

QReview

£ 2.00

The reference guide to QDOS and its derivatives

Volume 1 Issue 1

July 1993

TEXT87PLUS4 PUBLISHER LINEDESIGN

PRINTER MASTER

PUBLIC DOMAIN

ADVENTURE PLAYTIME

WIN A COPY OF
DIGITAL PRECISIONS
PERFECTION
WORDPROCESSOR

PLUS MUCH MORE ...

QReview

QReview is published by
© Quo Vadis Design
57 Shaftesbury Road
Romford Essex
RM1 2QJ
Tel: 0708-755 759

Editor/Publisher:
Bruce Nicholls

QReview is published quarterly and is available by subscription for four issues, at a cost of £8 in the UK, £10 in Europe and £14 any other country. Back issues are available from the publisher, please write for price details.

Editorial enquiries should be sent to the address given above. We welcome letters, comments, suggestions and articles from our readers. The submission deadline for the next issue is the 31st of August 93.

Articles submitted for publication should be on a 3.5 DD disk, or microdrive, in either Quill, Perfection, Text87 or Editor format and be accompanied by a printed copy of the article. Saved Screen dumps produced with the Sbytes command are also accepted together with screens saved by most QL drawing packages (Please indicate which package you used to produce the graphics).

QReview is independent and not affiliated to any vendor of hardware, software or services.

While every care has been taken with the compilation of this publication, we cannot accept responsibility for any errors or omissions. If any error or omission is found, we will endeavour to publish clarification in the next available issue.

All rights reserved. No part of this publication may be reproduced in any form or by any means without the prior permission in writing of the publishers. All trademarks are acknowledged as the property of their respective owners.

The opinions expressed are those of the authors and are not necessarily those of the publishers.

QReview is produced using a QL. The software used to produce the magazine is Text87Plus4 Publisher(Software87), Linedesign(Progs), Image Processor(DJC) and Screen Snatcher(DJC).

Contents

NEWS	3
BANTER <small>Tommy Thompson reviews a LARGE BANNER printing program.</small>	5
ALIEN FORMATS <small>Need to transfer data between different machines ? Bruce Nicholls looks at the alternatives.</small>	8
PRINTERMASTER <small>Jim Bulk calms down his printer, and his nerves, with this program from DJC.</small>	11
SCRABBLE <small>Still an old favourite ? Rich Mellor chooses his words carefully in this review.</small>	14
SUPER TOOLKIT II - PT VI <small>Stephen Bedford guides you through the use of PUT, BPUT, GET and BGET.</small>	15
COMPETITION <small>Win a copy of Digital Precision's Perfection word processor in this Editor competition.</small>	19
SUPER DISK LABELLER <small>John Reeves substitutes his hand written disk labels for some he can read !</small>	21
ADVENTURE PLAYTIME <small>Mike Tuppenney enters a strange world complete with fluffy rabbit.</small>	23
INTERNATIONAL QL MEETING <small>Dilwyn Jones in Eindhoven.</small>	24
TEXT87PLUS4 PUBLISHER/LINEDESIGN	26
<small>How good is this new combination ?</small>	
WHAT IS THIS POINTER THING ? <small>Back to basics, what is the Pointer Environment ?</small>	28
DJ TOOLKIT <small>A toolkit specifically designed for Qliberator, Stephen Bedford investigates.</small>	32
PUBLIC DOMAIN <small>What is Public Domain Software and where are the libraries ?</small>	35

Welcome to the first issue of QReview, a magazine devoted to QDOS and its derivatives. I hope the articles in this first issue are diverse enough to stimulate an interest in an area of QDOS that you haven't explored before. If you feel there is something missing or you would like a subject covered that has not appeared in any other magazine do write in. Please take the time to fill in the enclosed questionnaire as this is YOUR magazine and it will help me commission articles that will be of interest to most of our readers. Above all enjoy using QDOS.

NEWS

Miracle systems are still awaiting on the full release version of SMSQ for their QXL PC card [Ed: We hope to have a full review in the next magazine, see their advert for more details]. Work is still continuing on their graphics card which will give a maximum resolution of 1024*512 with 16 colours and 512*512 with 256 colours, there is also a 2 screen mode with a resolution of 512*256 with 256 colours. The board will also contain a network, serial, parallel, mouse and keyboard ports. Miracle are also still developing their SCSI interface which should also contain a through connector.

Digital Precision have released version 5 of their Perfection Special Edition word processor. The main addition is that the user is given the opportunity to select the desired auto-reformatting behaviour. This can be Never, where you have to press a key to reformat, User-delay, giving slightly delayed updating of lower lines and Instant where it reformats as-you-type. Perfection SE v5 costs £99.95, existing Perfection SE users can upgrade for £10.

Software87 have released a new version of their plus4 wordprocessor (v3.9) which can be integrated with Linedesign by PROGS to provide a modular desktop publishing package (See advert and article). They can also supply a range of Pointer Environment programs such as Qspread, a new spreadsheet program. For all enquiries you can ring their NEW phone number 071 485 9008 Monday to Friday 2pm-5pm.

Ergon Development have released ZM/128 a spectrum 48K/128K emulator. This has an improved Supervisor and supports Interface 1 emulation, joystick emulation and the new Z80 v2.0 48K.128K snapshot format. The program can only be bought as an addition to either the ZM/x (60000 ITL) or ZM/ht (90000 ITL) system and cost an extra 20000 ITL, for postage and packaging in Europe add 12000 ITL. Also new is Ergon Floppy disk utilities which provides a Disk Editor which is able to Recover corrupted files and an intelligent disk copier/verifier. The utilities work on double Density (720K), High Density (1.44Mb), Extra Density (3.2Mb) disks and even alien disks (PC, Spectrum etc.). The price is 35000 ITL plus postage and packaging.

Dilwyn Jones Computing has released a host of new and ex-CGH Services games and utility software. All software is post free to UK addresses, to other countries add £1.00 per program up to a maximum of £3.00.

Sidewriter is a program that prints spreadsheets and text files sideways, in landscape print, on a printer

which supports Epson compatible bit image graphics. Both 9 and 24 pin dot matrix printers are supported. The program can either be pointer driven with a mouse, or used from the keyboard without the Pointer Environment installed (e.g. on unexpanded QLs). It offers a choice of 6, 8, 9 or 12 lines per inch across the paper, handles paper up to 16 inches wide and up to 2048 characters sideways down the paper - clearly continuous paper is an advantage! Lines may be printed to guide the eye along columns of figures in large spreadsheets. The price is £15.

Convert-PCX is a graphics file format converter to change PC screens saved in PCX format to a QL screen format, the price is £12.50 (Software to transfer data between the PC and QL is not included).

Scanned Clipart 1 is an extensive collection of scanned clipart supplied in compressed form with a simple to use decompressor program. The images cover a wide range of subjects. The price is £10.

Now onto the ex-CGH programs:-

Open Golf is, would you believe it, a golf simulation with 50 courses. 384K of Ram is needed together with a colour monitor. The program is only available on disk and costs £12.50.

Grey Wolf is a world war 2 submarine simulation. Avoid the anti-submarine aircraft and seek out shipping in the North Atlantic. 384K of memory is needed together with an 85 column monitor. The program is only available on disk and costs £12.50.

Squidgy Round the World is a colourful non-violent arcade game where you have to guide the little character from the Cotswold lakes round some 50 colourful screens, collecting things as you go and avoiding hazards and being caught by some nasty people. It works on an unexpanded QL and is available on disk or microdrive for £12.50.

The 5 Game Pack is a collection of 5 mind games including Quadliner, Mindbender, Othello, Flag Puzzle and Roulette. It is suitable for an unexpanded QL and is available on disk or microdrive priced at £12.50.

Quick Mandelbrot III is a Mandelbrot and Julia set fractal generator program. It works on unexpanded QLs and is priced at £15.

SToQL is an Atari screen transfer program with image processing facilities. It converts Neochrome and all three Degas resolutions. (Software to transfer the files between the ST and QL is not supplied). The program needs at least 256K of memory and costs £12.50.

And finally

Quiz Master II is a colourful implementation of the computerised Quiz games frequently found in pubs and clubs. You can create your own question and answer sets and it comes with a general knowledge

and film/tv quiz. Suitable for unexpanded QLs the price is £12.50.

For anybody in need of a mouse Dilwyn can now supply a mouse and driver software to be used within the pointer environment. It comes with an adapter lead supplied for use with UK QL, the price is £40 and P&P is £2.50.

TF Services are now supplying a range of I2C Interfaces for use with the MKII Minerva (prices include P&P in the UK only). The Parallel Interface gives 16 input/output ports and can be used wherever logic level signals are required eg. model train controllers. Up to 4 can be connected and powered by the QL and it is priced at £25.

The Analogue Interface gives 8 analogue to digital inputs and 2 digital/analogue outputs. It can be used for temperature measurements, sound sampling etc and is priced at £30. Up to 4 can be connected to the QL.

Data sheets and Control software/manual are also available at £2 each.

QL Home Banker from DJW Software is now at v5 (which is, in fact, a complete re-write of the program). Home Banker is a personal finance management program that keeps a record of payments and receipts on up to 14 accounts. It automatically updates standing orders when necessary and enables a wide range of expenditure analysis. It requires a memory expanded QL, and is available on 3.5" disk for £20. Existing disk users can upgrade to v5 for £6. DJW are also developing a PC version of the program.

Finally Jochen Merz Software has released two new Pointer Environment games together with a Basic Online Help System.

The Oracle is an ancient tactic-puzzle where you have to fill different tiles into a field. In Minefield you need skill and concentration to clear a minefield. The Oracle costs 49,90 DM and Minefield costs 39,90 DM (postage and packaging in Europe add 13 DM). The Basic Online Help System is called HyperHELP BASIC. Simply clicking on a SuperBASIC word gives you a full description, use of all parameters plus examples of that word. The help files can be updated with any editor so that you can update and add remarks whenever you want. The price is 49 DM plus P&P.

Miracle Systems Ltd
25 Broughton Way
Osbaldwick
York
YO1 3BG
Tel: 0904 423986

Digital Precision Ltd
222 The Avenue
Chingford
London
E4 9SE
Tel: 081 5275493

Software87
33 Savernake Road
London
NW3 2JU
Tel: 071 4859008

Ergon Development
Davide Santachiara
Via Emilio De Marchi 2
42100 Reggio Emilia
Italy
Tel: 39 522 70409

Dilwyn Jones Computing
41 Bro Emrys
Tal-Y-Bont
Bangor
Gwynedd
LL57 3YT
Tel: 0248 354023

TF Services
12 Bouverie Place
London
W2 1RB
Tel: 071 7249053

DJW Software
11 Pound Close
Bramley
Basingstoke
Hants
RG26 5BL
Tel: 0256 881701

Jochen Merz Software
Im stillen Winkel 12
D-4100
Duisburg 11
Germany
Tel: 0203 501274

BANTER

An old duffers look at a banner making program.

It would be very easy to describe this program by Nick Ward as user friendly and capable of doing its designed job, but to leave it at that would be doing a great injustice to a good program. To describe the program as user friendly is an understatement for within ten minutes of looking at the program (and I am a plodder), I had produced my first banner. Sometime later my grandson, taking a strange program and using it on equipment foreign to him had clipped that time to eight minutes at his first try.

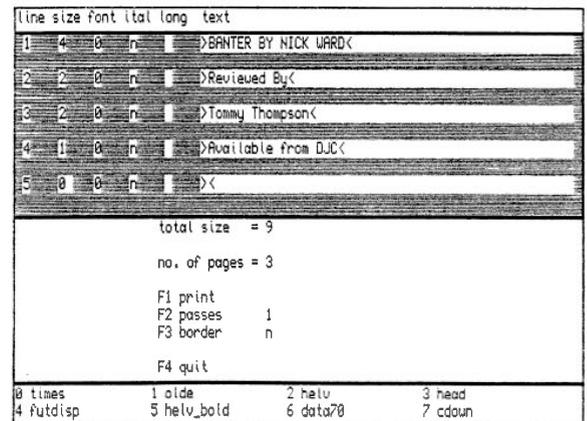
The program is designed to produce banners of 5 lines and up to four pages long. In short a banner of up to 44 inches long and 8 inches wide with or without a border as your fancy takes you. It is essential that continuous paper is used, as the banner is produced with the paper being printed sideways, ie. in a landscape mode.

The program will autoboot but I found that, when it was loaded this way, it was necessary to press Ctrl C to start the program. It can also be loaded using `lrun flp1 boot` or `exec w flp1 banter` or `exec w mdvI banter`, depending on the drives your machine employs. The screen then asks where it will find the fonts. This would normally be in the same drive as the program. When the fonts have been loaded an opening screen divided into three windows is presented (fig 1.0).

The top window shows five lines with 6 headings. These headings are LINE, SIZE, FONT, ITAL, LONG, & TEXT. The first column, over which you have no control, merely indicates the line number, 1 to 5, that you are working on. The second column SIZE asks you which size print you want in a range of 1 to 5. The third column, FONT, allows you a choice of any of eight different fonts, which are

named and numbered in the bottom window on the screen. ITAL the fourth column is asking whether or not you want italics and allows only a yes or no answer. The next column, LONG, is to give you information. If you enter too much text a # sign appears in the little box. Now we come to the heading TEXT and the area in which to print this is presented as < > and you print between the arrows. I found that if I used the whole five lines I could use a maximum of 250 characters on the banner, including spaces. The figures using four, three, two, or one line were 188, 105, 46, 12 respectively.

The middle window is concerned mainly with the printing of the banner and consists of 6 lines which are:-



line	size	font	ital	long	text
1	4	0	n		>BANTER BY NICK WARD<
2	2	0	n		>Reviewed By<
3	2	0	n		>Tommy Thompson<
4	1	0	n		>Available from DJC<
5	0	0	n		><

total size = 9
no. of pages = 3
F1 print
F2 passes 1
F3 border n
F4 quit

0 times	1 alde	2 helv	3 head
4 futdisp	5 helv_bold	6 data?0	7 cdown

Fig 1.0

Total size = 0

No. pages = 0
F1 Print
F2 Passes
F3 Border
F4 Quit

Total size shows the sum of the print sizes that you called up in the first window.

F1 will start the print process and

draw your banner onto the screen. It gives you the option of going from there to the printer or back to the window (fig 1.1).

F2 allows you to increase the passes of the printhead to 2, giving darker print.

F3 Border gives you the option of having your banner with a border around it.

'IT IS WITHOUT DOUBT THE MOST USER FRIENDLY PROGRAM THAT I HAVE USED'

The bottom window lists and numbers the available fonts, namely :- 0 times, 1 olde, 2 helv, 3 head, 4 futdisp, 5 helv_bold, 6 data70, 7 cdown.

The size of the print varies not only

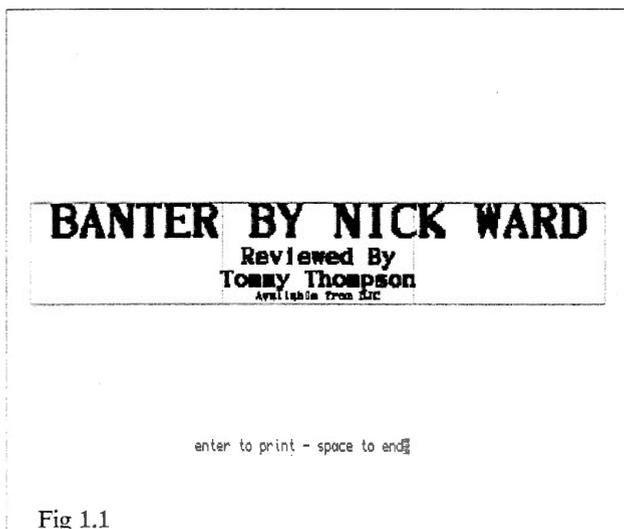


Fig 1.1

with the size selected but also with the number of lines on the banner. I found that on a one line banner that size 5 printer gave me letters 5 inches high. If the letters' height is greater than a quarter of the page height then they will be filled in, if less than a quarter of the height then they will be left as an outline.

So this your program but what do I think of it. It is without doubt the most user friendly program that I have used and the manual, an eight page quarto booklet is well written and all key strokes given. It is easy to read and progresses in a fashion that does not have you scrambling back to find something that you have missed. I would have liked to have seen more fonts available or perhaps the choice of fonts given could have been different. The manual does suggest that further fonts might be added at a later date. I found one other slight snag in that the length of the banner was always slightly longer than the number of pages indicated, so always allow for one more page than that being shown. One touch that I liked was that the print was centre justified so the finished banner was symmetric.

The program needs your QL to be expanded to at least 400k and it is compatible with Goldcard and Minerva v1.93.

The program was written by Nick Ward, to whom congratulations. I had fun with this program and enjoyed using it.

Tommy Thompson



plus4 publisher

We are pleased to announce an important development on the QL software scene. Thanks to **plus4**, QL users have been able to produce high quality text output matching that of the most expensive PC wordprocessors. However, until now, no QL program has been able to produce drawings and headline text of similar quality.

plus4 publisher is a new modular system comprising the **plus4** wordprocessor, **LINEdesign**, and **publisher's pack**.

The new page design program **LINEdesign** allows the creation of A4 pages consisting of scalable drawings and text. Extensive commands for accurate drawing using lines, rectangles, poly-lines, ellipses, and bezier curves are provided. You can apply gray shades, fill patterns and outlining to surfaces. Once you have drawn an object, you can move it around the page, enlarge or reduce it, expand or squash it, rotate or transform it *without losing any detail and without affecting other objects on the page*. In addition, **LINEdesign** can do the same with text, combining any of the 57 scalable founts supplied with the program. These are not bit-mapped founts as used by other QL programs. Each fount can be printed in any size from smallprint to huge headline (even 4 inches tall) without jagged edges or loss of quality. Text can be rotated to any angle, shaded, slanted, even distorted for special effects. **LINEdesign** is supplied on *Eleven* disks which contain the program, the founts and a large number of ready-made scalable drawings for inclusion in your publications.

publisher's pack contains the component programs which combine the text editing and printing capabilities of **plus4** with the graphic and fount handling power of **LINEdesign**. In addition **publisher's pack** includes two extra items: **fountext93**, a new high resolution upgrade to **fountext88** which prints at 180 x 180 dots per inch on 24-pin and bubblejet printers and the new **plus4** version 3.9 with many enhancements. Step-by-step instructions in the manual together with sample documents and ready-made page-layout objects such as shadowed boxes provide all you need to start preparing your own professional looking publications.

A Gold Card or Atari with QL Emulator is highly recommended for this system.

We also supply other exciting programs that are the best in their category. Programs such as the new spreadsheet, **QSpread**, the new database manager, **DATAdesign**, or the well established system manager, **Qpac II** which run under the Pointer Environment.

plus4 and plus4 publisher software	
plus4 publisher (plus4 + LINEdesign + publisher's pack)	£199
please enquire about special upgrade prices to plus4 publisher if you currently use plus4, text87 or LINEdesign	
LINEdesign	£99
plus4 wordprocessor	£79
fountext88 + founted89 (graphic driver and founts for plus4)	£39
2488 (drivers for plus4 for 24-pin and bubblejet printers)	£19
typeset90-deskjet (plus4 drivers for HP Deskjets and lasers)	£19

other software	
DATAdesign v. 3	£59
DATAdesign API	£19
QD version 5	£55
QSpread	£69
QDesign II	£69
Qpac II	£39
FiFi	£19
QTop	£29

You can pay by: cheque (UK banks), Traveller's Cheques, Postal Orders, Eurocheques (all in Pounds Sterling).

Software 87, 33 Savernake Road, London NW3 2JU

For all enquiries ring **071 485 9008** Monday to Friday 2pm-5pm

ALIEN FORMATS

This article is based on my experience in transferring data between the QL and PC, although I have discussed other alien formats. I will only be dealing with commercially available programs, that I know of, although more programs exist in the Public Domain and Quanta libraries. Longer review articles of some of the programs featured in this article are planned.

There are two processes involved with dealing in alien format data. The first is how to get the data physically from one machine to the other and the second is converting the data into a usable form.

The first process of how to physically get the data from one machine to the other can be further broken down into hardware and/or software options.

TRANSFERRING THE DATA - HARDWARE

The first option is available from TF Services. This is File Transfer which consists of a cable to link the two machines together and software to transfer text and programs between computers. This is available for connecting the QL to IBM compatible, Atari ST and Psion range of machines.

The second option is available from Dilwyn Jones Computing and links a PC and a QL via a serial port cable, this is the QL-PC Fileserver. Software for both machines is supplied and when loaded allows the QL to directly access most of the devices on the PC. For example you could type in the command:-

```
wcopy pcd3_ to flp1_
```

This would copy all the files on the C drive of the PC to floppy 1 of the QL. A full set of commands, compatible with most of the QL and Toolkit II commands, are supplied. Because the data is transmitted via the serial ports the maximum data transfer rate is 9600 baud on a normal QL. It is recommended, in the manual, to upgrade the 8049 co-processor responsible for this limit to Hermes which allows reliable transmission at 19200 baud.

TRANSFERRING THE DATA - SOFTWARE

To transfer the data by software the data is saved on to a floppy disk in an alien format and is then read and converted by the software to a QL format disk.

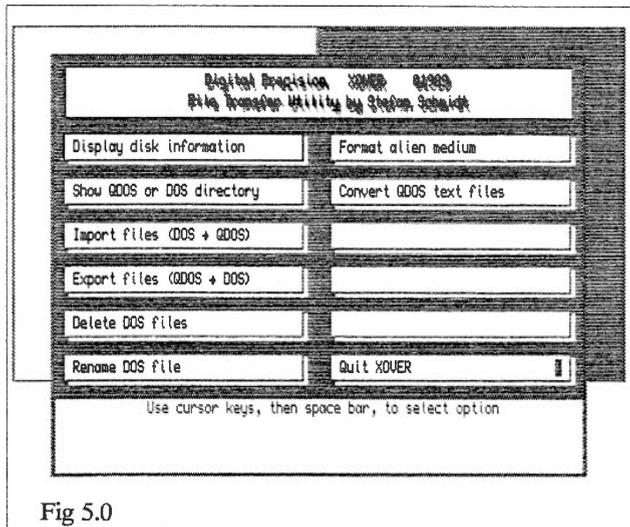


Fig 5.0

Digital Precision sell two programs to transfer data between the PC/ST and the QL. These are Media Manager Special Edition and Media Manager. Media Manager Special Edition gives the most flexibility when transferring files. It has the ability to transfer files at file and directory level. It also allows bi-directional

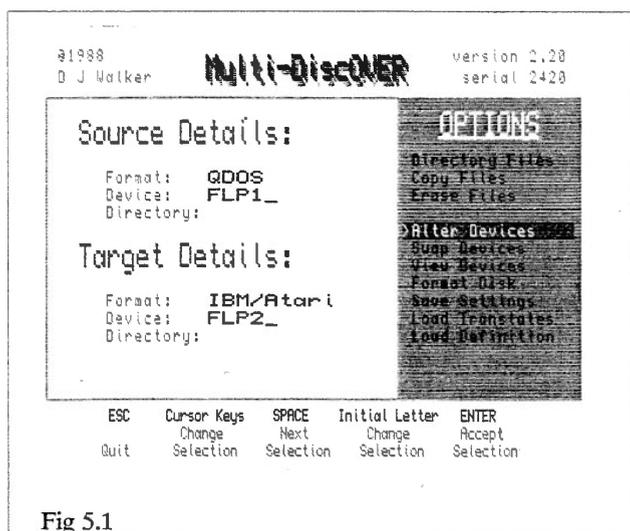


Fig 5.1

transferring of the files and is completely automatic. The program is called Xover and is also supplied with PC Conqueror (See fig 5.0).

Dilwyn Jones Computing has three programs which convert alien format disks to QL disks. The first is Discover, this allows the easy transfer of PC or ST format disks to QL disks in both directions. Multi Discover builds on Discover but is able to read and write BBC micro DFS and ADFS formats,

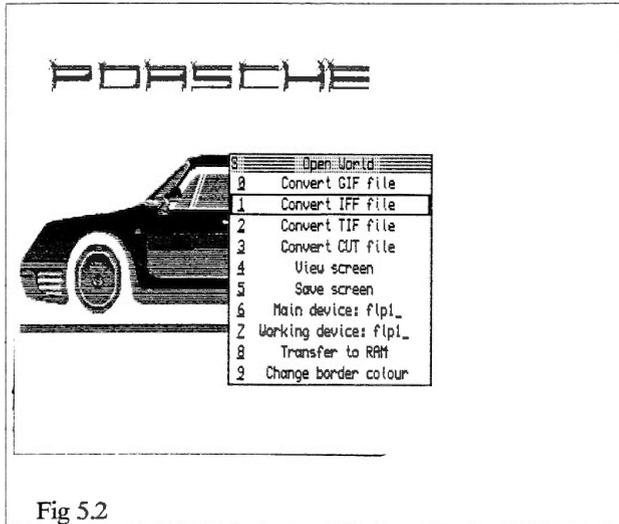


Fig 5.2

many CPM formats, Unix CPIO formats and recently added Spectrum and Sam Coupe formats in addition to PC or ST disks (See fig 5.1). The last program is very specialised as it allows the QL microdrives to read and write cartridges from the ICL OPD or the Merlin Tonto Computers. It is called OPD Interchange.

The latest transfer program to appear is Ergon Development's Ergon's Floppy Disk Utilities. This is able to read, at least, PC and Spectrum formats.

CONVERTING THE DATA

Once the data has been transferred to a storage device the QL can read the next stage is to convert the data into the right format.

Most of the above programs give an option to automatically convert text files from the alien format into the QDOS format. This is needed because QDOS uses only the CR character at the end of line where, as an

example, DOS/TOS have a CR/LF character. Certain ASCII characters above 128 are also different between different machines.

At present, I know of only four programs which specifically convert alien data formats into a format that QDOS software can use. Three are graphic file format converters and the other is for use with Wordstar or the PC versions of Quill etc.

The first graphic file format converter is not really a full blown program but a utility program supplied with LINEdesign by PROGS. This program converts Adobe Illustrator .AI files to the LINEdesign format.

The second graphic file format converter is Open World by Ergon Development. This program converts GIF, TIFF, IFF, and CUT graphic images to QL mode 4 or Mode 8 screens (See fig 5.2). Also included is a QL to GIF screen converter and a utility to read QL disks on the PC, these are written in C and the source code is given.

The last graphics file format converter is sold by Dilwyn Jones Computing and it is a PC PCX converter for the QL. It is called Convert-PCX and it can convert monochrome and 16 colour PCX images to QL Screens (See fig 5.3). The PCX file format is a very common standard on the

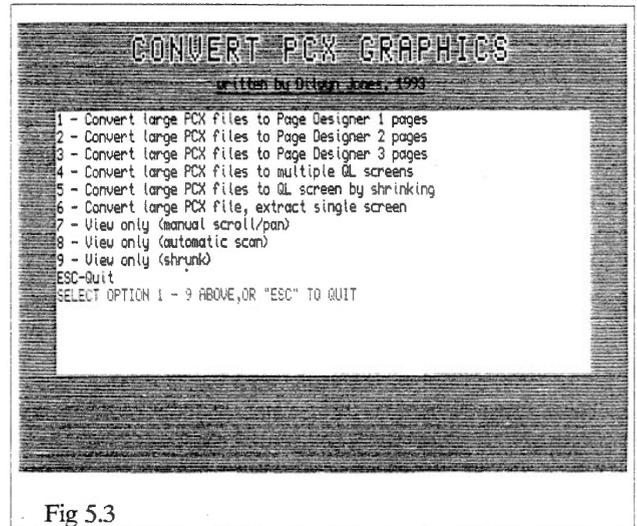


Fig 5.3

PC.

The last file format converter is Textidy sold by Dilwyn Jones Computing (See fig 5.4).

This can convert QL Quill doc files to the PC Quill (Psion sell PC versions of Quill, Abacus, Easel and Archive as PC Four) equivalent, or to a plain text file or to a Wordstar 3 format file. It can also convert QL Archive sedit screen files to their PC equivalent. This transfer works both ways and certain text manipulations can be performed such as removing headers and footers.

Bruce Nicholls

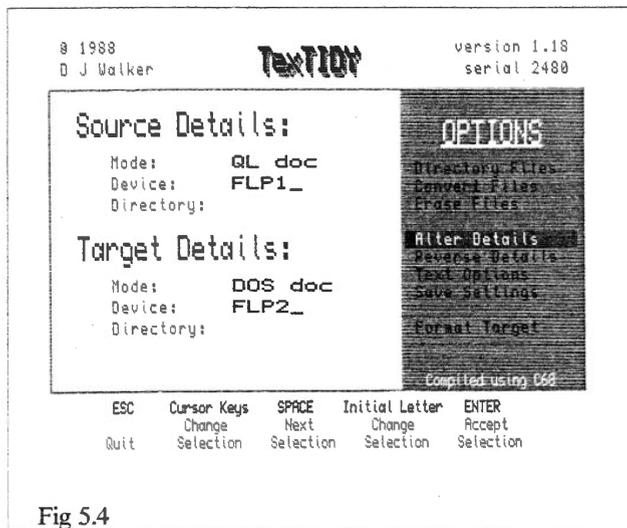


Fig 5.4

TF SERVICES
12 BOUVERIE PLACE
LONDON
W2 1RB
TEL: 071 7249053
FILE TRANSFER
SOFTWARE £7.50 PER
M/C. CABLE £10
HERMES £25.
(UK PRICES)

DILWYN JONES
COMPUTING
41 BRO EMRYS
TAL-Y-BONT
BANGOR
GWYNEDD
LL57 3YT
TEL: 0248 354023

ADD £1.00 TO NON UK
ADDRESS
QL-PC FILESERVER
£24.50 (UK)
DISCOVER (256K) £20
MULTI DISCOVER
(256K) £30
OPD INTERCHANGE £15
TEXTIDY (256K) £15
CONVERT PCX (512K)
£10

DIGITAL PRECISION
LTD
222 THE AVENUE
CHINGFORD
LONDON
E4 9SE
TEL: 081 5275493
MEDIA MANAGER SE
(256K) £49.95)
MEDIA MANAGER
£24.95
PC CONQUEROR (256K)
£59.95

ERGON DEVELOPMENT
DAVIDE SANTACHIARA
VIA EMILIO DE
MARCHI 2
42100 REGGIO EMILIA
ITALY
ERGON FLOPPY DISK
UTILITIES 35000 ITL
+ 12000 ITL P&P
OPEN WORLD 35000
ITL + 12000 ITL P&P

PROGS
LINEDESIGN (AS MUCH
AS POSSIBLE)
SEE DJC/SOFTWARE87
ADVERTS

PRINTERMASTER

Word processing is probably the most common use to which the QL is put, and this of course necessitates the purchase of a printer. Printers can be very expensive, and having paid good money for the machine of our choice, we naturally want to make the most of its features. Unfortunately, even when its accompanying manual has been relatively well written, getting to grips with it is often a time-consuming and frustrating business.

Quill, along with the the Psion suite's "printer_dat" file, provides a driver which produces creditable results. Only a very few of the printer's options can be incorporated in the installation program however, and to do this we must first of all learn how to implement the necessary "translates" which the "install_bas" program contains.

In "PRINTERMASTER", Dilwyn Jones and Joe Haftke have produced a utility which not only takes all the pain out of literally mastering your printer, but also exploits it to the full.

Consider this:

Your printer has a selection of letter quality fonts and you want to use say, "SCRIPT" printed in "ITALIC". Using superbasic, this could be achieved on an EPSON emulation by typing the following statements:

```
open #3, ser1
print #3, chr$(27);"4";chr$(27);"x";1;
      chr$(27);"k";chr$(4)
```

If you wanted to produce the same result in ARCHIVE, you might perhaps discover (after sweating much blood and tears!) that the only way to make it work would be by typing -

```
lprint chr(0)+chr(27)+chr(52)+
      chr(0)+chr(27)+chr(120)+chr(49)
      chr(0)+chr(27)+chr(107)+
      chr(0)+chr(4)
```

But Eureka! Now that you have PRINTERMASTER, all you need do is call up the program and use the cursor to highlight -

ITALICS ON <ENTER>

NLQ PRINT ON <ENTER>
SCRIPT FONT <ENTER>

(Yes, - that's all!)

When PRINTERMASTER is booted up from a working copy either as a single task or in multitasking mode, the title screen appears showing the current driver, port, baud rate, free memory and the number of control function defaults.

Pressing <F5> allows temporary port and baud rate changes to be made. The space bar (or any other key for that matter) is used to bring up the main menu screen (fig 2.0).

The lower portion of this second screen displays the menu options and the large upper window lists 48 of the total 120 printer functions available. Selection of these functions could not be simpler, as it is only necessary to navigate to the appropriate rectangular box using the flashing cursor. This is done, one box at a time, by using the arrow keys. Paging is

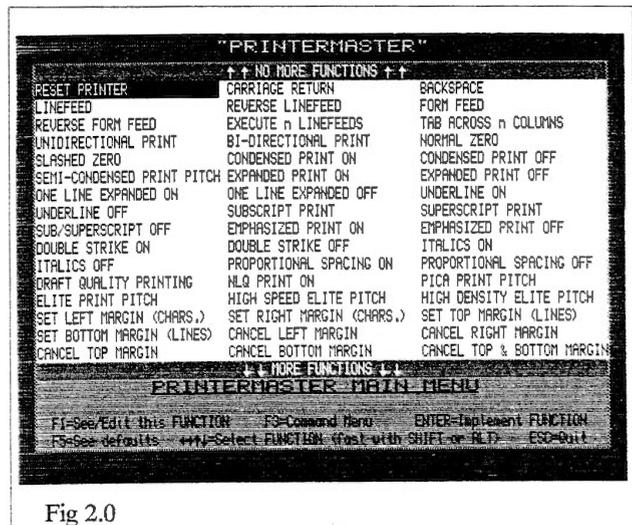


Fig 2.0

achieved in conjunction with <SHIFT>, and top/bottom movement takes place along with the <ALT> key.

When no more functions are available at the top of the screen, it tells you - but this nice little touch is only extended to the bottom when using the <ALT> key. A tiny inconsequential oversight, but a pity nevertheless.

Pressing <ENTER> sends the necessary codes to the printer automatically. <F1> displays the codes to be sent and <F5> can then be used to edit them. Altering these codes is completely straightforward. There is an option to confirm or alter the box name, and adjusting the codes is by integers only. (A very welcome ESC-ape from all this (ASCII) + "1B" (hex) + chr\$(27) gobbledegook!!!)

In conjunction with the drivers supplied in the program, the manual offers advice regarding printer similarities and differences. By saving the most appropriate driver as the "P_my_printer" required at start up, very little editing is therefore actually necessary.

A very useful feature however, is the ability to create a sequence of up to 21 codes so that multiple instructions to the printer can be incorporated in just one key press.

PRINTERMASTER is compatible with the pointer environment and in my own boot for Qpac 2 I have set up a hot key using

ERT HOT_LOAD1

('P','Printermaster_exc';!'Printermaster')

- which takes into account the change from file to job name and avoids confusion with ERT HOT_PICK('p','pick') my choice for the lower case hot key. If the program has already been loaded however,

ERT HOT_PICK('P','Printermaster')

- as suggested in the manual, is of course all that is necessary.

I have not found any real problems with PRINTERMASTER, though the authors' warning with regard to programs such as ARCHIVE which "hog" the printer should be noted. They say that the only remedy here is to enter the desired printer functions before loading and after quitting.

In so far as ARCHIVE is concerned, this restriction can be partially circumvented. By overwriting the "printer_dat" file with an additional copy of "P_my_printer" (renamed) on the same medium, PRINTERMASTER becomes, and remains, fully operational. Any printer codes within procedures which may be called will now

work in conjunction with the program, and the same applies to embedded codes in ABACUS.

If this method is employed, it may be necessary for QUILL to be reconfigured so that the usual "printer_dat" file is obtained from another source. Otherwise, when multitasking, essential word-processing facilities provided by the <F4> key will be disabled at print time.

Alternatively, "P_my_printer" could be copied as "printer_dat" to a different drive and ARCHIVE reconfigured accordingly.

PRINTERMASTER is a first class utility. Even if you already possess a sophisticated word-processor such as TEXT87 PLUS4 or PERFECTION, it is well worth while having a copy handy for use with other applications. It is supplied either on microdrive or disc, - the latter being neatly labelled with files listed in true Dilwyn Jones style. It is accompanied by a 16 page A5 manual written by Joe Haftke in English as user-friendly as the program itself.

Jim Buik

[Ed: A pointer driven version of the program will soon be released]

PRINTERMASTER
(128K) (FLP/MDV)
£20 (UK) £21 (REST)

DILWYN JONES
COMPUTING
41 BRO EMRYS
TAL-Y-BONT
BANGOR
GWYNEDD
LL57 3YT
TEL: 0248 354023

DILWYN JONES COMPUTING

41 BRO EMRYS, TAL-Y-BONT, BANGOR,
GWYNEDD, LL57 3YT, GREAT BRITAIN

TELEPHONE: (0248) 354023

QL SOFTWARE

A SELECTION FROM OUR RANGE OF NEARLY 100 PRODUCTS FOR THE QL, NO ROOM TO ADVERTISE THEM ALL HERE, SO PLEASE ASK FOR OUR CATALOGUE (PHONE FOR A COPY OR SEND A LETTER WITH YOUR ADDRESS).

<p>EASYPTR III part £40.50 Simplified pointer environment programming. Part 1 consists of sprite editor, menu editor and superbasic extensions to use menus in your own programs. Applications created using Easyprtr III can be compiled with QLiberator. Requires expanded memory, available on disk only.</p> <p>EASYPTR III part 2 £20.00 Consists of appendix manager and enhanced toolkit for control of menus etc in your programs.</p> <p>EASYPTR III part 3 £20.00 Consists of Easysource and C library routines, etc.</p>	<p>QPAC1 £19.95 Ideal companion to QPAC2, consists of small accessory programs such as calculator, calendar, clocks, alarm clocks, typewriter, etc. All can be mouse controlled. Pointer environment files included. Can be used with or without QPAC2. Expanded memory required, disk only.</p> <p>QTYP2 £29.95 Tony Tebby's spelling checker program. Check spelling as you type OR check existing files retrospectively. User interface allows you to write programs which use the dictionary facilities. English, French and German dictionaries included!</p>	<p>IMAGE PROCESSOR 2 £5.00 Easy to use graphics system, featuring usual graphics facilities, pixel zoom editing, image enhancement, mode conversion etc. 512k, disk only.</p>
<p>QLIBERATOR £50.00 Superb superbasic compiler, compiles virtually all of basic plus most toolkit commands, etc. Produce faster multitasking code from your basic programs. Compile resident extensions, use overlays, etc with the latest V3.36. Can be mouse controlled. Expanded memory required.</p>	<p>DISA £29.00 Interactive pointer driven machine code disassembler. 256k ram min. Disk only.</p>	<p>SCREEN COMPRESSION £10.00 Reduce the amount of storage required by graphics on disk or microdrive - supports several QL formats. 256k, disk only.</p>
<p>BUDGET QLIBERATOR £25.00 Excellent value, compiles virtually all of superbasic but without some of the additional facilities of its full version. Not mouse controlled. Works on unexpanded QL too.</p>	<p>MEGAToolKIT EPROM VERSION £25.00 £40.00 Large toolkit with over 200 BASIC extensions, suitable for use with QLiberator or Turbo. Many examples supplied, extensive manual. Suitable for unexpanded QL.</p>	<p>SCREEN DAZZLER £15.00 Unlike the usual screen savers, which simply turn off the display when the keyboard is not used for a while, this one can activate various graphical displays to provide an attractive means of preventing screen burn-in, more like the screen savers on other computers. If you have a compiler, you can even write your own savers by following the instructions in the manual. Pointer environment compatible.</p>
<p>DJToolKIT £10.00 Compact toolkit of BASIC extensions, ideal for use with QLiberator. Really useful programming commands, can be distributed with your compiled programs if you wish. At this price, a bargain! Suitable for unexpanded QL.</p>	<p>DISCOVER £20.00 The painless way to move files from QL to PC and vice versa. As simple as copying files between two disks. 256k ram min., disk only.</p>	<p>SCANNED CLIPART 1 £10.00 NEW! A disk full of compressed scanned pictures (decompression program supplied of course) which can be used in most QL programs (DTP, graphics, etc). Assorted collection, containing many pictures you may not find in other collections. Large number of pictures, a bargain at this price. 128k, disk only.</p>
<p>LINEDESIGN £100.00 Vector drawing package, uses outline fonts and clipart, move and resize text and graphics without loss of quality. Ideal for making posters, etc. Supplied with huge range of fonts and clipart on TEN disks! The more memory your system has, the better! Available on disk only, can be mouse controlled (including SERmouse).</p>	<p>MULTI DISCOVER £30.00 In addition to Discover facilities, also contains CPM, Unix CPIO, BBC micro and now Spectrum and SAM Coupe file transfer capability. 256k min. ram, disk only.</p>	<p>PRINTERMASTER £20.00 Select printer control codes quickly and simply from a menu to set fonts, page lengths, etc before printing from programs like Quill, etc. 128k, disk/mdv</p>
<p>DATA DESIGN 3 £60.00 Superb, fast pointer driven database with free form field structures, with the option of disk based for large files if required, or smaller files can be kept in memory for speed. You do not have to be able to program this version, but if you add the API package, it can be programmed from basic, C, or assembler. Expanded memory required, disk only.</p> <p>API for Data Design £20.00</p>	<p>TEXTIDY £15.00 Assists Discover with conversion of text files by stripping out control codes, etc. 256k ram min.</p>	<p>SERMOUSE £40.00 Albin Hessler's serial mouse driver software for the QL is now available from DJC complete with a QL style matching black mouse with 9 pin serial connector and UK style serial port adaptor lead. Version 3 driver software. Can now work with The Painter too. NB POSTAGE CHARGES BELOW</p>
<p>QPAC2 £39.95 Tony Tebby's superb pointer environment package. In addition to the pointer environment files themselves, this includes tutorials, extensive manual, files menu, channels and jobs menus, easy switching between jobs, hotkeys, etc. Mouse or keyboard controlled, a good introduction to pointer environment. 256k ram minimum. disk only</p>	<p>CONVERT-PCX £10.00 Used with Discover, allows transfer of bit mapped PC clipart graphics in PCX format (a common PC file format) to QL screens or Page Designer pages. 256k ram, disk only.</p> <p>QL-PC FILESERVER £24.50 Link a PC and a QL via a serial port cable and use this software to enable the two to communicate - the QL can save its files on a PC's disk systems and print to the PC's serial port using normal basic commands like COPY. Works on unexpanded QL.</p>	<p>MAGAZINES, EX-CGH SERVICES Ask for a price list of back issues of QL Technical Review, QL Leisure Review and QL Adventurer's Forum (all available at time of writing).</p>
	<p>BANTER £25.00 Simple to use banner maker which uses outline fonts for good quality large text. Prints sideways across up to 4 sheets of paper. Simple to use, menu driven, on screen preview before printing, etc. Suits most Epson compatible printers.</p>	<p>SQUIDQY ROUND THE WORLD £12.50 An arcade game, ideal for the young at heart! 128k</p> <p>5-GAMES PACK £12.50 5 'thinking' games in one bargain pack. 128k</p>

SUPPLIES

FLOPPY DISKS	£0.40
DSHD DISKS	£0.70
MICRODRIVES	£2.50
DISK LABELS	£2.00
On printer roll	£2.50
ADDRESS LABELS	£2.00
MDV LABELS	£2.00
MOUSE MATS	£2.50
Disk box dividers	£3.00
in stock once more!	

TERMS: Discounts - buy 2 programs, claim 5% off each, buy 3 or more, claim 10% off each program. Offer applies to software only. **POSTAGE** - Software is sent post free to UK addresses. Overseas please add £1.00 per program for postage (maximum £3.00). Floppy disks and serial mouse - add postage of £2.50. Labels/mouse mats - add postage of £0.50 per item if only buying these. **PAYMENT** - in UK currency (pounds sterling) only please. Payment by cheque, Eurocheque, Postal Order, cash (send by registered post), or by credit card (Visa! Mastercard! Eurocard! Connect). In case of difficulty contact us first to arrange a payment method if none of these is possible for you. Please make cheques, etc payable to DILWYN JONES COMPUTING (not to any other name or abbreviation please, our bank prefers it that way!).

SCRABBLE

This program was released on the QL sometime in 1986, but has been out on other home computers and in the original (board game) version for much longer than that.

As with other computer versions, Scrabble on the QL fails to achieve the same atmosphere as the original simply because there isn't the rattling around of the pieces, the rapid scrambling for the dictionary, and it is just too easy to see the racks of the other players. The main problem is that when there is more than one player, although a key must be pressed before the next player's rack is shown, allowing the players to swap over without seeing each other's racks, unless the other players leave the room or turn their backs whilst you make your move, then your rack is on screen for all to see. Even in the one player version, the QL's rack is displayed on screen whilst it makes its move, although it is generally too quick for you to remember what is on it.

There is a set maximum of four players, each of which the QL can play, each at a different level of play. At level 2 the computer is quite a formidable opponent, and certainly on level 4 it should prove pretty difficult for even the best players to beat. The dictionary supplied with the game is not all that large, but contains quite a scattering of odd words which will enable the computer to get the maximum points out of its seven letters. One oddity however is that the dictionary contains a few US spellings of words also (such as 'AX') which can prove beneficial, but a little annoying to those of us who were brought up in Britain with the correct spellings of words (I wonder how people would cope had they been taught the phonetic method of spelling which seems to be advocated in primary schools nowadays).

The game is easy enough to play. After a few initial questions, each player is given seven letters to play around with. The computer decides who is to start, and they must then come up with a word to place on the board. To help you decide which word to use, there are hint and juggle options which will either find a word from your available letters for you, or just mix up your letters randomly in the hope that something comes

to mind.

Once you have chosen your word, you enter the word and then move the cursor across the board to the word's starting place. You then press a key to place the word across or down the board, and if it will fit, it is then printed on the board. Unfortunately, if the word does not fit, you are not given the option to move the cursor again, but must re-enter the word.

You are then told the score given by the placement of that word, and must decide if that is the word you wish to place on the board. If so, the word is then checked against the dictionary to see if it is valid and the next player can then take his turn. Unfortunately, this gives a big opportunity to cheat, since if you say Yes the word does exist, then it is accepted by the computer as valid even though it is not in the dictionary. An understandable limitation I suppose.

The game is very well represented on screen, with excellent depiction of quite a large font for each letter (not very much of a jagged edge in sight). Each tile on your rack is shown with its score, and each coloured square and their score (eg double word, triple letter) is shown in all its glory on screen.

The game is a pleasure to play, but can never replace the original board version. However for those of us without a human opponent, this makes a most welcome adversary.

Rich Mellor

[Ed: This section of the magazine contains reviews of software now only available through the second hand software market. If you have come across a program not now marketed by any supplier and you think it is worth a look at we will be happy to accept an A4 page review of the program. Please write or phone to see if we have already received a review for publication.]

SCRABBLE
by
LEISURE GENIUS

SUPER TOOLKIT II - PT VI

This part of the notes cover a set of output (**PUT** and **BPUT**) and input (**GET** and **BGET**) commands each of which gives access to two features of QDOS that were previously unavailable through SuperBASIC.

The syntax of each of these commands is the same and so **BPUT** will be used as an example:

```
BPUT #channel \position, items
```

In the case of **BPUT** items is a series of bytes (integers in the range 0 to 255) to be written to the channel. These items may be constants (eg 2) or they may be integer (eg num%) or floating point variables (eg value) or expressions (eg 2 * num% and 4 + value) that evaluate to a value between 0 and 255. The items are written to a file or read from it in internal format eg 255 is not written as the characters 2 5 and 5 as is the case with **PRINT** but as a single byte (or character). This feature is explained in detail in sections 12.1 and 12.2.

position is the offset (in bytes) from the start of the file to which the data is written to (**BPUT** and **PUT**) or read from (**BGET** and **GET**). Thus, these commands give SuperBASIC the ability to manipulate direct access files. This is covered in the next section.

12 Direct Access Files

Most people will be familiar with the basic methods used for reading data from a file: opening the file for reading, and reading data from the file either until the end of file marker is reached or a particular piece of data has been read, then the file is closed. For example, if the file files_txt contains file names and the number of the disk on which each file is located. The records in the file are in the form filename nn, where filename is padded with spaces to 36 characters and nn is the disk number between 01 and 99. The following program would locate a given file:

```
100 INPUT "Filename: "; SearchFile$
110 chan = FOP_IN (files_txt)
120 REPEAT ReadFile
130 IF EOF (#chan) : PRINT SearchFile$; ' not found' : EXIT ReadFile
140 INPUT #chan, FileRec$
150 IF SearchFile$ INSTR FileRec$
160 Disk = FileRec$ (37 TO 38)
170 PRINT SearchFile$; ' is located on disk '; Disk
180 EXIT ReadFile
190 END IF
200 END REPEAT ReadFile
210 CLOSE #chan
```

That is alright if you have a fairly short list which isn't accessed very often. In the example above the files_txt is likely to be quite long: it contains details of 99 disks with perhaps an average of 25 files on each; almost 2500 lines. On average it will take 1250 searches to locate a given file. In this case it is better to order the list of files by the file name so that the beginning of the file might be:

ABACUS	02
ABBA_HOB	02
ARCHIVE	01

It is possible to use direct access techniques to speed up the process of searching ordered files. Take for granted at the moment that **GET #chan \n** will position the file pointer n bytes on from the start of the file. A simple direct access version of the earlier program would be:

```

100 : REMark record length includes one character for line feed (QDOS end of line)
110 :
120 RecLen = 39
130 :
140 : REMark Start half way through the file
150 :
160 NoRec = FLEN (\files_txt) / RecLen
161 :
162 : REMark Pos is the number of the record (line of data in the file)
163 : REMark that is being looked at - between 1 and NoRec.
164 : REMark Inc is the number of records that the files pointer is moved
165 : REMark by if a match is not made.
166 :
170 Pos = INT (NoRec / 2 + .5)
180 Inc = Pos
190 chan = FOP_IN (files_txt)
200 :
210 INPUT 'Filename: '; SearchFile$
220 REPEAT ReadFile
230   IF Pos < 1 OR Pos > NoRec
240     PRINT SearchFile$; ' not found'
250     EXIT ReadFile
260   END IF
270   GET #chan \ (RecLen * (Pos - 1))
280   INPUT #chan, FileRec$
290   IF SearchFile$ INSTR FileRec$
300     Disk = FileRec$ (37 TO 38)
310     PRINT SearchFile$; ' is on disk '; Disk
320     EXIT ReadFile
330   END IF
340   :
350   Inc = INT (Inc / 2 + .5)
360   IF SearchFile$ > FileRec$
370     :
380     : REMark Look nearer end of file
390     :
400     Pos = Pos + Inc
410   ELSE
420     :
430     : REMark Look nearer beginning of file
440     :
450     Pos = Pos - Inc
460   END IF
470 NEXT ReadFile
480 END REPEAT ReadFile
490 CLOSE

```

Note this program is only meant to illustrate the use of direct access files. It would require many additions to make it more useful and more robust. As you can see the program is now larger and more complex but, with 2500 records the maximum number of searches needed to locate a file is now twelve. Note that lines 230 to 260 are needed because an attempt to move the file pointer past the end of file does not produce an error but points to the end of file. Likewise with the beginning of file.

Now that the benefits of direct access files can be seen I shall explain the facilities provided by TKII in more detail.

12.1 Byte Input/Output

BGET is used to get any number of individual bytes from a file from in internal format. Optionally the position in the file to which the data is written may be specified. position. **BGET** could have been used in the example program above to the same effect. In that situation it is being used just to position the file pointer. No items were read. That was done by the **INPUT** statement that followed. For example,

```
chan = FOP_IN (flp1_boot)
BGET #chan \12, a%, b%
CLOSE #chan
```

would read the 13th and 14th bytes from flp1_boot as the position is quoted as an offset from the beginning of file - the first character is at offset 0. The variables a% and b% would contain values between 0 and 255 inclusive. If these instructions were performed on my boot disk then a% would be set to 49 and b% to 48 as these are the ASCII codes for the characters '1' and '0'.

If, rather than specifying the file position as a constant, it is specified as a variable eg,

```
chan = FOP_IN (flp1_boot)
n = 12
BGET #chan \n, a%, b%
CLOSE #chan
```

on completion n will be set to 14 - it has been updated to the new position of the file pointer: the next data read will start at an offset of 14 from the start of the file.

BPUT writes bytes to a file and has the same syntax as **BGET**. As explained in the **TKII** manual, **BPUT** can be used to send data to devices such as serial ports to initialise a printer for example.

12.2 Unformatted Input/Output

A command is also provided to write (**PUT**) and read (**GET**) the standard data types of integer, floating point and character string in their internal formats and optionally to a specified position in a file. Integers are written as two bytes rather than upto five bytes if **PRINT** is used. For example,

```
chan = FOP_NEW (flp1_test_dat)
PUT #chan, 400
CLOSE #chan
```

will write the number 400 in its internal format to the file. If the two bytes are read back from the file using **BGET #chan a%, b%** then it can be seen that the number 400 has been stored as the two bytes 1 and 144 ie $400 = 1 * 256 + 144$. Any integer may be read from a file using **GET #chan, a%**.

If the floating point number 400.0 is written to a file then four bytes are used eg.

```
number = 400
chan = FOP_NEW (flp1_test_dat)
PUT #chan, number
CLOSE #chan
```

To see how the number is stored now it is necessary to read back four bytes (**BGET #chan, a%, b%, c%, d%**). In this case the bytes will be 8, 9, 100 and 0. If floating point numbers are stored using **PRINT** they can use up to 8 bytes (10 if **PRINT_USING** is used). The same number is stored to the same precision using only 4 bytes if **PUT** is used.

GET and PUT may also be used to retrieve and store a string in its internal format. That is, two bytes giving the length of the string followed by the characters. eg 'Lynne' would be stored as the bytes 0, 5, 76, 121, 110, 110 and 101. The first two bytes give the length: $0 * 256 + 5$, the rest are the ASCII codes for each of the characters in the string.

As well as possibly saving space GET and PUT can also be used to used for direct access files as explained with BGET and BPUT. The only differences are that BGET and BPUT handle single bytes and GET and PUT handle the standard data types.

12.3 Truncate Files

It is possible to truncate an open file either to the current position of the file pointer or to a specified position. For example, the following would ruin my boot file:

```
OPEN #3, flpl_boot
BGET #3, a%, b%, c%, d%
TRUNCATE #3
CLOSE #3
```

Afterwards the file would be just **1000** - the first four characters.

If instead the following had been performed:

```
OPEN #3, flpl_boot
TRUNCATE #3, \20
CLOSE #3
```

my boot file would consist of **1000 : REMark System**.

12.4 Flush Buffers

The command **FLUSH** is used to ensure that a file is updated without having to close it. QDOS only writes to a file periodically so at any moment in time a file on disk that is open may not contain all the data that has been written to it. **FLUSH #3** will ensure that the file to which channel 3 is opened is updated.

FLUSH would also be used for communications over the network if for example a program is trying to write data and read data over the network at the same time. The network only allows communications in one direction at a time. Although channels may be open for sending data in both directions it would be necessary to **FLUSH** one channel before sending data on the other.

12.5 File Position

The function **FPOS** returns the position of the file pointer for a channel. Note that the example in the TKII manual has an error: it should read:

```
PUT #4 \102, value1, value2
```

The example as printed could not be entered into the SuperBASIC editor. If a comma had been put between #4 and 102 then the integer 102 and the floating point numbers value1 and value2 would be written to the file and FPOS would return 14 (2 for integer plus 6 each for the floating point numbers).

COMPARISON WITH OTHER PROGRAMMING LANGUAGES

	SuperBASIC	Pascal	C
Write data in internal format (1)			
byte	BPUT #3, ByteNum%	Write (fp, ByteNum)	fprintf (fp, ByteNum)
integer	PUT #3, IntNum%	Write (fp, IntNum)	fprintf (fp, IntNum)
floating point	PUT #3, RealNum	Write (fp, RealNum)	fprintf (fp, RealNum)
Read data in internal format (1)			
byte	BGET #3, ByteNum%	Read (fp, ByteNum)	scanf (fp, ByteNum)
integer	GET #3, IntNum%	Read (fp, IntNum)	scanf (fp, IntNum)
floating point	GET #3, RealNum	Read (fp, RealNum)	scanf (fp, RealNum)

(1) Both Pascal and C use the same commands for writing data in internal format as for writing it as ASCII. To differentiate in Pascal the file pointer, `fp`, is defined with the type `text` if ASCII data is to be written. In C a file is opened differently (`fp = fopen ('flp1_data', 'r')` to read an ASCII file and `fp = fopen ('flp1_data', 'rb')` to read a binary file).

Stephen Bedford

[Ed: The previous articles in this series have been published in QL Technical Review, back issues of which are available from Quo Vadis Design.]

COMPETITION

Win a copy of **Perfection**, Digital Precision's lightning fast word processor in this joint QReview and Digital Precision competition.

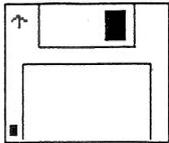
Digital Precision is offering a copy of Perfection word processor worth £59.99 to the reader who can submit the most enterprising Editor Command File.

What can an Editor Command File do? Literally it can be used to format anything. Two of the many uses of this programming language have been to assemble a file loaded in the Editor and to translate a Superbasic program loaded in the Editor to C.

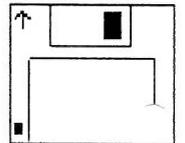
Submissions for the competition will be Judged on their usefulness and then technical merit, the competition winner will be chosen by Bruce Nicholls. Any submissions to the competition may be used in the magazine. If enough submissions are received, a Public Domain disk compilation of the command files may be collated. Please indicate if you would allow your command file to be included in such a disk.

Please send your submissions on microdrive or 3.5" DD disk format with an accompanying Editor file detailing its use, please include any demonstration files if needed, and send it to QReview Editor Competition, Quo Vadis Design, 57 Shaftesbury Road, Romford, Essex, RM1 2QJ. If you wish to receive your disk or microdrive back please enclose a SAE. The closing date for submissions is November 30th 1993, enough time to get writing. The winner will be announced in QReview Issue 3.

Why the Editor? Editor SE can do a few things Perfection can't, so the ideal combination is to have both. As a result, if you order Editor SE at the same time as Perfection, you can get Editor SE at half price (the normal price is £49.95).



QUBBESoft P/D



38, Brunwin Road, Rayne, Braintree, Essex. CM7 5BU.

Tel No: 0376 347852

Public Domain & Shareware Software

C68 Compiler Runtimes (3Disks).....	£3.00p
C68 Compiler Source Code (2 Disks).....	£2.00p
MicroEMACS V3.11 (2 Disks).....	£2.00p
GNU Text Utilities (2 Disks).....	£2.00p
QL Emulator for AMIGA V3.20 (3 Disks).....	£3.00p
SPECIAL 1 Q.A.T.S.....	£1.00p
SPECIAL 2 Molecular Graphics V5.09.....	£1.00p
SPECIAL 3 XLisp V1.4a.....	£1.00p
SPECIAL 4 QPACer.....	£1.00p
SPECIAL 5 'C' Tutorial.....	£1.00p
SPECIAL 6 Lib QPTR V2.00.....	£1.00p
SPECIAL 7 Lib CPORT V1.21.....	£1.00p
SPECIAL 8 QRactal Screens Demo.....	£1.00p
SPECIAL 9 QL Home Finance.....	£1.00p
SPECIAL10 ZM1+ SPECTRUM Emulator.....	£1.00p
SPECIAL11 Lib CURSES V1.01.....	£1.00p
SPECIAL12 ELVIS Editor V1.6.....	£1.00p
SPECIAL13 Txt 'N' Graphix (Demo).....	£1.00p
SPECIAL14 'C' Programming Tools 1.....	£1.00p
SPECIAL15 'C' Debugging Tools.....	£1.00p
SPECIAL16 Ergon Development (Demo Disk)..	£1.00p
SPECIAL17 Ger -> Eng Wordlist.....	£1.00p
SPECIAL18 QDesign (Demo).....	£1.00p
SPECIAL19 Dave Walker (Demo Disk).....	£1.00p
SPECIAL20 DBAS Database.....	£1.00p

PD Disks 1 to 13.....£1.00p ea.

(Each PD Disk contains 10 programs and a Menu Handler. Each Disk contains a BOOT program that RUNS the Menu. Each program can be RUN from the Menu unless otherwise stated).

All Disks are 3.5in DS/DD. ED & HD can be catered for but User must supply Disks.

P&P for PD & Shareware

Quantity.	U.K.	Europe	Z1	Z2
1 - 3	£0.50	£1.00	£1.50	£1.75
4 - 6	£0.75	£1.50	£2.00	£2.25
7 - 9	£1.00	£2.00	£2.50	£2.75
10 - 12	£1.25	£2.50	£3.00	£3.25
13 - 15	£1.50	£3.00	£3.50	£3.75
16 - 18	£1.75	£3.50	£4.00	£4.25
19 - 21	£2.00	£4.00	£4.50	£4.75
22 - 24	£2.25	£4.50	£5.00	£5.25

UK = Speaks for itself.

Europe = All EEC and Scandinavian Countries.

Z1 = Middle East, Nth & Sth America and Canada.

Z2 = Australia, New Zealand, Japan and Rest of World.

Catalogue

S.A.E. (A5 Size) or International Reply Coupon.

New QL Hardware

QEP 3 EPROM Programmer:- Will program 2716 to 27512 5V MOS & CMOS Eproms. A4 Manual inc. £120.00p

Trump Card :- 768K RAM, Toolkit 2, Disk Interface, Dynamic RAM Disk, A4 Manual. £95.00p

ExpandeRAM :- 512K of RAM with thru port to connect other peripherals (i.e. Disk I/face, Eprom Board). £45.00p

ExpandeRAM :- 0K of RAM, as above except User supplies RAM chips (8=256K, 16=512K). £20.00p

Twin 3.5in Disk Drives :- Fully cased with internal P.S.U., 720K formatted capacity per Drive. £100.00p

2nd User QL Hardware

QL's (JS/JMROM Version's).....	From £35.00p
Disk Interfaces.....	From £25.00p
Memory Expansion.....	From £30.00p
Disk Drives (Twin 3.5in).....	From £75.00p
Disk Drives (Single 3.5in).....	From £50.00p
Printers (9 Pin Dot Matrix).....	From £55.00p
Monitors (Green Screen).....	From £35.00p
Monitors (Colour).....	From £75.00p
Toolkit 2 (Plug in ROM type).....	£15.00p

2nd User QL Software & Miscellaneous Items

QL Related Books.....	Under Half Price
QL User & QL World Back Issues.....	75p ea
QUANTA Back Issues.....	40p ea
Used Microdrive Cartridges.....	80p ea
New 3.5in DS/DD Disks.....	40p ea

All types of Commercial Software including Games, Front Ends, Utilities etc, etc., too many to list here.

P&P for New QL Hardware

Item.	U.K.	Europe	Z1	Z2
QEP 3	£2.00	£3.00	£4.00	£5.00
Trump Card	£3.00	£4.00	£5.00	£6.00
ExpandeRAM	£1.50	£2.50	£3.50	£4.50
Disk Drives	£5.00	£7.50	£10.00	£12.50.

P&P for all other QL Items

Please Telephone or write for details.

Payment Methods

Cheques (in UK Pounds drawn on UK Bank), Postal Orders & Int. P.O.'s payable to:- QUBBESoft P/D.
Eurocheques payable to :- R.Dunnett
Cash in UK Pounds is also acceptable.

SUPER DISK LABELLER

The sales-pitch legend on the front page of the 20 page manual accompanying the one-disc program is as follows:-

- CREATE TIDY LOOKING LABELS
FOR YOUR QL DISCS TO
ORGANISE YOUR COLLECTION
QUICKLY AND NEATLY -

One is obliged to give some thought to the comparative value of anything that is being considered for purchase. In the case of this program one cannot help but reflect upon the relative cost inasmuch as the expected outcome is to be only the rather singular production of a printed label for a disk. Deeper reflection however, brings to mind that quite a number of us seem to have, despite our own earnest endeavours otherwise, a rather wandering hand when it comes to writing and particularly so when trying to write legibly in a small, tidy script.

Dilwyn Jones, co-author with Imre Dominik, on page 15 of the manual writes, '...that it proves to be a valuable utility to you that pays for itself in terms of the convenience and organisation and time saving it brings about.' I have to say that, you'll hardly credit the relief obtained when your conglomerate mess is transformed into a well-ordered library of easily managed and readable disks. The cost must therefore be a subjective one to be weighed against what you personally will get from the program.

What you get is:

Reconfigurable printer drivers and label sizes.
Several label styles and layouts.
Ability to add your own text and headings.
Reads filenames from disc directories to make into labels automatically and without fuss.
Print sleeve inserts.
Print full page lists for a hardcopy catalogue.

There is an index at the back of manual on page 20 which is quite extensive but for some reason there is no table of contents. Herewith:

page 2 = Introduction - Making a backup copy.
page 3 = Configur'n - Taskmaster - Printer-driver select.
page 4 = Menus.

page 5 = Quick label
page 6 = Sleeve Insert - Files Tidy List.
page 7 = Label-list of Filenames - Select Drive - Self Select'n.
page 8 = Sorting - Grouping - Removal of - Label Making.
page 10 = View/Edit Label.
page 11 = Printouts - Backup/Format - Menu Printer-driver.
page 15 = APPENDIX 1 - The Menus.
page 16 = APPENDIX 1(sic) - Sample printouts-labels-inserts-lists
page 18 = Printer Control Codes.

On inserting the disk and powering-up the program loads and activates automatically. The user is presented with a full-screen Main Menu giving five choices plus ESC (fig 3.0).

The five choices are activated with the function buttons, F1 thro' F5. F1 to F4 provide other menus and F5 on the F4 menu goes to yet another sub-menu. All six menus are shown in the manual and their purpose very thoroughly explained as per the above contents.



Fig 3.0

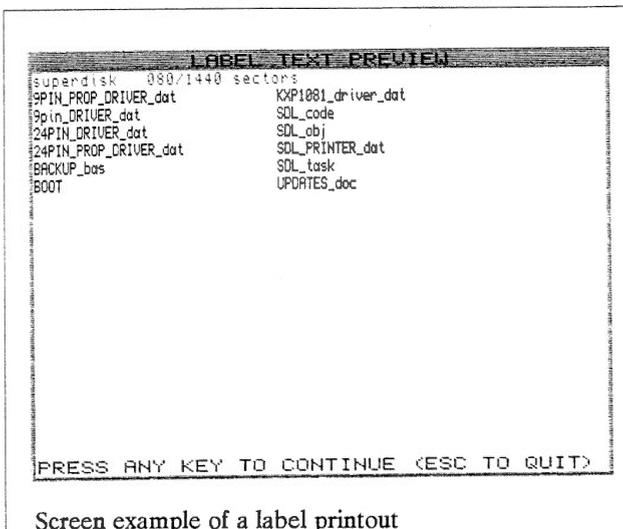
Happily, the thoughtful authors have given you the chance to get immediate results from the Main Menu using F5 = Quick Label, providing a facility that allows you to 'press a button' that produces a print-out of a label of filenames from the directory of the disk presently in your drive, ie., this program and its support files.

The program provides the ability to produce, as well as the normal disk labels, sleeve inserts and file tidy lists. Sleeve

inserts are the same size as the disk and can display more filenames than is possible with a normal label. File tidy lists are a master list of files on the disk printed onto a whole page, just the thing for a master disk index.

When producing a label you are giving the opportunity to decide in which order the files are printed on the disk. This can be either in alphabetic order, grouped by extension names, grouped by first characters or ordered manually. The options to print a label are extensive and should suit all the label types you could ever want to print.

However, the most important job you have to undertake is customising the printer-driver and this is done by invoking function key F4 on Main Menu, (Printouts & Printer-Drivers) then invoking the function key F2 on the subsequent sub-menu, (Customise Printer Driver). You are presented with a screen having seven red strips which themselves contain codes etc. pertinent to what you require for your particular label, such as the Default drive, Printer port, Baud-rate, end-of-line CR/LF, Preamble(up to 20 codes), Postamble(to 20 codes), the meaningful Name(up to 40 characters long), you are giving to this particular driver. At this point the manual advice is to have already planned your driver requirements on paper. It also says, (page 12), that a sample driver hardcopy is at the end of this manual; there isn't, but

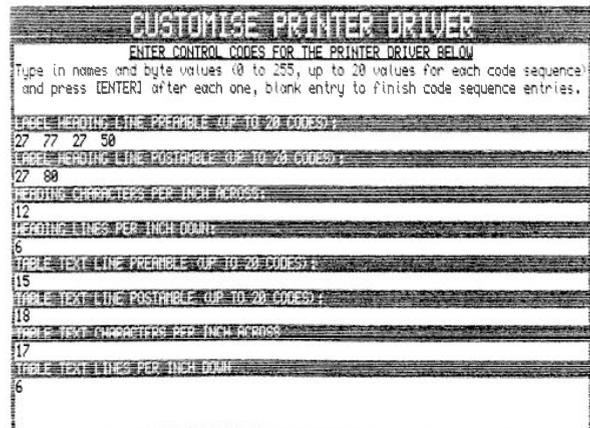


Screen example of a label printout

there is a list of common printer control codes.

Having successfully entered the codes on

this screen you are asked if this is satisfactory, y or n, and n will take you back to the beginning and y will flash up the second of the four screens needed to complete this task. Understanding the label

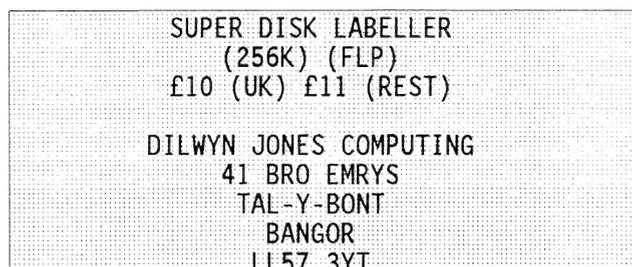


Customising a printer driver

requirements might be easier if you think of nested windows so that each label on a roll is one small window on a larger, the point of origin being at the top left side corner and measurements taken from that so that printing takes place within that measured area subject to careful thought on what space is taken up by the actual 'type' you have chosen. Pica is 10 chars. per inch, Elite is 12, Condensed Pica is 17 and Condensed Elite is 20. Then you must choose the line-spacing in relation to the size of 'type' the standard being 1/6 ie., 6 lines per inch. It goes without saying that you must also peruse the manual of your printer to establish just what it is capable of. Build and save several drivers.

Dilwyn Jones in the manual, says that customising a printer driver is a horrible job; I found it fascinating; it's what takes your fancy I suppose.

John Reeves



ADVENTURE PLAYTIME

This adventure was Written by ALAN PEMBERTON and is available from Public Domain Libraries.

OK so let's get in there.....

You are about to enter a strange world, unusual for an adventure, but first of all to help get you there, the Pizza man cometh, I do hope you ordered extra toppings. Nice door here isn't it, so in we go then, the adventure play area is open for your inspection. You can explore the pleasant lane, go to the village, pop into the library (take my book back will you, and get me a copy of "Solution to Anelpum Quat" thanks).

Well all this exploration is all very well but you soon realise that you cannot ignore all the people you meet: the tourist, the fluffy rabbit etc. Besides there is the Castle to go to, and the Fair ground as well as the Adventure to complete.

All in all this is great fun with plenty of humour to keep you going during

```
Home
*****
* Adventure Playtime *
* @ A. Pemberton, 1986/7 *
*****
You are at home .
It is cold and damp. The wallpaper
is peeling off the walls and the
carpet is rotting, but never mind...
there's a feeling of adventure in
the air.
You see :-
    a note
    a pizza
    your front door
>+
```

your stay. Alright, what about some help, some hints to help a weary traveller. Just a moment, oh very well anything for a quiet life, any way I'd like you to complete this as the end of this adventure is brilliant, you will

be well surprised.

As with all adventures examine everything. There is even an 'adventurer aid', and you will need all

```
Home
>read note
It is written in a beautiful flowing
hand, reading ...

Dear Thrillseeker (?!),
No 50 page novella to wade
through before you can start on this
adventure (thank God!). Your task is
simple, just this...
My imaginary world has recently
been plagued by a band of hapless
characters who are having great
problems in completing their respec-
tive quests and tasks.
Their anguish has caused me many
sleepless nights, until I have come
to the point where I need someone to
enter that world and restore some
sort of sanity.
```

you can get. You need the plank to get into the castle as the door is locked and the prisoner will be pleased to see you. The Questor will need something, why is he a gardener then? What about the scrolls (painful, sorry I'll skip the jokes), read this carefully you will need it later. The map? Well guess who needs that apart from the obvious, and when seven bells doth toll then get in there through that magic door, you will need help here, perhaps a nasal intake will be alright, I'm feeling funny, really funny, but that's another story. So here we are then chatting to an urban guerrilla then it's off to the fair. Great fair this isn't it? I've been all over, got some candyfloss and a sloffee tapple, sorry but while you've been sorting out what to do I got bored, I'll get rid of this toffee. Not sure about that cannon are you? Well let's try, oh wow let's goooo. So here we are on a beach at last and let's find the postman and get the box and we can go home.

That's all from me on this one.

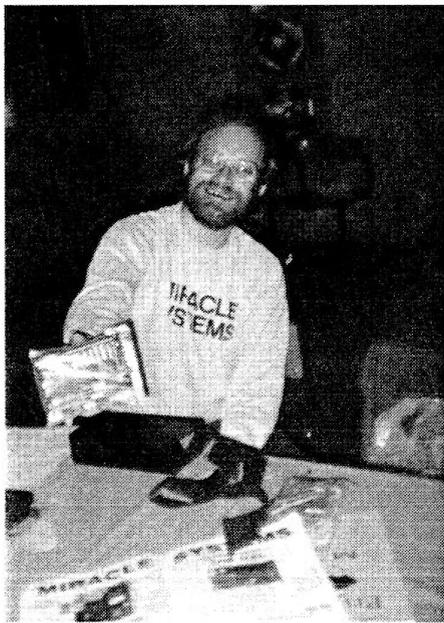
MIKE TUPPENNEY

INTERNATIONAL QL MEETING

This meeting was held on February 27th 1993 in Eindhoven, The Netherlands and attracted visitors from all over Europe. Fourteen of us travelled from England and spent an enjoyable weekend on the continent.

Exhibitors at the show included Digital Precision, Jochen Merz, TF Services, W.N. Richardson & Co, Miracle Systems Ltd, Qubbesoft, QL World, PROGS, Jurgen Falkenburg Computer Technik, Ergon Development, Cow Electronic, Albin Hessler Software, Quanta, Sin-QL-Air, the German Sinclair User Group, QItaly, International Freeware Exchange, and several second hand dealers.

Pride of place at the show no doubt had to go to Miracle Systems, showing their new QXL card, which



Stuart Honeyball of Miracle Systems with the QXL card.

allows PC users to have access to QL software on a PC by effectively putting a QL on a card which plugs into a PC, but uses the PC's disk drives, etc.

Qubbesoft have ensured that the QEPIII EPROM programmer formerly sold by Care Electronics is available once more for QL owners who wish to blow their own



Nathan Van der Auwera of PROGS demonstrates Linedesign.

EPROMs. Qubbesoft have been quite active of late and are quickly becoming a major player on the QL scene.

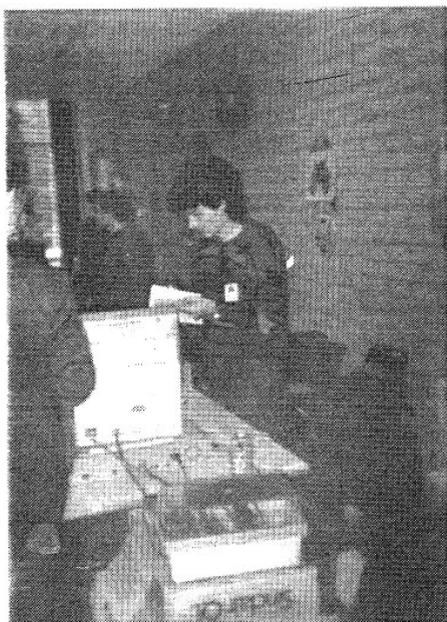
PROGS demonstrated their latest pointer driven software for the QL. The LineDesign program is an object orientated graphics program for the QL, where the text and graphics are held as 'objects' or 'outlines' rather than the bitmaps we are more used to, allowing scaling and repositioning of everything quickly and easily. DataDesign is now at version 3 and PROGS have acknowledged that not everyone used the programmability of the program, so the API (as they call the programming parts) is available separately now if you just want to use the main program as a simple to use pointer driven fast database with the option of memory based files or disk based files for databases where the files are too large to fit in memory.

Jochen Merz Software brought along version 5 of their editor, QD. They have also released version 4 of the

Menu Extension package, a superbly easy to use programming aid for users wishing to put together pointer driven programs with simple to program standard menus. Using this software, you can generate menus for pointer driven programs in minutes in some cases, leaving you free to concentrate on the rest of the program. Jochen has released a new program called HyperHelp to enable you to have on-line help available at all times, to remember the syntax of SuperBASIC extensions installed, for example.

Jurgen Falkenburg brought along his new QL-2000 system which is a new housing for the QL and add on cards. It has a built in power supply and you can add some of Jurgen's range of hardware such as his QL-BUS driver as well as more familiar hardware. Even the disk drives can be built in. The system looks good as well as putting everything in one convenient case.

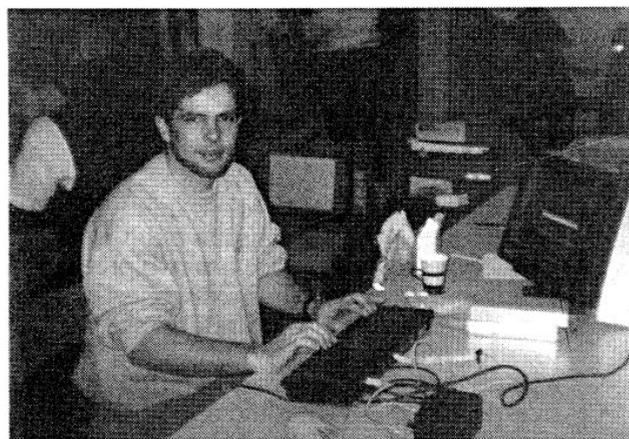
Readers may already be familiar with Italian company Ergon Development's ZX Spectrum emulators for the QL. They have now taken this a stage further with their ZM/hT Z80 to 68000 machine code compiler for the QL. It allows Spectrum software to be run much faster than on a conventional emulator, allowing a Gold



Jochen Merz tries to remember how to use his software.

Card to run Spectrum software at speeds approaching that of a real Spectrum rather than, for example, the 40% speed achieved by conventional emulators on most computers.

Cowo Electronic of Switzerland announced



URS KONIG of Cowo Electronic demonstrates QTOP V1.2

version 1.20 of their QTOP software and also announced the development of a second version of the ExeQTor machine. This new version will be based around a 386 PC board with the addition of the Miracle QXL card. Doesn't it warm your heart that whenever we QL users hear about PC's, the first thing we do is think of converting it to a QL compatible!!!

This show was well attended and I met many QL users from several countries whom I have heard of, written to and occasionally spoken to on the telephone. It was a real pleasure to meet these people in person and have a chance to talk to them, share experiences, try out new products and generally enjoy myself. Many visitors had also enjoyed the talks and lectures which were held during the day, with many eminent QL personalities discussing new products and generally talking about anything and everything QL. This is why you should consider visiting a QL show and joining an user group if you have not yet done so, you have everything to gain and you can make new friends with similar interests in the process.

Dilwyn Jones

TEXT87PLUS4 PUBLISHER/LINEDESIGN

How good is this combination ?

Well the first thing I must say is that this magazine is produced with this new combination. The graphics being produced in Linedesign and the text being produced in Text87Plus4 with the publisher's pack. So you can judge for yourself the quality of output that can be produced by these two programs.

The diagrams and text below detail how a sample page, supplied in the publishers pack, was created. There are two methods of combining text from Text87plus4 into Linedesign output. The first involves printing the text directly from Text87plus4 and then add the Linedesign output by overprinting. This method allows the use of the inbuilt founts of your printer which also gives faster text output. The second method, detailed below, involves sending the output

reduces the memory usage. If you use the large printer driver you have access to up to

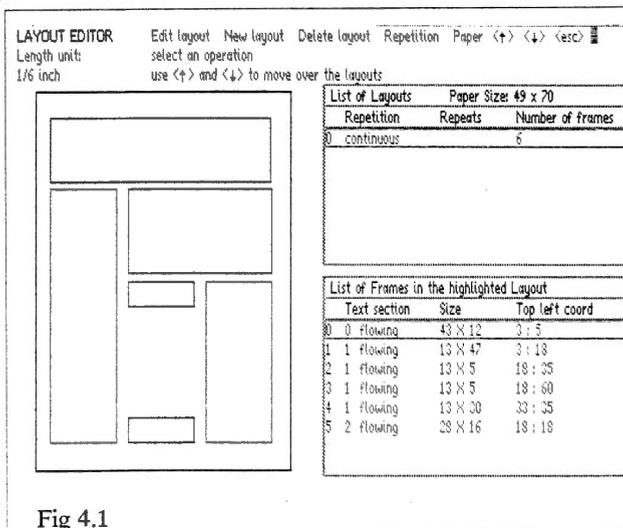


Fig 4.1

generated from Text87plus4 to Linedesign via a storage device. This is then merged into the graphics that have been created in Linedesign.

In Text87plus4 the founts that can be used in a document are defined in the printer driver. To allow the use of the founts supplied with Linedesign, ranging from Gothic script to Futuristic, two new printer drivers are supplied. Both contain all the founts supplied with Linedesign but one contains 4 sizes of each fount and the other contains only one size of each fount, this

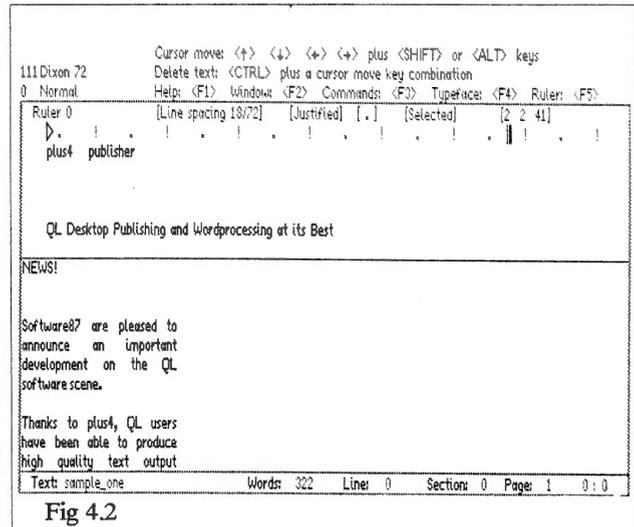


Fig 4.2

240 Typefaces !

In Text87plus4 the areas where text and graphics are to be printed are defined in a Page Layout. The Page Layout contains Frames which indicate where text and graphics are put on the page (Fig 4.1). A Frame can contain text or it can be left blank for easy placement of graphics within Linedesign. The Text is then created with the usual wordprocessing abilities such as line justification, tabs and fount changes (Fig 4.2). If at any time you need to visualise how your masterpiece will turn out you can use the Preview command in Text87plus4 to

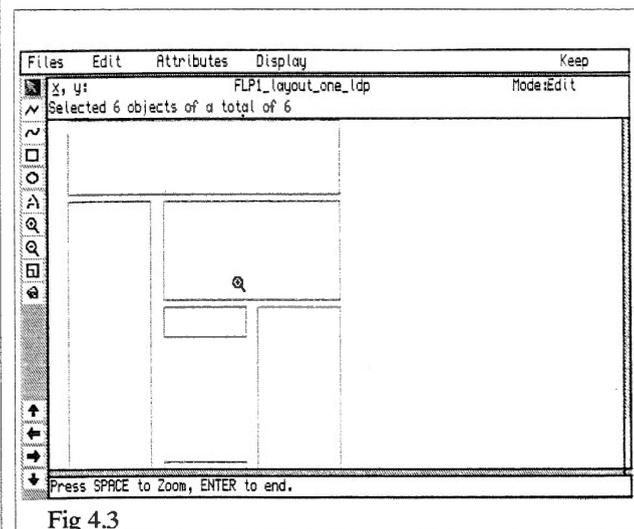


Fig 4.3

give a graphical representation of how the text and Frames are integrated on a page.

Once you are satisfied with the layout of your document you then have to transfer the Text and/or the Page Layout to Linedesign. This is performed simply by using the print to Linedesign command. This command gives you the choice of either transferring the text or the Page Layout. With both of the choices you can specify on what device the information gets written to, a ram disk is best. You then start to use Linedesign.

In Linedesign the Page Layout can then be loaded. The Frames within the Page Layout appear in Linedesign exactly the same as on the Text87Plus4 Page Layout screen (Fig 4.3). The Page Layout now loaded into Linedesign can then be used as a template to place any graphics or text special effects. The Frames, although they appear as real graphics, have an outline attribute of white meaning when you print the page out they do not appear on the printout unless they

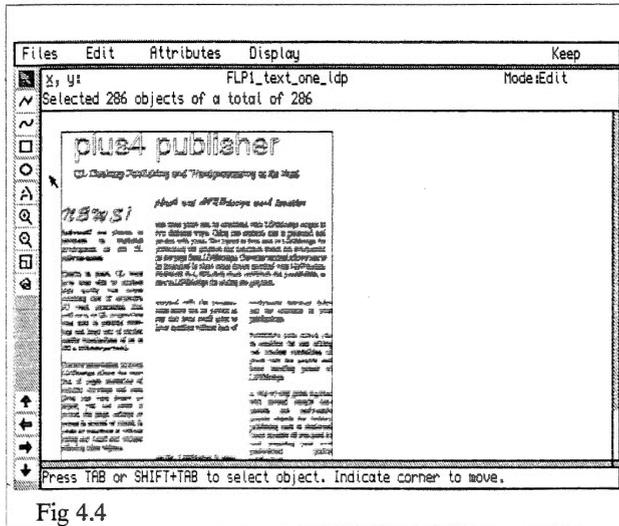


Fig 4.4

are printed over a black background. The attributes of the Frames can be changed to give a gray outline, black outline and/or filled with solid black or a gray scale.

Linedesign provides a range of graphic tools which, at the time of writing, includes a polyline tool, a polycurve tool, a square tool, a circle tool, a text tool. Tools for manipulating the graphics include a scale tool, a rotate tool, a move tool, and a magnifying tool. Other special facilities include options to slant an object (an object is any set of lines, curves, and text grouped

together), transform an object, move individual points of an object, combine objects and convert text to curves. All objects have attributes which can be changed. These attributes are typeface, size of font, filled, fill colour and outline colour. I have only listed the range of options available in Linedesign. To describe them further requires a much longer, indepth, article than this one but you can see from the host of options available you can design quite stunning graphics to include in your Page Layout.

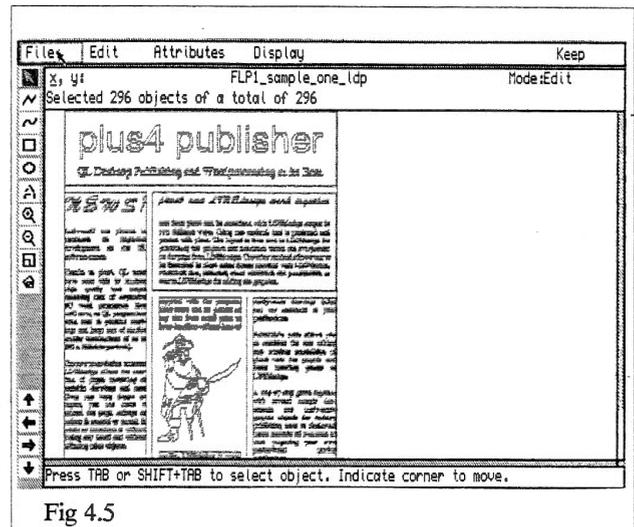


Fig 4.5

Once you have added the graphics to your Page Layout you can then merge the text file printed from Text87plus4 (4.4) onto your graphics. This gives the finished page of text and graphics (4.5) which can be printed at the maximum resolution your printer can cope with.

There you have it, quite simple really. If you are looking for high quality output from your QL I can thoroughly recommending this combination. Although I would recommend a Gold card is the minimum hardware you could easily run this combination on.

Bruce Nicholls

See Software87's Advert for more details of prices etc.

WHAT IS THIS POINTER THING ?

The Pointer Environment is a system which gives the QL an on-screen pointer to control software (the pointer can be driven by a mouse or by the cursor keys on the keyboard) and provides an extended environment to greatly improve performance from a user's point of view by, for example, saving and restoring the displays of the programs running when you press CTRL C. Imagine you have a word processor and an on-screen calculator. While typing a letter in Quill, you could press CTRL C which would bring up a calculator to add up a column of figures, then CTRL C to type this figure into Quill. What makes this system exciting is that as you press CTRL C, the system saves the display of Quill, the calculator jumps up over it (see fig below), when you CTRL C back to Quill, the system saves the display of the calculator and automatically tidies up the display by putting Quill's display back for you. The part which drives the pointer and looks after saving and restoring the displays of programs is called the Pointer Interface, which is usually supplied as a file called PTR_GEN. A second file, called

which program you were using at the time, pressing ALT C would load your calculator program. Or you could set up ALT Q to load a copy of Quill. The advantage is that unlike using a standard QL, there is no need to type CTRL C until you are back in BASIC and no need to have to type EXEC FLP1_QUILL, or whatever.

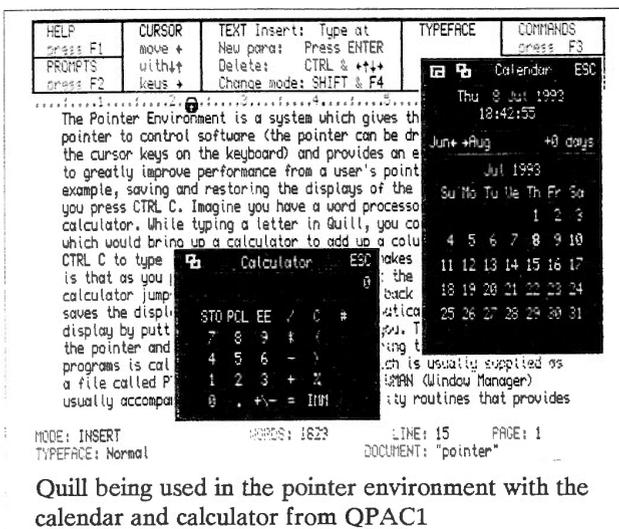
Using these commands you can load programs, install them in memory so that just by pressing a pair of keys you could start another copy of the program, put programs in a Button Frame (a list of program names which appears at the top of the screen to make it easy to select a program at a glance), or Pick a program - jump directly to it without having to type CTRL C until you reach the required program (sometimes it can be frustrating to use CTRL C several times if you have several programs in the QL at the same time).

There are also Hotkeys to stuff strings into the keyboard queue, recall the last line typed, or transfer strings from program to program via a Stuffer Buffer, which stores things temporarily for transfer to other programs.

There is also a system called Things, which is a system for defining and controlling areas of shared memory. It is so useful for such a number of applications that it is difficult to give it a specific name apart from it being a QDOS resource which can be used by almost anything which uses QDOS, hence the name THING. If you do not understand the concept, don't worry because it is mainly of interest to software writers.

That is one of the very pleasant aspects of Pointer Environment. It is designed to be used, you do not have to know every little technicality to use it. You only need to use those parts of it which are essential to your way of working and you can learn more and more about it as you go along. You don't have to learn everything in one go, but the more you use it, the more you learn and the more fascinating it becomes until one day you find that you cannot imagine using a QL without pointer environment. Learning it does not always come easy right at the beginning, but a little patience and effort is amply rewarded.

The vast majority of existing software which was not written to take advantage of the pointer environment will work within it, although they cannot be controlled by the mouse. The pointer environment can cope with Quill, Archive, Abacus and Easel, for example (a special set of commands is included to



Quill being used in the pointer environment with the calendar and calculator from QPAC1

WMAN (Window Manager) usually accompanies it. This is a set of utility routines that provides menu handling facilities to programs which have been written specially for the Extended Environment. It allows programs to be written in a manner which means they are reasonably consistent with each other in terms of appearance of menus (a menu is a list of items to choose from) and operation.

The extended environment also includes a system called Hotkeys. These are keys which, when pressed, cause an action to take place which is independent of the program being used at that moment. For example, you could set things up so that no matter

tame Quill's memory grabbing features!).

More recent software, including programs such as those from Jochen Merz, Albin Hessler, Dilwyn Jones Computing, PROGS, QJUMP, Liberation Software and Cowo Electronic all make use of the advanced features of the Pointer Environment and can be controlled by mouse or keyboard.

WHAT IS QPAC1 ?

QPAC 1 is a collection of little utilities which come in handy when using the pointer environment. It includes, in addition to the pointer environment files themselves (PTR_GEN, WMAN and HOT_REXT):-

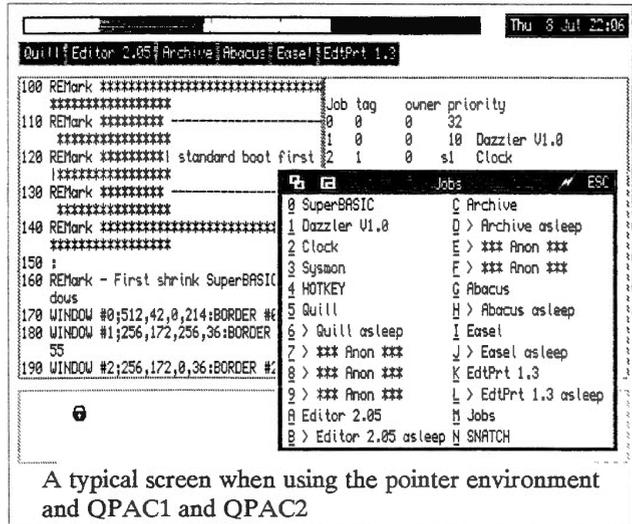
1. An on-screen digital clock
2. A popup calendar which works from 9AD to well into the future. You can flick from month to month display quickly and easily, or jump to another year and so on. It can be put into a Button Frame to be quickly and easily available (if you are not already familiar with the term, Button Frames are explained in the QPAC2 manual). Like all the QPAC1 programs, it can be mouse controlled (or keyboard controlling the pointer if you prefer)
3. A popup calculator which can pop up over programs like Quill for you to do a quick calculation, feed the result into a 'stuffer buffer' which can be recovered from another program by pressing ALT SPACE, to add the total of a column of figures in Quill, for example. It has the usual four functions plus percentage and 10 memories
4. An alarm clock can be programmed with a time and on-screen message to alert you to call someone at an arranged time, for example, or to remind you to stop using the QL to go and watch Coronation Street (sorry!), it can also give reminders at, say, 5 or 15 minutes before the actual alarm goes off
5. A typewriter allows you to type simply and quickly to a printer like an electric typewriter to save having to use a word processor for those short, simple jobs
6. Finally SYSMON is a system monitor showing memory usage and monitors the common heap.

WHAT IS QPAC2 ?

QPAC2 is NOT an upgraded version of QPAC1. So many people make that assumption that I decided to immediately make it clear. There is ample

justification for buying both QPAC1 and QPAC2 if required.

QPAC2 contains the Pointer Environment files PTR_GEN, WMAN and HOT_REXT explained above. Unlike QPAC1, QPAC2 contains a tutorial on



A typical screen when using the pointer environment and QPAC1 and QPAC2

using the pointer environment. An extensive manual and tutorial on the disk leads you by the hand into pointer environment and fully explains the Hotkey system and the BASIC extensions it offers.

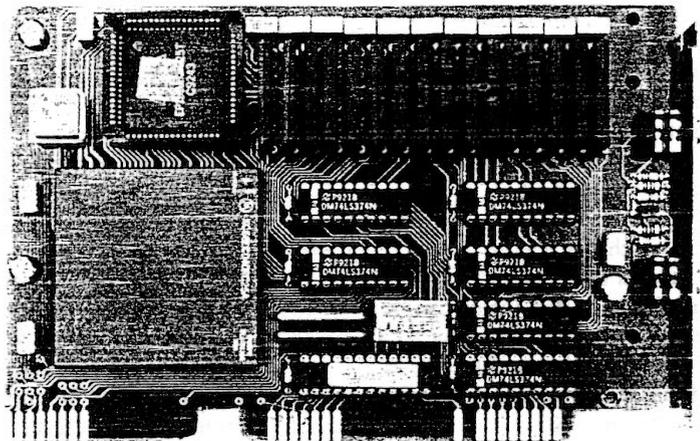
QPAC2 is a set of system control utilities, mostly implemented as menus within a program. They allow you to do things like set system defaults and mouse settings, control and use Things, execute programs directly, 'wake' programs, puts things into a Button Frame (a named list of programs appearing in strips on the screen for easy selection), job control menus, list and control hotkeys, give lists of jobs running, remove jobs, list channels used, and a comprehensive file handling menu allowing you to do things like view, copy, backup, update, move, print, execute, delete and format files and disks. A single program, QPAC2 itself, allows control of most of this. There is a large number of BASIC extensions as well.

If you want to make full use of multi-tasking and task-switching on your QL, QPAC2 is a must!

Dilwyn Jones

MIRACLE

THE QXL



The QXL turns the common PC into a QL compatible. The package comprises a half card that plugs into an 8 or 16 bit standard ISA slot and a diskette loaded with a QDOS compatible operating system and a Superbasic compatible interpreter. After installation simply type QXL and the PC will appear to be a QL allowing QL programs to be run from QL format diskettes.

The card itself has a 32 bit 68EC040 processor running at 20MHz which gives a good turn of speed. This processor has access to its own RAM and so performance is virtually independent of the host PC whether it has an 8088 or a Pentium. In fact the PC is used purely as an I/O system giving QL programs access to the PC's floppy disc, hard disc, keyboard, display, serial and parallel ports. The card itself has QL style network ports to allow connection to a QL network. The minimum PC specification required is an XT with EGA display and a spare standard slot.

Varying RAM sizes from 1M up to 8M can be supplied. The smaller capacities can be upgraded to the larger ones and the cost is simply the price difference. Not all the RAM is available to the user programs; the 1M equates roughly with a TRUMP CARD QL memory size and the 2M with a GOLD CARD QL.

During the lifetime of the QXL we intend to enhance the software to make use of the new hardware facilities of the PC such as SVGA graphics. As has been our policy with the TRUMP CARD and GOLD CARD we intend to provide software upgrades free of charge.

SYSTEMS

QXL prices

1M	£295	(£255)
2M	£325	(£280)
5M	£410	(£355)
8M	£495	(£430)

(prices in brackets for outside EC)

INTERNATIONAL QL REPORT (IQLR) is a regular magazine that all QL users should read. It has articles for the beginner, the advanced user and every one else in between. Also, the international flavour combined with low advertising rates makes it probably the best place to locate QL related items. IQLR is run by QL enthusiasts whose proud boast is that they have never been late with an issue. If you do not already get it then 'phone us now. One year's subscription for 6 issues to any European address is £22.00 and it's worth every penny. Subscribers elsewhere should contact SeaCoast Services, 15 Kilburn Court, Newport, RI 02840, U.S.A. direct.



Tel: (0904) 423986

To place an order by phone please have your credit card ready. For customers outside the EC we charge the prices shown in brackets.

To order by post, please fill in the form opposite or write to us quoting your credit card number and expiry date, or enclosing a cheque payable to MIRACLE SYSTEMS Ltd.

To: MIRACLE SYSTEMS Ltd, 25 Broughton Way, Osbaldwick, York, YO1 3BG, U.K. Tel: (0904) 423986

Please send me _____

I enclose a cheque to the value of: £ _____

Or debit credit card

Expires /

Name _____ Signature _____

Address _____

DJTOOLKIT

DJTOOLKIT has been written to provide 'QLiberator users with some of the file & memory handling utilities, direct file access (in internal format) & positioning commands that are found in the Turbo Toolkit and Toolkit 2 etc.'

DJTOOLKIT is a set of 38 commands and functions contained in a single file of a little over 3kb in size that is loaded into the resident procedure area of the QL's memory in the usual way:

```
base = RESPR (3178)
LBYTES flp1_DJTOOLKIT_bin, base
CALL base
```

or, if you use Toolkit 2:

```
LRESPR DJTOOLKIT_bin
```

The manual covers the facilities provided by the toolkit in two sections, the first covering procedures and the second functions. Each of these sections is arranged in alphabetical order. It would perhaps have been better to arrange the manual in groups according to the type of procedures and functions: file handling, memory management etc.

1 File Information

Five functions are provided that return information from the file header. Each of these functions may be passed a channel number associated with the open file or the file name itself contained in quotes. If negative numbers are returned then this indicates a QDOS error code.

FILE_BACKUP returns the backup date of a file as a floating point number. It may be converted to a string by the standard DATE\$ function. Super Toolkit II provides no direct equivalent to this command since it was written before the advent of Level 2 drivers. However, products that include Level 2 drivers (Hard Disks, Gold Card, Atari Emulator etc) come with a set of commands to access these new features. The function FBKDT is provided with the Gold Card and works in the same way.

FILE_DATASPACE returns the data space requirements of an executable file. This is equivalent to Super Toolkit II's FDAT.

FILE_LENGTH returns the length of a file in bytes. Equivalent to FLEN.

FILE_TYPE returns a code indicating the type of a file (eg 0 for BASIC, resident extensions etc, 1 for executable files, 255 for Level 2 directories ...). Equivalent to FTYP.

FILE_UPDATE returns the date when the file was last altered. It is equivalent to FUPDT. Although the manual states that this date is set on all known QLs I am sure it is only set if Super Toolkit II is running.

2 File Header

Two functions are provided for setting (**SET_HEADER**) and reading (**READ_HEADER**) file headers. Each of these functions is passed two parameters: a channel number associated with the file and the start address of a 64 byte block of memory. In the case of **SET_HEADER** the user POKES values into the block of memory then calls the function. For **READ_HEADER** the function is called and it places values into the block of memory to be read using PEEK. Both functions return a QDOS error code (which will be 0 if they work)

Super Toolkit II provides no direct equivalents to these functions but it is quite easy to do the same thing by opening the files and PUTting or GETting bytes to and from the header. After all, only experienced programmers are likely to want to this sort of thing anyway.

3 Direct Access Files

Five functions are provided for reading unformatted data from a file (**GET_BYTE**, **GET_FLOAT**, **GET_LONG**, **GET_STRING**, **GET_WORD**) and five procedures for writing the same data types (**PUT_BYTE** etc). **PUT_BYTE** and **GET_BYTE** are equivalent to Super Toolkit II' s **BPUT** and **BGET**. Super Toolkit II provides no equivalents to **PUT_LONG** and **GET_LONG** (which deal with four byte numbers). The remaining three functions and procedures which deal with the standard data types of 6 byte floating point numbers, strings and 2 byte integers are equivalent to Super Toolkit II' s **PUT** and **GET** which recognise the data types.

Two procedures are provided for setting the position of the file pointer **ABS_POSITION** (this may be set using Super Toolkit II by an optional parameter passed to **PUT** or **BPUT**) and **MOVE_POSITION** which moves the file pointer relative to its original position (Super Toolkit II provides no direct equivalent by may easily be emulated).

A function, **FILE_POSITION**, returns the current position of the file pointer (equivalent to **FPOS**).

The procedure **FLUSH_CHANNEL** (equivalent to **FLUSH**) is used to ensure that all write operations to a given channel are completed.

4 Memory Management

Two functions are provided that return the amount of free memory **BYTES_FREE** (equivalent to **FREE_MEM**) and **KBYTES_FREE**.

A function **RESERVE_HEAP** (equivalent to **ALCHP**) is provide to allocate space on the the common heap. It is similar to **RESPR** which reserves space in the resident procedure area. **RESERVE_HEAP** (and equivalents) are used when jobs (other than SuperBASIC) are running on the QL. In this situation the resident procedure area can no longer be expanded and so **RESPR** will fail.

RELEASE_HEAP (equivalent to **RECHP**) releases allocations on the common heap previously reserved by **RESERVE_HEAP**.

MOVE_MEM is a procedure which allows a specified number of bytes to be copied from one location to another. On my Gold Card it works at a rate of around 330Kb per second (timed on a move of 100Kb, 100 times) . Calls to Minerva can copy memory at 2.5Mb per second but **MOVE_MEM** is simpler to use. Super Toolkit II provides no equivalent.

The functions **SEARCH_C** and **SEARCH_I** are provided to search for strings in memory either matching exactly or in the latter case ignoring the case of letters. **SEARCH_C** searches at about 180K and **SEARCH_I** about 150K per second on a Gold Card. Unless you are searching a lot memory frequently this should be more than adequate (a Gold Card could search all memory in a little over 11 seconds and a QL fitted with a Trump Card might be expected to search all its memory in around 25 seconds. Again Super Toolkit II provides no equivalents.

SYSTEM_VARIABLES is a function that returns the address of the system variables. Minerva does not locate the system variables in a fixed place and this may be true of future QDOS compatible operating systems. This function provides a consistent way of providing the information. No equivalent provided by Super Toolkit II.

PEEK_STRING and **POKE_STRING** are provided to write strings to and read them from memory. Super Toolkit II provides no equivalents.

5 Miscellaneous

There are no Super Toolkit II equivalents for any of the functions in this section.

The function **CHECK** checks if a particular machine code extension is currently loaded. If you are writing software for use of other people than you can check that all necessary extension are loaded before the software is run.

DEV_NAME is used to return a directory device driver name (eg flp, mdv) and also gives the address at which the driver is located. The way the function works seems peculiar to me and not as easy to use as some alternatives that I use.

DJTK_VER\$ returns the version number of the toolkit as a string.

FETCH_BYTES returns a string of a specified number of characters from a given channel. It is equivalent to TURBO Toolkit's INPUT\$ which is a more usual name for this function which is found in many other BASIC dialects.

LEVEL2 is a function that indicates whether a device has level 2 drivers (eg real directories, backup dates, version numbers etc as on Gold Card, hard disks etc)

PEEK_STRING and **POKE_STRING** are provided to write strings to and read them from memory. Super Toolkit II provides no equivalents.

SCREEN_MODE returns the current mode (4 or 8. 12 on a Thor?) of the screen.

The functions **SEARCH_C** and **SEARCH_I** are provided to search for strings in memory either matching exactly or in the latter case ignoring the case of letters. **SEARCH_C** searches at about 180K and **SEARCH_I** about 150K per second on a Gold Card. Unless you are searching a lot of memory frequently then this should be more than adequate (a Gold Card could search all memory in a little over 11 seconds and a QL fitted with a Trump Card might be expected to search all its memory in around 25 seconds. Again Super Toolkit II provides no equivalents.

Since writing this review I have received a later copy of the toolkit, version 1.10. There are a number of additions in the area of font and screen handling which I have not looked at. There are also some improvements to existing commands. **MOVE_MEM** now works at over 1Mb per second for most cases. The manual has also been improved and a file containing many demo routines is included on the disk.

Well I think I have described all the procedures and functions provided by this toolkit. I have grouped them in sections with headings of the names used in the Super Toolkit II manual because I am most familiar with that software and many (perhaps two thirds in version 1.00) of the features in this toolkit have direct equivalents in Super Toolkit II.

Norman Dunbar has succeeded in his stating aim of providing QLiberator users file and memory handling utilities, direct file access and positioning commands as found in Toolkit II and Turbo Toolkit. However, the Toolkit II equivalents work with QLiberator as well (I have tested the version 1.00 commands and their Toolkit II equivalents both with the interpreter and QLiberator) and most people using QLiberator will have Toolkit II as part of their disk interface.

DJToolkit has longer more descriptive command names than Toolkit II, comes with a well written and clear manual (particularly with version 1.10) and the later version comes with example routines showing the use of the new features. It is thus well suited to less experienced users. Whether it is suited to more experienced users who already have Toolkit II depends on whether the extra commands are used. I would not buy this toolkit because I have Toolkit II and System which between them provide alternatives to most of the features provided by DJToolkit but I would recommend it to a less experienced user who does not already own an alternative.

Stephen Bedford

[Ed: The latest version of DJTOOLKIT is V1.12. It contains a function **QPTR** to tell if the Pointer Environment is loaded and a function to find the base screen address of any given channel which is aptly named **SCREEN_BASE**.]

DJTOOLKIT (128K) (FLP/MDV)
£10 (UK) £11 (REST)
DILWYN JONES COMPUTING, 41 BRO EMRYS
TAL-Y-BONT, BANGOR, GWYNEDD, LL57 3YT

PUBLIC DOMAIN

[Ed: Public Domain will be a regular feature in the magazine. It will contain news about the latest Public Domain, Shareware and Demos from three UK Public Domain Libraries. As an introduction to Public Domain the people who run the libraries introduce themselves. Any software that is said to be in the Public Domain is free and may be freely copied and exchanged, Public Domain Libraries only charge for the copying. With Shareware software the author of the software provides a full or cut down version of the software to be used for a trial period only. If you find the software of use you can then register with the author who may supply you with the latest version of the software and possibly documentation. The Libraries again only charge for copying. Demo software is commercial software placed in the Public Domain (There are other demos such as drawing pretty pictures), these are mostly missing some essential feature and are used for evaluation purposes only. The Libraries once again only charge for copying.]

Greetings Fellow P.D. Users.

I thought that I would introduce you to my Public Domain Library. S.J.P.D. I have been trading now since late 1990. when I started with 15 disks of P.D. Since then the library has gone from strength to strength and is now one of the largest libraries in Europe. I can offer over 120 disks of the best and latest in Public Domain and Shareware for the QL. S.J.P.D. library can offer programs to cater for a wide taste from Games Players through to Serious Utilities. There is something for everyone!

I offer two methods for obtaining the software. You can either send a formatted disk & return postage along with £1.00 per disk copy charge or pre-copied disks can be supplied for £1.75. this includes disk and return postage. I try to return all orders within 24 hours of receipt.

As the library is still growing at a phenomenal rate, I found it un-economical to produce a printed catalogue, so the catalogue is disk based. This is copied FREE onto your media, providing you supply return postage. SEND ME A DISK NOW, WHAT HAVE YOU GOT TO LOOSE?

If you have written a program why not send it to me for evaluation. Please enclose a written description of the program, along with an instruction file.
GOOD LUCK & HOPE TO HEAR FROM YOU SOON.

STEVE JOHNSON
S.J.P.D.
36 Eldwick St., Burnley, Lancs. BB10 3DZ. Tel: 0282 451854

"Richard Alexander's CGH Services Public Domain and Shareware for the QL is alive and well and being run by Joe Atkinson."

As of the 1st April 1993 I have taken on Richard's library and I am running it on the same terms and basis, namely £ 2.00 per disk for UK orders, £ 2.20 per disk for Europe, and £ 2.40 per disk for the rest of the World. Prices include disk (3.5" or 5.25" . 720K) and 1st Class or Air Mail postage.

The Library continues to flourish and has been extended to include some commercial programs which have recently been made public domain or shareware. The objective of the library remains the same, namely to provide QL enthusiasts with a complete range of high quality software, covering all aspects of computer use, including - games, programming, business, utilities, leisure, etc. at minimal prices.

Authors - new programs are always welcome to the library, as are upgrades to existing programs - media will be returned and postage refunded.

Customers - a new service, as well as the proven range of software, new programs will be made available whilst they are being tested and quality controlled. This gives you, the end user, the opportunity to try programs whilst they are at a late stage of development and to provide user comments which will be fed back to the author. Such programs will always be identified as "pre - release."

To obtain further information and a catalogue of the complete library, please send a stamped addressed envelope to :
Joe Atkinson, 36 Ranelagh Rd, Ealing, London, W5 5RJ, United Kingdom.

It is my intention that you will find my library to be at least as friendly and helpful as Richard's was.

JOE ATKINSON

QUBBEsoft PD has now been supplying Public Domain disks since late 1990. The name QUBBEsoft comes from when I was running a bulletin board named QUBBE standing for QL Users Bulletin Board in Essex. I now also sell 2nd Hand and new QL equipment including the Trump Card and QEP3.

My library consists of, at the time of writing, 13 PD volumes each with a user friendly menu system to select which program you wish to use. It also contains 24 special sets of disks which contain programs that justify being on their own disks. These range from a Public Domain Hard Disk Interface to Molecular Graphics, a program that enables the user to display, rotate and animate a number of molecules in a graphical form. Certain programs are also issued under their own name, these include the QL Emulator for the Amiga and C68 the Public Domain 'C' Compiler.

I welcome new submissions to the library and I am actively trying to get any old commercial QL programs, no longer available, released as Public Domain or Shareware, one example is Disk Special 9 - QL Home Finance.

For further information send a SAE or an International Reply Coupon and I will send you my catalogue (see my advert for further details). I attend most QL related shows in the UK and Europe, you can also see me in person at the Essex Quanta Meetings held every second Sunday of each month at Rayne village hall near Braintree.

I look forward to hearing or meeting you.

RON DUNNET

Fed up of DIGITAL PRECISION telling you how very good their software is?

✓ "As you might surmise by this time, I am impressed by QMATHS's abilities. Having noted that DIGITAL PRECISION's advertising tends to be loaded with superlatives (incredible, ultimate, superb come to mind), I had approached this evaluation with some scepticism. That scepticism has vanished." > INTERNATIONAL QL REPORT (IQLR) May/June 1993 issue, Official Review by M.Laverne commissioned by IQLR. Note IQLR had bought their review copy of the program.

✓ "PERFECTION is an exciting, full-flavoured, general purpose word processor of incredible capacity... PERFECTION has now been outshone by the recently released PERFECTION SPECIAL EDITION... The discoveries began to trip over themselves as PERFECTION SE responded to the keyboard with unexpected speed and intelligence... PERFECTION SE is blindingly fast at most things, and you are never left waiting for it. PERFECTION is everything that Quill never became: easy to use, very flexible, loaded with genuinely useful features, cleanly multi-tasking, capacious and incredibly fast. The SPECIAL EDITION offers 12 cylinder power and luxury to an already impressive package." > SINCLAIR QL WORLD magazine Official Review, April 1993 issue, by Mike Lloyd of Keyword Index / New QL User Guide fame.

✓ "I find PROFESSIONAL PUBLISHER an outstandingly good program that really does allow highly professional documents to be produced. For your interest I have included a few samples of work done for school using a combination of PERFECTION, PROFESSIONAL PUBLISHER, QUICKLASER and EYE-Q. You will be pleased to know that the quality has been rated so highly that people do not believe it can really have been done with just a QL... I must stress that I am already highly impressed with, and very satisfied by, the performance of PROFESSIONAL PUBLISHER and all the other DP programs that I use... I seem to learn something new that can be done almost each time I use the program. Very many thanks for helping to keep the QL ahead of the field." > Martin J Neave, Headteacher, Watton County Jnr School, Brandon Rd, Watton, Norfolk IP25 6AL (unsolicited letter dated 18 May 1993 ordering more programs: Mr Neave had paid full price for everything).

✓ "LIGHTNING SPECIAL EDITION accelerates QL operation as nothing else does... more than 10x is achievable and 2x-4x is typical... I could not fault LIGHTNING SPECIAL EDITION on anything. It is a clear winner and a best buy at £49.95." > SINCLAIR QL WORLD magazine Official Review, April 1990 issue, by Ron Massey, who said EDITOR (bought full price) was "Superb" in an earlier review.

✓ "PERFECTION is well named" > R.H.Petford, Kingston Hill, Surrey, KT2 7LJ (unsolicited letter received May 25, 1993: another full price purchaser & upgrader).

✓ "When my ideal program finally arrived in the form of PROFESSIONAL PUBLISHER, it surpassed all my expectations... PROFESSIONAL PUBLISHER (is) in a class of its own, and makes it the only QL desktop publishing program for the very serious user... Until Digital Precision released PROFESSIONAL PUBLISHER, my opinion was that the use I could make of desktop publishing was mainly restricted to short documents... PROFESSIONAL PUBLISHER is a very versatile program... The illustrations for this series of articles have all been produced on PROFESSIONAL PUBLISHER... My printer is a BROTHER 9-pin dot matrix printer. It does illustrate the very high quality that can be obtained from PROFESSIONAL PUBLISHER even when using a simple printer." > SINCLAIR QL WORLD magazine Guide to desktop publishing ("A Question of Dots"), January 1992 to December 1992 issues: the reviewer had bought PROFESSIONAL PUBLISHER, PERFECTION SE, FONT ENLARGER, TOOLBOXES, QUICKLASER etc from Digital Precision all at full price.

✓ "I am aware that over the years Digital Precision has given considerable support to the QL scene but seldom, if ever, can there have been such estimable service as I recently encountered with PERFECTION PLUS." > The Hon. W.D.R.Spens, Marsh Mills Cottage, Over Stowey, Bndgewater, Somerset, TA5 1HG, QUANTA magazine, March 1992 issue. Mr Spens bought his software at full price from Digital Precision.

✓ "The Digital Precision Desktop Publisher was rightly hailed as an extraordinary programming achievement when it was released two years ago. Mike Lloyd casts a professional eye over Digital Precision's latest page-making blockbuster (PROFESSIONAL PUBLISHER) and finds plenty to be pleased about... there is unlikely to be a single program of such magnitude and quality (as PROFESSIONAL PUBLISHER) written for the Sinclair QL." > SINCLAIR QL WORLD Official Review, August 1989 issue, by Mike Lloyd, who bought all this software at full price.

✓ "EDITOR is a liberation. After Quill, it was like jumping from an aquarium into the sea. It has become part of my professional life... Everyone is now writing about the excellence of PERFECTION. I have not tried it, not having any perceived need for it (having EDITOR)" > Suzanne Cronje, QUANTA magazine, May 1992 issue, page 2. Ms Cronje paid the full price for her copy of EDITOR.

✓ "I have found (PERFECTION) to be simply excellent, fast, packed with features and very well thought out. I can find little to say that will convey just how good this program is, except to quote Digital Precision's own advertising: PERFECTION will blow your socks off. PERFECTION is the program that Quill users have been waiting for." > SINCLAIR QL WORLD magazine Official Review, May 1991 issue by M. Knight, who is now a keen user of PERFECTION almost on a daily basis, we've heard.

✓ "Digital Precision (DP) decided to begin work on a replacement for Quill which would be very quick, simple to use and contain lots of excellent features - something upon which DP have built a very strong reputation in the QL market... Overall, the speed-up (of just the first release of PERFECTION - it is much faster now) on even a humble QL with Trump Card is amazing when compared with Quill (or any other word processor). On top of this, the program provides many excellent and well thought out features, each of which is easy to use... (it) is certainly years ahead of the competition on the QL (and even on many PCs)." > R.Mellor, c/o CGH Services, Cwm Gwen Hall, Pencader, Dyfed SA39 9HA; Official Review of the very first version of PERFECTION in QL TECHNICAL REVIEW issue 7: and the reviewer bought his own copy of this program from Digital Precision. An earlier QLTR reviewer pronounced LIGHTNING (just the standard version) superior to all the competition...

✓ "As a recent user of PERFECTION PLUS SE, may I add my thanks and praises to the ones I am sure you have already received... keep up the excellent work." > R Slawson, East Molesey, Surrey KT8 0BP (unsolicited letter from full price purchaser).

✓ "At about 360,000 words, the Mega SPELLCHECKER dictionary does not have much competition, on any computer! (Spellchecking) is about four times as fast as the best figures I have seen with other checkers on QL and PC." > SINCLAIR QL WORLD magazine official review of PERFECTION spellchecker, September 1992 issue, by Bryan Davies of Troubleshooter repute (review copies of all the competing products supplied to the magazine by their respective publishers).

✓ "I have been using PROFESSIONAL PUBLISHER for about eighteen months now... what you can do with it is colossal... I got Digital Precision's QUICKLASER. The results are as good as (Digital Precision) says in its advertisements... (there follows detailed information on suggested page sizes)" > P.Hamill, Lynncot, Back Lane, Elton, Peterborough, Cambs PE8 6RH, QUANTA magazine, Volume 9 issues 4/12. Mr Hamill has paid full price for all his software, naturally.

✓ "Once again I would like to say thank you for your help. I would like to tell the world what nice guys you are but unfortunately I have no contact with the outside world." > J.Bailey, Godshill, Ventnor PO38 3JJ (full price purchaser, May 24 1993).

✓ "PC CONQUEROR GOLD SPECIAL EDITION is an excellent product, accompanied, as so often with Digital Precision software, by a comprehensive and informative manual. The program does a difficult job, and does it well... Overall, this program is much faster, more compatible and capable..." > SINCLAIR QL WORLD magazine Official Review, March 1993 issue, by Mark Knight, QL programmer.

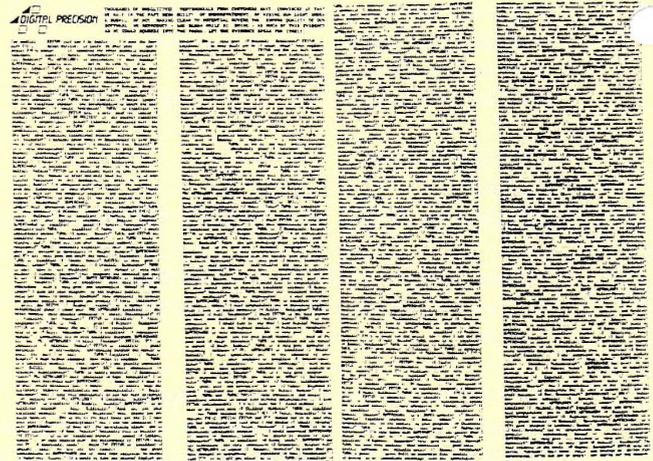
✓ "Many thanks for the update of PERFECTION SPECIAL EDITION. I am suitably impressed. Congratulations on producing the only word processor that I know that offers the best of all worlds as far as formatting is concerned. After Quill, PERFECTION is like a breath of fresh air." > Geoff Wicks, B.Russellstr 22, 1097HL Amsterdam, Netherlands (unsolicited letter dated 13 June 1993: all software including PERFECTION SE, PRO PUBLISHER, CONQUEROR SE etc. purchased at full price).

✓ "All I can say about QMATHS is: WOW!" > Robin Wyke-Holloway, Salisbury SP5 4WG (unsolicited letter received April 1993: Mr Holloway is a full price purchaser).

✓ "Having used a range of desktop publishers on the Atari ST & Amiga, I admit I am very impressed with the superior performance of PROFESSIONAL PUBLISHER. It contains everything required" > SINCLAIR QL WORLD January 1989 issue, "6 Best"

✓ "May I take this opportunity to say that I have, in the past, found the software you have supplied me with (LIGHTNING etc.) to be of extremely high standard, on a par with that found in industry-standard PC packages. Keep up the good work. Without your quality software, I would be forced to abandon the QL and go to a PC." > G. Reynolds, Crosby, Liverpool L23 0SS (unsolicited letter dated April 2 1993, placing a further order for DP software: all programs old & new were purchased at full price).

✓ This twenty is but a casual selection, drawing only on extracts from letters received by DIGITAL PRECISION in the last few days and from articles (in respected, independent QL journals) that just happened to be to hand. If we really had to, we could locate about 1,100 equally complimentary recent communications (the figure has been carefully arrived at by sampling all our correspondence files): pleasant though such a trawl would be, we have more pressing things to do, like keep refining our programs! In case any scepticism still exists, we refer potential purchasers of our products to pages 18 and 19 of the September 1988 issue of Sinclair QL World, which contained three to four hundred other unsolicited quotations from happy Digital Precision customers (together with the customer's name and whereabouts), all of whom had bought their DP programs. That collection covered only three programs (and only partly - we ran out of space) and predated our best software (LIGHTNING SE, PERFECTION (+SE), PROFESSIONAL PUBLISHER, PC CONQUEROR (+SE) etc). We reproduce those pages below, duly reduced to fit (no magnifying lens supplied, nor eyesight lawsuits solicited)! Don't think DP hides behind small print: send an SAE for a full-size copy, or ask for one free while ordering!



✓ DP are suppliers of the best QL software and hardware, including GOLD CARDS and QXLs (at extra-low prices with our software). If you do not receive any QL magazine containing our multiple page advertisements, please contact us for a copy of the ad, which contains brief details on all our programs, prices and special discounts. If you have been out of touch for a while, you may be amazed at how much new software we have now produce. DIGITAL PRECISION LTD, 222 The Avenue, Chingford, London E4 9SE Telephone (24 hour): 081 527 5493 (UK); +44 81 527 5493 (rest of the world)