

for the Risc PC

User Guide



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1

Introduction

Welcome to movies on your computer

Many popular movies and educational programs are now being released in CD-ROM format as well as VHS video. (Some titles are only released on CD-ROM.) CD-ROMs offer many advantages over video such as better quality and easier access to any part of the contents.

Data on movie CDs is compressed using a format called MPEG. (There's more on MPEG later.) MPEG is a very efficient way of compressing a movie but requires special hardware to decompress the data. This special hardware is provided by the Movie Magic card. The decompressed movie is then played, using the standard Acorn application *!ARPlayer*, to a monitor connected to the socket on the Movie Magic card.

About this manual

It is assumed that you have a basic knowledge of the RISC OS conventions and are familiar with standard applications. If this is not the case, we suggest that you first read the *Welcome Guide* supplied with the computer.

How MPEG works...

MPEG stands for *Motion Picture Expert Group*.

To display flicker-free pictures on screen requires data rates of 10MBytes per second. If you stored this amount of data without any compression, a minute of video would fill an entire CD.

So the image is compressed using a combination of several different techniques. For example, only changes between consecutive frames need to be stored. As a result, MPEG movies require only 150KBytes storage per second. A CD can now hold 70 minutes of movie.

The drawback is that special hardware is needed to compress and decompress the data. Compression is far more complicated than decompression. It requires specialised and very expensive hardware. MPEG compression on your computer is not possible.

Decompression is less complicated but still requires special hardware such as that on the Movie Magic card.

CD standards (Green Book & White Book)

There are two standards for movie CDs, usually referred to *Green Book* and *White Book*. (So named because of the colour of the outer covers of the two specifications.)

Green Book is the older standard and was originally developed by Philips. These CDs are usually marked *Digital Video on CD-i*. You are unlikely to find new Green Book CDs on sale.

White Book is the more common standard. These CDs are often marked *VideoCD*. Since July 1994 all new releases are White Book standard. Many older titles, originally released as Green Book CDs, are being re-issued as White Book CDs.

Movie magic can handle movies to either standard. However, some types of CD-ROM drives cannot handle Green book standard and so cannot read CDs in this format. Please note that this is a feature of the CD drive and not Movie Magic.

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Installation

What you should have received

Check that you have received the following:

- Movie Magic expansion card,
- floppy disc,
- monitor cable,
- registration and movie request card.

If any of these is missing, contact the supplier of Movie Magic.

What else you require

- A CD-ROM drive and SCSI interface installed in your Risc PC.
- A 50Hz PAL monitor with RGB input.

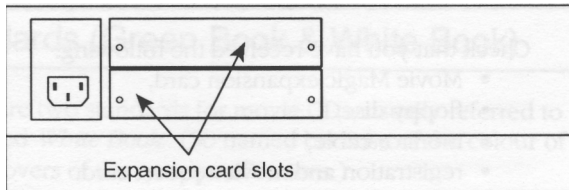
Suitable monitors are older Acorn-compatible monitors such as Acorn AKF11, Eizo 9060 or a domestic TV with a Scart connector.

If your monitor has only composite-video input, contact Wild Vision technical support at 15 Witney Way, Boldon Business Park, Boldon Colliery, Tyne & Wear NE32 9PE, telephone 0191 519 1455/fax 0191 519 1929.

Movie Magic *is* supplied with a Scart–Scart cable. If your monitor does not have a Scart connector, you need to purchase a suitable cable.

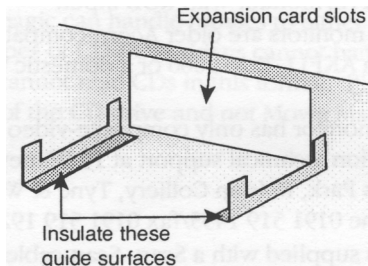
Installing the Movie Magic card

- 1 Switch off your computer.
- 2 Unplug all peripherals plugged into the computer.
- 3 Remove anything from the top of the computer such as a monitor.
- 4 Remove the top cover of the computer. This operation is described in the *Welcome Guide* supplied with the Risc PC.
- 5 Remove the blanking plate covering the slot you want to use. Don't lose the securing screws.



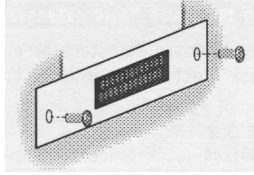
Caution!

You can plug the Movie Magic card into any free slot. If you want to use the bottom slot in a slice (the slot with the guides) note **in older Risc PCs, these guides are covered in conductive paint which can cause short-circuits on any expansion card in this slot. We recommend sticking insulation tape or similar on the guides before plugging in an expansion card.**



- 6 Support the backplane (the vertical circuit board) with one hand.
- 7 Plug the Movie Magic card into the computer. Make sure the card is fully plugged in.

- 8 Secure the Movie Magic card to the case of the computer:



- 9 Replace the computer's lid. This operation is described in the *Welcome Guide* supplied with the Risc PC.
- 10 Reconnect any peripherals you removed in step 2.

Testing the Movie Magic card

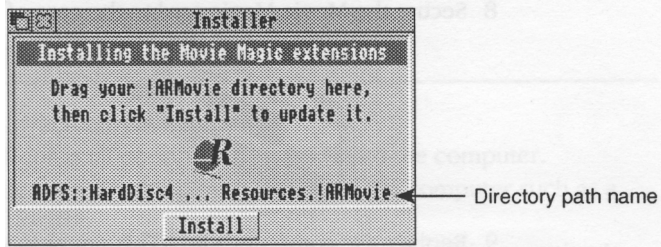
- 1 Switch on your computer. Let it complete its boot sequence.
- 2 Press *F12*. This exits the normal desktop and enters the command line. A * prompt is displayed.
- 3 Type
 MODULES
and press *Return*. This lists the expansion cards plugged into the computer. In the list should be Movie Magic. If Movie Magic is not listed:
 - check the card is properly plugged into the backplane,
 - try the card in a different socket. If neither of these work, contact the supplier of Movie Magic.
- 4 Press *Return* again to return to the desktop.

Installing the software

Movie Magic uses a standard Acorn resource, ARMovie, to play movies. However, ARMovie must be updated with the MPEG extensions from the Movie Magic disc.

- 1 Run *RInstall* from the Movie Magic floppy disc:

2. Installation



- 2 Usually RInstall automatically finds ARMovie and displays the directory path name in the window. If this field is blank, drag the !ARMovie icon onto the window.
- 3 Click **Install** to install the software within ARMovie.



- 4 Copy *GrabMPEG* into a suitable directory on your hard disc
- 5 You can now plug the monitor into the Movie Magic card.

Playing movies is described in the next section.

Installation is now complete. You do not need the floppy disc to use Movie Magic - we recommend storing it in a safe place.

3

Using Movie Magic

Suitable applications for playing movies

Movie Magic can use the Acorn application, *!ARPlayer*. This application is described in the *User Guide* supplied with the Risc PC.

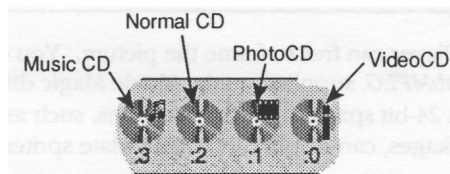
Alternatively, you can use any Replay-aware application.

Playing a movie

This describes playing a movie from a CD-ROM. You can play MPEG files from other sources in the same way.

As described in section 1 there are two standards for movie CDs, white book and green book. Movie Magic can process both standards but some CD-ROM drives cannot read green book discs.

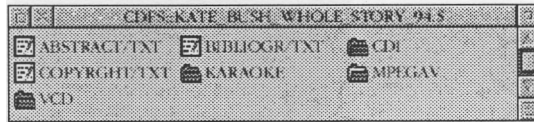
- 1 Load **ARPlayer**. This is usually in the *Apps* directory. Alternatively you can use any Replay-aware application.
- 2 Load the movie CD into the CD-ROM drive. The CD icon on the icon bar shows the type of CD:



Movie Magic plays CDs with the **i** icon.

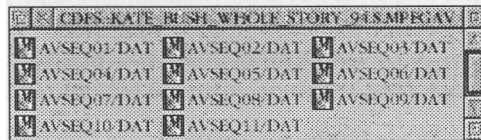
3. Playing a movie

- 3 Double-click on the CD icon to display the contents:

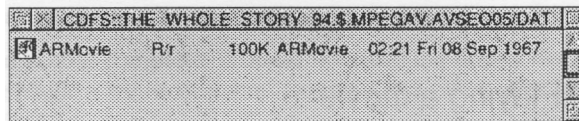


(This is an example CD-ROM; the exact contents of your CD-ROMs will be different.)

- 4 Usually there is directory with *MPEG* (*MPEGA* Vin this example) in its name. Open that directory:



- 5 Double-clicking on a file opens a window showing the ARMovie icon:



- 6 Drop the ARMovie icon onto the ARPlayer icon on the icon bar. This displays the movie title in a window on your usual monitor:
- 7 Click the *Play* button on ARPlayer to start playing the movie on the monitor plugged into the Movie Magic card.

If you pause the movie during playing, the current frame appears on both the Movie Magic monitor and in the ARPlayer window.

Grabbing a screen image



ARPlayer can freeze-frame the picture. You can then use *GrabMPEG*, supplied on the Movie Magic disc, to grab the image as a 24-bit sprite. Many applications, such as DTP and drawing packages, can display and manipulate sprites.

Note!

Most CDs are covered by copyright. Some uses of grabbed images can breach copyright. If in doubt, you should take suitable legal advice before publishing or distributing grabbed images. Computer Concepts are not lawyers and so cannot advise you.