INKWELL UPDATE OCTOBER 1987

The manual for ID Version 2.8 contains everything that was in the previous manual + updates. Improvements over earlier versions include

1. Default values for printing can be set from within ID.
2. Proportional spacing depends on the width of 'W' in the font
3. Extra fonts
4. Font widths up 87 times normal
5. Selectable bit image mode so ID works with printers like the Seriel 8056
6. Baud rating can be changed from inside ID.
7. Lines which are too long in preview are indicated by a grey square on the right hand end of the line in preview mode. After a long line ID waits for a key press before continuing. When using preview ensure you type in the correct file name. A mistake could cause a crash.

One recent addition not documented in the manual is the ability to use quadruple height. To do this press SHIFT and F2 (alter font) from the main menu. Press '5' then '1' or '2' to stretch the font. This will either stretch the capitals or the italics. In either case double height letters can be made by printing (with a stretched font) a line in capitals followed by the same line in italics.

Eg.

HELLO
hello

Will print the word 'HELLO' in double height letters. Combining this with a double height font (H2) will produce quadruple height letters which are ideal for headings or posters.

There are two limitations to this :

1. Line spacing must be 0 (L0)) or there will be a gap between the top and bottom of letters.
2. Equal character spacing must be used (C0) or the tops and bottoms of letters will not match.

Sorry if there has been any delay in this arriving. Revising ID and rewriting the manual has taken a while.

INKWELL DELUXE INSTRUCTION MANUAL

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1. INTRODUCTION

INKWELL DELUXE is a font editor and print utility.

The font editor allows you to design characters on a 16 x 16 grid. Eight complete fonts (sometimes called alphabets or character sets) are provided. New fonts can easily be designed and INKWELL DELUXE has a large number of facilities including adding shadow, rotations, flips, outlining, Italicising, emboldening and shrinking. Most of these can be applied to complete fonts so it possible to design a new font with a just few keypresses (see section 8 for details).

You can print documents using any or all, of the 8 fonts and have control over line spacing, print emphasis, character spacing, character width and height and print density.

INKWELL DELUXE works with all Epson compatible dot-matrix printers which have a double density print mode (see your printer manual if in doubt) and recent changes allow it to be used with single and quad bit image modes. It can therefore now work with printers like the Serial BOSS. It will work with any standard text editor which can produce ASCII files, including Quill, the MetaComCo editor and the HiSoft QL editor.

This manual was produced using INKWELL DELUXE, a Brother M1009 printer and Hi-Soft's excellent editor. It was originally printed A4 size then reduced to A5.

INKWELL DELUXE is very easy to use. To summarise :

1. Prepare a document using a standard editor such as Quill (see section 10).
2. Place this in MDV2.
3. Load INKWELL DELUXE in MDV1 (see section 3) and follow the directions given on screen.

2. GETTING STARTED

Before using INKWELL DELUXE (I.D. from now on) make sure you have made at least one back-up copy. To do this :

1) Reset the computer.
2) Press F1 or F2.
3) Place the original copy of I.D. in MDV1.
4) Place a blank cartridge in MDV2.
5) Type LRUN MDV1_CLONE. This will run a programme which will copy the contents of the cartridge in Drive 1 onto the cartridge in Drive 2.

Making a back-up will take a few minutes. When complete put the original I.D. cartridge in a safe place and work from a back-up copy.

To save INKWELL-DELUXE to disc follow steps 1-5 above but substitute FLP1 for MDV1.

It is perfectly reasonable for you to make a few back-up copies for security reasons. It is, however, illegal to lend or sell these to other people.

You can produce customised versions of I.D. which load and run using any set of 8 fonts (see section 8 for details).

3. LOADING I. D.

Place a back-up copy of I.D. in MDV1. Press the RESET switch on the right-hand end of the computer. Press F1 or F2. I.D. will load and display a screen divided into three main areas. (see diagram 1). To leave I.D. hold down CTRL and SHIFT and press "Q". To re-enter from BASIC type CALL X and press ENTER.

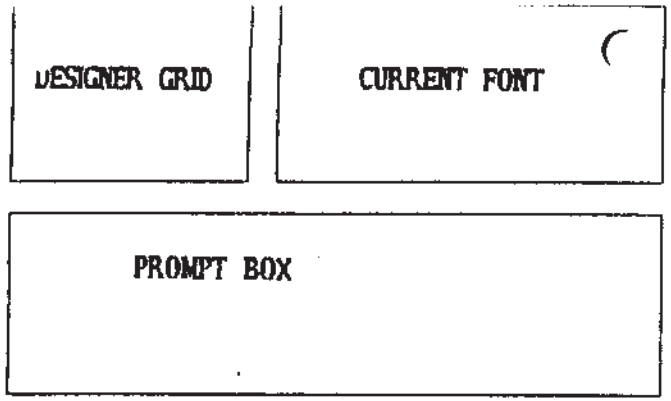


DIAGRAM 1. MAIN SCREEN AREAS

4. MAIN SCREEN AREAS

THE CHARACTER DESIGNER GRID

This is a 16 x 16 grid occupying the top left-hand area of the screen. It allows you to design new characters which may be up to 16 dots wide and 16 dots high.

THE CURRENT FONT

This consists of 128 characters and is in the top right half of the screen. The first two rows (characters 0-31) are usually blank. They can be defined in the same way as any other characters.

PROMPT BOX

This is in the lower half of the screen and provides information about the options available. It usually shows the main menu.

5. SIMPLE PRINTING

DEMONSTRATION DOCUMENT

There is a demo document on the cartridge. To print this out hold down SHIFT and press F1. Enter the document name as 'mdv1_demo' (or flp1_demo if you have transferred LD. to disc) and type SER1 to send the document to the printer.

OTHER DOCUMENTS

First of all the document has to be made suitable for LD. (see sections 10 and 11 for more details).

Load the document into a text editor (e.g. QUILL) and type ## (two hatch symbols obtained by pressing 3 and SHIFT at the same time) on a blank line before the start of the text. LD. uses a pair of hatches as a signal to begin printing. Place two hatch symbols in curly brackets (##) on the line after the last line of a document to signal that printing should stop. N.B. the curly brackets are next to the 'P' on the QL key board.

Save the document.

Place the cartridge with the document in MDV2.

Load LD. in MDV1 (see section 3).

Hold down SHIFT and press F1.

Type in the document-name. E.g.MDV2_letter_doc.

Type the destination. E.g. SER1 if the printer is connected to SER1.

The text will now be sent to the printer. For more elaborate printing see section 10.

On the cartridge is a printer driver for QUILL called PRINTER_DAT
Copy this to the version of QUILL you use with INKWELL DELUXE unless
you intend to set up your own printer driver (section 11 of manual)

NEW DEFAULT SETTINGS

From LD. you can adjust the baud rate, bit image mode and print style.

BAUD RATE

From the main menu press 'Y'. Choose the baud rate for your print from list shown. The default is 9600 which suits the Brother M1009

BIT IMAGE MODE

From the main menu press 'G'. Single density prints 480 dots across an A4 page, double prints 960 and quadruple prints 1920. Many older printers can only handle single density (e.g. the Serial 80CC). Quad density will only use the left half of a page (future versions may improve on this).

PRINT STYLE

This was suggested by Mr. Tyler of Aughton near Ormskirk.
From the main menu press 'U'. Then answer the folowing questions (see section 10 for more detailed information on control codes)

Line spacing (0-9) ?
Print emphasis (0-9) ?
Character width (0-9) ?
Character height (0-2) ?
Character spacing (0-2) ?
Inverse (0-1) ?
Use font (0-4) ?

The figures you enter here alter the current default settings for control codes. They will have an effect on print out AS LONG AS control code settings WITHIN the document do not change them.

This makes LD. very flexible. For example if you write a document which needs just one style of font, character size, line spacing etc. you can save it with no control codes except hatch symbols at the start and end then print it out in a variety of ways simply by changing the print style from LD. Each variation can be previewed (section 6) and the most appealing printed out.

P.S. with Quill avoid BOLD / UNDERLINE etc

6. PREVIEW

Before printing it is often useful to have an idea about how the print-out will look. LD. provides a WYSIWYG (what-you-see-is-what-you-get) preview which can reduce costly printing errors.

From the main menu press key 'P' In response to the prompt type in document name (e.g. mdv2_demo_doc) and press ENTER. The document will now be loaded into the QL and shown on screen.

Preview displays a document on-screen using the appropriate fonts and shows all font heights and widths plus character spacing, line spacing, and inverse printing if used.

As it shows each line on-screen LD. will beep if the line is too long. It beeps if the line covers more than half the screen width in single density mode (section 5).

Each section shown on-screen is the equivalent of approximately one quarter of an A4 page.

In preview mode F1 returns to the main menu. F2 displays the next section of the document. F3 displays the first section of the document.

Because Epson printers with double density bit image modes print up to 960 dots per line and the QL can only display 512 'dots' per line preview is a compromise. Each character is squashed side-ways so that a character which is 16 dots high and 14 dots wide will be shown on-screen as 16 dots high and 7 dots wide. This produces some loss of on-screen detail but still gives a very good idea of final printed output.

The WYSIWYG effect is not quite 100% accurate for another reason. When a character is squashed sideways its width is rounded up. E.g. a character which is really 14 dots wide will be shown as 7 (i.e. 14/2) dots wide. A character which is 8 dots wide will be shown as 5 (8/2 rounded up) dots wide. Because of this a line with a lot of characters of odd widths will appear on-screen as very

slightly longer than it really is.

A useful sequence is :
1. Write a document adding control codes if needed (section 10)
2. Print out this document using your normal method
3. Load LD. and preview the document noting any slight changes which are needed before printing.
4. Make the small changes shown in step 4
5. Preview the document again to check all is perfect
6. Print out the document using LD.

If you only add control codes for starting and ending printing then it is easy to change the final print out from within LD. (section 5).

7. DESIGNING A NEW ICON

First press E to erase the large grid. There is a small cross in the top left corner of the grid. This can be moved around the grid with the cursor keys. After pressing F1 the cross will leave a black trail. If F2 is pressed it leaves a white trail. As a letter/icon is designed on the large grid it is reproduced in miniature next to the small arrow in the bottom right corner of the prompt box. When you are satisfied with the design press F4. This puts an inverse cursor in the top left corner of the current font. When this is moved around with the cursor keys it turns letters into their inverse (white letters on a black back-ground). Move the cursor to the place where you want to store the letter and press ENTER.

If you want to alter a letter in the current font press F3. Move the inverse cursor to the appropriate letter and press ENTER. The selected letter will be placed on the large grid ready to be altered.

ICON MANIPULATION

See appendix 1 for a summary of key-presses.

LD. has a sophisticated set of commands for manipulating the current icon.

SCROLL

This moves the character in the CHARACTER DESIGNER GRID in the desired direction. Two versions are available, one with and one without wrap-around. Without wrap-around any parts of a character scrolling off the large grid are lost. With wrap-around they re-appear on the opposite side of the grid.

Scrolling needs only a single key-press.

Without wrap-around :	A = up	C = down	D = left	F = right
With wrap-around :	I = up	M = down	J = left	K = right

TURN

Pressing 'T' rotates the character in the large grid 90 degrees clockwise.

FLIP

This flips the character about its middle. 'V' produces a vertical flip. 'H' produces a horizontal flip.

SQUEEZE

Pressing 'Z' squeeZes gives the option of making a character 1/2 or 3/4 height. To change the width of a character or font first turn i with key 'T'.

ANGLE

This can help when designing an italic font. Press key 'A'.
Options are
1. Extreme skew left 2. Mild skew left
3. Mild skew right 4. Extreme skew right

Some detail may be lost if wide characters are skewed.

SHADOW

This produces a shadow 'under' the icon. Press 'S'. The depth and direction of shadow can be altered using the arrow keys.

LIGHT

Pressing key 'L' selectively removes black dots from the current ic

which makes it look lighter.

NEGATE
key 'N' makes black dots white and white dots black.

BOLD
This adds dark blocks and makes the icon thicker. Press key 'B' and use the arrow keys to make the character bolder

OUTLINE
Pressing 'O' removes all dark pixels which are bordered by 4 dark pixels. This produces an outline. This works well with 'fat' characters so it is be best to make the character fatter using 'B' before using outline. To draw a square box press key 'E' then 'N' then 'O'.

CHANGE PRINT DEFAULTS
Pressing 'U' allows the default print style to be altered. Line and character spacing, print emphasis, font used, and character size can all be changed. If a document which has only control codes for start and end printing (## and (##)) is printed its appearance can be dramatically altered without leaving LD. If you example you preview a letter and dont like the character spacing simply alter the default spacing from LD. preview it again and print it if its better. Any control codes which are not set within the document can be changed by this method (see section 10).

SUMMARY OF ICON COMMANDS
'U' produces a quick reference summary of the above commands in the PROMPT BOX. Appendix 1. shows a QL keyboard with all keys labelled.

8. DESIGNING A FONT

Most of the icon manipulation commands described in the previous section also work on the entire current font. To use them press SHIFT and F2 and follow the on-screen instructions. This allows new fonts to be designed quickly and easily.

To make a font narrower first turn the font using 'T' then squeeze it with 'Z'.

Shadow only works on individual characters.

ADD EXTRA DOTS
One extra command is add-eXtra dots. This only works from the manipulate font menu (press SHIFT and F2 from the main menu then press 'X'). Its effect is to add the pattern in the CHARACTER DESIGNER GRID to characters 48-128 (/ to ©) in the current font. One use for this is to produce an underlined font which can be used for headings. One of the extra fonts (ULB) on the cartridge was produced in this way.

Once you have manipulated a font remember to save it in memory and save it to microdrive if you wish to keep it permanently.

9. LOADING/SAVING FONTS

Fonts can be saved in memory or on a microdrive cartridge.

In memory there are 4 fonts. You can only print using the fonts in memory. If you wish to print using a new font this must first be loaded into memory. From the main menu any of LD.'s 4 fonts can be selected by pressing a number from 1 to 4.

To save a font in memory press O. This will prompt for a number between 1 and 4. Enter a number. If, for example, you press '3' the currently displayed font will be saved in memory as font 3.

To save fonts onto microdrive hold down SHIFT and press F4. In answer to the prompt enter a document name. E.g. MDV2_Gothic. The currently displayed font will then be saved onto microdrive. If there is a font on the cartridge with the same name as the one you try to save LD. will NOT save the font.

To load a font from microdrive hold down SHIFT and press F3. Enter

the font name. E.g. mdv1_ROMAN. The font will then load and be displayed as the current font (make sure you save this into memory before continuing).

SAVING INK-WELL DELUXE

The whole of INK-WELL including the fonts currently held in memory can be saved by pressing SHIFT and F5. So that your customised version automatically runs when you switch on the QL and press F1 or F2 remember to include a copy of the Super-Basic BOOT program with the customized LD. To do this place the original cartridge in MDV1_ and the customised cartridge in MDV2_ and type

```
COPY MDV1_BOOT TO MDV2_BOOT
```

N.B. type FLP1_ or whatever is appropriate if you are saving to disc.

THE FONTS IN THE PROGRAM

There are four fonts resident in LD.

1. GAELIC 2. NOVA 3. ITALIC 4. ROMAN

NOVA was supplied by Mr. Ashcroft of Newcastle and is used throughout this manual.

THE EXTRA FONTS

Some extra fonts are included on the cartridge.

1. ICONS : lots of small pictures and graphics
2. PLAIN : like bold but slimmer
3. STENCIL : like ROMAN but with gaps
4. BLOCK : fat square letters
5. SQUARE : uses few curves or diagonal line and reduces jaggies
6. TRAJAN : this was supplied by Mr. C.Davin. Always use proportional spacing with a gap of 0 with this (see section 10).
   The TRAJAN alphabet only has capitals. To make some very wide letters such as 'M' you need to combine the 'M' and what would have been 'a'. E.g. to write 'WELCOME' write 'WELCOaMmE'. Loading the TRAJAN font may make this clearer.
7. ULBOLD : same as bold but underlined. Used for all main titles in this manual.
8. MINI : like NOVA but a little smaller (also from T.Ashcroft)
9. DATA70 : a futuristic font
10. HAND : a bit like hand-writing
11. OLDE : ancient
12. OUTLINE: fat letters with white space

If you have designed any unusual or interesting fonts send them to PALANTIR PRODUCTS with a brief description. We wil return all cartridges and pay £10 for any we decide to keep.

10. CONTROL CODES

To use INKWELL DELUXE fully you must understand the use of cont codes (C.C.s). These are inserted into a document to control the way it is printed but they are NOT printed. All documents MUS include a C.C. to start printing and a C.C. to end printing. All other C.C.s are optional.

In general, all C.C.s recognised by INKWELL DELUXE follow these rules :

1. They are enclosed within a pair of curly brackets, '{' and '}'. The left bracket is obtained by pressing SHIFT and the key to the left of 'P' together. The right bracket is obtained by pressing SHIFT and the key above the ENTER key together. Bec INKWELL DELUXE uses curly brackets for C.C.s they cannot be printed. This is not a great disadvantage. There are two othe pairs of brackets and If you really must have curly brackets is a simple matter to redefine some other pair of characters N.B the signal to begin printing does not need to be in brack It is just a pair of hatch symbols (see section 5).

2. They are on a line on their own. Anything else on a line with C.C.s will not be printed.

3. They consist of a series of capital letters followed by numbers. For example (U2L4C0) / which means print using font 2, with double line spacing and equally spaced characters.

4. All C.C.s continue to have an effect until they are altered. Thus if you set line spacing to double line (using (L4)) all printing will use double line spacing until a new C.C. alters this.

Following the above rules

U4L1 is permissable, but

U0L1 is not since the 'U' is not followed by a number.

LINE SPACING

The C.C. for line spacing takes the form

(Ln)

'n' is a number between 0 and 9.The value of 'n' determines the line spacing according to the following table.

value of n	spacing in dots.	
0	16	(single line spacing)
1	20	
2	24	
3	28	
4	32	(double line spacing)
5	36	
6	40	
7	44	
8	48	(treble line spacing)
9	52	

CHARACTER SPACING

(Cn)

'n' is a number between 0 and 2.

value of n	type of spacing
0	equal
1	proportional (no gap between letters)
2	proportional (gap of one dot between letters)

With equal spacing all letters are the same width. I.D. determines this width by looking at the width of W (capital double-U). This is usually the widest character in a font so if it fits all others will.

When proportional spacing is selected the space allocated to each letter is proportional to its width. Thus 'm' takes up more space than 'i'. Most of this manual was produced using proportional spacing and a gap of one dot.

This line uses equal spacing.

This uses proportional spacing with no gap between letters.

This uses proportional spacing with a gap of 1 dot between letters.

INVERSE PRINTING

(In)

'n' can be 0 or 1. If 'n' = 0 then printing is normal. When 'n' = 1 letters are printed white on a black background.

USING DIFFERENT FONTS

(Un)

'n' is between 1 and 4. E.g. after (U4) all printing will use font 4. This manual mainly uses font 2.

EMPHASISED PRINTING

(En)

'n' is a number 1-9. Text is printed 'n' times. If, for example, you

set 'n' to 2 the printer would print each line twice which would make it darker. Reprinting slows down the printer and after a point (about 3 reprintings) the text is as dark as it will get.

PAUSE PRINTING

(P1)

After (H1) printing is halted until a key is pressed. This is useful for changing paper. Upon halting for (P1) INKWELL DELUXE plays a note.

PRINTING A SECTION OF A DOCUMENT

starts printing and (##) stops printing. Put ## at the start of a document and (##) at the end.

FONT WIDTH

(Wn)

'n' can be 1-9.

n	width
1	normal
2	double
3	treble
4	4 times
etc.	

In general the maximum number of characters on a line is 80 (with wide characters and proportional spacing this can be as low as 84). So if the font width is greater than normal make sure the number of characters on a line is adjusted appropriately. Eg if width is double then lines can only be 40 characters (32 if they are all wide)

FONT HEIGHT

(Hn)
'n' can be 1 or 2. 1 = normal height. 2 = double height.

11. QUILL AND OTHER EDITORS

For editors which produce ASCII documents (e.g. HiSoft,Metacomco and Computer One) simply save the text as an ASCII document as usual.

With QUILL you must install a printer driver. The INFORMATION section of the QL Manual describes the necessary steps. Follow these as far as the section SET UP FOR YOUR OWN PRINTER then select OTHER from the options provided. Then enter the following:

DRIVER NAME : INKWELL
PORT : SER1
BAUD RATE : 9600 as appropriate
PARITY : NONE
LINES/PAGE : 49 as appropriate
CHARACTERS/LINE : 70 as appropriate
CONT. FORMS : NO YES if continuous stationary
END OF LINE CODE: LF or other code such as CR if appropriate
PREAMBLE CODE : NONE
POSTAMBLE CODE : NONE
BOLD ON : NONE
etc...

A printer driver only needs to be installed once and has the bonus that QUILL's formatting capabilities can be used. The Quill document still needs to use INKWELL's control codes.

To produce ASCII documents from QUILL save them with a _LIS extension. To do this from QUILL :

Press F3 then press P
QUILL will prompt "Current ?"; press ENTER
QUILL will prompt "Whole ?"; press ENTER
QUILL will prompt "To ?"; TYPE NAME_LIS (substituting the name of your document for NAME) and press ENTER

To reload a _LIS document into QUILL use import.

12. MISCELLANEOUS POINTS

INKWELL DELUXE is rather slow and it is a good idea to use your normal printer driver to produce a rough draft of a long document which can then be checked before a final document is printed using LQ. Alternatively you could preview the document (see section 8).

LQ. doesn't like TABs so use spaces instead.

One of the extra fonts on the cartridge is 'ICONS'. This consists of a number of simple pictures and patterns which can be used to liven up a piece of text.

A whole font could be redefined to chess symbols which could be used for chess diagrams.

To send a SUPER-BASIC program to the printer with INKWELL DELUXE Make the first line of the program something like :

```
1 REM ##
```

Make the last line :

Save it in the normal way. When INKWELL DELUXE is loaded the basic program can be treated as a normal document and printed in the same way as a QUILL document.

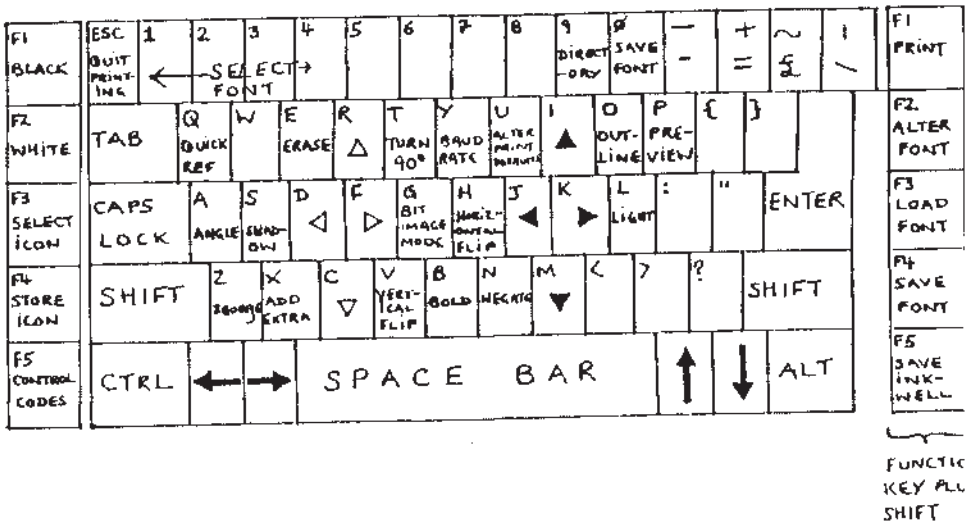
Printing 'ARCHIVE files. Save the Archive file using Archive's EXPORT option and SPOOLON (you will probably need to write an Archive procedure to get neatly tabulated output). Then treat the Archive file as a normal text document (load it into a text editor and place C.C.'s as required).

All main titles use (H3W2U2LOC2).

Sub-headings use (H2W1U2LOC2).

The main text is (H1W1U2LOC2).

APPENDIX 1 : KEY-BOARD LAY-OUT



FUNCTIC
KEY PL
SHIFT

△ = SCROLL WITHOUT WRAP ▲ = SCROLL WITH WRAP

APPENDIX 2: CONTROL CODES

```
## START PRINTING
(##) STOP PRINTING
(P1) PAUSE PRINTING
(Hn) FONT HEIGHT n =1-2
(WN) FONT WIDTH 1-9
(Cn) CHARACTER SPACING n = 0-2
(Ln) LINE SPACING n = 0-9
(In) INVERSE 0 = no 1 = yes
(Un) USE FONT n = 1-4
(En) PRINT EMPHASIS n = 1-9
```