



WINDOW ON ANOTHER WORLD

SEPTEMBER 1987

This month is Ladies Month. You may well ask why is that, because not so many Ladies work on computers, well, that is just what you think!

Gert is going to be away for the next two months as he told you in last months Newsletter. The Newsletter has been left in the hands of.... guess who, the Ladies of the Club! Together myself and Aileen of I.E. Have spent OODLES of time on this Newsletter, just to show the guys that we can also do something worthwhile!

You're probably asking yourself just who I am. Well I am one of the Lady students who works at I.E. part-time. I have agreed to do the Newsletter for the next two months, and to show the guys that they must not underestimate us gals! Oh, by the way my name is Anne.

This month the Newsletter takes on a New Look, with Discount Vouchers, Lots of pictures, reviews on soft- and hardware and a very special welcome to all our new members. This welcome includes VERY SPECIAL offers which are available to all of our members, both old and new. But, for the new members it will be a special surprise because of the reasonable prices. Well, we hope so!

The Newsletter is not just about selling, there are also exciting competitions, and if you send us an article worth publishing, then we will reward you with your efforts with a gift voucher of either R5, R10 or R15.

Well now enough gabbling, lets get on with it!

NOTES ON THE QL

USING #0

The QL inputs its commands through #0. By reopening #0 you can make QDOS input its commands from other devices eg. the *NETWORK*, thus letting another computer command your QL, or the *MICRODRIVES* as in this examples.

This can be used to make a small program that can be executed. One use of this would be to manipulate programs where execution would normally stop when a new program is loaded.

The following can be typed in, in program form.

First "save" your "program" on microdrive.

```
OPEN_NEW #4,mdv1_prg_cex
PRINT #4,"LOAD mdv1_program1"
PRINT #4,"LIST"
PRINT #4,"LOAD mdv1_program2"
PRINT #4,"RUN"
PRINT #4,"CLOSE #0:OPEN #0,con_"
CLOSE #4
```

You must have the command "*CLOSE #0:OPEN #0,con_*" as your last command, this command must be on one line. This is because once you close #0 it does not know where to find the next command, if it is on one line, it loads the line into its execution buffer and it open #0 before it has to read #0 again.

Now you must save two programs as program1 and program2. Then you can execute your "program".

```
CLOSE #0:OPEN #0,mdv1_prg_cex
```

A listing of program1 should appear and then program2 should run. This can be done in other ways but this was just a demonstration.

MISTake

QDOS has a keyword "MISTake", this word will act like REMark. You can use it by just typing mist (It will list it as MISTake). QDOS automatically fills this in when it finds a set of bytes that it does not recognise. I came across this keyword when I took out my microdrive while it was loading!!!

KEYROW (5)=128 is "O"

In the chart for the KEYROW command, in the QL user guide (Keyword section), my KEYROW (5)=128 was blank, this was supposed to be the letter "O". This mistake might be a misprint in my guide only. If not this tip might help you.

TO ALL SPECTRUM AND QL OWNERS.....

DO YOU HAVE A SPECTRUM WITH A TRL INTERFACE AND A QL?

THIS IS FOR YOU.....

USE SUPERMEDIA MANAGER TO RECOVER CORRUPTED FILES FROM YOUR TRL SYSTEM.

SIMPLY LOAD SUPER MEDIA MANAGER (AVAILABLE FROM I.E.) INTO YOUR QL .

LOAD THE CORRUPTED SPECTRUM DISK INTO THE QL SYSTEM AND USE THE ROUTINES FROM S.M.M. TO RETRIEVE THE CORRUPTED FILES. VOILA!

(AVAILABLE ON 3.5. OR 5.25 DISK)

SUPER MEDIA MANAGER

R199.00

23.88

P+P 1.50

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MUSHROOM
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VALID UNTIL

NO
128K
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THE CHARTS

BUDGET TOP TEN

			PRICE	GST	P&P
1	(3)	MILK RACE Nice tie-in to the real race. Entertaining with a touch of suspense	MASTERTRONIC 11.50	1.38	1.20
2	NEW!	STORMBRINGER Concluding section of Magic Knight series. And it's another hit	MASTERTRONIC 11.50	1.38	1.50
3	(1)	BMX SIMULATOR It's a genuine simulation - a biker's paradise with smooth slippery action	CODE MASTERS 7.99	.96	1.20
4	(10)	OLYMPIC SPECTACULAR Aging and tedious multi sports simulation. Tosh	ALTERNATIVE 7.99	.96	1.20
5	(4)	FOOTBALL MANAGER Years old but still the definitive football management game	ADDICTIVE 11.50	1.38	1.20
6	(7)	BRAINACHE Dull arcade game of a style that everyone thought was gone forever	CODE MASTERS 7.99	.96	1.20
7	(5)	SPEED KING II Passable 3D racing game with bikes - not cars	MASTERTRONIC 7.99	.96	1.20
8	(6)	OLLIE AND LISA A graphically good but dull pot-boller with cute characters	FIREBIRD 7.99	.96	1.20
9	NEW!	I, BALL Most arcade shooter. More sparkle and originality than most budget titles	FIREBIRD 7.99	.96	1.20
10	(9)	TRANSMUTER Despite boring moments this is a pretty reasonable shoot-em-up	CODE MASTERS 7.99	.96	1.20

REMEMBER!!!!!!!

WE STOCK

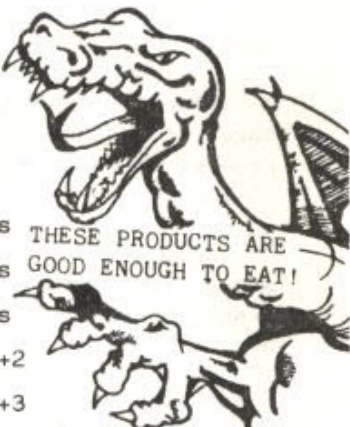
- * QL
- * ULA
- * CPU
- * IC'S
- * Books
- * Paper
- * Spares
- * Cables
- * Printers
- * Software
- * Diskettes

OTHER TITLES WHICH WILL SOON BE AVAILABLE EXCLUSIVELY TO THE 128K

- Glider Rider
- Xeno
- Paceland
- The Hunt for Red October
- Tai Pan
- Tibet
- Little Computer People
- Zork
- Hitch Hikers Guide to the Galaxy
- Spitfire 40
- Strike Force Harrier
- Biggles

As yet we do not have prices, but we will
CERTAINLY let you know as soon as we do.

- * Disk drives
- * Spectrum 48k
- * Spectrum 128k
- * Graphic pads
- * Music machines
- * Memory upgrades
- * Printer ribbons
- * Disk interfaces
- * Spectrum 128k +2
- * Spectrum 128k +3
- * Printer interfaces
- * Keyboard membranes



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128K

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GST 89.68
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INCLUDING THE CONTROLLER!!!!!!!

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*****Recognised Brand Name

*****New*****

*****Fully warranted



BOOK NOW TO AVOID DISAPPOINTMENT

READERS' LETTERS

Contributed by Olaf Bacon (Pretoria Sinclair User Group).



The SINCLAIR ZX SPECTRUM PLUS 3 128K was due to be launched by Amstrad mid-July, according to "POPULAR COMPUTING WEEKLY" dated May 29-June 4 1987. This is the 1987 update of the 1986 Plus 2, which was in turn an enhanced version of the machine which introduced many of us to Sir Ian Sinclair and the modern world of computing, the old favourite 1982 rubber key Speccy.



PLEASE PLEASE

Club members, we do realise that we are making life pretty full of hassels by asking you to make appointments getting codes and so forth.

The Sinclair ZX Spectrum Plus 3 has been completely redesigned internally. The case is finished in matt black, and is slightly deeper and chunkier than that of the Plus 2. The Plus 3 has a 58-key full-travel professional type keyboard. As with the Plus 2, only the major Sinclair Basic functions - LOAD, RUN, CODE - are marked in addition to the QWERTY symbols.

The Amstrad-type 3 inch disc drive now replaces the previous cassette deck which was built in to the Plus 2. This is a single-sided 3 inch device using the 40 track, nine sector, 512 bytes per sector standard Amstrad discs. Total storage is about 350K per disc. These are the same discs as are used by Amstrad's CPC 6128 and PCW 8256/8512. Locomotive Software wrote the disc operating system for the Plus 3, having come to an agreement with Digital Research, the original publisher of the CP/M operating systems, to produce a CP/M implementation for the new Spectrum. This will probably mean that data files generated with other CP/M machines, such as the Amstrad PCW, can be read by the Spectrum Plus Three.

Unfortunately, we have yet another request to make of you.

The Basic within the machine is essentially a version of the original Sinclair Basic. Obviously, Sinclair Basic (now Plus 3 Basic) and the Plus 3's operating system had to be revised to take account of the disc system. Chris Jenkins says in POPULAR COMPUTING WEEKLY 29 MAY-4 JUNE 1987, that "most old BASIC programs should run without modification."

Our neighbours are growing their grass to the verge of the road, as those of you who visit us know. Well, our neighbours would like to keep it that way.

Some major changes : a Centronics compatible parallel printer port has been added, fully supported from the new Plus 3 Basic. For the first time the Spectrum can be connected directly to quality printers without special interfaces or non-standard cables.

We have made special parking for you just outside our property. PLEASE PLEASE, PLEASE park there and not on our neighbours grass!

Did you know that LPRINT and LLIST were sent to the RS232 serial port on the Plus 2 instead of to the normal printer output, when in 128K mode? I hope this is overcome now on the Plus 3. Until I can afford to upgrade again, I find my trusty 48K Spectrum very handy to run the original programs, and to use to print my programs from.

Thank you, we appreciate your co-operation in this matter.

Meanwhile, have you been able to successfully send LLIST or LPRINT out to a parallel printer port, from the Plus 2 IN 128K MODE? If you or one of your friends have done so, then I and thousands of other Spectrum users would probably be very interested to read of your success, and details of your program in a future newsletter, so please send in your working solutions to ZX MUSHROOM CLUB for publishing in newsletters. I quite like modifying Basic programs by typing in the commands, while in

128K mode, but the 24 pin SEIKOSHA SL-80AI printer which I purchased from INFORMATION ENTERPRISES recently, uses a parallel input. Incidentally, I.E. prices are jolly good. Where else could you get a 24 pin printer, which is also IBM compatible, for under 1000 Rand ?

128K+3 REVIEW

AMSTRAD'S PLUS THREE

DISC-O-TECH

It's here at last! Following in the footsteps.....

The Spectrum has been famous almost from the day it was born, now 5 years later its fame has spread worldwide. Millions of Spectrum owners know the reason:

- * the combination of good colour,
 - * creative sound,
 - * and great value for money,
- which has guaranteed an unparalleled range of software (Ask I.E. they will tell You!)

The New SINCLAIR ZX SPECTRUM PLUS 3 128k, (to give its full title!) has a few surprises in store for us. The built-in disc drive means that at last a disc standard for the spectrum will be established.

Games will now load in seconds and not minutes. Each disc can hold more than 350k of programs and data, more than enough for a fifty thousand word novel!! This means that HUGE games - similar to the best of the US Commodore 64 disc-based programs will be possible.

The great connections of this little "Ballie" will get you far.

As well as all the extra features, existing Spectrum owners have been thought of as well and not just lost along the way.

- * An ordinary Cassette recorder can be connected to allow full access to the huge software base.

The Plus 3 has also inherited

- * Monitor connection RGB
- * 4 channel sound
- * Midi Port
- * Serial printer interface of the Plus 2 to make it by far the best connected Spectrum yet.

It also has the

- * joystick ports (which are now standard)
- * second Disc Drive Port
- * Expansion I/O Port (full Z80 Base)
- * auxiliary interface port.

COMPATIBILITY WITH OTHER MICROS

Some of the major changes are found in the line outports at the rear of the machine. A centronics compatible parallel printer port has been added.

For the first time the Spectrum can be connected directly to quality printers without special interfaces or non-standard cables.

There are two other BIG differences with previous Spectrums. The first is the Video output, this has been altered so that it will no longer drive monochrome monitors, maybe important if you're using a Spectrum for business or Educational purposes.

The second change is more significant. The Edge Connector has been altered so that the 9V line no longer exists. This has been used in the past to drive various peripherals like modems. These will no longer work with the Plus 3. So if you are up-grading, check your add-ons specifications - do they use the 9V line? they will not work.

Over the next few issues we'll be looking at the issues raised by the Plus 3 such as compatibility with the small number of 128 programs already released and the options for Plus and Plus 2 owners. We'll also be looking at the New Basic and DOS in more depth.

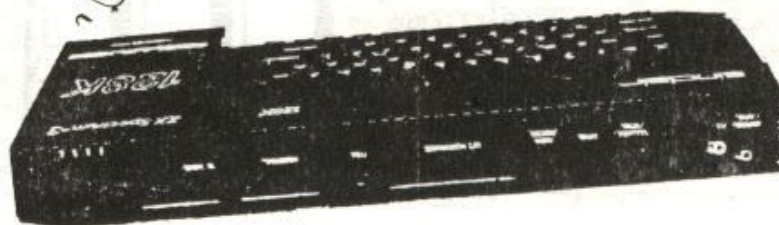
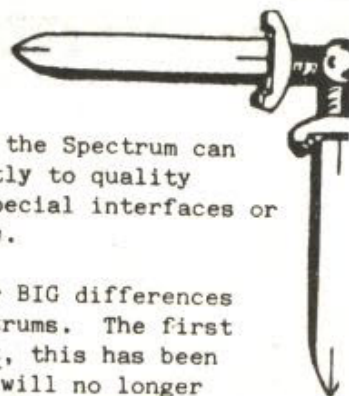
Our final verdict :- GOOD, BETTER, BEST. The new Spectrum Plus 3 is every bit a Spectrum. It comes from a good family and its been made even better. Its the best Spectrum yet!

At our Special introductory offer of R869.00, including the joystick, manual and 6-game disc, the Plus 3 is priced highly enough to make the R599.00 of the Plus 2 still a viable proposition. The Recommended Retail of the Plus 3 is R1 099.00, our normal price is R969.00.

INVITING?

We invite you to phone Anne, Aileen or Mary at I.E. for more information and availability.

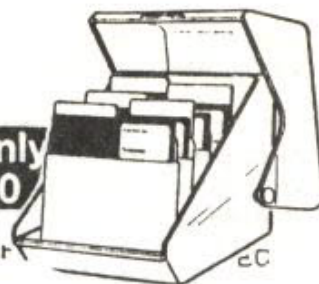
OR send a SAE + R1 Postal Order for other reviews and brochures of the new Plus 3.



US 3 DISC-O-TECH AMSTRAD'S PLUS 3 DISC-O-TECH

FLOPPY DISCS 100% GUARANTEED ERROR FREE

**Disks available only
in multiples of 10**



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I.E. now brings you this famous and reliable diskette at affordable prices and quantity discounts.

I.E. purchased these diskettes at a favourable exchange rate so not only will you save on I.E.'s normal lower price but NOW you will also beat the worsening exchange rate.

MAKE	SIZE	QTY	PRICE	SPECIAL	GST	P+P
VERBATIM	5.25	10	(28.50)	24.50	2.94	1.00
VERBATIM	5.25	20	(49.00)	46.00	5.52	1.20
VERBATIM	5.25	30	(85.50)	64.50	7.74	1.50
VERBATIM	5.2.5	50	(142.50)	95.00	11.40	2.00

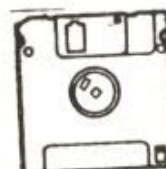
All above are double sided * double density
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Boxed
Complete with labels, envelopes and tabs.

MAKE	SIZE	QTY	PRICE	SPECIAL	GST	P+P
BASF	3.5	10	(64.50)	59.90	7.19	1.20
BASF	3.5.	20	(129.00)	110.00	13.20	1.40
BASF	3.5.	30	(193.50)	149.97	17.96	1.80
BASF	3.5.	50	(322.50)	138.00	16.56	2.00

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MAKE	SIZE	QTY	PRICE	SPECIAL	GST	P+P
BASF	3.5.	10	(79.99)	74.50	8.94	1.20
BASF	3.5.	20	(159.98)	143.00	17.16	1.40
BASF	3.5.	30	(239.97)	202.50	24.30	1.80
BASF	3.5.	50	(399.95)	309.90	37.19	2.00

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Complete with labels



REMEMBER : WE HAVE DISKETTE STORAGE BOXES

3.5 STORAGE BOX R 27.50 3.30 GST 2.00 P+P

THIS MONTH INFORMATION ENTERPRISES IS 4 YEARS OLD

TO CELEBRATE THIS AND THE MASSIVE INFUSION OF NEW MEMBERS,
AND TO GIVE YOU AN IDEA OF JUST HOW MUCH YOU SAVE BY
SHOPPING AT INFORMATION ENTERPRISES, I.E. IS OFFERING A WIDE
RANGE OF EXTRA SPECIAL OFFERS TO MUSHROOM CLUB MEMBERS ONLY.
(IF YOU HAVE FRIENDS WHO WOULD LIKE TO JOIN THEY ARE
WELCOME, JUST SEND US THEIR NAME AND ADDRESS.)

MOVES ARMY MOVES ARMY MOVES
VALID 31.10.87

DISKING

ARCADE AND ADVENTURE FANATICS - LOOK AND LEARN!

All of those of you who enjoy "souping up" your games to have infinite lives to open doors quickly, no energy drains, destroying meanies and many more, "I want it cheat" - here are some POKES which will be just up your alley.

ARE YOU STUCK IN UNENDING MAZES?

Do you find yourself going round and round and not getting anywhere?

WE CAN HELP YOU!!!

We have maps and solutions for the following:

THE QUEST FOR THE HOLY GRAIL
GAUNTLET
THEY STOLE A MILLION
FIST OF
FAIRLIGHT OF
COBRA
NOSFERATU
BOMBSARE
AVENGER
COLOUR OF MAGIC
VAMPIRE VILLAGE
BATMAN
SPIDERMAN
THE GREAT ESCAPE
DAN DARE

GET LOST!!!!!!!

or rather don't, send in for our map guide and you can find those keys, enter those secret passages and sneak up on perfect staragers!!!

SEND US A SAE + R1 Postal Order for the complete guide.

SEND A SAE AND R1 POSTAL ORDER TO US AND WE WILL SEND YOU THE MAPS/ SOLUTIONS TO THESE GAMES

WE HAVE RECEIVED THE FOLLOWING CHEAT CODES FROM OUR MEMBERS OF THE CLUB, BUT DUE TO THE LIMITED SPACE IN OUR NEWSLETTER WE CAN NOT PUBLISH THEM ALL, HOWEVER IF YOU SEND US A SAE AND A R1 POSTAL ORDER, WE WILL SEND YOU THE LIST.

THE LIST HAS POKES AND OTHER CHEAT CODES FOR THE FOLLOWING GAMES:

Arcadia, Cookie, defenda, Hunchback, Jet Pac, Psst, Trans Am, Atic Atac, Zaxxon, Pentagram, Manic Miner, Sabre Wulf, Tutankhamun, Moon Alert, Kosmic Kanga, Jet Set Willy, Pi-Balled, Lunar Jetman, Sai Combat, Sweevos World, Avalon, 3D Starstrike, Kokotoni Wilf, wheelie, Fall Guy, Alien 8, Gun Fright, Bobby Bearing, Pyracurse, Stainless Steel, Cyberun, Sam Fox's Poker, Ghosts 'n' Goblins, Jack the Nipper, Cauldron II, Commando, Biggles, Lightforce, 1942, War, Elite, Paperboy, Dan Dare, spindizzy, Spellbound, Ad Astra, Turbo Esprit



THE BUX PIF

THE convenience for your QL

Plug this into your ROM expander slot and it enables three ROM based programmes to be installed without plugging it in and out. Save wear and tear on your ROMs by using this convenience, which is switched based and all you do is switch between the ROMs.

Enable/disable switch 1.
Eprom switch 2-4.

BUX PIF

PRICE	R35.00
GST	4.20
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TOTAL	41.20

BUX PIF

THE convenience
for your QL



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WE STILL HAVE STOCKS

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Right from the first stunning graphic of THE TOMORROW WAR, you'll be swept into a very real, very gripping world of future conflict.

And in this scenario, YOU are the centrifugal force, a dictator ruthlessly determined to unite a nuclear-ravaged Europe.

In an atmosphere of spiralling tension, you have to react to actual modern reports, plan strategies, put entire armies and countries on the line and in the end force your dream of unity through into reality.



And it's available through mail order at the low local price of
R13,50 + R1,62 g.s.t. + R1,00 p.p. = R16,12

Orders to: the ZX Mushroom Club
box 35644
Menlo Park
PTA 0102

3-D graph

FROM: W. Gacrdes

This program is intended to be a subroutine of another program. If so the Stop command in line 150 should be substituted with a Go To command. The user can take from 1 to 14 bars.

```

1 REM 3D Graph
2 REM by WEG
3 PRINT TAB 13;"3D GRAPH"
5 SAVE "3D GRAPH"
10 LET c=0:LET x=0:LET y=10:LET i=0
20 INPUT "NUMBER OF BARS (1 TO 14)";b
30 IF b<1 OR b>14 THEN GO TO 20
31 REPEAT 1,b
40 INPUT "PERCENTAGE OF BARS (0-100)";p
50 IF p<0 OR p>100 THEN GO TO 40
70 PLOT 0,0: DRAW 223,0
71 PLOT 0,168: DRAW 0,-165
80 FOR j=0 TO p: FOR k=x TO y
90 PLOT k,j
100 NEXT k: NEXT j
110 PRINT AT 6,i;p
120 LET x=x+15: LET y=y+15
130 LET i=i+2: LET c=c+1
140 GO SUB 1000
150 IF c=b THEN STOP
160 GO TO 40
300 IF b<0 OR b>14 THEN GO TO 40
1000 DRAW 5,5: DRAW 0,-p: DRAW -5,-5
1010 DRAW -10,p: DRAW 0,-p: DRAW 10,0
1020 RETURN
    
```

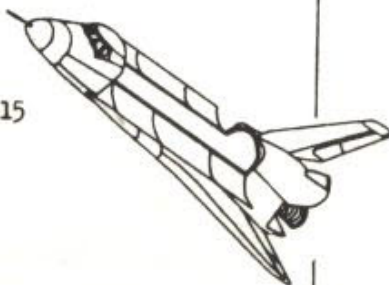
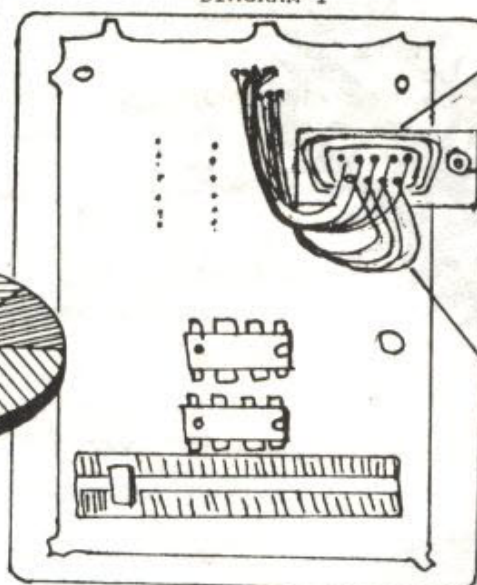


DIAGRAM 1



A hole is cut in the P.C. board and in the rear side of the interface as shown below.

DIAGRAM 2

PC BOARD

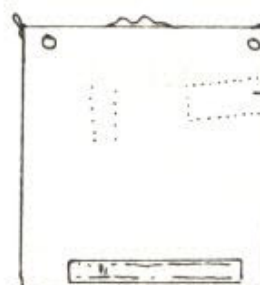


DIAGRAM 3

INTERFACE

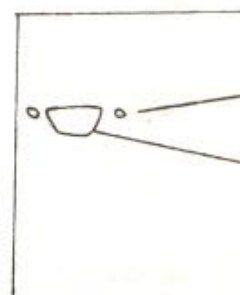
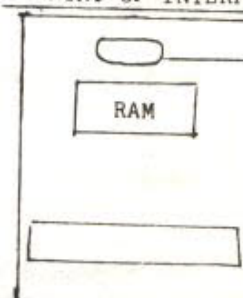


DIAGRAM 4

FRONT OF INTERFACE



MUSHROOMERS who have a DK Tronics keyboard and a Ram Electronics interface, this article is for you!
Curticy of C. Crafford

These people know that the keyboard is higher than the joystick plug. Mr Crafford made this modification to his interface to allow him to have the interface on the keyboard.

This will require some soldering, some cutting and some wire. Two screws will also be needed, but two nuts and bolts will work better.

THE CLUB ACCEPTS NO LIABILITY FOR THE INFORMATION CONTAINED IN THIS ARTICLE

The plug will now be at the rear of the interface and opposite the keyboard.

**UNBELIEVABLE
UNBEATABLE**



		RRP	SPECIAL
TAUSMAN	Games Workshop	R24.95	R17.99
First ever interactive multiplayer Arcade Adventure. Excellent, very addictive.		10 in stock	only
2. ONE-ON-ONE	Ariolasoft	38.00	24.95
A basketball action Program. U.S. no. 2 hit Chrome tape		10 in stock	only
3. QUAZER	Rose Software	19.99	14.49
The quiz with a difference. Test your quickthinking. As well as your quick reaction. Extremely stimulating educational game.		11 in stock	only
4. TASWORD II	Tasman Software	35.99	27.50
The Classic Wordprocessing program-long in the tooth-but excellent. I still use it and nothing else -(Sinclair User 5 Star Rating)		23 in stock	only
5. THE PYRAMID	Fantasy Software	14.95	9.95
An Arcade style game with a very adventurous feel to it - 120 chambers on 15 levels. Sinclair User Classic		13 in stock	only
6. REVERSI	Sinclair	14.95	9.95
Also known as Othello - Late nineteenth Century Board game - MAJOR game of Strategy		12 in stock	only
7. TWISTER	System 3 Software	33.50	16.99
Sinclair User 5 Star Rating		Stock 8	only
8. LORD OF THE RINGS	Melbourne House	65.75	29.99
* Sinclair User Classic *		Stock 10	only
9. CHESS	Sinclair	14.95	9.95
Traditional Board Game. 10 levels		Stock 16	only
10. THE DRIVE-IN	Fantasy	15.75	9.95
		Stock 11	only
11. DEATH STAR INTERCEPTOR	System 3 Software	38.95	25.23
		Stock 11	only
12. I OF THE MASK	Electric Dreams	38.15	26.95
		Stock 9	only
13. JET SET WILLY	Software Projects	21.40	13.25
		Stock 7	only
14. SORDERON'S SHADOW	Beyond	29.50	14.95
5 Star Rating (Sinclair User)		Stock 9	only
15. POOL	C.D.S.	14.75	9.95
		Stock 15	only
16. PENETRATOR	Melbourne House	23.95	14.95
		Stock 11	only
17. PANAMA JOE	Sinclair	14.95	7.95
You must guide Panama Joe through the Pyramid to Montezuma's Treasure Room. Arcade Action		Stock 9	only

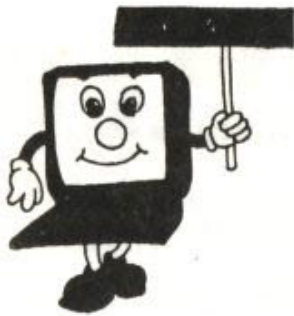
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PT()

VALID UNTIL... 31-10-87

IPG

E 128 STARS ON THE 128



18. STONKERS

Imagine

RRP SPECIAL

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Stock 9 only

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19. SPACE RAIDERS

Sinclair

16.50

7.95

Stock 12 only

%%%%%%%%%

20. MUSIC MASTER

Sinclair

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13.75

Stock 15 only

%%%%%%%%%

21. MAGNETS

Sinclair

23.95

13.75

Stock 12 only

%%%%%%%%%

22. SABRE WOLF

Ultimate

27.50

16.95

Sinclair User 5 Star Rating

Stock 9 only

%%%%%%%%%

23. THE GREAT SPACE RACE

Legend

29.00

14.95

Stock 11 only

%%%%%%%%%

24. GYRON

Firebird

29.95

17.25

A Tour-de-Force of perspective graphics with a fiendish strategy game. *Sinclair Classic*

Stock 7 only

%%%%%%%%%

25. KNIGHT LORE

Ultimate

29.60

19.50

3D Arcade Adventure *Sinclair Classic*

Stock 9 only

%%%%%%%%%

PLEASE NOTE that unlike a lot of firms I.E. does NOT put the Rubbish on special. Many of the above have been give 5 Star Ratings or Classic Ratings in the SINCLAIR USER.

%%%%%%%%%

UPGRADE YOUR SPECTRUM to 48k

SPECTRUM 48K TO 128K

we still have no DEFINITE and CONFIRMED news on the once-announced upgrade from 48K TO 128K but we shall inform you of this the moment we do

SPECTRUM 16K TO 48K

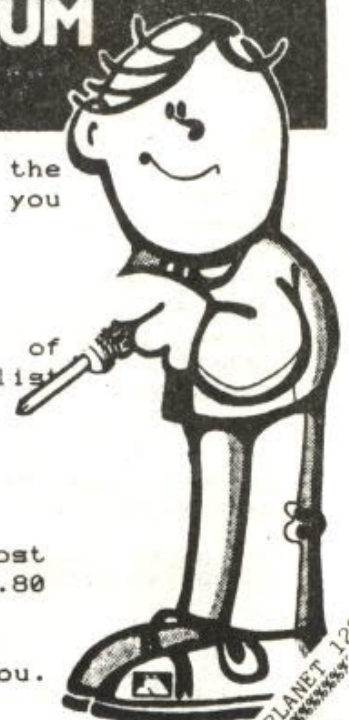
For all of you with 16k machines wanting to take advantage of the wonderful 48k programs advertised here and in our price list we have.....

MEMORY UPGRADES IN DO-IT-YOURSELF KITS

1 x MEMORY UPGRADE KIT (16K TO 48K)

price	gst	post
R59.00	7.08	1.80

note: for the faint-hearted we'll upgrade your machine for you. Just add R5.00 to the above and post to us.



THE MUSHROOM CLUB WELCOMES THE THOUSANDS OF NEW MEMBERS WHO HAVE JOINED IN RESPONSE TO THE ADVERTISEMENTS IN 'SCOPE' AND 'DIE HUISGENOOT'

DIE 'MUSHROOM CLUB' VERWELKOM DIE DUISENDE NUWE LEDE WAT AANGESLUIT NA DIE VERSKYNING VAN DIE ADVERTENSIE IN 'SCOPE' EN 'DIE HUISGENOOT.'

FORBIDDEN PLANET 128 FORBIDDEN PLANET 128
VALID UNTIL 31.12.83

1804: Adding Larger Values. L.G.Bee.

Here is something that might be of interest to other Spectrum 48K owners.

It was necessary to write a programme to list about 300 assets with values and to total them. The assets and values had to be changed frequently. Some values exceeded R999 999.99 and the total certainly did. The problem was that the Spectrum cannot handle larger figures without dropping the last cents column or going into Exponential display.

Some features in this particular programme are:

1. "p" can optionally be used for the decimal point and will be printed as a point. It makes entering easier.

2. A small marker automatically separates the figures into groups of 3 for easy reading of large figures.

3. The limit is now R99 999 999.99 instead of R999 999.99.

4. Typing "t" at any stage gives the total following which more items can still be added.

5. Unacceptable figures are pointed out and the message disappears when a sound figure is added - without leaving a blank line.

6. If an entry has taken the total above R99 999 999.99 a statement to this effect will immediately appear on the screen.

The only way I could find to get round the problem (all the items being stored in an Array) was to use Strings to separate the Rands from the Cents and to put the Strings together to print the Total.

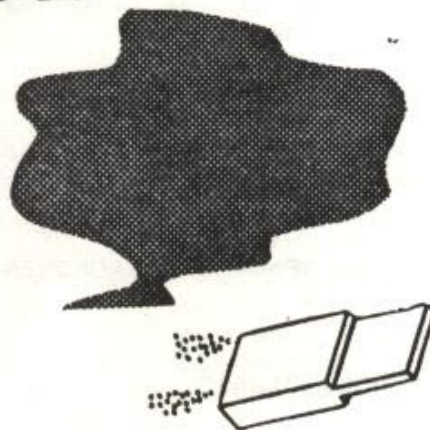
The method used is demonstrated in the short adding programme attached which can be adapted by members for insertion into their own business programmes.

It is on the tape as "letter" in Tasword 11 in 40 columns. The listing has been SAVED as "addition". Each has been SAVED twice for safety.

```
10>LET rands=0:LET cents=0
20 INPUT "Value? (t=TOTAL: ST
OP=Stop) ";v$
0 REM By L.G.Bee.
30 IF v$="t" THEN GO TO 170
40 IF v$=" " STOP
50 IF LEN v$>14 THEN LET v$=v
$(1 TO 11)
60 IF LEN v$>11 OR LEN v$<3 TH
EN GO TO 250
70 IF v$(LEN v$-2)="p" THEN L
ET v$(LEN v$-2)="."
80 IF NOT v$(LEN v$-2)="." THE
N GO TO 250
90 FOR f=1 TO LEN v$: IF f=LEN
v$-2 THEN GO TO 110
100 IF CODE v$(f)<48 OR CODE v$
(f)>57 THEN GO TO 250
110 NEXT f
120 PRINT TAB 20-LEN v$:v$
130 IF LEN v$>6 THEN PLOT 112.
```

```
(PEEK 23689)*8-9: IF LEN v$>9 TH
EN PLOT 88,(PEE
K 23689)*8-9
140 IF LEN v$>3 THEN LET rands
=rands+VAL v$( TO LEN v$-3)
150 LET cents=cents+VAL v$(LEN
v$-2 TO )
155 IF rands>999999999 AND cent
s>.99 THEN PRINT "TOTAL has OVE
RRUN R99 999 999
.99": STOP
157 GO TO 20
160 REM Print Total
170 LET t$=STR$ cents: FOR f=1
TO LEN t$: IF t$(f)="." THEN GO
TO 190
180 NEXT f: LET t$=t$+".00"
190 IF t$(LEN t$-1)="." THEN L
ET t$=t$+"0"
200 IF LEN t$=3 AND t$(1)="." T
HEN LET t$="0"+t$
210 LET r=rands+VAL t$(1 TO LEN
t$-2): LET t$=STR$ r+t$(LEN t$-
2 TO )
220 PRINT " TOTAL ";TAB 19-LEN
t$;"R"+t$
230 IF LEN t$>6 THEN PLOT 112,
(PEEK 23689)*8-9: IF LEN t$>9 TH
EN PLOT 88,(PEE
K 23689)*8-9
240 GO TO 20
250 REM Unacceptable entry
260 PRINT v$;" is not acceptabl
e"
270 POKE 23689,PEEK 23689+1
280 INPUT "Re-enter Value/t-TOT
AL:STOP=Stop";v$
290 PRINT TAB 5: "
"
300 POKE 23689,PEEK 23689+1
310 GO TO 30
```

ZUL



Fast, smooth and addictive rebounding ball type action brings good arcade games back into your price range. 100 percent machine code - no colour clash!

R16,97 + R2,03 g.s.t. + R1,00 p.p. = R20,00
Order using form at back of newsletter.

for the ZX Spectrum 48K/+



Talented? Musically frustrated? Read on...

We have several Music Programmes available for the Spectrum. All the programmes have been written by professional musicians and programmers, and even without any prior knowledge of music you will be able to use these programmes.

But, music does not only stop at Software on your Spectrum.... we have several Hardware packages which may be just up your... tinckle?!

This Hardware allows you to program harmonies, explosions, zaps, chimes and whistles and an infinite range of other sounds over a full 8 octaves, Hardware also comes with easy-to-understand user guide, and demo tape.

Sound good and adventurous? Well here follows our price list of all our available musical hard and software.

	RRP	Our PRICE
Music typewriter	37.50	34.99
Music Master	17.99	14.99
Three Channel Sound Synthesiser		
Spectrum	145.00	119.00
Currah Speech & Sound	75.99	67.99
Music Machine	215.00	185.00
Cheetah Midi Interface	225.00	199.00

Postage on Software R1.50
Postage on Hardware R2.00



adgesting Sentance



CAN YOU SPOT THE SPELLING MISTAKES?

Our Professor has already found 6. What a shame!!!!!! To see just how observant you are, We will award you with the Sought MUSHROOM Award. This award is the chance to write One whole page of the newsletter.

Send in for your spores NOW!

PS Ladies can't be good at everything!

WE'VE SAID IT BEFORE AND WE'LL SAY IT AGAIN,

I. E. WILL BEAT ANY PRICE

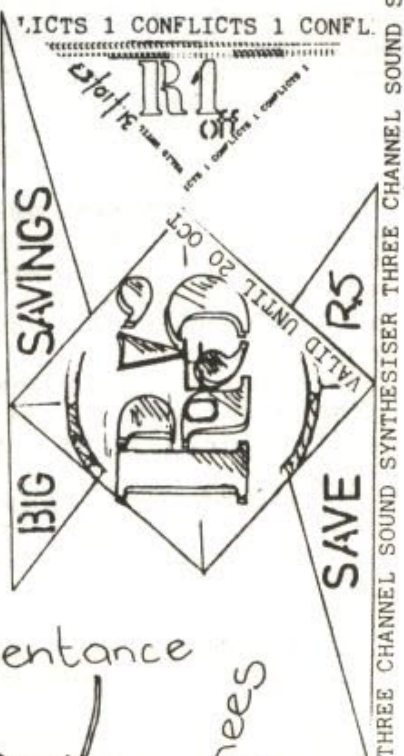
EVEN THOSE OF OUR COMPETITORS WHO ALSO PROMISE TO BEAT ANY PRICE. I. E. 'S PRICES CAN VARY FROM DAY TO DAY SO IF YOU SEE A PRICE ADVERTISED WHICH YOU THINK IS CHEAPER THAN OURS DON'T RUSH OUT AND BUY IT. MANY PEOPLE HAVE IN THE PAST ONLY TO FIND THAT I. E. 'S PRICE HAD DROPPED IN THE MEAN TIME.
THEY REGRETTED IT - MAKE SURE YOU DON'T!!

YOU WORK HARD FOR YOUR MONEY - YOU HAVE TO GIVE A LOT OF IT TO THE TAXMAN - DON'T THROW ANY OF THE REST AWAY

I. E. DOES NOT HAVE TO RESORT TO TRICKS TO GET YOUR CUSTOM - OUR SPECIAL OFFERS ARE STRAIGHT FORWARD BARGAIN -

TRUST US

WE HAVE YOUR INTEREST AT HEART - WE ONLY MARKET WHAT WE CONSIDER TO BE FIRST RATE PRODUCTS.



HAVING PROBLEMS SORTING OUT YOUR WAGES AT THE END OF THE WEEK? WELL, FOR ALL THOSE SMALL BUSINESSES WITH THIS PROBLEM, WE CAN HELP YOU.

FARM AND COMPANY WAGES has room for up to 200 employees on a monthly or weekly basis. This program stores the names of your employees, maximum 20 characters and the monthly/weekly rate of pay for that employee.

The setup section allows you to change the max. no. of employees income, deductions, etc.

WAGE PROBLEM

There is a setup section that allows you to modify the program to suit your payroll requirements.

Suitable for cassette, microdrive, and TRL disc interface.

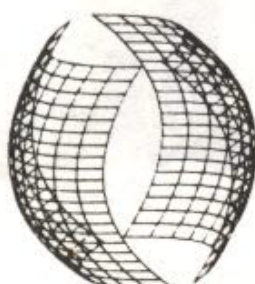
Coin/note breakdown and wages summary.

Prints payslips on a 32 or 80 column format suitable for all printers.

NORMAL PRICE 49.99
GST 6.00
55.99

SPECIAL OFFER 39.99
GST 4.80
44.79

P + P 1.85
46.64



YOU SAVE R11.20
offer valid until 20/10/87

SOFTWARE NEWS

INFO-LINK SOFTWARE (CC)

Suppliers of Application and Educational Software for the
ZX SPECTRUM 48K

IMPORTANT ANNOUNCEMENT TO ALL MUSHROOM CLUB MEMBERS:-

THE FOLLOWING SOFTWARE IS NOW AVAILABLE DIRECTLY TO ALL MUSHROOM CLUB MEMBERS AT SPECIALLY NEGOTIATED RATES.

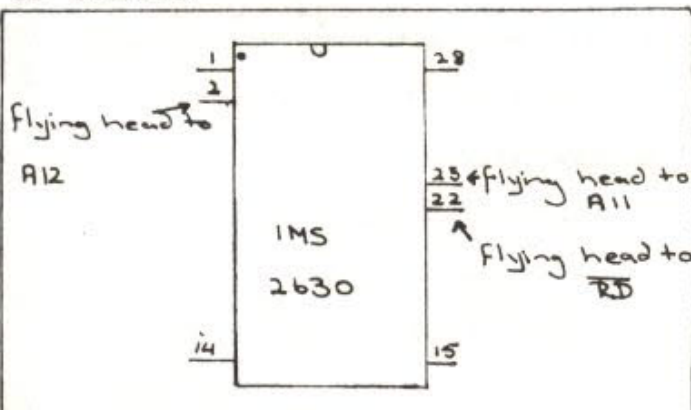
PROGRAM TITLE	PROG TYPE	STD PRICE	MEMBER PRICE	MEMBER SAVING
THE GENERAL LEDGER	APPL	R120.00	R90.00	R30.00
THE HOME ACCOUNTANT	APPL	R100.00	R70.00	R30.00
THE CREDITOR	APPL	R110.00	R77.00	R33.00
THE DEBTOR	APPL	R110.00	R77.00	R33.00
THE PAYROLL	APPL	R110.00	R77.00	R33.00
THE DIET PLANNER	APPL	R 55.00	R38.50	R16.50

EXTENDING ZX 81 RAM

8K dynamic RAM inside ZX 81

This modification extends memory of a ZX 81 from 1 K to 8 K byte without using an external memory pack.

Existing memory chips, usually two 2114's, are replaced by an 8 K by 8 Bit dynamic RAM, the INMOS IMS 2630 as follows



Remove the existing RAM IC or IC'S and clear out the holes the 28 pin package, preferably using a desoldering tool.

Fit a 28 pin socket to the board and bend pins 2, 22, 23 so that they do not fit in the socket when the IMS 2630 is inserted. Finally solder these pins to the circuit board as shown.

From Anton Erasmus

Card bonanza

FOR ZX SPECTRUM 48 K

Two exciting card games for the price of one!

rummy

Try to beat your speccie at this favourite card game. Speccie makes intelligent moves, can you?

patience

This great solitaire card game is for the "less vicious" card game lovers. Can you complete the sequences WITHOUT cheating? Featuring:

Card graphics that look like actual cards. Colour. Sound. Rules as given in the "OFFICIAL RULES OF CARD GAMES". Witty remarks and a quick thinking speccie! At the price of only R11.50 you will enjoy endless hours of hard thinking?! It is available through mail order from the ZX MUSHROOM CLUB, the total price is as follows: R11.50 + R1.38(gst) + R1.50(p&p) = R14.38

THE CLUB ACCEPTS NO LIABILITY FOR THE INFORMATION CONTAINED IN THIS ARTICLE

MEGA STORAGE ON YOUR SPECTRUM

Especially for your:
Spectrum 48K
Spectrum 128K
Spectrum 128K+2



Hook up a fast and reliable disk drive to drive to your Spectrum with the following systems.

BE THE ENVY OF YOUR FRIENDS AND EVEN SUPRISE THE PC BRIGADE!!!

BETA DISK INTERFACE from Technology Research

- * Easy to use and works like a Dream, reliable, no-nightmare repair bills!
- * Double Density
- * Capable of working with 1 - 4 floppy drives
- * Works with a 3.5 or 5.4 or 8 inch drives
- * Version 4.0 automatically selects drive
- * With DS-DD 80 track drive gives 636K Storage
- * Works with IBM and APPLE drives, and all SHURGART compatible drives (see end of article)

PRICE R239.00
GST 19.92
P&P 2.00

TOTAL 260.92



SANDY DISK INTERFACE (QL)

- * Plus 512k memory on board
- * Plus PRINTER INTERFACE for Parallel Printer
- * Compact and fits into the Expansion slot of the QL
- * Other specs are the same as those of the Beta Interface for the Spectrum

PRICE R999.00, Disc interface including
GST 119.88 Printer interface
P&P 2.00 and 512k upgrade.

TOTAL 1120.88

CUMANA DISK INTERFACE (QL)

- * Double Reset
- * Stores 728k per diskette
- * Other specs are the same as those of the Beta Interface for the Spectrum

PRICE R369.00
GST 44.28
P&P 2.00

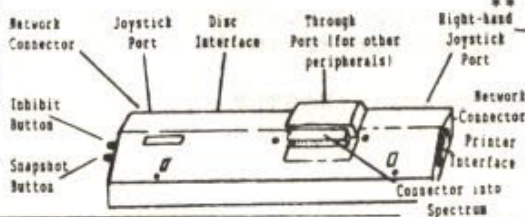
TOTAL 415.28

DISCIPLE DISK INTERFACE version 3.0

- * Double Density
- * Works with all SHURGART compatible drives
- * Has snapshot "magic" copy button
- * Built-in PRINTER INTERFACE
- * Built-in JOYSTICK INTERFACE
- * Works in both 48k and 128k modes
- * All for only

PRICE R375.00
GST 45.00
P&P 2.00

TOTAL 422.00



MITSUBISHI DRIVE

- * Slim-line
- * Double-sided, Double-density 80 Track
- * MSX compatible
- * Silent access, and very fast
- * Reliable
- * Beautifully cased in elegant black case
- * On/Off switch and Transformer included
- * Suitable for 48k, 128k, 128k+2 and QL

PRICE R499.00
GST 59.88
P&P 5.00

TOTAL 563.88



HAVE YOU SEEN OUR SPECIAL INTRODUCTORY OFFER ON THE SPECTRUM 128 +3 IN THE REVIEW ELSEWHERE IN THE NEWSLETTER?
YOU HAD BETTER LOOK QUICKLY AND BOOK ONE NOW BEFORE WE RUN OUT OF STOCK AND YOU WILL BE DISAPPOINTED.



MITSUBISHI DRIVE MITSUBISHI DRIVE MITSUBISHI DRIVE MITSUBIS

LOOK

NEW NEWS

LOOK

NEW SOFTWARE ON ORDER FOR THE SPECTRUM

TITLE	TYPE	PRICE	GST	P&P	TITLE	TYPE	PRICE	GST	P&P
Last Mission	Co	32.99	3.96	1.20	Down to Earth	*A	7.50	.90	1.20
Convoy Raider	Ss	29.99	3.60	1.20	Deathscape	Ssc	29.99	3.60	1.20
Armagaddon Man	Ss	47.99	5.76	1.50	Magmax	Ssc	29.99	3.60	1.20
Void Runner	*A	11.50	1.38	1.20	Metrocross	A	34.50	4.14	1.20
Moonstride	Ssc	29.89	3.59	1.20	Thing Bounces Back	A	29.99	3.60	1.20
Shadows of Modor	Ad	29.99	3.60	1.20	Arkanoid	A	29.99	3.60	1.20
Conflicts 1	Ss	47.99	5.76	1.50	Army Moves	A	29.99	3.60	1.20
Battle of Britain					Wizball	Ssc	29.99	3.60	1.20
Theatre Europe					Leader Board (golf)	Sim	19.99	2.40	1.50
Roundheads	Ss	29.99	3.60	1.20	Exton	A	29.99	3.60	1.20
Conflicts 2	Ss	29.99	3.60	1.50	Wonderboy	A	36.99	4.44	1.50
Battle for Midway					Tai Pan	A	29.99	3.60	1.20
Iwo Jima					Hydrofool	A	29.99	3.60	1.20
The Renegade	A	36.99	4.44	1.20	Zynaps	A	29.99	3.60	1.20
The Final Matrix	Ssc	34.50	4.14	1.20	Killed until Dead	A	34.50	4.14	1.20

KEY

Ss Strategy Simulation
 Co Coin-op
 Ad Adventure
 A Arcade
 Ssc Screen scroll
 Sim Simulation
 * Budget

COMPETITION

Complete the following sentence. The most ingenious sentence will get a R15 gift voucher, second prize is R10 and third is R5.
 So, lets see what you can come up with!

Trials of a

ARE YOU GOING TO BE SATISFIED WITH 3 INCHES?

I.E. NOW STOCKS THE SPECTRUM 128K PLUS 3 WITH ITS BUILT-IN 3 INCH DISK DRIVE. (SEE OUR REVIEW ELSEWHERE IN THIS MAG)

HOWEVER THERE HAS BEEN A LOT OF OTHER (MOSTLY GOOD) PUBLICITY ABOUT THE NEW SPECCY?

YET....

- DO YOU KNOW HOW FAST IT WORKS?

The drive is reasonably fast and appears to compare well with other home computer systems on the market. The Spectrum Plus 3 with its 128k memory loads most software tested in 2/3 seconds although at this point the only software tested was, the games packages supplied FREE with the computer.

Sinclair User No 66 of September 1987 writes that the drive performs better than the Commodore 64 and Commodore 128. (Your always THOUGHT the Spectrum was better but now you KNOW why)

WHY DON'T YOU TRY IT FOR YOURSELF - SEE OUR SPECIAL INTRODUCTORY OFFER ON THE SPECTRUM PLUS 3



SCARAB SYSTEMS

ARE you a serious Radio operator using either RTTY or CW? We have a package which will be just up your aerial?!!?

We have three packages which will certainly interest the serious operator and are designed to run on the spectrum either with or without a communications board.

Suspence getting you? Well lets get on with it!

SSTV The first is for SSTV reception. Enjoy SSTV reception on the Spectrum. This program enables you to join the growing band of SSTV enthusiasts on HF and VHF. The program requires no additional hardware as the tones are fed from the receiver directly to the EAR socket of the computer. Some of the many features include:

- * Adjustable Grey scale
- * Printer dump
- * 5 Grey levels
- * Load and Save screen to tape
- * full screen dump
- * Input analysis routine
- * Negate screen
- * selectable border colour
- * Demo cassette of SSTV audio pictures

Available on cassette for ONLY R69.99

RTTY & CW

This RTTY program is aimed at the serious operator and is designed to run with the Communications interface board (see below). It is supplied together with the CW program when the interface board is purchased. The program provides the following features:

- * Split-screen
- * Type ahead buffer
- * Transmittable real time clock
- * 10 Memories
- * 7 Memories of 255 characters
- * Callsign capture
- * Instantaneous Tx mode
- * Unshift on space

The CW program is provided as software support for the Scarab interface. It provides an auto-tracking receive program with the ability to run in semi break-in mode. Features also include:

- * special characters va, kn etc
- * 10 memories
- * Real time clock
- * Program configuration
- * callsign capture

PRICE ONLY R21.25

COMMUNICATIONS INTERFACE BOARD

The interface board is designed to enable the Spectrum to receive and transmit data. It is supplied with software for sending and receiving RTTY and CW digital signals. The unit works at 5V logic levels and requires the addition of a terminal unit such as the MPTU-1.

Features of the board are:

- * Three band rates
- * Relay driven PTT output
- * Logic high and low LED indication (MARK/SPACE)
- * Input/output buffer
- * Fully documented
- * Multi-turn presets for adjusting baud rates
- * Free Cassette software (see above)

THE BARGIN PRICE OF ONLY R159.20.



SPECIAL OFFER ON PRINTER FOR 3 DAYS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Seikosha, quality JAPANESE, NOT TAIWANEES, Printer on special. fully guaranteed for 6 months by Seikosha, This NEAR LETTER QUALITY PREINTER IS ABSOLUTE VALUE FOR MONEY.

SEPT							OCT						
S	M	T	W	T	F	S	S	M	D	W	D	V	S
	1	2	3	4	5							1	2
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30				25	26	27	28	29	30	31

- * NLQ
- * 100 CPS
- * Normal Price R517.00
- * Your Price only R475.00 + GST and Postage.

The Printer is the Seikosha SP 180



REMEMBER TO USE THE ORDER FORM ON THE BACK PAGE FOR QUICK PROCESSING OF ORDERS

COMPUTER CLASSIFIED

ZX Microdrive, Interface 1, 5 Cartridges
R270.00, DK'Tronics Programmable Joy-
stick interface - R60.00, Currah Micro-
Speech - R60.00 - Tel: JOHAN (012)
2992997(w), 219287(after Hours)

For Sale: downsway Electronics Program-
mable Joystick Interface - R50.00.
CONTACT: Brent Keel, PO Box 10, Veni,
Mbabane, SWAZILAND. PLEASE INCLUDE
TELEPHONE NUMBER

For Sale: Spectrum in saga keyboard
R300.00, Multiface 1 R160.00, Disc
Drive 5 1/4" + connections (cased)
R350.00, Software +R20 each, tape-
recorder-Blaupunkt computer compat.
R100.00, Phone Christopher Riley
at (012)709944 after 17h00.

1 microdrive R100.00, 1 Interface 1
R100.00, 6 used cartridges, Tasword 2
and Masterfile R50.00, ALL for R230.00
VTX 5000 Beltel Modem, brand new R280.00
with instructions. Contact Gary Argyrou
(01211) 20813 from 16h00 to 21h00.

For Sale: Spectrum 48K with Interface 1
R300.00, 3 X Microdrives R80.00 each.
1 X AMX Mouse R300.00, 27 X Microdrive
cartridges R8.00 each. Various games
and utilities also available. Also
Spectrum ROM & Shado ROM Disassembly
books. Contact Tony Scales at (041)
512110 afternoons and evenings.

I have recently purchased an AMSTRAD
CPC 464 from the Club and am very
impressed with the computer.

But, I have great difficulty in get-
ting any books or magazines to do
directly with my computer. There are
two books in particular, one is the
Amstrad Advanced Manual and the other
is the Amstrad User, which the Club is
already helping me with the purchase of
said.

Could I also possibly be put in contact
with other Amstrad users?

I thank you for your co-operation.

From: Mr T.P. Kinnear
PO Box 428
Ceres, Cape
6835

AT LAST!

Computers by Post

HAS THE TAXMAN BEEN GETTING YOU DOWN LATELY?

Has he been making that purchase just so much
more expensive for you to leave it until a
later date, and guess what higher prices?

Well I.E. is going to put you our Club
Members on top of the world!

Over the next few months we will be moving
to our new factory in Bophutswana. One
of the legal requirements for selling
goods to another country is, guess.....
NO GST!!!!

Yes, you have read correctly, any purchase
that you make from our factory will have no
GST charged on it. We will, however, still
be keeping our showroom at 417 Milner Street
in Waterkloof: and you can go and see our
goods there, but, unfortunately, should you
decide to purchase anything from our Pretoria
branch, then you will have to pay GST.

SO for GIANT savings order through the Post
and you will not have to pay GST.

We have not moved to BOPHUTSWANA yet, but
we will inform you as soon as the move has
been completed.

Sound good? Well, now we certainly will
beat any price.

In our next few issues of the Newsletter,
we will be giving you further details on
how to order and our address. So keep an
eye our for that final announcement, and
remember that Computers by Post will beat
any price. That is INFORMATION ENTERPRISES
promise.

**WE RESERVE THE
RIGHT TO LOWER
PRICES WITHOUT
PRIOR NOTICE AND
REFUND THE
DIFFERENCE OR
QUANTITY AT OUR
PREFERENCE.
Please ask for our
Price List for IBM®
PC compatible
systems & add-ons**



SPECIFICATIONS		
	SD-10	SD-15
Print Method	Serial Impact Dot Matrix	
Print Head	9 Wires (User Replaceable)	
Print Speed	180 cps, Bi-directional, Logic Seeking	
Paper Slew Speed	10 ips @ 1/6 in. Spacing	
Print Buffer	2K bytes (Expandable to 6K bytes with optional buffer board)	16K bytes
Number of columns	80, 96, 136 (40, 48, 68 Double Width)	136, 163, 233 (68, 81, 116 Double Width)
Character Matrix	Standard Characters: 9 dot x 11 dot STAR Block Graphics: 6 dot x 6 dot IBM Block Graphics: 12 dot x 11 dot User Defined: 8 dot x 4 to 11 dot Near Letter Quality: 17 dot x 11 dot	Bit Image Modes: 8 dot x 80 dots/in. 8 dot x 72 dots/in. 8 dot x 80 dots/in. 8 dot x 90 dots/in. 8 dot x 120 dots/in. 8 dot x 240 dots/in.
Character Sets	96 Standard ASCII Characters 88 Standard International Characters 96 Italic Characters 88 Italic International Characters 96 NLQ Characters 88 NLQ International Characters	83 NLQ IBM Special Characters 64 STAR Special Characters 83 IBM Special Characters 32 STAR Block Graphic Characters 50 IBM Block Graphic Characters 240 User-defined Characters
Character Fonts	Normal (10 CPI) Elite (12 CPI) Condensed (17 CPI) NLQ (10 CPI)	Enlarged (5, 6, 8.5 CPI) Emphasized Double Strike Italics Super and Sub Script
Special Features	Near Letter Quality Printing (NLQ) Easy Access Format Switches Self-test Flow Dump Downloadable Characters Macro Instruction Proportional Printing	Continuous Underlining Ultra Hi Resolution Bit Image Graphics Vertical and Horizontal Tabs Skip Over Perforation Master Print Mode Slashed Zero Linebuffer Dump
Line Spacing	1/6, 1/8 in. or 7/72 in. Standard n/72, n/144 in. (STAR mode) or n/216 in. (IBM PC mode) Programmable	
Paper Handling	Single Sheet (5.5-8.5 in. Wide) Continuous Paper (4-10 in. Wide)	Single Sheet (5.5-14.5 in. Wide) Continuous Paper (4-15.5 in. Wide)
	Copies (3 Carbonless Sheets)	
Ribbon	STAR Original Ribbon Cartridge # 80980250	STAR Original Ribbon Cartridge # 80980260
Interface	Standard Parallel (Centronics-compatible) Optional: Serial (RS-232 C/20 mA Current Loop)	
Dimensions (W x D x H)	392 x 357 x 154 mm (15.4 x 14.1 x 6.1 in.)	542 x 357 x 154 mm (21.3 x 14.1 x 6.1 in.)
Weight	9.1 kg (20.1 lbs.)	11.1 kg (24.5 lbs.)

Price: R 9.50

ORDER FORM

NAME _____ TEL _____ MEMBER REF #: _____

ADDRESS _____

To: INFORMATION ENTERPRISES, PO Box 35644, Menlo Park, 0102

DESCRIPTION	PRICE
*****	*****
_____	R_____
_____	R_____
_____	R_____
_____	R_____
_____	R_____
_____	R_____
_____	R_____
_____	R_____
_____	R_____

SUBTOTAL: R_____

PLEASE ASK FOR IE's CONDITIONS OF SALE

12% GST : R_____

PRICES IN THIS NEWSLETTER VALID UNTIL
31 OCTOBER 1987

* POSTAGE : R_____

TOTAL : R_____

* POSTAGE & PACKAGING All items registered for your protection. Remember to take your ID to the P.O. Insurance 50c extra per item. First price in () is for surface mail, second for air mail.

* SOFTWARE:

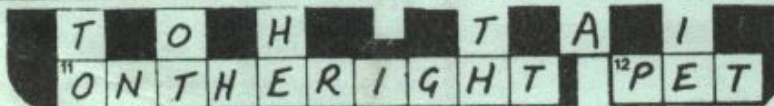
1 TAPE (R1.15, R1.50); 2 TAPES (R1.50, R1.85); 3 OR MORE TAPES (R2.30, R2.80); PACKS (R1.85, R2.30)

* HARDWARE:

INTERFACES (all) (R1.85, R2.30); DISC DRIVE (R5.90, R9.00); EXPANSION PACK (R3.45, R5.75); A4 PRINTER (R8.00, R13.80); TIMEX PRINTER (R4.45, R5.90); JOYSTICK (R1.885, R2.30); MONITOR (R8.00, R10.50); QL (R8.00, R14.50); SPECTRUM + (& 128K 2+) (R5.70, R8.25); PARTS: MEMBRANE (R2.30, R2.80); ALL OTHER PARTS (R1.85, R2.00); KEYBOARDS (all) (R1.85, R3.45).

You can have goods freighted - price on application.

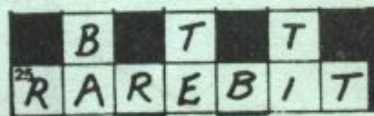
COMPETITION CORNER



ARE YOU GOOD AT MAKING UP NAMES?



Our second competition this month is to suggest a name for our new factory in Bophutswana. The winner of this prize will win a R20 voucher for burning out all those brain cells. The winner could be you.



"I've found where the dollars are kept. I'll change them for pounds". "What's the exchange rate?"