Acorn Pocket Book
A-Link 2 Guide

Introduction

The Pocket Book filing system allows files to be easily copied between the Acorn Pocket Book and an Archimedes computer.

The software is also able to convert several types of RISC OS (Archimedes) files so that they can be used in Pocket Book applications, and vice versa.

This software requires RISC OS 3 version 3.1 and above.

Packing list

The kit should contain the following items:

● A floppy disc containing the PocketFS application software

● A Pocket Book A-Link cable in two sections

● Acorn Pocket Book A-Link 2 Guide (this document)

● Guarantee Card.

If any of these items is missing or damaged, please contact your supplier immediately.

Installation

The installation process consists of the following steps:

updating the !System directory

making a copy of the application

setting up the Acorn Pocket Book.

Updating the !System directory using SysMerge

SysMerge is a utility for maintaining and combining !System directories. When new modules are released or! System is modified to provide new or enhanced facilities, you use the SysMerge utility to manage the process of updating !System directories.

I   Select one !System to be your master !System. (If you are a new user of Archimedes computers, this is the !System supplied on disc App 1, or if you have a hard disc system, it is in the root directory of your hard disc.) All modifications should be made to this !System or a copy of it.

2   If necessary, copy this master !System to a disc with plenty of free space. You may wish to copy it to a newly-formatted disc which will become your master system disc. (If so, give the disc a recognisable name, for example **SYSTEM, using Name disc** from the disc icon bar menu.)

3   Start the SysMerge application by double clicking on it. The dialogue box shown here will appear:
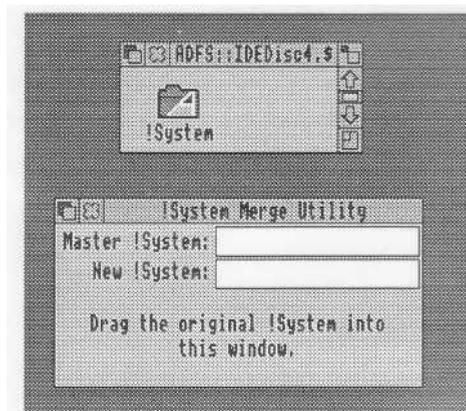
4   Drag the master !System directory into the SysMerge dialogue box. The pathname in the box labelled Master !System changes to the pathname of your master !System.

5   Drag the !System to be merged (the !System on the Pocket Book disc) into the SysMerge dialogue box

The Pocket Book disc !System's pathname will be displayed in the box labelled New! System. (If you use a purely floppy-based system you may have to change discs during this process.)

If all is well, the !Systems will be merged, and the message "!System Updated" will appear. If a problem occurs, an error message is displayed. SysMerge will report "Update failed". Take the appropriate action to resolve the problem, and then restart the merge process.

The most common error message you may see is "disc full"; this will not occur if you are merging onto a new system disc. If you have additional files on the master! System disc you should move them elsewhere.

When SysMerge is finished, you can quit the application, by selecting the Close icon on the window or by using the Quit menu option. Click Menu over the !SysMerge window to display the !SysMerge menu.

Repeat this process for all the !Systems on all your discs until you have a single master !System. This new master !System can then be used for all your work.

It is a good idea to make a backup copy of your new master !System disc, and to store this safely.

When you modify your master! System in the future, remember to take a new copy of it, and to change the copy. Do not delete older !Systems just in case something goes wrong.

Making a copy of the application

The application can be run from a hard disc, floppy disc or network file server.

You should take a copy of the disc supplied to work with during normal use; keep the original (with its write-protect set) as a backup.

If you do this, then you can still re-install it from your original, even if you accidentally delete the application on your copy.

To copy the application, drag the PocketFS icon to the required directory display.

Setting up the Acorn Pocket Book

You will need to use the Pocket Book A-Link cable supplied. This consists of a 9-pin serial cable which connects to the Archimedes computer, and an interface with a 6-pin connector which fits into the Pocket Book. If you have a BBC A3000, you will need to purchase the serial port upgrade from your Acorn supplier.

You do not need to switch off the Pocket Book before connecting it to or disconnecting it from the A-Link, but you should always switch off your Archimedes computer if you are connecting or disconnecting the serial A-Link at that end of the cable.

To connect your Pocket Book to the Archimedes computer:

1   Switch off your Archimedes computer.

2   Plug one end of the 9-pin serial cable into the D-shaped serial port on the Archimedes computer. Insert the other end into the Pocket Book interface.

3   Switch your Archimedes computer back on.

4   Connect the interface to the Pocket Book with the 6-pin connector on the lefthand side of the machine.

serial port
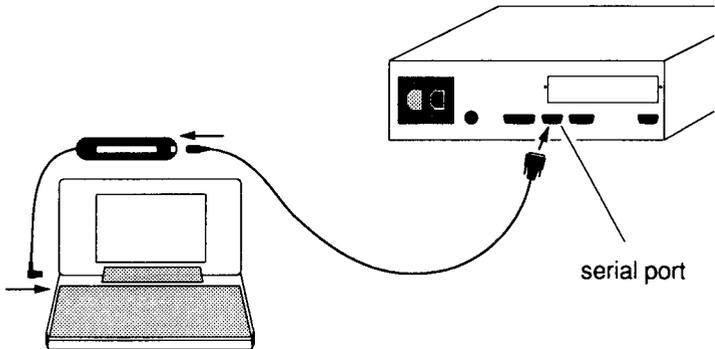
5   If necessary, switch the Pocket Book on.

6   Go to the Pocket Book's Desktop display, press the Menu key, and then use the left and right cursor keys to view the Special menu.

7   Select the Remote Link option from Special menu. Make sure that the remote link is switched on, and that the baud rate is set to 9600; use the cursor keys to alter the values if you need to. When the options are set correctly, press Enter.
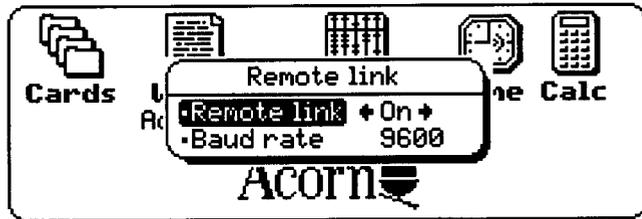
Note that if you open one or other of the Solid State Disk drive doors while you are using the A-Link, the A-Link cannot communicate until you close the door again.

Powering the A-Link

The A-Link uses power from the Pocket Book when it is in use. If you are running from batteries, using the A-Link will reduce the battery life. It is recommended that you use a Pocket Book mains adaptor (AHA35) while you are using the A-Link.

The A-Link may turn off suddenly if you use the A-Link when the battery power is too low.

Startinq the proqram

Double click on the PocketFS icon to load the program. The PocketFS icon should now be on the icon bar. The icon may initially be partly filled in red.

Make sure that you have switched your Pocket Book on, and then click on the PocketFS icon. PocketFS will start up, and any red areas of the icon will change to black and white.

If the red areas remain, either that the Pocket Book is not properly connected to the Archimedes computer, or the Pocket Book is switched off. The icon also reverts to its red fill if the Pocket Book has switched itself off to save power when not in use.

First make sure the Pocket Book is switched on, and then check that the Remote Link option on the Pocket Book is turned on as described in Setting up the Acorn Pocket Book. If this fails to remove the red fill, then check that both the Solid State Disk drive doors are closed and that all the cables are firmly connected. If the red fill still remains after you have checked all this, contact your supplier.

The conversion window

when you click on the PocketFS icon, the conversion window is displayed. The conversion window contains all Pocket Book files with a recognised file type, and looks similar to the Desktop display on the Pocket Book.

All drives on the Pocket Book are searched for files; those which are not on the internal drive are listed with a drive letter in square brackets after the file name.
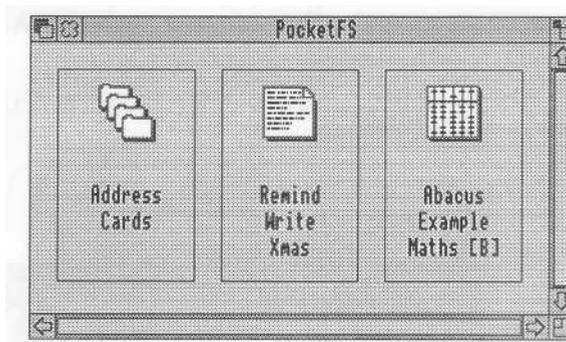
With this window you can:

● convert Pocket Book files to a Archimedes computer format (see Converting a Pocket Book *file* to RISC OS format on page 8)

● convert Archimedes files to the relevant Pocket Book format (see Character set mapping on page 10)

- rename and delete Pocket Book files (see other options within the conversion window on page 12)

- print files directly from the Pocket Book (see Using the Pocket Book while connected to the A-Link on page 16).

Select the file(s) you wish to convert, and drag this selection to a directory display, or, if you have selected a single file, you may want to drag it straight to the application you want to load it into. Your selection is converted automatically into the chosen format. If conversion will take some time, an hourglass is displayed showing the percentage completed.

Conversions supported

The following conversions between the Archimedes computer and the Pocket Book are supported. All these conversions work both ways (to and from your computer or Pocket Book).

RISC OS format	Direction of transfer	Pocket Book format
CSV	↔	Abacus
TSV	↔	Abacus
WK1	↔	Abacus
CSV	↔	Data
TSV	↔	Data
Text	↔	Write
RTF	↔	Write

Summary of file types

Text - Plain Text (File Type TEXT/&FFF)

Plain text files do not support style, emphasis or font information, however almost all editors, word processors and DTP applications can load plain text files.

RTF - Rich Text Format (File Type DOS/&FE4)

Rich Text Format supports style, emphasis and font information. Many word processors and DTP systems (such as Impression) can load or save Rich Text files, however not all computer systems or applications understand the same fonts etc.

CSV - Comma Separated Variable Format (File Type CSV/&DFE)

CSV files are used mainly by spreadsheets and databases. As the name suggests, CSV files contain variables separated by commas. CSV files do not support equations (equations are evaluated and the result substituted).

TSV - Tab Separated Variable Format (File Type TEXT/&FFF)

TSV format is similar to CSV but tabs instead of commas are used as the field separator, and the file type is ASCII text. TSV files are useful when transferring data between a spreadsheet or database, and a word processor.

WK1 - Lotus 1-2-3 WK1 Format (File Type Lotus/&DBO)

A file format supported by Lotus 1-2-3 Spreadsheet (version 2 onwards). WK1 files have an advantage over CSV/TSV in that equations are supported and are not substituted by their result. This means that when a WK I file is loaded into another spreadsheet program that understands WK I, cells can be changed and the spreadsheet re-evaluated without the need to re-enter equations.

Lotus WK1 files with a DOS file type may be dragged directly from a DOS floppy or partition into the conversion window.

Converting a Pocket Book file to RISC OS format

Before you try to convert files, make sure that the files you intend to convert are all closed; you cannot convert an open file. Open files are highlighted on the Pocket Book in bold. If you try to convert an open file, you will get the error message 'Already opened by another process'. To close an open file:

1   Go to the Pocket Book and use the cursor keys to select the file.

2   Press the Delete key.

3   The Pocket Book asks you if you wish to quit this file; to quit it
     press Y.

Pocket Book files can be converted into more than one type of
Archimedes computer file.

You choose the RISC OS file type by clicking Menu over the column
containing the file(s) you want to convert. Note that if you press
Menu when the pointer is between columns, the entire menu will be
greyed out.
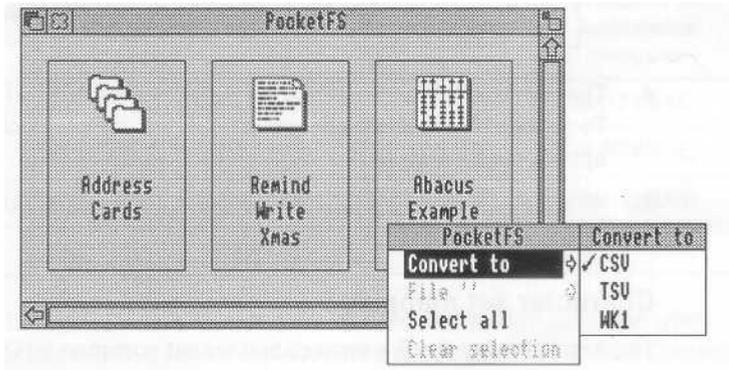
The entry Convert to has a sub-menu which lists the different file
types that the Pocket Book file can be converted into. The entry with
a tick beside it is the currently-selected file type for the conversion.
To select a different file type, click on the appropriate option.

Setting the default conversion format

You can set a default conversion format if you wish. You do this
from the Configure window:

1   Click Menu on the PocketFS icon on the icon bar, and choose
     the Configure... option to display the Configure window.

2   In the Configure window, click on the name of the column for
     which you wish to set a default conversion format.

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3   Then press Menu to display the Configure menu, and move the
     mouse across the sub-menus to the Convert to sub-menu.
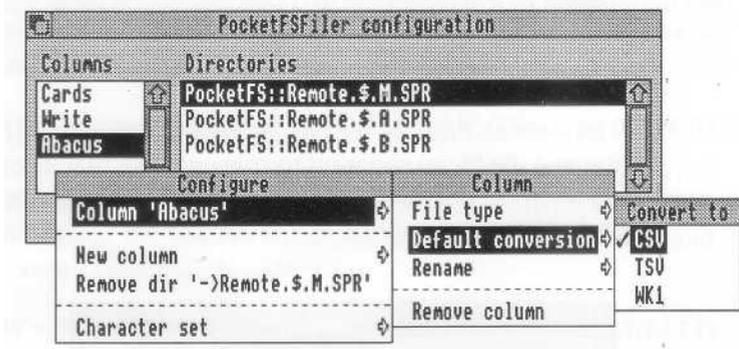
4   The current default conversion format is indicated with a tick.
     To set the new default conversion format, simply click on the
     appropriate menu option.

5   When you have finished, click on Save to save your changes to
     disc.

Character set mapping

The Acorn Pocket Book uses a character set common to DOS-based
computers. The character set flag allows you to choose between
DOS and Latin 1 when files are translated.

To choose a character set, click Menu on the PocketFS icon on the
icon bar, and choose the Configure... option. This displays the
Configure window.

Then, in the Configure window, click Menu again to display the
Configure menu. You can then choose a character set:
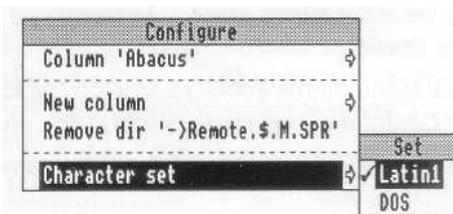
- if you choose Latin 1, the translator attempts to substitute the corresponding Latin] character when files are moved from the Pocket Book to the Archimedes computer. This option usually gives the best results.

- if you choose DOS, the character code is preserved. However the resulting characters do not look the same on both machines.

Example

The figures given in brackets are the character code in hexadecimal.

Character set flag	Character on Pocket Book	Direction of transfer	Character on Archimedes computer
Latin1	® (169/&A9)	→	® (174/&AE)
Latin1	® (169/&A9)	←	® (174/&AE)
DOS	® (169/&A9)	→	© (169/&A9)
DOS	« (174/&AE)	←	® (174/&AE)

Characters which do not exist on the destination machine when Latin 1 is selected are replaced by the corresponding DOS character.

Other options within the conversion window

other menu options within the conversion window allow you to rename and delete Pocket Book files, and to display further ¡nformation about the files.
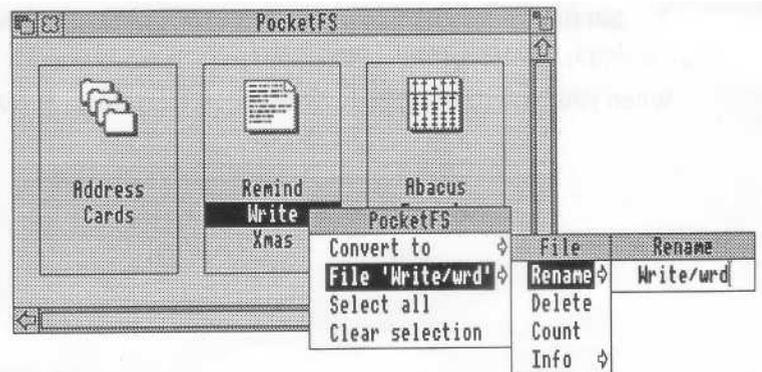
If you rename a file and do not specify a file name extension, the default extension is given automatically.

Converting RISC OS files to Pocket Book format

To convert RISC OS files to Pocket Book format, simply select the RISC OS file(s) within the directory display, and drag them onto the relevant column in the conversion window. Alternatively, you can drag a file icon from an application save box to the relevant column in the conversion window.

If the RISC OS file type is one that can be converted to a Pocket Book format, then conversion starts. If this will take some time, an hourglass is displayed showing the percentage completed.

When the file has been converted, the conversion window updates itself to display the file just saved to it. The Desktop display on the Pocket Book also shows this file.

Note that when you convert a large file, the Desktop window on the Pocket Book displays the new file before the conversion process has finished. Do not disconnect the A-Link, or attempt to use the file on the Pocket Book until the conversion window on the Archimedes computer has updated itself. This may take a few seconds.

Note: If you are transferring a lot of files from your Archimedes computer to the Pocket Book, you should switch off automatic updates; this allows the files to be copied much more quickly.

1 **Go to the Pocket Book's Desktop display, press the Menu key, and then choose Options from the Special menu.**

2 **Set the Update lists option to Desktop button using the cursor keys, and then press Enter.**

When you have finished the transfer, reset Update lists to Auto.

Writing to a specified drive

You can specify which drive to write files to by changing the configuration in the Configure window.

To do this, click Menu on the PocketFS icon on the icon bar, and choose the Configure... option. This displays the Configure window.
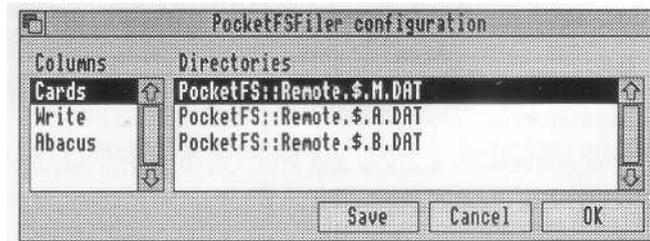
From here you can choose the drive on which to save each application's files. Initially, all files are saved on the internal disc, drive M. The default drive is the first drive on the list; in this case, it is drive M.

To change the drive for a particular application:

1   Click on the name of the application.

2   Click on the directory name of your chosen default destination drive.

3   Drag the highlighted directory to the top of the list.

4   When you have finished, click on:

   ●   OK to keep your changes for this session only, or

   ●   Save to save the changes to disc so that they are used automatically the next time you use PocketFS.

The directory display

You can open a standard RISC OS directory display of the files on the Pocket Book. You do this by clicking Menu on the icon bar icon, and choosing the open '$' option, or by clicking on the icon bar icon with Adjust.
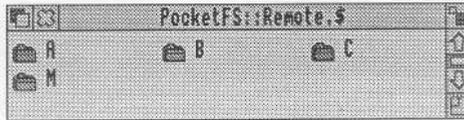
The conversion window and RISC OS directory display may both be open at the same time.

The root directory PocketFS::Remote.$ is displayed. The directories in the display correspond to devices on the Pocket Book: directory M is the internal drive; A and B, if present, are Solid State Disks; drive C is the remote link which also contains software used by the A-Link.

Files and directories can be copied, renamed, deleted etc., as in any other directory display. Exceptions to this are directories A, B, C and M in the root directory. This is because you are working with drives rather than with true directories. If you tried to save files in the root directory, this would correspond to adding another device to the Pocket Book.

You should note that directory C, and some Solid State Disks, are read only; you therefore cannot save files in them.

You should also remember that you cannot convert or copy an open file.

Note: If you are transferring a lot of files from your Archimedes computer to the Pocket Book, you should switch off automatic updates:

1   Go to the Pocket Book's Desktop display, press the Menu key, and then choose options from the Special menu.

2   Set the Update lists option to Desktop button using the cursor keys, and then press Enter.

3　　When you have finished the transfer, reset Update lists to Auto.

No conversion takes place when copying files between the Pocket Book directory display and the Archimedes computer.

File access permission

The Pocket Book and RISC OS filing systems treat access permission bits slightly differently.

To write protect a Pocket Book file against accidental changes or deletion, you need to change the file's access rights. You can do this from the Pocket Book itself, or from your Archimedes computer.

To write protect a file on the Pocket Book:

1　　Go to the Pocket Book and select the file.

2　　Press the Menu key, and then choose Attributes from the File menu.

3　　Set the Read only option to Yes using the cursor keys, and then press Enter.

To write protect a Pocket Book file from your Archimedes computer:

1　　Open a RISC OS directory display of the Pocket Book by clicking Menu on the icon bar icon and choosing the Open '$' option.

2　　Open the appropriate Pocket Book drive directory.

3　　Open the appropriate application directory:

- DAT for Cards
- SPR for Abacus
- WRD for Write.

4　　Select the file you wish to protect.

5　　You can now prevent a file from being accidentally modified or deleted by choosing File/Access/Protected.

　　Alternatively, setting File/Access details/Locked/Yes or File/Access details/Owner write/No will have the same effect.

Using the Pocket Book while connected to the A-Link

It is possible to use applications on the Pocket Book while the Pocket Book is connected to the A-Link. However files cannot be opened by both computers at the same time; the error message 'Already opened by another process' is generated if you attempt this. For details on how to close an open file, see Converting a Pocket Book *file* to RISC OS format on page 8.

If you create a new file on the Pocket Book either by using an application or the Pocket Book Desktop, an open directory display on the Archimedes computer will be updated to show the new file. This may take a few seconds, and you should not use the file until the open directory display has been updated.

You can print Pocket Book files directly from your Archimedes computer if you have a printer connected to it. Simply drag the file(s) you wish to print from the conversion window to the printer icon on the icon bar.

Using the A-Link to back up your Pocket Book

In order to preserve file data as file names, you should back up your Pocket Book files, directories or entire drives by dragging files from the Pocket book directory display onto a DOS partition or a DOS format floppy disc.

Pocket Book file names are similar to DOS file names: an eight-character file name followed by a three-character extension. Lower-case characters are not supported. RISC OS file names have ten characters, and can comprise any combination of upper and lower case characters.

File names are generally preserved when moving between the Pocket Book and an Archimedes. However, a DOS file name is truncated if it exceeds ten characters in length (including the separator between the file name and extension). For example:

RISC OS file name	Direction of transfer	DOS file name
MyFile	→	MYFILE
MyFile/Txt	→	MYFILE.TXT
MyFile129	→	Illegal as file name exceeds eight characters

DOS file name	Direction of transfer	RISC OS file name
NEW.DOC	→	NEW/DOC
SYS$1.TMP	→	SYS<1/TMP
NEWFILE.TXT	→	NEWFILE/TX (truncated)

File names are not truncated if they are copied onto a DOS partition or a DOS floppy disc.

File names with 'top-bit-set' characters (such as 'hard space', A, O, etc) should be avoided as the corresponding character may not exist on both the Pocket Book and your Archimedes computer. PocketFS will do its best to translate such characters but this can produce unexpected results.

Closing down PocketFS

The Quit menu option is used to remove the PocketFS application from the icon bar.

When you quit PocketFS, the modules used by the application (PocketFS and PocketLink) are killed by default. If you wish to retain these modules, choose the Quit/Keep FS option.

If another application needs these, it should load them explicitly.

Advanced options

Drive C in the conversion window

Drive C on the Pocket Book is actually software in a ROM contained in the A-Link adaptor cable. You should not (and should never need to) modify the configuration file to put drive C in the directory search path for the conversion window. If you do, you will find that the A-Link software runs very slowly.

Adding translator modules

The Configure window allows you to add additional columns for new conversion programs. In order to install a new conversion application, you should refer to the documentation supplied with the program.

To add a new column to the conversion window:

1   Click Menu on the PocketFS icon on the icon bar, and choose the Configure... option to display the Configure window.

2   In the Configure window, click on Menu to display the Configure menu, and the move the pointer across the New column to the Name sub-menu box:
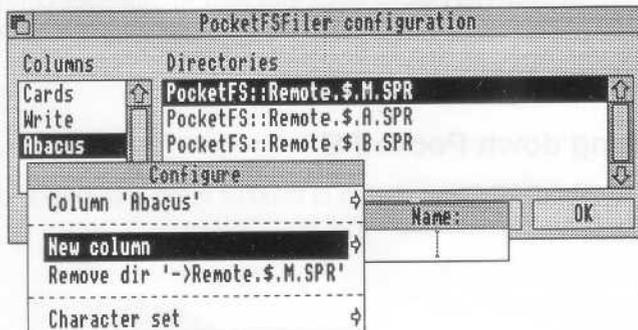
3   Give the new column a name, and press Return.

4   Select the new column name from the columns list, and drag the Pocket Book directory that contains the data files to be converted onto the 'Directories' area of the Configure window.

The name of this directory will appear in the window.

5   You can now set the column's file type by clicking on Menu, and moving the mouse across the sub-menus to the File type sub-menu:
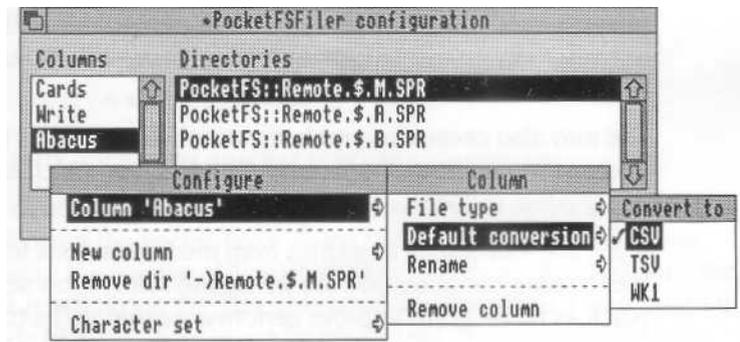
6   The current default conversion format is indicated with a tick in the Default conversion menu. To set the new default conversion format, simply click on the appropriate menu option.

7   Click on Save.

File types and file mapping

Files on the Pocket Book cannot be given a RISC OS file type. Instead, the PocketMap command is used to map a Pocket Book file name extension to a RISC OS file type. For example, if you type:

```
PocketMap DOC TEXT
```

at the command line, all file types with a DOC file name extension will appear as Text files.

To display the current mappings, type PocketMap without any parameters.

For more information about the PocketMap command, type:

```
*HELP PocketMap
```

Serial port issues on older Acorn machines

The serial port on Archimedes A300 series, 400/1 series, 440, A500 and BBC A3000 computers behaves slightly differently from the serial port on the newer Acorn A5000, A4, A3010 and A3020 computers.

When using the A-Link with one of the older machines, a check is not automatically made for the presence of the link. To kick-start the software, simply click on the PocketFS icon.

You may also encounter problems with these machines if you are running two applications that use the serial port (such as PocketFS and modem software.

If you are transferring large files from the Pocket Book to an Archimedes computer, you are advised to select a low screen mode (such as mode 12) to improve performance during the transfer.

The SerialUtil module

Some RISC OS 2 applications which use the serial port do not run correctly under RISC OS 3.1. The SerialUtil module supplied on the RISC OS 3.1 Apps 1 disc enables some of these applications to work.

However, the SerialUtil module prevents the A-Link from functioning correctly, and the module is therefore automatically removed by PocketFS if its presence is detected. If you wish to run an application that requires the SerialUtil module when you have finished using PocketFS, you should reload it by double-clicking on the file SerialUtil in the Modules directory of !System.

*Free not supported

PocketFS does not support the 'Free command. If you want to find out how much data is stored on a particular drive on your Pocket Book use the Count option on a RISC OS directory display menu. Alternatively, go to the Pocket Book's Desktop display, press the Menu key, and then choose Disk info from the info menu.

Error messages

Access violation

The file is not user-readable for read operations, or is locked / read-only on write operations.

Already opened by another process

This error occurs when you try to access a file you are currently editing on the Pocket Book. Some tasks on the Pocket Book may prevent the reading of files which they have open (for instance if the task is modifying the file). This error can also result if an attempt is made to access files in use by the system. To access the file from PocketFS, quit the task that is using the file.

Device full

There is insufficient space on the destination device (disc) to create the file. You will need to delete some of your existing data before you can transfer this file.

In addition to the size of the file, a further 6KB is needed - e.g. 28KB of free space is needed to copy a 22KB file.

Device is write protected or read only

The device (usually an SSD) is write-protected or read-only.

Device not ready / present

This error is normally generated by a faulty Solid State Disk. If you receive this error then you should check the device is installed and working correctly.

Disconnected from remote

This error can occasionally occur if the A-Link is turned off remotely while a file operation is taking place.

Invalid name

The name contains characters inappropriate to the filing system on the Pocket Book.

Not a Data file

The file you have tried to convert is not a valid Data file.

Not a Lotus file

The file you have tried to convert is not a valid Lotus file.

Not an Abacus file

The file you have tried to convert is not a valid Abacus file.

Not a Word file

The file you have tried to convert is not a valid Word file.

Objects cannot be created in the root directory

You cannot create a file in the root directory, as this would be equivalent to adding another device on the Pocket Book.

Operation not supported on PocketFS

Special fields are not supported on PocketFS.

Remote changed, or link restarted

The Pocket Book has been changed midway through an A-Link operation.

Some formulae could not be converted

This error can occur when you convert Lotus files to Abacus files or vice versa. If you are using a formula specific to Lotus or Abacus, then the formula will not be converted. However, as much as possible of the rest of the spreadsheet will be converted.

Unable to convert Lotus file

The Lotus file is not a valid . WK1 file or is corrupt and cannot be converted.

Computer Concepts Ltd

Acorn