

LocoLink

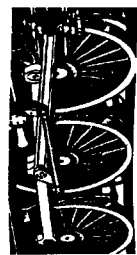
U S E R G U I D E

APR 90

ISBN 1 85195 031 1



9 781851 950317



**LOCOMOTIVE
SOFTWARE**

STIENSTRA
Wikkelaan 56
3852 CN ERMELO

Neither the whole, nor any part of the information contained in this manual may be adapted or reproduced in any material form except with the prior written approval of Locomotive Software Limited.

Whilst every effort has been made to verify that this software works as described, it is not possible to test any program of this complexity under all possible conditions or circumstances. Therefore LocoLink is supplied 'as is' without warranty of any kind either express or implied.

The particulars given in this manual are given by Locomotive Software in good faith. However, LocoLink is subject to continuous development and improvement, and it is acknowledged that there may be errors or omissions in this manual. If you experience any difficulty with the use of this product, please write to:

Locomotive Software Ltd
Dorking Business Park
Dorking
Surrey RH4 1YL

Locomotive Software reserves the right to revise this manual without prior warning.

Published by Locomotive Software Ltd
Printed by Ashford Colour Press, Gosport, Hants

First Published May 1990
2nd Edition published August 1990
ISBN 1 85195 031 1

LOCOMOTIVE, LOCO and LOCOSCRIPT are registered trademarks of Locomotive Software Ltd.
LocoScript PC, LocoScript 2 and LocoLink are trademarks of Locomotive Software Ltd.
LocoLink program: © Copyright 1990 Locomotive Software Ltd.

LocoLink

LocoLink is a means of transferring files from a PCW to a PC. It consists of two programs, one for the PC and the other for the PCW, and there is a special cable to join the two computers.

Once a PCW and a PC are connected by the cable these programs can transfer individual files, groups of files or the entire contents of discs from the PCW to the PC. You aren't restricted to LocoScript files; you can transfer files created by any other program.

The LocoLink pack comprises:

- *The special LocoLink cable*
- *A 3" PCW disc with the PCW LocoLink program*
- *This booklet*

You will also need the PC LocoLink program, which is included on LocoScript PC's master disc 1. (This program is also available separately as LocoLink PC.)

It is possible to use LocoLink with an ordinary serial cable instead of the special LocoLink cable. This is described in the LocoScript PC Installation Guide, but since it is less efficient than using the special LocoLink cable, it is not described in this booklet.

Structure of this booklet

After a general introduction, there are four chapters.

Chapter 1 explains how to prepare LocoLink for use: how to set up the discs you will need, and where you should copy the programs to.

Chapter 2 gives step-by-step instructions for the everyday use of LocoLink. It first explains how to fit the special cable, then

how to transfer files. There are separate sections depending on whether you want to move a single file, a LocoScript group, or a whole disc. There is also a section describing the differences in the procedure if you want to transfer non-LoCoScript files.

Chapter 3 discusses any likely problems you may run into, and suggests solutions.

Finally, Chapter 4 gives complete but terse instructions for using all the LocoLink commands.

How to use LocoLink

To transfer files you need to:

- *Connect the two computers with the cable*
- *Run the two LocoLink programs*
- *Give commands to both computers to tell them which files to transfer*

In general, at the PCW end you will tell the LLPCW program which files you wish transferred, and at the PC end you will tell the LLPC program which directory you wish the files transferred into.

(If you are not familiar with the handling of directories on your PC discs, then we recommend you read the relevant parts of your DOS manuals as soon as possible. Directories are a powerful and useful mechanism for organising files, so a little effort learning how to use them, will pay dividends.)

Normally the name of each file is transferred with it, so the name of the copy of the file on the PC will be the same as the original on the PCW.

Transferring a file does not affect the original in any way. The transfer is an operation which simply copies files from PCW 3" discs onto discs you can use on a PC. LocoLink is only one

of a number of ways of transferring files to a PC, but it is probably the cheapest.

After the file is transferred

Once a file has been transferred to a PC by LocoLink (or any other means) it may need to be converted before its contents can be used on the PC. LocoScript 1 and LocoScript 2 documents are converted automatically when they are edited by LocoScript PC. LocoFile data files may be converted by 'squashing' them. Conversion of these and other LocoScript files is covered in Appendix I of the LocoScript PC Reference Book.

The conversion required for non-LoCoScript files depends on which program is going to use them – you may need to consult an expert (Locomotive Software can give no support on this topic). And although *programs* for the PCW can be transferred there is absolutely no point in doing so, since the processor which runs programs in the heart of a PC is different from the processor in a PCW.

Some technical details

Using the LocoLink cable you can expect to transfer data at approximately a kilobyte a second (ie about twice as fast as on a serial cable). In addition, there is an overhead of about two seconds per file. Thus, for instance, to transfer thirty files of 1k each will take about a minute and a half (though this time will be reduced on fast machines).

Preparing to use LocoLink

Before you use the LocoLink programs, you should copy them from the discs they were supplied on and make working copies on other discs. This is so that if anything happens to your working copies, you can always make another working copy from the masters. This chapter describes how to do this.

(Incidentally, this is good general advice, and not specific to LocoLink: if it is possible to work from a copy of a program instead of the original, you should do so.)

Copying and running the PC program

The LocoLink program - LLLPC.EXE - is on the LocoScript PC Master Disc 1. (If you don't have LocoScript PC, LLLPC.EXE can be purchased separately as LocoLink PC.) Copy it from your Master disc onto a disc for the PC. It's probably most convenient to put it on your hard disc, if you have one. When you have made a copy, put the Master disc away somewhere safe; you should never run LocoLink directly from the Master disc.

If you are an experienced DOS user you may put the program anywhere, provided you can find it again and run it! The instructions for using LocoLink given below assume that you know how to run LLLPC.EXE wherever it may be situated on your disc.

If you are not an experienced DOS user you should put a copy of the file LLLPC.EXE in the same directory as the LS.BAT file created by the LocoScript PC installation program. (You can use LocoScript to do this.) The instructions for running LocoScript given by the installation program will then apply to running LocoLink PC, with LLLPC substituted for LS. For example, if the instructions for running LocoScript were:

```
A:
CD \
LS
```

then to run LocoLink PC you should type:

```
A:
CD \
LLPC etc. etc.
```

where *etc. etc.* are the parameters and options described below. Similarly, if the instructions for running LocoScript were to type:

```
C:\LS
then to run LocoLink PC you should type:
C:\LLPC etc. etc.
```

The instructions given in the following chapters omit most of this, and start ...LLPC - where the dots stand for the omitted portion.

Copying and running the PCW program

You should not work directly from the 3" master disc supplied with LocoLink in case the file on it (LLPCW.COM) gets damaged. Instead you should copy this file to another disc and work from that.

Format a fresh disc (if you need to) then copy the file LLLPCW.COM from your LocoLink disc to this new disc. If you do this with LocoScript's Copy file command, you must copy it into Group 0. Remember that when you need to select a destination group and drive you will need to hold down the **[SHIFT]** key to move the cursor to an empty group.

When you have copied LLLPCW.COM you should put away your LocoLink master disc, and work only from the copy you have made.

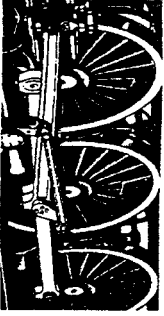
To run LocoLink on the PCW you need first to run CP/M. (You will not need to become a CP/M expert.) If you are unfamiliar with CP/M you should read Chapter 1 of the CP/M part of your manual, up to the end of section 1.2. For the 8256 and 8512, CP/M is covered in the second half of 'Book 1'. For the 9512, CP/M is covered in Part III of the manual, entitled 'Using CP/M, BASIC and LOGO'.

Assuming, then, that you are familiar with the basic notion of CP/M, load it onto your PCW from your CP/M start-up disc. Then, when you see the **A>** remove the CP/M disc, insert the disc with your copy of the LocoLink program, and type the command

```
A: LLLPCW etc. etc.
```

As with the PC command, the *etc. etc.* represent parameters and options described in the following chapters.

Return



**LOCOMOTIVE
SOFTWARE**

LocoLink: Erratum

The following amendment should be made to the LocoLink User Guide supplied in your LocoLink Pack.

Page 7: Making a working copy of the PCW program

The first paragraph of this section ("On the PCW, you should make a working copy...") should be replaced with the following:

You should not work directly from the 3" master disc supplied with LocoLink in case the file on it (LLPCW.COM) gets damaged. Instead you should copy this file to another disc and work from that.

Format a fresh disc (if you need to) then copy the file LLPCW.COM from your LocoLink disc to this new disc. If you do this with LocoScript's Copy file command, remember that when you need to select a destination group and drive you will need to hold down the **SHIFT** key to move the cursor to an empty group.

When you have copied LLPCW.COM you should put away your LocoLink master disc, and only work from the copy you have made.

14th June 1990

Using LocoLink

This chapter gives easy instructions for the day-to-day use of LocoLink. For more detailed instructions, see Chapter 4.

Fitting the cable / PCW *uit!*

Switch off your PCW. The power must be turned off when you connect or disconnect the LocoLink cable.

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS FOR FITTING THE LOCOLINK CABLE, YOU ARE LIKELY TO DAMAGE BOTH THE CABLE AND THE PCW PERMANENTLY.

Provided you turn the PCW's power off when you connect or disconnect the cable, and provided you carefully follow the instructions below, LocoLink cannot damage your computers. It is not necessary to turn the power off at the PC.

Connecting to the PC

The green end of the LocoLink cable connects to the PCW, and the other end connects to the PC. Plug the PC end of the cable into a *parallel* printer port on the PC. If you have a printer connected to your PC, it will probably already be connected to the parallel port; in this case you will need to temporarily remove the printer's plug from the socket so that you can fit the LocoLink cable.

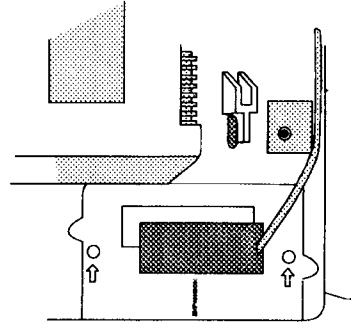
If your PC has more than one parallel port, connect it to port 1. (You can use other parallel ports if you wish; see the last section of this booklet – *The LLPC Options*.)

Connecting to the PCW

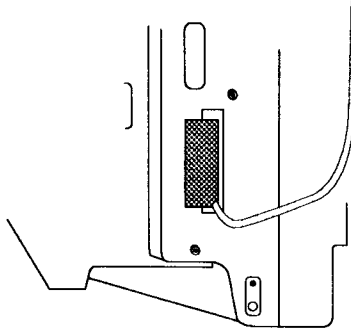
On the PCW the LocoLink cable plugs into the expansion slot – the card marked **EXPANSION** which pokes through an oblong hole in the case of the PCW.

First check that the connectors on the slot are clean. If your machine is not particularly new, clean the connectors by gently rubbing them with a soft pencil eraser.

Now carefully plug the cable in. It is very important to fit it the right way round. On a PCW8256 or 8512, the cable should emerge from the bottom of the connector; on a PCW9512, the cable should emerge from the left when the machine is viewed from the back. **If the cable appears not to fit easily, you are probably trying to insert it the wrong way round**; it is keyed so that it only fits properly one way.



PCW8256 or PCW8512



PCW9512

Other Adaptors on the PCW

If you have an adaptor such as the CPS8256 already plugged into the expansion slot, you will need to remove it before the LocoLink cable will fit. If you have an adaptor which has its own through connector, you can plug LocoLink directly into the adaptor, but if you have any problems with LocoLink, the first thing you should try is removing the adaptor and fitting the cable directly onto your PCW. Don't forget to turn the power off when you do this!

Transferring Files

This section of the guide shows by example how to transfer LocoScript files from the PCW to the PC. (CP/M files are dealt with later.) There are three sections:

- *transferring one file*
- *transferring several files*
- *transferring an entire disc*

More detailed (but more complex) information is given in Chapter 4.

Transferring one LocoScript file

Suppose you wish to transfer a LocoScript document called SON.OF which is in a group called YORK on a PCW Drive A type disc. And suppose the directory you wish to transfer it to is \SUMMER on the Drive C of the PC. Then the procedure to follow is:

- 1 *Put the disc with your copy of LLPCW.COM into drive A: and enter the command*

```
A:LLPCW A:YORK::SON.OF
```

This starts the program and specifies the file you wish to transfer. A start-up and copyright message are displayed on the screen.

If the file to transfer was on a Drive B type disc, you would type

```
A:LLPCW B:YORK::SON.OF
```

If the group had no name, but was simply displayed as group 4, say, you would use 4 instead of YORK:

```
A:LLPCW A:4::SON.OF
```

- 2 *Make sure the directory C:\SUMMER exists on the PC. (Create it if it does not.)*

- 3 *Start the LLPC program thus:*

```
...LLPC C:\SUMMER
```

This starts the LLPC program and tells it to put the files it receives into the directory \SUMMER on Drive C: You will see a start-up and copyright message displayed on this machine too.

If you wanted to transfer to a floppy disc, you would specify a floppy disc drive (A: for instance) instead of C:

```
...LLPC A:\SUMMER
```

- 4 *Wait until both machines display a message of the form:*

You may now change discs if you wish
Please press return at each machine
when both are ready

- 5 *Put the disc with the file to be transferred into the appropriate drive on the PCW; if you are transferring to a floppy disc put the appropriate disc into the PC's disc drive. Now press **RETURN** on the PCW and **↵** on the PC to start the transfer.*

When you press the keys, the programs attempt to establish communication with each other.

Make sure that both programs are waiting before pressing the keys on either machine. You need not press both keys exactly together, but neither should you make a cup of coffee between the two presses!

When communication is established the programs will say so. This should happen quite quickly. If it does not, check that you have pressed **RETURN** (on the PCW) and **↵** (on the PC). If this is not the problem, then check the connection. (See Chapter 3 if you need help with this.) Remember to turn the PCW's power off first.

- 6 *The PCW program finds the file to be transferred, and the PC program checks that the name of this file is not already in use at the PC end, and that it is a valid PC file name.*

- 7 *If there is a problem the program will tell you and suggest you provide a different name for the file. See 'When a Name is in Use at the PC End' on page 20 and 'When a PCW Name is not a Valid PC Name' on page 21.*

- 8 *The file is transferred. While the transfer is active each program displays a line of the general form:*

```
/ ++----- SON.OF 5120 ----- 5120
```

where:

– the first character on the line alternates between / and \ to show that the transfer is active.

– each + in the first set of ++----- represents the transfer of 10% of the current file.

– the name shown is the PC name for the file currently being transferred.

– the number following the name is the size of that file.

- each + in the second set of ++----- represents the transfer of 10% of the total to be transferred. (This is updated after the transfer of each file.)

- the last item on the line shows the size of the total transfer.

The two sizes shown are given in bytes for sizes up to 9999 bytes, in kilobytes for sizes up to 9999K bytes and in megabytes for anything bigger.

9 *When the file has been transferred you will see a summary of what has been done on the PCW's screen.*

10 *LLPCW returns you to CP/M, and LLPC returns you to DOS.*

Transferring a LocoScript group

The transfer of an entire group is equally straightforward. Use the same command described in the previous section, but don't specify a filename; then *all* the files in the group are transferred to the directory you specify with LLPC.

For example, suppose you wish to transfer an entire LocoScript group called YORK on a PCW Drive A type disc to \SUMMER on the Drive C of the PC. Then the procedure to follow is exactly as above, except that you will start the LLPCW program with the command

```
A:LLPCW A:YORK::
```

As before, if the group had no name, but was simply displayed as group 4, say, you would use 4 instead of the group name YORK:

```
A:LLPCW A:4::
```

If you only want to transfer some of the files in a group, you can use the usual wildcard characters: ? (which can represent any character) and * (which can represent a whole string of characters). So you might type:

```
A:LLPCW A:YORK::RICH*.TXT
```

which will transfer both RICHARD.TXT and RICHMOND.TXT (as well as any other TXT files with names starting RICH).

Transferring an entire LocoScript Disc

The transfer of an entire disc is a little more involved. The main difference is that directories as well as files are created at the PC end. A directory is created on the PC for each group on the PCW disc, and

the files in each group are transferred into the corresponding PC directory. The PC directories created are named after the PCW groups - where an unnamed (numbered) group produces a PC directory with just the number as its name.

To transfer all LocoScript documents and other files from a Drive A type PCW disc to a directory called \GLORIOUS on the disc in Drive B on your PC, the procedure is:

1 *Put the disc with your copy of LLPCW.COM into drive A and enter the command*

```
A:LLPCW A:
```

This starts the LLPCW program and tells it to transfer all files on disc A: in LocoScript groups 0 to 7 inclusive.

A start-up and copyright message are displayed on the screen.

If the disc was a Drive B type disc, you would type

```
A:LLPCW B:
```

2 *Make sure the relevant PC disc has the directory \GLORIOUS on it (creating it if it does not).*

3 *Start the LocoLink PC program thus:*

```
...LLPC B:\GLORIOUS
```

This starts LocoLink PC and tells it to create directories in the directory \GLORIOUS on Drive B, and put the files it receives into them.

4 *Wait until both machines display a message of the form:*

```
You may now change discs if you wish  
Please press return at each machine  
when both are ready
```

5 *Put the disc with files to be transferred into the appropriate drive on the PCW; if you are transferring to a floppy disc put the appropriate disc into the PC's disc drive. Press [RETURN] on the PCW and [R] on the PC to start the transfer of the files.*

When you press the keys, the programs attempt to establish communication with each other.

Make sure that both programs are waiting before pressing the keys on either machine. You need not try to press both keys exactly

together, but neither should you go out for the evening between the two presses!

When communication is established the programs will say so. This should happen quite quickly. If it does not, check that you have pressed **[RETURN]** (on the PCW) and **[C]** (on the PC). If this is not the problem, then check the connection. (See the section on 'Problems' if you need help with this.)

LocoLink will create directories on the PC corresponding to the LocoScript groups on the PCW disc. For example, if the PCW disc has groups:

```
CLARENCE      group 4
group 1      GLOSTER
group 2      RICHMOND
group 3      group 7
```

then eight directories will be created:

```
B:\GLORIOUS\CLARENCE
B:\GLORIOUS\1
B:\GLORIOUS\2
B:\GLORIOUS\3
B:\GLORIOUS\4
B:\GLORIOUS\GLOSTER
B:\GLORIOUS\RICHMOND
B:\GLORIOUS\7
```

except that no directory is created if no files are transferred for that group.

- 5 *The PC program checks that the names of these files and directories (if any) are not already in use at the PC end, and that they are valid PC file or directory names.*
- 6 *Where there is a problem the program will tell you and suggest you provide a different name for the file or directory. See 'When a Name is in Use at the PC End' and 'When a PCW Name is not a Valid PC Name' below.*
- 7 *The files are transferred. While the transfer is active each program displays a line of the general form:*

```
/ +++++----- GLOSTER\RICHARD.III 5120 +----- 145K
```

As before:

- the first character on the line alternates between / and \ to show that the transfer is active.
- each + in the first set of +----- represents the transfer of 10% of the current file.
- the name is the PC name for the file currently being transferred.
- the number following the name is the size of that file.
- each + in the second set of +----- represents the transfer of 10% of the total to be transferred. This indicator is changed each time the transfer of a file is completed.
- the last item on the line shows the size of the total transfer.

The two sizes shown are given in bytes for sizes up to 9999 bytes, in kilobytes for sizes up to 9999K bytes and in megabytes for anything bigger.

- 8 *When the files have been transferred LLPCW displays a summary of what it has done on the PCW screen.*
- 9 *LLPCW returns you to CP/M, and LLPC returns you to DOS.*

Non-LoCoScript Files

When you transfer non-LoCoScript files, you should append /C to the end of the LLPCW command.

For example, to transfer the entire contents of a Drive B type disc, you would type the following on the PCW:

```
A:LLPCW B: /C
```

This makes three changes to the way files are transferred:

- *Directories are given numbers, not names*
All directories which LocoLink creates on the PC will be given numeric names, even if you are transferring named LocoScript groups.
LoCoScript group names are stored on disc as empty files with the type .GRP. If you specify /C when you transfer LocoScript files, LocoLink will transfer these empty files along with everything else.

- *All user numbers are transferred, not just 0 to 7.*

LocoScript's groups correspond to CP/M user numbers 0 to 7; user numbers 8 to 15 are used for LocoScript's limbo files.

Normally LocoLink screens out files in groups 8 to 15, since it assumes you don't want to transfer limbo files, but the /C option allows you to transfer from any user number.

- *LocoScript support files are transferred*

LocoLink examines the files it transfers and screens out any which look like LocoScript support files (spelling dictionaries, settings files, etc.) since these are of no use on the PC. It is just possible that a CP/M file may look like one of these files to LocoLink; in this case you can transfer it with the /C option. However, system and hidden files cannot be transferred.

CP/M User Numbers

To transfer a CP/M file called RICHARD.III which is in user 12 on a Drive B type disc, you would type the following on the PCW:

```
A:LLPCW 12B:RICHARD.III /C
```

If you wanted to transfer all the files in user 0 on a Drive A type disc, the command would be:

```
A:LLPCW 0A: /C
```

(The /C option is necessary since you are transferring CP/M files.)

Tips and Hints

There are a number of facts which, while not essential, can be very useful when you are using the two LocoLink programs:

Abandoning a Transfer

Should you wish, you can abandon a transfer by typing 'Control-C' at either end. On the PCW this is done by pressing the **STOP** key, or by holding down the **ALT** key and pressing the C key. On the PC this is done by holding down the **CTRL** key and pressing the C key.

Names to Avoid

Some file type extensions are legal, but have special meaning on the PC:

.COM & .EXE Files called xxxx.COM and xxxx.EXE are thought by DOS to contain programs. Simply typing xxxx at DOS will run the program of that name. If the file does not contain a program then the result is undefined, unexpected and possibly unpleasant.

CP/M treats files called xxxx.COM in the same way. Note that a CP/M program will not function at all on a PC.

.BAT Files called xxxx.BAT are thought by DOS to be 'Batch' files, that is, files which contain DOS commands. Simply typing xxxx at DOS will cause it to try to obey the contents of the file. If the file does not contain DOS commands then it may, or may not, recover gracefully.

CP/M treats files called xxxx.SUB in a similar way. Note that a CP/M .SUB file may not function at all on a PC.

.BAK It is conventional for DOS programs, such as Word Processors, to save the old copy of a file when replacing it with the latest version. The old copy is saved by changing its name to have the file type extension '.BAK' - any previous file of that name is erased. This is similar to LocoScript's 'Limbo' mechanism on the PCW - and LocoScript on the PC conforms to this convention. If a file called xxxx.BAK is transferred to the PC then it is in danger of being quietly erased! (The same convention exists for CP/M programs.)

LocoLink will happily transfer files with these type extensions, but we recommend you promptly change the file type extension of any such files.

Disconnecting from the PC

When you have transferred all the files you wish to, it is probably a good idea to remove the LocoLink cable from the back of the PC. (You can then reconnect your printer, if you had to disconnect it.) It is safe to remove the cable from the PC without turning the power off, as long as you do not remove the cable from the PCW.

Problems

This chapter of the manual describes problems you may have with LocoLink, and offers some solutions.

Problems with transferred files

If you have a problem with a file after you have transferred it, you can be sure that it is not LocoLink which is the cause. LocoLink tests the transmission of each file as it is sent to make sure it has been transferred accurately, and it isn't possible for a file to become corrupted in this way.

However, you may still need to 'convert' the file in some way after it has been transferred so that it can be used with PC software. For LocoScript and other Loco-type files, all the necessary conversions are described in Appendix I of the Reference Book. For other software, you should consult the software's own documentation; Locomotive Software can offer no help with these files.

If you are certain that you have performed any necessary conversion correctly, you should check the PCW version of the file: the PC version of a file is sure to be corrupt if the PCW version was corrupt to start with.

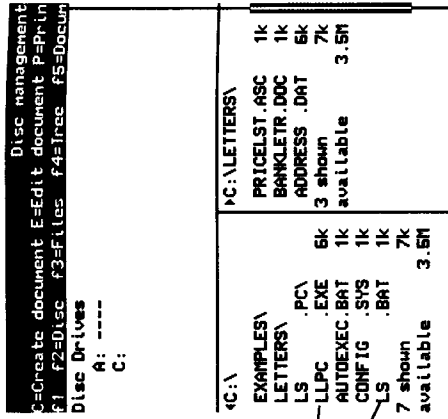
Bad Commands

If you get the message

Bad command or file name

when you type ...LLPC on the PC, it is because DOS cannot find the LocoLink program on your disc. Assuming you haven't mistyped the name of the program, you should check that you really have transferred the LLPC program to the disc and (if you're using floppy discs) that you have the right disc in the drive. If you are sure that LLPC.EXE is on the disc and you still get the Bad command or file name message, you've put the program somewhere where

DOS can't find it. Use LocoScript to move it to the root directory of the disc you load LocoScript from, so that when you press [Ctrl] + [F1] you see it in the same directory LS.BAT:



LLPC . EXE in the same directory as LS . BAT

If you are sure LLPC.EXE is in the correct directory on the disc, make sure you are trying to run the program in the correct way. See the section 'Copying and running the PC program' Chapter 1.

The corresponding problem on the PCW produces the message LLPCW?

If you get this message, you have either put the wrong disc in the drive, or you have told CP/M to look in the wrong drive (ie you have typed A:LLPCW... when you should have typed B:LLPCW... or vice versa) or you have not copied the file LLPCW.COM to group 0 of the disc.

Invalid Destination Directory

When you type the LLPC command, you must follow it with the name of the directory you are going to transfer files into. This directory must already exist; if it does not, you will get a message of the form

Please specify a valid destination directory path

If you get the message

Program line needs parameters in order to run

it is because you didn't specify a directory name at all, while the message

One destination path only, please means that you either tried to specify more than one directory, or LocoLink thinks you did! Make sure there are no spaces, commas, or other extraneous characters in the middle of the directory name or between the disc name and the directory name. Make sure you have not confused the forward and backward slash characters: you must use \ in a directory name, and / immediately before any options.

Unsuitable names

In some circumstances LocoLink may tell you that it cannot carry the PCW name for a file or directory across to the PC, and you should replace it with a new one. (The most likely time is if there is a name clash - when there is already a file on the PC with the name LocoLink wants to use.)

When this happens, the PCW program displays the old name, leaving the cursor at the end. You may then edit that name using various keys:

- the **←** and **→** keys will move the cursor along the name.
- the **←DEL** and **DEL→** keys will remove one character in the given direction.
- **ALT + X** will remove all characters of the name.
- character keys will add characters to the name.

Pressing **RETURN** (or **ENTER**) signals that the new name is ready. The next few sections explain how to deal with the problem according to what you want.

Clash of Names: When a Name is in Use at the PC End

If a file LocoLink wishes to transfer has a name which clashes with a file or directory on the PC, the PCW program will tell you, and suggest that you specify another name, as described above. The name you should specify depends on the result you want:

- if you want to overwrite the PC file, leave the filename unchanged, ie. simply press **↵**.

- if you don't want to transfer that file at all, delete the name (by pressing **ALT + X**) and then press **↵**.
- if you want the file to be transferred, but with a different name at the PC end, edit the name you are presented with as described above. If the name is permissible the file will be transferred with the new name.

In other cases (for instance if the name is not a permissible DOS name, or is the same as an existing directory at the PC end), you will be told and asked for another name.

If a directory LocoLink wishes to create at the PC end has a name which clashes with a file or directory already on the PC, the PCW program will again prompt you for a new name, as described above. The name you should specify depends on the result you want:

- if you want to transfer the files into the existing directory instead of creating a new one, leave the directory name unchanged, ie. simply press **↵**.
 - if you don't want to transfer the files destined for that directory at all, you should delete the directory name (by pressing **ALT + X**) and then press **↵**.
 - if you want the files to be transferred to a new directory, edit the name you are presented with as described above. If the name is permissible a new directory will be created with the new name, and the files will be transferred there.
- In other cases (for instance if the name is not a permissible DOS name, or is the same as an existing file at the PC end), you will be told and asked for another name.

When a PCW Name is not a Valid PC Name

There are names which DOS regards as invalid and which cannot be given to PC files and directories. This is because their names either include characters which are not allowed in names on the PC, or are reserved on the PC for devices. The following characters are not allowed in names on the PC:

* + /

The following names are reserved for devices on the PC:

CON AUX COM1 COM2 PRN LPT1 LPT2 LPT3 NUL

If the name of a file to be transferred (or directory to be created) is invalid on the PC, the PCW program will tell you, and ask you for another name, as described above. The action taken by the program depends on the new name, as follows:

- if you don't want to transfer the file or files at all, you should delete the suggested name (by pressing **[Alt] + X**) and press **[Enter]**.
- if you want the file(s) to be transferred, but with a different name (or into a different directory) at the PC end, edit the name you are presented with as described above. If the name is permissible the transfer will take place using the new name.

Testing the connection

If LocoLink does not work on your computer, it is possible that there is a fault, either in one of your computers or in the cable itself. To allow you to test this, versions of LocoLink from 1.4 onwards have a special test facility, allowing you to check the connection between your PC and your PCW. This section of the booklet explains how to use this facility. Obviously, if LocoLink works properly for you, you don't need to read this section.

It is worth remembering that if LocoLink transfers a file at all, it transfers it correctly. It is not possible for a file to be corrupted during the transfer.

Which version of LocoLink?

The test facility is incorporated in versions of LocoLink from 1.4 onwards, and if you want to use it, it is important that *both* LocoLink programs (on the PC and the PCW) are version 1.4 or later. You can find out which version of LocoLink you are using by typing the program name on its own, without any file names or parameters. Put a LocoLink disc in the machine and type

LLPC

on the PC, and

LLPCW

on the PCW, and you will see a message telling you which version of the software you are using.

Using the Test option

To test the connection, join your PCW and PC with the LocoLink cable and type:

LLPCW /T

on the PCW and

LLPC /T

on the PC. (If the cable is plugged into printer port 2 on the PC, you should type LLPC /T2 on the PC.)

The connection has four signals – two in each direction. The signals from the PC to the PCW are called *Data 0* and *Data 1* and those from the PCW to the PC are called *Ack* and *Busy*. Any of the four may be *true* or *false* at any particular moment.

When each LocoLink program starts it displays the state of the four signals on the screen. It says whether the signal is IN or OUT (ie. whether it is a signal IN TO that computer or OUT FROM it) and whether it is true or false. When a signal changes, the screen changes to reflect the new state.

Press 0 on the PC a few times; each keypress changes the state of the output signal Data 0. If the connection is working correctly the PCW will display a corresponding change to its input signal. (Make sure you use the 0 key at the top of the keyboard, above the letter keys.) When you are satisfied that Data 0 is working correctly, press 1 to test Data 1 in the same way.

Now press A and B on the PCW to change the state of Ack and Busy; if the connection is working correctly the PC will display a corresponding change.

As you make sure the four signals are working properly you should check there are no side-effects: changing one signal should not change any of the others.

When you have finished testing all the signals, you can leave LocoLink by pressing **[STOP]** on the PCW and **[Ctrl] + C** on the PC.

If none of the signals is transmitted at all, it is possible that the LocoLink is connected to the wrong printer port at the PC end – many PCs have more than one. Try changing the cable to another printer port. Some machines have a printer port on their video card, and call that port *port 1*; they refer to the built-in port as *port 2*. If you have a machine like this, you should start the LocoLink test on the PC with the command:

LLPC /T2

If you are certain the LocoLink cable is connected to the correct port but the test still produces incorrect results, there is a fault in one of three areas: the PC printer port, the PCW expansion slot, or the LocoLink cable itself.

Switch off your PCW. The power must be turned off when you connect or disconnect the LocoLink cable.

The first thing to try is to clean the PCW expansion slot. **TURN THE PCW'S POWER OFF**, and remove the LocoLink cable from the PCW. Now gently rub the connectors on the expansion slot with a soft pencil eraser. Reconnect the cable, check that it is firmly plugged in at the PC end, turn the power back on, and try again.

(It is just possible that the PC printer port is not standard; however we have yet to see one which is so far from the standard that it does not work with LocoLink. In particular, it is not necessary to have a 'bidirectional' printer port, which some other packages require. The machines most likely to have non-standard printer ports are portable or pocket PCs.)

Chapter 4

Detailed Instructions

The LLPCW Program

The LLPCW program is invoked with the command

LLPCW *parameter [option]*...

It is followed by one parameter which may itself be followed by a number of options. The parameter specifies which file or files are to be transferred. The options modify the transfer in one way or another.

Specifying the Files to be Transferred

The parameter takes one of the following forms:

drive-letter:
drive-letter: file-name
file-name

or one of the 'LocoScript' forms:

drive-letter: group-name : file-name
group-name : file-name
drive-letter: group-name :
group-name :

(you should not use the /C option if you use one of the 'LocoScript' forms)

or one of the 'CP/M' forms:

user-numberdrive-letter: file-name
user-number: file-name
user-numberdrive-letter:
user-number:

(you should always use the /C option if you use one of the 'CP/M' forms)

where the parameters have the meanings explained overleaf.

drive-letter

gives the drive from which to read the files. Note that before reading from this drive the program gives you the opportunity to change the disc in that drive.

If no drive is given then the current drive is assumed.

group-name

gives the LocoScript group name of the group or groups from which to read. The usual CP/M 'wild card' characters may be used to specify a range of groups. Note that groups which do not have LocoScript group names may here be referred to simply by number. If no group name is given then the group corresponding to the current CP/M user number is assumed.

The 'Limbo' versions of files are not transferred.

file-name

gives the name of the file or files to read. The usual CP/M 'wild card' characters may be used to specify a range of files. The name takes the form:

file-part [. *file-type-part*]]

in the usual way.

If no file name is given then *, * is assumed – ie. all files in the specified group/user or groups/users.

If only the *file-part* is given then . * is assumed for the file type.

user-number

gives the CP/M user number of the user or users from which to read. The usual CP/M 'wild card' character * may be used to specify all user numbers 0 to 15 inclusive. If no user number is given then the current user number is assumed.

The 'Entire Disc' form specifies that all files in all groups and all user numbers are to be transferred.

LocoLink will not transfer files which are part of LocoScript itself – such as LocoFont, printer driver and keyboard files (unless you use the /C option – see below). If the specification includes such files then the program will tell you which files it is not transferring.

LocoScript files which are 'Hidden' or 'System' are never transferred, even if you use the /C option. Neither are CP/M's System (SYS) files. Files which are marked 'Read Only' are transferred, but are not marked read only at the PC end.

Where Files are Transferred to

When the LLPC program is invoked at the PC end, you give it the name of a PC directory into which the transfer is to be made. This is called the destination directory.

Files are transferred directly into the destination directory except when either an entire disc is transferred or the group name or the user number contains one or more 'wild card' characters. In the latter cases directories will be created in the destination directory, and files transferred into them. The new directories are named after the PCW group or user number the files are transferred from:

- *If the /C option is not used then each new directory will be given the name of the corresponding LocoScript group. Groups which have no name produce directories whose names are the single digit of the corresponding group number.*
- *If the /C option is used, each new directory will be given a name which is the corresponding user number expressed as one or two digits.*

The LLPCW Options

Options are given following the file specification parameter. They take the form of a / character followed immediately by a letter. There are six possible options:

/S This option is required when using the Serial connection. You will not need this option if you have the LocoLink cable.

/D This option turns off the check for directories already existing at the PC end of the link. If a directory already exists with the same name as a directory LocoLink is about to create, it will not stop and ask what you want to do, but will transfer files to the existing directory. Note that even with this option the transfer cannot create a directory if a file of the same name already exists.

This option is useful if you have a number of discs with the same collection of groups on them, and you wish all files in the same group on all these discs to be placed in the one directory on the PC. You should be careful, though, in case there are files with the same name in these groups.

/R This option turns off the check for files already existing at the PC end. The transfer will, without further ado, replace existing files at

The LLPC Program

The LLPC program is invoked with the command

LLPC *parameter [option]*

The parameter specifies the destination directory – the directory into which files are to be transferred.

Specifying where to Transfer to

The parameter is the path name of a directory. This directory must exist when LLPC is invoked. The path may or may not include a drive part, and may or may not start at the root – this is handled in the usual way for DOS. Files are transferred either into this directory or into sub-directories of this directory, depending on what is being transferred (see 'Where Files are Transferred to', on page 27).

The LLPC Options

Options are given following the destination directory parameter. They take the form of a / character followed immediately by a letter and possibly a digit. There are three options:

/S This option is required when using the Serial connection. You will not need this option when using the LocoLink cable.

/Pn This option specifies that the LocoLink cable is plugged into the PC's parallel port number *n*. You do not need the P; the command can be abbreviated to just the number:

/n

The default value for *n* is 1, so that if you omit this option entirely, LocoLink PC defaults to receiving data via port 1, the main printer port.

However, if your computer has a parallel port on its video card, the main printer port will normally be number 2, and you should therefore append /P2 to the LLPC command.

/T This option is used to test the connection between the two machines. It can only be used in conjunction with the /T option at the other end of the link. Its use is described fully in the section 'Testing LocoLink'.

the PC end. Note that even with this option the transfer cannot replace a directory by a file of the same name. This option should be used with caution.

/I This option also turns off the check for files already existing at the PC end. However, instead of overwriting the existing version, the PCW file is simply not transferred. This may be useful if a previous transfer of files failed part way through for some reason.

/C The /C option indicates that CP/M files are being transferred. This has three main effects:

- if the 'Entire Disc' is being transferred, this means all files in user numbers 0 to 15 (not just 0 to 7) will be transferred. If the disc has been used for LocoScript files, this means any limbo files will be transferred with all the regular LocoScript files.
- any directory names required will be the corresponding user number expressed as one or two digits.
- all files (except system files) are transferred; specifically, LocoLink does not check to see whether files are part of LocoScript itself before transferring them.

The /C option must not be used if a group name is specified.

/T This option is used to test the connection between the two machines. It must be used in conjunction with the /T option at the other end of the link. Its use is described fully in the section 'Testing LocoLink'.

The LLPROFIL.OPT File

If you use the same options every time you use the LLPCW program you may wish to save some effort by constructing a file called LLPROFIL.OPT.

When the LLPCW program starts it looks to see if there is a file called LLPROFIL.OPT on the same disc as LLPCW.COM. If there is then LLPCW reads the first line, expecting to find options in the form given above. You might, for example, create LLPROFIL.OPT containing the single line

/D

so you need never type this option again! You can use LocoScript to create LLPROFIL.OPT, but you must remember to use 'Make ASCII' to convert it to a form that LLPCW can use.

The LL.BAT File

If you use the same option every time you use the LLPC program you may wish to save some effort by constructing a file called LL.BAT, which you should put in the same directory as LLPC.EXE. This works in a similar way to LLPROFIL.OPT on the PCW.

To run LocoLink on the PC, you should type LL instead of LLPC (ie. if you typed A:\LLPC before, you should now type A:\LL). DOS looks for a file called LL.BAT. If it finds one, it executes the commands in it, one by one. So you might, for example, create LL.BAT containing the single line

```
LLPC.EXE /P2 %1 %2 %3 %4 %5 %6 %7 %8 %9
```

so LocoLink will always automatically use printer port number 2. You can use LocoScript to create LL.BAT, but you must remember to use 'Make ASCII' to convert it to a form that DOS can use.

