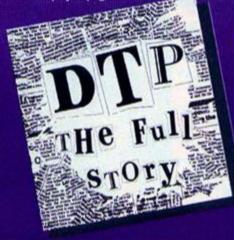


JUNE '95 ISSUE 117

### 11 DTP - the full story

Appearances are important. How a page looks may determine whether you read it. DTP can make all the difference but which package best suits your needs? Richard Fairhurst keeps you paged.



### 17 Parados on parade

Richard Wildey calls the Parados ROM to stand up straight and be counted and sounds the Last Post for the rank and file CPC operating systems.



A stranger in Parados? Win one and explore for yourself!

Make it big in the world of DTP with Micro-Design





How can you get into publishing? It's easy! You need your CPC, a printer, a target audience, and something to say. Got all that? Then all you need is a DTP package. Enter our competition and you might even get that for free!

### On your covertape...

### NORTH AND SOUTH

This American Civil War simulation/arcade game is 'rather wonderful' according to our tape editor. In fact it's so exciting Richard Fairhurst lost sleep and blood battling to get it for you. Oh, and AA awarded it a Mastergame in 1991.

### IMAGEPRINT

Perk up your printouts with this print enhancer utility. Transform your text with a smart sans serif typeface. Customise your current design or create new fonts with the font editor.

AMSCENE
DIRECTORY
The CPC 'Yellow Pages' only much more environmentally-friendly, of course.



Turn to page 5 now!



### What's happening

What have Simon Forrester's granny and Bonzo's Scrapyard got to do with the CPC? Is it as tenuous as it seems? And. have you won a copy of BrunWord?

### Reaction

Be famous or provocative for 30 days.

### Serious action!

North and South - this means war! And battle with dull layouts with Imageprint.

### Classifieds

Small, but not insignificant, reader ads.

### 20 Competition!

No need to pay to display! Win one of three copies of MicroDesign Extral

### 24 Back issues

Your backup in your hours of need.

### Serious stuff

### 10 Basically basic

Twist codes round your little finger.

### 16 Assembly line

It's chipper. Improve that old block game.

### 19 Hardware

Develop your software, hunt POKES. There's so much you can do with Hackit.

### 21 Techy forum

Richard Fairhurst 'mono'tors your colour printing problems; presents a project to build an A38; and goes shopping.

### Leisure zone

### **Public image**

Donner und Blitzen! It's the return of Rundschlag! Also Brains & Brawn, side B.

### **Cheat mode**

From Biff to Wild West Seymour via Chuckie Egg. Keep a plastic bag handy!

### 15 Further reading

ate it or love it, your CPC that is, 88i7 is the fanzine to reckon with. Also, the start of a series of DTP tips.

AA118 on sale: Thursday, 22 June, 1995



ABC 15,168

Jul '93 - Jan '94

### What's happening...

### **8BIT smart**

Brian Watson, founder and editor of 88/T fanzine (Further reading, AA116, page 9) has announced changes for the multi-format fanzine that's fast finding its feet in the market. It's also been reviewed in this month's Further reading see page 11.

Due to the increased cost of paper and printing, the cover price will rise from £1 to £1.25. This will be offset by a rise in production quality: a new paper stock making for a heavier, more durable magazine.

Commendably, this quality increase was previously subsidised by the profit made though the launch issues.

Subscribers will continue to get their issues for the original £1 price tag. Subscribers can also put a small ad in the magazine connecting them with the world of 8-bit users.

However, AA readers can continue to buy 8BIT for £1 per issue. Simply mention you saw this item in AA when you order...

A back issue service is now available for those who have missed the first four issues. They cost £1.25 each (they're reprints, misers). But issue 1 is available free when you order it with another.

As well as the regulars for which the fanzine has become known, issue 5 also contains a hot news scoop (what? – Ed) that we shan't spoil by stealing (Oh, go on – Ed). Oh, ethics be blowed – we've got room (Yay! – Ed). They've just found out that...

Note: don't send cash by post – use cheques or postal orders only. Brian Watson, 88IT, Harrowden, 39 High Street, Sutton in the liste, Ely, Cambs C86 2RA.

In AAP15 we asked: Who wrote the poem beginning "Twas brillig and the airthy toves..."? This was Jabberwocky, of course. The answer was Charles Dodgson, better known by his pen name, Lowis Carroll, Dave Hail of Stretford wins a copy of the excellent BrunWord WP.

Hundreds of you returned your AA Reader Survey questionnaires.
We are processing the results right now... Henry Bennett from Kimpton, Sharon Porter from Stoke on Trent, and Ray Powell from Sporle, win 10 games each. Thanks to everyone who replied.

### CompuServe-ice

Those of you who screamed when you received your first Internet access bill will be pleased to hear of CompuServe's new pricing scheme. You get three free hours of unrestricted Internet access per month included in the cost of membership (£6.50/month). You could save as much as 87% on your CompuServe bill. You also get free access to 120 basic services, such as news, weather and sport

If you aren't already on-line turn to the back page, immediately, to order a back issue of AA105. This is the essential guide to getting your CPC in touch with the whole wired world. CompuServe = 0800 289378 (voice mail), or www.compuserve.com (web page), or e-mail networkinfo@cis.compuserve.com.

### **Get hammered**

As my granny used to say to me, you can never have too many PD libraries. Were she not 80, she'd jump for joy to hear that a new Liverpool-based library, namely Hammer PD has opened its letter box to the public.

The library also deals in Spectrum software, so owners of That Other Amstrad Machine can buy software. For a catalogue send £1 plus a tape to Hammer PD mentioning that you own an Amstrad (so that the catalogue is in the correct format). Hammer PD, 43 Gwydir Street, Toxteth, Liverpool L8 3TJ.

### Tres Bon-zo

CPC veterans will remember the series of powerful Bonzo backup utilities produced by Nemesis in the eighties, which saved the lives of discowning tape users everywhere. There was also a monthly Bonzo newsletter and now Bonzo's Scrapyard is returning to your mats, on an 'occasional' basis, under the editorship of one Dave Caleno.

For a copy, send them an A4 SAE plus an extra first class stamp.

Bonzo's Scrapyard, 29 Chapter Road, Strood, Rochester, Kent ME2 3PX = 01634 724262 (8.30pm - 10.30pm).



Leon Brown, 'one of the owners' of Hammer PD, sent us this poster. If the project 'hits home' why not support it? See 'Get hammered'.

### Be a supporter

this issue of Amstrad
Action bear in mind that it's a
magazine of over ten years
standing. The writers on board
have been with the machine from
the start and a lot of you, the AA
readers, are veterans, too.

When a computer like the CPC reaches this point in its life, the commercial market doesn't really want to know. We've seen the gap in the market left by the big companies as they pull out, and we've reached the era of the smaller, independent software house, run by CPC fans.

What's our point? Well, the software you see advertised in the magazine is undoubtedly of a higher quality - the games are written by programmers who spent years learning to push the machine to the limits, and the serious software is written by people who know where the CPC's strengths lie, and, how to tackle the problems of lack of speed and power. Similarly, the fanzine editors and PD librarians know the machine and its supporters so well that they can ensure the highest quality of content for their libraries and fanzines.

Not everyone has to be that supportive of the machine, though. Someone has to be a customer and buy the software the dedicated programmers produce. If you don't, the people still out there will give up as well.

So, as you thumb through this month's AA, think about buying some of the great things reviewed within it – and be one of the people who supports the CPC, not one of those who asks where all the support has gone.

The AA team

### The scene of the prime...

...and up-to-date CPC contacts is now on your Covertape. Please help keep it current and informative by sending us changes and/or details for inclusion to Amscene Directory, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail them to us, putting 'Amscene Directory' in the subject line, to aa@futurenet.co.uk.

### **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 Kev (the crayon) Hibbert

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 falled 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

Simon Forrester picks the letters and holds the authors up to ridicule. To retaliate or suffer the same fate write to Reaction, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at ag@futurenet.co.uk.

### PD warrior

I've come to the conclusion that you're making quite a mistake regarding PD software – you've always bottled PD up in a certain section of the magazine. I guess this was all very well in 1990 when you had no shortage of commercial software, but it seems foolish now considering how often decent full-price software (games especially) are released.

You have always almost attacked PD with the usual 'if it's cheap, it's crap' psychology by always reviewing PD in a small section of the magazine rather than as commercial software that happens to be free. As well as labelling PD software, before it is even seen as not as good as commercial, this also discourages people from entering their program into the public domain as they know nobody will hear of them and if they do, they won't think of the programmer as being any good.

You also seem to hand over PD reviews to somebody else as if they aren't good enough for the full-time AA staff who review full-price software. Is that what you think or do you prefer people to think you think that?

Perhaps the reason you treat PD the way you do is because you never actually see any, just leaving it for a freelancer to go through like it's not worth bothering about. Okay, there is rubbish roaming around PD libraries too, but, please don't try to tell me that all full-price games are brilliant, because they're not. All I am asking for is equal treatment for software that the programmers have generously not put a price tag on.

Thanks for the great mag otherwise. Malcolm Dowse, Dublin

Yep - that's about the shape of it

Seriously though, Malcolm, I think you've got us wrong. The reason full-priced software gets more space than PD software is because it costs more—if you were paying £10 for something, you'd want to read a far more in-depth review than if you were getting something for free. If you buy rubbish PD you've wasted £1, not £10.

The fact that we hand it over to a freelancer doesn't mean we can't be bothered to look at it, just that we prefer to have a PD expert reviewing it. We do the same with Techy forum, Cheat mode, and most other sections of the mag because we feel the Amstrad Action specialist freelancers are the best people for the job.

Full-price games aren't always better – PD software makes a massive contribution to the CPC's software base, more so than the majority of commercial software nowadays. We wouldn't want to give AA over to PD reviews, though, as we feel there's a lot more to cover in these pages as well.

### Orthodox geeks

My name is John and my pseudo is JFMC. I'm a member of the Greek demo group Chaos.



No S.E.X. please, we're Greek.

I'd like to comment on the review of S.E.X. in AA113 (Public image, page 6). Please don't criticise the Greek CPC scene or think it's inactive because of stupid or childish people. The Chaos group is serious about the CPC and we're trying to organise the CPC scene despite the immature contingent.

John Fellides, Athens

Ooh – harsh words there from Athens. Though we stand by what Keith Woods said in his S.E.X. review, we don't have anything against the Greek CPC scene. In fact, if everyone in Greece could write in, we might find an excuse to come over to Greece and interview you. Yep, we love the Greek scene.

A lot of people have told us how hard it is to keep in touch with other users and companies featured in AA, if you're overseas, so it's time we did something about it. If any organisations in Europe want to send their details in to us, we'll run a feature and give you the indispensable CPC guide to Europe.

### Oz-tracised?

I'm an Australian Amstrad user who's disappointed to hear that Amstrad have just pulled out of Australia, an unfortunate turn for us CPC fans.

Is there any way I can run CPC software on my PC?

Secondly, are there any user groups or contacts in Australia?

Martin O'Connor, Victoria, Australia

To be honest, you shouldn't worry about what Amstrad do. They stopped supporting the CPC a long time ago, and it didn't affect the users, the scene, or this magazine. We'll include Australia in our roundup (see 'Orthodox geeks') if anyone wants to get in touch, and you'll find out just how much is still going on in your country.

### **Get connected**

Following the advice in your recent comms feature, I went out and bought a modem and RS232 interface second-hand.

I've spent a long time on bulletin boards and the Net, but can't access the Futurenet World Wide Web pages to read all about Amstrad Action. Why isn't there an AA bulletin board for people with modems to ring? Lee Archer, Bristol

Good question – why haven't we got an AA bulletin board? That all depends how many people have moderns, doesn't it? If you'd like to use an AA BBS, write in and let us know – if we get enough requests, we'll look into it.

### **Covertape queries**

1 I have the superb driving game Continental Circus, but have encountered one small problem. No matter how many times I reach Japan, I can't seem to complete it. Can you help me by giving me a keypress cheat for it? 2 Whatever happened to the Fantasy World Dizzy solution?

3 Both the Amstrad Action covertapes 47 and 49 were not a little disappointing. Thanks for Titus the Fox, though!

4 Please can you put Purple Saturn Day on the covertape? I'd ask for Bloodwych but I understand you're having trouble getting it.

Keep up the good work - AA is great. Roger Gomes, London.

1 No

2 From what I remember, we took one look at the first set of Dizzy solutions, realised that they were deathly dull for all but the most ardent Dizzy fan, and

decided not to run the next one. I hate Dizzy, anyway. 3 We always try to get the best games on the tapes, but they're never to absolutely everyone's liking. If you've got any suggestions, let us know and we'll see what we can do.



Dixxy - not everyone is a fan.

4 Purple Saturn Day is, unfortunately, disc-only, making it fairly impractical for use on the covertage. As for Bloodwych, the search continues. It's a great game, and if we can get it for a tape we will.

### lf it's worth saying...

t's worth saying well. [I don't think we'll be done for abuse of copyright on that one...] All in all, we've had a good round of letters this month, so if you have any comments, queries, gripes or announcements, this is your page and your opportunity to voice them.

If you want your letter to get printed there are some points worth remembering:

• talk about something original, or

- something topical.
- We are particularly interested in:
- your exploits on the Net (achieved using your CPC, of course);
- any new things you've got your CPC to do, or
- in any general CPC gossip.

Any letters about the Stormlord, the size of the mag, the lack of games coverage or the decline of the CPC in the shops will be ritually burnt.

June 1995 AMSTRAD ACTION

Richard Fairhurst takes a trip into American history with this month's covertape but still finds time to smarten up his image.

Amscene directory



Avoid drafts, use Imageprint to Improve the quality of your print-outs.

### magePrint

Robot PD

If you have a 9-pin dot-matrix printer, you know how shoddy the output can sometimes be. Draft quality is fine for listings but little else. And near-letter quality... well, although you might use it for a letter to Great Aunt Agatha, it's not the best way of convincing your bank manager that you really could it with its own, custom-designed font (by Geoff Shortl, it makes your printed output presentable, for once.

The standard Epson codes for bold, italics, and underlining are understood, as re those for pica, elite, and proportional spacing (although, as usual, bear in mind that your word processor's justification facility won't co-operate with proportional spacing). If you're bored with the standard font, ImagePrint even has a utility to design your own. Note that each character needs to be defined twice - once for the normal font, and once in italics.

Once ImagePrint has loaded, type IP.ON to enable it, and IIP.OFF to return to normal printing. It's compatible with all word processors (such as Protext which use the CPC's standard print routine.

### North and South

Infogrames

In AA66, we awarded North and South Mastergame status, with a rating of 91%. AA reader Nicholas Campbell of Newtonards, Northern Ireland, says it's his favourite game...

It's 1861 in America (they always were a bit behind the times) and the right on Abraham Lincoln has decreed the abolition of slavery. The folks in the Deep South (home to double-chocolate Mississippi Mud Pie, Dallas and R.E.M.) aren't too chuffed and have formed the Confederacy. Needless to say, Lincoln's men don't really want to see half of the States break away.

Thus was born the American Civil War.

Once you've chosen your game controls, the options screen appear. You can then click (move the pointer and press Fire!) on:

- the characters to select the difficulty level,
- the flag behind them to select which side you want to play and also on;
- . the three small pictures at the top to turn

# NORTH & SOUTH •

North and South - the options screen. Get your new identity here. And have a yankee doodle of a day.

'disasters' (Indians, storm clouds, and European reinforcements) on or off

If you don't want to play the arcade sequences, click on the small pictures below them. Finally, click on 'Go' to start the game proper.

To move your armies from state to state, simply click on their current location, followed by the one you wish to move them to. Moving them on to another of your armies merges them into one, more powerful force, while moving them on to your opponent's armies causes a battle. (Use the key you've defined for 'select' to switch between infantry, cavalry and cannons.)

Should you require more troops you need five bags of gold. Get these by possessing two towns, and a railroad link between them. You can conquer towns from the enemy in an arcade sequence. where your objective is to reach the flag at the far end of the fort before your time runs out.

Finally, if you have conquered South Carolina and the appropriate option is switched on, your army occasionally receives a ship of European reinforcements, which can't be bad.



Exchanging 'Civilities' in North and South, which we awarded Mastergame status.

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.

Loading troubles?

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

However, if the covertape loads okay but you are still having problems, don't shout at Ablex. instead write to Covertape Clinic, Techy Forum, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk putting 'covertape' in the subject line.

# Public MAGE

Keith Woods was shattered playing Crack-It but recovered to write a round-up of the CPC PD magazine, Rundschlag.

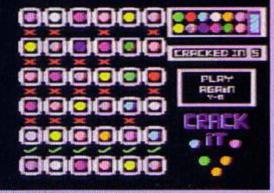
GAMES

Brains & Brawn - Side B

By Kevin Heywood

fair bit of luck to crack the code. The inclusion of different skill levels, which would allow you to set the number of chances you get, would have made this rather average clone a much better one.

50%



Crack-It: you are allowed five attempts and no passes.

### 1 Crack-It

Crack-it is basically a clone of the old game
Mastermind, that is, the one without the funny
Icelandic bloke questioning train spotters. Instead,
the computer chooses, in order, six coloured
spheres from a choice of 12 and you have to guess
what colours have been put where.



Boat Crack-it: win a 'Magnus' of champers.

After each guess, the computer tells you which spheres you got completely right, which you chose correctly but put in the wrong place and which aren't included. The aim is to guess the place and colour of all six spheres in just five attempts.

Unfortunately, a mere five attempts makes this version of Mastermind just a little too difficult for my liking. As well as applying logic,

you need a

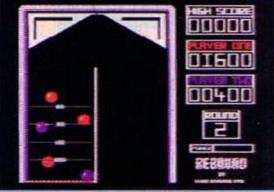
### 2 Rebound

Rebound is a two-player game of what appears to be some form of futuristic bowls. It's not quite as your Grandpa might play it, but it's about as exciting.

No, I tell a lie, it's worse. At least in real bowls you get a ruddy great field to hurl your projectiles down, to try and get them as close as possible to a very small white ball. In this version, you have the far less considerable length of the CPC screen to play with and stopping anywhere short of the run-off area scores you points.

This just makes the thing too easy. Even worse, you aim by stopping your slow-

moving ball as it moves from left to right at the bottom of the screen. The greatest fun in bowls is the sadistic pleasure gained in knocking your opponent's carefully placed ball into oblivion.



Rebound: If you play second, you come in first.

Imagine a game in which you never miss – that's Rebound. The winner of the game is nearly always the player that goes second, as his or her last ball is always the one which is left, because all the game consists of is taking turns to knock each other's balls off the screen.

And you don't even get to wear one of those kinky little white hats... 20%

### 3 Annihilation

Ah, now this is more like it. Kevin seems to have a talent for producing simple yet fun shoot-em-ups,



Annihilation: a simple but fun shoot'em-up...



... In which it's you against an array of aliens.

and this game Annihilation is no exception.

Unlike Killabeez (AA116, page 6), Annihilation is a sideways scrolling shoot'em-up. You have to fend off countiess waves of alien invaders that appear from the left of the screen with the aid of just one, small and fairly pathetic, gun.

As well as saving humanity from these fiendish creatures, your action also saves yourself in the shorter term. It's vital that you pick up the fuel and energy that the aliens drop when shot if you're going to make it through 'till tea-time.

Annihilation is really nothing amazing, but it is both colourful and fast enough to make sure you are kept well occupied on a dull and dreary day.

Annihilation is another of those games that keeps

me happy by proving again the great gaming truism – that simple, unadulterated gameplay is far more important than any special effects.

### 4 Asteroids

Asteroids is another simple PD version of the classic game of the same name from yesteryear.

For those of you that don't already know (is there really anyone left who doesn't?), in Asteroids you control a spacecraft plonked in the middle of the screen with only rocks for company. Unfortunately the rocks don't

appreciate your society, so they fly around the screen trying to ram you out of existence. Your only option is to blast them to smithereens before they succeed in doing just that.

To be honest, Kevin Heywood's Asteroids isn't the best version of the game

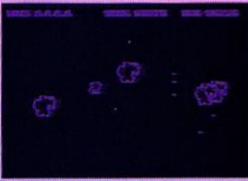


Rocks to send you realing.

I've seen, but it's not the worst either. Its big fault is that the bullets travel too slowly. This makes calculating your aim difficult and the game seem slower and duller than it actually is.

Otherwise, it's a passable

version of a passable game.



Asteroids: the rocky road to being obliterated.

enough you'll remember that a long time hence Amstrad Action gave SuperMonitor a whopping 90% rating, which leaves little room for improvement,

Has Antoine managed it?

Yes! And no! A few features have been added to Turbo SuperMonitor, but at a price. Probably the most interesting and useful aspect is that Turbo

> SuperMonitor itself is stored in part of the video RAM. This means that ordinary RAM space is left totally free, which is a boon if you're disassembling a really long file.

The downside of this, of course, is that you're left with a postage stamp display, which is just a little annoying when you've got large volumes of information to display. Granted, TSM's scrolling routines are fast, but I can't get used to peering a postage stamp.

The rest of Turbo SuperMonitor moves at a decent speed as well - it's clearly very well programmed. However, apart from a few cosmetic changes, it shows little improvement on Crown's effort.

One thing that may be useful, however, is that unlike SuperMonitor it contains full English instructions, and even the odd help message.

Turbo SuperMonitor may contain a few improvements, but it makes too big a compromise to make you want to change from using SuperMonitor.

It would still be well worth having, however, for those odd occasions when a program like this might make life just a little bit easier.



### Get in tou

It's a long time since we've said this, so it's high time we repeated it again... If you've written any PD programs you'd like reviewed, if you've set up a PD library you think could do with a mention, or if you have any comments or queries to make about PD, then write in. Mark your envelopes 'Public image', Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk putting 'Public image' in the subject line.

### UTILITIES

### Turbo Super Monitor Razormaid Mix 1994

By Antoine Pitrou

Rivalry between programmers is nothing new. It's also the best thing we ordinary punters can ever hope for. When two programmers seek to outdo each other you know the result's going to be good.

This Monitor has been written by Antoine Pitrou, as he says himself:

"Especially for assembler programmers and demomakers, for whom SuperMonitor 1.4+ (by Crown] wasn't adapted to their needs."

Essentially, Antoine aimed to improve on the best features of SuperMonitor, and add some extraones. However, if you cast your minds back far

## noter samman for 1509 of 1984 -四 糖

Turbo SuperMonitor: new things at a price.

### Next month:

slightly different (though still covering the essential selection of the best PD software the planet has to offer), because:

- · it'll be hosted from Uranus.
- · we'll be sending a particularly good-looking female or rather handsome male (depending on your stated preference) to whisper the ratings into your ear.
- · Simon Forrester will be writing it. Employees of Future Publishing, authors of PD software and Simon Forrester are not eligible to enter. Simon's decision is final.

### Rundschlag

Rundschlag, described as "An International Magazine supporting the CPC PD" is a long running German magazine, and issue 16 recently arrived for review in the AA office...

Rundschlag is a magazine that has been doing Trojan work to support the CFC for many years.

In fact, in many ways Rundschlag is much more than just a magazine. It's more like the newsletter of an association of ardent CPC enthusiasts, because, although it lacks a formal club structure, all the readers are encouraged to help out with every aspect of the magazine's production. Indeed without the support of the readers, the magazine could not exist. n this respect, it is similar to the excellent WACCI in Britain.

You could be forgiven for thinking that in these, perhaps slightly leaner, times for the CPC, the quality of magazines like

Rundschlag would founder. In fact, anyone who remembers the rather haphazardly produced

Rundschlag of a number of years ago is surely shuddering at the thought of what it must look like today. The pleasantly surprising truth, however, is that, rather than declining, the production quality of Rundschlag has improved dramatically.

While the commercial world may have almost completely abandoned the CPC, ordinary users have responded by rallying around Rundschlag to put it among the best designed, printed and bound amateur CPC magazines. In the meantime, however, the quality of the content has remained steady.

Given its underground roots Rundschlag was always very much a PD magazine and, now that there are so few commercial releases, it is almost entirely so. As well as covering all the latest PD releases Rundschlag offers: • 50 pages of

technical articles (by the best PD programmers);

• letters:

help pages and also;

· coverage of the computer world in general (in recognition of the fact that many CPC owners have more than one type of computer).

The biggest problem with Rundschlag is the same one that has bedevilled it since its inception the lack of support from English-speaking countries, especially the largest, Britain. Rundschlag has sought to be a pan-European magazine, yet has always had trouble getting enough English articles and as most of it was in German no-one in Britain wanted to buy the magazine.

To overcome this Rundschlag has been translating most of its articles into English. In issue 16 it claims to have translated 90% of all articles, although some of these translations are summaries so the English content is still small. It's a big. improvement, however.

The most exciting thing about the new Rundschlag is its imaginative coverdisc scheme when you subscribe you get a coverdisc full of the latest PD. You are trusted to send back the disc. when you've finished it - with any new PD you may have on it. This is not only a great service, it also helps the spread of PD software throughout Europe.

Rundschlag is one of the best things the CPC has got going for it in Europe at the moment. Each. issue is brimming over with very useful information on everything from turning a GX4000 and an old CPC into a fully functioning Plus, to pages of games cheats. It's just a shame that it's something that British CPC users continue to miss out on, as their contribution would be greatly appreciated.

### 8

## The state

Simon Forrester raids Phil-the-ex-para-turned-postie's bag to sort out more tips for the games you love to play.

### **Chuckie Egg**

No – I don't care. Chuckie Egg is (and always will be) a truly classic game, and we're going to give it yet more coverage this month with a cheat for infinite lives that's been around since the dawn of time (well, the hatching of Chuckie Egg, anyway). Strangely enough, real chuckie egg is foul, unpalatable muck.

10 - MEMORY - 47FFF 20 - LOAD - "chuckie.bin", &8000 30 - POXE - &867B, 0 40 - CALL - 83097

Ah - that feels so much better.

### Lemmings

Since the classic Psygnosis puzzler first appeared on the CPC, AA has been flooded with requests for help. Indeed, AA pulled it apart in October 1992. From the amount of letters we get about the game, it doesn't look as if anyone has the original, so...

- To sort out a bug with the disc version of the game use a Multiface to poke &98C8 with &3C. If you do this the game can cope with level codes.
- Holding down the keys SHIFT, Z. E and X on the screen that displays the current level moves you on to the next one. Don't go past level 60 though, as all kinds of horrible things happen.
- It's possible to turn blockers back to walkers if you get a lemming to dig under the ground he's standing on. This helps if you don't want to have to blow the sweeties up at the end of each level, reducing the amount you save.
- If you run out of blockers, dig a pit to trap the lemmings in. Build ramps to get them out of it.

### Pokerama!

Over the past two months. Lee Rouane has taken you through every step of finding your own cheats for the games you like to play. Of course, you need a Multiface, but if you've been following his (excellent) advice, you should have a whole stack of your own, origina Multiface codes by now.

What to do? Said them is to Cheat mode. Amstrad Action, 30 Monthouth Street, Bath.

What to do? Seed them in to Cheat mode, Amstrad Action, 30 Monmouth Street, Sath, Avon BAI 25W or e-mail them to assistance.co.uk putting 'Cheat mode' in the tablect line.

### Can you hack it?

Lack out for the second part of Lee Rouane's guide to hacking next month. Well, everyone is entitled to a boliday.

- Lemmings die one by one, remember. So if you can't avoid a trap, compact a bunch of lemmings and send them in. While some are dying, the others cross to safety.
- Lemmings can't fall too far. If you are building ramps, build another one parallel to the first, so that if any of the furry fiends overtakes the ramp-builder, it drops on to the ramp below and walks back to safety. Achieve this by building your first ramp at the edge of a platform and the second a little way in.

Thanks to Jamie Turpin, Gordon Masson and Mike Wong for that lot.

### Biff

Ever since Dave Golder and I put it on the covertape, we've had requests for help with Alternative's platform adventure. This can be a problem for him, as Dave now works for a different magazine altogether, (the soon-to-be-launched science fiction title), SFX, so we'll make his life enjoyable again by printing a complete solution.

- 1 Go left and pick up the power card.
- 2 Head back to the right, pick up the wire-cutters and climb the tree close by.
- 3 At the top of the tree, use both the objects.
- 4 Go to the left (along the top) and get the rope from the room.
- 5 Go back down the tree and use the rope to make a bridge across the unjumpable gap.
- 6 Go over the bridge, and take the old clothes you find there.
- 7 Continue to the left and make a scarecrow in the field.
- 8 Carry on to get the chocolate seeds (chocolate seeds? Ed).
- 9 Go back to the field (right) and plant the seeds, producing chocolate.
- 10 You can now go back to the top of the tree and give the seeds to your mum.
- 11 Go down the tree, head to the left and take the axe.
- 12 Back to the field, to chop down the chocolate tree.
- 13 Go left and build another bridge with the tree.
- 14 Cross the bridge and get the oil, the key and the explosives.

  15 Go to the far left and use the oil and key on the
- lock.

  16 Go down into the mine and use the explosives on
- the wall.

  17 Leave the mine, go back to the right and get the
- 18 Head back to the left to get the torch, and go back to the mine.
- 19 Go through the mine using the torch, and get the jewel.

20 Leave the mine, go to the left and find the broken ring. You can now use that same jewel to



repair this ring.

- 21 Go left, return to the tree and give the ring to mum.
- 22 Go to the right and get the empty glass.
- 23 Go back down the tree, head to the right, fill the glass at the well then go to the right and get the record.

24 Go left, head back to the tree, then give the glass of water and the record to mum.

- 25 Go down the tree, then left, in search of the matches and banger.
- 26 Light the banger.
- 27 Go to the right and get the coin.
- 28 Go to the ice cream van and buy an ice cream.
- 29 Go left with the ice cream and lit banger, then pick up the flower seeds.
- 30 Back at the tree, you can give the ice cream to mum.
- 31 To the right of the base of the tree you find a flower pot.
- 32 Go to the left and get the bug spray, then continue to the field.
- 33 Use the flower seeds, flower pot and bug spray to grow a rose.
- 34 Go back to mum and give her the rose.

### Wild West Seymour

As if this game wasn't already stupidly overeasy, here are some handy level codes to keep the genie off your back...

Act 2 - 210135008

Act 3 - 100700068

Act 4 - 238A3500

### **Bubble Bobble**

Anyone who hasn't survived to see the final evels (over 79) on the classic Firebird bubble'em-up might be grateful for the password you need to load the thing. Be careful when you type it in, though...

ZZZ133VZZZZZZ4ZZZ1Z4V44ZZ1YZ4V3

### Cecco games

One way to get a few advantages in those tricky Cecco classics is to redefine your keys at the start: Exolon – Z. O. R. B and A

EX01011 - 2, U, K, B and A

Cybernoid - Y, X, E and S

Cybernoid 2 - O, R, G and Y

Stormford – This one is easy and plainly visible to anyone who goes through memory searching for text with a Multiface (you do, don't you?).

On the title screen, type BRINGONTHEGRILS quickly and without spaces, and the number 12 should appear in the top right corner of the screen. Pressing a number from 1 to 4 now takes you to that level with infinite lives.



As busy as a market in downtown Cairo on market day, this is the market place to be seen in. Market my words...

### PEN PALS

Pen pal wanted by lady with an Amstrad 464 with no add-ons. Getting to grips with BASIC but would like to earn more than AA teaches. Nora Lees, 285 Franklin Road, Cotteridge, Birmingham B30 1NH.

### **USER GROUPS**

Bonzo tape to disc copier, Hisoft 'C' compiler. Will pay cash or swap for loads of software including all REVEALS's products. Mark = 01527 403813.

### FOR SALE

Games for sale, disc/cassette, reasonable prices from 25p, swaps considered. Send SAE to Simon Pert, 23 Cleave Road, Gillingham, Kent ME7 4AY or = 01634 574007.

Amstrad DMP 2160 printer, £90. Dead CPC 464 £30. Budget games £1 each. SAE for list. Harry Bennett, 1 Coopers Hill, Kimpton, Nr Hitchin, Herts SG4 8QT.

Amstrad 464, colour monitor, joysticks, Light Gun, printer, disc drive, 60 games, 12 blank discs, three manuals, 13 AAs plus cover tapes, £50 the lot or will split. = 01223 312450.

Mags ACU 1985, 1986, Jan to Dec; CPC464 User, issues 1&2, plus various other mags.

Games and some hardware for full list write or call. Will consider swaps within reason. Michael Jackson, 41 Farm Road, Limehurst Village, Oldham, Lancs OL8 3NW.

6128, colour, second drive, MP2 adaptor, joystick, games business software. 

9 01706 825199 (eves).

Spectrum games, with instructions £1.50, without, £1. Any game available. For list write to Password International, c/o 94 Langford Road,

£75. # 0181 395 7633 (eves).

Megabuffer or will swap for 8-socket ROM box. £30 Elite on disc for 6128. £20 or swap for toolkit on ROM. Michael Jackson, 41 Farm Road, Limehurst Village, Oldham, Lancs OL8 3NW.

Programs for Amstrad 6128/644 disc, games, educational utility £3-£10 each.

= 0181 3957633 (eves).

ROMDOS XL in its own ROM box, large format, 800K, 464, 664, 6128 compatible. £15 plus £1 p&p. Dave Stitson, 4 Connaught Avenue, Mutley, Plymouth, Devon PL4 7BX 

01752 254404.

DMP200 Amstrad printer plus manual, £35, ono; Maxam ROM plus manual, £10. Other bits, too, including tonnes of games and hardware. SAE to Nick, 153 Hamilton Road, Felixstowe, Suffolk, Suffolk iP11 7DR.

Games and PD on tapes for CPC464. SAE for list to Gary Smethers, 13 Meadow Close, Cononley, Keighley, W Yorks BD20 8LZ.

Software for sale: discs, tapes, serious, games. SAE to Bob Miller, 55 Den Lane, Springhead, Oldham OL4 4NN.

Many Amstrad tape games for sale, classic and not so classic. SAE to Sheelagh Regan, 41 Mount Road, Braintree, Essex CMY 3JA.

Amstrad stuff for sale. Includes 3-inch disc drive, Multiface II, CPC 464, colour monitor, SSA1 speakers and much more. Write to: David Barnsby, 10 Churchill Road, Earls Barton, Northhants NN6 OPO.

Games for sale! All tape for CPC464. For price list, SAE to G Pearson, 14 Malton Road, Rillington, Malton, North Yorkshire Y017 8LS. Loads of CPC gear. Monitor, modulator, over 150 AA and other mags plus covertapes. Going very cheap. 

□ 01243 821842.

Amstrad 6128, colour monitor, joystick, lightpen, DMP2000 printer, connection leads, cassette player, much software, documentation, Hundreds of games plus AA issues. Excellent condition. £225. David Hume 
■ 0181 4236130. 6128: Lemmings/SIM City, £15; disc, £13; tape: Snoopy/ATF – £6, disc £4.50, tape (incl p&p). GC and complete only. 
■ 0116 2705577 (Wednesday, Friday, weekends, eves).

DDI1 modified interface for FD1 drive to work with 464 Plus, also 3-inch

disc games wanted.
Jason = 01482 830438.

Can anyone help? I am after a copy of instructions for game.
Bob = 01723 515863, I will pay for copy.

Vidi Digitiser, Microtext
Teletext adaptor, Dart scanner for DMP 2000.
Good prices paid for kit in good condition. = 01245 496194.

CPC 6128, printer, software, blank discs, £150. ROMBO ROM Box, Protext and MS800 ROMS £30. 3-inch drive £20. 5-inch drive £50. w 01993 891346. CPC 6128, monitor, TV modulator, printer (manual), 150 cassettes, 80 discs including Tasword/Spell/poster Advanced Art Studio, Mini Office II, lots of games, 41 AA mags, Light Pen and disc, tape deck, Multiface II, joystick, 3inch disc drive and much

more. All for £350 or

nearest offer.

lan = 0151 480 9931 (Liverpool, 6-9pm).

Loads of discs and tape software, ROMs, books and hardware. SAE for list. John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH.

Amstrad tape and disc games. Full price and budget titles, boxed with instructions. SAE to Steve Church, 'Broadmead', Park Road, Paulton, Avon BS18 5NF.

### WANTED

Needed to complete the set, Amstrad Action no. 85 with covertape.

Chas # 01284 764936. Suffolk.

Multiface for 464+. Will pay up to £20. Urgently needed. A490 multiface cheats section also wanted. Copy will do. Can you help find these? John Evans, 45 Edward Street, Fairview Blackwood, Gwent NP2 1NY.

Multiface 1 or 2 wanted for Amstrad CPC6128. Pay good money. Jonathan Page, 1 Queens Road, Sandown, Isle of Wight PO36 8DT. # 01983 408853.

6128: Lemmings/SIM City, £15; disc, £13; tape: Snoopy/ATF – £6, disc £4.50, tape (incl p&p). GC and complete only. 

→ 0116 2705577 (Wednesday, Friday, weekends, eves).

will pay for copy.

Vidi Digitiser, Microtext Teletext adaptor, Dart scanner for DMP 2000. Good prices paid for kit in good condition. # 01245 496194.

Assembler (464) and Dissembler. If you have either please get in touch. Mark Townend, 6 Mount Vale Drive, York, North Yorks YO2 2DN = 01904 644609.

MPI Modulator for CPC 464. = 01383 737221.

### Cut it out?

There's no need to destroy your copy of AA when sending ads to our classifieds section. A photocopy is fine. The important thing is that we can read it and that you enclose contact details should we need to check the content

AMS	TRAD	ACT	101	1
FREE	READ	ER	AD	<b>FORM</b>

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

Your nam	•			
Your add	ress			
		The second		
120	and the same		ost code	
	W			ervices 🗆 Other
or said	Want	ea 🗆 User	groups 🗆 3	orvices () Omer
	PM			

June 1995 AMSTRAD ACTION

Simon Forrester needlessly overcomplicates your life, showing you how to manipulate relocatable machine code routines easily from BASIC and then pauses to wonder why nobody's cheering.

It's the same old story – there's so much you can add to BASIC with just a little bit of machine code, but writing the stuff is just way too much hassle. This is, after all, a BASIC tutorial, and you don't want to get swamped with overly complicated stuff, such as creating new commands.

So, if I were to tell you that there's an easy way to manipulate, manage, automatically relocate and run machine code routines, a way which is already hidden in the depths of Locomotive, you'd probably want to know more. Bear in mind, by the way, that you're not going to need an indepth knowledge of machine code to use this system.

Let's start at the beginning...

### **Variables**

You're familiar with variables – the letters to which you assign values:

18 FOR a=1 TO 18 20 PRINT a 38 NEXT a

In this situation, the variable a is given a value by the FOR/NEXT commands, which is printed by the PRINT command. This is how variables are used to store numbers. You don't have to stop at that, though...

18 as=| Bliney!| 20 PRINT as

This time, a variable has been used to store a string. You can tell it's a string by the '\$' symbol that follows the variable name. What you're really interested in is exactly how this is stored in memory.

### On location

If you were to look at the area of memory in which this string was stored, you'd see the first location containing a 'B', the next containing an 'T, the third with an 'T, and so on. They don't actually contain these characters, though – the location contains the number from 0 to 255 that the CPC uses as an ASCII code for that character (B is 66, for example). Similarly, if you look at a machine code program in memory, each location contains a number from 0 to 255, these numbers this time building up the machine code program.

Wouldn't it be great if the letters that built up the word 'blimey' meant something in machine code when converted to ASCII characters?'
You're catching on quickly...

### As an example...

Type in and run the following program, without worrying that it doesn't do anything notable, but without resetting your machine afterwards:

19 rets:||
28 READ byts
38 IF byts:| \*\*| THEM END
48 byt:UAL(\_A| +byts)
58 rets:rets+CHR\*(byt)
68 GOTO -28
78 DATA -3e ,87 ,ed ,Sa ,bb ,c3 ,\*\*

Don't worry too much about how the program works, suffice it to say it takes the hexadecimal numbers stored in line 70 and fills **@rot!** with the letters they correspond to on the ASCII table. If you like, you could try:

### PRINT-rots

This gives you an ASCII representation of the set of numbers, and proves the program worked. If all went well, you should hear a beep, as the second character is 07, which translates to a beep when printed, displaying nothing on screen. The reason the 07 code is in there is because this is one of those stupid, annoying machine code programs that just beeps, so you can check that it works.

### Tracking it down

All you really need now is to find out where in memory **@ret\$** is stored. Locomotive BASIC has a provision for such a time:

### PRINT-Brots

Note the @ symbol before the variable's name. This is an automatic numerical variable that hovers somewhere between 0 and 65535. If you end up with a minus figure, don't worry, that's just the way BASIC prefers to think of the number it's dealing with. You can now call the routine, though:

### CALL-Brots

With a bit of luck, you should hear a beep (check the volume on your machine if you can't hear it). This means not only that the system works, but that you've learned all you need to.

### Loose ends

You've done it ret\$ contains a machine code routine, and you have found a way to run that same routine. You can use the program to create any routine by changing the figures in the DATA statement on line 70, and store the variables using the OPENOUT command (and friends) that

Angela Cook and Rob Buckley explained so ably in AA115. (If you missed it turn to the back cover to see how to order a back issue.)

### What about 464s?

If you are a 464 owner and you get tired of the beep, you could try the following numbers to get your own COPYCHR\$ routine. This allows them to read characters from the screen (a feature lacking on the 464). The numbers are:

od,68,bb,32,88,be,\*\*

To use it, move the text cursor onto the square you want to check, CALL the routine, and PEEK the value from &be80. If you wanted to read the screen position 1,2, for example, and put the value in a variable called c, you would use the following commands:

LOCATE-1,2 CALL-Grots c=PEEK(&be88)

### Looking ahead

Keep watching this column, we'll print more of these little sets of numbers whenever we can fit them in, to give BASIC just that little bit more power.

But until then

AMEN (Alega jani Tari) Amendaka da ahada da ahada da

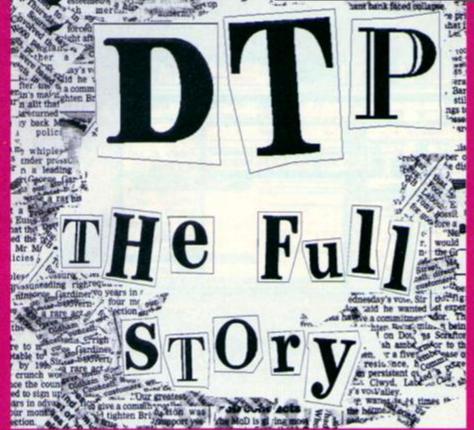
### Check it

Check the program is correct using TypeChecker – see page 16.

### NEXT MONTH:

Create animations and colourful displays with palette switching with that writer of many colours and many guises Simon Forrester.

June 1995 AMSTRAD ACTION



'Publish and be damned', they say. Don't burn your fingers by forking out for the wrong package – use the AA guide to desktop publishing. Richard Fairhurst plays Beelzebub.

It's thanks to desktop publishing that this page of AA looks the way it does. Buried deep on the hard disc of a Macintosh in the AA offices is a file which, when loaded, looks the same as the one you have in your hands now: in colour, with screenshots and everything. The Art Editor creates an outline page with QuarkXPress, flows text on to it, adds some graphics, and juggles the whole thing around to produce a clear, readable layout...

Surprisingly, for a technique that can produce such high quality results, desktop publishing has only been around for the past decade. Since 1984, in fact. The year when both the Apple Macintosh and our very own CPC were launched. Despite the huge difference in price (£3000 versus £300), the technical capabilities of the 128K Mac of 1984 weren't that different to a CPC 464 – a faster processor and a bit more memory were about the size of it. The Mac's real innovation was its graphical user interface, and this is where DTP sprang from. Although books were increasingly being produced with computers, magazine and newspaper work only became realistically possible with a computer which treated text as a graphical object, to be styled in any font or size you liked.

Surprisingly, for a technique that can produce such high quality results, desktop publishing has only been around for the past decade

Although the gap between the CPC and the Mac has widened over the last decade, a disc-based,



MicroDesign: excellent graphics features,

128K CPC is still capable of producing decent pages for a farzine, notice or poster. Most of the farzines reviewed in Further Reading' – WACCI, Artificial Intelligence, CPC User – are produced using the machine they write about and one of the many DTP options available for the CPC.

There are four main packages. All are highly accomplished programs:

- MicroDesign Plus (CampurSoft).
- Stop Press (AMS),
- Page Publisher (SD Microsystems), and
- PowerPage 128 (Robot PD), which, er. I wrote.
   I've ranked them in four key categories, but bear in mind that a third or even fourth place ranking is no insult when dealing with programs of this calibre.

### **Graphics**

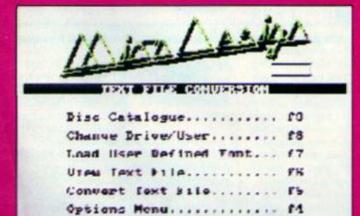
All four packages provide the basic graphics functions you'd expect. You can:

- draw lines, rectangles and circles;
- fill shapes with a user-definable pattern;
- copy an area of the page to a new location, and;
- undo your last action if you messed up.
   So, no great surprises here.

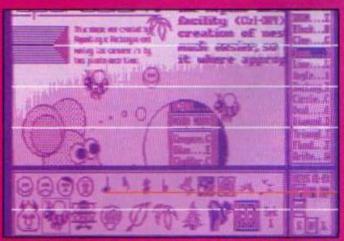
Stop Press wins on a simple numerical basis. It's packed with features, such as enlarging, reducing, reflecting, rotating and scrolling areas taithough question why you should want to 'scrolf an area of the page, rather than moving it somewhere else).

Switching between operations, though, can be cumbersome. While to draw a line, you select the 'paint-pot' icon, followed by the 'shapes' menu, and the 'line' option. If you're especially unlucky, the program forgets how to draw lines, and you have to load in some code from the program disc first.

Although MicroDesign is missing some of the more esoteric features of Stop Press it was points for sensible program design. For example, all the graphics options are grouped together in one section, where they can be accessed by a single keypress. Added to the unique icon system, which stores a set of small pictures in memory ready to be



MicroDesign Plass some of this program's functions are held in a supervise submicer program.



MicroDesign Plus: use this program's icon feature to place silly pictures throughout your documents.

Ø

placed anywhere on the page, this gives MicroDesign the edge in graphics capabilities. It loses marks, though, for the enlargement routine which is in a separately-loaded program (the MicroDesign Plus enhancement program).

### Stop Press wins on a simple numerical basis. It's packed with features such as enlarging, reducing, reflecting, rotating and scrolling

Page Publisher, too, provides the useful features of Stop Press as well as a clever user-definable pen shape feature, however, there is one vital omission – a zoom or magnify mode. An omission which makes fine detail work almost impossible. Another downer is the lack of visual prompting when drawing a shape. And although 'rubber-banding' is available as an option (it's standard on the other programs), it's very slow and makes the program almost unusable.

### **Graphics ranking**

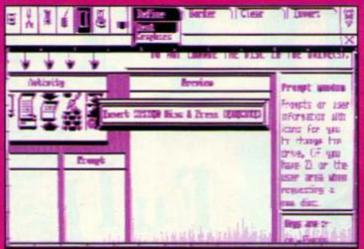
- 1 MicroDesign Plus
- 2 Stop Press
- 3 Page Publisher
- 4 PowerPage 128

PowerPage 128 does provide a zoom mode, but its graphics facilities are sparse compared to the other three. There is no rotation routine (although you can reflect shapes), no enlargement or reduction, no freehand option and there are no pen shapes.

Operation of PowerPage 128 though, is quick, and easy – drawing a line is simply a matter of pressing COPY, moving the cursor to the end point of the line, and hitting COPY again.

If it really were the case that 'the medium is the message', MicroDesign's graphics power would make it a Hermes among DTP packages. However, the winner in the graphics section includes just one text option, 'Write', which lets you write in either the standard Amstrad font or a reduced version, single or double width. There is no word-wrap, no justification, nothing. The only consolation is that you can use the icon system to produce headlines and a number of excellent fonts are supplied.

For columns of text, you have to load the



Stop Pross: you'll be looking at this 'Insert disc' prompt rather a lot when you use this program.

enhancer program which takes a plain text file and creates a clip art file containing this text in the font of your choice, ready to load into MicroDesign. However, this method still won't format your text – that's up to your word processor – and so you lose features such as wrapping text around pictures, micro-justification, proportional text, and so on.

Stop Press and Page Publisher have similar (good) text capabilities. You can type text directly on to the page or import it from a disc file. You can set columns anywhere on the page, and micro-justified, proportional text is no problem in any size. Both programs allow you to load three 16-by-16 fonts at once (Stop Press, allows you to load the standard Amstrad font, as well), and edit them any way you like. Stop Press has another advantage, too – the excellent autoflow option, which automatically lays text out around any pictures on the page. This is ideal for embedding clip art between columns, say.

PowerPage 128 makes up for its poor showing in the graphics department with a very respectable set of text tools. It, too, can produce columns of micro-justified, proportional text (in either an 8-by-8 font or a 16-by-16 headline font), and you can enlarge and edit the fonts easily. That nice autoflow

### Text ranking

- 1 PowerPage 128
- 2 Stop Press
- 3 Page Publisher
- 4 MicroDesign Plus

facility is also present.

Best, though, are the bold, italics and underline options, which you can change in and out of, half-way through a paragraph. If you are importing a Protext document you can save these as control codes which PowerPage 128 automatically picks up. Although rather slow these are, however, the best text-handling facilities of the four

### Printing

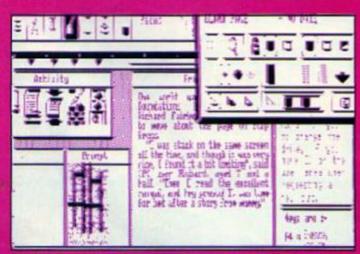
It really is a case o swings and

roundabouts for CampurSoft: MicroDesign's output is excellent, whether the page is printed as A4, A5 or even A6 (a quarter of the size of this page). There's also an option for a 'strip' format page which combines four of these files on one sheet of paper to create an incredibly high resolution page, with an output which is almost as good as that of a cheap laser printer. However, it's nigh on impossible to create anything more complicated than a poster in this format, as each page needs to be split over four horizontal files. A column-based fanzine layout, for example, is a definite no-no.

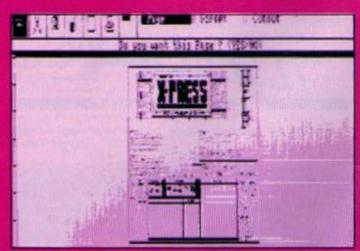
MicroDesign has a 'strip' format page which creates an incredibly high resolution page with an output almost as good as that of a cheap laser

There's more... You can select normal or 'single-pin' printing (highly impressive, but a sure-fire way of wearing out your printer), and light or dark input. Page Publisher and Stop Press can't top this, but both are capable of producing good quality A4 or A5 print-outs in draft or high quality.

Unlike the other three, PowerPage 128 is designed around an A5 page size (as used by many



Stop Press: this CPC desktop publishing package provides every graphics option you could want.



Stop Press: packed with features and capable of doing most of what you could expect a CPC DTP package to achieve.

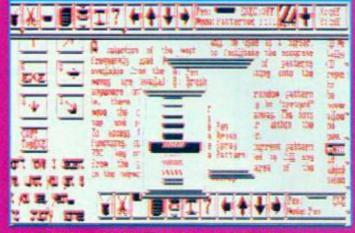
Page Publisher: this is a good all-rounder of a desktop publishing program for both text and graphics.

programs on test, is a menu and window-based system), the design has lost its way a little in the process. In Stop Press simple operations often require not a little navigation through a set of menus and unclear icons.

The program's creators, AMS, are also renowned as mouse manufacturers. As a result mouse users will find Stop Press more comfortable than those with a joystick. Keyboard users will find the pointer speed uncomfortably last and the need to simulate three mouse buttons awkward.

But, by far the worst failing, is the need for Stop Press to constantly load code from the program disc, even for relatively simple operations. The actual program code is very fast, and should serve as an example to all other DTP programmers. Despite this, designing a page with Stop Press takes more time to do than with any other of the packages I have reviewed, here.

In fact, the other packages are, in general, highly usable. Page Publisher and PowerPage 128 hold all the program code in memory at one time, so you don't need to constantly flip discs. A few



Page Publisher: with this DTP package you have all these pen shapes at your disposal to draw with.

MicroDesign features are held in the MicroDesign Plus enhancer, a separate program (though you can easily access it from the main code). As these are generally the lesser used features, plus the slightly feeble text-to-clip art conversion routine, you probably won't be too put out by this.

Page Publisher and PowerPage 128 hold all the program code in memory at one time, so you don't need to be flipping discs constantly

The Page Publisher menus are rather slow to appear, which can become irritating when you know your way around the program – PowerPage and MicroDesign both bring up their option lists almost instantly, and boast more manageable cursor control. Page Publisher is most easily controlled with a joystick or mouse, and MicroDesign works happily with keyboard, joystick, or mouse. PowerPage users are limited to keyboard control, although this can make drawing operations, especially, faster when you get used to them.

Available keypresses are constantly displayed on the MicroDesign screen, which makes operation extremely easy – you very rarely need to refer to the (brief) manual. Page Publisher, too, is supplied with a short but complete reference.

Stop Press almost recovers some of its former glory here, with a superb manual, full of illustrations and tutorial walkthroughs. PowerPage 128 loses out by being an (almost) PD program. There are plenty



Page Publisher: this program comes out well, if not outstandingly, in each class.

### **Printing ranking**

fanzines) rather than A4. This means its A4 output is

coarse and blotchy, although you can alter the 'print

quality' option. A5 print-outs are more satisfactory

All of the four programs output to standard

usually slightly elongated. Stardump is a utility which

Epson-compatible 24-pin printers. The output is

than those produced by the other programs

solves this problem for MicroDesign users.

- 1 MicroDesign Plus
- 2= Page Publisher
- 2= Stop Press
- 4 PowerPage 128

### Ease of use

After consistently high ratings throughout the test, this is where Stop Press falls down. Although a lot of effort has been put into the actual programming behind the human interface (which, as with the other

### Coming soon...

Version 2 of MicroDesign has been planned for years. Radical's Rob Buckley has now been appointed to code CampurSoft's new DTP package. We'll keep you informed.

### Other options

Although the programs we've tested here are the most powerful and widely-used CPC desktop publishing packages, a few others exist. You may be able to find Pagemaker Plus, Edition One or the originally titled DTP in a PD library. Although none of these offer anywhere near as much power as the big four, you haven't got much to lose at PD prices. In addition, there's the original PowerPage, forerunner of the 128K version. Although slightly clunky, it's pretty much the only option for 64K users who aren't satisfied with text-only pages.

Moving slightly upmarket, three homebrew programs, Pagemaker Deluxe, Advanced DTP, and PageSetter, offer a bit more welly than most of the PD alternatives. Sadly, these programs are no longer available, and they offer little or nothing that even the original 64K PowerPage can't muster.

One remaining commercial package,

Mirrorsoft's Fleet Street Editor, never took off. So, if you see a cheap copy anywhere, make sure it's the second, improved version, rather than the original bugged code.

You can publish from your desktop without using a DTP package, of course. There are a number of other CPC-based options available to would-be press barons. If you're producing a more staid publication, you might like to take the approach of the serious fanzine WACCI. Instead of using Stop Press, MicroDesign or the like, load up a word processor - Protext, for example - and produce columns of text. You can produce artwork and headings with Advanced Art Studio or GPaint, and assemble the whole lot onto a sheet of A4 with scissors and glue, ready for the photocopier. If this is your route, there are several programs to spruce up your WP output including ProPrint. Protype, Qualitas, and ImagePrint (on this month's covertape) which replaces your printer's standard typeface with a quality, user-definable offering. Although these are largely irrelevant if you own a smart new 24-pin beast, those with geriatric Epsons and DMP-2000s need them.

There's also Sentinel Software's Pro-Ext which plugs on to Protext and allows you to incorporate large headlines and clip art into a standard Protext document, and as such is ideal for simple DTP. (And, yes, I wrote that one, too.)





Poverfage 128 vl. I vl.154 Pichard Fairburst Tobat Pl

Alacst Mit presission exprised for connectial oc sext-connercial distribution

Formard specieg: Proportional Line specing: Paragraph space: Lest size: escline size: Flow control: Justify style: Print quality:

1 28: has ditors all over Brit as their program of choice. of instruction files, but they are supplied on the disc itself, so you need to print them out yourself first.

Accessing disc files isn't difficult with any of the packages although the MicroDesign and PowerPage 128's filing routines are more friendly and powerful overall. Finally, the packages but MicroDesign can execute external commands, such as [DIR and [ERA. However, only PowerPage proved happy to access other sideways ROMs, such as Maxam and Utopia.

### Ease of use rankina

- 1 MicroDesign Plus
- 2= PowerPage 128
- 2= Page Publisher
- 4 Stop Press



PowerPage: this program's page files are automatically compressed to save space.



PowerPage: the strength of this desktop publishing package is in its text handling

### Buy, buy, baby

Protext, Protype - OJ Software

# 01257 421915

Pro-Ext - Sentinel Software = 0181 876 7032 Stardump utility - Goldmark Systems

= 01707 271529, £14.95

Stop Press - AMS, was £34.95, try small ads MicroDesign Plus - CampurSoft

= 0141 554 4735, £29.99

Power Page 128 - Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF, £2.25 (includes disc) plus SAE

Page Publisher - SD Microsystems # 0195 483750, £25

### Keeping you paged - the top four DTP packages



### ress

Stop Press is a true veteran of the CPC (AA featured a review of

its original incarnation, Pagemaker, more than eight years ago).

Stop Press is packed with features, and does most of what you could expect a CPC DTP package to achieve. Both text handling and graphics facilities are very good indeed.

Despite all this, Stop Press's awkward way of working and frequent disc accesses are likely to drive you up the wall. However, if you can survive constantly swapping discs on a single-drive machine, and you have an AMX three-button mouse, Stop Press could be the package for you.

Why not try using a friend's copy for a week or two before handing over your dosh?



### MD Plus

MD Plus features excellent graphics features, brilliant print-outs, a clean and

simple user interface...

MicroDesign has a lot going for it. If you're producing mainly graphically-based documents posters, for example, or headines and illustrations for a fanzine where the body text is printed with a word processor - then MicroDesign is by far your best choice.

Fanzine editors have to pass up the chance of the lovely headline fonts supplied, but as it stands, the current version of MicroDesign really hasn't progressed far enough from its MODE 2 art/design roots to be a flexible choice for integrated text and graphics work.

Few fanzines would risk printing CPC-generated fonts without being proportionally spaced, at least.



### Page Publisher

Page Publisher comes out well, if not outstandingly, in each

category I tested it. However, fanzine editors, in particular, will miss the ability (present in the other three packages) to import the .CUT clip art format. Originally a creation of the Stop Press developers this is now the standard for CPC and PCW DTP programs. It limits you to SD's own two picture discs plus a decent selection provided on the B side of the program disc.

If you can live without that and the zoom and autoflow options of other packages, and if the laid back way the menus roll on to the screen doesn't offend, then Page Publisher is a good all-round choice if you don't want the fanzine-centred features of PowerPage or the all-out graphical approach of MicroDesign.



### Power

PowerPage 128 has been adopted by fanzine editors all over Britain as their program of choice, and it's not difficult to see why. The powerful text formatting options, with the quick keyboard-based operations that speed up page layout, are ideal for the purpose.

Its preference for A5 print-outs. although great for the fanzine editor, isn't so useful for notices and similar applications. A4 printouts are available, but they're a bit tatty. PowerPage 128 is noticeably lacking in the advanced graphics department, too, which might either cause you to run to an art package. (such as the PD GPaint) or to MicroDesign Plus. At the low PD price, though, you're not going to lose out on much by trying it.



**SLIP AST Ready-made** pictures which you can load on to a page

**LUETTE ILLATION Adding extra** space between words so that column of text are both

straight. Micro-justification. adds a fine amount of space rather than a whole 'letter space' giving a more professional result. PROPORTIONAL TEXT WHOILE where a letter i, for example

page than the wider letter m inhabits. Amstrad Action is laid out in proportional text, but your Amstrad screen usually displays nonproportional writing.

RUBBER BANDING An easy way of positioning graphics on-screen, where the line or rectangle you are about to draw is redrawn as you move the cursor to set its destination point.

Simon Forrester trawls the clear blue ocean of fanzines and finds a silken pearl among the coarse nets. Perhaps, though, it's really just a matter of scale...



### SBIT

= 01353 777006.

PRICE: £1.25 per copy or get ten issues for £10. AA readers can buy individual copies for £10 see 'What's happening', page 3. EDITOR: Brian Watson ADDRESS: Harrowden, 39 High Street, Sutton-in-the-Isle, Ely, Cambs CB6 2RA

On its fifth bi-monthly issue, 88IT has changed its name. Formally known as 88/T Mart, the magazine dropped a word to signify the change in its stance. Brian Watson, the Cambridgeshire-based editor,

says he is "primarily concerned with ideas and information for users of 8bit computers\*. To this end, issue 5 is tying up the loose ends, so to speak.

What you get You a lot for your £1. The 16-page magazine comes with two extra supplements, each consisting of four A4 sides. These work well, as the first is dedicated to readers' small ads and the second is a more relaxed, 'comic' supplement which contains more personal news, as well as supplier contact lists and helpful quotes that I can rip off, for example:

"The fear of danger is 10,000 times more frightening than danger itself". This is a quote from Robinson Crusoe by Daniel Defoe. Lower your daily fear quotient by regularly backing up your work."

I get the feeling that this is from someone who's used to computers. Quotes aside, 88IT is a great fanzine: it covers topics from C64 loading problems to CPC Protext tips in a friendly, cheerful-yet-competent, style.

There are probably three people somewhere in Warwick who don't like the idea of reading about different machines, but 88IT's editor is clearly a man with a devoted passion for the

CPC, PCW, Spectrum and C64, and this clearly shows through in his work.

### In the style of...

The secret to 8817 is the writing team, in that they don't really seem to have one - you get the feeling that the writer has abandoned writing in favour of popping round for a chat. Information and ideas are woven through happy tales of 8-bit exploits, while Tom Dean happily talks about the contents of his discmag, Impact. The combination of snippets and longer pieces works well, making for an comfortable and entertaining read.

The other benefit of the mag is its disproportionately high number of adverts. When Brian implements the new policy of fewer ads the abundance of information that adverts create will be missed. I have little doubt in Brian Watson's ability to more than make up for the adverts, but they do provide a useful service of their own, taking the



ISSUE 5

April / Way 1995

Marrowden, 39 Migh Street, Suttan-In-the-Jale, ELY, Cante: COE 288

Editor: Srian Matson

Tal: 01353 777008

BECKET CHARGO - 1200E 6

THE RES PERCE

Never one to stand shill, AMIT SMET is now MNIT. This reflects the face that although obsertionsents we wrill very much part of the whole, it is now primarily experted with lease and information for users of 8-bit

To that end, this lawur is by way of being a round-up of unfinished basiness Se, if i've omitted anything sent in recently, "he morey but will try to get it in ment time.

Among from "in the pipe" for the future I have a long place as deshtoo publishing uning as 8-10 compares with the mytimal extras to get the results you would note the page and then into your prompettive readors" latels.

lasteed of clearly concentrating on a single computer or program as other communities are described as professional design communitation of professional design communitation with program of experience in advertising and the news modils. Be has gone back to first principles of presentation and part may the Tandamentals for MBIT readers, including cost implications of the options at different singer.

he said be found it a challenging special in sect within a smaller range of uplins them be in accustment to a smaller range of uplins them be in accustment to an extended to, and derign the request on the project, he shall that all the "subsequientles" of good design practice could be fully implemented as a prosser, sequelize the order as a prosser, sequelize to other sect of publication produced using an 8-bit computer as the heart of the process.

Have we got a name? We have got a success fee page 12 for the big sown. Surey it this not make the freed page, as such landmark stories should, but must of the layout very was done and I SIBN's want to delay the seed by colonizating the whole thing.

### COMMUNICATION VICTORIES PROJECT

I would like to do a comprehen-tions of printed (nather than disc) functors on 8-bit comput 1 meed year boly.

If you publish as 8-bit magazine use seed as a recent copy as that 2 incl the world what you are delay, asize, a letter with the frequency medication and enhancement assessed id be appreciated as well.

If you subscribe to one of more of these shall-press published into 1 to like to berroe a recent inset to to what I, and others, are electing, will return such copies promptly. Please don't leave to be seemed or or

The only magazines I already have to head in dee's used more of are consistly, forward FDV Cold Newsletter, ON User, The Dian Drive, Sisty-Franc, and WACCI. Whether clab publications or loops subscription, 3'd 158s to cover both. There is no comparison of judgment element to thirt. I jout went to get the internation on what's out there so a wider, solitoner. Thanks is all these who helped, See you is Joun.

BBIT, as it stands, it's a good road. More please.

### FANZINES



pressure off the editorial to keep up with what absolutely everybody is doing.

### Appearances can be...

The only real criticism that can be levelled at 8BIT is its appearance, but to be honest that's not really an issue - the lack of PowerPage masterpieces doesn't detract from the text.

Personally, I hope 88IT doesn't change its style too much - to move away from the atmosphere and feel of the latest issue would be a shame. As you read this, the improved issue should be hot-footing. its way to the AA office, and you can be sure of an update next month. In the meantime,I recommend you get issue 5 and share my high hopes.

Content: Clear, friendly, unpretentious. 85% Appearance: Clean, acceptable, on the up. 70%

Overall: 85%



### DTP - a practical guide

If you enjoyed Angela Cooke's review of MicroDesign and devoured Andrew Chapman's key to spotting printed material produced using desktop publishing (AA116) you'll already have read Richard Fairhurst's advice in our main feature this month (see page 11). Indeed you are probably just about to run out to get yourself a shiny new DTP package to run on your CPC! However, If you're planning to produce a fanzine with it, you need more than layout skills...

The beauty of fanzines is that they can survive on a small, special interest, readership. The point? You don't have to please the entire CPC user base in each issue. You could, for instance, produce a magazine aimed at general users; fill your pages with PD reviews; give advice to beginners or talk about old computer games (Digital Press-style).

Try to cover everything, though, and you won't have the time, energy or space to go into much detail on each subject, and you'll be wasting your talents. Don't be afraid to just rave about PD from cover to cover, as you'll have produced an excellent PD review fanzine with a readership which loves PD.

### **NEXT MONTH:**

on Forrester starts a miss-it-at-yourperil series on producing a fanzine. If you want to get something into print and make it look professional don't forego this opportunity to learn from a pro!

### Typing listings

- Type in exactly what we print.
- · OMIT the first four letters in each line.
- 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 those 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.

FAML 18-'-TypeChecker-VI.8---By-Simon-Forrest er---Dec-1982

MAGJ 28-'-For-Amstrad-Action---Public-Domain

DANK 28-MEMORY-ASFFF

CAJE 48-csun=8

CAME SO-FOR-addr=84000-TO-8405B

DAKJ 68-READ-bytes

GAJB 78-byte:UAL(\_A| +byte5)

FACF 80-PONE-addr.byte

CAFB 98-esun:esun+byte

DALK 100-NEXT-addr

OACI 118-IF-csum()A2ADD-THEN-PRINT-| Checksum-Error| :EMD

LAHE 115-POKE-84001, PEEX-(ABBSB): POKE-84002, PEEX-(ABBSC)

KAHI 120-POKE-ABBSA, ACJ: POKE-ABBSB, A3: POKE-ABBSC, A40

MACN 130-PRINT-| TypeChecker-VI.0-Installed| :END MADC 140-DATA-CF,FE,93,FE,00,C0,00,40,FS,CS,D S.ES.FE.0D.CA.22

LACJ 158-DATA-AB, SF, 16, 88, 28, 58, 48, 19, 22, 58, 8 8, E1, D1, C1, F1, C3

LAFJ 160-DATA-80,00,3E,20,CD,00,40,3E,18,CD,0 0,40,2A,SA,40,7C

LADI 170-DATA-CD,45,00,7D,CD,45,00,3E,18,CD,8 0,00,21,00,00,22

LACH 188-DATH-SH, AB, C3, 18, AB, F5, E6, BF, C6, 41, C D, OB, AB, F1, E6, FB

RAJC 198-04T4-1F,1F,1F,1F,C6,41,C0,80,40,C9,8 0.80,END

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

PORE ARREST, 8 turns it off, while, PORE ARREST, 3 turns it back on.

### Fine tune last month's 'catch the block with your bigger block' to produce a classic gaming experience, with Richard Fairhurst.

How do you get an on-screen score which is constantly updated? You are using the, extremely slow, standard firmware routine (&B85A), to print the score, so adding the score-printing routine (Id a,(score): call pr\_a) to the main loop of the program slows it by a ridiculous amount. Because the score only changes when a new ball is launched from the top of the screen you can locate the score-printing routine in this part of the program, where speed of operation isn't so critical. So, delete the original score-printing code from the program's quit routine, and add a call pr\_a immediately after the score is updated (Id a,(score): inc a: Id (score).a).

Theoretically, this is no problem but a couple of aspects of the program's operation conflict with this. 

1 The score first appears as 000, then 000001, then 000001002, because you're not resetting the cursor position so the score is printed in the same location every time. To fix this place the machine code equivalent of a LOCATE command – Id h,1: Id I,1: call &BB75 to locate at (1,1) – before the score is printed. Put this before the score is updated. 

2 If the ball comes down on the left-hand side of the screen it wipes out the score as it falls. So change the cp 2 after call random (at the .retry label) to a cp 8, so the program rejects any ball position which would wipe out the score.

### Sound it out

You now have professional-quality code and graphics but no soundtrack. However, if you have a soundtrack-generating program here's your moment. (BooTracker users have to shift package to use their music in a game such as this: it uses the firmware sound routines which won't work in your game because... you've turned the firmware interrupts off.)

Other packages work by generating sound every 1/50 second: perfect, as your game is timed in the same way. To add sound you add a CALL to the main game loop. If the music is located at &4000, the CALL is probably to &4003, but this depends on the package. In addition, you need a CALL &4000 to initialise the music at the start of the program, and a CALL &4006 to shut it up before quitting.

### **Bounce your ideas**

Your game can't really play any faster so how about making the bat continue in the direction you send it in and bouncing off the 'walls' for good measure?

You need to set up a new variable to do this. Add btdir dw 0 to the variables section, with btdir standing for 'bat direction'. This initially is 0, so that the bat doesn't move until a key is pressed. Later it contains +2 for a bat moving right, and -2 for a bat moving left. You can simplify the left and right routines, then, to simply set this variable:

Jeft Id hl,&FFFE: Id (btdir),hl: ret right Id hl,2 : Id (btdir),hl: ret

The Z80 can't handle negative numbers as such, but &FFFE is equivalent to -2. So, if the bat position is 34, adding &10000 to it would (if the Z80 could cope with such large numbers) result in &10022. As the Z80 can only handle 16-bit numbers (four-digit hex), the result 'wraps round' to &0022 – or 34 again, so it follows that to subtract 2, you can add &10000 minus 2, which is &FFFE.

### Get it right (or left)

Finally, you need to add code to move the bat right or left and bounce it when it hits a wall. Add this simple code to the start of the .bat sub-routine:

at Id de,(btdir)

ld a,(btcol): add e

ld (btcol),a

ld hl.(btaddr); add hl.de

ld (btaddr),hi

or a : jp z,revers cp 70: jp z,revers

This calls another routine to 'bounce', or reverse, the bat's direction. Now change 2 to -2, and vice versa and add this routine (after any sub-routine):

revers Id hl,(btdir)

ld a.h: cpl: ld h.a.

ld a,l: neg: ld l,a

ld (btdir),hi

ip bat

CPL inverts each bit of the byte in A, and NEG takes it from 0. Using your knowledge of binary, see if you can work out how this changes between 2 and -2.

### Track them down

Soundtrakker – try the AA reader ads, page 9. ChaRleyTraCker – coming soon from Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF. Equinoxe – try the AA reader ads, page 9. Soundhakker Pro – try AA reader ads, page 9. BooTracker – covertape Amstrad Action, issue 92, May 1993.

### **NEXT MONTH:**

Start on a proper maze-type arcade game. So begin planning those screens now...J

### Richard Wildey barks the orders and watches how the Parados ROM responds. Attentionnnnnn!

but as the original review was over a year ago (AA99, page 55) it seems a re-review is necessary. This is because some people still haven't got the message that Parados is the large format operating system you should get.

Simply the best No matter what system, if any, you are using, Parados will no doubt replace it with its ability to recognise 22 different formats, including RomDOS. MS800 and SDOS discs. It doesn't, however, recognise RoDOS discs, but then again not much does. Another incompatibility is that Parados doesn't work under CP/M Plus but does work under CP/M discs under both. As well as acknowledging this myriad of formats from your initial CPC boot-up, you can read, write to and format across them.

### A stranger in Parados?

Initially Parados is transparent to the user, taking up only six bytes in memory, until you issue an RSX to bring up the Parados disc utility. This is split into two windows with a pop-up menu running along the bottom row. The filename window takes up a large proportion of the screen. To the right of this is the information box, telling you what format your logged

disc is, how many K are available on it and so on.

This utility lets you perform just about every option you could require, except that there's no exit - you have to reset the computer to quit. You have two

- disc and.
- file options, each accessible from different menus. To access one you have to hold down (SHIFT), the other (CONTROL). At first bit fiddly but you soon get used to them.

  In the disc menu the main options are

- Format.
- Verity.
- Configure and,
- Log

They do what you would expect. An important aspect in the Configure menu, which is scarcely mentioned in the instruction manual, is that you can set up Parados to read the second side of a 3.5-inch disc. This side switching is useful if you get a disc from a user who has a side switch when you don't.

### Go backwards to format

The menu bar along the bottom shows a backup option which, in fact, was never implemented. You

TIES CONTROL CANCELLOS. Program by Elichard Williams spel file

s: software side switching is one of the, useful, options.

can format discs quickly – and backwards! Backwards formatting is a clever feature which is rarely used by other such disc utilities. This is where the computer starts formatting from track 39 and counts down to 0 which means that the directory of the disc is the last thing to be wiped.

### All is not lost

Backwards formatting means that if you suddenly realise that you are formatting the wrong disc, which happens all too often, you only lose the last few tracks. If the disc were not full all the files might still be intact, and at worst some should still be there. There are several occasions on which I could have done with this facility. There is nothing worse than realising you are formatting the disc in drive A

### Computing, Program by Richard Wilson



Parados: It's the CPC disc operating system par excellence.

### Filling in the format

With 22 different formats on offer which do you choose? You should format 3-inch discs to the standard Data Format to ensure compatibility with other machines. Though, if you are the only person who uses the disc, then you can use one of the special Parados formats that gives you 203K on one side of a 3-inch disc.

Parados also provides compatibility for Ultraform an old Amstrad Action Type-in that also gives you 203K on a side.

It's on the 3.5-inch discs that Parados really comes into its own. Double-sided 80 track formats are those with the potential for more than 700K on one disc. Six of these are on offer, the most reliable of which is RomDOS D1 which gives you 716K and a possible 128 directory entries.

# 91593 QUANTUM Computing. Program by Richard Wi

### Parados: all users are displayed at onco.

instead of B just after you have seen the track rumber move up past 1.

### Looking at the menu

in the files menu you have the power to:

• Change file attributes;

- · Rename;
- Move a file to a different user area. A header reader would have been a nice addition...

In the main window the files are spread in

100K free memory for the buffer, it varies with the number of files on the logged disc. You may think that this is plenty but if you are lucky enough to own a silicon disc or any extra memory Parados recognises up to 576K which gives you a 550K buffer. This buffering minimises disc swapping and speeds up copying when you are transferring files.

### To sum up

Parados is the best operating system of its type on

the CPC. The utility is both powerful and apparently buz-free, but it does have a couple of irritating features. These aside, if you were confused as to which DOS to get you should now be convinced that there is only one worth considering

if, on the other hand, you've already got an operating system, is it worth upgrading to Parados?

Yes! It is worth installing Parados even if

you have the previous king of operating systems, RomDOS, (the original RomDOS, that is, not the bugged RomDOS XL).

The Parados disc copier is an essential utility for RomDOS, after all what other piece of software

lets you copy

Get the top CPC operating system free - win a Parados ROM worth £14.99! Simply tell us who wrote Paradise Lost and get your answers on a postcard or on the back-of-an-envelope to us by Friday, 30 June 1995 at Paranold, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 28W, or e-mail us at aa@futurenet.co.uk.

### regained Product: ParaDOS Price: £14.99 (ROM only) Supplier: CampurSoft, 10 McIntosh Court, Wellpark, Glasgow G31 2HW = 0141 554 4735/fax 0141 227 4486. a RomDOS disc to an MS800 disc all in one fell swoon<sup>2</sup> So, throw away MScopy, MaxiDOS, RomDOS and all associated programs and let Parados do the lot for you in one package. **Miniminii**

Complete compatibility

Parados sits quite happily in any ROM slot in a ROMboard though you can use Parados as a complete replacement for AmsDOS, the original disc operating system inside your CPC. This not only saves a space in your ROMboard but, more importantly, gives you complete compatibility with other software. This means you can use your large format discs with Stop Press, Art Studio, and all those other programs that wouldn't normally work. However, you can't use it with CP/M Plus as this uses all its own disc routines. In the older 6128 and 664 machines the AmsDOS chip (40015) is in a socket and you can gently prise it out with a screwdriver and pop Parados in in its place. On later 6128s this Amsdos chip was machine soldered to

the motherboard. Replacement should

as the AmsDOS ROM inside the DD-1 interface is in a ROM socket so you can

replace it with ease. The only drawback of

installing Parados directly into you CPC is

that you can no longer use DR LOGO 3 under

CP/M as part of this program is stored on the

Parados

your computer.

AmsDOS ROM.

therefore only be performed by anyone with

extremely competent soldering skills - this is

definitely not something you should attempt if

you are a novice as you could easily write off

For once 464 owners have an advantage

### Parados supports 22 different formats.

columns of three each with 20 rows. To select a file you must use the up and down cursor keys. If there are more than 20 and the next column is already in use you cannot use the left and right keys to jump across which is rather annoying

On discs with more than 60 files you can scroll onto the next page. The names are displayed regardless of the user number or whether files are hidden or not. You can set Parados to read a single user if, in the unlikely event, you have very organised disc structures. You can, however, set this figure to 229 to view all the erased files on a disc, which you can then move into user 3 to unerase them using the move option.

### Play tag and win!

To Copy, Rename, Erase or Change the attributes of multiple files you tag them and perform the operation in one go. For ease you can tag or untag a whole disc with one keypress

Copying multiple files is where the Parados buffer shines, on a 128K machine you have around



H's for the CPC, H's recom it's up for grabs. Parados

June 1995 AMSTRAD ACTION

## So why do you need Hackit?

Hackit is a one-slot romboard with many uses. Could it be what you're looking for? Richard Wildey helps you decide.



### Hackit: the graphical momory dump.

Hackit is a foreground ROM so it initialises before BASIC, or any other ROM, should you want it to. There is an on and off switch so it's completely out of the way when you don't need it.

### What's the use?

Hackit has many uses:

- it is an excellent software development tool;
- it's pretty useful for hunting down pokes for infinite lives in games, and,
- you can use it to, er, examine, not copy of course, other people's code;

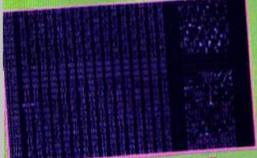
With Hackit you can break into a program while it's running and do such helpful things as:

- · disassemble to the screen or disc;
- · edit the memory, search for values;
- save areas of code.

Hackit also has many other practical features. For example, it also includes an assembler. This is notoriously user-unfriendly but it does its job. For example, with the Multiface you can CALL directly, but if you use Hackit, once you have broken into a program you cannot return unless you know the memory address at which you stopped it.

### Hackit v the Multiface

People are often under the misconception that Hackit is similar to the Multiface, but, in fact, the two are not really comparable. The Multiface gives you basic memory



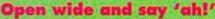
View the memory as HEX and ASCII.

editing features whereas Hackit is a specialised tool for serious users with a knowledge of assembly language.

Hackit can also help you advance your understanding of machine code as you can disassemble other people's programs to find out what makes them tick. Don't always take what Hackit tells you as gospel, though, because, undocumented op codes fool it and cause it to stop disassembling.

Hackit doesn't like indirect addressing, thinking mnemonics such as LD HL,(&2033) are LD HL,&2033, in fact, Hackit has been known to make up op codes of its own! However if it's only your own programs that

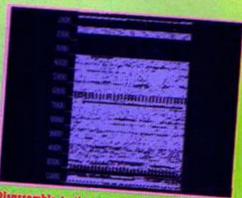
you're looking at, and you stick purely to programming legal commands, Hackit should have no problems.



If your program has crashed you can dive in and examine the memory to check everything is in order. You could also try forcing it out of a situation by calling sub-routines directly with parameters that Hackit lets you set up.

- Other features within Hackit are:

   a header reader;
- hexadecimal to decimal converter;
- the ability to fill and move code, and,



Disassemble to the scroon, printer or disc.

the ability to perform IN and OUT operations.

All in all Hackit is an excellent piece of hardware but it is let down by poor software. The assembler is awful to use but the dissembler certainly makes a programmer's life a lot easier.



All the commands which are available.

### Where to go

Unfortunately, Siren Software no longer make Hackit so it's time to trawl those AA reader ads again, or place your own, see page 9.
Clubs such as WACCI and UAUG (see the Amscene Directory on the covertape for club contact details) may also be able to help you out if you do want to get a copy of Hackit.

There are several versions of Hackit, but those beyond Version 4 have the assembler and are reputed to contain fewer bugs. There are also some French versions floating around so make sure what you know what you're getting. Hackit originally retailed at £35 but was reduced to £25 so don't pay much more, if any, than this.

### **Recovery positions**

Hackit is handy if your computer crashes and you are in danger of losing hours of work. Assuming the computer has just 'hung', rather than reset, you can jump into Hackit, enter [D] to initialise AmsDOS then input [S] with your chosen filename to save. Then pick the relevant addresses from those in the box, use the same address for Entry and Load as the given start address, and then you should find that the panic should be over. Where the length of code varies use the graphical memory dump ([M]) to find the end then fine tune this figure with the memory editor.

Program	Start	Length	Additional information
Protext (ROM/disc) Maxam (ROM/disc) OCP Art Studio	&172	Unknown	Save as Binary
	&170	Unknown	Save as Binary
	&4000	&4000	Change to Bank 2
TUSS clipboard	84000	&4000	Change to Bank 4
BASIC	8170	Unknown	Save as BASIC

You too can make it big! What? Your text, that is, using MicroDesign Extra. And we have three copies as prizes!

up, we have three copies of MicroDesign Extra, worth £14.99 each, to rush to the winners of this month's coruscating competition. This is your chance to win a package which can make your posters and newsletters outshine those of the competition.

Use MicroDesign Extra for its

- o clip art;
- sheet music facilities:
- headline fonts.

In her review of MicroDesign Extra, in

MD Extra: xoom facility, huge headlines, and more AA116, (Designs on layout, page 18) Angela Cook concluded:

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

And Angela should know because, in the same article, she confesses:

I used to use MicroDesign for designing front pages, newspapers and reports in connection with my homework when I was still

Angela finds that MicroDesign Extra enhances the versatility of MicroDesign. So, if you are into design or need to layout almost any kind of document, and have, or are thinking about buying, MicroDesign you need MicroDesign Extra. So, if you agree, why not take up this opportunity to win a copy? Remember, we have three copies up for grabs.

Simply answer the question which follows,

then send your answer on a postcard or on the back-of-an-envelope to:

It's a pig of a question, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail it to aa@futurenet.co.uk before Friday, 30 June 1995.

And the question is:

What was the original name of the original company that produced the original MicroDesign?\*

\*Clue: look in the MicroDesign Extra review in AA116.

### New designs?

For more information about MicroDesign Extra and to find what's happening with the proposed updated version of MicroDesign - MicroDesign 2 - contact CampurSoft, 10 Mcintosh Court, Wellpark, Glasgow G31 2HW

= 0141 554 4735, fax 0141 227 4486.

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

Operation Thunderbolt

\* Switch Blade

\* Klay

- No Exit
- \* Navy Seals
- \* Pro Tennis Tour

- \* Barbarian II
  - \* Robocop II
- \* Pang \* Batman The Movie

All games are unboxed/without instructions at a special price of £9.99 All Ten Games At A Special Offer Price of £74.99

Amstrad 6128+/464+/GX4000

Enforcer Cartridge for the Trojan Phazer Gun	£14.99
Amstrad Burnin' Rubber/ Loco Basic Cartridge	
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
	THE STATE OF STREET

Amstrad 464 and 6128 General Amstrad LP1 Light Pen and software for the 464 ...... Amstrad 464 Light Gun and games cassette (5 Games) £19.99 .. £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 69.99 Amstrad Cassette Head Tape Head Demagnetizer Amstrad Printer Lead (34 Way Edge Connector to Centronic Plug) £9.99 Amstrad JY2 Joystick .

Amstrad 464 "Teach Yourself Basic" Tutorial Guide with 2 Cassettes Part I Part 2 €9.99 Amstrad 464 Circuit Boards complete P/N.Z70375 ..... Amstrad 6128 Cassette Leads..... £5.99 Amstrad Action Binders (Holds 12 copies of A.A) Choice Blue or Red £4.99

Amstrad Action Cheat Mode Book (Cover Issues 17-50) ALL PRICES INCLUDE POSTAGE, PACKING ETC. LL ORDERS BY RETURN..CHEQUES/VISA/ACCESS/PO'S.

TRADING POST

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

Doctor Who Star Trek: Voyage r The Avengers Terry Pratche tt Waterworld Babylon 5 Red Dwarf Aliens Blade Runner X-Files The Prisoner Blake's 7 S tar Wars Village of the Damn ed Tank Girl Thunderbirds De ep Space Nine Clive Barker T e Hitchhiker's Guide to the Ga axy Johnny Mnemonic Godzil a Akira Spiderman Mission I possible Stargate Space:1999 Planet of the Apes Judge Dre

Coming soon SFX

# FORUM

AA's resident archivist
Richard Fairhurst returns
with a hardware project
from the past and also
answers some of your more
up-to-date questions.

### QUESTIONS AND ANSWERS

Colour dumped
I recently got the Citizen ABC-24
colour printer and the OCP Advanced
Art Studio for my 464. I have used different
colours in my pictures but when I print them
out they only print in black and white. And yes,
I do have a colour ribbon.

Please tell me how to print in colour. Paul Walker, Harrogate

Colourdump 3

Advanced Art Studio's built-in print routine is only for black and white printers – affordable colour printing is a relatively recent development and OCP is an old program! However, two commercial programs print

pictures in colour:

- ColourDump 3 from OJ Software, 273 Mossy Lea Road, Wrightington, Nr Wigan, Lancs WN6 9RN
- # 01257 421915),
  price £15.95, and
  the slower,

   printer driver from
- printer driver from Datel Electronics, Govan Road, Fenton Industrial Estate, Fenton, Stoke on-Trent

ST4 2RS = 01782 744707,

price £19.99. Both programs are on disc only However, a word of warning...

Both programs are designed for Star colour printers. If — as is highly likely — your Citizen doesn't use the same codes (of the form (ICI) to set a colour), you need to ask a friendly hacker to tweak the program, or give up on printing pictures in colour altogether.

Check your printer manual!

Pin-head
Can you tell me a firm which supply a plug-on side switch for my 3.5-inch disc drive? Avatar doesn't seem to be supplying them now or, at least, not for me – they sent my money back.

Derrick Frost, Northampton

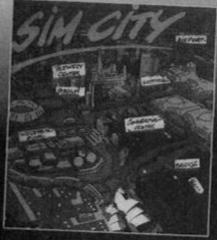
Sadly, no other CPC firm ever supplied plug-on side switch units. However, it is relatively easy to add a (nonplug-on) side switch yourself. If you're not happy with a soldering iron try giving the following instructions to a bod at your local electronics shop...

Look for a 34-wire cable connecting your CPC to the 3.5-inch disc drive. The red wire on one side connects to pin 1, the wire furthest from it connects to pin 34. So, by counting between them, locate the cable which connects to pin 32.

Now whip out your soldering iron and connect a switch (SPDT, meaning, single pole, double throw) between this and one of the cables immediately next to it. In other words, I mean pin 31 or pin 33, which are both ground.

Now use this switch to flip between side 0 and side 1, to use RomDOS or ParaDOS double-sided formats, set it to side 0.

That should do it!



Disappearing acts: first the software company, then the game?

Evaporated disc
I do not know if others have had this
problem, but perhaps you can help.

I have two Infogrames disc games (Teenage Queen and Captain Blood), both of which have evaporated off the discs. These have been stored with other discs which are still okay.

How do I go about replacing my games as the company, which used to advertise in AA, has disappeared. I am now worried about Sim City, produced by the same company: on side

### Covertape clinic



### Save our sprites

I've managed to capture a couple of sprites using TUSS off the AA115 covertape, but I can't save them. Option 9 from the menu doesn't access the disc or anything. And how can you save a sprite as ASCII anyway? Does it save a description of what the sprite looks like or something? Robert Waring. Southend

Okay, here's how to do it. First of all, select the appropriate saving method using option 9. Save as ASCII generates db statements with a hex dump of the sprite, so it can be directly incorporated into

assembly language source code. You should also use

this option to enter the filename to save the sprite under.

Now, return to the sprite display screen, and press COPY. You can then use the cursor keys to wipe any rubbish you don't want saved off the screen. Finally, press COPY again, and the sprite is saved to disc.

The full (and rather hefty)
TUSS manual is available from the
original authors of the program,
Sentinel Software, priced £2

© 0181 876 7032.



Do anything you wanna do: save sprites using TUSS and option 9.

### **Spelling checker blues**

I can't get PowerSpell to work on my computer - a 464 with 3.5-inch disc drive.

Is there an error in the program, or do I need a memory expansion? Sally Tomlinson, Salford

The latter, I'm afraid. PowerSpell has a 48K dictionary, and because the 464 only has 39K

available for programs (the rest is taken up by the firmware and screen memory), there's no way it will work on the oldest Amstrad.

Getting hold of a memory expansion, too, could be tricky now that Datel are no longer supplying them, so it's back to trying the AA classifieds section on page 9. But, because PowerSpell uses its own bank-switching routines (rather than relying on the 6128-only Bank Manager), you can run it without problems should you purchase a 64K expansion.



Don't back off, back up. But no need to exert yourself - Xexor will back up most discs for you.

A, I have ADH.BIN (15k), ADL.BIN (40k), DISC. (1K) and nothing on side B.

Does this seem right? G Hayes, London

I doubt you need to worry about Sim City in particular. The 1K file is the loader, the 15K file the loading screen, and the 40K file the main code - all perfectly above board. Side B of disc games is usually blank, too.

You might like to try backing up your disc games and storing the backups in a safe place, to prevent future catastrophes

The best program currently available for such a job is Richard Wilson's Xexor (from Sentinel Software, 41 Enmore Gardens, East Sheen, London SW14 8RF,

cs94rrw@brunel.ac.uk, £14.99). Although it won't back up all games it can cope with more software than any other copier.

Are you, by any chance, storing your discs near a magnetic field of any type, as produced by monitors, power supplies, TVs, speakers and such like? This could be the source of your problems.

Alternatively, it could be that someone might merely be trying to prevent you playing vile and depraved software such as Teenage Queen...

> Insane in the membrane

I have a 664 with a damaged keyboard membrane, and I am having difficulty finding a

If I can't find one can I remove the disc drive, make a casing to house it and connect it as a first disc drive for my 464? And if so, how? W Gilhespy, Aylesbury

If you haven't done so already, CPC PLC are the people to contact for all your replacement Amstrad parts (CPC PLC, Component House, Faraday Drive, Fulwood, Preston PR2 4PP # 01772 654477).

You could also try the AA classifieds on page 9. You might find that someone, somewhere, has a dead 664, with a perfectly decent keyboard that he or she is willing to get rid of. (Having said this, though, I must admit that keyboard failure is probably the most common fault with 664s9

Disc drive mechanisms are pretty much the same on all CPCs, but, sadly, there's more to a 464 'first drive' than just the actual disc drive itself.

The CPC 464 doesn't have any circuitry to control the disc drive, or even an AmsDOS ROM. This is why a first drive for the 464 originally cost £160, whereas a second drive was priced at a much more reasonable (ahem) £100. Again, your best bet is to try the AA classifieds to see if anyone is offering the working part of a DDI-1 which has partially broken down.

TOP TIPS

Hardware to port...!

By popular demand, this month's Top tips presents a project to build an A38. We could have reprinted another project which graced the pages of an even older copy of AA, but the, by far the more professional, design of this one bears repeating. (If you want to build the other project it worked by routing the cassette motor on/off signal to bit 8 of the printer. This is fine if you can stand a 'click' every time you want to print a character above 127, but it's a little tatty!) If you're not confident with a soldering iron.

or you don't know what IC stands for, get someone else to assemble the project for you. Attempting to build a hardware project where you are not quite sure what you are do sure-fire way to damage your printer, your CPC, and various parts of your anatomy.

On the up side, however,



Map-lin it out. You can build an A38.

this isn't a particularly complex project, so if you have a reasonable amount of experience with such things you shouldn't really encounter too many problems.

Plus owners, by the way, needn't bother with this - you have an 8-bit printer port built into your machine, which only requires a short listing to get up and running, and which we'll deal with when the original CPC project is finished.

Shopping list

All of these parts should be readily available from any reputable electronics components supplier. Get the Maplin Electronics (mail order company) catalogue (below, left) from your local W H Smith's, look out for branches of Maplin in large cities or try their customer services

# 01702 552911 to find your nearest branch.

 one each of the following ICs: 74-133, 74-138, 74-273, 74-241, 74-02, 74-121. These are usually catalogued as, for example, 74HC133 (the CMOS version) or 74LS133;

 a socket for each, so add two 14-pin IC sockets, two 16-pin sockets, and two 20-pin sockets to your list;
• one socket to hook up to the (50-way) edge

connector on the CPC;

 one 36-way Centronics connector for the printer. If you use a CPC-specific printer lead you need a more standard male-to-male lead to use this interface.

The port also requires:

• three R1/2/4 4K7 Ohm resistors;

an R3 150 Ohm resistor; and a

C1 1 5F capacitor;
a Vero-Q stripboard, although difficult to get hold of, is ideal for mounting the whole project on, thanks to its 'IC-ready' etchings. And finally,

 the wire! Wire wrap, which is thinner than the normal stuff, makes fine electronics work such as this a good deal easier.

### Hard facts

The project sits on the expansion port of your CPC, rather than on the printer port, and implements a whole new 8-bit data port. In

addition, there's the necessary strobe output (used to tell the printer that a new character has been sent) and 'busy' input. Theoretically, then, you could connect two printers to your CPC at once, one off each port, although why you should want to do so is a different matter...

To let software (including BASIC) use the new port, you need to type in a short listing that redirects the firmware print routine to use I/O addresses &FBF9 (the new data port) and &FBF8 (the strobe/busy port).

Here's a simple listing to do the job.

118 FOR n=44999 TO 44958 128 READ at: POKE n, VAL(\_A| +a\$) 138 NEXT: CALL A4000 148 DATA 3E,C3,21,28,BD,11,08,A8 158 DATA CD,52,48,11,27,48,CD,52 168 DATA 40,11,20,48,CD,52,40,11 178 DATA 37,48,CD,52,48,21,F1,BD 180 DATA 11,43,40,CD,52,40,C9,CS

100 MEMORY ASFFF

198 DATA CD,43,A8,C1,C9,C5,81,F8

200 DATA FB,ED,48,CB,41,C1,C9,CS 210 DATA 01,F9,FB,ED,79,08,ED,79

220 DATA C1,37,C9,01,32,00,CD,2D

238 DATA A8,28,EC,18,F9,80,28,F6

248 DATA B7,C9,77,23,73,23,72,23,C9

Note, however, that any software that reinitialises the firmware or uses its own print routine -which, incidentally, includes anything which is CP/M-based - needs to be hacked severely before it can use the new facilities.

### **NEXT MONTH:**

For probably the first time, Techy Forum, presents a, sort of, 'Next month' box! (AA readers faint all over Britain.)

Due to space restrictions, you'll have to wait another four weeks for information on how to put the port together. Sorry. However, if the amount of mail we've received on this subject is anything to go by, Maplin needs to stock up on parts...



### (01257) O.J. SOFTWARE (01257) 421915 Fast Friendly Service 421915

VISA

		_
STRATEGY/SIA	AULAT	ION
		.Dusk
Chess, Droughts, Bridge, Blo	gommon	.08.95
Cluedo Colossus 4 Bridge		99.63.
Colossus 4 Chess	£3.75	£4.99 £7.95
Football Manager II	\$2.99	99.62
Ecophod Monopher E a Fun KX		\$6.99
Football Manager III		99,92
Football Manager III Football Manager World Cup Monopoly	\$7.99	\$2.99
Monopoly, Cluedo, Scrabble	£12,95	\$12.95
W.Cup Italia 90 (Not CPC+)	*****	99.63
Social Monio	20.94	TA'AA
Ances		
ARCAD	CASS	Disk
Chart Attack	£4.99	Disk
Dizzy Colection	£8.50	
Dizzy Collection Dbl Drag II + Rodland Double Dragon Dragon Team	\$3.75	£12.95
Dream Team	99.62	12000
CF+ SOC - and the last time that the		99.63
Hanna Borbero Collection Loops Collection	£4.99	\$6.99
Midnight Res + Nightbreed Mystical	THE REAL PROPERTY.	99.62
Mysical	\$3.75	99.62 99.62
Myth Focland Poperboy II Prehistorik II Realistorik II	K2./5	\$7.99
Poperboy II	01.00	\$12.95
Prehistorik II Rodfand + Obi Dragon III	29.50	E12.95
Super Couldron	£9.50	£12.93
Super Spoon by a Pt Finish	£4.00	00.00
Turtles The Coin Op	\$4.99	E6.66
SPECIAL OFFER		
All Daka Baxed With		Ns .
Bonanza Bess Incredible Shrinking Sphere	N 811 811 91	£2.99
Monty Python		£2.99
Monty Python		22.99
Wild Streets	40, dec 400 pr	£2.99
Pop Up	-	£3.99
Bock to the Future II		£4.99
Light Corridor		£4.99 £3.99

Accessories	5
AMI Mouse & Interface	£34.95
MP1F/2F 464/6128 to Scort TV	£10.00
Coble 6128 to FDI 2nd Drive	67.95
Coble Megadrive1/CTM644 Mon	\$0.00
Coble Megaditive2/CTM644 Mon.	\$12.99
Cable Megadrive 1/CM14 Mon	20.00
Cable Megodrive2/CM14 Mon	\$14.99
Cable Amigs/Attri/Spectrum Phone	100000
Counte Lead (with REM Corn)	£3.95
Disk Drive Bolt	62.90
Disk Drive Cleaner 3*	25.95
Disk Drive 3.5" + Ramdos 6728	E79.95
Disks 3" Ex Games	10-614.99
Dids 3.5° DSDD	10: E4 99
Did: 3.5° DSHD	10: 66:00
Inkjer Refd Conon/HP/Cr Bk	28.90
Major Rafill Colour	617.00
Khoord Ext leads 464	28.95
Khoord Ext leads 6126	20.05
Khoard Est 464+/6128+	29.95
Mouse Mot	12.99
Printer Cobile CPC 1 Mir.	\$6.95
Printer Coble CPC 1.5 Mer	20.03
Printer Cobie CPC 2 Min	£10.95
Ninter Coble CPC+ 2 Mr	87.95
Jovelick Soliter	£2 99
Joyatck Extension Sand	\$4.90
Rishon Ralek	\$12.95
Screen Filter Mesh Coll/Mono	£14.95
Screen Filter Mesh Coll/Mono	\$11.95
System Disk 6128 (Sides 182)	E9.95
BUILD	

An Veg Min

Cl. Arcedo 3

Formula G.Frix

Howard Duck

Moon Tree

Ees

Fostman Pat

BUSINESS/UTILIT	TIES
	Disk
Advanced Art Studio 6128	
Adv Art + AMX Mouse + M Mot	£54.95
Adv Art Studio + Col Dump3	\$29.99
punc and passe returned	214.99
Colour Dump 3 (Col Scr Dump)	£15,95
Crosh Course Typing Tut 6128	£20.95
D.E.S. ROM Version E24.99	\$14.99
Discology (Disk Utility)	-09.83
Masterasic 128 (128k).	\$27.95
Moderfile III (128k)	\$29.95
Moxem Assembler/Discountibler	\$23.95
Microdesign = DTP for 6128	
Microdesign + AMX Mouse	259.99
Microdesign Estra	\$14.00
Microdesign Maps UK	£14.99
Microdwign Mops World	E14.99
Mini Office Original Cass Only	\$2.99
Money Manager (+PCW)	\$24.95
Porodos Rom	£14.99
Propriet ROM\$24.99	\$15.99
Protest Disk	\$21.95
Protest CPM (6128)	\$51.95
Prospel	.\$20.95
Protype (Print Enhancer)	623.95
Routeplanner (New)	£19.95
Soft Lok Tope to Disk Transfer	214.99
Torword 6128	\$24.95
Tor-Spell (for Torward)	\$20.95
Xexor Disk Utility 1	\$14.99

G.Sood Old

let Ninja Refe

Night Gunner Pro Mint Bike

Scooby Doo

Trop Door live Alterno

Grid box II

J.Wilson Comp

Pegous Bridge

Punch & Judy

Socrar Bou

Tobo Bile

1	EDUCAT	ION	
	THE RESERVE OF THE PERSON NAMED IN	CASS	Disk
9	Fun School I Un 5, 5-8, 8+	Euch	29.95
ы	Fun School II Us 6	\$3.99	
	Fun School II 6-8	\$3.99	
Я	Fun School II 8+	\$3.99	
П	Fun School 3 or 4-5	\$10.95	\$13.95
-	Fun School 4 7-11	\$10.95	\$13.95
	Playdays 3-8	£10.95	
Н	Shoe People 4-6	25.99	
ы	Lets Play with Words 4-8	£12.95	\$12.95
Н	Fun with Words 7-	.08.80	\$11.95
	Read Right Away 1 5-8	29.93	£12.95
1	Read Right Away 2 6-9	29.95	£12.95
1	Read Right Away 3 7+	29.95	£12.95
	Beter Spelling 9+	£8.95	\$12.95
Н	Sen Play Numbers 4-8	£12.95	\$12.95
Н	Lets Play Money 4-8	£12.95	\$12,95
ч	Primary Maths 3-12	\$24.95	\$24.95
Н	Fun with Numbers 7-	CB.50	£11.95
	Torget Maths 6-13	March 1981	\$12.95
4	Micro Maths 11+	\$24.95	\$24.95
ч	Mega Mahs 15+	\$24.95	\$24.95
1	French Mistress 11+		\$16.95
	German Moster 11+		216.95
ш	Spenish Tutor 11+		\$16.95
Н	Micro English S-Ad	\$24.95	\$24.95
	Granny's Gorden 6-10 (61		£19.95
П	Dragon World 6-10 (5128)		\$23.95
н	Giori Cifer 9.14		£15.95
	Answer Book Quiz 6-11		\$11.95
-			

Endanne

Gin Roor

K. Dolgleich

Popeye Q10 Tankb

Socity Sweep Thomas Tank

Dores West

ORIES		DOSINESS/ GIILIIES		EDUCATION		
	£34.95	Advonced Art Studio 6128	Disk	CAS	s Disk	
of TV	£19.99	Advanced Art Studio 6128	\$10.03	Fun School I Un 5, 5-8, 8+ Each		
			\$54.95	Fun School II Ibs A CT 00	-	
14 Mon	66.65	Adv Art Studio + Col Dump3	\$29.99	Fun School II Un 6		
LE NAME	\$12.99	Basic Idea (Basic Tutorial) Colour Dump 3 (Col Sor Dump)	\$14.99	Fun School I Re C1 95		
Mon	20.00 £14.99	Colour Dump 3 (Col Sor Dump)	\$15.95	Fun School II 8+ £3.99 Fun School 3 or 4-5 £10.95	20 219	
Mon	\$14.99	Crash Course Typing Tut 6128	\$20.95	Fun School 4 7-11 \$10.95	613.05	
in flore.			214.00	Pinetno 3.8 £10.91		
er	\$3.95	Discology Disk Utilia/	00.83	Shoe People 4.6 CS 00		
×12)	62.99	Modernic 128 (128)	\$27.95	Jan Blac with Words 4.8 F12 Or	01205	
	£5.95 £79.95	Monterfile III (1/28k)	\$29.95	East with White 7. CA ST	611.05	
128	E79.95	Moxem Assembler/Discosambler	\$23.95	Rend Puris August 1 5 8 CO CO	613.05	
	- PUC BIA, TT	Administration a PATR for A 2 74	\$29.99	Read Right Away 1 5-8	213.05	
_	_10: E4.99	Advantages - AAAY Marine	P45 00		612.05	
	10: 66.99	Microdesign Maps UK Microdesign Maps UK Microdesign Maps World Mini Office Original Cass Only	C14 00	Return Combine Co. CR Cd	C17.05	
&	58.99	Microfesion Mone I K	£14.00	Beter Spelling 9+ £8.95 Jam Play Numbers 4-8 £12.95	212.05	
	611.99	Microslavine More Whold	F14 00	lets Play Money 48 \$12.95	012.05	
	\$8.95	Mini Office Original Cost Only	22.00	Primary Mahs 3-12 £24.95	274.75	
	20.05	Money Manager (all 745	024.04	Friday Monte 3-12 £24.93	211.05	
	E9.95	money monager (+1-C+1)	£14 00	Fun with Founders 7- Alf-20	E11.95	
	62.99	Money Manager (+PCW) Parados Ban Propriet ROM £24.99	015.00	Norger Midme 0-13	K12.92	
_	\$8.95	Protect Disk Protect CRM (6128) Protect CRM (6128) Protect CRM (6128) Protect CRM (6128) Routeplanner (New)	291.06	Micro Mona 11+ £24.93	524.95	
_	29.95	Protein China (4 h-58)	261.04	Mega Mons 13+	- A24.VS	
	£10.95	Lioles Cuit lo 1741	600.05	Prench Mishest 11+	F10.93	
	E7.95	Prospel	620,93	German Moster 11+	E10.93	
_	12.99	Protype (Print Enhancer)	E23.Y3	Sponish futor 11+	£16.95	
	E4.90	Routeplanner (Ferw)	E19.93	Micro English 8-Ad		
	812.95	Scott Lok Soose to Disk Intervene	214.00	CHISNAY & CHOUSAN (6-10) 95 ( 28)	E14.42	
10	£14.95	Torword 6   28	£24.93	Dragon World 6-10 (6128)		
-	A11.95	lanapel (for losered)	840.95	Dragon World 6-10 (6128) Glort Killer 9-14		
12)	E9.95	Xexor Disk Utility 1	£14.99	Answer Book Quiz 6-11	29.112	

		PR	IN	TE	RS
prin	ters	listed	bei	ow	are
<b>US#</b>	wit	AM	STR	AD	CPC
hen	ord	ering	ple	910	shoh

Att

CPC. e compute STAR LC90 9 Pin Mono\_ \$139.95 STAR IC100 9 Pin Mono/Colour £169.95 c. Colour/Mono Ribbon + Colourdo STAR LC240 24 Pin Mona All prices include coble & delivery

PRINTER RIBBONS						
Quantitys	1	2	5			
DMP 2000/3000	C3.75.	E7 00	\$16.25			
CITIZEN 1200		£7.50	£16.25			
IC10/20/100						
IC2410/20/200						
OF1080/81		D.00.	£16.25			
091124			X16.25			
OP2123/2124	E4.95	£9.50				
C10/100 Colour	28.95	\$17.50				
IC200 Move.	E4.95	£9.50				
C200 Colour	\$12.95	\$25.00				
Other sales	16.6		4.0			

RIBBON REINK. £12.95

INKIET Refill Black \$8.99 Col \$11.99

### Investicas

AMSTRAD IV2	24.00
AMSIRAD ITZ	- 65.99
AMSTRAD JOYPAD	£13,95
CHEETAH Bug	£13.95
KONIX Speedking	£11.95
KONIX Navigator	£13.95
QUICKSHOT Python 1	£10.95
GUICKSHOT Python 1 Microswitch	\$11,95
ZIPSTICK Super Pro	£14.95
JOYSTICK SPUTTER	\$2.99
JOYSTICK EXTENSION	\$4.00

BUDGET CASSETTES £3.75 EACH

HOW TO OBDIES: ACCESS/VISA TELOR FAX. (01257) 421915 MON-FRI 8.30 -17.30 SAT 8.30 - 12.30

BY POST- LIST ITMAS REQUIRED. MARK CHEQUES/PO'S PAYABLE TO O.J. SOFTWARE.

SEND TO O.J. SOFTWARE, 273 MOSSY LEA ROAD, WEIGHTINGTON, HE WIGAN, LANCS WHO PR.

POSTAGES: UNOTED KINGOOM, OBDIES OVER ES.00 POST FREE (OBDIES UNDER ES.00 ADD 50F).

POSTAGES: OVERSIAS (AIR) ADD CT.00 FRE ITEM SOFTWARE (PAYMENT BANK DRAFT/CREDIT CARD)

PLEASE WILTE DE PRONE FOR LATEST PRICE LIST (ANSWERPHONES/PAX OUTSIDE MARKAL HOURS)

## ympton Cottage, Brunswick Rd, Worthing, Sussex BN11 3NO TEL: 01903 206739

3D Pinholf

Cl. Arosdia 2

Freddy Harded

H.K.Phooey

Popeye 3

Red Arrows

Spag Western

Tin Tim Moon

Mosk

MECABLASTERS

on 2 discs

The biggest game ever seen on the CPC is exclusive to Radical. With more levels & features than its SNES & MD counterpart, the only thing that's smaller is the price. An essential buy for any CPC gamer.



Action Fook Court Duckula

Gone Own

Moster Chr

Rugby Boss

Spin Dizzy

Theore Euro

Formon For 2

Andy Cop Cricket he

Gone Over II

Indoor Socow

N.Monsel GP

**Bun for Gold** 

To Suit Mood

The second secon				
WHO SAID THAT	£13.95	UNDERSEA A	DVENTURE	£9.95
SMART PLUS (PLUS ONI	Y)£13.95	MASTERS OF	SPACE	£9.95
ROUTEPLANNER	£19.95	STAR DRIVER £9-95		
DES (ROM)	£24.95	ABANDONED £TBA		
DES (DISC)	£13.95	MICRO DESIGN PLUS £24.95		
DES APPLICATIONS 1	£13.95	<b>PREHISTORIK</b>	£11.95	
FLUFF (PLUS ONLY)	£7.95	SUPER CAULD	RON	£11.95
POSTCODE	TEL			
GAME		DISC 3" OR 3.5"	VALUE	
Name and Address of the Owner, where			£	
1			£	
		TOTAL	£	

Ct Avedo

Gurlighan

Popeye 2 Rolly Sim

Spoce Rider Rop Cet

### ABANDONED

£TBA (128K only)

They said it couldn't be done - but now the CPC has its own answer to DOOM. Super fast scaled blasting action set on an abandoned moon-base and its mines. Comes in Plus and CPC versions - Please write or phone for details.

### ROUTEPLANNER

£19.95 (128k Disc)

This will map any route in the British Isles. With up to date road information, this program is essential for any UK road user.

£23.95 (ROM) £13.95 (Disc)

The CPC's genuine desktop system is fast becoming standard among CPC users. It offers a full windows style interface, with dozens of disc functions.

### DES APPLICATIONS 1 £13.95 (128k only)

This is a collection of programs which run in the DES operating system. They include: Calculator, Notepad, Diary, Address Book, and the DES Tiles.

### MICRO DESIGN PLUS £24.95 (128k only)

The best DTP on the CPC, with more features and fantastic print quality. Can produce pages up to A4 size with good resolution using a special 256k page. Lots of fonts + clip art are also available.

All programs are on 3" or 3.5" unless stated — Please specify the format required. All orders over £20 have a 10% discount until the end of JUNE. If you would like a catalogue or any information on any of our programs please send a SAE.

### 3491550 =5

Check out these crazy prices... 1 back issue .....£2.50

3 back issues .....£6.50 4 back issues .....£7.50

2 back issues ......



Don't miss out! All the AA covertapes, all the tips and all the hot-off-the-press info for less money!





All extra issues .....add £1.50 for each ALC: SOLD THOUT AAJOI: Covertape: Erolon, Home Accounts, Inside: The complete guide to animation on the CPC, interview with Radical Software, Elite Masterclass. SOLD OUT AA103: Covertage: Nebulus, Speech Inside: copying devices, Fault preview, Umsoft interview, ow-cost printer reviews. AA104: Covertage: AA Toolkit, Uridium. Inside: Fluff review, AALOE Covertape: AA Tookit, Unidom, Inside: Fluff review, the PD scene exposed, sports sim round-up, Basic Idea, Hor Teacher and all the other usual stuff.
AALOE Covertape: Deliverance, Bomber, Basic Utilities, Inside: A comprises guide to getting your CPC to communica with other computers, Megablasters preview.
AALOE Covertape: Zynaps. Spriting Back, Inside: The easy way to animate your graphics, the compliate beginners' guid to printers. Reviews: Making Minic. AA107: Covertape: Ikari Warriors, Picasso (art package), Inside: The welrdest and most pointless software and hardw ever released for the CPC. Review: Masters of Space.

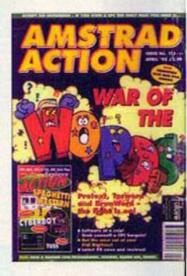
ot

AA111: Covertage: D.E.S, DOS Copy, Breakdown, Inside: The ultimate (no lessi) guide to CPC hardware and software. AA112: Covertage: Titus the Fcx, Megablaster Demo, Desktop Organiae (disc only), Inside Public Domain - what it is and where you can get it. Plus: the top 50 PO titles of all time! AAI12 Covertage: Samural Trilegy, Power Spoil, Inside: Software: commercial versus PO. Is one better than the other? Plus: link your keyboard with your joystick.

AAI14. Covertage: 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 your CPC into the next century! P Mark III review, All Format Fairs.

Mark W review, All Format Fars. All 15: Covertage: Spaghert Western, Cyberboy, TUSS. Feature: War of the words - Protest V Easword V BrunWord. All 6: Covertage: Chuckke Egg. Hercules, Disc Editor, Disc Archiver, Columbia VI.1, Assembly Line Source Code.





### **Amstrad Action Back Issues**

Address				
Post code		Phone No _		
Method of paym	ent (please	tick)		
Access 🖵	Visa 🔲	Cheque	]	PO 🖵
Credit Card No			Expir	date

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

I would like the following back issues...

Cost of back issues	1
Please add cost of postage and packaging	
Total cost	

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.