

PERMANENT MEMORY SYSTEMS

User Guide

# MULTI-FONT NTQ

Near Text Quality Typesetting Software

For

EPSON RX Compatible Printers

BBC



ELECTRON



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PMS would like to say "ta" to, Derek Mathieson NTQ's original author (Please make a backup!), Kenny Hobbs the "cool one" for his contributions (no you can't have any user workspace!), Gordon Cameron the "hairy one" for suggesting yet another new feature, Brian Wyld for staying out of the road, Brenda Cameron for the caffeine, Ian L Fyfe Esq. for the fancy fonts, Norrie Craig for the high speed artwork, PRONTAPRINT (Hamilton) for living up to their name , yet again, and anyone else crazy enough to be associated with this project.

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## CHAPTER 1

### 1.1 OVERVIEW OF PMS MULTI-FONT NTQ

PMS Multi-Font NTQ is an extremely powerful ROM based printer driver, which allows the user to create high quality text in a wide variety of styles. This is accomplished by the use of **Escape** sequences, similar to the standard **Escape** sequences used by your printer.

These Escape sequences can be used from WORDWISE, WORDWISE-PLUS, VIEW (using printer driver supplied), BASIC or any language which allows passing of control codes to the printer.

A set of STAR commands **\*NTQ**, **\*DRAFT** and **\*NTQOFF** are used to select and deselect the NTQ Driver.

Comprehensive HELP pages are displayed by the commands **\*HELP NTQ**, **\*HELP FONTS** & **\*HELP MACROS**.

The basic NTQ system comprises of a two ROM set, a Utilities Disk, and this User Guide. One ROM is marked "**NTQ DRIVER**" and MUST always be present in the BBC/Master for NTQ to operate. The second ROM is marked "**FONT EXTENSION 1**", and contains 4 extra fonts which are accessed by the Driver ROM.

### 1.2 INSTALLING THE NTQ ROMs

The instructions for fitting the NTQ ROM(s) are exactly the same as any other ROM. With the power off, remove the lid of the BBC/MASTER by unscrewing the four crosshead screws. On the BBC the keyboard also has to be removed by unscrewing the 2 or 3 nuts and bolts and sliding it forward. The ROM sockets are the 28 pin sockets to the right of the board on both the BBC and the MASTER. If you have an extension ROM board fitted to your BBC, this may be used to hold the NTQ ROM(s). Once you have identified the ROM sockets on your computer the ROM(s) can be plugged in to any of the vacant ROM sockets. Insert the NTQ ROM(s) into an empty socket WITH THE NOTCH TO THE BACK OF THE BBC OR WITH THE NOTCH TO THE LEFT IN THE MASTER, ie the same way as the other ROMs.

Check for bent pins on the ROM(s). Replace the keyboard and cover.  
Switch on the BBC and type:

**\*HELP <RETURN>**

In the help messages you should see:

**PMS Multi-Font NTQ 1.0  
NTQ  
FONTS**

**NTQ Font Extension ROM 1**

plus the names of any Font Extension ROMS which are installed.  
If these messages are not present, switch off and check the above  
steps carefully.

If problems persist contact PMS, or a knowledgeable friend.

### 1.3 EFFECT ON PAGE

NTQ on the BBC requires one page of workspace for processing the  
text. This is claimed on switch on by raising PAGE by &100 bytes.  
eg in a DFS machine with PAGE normally at &1900, PAGE will be raised  
to &1A00. See the section on disabling NTQ if this causes hardship.

Note: The above does not apply to NTQ running on a MASTER.

### 1.3 THE UTILITIES DISK

The Utilities Disk supplied with PMS Multi-Font NTQ is in a format  
suitable for 40 track disk drives.

### USING 80 TRACK DISK DRIVES

If you have 80 track drives, the Utilities Disk must be converted  
to the correct format, before use, by the following procedure:

- 1: Remove the write protect tab from the Utilities Disk
- 2: Insert the Utilities Disk into 80 track drive
- 3: Type in \*80 <RETURN>
- 4: Wait until the disk stops turning (1min approx.)
- 5: Remove disk and replace the write protect tab.

## **SECURITY COPIES**

The Utilities Disk supplied contains the VIEW printer driver, Font Extension ROM creator, Font Definer and copies of the seven fonts as supplied in the two NTQ ROMs.

We suggest that you immediately make a security copy of the Utilities Disk using \*BACKUP (see DFS Manual). There is no software protection on the Utilities Disk!!

### 1.4 THE FRONT PANEL

With the Utilities Disk in DRIVE 0, perform a SHIFT-BREAK. This will enter you into the NTQ Utilities FRONT PANEL.

The Front Panel allows the user access to the two Utility programs used in conjunction with the PMS Multi-Font NTQ package. Access to the Font Designer and Font Extension ROM creator programs should always be through this Front Panel, and the Exit from these programs should also be through the Front Panel.

A full explanation of each of the Options is found later in the manual. If you are starting out for the first time with PMS Multi-Font NTQ you can leave reading these chapters, until you are more familiar with the system.

#### 1.4 PRINTER SETTINGS

To use PMS Multi-Font NTQ, the internal switches in your printer may have to be reset. The **AUTO LINE FEED** switch must be **ON**, otherwise the printer will not linefeed correctly.

If you normally have to enter \*FX6,0 before using your printer, you will have to alter the switch.

IMPORTANT: \*FX6 commands have NO effect on NTQ.

## Chapter 2

### THE \*COMMANDS

These \* commands can all be entered directly from the keyboard, or as a line in a program, or in BASIC II by the OSCLI command.

#### 2.1 \*NTQ

The command \*NTQ causes all subsequent printer output to be in NTQ quality. The \*NTQ can be issues at any time, and it is good practice to issue a \*NTQ command BEFORE any printing, to make certain the NTQ is selected. \*NTQ will reset all NTQ features to their default values. (Linespace, height, width and font to 1, underline off, 10 char/in pitch, no background and no micro-justification)

#### 2.2 \*DRAFT

The command \*DRAFT causes all subsequent printer output to be in Draft NTQ Quality. If the command \*NTQ is issued while in Draft mode then true NTQ quality will be reselected.

\*DRAFT also selects default features.

#### 2.3 \*NTQOFF

The command \*NTQOFF causes all subsequent printer output to be in normal dot-matrix quality.

#### 2.4 Use of ESCAPE Key Within NTQ

The ESCAPE key is partially disabled during printing of a line of text. To interrupt printing HOLD DOWN the ESCAPE key until printing stops.

It is advisable to switch the printer off and on again after pressing ESCAPE to reset the printer.

Pressing ESCAPE causes printed output to revert to normal dot-matrix output, so the command \*NTQ MUST be re-issuing to re-enter NTQ print output.

## Chapter 3

### THE ESCAPE SEQUENCES

PMS Multi-Font NTQ uses a set of 8 Escape Sequences to select the features of text to be printed, together with an ninth Escape Sequence for selecting MACRO commands.

#### 3.1 ESCAPE SEQUENCES FROM BASIC

These commands can be issued from a BASIC program, either as a VDU stream, or in a PRINT statement.

IMPORTANT: In both cases, a VDUL or CHR\$(1) MUST precede every element of the Escape Sequence (see BBC USER GUIDE page 379)

EXAMPLE: To set width to 3 in BASIC

```
VDUL,27,1,ASC("W"),1,3
or
PRINT CHR$(1)+CHR$(27)+CHR$(1)+"W"+CHR$(1)+CHR$(3)
```

#### 3.2 ESCAPE SEQUENCES FROM WORDWISE

From WORDWISE the usual syntax for Escape Sequences should be followed.

EXAMPLE: To set width to 3 in WORDWISE

(f1)OC27,"W",3(f2) – ASCII code for "W" = 87.

From WOROWISE-PLUS the following are also acceptable syntax:

(f1)OC27,"W",3(f2) or (f1)ES"W",3(f2)

NOTES: These Escape Sequences can also be issued from any language, including machine code (via OSWRCH), which allows passing of control codes to the printer.

Both upper and lower case letters will be accepted in the Escape Sequences.

All features selected by Escape Sequences are maintained over carriage returns.

### 3.3 LIST OF ESCAPE SEQUENCES

#### ESC W

---

**Name** Set Width

**Format** VDU1,27,1,ASC"W",1,n or 0C27,87,n  
(n=1 to 16)

**Function** This sequence sets the width of the subsequent text to n times the normal width.

#### Example

```
10 REM MULTIPLE WIDTH
20 VDU2
30 FOR N=1 TO 3
40 VDU1,27,1,ASC"W",1,N
50 PRINT" WIDTH: ";N;
60 NEXT N
70 PRINT
80 VDU3
```

```
WIDTH 1   WIDTH 2   W I D T H 3
```

See Also ESC X, ESC P

## ESC L

---

**Name** Set Line Space

**Format** VDU1,27,1,ASC"L",1,n or 0C27,76,n (n=1 to 16)

**Function** Sets the line space to permit the printing of multi-height text. The value of n must not be less than the MAXIMUM height to be printed in subsequent text.  
The command is also used to set the height of any background shading patterns.

**Example** (see example for ESC H)

See Also ESC X, ESC H, ESC B

## ESC H

---

**Name** Set Height

**Format** VDU1,27,1,ASC"H",1,n or 0C27,72,n (n=1 to 16)

**Function** Sets the height of the subsequent text to n times the normal height.

### Example

```
10 REM MULTIPLE HEIGHTS
20. VDU2
30 VDU1,27,1,ASC"L",1,4 : REM SET LINE SPACE TO 4
40 FOR N=1 TO 4
50 VDU1,27,1,ASC"H",1,N
60 PRINT " HEIGHT : "N;
70 NEXT N
80 PRINT
90 VDU3
```

HEIGHT :1 HEIGHT :2 HEIGHT :3

See Also ESC L, ESC X

When using multiple height characters, the line space MUST be correctly set, (by ESC L), to allow space for the multiple height characters.

Notes

## ESC F

---

**Name**            Select Font

**Format**        VDU1,27,1,ASC"F",1,n or 0C27,70n (n=1 to 32)

**Function**     Selects the font in which subsequent text is printed.

### Example

```
10 REM CHANGING FONTS
20 VDU2
30 VDU1,27,1,ASC"F",1,1
40 PRINT "Look at this in font 1"
50 VDU1,27,1,ASC"F",1,5
60 PRINT "And now in font 5"
70 PRINT
80 VDU3
```

Look at this in font 1

And now in font 5

See Also ESC P, ESC X

**Note**            The number (n) of a font is the number displayed beside the font on a \*HELP FONTS command. If the number of a non-existent font is used the default font 1 is selected.

## ESC U

---

**Name** Underline

**Format** VDU1,27,1,ASC"U",1,n or 0C27,85,n (n=0 or 1)

**Function** Switches ON (n=1), or OFF (n=0) the underlining of subsequent text.

### Example

```
10 REM CHANGING UNDERLINE
20 VDU2
30 VDU1,27,1,ASC"U",1,1
40 PRINT "This is all underlined";
50 VDU1,27,1,ASC"U",1,0
60 PRINT " And this is not."
70 PRINT
80 VDU3
```

This is all underlined And this is not.

See Also ESC X

**Note** Take care to switch off underline at the correct position, or margins could be underlined!

## ESC P

---

**Name** Select Pitch

**Format** VDU1,27,1,ASC"P",1,n or 0C27,80,n (n=0 to 7)

**Function** Selects the pitch of subsequent text. n PITCH (char/in)

0	10
1	proportional spacing
2	11
3	12
4	13
5	15
6	17
7	20

### Example

```
10 REM CHANGING PITCHES
20 VDU2
30 VDU1,27,1,ASC"P",1,0
40 PRINT "1234567890 - 10 CHAR/IN"
50 VDU1,27,1,ASC"P",1,3
60 PRINT "1234567890 - 12 CHAR/IN"
70 PRINT
80 VDU3
```

```
1231J567890 - 10 CHAR/IN
1234567890 — 12 CHAR/IN
```

NOTE In ALL fonts, when proportional spacing is selected, the SPACE character has a width which corresponds to a pitch of 15 char/in. Therefore for example, in WORDWISE, with proportional spacing, a left margin of 1 inch would be set by (f 1 )LM15(f2).

See Also ESC X ESC J

## ESC B

---

**Name** Set Background

**Format** VDU1,27,1,ASC"B",1,n or 0C27,66,n  
(n=0 to 15)

**Function** Selects a background shading pattern over which subsequent text is printed or selects inverse text.

Background	Function
0	No background
1 - 14	Various shaded backgrounds
15	Inverse text

### Example

```
10 REM BACKGROUNDS
20 VDU2
30 VDU1,27,1,ASC"L",1,3   REM SET LINE SPACE TO 3
40 VDU1,27,1,ASC"H",1,2   REM SET HEIGHT TO 2
50 VDU1,27,1,ASC"W",1,2   REM SET WIDTH TO 2
70 VDU1,27,1,ASC"B",1,1
80 PRINT" " THIS IS SHADED "
90 VDU1,27,1,ASC"B",1,15
100 PRINT " INVERSE TEXT "
110 PRINT
120 VDU3
```

THIS IS SHADED

INVERSE TEXT

See Also ESC L, ESC X,

## ESC J

---

**Name** Micro-justification

**Format** VDU1,27,1,ASC"J",1,n or 0C27,74,n (n=0 to 80)

**Function** Selects micro-justification mode, and sets the position of the right margin to n 1/10ths of an inch measured from the left edge of the paper (NOT the left margin). NTQ will attempt to right justify all subsequent text by inserting micro-spaces between words.  
Micro-justification automatically selects proportional spacing. Micro-justification is switched off by setting n=0.

### EXAMPLE:

```
10 REM MICRO-JUSTIFICATION
20 VDU2
30 VDU1,27,1,ASC"J",1,15      REM SET RIGHT MARGIN TO 1.5ins
40 PRINT"Now is the time"
50 PRINT"f or all good men"
60 PRINT"to come to the aid"
70 PRINT"of the party."
80 PRINT
90 VDU3
```

Now is. the time  
for all good men to  
come to the aid of  
the party.

See also ESC X ESC P

## ESC X

---

<b>Name</b>	MACRO Command
<b>Format</b>	VDU1,27,1,ASC"X",1,n or 0C27,88,n (n=0 to 15)
<b>Function</b>	All subsequent text will be printed in the style of the MACRO n. A single MACRO command will select a value for ALL the previous features.
<b>Note</b>	MACRO commands can be set using the command  *MACRO, see section on *MACRO for full details on using and defining MACROS

### 3.4 PASSING OTHER CODES TO THE PRINTER

As well as ESCAPE sequences, the following codes can be sent to the printer from within PMS Multi-Font NTQ.

#### **CHR\$( 10)**

This causes a small linefeed to be sent to the printer which permits the vertical joining-up of characters on two, or more lines.

Example (WORDWISE)

```
ggggg(f1)OC10( f2)AAAAA
```

#### **CHR\$(130)**

This toggles the linefeed size between short linefeeds (as with CHR\$(10)) and normal linefeed. Issuing the code CHR\$(130) caused all subsequent linefeeds to be short, issuing CHR\$(130) again switches linefeeds back to normal size. This is useful when producing solid backgrounds and inverse text over two or more lines.

EXAMPLE

With CHR\$(130)



A solid  
block

Without CHR\$(130)

CHR\$(12)

This advances the paper in the printer to the top of the next page. (Form Feed) The page length can be set using the normal printer ESCAPE sequences (see next section).

CHR\$(128)/CHR\$(129)

These two special codes can be used to temporarily switch NTQ OFF (129) and ON (128) from within text. This is useful for passing other codes to the printer, eg setting page length, or simply coming out of NTQ to print some text in normal dot-matrix quality.

Note: It is not possible to switch from NTQ to dot-matrix and back again to NTQ in one line.

Example (WORDWISE)

```
NTQ QUALITY(f1)OC129(f2)DOT MATRIX QUALITY
(f1)OC128(f2)AND BACK TO NTQ
```

```
NTQ QUALITY
DOT MATRIX QUALITY
AND BACK TO NTQ
```

## CHAPTER 4

### MICRO-JUSTIFICATION

With proportionally spaced text the letters are narrower than in standard 10 pitch. The extra space thus created is normally all at the end of the line. Therefore even if justified text is created by the word-processor, a ragged right margin is produced when printed using proportionally spaced text. In order to overcome this, micro-justification must be used.

The micro-justification feature of NTQ allows proportionally spaced text to be printed out as a BLOCK, ie to appear with straight left AND right margins, as in a newspaper column. NTQ achieves this by inserting small amounts of padding (called micro-spaces) between the words on a line. This is done in such a way that the last letter of every line lines up vertically with the last letter of the previous lines.

In order to use the micro-justification command NTQ requires to be told where on the paper the right margin is to be positioned. This is done with the ESCAPE sequence: **ESC"J",n** where "n" is the distance across the page in 1/10ths of an inch.

Micro-justification is switched off by setting n to 0.

When Micro-justification is selected, proportional text is automatically selected.

Because wordprocessors do not fully support this form of Micro-justification, a degree of "trial and error" is necessary to achieve the desired results. NTQ will attempt to Micro-justify a line of text if the following condition holds:

The number of characters in the WHOLE line, including left margin, is not less than the number of characters in an equivalent 10 pitch line. (n in the ESCAPE "J" command).

If the line of text is too long to be micro-justified then it will be printed extending beyond the right margin.

**EXAMPLE:** Suppose we require a piece of text with left margin 1 inch and a line length of 6 inches, and we are using font 1 (PICA - a fairly "wide" font).

The setting for Micro-justification would be ESC"J",70 (right margin 7 inches across paper).

The left margin should be set to 15 (see note on ESC"P"). The line length could be set to 60 but this would produce rather "spaced out" text so a line length of 65 could be tried. There is no certain method of determining the correct value to use for the line length, and a trial print of the text is the only way of seeing if you have chosen a value which will fit into the block, and makes the text look correct.

## CHAPTER 5

### THE NTQ FONT DESIGNER

#### 5.1 INTRODUCTION

The NTQ Font Designer allows users to create their own fonts, or customize the supplied fonts.

Input to the Designer may be by Keyboard. British Micro Graphpad, AMX Mouse, Cumana Touchpad or joystick.

Each font is stored in a file on directory F, eg F.ISONORM.

#### 5.2 SETTING UP THE FONT DESIGNER

The NTQ designer program can only be entered from the Front Panel. Select option <F> and confirm selection <Y>.

Remove the system disk and insert into drive 0 the working disk containing the font library if required.

Select the input device you wish to use, from the list displayed.

Up to EIGHT fonts may be worked on simultaneously from within the Designer, each being assigned a number 1-8. Enter the name of each font file, omitting the F. directory name. Hit RETURN when the list of fonts you wish to work on is complete.

If a new font, not on the disk, is to be created, a message is displayed informing you that a new file is being created.

### 5.3 DESIGNING CHARACTERS

Place the Function Key Strip on the BBCI making sure that CLEAR is opposite f0.

#### **THE GRID**

The grid in which characters are formed is 24 horizontally by 16 vertically. The flashing dot can be moved around this grid by manipulating the input device. If the keyboard is selected as input device the controlling keys are:

: - UP            / - DOWN  
Z - LEFT        X - RIGHT

A box can be **FILLED** by moving the flashing dot to the required position and pressing **TAB** or **RETURN**.

A box can be **CLEARED** by moving the flashing dot to the required position and pressing **SHIFT**.

#### **THE FUNCTION KEYS**

The Function Keys are used as follows:

f0    Clears grid.  
f1    Set character width for proportional spacing.  
f2    Save current character on grid  
f3    Load character into grid  
f4    "Flip" character on grid  
f5    "Flop" character on grid  
f6    Invert every box  
f7    Unused  
f8    Print current character on printer  
f9    Exit Definer and return to Front Panel.

The CURSOR keys can be used to move the ENTIRE character around inside the grid.

If you get into difficulties simply press **ESCAPE** to return to **EDIT** mode.

## SETTING PROPORTIONAL SPACING WIDTH

Since not all characters are the same width, the user must set the width of the character before saving it into the Font Library. These widths are only used when printing in proportional spacing.

Select f1, and use the input device to position the arrows at the LEFT and RIGHT sides of the character. Normally set the LEFT and RIGHT to **TWO BOXES BEYOND** either side of the actual character. These spaces form the spacing between characters when printing in proportional mode.

## HINTS ON DEFINING FONTS

1. Don't be too ambitious to begin with!!
2. Make the characters fill as much as possible of the grid.
3. Horizontally adjacent dots will not be printed in single width characters, but will be in multi-width.
4. Characters will appear slightly narrower than on the grid when printed on paper.
5. Leave space for descenders, usually 3 boxes.
6. **ALWAYS KEEP A BACKUP OF YOUR FONTS!!!!**

PMS will PAY (money!!) for new good quality COMPLETE fonts (especially foreign alphabets and technical symbols), which can be added to future Font Libraries – send PMS a printout.

## CHAPTER 6

### THE NTQ MACRO DEFINER

#### 6.1 INTRODUCTION

MACROs are single ESCAPE sequences (ESC"X",n), which can be used to set **ALL** features in one command. This avoids the need for long sets of ESCAPE sequences when you want to change style.

There are 16 MACRO commands available ten of which are user definable.

MACRO commands, once defined, can be stored on disk or tape using the command **\*MACROSV** and reloaded using the command **\*MACROLD**

#### 6.2 ENTERING THE MACRO DEFINER on Electron: CHAIN"MACED"

The MACRO definer can only be entered by typing **\*MACRO (<n>)** where n is an optional parameter corresponding to the number of the macro to be edited. The screen will clear and a page of information will be displayed with the macro currently being edited in a box in the middle of the screen.

#### 6.3 DEFINING MACRO COMMANDS

Use left and right cursor keys to move through the MACRO displayed in the window typing in the values of the various features. Enter leading zeros for numbers less than 2 digits eg '02'. You may exit the MACRO definer at any time by pressing **ESCAPE**.

## ERRORS IN MACRO DEFINITIONS

If a white block appears under the number you have typed this indicates that the value is outside the range of acceptable values for that particular feature. MACRO definitions which contains errors will not be stored when ESCAPE is pressed.

If you wish to change another MACRO without first leaving the definer then the Up and Down cursor keys can be used to move through the MACROS.

Note: It is not possible to move through the macros unless there are no white blocks under any of the numbers.

### 6.4 SAVING AND LOADING MACROS

There are two commands associated with saving and loading User Defined MACROS.

The first is **\*MACROSV <fsp>** which will save the ten User Defined MACROS onto Tape/Disk under the filename given after the star command.

The other command is **\*MACROLD <fsp>** which will load a file from Tape/Disk with the filename given after the star command as before.

## Chapter 7

### NTQ FONT ROM CREATOR

#### 7.1 Introduction

This program allows the user to create their own Font Extension ROMs for use with the NTQ Driver ROM. The program creates a file which is a complete 16K ROM image, containing all the necessary ROM header code, and compressed versions of the fonts. The ROM images created by this program may be burnt into a 16K EPROM or loaded into any bank of sideways RAM.

The utility uses font files created by the Font Definer program. These are compressed by a data compaction technique which allows a maximum of four fonts to be contained in one 16K ROM.

#### 7.2 USING THE PROGRAM

Enter the program by selecting option R from the Front Panel. Place the disk containing the font files in drive 0.

Enter the number that the font will be known as when used with NTQ, followed by the file name of the font file, omitting the F. directory name.

#### **IMPORTANT** - Allocation of Font Numbers

The number of the font must be a UNIQUE number as no two fonts can have the same font number. The Fonts supplied with the NTQ package have numbers 1 to 7. Font numbers 8 to 24 are reserved for the PMS NTQ Font Library and should not be used for user defined fonts. Font numbers 25 to 32 are allocated as user font numbers and may be used in conjunction with this program.

The program will then prompt for a Font Extension ROM number. These are simply for ROM identification with the \*HELP command, and do not need to be unique.

A file name for the Font Extension ROM image is then requested.

**Note:** Due to the amount of data being manipulated during the creation process, the screen memory may be used with the effect that mush may be produced on the upper half of the screen.

Should you require your Font Extension ROMs burnt into EPROM, then PMS will provide this service - contact the sales office for further details.

## CHAPTER 8

### TECHNICAL INFORMATION

#### 8.1 Disabling NTQ

On the BBC, NTQ can be disabled so that it does not raise PAGE by issuing the command:

```
*FX 164,4 <RETURN>  
followed by <BREAK>
```

This will cause the word Disabled to be printed next to the title string on BREAK. NTQ will then not respond to any further commands until it has been re-enabled by the command:

```
*FX 164 <RETURN>  
followed by <BREAK>
```

**WARNING:** This operation will raise PAGE by &100 bytes. This will corrupt data or BASIC programs that were stored in memory at the previous value of PAGE.

On the Master, NTQ can be disabled by using \*UNPLUG, as with any other ROM. On the Master, NTQ does not raise PAGE and thus there should be no reason for disabling the ROM.

## 8.2 OSWORD &30

This OSWORD can be used to read the font definitions of any character from a Font Extension ROM. It requires a parameter block of 51 bytes pointed to by the X and Y registers as normal.

XY+ 0 - Font number  
     1 - Ascii code of character - 32

On exit, XY+2 to XY+49 contain the character definition and XY+50 contains the proportional spacing width byte. If a non-existent font is addressed, the parameter block remains unchanged.

## Additional Notes for View Users

After installing the NTQ ROMS. Enter View by typing:

**\*WORD (RETURN>**

To use NTQ from View, a custom printer driver must first be loaded from the Utilities Disk.

To load the View Printer Driver type:

**PRINTER NTQdrv <RETURN>** at the => prompt.

NTQ commands can now be inserted into the view text using the following syntax.

**HIGHLIGHT 2** - Begin NTQ command.

**HIGHLIGHT 1** - End NTQ command.

In View, HIGHLIGHT 2 is obtained by pressing <SHIFT>-f5 and is displayed as inverse \* \*  
HIGHLIGHT 1 is obtained by pressing <SHIFT>-f4 and is displayed as inverse - .

For example, press <ESCAPE> to enter edit mode and type in the following.

Now is the time for all good men to come to the aid of the party.

(There is no need to press <RETURN> at the end.)

Make sure that View is in INSERT mode (a letter I should appear among the letters at the top-left of the screen). If it is not in INSERT MODE then press <CTRL>-f4 until it is.

Now to make the word 'good' in the text appear in a different font move the cursor under the 'g' of 'good' and type:

**\*f2**

The line should now read:

Now is the time for all \*f2 good men to come to the aid of the party.

What the sequence **\*f2-** does is to make all text after it to be printed in Font 2, thus to make only the word good appear in font 2 another command must be used to print the text after the word 'good' appear in font 1 (the default font). This is done with the sequence:

**\*f1-**

INSERT this before the word 'men' in the same way a before so that the line now reads:

Now is the time for all **\*f2-**good **\*f1-**men to come to the aid of the party.

To print this press <ESCAPE> to return to the View title screen and type:

**\*NTQ (RETURN)**

This select NTQ printout.  
Now check that the printer is ready and type

PRINT **<RETURN>**

The printout should be something like this.

Now is the time for all **good** men to come to the aid of the party.

All other command letters are used in the same way. For example NEW the text and type:

**\*L3-\***H3- Height 3 **\*W2-**Width 2

This will produce triple height and double width text.

For a complete list of all the command letters see the NTQ User Guide or type:

**HELP NTQ <RETURN>**

# ELECTRON MULTI-FONT NTQ NEAR TEXT QUALITY FONT SOFTWARE

ELECTRON NTQ has all the features of the BBC version:

MULTI HEIGHT, WIDTH, FONT, PITCH on the same line of text. INVERSE, BACKGROUNDS, and UNDERLINE are available, together with MICRO-JUSTIFIED text.

All this from WITHIN VIEW, WORDPOWER, or WORDWISE (with E2P or MODE 7 adaptor), or simply from BASIC.

The powerful MACRO commands are fully supported, and a MACRO DEFINER is included on the system disk. This is one of the main differences between the BBC and the Electron version. The BBC version has a MACRO definer built into the NTQ ROM, which uses a special MODE 7 screen to define MACROS, this has been rewritten to work from disk in MODE 6 on the Electron.

ELECTRON NTQ comes on TWO 16K ROMS which can be fitted to a cartridge or into the Slogger ROM Box or ROM Box \*. If only the DRIVER ROM is fitted, NTQ will work but only 3 fonts will be available. Extra fonts can be purchased on FONT EXTENSION ROMs or as disk files to be loaded into sideways RAM. The system disk contains a FONT DEFINER to let you create your own fonts.

## DEFINING MACROS

To define MACROS on the Electron, you must insert the system disk and type CHAIN"MACED". Once the program has loaded proceed as described in the USER GUIDE. Once MACROS are defined they can be saved to disk by the \*MACROSV command.

NOTE: Using the program MACED will corrupt the contents of RAM .so save anything you want to keep first!

## VIEW EXAMPLE

To help you use NTQ from VIEW a file called "VIEWex" is included on the System disk. to print the sample text proceed as follows:

- 1: Go into VIEW as normal
- 2: Insert the system disk (\*MOUNT on ADFS)
- 3: Load the printer driver by typing PRINTER NTQDRV
- 4: Load the sample text by typing LOAD VIEWEX
- 5: Select NTQ printout by typing \*NTQ
- 6: Print the text by typing PRINT

NOTE: Printing on the Electron can be slow. Printing can be greatly speeded up by installing a TURBO or MASTER RAM board into the Electron. These are available from Slogger.

NOTE: The VIEW Highlight codes HT1 and HT2 are obtained by FUNC+H (-) and FUNC+J (\*) resp.

The file VIEWex:

THIS IS MULTI-FONT NTQ in STANDARD TYPE PROPORTIONAL SPACING

Let's change to **COMPACTA BLACK** font **and** now to ISONORM FONT.

This is double height  
This is triple width.

And back to normal using MACRO 0.

# NOTES FOR NTQ USERS

The following points have been brought to our attention by some NTQ users and we would like to pass on these on to you. If you have any tips on the use of NTQ, which may be useful to other users, please contact PMS.

## 1 PRINTER BUFFERS

NTQ will NOT work with many printer buffers. These include buffers which use banks of sideways RAM, and buffers on shadow RAM boards. eg WATFORD 32K. ARIES B32 and SOLIDISK 4MEG boards.

Printer buffers built into printers WILL work with NTQ.

The inability to use a printer buffer with NTQ will cause little hardship as there would be no appreciable speed increase when using a buffer. This is because the printer is operating in graphics mode, not text mode when printing NTQ text.

## 2 USING NTQ WITH INTERWORD

The NTQ ESCAPE sequences can be entered into INTERWORD text using the embedded command menu, obtained by hitting function key F1. The ESCAPE sequences can be entered in several forms, including: 27,"W",2 or ESC"W",2 or 27,87,2.

Remember to type \*NTQ from the main menu BEFORE pressing 6 to print the text.

NOTE: If you use INTERWORD on the MASTER with NTQ, you will require a special version of NTQ, contact the Sales Office.

## 3 CONFLICT OF WORKSPACE

A few ROMs are causing a conflict of workspace with NTQ. NTQ's private workspace is being corrupted by these ROMs. The best way to avoid this is to alter the order of the ROMs in the BBC to make NTQ the LOWEST priority ROM.

This problem has occurred with certain SOLIDISK DFS's and ADFS's.

## 4: USING THE FONT DESIGNER

When using the FONT DESIGNER, the FONT NUMBER specified at the start of the progrs.m should be used when selecting the FONT in the LOAD **and SAVE character** options. Do not type in the NAME of the FONT, it will be ignored.

When a FONT EXTENSION ROM is loaded into **sideways RAM**, the **sideways RAM** should be write protected, immediately after it is loaded, if possible. This is only necessary if the sideways RAM is auto-select. ie you can directly \*LOAD to it.

PMS can put your own FONTS into ROM for you for £5.00 inc VAT **and postage** - **send** us your FONT files on disk.

## 5 VIEW WITH NTQ

The printer driver NTQDRV must first be loaded into the computer, as detailed on the separate sheet. The command \*NTQ or \*DRAFT should be entered, from command mode, before printing the NTQ text.

## PMS SYSTEM DISKS

System Disks supplied by PMS are unprotected (unless otherwise stated). For the BBC and MASTER, the 5.25" System Disks are on single sided, 40 track, DFS format. To use these disks on 80 track drives the following procedure must be followed.

### \* ON THE BBC WITH DFS \*

#### 1. Dual 40/80 Switchable drives.

If the drives you are using are dual switchable then we recommend that you make a backup of the System disk onto 80 track as follows

- a) Place the System disk in drive 0 and set to 40 track
- b) Place a blank formatted disk in drive 1 and set to 80 track.
- c) Transfer the files using \*COPY 0 1 \*•\* (DO NOT USE \*BACKUP)

#### 2. Single 40/80 switchable and single and dual 80 track drives.

The System disk can be converted to 80 track by inserting the System Disk into drive 0, setting to 80 track if necessary, and typing in \*80 <RETURN>. The conversion process takes about 1 minute and stars (\*) will appear on the screen to indicate successful conversion.

NOTES: Certain DFS's, especially double density versions do not implement correctly the 8271 commands used in the \*80 program, so the result of doing a \*80 may be a corrupted disk, if this happens PMS will be happy to exchange the corrupted disk for a new one in the correct format at no charge. This problem does not occur with "normal" DFS's, eg ACORN DFS, DNFS, and Watford DFS.

### \* ON THE MASTER \*

When using the MASTER, DFS must first be selected, ie not ADFS. This is done by typing \*DISK. There is no need to convert disks on the MASTER, as 40 track disks can be read by 80 track drives. This is done by typing \*DRIVE 0 40 or \*DRIVE 1 40 etc. -

If you are using dual 80 track drives them to make an 80 track backup, set drive 0 to read 40 track (by \*DRIVE 0 40) and drive 1 to 80 track (by \*DRIVE 1 80), then copy the files using \*COPY 0 1 \*•\* (DO NOT USE \* BACKUP).

NOTE: \*80 will not work on the MASTER, and an error message will be generated if you attempt to use it.

### \* ON THE MASTER COMPACT AND ELECTRON WITH PLUS 3 \*

System Disks for the MASTER COMPACT and ELECTRON with PLUS 3 are 3.5,,, single sided, 80 track, ADFS format disks. These can be read on double sided drives, although only one side is formatted. To make a backup copy of the disks follow the normal procedure set out in the Manual.

NOTE: ALL SOFTWARE SUPPLIED BY PMS IS COPYRIGHT, AND MUST ONLY BE COPIED BY THE ORIGINAL USER FOR HIS/HER EXCLUSIVE USE. Any individual, school, college or organisation found breaching copyright will be prosecuted. PMS offer substantial rewards for information leading to successful prosecutions.

# BUYING FONT FILES ON DISK

Since many BBC users have sideways RAM fitted to their computers, and the MASTER and COMPACT have sideways RAM as standard, PMS have now decided to supply font files on disk. These font files can be made into a FONT EXTENSION ROM image, which can be loaded into a bank of sideways RAM. A program to create such ROM images is supplied on every FONT LIBRARY DISK.

There are TWO ways of purchasing the font files:

## 1. FONT LIBRARY DISKS 1 to 4

These disks contain a predetermined set of fonts. The fonts are divided into groups: 2 - "Serious" and 2 - "Fancy" font disks. See the enclosed sheet for details of which fonts appear in which disk. The selection of fonts on these disks CANNOT be rearranged.

The FONT LIBRARY DISKS cost £15 inc VAT and postage.

## 2. INDIVIDUAL FONT FILES

NTQ users can select any number of font files from the Font Library, these will be put onto disk together with the ROM image creator program, to produce a PERSONALISED FONT LIBRARY DISK.

The font files cost £1.50 each inc VAT and postage.

**PLEASE USE THE ORDER FORM ON THE REVERSE OF THIS SHEET.**

**RMS**

**CLEAR**

F4

**SET  
WIDTH**

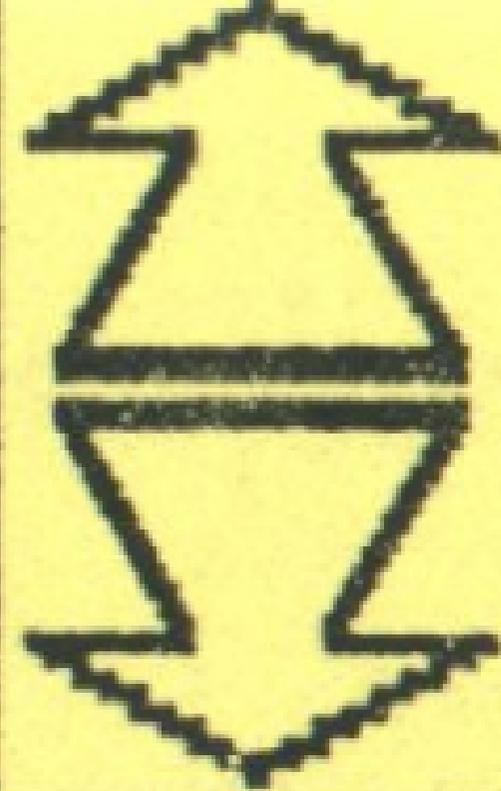
F1

**SAVE**

F2

**LOAD**

F3



**INVERT**

F6

**PRINT**

F8

**EXIT**

F9

# NTQ FONT LIBRARY DISKS

Four FONT LIBRARY DISKS are now available.

Each disk contains the font files, and a program to create FONT EXTENSION ROM images. These images can be loaded into sideways RAM. If the sideways RAM is "auto-select" - ie you simply type \*LOAD "file" 8000 to load a ROM image - then the RAM MUST BE WRITE PROTECTED after loading the image.

Please order these FONT LIBRARY DISKS using the enclosed order form.

NOTE: the numbers of the fonts are those in the red booklet.

## **DISK 1: FANCY FONTS No 1**

8 9 12 13 14 15 23 30 31 32 33 34 35 36

## **DISK 2: SERIOUS FONTS No 1**

10 11 16 17 18 19 20 21 22 24 25 26 27 28 37

## **DISK 3: SERIOUS FONTS No 2**

40 43 44 46 47 49 53 55 56 57 58

## **DISK 4: FANCY FONTS No 2**

38 39 41 42 45 48 50 51 52 54

# DMS MULTI-FONT NTQ

## FONT LIBRARY

All fonts are displayed DOUBLE HEIGHT, DOUBLE WIDTH with PROPORTIONAL SPACING.

NOTE: When ordering FONT EXTENSION ROMs, YOU must specify the number you wish allocated to each font. NTQ allows font numbers up to 32. Please use the enclosed ORDER FORMS for any purchases.

*Planets*

• FONT No: 1 NAME: STANDARD TYPE *STDTYPE 1*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*~{|'++\*}<>?-^\\@[\_::],./

• FONT No: 2 NAME: COMPACTA BLACK *COMPLK 2*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*~{|'++\*}<>?-^\\@[\_::],./

• FONT No: 3 NAME: ISONORM *ISONORM 3*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*~{|'++\*}<>?-^\\@[\_::],./

• FONT No: 4 NAME: BOOKTYPE

BOOKTYPE 4

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 5 NAME: STANDARD ITALIC

ITALIC 5

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 6 NAME: GOTHIC

GOTHIC 6

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 7 NAME: HITECH

HITECH 7

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 8 NAME: WESTERN

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 9 NAME: OUTLINE

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 10 NAME: TALL

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 11 NAME: BOLD

BOLD 12

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 12 NAME: OLD ENGLISH

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./

• FONT No: 13 NAME: ROUNDHAND

ROUNDHAND 16

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/|{+\*}<>?-^\\@[\_::],./



FONT No: 24 NAME: CLEAR TYPE

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"#\$%&'()\*=~/\{£+\*}(<>?-^@\[\_;:;],./

• FONT No: 25 NAME: SMALL BOLD *Small* 13

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**1234567890**

!"#\$%&'()\*=~/\{£+\*}(<>?-^@\[\_;:;],./

FONT No: 26 NAME: CLEAR ITALIC

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*1234567890*

!"#\$%&'()\*=~/\{£+\*}(<>?-^@\[\_;:;],./

FONT No: 27 NAME: CLARET

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"#\$%&'()\*=~/\{£+\*}(<>?-^@\[\_;:;],./

FONT No: 28 NAME: FOREIGN (LATIN)

À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ð Ñ Ò Ó Ô Õ Ö × Ø Ù Ú  
á â ã ä å æ ç è é ê ë ì í î ï ð ó ô õ ö ÷ ø ù ú  
± ² ³ µ ¶ · ¸ ¹  
ı Œ œ Ÿ Š š Ÿ Ÿ © ½ þ ú à « » ¼ ¾ ¿ ð ù à ò » ½ ¼ ¾ ¿ ð ù

FONT No: 29 NAME: STANDARD SAN SERIF

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"£\$%&'()\*=~/\{^+\*}(<>?-^@\[\_;:;],./

FONT No: 30 NAME: STENCIL

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"£\$%&'()\*=~/\{^+\*}(<>?-^@\[\_;:;],./

FONT No: 31 NAME: HOLLOW

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"£\$%&'()\*=~/\{^+\*}(<>?-^@\[\_;:;],./

FONT No: 32 NAME: TWENTIES

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

!"£\$%&'()\*=~/\{^+\*}(<>?-^@\[\_;:;],./

FONT No: 33 NAME: SHADOW

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!"£\$%&'()\*=~/\{^+\*}(<>?-^@\[\_;:;],./



• FONT No: 44 NAME: ITALIC STD. 15 PITCH ISTD15 9

ABCDEFGHIJKLMN**OP**QRSTUVWXYZ  
abcdefghijklm**no**pqrstuvwxyz  
1234567890  
!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./

FONT No: 45 NAME: FELT PEN

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

• FONT No: 46 NAME: SAN SERIF 15 PITCH SANS15 10

ABCDEFGHIJKLMN**OP**QRSTUVWXYZ  
abcdefghijklm**no**pqrstuvwxyz  
1234567890  
!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./

• FONT No: 47 NAME: ITALIC SAN 15 PITCH ISANS15 11

ABCDEFGHIJKLMN**OP**QRSTUVWXYZ  
abcdefghijklm**no**pqrstuvwxyz  
1234567890  
!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./

FONT No: 48 NAME: HERALDIC

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\B[\_::],./**

FONT No: 49 NAME: STRONG

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

FONT No: 50 NAME: GIRDER

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

FONT No: 51 NAME: OLD GERMAN

**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**  
**a b c d e f g h i j k l m n o p q r s t u v w x y z**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

• FONT No: 52 NAME: RAISED RAISED 17

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

FONT No: 53 NAME: THEATRICAL

**ABCDEFGHIJKLMN**OP**QRSTUVWXYZ**  
**abcdefghijklm**no**pqrstuvwxyz**  
**1234567890**  
**!"#\$%&'()=~/|{'+\*}<>?-^\\@[\_::],./**

FONT No: 54 NAME: PLATFORM

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

!"#\$%&'()\*~{|}+\*{<>?~^\\e[\_:;],./

FONT No: 55 NAME: LED (NO LOWER CASE)

ABCDEFGHIJKLMNOPQRSTUVWXYZ

1234567890

!"#\$%&'()\*~{|}+\*{<>?~^\\e[\_:;],./

FONT No: 56 NAME: LCD (NO LOWER CASE)

ABCDEFGHIJKLMNOPQRSTUVWXYZ

1234567890

!"#\$%&'()\*~{|}+\*{<>?~^\\e[\_:;],./

• FONT No: 57 NAME: SLIM

Slim 18

ABCDEFGHIJKLMN O P Q R S T U V W X Y Z

abcdefghijklmnopqrstuvwxyz

1234567890

!"#\$%&'()\*~{|}+\*{<>?~^\\e[\_:;],./

• FONT No: 58 NAME: CLASSY

CLASSY 19

ABCDEFGHIJKLMN O P Q R S T U V W X Y Z

abcdefghijklmnopqrstuvwxyz

1234567890

!"#\$%&'()\*~{|}+\*{<>?~^\\e[\_:;],./

2  
**ROM**  
SET  
User Guide

Utilities disk



PERMANENT MEMORY SYSTEMS

# MULTI-FONT NTQ

Near Text Quality Typesetting Software

For

EPSON RX Compatible Printers

**BBC**



**ELECTRON**

FONT  
LIBRARY DISK



PERMANENT MEMORY SYSTEMS

# MULTI-FONT NTQ

Near Text Quality Typesetting Software

For  
EPSON RX Compatible Printers

BBC



ELECTRON