ACCEPT NO IMITATIONS – IF YOU OWN A CPC THE ONLY MAG YOU NEED IS...

AMSTRAD ACTION

ISSUE No. 116
MAY '95
£2.99

WIN
OVER £100's WORTH OF WORD PROCESSING PROGRAMS

Trouble shooting special

Blast through CPC faults and errors – we show you how!

CPC 464, CPC 6128, CPC 464 Plus
MAY 1995
Serious ACTION
GAME CHUCKIE EGG
GAME HERCULES
PLUS
- DISC EDITOR
- DISC ARCHIVER
- CAMERA
- COLUMBIA V1.1
- ASSEMBLY LINE SOURCE CODE
- BANK MAN REPLACEMENT

- Discover the power of MicroDesign page processing!
- PD programmer David Hall speaks out!
- Multiface poke tutorial!

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

future PUBLISHING
Your guarantee of value
NOT an official Amstrad publication

AMSTRAD ACTION Line-up

MAY '95 ISSUE 116

12 The AA troubleshooting special



A new haircut, wearing support tights and cutting down on crisps might revitalise your appearance and sense of inner wellbeing. Richard Fairhurst says you can do something similar for your CPC! So turn to page 12 to see how to spring a seasonal surprise on your computer. It'll be good for both of you and need cost no more than your time!

18 Designs on layout

Angela Cook makes headlines with *MicroDesign* while Andrew Chapman highlights the hallmarks of desktop publishing.



MicroDesign: make



15 Can you hack it?

Make the jump from wannabe to experienced hacker in the first half of Lee Rouane's guide to multiface pokes.

23 COMPETITION!



Tas-Spell and *Tasword*, *Protext* (CP/M and disc versions), *ProPrint*, the ROM version: some of the best of the CPC word processing packages and all waiting to be won. Get lucky this month – turn to page 23!



On your covertape...

CHUCKIE EGG
The classic platform game.



Chuckie Egg: laid on just for you!

HERCULES
Get the fighting spirit!

DISC EDITOR
Requires DES demo from Covertape 111.

DISC ARCHIVER
Requires DES demo from Covertape 111

COLUMBIA V1.1
Your chance to upgrade to *Columbia* from Covertape 114.

ASSEMBLY LINE SOURCE CODE
Machine code for a simple game.

BANKMAN REPLACEMENT
Turn to page 12 now to see this one in operation!

Turn to page 5 now!

Regulars

3 What's happening
If it's new it's here. Have you won our 'Scotfree' and 'Comms' compos?
WIN Win a copy of the TUSS manual.

4 Reaction
Make your points. Make our day.

5 Serious action!
Engaging games and preoccupying programs selected specifically for you.

10 Classifieds
The *AA* bring and wave it goodbye sales. They're here and they're free.

20 Amscene Directory
Clubs, comms, upgrades and user groups. Your one-stop guide.

23 Competition!
WIN Win the pick of the CPC WPs: *TasWord* and *Protext*, *ProPrint*.

24 Back issues
A good deal at great prices.

Serious stuff

16 Assembly line
Good game? Well, if it isn't you've only yourself to blame. Why? You wrote it!

17 Hardware
Would owning a mouse get you out of a hole? Richard Wildey nose.

21 Techy forum
Richard Fairhurst talks around the subject of borders before getting site specific on the Internet.

Leisure zone

6 Public image
Keith Woods on the pick of PD and in conversation with David Hall.

8 Cheat mode
See Sherwood for the trees and Capp it all with an 'andy cheat.

9 Further reading
Amstrad Power, CPC Southwest Magazine reviewed. Plus! Fanzine news.

AA117 on sale: Thursday, 25 May, 1995

Future PUBLISHING

ABC 15,168
Member of the Audit Bureau of Circulation
Jul '93 – Jan '94

What's happening...

Well connected

As well as being great for special interests, business communication and general conversation, the Internet is a valuable tool for education – being able to link up to a school or college in the world at the speed of light opens up a new world of information and discussion.

Project Connect aims to get schools on-line; looks to give students access to libraries, encyclopedias, weather, geography, sound, images, films, news reels and videos, among other helpful resources. Students will have e-mail, allowing them to exchange ideas with contemporaries across the world. "Enquiry learning", Connect say, "will have come of age".

The scheme is said to be one of the biggest advancements in learning this century.

TOSCA, Unit 1b, Station Buildings, Station Road, Gobowen, Nr Oswestry, Shrops SY11 3LX ☎ 01691 670543.

Comm(s)on knowledge

Still on the subject of the Internet, if you are still unsure what comms is all about, why not visit the Science Museum next time you're in London?

Information Superhighway is the subject of a an interactive, screen-based exhibition open between Wednesday, 26 April and Sunday 3 September 1995.

Science Museum, Exhibition Road, South Kensington, London Sw7 2DD ☎ 0171 938 8080/8008. Opening hours: 10am-6pm Mon-Sun. £5 adults, £2.60 OAP/Concs. Free to the disabled and after 4.30pm.



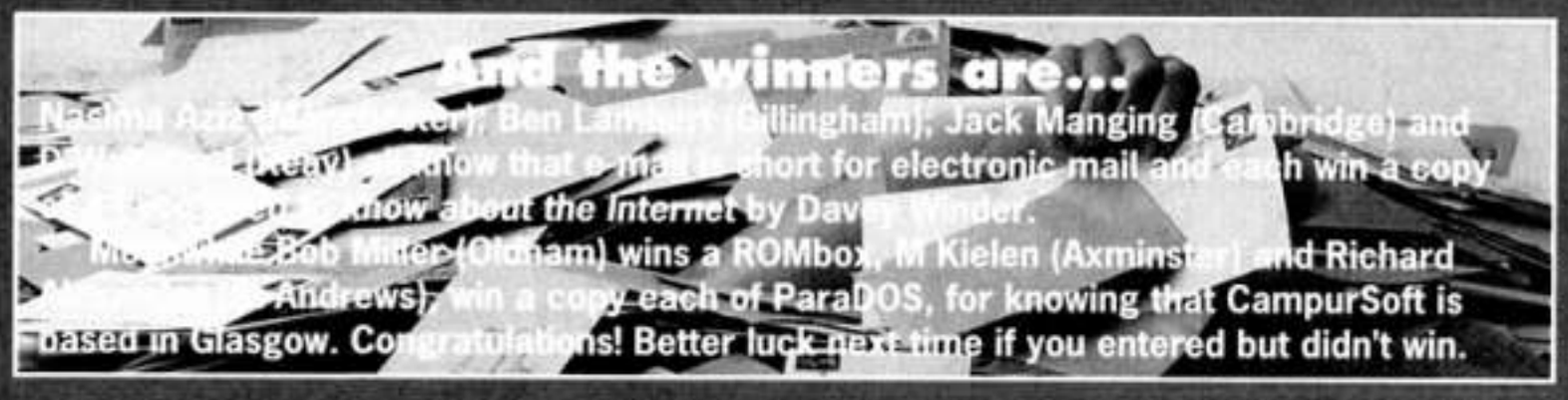
See the Internet in action.

Widgets for sale

STS Software, long-time veterans of the CPC market, have a some new offers:

- 6128 upgrade ROM – STS kit for upgrading a 464 to a 6128 costs £15 down from £25;
- Plus widget – those dongles for connecting normal CPC hardware to the Plus are down to £7.95 from £9.99.
- ParaDOS. – the STS high-capacity disc operating system now costs £15 (ROM only).
- Turbo Imager – the STS ROM-based disc archiver (as reviewed in *AA*113) now costs £10.

STS, 298 Holton Road, Barry, South Wales CF63 4HW ☎ 01446 700730.



And the winners are...

Naeima Azz[illegible] (Chester), Ben Lam[illegible] (Gillingham), Jack Manging (Cambridge) and [illegible] (Ireby) all know that e-mail is short for electronic mail and each win a copy of *Know about the Internet* by Davey Winder.

Mc[illegible] Bob Miller (Oldham) wins a ROMbox, M Kielen (Axminster) and Richard [illegible] Andrews) win a copy each of ParaDOS, for knowing that CampurSoft is based in Glasgow. Congratulations! Better luck next time if you entered but didn't win.

Ex-static

Look out for the Go Anywhere Enhanced Performance 3.5-inch discs from 3M Data Storage. 3M say the new discs are designed to:

- cut down on the static build-up that can lead to corruptions and data loss;
- reduce friction while discs are in use;
- and withstand temperature, pressure and humidity changes with a higher success rate. In continuous tests, 3M say that these wonderdiscs show a 95% reduction in fungus, mould and data loss over conventional discs.

3M claim that the discs are indestructible, and that they can store up 2Mb of data. Although there isn't currently a system which makes use of this on the CPC, expect to see those high-capacity DOS system updates soon.

Radical, dude

Are you stuck for software to buy this spring? Radical Software are making things easy for you – their March catalogue is free. And with updated versions of titles like *Blackjack* and *Cribbage*, it's worth taking a look.

Radical are also always on the lookout for new software. If you have anything you want them to see, send it along – you could be writing the software, instead of buying it!

SAE to Radical Software, Brympton Cottage, Brunswick Road, Worthing, West Sussex BN11 3NQ.

On the box...

Version 2 of the CampurSoft ROMbox is now available. It consists of circuit diagrams and also text files comprising a list of components and the overall layout of the ROMbox.

Send an A4 SAE and blank 3/3.5-inch disc to CampurSoft, 10 Mcintosh Court, Wellpark, Glasgow G31 2HW.

Hey Presto!

Brian Key is the new owner of the Presto PD library now renamed Presto 2.

Brian tells us he is offering his predecessor's programs and also a few of his own.

Presto 2 caters for 3- and 3.5-inch discs and can format the latter to any ParaDOS format which means that, in most cases, the programs from two discs can be put on to just one.

Brian says he can put programs on to both sides of double-sided 3.5-inch discs using a sideswitch, if necessary.

One side of a disc costs 25p if all programs are copied or Brian will copy an assortment of programs for 40p per side.

Presto 2, 87 Sweetmans Road, Shaftesbury, Dorset SP7 8EH.

Zap to the future

Limited stocks of *Zap't'balls* are still available but cheaper – down from £16.99 to £4.99, disc only, from Sentinel Software.
To contact Sentinel Software, see Amscene Directory, page 20.

WIN!WIN!WIN!WIN!WIN!

Sorry, we should have advised the games writers among you that there's a manual for TUSS (the utility featured on the *AA*115 covertape).
The manual costs £2 (incl p&p) from Sentinel Software (see Amscene Directory, page 20). But, we have three copies to give away! Just tell us what TUSS stands for and send your answer on a postcard or back-of-an-envelope to TUSSle free!, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail your answer to aa@futurenet.co.uk before Wednesday, 24 May 1995.

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 Jayne Owen
Ad Design Cherry Coad
Circulation Manager Jon Bickley

© Future Publishing Ltd 1995
Amstrad Action is an independent publication. The company 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 submitted 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 written permission.

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.

Reaction

Something to sound off about? This is your place to pontificate. Write to Reaction, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk putting 'reaction' in the subject line.

Blimey – a newie!

I am new to the CPC, and would like to know about a word processor for this machine. Which is best, and why (or should I write to Techy Forum)?

Why not bring back Power Up? This was packed with interesting facts about the writers of the magazine. You could also do a feature or article about it – it would be interesting to know what the writers' tastes in music are, what hobbies they have and what they look like, as you did in issue 100.
Roger Bernhard, Clacton

Hmm... If you're looking for a simple yet powerful word processor with all the features you're used to on other machines, you should go for *Protext, Tasword or BrunWord* (see 'War of the Words', *AA115). (As it happens you could win a copy of either Protext or Tasword this month – see the competition on page 23 – Ed.)*

As for Power Up, we really don't have the space for whole pages devoted the *AA* writers but if enough people write in to say they are interested, we'll do a one-off profile page. **AA**

Delayed reaction

I've only been reading *AA* for about a year-and-a-half, but I've nearly got a full set (only three to go). I feel I have to write to enquire about the delays in publication, but first, I think congratulations are in order as the March issue actually came out in March.

I also feel that the standard of *Amstrad Action* has recently fallen to the level of *Commodore Format*. Having got that off my chest, I will continue to buy your magazine.
Charlie Stevens, Bury St Edmunds

The beauty of *AA* is that it's collectable – a binderful of mags is invaluable reference for all things CPC (as well as Dave Golder's recycled gags).

We used to put the March issue out in February, the April issue out in March, and so on, but people complained about that, too. As long as you're getting one *AA* per month, if I were you, I wouldn't worry about the date on the cover.

I could add, Charlie, that the quality of letters written both mags receive has fallen, too. **AA**

Can you deliver?

Please, please, please can you settle this once and for all – can Ablex supply a 3-inch disc version of the June 1994 covertape (featuring *Deliverance*)?

Ablex are adamant that you have never given them a master. Like other owners of the tape version I have been unable to get the thing running on my 464.

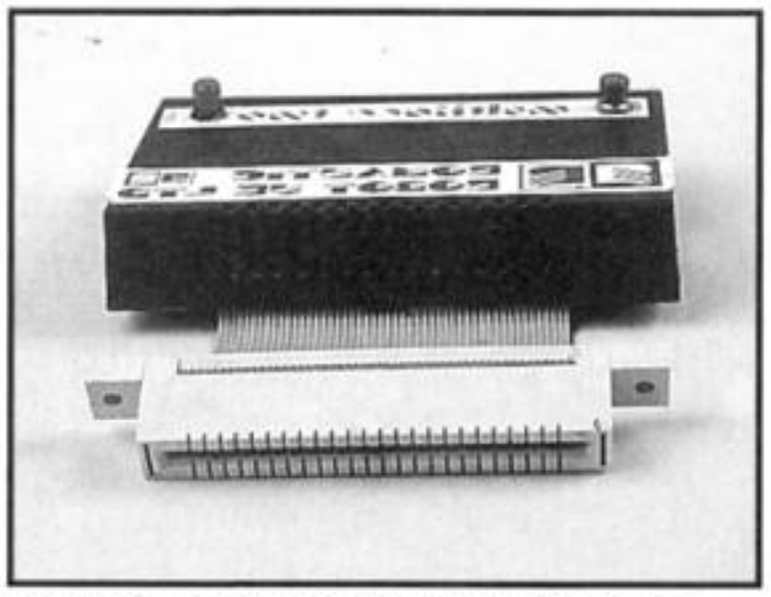
I think it's time I heard the truth, the whole truth and nothing but the truth.

Brilliant mag, by the way – keep the CPC flag flying for as long as possible.
Colin Hazell, Thame

Right, that's it. The June 1994 covertape is not available in disc form. We can't supply you with a working disc copy of *Deliverance*. No, really. It's unfortunate, but that's the way it is. We've reassigned our team of top boffins (well, me) to try to get the tape version working on the 464. As soon as we succeed we'll print the solution. **AA**

Ad libbing

We've been reading *AA* regularly for several years and have noticed how difficult it is to buy software for the CPC in computer retail shops. The small ads section was therefore invaluable for finding things like the Multiface 2, so please bring it back. I appreciate free ads can't make economic sense but I'm sure that Amstrad addicts would be more than happy to pay a reasonable fee to advertise.
Margaret Schofield, Stockport



For elusive-but-essential CPC goods and services try the free *AA* small ads on p20.

Reader ads are a vital source of software for a lot of readers, and we wouldn't dream of dropping them completely. They had to stand aside recently to make space for other features, but turn to page 10 and you'll see, from this month's crop of classifieds, that they're back in full force – so shop away!

As for the Multiface, try ringing Romantic Robot. (For details of this and other CPC essential contacts see the Amscene Directory, page 20.) As for the fee, we wouldn't dream of charging for the service – we're only happy to help.

Degrees of experience

I am 13-years-old and currently choosing my GCSE options. I'm interested in getting a job in journalism when I leave school. I was wondering what sort of options would be best to pursue this career.

I'm just starting work on a fanzine called *AMS-NEWS*, and I'll send you a copy as soon as it's finished. Do I need permission to put PD programs on the cover disc? I'd like to put the original 64K *PowerPage* on the disc.
Richard Tutton, Bodmin

Journalism is a funny field to work in. If you want to get into tabloid journalism you'll need one of those degree things. Computer magazines are something you'll fall into by accident, but if you want to tailor your options, you should study English language and literature, as well as sociology. *(Really? – Ed.)*

As for PD you can reproduce as much of it as you want as long as you don't charge. If the disc is free you can fill it with PD. If your readers have to send away for a disc you can only charge them for the disc and postage – you cannot charge people for Public Domain software.

Do send us a copy of *AMS-NEWS*, by the way, we look forward to reading it. **AA**

Within spitting distance

Karen Levell is fabulous. We should have more female editors. And, spit on the toothy GX4000 hater (aka Dave Golder) for me, please.
Chris Griffin, Bristol



Absolutely fabulous *AA* editor, Karen. But was this taken before or after the visit to the surgeon?



Dave Golder, ex-*AA* Editor, and Stevie Wonder lookalike.

The answer to both must be: why?

Oh, by the way, I passed your letter to Dave, along with your address. I note that you live just up the road from him so he should be able to get there in his lunch hour! **AA**

Comm and get it!

Can anyone help? Is anybody out there?
/g=keith/s=schofield@mhs-cable.attmail.com

Are you sure you wanted to ask that question? **AA**

Last night of the EPROMS?

Do you know if anyone still sell EPROM programmers for the CPC6128?
Paul Bowden, Roborough

Coincidentally, EPROMS are featured in the *CPC Southwest* fanzine reviewed In Further Reading – see page 9. Otherwise it's off to the *AA* small ads with you – armed with a pen and the telephone.

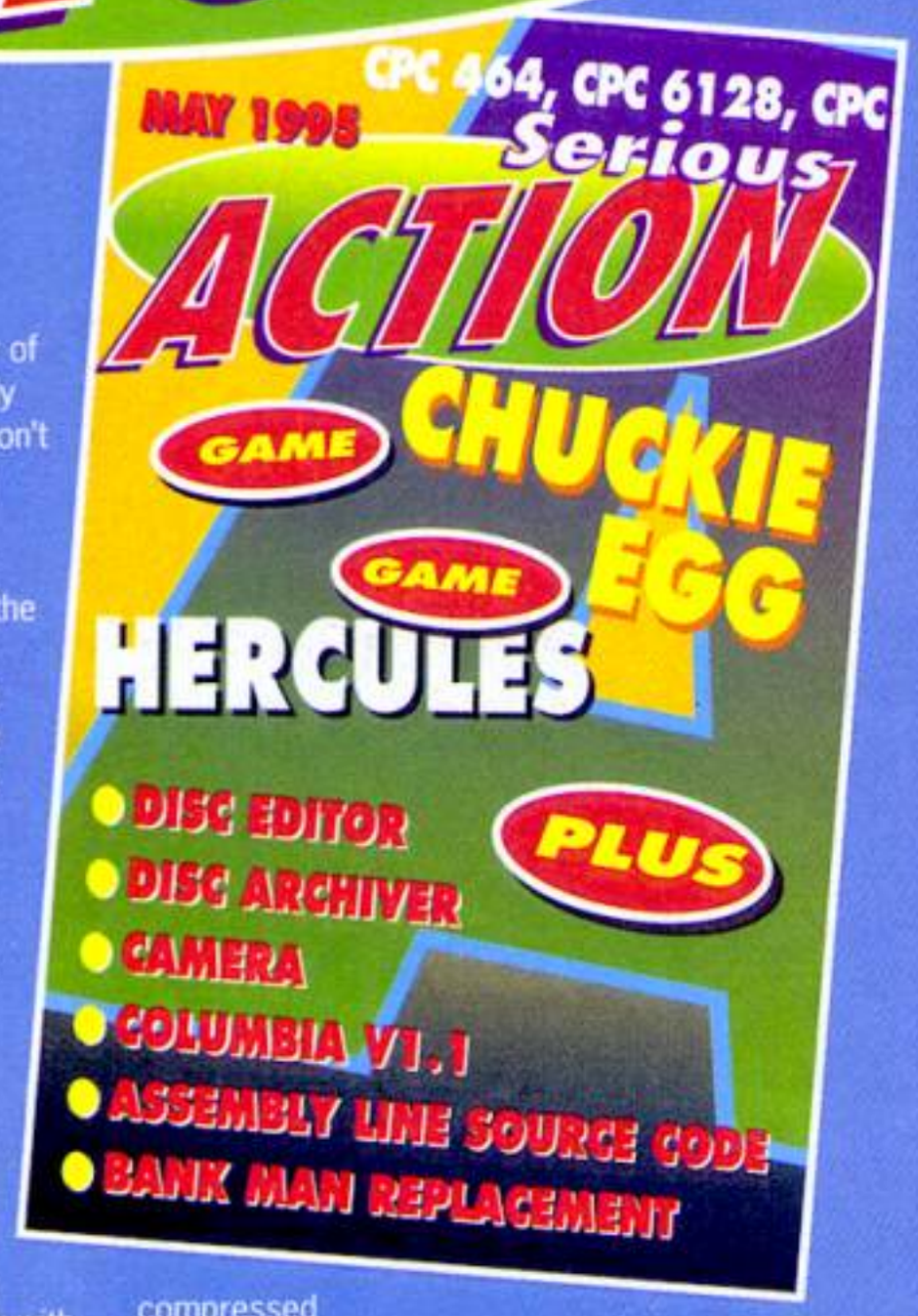
(Yes, yes, you know, you'll find the AA classifieds on page 10.) **AA**

Stirring it

Is *Super Cauldron* going to be on the covertape, or should I turn to the *AA* small ads?
Meirion Boudier

I like the way 'Turn to the AA small ads' is fast becoming a figure of speech. **AA**

Serious ACTION



Is Chuckie Egg the most addictive game ever...? Richard Fairhurst thinks so and now he's put it on the covertape just for you.

CHUCKIE EGG

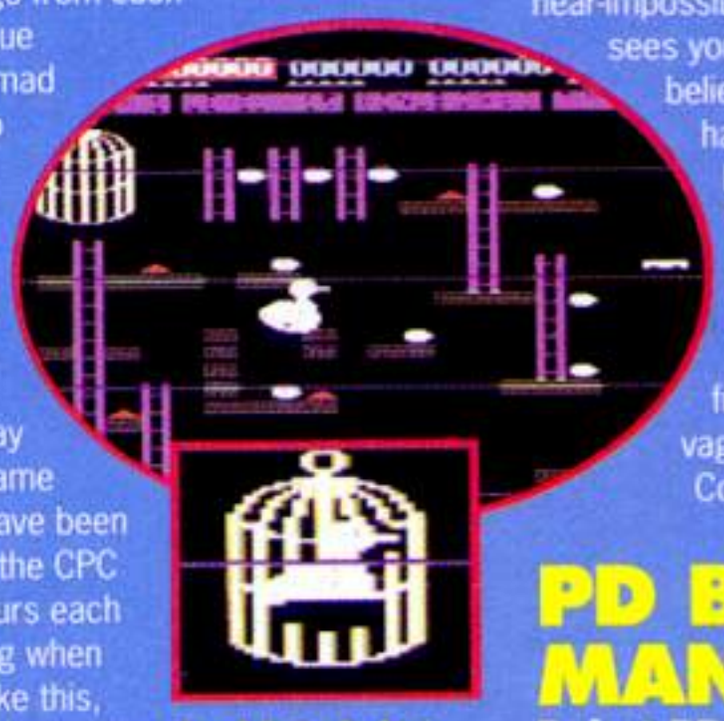
A&F Software

We celebrated ten years of the CPC in 1994: now, we're giving you a ten-year-old game. Swindlers? Cheapskates? Not a bit of it.

Chuckie Egg, you see, is the all-time classic platform game. As Hen House Harry, you have to collect all the eggs from each level, avoid the blue 'nasties' and the mad duck, and pick up corn for bonus points. That's it.

The keys are redefinable, and you can have up to four players.

Suffice it to say that, since this game arrived, people have been sitting in front of the CPC for almost 24 hours each day, remembering when games were all like this, and arguing about what the 'nasties' are (Chickens? Ducks? Ostriches?).



Duck! Or is it a chicken? Ostrich?

Simon, the Hairy Happening was ecstatic to hear the game was on the covertape and subjected the *AA* office to shouts of delight. And in a few days' time, you too will be humming 'Dum-de-dum-de-dum-de-dum-de-dum... Dillip!

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. To transfer the files to disc, you need one side of a disc, formatted to data format.

Loading troubles?

If your tape comes up with 'Read error a' or 'Read error b', our duplicators, Ablex, are the people to contact. Write to them at Ablex Audio Video Ltd, Harcourt, Halesfield 14, Telford, Shropshire TF7.4QR, enclosing your tape, your name and address, details of the problem, and telling them what CPC you use.

However, if the covertape loads okay and you're still having problems getting the thing to actually do what it's meant to, don't shout at Ablex, 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 'covertape' in the subject line.

HERCULES

Gremlin Graphics

In Greek mythology, Hercules had to prove himself to the Gods by performing a number of near-impossible tasks. This game supposedly sees you taking the role of Hercules. Don't believe a word of it: in fact, all you have to do here is beat a lot of baddies up and collect various objects which bounce around the screen seemingly without reason. Standard beat 'em up fare, in other words, and great fun. At least the backdrop looks vaguely Greek.

Control is joystick-only.

PD BANK MANAGER

Robot PD

The file BANKMAN.BIN has long been the curse of 464 and 664 owners. Many PD programs which use the extra 64K have relied on it to work, yet it isn't supplied with any CPC before the 6128 – nor does it work with them. To accompany our trouble-shooting special this issue (see page 12), here's a PD clone. It doesn't provide all the features of the original (most notably, it's not relocatable, so you need to load it and then run the program in question), but it happily lets programs such as *I-Spell* and *Crossword Compiler* run on any 128K machine. There are full instructions in the loader.

ASSEMBLY LINE SOURCE CODE

Since this month's Assembly Line listing is a little too long to print in *AA* itself, I've put it on the tape – it even saves you the typing.

Just load it into your assembler of choice (the code was created with Maxam 1.5 and works with other versions of Maxam, but it may need some adaptation before other assemblers can use it), assemble, and CALL the routine. Now you have a very simple 'catch the falling block' game.

COLUMBIA V1.1

Robot PD

Remember *Columbia*, the compression program featured on the covertape of *AA*114? For disc users only, here's the latest version. As well as being slightly more efficient and reliable, there's one major new feature: multi-record files. If you select this from the options menu, you can compress a number of files into one, large compressed file. Perfect for PD libraries, bulletin boards and also for swappers.

Apart from this, operation is the same as the original, so you shouldn't need any more help.

DES UTILITIES

CampurSoft

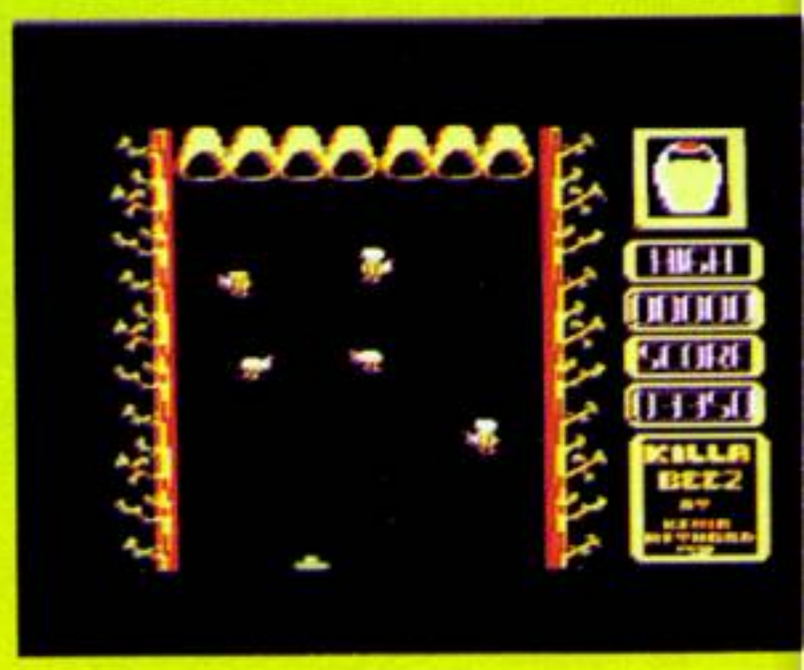
The creators of the DES front end, a demo version of which was featured on the *AA*111 covertape (for disc users only), have kindly provided three utilities for use under the DES environment. Therefore, if you haven't got *AA*111, you need to order a back issue (see the outside back cover of this issue) to be able to use these programs. Alternatively, the full version of DES is available from CampurSoft, 10 Mcintosh Court, Wellpark, Glasgow G31 2HW ☎ 0141 554 4735.

Archiver lets you back discs up on to tape. The operation is menu-driven, in true DES fashion. It works with all versions of DES but the ROM version includes this option as standard.

Camera is for users of the full DES ROM version only, and lets you take a snapshot of the screen at any point by pressing CTRL and COPY together. Finally, the sector editor *Discedit* lets you hack discs to pieces, changing files and directory entries at will.

Please note that *Discedit* is not for use by beginners. If used carelessly, this program can seriously damage your files, so you should *always* work on a backup disc.

Public IMAGE



Killabeez: not a has bee-n!. It's buzzing.

If you suffer with 'xeno phobias' Keith Woods reviews a game which might help. His discussion with David Hall, the game's creator, about feather dusters can't fail to blow any other cobwebs away... You'll be tickled. Guaranteed.

GAMES

Xenomorphs

By David Hall



Take your partners. Ready ladies? Dosi-do.



Now we're into Smashing Pumpkins.

Jolly: "Erm, I'm sorry to bother ya like, but if you're not too busy, you might like to know that the Led Dwarf seems to be under alien attack."
Frighten: "Good heavens, Jolly's right sir, the hyperbolic electromagnetic current detector indicates that there are 20 waves of varying alien species heading our way!"
Dimmer: "We're all going to die!"
Blister: "No, wait! If we could just load up the smeggin' laser cannon we might be able to fight them off."
Frighten: "Good thinking, Sir. Take hold of this joystick, and, Sir..."
Blister: "Yes, Frighten?"
Frighten: "G... Good luck, Sir."
Blister: "Hey, this is really workin', I'm managin' to shoot a few of the smegheads down."
Frighten:" Be careful, Sir, those aliens are shooting like crazy. Five hits and we're history!"
Dimmer (from behind a chair): "And there's the first, you imbecile!"
Blister: "Listen, I don't see you tryin' to help, smeghead. It may be fun blasting these aliens outta the sky, but it 'aint easy. We've gotta hit each alien loadsa times before it dies. I can't see how we're gonna make it through ten of these waves, never mind 20."
Frighten: "I'd like to help, Sir, really, but we've only got one cannon."
Blister: "That's all right, Frighten, this is only an 'Almost PD' ship after all."
Prat: "Hey, give me a go! That looks like good fun."
Blister: Smeggin' right it is, it's much better than that *Spaced Invaders*."
Prat: "Yeah, and I really like those aliens' threads. They're really hip and to the groove. Each different wave has a new look, but they're all really colourful and well made. And they just ooze style. They all move so fast and so smoothly, while managing to keep shootin' at us."
Frighten: "That's all very well, Sir, but one more hit and we're dead!"
Prat (turns head): "Hey, just shut up, metal head! I'll get 'em."
Frighten: "Sir, watch out, Sir!"
All: "Aaaarrgghh!!!"

Where to go

Xenomorphs is 'Almost PD' and is only available directly from the author. You get another 13 PD programs on the disc when you order: we look at these next month. To order straight away, however, send a disc and £2 (the price includes p&p) to David Hall, 280 Derbyshire Lane West, Stretford, Manchester M32 9LU.

Brains & Brawn

By Kevin Heywood

Brains & Brawn is a collection of eight former homebrew games recently released by Kevin Heyword into the Public Domain. This month you look at side A of the collection: side B follows.

Killabeez

Killabeez is an excellent shoot-'em-up in which you have to protect a hoard of honey against swarms of ravenous bees. The bees buzz in swiftly from the top of the screen, dropping contaminated honey bombs as they approach. Touch a bomb or a bee and your precious stock of honey is depleted. However, blast away one of the furry critters and you add to your jar of sweetness.

After you destroy each swarm a bigger one comes along. Every three swarms you destroy takes you to an entertaining bonus level where you have to try and collect blue flowers while avoiding pink and red blooms.

Killabeez is fast, smooth, colourful and, most of all, it's fun. It's guaranteed to give you a great buzz for a few hours at least!

60%

Puckshot

Puckshot is an adaptation of a simple, but classic two-player game. Basically, all the screen holds is a bat and goal for each player and a puck. Both players can move their bats around in their own half. They can also shoot at the puck. If either of the players hit it, the puck is pushed in the direction it was hit. Outsmart your opponent and you can send the puck hurtling past them into their goal.

Admittedly, *Puckshot* isn't the most original game ever, but it's just as much fun as it ever was. It's also not the best version of the game, I've ever seen, but it's fast enough and also very smooth.

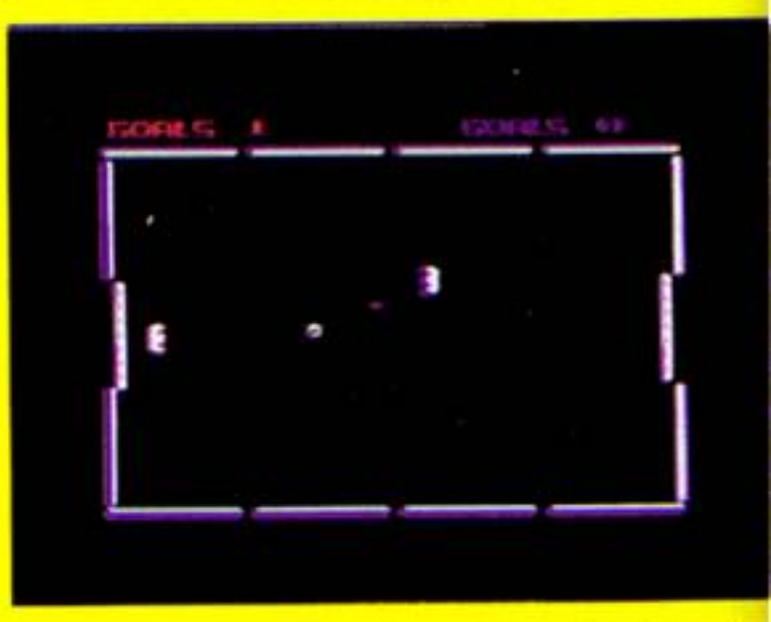
To conclude, *Puckshot* is a worthy enough addition to this collection.

72%

Match-It

Oh dear, it was going so well up until now!





Puckshot: more fun than the grabs show!

65%

3 Match-It

Oh dear, it was going so well up until now!

Match-It is a poor version of the two-player memory game in which you turn over face-down cards and try to remember what you saw so you can match them up if you happen to turn over a card of the same colour later on. Do this and the two matching cards disappear. The winner is the one who has clocked up most matches by the time the board is cleared.

Unfortunately, *Match-It* is slow, awkward and features horribly garish colours. There are much better versions out there, one of which I review next month. This one just leaves you amazed that it could have been written by the author of *Killabeez*.

30%

4 Dead-Zone

Dead-Zone is a two-player war game in which each player has a group of soldiers. The aim is that you have to move into a position to shoot your opponent's soldiers. Each player takes it in turn to move and shoot. When taking aim, you have to try and guess the distance between your soldier and your target, which is where the challenge lies.

All this has been done before, and, quite frankly, it wasn't very interesting the first time.

Dead-Zone is only for people that enjoy a quiet, sedate life. Basically, this means people for whom trying a new flavour of soup at the works canteen or taking a walk by the river is probably altogether too much excitement.

50%



Dead-Zone: a dead loss. Deadly dull. Done to death. As quiet as the grave.

UTILITIES



Multi Mark: not original. Not essential. Not bad, though.

Multi Mark

By Tom and Gerry, GPA

Have you had enough of disc utilities that do weird and wonderful things to your floppies yet? Even if the answer is yes you may find *Multi Mark* worth checking out.

Multi Mark does lots of things that many existing disc utilities also do well. It can format your disc (although only, for some odd reason, in data or vendor), verify discs and write over bad sectors to make partly corrupted discs usable again. Each of these options is as comprehensive as you have come to expect.

One thing that marks *Multi Mark* out from the crowd is its 'mirror' option. If you're up all night worrying that some great disaster is about to befall the first track of your disc, causing it to lose its precious directory, this option allows you to copy the directory on to another track. In the unlikely event that the great disaster actually happens, you can restore your directory to its rightful place and you can access all your lovely files again.

Far more interesting are the 'special' format options. Not only can you format your discs to 187K, but *Multi Mark* also allows you to use a whopping 208K format. It does this by formatting ten sectors in 42 tracks.

The problem with using such formats is that virtually no program recognises them. *Multi Mark* gets around this by providing you with a number of RSX commands for use from Basic. This still makes using 208K discs awkward and also time-consuming. It's amazing that *Multi Mark* doesn't include a facility for copying programs from one format to another. Such a feature would make this 'special' format a million times more useful.

Overall, though, *Multi Mark* isn't a bad program. Although it won't be the answer to all your disc needs, used in conjunction with other programs it may prove quite useful.



Hall marks

David Hall describes himself as: an over-18-Holsten-Pils-drinker with an IQ that matches his shoe size (11!). He likes eating jammy doughnuts, keeps a cute Russian hamster called Boris, has a fetish for 'Haloween pumpkin heads' and is soon to marry his girlfriend Alison Taylor.

David's favourite film is *Rocky IV*, but don't hold that against him, as he's also one of the most prolific games programmers who has ever graced the CPC scene. Past glories include the excellent *Forcefield*, and also *Xenomorphs* (reviewed on the previous page). I decided to find out what drives this man of a million shoot-'em-ups...

AA You've been writing games for the CPC for as long as anyone can remember, David. Do you remember when it were all fields?

DH In fact, I was around before the CPC was a sparkle in Alan Sugar's eye! I started with a Sharp PC1211 (in the days when PC stood for Pocket Computer), then a ZX81, Vic-20, Oric-1, Amstrad CPC 464 and now an Amstrad CPC 6128. I can honestly say that the CPC is the best all-round computer I have ever used, and when it dies a piece of me will die with it! (*How sweet! – Keith.*)

AA Do you think the CPC will live forever and, if so, is it some kind of silicon God?

DH The CPC will only live for as long as the CPC fanatics allow it to — once we desert the machine it will fade away... Forever!

AA Is the CPC a silicon God?

DH No, but Pamela Anderson from *Baywatch* is!

AA What usually inspires your glorious creations?

DH Well, as you know there is no such thing as an original game these days, so I just tend to pick up a genre (for example, shoot-'em-ups) and build up a game from there.

AA What's the most essential piece of software for a games programmer?

DH It has to be an assembler (Maxam is best), but every programmer says that, so I'll tell you that the second most important piece of software treasure is... an art package. *OCP Art Studio* is by far the best.

AA What's it like to be a 'famous' PD programmer?

DH I'll ask Rob Buckley the next time I see him!

AA To change the subject, early pre-Socratic philosophers thought the world was made out of either air, fire or water. What do you think the world's made out of?

DH Rock and metal... Mainly Metallica, Megadeath, Slayer and Suicidal Tendencies.

AA Have you any more CPC programs planned?

DH Of course! I'm hoping to do a platform game next, or maybe even a game creation utility, but I've plenty of other game ideas.

AA Finally David, what's your favourite use for a feather duster?

DH That's a secret between myself and the local Tory MP!

NEXT MONTH:

Look out for the remaining 13 PD programs on the *Xenomorphs* disc; side B of *Brains and Brawn*; and (!!) the reviews of the monitor programs promised for this issue. (We ran out of space. Very sorry about that.)

cheat mode



Welcome again to another mouth-watering selection of cheating fancies served up in time for tea by Lee Rouane.

Oink

First up this month is a neat little cheat for that age old porker *Oink*. Robert Walker suggests that on 'Pete's Pimple' press ESC until the message 'Press Escape or Enter' appears. You should now be able to press a key from F1 to F9 to move to that respective level (F6 for level 6). Cheers Rob!

Curse Of Sherwood

1 'Stand in a ring of toadstools to be transported to another part of the forest. Use the Ice Wand to get past the river.
2 Use the key to open the door behind the ogre to get to the hermit's house.
3 Use the club to smash the door open near a ring of toadstools to get the silver dagger and the crucifix. Use the silver dagger to kill the werewolf.

Andy Capp

Michelle Tomlinson tries yet again to pinch my job by sending in an almost complete cheat mode. Here are just a few of her hints and tips.
1 Buy the *Daily Mirror* and the *Racing News* from the newsagent's. Give the *Daily Mirror* to Flo to get your benefit card. Use the *Racing News* and place a £1 bet on Trap 1 at the betting office to get the rent book.
2 Speak to the woman at the Employment Exchange to see if she has any jobs. Go to Fred's Wing Nuts and ask for the job. Say that you can use a computer, a Spectrum, and that you have no experience. Then ask for a sub.
3 Take the rent book and £20 to the town hall to pay the rent so the rent man moves away from the pub. Go to the police station and get Chalkie's key. This key opens No. 38.
4 The red rose is hidden in Chalkie's garden. You can speak to the girl if you are carrying the red rose. Use kisses to halt people. They can also be useful (kisses that is) if you are in trouble with the police because you can halt the policeman by kissing him, thus giving you a chance to sneak by.

Stifflip & Co

1 Give the Smith and Western to General Moustachio. Tie the thread to the rope hanging in the bar and then walk west to make the barman move east. To get the crystal from the starting position, keep going west until you reach a tree. Climb up the tree and pick up the hanging vine. Jump, pick up the hanging vine again and jump.
2 Get the crystal and jump. Do not use the hanging vine from the crystal location. To remove the rope trap, (near the monkey) from the starting position of Mrs Primsbottom, keep going west until you reach the tree. Climb the tree and untie the knotted rope. Get the reed and cut it with the knife. Go to the snake and blow down the reed to charm it. As Professor Braindeth, open the wireless and put the hair clip and crystal into the wireless and close the wireless to fix it.

Saboteur 2

Steaming in with a well aired poke is Lee Loriner from Belfield, Rochdale. He suggests that on *Saboteur 2*, (first dust the cobwebs off) you should use these level codes for a better life.

Level 2 – Jonin
Level 3 – Kime
Level 4 – Kuji Kiri
Level 5 – Saimenjitsu
Level 6 – Genin
Level 7 – Mi Lu Kata
Level 8 – Dim Mak
Level 9 – Satori

Lee also begs me to say hello to his girlfriend Debbie who is a computer widow (he says). "Hello."

Get down to hacking

Still not satiated? Turn to page 15 where Lee takes the lid off hacking.

The multiface way

The (T)s and (D)s before the address indicate whether the poke was written for a tape or disc game (they might work on both, it's worth a try). Just in case you don't already know how to put in these BLACK BOX POKES, here are the steps to success.

A) Load the game as normal
B) Press the RED button on the MULTIFACE
C) Press "I" for tool
D) Press "*" to make sure you select the code
E) Press "H" for HEXADECIMAL input
F) Press "SPACE" for input
G) Type in the ADDRESS (4 characters ie. 3A7C)
H) Type in the POKE (2 characters ie. A7)
I) Press "RETURN"
J) If there is more than one poke goto (F)
K) Press "ESC" back to the menu
L) Press "R" to return to the game.

Multiface pokes

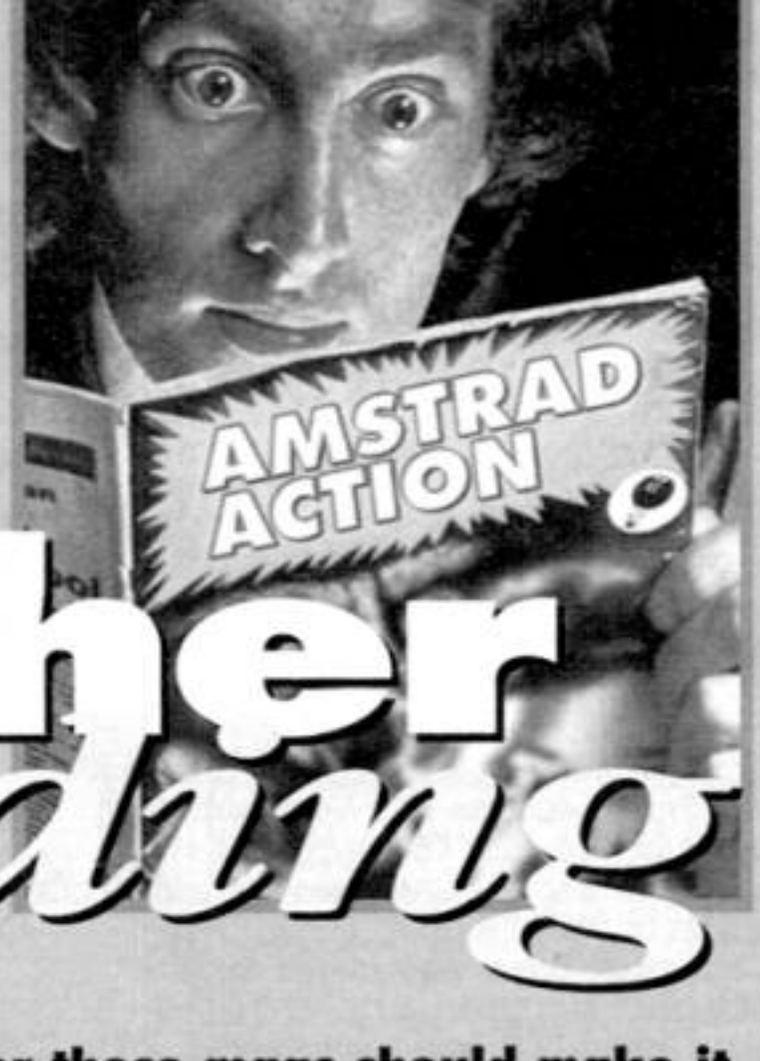
Ken Wood dons his guns and steps out on to the sand to face the *Z80* code, alone...

***On F16, the pokes should be entered on the weapons as the colours are not restored to normal. 36 is also the maximum amount of weapons allowed for these pokes.**

Game Name	Media	Poke, Addr	Effect
Breakdown Demo	(T)	&50CF,&00	Infinite Lives
		&4C63,&00]	Infinite Units
		&4CAD,&00]	Do Both Pokes
Crazy Cars 3 Demo	(T)	&194C,&09]	More Cash
		&194E,&04]	Do Both Pokes
Megablasters Demo	(T)	&138D,&A7]	Infinite Lives
		&139B,&A7]	For Both Players
F16 Combat Pilot*	(D)	&7A94,&24	36 AGM65D Missiles
		&7A97,&24	36 AGM65E Missiles
		&7A91,&24	36 AGM88A Missiles
		&7A8B,&24	36 A19M Missiles
		&7A8E,&24	36 AIM120 Missiles
		&7A9A,&24	36 Durandals
		&7ACD,&24	36 Chaff
		&7ACE,&24	36 Flares







Further reading

David Crookes decides whether these mags should make it to your door or to the recycling plant.

News

Jamo PD have released a new fanzine called *CPC Pacific* (which shares the same name as my small software 'company', see the Amscene Directory, page 20). *CPC Pacific* is edited by James and is out now and centres on PD software as well as listings, help and tutorials. Watch this space for a review soon.

James Ford ☎ 01676 533467.

Brian Watson caused me to go into temporary shock by announcing that issue 4 of *8-Bit Mart* would be the last. Fortunately this brilliant magazine is going for a different strategy, not closing down. It is now called *8BIT* and provides coverage of the whole of the 8-bit scene. The difference between this 'new' mag and the previous ones is the amount of advertising space. There will be less advertising to make way for more articles.

8BIT, 'Harrowden', 39 High Street, Sutton-in-the-isle, Ely, Cambs CB6 2RA
☎ 01353 777006

WACCI thanks the *AA* readers who took up the offer of three issues for £3. The WACCI readership is now 375.

It's nice to see you are supporting an excellent organisation.

WACCI, 7 Brunswood Green, Hawarden, Deeside, Clywd CH5 3JA
☎ 01244 534942



Don't be a spore sport! Read WACCI, it runs rings round other fanzines.

NEXT MONTH:

We go continental (well, to over the sea to Sk... Ireland, anyway) as *Amstrad User* is spun in the disc drive with the rest of the contents of my library.

Amstrad Power – better than a slap in the face with a sodden kipper?

Amstrad Power

Price: 75p+SAE+DISC (for cover disc)
Editor: Peter Denyard
Address: 117 Heron Gardens, Portishead, Bristol BS20 9BN

"Sorry *Amstrad Action*, but we nicked your cover software. Ha Ha you die. Power to the fanzines. Your mag should go on the fat fast plan. Make it thicker. ED."

Reading this quote, you may think that we at *AA* towers have just received a warped death threat from a dysfunctional baboon in a Hollywood film set up. We probably have. But, to tell you the truth, that message was scrawled on to the second page of *Amstrad Power*, that bastion of professional journalism.

Actually *Amstrad Power* is not a bad little magazine. Professionalism doesn't come into it in terms of writing or design, but there's a little something about it that makes me kinda, not want to tear it to shreds. Is it the totally amateur type of way that the mag has been thrown together? Or is it because it is so, well, stupid?

I reckon it must be both. The magazine is carelessly put together using what must be a PC. It should surely look professional, then? Not really because it is basically a cut and paste job with no real care for how it looks in the end. The *Megablasters* review is one such atrocity with bits and pieces all over the page and child-like pictures filling up space.

Still, there is some charm to the pages and I have seen many fanzines which are far worse than this, *Eliminator*, (see *AA*115) for a start.

Amstrad Power consists of game reviews and tips for a variety of games. All are quite well written, if a little too short, and provide a good read for a while or so. While not being in-depth, they sure give clear buying recommendations which any gamers will revel in.

But, what more can I say? It is an 'average' magazine. A sodden kipper would be better than a slap in the face with a copy of *Amstrad Power* any day of the week. Since this isn't at issue, send the 75p and check it out. You won't be disappointed because I've said it's quite bobbins.

Content: 40%
Appearance: 40%
Overall: 42%

CPC Southwest Magazine

Price: 80p
Editor: Dave Stitson
Address: 4 Connaught Avenue, Mutley, Plymouth PL4 7BX

CPC Southwest popped through the mail and I grabbed hold of it, eager to see whether Editor Dave Stitson had done what he had promised he would and improved the 'zine's design and overall professionalism (this month's buzz word).

He has! It now looks like an extremely good offering and is definitely well worth the asking price. So what's changed?

Well, the layout is much less cluttered and much more easy on the eye. It looks as if a lot of work has gone into it. While not perfect, this gives the mag a greater boost.

There are many more excellent articles covering just about everything from GAC to EPROM blowing. There are also many reviews of cheap software and news and views.



CPC Southwest: improved!

In short *CPC Southwest* is much better than the previous issue and you should definitely take a look now. Let it develop a character and a more fluid style, though, and you'll see a fantastic 'zine emerging from Plymouth (with the naked eye, too).

Content: 69%
Appearance: 70%
Overall: 70%

Reader ads

Going for a song, sorry, some sovs... The CPC cornucopia of collectables and commodities commences here.

FOR SALE

CPC 464 with DD-1 disc drive, DMP2000 Printer. Numerous discs and tapes – serious and games including covertapes. Also magazines: *AA*, 1-60 bound, 61-81 loose; *ACU* Jan 85 – 90; Feb 90 – Jan 91, loose. *Computing with the Amstrad*, 1 – 48, bound. £250 o.n.o.. (Reading) ☎ 01734 844682.

Amstrad Action magazines sale, 1988-1992, 12 months in each case, £7, £6.75, £6.50, £6, £6 respectively, (excl p&p). Mr Whigginson, 58 Waverton Road, Bucnall, Stoke-on-Trent, Staffs ST2 0QY ☎ 01782 311321.

464 Plus with colour monitor and manual; 2 joysticks and paddle; plus many discs and back issues of *AA*. Offers: ☎ 01524 848556 (after 6pm).

464 Plus with DD-1, colour monitor, several games (tape), Mlni Office II (disc), Protext (tape). OK condition (it works!). £150, ono. ☎ 01279 427956.

464 Plus upgraded to 128K, disc interface, keyboard only £60 ONO, Multiface 11 £15, ROMBO ROm box £10, Protext, DES, PARADOS, ROMS £5 each ☎ 0121 3776217.

Amstrad CPC 6128. Clean, original manual, lots of magazines. Mini Office 2, Stop Press DTP, extra fonts, Money Manager, AMX mouse, extra discs, green screen, dust covers, £50. ☎ 0181 852 4647.

Amstrad colour CPC 6128 and loads of disc and tape software, ROM's, books and hardware. SAE for list. John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH.

Games and PD on tapes for CPC 464. SAE for list to Gary Smethers, 13 Meadow Close, Cononley, Keighley, W Yorks BD20 8LZ.

Amstrad CPC 464, colour monitor, manual, £100 ONO. ☎ 01704 231954 (Southport).

6128, colour monitor, Multiface, mouse, cassette player, dust covers, *AA* 1-42 with tapes, Tas-sign OCP, Art Studio, plus lots more. £160. Grimsby ☎ 01472 241641.

Amstrad CPC 6128 colour computer, disc, tape drives, mouse, joystick, manuals, Mlni Office 2 software £75. Also 50+ games on tape and disc. £2 each. (Woking) ☎ 01483 476661.

Lemmings and lots of other CPC software for sale. SAE to M Ruegg, 8 The Horse Park, Carrickfergus, Co.Antrim BT38 7ED. Also SimCity (cassette) wanted.

Empty ROMbox with instructions. £25. Another with Protext workbox. £45. Vortex expansion board for 464. £20. 464 keyboard, as new. £20. Lots of software, disc and tape and serious games. ☎ 01633 857376.

Cheap disc driver and games. £80 ono. Multiface II with Insider. £15. MP-1 module. £15. Mr W Darby, 73 Pelham Road, Cowes, Isle of Wight PO31 7DN.

***AA* magazines**, all mags with tapes from 79 to 109 £2 each. Steve ☎ 01704 573156 (after 4pm weekdays).

6128 tape, Art Studio, AMX mouse, Multiface Insider, tapes, discs, utilities, games, WordPerfect, ADAM, Prince of Persia, etc. All manuals, tutorials and mags. £100. ☎ 01204 840951.

Amstrad CPC464, upgraded to 6128 with 128K memory, disc drive, colour monitor, Multiface 2, 2 joysticks, Seikosha SP-1900 Plus printer, loads of software on disc and tape, including Tasword Word-processor on disc. £300 ono. ☎ 015395 63090.

Amstrad CPC464 Plus, manuals, leads, full colour monitor, more than 50 games, lots of magazines and covertapes, joystick, cartridge game, vgc. £135 ono. Jonathan ☎ 01708 551572 (eves).

Manuals DDI-1 user manual. £10. 464 user manual. £10. DDI interface. £15. All prices incl postage. PD Encounters, 41 Westmoreland Ave, Newbiggin-by-the-Sea, Northumberland, NE64 6RN ☎ 01670 855486.

Strategy game complete with mission Editor, plus 191K free PD. Cheques for £2.25 for tape to Gary Smethers, 13 Meadow Close, Cononley, West Yorkshire, BD20 8LZ.

Amstrad CPC6128 with colour monitor, tape lead, and more than 60 games on tape and disc. Also Lightpen and Art Package. £90 ono. James ☎ 0121 353 8238.

Disc software, Infocom games, £3 each. Mini Office 2. £4. SimCity. £4. Lemmings. £4. MatchDay 2. £2. OCP Art Studio. £5. SuperCalc 2. £5. Zini. £4. Many more ☎ 01553 691322.

ROMboard extra with 6128 ROM, Promerge+, Prospell and ROMdos. £25. Microtext teletext adaptor for CPC (requires input signal from a video recorder). £20. Qualitas software and 8-bit printer port. £5. ☎ 01553 691322.

DDI disc drive. £30. 3.5-inch second drive. £25. 64K memory expansion. £20. Multiface 2. £15. Protext ROM on AD2 cartridge £13. ROMboard with 4 ROMs. £25. ☎ 01553 691322.

Amstrad CPC464, colour monitor, 3-inch disc drive, 256K RAM, Art Studio, mouse, tutorial manuals, dust covers, Mini Office 2, general ledger, more than 40 games, spare discs, storage box. £225. ☎ 01480 215810.

Amstrad 6128 colour monitor, datacorder, joystick, Light Gun, loads of discs and tapes, magazines and manual. £250 ono. ☎ 01634 201232 (after 4pm).

CPC464, green screen, modulator, more than 100 games, joystick, Lightpen, printer cable. £80 ono. Brett ☎ 01705 53217.

CPC6128, colour plus tape player, TV modulator, manual, desk, mouse, Multiface and many disc and tape games. £150 ono. John ☎ 0181 644 2444.

6128 (464 upgrade), colour monitor, two disc drives, ROMbox, ROMs, software, books, mags, complete CPC system. £195. Dave ☎ 01628 524529 (eves and weekends).

Amstrad GX4000 console, with CM1four-colour stereo monitor, Burnin Rubber, Navy Seals and Pang cartridges, System in full working order, great fun. £100 ono. Matt ☎ 01444 450454.

Colour CPC6128 with disc software. £110. Quality software on disc and ROM, some hardware. SAE to John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH.

CPC6128, colour monitor, Amstrad LQ5000DI printer, Terminator 2, WWF, Bart versus Mutants, Robocop, more discs/tapes. *AAs* and covertapes 70-101. Mini Office 2, OCP Studio StopPress. £215 ono. Stephen ☎ 01992 469530.

Amstrad CPC6128, disc drive, colour monitor, manual, System discs, 33 discs, including Brunword, Art Studio, Mini Office II, more than 30 tape games, mags and utilities. £200. ☎ 01278 781174 (Somerset).

Speedway Racing, a new game for most Amstrad Commodore and Spectrum computers. Cassettes. £4.95, discs from £6. ☎ 01745 339779.

Amstrad 464 and 6128 tapes and disks, books and hardware. SAE to Eddie (*AA*), 151 Balsusney Road, Kirkcaldy, Fife, KY2 5LH.

Mags ACU May '90 – May '92, CPC attack Jun '92 – Oct '92, good condition 40p each. Large SAE. Also *AA*'s games. A Swinbourne, 11 Vicarage View Redditch, Worcs B97 4RF.

PEN PALS

Lady, aged 58 would like computer penfriends, any age. I have a 464 with no add-ons. Mrs Nora Lees, 285 Franklin Road, Cotteridge, Birmingham B30 1NH.

OTHER

Tape PD has closed because I have no longer have the time to run it. Thanks for all of your support. Paul Sillifaut, Lower Dexbeer, Dexbeer EX22 7LA.

WANTED

MP3 Plus TV tuner for CTM644 Plus. Will pay up to £40 for good condition. Need one quickly. Larry ☎ 01595 695701.

Pipeline software (Apologies to anyone who called the number given in *AA*113, it was incorrect.) Games and utilities wanted. Mine have corrupted. Also selling 3D contruction kit, my type-ins and other cassette games. Nicholas ☎ 01238 541716.

AMSTRAD ACTION FREE READER AD FORM

Want some software? Want to get shot of something? Fill in the box below – one word to one box – not forgetting your contact details. Send it to: Reader Ads, *Amstrad Action*, 30 Monmouth Street, Bath Avon BA1 2BW.

Your name

Your address

Post code

☐ **For sale** ☐ **Wanted** ☐ **User groups** ☐ **Services** ☐ **Other**

(01257) 421915 O.J. SOFTWARE (01257) 421915

Fast Friendly Service

STRATEGY/SIMULATION

	Cass	.Disk
Chess, Draughts, Bridge, Bkgammon		£8.95
Cluedo		£6.99
Colossus 4 Bridge	£3.75	£4.99
Colossus 4 Chess		£7.95
Football Manager II	£2.99	£6.99
Football Manager II + Exp Kit		£6.99
Football Manager III		£9.99
Football Manager World Cup		£6.99
Monopoly	£2.99	£2.99
Monopoly, Cluedo, Scrabble	£12.95	£12.95
W.Cup Italia 90 (Not CPC+)		£6.99
Soccer Mania	£6.99	£9.99

ARCADE

	Cass	Disk
Chart Attack	£4.99	
Dizzy Collection	£8.50	
Dbl Drag III + Rodland		£12.95
Double Dragon	£3.75	£6.99
Dream Team	£6.99	
G - Loc		£6.99
Hanna Barbera Collection	£4.99	
Loopz Collection		£6.99
Midnight Res + Nightbreed		£6.99
Mystical		£6.99
Myth	£3.75	£6.99
Pacland		£7.99
Paperboy II		£12.95
Prehistorik II	£9.50	
Rodland + Dbl Dragon III		£12.95
Super Cauldron	£9.50	
Super Space Inv + Pit Fighter	£4.99	£9.99
Turtles The Coin Op	£4.99	£9.99

SPECIAL OFFER DISKS

All Disks Boxed With Instructions

Bonanza Bros	£2.99
Incredible Shrinking Sphere	£2.99
Monty Python	£2.99
Monopoly	£2.99
Wild Streets	£2.99
Galactic Games	£3.99
Pop Up	£3.99
Back to the Future II	£4.99
Light Corridor	£4.99
Sporting Triangles	£3.99
Teenage Turtles	£4.99

ACCESSORIES

AMX Mouse & Interface	£34.95
MP1F/2F 464/6128 to Scart TV	£19.99
Cable 6128 to FDI 2nd Drive	£7.95
Cable Megadrive1/CTM644 Mon	£9.99
Cable Megadrive2/CTM644 Mon	£12.99
Cable Megadrive1/CM14 Mon	£9.99
Cable Megadrive2/CM14 Mon	£14.99
Cable Amiga/Atari/Spectrum Phone Cassette Lead (with REM Conn)	£3.95
Disk Drive Belt	£2.99
Disk Drive Cleaner 3"	£5.95
Disk Drive 3.5" + Ramdos 6128	£79.95
Disks 3" Ex Games	10: £14.99
Disks 3.5" DSDD	10: £4.99
Disks 3.5" DSHD	10: £6.99
Inkjet Refill Canon/HP/Cit Blk	£8.99
Inkjet Refill Colour	£11.99
Kboard Ext Leads 464	£8.95
Kboard Ext Leads 6128	£9.95
Kboard Ext 464+/6128+	£9.95
Mouse Mat	£2.99
Printer Cable CPC 1 Mtr	£8.95
Printer Cable CPC 1.5 Mtr	£9.95
Printer Cable CPC 2 Mtr	£10.95
Printer Cable CPC+ 2 Mtr	£7.95
Joystick Splitter	£2.99
Joystick Extension Lead	£4.99
Ribbon Re-Ink	£12.95
Screen Filter Mesh Coll/Mono	£14.95
System Disk 6128+	£11.95
System Disk 6128 (Sides 1&2)	£9.95

BUSINESS/UTILITIES

	Disk
Advanced Art Studio 6128	£19.95
Adv Art + AMX Mouse + M Mat	£54.95
Adv Art Studio + Col Dump3	£29.99
Basic Idea (Basic Tutorial)	£14.99
Colour Dump 3 (Col Scr Dump)	£15.95
Crash Course Typing Tut 6128	£20.95
D.E.S. ROM Version £24.99	£14.99
Discology (Disk Utility)	£8.99
Mastercalc 128 (128k)	£27.95
Masterfile III (128k)	£29.95
Maxam Assembler/Disassembler	£23.95
Microdesign + DTP for 6128	£29.99
Microdesign + AMX Mouse	£59.99
Microdesign Extra	£14.99
Microdesign Maps UK	£14.99
Microdesign Maps World	£14.99
Mini Office Original Cass Only	£2.99
Money Manager (+PCW)	£24.95
Parados Rom	£14.99
Proprint ROM £24.99	£15.99
Protext 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
Tasword 6128	£24.95
Tas-Spell (For Tasword)	£20.95
Xexor Disk Utility 1	£14.99

EDUCATION

	Cass	Disk
Fun School I Un 5, 5-8, 8+ Each		£8.95
Fun School II Un 6	£3.99	
Fun School II 6-8	£3.99	
Fun School II 8+	£3.99	
Fun School 3 or 4 -5	£10.95	£13.95
Fun School 4 7-11	£10.95	£13.95
Playdays 3-8	£10.95	
Shoe People 4-6	£5.99	
Lets Play with Words 4-8	£12.95	£12.95
Fun with Words 7-	£8.50	£11.95
Read Right Away 1 5-8	£9.95	£12.95
Read Right Away 2 6-9	£9.95	£12.95
Read Right Away 3 7+	£9.95	£12.95
Better Spelling 9+	£8.95	£12.95
Lets Play Numbers 4-8	£12.95	£12.95
Lets Play Money 4-8	£12.95	£12.95
Primary Maths 3-12	£24.95	£24.95
Fun with Numbers 7-	£8.50	£11.95
Target Maths 6-13		£12.95
Micro Maths 11+	£24.95	£24.95
Mega Maths 15+	£24.95	£24.95
French Mistress 11+		£16.95
German Master 11+		£16.95
Spanish Tutor 11+		£16.95
Micro English 8-Ad	£24.95	£24.95
Granny's Garden 6-10 (6128)		£19.95
Dragon World 6-10 (6128)		£23.95
Giant Killer 9-14		£15.95
Answer Back Quiz 6-11		£11.95

PRINTERS

All printers listed below are suitable for use with AMSTRAD CPC, CPC+

When ordering please state computer

STAR LC90 9 Pin Mono £139.95

STAR LC100 9 Pin Mono/Colour £169.95

(Inc. Colour/Mono Ribbon + Colourdump 3)

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 120D	£3.95	£7.50	£16.25
LC10/20/100	£3.75	£7.00	£16.25
LC24-10/20/200	£3.95	£7.50	£17.50
KXP1080/81	£3.75	£7.00	£16.25
KXP1124	£3.75	£7.00	£16.25
KXP2123/2124	£4.95	£9.50	
LC10/100 Colour	£8.95	£17.50	
LC200 Mono	£4.95	£9.50	
LC200 Colour	£12.95	£25.00	

Other printer ribbons please phone

RIBBON RE-INK £12.95

INKJET Refill Black £8.99 .Col £11.99

JOYSTICKS

AMSTRAD JY2	£6.99
AMSTRAD JOYPAD	£13.95
CHEETAH Bug	£13.95
KONIX Speedking	£11.95
KONIX Navigator	£13.95
QUICKSHOT Python 1	£10.95
QUICKSHOT Python 1 Microswitch	£11.95
ZIPSTICK Super Pro	£14.95
JOYSTICK SPLITTER	£2.99
JOYSTICK EXTENSION	£4.99

BUDGET CASSETTES £1.99, 3 FOR £5.00, 5 FOR £7.50

3D Pinball	An Veg Min	Action Pack	Andy Cap	Aussie Rules	Bully Darts	Cavemania	Cl. Arcadia
Cl Arcadia 2	Cl Arcadia 3	Count Duckula	Cricket Int	Dandy	Edd Duck	Endzone	Fremn Sam
Freddy Hardest	Formula G.Prix	Game Over	Game Over II	G.Gooch Crick	Grid Iron II	Gun Boat	Gunfighter
H.K.Phooey	Howard Duck	Huxley Pig	Indoor Soccer	Int Ninja Rab	J.Wilson Comp	K. Dalgleish	Jaws
Mask	Moon Torc	Master Chess	N.Mansell GP	Night Gunner	Pegasus Bridge	Popeye	Popeye 2
Popeye 3	Postman Pat	Postman Pat 2	Postman Pat 3	Pro Mnt Bike	Punch & Judy	Q10 Tankbust	Rally Sim
Red Arrows	Rex	Rugby Boss	Run for Gold	Scooby Doo	Soccer Boss	Sooty Sweep	Space Rider
Spag Western	Spy v Spy	Spin Dizzy	Spitfire 40	Str Force Harr	Super Ted	Thomas Tank	Top Cat
Tin Tin Moon	Trap Door	Theatre Europe	Tr Suit Mnagr	Trap Door	Turbo Bike	Dares Winsll	Xanagrams

More Titles Available. Please Give Alternatives When Ordering

HOW TO ORDER:- ACCESS/VISA TEL OR FAX (01257) 421915 MON-FRI 8.30 -17.30 SAT 8.30 - 12.30
BY POST:- LIST ITEMS REQUIRED. MAKE CHEQUES/PO'S PAYABLE TO O.J.SOFTWARE.
SEND TO O.J.SOFTWARE, 273 MOSSY LEA ROAD, WRIGHTINGTON, NR WIGAN, LANCS WN6 9RN.
POSTAGE:- UNITED KINGDOM, ORDERS OVER £5.00 POST FREE (ORDERS UNDER £5.00 ADD 50P).
POSTAGE:- OVERSEAS (AIR) ADD £1.00 PER ITEM SOFTWARE (PAYMENT BANK DRAFT/CREDIT CARD)
PLEASE WRITE OR PHONE FOR LATEST PRICE LIST (ANSWERPHONE/FAX OUTSIDE NORMAL HOURS)

BUDGET CASSETTES £3.75 EACH

Chuckie Egg	Continental Circus
Dizzy Magicland	Double Dragon
Double Dragon II	Golden Axe
International Tennis	Myth
Rick Dangerous	R-Type
Rodland	Soccer Double 3
Steg the Slug	Teenage Turtles
Test Master	Turrican
Turrican II	WWF Wrestle

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE YO12 7EY.

OPEN 6 DAYS A WEEK

TEL: 01723 376586/503299

4 MOST STUNTS £2.99	EDD THE DUCK £2.99	NAVY MOVES £2.99			
BMX NINJA/STUNT EXPERTS/TURBOBIKE /MOUNTAIN BIKE	FORGOTTEN WORLDS £2.99	NINJA REMIX £2.99			
4 MOST MEGA HEROES £2.99	FUN SCHOOL UNDER 6 ..... £3.00	NORTH & SOUTH £3.99			
DANDY/CAPTAINS/SPACE TROOPER/FREDDY HARDEST	FUN SCHOOL 6/8 ..... £3.00	PLAYDAYS 4-8YRS £3.50			
4 MOST CUTE £2.99	FUN SCHOOL OVER 8 ..... £3.00	PRO SKI SIM £2.99			
HOWARD THE DUCK/DANGER MOUSE/ D.M WHOOPEE/ PUNCH & JUDY	GAUNTLET 3 (128 ONLY) £2.99	SHADOW OF THE BEAST £2.99			
AIR BORNE RANGER £2.99	GEMINI WING £2.99	SIDE ARMS £2.00			
ADDAMS FAMILY £3.50	MARAUDER £2.00	SIMPSONS £3.50			
ARCADE FRUIT MACHINE £2.99	HERO QUEST £2.99	SNOWBALL IN HELL £2.99			
ARCADE TRIVIA QUIZ £2.99	HERO QUEST RETURN OF THE WITCH LORD £2.99	SOOTY & SWEEP £2.99			
CAPTAIN PLANET £2.99	JETSONS £3.99	ST DRAGON £2.99			
COLOSSEUM £2.00	L.E.D STORM £2.99	SWITCH BLADE £2.99			
COMPUTER HITS 5 ..... £2.99	LAST DUEL £2.99	SWORD OF THE SAMURAI £2.99			
CRACK DAWN £2.99	LOTUS ESPRIT £2.99	TEENAGE QUEEN £2.99			
DAN DARE 3 ..... £2.99	MAN UTD £2.99	TERMINATOR 2 ..... £3.50			
DARKMAN £2.99	MATCH POINT £2.99	THOMAS THE TANK ENGINE £2.99			
	MIG 29 ..... £2.99	TOYOTA CELICA RALLY £2.99			
	NARCO POLICE £2.99	TURBO THE TORTOISE			
CRICKET MASTER £2.50	PRO TENNIS £2.50	4 MOST BALLS BOOTS + BRAINS			
GRAHAM GOOCH £2.50	QUATTRO RACERS £2.50	AUSSIE RULES/RUGBY BOSS/ SOCCER CHALLENGE/ SOCCER BOSS £2.50			
GRAND PRIX SIM £2.50	SUPERSCRAMBLE £2.50	SUPER SPORTS			
INT TENNIS £2.50	WEL LE MANS £2.50	US BASKET MASTER/CRICKET INT/ KENTUCKY RACING/ CHAMP SPRINT £2.50			
KENNY DAGLISH MANAGER £2.50	WORLD SOCCER £2.50	DIZZY DOWN THE RAPIDS £2.99			
MANCHESTER UNITED IN EUROPE £2.50	WORLD SPORTS £2.50	DIZZY PANIC £2.99			
MOTOR CYCLE 500 ..... £2.50	WWF £2.50	MAGIC LAND DIZZY £2.99			
PING PONG £2.50					

SALE OFFER ANY 3 FOR £5-00 *PLEASE GIVE 1 ALTERNATIVE*

CASSETTE COMPILATIONS Any 2 for £6.00

2 HOT 2 HANDLE 4.99
SHADOW WARRIORS/TOTAL RECALL/ GOLDEN AXE/ SUPER OFF ROAD

CHART ATTACK 3.99
LOTUS ESPRIT/TURBO CHALLENGE/ SUPERCARS/ SHADOW OF THE BEAST/ IMPOSSAMOLE/GHOULS 'N' GHOSTS

COIN OP HITS 2 ..... 4.99
DYNASTY WARS/NINJA SPIRIT/ VIGILANTE/ HAMMERFIST/GHOULS 'N' GHOSTS

DIZZYS EXCELLENT ADVENTURES £4.99
DIZZY PANIC/DIZZY DOWN THE RAPIDS/DIZZY PRINCE OF YOLK FOLK/SPELLBOUND DIZZY/QUICK SNACK

GAME SET + MATCH 2 ..... 4.99
TRACK + FIELD/IAN BOTHAMS TEST MATCH/BASKET

MASTER/SUPER HANG ON/NICK FALDO'S OPEN/CHAMPIONSHIP SPRINT/ MATCHDAY II/ STEVE DAVIS SNOOKER

KIDS PACK 1 ..... 4.99
POSTMAN PAT/SOOTY + SWEEP/ COUNT DUCKULA/POPEYE II/THE WOMBLES/SUPER TED

KIDS PACK 2 ..... 4.99
FIREMAN SAM/COUNT DUCKULA II/POPEYE/ POSTMAN PAT II/HUXLEY PIG/BANGERS + MASH

MOVIE PREMIER £3.99
BACK TO THE FUTURE II/ TEENAGE MUTANT HERO TURTLES/GREMLINS II/DAYS OF THUNDER

POSTMAN PAT COLLECTION 3.99
POSTMAN PAT 1,2 + 3

POPEYE COLLECTION 3.99
POPEYE 1,2 + 3

POWER UP 4.99
ALTERED BEAST/RAINBOW ISLAND/X OUT/CHASE H.Q./ TURRICAN

RAINBOW COLLECTION 4.99
RAINBOW ISLAND/BUBBLE BOBBLE/ NEW ZEALAND STORY

SPORTS COLLECTION 3.99
PRO TENNIS TOUR/RUN THE GAUNTLET/ WORLD CUP ITALIA 90

THE NINJA COLLECTION 3.99
DOUBLE DRAGON/SHADOW WARRIORS/ DRAGON NINJA

CASSETTES OUR CHOICE MIXED TITLES 10 FOR £5.00

AMSTRAD DISKS

BONANZA BROTHERS	£2.99
CAPTAIN PLANET	£2.50
GRANDSTAND (FRENCH INSTRUCTIONS)	£3.99
PRO TENNIS/WORLD CLASS LEADER BOARD GAZZA'S SUPER SOCCER/ CONTINENTAL CIRCUS	
HERO QUEST PLUS RETURN OF THE WITCH LORD	£7.99
HOUSE MIX	£3.99
SKATE CRAZY/DEFLEKTOR/MOTOR MASSACRE/KNIGHT RAIDER/DARK FUSION/ARTURA	
LOTUS ESPRIT	£3.99
PAPERBOY 2	£2.50
VIRTUAL WORLDS (NO INSTRUCTIONS)	£2.00
DRILLER/TOTAL ECLIPSE/CASTLE MASTER/THE CRYPT	

3" CLEANING DISK £3.50

BLANK 3" DISKS EX SOFTWARE 10 FOR £7.99 OR £1 EACH

100 CAP 3i - 3" DISK BOX £5.99

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER...
CHEQUES + POSTAL ORDERS MADE PAYABLE TO **WIZARD GAMES**
Please send an SAE for full lists. OVERSEAS £1.00 PER ITEM P+P. ORDERS £5 AND UNDER ADD 50P P+P

Amstrad Games Cartridges for the 6128+/464+/GX4000

* No Exit	* Operation Thunderbolt
* Navy Seals	* Switch Blade
* Pro Tennis Tour	* Klax
* Barbarian II	* Robocop II
* Batman The Movie	* Pang

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	£14.99
Amstrad Burnin' Rubber/ Loco Basic Cartridge	£19.99
Amstrad 6128+/464+ Instruction Manual	£14.99
Amstrad 464+ Computer with Stereo Mono Monitor	£125.00
Amstrad 6128+/464+ keyboard membrane	£12.99
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
Amstrad 464+ Computer Console	£65.00

Amstrad 464 and 6128 General

Amstrad LP1 Light Pen and software for the 464	£19.99
Amstrad 464 Light Gun and games cassette (5 Games)	£15.49
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 Cassette Head Tape Head Demagnetizer	£9.99
Amstrad Printer Lead (34 Way Edge Connector to Centronic Plug)	£9.99
Amstrad JY2 Joystick	£9.99
Amstrad 464 "Teach Yourself Basic" Tutorial Guide with 2 Cassettes	
Part 1	£9.99
Part 2	£9.99
Amstrad 464 Circuit Boards complete P/N.Z70375	£34.99
Amstrad 6128 Cassette Leads	£5.99
3" Disks (ex. software)	Pack of 10 £15.00
Amstrad Action Binders (Holds 12 copies of A.A) Choice Blue or Red	£4.99
Amstrad Action Cheat Mode Book (Cover Issues 17-50)	£4.99

ALL PRICES INCLUDE POSTAGE, PACKING ETC.

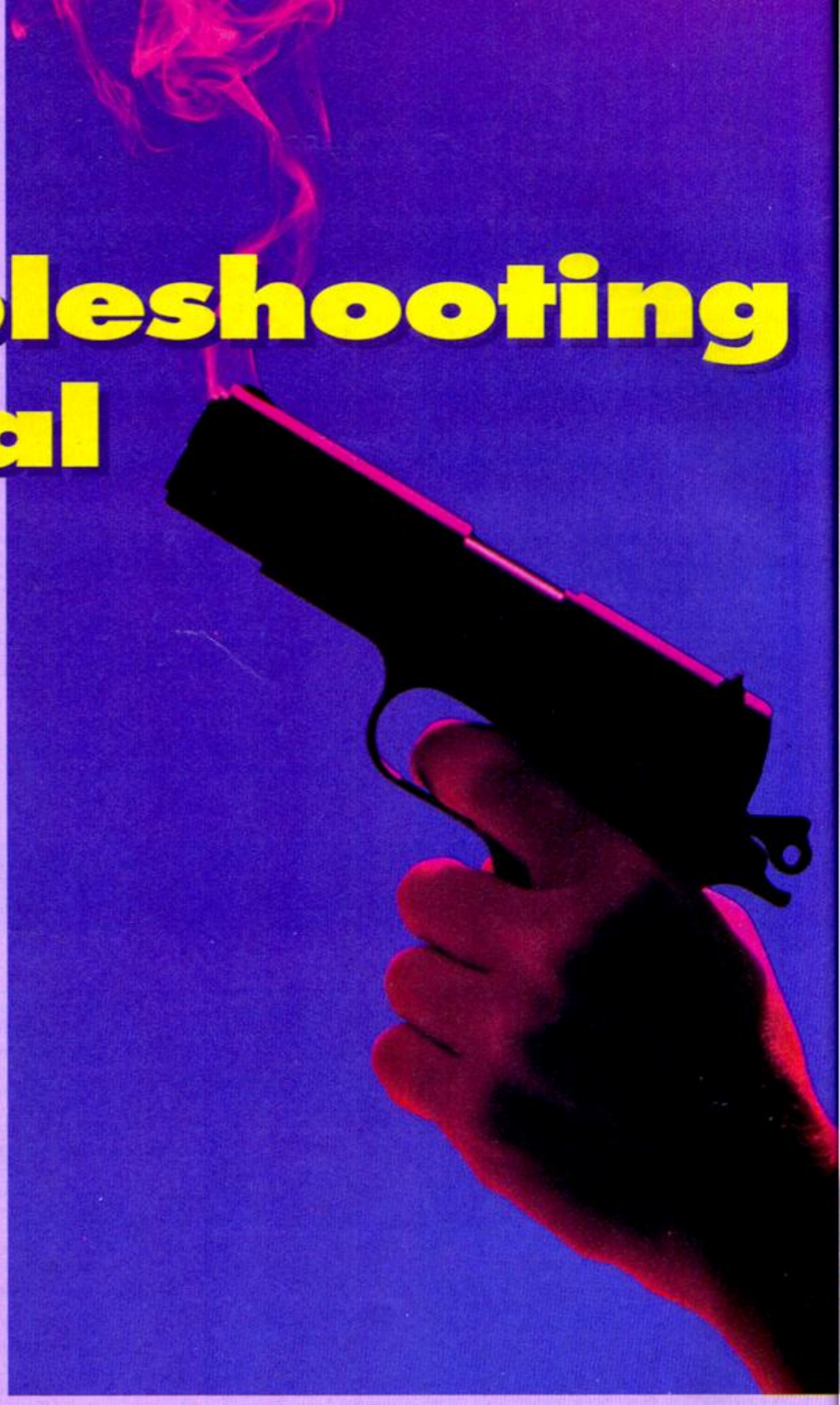
ALL ORDERS BY RETURN..CHEQUES/VISA/ACCESS/PO'S.

TRADING POST

VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF

TELEPHONE/FAX (01952) 462135

Troubleshooting special



If your CPC is feeling its age, don't throw it away. Instead, follow the Amstrad Action complete guide to rejuvenating your faithful old Amstrad. Richard Fairhurst is your host...

From the very beginning, Amstrad's CPCs have enjoyed a reputation for being reliable machines. Back in the days when Spectrums overheating was a regular occurrence, Amstrad owners could look on smugly with their flawless newly-acquired CPCs. Even when once-proud CPC owners upgraded to Amigas, the horrendously dodgy power supplies would regularly force them back to their Amstrads when the shiny new Commodore broke down.

Strained but true

After over ten years, though, it's not surprising that a few CPCs are creaking under the strain. As regular *AA* readers will know there are some 'classic' software problems, too. Problems which have occupied Techy Forum (and its predecessors, Problem Attic and Forum) for years.

So if your CPC's not doing what it ought, here's the *Amstrad Action* ultimate round-up of how to get your machine back on its feet again.

SOFTWARE PROBLEMS

Word processor file won't load?

The 'standard' for storing text on computers is the ASCII file which is basically a simple representation on disc of the text in a document and nothing else. However, since word processors frequently store extra information in their files – on page layout, bold and italic codes, and so on – this standard isn't always adhered to.

This can present a problem if, for example, you've received a program with on-disc documentation, which you can't read due to it being in a custom word processor format. If the program runs under AmsDOS, the file was almost certainly have been created with *Protext* – the most popular CPC word processor, bar none.

CP/M programs, on the other hand, are commonly accompanied with documentation created with the old workhorse *WordStar*, or one of its many clones. To convert a *WordStar* file to a simple ASCII file, use the following program:

```
10 INPUT "Original filename: ",o$
20 INPUT "New filename: ",n$
30 OPENOUT n$: OPENIN o$
40 WHILE NOT EOF: LINE INPUT#9,a$
50 FOR n=1 TO LEN(a$):
c=ASC(MID$(a$,n,1))
60 c=c AND 127
70 MID$(a$,n,1)=CHR$(c)
80 NEXT: PRINT#9,a$: WEND
90 CLOSEIN: CLOSEOUT
```

And to convert a *Protext* file into something a bit more readable, add the lines, below, to the above program. If 'File type error in line 30' is reported, don't worry – just type CONT, and the program goes about its business.

```
45 WHILE LEFT$(a$,1)=CHR$(138):
a$=MID$(a$,2): WEND
60 IF c=144 THEN c=32
```

If you don't have a word processor but want a way of displaying text files on your screen, here is the simplest way to do it.

To send output to your printer, add #8, (with comma) after the PRINT in line 40

HARDWARE PROBLEMS

Double-spaced printing

In the original 464 design, and with subsequent CPCs, Amstrad mistakenly supplied the wrong voltage to one of the 'pins' (or rather, contacts) on the printer port – number 14. This has the effect of making many printers double-space output.

The solution is easy enough: fix 'pin 14' so that no current is generated on it. If you're quaking with the thought of taking a soldering iron to your CPC,



don't worry: all you need is a small piece of sticky tape (cor, it's just like Blue Peter) to stick over the fourth contact from the left on the top side of your printer port. The contacts to the left ('pin 15') and right ('pin 13') are unused, so you can cover those, too. Look at the diagram, above, if you're unsure.

All you need is a small piece of sticky tape (cor, it's just like Blue Peter) to stick over the fourth contact from the left on the top side of your printer port

Tapes not loading

If your old tapes have stopped working, and all you can load are programs which you've saved on to tape yourself recently, it's likely that the 'azimuth' on your tape deck has slipped out of alignment. This is a tiny screw, recessed into your tape deck (see the photograph, right, for its location on a 464) is so small you need a watchmaker's screwdriver to adjust it. (These are often on sale at markets.)

Shove a game into the tape deck, rewind and press PLAY, turn the computer's volume up to maximum, and type CALL &BC6E to start the motor. When you hear the signal on the tape, start twisting the azimuth left or right by minute amounts, until the sound is at its least muffled – this is the correct position for the azimuth.

It helps, too, to run a tape-cleaning cassette through your cassette deck once in a while. These are available from most record shops.

Pound signs don't print?

Many printers come with their 'language setting' defaulting to American. This doesn't mean that they replace every occurrence of the word tap with 'faucet', 'pavement' with 'sidewalk' or take out all the 'u's in words like 'colour'. What it really means is that they print the American character represented by ASCII code 35 – the hash (#) – rather than the British pound (£) symbol.

The solution varies from printer to printer, so you need your manual. Look for the section marked 'DIP switches'. Somewhere on your printer, there is a set of tiny up-down switches. Three or four of these combine to change the language setting. Set these to the position indicated for British, and you shouldn't need to do anything else.

Peripherals won't work?

If you're having problems with any devices connected to the expansion port – the Multiface, ROM-board, Hackit, serial interface, you name it – the traditional remedy is to clean the expansion port itself and the connectors on anything attached to it. (Plus owners are lucky here: their Amphenol connectors are much more robust.)

A cotton wool swab dipped in isopropyl alcohol (if you've bought a tape-head cleaning kit, pinch it from there!) is usually adequate.

Alternatively, for those really tough stains, Disc Jockey Danny Baker recommends a Peco model railway track rubber – available from your local games and hobbies shop. I personally wouldn't swap even two bottles of isopropyl alcohol for my new formula Peco track rubber.

Danny Baker recommends a Peco model railway track rubber. I personally wouldn't swap even two bottles of isopropyl alcohol for my new formula Peco track rubber

Before you try this, though, you might like to simply swap the order in which your peripherals are connected – this is surprisingly effective. Even loosening the connections can sometimes help.



That's not any old screw, it's an azimuth.

Mistaken 'Disc missing' errors

Of late, probably the most common problem with CPC 3-inch disc drives has been the error 'Drive A: disc missing' when there is, in fact, a disc in the drive. The cause of this is a worn drive belt. Fortunately, these are easy and cheap to replace.

Although you could obtain the official Amstrad replacement part, a drive belt for a domestic tape player does just as well. Make sure that you obtain one of the correct dimensions. Ideally the disc drive belt should be 7cm long (although a difference of between one and two millimetres won't hurt), 0.3cm or 0.4cm high, and 0.5mm thick.

Once you have this, open up your CPC by removing the screws on the base and (if necessary on your model of CPC) removing the keyboard connection. Unscrew and unplug the circuit board beneath the disc drive, and you can then remove the old drive belt and fit the new one. Since this problem has only recently surfaced on a minority of machines, your CPC should then be safe for another ten years or so...!

'Memory full' appears on loading

First up, if possible, reset your CPC before attempting to load a program with a BASIC loader (many games, in particular, use this method). Still no luck? Turn off any ROMs and peripherals you have attached to the expansion port, or remove them if you don't have a ROM on/off switch. Typing PRINT HIMEM should return 42619 on a disc-based machine, or 43903 on a tape-based system.

If you still get a 'Memory full' message, it's likely you're trying to load an old tape game which can't cope with the small amount of memory that AmsDOS (the disc operating system) takes up. The following short listing resets the computer with AmsDOS off, and enables you to load such games.

```
10 MEMORY &7FFF: FOR n=&8000 TO &800F
20 READ a$: POKE n,VAL("&"+a$)
30 NEXT: CALL &8000
40 DATA 21,08,80,3E,00,C3,16,BD
50 DATA 3E,C9,32,CB,BC,C3,06,C0
```

I can't print graphics characters

Trying to get a printer to output graphics characters – those with ASCII codes above 127 – is fraught with difficulties. For starters, even though your CPC responds to PRINT CHR$(224) by printing a smiley face, CHR$(224) on your printer is likely to be an entirely different character. As usual, consulting the printer's manual should help.

However, you find that PRINT#8,CHR$(224) still doesn't print a graphics character. Instead, it prints a grave accent, or CHR$(96). The reason for this is that Amstrad's printer port design, once again, is slightly lacking, which means that, in fact, it won't send bit 7 of any data.

If you put this into English this techno-speak translates as meaning that sending character 128 actually sends character 0, sending character 129 sends character 1, and so on up to character 255, which sends character 127.

The 464 Plus and 6128 Plus both have a proper 8-bit printer port. However, their operating system doesn't actually know about this. As a result it simply

strips out any characters from 128 to 255 in standard CPC fashion. Very useful.

Put into English, this means that sending character 128 actually sends character 0, sending character 129 sends character 1, and so on, up to character 255, which sends character 127

There are two solutions. You can fit an 8-bit printer port add-on. (Potential *BrunWord* Elite – see *AA114/115* – purchasers, for example, have this as an option, look out also for a DIY hardware project in a forthcoming Techy Forum). Alternatively, many printers can be sent an instruction to tell them to switch to characters 128 to 255, rather than 0 to 127. On the Amstrad DMP-2000, for example, you can obtain character 224 by:

```
PRINT
CHR$(27)+">";CHR$(96);CHR$(27)+"=";
```

For some printers you need to replace the ">" and "=" by "4" and "5" respectively. Check your manual! This doesn't give you the full functionality of an 8-bit printer port – for example, it won't work for sending graphics data nor for redefining characters, where the eighth bit is crucial – but it's a workable compromise, at least.

Have 128K but can't run 6128 programs?

Owners of the original CPC 464 are missing a few BASIC commands and firmware features, such as a shape-filling facility (the FILL command in BASIC), available on the 664, 6128 and Plus machines. This is very rarely a problem with commercial software or well-written PD, but if the program you need relies on one of these commands (often causing a repeated 'Syntax error' message to appear on the screen), you might be able to get hold of a 6128 ROM (part number 40025) to replace your 464 ROM. If you're not confident about desoldering a chip from your CPC's circuit board, get a professional to do it. The 40025, although less easy to find than previously, should be available from CPC Plc (see box on page 14).

The 6128 comes with a short piece of code called Bank Manager (or simply 'Bankman'), which provides access to the extra memory of BASIC. However, it isn't provided with the 464 or 664, and won't work on either of those machines anyway – even if expanded to 128k. On this month's covertape, there is a new PD equivalent, which provides many of its features and works on all 128K machines. If you know a friendly 6128 owner who will give you a copy of the original Bank Manager program, here's a quick fix to make it work on both 464s and 664s:

```
100 mcentry=HIMEM-&524
110 MEMORY mcentry-1: LOAD
"BANKMAN.BIN",mcentry
120 FOR n=mcentry TO mcentry+&524
130 WHILE PEEK(n)=&5B AND PEEK(n+1)=&BD
140 POKE n,0: POKE n+1,&AF
150 WEND: NEXT: FOR n=&AF00 TO &AF13
160 READ a$: POKE n,VAL("&"+a$): NEXT
170 DATA C5,F6,C0,06,7F,4F,3A,13,AF,E6
180 DATA 0F,ED,49,ED,43,13,AF,C1,C9,00
190 CALL mcentry
```

The only remaining problem is CP/M Plus. This, too, refuses to work even on expanded 464s and 664s. This is because, on loading, the first thing it does is to check whether your CPC is a 6128, rather than whether it has 128K memory. By removing this check, you can make it work on any 128K machine.

Load up a disc editor (such as the DES utility on this month's covertape, for example), and go to track 2, sector &45. The fifteenth line down – with the DES editor, it is the second-to-bottom line of page 1 – begins with &C8. Change this to &C9, write the sector to disc and you have a version of CP/M Plus which is 464-compatible . You lucky, lucky person, you.

Programs won't load from drive B?

Most serious CPC owners, by now, have acquired a 3.5-inch second drive. The discs are much cheaper, and can hold approximately twice as much as a standard 3-inch disc. Many machine code programs won't load from drive B, though. The first part of the code loads and the program then looks for any other files on drive A.

The ultimate solution to this is to fit ParaDOS internally and add an ABBA switch, which allows you to treat the 3.5-inch drive as drive A when required (try STS, see the 'Still stuck' box below). For a cheaper alternative, though, you could try the following listing, which at least allows some programs to load from a second drive. It works by disabling CALLs to the routine which resets ROMs, including the disc system: type in the program, switch to drive B (|B) and type CALL &8000,"filename". Ideally, you could append that to the end of the program, and save it as a loader for the program in question.

```
100 MEMORY &7FFF
110 FOR n=&8000 TO &804B: READ a$
120 POKE n,VAL("&"+a$): NEXT
130 DATA 3E,C9,32,CB,BC,32,CE,BC
140 DATA 32,C8,BC,32,37,BD,3E,E9
150 DATA 32,16,BD,DD,6E,00,DD,66
160 DATA 01,46,23,5E,23,56,EB,11
170 DATA 00,C0,CD,77,BC,D2,00,00
180 DATA B7,C8,FE,01,C8,D5,21,3C
190 DATA 80,11,00,AF,01,10,00,ED
200 DATA B0,C3,00,AF,E1,CD,83,BC
210 DATA D2,00,00,E5,CD,7A,BC,E1
220 DATA CD,03,B9,E9
```

If, after CALLing &8000, the disc drive chugs and returns to the Ready prompt, it's because you're trying to load a BASIC program. Type RUN"filename" after the CALL &8000, and the BASIC program loads with the B-drive patch still in memory.

STILL STUCK?

Where to get help

Your first port of call should always be the manual – check that you're doing everything by the book before you suspect a serious problem. If this doesn't help phone the manufacturer of the hardware or software you're having trouble with. It's possible that it's a recognised fault for which a solution has been worked out. For example, a sampler I've recently bought has taken to giving error messages in some circumstances. A phone call to the factory yielded a new version of the ROM to install. It's always worth a try... Unless, of course, it involves phoning Amstrad, whose knowledge of things CPC is minimal.

AA are happy to help with CPC problems. Our monthly Techy Forum features solutions to a selection of your technical problems. You can e-mail your queries to us now, too. (see page 21 for contact details). However, we can only answer your queries through the pages of the magazine so don't enclose an SAE, please, nor phone the AA office.

Amateur CPC publications are always a good bet, for technical help, too. (See the Amscene directory for more contacts.) *WACCI*'s letters page is a recognised forum for those wanting just such help, and WACCI, the club, even have a list of members prepared to offer help by phone. Other fanzines, such as the PD disc mag *Better Than Life*, also answer readers' questions.

Your first port of call should always be the manual – check that you are doing everything by the book before you suspect a serious problem

If you have access to the Internet, then the newsgroup comp.sys.amstrad.8bit is a good place to obtain help. Every fortnight, the FAQ (a list of Frequently Asked Questions, and their answers) is posted. If your problem isn't one of those then a set of experts ranging from CPC designer Cliff Lawson and Locomotive Software boss Richard Clayton to demo-coder NWC are on hand to give their best advice and of course it's virtually instant.

If you need spares for your CPC, CPC Plc are the people to contact. Their individual prices are much higher than their trade prices, though, so try to order through an electronics shop if at all possible. (See CPC contacts box, below.)

CPC contacts

CPC PLC
Component House, Faraday Drive, Fulwood, Preston PR2 4PP ☎ 01772 654477.

STS
298 Holton Road, Barry, South Wales CF63 4HW ☎ 01446 700730.

Techy Forum
30 Monmouth Street, Bath, Avon BA1 2BW, or aa@futurenet.co.uk putting 'Techy F' in the subject line.

WACCI
7 Brunsward Green, Hawarden, Deeside, Clywd CH5 3JA ☎ 01244 534942.

Can you hack it?

The rites and wrongs of pokes. Lee Rouane is master of ceremony in the first half of your initiation to hacking!

To start things off nicely you first need a Multiface and a copy of *Tearaway* (the best) or *Insider* (hmm...). Failing that, the *Hackit* ROM does the job just as well but novice cheat finders may encounter problems.

Right, down to business...

Addressing the issue

Most games use a standard set of routines to decrement, or in some cases, increment the lives or energy, and so on. In the easiest of cases you find out how many lives you start with, lose one, and then look through the code to find an address that holds a value one less than the one you started with.

In the recent covertape game, *Turbo The Tortoise* (AA109), for example, you start with three lives and three energy bars. Now you begin looking for an address that at the start holds three, but which can hold a number lower than three every time you lose a life.

A standard routine to perform this function looks like this:

```
3E 03      LD A,&03 ;LoaD the Accumulator
                    with 3
3A xx xx   LD (xxxx),A ;LoaD an unknown
                    number (xxxx) with A
```

You use the ampersand sign (&) to denote that the number after it is in HEXadecimal. The HEXadecimal counting system works differently to the normal one. When you reach ten in the in HEXadecimal system you switch to an alphabetical system. The table below counts up to 20 and the system should be clear enough to count higher if you need to.

Decimal – 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20
Hex – 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 10 11 12 13 14

The routine in the first example was found using *Tearaway* at address &5E57 by searching for the routine 3E,03. Now just change the 03 to a higher number such as &FF (255 decimal), but, because the routine was found at &5E57, the actual poke (&03) is at address &5E58. This is because the routine occupies two bytes of memory, the first at &5E57 and the last at &5E58.

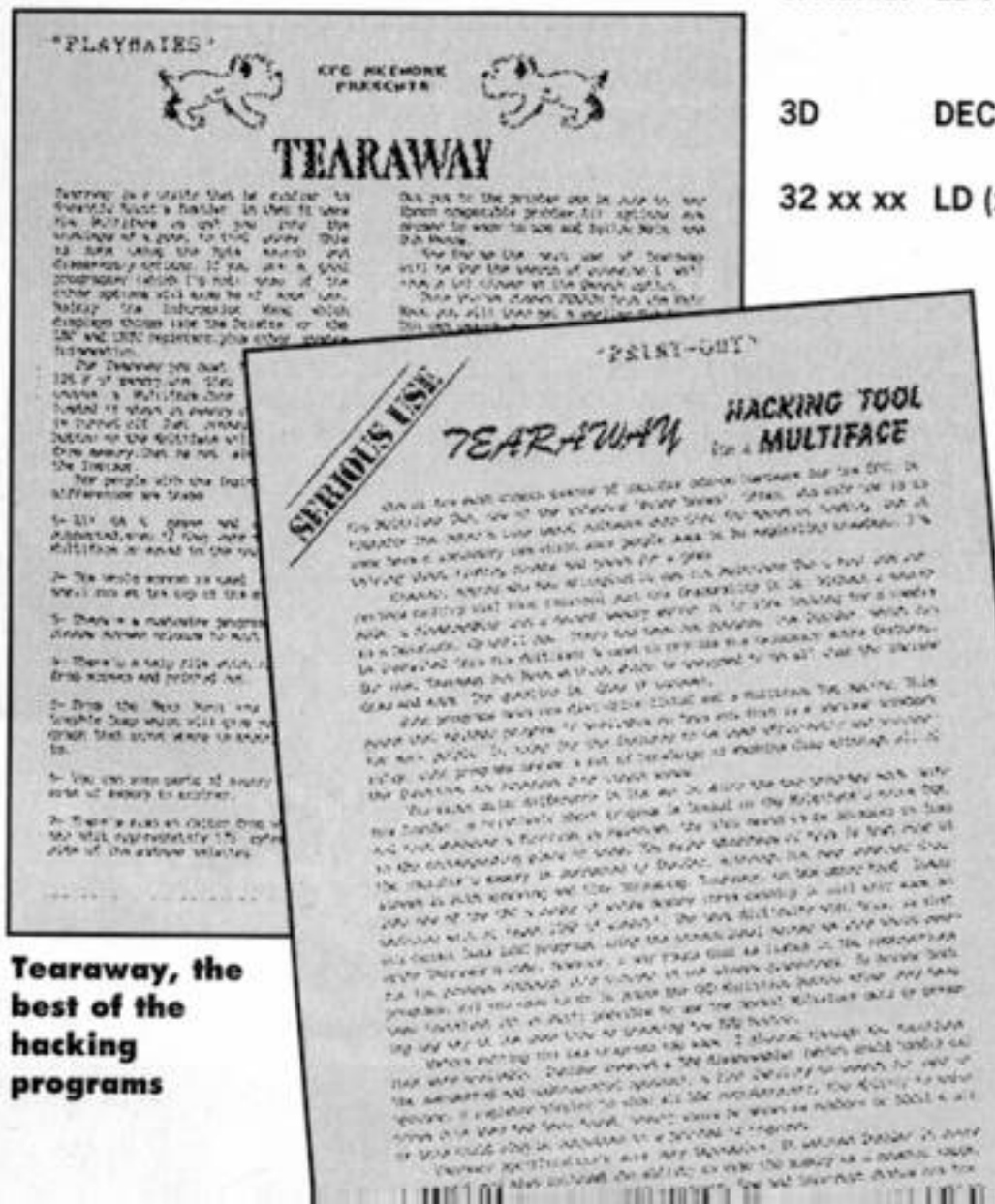
DEC A instruction

One of the other common routines is the DEC A instruction. This routine takes what is held in A (unless specified otherwise) and decrements it by one. The example below shows how it is more commonly used:

```
3A xx xx   LD A,(xxxx)   ;LoaD the Accumulator
                         with value held at
                         unknown address
3D         DEC A         ;DECrement this value
                         by one
32 xx xx   LD (xxxx),A   ;put the amended value
                         back to unspecified
                         address
```

This routine was found in the covertape game *Fantasy World Dizzy* at address &6AF6. To stop the lives counting down you need to nullify the DEC A instruction at address &6AF9. The most popular is the NOP (NO oPeration) code.

The HEX equivalent of this instruction is &00 so poke this into address &6AF9 to take out the DEC A instruction and provide infinite lives. You can also use &A7 (AND A), &C9 (RET) or &3C (INC A) instead of &00. One works better so it's a case of trial and error.



Tearaway, the best of the hacking programs

Roll up, roll up!
Insider (£7.95, plus £2 p&p) Romantic Robot, 54 Deanscroft Avenue, London NW9 8EN ☎ 0181 200 8870.
Tearaway (£6), from UAUG (disc library, programs available to members only). Details from Tony Baker, Chairman, 26 Uplands Crescent, Fareham, Hants PO16 7SY ☎ 01329 234291.
The **Hackit ROM** is no longer available, try the *AA* Reader ads (see page 10).

Member rates

If you buy *Tearaway* and *Superwimp* (see 'So why do you need a mouse?', page 17) the combined price is £10 instead of £6 per program. Both programs are available to members of UAUG only (see Roll up, roll up!).

Other common routines are listed below and it is not usual for a game to vary on these routines.

```
2A xx xx   LD HL,(xxxx) ;LoaD HL with value
                        held at unspecified
                        address
35         DEC (HL)     DECrement the value in
                        HL by one (nullify this)
46         LD B,(HL)    ;LoaD B with the value
                        in HL
05         DEC B        ;DECrement the value
                        by one (nullify this)
70         LD (HL),B    ;LoaD HL with the
                        amended value in B
7E         LD A,(HL)    ;LoaD A with the value
                        in HL
3D         DEC A        ;DECrement the value
                        in A by one (nullify this)
77         LD (HL),A    ;LoaD HL with the
                        amended value in A
3A xx xx   LD A,(xxxx)  ;LoaD A with the value
                        held at unspecified
                        address
D6 01      SUB &01      ;SUBtract the value in
                        A by one (nullify this)
```

Next month:

Another covertape game but not just another poke. You look at inserting your new-found multiface pokes into your own routines.

Assembly line

Typing listings

- Make sure you type in exactly what we print.
- OMIT the first four letters in each line: they are a code which works in conjunction with our *TypeChecker* program below.
- Only press RETURN when you get to the end of a command line. If a command line goes on to two lines don't press RETURN at the break. Your lines on screen should break in the same place as in the mag.
- The dots you see in some lines (like the one between 'well' and 'done' in the line PRINT| Well·done|) indicate spaces. The number of dots tells you how many spaces.

TypeChecker

This program enables you to check whether you've typed *AA* listings in correctly. Type it in, then SAVE it for future use. When you want to doublecheck that you typed a listing in correctly:

- load up *TypeChecker*;
- type NEW;
- type in the listing of your choice;
- when you have finished type LIST.

At the end of every line a highlighted code appears. It should be the same as the code printed in front of the same line in *AA*. If it isn't you have typed that line incorrectly.

```
PAML 10·'·TypeChecker·V1.0·-·By·Simon·Forrest
     er·-·Dec·1992
MAOJ 20·'·For·Amstrad·Action·-·Public·Domain
DANK 30·MEMORY·&9FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL(_&|+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum()&2ADD·THEN·PRINT·|Checksum·
     Error| :END
LAHE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,PEEK·
     (&BB5C)
KAHI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·
     &BB5C,&A0
MACN 130·PRINT·|TypeChecker·V1.0·Installed| :END
MABC 140·DATA·CF,FE,93,FE,0A,CA,00,A0,F5,C5,D
     5,E5,FE,0D,CA,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,20,CD,00,A0,3E,18,CD,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·CD,45,A0,7D,CD,45,A0,3E,18,CD,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E6,0F,C6,41,C
     D,00,A0,F1,E6,F0
XAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,00,A0,C9,0
     0,00,END
```

Turning TypeChecker off (it is automatically initialised when you RUN the program above) and back on again is quite simple:

`POKE &BB5B,0` turns it off, while,
`POKE &BB5B,3` turns it back on.

What, no code? Well, for this month at least, you're looking in the wrong place. Richard Fairhurst explains.

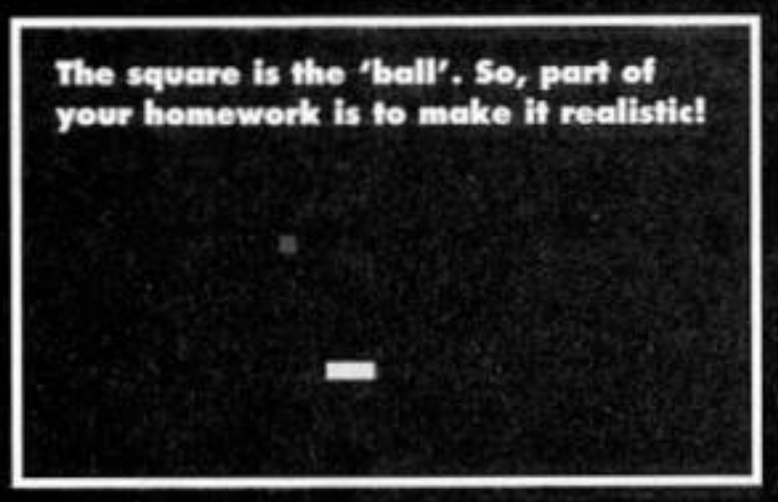
This month, the Assembly line code has moved from this page to the covertape. It saves you time in typing it in, but more importantly, it lets you work on a meatier chunk of assembly language than would fit on one page.

Get caught out

The filename is ASSEMBLY.SRC (.SRC standing for source code). Just load it into the text editor of your assembler, assemble the code (to &8000), and CALL it. Move the bat left and right with the cursor keys to catch the falling ball. Miss and it's game over, and you are told how many balls you caught. It might not be *Prehistorik II*, but, hey!, its only a few bytes of code.

If you can manage to 'un-addict' yourself from the amazing game-play, then fire up your text editor, and take a look at the code. There are comments sprinkled liberally throughout, so it shouldn't be too difficult to make sense of it.

At the start of each game, you clear the screen to MODE 1, reset the score to 1 (really), and set up interrupts. As you aren't using the CPC's built-in interrupt routine which handles keyboard scanning and sound production you could get away with turning interrupts off here with the DI op-code. In fact, here you poke the op-codes EI: RET into &38, which is the address which the CPC calls 300 times per second so that interrupts are enabled, but all the interrupt routine does is return. There is a reason for this, but you'll have to wait until a future issue of *AA* to find out. (Don't you just love being kept in suspense?)



The square is the 'ball'. So, part of your homework is to make it realistic!

Initially you...

Initialise the variables for the position of the bat and the ball. Each one has a 'proper' position (the column on the screen, and a row in the case of the falling ball), as well as a screen address. The program could calculate the screen address from the row and column each time it needs to print the bat and ball, but calculating it initially and updating it each time they are moved is a lot easier. The ball's position is determined by getting a random number (generated by the sub-routine .random). If it's not between 2 and 78 you get another one. Finally for the initialisation, you add 1 to the score: so that the initial score of 1 becomes 0.

Circulars and flyers

The main game loop is a simple section, this waits for frame flyback (re-read my column in *AA*115 if you are unsure about this), and then scans the keyboard. If the left or right cursor keys have been pressed, a routine is called to change the position of the bat as long as it's not at the edge of the screen. Don't worry about how the .keysc routine works. It's a complicated piece of coding which checks to see which keys have been pressed, and returns the results encoded in the ten bytes at .keybuf. However, when you have disabled the firmware interrupt, nice friendly sub-routines such as &BB09 stop working!

The loop proceeds to draw the 'ball', and advance its position by four screen lines for next time. Instead of having two separate routines, one to wipe the last position of the ball and another to draw it at its new position, this routine does both. (*This month's homework is to try and work out how – Ed.*) If you're feeling particularly keen, you could replace this with a proper sprite routine, to display a more artistic ball than the solid red square.

The bat is then drawn in a similar fashion (by the sub-routine .bat), and the loop is resumed if the ball hasn't reached the bottom of the screen yet. If it has, then the columns of the ball and (three-character wide) bat are checked. The program only jumps back to increase the score and starts dropping another ball if the ball has landed on the bat. Otherwise, the CPC's firmware interrupt routine is restored.

Divided it stands

Note that when changing the code at &38, you should disable interrupts for the interim and also that the score is printed by a three-digit decimal print routine, .pr_a. This works by subtracting 100 until the number is less than 0, hence finding out how many hundreds there are in the number, and printing this. Repeat for tens and units.

There you go – your first full machine code 'game' (sort of). Now read, enjoy, digest and see if you can beat my hi-score of 38!

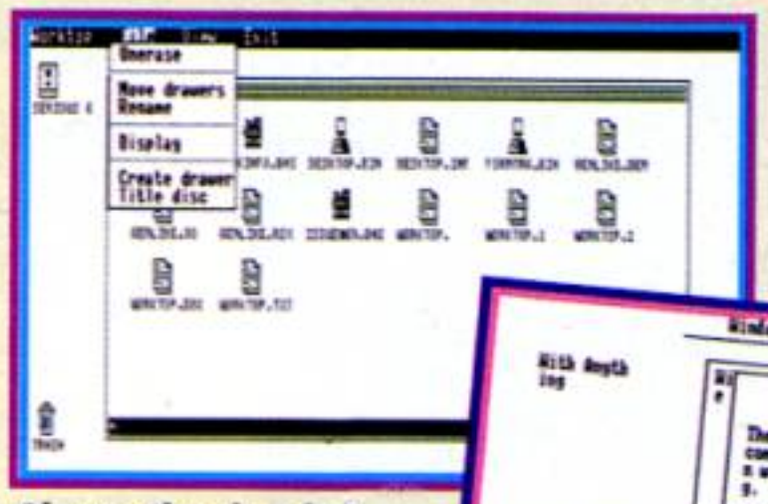
NEXT MONTH:

If this isn't enough of a gaming or coding challenge, next month you add features and gameplay to create the most epic covertape game since, er, *Chuckie Egg*.

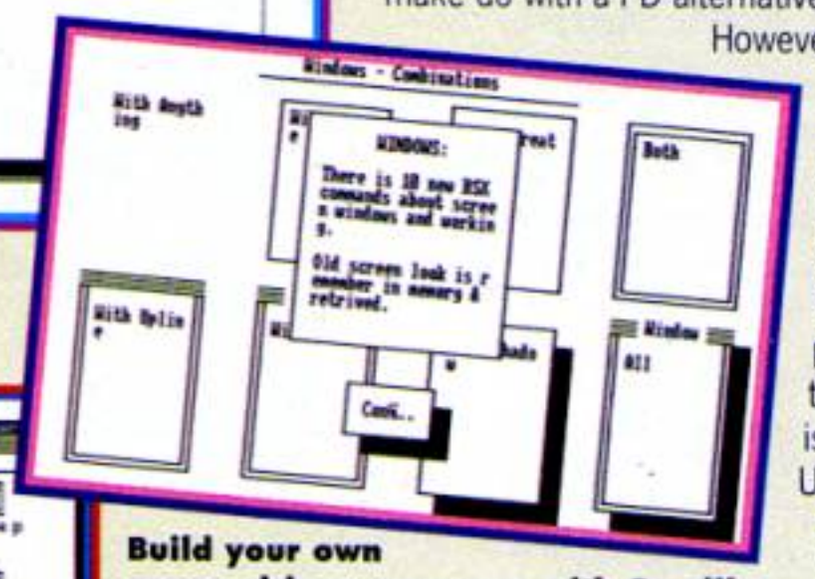
So why do you need a mouse?

Is the case for owning a mouse squeaky clean? Shh, while Richard Wildey whiskers the answer.

Before you think a page from *Rodent Monthly* has slipped undetected into your favourite computer magazine, read on. A mouse is a hardware device that allows you to move a pointer around the screen in a simple way. Graphical user interfaces (GUI's) use them, unfortunately on the CPC we have AmsDOS – Windows it certainly isn't. So without a GUI why do you need a mouse?



Above, the slow but functional Worktop.



Build your own mouse-driven programs with Gemlike.

What's the point?

There are a few applications on the Amstrad that benefit from the aid of a mouse... DTP programs such as *MicroDesign*, *PowerPage* and *Stop Press*, and art packages such as *Art Studio*, *Smart Plus* and *Picasso*, fall into this category.

There are quite a few operating systems that attempt to bring the desktop interface to the CPC. In the Public Domain you have Worktop which is a rather clumsy, slow, but working, implementation. A more polished attempt comes in the guise of EasyDos, this is however not what you might call bug-free. However, EasyDos is simple to use and a suite of RSX's allow you to use the pointer system in your own code. These RSX's are unfortunately undocumented within the program, though *AA* printed a letter from David Wild, the EasyDos author, which listed the function of each RSX (please see *AA*69).



EasyDos, the first of many PD graphical user interfaces.

Write like a WIMP!

If writing your own WIMP applications appeals then Superwimp is likely to be of interest. This is a series of very well documented RSX's with demonstration programs that allow you to build up your own applications.

There used to be a major flaw in this program – the actual WIMP code used by Superwimp was copyrighted to CPC Network. You needed this code for your programs to work which meant you couldn't give your user friendly programs to others, in which case you had to make do with a PD alternative, such as Gemlike.

However, this was not as comprehensive as Superwimp and only worked in MODE 2 but it was adequate for building your own programs. Now, though, Superwimp is available from the UAUG (United Amstrad User Group) disc library (see Where to go) and is distributed under shareware conditions.

If you don't fancy writing your own applications the up and coming operating system which has a small, but growing number of programs written for it, is DES. This is CampurSoft's commercial contribution to the genre and comes on ROM and disc.

ROM is the only sensible place for a GUI to be as this allows your computer to jump straight into the WIMP system without loading a program first. Doing so seems to defeat the object of the program. DES is the best offering of a graphical shell for AmsDOS currently available. It isn't perfect but it makes a good case for buying a mouse – just so you can feel you've got a PC.

Paws for thought

Only two brands of mice are on offer for the Amstrad: don't go buying one for use with a PC because it just won't work!

The Genius Mouse and the AMX Mouse both take input from the joystick port so any program that works with a joystick also works with a mouse, which brings a whole new dimension to *Arkanoid*. The Genius Mouse has only two buttons, the AMX has three. However the middle button is almost never used and the right button is the primary one. This is something you must remember if you're used to the left being foremost as it is on the PC.

Of the two the AMX mouse is more ergonomic in design and comfortable to use. The Genius is too rectangular and the buttons feel much loser than that of the AMX mouse. On the down side, though, you can't use the tape port on a 6128: when the AMX mouse is plugged in the hardware obscures the tape input socket.

Where to go

AMX Mouse	**OJ Software** **273 Mossy Lea Road, Wrightington, Nr Wigan, Lancs WN6 9RN** **☎ 01257 421915**	**£34.95 (incl p&p)**
Genius Mouse	**Datel Electronics** **Govan Road, Fenton Industrial Estate, Fenton, Stoke-on-Trent ST4 2RS** **☎ 01782 744707**	**£34.99 (incl p&p) (incl *Advanced Art Studio*)**
DES	**CampurSoft** **10 Mcintosh Court, Wellpark, Glasgow G31 2HW** **☎ 0141 554 4735**	**£24.99 (ROM), £14.99 (disc)**
Superwimp	**UAUG** **(Programs available to members only). Details from Tony Baker, Chairman, 26 Uplands Crescent, Fareham, Hants PO16 7SY ☎ 01329 234291. (Registration to James Verity, 3 The Cottons, Outwell, Wisbech, Cambs PE13 8TL.)**	**£6 (disc only)**
EasyDos,	**From all good Public Domain libraries.**	
WorkTop,	**From all good Public Domain libraries.**	
Gemlike	**From all good Public Domain libraries.**	

Next month:

***Hackit* is the development tool Richard Wildey wouldn't be without. Find out why you should have one.**

Designs on layout

How do you give impact to your posters and pizazz to your pages? Angela Cook shows you how to make headlines with MicroDesign.

MicroDesign is, if not *the* best, then one of the best, commercial desktop publishing programs for the CPC. Anybody who does not know what sort of effect they can get from *MicroDesign*, should look at the layout of any issue of WACCI. However, for those who are new to *MicroDesign*, let's rewind the tape...

The game of the name

It's 1988, Hogsoft produce the first *MicroDesign*, and Siren Software release it. Hogsoft change their name to Creative Technology... In 1989 Siren produce something called *MicroDesign Extra*... In 1991 Siren transfer their licence to CampurSoft... In 1995 *MicroDesign Extra* is re-released

Before we go on, let's see what 1996 has in store. Fast forward. Oh rats, the tape has run out. Does this mean the end of the world as we know it? (*Get on with it or I'll fast forward you – Ed.*)

Anyhow, *MicroDesign Extra* is of no use to you, unless you have *MicroDesign*. Basically, *MicroDesign Extra* is a disc-like clip art that you can get from any good PD library (check out the contact addresses in Amscene Directory on page 20). It has headlines, some nice clouds, flow chart symbols and much more.

The good bit is on side two.

Get a head!

You can produce sheets of music. There are staves, clefs, keys, even some songs all ready done for you. It's here you find the notes and other essentials, all saved as icons. There are more headline fonts, too. These are big fonts that have been designed for you to copy and move about for your headlines (hence the name). This is a little tricky and sometimes also time-consuming but it does give excellent effects. If you are already accustomed to *MicroDesign*, this presents no problem.

MicroDesign Extra is essentially for the hundreds of new customers that did not buy it before from Siren even though there are some new features which were added after Siren sold it.

When can you use it?

MicroDesign is excellent for producing newsletters, club notices, posters, fanzines and magazines, doing homework and much more.

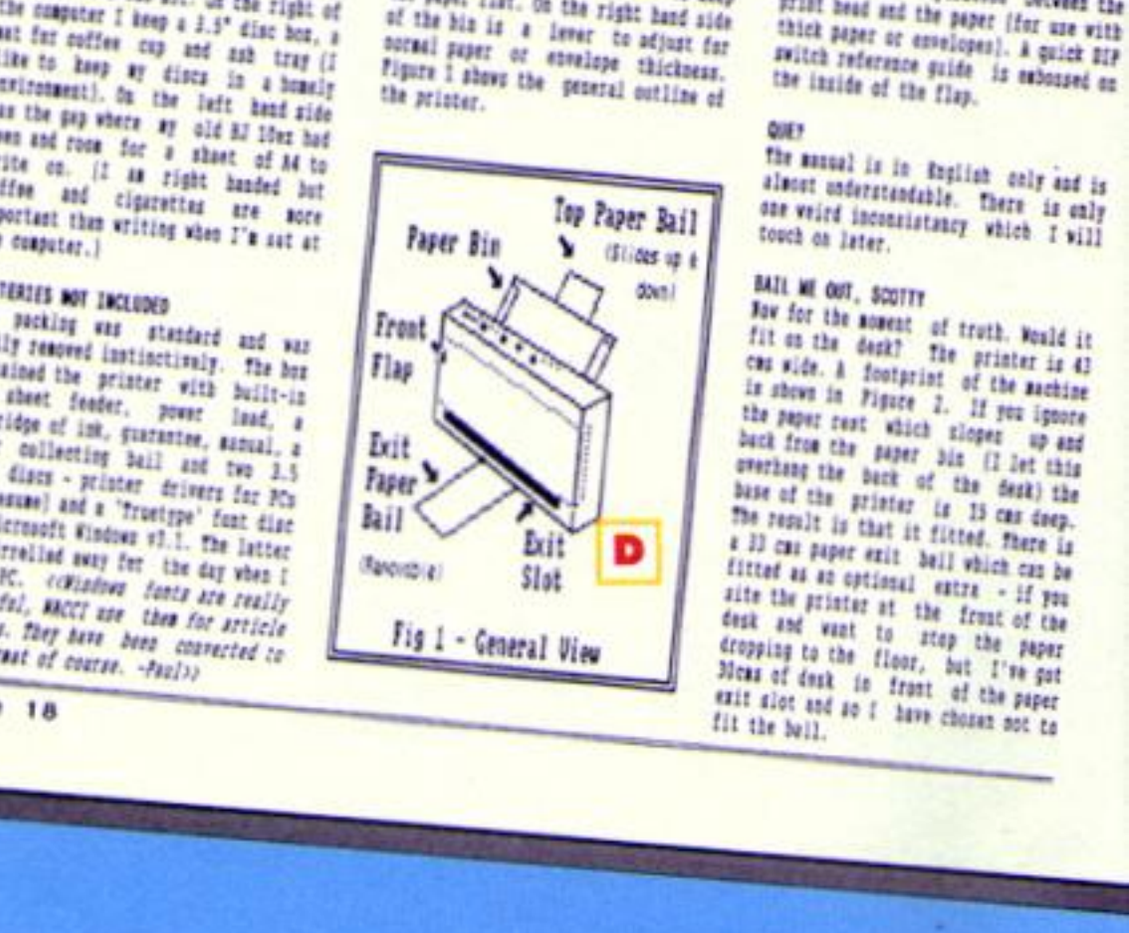
It is versatile and you can easily import clip art into it. I used to use *MicroDesign* a lot for designing front pages, newspapers and reports in connection with my homework when I was still at school.

MicroDesign Extra enhances this versatility yet further with new headlines, an ability to create music sheets and lots of other little surprises for you.

There are no instructions for *MicroDesign Extra*

Who's got them?

The two-disc set for *MicroDesign* (the original and the enhancer, *MicroDesign Plus*) costs £29.99. *MicroDesign Extra* costs £14.99 (incl p&p) in ROMDos or data format, while the 3.5-inch disc costs £13.99 (incl p&p) all from CampurSoft, 10 McIntosh Court, Wellpark, Glasgow G31 2HW ☎ 0141 554 4735, fax 0141 227 4486.



A Work Experience

Bob Moffatt

tries to review a printer but ends up with more work than he bargained for.

Bob has been trying to buy a printer and review it for us while taking his son to work each day. The ... has clearly driven him towards sanity, this final article is almost coher...

BOXING DAY

(You have used that heading before Bob, please refrain from boring readers by repetition. -Paul)) The box was huge. There seemed little chance that the printer would fit on the desk. It's only la 20cms wide and 60 cms deep and the computer has to sit in the middle because there are drawers on either side, fixing the place where I can sit. On the right of the computer I keep a 3.5" disc box, a mat for coffee cup and ash tray (I like to keep my discs in a homely environment). On the left hand side was the gap where my old BJ 10ex had been and room for a sheet of A4 to write on. (I am right handed but coffee and cigarettes are more important than writing when I'm sat at the computer.)

BATTERIES NOT INCLUDED

The packing was standard and was easily removed instinctively. The box contained the printer with built-in cut sheet feeder, power lead, a cartridge of ink, guarantee, manual, a paper collecting bail and two 3.5 inch discs - printer drivers for PCs (I presume) and a 'Truetype' font disc for Microsoft Windows v3.1. The latter I squirrelled away for the day when I buy a PC. (Windows fonts are really wonderful, WACCI use them for article headers. They have been converted to MD+ format of course. -Paul))

PENNY FARTHING

The printer is the now quite familiar 'sit up and beg' design. Paper (A4 portrait or landscape, or A3 portrait) fits in the sloping cut sheet feeder at the rear. The left hand side of the feeder slides from side to side to adjust for paper width. At the back of the paper bin is a paper bail to keep the paper flat. On the right hand side of the bin is a lever to adjust for normal paper or envelope thickness. Figure 1 shows the general outline of the printer.

Fig 1 - General View

ZIP-ZE-OK DOO DAH

The top of the main printer ho... houses an access flap for the D... switches (12 of them), the Power B... Button and its LED, 3 other contro... buttons and four more indicator LEDs. There's a flap on the front surface which opens to reveal the ink cartridge and print head (combined - buy a new cartridge, get a new print head, just like the BJ 10) and a lever to adjust the separation between the print head and the paper (for use with thick paper or envelopes). A quick DIP switch reference guide is embossed on the inside of the flap.

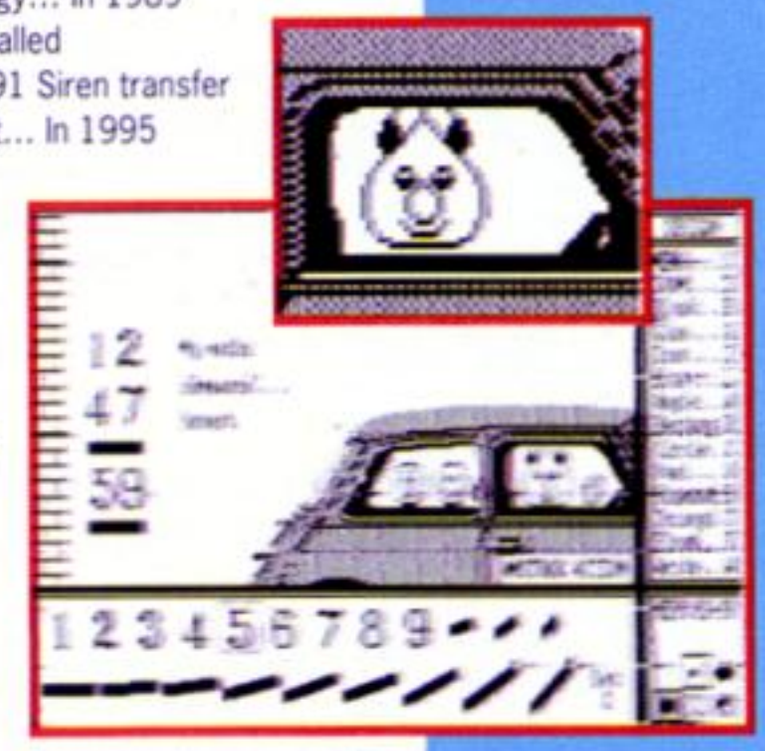
QUE?

The manual is in English only and is almost understandable. There is only one weird inconsistancy which I will touch on later.

BAIL ME OUT, SCOTTY

Now for the moment of truth. Would it fit on the desk? The printer is 43 cms wide. A footprint of the machine is shown in Figure 2. If you ignore the paper rest which slopes up and back from the paper bin (I let this overhang the back of the desk) the base of the printer is 15 cms deep. The result is that it fitted. There is a 33 cms paper exit bail which can be fitted as an optional extra - if you site the printer at the front of the desk and want to stop the paper dropping to the floor, but I've got 30cms of desk in front of the paper exit slot and so I have chosen not to fit the bail.

Page 18



Get closer, zoom in.



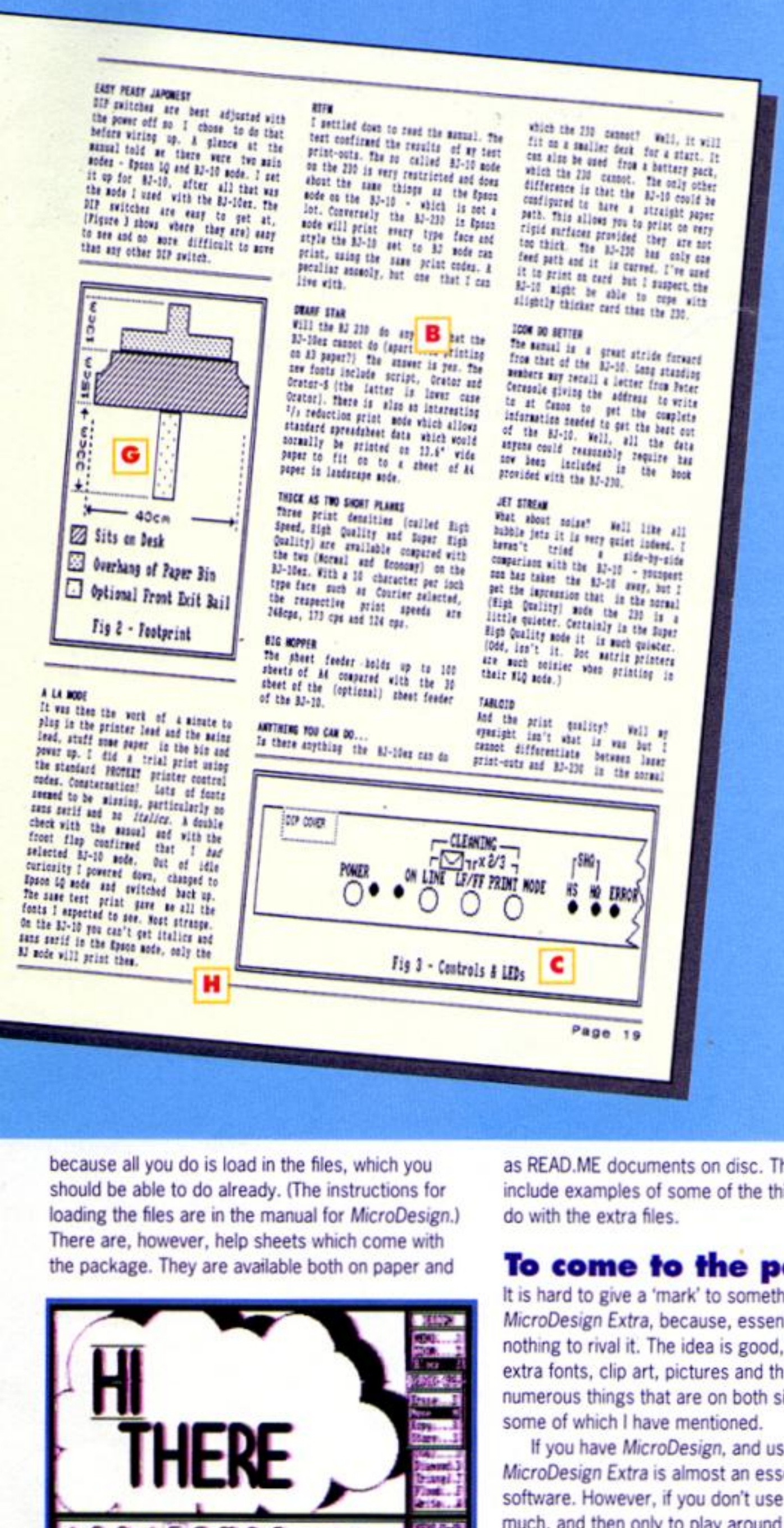
Loading a file from the MD Extra disc.

On the map

CampurSoft also sell *MicroDesign Maps*, which are, as the name makes clear, maps for use within *MicroDesign*. Maps of the United Kingdom cost £15.99 (incl p&p) on 3-inch disc or £12.99 (incl p&p) in 3.5-inch format. World maps cost £12.99 (incl p&p) for the 3.5-inch version and £13.99 (incl p&p) on 3-inch disc.

Desktop publishing the MicroDesign way

Andrew Chapman explains how the layout of one double-page spread from WACCI illustrates the versatility of MicroDesign and the basics of desktop publishing.


EASY PEASY JAPONESY

DIP switches are best adjusted with the power off so I chose to do that before wiring up. A glance at the manual told me there were two main modes - Epson LQ and BJ-10 mode. I set it up for BJ-10, after all that was the mode I used with the BJ-10ex. The DIP switches are easy to get at, (Figure 3 shows where they are) easy to see and no more difficult to move than any other DIP switch.

Fig 2 - Footprint

A LA MODE

It was then the work of a minute to plug in the printer lead and the mains lead, stuff some paper in the bin and power up. I did a trial print using the standard PROTEXT printer control codes. Consternation! Lots of fonts seemed to be missing, particularly no sans serif and no *italics*. A double check with the manual and with the front flap confirmed that I had selected BJ-10 mode. Out of idle curiosity I powered down, changed to Epson LQ mode and switched back up. The same test print gave me all the fonts I expected to see. Most strange. On the BJ-10 you can't get italics and sans serif in the Epson mode, only the BJ mode will print them.

RTFM

I settled down to read the manual. The test confirmed the results of my test print-outs. The so called BJ-10 mode on the 230 is very restricted and does about the same things as the Epson mode on the BJ-10 - which is not a lot. Conversely the BJ-230 in Epson mode will print every type face and style the BJ-10 set to BJ mode can print, using the same print codes. A peculiar anomoly, but one that I can live with.

DRAW STAR

Will the BJ 230 do anything that the BJ-10ex cannot do (apart from printing on A3 paper?) The answer is yes. The new fonts include script, Orator and Orator-S (the latter is lower case Orator). There is also an interesting ½ reduction print mode which allows standard spreadsheet data which would normally be printed on 13.6" wide paper to fit on to a sheet of A4 paper in landscape mode.

THICK AS TWO SHORT PLANKS

Three print densities (called High Speed, High Quality and Super High Quality) are available compared with the two (Normal and Economy) on the BJ-10ex. With a 10 character per inch type face such as Courier selected, the respective print speeds are 248cps, 173 cps and 124 cps.

BIG HOPPER

The sheet feeder holds up to 100 sheets of A4 compared with the 30 sheet of the (optional) sheet feeder of the BJ-10.

ANYTHING YOU CAN DO...

Is there anything the BJ-10ex can do which the 230 cannot? Well, it will fit on a smaller desk for a start. It can also be used from a battery pack, which the 230 cannot. The only other difference is that the BJ-10 could be configured to have a straight paper path. This allows you to print on very rigid surfaces provided they are not too thick. The BJ-230 has only one feed path and it is curved. I've used it to print on card but I suspect the BJ-10 might be able to cope with slightly thicker card than the 230.

ICON DO BETTER

The manual is a great stride forward from that of the BJ-10. Long standing members may recall a letter from Peter Cervasole giving the address to write to at Canon to get the complete information needed to get the best out of the BJ-10. Well, all the data anyone could reasonably require has now been included in the book provided with the BJ-230.

JET STREAM

What about noise? Well like all bubble jets it is very quiet indeed. I haven't tried a side-by-side comparison with the BJ-10 - youngest son has taken the BJ-10 away, but I get the impression that in the normal (High Quality) mode the 230 is a little quieter. Certainly in the Super High Quality mode it is much quieter. (Odd, isn't it. Dot matrix printers are much noisier when printing in their NLQ mode.)

TABLOID

And the print quality? Well my eyesight isn't what it was but I cannot differentiate between laser print-outs and BJ-230 in the normal

Fig 3 - Controls & LEDs

A HEADLINE NEWS
It's easy to scale up the size of lettering for impact. This is the 'Chunky' font. If you use a large font to start with the letters are jagged because scaling distorts the smooth pattern of dots (pixels) that make up a letter.

B BREAKING UP IS EASY
Make text easier on the eye by dividing with headings ('crossheads') in a larger size or in bold for emphasis.

C TRAVEL ABROAD
Putting the text in columns doesn't mean everything else is fixed. Placing this box across two columns makes the page look more interesting. To resize a box just stretch the 'elastic' lines from the corners when you select it.

D GET IT TOGETHER
Text and graphics don't always have to be kept apart, however. You can make a diagram clearer using explanatory text then separate it from the main 'body' text by enclosing it within a neat double box, as here.

E GET THE PICTURE
Illustrations make a page more fun. Buy collections of images ('clip art') to drop straight on to your *MicroDesign* page. But why does the gardener look so happy?

F FLASH FLOODS
You can give pictures a more solid feel by filling them with patterns using *MicroDesign*'s Flood tool. The tool floods any shape that has a solid line around it.

G SHAPELY FIGURES
It's simple to build up a picture yourself by putting boxes and circles together. You can easily erase corners and draw lines across to make unusual shapes, then flood them. Look at the text running up the side of the picture: *MicroDesign* prints at 90, 180 or 270 degrees.

H GIVEN LINES
If you use the Line tool to draw a solid line right across the page you can Copy it. You can also draw patterned lines such as the dots you often see around coupons.

I STYLE CONSCIOUS.
MicroDesign's text editing mode is like a mini WP so you can make text bold or italic, or underline it. If you prefer, you can load in text from a word processor like *Protext*.

because all you do is load in the files, which you should be able to do already. (The instructions for loading the files are in the manual for *MicroDesign*.) There are, however, help sheets which come with the package. They are available both on paper and as READ.ME documents on disc. These sheets include examples of some of the things that you can do with the extra files.

Moving headline text: useful but takes time.

To come to the point...

It is hard to give a 'mark' to something like *MicroDesign Extra*, because, essentially, there is nothing to rival it. The idea is good, there are the extra fonts, clip art, pictures and the other numerous things that are on both sides of the disc, some of which I have mentioned.

If you have *MicroDesign*, and use it a lot, then *MicroDesign Extra* is almost an essential piece of software. However, if you don't use *MicroDesign* much, and then only to play around with it while you are trying to work out how to use it, don't bother buying *MicroDesign Extra*. But you fall into the latter category then you are really not getting the most out of your CPC.

MicroDesign 2

What about a *MicroDesign 2?* CampurSoft say they are working on it and that progress is slow but constant. The new version will enable extensive text formatting and permit autoflow around graphics. *AA*'s Rob Buckley is doing the deed, so you can be sure of an excellent program, when it finally arrives. And, of course, we'll keep you informed.

Next month:

How can your CPC use 3.5-inch discs? With ParaDOS says Richard Wildey.

ALSO WIN! a copy of *MicroDesign Extra!* Your printed documents will never be the same.

Amscene directory



Clubs

United Amstrad User Group (UAUG), 26 Uplands Crescent, Fareham, Hants PO16 7SY
☎ 01329 234291

Comms

Genesis
the 8bit generation
comp.sys.amstrad.8bit
(newsgroup)
e-mail: roussin@genesis8.frmug.fr.net
(BBS with CPC software established October 1994. 24 Mb of programs including CPCEMU and CPE emulators (on PC and Amiga).
☎ 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
☎ 0181 317 0100

Fanzines

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

Amszine
· Gayton, Laneside Road, New Mills, Nr Stockport SK12 4LU
☎ 01663 744863

CPC Mania, £1.50
DMP Software
· 89 Wolverhampton Road, Codsall, Wolverhampton WV8 1PL

The Eliminator
· 14 Station Road, Riccall, York, North Yorks YO4 6QJ
Cheques payable to J R Naylor. Or send 50p.

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

PD Libraries

Basic PD
· 3 Beacon Lane, Whipton, Exeter, Devon, EX4 8BD
Cassette-only library. Dealing only in BASIC.

Colrob PD
· 9 Aviemore Road, Hemlington, Middlesbrough
Tape-only PD library.

Demon
· 42 Overton Close, Hall Green, Birmingham B28 9NA
E-mail: dave@kechb.demon.co.uk
3.5-inch discs available.

GD PD Software
· 4 Connaught Avenue, Mutley, Plymouth 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 digitising service.

Jamo PD
☎ 01676 533467
A two-side selection costs the same as one-side.

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

PD Fun
· Duncan Tissard, Folly Farm, Cold Ashton, Chippenham, Wilts SN14 8JR
A policy of 'no serious software'.

Presto 2
· 87 Sweetmans Road, Shaftesbury, Dorset SP7 8EH.

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

Robot PD
· 2 Trent Road, Oakham, Rutland LE15 6HF

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) 01772 703131

Romantic Robot
☎ 0181 200 8870

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

Indie Software Cos

CampurSoft
· 10 McIntosh Court, Wellpark, Glasgow G31 2HW ☎ 0141 554 4735

CPC Southwest
· 4 Connaught Avenue, Mutley, Plymouth PL4 7BX

Crystal X Software
· 11 Vicarage View, Redditch, Worcs B97 4RF
Stellar Outpost, £2.99 (tape), £3.99 (disc).

DMP Software
· 89 Wolverhampton Road, Codsall, Wolverhampton WV8 1PL
Send SAE for catalogue.

Pacific Software
· 37 Trimingham Drive, Bury, Lancs BL8 1JW

Radical Software
Brympton Cottage, Brunswick Road, Worthing, West Sussex BN11 3NQ
☎/fax 01903 206739

SD Microsystems
☎ 01953 483750

Sentinel Software
41 Enmore Gardens, East Sheen, London SW14 8RF
E-mail: cs94rrw@Brunel.ac.uk
STS titles and a few original products.

Siren Software
☎ 0161 7965279

Mail Order

Trading Post
☎ 01952 462135

Trojan
☎ 01554 777993

Wizard Games
☎/fax 01723 376586,
☎ 01723 503299

Services

Merlin-Serve
Brympton Cottage, Brunswick Road, Worthing, West Sussex BN11 3NQ
☎/fax 01903 206739
Games for sale from 50p. Swaps. Will buy unwanted CPC stuff.

Software suppliers

OJ Software
☎ 01257 421915

Computer Cavern
☎ 01628 891101

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

Tronics North
· PO Box 7419, Garbutt, Queensland, Australia, 4814
Large supplier of software and CPC bits.
☎ 010 6177 253 766

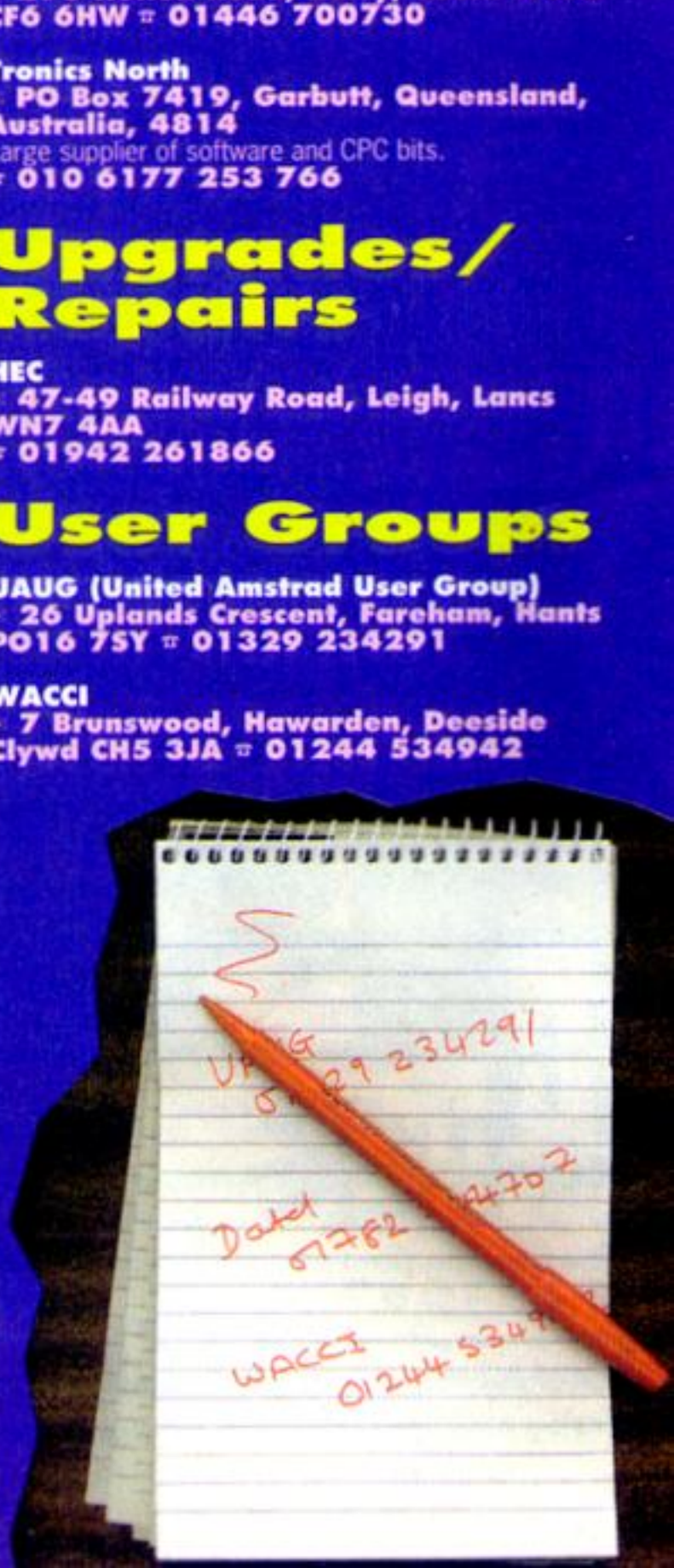
Upgrades/ Repairs

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

User Groups

UAUG (United Amstrad User Group)
· 26 Uplands Crescent, Fareham, Hants PO16 7SY ☎ 01329 234291

WACCI
· 7 Brunswood, Hawarden, Deeside Clywd CH5 3JA ☎ 01244 534942



TECHY forum

Why doesn't my printer print? How do I work your covertapes? Why do people watch GMTV? Richard Fairhurst has the answers. Well, to the first two questions, anyway.

QUESTIONS AND ANSWERS

Invisible touch

1 In *AA*105 you said you would consider reprinting a hardware project for an 8-bit printer port. I think this would be a brilliant idea...

2 In one of your magazines, you said that there is a way of formatting 3-inch discs to 360K per side. How is this done?

3 Which serial interface and modem do you recommend for use with a CPC 6128, in terms of price, user-friendliness and so on?

4 What happened to the hard disc for the CPC?

5 Which is the best ROM-board?

6 Can the dk'Tronics Lightpen interface for the 464 be used on a 6128, as I have both?

7 Where is the best place to track down 3-inch discs?

8 When catalogued when of my discs doesn't show any programs, yet it only has 10K free, and I can run programs from it by simply typing, say, RUN"RADLEAK".

I think this disc is a PD selection – I'm not sure, because it came second-hand with my computer. Yet using the Organise program, written by yourself (*that's the original Disc Organise, not Desktop Organise – Richard*), I log in this disc, and the program displays each file, calling them 'R/O system'.

What does this mean? How can they be used otherwise?

9 Could the 3-inch drive on my 6128 be used on a PC, in place of the 5.25-inch drive, say? How?

10 Is there a service manual for the 6128? I know there is for the CPC Plus range.

11 Where can I get the enhanced version of *GPaint*? (*GPaint+* ?)

Barry Hunter, Ffestiniog



The larger box is the SM2400.



Link a CPC and interface with a Multiface.

1 So do a lot of you, judging by the letters *AA* receives. Look out for a forthcoming 'Top Tips'.

2 Did we...? You can format them to 360K per side using a PCW 8512 second drive, but it's impossible on a normal CPC – 240K

Covertape Clinic

Illogical Trilogy

Please tell me how to get the *AA*113 covertape (*Samurai Trilogy*) working. It loads as far as the language selection screen and then, no matter what I do, it progresses no further.

David Percival, Birmingham



Samurai – somewhat idiosyncratic.

As we pointed out in the instructions, the *Samurai Trilogy* menu system is a little idiosyncratic. To choose an option, first move the highlight bar with the joystick to the appropriate line and then move your joystick right to select this option. Then press Fire! to leave the menu. This system comes in useful in later menus – the training menu, for example, where you need to choose more than one option at once.

Hope this helps.

One born every minute...

1 When is *Street Fighter II* coming out on the covertape? I haven't heard about it for ages.

2 In *AA*111 you gave me a copy of the DES demo, but the covertape wasn't working well. I got everything else to work except DES – why? The covertape sound was all wavery.

3 Thanks for *PowerSpell* in *AA*113: you saved me a lot of money! What are the controls for *Samurai Trilogy*?

4 Where can I get *Megablasters*, the full game?

Ian Sinclair, Preston

1 Er, don't hold your breath. The advert was intended to show that if you didn't read *AA*, you wouldn't know if it was released. *Street Fighter II* is not coming out on the CPC. What do you want it for now that you've got *Chuckie Egg* (see page 5), anyway?

2 If the tape sound is 'wavery', and all your other tapes work okay, it's likely that you've got a dud tape. To check whether this is the case, insert the offending side, rewind to the start, and type CAT. If nothing shows up, or you see 'Read error', your tape won't load. Ablex will replace it for you – see the covertape page (5) for details.

3 *Samurai Trilogy* is controlled by the joystick – see the above letter.

4 To get *Megabusters* try Radical Software ☎/fax 01903 206739.

AA small ads: the place for bargains.

4 READER ADS

Reader ads

If you want CPC-related software or hardware do you know where to start? Here! And if you are having a clear out and want to make space for new items? Ditto! Try it.

WANTED

Amstrad 464 cassette for writing and making music on the CPC. Anyone who has information or a cassette for music write to Thomas Hughes, [illegible], Mordiford, Hereford HRL 4EJ.

£10. CP/M discs £5. 40 *AA*s. Offers? Eight discs of games £15. Tape games. Darren ☎ 091 3732516

More than 20 Amstrad Action covertapes, 10 to 44. Cut-price Lemmings and Turtles. SAE to Donal McBrien, Corrastistune, Derrylin, Enniskillen, Co Fearmanagh, N Ireland, BT92 9EE

Amstrad Computer User Magazines. (Mar '90 - [illegible] plus A4 SAE. Hacker (tape)

per side's about the limit, and that's both tricky and somewhat unreliable.
3 An Amstrad, Pace or Cirkit serial interface is your best bet. To get hold of them try the *AA* small ads – turn to page 10. Use the grid to place an ad in the Wanted section of a forthcoming issue. It's a free service! For a modem, go for the cheapest 2400 baud model you can get hold of – Amstrad's own SM2400 has been discounted a lot recently, see page 21. (I picked up mine for £35.) The CPC can't cope with much over 2400 baud, although a more expensive model might be a better if you're planning to move to a PC or a Mac soon.
4 Quantum Computing happened to it. Moreover, a hard disc would be no use at all for a CPC: CPC programs simply aren't designed to pick up on mass storage like that and they don't need to.
5 One you can get hold of (see 3, above, for details of the *AA* classified pages) is the classic Rombo. It is common, reliable and sturdy.
6 The only difference between dk'Tronics' 464 and 6128 models is that of shape. You'll find it difficult, then, to physically fit a 464 interface to a 6128, but if you can put something between the computer and the interface – a Multiface, for example – it'll be okay.
7 Try any of the advertisers in this issue, or the WACCI User Group (☎ 01983 882197). The best discs available are ex-software house stock, as they are usually Maxell discs, rather than the rather grotty Amsoft-branded discs which are available elsewhere.
8 R/O means 'read only' – in other words, the file can't be deleted. 'System' describes a file which, although it's on the disc, is invisible to the CAT command. This is why your disc appears to be empty. Numerous disc utilities, such as the ubiquitous *ParaDOS*, can set files to 'System' status, or make them visible again.
9 Yep – the pinouts of a 3-inch drive adhere to the Shugart standard used by PCs everywhere. The only proviso is that you should not try to use an Amstrad 3-inch drive on a PC in conjunction with any other floppy drive at the same time: serious damage can result to your internal drive if you do. Always just swap the two around.
10 6128 service manuals can be found floating around frequently at All Formats Computer Fairs, see *AA*114 page 6. (*A levitating technical reference? This I have to see– Ed.*) Alternatively, WACCI's book library – ☎ 01733 260616 – have a copy to lend members.
11 It's called *GPaint 2*. Most PD libraries should have a copy – try Sheepsoft (see Amscene Directory on page 20).

Border of Swindon

I want to put a border with pictures on the screen around some text in a program I am making. I have already made a title screen using *GPaint*, and wonder if it's possible to do the same in the border.
Darren Rolfe, Swindon

You can't put any graphics in the usual 'border' (the one whose colour you change with the BORDER command) without using the overscan technique, which is the domain of demo coders. However, if you draw a screen with *GPaint* consisting of a frame to put some text in, you can load this into BASIC with the usual method – LOAD "filename",&C000 – and then restrict the area in which the CPC prints text by using the WINDOW command. For example, if you had drawn a frame two characters wide in MODE 1, you would type WINDOW 3,38,3,23. To get back to normal, type WINDOW 1,40,1,25.

Tripe-checker?

I was flicking through some of my recent AAs and, to my joy, found a type-in from AA108 called Animator: so, being really into computer-aided animation techniques, I decided to type it in. To my horror I found something wrong with it when it had finished – it ran and then nothing happened. As I had been using *TypeChecker*, I put it through it... Nothing wrong. Please can you help?
Richard Soper, Deeping St James

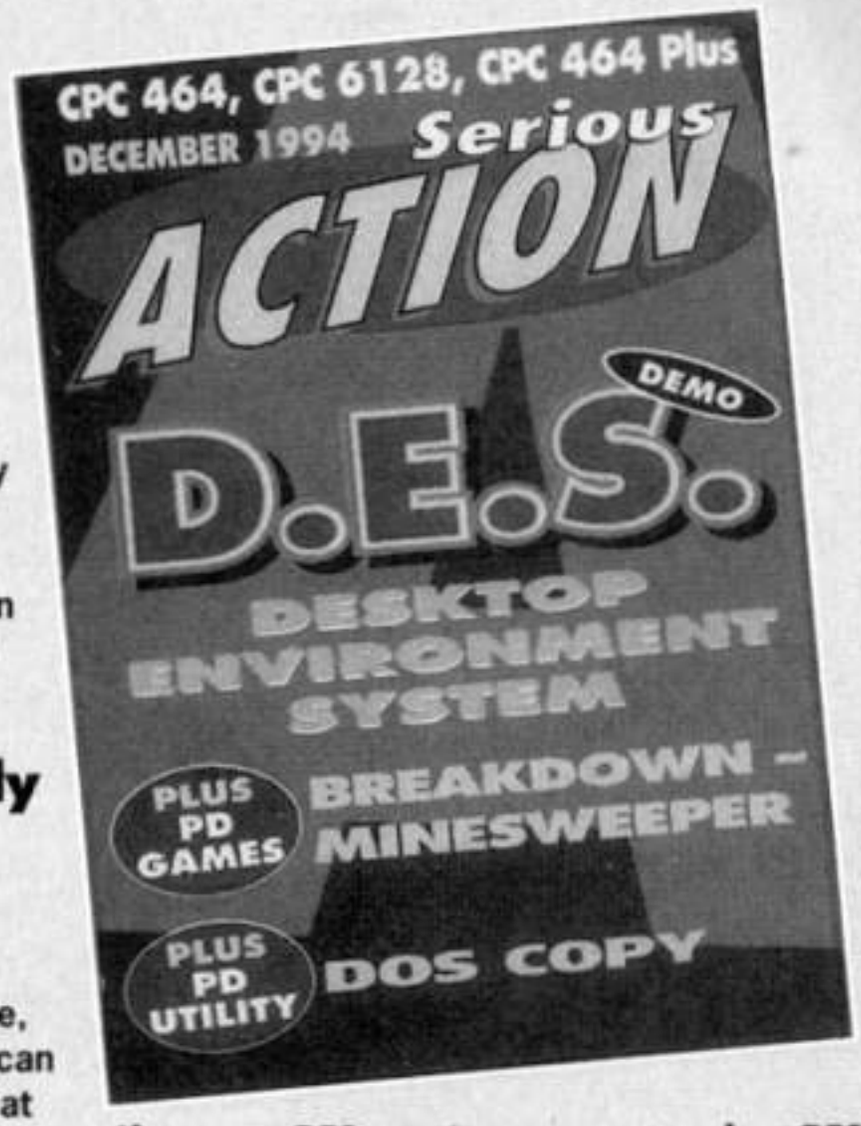
We haven't heard of anyone else having problems with *Animator*, so it's probably your typing. *TypeChecker*, although it notices if you type the wrong letters in a line, doesn't pick up if they're in the wrong order – for example, if you've swapped two letters or numbers around, accidentally. Check the listing again, keeping an eye out for this.

If you don't have any luck, there's an Almost PD program by the name of *Animator II* available. Ask your favourite library for a copy.

Top tips

Speedy Gonzal-DES

Peter Campbell, the man behind Glaswegian CPC specialists and authors of DES CampurSoft, reports that a number of *AA* readers are asking how to speed the pointer up in the demo version of DES which we gave away on the *AA*111 covertape. It's easy... Hold down SHIFT or CTRL as you are moving the cursor. Another easy way to speed up using DES is to use the keyboard shortcuts – whenever you see an underlined letter, that key can be pressed to gain instant access to the option in question.



If you are DES-perate you can speed up DES.

Go Forth and multiply

There hasn't been anything really techy released for the CPC in ages: disc utilities, WIMP systems, no problem. But a new programming language? Sorry, can't help you there, guv. Why not try a PD library – they can provide you with some CP/M stuff that takes two hours to install and still won't work afterwards.

In fact, a knowledgeable-sounding chap called David Cantrell has recently contacted us with details of a new Forth compiler running under AmsDOS (for 128K disc machines only), which he's positioning as a serious system for developing stand-alone machine code programs – without the hassle of assembly language. Although it's not like any other you've seen (for example, to add two and two, you'd write 2 2 +). Forth can be an incredibly flexible language.

For around £10 this should be worth looking out for. We'll be carrying more details in a future *AA*, or you can contact David direct (remember to enclose an SAE!) at 116 London Road, Bexhill-on-Sea, East Sussex TN39 4AA. David is also the man to contact regarding CPC-Emu, one of the increasingly numerous CPC emulators for PCs.

New formula surf

Rule 1 of the Internet: never trust anyone who mentions the phrase 'Information Superhighway', 'Surfin' the 'Net', or any such abomination...

Anyway, courtesy of the FAQ (Frequently Asked Questions list) of the newsgroup comp.sys.amstrad.8bit, here's a quick guide to what you can find on the 'net which is of use to CPC users.

First up, there's the aforementioned newsgroup, which (despite being populated by some illustrious characters in the CPC's history) has a friendly and helpful atmosphere. There are also 'World Wide Web' sites with interesting information (including the *AA* home page) *see What's* happening *AA*115, page 3 or find us at: http://www.futurenet.co.uk/computing/amstradaction.html

The other resources of most interest are ftp sites – Internet jargon for collections of programs that can be downloaded freely. You need a special ftp program and the usual protocol is to log on with the username 'anonymous', and the password set to your standard e-mail address. The best one is ftp.ibp.fr – look in the directory/pub/amstrad. ftp.demon.co.uk contains a number of CP/M programs in the directory /pub/cpm. If you are using a PC, you can download the CPC emulator from ftp.ibp.fr, among other sites. There's also an ftp site in Norway with tons of CPC stuff, but as it's full of pirated software, it's not our place to recommend it.

In a WORD

You've read the article*, and followed the logic, now you can win one of the word processors...

Versatility and ease of use are the most sought after attributes of a word processor. Angela found that both *Tasword* and *Protext* shape up...

- Both word processors have orderly screens for which you can choose the colours.

You can also,

- jump from one end of a document to another;
- and from one page to another.

In addition you can,

- cut and paste using block markers;
- set margins... All using in-built control codes.

In addition you can set the printing options and choose from:

- continuous printing;
- near letter quality;
- page numbers;
- headers;
- footers;
- page length;
- margins...



Tasword

Tasword is easy to use. It has a status bar which mirrors how you handle the text. If your text is in caps, for example, so is the status bar. The menu option is well thought out and simple to use.

Angela Cook concluded:

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

If you win *Tasword 6128* you will also receive its spell checker – *Tas-Spell*. Both are suitable for use on the CPC 6128. *Tasword* retails for £29.95 and *Tas-Spell* for £24.95.

For more information on *Tasword* and *Tas-Spell* contact Tasman Software, Springfield House, Hyde Terrace, Leeds LS2 9LN ☎ 0113 2438301.

Protext

The *Protext* screen is available for green or colour monitors or, as with *Tasword*, you can define the colours yourself.

Protext boasts several modes including a command mode through which you can access the HELP function. The others include:

- document, in which you compose your letters to

How to win!

Simply tell us:

HOW MANY BINARY DIGITS THERE ARE IN AN 8 BIT MACHINE.

Put your answer on a back-of-an-envelope or on a postcard; state which of the prizes you wish to win and send it to, In a word, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or you can e-mail us at aa@futurenet.co.uk.

The closing date is Wednesday, 24 May, 1995.

Reaction and;

- program which you can use to type your own program before using it in BASIC.

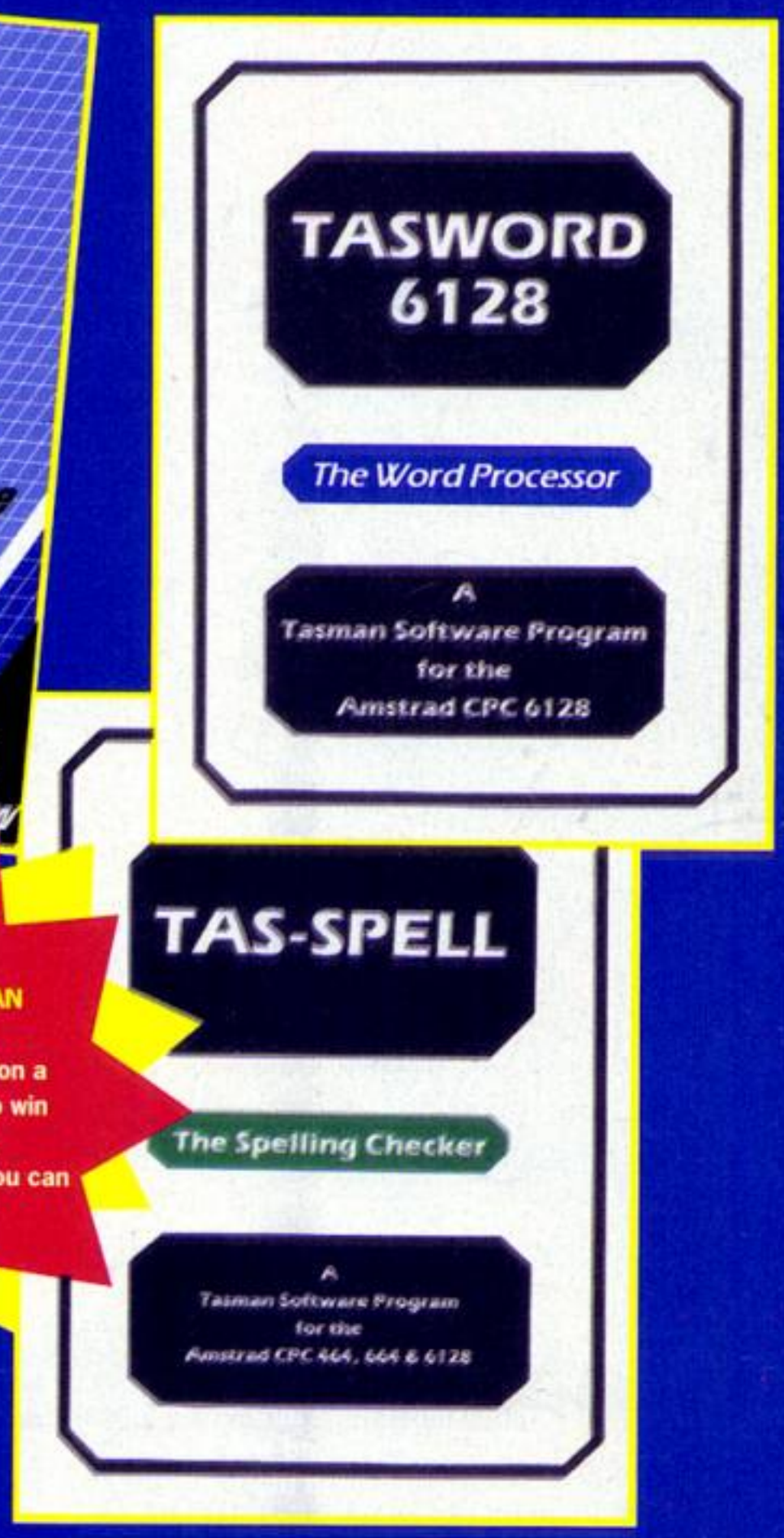
The CP/M version of *Protext* comes with a spell checker and mail merge. We have disc versions of each of *Protext* and *Protext* CP/M versions to give away this month!

Angela found that:

"...the Protext manual is thoughtfully written, easy to understand and has both an index and helpful glossary."

Protext costs around £30 and the CP/M version costs around £35. For more information contact Arnor Ltd, Lincoln Road, Peterborough PE1 3HA ☎ 01733 68909/fax 01733 67299.

There is also a *Protext* ROM chip, the *ProPrint*, (*Protext* enhancer) which costs £24.99. (The disc version costs £14.99.) More information from CampurSoft, 10 Mcintosh Court, Wellpark, Glasgow G31 2HW ☎ 0141 554 4735/fax 0141 227 4486.



* In 'War of the Words', *AA115*, Angela Cook compared the major players in the CPC WP scene.

BACK ISSUES

4 ISSUES FOR THE PRICE OF 3

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



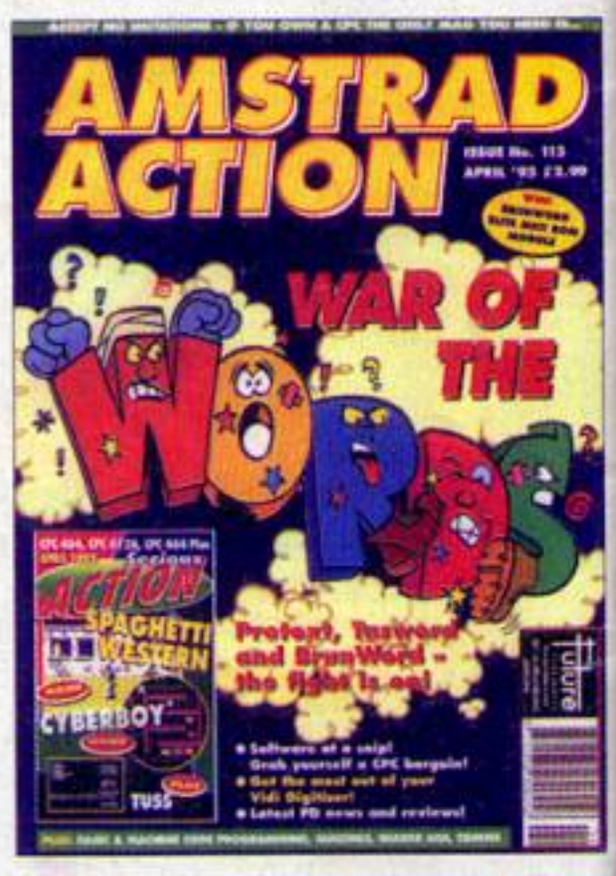
Check out these crazy prices...

1 back issue £2.50
2 back issues £4.50
3 back issues £6.50
4 back issues £7.50

All extra issues.....add £1.50 for each







AA82: SOLD OUT
AA83: SOLD OUT
AA84: SOLD OUT
AA85: SOLD OUT
AA86: SOLD OUT
AA87: SOLD OUT
AA88: SOLD OUT
AA89: SOLD OUT
AA90: SOLD OUT
AA91: SOLD OUT
AA92: SOLD OUT
AA93: SOLD OUT
AA94: SOLD OUT
AA95: SOLD OUT
AA96: SOLD OUT
AA97: SOLD OUT
AA98: SOLD OUT
AA99: SOLD OUT
AA100: SOLD OUT

AA101: Covertape: *Exolon, Home Accounts*. Inside: The complete guide to animation on the CPC, interview with Radical Software, *Elite* Masterclass.
AA102: Covertape: *Cybernoid 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.
AA103: Covertape: *Nebulus, Speech*. Inside: copying devices, *Fluff* preview, Elmsoft 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.
AA105: Covertape: *Deliverance, Bomber, Basic Utilities*. Inside: A complete guide to getting your CPC to communicate with other computers, *Megablasters* preview.
AA106: Covertape: *Zynaps, Spriting Back*. Inside: The easy way to animate your graphics, the complete beginners' guide to printers. Reviews: *Making Music*.
AA107: Covertape: *Ikari Warriors*, Picasso (art package). Inside: The weirdest and most pointless software and hardware ever released for the CPC. Review: *Masters of Space*.
AA108: SOLD OUT
AA109: SOLD OUT
AA110: SOLD OUT
AA111: Covertape: *D.E.S, DOS Copy, Breakdown*. Inside: The ultimate [no less!] guide to CPC hardware and software.
AA112: Covertape: *Titus the Fox, Megablaster* Demo, *Desktop Organise* (disc only). Inside: Public Domain – what it is and where you can get it. Plus: the top 50 PD titles of all time!
AA113: Covertape: *Samurai Trilogy, Power Spell*. Inside: Software: commercial versus PD. Is one better than the other? Plus: link your keyboard with your joystick.
AA114: Covertape: *Masters of Space, Ball Bearing, Columbia*. Inside: Feature: Reach for the future – hard/software to take your CPC into the next century! Plus: *BrunWord Elite ROM Mark III* review, All Format Fairs.
AA115: Covertape: *Spaghetti Western, Cyberboy, TUSS*. Feature: War of the words – *Protext V Tasword V BrunWord*.

Amstrad Action Back Issues

Name _____

Address _____

_____

Post code _____ Phone No _____

Method of payment (*please tick*)

Access ❑ Visa ❑ Cheque ❑ PO ❑

Credit Card No _____ Expiry date _____

Postage and packing rates (per order)

● UK £1 ● Europe £2 ● Rest of the world £4

I would like the following back issues...

_____

Cost of back issues _____ £□□.□□

Please add cost of postage and packaging _____ £□□.□□

Total cost _____ £□□.□□

Please make all cheques payable in pounds sterling to Future Publishing Limited, and send the whole lot off to:

Amstrad Action Back Issues, Future Publishing, FREEPOST, Somerton, Somerset TA11 6BR. No stamp needed within the UK.