RISC OS 3 Release Note
(Version 3.11)

Contents

Introduction

This release note describes

- features of the operating system which have not been covered in the manuals
- upgrading from older versions of RISC OS
- operational aspects which allow users to make the best use of their system
- known problem areas within the hardware and software.

RISC 0S 3 version 3.10 or later has not been tested for use in safety critical applications.

Read the first sections of this release note when starting with

RISC OS 3 version 3:10 or later – you may find doing this saves you from problems later: The sections up to and including Points *to watch out for* are relevant to all users: 1f you have a printer, read *Printing hints and tips:* If you are upgrading from RISC OS 2 or RISC OS 3 version 3:00, there is an appropriate section of additional information:

Sections from *Compatibility issues* onwards are intended as reference material. Look in the *Compatibility issues* section for general compatibility points, plus details of the compatibility of RISC OS 3 version 3:10 or later and Acorn machines with hardware add-ons and Acorn software products. The *Printers* section lists the printer drivers provided: The *Support disc* section describes the contents of the Support disc not documented in the *User and Applications Guide:* In *Known problems with third party applications* some third-party applications are listed alphabetically, with relevant advice for each one

Advice for using RISC OS 3 version 3.10 or later

Setting up !System and !Scrap

The earlier releases 2:00 and 2:01 of RISC OS contained a !System directory which had two main functions: It was used as a location to hold system resources (relocatable modules), which could be loaded as required by applications, and also as a location where temporary files could be created and deleted as necessary by applications:

In RISC OS 3 these functions have been separated into two independent applications, !System and !Scrap:

• !System contains the system resource modules as before.

• !Scrap is used for temporary files.

With non-networked hard-disc systems both !System and !Scrap should be stored at the top-level (root) of the hard disc. You should open this directory as a matter of course before running any other applications.

With non-networked floppy-disc systems, both !System and !Scrap should be stored at the top level (root) of a floppy disc. You should insert this floppy and open this directory as a matter of course before running any other applications: You may wish to place copies of !Scrap on other working discs, and double-click on them after disc insertion to ensure that temporary files are stored without too many disc changes:

Where a system is networked, the arrangement depends on whether or not communal applications are loaded from the network: If applications are not loaded from the network, the system is set up as above. If applications are loaded from the network, then the !System may reside on the network where it can be centrally updated, while !Scrap should reside as before, on a local disc. See your Network Manager or network documentation for further advice.

If you place !Scrap in a position without much free space, some applications will fail to operate. If this occurs, some (e:g: ChangeFSl) can leave temporary files within Scrap, so check for and delete any such files:

Using !Alarm

In some circumstances it is possible to set an alarm and switch off or reset your machine without saving it, hence forgetting the alarm. To avoid this, enable automatic update of your alarm database:

I Click Menu on the Alarm icon and choose **Setup...**

2 Choose the option **Automatically update the alarm database**

3 Click Menu on the Alarm icon and choose **Alarms...**

4 Click Menu on the alarm list window and use the **Save as alarms** option to save an alarm file to disc.

5 Save a Desktop boot file from the Task Manager menu to start ! Alarm with your alarm file loaded: For more details of this step, see the *User* Guide chapter entitled *Desktop boot files* together with the later section of the same name in this release note:

In some circumstances repeating alarms can cause surprising effects, so avoid their use.

Alarm can fail if you modify the same alarm in two ways at once — for example, deferring an alarm that you are currently changing having clicked on it in the main alarm list window.

Using Paint

Deleting the far right column in Paint

Deleting the outside column of pixels on the righthand edge of a sprite with Paint can be difficult. You must position the pointer close enough to the edge of the sprite to include the last column of pixels, without straying onto the scroll bar before you click — if you do click on the scroll bar, deletion will not occur as you expect. Increasing the zoom scale can help, or you can delete the last column separately using the **Edit, Delete columns** menu options then using the keyboard to request I column to be deleted.

Using transparent masks in Paint

Transparent masks are enabled or disabled using the **Mask** option on the **Edit** sub-menu of Paint. When enabled, an extra mask colour is added to those displayed in the Colours window. If this colour is the selected colour when you disable **Mask,** Paint can fail.

Using Paint in the large pixel mode 22

The tools window of Paint is not always completely visible in mode 22.

Saving files from Draw for loading by other applications

The Drawfile format has been extended for the RISC OS 3:10 or later version of Draw to include a new 'type I l' object which records such details about the file as the page size and orientation, etc. Some applications may fail to load Drawfiles containing this new object. If this is a problem, load the Drawfile concerned into Draw, select all and save the selection. This saves a Drawfile without a type I object:

When you save a file from Draw to load it into Acorn DTP, **Convert to path** any rotated text, otherwise DTP will not display or print the rotated text:

Adding new fonts

RISC OS 3 version 3:10 or later can support a number of different Fonts directories being used simultaneously: This makes adding new fonts to the system very easy— whenever directories of fonts are seen, they can be accessed:

Where an application provides additional fonts, the two !Fonts directories can be merged by opening both !Fonts directories with a Shift-double-click and copying the font directories (only) from the application to the user's master font directory: However this is simply a matter of convenience as you can group all fonts in a single directory or partition them by use as you choose:

You must not use a !Fonts application designed for use with RISC OS 2:00 or 2.01 with RISC OS 3 version 3.10 or later because they are not compatible with the fonts in the RISC OS 3 ROMs. To use the fonts contained in an old type !Fonts application, they must be moved over into a new type !Fonts application: The RISC OS 3 *User Guide* shows you how to do this.

If you accidentally use a pre-RISC OS 3 type !Fonts, you will no longer be able to use any of the ROM fonts. The only way to cure this problem is to reboot the computer:

Configuring your system

Various aspects of the system are configurable to allow you to optimise the settings of the machine to fit your particular pattern of use.

Desktop boot files

Most details of using desktop boot files saved by the Task Manager are described in the *User Guide* chapter entitled *Desktop boot files*. Step 6 of the section entitled *Starting up your desktop 'world' automatically* is incorrect:

To achieve the effect of step 6, you must perform the following:

1 Press F1 2 to go to the command line:

2 Type

```
*Configure Boot
```

3 Type

```
*Configure Drive n
```

where n is the drive number of the disc you wish to boot from (e:g. 4 for the ADFS hard disc of an Acorn A5000 or Archimedes 440).

4 If you wish to boot from a SCS1 hard disc (e:g: on an Archimedes 540) type

```
*Configure FileSystem SCSI
```

```
*SCSI
```

5 Type

```
*Opt 4,2
```

6 Press Return to return to the desktop.

Auto monitor detection

To guarantee that a display will appear on your monitor regardless of its type (TV, VGA, SuperVGA or Multiscan) the system as configured by default (as supplied in a new machine) will start up in Multiscan mode on SuperVGA monitors:

7

Multiscan is the correct monitor type for the Acorn Multiscan monitor:

Although with the default configuration you will get a picture on most monitors, to get the best from your monitor configure it to its specific monitor type.

Font cache

If you are making extensive use of the outline fonts, say using a DTP application, then a larger than default font cache size may be desirable. There is a trade-off between the memory space consumed by the font cache and the speed of display and printing of outline fonts. A more suitable size for the font cache, for heavy font use, would be 256K. This setting can be adjusted from the **Font cache** entry in the **Memory allocation** dialogue box of the Configure application:

When using a 1MB machine to run applications which do not use fonts (for example many games) it may be necessary to maximise free RAM (Random Access Memory) available for the applications by setting the font cache to 8K:

Note that some applications such as Draw will not function with a zero font cache, and may loop when you attempt to load a file into them.

Configurable bitmap size

The way in which characters are printed and displayed is controlled by the option **Use cached bitmaps for characters** in the **Fonts** dialogue box of the Configure application:

Characters smaller than the cached bitmaps value are converted to bitmaps, whereas larger characters are drawn directly from outlines:

If you set the cached bitmaps value to a high value, the cacheing of large characters can take over the whole cache causing the smaller characters to be removed: The smaller characters will have to be cached again when needed: This effect can slow down printing and the display.

The cached bitmaps value should be set to the size of the bulk of the text in any particular document. Thus if the Draw example document is to be printed, the setting should be adjusted to 12 point: Characters larger than this are not cached and so do not affect the cached characters, but print slowly.

Note that the fonts settings of !Configure are in **points** on RISC OS 3 version 3:10 or later, not **pixels** as on RISC OS 2 or 3 version 3.00. A given number of points is much larger than the same number of pixels, so be careful to set these configuration details to sensible values:

The !Configure application

Some of the !Configure options are not 'instant effect' options and require the machine to be rebooted before the options take effect: For example, the **Use ArthurLib** option in the **Net** window and all the **Memory** options only take effect after rebooting, and if you change the configured number of discs, you should also reboot the machine:

Any !Configure options that require you to type in a number must be followed by pressing Return:

1f you change the settings in the **Mouse** options window to values that are wildly different from the defaults, you may experience awkward behaviour from the keyboard and mouse. Cure this by changing the mouse options back to the defaults:

If you have a non-Acorn SCSI card fitted, you should not use !Configure to alter the number of drives, as the usage of CMOS RAM varies between manufacturers:

Concealing the !Configure application

Although !Configure is included in the ROM, you may wish to set up a machine so that !Configure is not immediately visible to the user, to discourage tampering with configuration settings (e.g: in a school).

To conceal !Configure:

1 Press F12 to move to the command line, then type

```
*Unplug !Configure.
```

2 Perform a Ctrl-RESET.

To make !Configure visible again:

1 Press F12 to move to the command line, then type

```
*RMReinit !Configure
```

2 Perform a Ctrl-RESET:

Points to watch out for

Multiple Filer operations

Running two Filer operations on the **same fIles** simultaneously can have unexpected results.

For instance, you could start an operation to delete the contents of a directory and, at the same time, start another operation to copy a file into that same directory. Then whether the file is actually present in the directory, after both operations have completed, depends on the detailed timing of the two operations. The copy may have taken place either before or after that point in the directory was reached by the deletion.

Another example is setting off two operations altering file access permissions differently within the same directory at the same time. The access permissions you end up with may not be predictable.

If you have any doubt as to whether two operations will interfere, it is safest simply to wait for the first to complete before starting the second:

Dismounting DOS floppy discs

In some circumstances when you write a file to a DOS floppy disc using the RISC OS 3.10 or later Filer your data is not completely stored on disc until you dismount the disc: Before removing a DOS floppy disc from your drive that you have written to, dismount it using the Filer menu. This is not necessary if you have only written to the floppy disc using the PC Emulator:

Mounting more than eight DOS format floppy discs at once generates the error Too many discs: If you encounter this, click on the error box **OK** button, press F12 to go to the command line, then type *Shut and press Return twice (to enter the command then return to the desktop). Note that *Shut should be avoided in normal use, as it can crash some applications when you return to the desktop:

To avoid this problem when working with a large number of DOS discs, dismount them, using the Filer menu before removing them from your drive:

Filename truncation

RISC OS 3 filing systems have maximum filename lengths. For example, ADFS and DOSFS have limits of 10 and 8 characters respectively (excluding directory path). If you try to save a file with a name of more than this length, RISC OS 3 truncates this name to the required length without warning you, unless you disable the `Truncate` configuration option from the command line:

Swapping floppy discs between machines

If you have opened a directory display for a floppy disc on one machine, then take it out and modify it on another computer before replacing it in the first machine, it may seem that the new changes cannot be seen: This is because ADFS caches some disc contents, and the first machine is referring to this cache rather than the disc. To avoid this problem, dismount the floppy disc from the first machine before removing it, or click again on the drive :0 icon after replacing the modified disc:

Different time zones between machines

RISC OS 3 has been enhanced to understand the concepts of time zones and daylight saving time (British Summer Time in the UK): In the situation where RISC OS 2 and RISC OS 3 machines are used side-by-side there is potential for loss of data when interchanging files back and forth.

Both machines will display the same time to the user; however the RISC OS 3 machine operates with a GMT clock and a time zone setting, whereas the RISC OS 2 machine operates purely its own local time. During British Summer Time a file time-stamped on RISC OS 2 would have the BST time stamp whereas the RISC OS 3 machine would stamp the file with a GMT time: Thus if a file is written on a RISC OS 2 machine, modified on a RISC OS 3 machine

and moved back to a RISC OS 2 machine all within the same hour the date stamp of the original file will be later than the date stamp of the modified version.

This scenario can cause problems if you try to copy files with the **Newer** option set: If, using the procedure described above, you try to copy a file with the **Newer** option set, the old file would **not** be replaced by the newer one.

Dismounting a disc during a Filer operation

You must not dismount a disc during a Filer operation on that disc. Doing so will cause a Handle is either illegal or has been closed error message: You then have to ensure that the disc is inserted (if it is a floppy disc) and click on **Restart** to start the Filer operation again:

Desktop boot files and renaming your disc

When you create a desktop boot file by saving it from the Task Manager menu, this file includes the name of the disc containing the applications auto-loaded: If you rename your disc, or move your auto-loaded applications, the desktop boot file may cease to work unless you edit or reconstruct it:

Desktop boot file corruption

Sustained usage of some applications with very little free RAM can result in a desktop boot file saved to your root directory becoming corrupted: If this becomes a problem, make your !Boot file into a file DeskBoot within a !Boot directory, as described in the later section entitled *Displaying Free space information with* SCS1 *discs* (but without the *RMLoad line).

Continuing after a Format/Verify failure

If a fault occurs during the verify stage of formatting, the fault is flagged and you are asked if you want to continue: Click on **Continue** to continue the verify process: This marks the sector as defective and moves on: If you don't want to continue with the verify, click on the window's close icon:

Power-on self-test

There is an automatic power-on self-test carried out whenever the computer is powered on. This displays a red screen followed by a blue, then black screen if the test passes. If the test fails, the screen stays red or blue with the floppy disc light flashing for about 30 seconds. If your machine fails this test, first try switching it off and on again. Then try removing any hardware add-ons, and if the failure persists, contact your dealer:

Some third party VIDC enhancer hardware can cause this test to fail: To work round this, you can disable parts of the power-on self-test:

1 Perform a Delete-power-on:

2 Press F12, then at the command line * prompt, enter

```
*FX 162, &bc, &80
```

3 Re-create any non-standard configuration options you require, using ! Configure and/or the command line, without loading an existing configuration file:

4 Save your newly created configuration file to a safe place on disc.

5 Switch your machine off then on again to check that the power-on self-test now does not fail:

Greyed-out menus

RISC OS 3 version 3:10 or later allows you to follow some greyed-out menu options to view greyed-out sub-menus. Greyed-out menus contain a set of options that are not currently applicable and can therefore not be selected: However, you cannot display greyed-out dialogue boxes.

Some iconised applications do not display a menu

Some iconised applications, for example Impression, do not display a menu when using Shift-Menu: You can make Impression documents display this menu if you set the documents up not showing page rulers:

Quitting Pinboard with iconised windows

If you quit the Pinboard application from the Task Manager while
you have windows iconised, these windows disappear: If they are
windows such as Edit windows with modified data, this data can be
lost.

Unrecognised DOS disc names

Some DOS utilities allow floppy discs to be given names including a '.
' character, for example `AB . CD.` Such disc names are not recognised
by the RISC OS 3 Filer, which may produce errors such as
`Please insert disc 'AB'.`

DOS allows disc names of one or more characters, while the RISC OS 3
Filer requires two or more, and produces an error such as `Bad drive`
when you open a directory display for a disc with a one character name.

The Acorn PC emulator or a PC may be used to correct the names of
such discs:

Overwriting DOSDisc partitions

RISC OS 3 version 3:10 or later does not allow you to overwrite files
of type DOSDisc in the same way that you can other files, since
DOSDisc partitions are both files and directories.

DOS partition size limitation

DOSFS cannot be used with DOS partitions of 32Mb or larger:

Using RMFaster

Do not use RMFaster on ROM-based C applications.

Moving multiple files between floppy discs

If you are using a computer that only has a single floppy-disc drive, we recommend that you do not move multiple files from one floppy disc to another as the computer will ask you to make multiple disc changes: You should first copy the files to the new disc and then go back and delete the files on the original disc.

!Fonts Sidney encoding

The !Fonts application has within it a Sidney directory that contains a Sidney encoding but does not contain any font information. The encoding allows files that contain Sidney symbols to be printed on a PostScript printer: However, these symbols will not be visible on screen:

If you have a copy of the full Sidney font you should copy the contents of the Sidney font directory into the Sidney directory containing the encoding: Do not delete the encoding file.

Displaying Free space information with SCSI discs

Because of the way the ROM on the Acorn SCS1 expansion card with SCSIFiler version 0:23 or earlier operates, the windowed version of the Free space is not displayed; instead you get the RISC OS 2 display: This can be fixed by using the SCSIFiler module that resides in the ! System modules directory:

To ensure that this SCSIFiler module is loaded each time you reboot your computer, rename any desktop !Boot file you have saved from the Task Manager to DeskBoot, create a directory called ! Boot in the top level directory of your hard disc, and move DeskBoot into it:

Create an Obey file using Edit with text such as the following and save it as !Boot:!Run:

```
*RMEnsure SCSIFiler 0.24 RMLoad SCSI::4.$.!System.Modules.SCSIFiler
*Desktop -file SCSI::4.$.!Boot.DeskBoot
```

Note that the filenames need to be correct for your hard disc arrangement, and do not enter any newlines after the second line above: Ensure that your hard disc is set to *Opt 4,2:

Alternatively, you can upgrade your SCS1 card with the Acorn
upgrade product AKA33.

*Copy

*Copy with the P option no longer works. Either use a RAM disc as
the intermediary or use the desktop for copying.

Using S and M format discs

BBC Master 128 ADFS S and M format floppy discs are not
supported:

*Title

The *Title command is not implemented. This is also true within the
6502 emulation.

Printing hints and tips

In addition to the points listed here, there is further printing information in the later sections entitled *Upgrading from* RISC OS 2 *or* RISC OS 3 *version* 3.00 and *Printers.* If you have printing problems with a third party application, see the later section Known *problems with third party applications.*

Attempting to print to non-existent printers

If you attempt to print to a printer which is not connected to your machine, RISC OS 3 version 3.10 or later can freeze, waiting for the printer to be connected.

Blank pages on dot-matrix printers

If you find that a dot-matrix printer with fan-fold paper is outputting alternate blank pages, try turning off the printer's form feed if it is switchable, or reduce the number of lines printed per page on the **Edit paper sizes...** dialogue box of your printer:

Printing BASIC listings

To print a listing of a BAS1C program, drag the program file from a directory display to your printer icon. When a BASIC program is loaded into Edit, it does not print as text from Edit:

Printing Music files

To print a music file, you have to first load it into Maestro and choose **Print,** rather than just drag it from a directory display to your printer icon:

Printing 1stWord Plus files

If the application 1stWord Plus is loaded or has been 'seen' by your machine, IstWord Plus files (i:e. those with file type 1WPDoc) will be printed for you by IstWord Plus. When printing using I stWord Plus, note that the printer must be correctly configured in IstWord Plus itself as well as in !Printers: If IstWord Plus attempts to print to a non-existent printer, your machine may hang:

In the absence of !I stWord Plus, !Printers as supplied with RISC OS 3 version 3:10 or later can print most I stWord Plus files. 1WPDoc files containing footnotes or diagrams will not print correctly in this way, however: For more details see the appendix entitled *The fancy text file format* in the RISC OS 3 User *Guide.*

Mapping fonts using the FontPrint application

Mapping a RISC OS font to a resident font in a PostScript printer may be accomplished by entering the font's PostScript name into the relevant menu of !FontPrint. This should be automatically successful for most alphabet fonts; for symbol fonts its success depends on the availability of an encoding file. The encoding tells the system which PostScript glyph to render for each ASC1I character code.

The encoding file should be given the name Encoding and placed in the same directory as the font's Outlines and IntMetrics files: If you need an encoding file for a third party font, contact your vendor:

An encoding file should contain exactly 256 lines of the form

`/glyphname`

where a glyph called `/glyphname` is known to exist in the printer font. Non-existent glyphs should be entered as `/.notdef`.

If a particular glyph name is the Nth entry in the encoding file, then that glyph will be rendered for character code N.

Downloading fonts to a network printer server

Downloading a font to a printer is fairly time consuming, and since a network printer is a shared resource, may not be helpful to other users: Once you have downloaded a font, to use it from another station the font name must be mapped to the name of the downloaded font prefixed by DL (correctly capitalised).

User and Applications Guides Addenda

Printing chapter, User Guide **page 67**

The PostScript printer configuration dialogue box of the !Printers application has an option **Accent generation** in addition to those pictured and described on page 67 of the *User Guide*.

When **Accent generation** is enabled, !Printers will automatically generate accented characters which can be printed even if they are not supported by your printer: Unless you need to print unusual accented characters such as w or y circumflex (used in Welsh) leave **Accent generation** off, as it slows text printing and does not work with printers with small internal memory. **Accent generation** is off by default:

PrintEdit chapter, *Applications* Guide **page 186**

The main dialogue box of the !PrintEdit application has some paper offset options in addition to those pictured and described on page 186 of the *Applications Guide:*

Paper X offset and **Paper Y offset** allow you to specify the size of margin at the left and top of each page not to be printed on. The **mm** and **inches** options allow you to choose to specify this in mm or inches:

Upgrading from RISC OS 2 or RISC OS 3 version 3.0

The following aspects need to be considered if you already have a RISC OS 2 machine. If you are upgrading from RISC OS 3 version 3. 00, see the section below entitled Printer *drivers:*

!System

You may need to move modules installed in the !System.modules directory from the RISC OS 2 to RISC OS 3 version 3:10 or later system. To do this:

I Open the !System applications by Shift-double-clicking on both of the !System applications.

2 Choose the **Newer** Filer option, then copy the contents of the old !System:modules into the new !System:modules:

Many of the modules supplied or licensed by Acorn which previously needed to be loaded from disc are now present in the ROM. There is no need to copy over versions of the following modules:

Module	Filename
Shared C Library	Clib
Colour Translator	Colours
Floating Point Emulator	FPEmulator
Outline Font Manager	Fonts
Messages lookup	MsgTrans
SuperSample	Super
Sound Scheduler	Sound2
Hourglass	Hourglass
1RO Utils	1ROUtils
NetPrint	NetPrint
NetStatus	NetStatus
NetFiler	NetFiler
NetFS	NetFS
TaskWindow	Task
65Tube	65Tube
Window Utils	WimpUtils

If you have a floating point co-processor, you will need to copy version 3.10 or later of the floating point emulator from your FPC Support Disc into the modules directory and then ensure that this is loaded over the ROM version.

Using !Fonts on a network server

If you have a network server that is serving both RISC OS 2 and RISC OS 3 computers there are some restrictions on the use of the new !Fonts application. You should contact Customer Support and request the RISC OS 3 *!Fonts technical support note.*

Contact Customer Support at:

Customer Support
Acorn Computers Limited
Fulbourn Road
Cambridge CB1 4JN

Printer Drivers

The printer drivers supplied with RISC OS 2 are not compatible with RISC OS 3.10 or later applications such as Draw. You should use !Printers as supplied with RISC OS 3 version 3.10 or later instead. Do not use the version of !Printers supplied with RISC OS 3 version 3.00.

You may find that RISC OS 3.10 or later !Printers prints pages lighter or darker than the RISC OS 2 or RISC OS 3 version 3.00 printer drivers. This is usually due to a change in the amount of interlacing being performed i.e. the number of passes the print head makes over the same section of the paper: For more details, see the Read_Me file in the Printers directory of App2.

Text printed on a PostScript printer is by default about 20% larger from the RISC OS 3.10 or later printer drivers than it was from the RISC OS 2 or 3 version 3.00 drivers. This is for compatibility with dot matrix printing. To adjust this, alter the **Text scale** entry in the PostScript printer configuration dialogue box for your printer:

Compatibility issues

Significant efforts have been undertaken to maintain compatibility of applications between RISC OS 2 and RISC OS 3 version 3.10 or later: However there are some unavoidable differences.

Hardware compatibility

There are significant hardware differences between the Acorn A5000, A4, A3010 and A3020 computers and the previous Archimedes 300 series, 400/1 series, 440, A500 and BBC A3000 computers. Compatibility problems are possible in the following areas:

Performance

The A5000 and A4 computers are fitted with ARM3. The A3010 and A3020 are fitted with a high clock-speed ARM2.

The raw performance of an ARM3 computer is around three times that of a standard clock-speed ARM2 computer: The high clock-speed ARM2 machines have around one and a half times the raw performance of a standard clock speed ARM2 computer: This can cause problems with certain games which do not adjust their speed according to the performance of the machine. On an ARM3 machine this can be partially alleviated by running the following command sequence before starting the game:

I Press F12 to enter command line

2 Enter
    *Cache Off

3 Press Return again to get back to desktop.

Repeat the sequence with *Cache on to return the machine to its faster state.

VGA display modes

VGA screen modes (25,26,27 and 28) with multi-frequency monitors and any screen modes with VGA monitors have a screen refresh rate of 60Hz rather than 50Hz. This can upset some games' timing so that they run too rapidly.

Sound changes

In VGA modes, sound is approximately one semitone higher than is normal in other modes. The sound will also play about 5% faster:

Peripheral architecture

The peripheral systems on the A5000, A4, A3010 and A3020 use integrated I/O chips – the Chips & Technologies 82C710 and 82C71 1A. This has the following effects:

• Any software which performs direct access to the hardware of previous models may no longer function correctly. This is normally only a problem with applications which demand dongles or with disc protection techniques which rely on hardware features of the old floppy-disc controller:

• Split baud rate serial operation is no longer supported on the machines listed above. This affects users who wish to access Prestel-like V23 systems with old non-speed buffering modems.

External floppy discs

There is no provision for using external floppy-disc drives with an A4, A3010 or A3020.

If an external high density 5.25" disc is added to an A5000, the hardware is only capable of reliably accessing 1.2MB 1BM PC format discs, not 360K. Low density 5.25" 80- and 40-track drives may not work reliably with machines running RISC OS 3 version 3.10 or later:

For more details of external floppy use, you can contact Customer Support and request the External disc drive support notes. Contact Customer Support at:

Customer Support
Acorn Computers Limited
Fulbourn Road
Cambridge CB1 4JN

Modems and MIDI equipment

High-speed transfer of data between your computer and a modem or some M1D1 equipment requires rapid response by RISC OS to interrupts (i.e. low interrupt latency). When performing such a data transfer, avoid using !Draw to select and alter objects, and also opening RISC OS directory displays.

Equipment for users with special needs

Some input devices for special needs users fail to restore the RISC OS 3 screen display after it has blanked, so when using such devices, set screen blanking off. This is set from the **Blank delay** field of the **Screen** dialogue box of !Configure.

PCATS graphics enhancers

Some versions of the PCATS graphics enhancer prevent RISC OS 3 version 3.10 or later startup. If you have this problem, contact your graphics enhancer vendor for upgrades and further information.

Software compatibility

There are a number of relatively small changes between RISC OS 2 and RISC OS 3 version 3.10 or later which may change how your applications look or behave. These will normally not stop your software working. Examples might be slight changes to the appearance of window borders, or truncation of a filename when you try to save a file from an application with a name of more than 10 characters, rather than this causing an error:

Free memory on a 1MB machine

Due to the greater amount of software in ROM, all requiring RAM workspace, there is slightly less free RAM available for running applications from disc on RISC OS 3 version 3.10 or later than there was on RISC OS 2. You are only likely to notice this when using a 1MB machine to run applications such as games constructed to use almost all available RAM on a 1MB RISC OS 2 system.

Some applications, such as Maestro, require sufficient space both in the **Next** wimp slot and in the module area, which can absorb memory from the **Free** area. In some circumstances you may find that using the Task Manager to reduce the **Next** slot and increase **Free** may allow such applications to run.

For information on how to make best use of a 1MB RISC OS 3 machine, see the earlier section entitled *Configuration of the system* and the appendix entitled Getting *the best out of* 1MB *computers* in the User Guide.

Acorn PC emulator

To run the Acorn PC emulator on an A5000, A3010 or A3020 you require version 1.7 or later of the Acorn PC emulator product. You require version 1.8 or later for an A4. Contact your Acorn dealer for more information. When using 1.7 on an A5000, A3010 or A3020, format discs using DOSFS rather than the PCEmulator, as formatting using 1.7 on RISC OS 3 may produce discs that cannot be read by DOSFS.

Version 1.6 of the Acorn PC emulator can be used with a BBC A3000, Archimedes 540, 400/1 series, 440 or 300 series machine running RISC OS 3 version 3.10 or later: First use the !Patch application on the Support disc to patch the emulator to allow access to DOSDisc partitions, then alter the filetype of your DOS partitions to DOSDisc.

Versions 1.33 and 1.34 of the Acorn PC emulator can be used with a BBC A3000, Archimedes 540, 400/1 series, 440 or 300 series machine running RISC OS 3 version 3.10 or later: First replace the file entitled !Modules within your !PC.Gen Boot directory with one supplied on the RISC OS 3.10 or later Support Disc. For instructions, see the file ReadMe in the PCEm 13 directory of your Support Disc. Next alter

the filetype of your DOS partitions to DOSDisc.

The features provided by the MultiFS application included with the PC emulator are now incorporated in RISC OS 3 version 3.10 or later, and you should no longer use MultiFS.

Accessing a DOS floppy disc or a networked DOS partition with both the PC emulator and the RISC OS 3.10 or later Filer at the same time can corrupt the disc or partition. To avoid this, dismount a floppy

disc from the RISC OS 3.10 or later Filer before starting the PC emulator to use it, and do not reference it again **from the Filer** until you have finished with the emulator: Close all Filer directory displays for a networked partition before referencing it with the PC emulator, and leave it untouched from the Filer until you have finished with the emulator:

Acorn Desktop C and Acorn Desktop Assembler

The !Find application included in the Acorn Desktop C and Acorn Desktop Assembler products fails on seeing a PC partition file.

On RISC OS 3, pressing Ctrl-Shift-) or Ctrl-Shift-(enters different characters from the same keypress on RISC OS 2, so the bracket matching feature of the SrcEdit editor in Acorn Desktop C and Assembler is no longer activated when using RISC OS 3.

See the later section about !DDTPatch on the support disc for details of patching the debugger DDT for use on RISC OS 3 version 3.10 or later:

The ModeEx and SkeIRM program examples supplied with Acorn Desktop Assembler implement a screen mode 29. Since RISC OS 3 provides a mode 29, alter the mode added by the examples to a mode number not used by RISC OS 3 before assembling them.

Twin

The Ctrl-f9 feature of the Twin programmer's editor from Acorn fails on RISC OS 3 version 3.10 or later:

Acorn Level 4 Fileserver

Acorn AUN / Level 4 Fileserver (Release 2) is needed if client stations are running RISC OS 3 version 3.11 or later: It is also advisable to run this version of the software if the server machine is running version 3.11, as the older version of the software can result in lost data if files greater than 16MB are accessed. The new version will also allow access to PC partitions over the network.

SetStation

Version 2.01 or later of the SetStation utility supplied by Acorn for setting Econet station numbers is needed for use with RISC OS 3 version 3.10 or later: If you set the station number of a RISC OS 3.10 or later machine with SetStation 2.00, this setting is lost when the machine configuration is reset with a Delete-power-on.

A recent SetStation utility is included in the Acorn Level 4 Fileserver /AUN product, or can be obtained from Acorn Dealers or education authority 1T advisers as part of the disc entitled RISC OS *Extras Extras.*

Acorn TCP/IP Protocol Suite

Before using the !VT220 application supplied as part of the TCP/IP Protocol Suite, you should configure RISC OS 3 not to allow windows to go off the screen top, otherwise the VT220 main window can become positioned with its title bar off screen in the smaller screen modes. To configure this, switch off the **Allow windows off screen – in all directions** option in the **Windows** dialogue box of the Configure application.

See the later section entitled *Compatibility issues* for details of patching the Internet applications.

RISC iX

You are recommended to use version 1.22 or later of RISC iX on a machine containing RISC OS 3 version 3.10 or later: Users of earlier versions of RISC iX can obtain upgrades from Granada Microcare consisting of a replacement RISCiXFS and RISC iX kernel. RISC iX 1.22 can be used on a RISC OS 3.10 or later machine without patching.

To use RISC iX versions 1.10, 1.20 or 1.21 on a RISC OS 3 version 3.10 or later machine, your RISCiXFS module must be patched with !Patch, otherwise booting RISC iX fails with an error such as `Unknown machine hardware`. Note that you must apply only the correct patch for your hardware. If your hardware is non-standard, such as an Archimedes 440 fitted with an ARM3 upgrade, you may find a patched RISCiXFS does not work correctly.

In some circumstances booting RISC iX with !RISCiX version 1.22 or earlier may fail on RISC OS 3.10 or later: Instead start RISC iX from the command line as follows:

I Perform a Ctrl-RESET with the numeric keypad '*' key pressed. If you have auto booting of RISC OS from a !Boot file enabled, you also need to keep Shift pressed. This resets your machine and leaves you at the command line without starting the RISC OS desktop.

2 From the command line *RMLoad the RISCiXFS relocatable module.

3 From the command line *boot to start RISC iX.

If a boot of RISC iX fails, power your machine off and on again before continuing.

IstWord Plus

The original release of 1stWord Plus (SKB 68) is not usable on RISC OS 3 version 3.10 or later because menus appear in unreadable colours. 1stWord Plus Release 2 is needed for RISC OS 3.10 or later:

Applications that use the serial port

Some RISC OS 2 applications which interface with the serial port do not work correctly on RISC OS 3 version 3.10 or later, due to changes in the specification of the buffer vectors. The SerialUtils module allows some of these applications to work again.

If you have an application written for RISC OS 2 which uses the serial port, you should first test it without loading the SerialUtils module.

If the application fails to work correctly, you should then switch your machine off and on again, load the SerialUtils module, and then try running your application

To load the SerialUtils module, double-click on the file SerialUtil in the Modules directory in !System.

New command line abbreviations

RISC OS 3 uses a different set of command abbreviations from those used in RISC OS 2.

For example, the abbreviation for BAS1C used to be `*ba.;` it is now `*bas.`

If you want to use the RISC OS 2 set of abbreviations, double-click on the Commands file contained on the support disc.

Software that has been written using the RISC OS 2 abbreviations may not work correctly with the RISC OS 3 set of abbreviations. If you have a problem with software not functioning correctly, try restoring the RISC OS 2 set of abbreviations before running the software.

This problem is normally only seen with games titles; one symptomatic error message is `Bad Parameters` on running the program

Support disc

There are some more significant problems with some applications which require correction. The support disc contains some 'patch' applications to do this; these are described below.

The support disc contains the applications !Patch, !DDTPatch and !PatchAce to cure minor problems with some software caused by changes between RISC OS 2 and RISC OS 3 version 3.10 or later:

The support disc also contains !ChangeFSI, !IntKey and !T1ToFont. !ChangeFSI and !T1ToFont are documented in the Applications Guide.

For information on the Commands file supplied on the Support disc, see the previous section entitled *New command line abbreviations.*

!Patch

!Patch modifies parts of the following software:

- Acorn PC emulator version 1.6
- Acorn Desktop Publisher
- TCP/IP Protocol Suite
- !RISCiX application to start the RISCiX operating system
- !Jiglet and !Jigsaw from 4Mation
- Hutchinson Encyclopedia CD ROM from Attica Cybernetics.

If you have any of these, using the !Patch application will ensure they run correctly under RISC OS 3 version 3.10 or later: !Patch is not able to patch Acorn Desktop Publisher on a 1MB machine, as it needs more memory to process the large binary file in this application.

To patch an application, double-click on !Patch to start it, then drag the application directory to be patched onto !Patch on the icon bar: A window will be opened containing the file to be patched. Select this file, click Menu in this window, and choose **Patch selected.**

Note that !Patch is case-sensitive in its checking of the names of files to be patched. If you have changed the case of a filename that needs patching, e.g. !DTP.!RunImage to !DTp.!Runlmage or !DTP.! runimage, Patch does not notice that this file exists and does not list it in its main window.

For more information about !Patch, see the !Help file in the !Patch directory.

!DDTPatch

!DDTPatch enables you to patch version 1.50 of the DDT module to produce DDT version 1.52. Version 1.52 or later of DDT is required for use with RISC OS 3 version 3.10 or later:

Take a backup of your DDT module before attempting to patch it.

To patch DDT, first double-click on !DDTPatch. Click on the DDTPatch icon on the icon bar to open its dialogue box. Set the writable icon in this box to the filename of the DDT module you wish to patch, then click on the OK icon.

!PatchAce

!PatchAce is an application to do a minor fix to !Euclid, !Splice and ! Tween for RISC OS 3 version 3.10 or later:

Simply display the discs that have these applications on them, then run !PatchAce, and it will do the rest. Make sure that the discs you use are not write-protected. The error Data lost indicates that a disc is write-protected.

If you have any difficulties with the procedure above, send your master disc for update to:

Ace Computing
27 Victoria Road
CAMBR1DGE CB4 3BW
Tel: (0223) 322559 Fax: (0223) 69180

Intkey

The application !Intkey, when double-clicked (run) loads a relocatable module with the filename IntKey. This provides a RISC OS 2 compatible way of accessing foreign keyboard layouts. You are unlikely to need to use IntKey unless specifically told to do so by the instructions of a third party program.

Printers

Printer definition files are provided for the printers listed below. If your printer does not have a definition file, you will probably find that it will work with one of the other definition files listed here:

*   Acorn JP-150.

*   Apple ImageWriter II, LaserWriter, LaserWriter Plus, LaserWriter I I NT and LaserWriter II NTX.

*   Canon BJ-130e, BJC-800 and BubbleJet.

*   Citizen Swift-24.

*   Epson EX-800, FX-80, FX-85, JX-80, LQ-860, MX-80II and MX-80III.

*   Generic PostScript and Text printers.

*   Hewlett-Packard Laserjet II, Laserjet III, Laserjet II-PS, Laserjet IID-PS, LaserJet IIID-PS, DeskJet, DeskJet+.

*   IBM Pro-X24E, 4216, 4019/17 and 4019/39.

*   Integrex Colourjet 132 and Colourjet 2000.

*   Linotronic 100 and 200.

*   NEC P6 plus and other 24-pin NEC printers.

*   QMS Colourscript 100.

*   Qume ScriptTEN.

*   Star DP-510, LC-200 and LC24-200.

*   Texas Instruments OmniLaser:

For more information regarding the printer definition files read the Read_Me files contained in each subdirectory of the Printers directory in App2. For more general information, see the Read_Me file in the Printers directory itself.

Known problems with third-party applications

A number of companies publishing RISC OS software recommend the use of specific recent versions of their applications on RISC OS 3 version 3.10 or later: Some examples are listed below alphabetically, together with other types of problem or advice relating to third party applications.

If you encounter any software that does not run correctly on RISC OS 3 version 3.10 or later, we advise you to contact the software publisher and ask for help. Please make it clear to them that you are using RISC OS 3 version 3.10 or later:

Acorn Lisp

You must issue a `*FX 13, 11` command before loading Acorn LISP

Ancestry

Versions of Ancestry from Minerva Software earlier than 2.02 fail to start up on RISC OS 3 version 3.10 or later unless your printer is connected and on line. For upgrades or further information contact Minerva.

Artisan 2

Versions of Artisan 2 before 1.05 can prevent you from moving the pointer to the right of the screen when working in some high resolution screen modes. For this and other reasons, Clares Micro Supplies recommend the use of release 1.05 with RISC OS 3 version 3. 10 or later:

Blaston and Fine Racer

These games from Eterna fail on RISC OS 3 version 3.10 or later, sometimes reconfiguring your machine.

Casino, Caverns, Family Favourites and Ibix the Viking

These games from Minerva Software do not operate on RISC OS 3 version 3.10 or later:

Compression

Versions up to 1.10 of Compression from Computer Concepts do not work on RISC OS 3 version 3.10 or later and should not be used. Contact Computer Concepts for upgrades or further information.

Corruption

The game Corruption from Magnetic Scrolls does not operate on RISC OS 3 version 3.10 or later:

Disc Sharer

RISC OS 3 version 3.10 or later client machines will not work with Disc Sharer 1.00 (30-Aug-89) from Oak Solutions Ltd. Please contact Oak Solutions for further information.

DiscTree

Versions of DiscTree from Mitre software earlier than 2.30 fail with a fatal internal error: Reboot your computer after this error: For further information and upgrades, contact Mitre Software Ltd.

Electromusic Research software

Recent versions of some software packages from Electromusic Research are needed for use on RISC OS 3 version 3.10 or later: Contact Electromusic Research for upgrades or more information.

Euclid

Versions of Euclid before 2.18 do not display all colours correctly in most screen modes when used with RISC OS 3 version 3.10 or later: Colours are correct in 256 colour modes. Users affected by this can obtain an upgrade from Ace Computing for a handling charge, and should contact them at the address given in the earlier section

entitled *!PatchAce.*

Fireball II and E-Type

These and some other games play too fast. See the earlier section entitled *Hardware Compatibility*.

FirstSense

Versions earlier than 1.01 of FirstSense from Philip Harris Education display icons at the screen top which do not clearly display their selection state on RISC OS 3 version 3.10 or later, hence making the package difficult to use. For upgrades or further information, contact Philip Harris Education.

Folio font

The Folio font supplied as a DTP demonstration with the October 1991 issue of Acorn User causes repeated Font cache full errors. Contact ESM for further information.

FontFX

Versions earlier than 4.31 of FontFX from The Data Store fail to load under RISC OS 3 version 3.10 or later: Contact The Data Store for upgrades or further information.

Graphic Writer

Versions earlier than 1.08 of Graphic Writer from Clares Micro Supplies do not allow you to save files under RISC OS 3 version 3.10 or later: Contact Clares Micro Supplies for upgrades or further information.

Hearsay

The Hearsay communications package from RISC Developments does not operate on RISC OS 3 version 3.10 or later: You are recommended to use the later Hearsay 11 package instead. For more details, contact RISC Developments.

Impression

The greyscale dithering in versions before 2.17 of 1mpression from Computer Concepts does not work on RISC OS 3 version 3.10 or later and can result in screen colours changing wildly. To overcome this either remove or rename the module called ColourExt from the RMStore directory found inside the Impression application.

When printing a document using Impression version 2.16 or earlier to a PostScript printer on RISC OS 3 version 3.10 or later, fonts used in a Drawfile contained in the document may not be printed correctly.

For upgrades or further details, contact Computer Concepts Ltd.

Inspiration

Versions of Inspiration up to 1.03 will not run with RISC OS 3 version 3.10 or later:

LaserDirect

Versions of LaserDirect from Computer Concepts earlier than 2.05 should be used with the `Quick text` option off, or printing may fail on a RISC OS 3 version 3.10 or later machine. When printing from Draw or Paint to LaserDirect versions earlier than 2.05, drag your file to the LaserDirect application icon from a directory display or Save dialogue box rather than use the `Print` options on the Draw and Paint menus, or printing may not start.

For upgrades or more details, contact Computer Concepts.

Magpie

Versions earlier than 1A.02 of Magpie from Longman Logotron Ltd. can cause printer errors when attempting to print to a PostScript printer: Contact Longman Logotron for upgrades or further information.

Ovation

Versions earlier than 1.26 of Ovation from RISC Developments Ltd. do not iconise their document windows correctly on the Pinboard of RISC OS 3.10 or later: If you attempt to iconise such an Ovation window by clicking on its close icon with Shift pressed, it may disappear and lose any associated data. For upgrades or further information, contact RISC Developments.

PipeDream

When using the Z88 Filer supplied by Colton Software with PipeDream, RISC OS 3.10 or later should be configured with interactive file copying off. To configure this, turn off the **Interactive file copying** option in the **Windows** dialogue box of Configure.

Projector

The !Projector application supplied by Ace Computing in some of its software products redefines character 144 (&90). This character is undefined in RISC OS 2, but RISC OS 3 defines it as an open quote. To restore the correct character definition after running Projector:

I   Press F1 2 to enter command line.

2 Type `*Country UK` and press Return.

3 Press Return again to get back to desktop.

Saloon Cars

Some versions of the game Saloon Cars from The Fourth Dimension fail on RISC OS 3 version 3.10 or later with errors such as `File ` `WindowManager :Sprites24' not found`. For upgrades or further information contact The Fourth Dimension.

ShareHolder

Versions earlier than 2.03 of ShareHolder from Silicon Vision Ltd. are not compatible with RISC OS 3 version 3.10 or later: Contact Silicon Vision for upgrades or further information.

ShowPage

ShowPage version 3.31 from Computer Concepts does not display the fonts Trinity, Homerton and Corpus contained in the RISC OS 3.10 or later ROMs correctly.

Sound and Graphics Demo of Render Bender

Disc 1 of this two-disc demonstration product from Clares Micro Supplies does not work with RISC OS 3 version 3.10 or later. This product has been superseded by later demonstrations.

STracker

Later versions of the soundtracker module by Hugo Fiennes do not work when used in conjunction with VGA or SuperVGA monitors.

Timewatch

Versions of Timewatch from Mitre software earlier than 0.30 fail with a fatal internal error: Reboot your computer after this error: For further information and upgrades, contact Mitre Software Ltd.

TinyDraw

When TinyDraw versions earlier than Release 2 are set up to print to a file, invoking the **Print** option in TinyDraw causes the computer to hang. For upgrades or further information, contact Topologika.

Waiter

Version earlier than 2.2 of Waiter from Digital Services Ltd. can fail to load under RISC OS 3 version 3.10 or later with errors such as `Bad sprite file.` For upgrades or further information contact Digital Services Ltd.

Zarch

The game Zarch from Superior Software can fail to load when you are short of memory, e.g. on a 1MB RISC OS 3.10 or later machine, producing a message such as `Protected disc.` 1f you have this problem, try reducing the **Next** slot to slightly less than 600K from the Task display.

Report Form

RISC OS 3 *version* 3.11 *Release Note*
Issue 2 — 0496,070

Use this form to report any problems that you find in the software. Your comments will be taken into account in future products.

What is the exact configuration of your computer:

Computer:
RAM:
Hard disc drives:

Expansion cards:
Monitor type:
Monitor configuration:
Other:

Provide a summary of the problem:

Jf there is not enough room for your comments, please continue overleaf

An alternative way of reporting this information to Acorn is to type exactly the information you would write on this form into a text file using Edit and post it to the address below on an E format ADFS floppy disc.

How would you classify your experience with computers?

☐ **First-time user**   ☐ **Used computers before**   ☐ **Programmer**   ☐ **Experienced Programmer**

Cut *out or photocopy and post to:*

Dept R0311
Customer Support

Acorn Computers Limited
Fulbourn Road
Cambridge CB1 4JN

Your name and address:

This information will only be used to get in touch with you in case we wish to explore your comments further