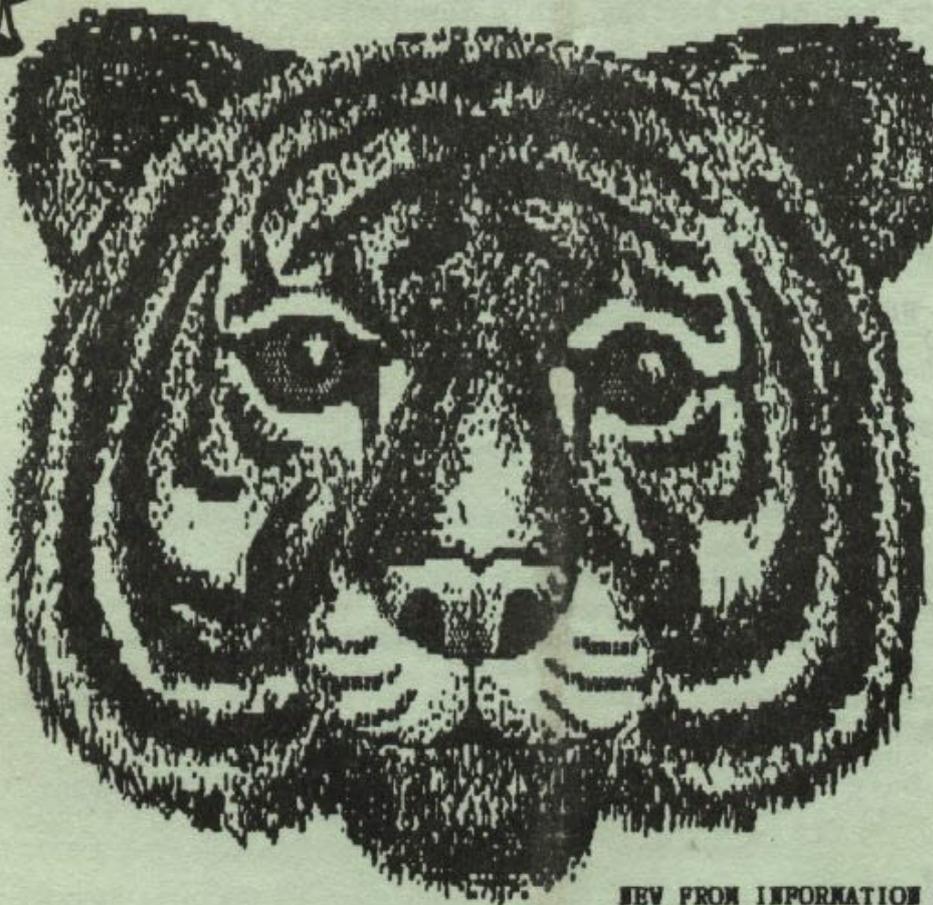




MAY 1987



NEW FROM INFORMATION ENTERPRISES

WE HAVE RECEIVED THE FOLLOWING IN THE PAST MONTH: (Prices in R)

QL Assembler Workbench	87.45
TechniQL	176.72
G.A.C. Spectrum	79.00
Pist II	31.67
Star Glider	52.89
Rogue Trooper	35.24
Konami's Coin-op hits	35.99
Fairlight 2	28.50
Vera Cruz	32.50
Theatre Europe	34.99
Xevious	27.99
Pascal (Hisoft) Spectrum	85.76
Lost Pharaoh (QL)	51.27
Artist II (128K)	61.99
Artist II (48K)	52.50
Great Escape	27.29
Quazatron	30.47
Microdrive	8.25
Disciple Interface	369.00
Spectrum 48K +	388.00
Spectrum 128K	426.00
Opus Disc Drive	499.00
Cheetah 126+ Joystick	24.50
Trans Express (MD)	34.95
QL Membrane (part)	29.99
Spectrum Membrane	27.50
QL Joystick adaptor	19.99
3.5" Mitsubishi Drives	499.00

The following is on order and will have arrived or is in stock now.

Title:	Sinclair User Star Rating April issue:
Tasword 2 128K	****
Sky runner	****
Acadamy	****
Aliens	****
Arkanoid	*****
Silent Service	*****
Jailbreak	****
Enduro Racer (not reviewed)	
Hit Pack	*****
Matt Lucas	*****
Icon	****
President	*****
The Pawn	*****
THE P.A.W. (not reviewed)	
Sidney Affair	****
Vera Cruz	*****
Martanoids	*****
Front Page (QL) (not reviewed)	
Feud	****
Murder off Miami	****
Professional Snooker	****
Paperboy	****
Uchi Mata	****
Battlefield Germany	****

Beta Basic

The following comes from a Beta Basic Newsletter. As you know, The ZX Mushroom Club has the rights for distributing this newsletter. If you want it, send in R20.00 (on order form please!) for one years subscription (6 copies). If you did order the newsletter, and have not received anything yet - I'll send out everything during this month (if possible, up to #6).

This contribution was sent in by A.J. Herstel, Holland. Line numbers have been added to aid explanation, but the whole procedure was originally one line. The original replaced all uses of "1" with a variable to save memory, but it has been altered to aid clarity. Here is a modified version of the syntax description:

NEW COMMANDS

```
md <value>,<name>
md < 0 = SAVE                >,<>
md < more than 0 = RESAVE    >,<>
md < 1 = DEFAULT            >,<SAV
md <>,<"" = DEFAULT>
```

If you type just `md` you will see at the bottom of the screen: `RESAVE 1;`

You can complete the name, omitting the trailing quotes if you like, and the program named will be ERASEd from drive 1 before the current version is SAVED and VERIFYed. If you had typed `md 0` you would have seen: `SAVE 1;` which SAVE and VERIFY without ERASE. You can alter the drive number by editing what appears at the bottom of the screen. LINE can be added, as a keyword or in lower-case letters, e.g. `RESAVE 1;"box" LINE 10`. In a program you might use `md "1";""box": LBT f$="1;""box"" code 65000,20": LET q=35: md q,f$`

Because you have supplied a name, the procedure does not pause to let you type one. Note that the only significance of the first parameter is wheter it is zero or none-zero.

```
1 DEF PROC md c,f$
  LOCAL p,q
  DEFAULT c=1,f$=""
2 DO WHILE NOT LEN f$
  LET f$="1;""
3 EDIT "RESAVE "((c=0)*2+1 TO ); LINE f$
  LOOP UNTIL 1
4 LET p=INSTRING(1,f$,"")+1,q=INSTRING(p,f$,"")
  DO WHILE NOT q
  LET f$=f$+"",q=LEN f$
5 PRINT #1;AT 0,1; f$(p-q TO q)
6 DO WHILE c
  PRINT #1;" ERASE ";
  KEYIN " ERASE "+f$(p-3 TO q)
7 LOOP UNTIL 1
  LET q=LEN f$-(LEN f$-q)*(INSTRING(q,f$," LINE ") OR INSTRING (q,f$,"line:))
  PRINT #1;" SAVE ";
  KEYIN " SAVE "+f$
  PRINT #1;" VERIFY"
  KEYIN " VERIFY "+ f$( TO q)
8 INPUT ""
END PROC
```

Comments: It took me a while to understand what was going on! Line 2 is equivalent to `IF f$="" THEN ...`. The rest of the DO-LOOP allows the user to supply `f$`. `LOOP UNTIL 1` means "never LOOP" - in other words, the LOOP's only purpose is to act as a marker, which can be jumped past by the DO WHILE, if `f$` is not a null string. This makes the whole loop equivalent to:

```
IF f$="" THEN
  (statements)
END IF
```

This allows termination of IF-equivalents without use of a line number. The same structure is used to add a trailing quote IF one wasn't provided (line 4), and to do an ERASE, IF the first paramater was non-zero (line 6).

Line 3 uses an interesting method of printing SAVE or RESAVE in the lower part of the screen. The multiple quote marks in line 4 could be confusing. Quote marks inside strings have to be entered twice; the INSTRING functions are just looking for a single quote mark. Line 8 is used to clear the lower screen, without waiting for input.

Mr. Herstel also came up with the idea of renumbering the procedure as line zero, but this gave him errors, because he also renumbered the original line zero as line 2. Don't do this! The original line zero must be kept as line zero, and it must be the first line in the program. Beta Basic executes the USR statement in that line by the equivalent of GOTO line 0, statement 23, after some Microdrive operations.

SINCLAIR USER, JAN. 85 (ABOUT RELEASE 1.8): "HAS ESTABLISHED ITSELF AS THE STANDARD EXTENDED BASIC FOR THE SPECTRUM...TURNS SINCLAIR BASIC FROM A GOOD VERSION OF THE LANGUAGE TO A FANTASTIC ONE." NOW, WITH RELEASE 3.0, BETA BASIC BECOMES PROBABLY THE MOST POWERFUL BASIC AVAILABLE ON ANY 8-BIT MICRO!

PROCEDURES - a terrific implementation that lets you extend your Basic! No PROC keyword is needed; e.g. you can use commands like: swop a,b or draw_box 10,20,5 or addup b(,),sum. With parameter passing by value or by reference (including arrays), LOCAL variables, recursion and DEFAULT parameter values.

Up to 128 WINDOWS each with their own attributes and character size.

ANY CHARACTER SIZE (giving from 1 to 64 or more chars/line!).

LISTINGS with optional automatic indentation of loops, procedures, IF, etc. Works on existing Spectrum Basic programs too!

KEYWORDS (including the Spectrum Basic ones) can all be entered by typing them in full, or by the "single entry" method, or both in the same line.

A full range of TOOLKIT commands.

EXCEPTIONAL ARRAY and STRING handling.

Many powerful GRAPHICS commands.

EXCELLENT EDITOR - fast and convenient.

MICRODRIVE commands are improved and much easier to use.

OTHER FEATURES, new or improved, are too many to fully list! DO - LOOP structure with WHILE, UNTIL and EXIT IF; ALTER, AUTO, BREAK, CLEAR, CLOCK, CONTROL CODES, DEF KEY, DPOKE, DRAW TO, EDIT, ELSE, FILL, GET, JOIN, KEYIN, multi-LET, LIST a slicer, LIST DATA, ON, ON ERROR, OVER 2, POKE strings, POP, READ LINE, REF, ROLL, SCROLL, SPLIT, TRACE, USING. Faster GOTOs, GOSUBs and FOR-NEXT loops.

26 POWERFUL FUNCTIONS: AND, OR, XOR, DEC, HEX\$, BIN\$; fast SINE, COSE, RNDM; CHAR\$, NUMBER, DPEEK, EOF, FILLED, INARRAY, INSTRING, ITEM, LENGTH, MEMORY\$, MEM, MOD, SCRNS\$, SHIFTS\$, STRINGS\$, TIMES\$, USING\$.

Spectrum Basic compatible - you can run existing programs. Transferable to Microdrive. Wafadrive and other special versions available.

Comprehensive A5-size manual. Ninety pages, packed with examples.

To show you the power of Beta Basic's excellent procedures, we include on each tape a FREE TURTLE GRAPHICS package!

BETA BASIC 3.0

SPECIAL OFFER
Check this value

10 games worth R270.00, now for only R19.95

SOFTAID compilation. Fantastic value of a compilation of a compilation of the following hits. Buy and you support famine relief in Ethiopia: Horace goes Skiing; Spellbound; Starbike; Kokoŋoni Wilf; Pyramide; Gilligans Gold; Ant Attack; 3D Tank Attack; Jack and the Beanstalk; Sorcery.

PROFESSIONAL BUSINESS SOFTWARE

GENINI
5 ONLY

CASHBOOK :	NORMAL PRICE	R49.95, NOW SPECIAL PRICE	R9.95
FINAL ACCOUNTS:	FINAL ACCOUNTS	R49.95, NOW SPECIAL PRICE	R9.95

PRINTER OF THE MONTH

A Panasonic look-alike known as the D.M.S.
Phone for Specs or look in your old newsletter.
IE's incredibly low price R549.00. If you also buy a ZXL PRINT,
you can have the printer for R529.00.

Competition

Last month's answers were LUCAS MAREE, SPECTRUM and TASWORD 2. The winners of R15, R10 and R5 gift vouchers are Mr Francis Drake (really!), Mr Tony Prince and Mr L.J. Haasbroek.

This month's competition is quite easy. All you have to do when sending in an order is to complete the sentence "There once was a club...." on the entry form at the bottom of the page.

The winner could be the funniest entry, a lyric but definitely not the ~~20-20%~~ dirtiest one.

If you need printer paper, printer ribbons, floppy discs (any size and quality), monitors, printers, plotters, floppy disc drives - contact Information Enterprises - we supply organisations and individuals by mail anywhere in Southern Africa (including Zimbabwe, Swaziland, Lesotho, Botswana and South West Africa) at the lowest possible prices.

Utz' Laws of Computer Programming: (1) Any given program, when running, is obsolete. (2) Any given program costs more and takes longer. (3) If a program is useful, it will have to be changed. (4) Any given program will expand to fill all available memory. (5) If a program is useless, it will be documented. (6) The value of a program is proportional to the weight of its output. (7) Program complexity grows until it exceeds the capability of the programmer who must maintain it. (8) Make it possible for programmers to write in English, and you will find that programmers cannot write in English.

Murphy's second Law: (and my personal motto - Gert) EVERYTHING TAKES LONGER THAN YOU THINK. **Murphy's eleventh law:** It is impossible to make anything foolproof, because fools are so ingenious. **Landay's Programming Paradoxes** (1) The world's best programmer has to be someone. (2) The more humanlike a computer becomes, the less it spends time computing and the more it spends time doing more humanlike work. A software committee of one is limited by its own horizon and will specify software only so far.

disk drive special

(Same as advertised in the April newsletter)

DS-DD 80 track drive suitable for QL/BBC/Spectrum 48K, +, 128+2, 128K. We still have stocks of the drive.

R279.00 + R33.48 GST + R7.00 P&P (or R13 airmail)

Features: fully cased, fan for cooling, stores 620K (Beta), 720K (Disciple), 720K (QL). Can use cheap easily obtainable diskettes.

B.A.S.F. DISKETTES

5 1/4" DS-DD per 25 R1.99 each TOTAL PACK R49.75, R5.97 GST, R2.00 P&P
 !!SEND NOW TO AVOID DISAPPOINTMENT!!

REMEMBER

We stock a complete selection of parts for the Spectrum and QL e.g. membranes, power packs, ULA's, ROM's and memory chips. Phone now or send in an S.A.B. for complete list.

Our complete catalogue now available - send in R1.00

NOW GAMES
SPECIAL OFFER

GREAT VALUE!! Sinclair Classics!! 5 * Games !!

- Lords of Midnight	- Brian Bloodaxe	- Pyjamarama
- Arabian Nights	- Falcon Patrol II	- Strangeloop

ALL THIS FOR ONLY R19.50 (R2.34 GST + R1.00 P&P)

Special Offer
"CITY"

The Game: City is real-time better-than-a-board game in which the Spectrum keeps track of the money and properties - and acts as timekeeper - while the City you built takes on a life of its own. This City has banks, factories, houses, apartment blocks, shops and pubs. Four property developers struggle for rents and profits - building, purchasing and demolishing their way to one million pounds. But life isn't that simple because in City you have to pay taxes - and the banks charge interest on overdraft too! When people start to move about and property values alter you'll be glad that the Spectrum is keeping track of everything while you just play the game.

* For one to four players - play against your friends or your Spectrum * Full colour, hi-res graphics - sound * Real-time action keeps you on your toes * Select from FOUR different game types - game SAVE feature * Self demonstrating.

A REAL-TIME COMPUTERISED BETTER-THAN-A-BOARD GAME SPECIALLY WRITTEN FOR THE SINCLAIR
 SPECTRUM 48K
 R14.50 & R1.74 GST & R1.30

AMSTRAD PC1512
SPECIAL OFFER

IBM / AMSTRAD PC1512 USERS - IBM parallel / serial printer cable

AMSTRAD PC1512
 (not to be repeated)

AMSTRAD owners / IBM owners / Sinclair Spectrum / QL

SEIKOSHA SP12001 ONLY R629.00 (+ R75.48 GST + R7.00 SURFACE MAIL OR R13.00 AIRMAIL)

THE GAME

FREDERICK FORSYTH THE FOURTH PROTOCOL

Part 1

This has been dealt with in March by Jade Hamburger.

Part 2

At Westminster, go to the first floor of Sentential House, send out a computer search from the computer room to Bremerhaven, then go to the printer and communications rooms. Phone Bristol and Harwich, then go to a tube station and ride until you come to Paddington station. Go to the Paddington railway office, and get on a train to Bristol. If you did not telephone earlier, you will find a Strike is on, and you won't be able to use the busses. Go to platform one, and get on a bus to the docks. Get on board the Mistral, and look around. To get out of the Barbican, find a shop and buy a guide.

Part 3

When loaded, you should enter the Tiptree warehouse. Arm all but one of your men with grenades, and one with a wingmaster gun. Go to entrance one with all your men, and throw grenades into the rooms with KGB agents. When they are all dead, shoot the security door with the wingmaster and kill off the three extra KGB agents. Go into the bomb room, and examine the cabinet. Then type "type number", "1251987", "examine bomb", "examine lights", "touch keys", "RYG" (no spaces, this is what Pasternak was trying to tell you in part one when he said "suetofor" - traffic lights), then quickly type "cut wire" and "R". Then wait until the timer reaches 12, and you should get a end-game message.

Warehouse Map - part 3

I	J	Bomb Room
	KGB	
F	G	H
KGB		KGB
C	D	E
KGB	KGB	KGB
A	B	
KGB	KGB	

KGB agent here at start. An agent will be in bomb room if you haven't killed all the others before you enter.

- Gary Muston

A software mega-adventure, based in the chilling world of counterespionage, from one of the world's greatest living fiction writers ...

Hatched in a remote dacha in the forests outside Moscow, Plan Aurora is executed with relentless brilliance and skill by a hand-picked team. A crack Soviet agent, placed under cover in Britain, begins to assemble the pieces of a jigsaw of devastation.

Working blind on the faintest of clues, MI5 investigator John Preston leads an operation of the greatest urgency, racing against an unknown deadline.

In THE FOURTH PROTOCOL: The Game, you are John Preston. Your aim is to piece together the jigsaw, uncover the plot, prevent the breaching of the Fourth Protocol, and stop Plan Aurora. In your task, you are able to access the on-line resources of CenCom, MI5's central communications computer, and use the services in the field of both MI5 and the intelligence networks of friendly nations. But too many wrong decisions and moves will lower Preston's prestige in the service and valuable field support will be withdrawn.

All three episodes of THE FOURTH PROTOCOL: The Game must be completed, against the deadline, before Plan Aurora is finally thwarted.

You can now see the Movie (now showing locally) then play THE GAME. It has ordered THE GAME - it will cost approx. £49.00, send in your £10.00 deposit NOW!!!

The NATO Documents (Game 1)

* real time element puts the player under constant pressure

* created by a large professional team of games designers, graphic artists, games programmers and editors

* strong, concurrent and multidimensional plot lines give an accurate depiction of life in the intelligence networks

* unique use of icon-driven graphics makes for user friendly game, under the players complete control

THIS PAGE IS YOURS ... FOR QUESTIONS, HELP, HINTS AND TIPS.

Mr A.W. KOLLE writes "One point that was not made in your review (of the Seikosha SP1000) is that the printer supports the Epson FX80 commands completely.

Further the following comments for users of Pascal and Devpac. Switch DIP Switch 1-7 ON. Executing LPRINT CHR\$(5) is not necessary from within either Program.

"Vir U inligting sal ook ek daarvan hou indien ons nuusblaadje weer op die ou trant aangebied kan word met minder advertensies en meer van onder andere die volgende:

1. Intik programme vir die 48K,
2. Tips t.o.v. programmering veral t.o.v. pokes,
3. Onderrig in hoe ;n mens die beste programmeer soos uitleg, so min as moontlik GOTO's ens." - Mr AE DOEVENDANS

Eerstens wil ek verskoning vra - laas maand se Simple Simon is ingestuur deur H.L. Loedolff van Sasolburg (hoop ek het dit die keer reg), en die H.L. Doevendans nie.

Disc Error 4.0 Not O.K.

Ek stem heeltemal saam. Met 'n gratis nuusbrieff moet mens egter 'n sekere hoeveelheid advertensies verwag. Information Enterprises het hulle egter bereid verklaar om die nuusbrieff dikker te maak om sodoende meer artikels toe te laat. Alles berus egter op die lesers, en ek hoop die R10 tot R15 beloning vir artikels help om U, en al die ander lesers oor te haal om pen en papier nader te skuif.

"Is there anybody who can help with Tir Na Gog and Dun Darach? Also if anybody has a poke for Dinamite Dan I'd be most grateful." - C.W. BADENHORST

"Could you please give me some information regarding the BETA DISK INTERFACE. The information I require is can random access be used when using the BETA and a five and a quater disc drive with MASTERFILE"

a) The Beta Disk Interface can handle random access. b) Masterfile can not handle random access files, and will have to be dramatically altered.

"..... asking for help in how to get more energy to get through all the mazes on the 'Lands of Havoc' for the QL. We also have 2 QL's in the family, but can't get them to network." - Mr. KIRKIRIDIS

Well, here are two excellent chances for those who do know the answers, to write articles on these topics; send them in and get a R10 to R15 gift vouchers when we publish your article!

"Verder benodig ek inligting hoe om Afrikaanse lettertipes vanaf my Star Gemini 10X drukker oor te stuur." - HESTER BURGER.

Daar bestaan drie moontlikhede. Eerste moontlikheid: Hierdie is seker die maklikste metode. LRUN MDV1_install_bas op die Quill Cartridge, kies EDIT (van die printer dat wat vir U spesifieke drucker werk - dit sal die huidige printer dat wees) en beweeg die Cursor af tot by die eerste TRANSLATE wat niks (NONE) bevat. Druk die regter Cursor (>), en tik die volgende in: '*,8 [ENTER]. In die plek van die * in die bevel moet 'n grafiese karakter van U keuse (bv. CTRL SHIFT a) gesit word. Druk nou F5 om die printer dat te install. Indien U nou in Quill 'n deelteken op 'n e wil sit sal U die woord as volg tik: ingee*"nt, waar * die grafiese karakter is soos deur U gekies. Hierdie metode is ook beter daarin dat enige karakter op die manier, tydens die intik van die dokument opgemaak kan word. Die tweede moontlikheid. Hierdie moontlikheid is beter in die sin dat wat U sien, is wat U kry. Indien mens bv. 'n deelteken i wil druk in 'n dokument, sal mens in die dokument die deelteken i tik (met CTRL 2). So ook kan mens 'n deelteken o (CTRL SHIFT 4) of 'n kappie e (CTRL 1) tik. 'n Lys van al die karakters wat so moontlik is verskyn in die handboek op pg 6 en 7 van die Concepts gedeelte. Wat nou gedoen moet word is dat die drucker instruksies sal moet ontvang om net soos met die eerste moontlikheid te werk te gaan, behalwe dat die TRANSLATE soos volg verander sal word: '*,e,8," [enter], waar * die karakter is soos wat U dit in Quill gebruik het

(in die geval CTRL /). Wat U eintelik hier doen is om met die eerste karakter aan die computer te sê (sien ek practice what ek preach) dat die volgende gedoen moet word: druk 'n e, doen 'n back space (BS/ code 8), en druk nou 'n ". Die derde moontlikheid is dat die karakter soos U dit wil hê alreeds bestaan in U drukker se karakter stel, en dat U die TRANSLATE as volg sal saamstel: '*,nnn (waar * die karakter is soos gebruik in Quill, en nnn die kode is van die karakter soos opgespoor in U drukker se handboek. 'n Voorbeeld is die 'umlaut o' wat karakter 215 in die Gemini se karakter stel is. Wat bogenoemde op neerkom is dat U sal moet

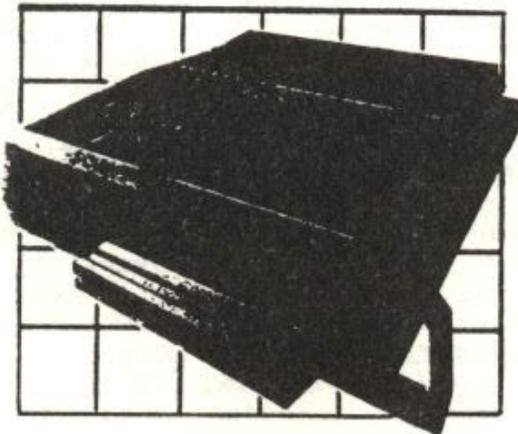
eksperimenteer en tien teen een 'n kombinasie van die drie moontlikhede sal gebruik. Probleme: Gedink dit is so maklik soos dit? Probleme sal opduik indien jy in 'n ander druk styl bv. proportional of elite druk, aangesien die back space nog steeds 'n standaard back space sal wees, en die kappie of deelteken dan nie 100% op die karakter sal wees nie, maar eerder 'n millimeter of wat te veel na links. Die oplossing hier (ek het dit nog nie self gedoen nie), is om terug te skakel na normale karaktergrootte, die deelteken karakter te druk en dan weer na die ander grootte te skakel. Ek verwag egter dat dit onaanvaarbaar sal lyk.

Tilting Base for Zenith Monitor

Special offer only R29.00
(Normal Price is R39.00)

Only 4 available!!

THE BUDGET is a program you must add to your collection of good accounting Software. It consists of a budget planning facility, a expense recording and bank reconciliation facilities. You can do screen dumps or save to cassette/microdrive the full pages of lists of your expenses. This is a exiting utility and is a must for all Mushroom Club members. Cost is R6.24 (program on cassette & instructions), GST R0.75, P&P R1.00
= T O T A L R7.99



RAMPRINT WITH RAMWRITE SPECTRUM

A brand new Centronics interface for the range of Spectrum computers. No need to load any software, the Ramprint has all the driving software it needs built-in. But the most exciting feature of Ramprint is Ramwrite, an "instant access" word processor. Even the printer cable and a joystick port are included in the price. Add a printer for the complete package.

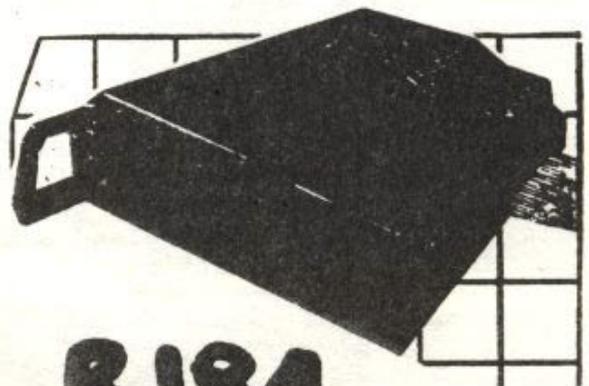
R119

MUSIC MACHINE

SPECTRUM
AMSTRAD CPC

The first complete home computer music system, not just a sampler, MIDI interface, drum machine and music composer but a fully integrated package.

For the first time the computer owner can create sounds, write music, add drums and even control other musical instruments all from one single easy to use unit. Music Machine is packed with exciting features and controlled by superb menu-driven graphic screens.



R184

Dear Gert,

I've just received my newsletter! Well, in connection to 'Notorious George' and that other 'mouth guy, I've just completed Dan Dare WITHOUT using any pokes!

I still feel Marvelous, as I can help 'Mouthy' with Sherlock Holmes.

Here goes: Once you've Hailed a cab and are inside it, tell the CABBIE to go to Kings Road. From there you go to the last platform and you should meet someone there. You must FOLLOW him onto the train. (the time when you catch the train should be approx. 09h15)

Ha! Now I feel even more marvelous!!!

Marvelous Mark.

```

10 REM This program helps one to
insert POKES for infinite lives into
programs saved with the Beta Disc
snapshot button.
20 REM Programs that are loaded with (
GO TO "name" CODE)
30 REM e.g. "BOMB JACK" POKE
49530, number of lives
40 CLS: INPUT AT 0,0;"NAME OF
PROGRAM"; AT 1,0; LINE f$
50 IF LEN f$ > 8 OR f$ = "" THEN BEEP
.1,30: GOTO 40
60 INPUT AT 0,0;"POKE address,
number"; AT 1,0;"address ?
"; add,"number ? "; num
70 IF add > 65535 OR add < 16384 THEN BEEP
.1,40: GO TO 60
80 IF num < 0 OR num > 255 THEN BEEP
.1,40: GO TO 60
90 LET sector = INT (add / 256 - 63): LET
badd = sector * 256 + 16128: LET
offset = add - badd
100 LET l = USR 15363: REM: PEEK f$ CODE
50000, sektor
110 IF l = 1 THEN CLS: PRINT AT
0,0;"File not found": PAUSE 40: GO TO
10
120 IF l = 70 THEN CLS: PRINT AT
0,0;"Disk error": PAUSE 40: GO TO 10
130 PRINT AT 0,0;"address"; AT
0,8;"old value"; AT 0,22; num
140 PRINT AT 2,0; add; AT 2,8; PEEK
(50000 + offset); AT 2,22; num
150 PRINT #0; AT 0,0;"Are you sure you
want to"; AT 1,0;"continue y/n ?"
160 IF INKEY$ = "" OR INKEY$ = CHR$ 13
THEN GO TO 160
170 IF INKEY$ <> "Y" THEN IF INKEY$ <> "y"
THEN GO TO 10
180 POKE (50000 + offset), num
190 RANDOMIZE USR 15363: REM: POKE f$
CODE 50000, sektor
200 CLS: GOTO 10
    
```

Anton Erasmus

ADVERTS

THE TOMORROW WAR is a fantasy simulation set in the future, after the third world war. Your aim is to conquer and unite Europe. Included is a multiple page instruction and background booklet. Send R5 and a blank tape (or R7 if you don't supply the tape) to 66, 9th Street Linden JHB 2195

TRS 80 MOD. 100, DISC, VIDEO INTERFACE, RS232 & CENTRONICS INT., ADDITIONAL ROMS, MODEM, BAR CODE READER, OPERATING SYSTEM, MANUALS, RANGE OF BOOKS, AND SOFTWARE:- Phone R. Lachenicht, Krugersdorp 660-2977

MATCHMAKER: Let your peripheral meet its most compatible owner by means of scientific selection. Send in the peripherals description plus 20c per word. Regret no commercial software. Only sinclair people need reply.

Disc Interface (Beta) 4.0 R239; ZXL PRINT R139; Spectrum plus DK'TRONICS Keyboard R299; Software including Logic 3, Cashbook, Accounts, Omnicalc, Scrabble, Tax Assesor, Tasword 2, Kemp Stock Control etc. All very cheap. Reason - bought QL. Phone Joe Mitchell (012)3301562

For sale: Spectrum 48K as new + books R400.00; Interface 1 and 2 Microdrives R350.00, Programmable joystick Interface R50.00, Wide range of software R10.00 per tape or R200 for all: R1000 for the lot. Prices negotiable. Please contact Barry at (061) 41435 after 2pm.

SPECRACE III: a guide to horseracing: A fast accurate placing of the racing field using mathematical calculations. A guaranteed profit of 60% and more. Result saving facilities. Printer compatible. Send a tape and R5 to J. Nysschen, 5 Brian Ave, Horison View, 1725

Alphacom 32 drukker (soos nuut) en 4 rolle papier te koop : R180.00. Sinclair ZX 80 rekenaar R30.00. Skakel van Niekerk (012) 865306.

For Sale: Sinclair QL R500; RS232 Cable R15; Software includes Psion 4D, Chess and Transact R75; 20 Cartridges R30. Phone Boyde after hours at (011) 679-2787

BLACK JACK, POKER, SOLITAIRE and DRAW POKER. World's most favourite card games yours for only R10.00! (all handling costs and tape included). Features: 32x32 pixel card graphics, colour, official rules, most enjoyable! Send name, address and R10.00 to Gustav Oberholtzer, Mamanthane Street 286, Brasmusrand, 0181



SPECIFICATION AND FEATURES

AMSTRAD

512K system unit with all circuitry on a single motherboard.
 8MHz 8086 processor.
 Memory expandable on motherboard to 640K.
 Integral colour graphics adaptor with special 16 colour hi-res mode.
 Three full-size compatible expansion slots with power available in the standard unit to supply a hard disc and controller.
 Choice of one or two 360K 5¼" floppy discs or one floppy with a 10 or 20 megabyte hard disc drive.
HARD DISC VERSIONS ARE SUPPLIED WITH AN EXTRA FLOPPY DISC AND MANUAL WITH BACKUP, RESTORE AND FORMAT UTILITIES.
 Motherboard includes an RS232c serial and parallel interface with standard connectors.
 Loudspeaker with volume control.
 Battery-backed real time clock and configuration RAM.
 Socket for 8087 maths co-processor.
 Connector for light pen.

Complete with Colour Monitor or Monochrome (Grey Level) monitor.
 The standard built-in colour adaptor provides all the following modes:
 Medium resolution Alpha; 16 colours, 40x25 characters.
 High resolution Alpha; 16 colours, 80x25 characters.
 Medium resolution Graphics; Three 4-colour palettes, 320x200 pixels.
 High resolution Graphics; 2 colour, 640x200 pixels.
 + Special high-res Graphics; 16 colours, 640x200 pixels.

This special mode is included as standard, in addition to the Alpha and Graphics modes, and allows the display of high resolution graphics (for example GEM) in 16 colours.



GEM Paint shown here on a Monochrome monitor

- Full size QWERTY keyboard. Illuminated Numlock and Capslock. Keyboard joystick port. Extra DEL→ and ENTER keys. Adjustable legs.
- Two button Mouse with Dedicated port on system unit. Microsoft compatible MOUSE.COM plus special text operation.
- Extensive Operating Software including four diskettes. Compatible ROM BIOS. Microsoft MS DOS 3.2 Operating System. Compatible device drivers with RAMdrive and enhanced media flexibility. Wide range of compatible utilities. Networking and hard disc support. Digital Research GEM (Graphics Environment Manager) plus GEM Desktop. Digital Research GEM Paint. Digital Research DOS Plus, runs MS DOS and CP/M-86 applications. GEM based Locomotive BASIC 2.
- User manual. Covers Getting Started, GEM, MS DOS, the Utilities, DOS Plus and a summary of BASIC 2.
- DIMENSIONS
 PC1512SD System unit 372 W 384 D 135 H 6.05 Kg
 PC1512DD System unit 372 W 384 D 135 H 7.75 Kg
 Keyboard Unit inc feet 465 W 180 D 58 H 1.175 Kg.
 ● PC MM Monochrome Monitor 350 W 300 D 315 H 7.43 Kg.
 ● PC CM Colour Monitor 372 W 365 D 330 H 11.6 Kg.
All dimensions are in millimetres.

PC1512

In-store Check List for the Amstrad PC1512

- 512K bytes of main memory, with a 16Bit 8086 operating at 8MHz expandable to 640K
- Standard 5¼ inch disc drive(s).
- 10 and 20 megabyte hard disc versions available.
- 80 Column display with 16 colour graphics.
- Mono or colour monitor with compatible graphics standards, i.e. monochrome monitor displays 16 grey levels.
- Quartz real-time clock with battery back-up.
- Serial and parallel interface connectors as standard with flow control over the serial interface.
- Separate port for the "mouse" which is supplied as standard.
- IBM PC software compatibility, with Microsoft MSDOS 3.2 and Digital Research's DOS Plus.
- Digital Research's GEM 'Graphics Environment Manager' software and built-in mouse pointing system supplied with "Desktop" and "GEM Paint"
- Locomotive Software's powerful new GEM BASIC2, a significant advance in the BASIC language that offers the GEM interface to BOTH the beginner and the advanced programmer.
- 3 compatible hardware expansion slots — you can upgrade to hard disc systems, modems, networks, extra printer ports, and many other hardware applications simply by plugging-in an expansion card.
- Print spooler, enabling processing to continue whilst outputting to a printer.
- Joystick port, built into keyboard.



The Amstrad PC1512

The Amstrad PC1512 is probably the most important British Micro to appear this year. It has been a calculated gamble from Alan Sugar, designed to penetrate a new market - the big business buyers of PC's - with a machine that appeals to their cost-consciousness, a gamble that has certainly paid off!

Not only is it faster than the IBM (8 MHz), it is also a smaller box and includes as standard functions and features that have to be bought (and paid for) separately on a normal IBM-type machine.

The Amstrad PC1512 is the closest machine to the Colour Apple Mac that everyone has been requesting. What's more is that it is PC compatible and at less than half the price of the Mac.

The bundled approach to the Amstrad gives the user amazing value for money. Approximate prices of the "give aways" are as follows:

Clock	R160-00
Mouse	R360-00 (Microsoft)
MS DOS 3.2	R308-00
GEM Windowing Environment) US	\$400-00
Datamation, Nov)	R900-00
GEM Paint)	
	=====
TOTAL	R1728-00

Amstrad Software

Amstrad has negotiated OEM distribution on several products that now carry the Amstrad logo. These products operate in the GEM environment and use the Mouse interface. They will retail at about half the usual price. These products include Wordstar, Reflex, Supercalc III and Sidekick.

INFORMATION ENTERPRISES' UNBELIEVABLE UNBEATABLE PRICES

(If you are quoted lower prices and can prove it we will beat THAT price)

- * PC1512 with single 360K floppy drive, monochrome monitor
IE's price R2085 RRP R2995
- * PC1512 with single 360K floppy drive, colour monitor
IE's price R2855 RRP R3995
- * PC1512 with dual drive, monochrome monitor
IE's price R2525 RRP R3595
- * PC1512 with dual drive, colour monitor
IE's price R3250 RRP R4595
- * PC1512 with 20 Meg Hard disk, monochrome monitor
IE's price R3575 RRP R5595
- * PC1512 with 20 Meg Hard disk, colour monitor
IE's price R4345 RRP R6595

NB.: NO CATCHES - ALL STANDARD FEATURES LISTED OPPOSITE ARE INCLUDED IN THE PRICE. ONE YEAR GUARANTEE ON ABOVE.

Contact us for our incredibly low upgrade and software prices - and for a list of printers which we can supply (virtually any model at rock-bottom prices)

Amstrad PC5112

12

A FEATURES COMPARISON WITH YOUR AVERAGE ASIAN COMPETITOR - PLUS DO NOT FORGET THAT YOU ARE GETTING A BIG NAME (NOT JUST BIG NAME COMPATIBILITY)

FEATURES COMPARISON - BASIC PCS

<u>Feature</u>	<u>PC1512</u>	<u>Average Asian Sourced PC</u>	<u>Cost to bring to Amstrad Level</u>
RAM	512K	256K	+/- R180
Diskette Drive	1	1	-
Processor	8086	8088	n/a
Clock speed	8MH	4.7MH	n/a
Real Time Clock with battery back-up	Y	N	+/- R100
RS232 interface	Y	N	- R100
Parallel I/F	Y	Y	-
Mouse & mouse software	Y	N	+/- R400
User expansion slots after "standard" features fitted	3	3-4	n/a
Joystick port	Y	N	R50
Tilt & swivel adjustments of monitor	Y	N	R35
Operating Systems	MSDOS 3.2	N	+/- R300
Operating Systems and BASIC	DOS plus BASIC 2	N	+/- R300
GEM Desktop	Y	N	+/- R300
GEM Paint	Y	N	+/- R300
Full Manual	Y	N	+/- R35
RAM Disk configuration	Y	N	R50

What the Press have to say:

"King of the Clones" - Your Computer, Oct 1986

"If there is such a thing as the perfect PC Clone, this is it." - PCW, Oct 1986

"Waiting list for Amstrad" - Computerworld, 26 Sep 1986

M C P Colour Plotter

(See April newsletter for Specifications)

NEW BUYERS WILL NOW GET THIS EXCELLENT PLOTTER FOR R579 excl. GST - THIS IS A SPECIAL DISCOUNT OF R100

AND EVEN BETTER NEWS IS IF YOU BOUGHT A MCP PLOTTER LAST MONTH, WHEN PROVIDING PROOF OF THIS SALE WE WILL GIVE YOU A CREDIT NOTE OF R100!!!

A high resolution screen dump option is available on the new ZX PRINT interface which we advertised last month. I.E. is prepared to trade in your old ZX PRINT against the new improved version when buying a MCP Colour Plotter. You will only be required to pay in R65.



R219-00

1 Basic Unit Accommodates:

- Printer
- CPU and VDU
- Storage shelf for paper or manuals.

ACCESSORIES:

2 Paper Feed Tray

- Enables paper and manuals to be stored on separate shelves.

3 Paper Catch Basket

- Allows automatic folding of all sizes of continuous stationery.

4 Document Holder

- Extends the keyboard left and/or right allowing a working surface; fabricated in attractive smokey perspex.

5 Multi Outlet Plug

- Accommodates printer and CPU and allows a 5 m single plug electrical connection.

SPECIFICATIONS

Basic Unit

600 mm W 750 mm D
1230 mm H

Paper Catch Basket

450 mm W 300 mm D

Document Holder

250 mm W 300 mm D

Paper Feed Tray

550 mm W 300 mm D

Multi Outlet Plug

5 m Cord 3 x 15 Amp

In last months newsletter I mentioned that we'll pay between R10 and R15 (in gift vouchers) for articles which are published in the newsletter. But really, I meant ARTICLES, not articles. One "article" I received contained 21 lines, giving 8 POKEs, expecting R15.00. Let me try again. We will pay R10 to R15, in Information Enterprises gift vouchers for articles published in the newsletter. This excludes hints and tips, unless they take on the format of a *proper* article (originals, not condensed Your Computer, Sinclair User, ZX Computng etc.!!!). A typical article will take up at least one page of the newsletter (approx. 1100 words). And please do remember that this is your newsletter, which you receive courtesy of Information Enterprises - we will not reject any free attempts!

Please note that we require at least a months notice prior to a change of address. The contents of this newsletter including all articles, drawings and other items therein belongs to THE ZX MUSHROOM CLUB unless stated otherwise and copying thereof requires the prior consent of THE ZX MUSHROOM CLUB. Please note that Sinclair, ZX, ZX Spectrum, QL, ZX Microdrive, ZX Interface, Cartridge and some other unknown words are the trademarks of Amstrad (sulk). Contributors' opinions expressed in this newsletter do not necessarily represent those of persons involved in THE ZX MUSHROOM CLUB. Offers (i.e. copies etc.) are valid only for a month after the date of the newsletter. THE ZX MUSHROOM CLUB is sponsored in full by Information Enterprises. IE reserves the right to make alterations to prices in the newsletter or added to the newsletter or advertised otherwise. Prices exclude GST and P&P. IE's Beltel Mail number is 015810, telephone number 012-468226 and address 417 Milner Street, Menlo Park. Their postal address is shared with the Club as on the first page of the newsletter. Visits to IE by appointment only; business hours 08h00-13h00; 14h00-18h00. On Saturdays IE closes at 16h00. Prices quoted in newsletters are cash prices. IE handles C.O.D. orders. Gift vouchers are available from the Mushroom Club in units of R5 and R10. Please support our sponsors.

I READ WITH INTEREST THAT YOUR A-SA-NIA ARTICLE HAD BEEN NEARLY BANNED AND NOT WISHING TO SEE THE EDITOR OF THIS MAGAZINE INCARCERATED (THAT'S NOT ILLEGAL, IS IT ?). I QUICKLY DRAFTED THE FOLLOWING QL-TOOLKIT WHICH SHOULD , ONE, PROVE USEFUL AND, TWO, KEEP YOUR PEN BEHIND YOUR EAR; OUT OF HARM'S WAY.

BY WAY OF EXPLANATION :-

Dan Fitzgibbon's

SPLIT - SPLITS THE SCREEN IN TWO HALVES
 SET - RESTORES SCREEN TO NORMAL
 CL - CL 0/CL 1/CL 2/CL 3/CL 4 VARIOUS CLS OPTIONS
 CAPON - CAPITALS ON
 CAPOFF - CAPITALS OFF
 PPP - A VERY FLEXIBLE PRINT TO CHANNEL 0 OPTION. FOR EXAMPLES OF ITS USE, SEE THE PROGRAMME ITSELF
 DR - LISTS THE DIRECTORY OF EITHER MICRODRIVE TO SCREEN
 DEL - DELETES ANY FILE (USE WITH GREAT CARE)
 VIEW - A VERY USEFUL ROUTINE THAT LISTS ANY MICRODRIVE TO SCREEN BUT LEAVES ALL CURRENTLY LOADED PROGRAMMES UNAFFECTED

Last year I wrote a 'controversial' article, A-SA-NIA, which almost lead to me having more time (get that, eh?) for thinking up even more controversial articles. Now that the dust has settled, I can at last publish the one good thing that came from a whole indaba.

```

31000 REMARK *****
31002 REMARK ***** TOOL KIT *****
31004 REMARK *****
31006 DEFINE PROCEDURE SET
31008 WIPE
31010 WINDOW#1,448,200,32, 15:PAPER#1,7:INK#1,0
31012 WINDOW#2,448,200,32, 15:PAPER#2,5:INK#2,0
31014 WINDOW#0,448, 40,32,216:PAPER#0,0:INK#0,7
31016 CL 4
31018 END DEFINE
31020 DEFINE PROCEDURE WIPE
31022 MODE 256:WINDOW 512,256,0,0
31024 PAPER 0:CL 1
31026 END DEFINE
31028 DEFINE PROCEDURE SPLIT
31030 WIPE
31032 WINDOW#1,224,200, 32, 15:PAPER#1,7:INK#1,0
31034 WINDOW#2,224,200,256, 15:PAPER#2,5:INK#2,0
31036 WINDOW#0,448, 40, 32,216:PAPER#0,0:INK#0,7
31038 CL 4
31040 END DEFINE
31042 DEFINE PROCEDURE CL(NNN)
31044 SELECT ON NNN
31046 =0:CLS#0
31048 =1:CLS#1
31050 =2:CLS#2
31052 =3:CLS#1:CLS#2
31054 =4:CLS#1:CLS#2:CLS#0
31056 END SELECT
31058 END DEFINE
31060 DEFINE PROCEDURE CAPON
31062 POKE 163976,255
31064 END DEFINE
31066 DEFINE PROCEDURE CAPOFF
31068 POKE 163976,0
31070 END DEFINE
31072 DEFINE PROCEDURE PPP(I%)
31074 CL 0:PRINT#0\\I%
31076 END DEFINE
31078 DEFINE PROCEDURE DRIVENUM
31080 PPP 'WHICH DRIVE 1(LHS) 2(RHS)'
31082 I%=INKEY$(#0,-1):IF I%<'1' AND I%>'2':GO TO 31082
31084 DRIVE#='MDV'I%'\_':CL 0
31086 END DEFINE
31088 DEFINE PROCEDURE DRIVE_TITLE
31090 PPP DRIVE% ' HIT TITLE ':INPUT#0,TITLE$:CL 0
31092 END DEFINE
31094 DEFINE PROCEDURE DR
31096 CL 4:DRIVENUM:CL 1:DIR#1, DRIVE%
31098 END DEFINE

```

```

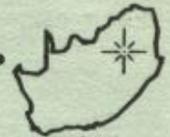
21100 DEFINE
31102 CL 4:DRIVE_TITLE
31104 PPP'HIT ANY KEY TO DELETE 'ADRIVE%TITLE$:PAUSE:CL 0
31106 DELETE DRIVE%TITLE$
31108 CL 4:DIR DRIVES
31110 END DEFINE
31112 PROCEDURE VIEW
31114 DR:DRIVE_TITLE
31116 PPP'HIT CTRL/F5 TO HALT LISTING'
31118 OPEN#3,SCHR_448X200A32X15:CLS#3:CLOSE#3
31120 COPY DRIVE%TITLE$ TO SCR
31122 PPP, OK
31124 END DEFINE

```



B & H ACADEMY (PTY) LTD.

White Cliffs, 5 Dover Street, Ferndale 2194
P.O. Box 4629, Randburg 2125
Tel. (011) 789-4074/5



B & H Academy
(Pty) Ltd

Reg. No. 84/1104117

Member of
Johannesburg Computer
Holdings (Pty) Ltd

Reg. No. 84/1127107

**S. A. I. E. T. E. APPROVED
COMPUTER HARDWARE
COURSES
IN
WORDPROCESSOR BASICS
MICROPROCESSOR INTERMEDIATE
ALSO
ELECTRONIC BASIC
DIGITAL ELECTRONICS
DATA COMMUNICATION**

All courses may be had on a correspondence basis (six months) part time (fifteen evening classes) and full time (five days, Monday to Friday).

Successful students (50% pass mark) will earn a diploma awarded jointly by S.A.I.E.T.E. and B & H Academy.

The Microprocessor Basic course is supplied with a Microprofessor (P.C. learning kit). Most courses have practical as well as academic features.

For further information either write to B & H Academy, P O Box 4629, Randburg, 2125. or phone Hugh Rose (day) 789-4074 (eve) 465-1489.

~~~~~  
**ORDER FORM**  
~~~~~

MEMBER REF. #: _____
NAME _____
ADDRESS _____

(^^^ OR AFFIX NEWSLETTER LABEL ^^)

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

DESCRIPTION	PRICE
_____	R _____.

PLEASE ASK FOR IE's CONDITIONS OF SALE

SUBTOTAL: R _____.

12% GST : R _____.

* 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 (R1.00, R1.30); 2 TAPES (R1.30, R1.50); 3 OR MORE TAPES (R2.00, R2.50); PACKS (R1.50, R2.00)

HARDWARE:

INTERFACES (all) (R1.50, R2.00); DISC DRIVE (R5.50, R8.00); EXPANSION PACK (R3.00, R5.00); A4 PRINTER (R7.00, R13.00);
TIMEX PRINTER (R4.00, R5.50); JOYSTICK (R1.50, R2.00); MONITOR (R7.00, R9.50); QL (R7.00, R13.00); SPECTRUM + (8 128K
2+) (R5.00, R7.50); PARTS: MEMBRANE (R2.00, R2.50); ALL OTHER PARTS (R1.50, R1.80); KEYBOARDS (all) (R1.50, R3.00).

You can have goods freighted - price on application. We also do C.O.D. parcels by post. Please send SAE for info.

***** CUT HERE AND STAPLE TO YOUR ORDER *****
MAY COMPETITION

There once was a club

.....

.....