pcw-2in1

Version 2

User Guide

Copyright Notice

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INTRODUCTION

Welcome to the User Guide for Moonstone Computing's *pcw-2in1* program.

pcw-2in1 Version 2 has been written specially for the Amstrad PCW and PcW range, and provides a friendly, fast and easy-to-use Disc and File Manager for your floppy discs. With *2in1*, you can quickly and easily move around Groups and Discs, marking, deleting and copying any number of files at once with a single key-press. You can even format and verify discs, all without leaving *2in1*!

Unlike other similar programs, however, *2in1* also lets you transfer files on disc between your PCW and any other computer capable of using "industry standard" MS-DOS 5.25" 360K and 3.5" 720K format discs. These include the IBM PC, AT, PS/2 and compatibles; RM Nimbus; Apple Macintosh; Commodore Amiga and Atari ST. *2in1* will do this using the 3.5" Drive "A" fitted to the new PcW range, or with a 3.5" or 5.25" Drive "B" fitted to any of the older PCW models.

All discs are analysed automatically by *2in1*, and the PCW is set up to use the appropriate format without any action by the user whatsoever.

All options are presented in short, easy to understand menus, and Disc directories are viewed in windows, with cursors used to select files. Any number of files can be tagged and then deleted or copied in a single operation.

2in1 **won't** let you run PC programs on your PCW (or vice versa)! This is a common misconception, but is simply impossible. Although *2in1* will transfer any type of file, including programs, these will not run. In general, programs written for one type of computer can never run on a different type, and this is certainly the case with the PCW.

2in1 is ideally suited for use with Flipper and large RAM packs; indeed, if you have a PCW8256 or PcW9256 we would strongly recommend that you upgrade to at least 512K RAM. When you run

2in1, approximately 60K of RAMdisc space is reserved for use by the program, so if you have only the basic 112K RAMdisc on an unexpanded 256K machine, you will have very little space left to hold files.

Although *2in1* will work happily on any PCW with a GEM or Vortex hard disc drive attached, you will **not** be able to access files on the hard drive from within *2in1*.

The READ.ME file

You will find on disc a file called READ.ME, which contains information specific to the version of *2in1* which you have, or which has been added since this manual was printed.

You should examine and, if necessary, print out this file for your reference. The file contains text in ASCII format, and can be read into a Locoscript document using **Insert text**. Alternatively, you can view it on the screen directly from CP/M by entering

A>type read.me

and pressing **RETURN**.

A PCW by any other name...

Amstrad's inspired naming of the various models in the PCW and PcW ranges seems designed to cause the maximum amount of confusion among users and manual writers alike! In this manual, whenever we need to differentiate we'll use the term **PCW** to refer to any model in the older, 3" disc range and **PcW** to mean a model in the newer, 3.5" disc range of machines. Where a point applies equally to *all* models, we'll just use **PCW** as a generic term.

Customer Support

We hope you enjoy using *2in1*, and find it useful and easy to use. We welcome any suggestions you may have to improve our products, and are happy to provide support to our customers.

Should you require support then, if possible, please write to us - this allows us to give full and thorough consideration to your problem. However, if your problem is especially urgent, please phone us between 3pm and 5pm weekdays, when technical staff will generally be available.

However you contact us for support, we will require the following pieces of information :

Support Checklist

* Your name, address and daytime phone number.

* Your supplier and invoice number.

* *Full* details of your computer type and any add-ons or expansion hardware you have attached.

* Your CP/M Version Number (displayed when you boot CP/M).

* The contents of any PROFILE.SUB file you are using.

* The Version Number of your copy of *2in1* (displayed when you run the program).

* *Full* details of your problem, including exact circumstances in which it occurred and the *exact* contents of any error message displayed on the screen.

Providing us with all the necessary information ensures that any problem can be resolved as quickly and efficiently as possible.

Copying *2in1*

Before running **2in1**, please follow the instructions given below to create a Working Copy of your Distribution Disc. This Copy should then be used whenever you want to run **2in1**; the original Distribution Disc should be replaced in the box and filed away in a safe place, and **not** used routinely.

2in1 is protected by U.K. and International Copyright Law. This means that it is **illegal** to make a copy of the program or this manual to give to someone else, even if it is "just for them to look at", or to use multiple copies of the program in more than one computer. Programs are just like books - if you need two copies, you have to buy them both.

Contraventions of the U.K. Copyright Act are now subject to severe penalties, including imprisonment. As well being against the Law, copying software deprives us of sales and so reduces our ability to properly support genuine owners or develop new programs for you to use - in other words, **you** will lose out too.

You paid for **2in1** - if someone else wants a copy, tell them to do the same!

Copying your Distribution Disc

Before you do start using **2in1**, you should make a Working Copy of the program.

To do this, you must boot the PCW from a Start-of-Day disc which contains a copy of CP/M Plus. When you do this, you will see CP/M sign on and display the

A>

prompt.

The command required next varies depending on which type of PCW/PcW you are using.

PCW8256; PCW8512; All PcW models :

Type **DISCKIT**, and then press **RETURN.**

PCW9512 :

Type **8000COPY**, and then press **RETURN.**

This will run the appropriate Disc Copying program; follow its prompts to insert and copy your *2in1* Distribution Disc.

You should now file the Distribution Disc in a safe place, and use the new Working Copy to run the program. If this copy ever fails or is lost, you can make another one. Never use your Distribution Disc to run the program.

Hard Disc users

If you have a hard disc attached to your PCW, you can run *2in1* much faster from there - just copy all the files from your Working Copy onto your hard disc. Now just log to that hard drive instead of the floppy before typing **2in1**.

If you have a Cirtech GEM hard disc, this changes the names of your floppy discs from **A** and **B** to **C** and **D** respectively. In this manual, however, we will use the normal names of **Drive A** and **Drive B** throughout for the floppies - you should just read **C** and **D** for these instead. Don't worry, though - *2in1* itself does know that your drive names have been changed and will show them properly.

Running *2in1*

2in1 runs under the CP/M Plus Operating System; this means that it cannot be used directly from Locoscript. Instead, you must boot the PCW from a Start-of-Day disc which contains a copy of CP/M Plus, as you did when you copied your Distribution Disc. If you have just done this, you will already be in CP/M and so do not need to reboot the computer.

Insert your *2in1* Working Disc in Drive "A", and at the

A>

prompt type **2in1**, then press **RETURN.**

You will hear the program begin to load from the disc; after a short delay, the screen will clear and display a sign-on message. There will now be a longer delay while the program loads up overlay files from disc into RAMdisc; when this is finished, the normal *2in1* Main Screen will be displayed, and all discs present will have their types and contents displayed as in the diagram below. Please wait until you see this finish before removing your *2in1* working disc!

The Screen Layout

You will see that the screen is divided into four main areas. At the top left is the **Options Window**, where the options available at any time will be displayed. The other three **File Windows** are used to display the files present in Drive "A", Drive "B" and Drive "M".

The windows corresponding to the two floppy disc drives are always positioned adjacent to their respective drives, so the above picture is from a PCW8256/8512 - on a PCW9512 and all PcWs, the bottom two windows are adjacent to the floppy drives and so they are used for the Drive "A" and "B" File Windows, with the window for the RAMdisc in the top right of the screen.

If you do not have a second drive fitted, a message to that effect will appear in the Drive "B" File Window, and you will not be allowed to operate on this drive.

Each File Window displays the type of disc, the number and names of any files in the current User Area, their sizes in KiloBytes (**K**), and the free space remaining on the disc.

Some Terminology

You may not be familiar with the term **User Area**. This is however just another name for the current **Group** we are examining. It is only possible to work with the files in one Group at a time, but this can be selected and altered by the **U Set User Area** command.

Each PCW disc can have files in up to **16** User Areas, numbered 0 through 15. Locoscript uses the first 8 of these for its File Groups, and the second 8 for Limbo. When you put a file into Limbo, Locoscript doesn't actually delete it, but just puts it into one of these higher User Areas. Each File Group has its own Limbo Area; this is just the User Area whose number is the Group number + 8.

The **Current Drive** is shown by having its name in its File Window placed in reverse video. This shows you the disc drive on which you are operating.

How *2in1* works

One of the most important to things to remember about *2in1* is that **all** operations are carried out on the disc or files in the Current Drive.

To change the Current Drive, press the **TAB** key; each press will cycle the Current Drive one place around the circle Drive "A" - Drive "B" - Drive "M" and then back to Drive "A" again.

Before you can perform any file operations on a disc, it must be **logged in.** This is similar to the **Disc Change** command in LocoScript, and is done automatically for any discs *2in1* finds in the drives when it starts up. Thereafter, anytime you change a disc you must tell **2in1** you have done so by logging it in again. The command which does this is described in more detail in the next section.

Once the current drive is logged in, any files present on it will be listed and a **cursor** placed over the first one.

The ↑ and ↓ cursor keys control the movement of this cursor; if there are more files in the drive than the File Window can show at once, press the **Page** key to scroll down the list. Moving the cursor down beyond the bottom file in the window will have the same effect. To move back up the list, either move the cursor up beyond the top file, or press **ALT + Page.** For convenience, the **SPACE** bar will act in the same way as the ↓ cursor key.

Several of *2in1*'s operations are performed on a whole batch of files at once. You select files for inclusion in such a mass operation by **tagging** each of them. This is done by placing the cursor over the file you wish to tag or untag and then pressing

| **+** | to **Tag** a file, or

| **—** | to **Untag** a file you have previously tagged.

A tagged file is marked in the File Window with a ♦ character to the left of the file's name.

Batches of tagged files can be copied to another disc or deleted by issuing a single command; this is much faster and easier to use than either CP/M's confusing **pip** or **era** commands or Locoscript's File Manager, where files must be operated on individually.

Other functions, however, operate on only one file at a time; to select the file you wish to use, simply place the cursor on it and press the required command.

At any time, pressing the **CANcel** key will stop the operation in progress. In most cases, you will then be prompted for confirmation in case **CANcel** was pressed by mistake.

You will also be asked for confirmation before *2in1* accepts a command which you would not want to press accidentally, such as formatting a disc or exiting from the program.

Wherever you are prompted to press the **RETURN** key, you will find that the **ENTER** key will also work; Locoscript users may find this more familiar and convenient to use.

To exit completely from *2in1* and return to CP/M, press **EXIT**.

Using MS-DOS discs

2in1 can use both 360K or 720K MS-DOS discs in either floppy disc drive, and will detect whether a disc is PCW or DOS automatically.

All *2in1*'s functions can be used with a DOS disc in just the same way as with a PCW disc, except for **U User Area**. This has no meaning in the context of a DOS disc and so will be ignored.

A much more detailed discussion on the use of MS-DOS discs is provided in the final part of this manual.

USING *2in1*

Logging in a Disc

As explained above, you must use the **L** command whenever you change a disc in a drive, to tell *2in1* to examine it, determine the format and display the files it contains. This command is similar to Locoscript's **Disc change** command, except that in *2in1*, **only** the current drive is re-logged.

The disc to be used as the destination for a file copying operation does not need to be explicitly logged in first; *2in1* does this automatically before starting the copying process.

Similarly, you need not explicitly log a disc in before either formatting or verifying it. Indeed, attempting to log in an unformatted disc will fail as there is no data on it.

Selecting a User Area

The **U** command lets you change the User Area, or Group, on the current disc. You will need to do this if you want to work with files in several Groups; *2in1* only shows the files present in one Group at a time.

The concept of User Areas was explained in the Introduction; briefly, User Areas **0** through **7** correspond to the Locoscript File Groups with the same numbers, while User Areas **8** through **15** are used by Locoscript to hold files which have been placed in Limbo.

When you use this command, you will be prompted for the new User Area to switch to. As an aid, the second line of the prompt window contains a list of any User Areas which appear to contain files.

Renaming a File

The **R** command allows you to change the name of the file on the current drive over which the cursor is positioned.

You will be prompted for the new name to give the file by a message such as

```
Rename file EXAMPLE.DOC to ▓▓▓▓▓.▓▓
```

You should now type in the new name which you want to give the file. If you change your mind, pressing the **CANcel** key will stop the operation.

"Wildcard" Tagging

Many of *2in1*'s functions operate on a batch of tagged files rather than individually. You will usually build such a batch by tagging each file manually; however, there is a faster way of doing this if you either want to tag all the files which are present, or they have a common element to their names.

The **W** command provides a quick and convenient method to tag a large number of files at the same time. You will be prompted for an ambiguous file name; this may contain the standard **?** and ***** wildcard characters.

All files matching this filename will be automatically tagged, so specifying ***.*** will tag **all** the files on the current drive.

If you are unfamiliar with the concept of wildcard filenames, please consult your PCW User Guide for a full explanation.

Deleting Files

Unlike LocoScript or CP/M, *2in1* deletes files as a batch rather than singly. So, you should first tag all the files you wish to delete. The **D** command will permanently delete all the tagged files on the current drive. Before proceeding, you will be asked for confirmation with a message such as

```
Delete Tagged Files From Drive A (y/n) ? █
```

Pressing **Y** or **y** will continue the deletion process; pressing **N** or **n** will stop it.

Warning!

2in1's Delete command will **permanently erase** all tagged file. There is **no** equivalent of Locoscript's "Limbo" facility in *2in1*!.

Copying Files

Copying files with *2in1* is extremely easy, as whole a whole batch of files can be copied with a single command. First, **TAB** the cursor to the drive you want to copy from, and tag all the files you want to copy. The **C** command will then copy **all** these tagged files to a different drive.

2in1 does not care what type of disc either the source or destination may be - you can copy files between PCW and PCW or MS-DOS discs with this command, in exactly the same way. *2in1* always knows which types of discs you are using, and automatically configures itself accordingly.

You will first be prompted with a message such as

```
Copy to which drive (A or M) ? █
```

to allow you to select the destination. When you have done so, *2in1*

clears the Options Window and displays the number of files to be copied and details of the file currently being copied.

As with most operations in *2in1*, pressing the **CANcel** key at any time will allow you to stop the copying process.

Moving Files

2in1 does not provide an explicit command for moving a batch of files from one disc to another.

However, doing so is quite simple. First, tag and copy the files to their new location as described above. You will then see that the original source files are still tagged, so just press **D** and they will be deleted.

File Attributes

File Attributes are properties of each file which determine, for example, whether or not the file's name will normally be displayed in a directory listing, or whether the file can be modified or deleted. *2in1* displays any attributes which are set for each file at the right hand side of the File Window.

On the PCW, you will not normally be aware of a file's attributes. However, it can sometimes be useful to alter these for specific purposes. The **A** command allows you to change the **Attributes** of all the files currently tagged.

PCW File Attributes

Any PCW file has seven Attributes, of which only two (**System** and **Read-Only**) are in general use. Please refer to the CP/M section of the PCW User Guide or an appropriate book for details of File Attributes and their functions.

MS-DOS File Attributes

2in1 also displays, and allows you to alter, certain of the attributes associated with files on an MS-DOS PC disc. These are broadly similar in effect to those used by PCW and CPC discs, but have the following two additional features.

D   Directory

> This attribute means that the file is really not a file at all, but is actually a **Subdirectory**. This a feature of MS-DOS which PCW users will not be familiar with, and is due to the ability of an MS-DOS disc to have more than one file directory.

> In practice, this need not concern us, as *2in1* will only show and operate on files in the main, or Root, MS-DOS directory. You will see any Subdirectories displayed with their names between < and > brackets, with the **D** attribute displayed at the side. You will not be able to do anything to these Subdirectories.

V   Volume Label

> MS-DOS discs can be given names; these are shown by *2in1* with their names between [and] brackets, and the **V** attribute displayed beside them. You will not be able to do anything to Volume Labels.

Changing File Attributes

When you press the A command, *2in1* will display a small window in the centre of the screen with a message such as

```
Change which attributes (RSA1234 or *)?
```

You may type in a string containing any of the attributes listed which you want to change, or a *****. A ***** will **reset** all attributes. Press **RETURN** to complete.

On an MS-DOS disc, the list of attributes offered is a little different -
you will then be prompted instead with

```
Change which attributes (RSHA or *)? 
```

Verifying a Disc

The **V** command lets you perform a check of any disc for damage or
magnetic corruption. This process is entirely non-destructive; any files
on the disc will **not** be damaged.

It is a good idea to verify all your important discs regularly; if a file
has become corrupted or the disc has been damaged, you will then
detect this as early as possible, and hopefully in time to recover most
or all of the data from the disc with a program such as *pcw-ToolKit*.

You do not need to know the format of a disc to verify it with *2in1*;
this will be determined automatically and reported as part of the
process. During the verification process, a graph will be displayed in
the Options Window to show progress.

Formatting a Disc

The **F** command allows you to format a disc in the current drive for
use by either the PCW or MS-DOS.

When you press **F**, you will first be offered a menu in the Options
Window showing the four types of disc format which *2in1* can create.
Not all of these may be applicable to the current drive, and an invalid
choice will result in an error message being displayed.

Once you have selected an appropriate format type, you will be
prompted for a final confirmation with a message such as

```
Confirm Format Disc (y/n) ? █
```

Pressing **Y** or **y** will start the formatting process; pressing **N** or **n** will stop it.

As formatting proceeds, a graph will be displayed in the Options Window showing the operation in progress.

After a disc has been formatted, you will be given the option of Verifying it. It is normally wise to do so; please see Page 15 for details of *2in1*'s Verify function.

Warning!

Pressing **CANcel** at any time will allow you to abort the formatting operation. However, if you do this after formatting has actually started, then you will still have corrupted information on the disc. Any files on it will no longer be accessible, and may be destroyed.

Be careful, therefore, when using this command - read all the prompts fully and always check that you really are working on the drive you think you are! It is a wise precaution to always remove all discs bar the one to be formatted from the computer before you begin a formatting operation.

TRANSFERRING FILES TO OR FROM MS-DOS

This section provides some more detailed information specific to the sharing of files between the PCW and other types of computers capable of using MS-DOS format discs.

What is MS-DOS?

MS-DOS is the name of the Operating System program used by all IBM-PCs and compatible computers. This program, just like the CP/M we have on PCWs, is responsible for "running" the PC, which is a much more complex computer than the PCW, and for providing the command line interface for interacting with the user (MS-DOS has an unfriendly **A>** prompt just like CP/M!)

More significantly for us, MS-DOS is also responsible for formatting PC discs and organising the layout of files and data on the discs. Unfortunately for us, it does this in an entirely different and incompatible way to that used by CP/M on the PCW! Normally, therefore, neither LocoScript nor CP/M can understand a disc from a PC - any attempt to read one will just result in the terse "Disc is Bad Format" error message.

Because of the differences between the PCW and a PC we can never run MS-DOS itself (nor any other PC programs) on the PCW. However, *2in1* does let the PCW understand the format of MS-DOS discs. Using *2in1*, you can move files to or from an MS-DOS disc as easily as any other. In fact you can do anything with an MS-DOS disc within *2in1* which you can with any normal PCW disc - copy, move delete or rename files and even format or verify a disc to be used with MS-DOS.

As was discussed in the Introduction, though, it is important to remember that only double-density, 360K 5.25" or 720K 3.5" MS-DOS discs can be used with *2in1*, **NOT** the high-density 1.2M and 1.44 types used normally by many modern PCs. Also, only files in the main, or **root**, directory can be accessed with *2in1*.

Which computers can understand MS-DOS discs?

Nowadays, MS-DOS format has become the standard way of storing data on disc and is used commonly by many types of computers, not just the PCs it was originally designed for. Other computers (such as the PCW!) don't normally use the MS-DOS filing system themselves, but are able to use these discs with the aid of a suitable program (such as *2in1*).

A brief guide to the mechanics of transferring files between the PCW and various other common types of computers is given below.

The IBM-PC, XT, AT, PS/2 and compatibles

This is the easiest category to deal with - any computer which actually **runs** a standard version of MS-DOS as its operating system can also use MS-DOS discs prepared on the PCW with *2in1*. Note that MS-DOS is used here for both the generic Microsoft version of DOS found on PC-compatibles such as Amstrad, Compaq and many others, **and** PC-DOS, the "official" version found on genuine IBM machines. PC-DOS is completely compatible with MS-DOS.

OS/2, a more sophisticated operating system used on some powerful AT and PS/2 class PCs can also produce and use MS-DOS discs quite happily.

This category therefore includes all IBM-PC, XT, AT and PS/2 type computers, as well as all "PC-compatibles" such as Amstrad's PC1512, PC1640, PC2000 and higher. Other well-known compatibles include Dell, Viglen, Elonex and Compaq, but the whole list runs into literally hundreds of different makes. All, however, run MS-DOS and can use discs produced by *2in1* on your PCW!

The RM Nimbus and Apricot Xen

Only the British could produce PCs which weren't true PC-compatibles! However stupid it may sound now, for many years we did just that and thought we were being clever.

Research Machines produced a range of Nimbus computers, mainly for the educational market, which were similar to real PCs but, alas, not similar enough to run PC programs. They ran a version of MS-DOS - but even this was slightly different! As a result, any disc to be used to transfer files to or from a Nimbus **must** be formatted on the Nimbus, **not** on the PCW; unfortunately, the standard MS-DOS disc which *2in1* will format cannot be understood by the Nimbus.

Thereafter, *2in1* can be used as normal to transfer files to and from these discs, as *2in1* **can** understand the format used by Nimbus.

Apricot produced Britain's first large-volume PC. However - yes, you guessed it - they weren't. Just like the Nimbus, they could not run standard PC programs and used a non-standard version of MS-DOS. This was in fact so non-standard that they could not even read normal PC discs at all, and normal PCs couldn't read those from Apricots. They did look nice, however, and won design awards.

This wonderful state of affairs actually continued for years, including all the models Apricot produced up to and including the relatively modern Xen range. Only from the Xen-i models onwards did they change over to full PC- and MS-DOS compatibility.

This means that discs from any Apricot of Xen vintage or earlier simply **cannot** be used with *2in1*. Discs from later models (Xen-i, Qi, etc) are however fully compatible and should give no problems at all.

The Apple Macintosh

All Macs normally use a disc format which is completely unreadable by the PCW's disc controller circuitry. However, by using a program called **Apple File Exchange (AFE)** Macs can read and write files on MS-DOS format discs. AFE does exactly the same job on the Mac as *2in1* does on the PCW, effectively allowing an MS-DOS disc to be used as an intermediary format to transfer files between the two machines.

The catch is that not all Macs can do this as it requires that they are fitted with the more modern type of floppy disc drive, called a SuperDrive. As a rule of thumb, all types of Mac produced from 1991

onwards, including the Mac Classic, are fitted with these drives as standard. Before then, only the more powerful Mac II models were fitted with these; most older small Macs will not have this drive fitted. If in doubt, consult your Apple dealer.

The Atari ST and Commodore Amiga

The normal disc format used by both these computers is not compatible with MS-DOS or *2in1*. However, both can automatically recognise and use an MS-DOS format disc produced by *2in1*, and there are programs available for both machines to allow them to format discs to MS-DOS.

Any problems you may encounter are likely be due to bugs in the MS-DOS format emulation on these computers - neither is perfect and both can behave oddly. It is wise to always check files after they have been transferred.

Transferring documents

Even once you have solved the mechanics of transferring files across different disc formats, there is still the problem of the **file format**. This is the way different programs choose to represent and organise the information they are storing within their files.

Life being what it is, different programs all use different structures and file formats for their data, and often can't understand each other's files at all. Nowhere is this problem more acute than in the world of wordprocessors and their document files.

LocoScript-PC

All versions of LocoScript-PC can import PCW-LocoScript document files in their entirety, retaining all codes and layout information. The reverse, unfortunately, is not true.

Because of its greater functionality, LocoScript-PC document files are more complex than those used by PCW-LocoScript, and so cannot be transferred back to the PCW. If you are fortunate enough to have a copy of LocoScript-PC version 1.56 or later, you will however find a "LocoScript 2" file option in the export menu. This will produce a version of the PC document file which any PCW LocoScript version 2.30 or later will read correctly. Some such files will produce a spurious "**Unexpected End of File**" error message when read into LocoScript 2; it is safe to just ignore this and continue.

If, though, either your copy of LocoScript-PC is older than 1.56 or you are using a version of LocoScript before 2.30 on the PCW, then the only way you will be able to transfer text back to the PCW is in the form of ASCII.

ASCII (which stands for American Standard Code for Information Interchange) is one of the few genuine standards that exists across the whole computing world. The drawback is that it is extremely rudimentary. ASCII is just a simple computer representation of plain text - upper and lower case alphas, the numbers 0 to 9 and some common symbols such as punctuation marks. No codes are allocated for more exotic symbols such as foreign (i.e. non-U.S.) language characters - there isn't even a pound sign!

If you have to transfer your document as ASCII, then, be prepared to lose many of LocoScript's characters and all of the layout codes such as bold, underline, size, font etc. All that will come across is the basic text content. Paragraph structure should be retained, but that's about all - anything fancy like headers, footers and tables will be lost or messed up.

To bring an ASCII file back into LocoScript on the PCW, the process is quite simple. Just read it into the document you are editing using the **Insert Text** command from the **Actions** menu (**Modes** in LocoScript 1). Although this function is designed for including stock blocks of text from disc, LocoScript happens to store these as plain ASCII and so will read in any ASCII file this way. As always with LocoScript, reading in a large file will take quite a while - you will see it scrolling up the screen as it comes in, line by line.

Any other wordprocessor / DTP program

Even among PC wordprocessors, there is very little in the way of shared file formats - in general, any wordprocessor will only read its own documents or ASCII files. Many now come with conversion programs which can transform one document format into another; unfortunately, none of these yet include LocoScript format.

So, to transfer text to or from any PC or Mac wordprocessor or DTP program, you will almost certainly have to covert the document to plain ASCII first. This can then be read by the program on the other computer, or if going the other way can be read into a LocoScript document on the PCW as described above.

On the PCW, converting a file from a LocoScript document to ASCII is straightforward. From the File Manager screen, select the **Actions** menu (**Modes** in LocoScript 1) and then choose **Make ASCII file**. It is a good idea to give all your ASCII files the same filename extension, such as .ASC or .TXT, so you can easily distinguish them from documents files. If converting to ASCII on the other computer, there will generally be an appropriate option in one of the File menus - if in doubt, consult the program's manual.

Transferring other data

For all their mutual incompatibilities, at least wordprocessors are always transferring one basic item - a stream of text. This means that, at worst, this can be converted to ASCII and understood by everyone. Unfortunately, this is not true of more complex data structures such as graphics, database records or spreadsheet entries.

The best chance of success in these cases is where a version of the same program is available on both the PCW and the other computer. You must still check, however, that these do actually share a common file format - even if the same program runs on two different computers and looks identical, there is still no guarantee that they will store their data in the same way. If the manuals aren't clear about this you should consult the program's producer for advice.

Database and Spreadsheet files

Some PC database and spreadsheet programs have older, CP/M relatives and offer limited file compatibility. On the PC dBase III, for example, can read dBase II files from the PCW - but the reverse is not true. Similarly, SuperCalc III on the PC can read SuperCalc II files but again the reverse is not possible.

With both databases and spreadsheets, however, there are standard ways to exchange data in an ASCII format. With a database, for example, this will usually mean having to rebuild the form entry screens and reports manually, but the actual data records can be transferred. So, even if two programs appear incompatible, there may still be hope. Examine the manuals for each program, looking for information on **Import** and **Export** of data for more specific details.

Accounts programs

Even this tends not to be possible for more esoteric programs such as accounts packages, although you should certainly check the manuals just in case. In general, transfer of highly structured data between different programs and computers is at best difficult, and may well require specialist help. At worst, it may not be possible at all.

Graphics and DTP files

Possibly the hardest data to transfer is graphics. It should be easy - there are several different, well-known standard file formats in existence for the exchange of graphics, such as GIF, PCX, IMG, CGM, TIFF, and PICT. Unfortunately, while these are used widely in the more standardised PC and Mac world, programs on the PCW tend to be wholly incompatible with them. Again, all you can do is check the manuals and consult the program's producer for advice.

Note that Micro Design 2 area (.MDA) files are transferrable directly between the PCW and PC versions of the program. However, they cannot be understood by any other DTP program.