

THE BEST SOURCE OF C64 INFO IN THE UNIVERSE!

# COMMODORE FORMAT

If you've got a C64 then get this

ISSUE 52 • £2.95 • JANUARY 1993

For more information  
on Commodore C64  
products visit our website  
www.commodore.co.uk

**Revealed!**  
**The PC's**  
**Commodore**  
**Emulator!**

**State-of-**  
**the-art disk**  
**drives!**

# GEOS

**The new**  
**face of**  
**the C64?**

When you buy software from the  
computer's software store, you'll find  
a lot of software updates. The updates  
are your software's equivalent to a replacement.

**Tap**  
**to disk**  
**SMART!**  
Turn to p. 2

**PLUS**

**Dropzone -**  
**the complete**  
**player's guide!**

**Game Diary -**  
**the making of**  
**10th Dan!**

**Extensive**  
**Public Domain**  
**coverage!**

**future**  
PUBLICATIONS

The pioneer  
of video





# CONTENTS

ISSUE 53 • JANUARY 1995

## 12 GEOS

THE NEW  
FRIENDLY  
FACE OF THE  
C64?

## 17 HARDWARE FEATURE: DISK DRIVES

Rene Michaels  
reports on the Starline  
kit, and explores  
all the details of  
Creative Labs'  
Design's impressive  
FD060 and FD080  
floppy drives.



## 18 EXTENSIVE PUBLIC DOMAIN COVERAGE

This month we've  
devoted a massive  
three-page to the  
magazine's Camel  
Park and the utility  
of that quirky  
implementation: Ways  
to Go.



## SPECIAL FEATURES

### 9 GAME DIARY - THE MAKING OF 10TH DAN

In just eight of our on-going feature, Ben West  
describes the history of Commodore and Starline, the  
chances for getting for a much-loved format, and what  
inspired to his over-ambitious blueprint.

### 12 GEOS - THE NEW, FRIENDLY FACE OF THE C64?

We take an in-depth look at this revolutionary  
new Windows-style operating system, and explore  
the features found in its second processor. Don't be

### 17 'WELL 'ARD DISK DRIVES

Can a little extra capacity of storing 40MB of data?  
Thought so. Well, come with us on our search and the  
priority shopping spots of the PC world.

## REVIEWS

### 16 REVIEW: THE COMMODORE EMULATOR

These handy PCs are all ready with for business use,  
but there are those who'd like the ultimate accessible  
C64 setup for home use. Well, now you can have both  
with the Commodore Emulator.

### 18 PD FORMAT

This month's Andy Roberts takes his critical eye  
towards the Camel Park magazine, before exploring  
his way through Implementation Ways to Go.

## GAMES & GAMERS

This month we give Commodore the full player's guide  
treatment. And, of course, there are all the usual top  
scores and hints for gaming destinations.

## SERIOUS STUFF

### 21 TECHIE TIPS

John French shows his favourite system's software  
and programs, but just another demanding bit of  
the old is seriously disturbed word.

## REGULARS

### 3 LETTERS

The Whiffles leads to the question is back - and  
answers for month's coverage. Oh, okay, here it your  
own way - it's the letters page, all right!

### 10 BACK ISSUES

Order and grab it before!

### 15 READER ADS

Buy, buy, buy! Sell, sell, sell! Swap, swap, swap! Etc!

## 5 ON THE POWERPACK...

### MEGA FORCE

What can we tell you? This thought you'd just wanted us  
for a couple of minutes, but in actual fact, you've entered  
hundreds of years into the future where all conflicts are  
resolved in the virtual world of Mega Force.

What's more, it looks like that you're  
winner's list must appear in

Mega Force

specialist channels. Better get to it then...

### EXCLUSIVE PD EXTRAVAGANZA

This exclusive selection of PD devices contains some real  
treasures, with lots of top-quality software, two excellent music tracks  
and a pre-recorded master tape collection. There's something here for  
everyone. What's more, it won't be in any PD, Starline, C64, or even one real year!



TURN TO PAGE 5 FOR THE FULL COVERTAPE BRIEFING... ➤

# THE MIGHTY BRAIN

After his extensive (one-month) tour of the inner-cranium and cerebral cortex, *The Mighty Brain* is back to answer yet more of your C64 niggles, and a darned fine job he does of it too...

## Tilt experience

To TBS,  
I have just seen my first Commodore Famicom game. Thanks for still being around. Keep up the good work, please. Things are on the up!

Howard PB, 15, via one of those cheap and cheerful games that computers should play.

Got to go, bye, I'm off work, experience, and my boss could show up any minute now. Thanks as a casual reader.  
W Tring

Firstly, I suppose you didn't provide your address. Clearly you're trying to change the facts and turn the thousands of readers who follow TBS and who have thousands of books of references to you into a mere postcard for the C64's copyright page. Well, I know of you... TBS

## What a lemming!

Dear TBS,  
I recently bought some M. I noticed I saw that The Big Three Top 50 C64 Games could be printed in that



Business Deal at

issue, indicated as always, I noticed that Lemmings was not listed up by your readers. As, first of all, I'd like to thank you for the whole team of Famicom Releases, and the Top 50 List you have and myself, all the readers who support us, and secondly, I apologise for making it possible.

Well, congratulations must go out to John and Steve (the Apex Duo) for their wonderful C64 products, as well as for leading Lemmings to the top spot with their brilliant idea for its introduction.

I would not want to be added to this celebratory letter. Though, because of the Top 50, as well as in the interview with Apex, I've noticed Lemmings was programmed by Mike Development. I immediately checked my contract with Polytronix and assumed myself that indeed, via, E&E Software, mentioned in Apex Plus, E&E Software.

Sorry about the confusion, then, but it was never meant who mentioned Mike Development. It appears to be not our world's writing for... TBS

## Sprightly laws

Dear TBS,

- 1 Is it illegal to use sprites from other games (Lemmings for example) in your own creation?
- 2 If so, would it be legal if you altered the sprites, say by a few pixels or by changing the colour?
- 3 Why do lemmings always ask where you're going to be hitting?
- 4 Embroidering Long Overalls, Good!



We know it's funny, but, no, you don't do it off.

- 1 If you intend to sell the end product, it may count out all of them, yes, it is.
- 2 If your new sprites are all recognisably based on the original, then that's still illegal. It's not the way Lemmings' Sprightly legs sounds very similar to an old

# LEMMINGS 'N' PIECES

- 1 Do you think that Super Street Fighter 2 will ever come out on the C64? A Ross, Buxton, MS

I think because I am, I think that Super Street Fighter 2 will come out on the C64... but strangely, it won't. As given in my philosophy, I like, TBS



- 2 I was very impressed with the Electric Boys when I wrote them. Are there going to be any more down the list? I hope so. Davey Lee, Dublin

The answer certainly divided you all. None of you loved them, while others just couldn't see the point in something you couldn't play. But the more your hearts beat, at being, Commodore Famicom will,

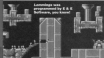
Kevin Carroll, has given the guidelines for most items, but not covered here will always something playable on the tape for those of you who don't appreciate all those, TBS

- 3 Is it illegal to write letters for Lemmings? I will then call them as a Submitter? David Connolly, Woodhouse

Yes... that's called infringement of copyright, and will result in a battle if you're caught. TBS

- 4 What's happening about our 'New Big Thing' game idea? Wayne Hill, Essex

The response to the New Big Thing competition was overwhelming, and it's taking time to sort things out. The entries have now been forwarded to Electric Boys for judging, and will be out of our hands some time. Winners will get their cut together in the next couple of months. TBS



Lemmings was programmed by E & E Software, you know!









# GAMEBUSTERS

## DROPZONE: THE PLAYER'S GUIDE

### DROPZONE

A classic C64 shoot-'em-up, a legend in the gaming world, and a very playable game to boot. Andy Roberts rustles up some advice with help from Dropzone's creator Archer Maclean.

GAMES  
TIPS

**A**fter the devastating robot war of 2088, the few remaining humans residing on Earth (technically the planet) set out to find a few Earth where they could survive. This ship needed nuclear warheads for power, though, so a contingent of men were sent to planet X, the real life, relatively active, orange-colored moon of Jupiter.

It's your mission to protect the men from being attacked by a host of disguised, robot-like aliens who use amazingly the presence of humans on their moon. You are equipped with a pulse laser, a jet-powered backpack, a rotating device, and planet-shaking atom bombs.

### Getting started

You'll never obtain more than a rocket tank unless you familiarize yourself with the game and manage to master the coordination required to survive. The latter is greatly aided by using a decent joystick.

The best set are the ones that give a clear "click" when they're contacted, are position- and weight-based, and which have an idle sideways movement as possible. The big single joystick are not good because you won't know what position it's in unless you look at the screen... by which time you're dead meat.

### General tips

The most important piece of advice I can give is not to shoot too much. Really? — Really! Well, not unless your reactions are really fast and you're kept in a steady state on the scanner for approaching trouble (approaching me,

here with no approaching trouble). Consult the scanner regularly as it does help to know what's coming.

At the start of every 15-second frame, a contingent of aggressive aliens are placed near the base, making it easy to quickly scan all of them for a good target. In the first couple of waves it's quite easy to take off eight men, but if you wish to save the men during later waves, you'll need to shoot a few more. So, it's often a good idea to shoot a few men — that way you're only protecting two or three. It may seem a little odd, but it's either your life or theirs.

Generally speaking, it's best to fire each shot as it appears as you enter it, except perhaps for spaces, which can be obtained and may well need a double barrel.

It's a good idea to try and remember these atom bombs because you'll definitely need them during later waves — an early release one which it will save you



in replacement. The alien's reaction are extremely accurate, but they're really to find their target — you — 85% of the time. So, unless you change your speed and direction quickly you'll get hit.

You should destroy Blunder storms on sight, otherwise you'll end up being nailed to a rock by

power lightning later in the level. If you have to pass under one, don't. But if it's not coming straight at you, shoot it, and time your pass accordingly.

The Spaces are fairly harmless, slow-moving blobs — unless they go until they're triggered by your laser. It's about that to when, this happens, the Spaces release four bullets, which can be a fatal instance, and very hard to hit. Shots (which don't always completely destroy



Spaces, and sometimes they leave a few bullets behind, so be careful). Trains can be shot more easily while you're at the top of the screen — just quickly look from side to side as you fire the shot.

Train missiles aren't quite easy to finish once you know how, but they have to be completed fairly quickly because the train's (generally 0.75 in speed) appears after fairly or so seconds. As the wave starts, move along taking all the Spaces with a few shots. Then activate the train above and let all the train's follow you on screen. Now simply activate one or two whole bombs to help everything out, then clear as any shaggy ball getting. It's necessary, shoot all the remaining train — you'll get a new set during the last wave anyway.

### Man-handling

The man attack sequence goes as follows: when a Planter, sitting on the planet surface, detects a man below it it steps to attack him. The man uses the tool and sets out a laser while for help, which echoes around the atmosphere. An attack then emerges from the Planter and they both descend to the ground, at which point the ground is activated and sets off to kill the man.

Meanwhile, the Planter has mutated into a robot. However, just keep on destroying you. When you hear the whistle, the ground will



Sitting on a planet is not a good idea. Trust me, I know!

## Name and Rank

For those of you who wish to become the ultimate space adventurer, here are the correct order to which you can rise...

1. Sail (and — greatest recommendation)
2. Debris Collector
3. Trooper
4. Moon Guard
5. Planetary
6. Air
7. Planet Guardian
8. Planet Lord
9. Star Warrior
10. Solar Priest
11. Emperor — mission completed





- The lemmings are already on the march...  
 21 0876 501,141,074,588,091,000,009,149  
 22 0876 171,141,320,115,111,741,076,145  
 23 0876 091,090,090,090,111,090,076,076  
 24 0876 011,091,076,090,141  
 25 0876 00000/170,000,000,141,000

## CHAOS

**Chaos** (PowerPlay 88)  
 Despite Chaos' relative simplicity and colorful graphics, it can be rather tricky to play. So, for infinite fun, simply play it on hard, SAKE it for future use, then play it.

- 2 000-0000 0000 00 000  
 2 000 0000 00 000 0000  
 0000000000 0000 0000  
 2 00 000000 0000 0000 0000  
 000000 000  
 2 0000 000,100,000,000  
 00 0000 000,000,000,000,000,141,141



## LEMMINGS

### Lemmings

2 0 0 software, CD-ROM, CD-ROM, CD-ROM, CD-ROM

To follow up the top printed list issue, as well as the passwords for the first two different but leveling, here are the remaining Lemmings passwords courtesy of MPF. Thanks to Tom Swanson. Commentators also to share from Wally whose passwords proved particularly handy, systems of the ready and requirements on...

#### FAKING LEVEL

1. 00000000
2. 00000000
3. 00000000
4. 00000000
5. 00000000
6. 00000000
7. 00000000
8. 00000000
9. 00000000
10. 00000000
11. 00000000
12. 00000000
13. 00000000
14. 00000000
15. 00000000
16. 00000000

#### BATHEN LEVEL

1. 00000000
2. 00000000
3. 00000000
4. 00000000
5. 00000000
6. 00000000
7. 00000000
8. 00000000
9. 00000000
10. 00000000
11. 00000000
12. 00000000
13. 00000000
14. 00000000
15. 00000000
16. 00000000

## ACTION REPLAY POKES

Your favorite video game scores by using Action Replay. You can play the game, press a button for the POKES, then press F1 to reveal them. Many thanks to regular contributor Warren Pilkington for sending them in.

#### CHRON

POKE 000000 - infinite lives

#### SALAMANDER

POKE 0000 000  
 POKE 0000 000 - infinite lives

#### WARRIOR

POKE 000000  
 POKE 0000 000 - infinite lives  
 POKE 0000 000 - infinite lives  
 POKE 0000 000 - infinite lives

#### TAKING LEVEL CODES

17. 00000000
18. 00000000
19. 00000000
20. 00000000
21. 00000000
22. 00000000
23. 00000000
24. 00000000
25. 00000000

#### NORTHWEST LEVEL CODES

17. 00000000
18. 00000000
19. 00000000
20. 00000000
21. 00000000
22. 00000000
23. 00000000
24. 00000000
25. 00000000



# ADVANCED COMPUTER SUPPLIES

0830 870255 (M-F Mon-Fri) (Mail Order Only)

UNIVERSAL BUSINESS CENTRE, ALBRIGHT IND. EST. FERRY LANE, BAINHAM, ESSEX SM13 9BU.

"WAREHOUSE CLEARANCE LIMITED SUPPLIES ONLY" Prices give at least 2 alternatives or we will be disappointed

• All these products are for the Commodore C64 •

April 2 - June 1988		SOFTWARE		GAMES		SPECIAL OFFERS	
Amiga 1000	21.00	The Unconquered	21.00	World Cup Soccer '88	10.00	1000 Data Disk 5.25"	2.00/PC
Amiga 2000	21.00	The Best of Commodore	21.00	Capitaine	10.00	1" Diskette 5.25" 50/PC	
Amiga 500	21.00	Commodore Manual	21.00	Capitaine 2 PROBLEM			
Amiga 600	21.00	Compaq	21.00	Battle Commander	21.00		
Amiga 800	21.00	Compaq II	21.00	Robocop 2	21.00	Gettable! Police in Microcenter 4.95	
Amiga 9500	21.00	Compaq III	21.00	Robocop 3	21.00	Gettable! Microcenter in Microcenter	
Amiga 10000	21.00	Compaq IV	21.00	Robocop 4	21.00	2000 5.25" 50/PC	
Amiga 1200	21.00	Compaq V	21.00	Robocop 5	21.00	Gettable! Microcenter 2000 5.25" 50/PC	
Amiga 1600	21.00	Compaq VI	21.00	Robocop 6	21.00	Gettable! Microcenter 1000 5.25" 50/PC	
Amiga 2600	21.00	Compaq VII	21.00	Robocop 7	21.00	Gettable! Microcenter 500 5.25" 50/PC	
Amiga 3600	21.00	Compaq VIII	21.00	Robocop 8	21.00		
Amiga 4600	21.00	Compaq IX	21.00	Robocop 9	21.00		
Amiga 5600	21.00	Compaq X	21.00	Robocop 10	21.00		
Amiga 6600	21.00	Compaq XI	21.00	Robocop 11	21.00		
Amiga 7600	21.00	Compaq XII	21.00	Robocop 12	21.00		
Amiga 8600	21.00	Compaq XIII	21.00	Robocop 13	21.00		
Amiga 9600	21.00	Compaq XIV	21.00	Robocop 14	21.00		
Amiga 10600	21.00	Compaq XV	21.00	Robocop 15	21.00		
Amiga 11600	21.00	Compaq XVI	21.00	Robocop 16	21.00		
Amiga 12600	21.00	Compaq XVII	21.00	Robocop 17	21.00		
Amiga 13600	21.00	Compaq XVIII	21.00	Robocop 18	21.00		
Amiga 14600	21.00	Compaq XIX	21.00	Robocop 19	21.00		
Amiga 15600	21.00	Compaq XX	21.00	Robocop 20	21.00		
Amiga 16600	21.00	Compaq XXI	21.00	Robocop 21	21.00		
Amiga 17600	21.00	Compaq XXII	21.00	Robocop 22	21.00		
Amiga 18600	21.00	Compaq XXIII	21.00	Robocop 23	21.00		
Amiga 19600	21.00	Compaq XXIV	21.00	Robocop 24	21.00		
Amiga 20600	21.00	Compaq XXV	21.00	Robocop 25	21.00		
Amiga 21600	21.00	Compaq XXVI	21.00	Robocop 26	21.00		
Amiga 22600	21.00	Compaq XXVII	21.00	Robocop 27	21.00		
Amiga 23600	21.00	Compaq XXVIII	21.00	Robocop 28	21.00		
Amiga 24600	21.00	Compaq XXIX	21.00	Robocop 29	21.00		
Amiga 25600	21.00	Compaq XXX	21.00	Robocop 30	21.00		
Amiga 26600	21.00	Compaq XXXI	21.00	Robocop 31	21.00		
Amiga 27600	21.00	Compaq XXXII	21.00	Robocop 32	21.00		
Amiga 28600	21.00	Compaq XXXIII	21.00	Robocop 33	21.00		
Amiga 29600	21.00	Compaq XXXIV	21.00	Robocop 34	21.00		
Amiga 30600	21.00	Compaq XXXV	21.00	Robocop 35	21.00		
Amiga 31600	21.00	Compaq XXXVI	21.00	Robocop 36	21.00		
Amiga 32600	21.00	Compaq XXXVII	21.00	Robocop 37	21.00		
Amiga 33600	21.00	Compaq XXXVIII	21.00	Robocop 38	21.00		
Amiga 34600	21.00	Compaq XXXIX	21.00	Robocop 39	21.00		
Amiga 35600	21.00	Compaq XL	21.00	Robocop 40	21.00		
Amiga 36600	21.00	Compaq XLI	21.00	Robocop 41	21.00		
Amiga 37600	21.00	Compaq XLII	21.00	Robocop 42	21.00		
Amiga 38600	21.00	Compaq XLIII	21.00	Robocop 43	21.00		
Amiga 39600	21.00	Compaq XLIV	21.00	Robocop 44	21.00		
Amiga 40600	21.00	Compaq XLV	21.00	Robocop 45	21.00		
Amiga 41600	21.00	Compaq XLVI	21.00	Robocop 46	21.00		
Amiga 42600	21.00	Compaq XLVII	21.00	Robocop 47	21.00		
Amiga 43600	21.00	Compaq XLVIII	21.00	Robocop 48	21.00		
Amiga 44600	21.00	Compaq XLIX	21.00	Robocop 49	21.00		
Amiga 45600	21.00	Compaq L	21.00	Robocop 50	21.00		
Amiga 46600	21.00	Compaq LI	21.00	Robocop 51	21.00		
Amiga 47600	21.00	Compaq LII	21.00	Robocop 52	21.00		
Amiga 48600	21.00	Compaq LIII	21.00	Robocop 53	21.00		
Amiga 49600	21.00	Compaq LIV	21.00	Robocop 54	21.00		
Amiga 50600	21.00	Compaq LV	21.00	Robocop 55	21.00		
Amiga 51600	21.00	Compaq LVI	21.00	Robocop 56	21.00		
Amiga 52600	21.00	Compaq LVII	21.00	Robocop 57	21.00		
Amiga 53600	21.00	Compaq LVIII	21.00	Robocop 58	21.00		
Amiga 54600	21.00	Compaq LIX	21.00	Robocop 59	21.00		
Amiga 55600	21.00	Compaq LX	21.00	Robocop 60	21.00		
Amiga 56600	21.00	Compaq LXI	21.00	Robocop 61	21.00		
Amiga 57600	21.00	Compaq LXII	21.00	Robocop 62	21.00		
Amiga 58600	21.00	Compaq LXIII	21.00	Robocop 63	21.00		
Amiga 59600	21.00	Compaq LXIV	21.00	Robocop 64	21.00		
Amiga 60600	21.00	Compaq LXV	21.00	Robocop 65	21.00		
Amiga 61600	21.00	Compaq LXVI	21.00	Robocop 66	21.00		
Amiga 62600	21.00	Compaq LXVII	21.00	Robocop 67	21.00		
Amiga 63600	21.00	Compaq LXVIII	21.00	Robocop 68	21.00		
Amiga 64600	21.00	Compaq LXIX	21.00	Robocop 69	21.00		
Amiga 65600	21.00	Compaq LXX	21.00	Robocop 70	21.00		
Amiga 66600	21.00	Compaq LXXI	21.00	Robocop 71	21.00		
Amiga 67600	21.00	Compaq LXXII	21.00	Robocop 72	21.00		
Amiga 68600	21.00	Compaq LXXIII	21.00	Robocop 73	21.00		
Amiga 69600	21.00	Compaq LXXIV	21.00	Robocop 74	21.00		
Amiga 70600	21.00	Compaq LXXV	21.00	Robocop 75	21.00		
Amiga 71600	21.00	Compaq LXXVI	21.00	Robocop 76	21.00		
Amiga 72600	21.00	Compaq LXXVII	21.00	Robocop 77	21.00		
Amiga 73600	21.00	Compaq LXXVIII	21.00	Robocop 78	21.00		
Amiga 74600	21.00	Compaq LXXIX	21.00	Robocop 79	21.00		
Amiga 75600	21.00	Compaq LXXX	21.00	Robocop 80	21.00		
Amiga 76600	21.00	Compaq LXXXI	21.00	Robocop 81	21.00		
Amiga 77600	21.00	Compaq LXXXII	21.00	Robocop 82	21.00		
Amiga 78600	21.00	Compaq LXXXIII	21.00	Robocop 83	21.00		
Amiga 79600	21.00	Compaq LXXXIV	21.00	Robocop 84	21.00		
Amiga 80600	21.00	Compaq LXXXV	21.00	Robocop 85	21.00		
Amiga 81600	21.00	Compaq LXXXVI	21.00	Robocop 86	21.00		
Amiga 82600	21.00	Compaq LXXXVII	21.00	Robocop 87	21.00		
Amiga 83600	21.00	Compaq LXXXVIII	21.00	Robocop 88	21.00		
Amiga 84600	21.00	Compaq LXXXIX	21.00	Robocop 89	21.00		
Amiga 85600	21.00	Compaq LXXXX	21.00	Robocop 90	21.00		
Amiga 86600	21.00	Compaq LXXXXI	21.00	Robocop 91	21.00		
Amiga 87600	21.00	Compaq LXXXXII	21.00	Robocop 92	21.00		
Amiga 88600	21.00	Compaq LXXXXIII	21.00	Robocop 93	21.00		
Amiga 89600	21.00	Compaq LXXXXIV	21.00	Robocop 94	21.00		
Amiga 90600	21.00	Compaq LXXXXV	21.00	Robocop 95	21.00		
Amiga 91600	21.00	Compaq LXXXXVI	21.00	Robocop 96	21.00		
Amiga 92600	21.00	Compaq LXXXXVII	21.00	Robocop 97	21.00		
Amiga 93600	21.00	Compaq LXXXXVIII	21.00	Robocop 98	21.00		
Amiga 94600	21.00	Compaq LXXXXIX	21.00	Robocop 99	21.00		
Amiga 95600	21.00	Compaq LXXXXX	21.00	Robocop 100	21.00		

POSTAGE AND PACKING FEES: £1 PER ORDER. OVER £100.00 ON TOPHATERS FREE. CHECKS & PAYROLL ORDERS PAYABLE TO L.B. SMITH.

★ FREE GAME WITH EVERY £10.00 SPEND ★





All these issues of Commodore Format are still available, and now you can get them cheaper than ever before!

# BACK ISSUES



**153** From the pages of the 153 & 154 issues, Commodore Format readers can enjoy the following features:

**153** The new Commodore 128K, 128K+ and 128Kmax computers.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**153** Commodore's new 1.44MB floppy diskettes.

**154** From the pages of the 154 issue, Commodore Format readers can enjoy the following features:

**154** The new Commodore 128K, 128K+ and 128Kmax computers.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**154** Commodore's new 1.44MB floppy diskettes.

**SPECIAL OFFER**  
THE MORE YOU BUY, THE MORE YOU SAVE!



**PLUS:**  
COMMODORE  
FORMAT  
BINDERS

Just  
**£9.99**

## CHECK OUT THESE CRAZY PRICES!

- 1 back issues £3.50 Save 45p
  - 2 back issues £4.50 Save £1.40
  - 3 back issues £6.50 Save £3.50
  - 4 back issues £7.50 Save £4.50
- All extra back issues add £1.50 for each

4 Plus £1 for postage and packaging (see coupon for rates outside the UK)  
4 Orders within the UK do not require a stamp

## COMMODORE FORMAT BACK ISSUES

Name

I would like the following back issues...

Address

Cost of back issues

Post code  Phone no

I would like a Commodore Format binder

Method of payment (please tick)

Please add price postage and packaging\*

Access  Visa  Cheque  PO

Total cost

Credit Card No  Expiry date

Please make all cheques payable in pounds sterling to Future Publishing

POSTAGE AND PACKAGING:

Limited, and send the whole lot off to Commodore Format Back Issues, Future

153 £1 • 154 £1 • 155 £1 • 156 £1 • 157 £1 • 158 £1 • 159 £1 • 160 £1

Publishing, FINEPRINT, Gower, London, EC2A 3FB



# WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH,  
NORTH YORKSHIRE YO12 7JY. UP TO CHRISTMAS  
OPEN 7 DAYS A WEEK 9.00AM - 5.30PM.  
TEL: 0202 274467/274677

## \* C. 64 CASSETTES \*

THE GREAT ESCAPE	£2.99
THE GREAT ESCAPE II	£2.99
THE GREAT ESCAPE III	£2.99
THE GREAT ESCAPE IV	£2.99
THE GREAT ESCAPE V	£2.99
THE GREAT ESCAPE VI	£2.99
THE GREAT ESCAPE VII	£2.99
THE GREAT ESCAPE VIII	£2.99
THE GREAT ESCAPE IX	£2.99
THE GREAT ESCAPE X	£2.99
THE GREAT ESCAPE XI	£2.99
THE GREAT ESCAPE XII	£2.99
THE GREAT ESCAPE XIII	£2.99
THE GREAT ESCAPE XIV	£2.99
THE GREAT ESCAPE XV	£2.99
THE GREAT ESCAPE XVI	£2.99
THE GREAT ESCAPE XVII	£2.99
THE GREAT ESCAPE XVIII	£2.99
THE GREAT ESCAPE XIX	£2.99
THE GREAT ESCAPE XX	£2.99
THE GREAT ESCAPE XXI	£2.99
THE GREAT ESCAPE XXII	£2.99
THE GREAT ESCAPE XXIII	£2.99
THE GREAT ESCAPE XXIV	£2.99
THE GREAT ESCAPE XXV	£2.99
THE GREAT ESCAPE XXVI	£2.99
THE GREAT ESCAPE XXVII	£2.99
THE GREAT ESCAPE XXVIII	£2.99
THE GREAT ESCAPE XXIX	£2.99
THE GREAT ESCAPE XXX	£2.99

THE GREAT ESCAPE XXXI	£2.99
THE GREAT ESCAPE XXXII	£2.99
THE GREAT ESCAPE XXXIII	£2.99
THE GREAT ESCAPE XXXIV	£2.99
THE GREAT ESCAPE XXXV	£2.99
THE GREAT ESCAPE XXXVI	£2.99
THE GREAT ESCAPE XXXVII	£2.99
THE GREAT ESCAPE XXXVIII	£2.99
THE GREAT ESCAPE XXXIX	£2.99
THE GREAT ESCAPE XL	£2.99
THE GREAT ESCAPE XLI	£2.99
THE GREAT ESCAPE XLII	£2.99
THE GREAT ESCAPE XLIII	£2.99
THE GREAT ESCAPE XLIV	£2.99
THE GREAT ESCAPE XLV	£2.99
THE GREAT ESCAPE XLVI	£2.99
THE GREAT ESCAPE XLVII	£2.99
THE GREAT ESCAPE XLVIII	£2.99
THE GREAT ESCAPE XLIX	£2.99
THE GREAT ESCAPE L	£2.99

**144 CASSETTES FOR ONLY  
3 FOR £10  
OR 64-99 (A08)**

**CALL 0202 274467**

**WIZARD GAMES**

**100% GUARANTEE**

**FREE DELIVERY**

**WIZARD GAMES**

**CALL 0202 274467**

## \* DISK COMPILATIONS \*

THE GREAT ESCAPE	£2.99
THE GREAT ESCAPE II	£2.99
THE GREAT ESCAPE III	£2.99
THE GREAT ESCAPE IV	£2.99
THE GREAT ESCAPE V	£2.99
THE GREAT ESCAPE VI	£2.99
THE GREAT ESCAPE VII	£2.99
THE GREAT ESCAPE VIII	£2.99
THE GREAT ESCAPE IX	£2.99
THE GREAT ESCAPE X	£2.99
THE GREAT ESCAPE XI	£2.99
THE GREAT ESCAPE XII	£2.99
THE GREAT ESCAPE XIII	£2.99
THE GREAT ESCAPE XIV	£2.99
THE GREAT ESCAPE XV	£2.99
THE GREAT ESCAPE XVI	£2.99
THE GREAT ESCAPE XVII	£2.99
THE GREAT ESCAPE XVIII	£2.99
THE GREAT ESCAPE XIX	£2.99
THE GREAT ESCAPE XX	£2.99
THE GREAT ESCAPE XXI	£2.99
THE GREAT ESCAPE XXII	£2.99
THE GREAT ESCAPE XXIII	£2.99
THE GREAT ESCAPE XXIV	£2.99
THE GREAT ESCAPE XXV	£2.99
THE GREAT ESCAPE XXVI	£2.99
THE GREAT ESCAPE XXVII	£2.99
THE GREAT ESCAPE XXVIII	£2.99
THE GREAT ESCAPE XXIX	£2.99
THE GREAT ESCAPE XXX	£2.99

THE GREAT ESCAPE XXXI	£2.99
THE GREAT ESCAPE XXXII	£2.99
THE GREAT ESCAPE XXXIII	£2.99
THE GREAT ESCAPE XXXIV	£2.99
THE GREAT ESCAPE XXXV	£2.99
THE GREAT ESCAPE XXXVI	£2.99
THE GREAT ESCAPE XXXVII	£2.99
THE GREAT ESCAPE XXXVIII	£2.99
THE GREAT ESCAPE XXXIX	£2.99
THE GREAT ESCAPE XL	£2.99
THE GREAT ESCAPE XLI	£2.99
THE GREAT ESCAPE XLII	£2.99
THE GREAT ESCAPE XLIII	£2.99
THE GREAT ESCAPE XLIV	£2.99
THE GREAT ESCAPE XLV	£2.99
THE GREAT ESCAPE XLVI	£2.99
THE GREAT ESCAPE XLVII	£2.99
THE GREAT ESCAPE XLVIII	£2.99
THE GREAT ESCAPE XLIX	£2.99
THE GREAT ESCAPE L	£2.99

**100 DISKS FOR ONLY 100 DISKS FOR ONLY 100 DISKS**

**CHOOSE ANY 3 OF THE FOLLOWING SPORTS DISKS FOR £10.00**

**THE GREAT ESCAPE XXXI**

**THE GREAT ESCAPE XXXII**

**THE GREAT ESCAPE XXXIII**

**THE GREAT ESCAPE XXXIV**

**THE GREAT ESCAPE XXXV**

**THE GREAT ESCAPE XXXVI**

**THE GREAT ESCAPE XXXVII**

**THE GREAT ESCAPE XXXVIII**

**THE GREAT ESCAPE XXXIX**

**THE GREAT ESCAPE XL**

**THE GREAT ESCAPE XLI**

**THE GREAT ESCAPE XLII**

**THE GREAT ESCAPE XLIII**

**THE GREAT ESCAPE XLIV**

**THE GREAT ESCAPE XLV**

**THE GREAT ESCAPE XLVI**

**THE GREAT ESCAPE XLVII**

**THE GREAT ESCAPE XLVIII**

**THE GREAT ESCAPE XLIX**

**THE GREAT ESCAPE L**

**THE GREAT ESCAPE LI**

**THE GREAT ESCAPE LII**

**THE GREAT ESCAPE LIII**

**THE GREAT ESCAPE LIV**

**THE GREAT ESCAPE LV**

**THE GREAT ESCAPE LVI**

**THE GREAT ESCAPE LVII**

**THE GREAT ESCAPE LVIII**

**THE GREAT ESCAPE LVIX**

**THE GREAT ESCAPE LX**

**THE GREAT ESCAPE LXI**

**THE GREAT ESCAPE LXII**

**THE GREAT ESCAPE LXIII**

**THE GREAT ESCAPE LXIV**

**THE GREAT ESCAPE LXV**

## \* CASSETTE COMPILATIONS \*

THE GREAT ESCAPE	£2.99
THE GREAT ESCAPE II	£2.99
THE GREAT ESCAPE III	£2.99
THE GREAT ESCAPE IV	£2.99
THE GREAT ESCAPE V	£2.99
THE GREAT ESCAPE VI	£2.99
THE GREAT ESCAPE VII	£2.99
THE GREAT ESCAPE VIII	£2.99
THE GREAT ESCAPE IX	£2.99
THE GREAT ESCAPE X	£2.99
THE GREAT ESCAPE XI	£2.99
THE GREAT ESCAPE XII	£2.99
THE GREAT ESCAPE XIII	£2.99
THE GREAT ESCAPE XIV	£2.99
THE GREAT ESCAPE XV	£2.99
THE GREAT ESCAPE XVI	£2.99
THE GREAT ESCAPE XVII	£2.99
THE GREAT ESCAPE XVIII	£2.99
THE GREAT ESCAPE XIX	£2.99
THE GREAT ESCAPE XX	£2.99
THE GREAT ESCAPE XXI	£2.99
THE GREAT ESCAPE XXII	£2.99
THE GREAT ESCAPE XXIII	£2.99
THE GREAT ESCAPE XXIV	£2.99
THE GREAT ESCAPE XXV	£2.99
THE GREAT ESCAPE XXVI	£2.99
THE GREAT ESCAPE XXVII	£2.99
THE GREAT ESCAPE XXVIII	£2.99
THE GREAT ESCAPE XXIX	£2.99
THE GREAT ESCAPE XXX	£2.99

**100 CASSETTES FOR ONLY 100 CASSETTES FOR ONLY 100 CASSETTES**

**CHOOSE ANY 3 OF THE FOLLOWING SPORTS DISKS FOR £10.00**

**THE GREAT ESCAPE XXXI**

**THE GREAT ESCAPE XXXII**

**THE GREAT ESCAPE XXXIII**

**THE GREAT ESCAPE XXXIV**

**THE GREAT ESCAPE XXXV**

**THE GREAT ESCAPE XXXVI**

**THE GREAT ESCAPE XXXVII**

**THE GREAT ESCAPE XXXVIII**

**THE GREAT ESCAPE XXXIX**

**THE GREAT ESCAPE XL**

**THE GREAT ESCAPE XLI**

**THE GREAT ESCAPE XLII**

**THE GREAT ESCAPE XLIII**

**THE GREAT ESCAPE XLIV**

**THE GREAT ESCAPE XLV**

**THE GREAT ESCAPE XLVI**

**THE GREAT ESCAPE XLVII**

**THE GREAT ESCAPE XLVIII**

**THE GREAT ESCAPE XLIX**

**THE GREAT ESCAPE L**

**THE GREAT ESCAPE LI**

**THE GREAT ESCAPE LII**

**THE GREAT ESCAPE LIII**

**THE GREAT ESCAPE LIV**

**THE GREAT ESCAPE LV**

**THE GREAT ESCAPE LVI**

**THE GREAT ESCAPE LVII**

**THE GREAT ESCAPE LVIII**

**THE GREAT ESCAPE LVIX**

**THE GREAT ESCAPE LX**

**THE GREAT ESCAPE LXI**

**THE GREAT ESCAPE LXII**

**THE GREAT ESCAPE LXIII**

**THE GREAT ESCAPE LXIV**

**THE GREAT ESCAPE LXV**

**NAME SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVE FROM ORDER, ORDER £1.00 AND ORDER AND POP P.P. CHARGES - POSTAL ORDERS MUST BE PAID TO WIZARD GAMES. OVERSEAS CUSTOMERS ADD £1.00 PER ITEM P.P. PLEASE ALLOW 2 WEEKS FOR DELIVERY. SEND ONE FOR YOUR LETTERS**

# COMMODORE SUPPLIES

## C64/C128 COMPATIBLE DATA RECORDER

Commodore C64/C128 compatible Data Recorders with tape cassette, fast forward, rewind, stop/step, play and record facilities. Supplied complete with lead and ready to plug straight into your computer



£19.99 inc P&P

## C64/C128 PRINTER INTERFACE

The C64/C128 printer interface is designed so that you can connect almost any parallel/centronics (IBM compatible) printer to your Commodore computer.

Complete interface with lead and full instructions. **£29.99 inc P&P**

## COMMODORE SUPPLIES

Commodore 64 power supply	£20.99
Commodore 64/C128 compatible cassette recorder	£19.99
Commodore cassette data duplicator	£9.99
Replacement cassette recorder plug and lead	£5.99
Commodore 64 user manual	£2.99
Commodore 64 Lead (computer to TV)	£3.99
Commodore 64C modules	£5.99
Commodore 64C monitor drive lead (3 pin alt)	£5.99
Commodore colour monitor leads (2in 3 pin)	£5.99
Commodore 64/C128 parallel printer interface	£29.99
1 inch 8in Software Disk - Pack of 20	£6.00

**PRICES INCLUDE POSTAGE, PACKING & VAT ETC.**

If you would like to be put on our regular mailing list for special offers etc. please write and tell us on mailing which computer model you have. You also deal with Specimen, Amstrad, Acorn, Brima and PC Computers.

**ALL ORDERS SENT BY RETURN: CHEQUE/VISA/ACCESS/PO**

## TRADING POST

VICTORIA ROAD, SHIPHAL, SHROPSHIRE TF9 1AF TELEPHONE /FAX (0982) 261131





# GEOS

## THE NEW FACE OF THE C64?

Russ Michaels unpacks the GEOS goodies and explains why this ultra-smooth operating system could be just the face-server the C64 has been waiting for.

**L**ooking for a new operating system for your Commodore 64? Well, you've found it. GEOS (Graphic Environment Operating System) is the new face of the C64, and it's a real beauty. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system.

GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system.



GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system.

GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. GEOS is a graphical operating system that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system.

CONTACT Plus is a software package that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system. CONTACT Plus is a software package that runs on the Commodore 64, and it's designed to be a more user-friendly and powerful alternative to the standard Commodore 64 operating system.



Real! saves you up to three times for any important engagements — like a deadline set in Battery Street parking.

Even that you use with GEOS is streamlined in a special way that enables it to display each individual file as an icon. The desktop can display eight of these icons at a time — they're shown as windows or a window. To reach the next eight files for their respective icons, you simply click your pointer on the turned-up corner of the current page. Each file can be manipulated by the options in the pull-down menu, or if you prefer, by using each icon's shortcut keyboard or mouse.

Close again, the alternative for the PC. GEOS enables you to select your file with a single click. Once the file is selected you can do all the usual stuff: open it, manipulate it in whatever data window is required. It can even view a document file or show the file's details, such as filename, date, author and other things. The details for each file have standard parameters, and although these have been rarely GEOS, there is still space for you to enter your more specific descriptions.

The icons can also be easily moved to other desktop pages, so you can organize your files in the way you find most efficient. For example, you might choose to put all your applications on page one, your printer drivers on page two and so on. Each page will then tell you how many files are on the disk, how many kilobytes you've used, and how many more are free.

As well as using the pull-down menu, you can also manipulate the files themselves by double-clicking on their icons using your mouse-pointing device.

There are three methods of looking on an icon. You can

use a single click to highlight an icon, a rapid double-click to open or execute the file in question, or a double-click with a slight delay between clicks to pop up an icon.

The latter method enables you to place the file over the mouse cursor to label it, use the pointer cursor to point it, use the disk drive icon to copy it to that disk, or over the keyboard, where it will stay until you reorganize the desktop's pages or swap disks on a single-drive system, before copying it to a new page or disk.

Of course, your files don't have to be stored as more, because the desktop's View menu also enables you to display files by name, size, type and date, which all help to keep the content fit.

Many of these functions are also to perform the data as a whole using the pull-down menu. You can open, close, rename, delete, and format a disk icon, file — and even view all the disk's files.

Well, that just about covers the most important Geowrite functions. There are others of course, but — hey — we don't want to spoil at just that.

## Geowrite

This is the word processor application that comes with GEOS, and what a great little word to say that, it is. It's available to test a member of the Beams Age page early last year.

The first thing that makes Geowrite stand out from its

competitors is its proportional font feature. This means the text is positioned on the bottom in such a way that it runs out all the unnecessary gaps and spaces between letters, which enables you to fit more text on each line.

The editing mode is actually about two-and-a-half screens wide, the cursor window covers this area to give you feedback on all over 100 columns per line and registers per line. This means your text doesn't need that word processor that sets a tremendous volume display such as a word processor.

The desktop tool-pulling feature, which was available from the pull-down menu, an extension to say the least here's a real cut-off.

The GEOS Menu. The grid you access to the Photo Manager, Calculator and Manager, all of which are great options that are also available in many other applications.

The Photo Manager consists of a library of graphic objects from Geowrite. These are arranged in pages, with each page containing one graphic. You can view when they appear in the menu, and then edit and paste your chosen graphic into a page before returning to the editing screen. The advantages of the Beams will be dealt with later.

The Calculator is exactly that, a calculator. It works exactly like its real-life counterpart. Set up in the Windows, this is a bit like a library or calculator, and again it works on the pages system. The keyboard enables you to have yourself messages, notes, reminders, etc.

The File menu. You can use this particular menu to update the current file that is, save any changes made, preview the file on an A4 representation of how the printed page will look, rename the file using the standard options and convert any changes you've made since you last saved it, to name and print the file.

The print options also offer you loads of choices covering the printing of the document. For instance, you can choose half, full, or high-resolution printing, to print only the even and odd pages, and so on. You can also choose single sheet paper or sheet paper or more than one.

## Get a face lift!

The combined GEOS system and Geowrite application (which starts at £29.99 for the CMA) is available from Electric Toys Entertainment Software. If you want more details, then grab a copy of the Toys latest product guide by sending your name, address and two-foot class stamps to Electric Toys, 1170 Brighton Road, Purley, Surrey CR2 6BP.

The GEOS system offers CMA users all the benefits of the Windows operating system, but at a fraction of the cost.



can also control the print option from here.

**The Style menu:** This is where the Setup menu item in the GEOS menu screen comes into play. The Style menu enables you to edit, copy and paste text and graphics to and from a document. Whatever you've copied or the Setup menu item will be placed in your current document where you set the Place option.

The **Printing** both for moving graphics and editing text. And if you want to keep a selection of different tags and graphics, you can store them in a library function in the Place Menu.

**The Options Menu:** This menu enables you to search the document for specific words, change all occurrences of that word, table graphics for dot-dot on or dot-dot off,

open the heading and footers, select a page number and expand the document to full width, which is useful if you've set the display to only cover a screen-width but now wish to print it at width.

**The Page menu:** This enables you to navigate easily around your document. You can choose to flip to the next or previous page, or then jump to a particular page with the Goto page number option. You can also set up page breaks, the pages and GCL printing from here.

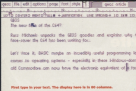
**The Font menu:** As you'd expect, this enables you to change your current font or change highlighted sections of text to a new typeface. GEOS comes with seven different fonts in various sizes. There are, however, a number of additional font files available that

substantially increase this number.

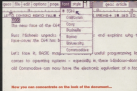
**The Style menu:** This enables you to use different text tags, such as italic, bold, under, underline, outline, etc. And they appear in the first print, even if your printer isn't capable of such functions.

The tabs at the top of the Overview screen enables you to set the size of your margins, tabs, the justification and the leading (the space between the lines of text).

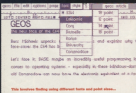
So, that's the word processor, but what else has the GEOS system got to offer? Well, there's no need to be afraid unless, for you need't worry because over the next few months we'll be covering all the major GEOS applications that come along in our way. Please!



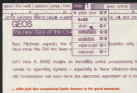
Print type in your text. The display here is in 80 columns.



Now you can concentrate on the look of the document...



This involves holding using different fonts and point sizes...



... with just the occasional bells thrown in for good measure.



There, that looks pretty damn amazing to me...



... Do dare! The printed preview highlights a few short-cuts!

# BUY-A-RAMA

## FOR SALE

**100+ tape games from \$10 to £3.00.** Budget to completion. **AtHome**, **Plus-204** tape and tape. **Plus books**, **S&E** for **£1** **Line Drive**, **Scuba**, **Masterstar** **CMC**, **£3.00** each with software. **Database**, **Genex**, **radio**, **Copy** tape and tapes. **Genex** on cassette/tapes, including **Tennis** and **SGO**. **Others?** **£200** **1990**.

**Phone: 050 524240**  
**Elton Berwin**, **Bevin Command**, **Donkirk**, **Acton-Pepper** call Mark **W** and see game-construction-88

**Phone: 081 789 1330**  
**20 C64-games for sale**, including **Edible** **POO**, **Jump** (Challenge), **Auto** **Fast** (simulation) and **Interiors**. **30** **Macintosh** **CDs**, **Madrox**, **Toronto**, **Kid**, **C64** and **5241** **disk drive**, **10** **1200** **printer**, **second expansion** (computer), **Acton** **Pepper**, **GEOS** and **books** more. **£120**.

**Phone: 050 807176**  
**C64x** computer, database, graphics, **100+** games and some educational software. **£70** on.

**Phone: 0706 52144**  
**CMC**, database and games. **£40**. **Two** **1000** **MS-DOS** **drives**, **£30** each. **GEORAM** available. **100** **30** disk games, **200** tape games, utilities, demos, music and Commodore format disks. **1 to 40**.

**Phone: 081 266 9333**  
**CM tape players**, **40** tapes, **200** disks, **disk drive**, **printer**, **joystick**, **mouse**, **lightpen** and more. **Perfect** for beginners. **£100** on.

**For details** phone: **050 809090**, **C64** cassette originals from **£10**, including **Defenders**, **CV** **Crash** and more. **For** a complete list send an SAE to **Black** **Hardware**, **The** **Playhouse**, **Donkirk** **Donkirk**, **Whitby**, **North** **YO21** **1AA**.

**C6802** for sale. **£75** with games or tape

or disk. Games for **£10** (C64). **Lightpen** and **tape** disk included with the **Merivale** and **books**. **£20** on.

**Phone** **now: 0431 534161**  
**CM tape** (new), database, two graphics and all books. **£8** in original boxes with manuals. **£20** on.

**Phone: 0403 602 080** (Barnes)  
**Approximately 60 C64 games**, plus **Commodore** **Format** **PowerPacs** **1 to 47**, **£30** **1301** **mouse**, **30** **Acton** **Pepper** **challenge** **Books**, **£20**, **Plus** **more**. **Phone** **first** on **01795 645011**. **Commodore** **64** games for sale. **Very** **cheap**.

**Phone: 0503 940 55** for complete list. **Two** **64s**, **ten** disk drives, **ten** cassette (new) software, **telegraphics**, **books** (software) **2000+**, **magazines** (entire) **1500+**, **antennas**, **Others?** **Contact** **Mike** **Summers**, **11** **Camden** **Roads**, **Woking** **RD4**, **Weston**, **Leicestershire** **LE17** **6JL**.

**Database** disks for sale. **First** **customer** **free** disk. **For** more details, send an SAE to **Jan** **McLeod**, **24** **Peasem** **Way**, **Peasey**, **Bedford** **PK2** **8D9**.

**Games** (new) - **10**, **10** budget games - **£10**. **Ten** **full-price** games - **£70** (light pen and mouse) - **£100**. **Games** - **10**, **Yale** **Programs** - **£10**.

**Phone: 0503 71008**  
**Can't** **Wait** **Get** **Things**, **the** **amazing** **new** **320** **game**. **Send** a **blank** **tape** & **70s** or a **blank** **tape**, **£40** & **200**. **Also**, **free** **stay** and **update** **down** **letter** **programs**.

**Contact** **Clare** **Reese**, **Smithy** **Cottage**, **Warrington**, **Cheshire**, **Southern** **WA3** **8JL**.  
**Commodore** **64** with **1541** **800** **disk drive**, **30** **containing** **10** **0000** **patches**, **mouse**, **mouse** **mat** and **tracker**. **Send** **an** **S&E**. **£20** on. **What's** **new?** **Phone: 0402 80004**.

**New** to **Home**, **Target** **Foreigner**, **Renegade**, **Ghost**, **V** **Ballies**, **Virginia**,

**Red** **Star** **War** - **£2** each. **Other** **ten** **new** - **£2.00**. **Contact** **Richard** **Warrington**, **10** **Claydon** **Claydon**, **W-44E**, **Gloucester** **GL2** **7JF**.

## WANTED

**Multi** **player** **Commodore** **64** **on** **disk** **top**. **I** **would** **like** **to** **buy** **any** **Commodore** **64** **games**, **at** **The** **Shanley**, **Stakes** **Conventry** **CV1** **8AA**. **C64** **database** **version** **of** **Pictionary** **and** **Puzzle** **is** **not** **pay** **to** **£5** **for** **both** **together**. **Contact** **Stakes** **Class**, **Barford**, **Road** **SA1** **1AQ**.

**Disc** **drive**, **Commodore** **64**, **Great** **Game** **Games**. **Plus** **instructions** **for** **Edible** **and** **Poppy**. **Write** **to** **2** **Beeston** **Street**, **Nottingham** **NN1** **1YB**.

**Wanted** **on** **tape**: **Stomping** **(Mastermind)**, **Spiffwood** **(Mastermind)** **and** **Interact** **(Interact)**, **£10** **per** **£7** **for** **each** **original** **game**. **Write** **to** **Alan** **Dijkster**, **Wijksteeg** **25**, **48070** **Wieringen**, **Netherlands**.

**Big** **file** **I** **wanted** **urgently** **on** **compact**. **Send** **your** **post**.

**Phone** **now: 0271 26880** **after** **5pm**. **Commodore** **C64** **business** **software** **cont.**. **Especially** **Company** **Part** **2** **to** **buy**. **Plus** **any** **pages** **and** **print** **programs**.

**Phone: 081 688 9767**  
**Commodore** **Format** **issue** **60** **with** **contents**, **wanted** **desperately**, **£60** **per** **copy** **to** **£5**. **Please** **contact** **James** **on** **0502 82821**.

**Word** **processing** **package** **complete** **with** **manual** **for** **64**. **Disc** **only**. **Phone: 0584 268274**.

**Easy** **Budget** **software** **for** **C64**. **Please** **help** **me** **order** **when** **you** **get** **future** **to** **print**. **For** **your** **post**.

**Phone** **now** **on** **0443 88244**. **Urgently** **wanted**: **Book** **Review** **or** **disk**. **Any** **reasonable** **price** **paid**.

**Phone** **now** **on** **0443 74688**. **Simon's** **BASIC** **software** **with** **instructions**. **Write** **any** **reasonable** **price**.

**Phone: 081 626 8371**. **Or** **write** **to** **Frank**, **10** **Temple** **Street**, **London** **E4** **6BT**. **Wanted** **for** **Best** **Power** **software**. **On** **70** **new** **software** **including** **word** **processors**, **C64-100** **Sound** **Expansive** **module** **and** **Sound** **Studio** **200** **compatible**. **Phone: John** **on** **0803 83001**.

## SWAPS

**I** **will** **exchange** **Commodore** **64** **with** **database** **and** **Commodore** **Format** **and** **Commodore** **Phone** **mag** **(including** **contents)** **for** **an** **Atari** **600** **with** **games** **and** **Amiga** **mag** **(including** **contents)**. **Contact** **Alan** **Red**, **10** **Straw** **House**, **Wynthorpe** **Road**, **Doncaster** **DN9** **5UP**.

## USER GROUPS

**SE09/MS09** **now** **over** **200** **games**. **For** **the** **latest** **list** **send** **an** **SAE** **to** **SE09/MS09**, **13** **Admiral** **Way**, **Colton** **on** **Sea**, **Great** **Tottenham**, **North** **HA9** **9NS**.

**Do** **you** **program** **or** **write** **music** **on** **the** **CMFT** **Y&T** **list**, **write** **to** **me** **and** **join** **our** **programming** **group**. **Contact** **St** **Rosemary** **Pal**, **Stratford**, **North** **HA9** **9NS**.

**A** **new** **feature** **is** **starting** **soon**. **For** **more** **information** **please** **send** **an** **SAE** **&** **50p** **to** **3** **Leeds**, **10** **Stately** **Close**, **Calverley**, **Bradford**, **West** **BD9** **6NS**.

## PEN PALS

**Male** **or** **female** **pen** **pal** **wanted** **to** **swap** **ideas** **and** **games** **for** **the** **C64**. **Contact** **Jason** **Page**, **10** **Peabody** **Estates**, **Farnham** **Lane**, **London** **SE9** **8SL**.

**BUYING? SELLING? SWAPPING? OR DOING SOMETHING ELSE THAT THE REST OF THE WORLD SHOULD KNOW ABOUT THEN COMMODORE FORMAT IS THE BEST PLACE TO ADVERTISE...**

**And** **it's** **all** **done** **on** **filling** **in** **this** **form** **and** **sending** **it** **to** **us** **at** **Buy-A-Rama**. **Commodore** **Format**, **20** **Manor** **Street**, **Donkirk** **Donkirk**, **Whitby**, **North** **YO21** **1AA**. **And** **it's** **fast** **! But** **don't** **forget** **to** **send** **an** **S&E** **with** **it**. **It's** **one** **word** **to** **click**. **Click** **to** **more** **and** **your** **ad** **will** **be** **shown** **!**

## BUY-A-RAMA ORDER FORM

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

Classification:  Ad for sale  For sale  Wanted  Swaps  User groups  Penpals




# WELL 'ARD DISK DRIVES

Cast your mind back to CF47, a time of barmy summer nights and our first Well 'ard feature. If you remember, Russ Michaels of Electric Boys fame was reveling in the delights of the American hardware scene. Well, now he's back with the details...



So, as you feed the sound of the floppy drive as mentioned during our last encounter, but how will they all with your current set up? What exactly are they going to add to your life? And how will they make your friends get well-into? Well, just show the feature under the hood and watch the show.

## High-capacity 3.5-inch floppy drives

The month's premier attraction immediately shows you the power of your C64. While Macintosh and PC owners struggle along with 1.44Mb disks and single density are all standard with high-capacity 3.5-inch floppy drives with Creative Micro Design's FD series drives can't compare.

The FD4000 offers you an astounding 1.8Mb, while the FD4020 will store your most with its 3.88Mb disks. These FD drives also offer you for better compatibility than even Commodore's own 700T, and with an easy-to-use operating system and all the utilities you need to run and transfer them, you really can't lose.



**And here it is: the FD 4020 offers you all the compact convenience, the vital installation is: 3.5" by 4.1" by 1.5", making it Commodore's smallest ever floppy drive.**

It's on top of that, there's also a useful Sleep button on the front panel that enables you to sleep between disks, 8 and 16 disks, giving you maximum efficiency and compatibility with software that expects PC-04 loaded from a specific device.

The FD is also available with optional PFC (Real Time Clock), which automatically "wakeup" you first with the date and time, and should you be running DOS-2 (see page 12 for all the month's exciting details), PFC will automatically set the clock too. So, don't worry if you can't afford to shell out for this at the same time as the PFC.

enhanced-density disks, which offer up to 3,888K of storage space.

By using the Big Blue Reader utility file also provides 3.5-inch disks for 700K, 1.44Mb and 3.88Mb for use on PC machines. This is extremely handy because it enables you to share files between both platforms.

That's not all: the powerful operating system the FD not only enables you to create multiple partitions and sub-directories, but also enables you to create partitions that emulate the 1541, 1571 and 1581 drives. Each of these partitions identically copies the track and sector layout of the emulated drive. This means you can run software written specifically for the Commodore drive on the FD. In addition, as the FD's large storage capacity, you can have many emulation partitions, each acting as a full disk on the Commodore drive.

## Special features

Write most disk drives, the FD systems aren't restricted to certain device numbers, the four dip switches on the front side enable you to set the actual device number at anything between 8 and 15.

## Where to get them

The FD4000 and FD4020 are both available from Electric Boys Entertainment Software. And the prices are as follows:

FD4000 (with 500K disks)	1199.00
FD4000 with PFC	1399.00
FD4020 (500K, 1.8Mb and 3.88Mb)	1399.00
FD4020 with PFC	1599.00

For a copy of the Electric Boys' latest product guide, which includes the prices and details of all the latest American hardware and DOS-2 software, send your name, address and two first class stamps to Electric Boys Entertainment Software, 1000 Brighton Road, Puddle Springs, NSW 2245. Please state whether you're a dealer or home user.

Obviously you can't always buy it as an add-on later.

## Software

PC software comes complete with FD Utilities, which is a comprehensive collection of copying, moving and partitioning tools. Included on the disk are 30Copy (a multi-disk copier), 7Copy (a four-drive file copier) and 8Copy (a powerful backup utility that enables HD and 3.5-inch systems to back up large partitions or entire drives to several disks). You can also use 8Copy's built-up FD-04 disks to 1541 or 1571 drives.

The FD-Tools program has a simple-to-use menu system that enables you to perform all your formatting and partitioning with ease - and without having to plough through loads of manuals.

Then there's DOS-2, of course. C64's 320K-oriented can load up the SEED program on your FD drive, while the C64's Move tool on the Commodore will enable you to access partitions of 3.5-inch drives are only compatible with version 2.0 of SEED-2.

And if you're still worried about your old tape and 1.25-inch disk software, then you'll be pleased to hear that Electric Boys Entertainment Software now runs a re-mastering service to transfer your programs to ordinary and FD disks. Electric Boys also has a number of titles in production for the US market. So, Road Star shipping your company and get on with the action - pronto!

So, now you know what the FD4000 and FD4020 are all about, the decisions is yours - do you want to struggle on with low-capacity drives or decide yourself? Probably the wrong question! If you want to become one of the thousands of Commodore users who already enjoy a current and productive system? The choice is yours...

## Next Month

We'll be looking at the wonders of AmigaOS, the new disk speed enhancement system that can increase average loading times by 50% or 10%. See you then!



# PD FORMAT

It's cheaper than a car boot sale, more fun than a day at Alton Towers, and is known to the world as PD software. Andy Roberts test drives a handful of the very latest megademos - but which one will turn out to be the rusty old Skoda?



Camel Park's title screen (top left)

## Camel Park

(Games)

Camel Park is another megademo from the world famous group responsible for the classic (or classic Camel) and the critically acclaimed Tiger Power demo (and, incidentally, to the bit of head). It's not the supreme straight away. Camel Park is not as good as Tower Power but it's still a formidable piece of software. The first portion of the demo is basically a menu that enables you to view either the whole demo, or to start from one of four subdemo points. This is an original concept, which enables you to skip straight

to your favourite bits with the minimum of fuss.

As for the rest of the demo, well, read on...

- **Introduction:** This is actually a fairly sparse lot of details about the demo - although the video presentation is certainly quite stunning, and can only really be described as mind-blowing fireworks. Considered greatly, but never taken as a quest.
- **Parade Leader:** This is basically a filler, which occupies the monitor while the next program is being loaded. As you may have guessed, it features the wonderful Parade on Parade, which stands watching us as it runs the screen and throwing the ball as he goes. Unfortunately, it doesn't offer much entertainment value, and is really a little too hard for a demo of this type.



Business graphics, great jumping balls.

- **Full-time Parade:** If you're never bored of parade before, skip while watching an episode of Cluediply. Allow me to explain. Computers such as the Amiga and PC enable you to store dozens of colour changes on each palette. This enables a surreal-looking colour effect called palette flip, which is the effect possible on an IBM machine with only 16 colours? But no, surprise effect is breathtaking.



Look out, look out, here's a Parade on Parade!



Another job for the Man and co.

- **Good Camel:** This is the first of three appearances made by Good Camel, and it comes in the form of another Parade leader. This animal certainly remains motionless as he/she drops in to the screen to open out the word Camelot. And in case you hadn't guessed, Good Camel stomps from the letter 'M' (Mounting stall).

- **Jumping Balls:** This isn't the sort of thing you really expect to find in a quality demo. A spherical ball bounces down and across the various 'platforms' dotted around the screen. If you're never had the chance to mess around with a sprite multiplexer, it probably won't impress you very much.



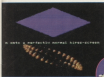
Turn on this feature whenever you're in a mood...



## Parallel

This month we see the birth of another PD show, Parallel Public Domain. The new library is based in Northern Ireland, and is, according to its founder, the first one ever (the Special Demo). This latest addition brings the total number of libraries to six - but is there a gap in the market for another company? Well, Philp Boyce seems to think so, indeed his software company, Parallel Logic, has already released one PD product called the 'New Crystal' (released in 2740).

PLD goes on-line on the 1 January 1990, and Boyce assures us that it already has several demos and



The impressive *Apogee* zoom.

- **Cancel Speech:** This is another interesting example, but the time for old third EGA is squandered by an appalling stream of non-sense text. Oh dear, can things possibly get any worse? (Character)

Finally, the programmer makes up for the unimpressive cancel interface with an extremely well-programmed visual effect. Imagine a chessboard, no bigger than eight by eight pixels (single character). Now imagine that chessboard zooming smoothly towards you until it fills the whole screen. Out of that, now you



How beautiful a chess board!

- **Cancel Jumper:** Yes, I'm ranting about Jeff Minter's terrible fan of clothing. As the next section leads, *Clon* (Cancel) focuses around the screen from bounce to bounce. And finally, bounce again.

● **Apogee's Zoom:** This is a very slowly programmed effect, in which various shapes merge and morph into a variety of different silhouettes. It's the reverse the SA's come to video graphics, and it moves ever-to-forever. The "unimpressive" effect of the bottom of the screen warrants special attention too.

● **Widespread:** This isn't so much a demo yet, as a visual effect that happens like the leading interface. It's a rather simple fan-out mountain effect, and it's quite striking compared to the cycling clouds and text that accompanies the rest of the demo.

Okay, so what's the best game, eh?

- **Cyber-Vector:** This is another variation on the video graphics theme, but the time the title is squandered at the top of the screen is clearly "wasted" after it's nothing spectacular, but I don't go to prove that imagination is not dead.

● **Technical:** Well, you don't actually get *Clon* a *Terse* version as the requirements in *Clon* are too high. *Clon* that's complete for the top of the screen is also with a various draw pattern.

● **Real-Time:** This is another relatively simple effect, a similar version of which can be found in various other public domain demos. In this character version, the color of the screen increases in brightness relative to the zooming.

● **Buddy Bomber:** This is one for technical freaks who often equate as much out of the CPU as it is memory possible. This part features dozens of dots moving in and out of the side borders. Occasionally it pictures the text

## PD Format Directory

It would be ideal, of course, and downright tempting to recommend any one particular format - PD software is free, and most formats will have the latest software in stock. That's why you're invited to explore and produce the PD Format Directory.

If you've never indexed PD software before, write to a few libraries (providing an SASE) and ask for an up-to-date catalogue. Some libraries only stock disk-based software, so it might also be a good idea to mention whether or not you need a disk drive. To make the reader, we now specify whether the catalogue needs tapes (T) or disks (D) sent to the company's name - all at the end of the line.

If you've a PD library and can't find your company listed here, write to us at: PD Format, Commodore Format, 38 Bowdoin Street, Box, 400004 0000. And if you're a programmer or PD library manager, that's also the address to which you should send your latest software.

Binary Zone PD/The Gateway 4-D  
34 Portland Road, Driffield, Wiltshire BA15 2JH

Electric Boys PD/D  
1178 Brighton Road, Purley, Surrey CR1 0BP

Fun PD/T  
4 Station Avenue, Oxide Green, Wigan, W93 0SS,  
K90D 8 8 8  
1 Pinfold Place, Kilmarnock, Scotland KA4 1AA

4 Ringing PD/D  
14 Newnham Road, Southsea HA 2AP

SH PD/D  
1 Newnham Close, Newnham Park, Northam, North  
Devon EX24 0BP

Magnum PD/T & D  
21 Tipton House Lane, Penarth, Gwent NP23 6G, West  
Wales NP23 6G

PLPD/D  
44 Windage Avenue, Whitehead, County Antrim,  
Northern Ireland BT16 9BA

Shannon Plan/D  
Puffinball House, 60 High Street, Penarth,  
Worcestershire NP23 1GU

Utopia PD/D  
44 Compton Road, Colchester, Essex, SS1  
0G, Colchester, CM4 0GG

## Domain

game in production. As an initial tester, however, Boyce has put together a few disk compilations that include various demos, games, graphics and utilities. Luckily, much of the software is either old or ready-coded (some of the programs are written in BASIC), but there are a few classics on their too.

If you're like to get one of these sample sets, simply send a cheque or postal order for £2 (postal payable to PD/D) to the address listed in the PD Format Directory on the right. Oh, and don't forget to tell them exactly who sent you.

PD Domain  
c/o T. J. Boyce  
C/O RAY  
1178 Brighton Road  
Purley, Surrey CR1 0BP









94 software. There are also a few OS/2 programs that run properly on the i486 while it's operating in native mode. These are mainly BASIC programs, which don't contain any machine code and don't do an excessive amount of POSTing (and so fit in the memory). Other programs can't do this because of the two machine's different memory maps.

Conversely, the majority of programs for the OS/2 can't work on the OS/2 because the BASIC card in the OS/2 emulator is incapable of adding keywords not found in the Meta-BASIC, such as the `PRINT` statement. After these rules, however, you can use the OS/2 simply doesn't understand. Do the work with it, need to know OS/2 programs or the C compiler, not that I'm saying it's impossible to run OS/2 programs on the i486, you understand. Jesse



### Eliminate characters

See Techie Tip

1 I've had my Commodore 64000 card built for over a year now, but I still haven't found a way to defeat high-

quality letters. Also, I would like to know if there is a way I can make the printer go over characters listed in printers' code tables. If it is possible, could you give me a BASIC listing to do it, please?

2 Could you also tell me if there is any way of producing coordinated characters on the OS/2's display? I've had an idea that involves reducing the number of bits in a character grid from eight to four.

3 How do you fix the size of the characters on the screen to produce a sort of 20-column display?

4 This screen is weak in display, but would it work in graphics? (Michele Lewis, Southampton)

# QUICK SHOTS

1 Is it worth buying my 2 MB upgrade or should I upgrade to an 8 MB?

Dean Leland, Co-Editor

Even if I think you mean upgrading there, don't you? Why change computer when the one you're going to already does everything you want? If you get into programming and have a job at writing your own games. This will give you hours of creative fun, rather than fumbling your brain with an array of Atari games that generally score a big fat zero when gameplay is concerned. Allegedly Jesse

2 In Commodore Personal-64 Paul Bender asked about using a 10000 monitor in OS/2 mode to get the 80 column display with the MBI. I've made a deal up which is a job if you're an 80 job OS/2 and it works a treat. I would be glad to supply a need for this job in return for a copy of the MBI user manual. J. Anderson, Ajkshury

If anyone would like such a deal and can supply the MBI user manual, let me know and I'll give you my address on. You may know, even if I give the manual to the first who writes for it if you haven't got time to offer for or else may make one for you in return for a cash donation instead. Jesse

3 Many thanks for the excellent machine code intro. It has happened completely at my learning end

4 regarding of the machine code language. Could you possibly tell me what the start and final addresses are for the 4000-Assembler please? Andrew McCombe, Coventry

5 I've just you found the Machine Code series helpful, and I hope you find the follow up articles just as useful. Next month we'll be checking little snippets of information about the printer and how the OS/2 requires your way in order to help you get the most out of machine code programming.

As for the OS/2-Assembler is concerned, it's located from 2000 to 20FF hexdecimal. Jesse

6 What is the PCMB code for the screen list? Chris Smith, Manchester

To change the screen colour -- or screen list if you prefer -- you store a number between 0 and 16 at location bits in other words, 0x1000 040 (16) for white or similar. The numbers correspond to the standard OS/2 colour codes: from 0 to 14 these correspond to black, white, red, cyan, purple, green, blue, yellow, orange, brown, pink, dark grey, medium grey, light grey, light blue and light grey. Here's that for a memory! Jesse

## TECHIE QUERIES - DON'T CALL US!

If you have any technical queries about your OS/2, the only person on the magazine who can help you is James French, and he can only be contacted by post to the editorial team in the 20 office. If your phone on the office there is not on then there are two ways you can write us and get a deal to, we would love to bring enough -- and if possible you can already write to us from getting us with the job of producing the magazine, in fact. If you phone the office, you'll get a an answering machine that tells you the name of 48 days time, so there's no point writing your letter to. Please send all techie queries to: PCMB to: Techie Tips, Commodore Personal, Future Publishing, 20 Museum Street, Bath, Avon BA1 1BN

# MPS 803

1 The only way to produce such letters on your printer would be to use the graphics mode to define your own letters. However, you'd need quite a complex machine code routine to decide which character you wanted to print and then to output the necessary bits to the printer, rather than just registering the characters again. However, although the characters would be defined, the data for making them up would be left to the printer to define. If you need better quality print for professional reasons, that you'll be better off investing in a new printer that incorporates such fonts -- the effort required to produce your own wouldn't be justified by the result.

2 There are a couple of programs on the Public Domain that do just the very effect. They don't actually reduce the physical size of the characters, however, instead they use the OS/2's managed graphics mode. A routine is set up that intercepts the computer's routines every time a key is pressed. The relevant data are then passed to the bitmap scanner to get the bitmap of the outline of characters. Jesse





