would be done either by loading in the machine code from disc, or poking it in from DATA statements. For reasons of speed and space, though, the machine code in the covertage menu is contained in the same file as the BASIC

A BASIC program starts at address &170. With a short (two-line!) program such as the menu, it's over by &1AO: use a monitor (such as Maxam) to see where the first free part of memory is. This is the ideal place to locate your machine code routine. The only problem is

combining the two and saving them out into one file. You could write a special routine to load both files in and save them out together, but it's arguably easier to PEEK and copy out the bytes making up the BASIC program (from &170 to &19F, for example), and then insert them using defb at the start of the machine code source file.

To finish off, you need to make sure that the file in question is marked as BASIC, not machine code. Again, you can write a special program to load it in and save it out with filetype 0. If you're just doing a one-off, though, you might as well take a Sector Editor to the first sector of the file, replace the 02 in the header (binary file) with 00 (unprotected BASIC), making sure to decrement the two-byte checksum at bytes 67 and 68 accordingly, and save the sector.

Software af ship

lot of the letters that AA receives concern themselves with the non-availability of CPC software. You've got a greater chance of getting a squeal of enjoyment from watching Denis Norden's attempts at humour than finding a major chain store with a blast of CPC software.

The way ahead for some time now has been mail order. You know that there is an abundance of top quality independent software producers springing up at a raring rate, but did you know that you can buy a vast range of CPC goodies cheaply? Here are some suggestions to help you find the bargains...

A cottage industry has grown up around the second-hand market, after all if that is the only way you can get hold of software then so be it.

 Advantage: the gear is dirt cheap, so cheap in fact that you could get hold of eight second-hand budget tapes for the price of a brand-new one. Why David Crookes buys an armful of newsprint, unsheathes and sharpens his scissors, and hopes that the first cut will be the cheapest.

 buy new when a used one is just as good?
 Disadvantage: not many people know of these services so are missing out. However, not you, and not now, we hope.

Al's Angela Cook has set up Merlin-Serve, a business selling second-user software and equipment at the lowest prices possible. Angela, hit upon a beautiful concept. She looked at the situation of the time and decided that if brand-new software was not being released then the only option was to gather up lots of second-hand gear and let you delve into the wares and come out with a bargain.

The service is brilliant. This is quite a diversion for AA because I don't think we have ever reviewed a software supplier before, but what the heck, you need to know.

The service is magical

Fast and friendly are the key words surrounding Merlin-Serve. So many people are put off from ordering second-hand software from individuals that a service such as this should help non-trusters to get in on the act. You could say it is the best thing to happen to the CPC in years.

Angela has lots of cassette games for only 50p, many disc offerings for £3, quite a

few pieces of hardware, magazines and spare parts. In short, you should find a bargain. She even buys your unwanted stuff and consider swaps – a good way to clear your shelves and let others take advantage of your unneeded goodies.

There's more. Angela's dad runs a PD library called King Arthur's Domain so you could do all your shopping in one go. (Better than QVC – the shopping channel – too, not least because there's something of interest to you in it.)

WACCI, that infamous club, has set up a Market Stall for its members.

"Which market is that located in?" 1001 readers up and down the country are asking themselves. Well when it says Market Stall, it is actually a reference to a page that is set aside in WACCI for members to sell their excess software and hardware and plead for wanted goods. It's a bit like AA's small ads except that people who place wanted ads are recorded and matched to sellers so, as WACCI Editor

Paul Dwerryhouse says,

"He who wants, talks to he that has."

The publication 8B(T (formerly 8-bit Mart) provides an magazine devoted to adverts. This is not a pure second-hand fest but there is a large amount of classified advertisements which may provide just what you are looking for, at ridiculously cheap prices. It's worth taking a look.

Don't be had

What if you don't like buying things second-hand for fear of getting rubbish in return for your cash? There is a risk when you buy used goods that what you receive has been played about with so much that it has become as worn as Damon Hill's tyres.

Members of the two major user groups, WACCI and the United Amstrad User Group (UAUG), can claim a discount on a potpourri of goodies from respected softies such as SD Microsystems and CampurSoft. All you need to do is subscribe to either one of the clubs and save stacks of moolah.

Then, there are the AA reader ads (see page 15). They are free, they cover the whole CPC scene, and because they are a section within AA you get a bargain before you even start putting biro to grid. What are you waiting for?

Bargain hunters start here

CampurSoft 10 Mcintosh Court, Wellpark, Glasgow G31 2HW

0141554 4735/fax 0141 227 4486 King Arthur's Domain, Brympton Cottage, Brunswick Rd, Worthing, Sussex BN11 3NQ ### 01903 206739

Merlin-Serve (address as above) SD Microsystems, PO Box 24, Attleborough, Norfolk NR17 1HL v/fax 01953 483750 UAUG, 26 Uplands Crescent, Fareham, Hants.

PO16 7SY = 01329 234291 WACCI, 7 Brunswood Green, Hawarden, Deeside, Clywd CH5 3JA = 01244 534942

8BIT, Harrowden, 39 High Street, Sutton-in-the-Isle, Ely, Cambs CB6 2RA = 01353 777006



BACK ISSUES

1 back issue£2.50

2 back issues 3 back issues

4 back issues

ISSUES FOR THE PRICE OF

Don't miss out! All the cover discs, all the tips and all the hot-off the-press information for less money!





All extra issuesadd £1.50 for each complete guide to animation on the Radical Software. Elite Masterclass. AA102: Covertage: Cybernold 2, Graph Master, D+I+Y+F+X. Inside: make some noise – your CPC's sonic capabilities. The CPC world. Reviewed: DES – Desktop Environment System. AAIOE Covertape: Nebulus. Speech. Inside: copying devices. Fulf preview, Elmost interview, low-cost printer reviews.

AA104: Covertape: AA Toolkit, Uridium. Inside: Fluff review,
the PD scene exposed, sports sim round-up, Basic Idea, Home Teacher and all the other usual stuff.

AA10fs Covertage: Deliverance, Bomber, Sasic Utilities.
Inside: A complete guide to getting your CPC to communicate with other computers. Megablasters preview. AALDE Covertable: Zynaps, Springs Back, Iraide: The easy way to animate your graphics, the complete beginners' guide to printers. Reviews: Making Mosic. AA107 Covertage: Bari Wa miors, Picasso (art package) Inside: The weirdest and most pointless software and ever released for the CPC. Review: Masters of Space. AAIIO: AA111: Covertage: D.E.S. DOS Copy, Breakdown, Inside: The ultimate (no lessi) guide to CPC handware and softwar? AAII2 Covertage: Taus the Fox, Megablaster Demo, Decktop Organise (disc only), Inside: Public Domain - what it is and where you can get it. Place the top 50 PD totos of all time!





Amstrad Action Back Issues

Post codePhone No Method of payment (please tick)	Z.N
Method of payment (please tick)	
MANAGEMENT OF THE PROPERTY OF	
Access Visa Cheque	PO 🖵
Credit Card No Expir	y date
Postage and packing rates (per order)	

I would like the following back issues...

where you can get it. Place the top 50 PD USes of all titled AA112 Covertage. Sammal Prilegy, Power Spell, Issidec: Software; commercial versus PD. Is one better than the other? Place the your keyboard with your pryblick. AA114: Covertage. Material of Space, BAI Bearing, Columbia. Insider, Feature: Roach for the Suture – hand/software to take your CPD into the next century? Place: Bruniford Eithe ROM Mark III neview, AI Format Fairs.

Cost of back issues	£ .
Please add cost of postage and packaging	
Total cost	_£00.00

Amstrad Action Back Issues, Future Publishing, FREEPOST,

Publishing Limited, and send the whole lot off to:

Somerton, Somerset TA11 6BR. No stamp needed within the UK.