Thank you for buying *QWriter II*. This is not only an update of QWriter, the whole code has been re-written to include many features, although it is compatible with old versions of QWriter.

This program contains a coded number. It is possible to find out the initiator of illegal copies.

In the following manual square brackets [ ] show optional parameters, text printed italic are examples. In examples only mdv will be used; if you bought *QWriter II* on floppy disc, use flp instead of mdv.

Load *QWriter II* by booting your QL as usual after a reset or power-on or type

LRUN mdv1_BOOT

QWriter II will load itself and then try to find a setup-data-file on mdv1_ called

mdv1_QWRITER_lst

When buying *QWriter II* you get many fonts. *QWriter II* may contain up to 64 fonts, numbered from 0 to 63. Font #0 is always pre-defined; it is Antiqua 12. To create your own version with the fonts you need (if you do not have a memory expansion it would be a waste of memory to load in all fonts) you may create a setup-data-file (if there is already a setup-data-file on mdv1_ you must delete it first):

```
OPEN_NEW #3,mdv1_QWRITER_lst
```

Now you can print the filenames of all fonts you wish to load, e.g.

```
PRINT #3;'mdv1_OLDENGLISH_fnt'
PRINT #3;'mdv1_NEON_fnt'
PRINT #3;'mdv1_GROTESQUE_fnt'
CLOSE #3
```

This setup-data-file would instruct *QWriter II* when booting to load OLDENGLISH as font #1, NEON to be #2 and GROTESQUE to be #3.
You can find out which fonts you may use by doing a *DIR mdv1_*. All filenames ending with _fnt are possible.

You may load fonts which were not loaded during the boot by using the new command
NLQ_LOAD *device_filename,fontno*
This command will try to load the file specified by *device_filename* (e.g. mdv1_OLDENGLISH_fnt) and assigns it to be font #*fontno*. If there is no file called *filename* on *device* then _fnt will be appended to the filename and another try to load it will be made. If it fails again and there is a DATA_USE default directory, then this will be placed before the filename and a final try will be made. All fonts loaded this way will get lost if you remove the NLQ-Server job.
NLQ_LOAD mdv1_OLDENGLISH_fnt,4 loads OLDENGLISH from mdv1_ to be font #4
NLQ_LOAD mdv1_OLDENGLISH,4 does the same and
NLQ_LOAD OLDENGLISH,4 does the same also if DATA_USE is mdv1_.

You can get a list of the currently installed fonts by typing
NLQ_FONTS [#*channel*]
This lists the font number, the font name and the font height in pixels to the specified channel. If there is no channel number output goes to window #1. The font currently selected (if there is any) will be marked with a > character.

QWriter II is ready to use now. First you have to tell *QWriter II* where to send its graphic data to the printer. This could be done with the command
NLQ_USE [*device*]
where *device* is the device to which the printer is connected (e.g. ser or par).
If you do not specify a device then the current device (if there is any) will be closed from NLQ_USE and may be used otherwise. The same occurs if there is a device specified and there was a NLQ_USE with parameter before. This command also ensures that there is a NLQ-Server job running. If not, it will be created. Without this job no output will occur. Do not remove this job while there is a channel open to NLQ or the job is currently printing.
If you have to kill the job you can re-create it at a later date by typing
NLQ_SERVE

You are now able to open the NLQ-device the same way you do to any other device, its device name is
NLQ_*bits*P*font*
where *bits* means the number of bits per printer line. Default is 960. At the moment there are four densities allowed: 480, 640, 720 and 960 pixels/line. EPSON RX and FX-compatible printers allow all densities; MX compatible just 480 and 960. *font* selects the font number; default is font #0 - Antiqua 12.

You can open a channel to NLQ, for example

OPEN #3,NLQ#4

opens channel #3 to be NLQ, uses default density 960 and selects font 4 (if font #4 has been loaded!).

Now you can send anything to the open channel you wish, e.g.

PRINT #3;'Hello!' prints Hello!
BPUT #3,65,66,67,10 prints ABC
LIST #3 prints the SuperBASIC listing currently held in memory

Control-codes

1	disables *QWriter II* fonts and sends anything printed to NLQ directly to the printer without modifying it. You can leave this mode by sending CHR$(255).
2 n	Select font. Must be followed by the font number n.
3	Enables double-strike. Each line is printed twice with a linefeed of 1/218" before the second printing.
4	Disables double-strike
9 n1 n2	Tabulate to right. The new position will be n1*256+n2; if the current print position is higher the Tabulate will be ignored.
10	Line feed. Prints the current line (if there are characters in the line buffer) and moves the paper to the next line.
12	Form Feed. Moves the paper to the beginning of the next page.
13 n	Select multiple width by factor n.
14	Select double width.
15	Select normal width.
16 n	Select space out by n bits.
17	Select normal space out.
18	Deselect space out.
19	Select unproportional printing.
20	Deselect unproportional printing.
24	Cancel current line.

The remaining printable characters will be printed if they are defined in the current font. If not a short beep is made for every character which is not defined.

Examples to the control-codes:

1 To print normal text to the printer when using a NLQ device you first have to disable the server to modify the data by sending this control code:

PRINT#3;CHR$(1); or

BPUT#3,1 (if you own SuperToolkit II for example).

Now you can print anything you wish to the printer the same way you do without *QWriter II*. You can leave this mode by sending control code 255.

2 To select another font, use control-code 2, followed by the font-number, for example, OLD ENGLISH is font #4), you may use
PRINT#3;CHR$(2);CHR$(4); to select it or
PUT#3,2,4

3 To make the printout darker you can select this control code. Every line is printed twice, there is a linefeed of 1/218" after the first print.

9 To tabulate to a specific position, say 400, use
PUT#3,9,1,144 (you should know now how to PRINT)

19 As all pre-defined fonts are proportional defined it is very difficult to create tabulated tables. If you select unproportional printing every character is spaced the width of the widest character in the font. If you select another font the unproportional printing is cancelled.

If you wish to list a BASIC-Program using the OLDENGLISH to a printer connected to ser1; you must load *QWriter II* first, then load the OLDENGLISH font:
NLQ_LOAD mdv1_OLDENGLISH,4 to load
NLQ_USE ser to direct output to ser1.
Then, if the program is stored on a device; type in
COPY mdv1_someprogram TO nlqf4
If the program is currently in the memory, use the following:
OPEN#3,nlqf4:LIST#3:CLOSE#3

QWriter II and Quill

To use *QWriter II* with Quill you have to install a new printer driver: LRUN install_bas of Quill and select parallel port (even if you print to ser). Set NLQ to be the port name and install the *QWriter II* control codes for bold etc. and translations as you wish. To make it possible to select any font from Quill, translate a character you do not use to code 2. You can place this character into a Quill text followed by a letter to select a font (A means font 1, B font 2 etc.). Before starting Quill you must load *QWriter II* and type in
NLQ_USE ser (or par or whatever you need).

If the *QWriter II* cartridge contains a file called updates_doc, please have a look at it first.

After loading *QWriter II* you may run the demo program called mdv1_DEMO.
