

In this issue of *Script* we have articles which explain some of the more advanced features of our software and how you can use them. We also have the details of Business Computing 90 which will be held at the end of September at Earls Court.

We start with a LocoFile article that describes the way in which you can pick out the same record under a number of different headings depending on your current requirements. You do this by setting up an Alternative Main Key index in which the entries are drawn from a number of different items in each record. This article describes how this is done.

Next we turn to CHARKIT. Last time we told you how to change the Header section of a Character Set in order to use a font that LocoScript doesn't normally support. In this issue we'll be showing you the rest of the changes you need to make to the Character Set in order to support your chosen font fully.

When producing a document it is often useful to be able to add footnotes which clarify points in your text. LocoScript does not have an automatic footnoting facility, however in this issue we show you the way that you can add them yourself without disturbing the rest of your text.

Printing your addresses out on labels stationery is a quick and easy way of addressing large numbers of envelopes. So we have an article on the different ways that you can do this using LocoScript and LocoMail, and you can pick the method that's best for you.

Finally, as some of you may already know, this month marks LocoScript's fifth anniversary. To celebrate this event we have decided to do something we have always refused to do before! All is explained on the back page.

### **Contents**

### News

2

Business Computing 90; new prices

### **Keywords**

3

LocoFile's Alternative Main Key indexes explained

### **CHARKIT**

6

The second part of the CHARKIT article

### **Footnotes**

10

How to add footnotes to a LocoScript document

### **Printing labels**

12

Printing addresses on labels for mailshots etc

### Letters

16

Extracts from our post bag

### **PostScript**

20

Script is published by:



©1990 Locomotive Software Ltd.

### News

### **Business Computing 90**

It's showtime again! This time we're off to Business Computing 90 which will be held on the 25th-28th of September at Earls Court. The entrance fee will be £4.00 per person, but the enclosed ticket will get you in free!

Business Computing 90 is London's biggest business computing event. All the big names in computing will be attending the show and you'll be able to see all the new developments in the computer industry.

Of special interest to PCW users this year will be the PCW 'Village'. Here you'll be able to pick up plenty of hints and tips and discuss any queries you have with the experts. Locomotive will have a small stand in this area where we will be showing some our PCW software and answering questions. The PCW Village will be situated in the Main Hall of the Exhibition, so it will be easy to find.

£125+VAT
£29.95+VAT
£29.95 inc VAT
£34.95 inc VAT
£44.90 inc VAT
£24.95 inc VAT
£39.90 inc VAT
£29.95 inc VAT
£49.90 inc VAT
£29.95 inc VAT
£34.95 inc VAT
£19.95 (0% VAT)
£14.95 inc VAT
£19.95 inc VAT
£24.95 inc VAT
£29.95 inc VAT
£29.95 inc VAT
£14.95 inc VAT
£14.95 (0%VAT)
£19.95 (0%VAT)

Our main Locomotive stand will also be in the Main Hall, not far from the PCW Village. Here we will be demonstrating our new software for IBM compatible PCs, LocoScript PC, as well as our PCW software. If you haven't had a chance to see how LocoScript PC works yet, Business Computing 90 will give you a good opportunity to do so!

### Write for Script

There must be many of you out there who are veritable experts on PCW word processing, who are using the LocoScript family for a wide range of different purposes.

If you think that you employ LocoScript in a way that may interest, or be of use to other LocoScript users, we would like you to write in and tell us about it. We have found that many of our readers enjoy stories about the different ways that people use our software and we would like to have more of them in *Script*. So get scribbling and you may see your name in print!

### **Price changes**

From the 1st of September our product range is being re-structured and the recommended retail prices for our products will be changing as well.

New for the 8256/8512 is LocoScript and LocoFile in a single pack for just £44.90 – a good way to introduce friends to the LocoScript family. The other main change is that we now have just one LocoFont pack for the PCW8256/8512 and one LocoFont 24 pack for 24 pin printers. Each pack will contain the full range of fonts developed for these printers.

Also introduced is a special LocoMail User Guide for PCW9512 users. This includes a free disc including the examples and 'programs' covered in the User Guide.

Details of the new prices are shown in the box opposite.

# Selection by keyword

A common requirement with a datafile is to be able to pick out the same record under a number of different headings, depending on what you are currently interested in. For example, if you store details of your CD collection in a datafile, you will probably want to be able to display the title, artist etc. of a particular CD simply by naming one of the tracks on this disc.

The LocoFile solution to this problem is to set up an index in which the entries are drawn from a number of different items in each record. Such an index is called an 'Alternative Main Key index' and it is one of LocoFile's more sophisticated types of index. This article describes how to set up this type of index, taking as its example a datafile set up to allow guests to pick out cocktail recipes on the basis of their ingredients.

If you have used LocoFile at all, you will already be familiar with the standard type of index in which one of the items on the record is nominated as the Main Key item. Once this item has been selected, LocoFile constructs an index out of the information that appears in this particular item on each of the records in the datafile. For example, in an address datafile, you might nominate the Surname item as the Main Key item for an index: you would then be able to pick out the address details of the person you want simply by giving their surname.

An Alternative Main Key index is really very like this simple 'Main Key' index. The only difference is that, instead of just putting one item on each record into the index, you nominate as many of the items on the card as you wish as 'Alternative' Main Key items. LocoFile then constructs the index out of the information that appears in all these separate items. So, for example, if your address datafile covered couples who kept their individual surnames, you could pick out the same address details under either surname because both would be included in the index.

This is just one simple use of an Alternative Main Key index. Another is to provide the

'Keyword' indexes used by academics to pick out the details of articles that cover a particular topic. Again what you want is to pick out the same article under a number of different headings, which in turn means having the article listed under each of the relevant keywords in the index.

Another use is, of course, to allow you to pick out a cocktail from any of its ingredients.

### Setting up the records

So what do you need in a Cocktail database in order to set up such an index?

Well, the principal thing you need is a number of separate 'Ingredients' items - so that you can put each ingredient of the cocktail in a separate item. One of the most important things to remember about Alternative Main Key indexes is that the entries in the index are taken from separate items.

If you are now envisaging a datafile with separate 'Bacardi', 'Gin' and 'Rum' items, forget it. You could set it up in that way but we wouldn't recommend it. For a start it would be hard work creating all the separate items - and you would probably run out of

new items to create before you had finished. The 50 items you can have on a record sounds a lot but isn't really enough to cater for all the different ingredients you would want to cover.

Moreover, even if you could set up enough items, filling out the details of the cards would be something of a pain. Firstly, simply picking out the different ingredients would involve you in jumping all over the card. And when you got to the required item, you would still have to type the name of the ingredient even though it is the name of the item. Index entries are taken from the details *within* the items, not from the item names. So if you were hoping to use these items to record the quantity of each ingredient – sorry, it doesn't work that way.

Fortunately, there is no need to set up masses of individually-named items. All you actually need is, say, 10 Ingredients items – called, for example, 'Ingred1', 'Ingred2' ... 'Ingred10' – which you then fill in with the names of the actual ingredients in a particular cocktail. LocoFile is quite clever enough to find matching information across the full range of items nominated as Main Key items.

For example, the ingredients of a Piña Colada are (in order of importance) White rum, Pineapple juice and Coconut cream, while those of a Banana Daquiri are Créme de banane, White rum, Single cream and banana. The way

this information might appear on the cards is shown in the examples in the box below.

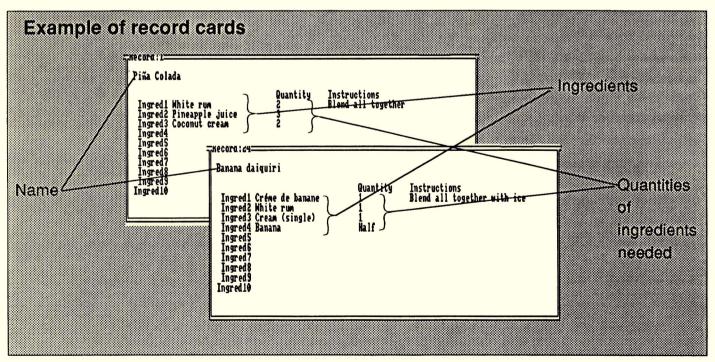
There are two important things to mention here. Firstly, that although White rum is an ingredient of both cocktails, we don't have to put it in the same item on both cards: this is a common misconception people have about Alternative Main Key indexes. The other thing to point out is that there is no need to skimp on the number of 'Ingred' items you have: having extra blank items on a card doesn't add to the size either of your records or of the datafile indexes.

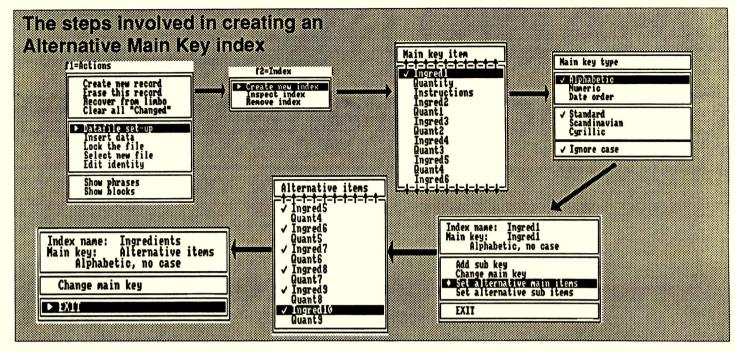
### Setting up the index

Setting up an Alternative Main Key index is scarcely more difficult than setting up the simple one-item type of Main Key index. The steps are shown in the box opposite.

As with any overall change to a datafile, you need to go into the Datafile Set-up to create the index. So from the datafile on the screen, you first display the f1 Actions menu, select the Datafile set-up option and press [MEA].

Once you are in the Datafile Set-up, move the cursor to the first of the Ingredients items (for example, by using [ENTER] and [RELAY]), then call up the f2 Index menu, check that Create new index is highlighted and press [ENTER]. A list of the items on the card is then





displayed: simply check that Ingred1 is ticked and then press **EMER**). LocoFile then displays its Key type menu for you to specify the type of sorting you will want in the index alphabetic, numeric or date. Alphabetic is automatically selected for you and is what you want, so again simply press ENTER].

LocoFile then displays a summary of the index you specified so far, with the name of the item you picked out as the name of the index - all exactly as in setting up a simple one-item Main Key index. The next step is where it changes. Instead of simply exiting from this summary, move the cursor to Set alternative main i tems and press ENTER. LocoFile then displays the full list of items, with a tick beside the Ingred1 item that you have already picked out. Simply tick Ingred2...Ingred10 so that all the Ingredients items are selected for this index (this should give you the feeling of these items really being alternatives) and then press [EMEA].

LocoFile now displays its Key type menu again - in case you want to change the type of sorting (just press EMER) - and then it displays the index summary again. The index should now be set up as you want, except that its name will currently be set the name of the item you first picked out - Ingred1. Cursor up to the top line of the menu and set a better name such as Ingredients, then select the EXIT option and press ENTER].

The Ingredients index you wanted is now defined and will be created when you leave Datafile Set-up and return to the datafile itself.

### Using the index

Using an Alternative Main Key index is just like using a one-item Main Key index. You select the index using the f2 Index menu and then go straight to a cocktail with a particular ingredient by calling up the f5 Goto menu and giving the name of the ingredient you are interested in. You can then use PAGE to step through the other cocktails that have this among their ingredients.

However, for our particular application, there are a couple of nice features about the way this works in practice. For a start, as you step through the Ingredients index you will find that the same cocktail will appear under each of its ingredients in turn (blank items not included). With a simple Main Key index, you can only pick out each record once. Secondly, when you display a cocktail with your chosen ingredient, a quick glance up at the second Information line will tell you whether this is the only cocktail with this ingredient or whether there are more. If Unique is shown on this line, then you are looking at the only cocktail with the chosen ingredient: if it isn't shown, there are other cocktails with this ingredient for you to consider.

# CHARKIT: Characters and widths

In the last issue, we showed you how you can set up a Character Set file for a built-in font on a matrix printer such as the Star LC24-10 simply by taking one of the supplied Character Definition files and making a few changes. If you carried out these steps for yourself, you would have found that you could print quite satisfactorily in this font – except for two things. Firstly, you can't print quite all the characters you can with the Character Set embedded in the LC24-10's printer driver. Secondly, any proportionally-spaced text is a bit erratic.

In this article, we look at changes to the Character Definition file that put both of these right.

As we explained last time, the Character Definition file CHARKIT uses is in two sections – the Header section and the File Body. The Header section deals with the selection of the required font and its overall details: it was this section that we altered last time in order to select the LC24-10's Orator font. The File Body contains precise details of the characters in the Character Set – and it is this section that we have to change here.

At first glance, the File Body looks pretty horrendous, but in fact it is only a list of all the

: Orator CHARACTER SET for LC24-10 PRINTER 123456789012345678901234567890 I"STAR LC24-10 PRINTER" !"Orator typestyle." teader section 31 Aug 90" l"Anyone : 123456789012 "Orator<mark>" 24: Character Set and Default Width</mark> :123456789012 "Standard" Ps: Character Style & Pitch "I'ESC'ki'3'I'ESC'ti'1'I'ESC'6'":Orator font, IBM set 120 : PS widths are in 1/120". Printer code 1'3' -- "HEARTS" 12 "DIAMONDS" 12 Name of character 1 \* 5 \* "CLUBS" 1 \* 6 \* "SPADES" !'&15' "Section" —Character Width

characters in the Character Set, together with the code that the printer uses to identify the character and details of the character's width. (The width is needed so that proportionallyspaced text can be laid out correctly.) True, the way in which these details are specified is defined very precisely and you have to be careful to include the right number of quote marks etc. but the rules that you need to apply are actually quite straightforward.

The really good news is that, although it looks like you have a great deal of information to prepare, there is actually very little work for you to do. As we said last time, most dot-matrix printers use either the IBM or the Epson Character Set so the bulk of the information is already in the example Character Definition file that you work from. Indeed, that's how you could print documents quite satisfactorily without making any changes to the File Body. All that's missing are a few special characters and the correct width information, which is what we'll show you how to deal with now.

(People preparing a Character Definition file for a printwheel, particularly a PS printwheel, aren't quite so lucky though they do have fewer characters to define: we'll look at the problem from their angle in a future Script article.)

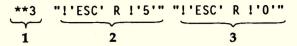
### Adding special characters

Although dot-matrix printers typically offer either the IBM Character Set or the Epson Character Set (occasionally both), their manufacturers also extend the range of characters a little to make their printer more attractive to users. The commonest extensions that they put in are a choice of zeroes (with and without a slash) and a set of 'language variants' - versions of the basic Character Set, each tailored to the requirements of a different national language. In particular, it is usual for these language variants to include characters like \$\textsq\$ (the international currency symbol) and the umlaut accent which aren't in the standard Character Set.

On some printers these variants are selected purely by setting switches on the printer, but on others, it is possible to select these options by sending special 'escape sequences' to the printer. (As we mentioned last time, escape sequences are just sequences of codes, so-called because they typically start with the 'Escape' code ESC.) These escape sequences make it possible to select the extra characters from a program such as LocoScript, and indeed it is usual to refer to options that can be selected via escape sequences as 'software selectable'.

The Star LC24-10 offers both language variants and a choice of zero and while these can be selected via switches on the printer, they can also be selected via escape sequences. In other words, what's required to print a character like \(\mathbb{g}\) is first the escape sequence that selects the correct language variant (Swedish in this case), then the code for \(\mathbb{Z}\) itself (expressed as &24) and then the escape sequence that goes back to the standard Character Set. To add this character to the Character Set we just need a way of expressing this in the Character Definition file.

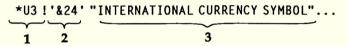
The technique used is to record the escape sequence that selects the special variant and the one that returns to the standard set together as a 'User sequence' which is identified by a number. The definition of a User sequence also looks offputting at first but it is nothing like as complicated as it seems. For example, the following defines the codes needed to select the LC24-10's Swedish Character Set as User sequence 3:



- 1 User sequence 3
- 2 Escape sequence that selects Swedish
- 3 Escape sequence that returns to the US Character Set (the standard)

(ESC R n escape sequence is in fact recognised by a wide range of printers as the command to select a different national language Character Set.)

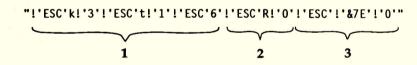
Then for the definition of the p character itself, you simply precede the code by a reference to the appropriate User sequence as follows:



- 1 User sequence
- 2 Printer code
- 3 LocoScript's name for the pt character

(A complete list of the user sequences and character definitions needed to add all the special characters available on the LC24-10 is given overleaf.)

That's all there is to adding these characters except for one thing. Because LocoScript will be going from one character set to another, it is important to define its starting position as the US Character Set and the unslashed zero. To do this, you just have to add a couple of extra sequences to the selection sequence in the Header section as follows:



- 1 Sequence selecting Orator font
- 2 Sequence selecting US Character Set
- 3 Sequence selecting unslashed zero

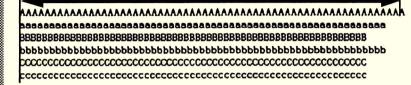
Once you have done this, the starting state of the printer is completely defined, regardless of how the switches on the printer have been set. So if you have been using the switches to produce special effects like slashed zeroes, sorry - it won't work any more.



Document to calculate PS widths as it appears on the screen

### The way it looks when printed

Draw lines as shown in the example at the start of the line and another before the last letter. The distance between them is the measurement you need.



### Putting in the widths

The character widths listed in the File Body tell LocoScript how wide each character is and these too need to be tailored to the particular font – or, at least they do if you want proportionally-spaced text to be printed correctly. LocoScript uses these widths to calculate how to justify proportionally-spaced text and where the line breaks should be. For this reason, the widths are often referred to as PS widths. If you only ever use fixed pitch text (10, 12, 15 or 17 characters per inch), the character widths set in the Character Definition file are irrelevant.

The character width information makes up the final section of each character definition line. If you examine the IBM.EG Character Definition file, you will see that this doesn't always give just one number at the end of each line.

Technically, LocoScript requires four PS width values – corresponding to the character's width when printed upright and italic in both High and Draft Quality. The character width can be different in each of these four cases.

Fortunately, however, you normally only need to give the first of these widths – the width of the character when printed upright at High Quality. The values that LocoScript then calculates for the draft and italic widths are quite good enough for most purposes.

In principle, then, all you have to do is work down the list of characters replacing the widths given in the file by the correct PS widths for your chosen font. Then when all has been finished, you just have to run CHARKIT and process the finished Character Definition file to produce the Character Set file you need.

### Finding out PS information

The problem is that PS widths are rarely documented by printer manufacturers because they are not normally needed to use the printer. Even when widths are quoted, the manufacturer may just give them as a series of numbers without telling you what units are being used.

However, there is no need to be disheartened. For a start, the most usual units are 1/60 " for daisy-wheel printers; 1/120 " for 9-pin printers; 1/360 " for 24-pin printers; and 1/300 " for laser printers. Once you know this, you can both interpret whatever figures are quoted in the printer's manual.

You can also work out the PS widths yourself if these are not given. If you have a daisy-wheel printer, this involves running a special program that we supply alongside CHARKIT. (We'll explain how this program works when we look at preparing Character Set files to support additional printwheels.) If you have a dot-matrix printer or a laser printer, however, you can find out the PS widths by printing out a LocoScript document like the one shown in the screen dump in the box at High Quality, using a provisional version of the Character Set file (created from the Character Definition file you have set up so far) and then measuring this up.

The important features of this document are that it contains a line of each character in the character set – either 31 or 61 characters on each line – and it has proportional spacing selected at the start. This gives you a sample of each character in your chosen font printed at its natural character width. (The numbers 31 and 61 are used because this makes the arithmetic easier as we shall see.)

The calculation of the width of a character in the appropriate printer units then goes as follows. Measure across either 30 or 60 characters as shown in the diagram below the screen dump: record this measurement in inches. Now divide this measurement by the number of characters you have measured across – 30 or 60 – and then multiply by the number of printer units in an inch.

For example, if 60 of a particular character measure  $5^3/4''$  ( $^{23}/4''$ ), then each character is  $^{23}/4$  x  $^1/60''$  wide. If your printer is a 9-pin printer, then the printer unit is  $^1/120''$  and so there are 120 of these to the inch. Thus the character width is  $^{23}/4$  x  $^1/60$  x 120 which is approximately 11. (With a 24-pin printer you would multiply by 360, while with a laser printer you would multiply by 300.)

You simply have to do this measurement and calculation for each character in the character set. With an LC24-10, you don't even have to do that – because we've given you a table of the widths below. As explained alongside the table, you can use these widths whichever font you are setting up the Character Set for (with the exception of the Script font) because the fonts on the LC24-10 have the same PS widths.

Changes	to the Fil	e Body for	the LC24-10				
The characters to add  The User Sequence definitions				The Character definitions *UL L'ATE" "UMLAUT" *UZ L'ASC" "O STROKE UPPER" 12			
**1 "!'ESC'R **2 "!'ESC'R **3 "!'ESC'R **4 "!'ESC'!	[1418 8] [15** **]	ESCIRITOTE ESCIRITOTE ESCIRITOTE ESCIRITOTE	:France *  :Denmark *  :Sweden *  :Slashed zero	2 1'470' "0 STR 3 1'424" "1NTER 4 1'430" "ZERO" pte: You also need	OKE LOWER" NATIONAL CURRENC	10 SYMBOL" 10 10 dard definition	
• The PS	widths – app	licable to all the	LC2410's fonts ex				
[3] [4] [5] [6] [6] [4:15] [SP [1] [7] [4:23] [4:23] [4:27] [(trice) [4] [4:4] [4:4] [5] [5] [5] [6] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	12 4 12 5 12 6 12 7 10 8 9 10 : 6 !; 10 = 10 > 12 7 12 7 12 6 [&40] 8 A 8 B 10 C 10 D 6 E 10 F	10 P 10 Q 10 R 10 S 10 T 10 U 6 V 6 W 10 X 10 Z 10 !\&5B !\&5C 12 !\&5B 12 (Circumfe 12 12 12 12 14 15 C	no width) Y 10 2 ''&7B'	8   \$\frac{1}{6}\text{8}\$   \$\frac{1}{6}\text{9}\$   \$\	8 10 18 99 1	12 12 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	
// (Stoke accent no	10 F 10 H 10 H 10 K 10 M 10 N 10 O	12 a 12 b 8 c 10 d 12 e 12 f 14 g 12 h 12 i	6 :&AC 10 !'&7D 12 !'&7E' 10 12 !'&81 10 !'&82' 8 !'&83' 12 !'&84' 12 !'&85' 6 !'&86'	8 18-9 18-9 12 The 10 Spe 10 char 10 which 10 plus	B' 10 !'8	ers <sup>e</sup> . These are character set as an accent	

### Footnotes

When writing a document it is often useful to be able to add footnotes at the bottom of the pages to explain the text or to give the reader some additional information. LocoScript doesn't have an automatic footnoting facility and the Footer section is not appropriate for footnotes because any text you put here will appear on every page in the document. However it is still possible to use footnotes and this article will show you how.

We'll even show you how to keep your text justified if you have to break a paragraph to add the footnote.

Footnotes generally act as 'asides', providing more information about something mentioned in the main text. For example, if you were discussing an idea from a book in your document, you might want a footnote giving the name and author and the chapters of the book you are referring to. And as this footnote is linked to a specific part of the text, you'll want it to appear on the same page as this text.

In this article we'll be showing you the best way to add footnotes to a document and how to position them in the place you want.

### Putting in footnotes

First you need to think about how you are going to mark the place in the text that the footnote is linked to. This mark is often a symbol like a dagger, ie. t, which can be put into Superscript like this by pressing followed by SR before the symbol then 🖃 SR after it.

(If you want to add a lot of footnotes, it may be better to use numbers instead of symbols. This would avoid any confusion should you have more than one footnote on a page.)

The political novels of Anthony Trollope are comprehensively examined in "Politics and the Victorian Novel"+ by Paul Gosling.

In "Phineas Finn", Trollope deals with the story of a young and ambitious Irishman whose public and personal integrity is challenged. He is forced to give up his career when he finds himself unable to

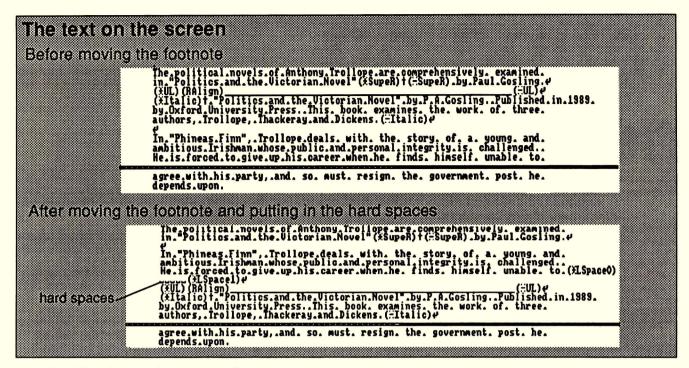
t "Politics and the Victorian Novel" by P A Gosling. Published in 1989 by Oxford University Press. This book examines the work of three authors, Trollope, Thackeray and Dickens.

We'd then recommend you to type your footnote immediately after the paragraph it concerns. Then you can edit the note at the same time as you correct the rest of the text. There is no need to worry about the position of the notes until you have finished editing. Once the text is completely finished, you can move the footnotes to the bottom of the page. If you move your footnotes too early, ie. before you have finished altering the text, you could find that the position of your footnotes changes and you'll have to move them to the bottom of the page all over again!

When you have finished editing, you should start to work from the beginning of the document, moving your footnotes in the following way. Begin by copying the footnote to a block; don't cut the original note yet because this changes the position of the page break and it's much easier to put the footnote in the right place if the page break doesn't move. Paste the footnote in immediately after the page break. Then, once you have deleted the original note, your footnote will be at the bottom of the page.

### Styling your footnotes

Footnotes are often put into a different style to the main text to make it easier to distinguish them, for example they may be in italic, or a different pitch. You could also separate them from the text either by using underline to draw a line across the page as shown in our example, or by leaving a blank line between the text and the footnote.



You should style your footnotes at the same time as you edit the rest of your document. Styling them after you position them could upset the rest of the document; for example, changing the character pitch of your note could make it larger or smaller than before and this would alter the text on the following pages. Styling your notes before the final edit prevents this and all you have to do later is make sure that when you copy the footnote, you copy all the styling codes as well.

### Breaking a paragraph

Positioning the footnote is a very simple matter if there is a paragraph break at the point where the page ends. To ensure this happens you can tell LocoScript not to break paragraphs as we showed you in Issue 14 of *Script*, but we only recommend this if your paragraphs are quite short. If your paragraphs are long, your pages may appear very uneven.

If your text is unjustified there is again no problem as it doesn't matter if you have to break a paragraph with a carriage return to insert the footnote; the appearance of the text will remain the same. But if your text is justified, putting in the footnote could mean that the last line of text on the page won't be justified which may look rather strange. However it is possible to make the last line look as if it was justified with a little 'trickery'.

This is done using LocoScript's hard space feature. A hard space is a non-breaking space and its usual job is to stop LocoScript breaking a line where it's inappropriate to do so, for example, between 1st and August. A hard space is produced by pressing [1] followed by [SPACE] and looks just like a normal space. However by putting a tick beside the Spaces option on the f8 Options menu, you can distinguish between a hard space and a normal space as shown in the examples above.

The trick is to go to the end of the line where you have to break the text and type enough hard spaces to fill up the rest of the line. As soon as the line is full, it will break on the first normal space, (the space after the last word), taking the hard spaces onto a new line. This will justify the broken line, as shown in the example above.

The hard spaces add a line containing 'invisible' text to your document between the last line and the start of the footnote. This line can replace any blank line you left before the footnote, or you can stop this 'invisible' line having a visible effect. You do this by changing the line spacing of the blank line. Change the line spacing to 0 at the end of the last line before the hard spaces, then put it back to 1 after the carriage return as shown above. This will hide the line.

## Printing on labels

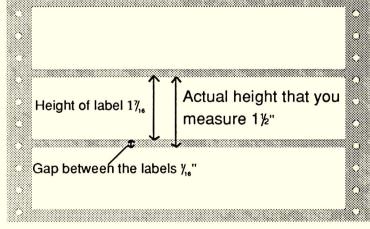
In the last issue of Script, we looked at printing single addresses directly onto envelopes. This method is fine if you only want to send a few letters, but printing out a large number of addresses in this way would be very time consuming. Printing your addresses on labels is a much easier way of addressing large numbers of envelopes.

LocoScript will let you print out addresses on either single labels or 'n' across labels stationery once you have put the addresses into a suitable document. If you use LocoMail you can set up a program that will take your addresses straight from your datafile and set them up for printing in the way you want.

In this article we will be showing you how to produce labels in both ways and we will also be showing you how you can avoid getting blank lines in your addresses when using LocoMail.

Printing addresses on labels is really just the same as printing your addresses on ordinary paper – except that the labels are very much shorter! So the first thing you have to do is to set up a Paper Type for the labels stationery that you want to use. Then it's simply a matter of putting your addresses into a document set up for your labels Paper Type and printing them out. You can either type the addresses into your document, or if they are already stored in a datafile, you can insert them using LocoMail. We'll be showing you both these methods, so you can choose the one that suits you best.

### Measuring your labels stationery



### **Setting up the Paper Type**

Regardless of the way you are going to produce your address labels you have to tell LocoScript the specifications of the labels you are going to use. So the first thing to do is set up a Paper Type for your labels which you do via the Create Paper Type option in the Settings menu.

Start by working out the height of your labels. It is important that you remember to include the space between the labels as well, as we've shown in the illustration. So, for example, if the actual height of the label is 17, but the distance between each label is \,", you should think of the height as 1½", which is nine lines.

As well as setting the Height, you'll also need to set the Top and Bottom Gaps. Remember that you have to allow for the space between the labels so we suggest that you set the Top Gap to 0 and the Bottom Gap to 1. So with 1½" labels you will have eight lines for each address. It may be a good idea to experiment with one or two addresses before printing out all the addresses you want, to see what spacing looks best. Lastly you need to give the new Paper Type a name. We suggest that you call it something obvious like LABELS so it'll be easy to pick out again. If you wanted to distinguish it further you could include the

size of the stationery you are using as well. In the box we show you exactly how to set up a Paper Type for 1½" labels.

### Setting up the document

The next step is to set up the document which will hold your addresses. This document should be set up for your LABELS Paper Type. (You do this by going into Document Set up and selecting Paper Type from the f6 Page menu. Select your LABELS Paper Type by moving the cursor to it, pressing the key and then header and Footer zones are set to 0 by calling up the Page Layout option from the Page menu. You should also clear any text from the Header and Footer zones by selecting the Delete Header/Footer option in the f1 menu. If there was any text in these zones, it would be printed on every label and ruin your spacing.

The way the addresses are laid out in this document controls the way they are printed on the labels, so you have to decide where you want to set the margins and so on. First work out how large you want the space between the left edge of the label and the address to be, and then set the left margin to this position. Setting the right margin is not so important because the lines of your addresses will be of different lengths anyway. It's at this point that the type of labels stationery that you are using becomes important. If you are using single labels all you have to do is set the margins. But if you are using 'n' across labels you have to set up tabs as well in order to divide the addresses and position them on your labels accordingly. Full instructions on how to set up tabs in a document is given in Session 11 of the LocoScript 2 manual and Session 12 of the 9512 User Instructions.

Now all you have to do is type in the addresses you want to print. If you are using single label stationery you can just type in your addresses one after the other. If you are using 'n' across labels you type in the first line of your first address, put in a tab then type the first line of your second address and so on depending on the labels you are using. So your addresses will be laid out next to each other and the tabs will ensure that they are printed correctly on the labels.

Each actual line, whether a line of a single address or made up of a number of lines from different addresses, should have a carriage return at the end, and the last line should be separated from the next address or series of

### Setting up the Paper Type for 1%" labels

- 1 Go to the Disc Manager Screen,
- 2 Press 76, move the cursor to Paper. Types and press
- 3 Move the cursor to the 11continuous Paper Type which you will base your labels Paper Type on and press [REE].
- 4 On the top line of the menu which appears type in the name for the Paper Type for example, LABELS.
- 5 Move the cursor to the option Helight, type 9 and press (EMER).
- 6 Move the cursor to Top. Gap, type 0 and press BREA.
- 7 Move the cursor to Bottom Gap, type 1 and press
  [BODE].
- 8 The option for Ignore paper sensor should normally be left unticked so that LocoScript can tell you when the roll of labels has nearly run out.

  However, if you want to position the labels stationery in the middle of the printer you'll have to select Ignore Paper Sensor. Otherwise you'll would keep getting the No paper message because the paper sensor is situated to the left of the printer and would therefore be unable to tell that there was paper in the printer.
- 9 Select Create new Paper Type and press [MIEN]. LABELS now appears in the Paper Type menu.
- 10 Move the cursor to EXIT and press [BIEF]. You now return to the Settings menu.
- 11 Finally save your new Paper type to your Start-of-day disc so you can use it again. Move the cursor to write Settings STD and pressing [NIIII]. The following message will appear:

The settings should now be written to SETTINGS.SID on your Start of Day Disc

Prite to the disc now in drive A:
Leave to be written later

Insert your Start-of-day disc into Drive A and press
[BIER] . Your LABELS Paper Type is now saved and you
are returned to the Disc Manager Screen.

addresses by a 'End page here' marker like this \$\mathbb{I}\$. All these details are shown in the examples overleaf of the different documents you need for single or multiple labels.

Once you have carried out all these steps and checked that your addresses are correct, your labels are ready to print.

### Taking the addresses from a datafile

If you have your addresses stored in a datafile you can use LocoMail to insert them into your "Labels" document. This would save time because you wouldn't have to type the addresses in. If you are using 'n' across labels you can even tell LocoMail to add the addresses together and tab them so they will be printed out properly.

You begin in exactly the same way, setting up the document for the LABELS Paper Type, then arranging the Page Layout, margins and tabs to suit your labels just as we described before. But instead of typing your addresses, you set up a LocoMail program to take them out of your datafile.

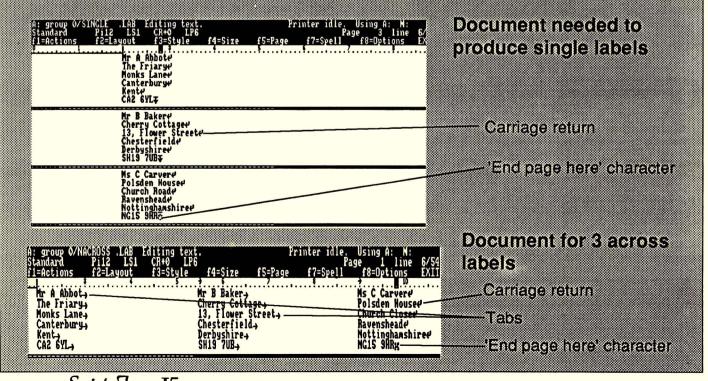
If you are using single labels stationery the LocoMail program you need is very simple. All it has to do is take the addresses from the datafile and put them straight into the document. But if you want to use 'n' across labels the LocoMail program will be more complicated because LocoScript can't print one address then go back to the top of the next label to print the next address. Instead the LocoMail program has to collect up the address information from three of the records in the datafile (or however many labels you have), add them together with tabs in the appropriate places, and keep doing this until the end of the datafile is reached. This also means that your addresses in the datafile can't

be stored as a single item; each line of each address must be a separate item so it can be extracted individually.

A LocoMail Master for producing labels is fully explained in Chapter 15 'Continuous labels' of the LocoMail manual. All you have to do to adapt it for your use is set the item-names to match your own datafile and set the Loopcount item to match the stationery you are using. Loopcount counts the number of addresses that are added together. So if you were using 3 across labels, you would set Loopcount to 3.

This Master is supplied on the LocoMail Examples disc, set up for 3 across labels. It's called LABELDOC.EG and you can merge it with your address datafile to produce your labels. However, if you have used this Master or followed the instructions in the LocoMail manual to produce address labels, you may have discovered a problem.

In order to make the datafile easy to index, the items holding the individual lines of the addresses are given names like 'street', 'village', 'town' etc. But not every address in the datafile will have all these items, for example some addresses will not include the name of a village, so in these cases the village item will be left empty. This won't affect indexing, but when the LocoMail program for labels looks for a village item, it will leave a blank line whenever it finds the village item empty. As a result some of the labels will have blank lines in them.

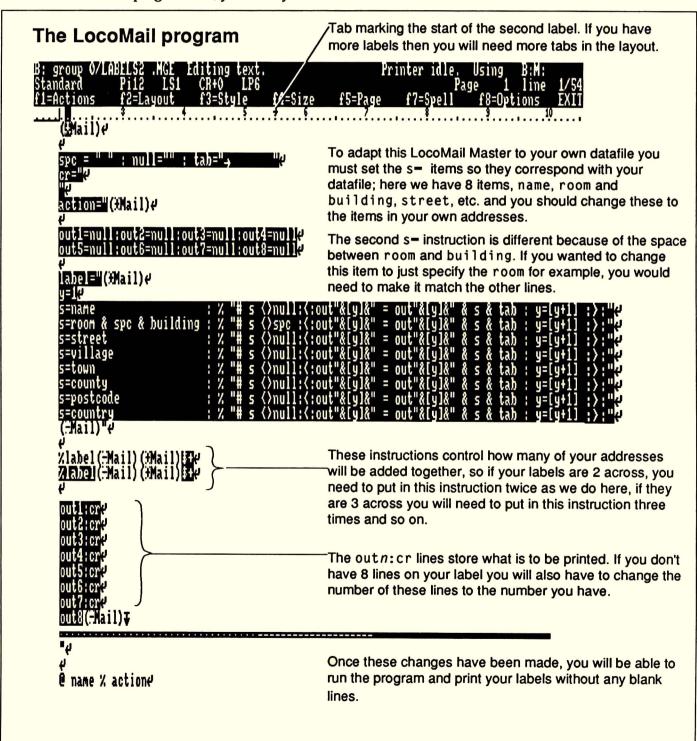


To avoid this you need a LocoMail program that collects the addresses as before, but will also get rid of the blank lines by moving up the remaining items of the address to fill any gaps left by empty items.

### Avoiding blank lines

The LocoMail program that does this is given in the box. To use this program with your own datafile you will need to make some small changes. These changes are specified in the instructions given beside the program. If you would like to test the program first, you can try it out with LABELDAT.EG which you'll also find on the LocoMail Examples disc.

Basically what the program is doing is going through each address in the datafile extracting the named items. Where it differs to the program given in the manual is that when it finds a blank item, it looks for the next non-blank item and adds this to the next Out item, which is then printed. It's easiest if you think of the items in the address as forming a sort of queue to be printed; if one item is missing, the next one will move up to take its place.



### Using a French PCW

I am currently writing a book in my spare moments, putting the text on disc on the B drive of my PCW8512. I shall be going to France for three weeks soon and, since I shall have access to a 9512, I would like to give a little time to continuing my writing. The machine has an AZERTY keyboard and a French Start-of-day

What I would like to know is whether there is a Start-of-day disc which would enable me to treat the keyboard as a QWERTY one (I touch type reasonably and would not be worried by the unfamiliar labelling), and which would not result in pages of nonsense when I got my disc home to my 8512? Would an ordinary English 9512 Start-of-day disc do, or would there be incompatibilities with this? It may be that I just have to resign myself to writing by hand and typing it in when I get home, but it seemed worthwhile to ask.

#### Rev HD, Cambridge

A French PCW9512 is just like an English PCW9512 except for the black marks on the keyboard, so all you'll need is an English Start-of-day disc suitable for a PCW9512. This will have the English keyboard file, so you'll be able to use the French PCW exactly as if it had a QWERTY layout without any problems at all. Any text you've already got on the disc will be completely unaffected by the change of machine, and any text you type in on the French machine will be similarly undamaged when you use it on your own machine at home.

### Top Gap too big

I've created my own A5 paper type but LocoScript does not appear to recognise it. When I print a document set up with this Paper Type, the text on the first page prints 5 lines lower than it should. This means that the footer is printed on the next page and start of the second page prints about half way down the page instead of at the top. What am I doing wrong? I've enclosed my Start-of-day disc for your comments.

#### Mr LG, Gosport

From your Start-of-day disc we found that your Paper Type is set up for A5 continuous paper but we think you are printing your document using single sheet paper.

When you load a piece of single sheet stationery into the printer it automatically feeds in enough paper to enable the printer to grip it properly, which leaves an inch gap at the top of the paper. LocoScript then takes this into account when calculating the Top Gap requirement.

With continuous stationery, LocoScript expects the paper to be positioned immediately after the perforations, so it doesn't make any adjustment to the normal space it would leave for the Top Gap.

So your problem is caused by the fact that you are using single sheet paper which your printer feeds in an inch, but LocoScript thinks you are using continuous paper so it doesn't allow for this extra inch. This results in a Top Gap allowance that is too big.

### Printing addresses

After reading the article 'Printing Addresses' in Issue 14, I thought the method that I have used for several years may be of interest to Script readers.

The first step is to 'make' a group and call it something like 'ADR' for example. Then, as described in the article, I set up a template. When typing a business letter where the name and address appear on the left hand side, I save the address as a Phrase before printing. I can then go into the ADR group, create a document and insert the phrase. If this address will be needed again, it can be saved under a name that will make it easy to pick out.

Some may think it is wasteful of disc space as each address will take up 2k. However this does not matter to 'ordinary' users like myself who haven't got hundreds of addresses for normal correspondence. It is also easier to apply than having all the names and addresses in one file and then 'telling' LocoScript to print from page x to page y and so on.

Regarding envelopes for the PCW printer, by shopping around it is possible to find lightweight envelopes in both of the popular sizes which will print without any problems or need for readjustment on the printer.

#### Mr EH, Macclesfield

Thank you for your tip.

### Unsuitable disc

I have a standard 3" CF2 PCW 8256 disc which was used on a 9512 using LocoScript v2.16 and I now wish to edit it on my 8256 and print out on this machine.

When I insert the disc into the 8256 I get this message; Disc is unsuitable for drive. Is there any way overcoming this problem?

#### Mr WG, Barnard Castle

You can't use the disc on your PCW 8256 because it has been formatted by the 9512. A 8256 formats a disc to a capacity of 180k, while a 9512 formats a disc to a capacity of 720k which cannot be read on a 8256. This is why you get the Disc is unsuitable message.

However it is still possible to transfer your work to your 8256. If you have access to a 8512, you can insert the 9512 disc into Drive B and copy the files you want onto a new disc in Drive A. The Drive A on the 8512 formats the disc to 180k which is the same as the 8256, while the Drive B formats to 720k, the same as the 9512. So it is possible to take the files you want from the 9512 disc and put them onto a new disc that your 8256 will be able to read.

If you don't have access to a 8512, you could adapt your 8256 so it could read your disc by fitting a Drive B, which would be the same as the one on the 8512. Your hardware dealer could advise you on how to do this, or tell you of someone who would fit it for you.

### Calculating costs

I am currently using LocoScript v2.28 with LocoFile, LocoMail and LocoSpell. Until now I have kept insurance records containing such details as Item, Description, Owner, Date purchased and Cost in a separate database program.

This program has the facility of producing a summary in the form of the total cost of all the items in the file or the cost of each group. Is there a way I could do this using LocoFile?

#### Captain RW, Nottingham

LocoFile can extract the cost items from the current record in the datafile, but it cannot add figures together to produce a total. To do this you need to use LocoMail.

LocoMail can carry out all the common arithmetic operations needed in financial calculations. Using the usual symbols, ie. + for addition, - for subtraction, \* for multiplication and / for division, you can enter your calculation, surround it in square brackets and LocoMail will carry out the calculation and put the result into your document.

So using LocoMail it is possible to extract the items you want from the LocoFile datafile and then add them together to produce a total cost. For more information on this, see the article on printing lists with LocoMail in Issue 9 of Script.

### **Printer options**

Thank you for the upgrade to LocoScript, v2.29. I have installed the upgrade following the instructions and everything seems to be alright with one exception. In paragraph 3 on page 15 of the PCW9512 Update Information says I ought to see the following options after selecting the printer options:

Printer Width **Sheet Feeder Option** Interface Option

However when I select printer options I see the following:

Sheet Feeder Ribbon Type Impression Control

Nothing I do brings up either Printer Width or Interface Option and I wonder whether you can tell me what is wrong.

Mr JW, Staines

The printer options you refer to are the ones displayed when you are setting the Printer Defaults within the f6 Settings menu.

The settings you make via these options affect the printer that is currently selected at the top of the Printer Defaults menu. So the printer options that you see depend on which printer this is.

From what you tell us, we deduce that you have the PCW9512 printer selected, because the Sheet Feeder, Ribbon Type and Impression Control options are the ones you would get with this printer. To get the options you want you should move the cursor to Defaults for printer and press ENTER. You will now see a list of the printers that are installed on your system. Tick the name of your new printer and press ENTER to return to the menu. Now when you select the Printer options you will see the options that you expect.

### Paper problems

We have recently purchased a Citizen 'Swift 9' Dot matrix printer to use with a PCW9512. We have changed the printer commands to suit the FX80 NLQ which seems to work, however we have experienced a problem with one operation

We want to enter data into LocoFile and merge it with a template on the manual setting, then edit and print out in a contract. With the old daisy wheel printer it used to print out each one as soon as the command was entered, but with the new printer the first contract prints O.K, but then the next contract merges on the screen but does not print when the command is given. To make it print we have to press PTR, resume printing, then ENTER, then EXIT and only then it prints out. Is there any way we can get it to print without going through this every single time?

### Mr MC, Peterborough

The effect you're seeing is caused by the way in which LocoScript handles single sheet paper on external printers. When you are using the built-in printer, LocoScript can sense when the bail bar is pulled back to load a new sheet of paper and it automatically goes into Printer Control State and cancels the 'Waiting for paper' message. So you only have to press EXIT to resume printing. However when you are using an external printer LocoScript can't tell that you have inserted more paper, so it stays in its 'Waiting for paper' state which you clear by following the steps you have described in your letter. If your version of LocoScript is v2.12 or later you can alternatively press PTR followed by (1911) to resume printing.

One way to avoid this problem is to use a sheet feeder to feed your paper into your printer. Precisely how you set up LocoScript to work with the sheet feeder depends on the version of LocoScript you are using. If you have a version older than v2.28 you will need to change the Paper Type so LocoScript expects continuous stationery (and change the Top and Bottom gaps to suit). However with v2.29 on the 9512 (2.28 on a PCW8256/ 8512) you only need to select the special Sheet feeder option under the 'Printer options' menu.

Alternatively, if your printer can detect if it has paper and automatically prevents itself from printing on the platen, you can tell LocoScript to expect continuous paper. Then the printer will control the paper instead of LocoScript.

### 'Disc is full' message

I am using LocoScript 2 on my PCW8256 quite satisfactorily except in one respect which is that a Disc is full message appears when I am moving text around even though sometimes no more than 20k has been used on the first file on disc and there is, therefore, at least 150k free. Obviously, I cannot delete a file in this case!

I should be glad to know whether this is caused by a fault in the Start-of-day disc or is simply the result of using LocoScript 2 on the PCW8256. As I shall shortly be handling some very large documents, I hope you may be able to tell me how the problem might be overcome.

#### Ms RS, Bristol

We suspect that the Disc is full message you are getting is not referring to your floppy disc but to Drive M. If the space on Drive M is fairly small, it is very easy to fill up this drive when you are editing. The problem occurs when you move back through a document because the text is then temporarily stored on Drive M in order to save time when you start to move forwards again. If the document you are working on is larger than the available space on Drive M you will get the Disc is full message.

The short term solution is to take the Run Disc Manager option you are offered and clear some space on the affected drive. You can clear space on Drive M for example by removing the LocoSpell dictionary. Once you have cleared enough room, you will be able to continue editing the document when you exit from the Disc Manager.

Note: Do not select Cancel operation because this may result in you losing all the editing you have done in the document since you last saved to your disc.

As you are going to be working with large documents, the best solution is a memory upgrade. There are several possible ways to increase the memory of an 8256. You can increase the memory to 512k by fitting a set of microchips inside your PCW. Full instructions on how to do this are included with the kit that we supply.

You can now increase your memory to 768k with a RAMPAC. This consists of a external unit which you plug into the expansion port at the back of the PCW, and this is also available from us. Write to us for more details, or see Issue 13 of Script which contains a fuller explanation.

### **Printing special characters**

I have recently purchased a Sinclair SP200 dot matrix printer, which I understand is identical to the Amstrad DMP 3160, and which I wish to use as an alternative printer for my Amstrad PCW9512.

I am disappointed to find that even with a dot matrix printer I am still unable to print LocoScript's mathematical symbols and greek letters, even though it is easily possible to bring them up on the screen.

I would be grateful for information which will enable me to overcome this problem and details of any software you can supply which will enable me to make fuller use of the range of LocoScript's characters.

#### Mrs PF, Nottingham

Because the characters you mention are specialised ones, in general the only printers that can support them are the ones that can accept 'downloaded' characters from LocoScript, using printer files from the 24-pin Printer Drivers disc. The patterns for the characters are then stored in the printer's memory or 'buffer' and printed from there. Most 24-pin dot matrix printers can accept downloaded characters, so it is possible to print all of LocoScript's characters when you use a suitable dot matrix printer with the correct printer file from the 24-pin Printer Drivers disc.

However the printer you refer to is a 9-pin dot matrix and unfortunately LocoScript hasn't got a downloading system for 9-pin printers. This means it is not possible to download LocoScript's special characters and you are therefore restricted to the printer's own fonts and characters when printing your documents.

To print the characters you want, you would have to change your printer to a more modern 24-pin dot matrix printer. For more information on 24-pin printers and the way they produce LocoScript's characters, see the article in Issue 9 of Script.

### Laser printers

I am considering buying a laser printer for use with my 8512 but understand that they will not print out all of LocoScript 2's characters, or obey all LocoScript's commands such as 'bold', 'italic', 'underline' etc.

I am interested in the Brother HL-8 and the Epson GQ-3500 and would be grateful if you could let me know which characters they would be unable to print and which commands they couldn't obey using the Printer Drivers disc.

#### Mr WF, Bath

LocoScript is not normally able to download characters to a laser printer. So laser printers can only print the LocoScript characters that can be produced by their own fonts. Underlining is usually available with all printers, however bold and italic will only be produced if the printer has the appropriate bold/italic fonts, or if the printer itself can embolden or slant the characters it prints.

The GQ3500 has Courier, EDP and Modern PS fonts built-in and can print LocoScript characters available in the IBM PC character set. The HL-8 supports an HP LaserJet emulation and has Brougham and Anelia (similiar to Courier) fonts built-in. The HL-8 is able to embolden and slant characters, but the GQ3500 needs the right fonts to do this. For more details about these printers you should consult a dealer.

If you do want to be able to print all the characters, you ought to consider the new Epson GQ5000 which we discussed in Issue 13 of Script in the article on Laser Printers. If an extra 0.5M of memory is added, this printer can emulate a 24-pin dot matrix printer on which you can print all of LocoScript's characters and printstyles, although admittedly the quality of the downloaded characters is not as good as the characters already supported by the laser printer.

### LocoFile upgrade

I have LocoFile v2.21 which I use on a PCW9512. I have had this for some time and I wondered what advantages I would gain if I was to upgrade to the latest version of LocoFile?

#### Ms KMH, Leeds

There are two main differences between LocoFile v2.21 and the latest version for the PCW9512 which is 2.29.

Firstly when you are using a multiple key index and paging through the file, the cursor now jumps to the current index item instead of staying still. Secondly the way in which LocoFile squashes a large datafile has also changed. Using v2.29 you only need enough room on Drive M to store one index, instead of needing enough space to hold all of your indexes as v2.21 does.

# PostScript

### **Happy Birthday!**

The Amstrad PCW will be five this month. Yes, it was back in August 1985 that the PCW8256 made its first appearance.

> A quick calculation will tell you that this means that LocoScript is also five this month. So we thought we'd celebrate by bringing out a special commemorative sweatshirt and offering it to Script readers. Those of you who have visited us on our stand at the various shows will know that we have kept the previous Locomotive sweatshirts very much to ourselves!

The sweatshirt is made of a white cotton mix and is available in two sizes, Large and Extra Large. On the front it has this

striking design, printed in green and black.

The sweatshirt will cost £14.95, inclusive of postage and packing, but there will be an extra charge of £5.00 for orders from outside the U.K.

ANNIVERSARY

LOCOMOTI SOFTWARE

So if you want to show the world that you have good taste in software complete the enclosed order form and send it to our usual address. And of cours Christmas is only 4 months away so it's time to think about presents...!