



User Manual

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System Requirements

Media Magic is deigned to run on a Macintosh computer with the following minimum specifications:

- Power Mac 604e/200 Mhz processor (G3/266 Mhz or better recommended)
- 64 MB RAM or more
- Mac OS 8.6 or later (Mac OS 9.x recommended)
- Mac OS compliant SCSI card (for connection of external drives)
- USB port (for connection of license key)

Note that Media Magic is not currently designed to run natively under Mac OSX (although it will run in the Mac OSX Classic environment).

The Mac OS File Exchange Control Panel must be enabled to allow access to files on FAT16/FAT32 formatted volumes.

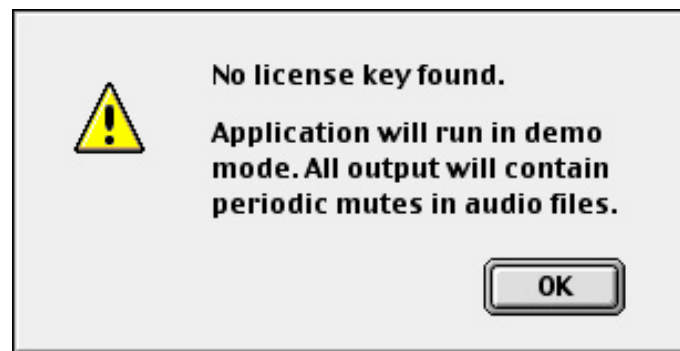
Installation

Before installing or running the application software for the first time, you need to install two System Extensions which are used to communicate with the Copy Protection key used for Media Magic.

1. Copy the files *MacHasp4Shim* and *MacHaspUsbDD* to the **Extensions** folder in the **System Folder**.
2. Reboot the system.
3. Connect the Copy Protection key to any available USB port.

The system will now recognize the license key and allow full use of the software.

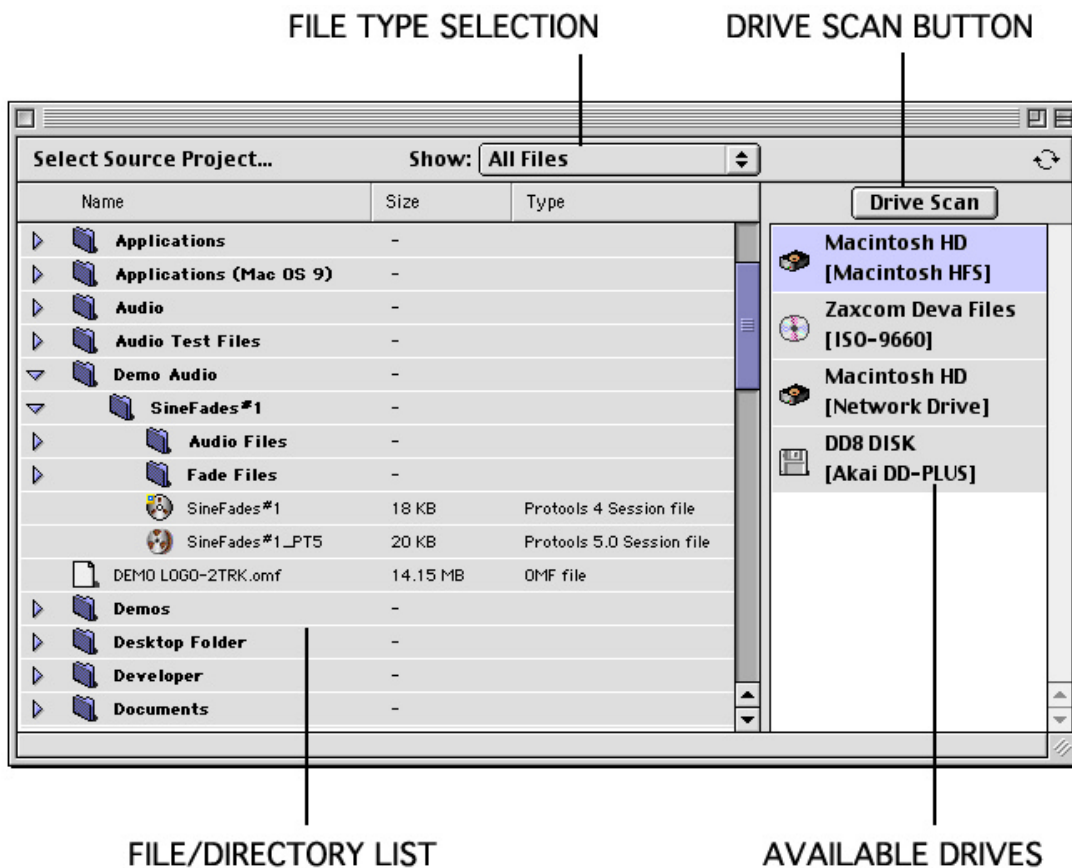
Note: If the Media Magic application is launched without the license key connected it will run in demonstration mode. In this mode, all audio conversions will contain mutes at periodic intervals. The warning message shown below will be displayed to indicate that the application is running in demo mode:



Project Explorer Window

After launching the application, the main project selection window will be displayed. This window is divided into two areas. The right hand side of the window shows a list of all drives that are accessible by Media Magic. This may include drives or volumes mounted on the Macintosh desktop (including CD-ROMs and network volumes) as well as other SCSI drives handled by Media Magic. Clicking on any drive will select it and it will be shown highlighted.

The left hand side of the window shows a listing of files and directories on the selected disk.



Basic Operation

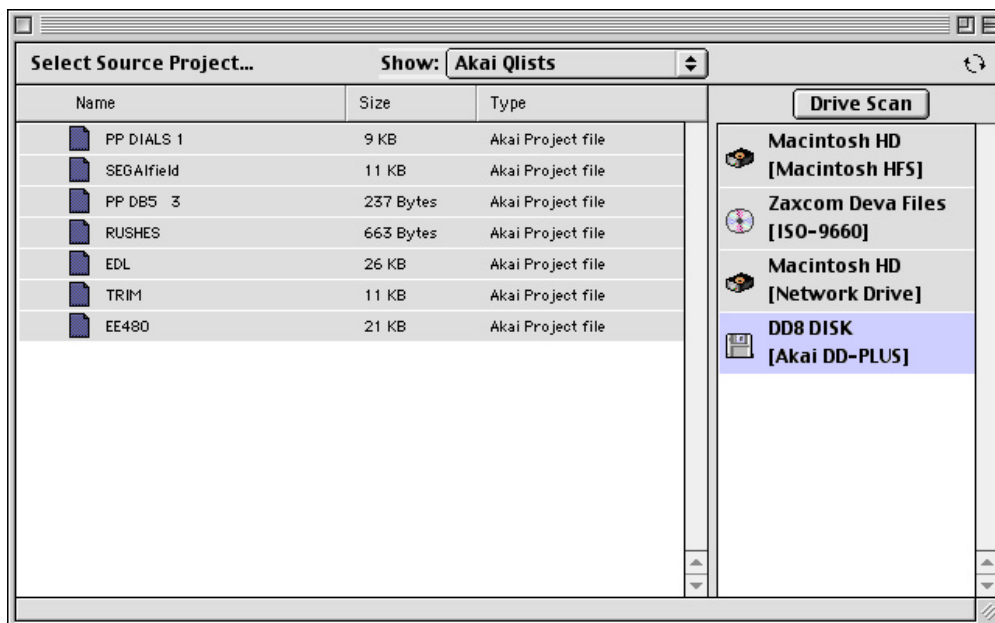
DRIVE SCAN BUTTON

Press the Drive Scan button to update the list of drives available to Media Magic. This will rescan for volumes mounted by the Mac OS as well as SCSI drives in other formats.

FILE TYPE SELECTION

The file type selection menu allows you to choose which type of file will be shown in the file list. The file types available in this menu will change according to the format of the drive currently selected.

The FILE TYPE SELECTION field can make it much easier to find project files on many disks. For example, the screen below shows the AKAI QLIST project files available on an an AKAI DD-PLUS format disk:

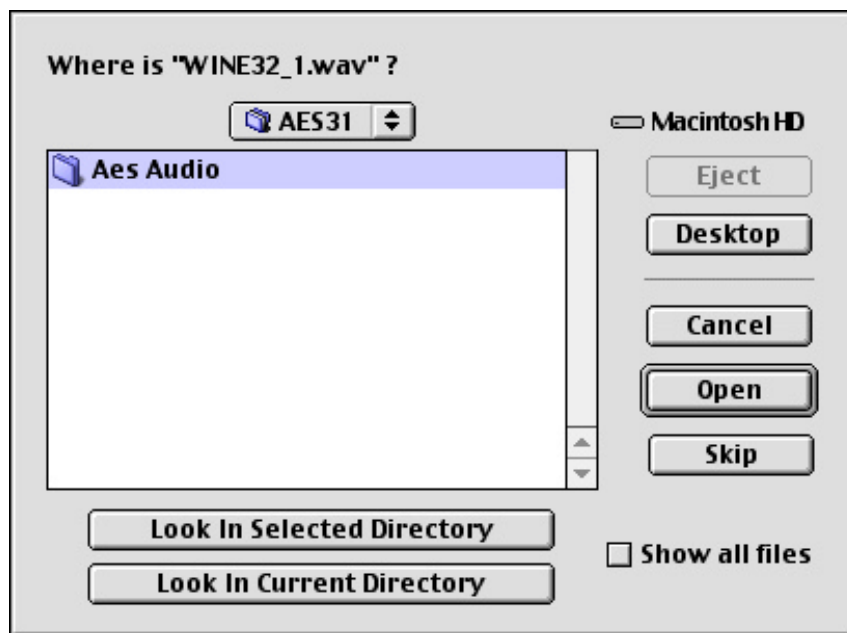


Project Conversion

The easiest way to select a project to convert is to drag it from the file list (on the left hand side of the screen) onto the disk (on the right hand side of the screen) that you want the destination project to be created on.

Alternatively, you can double click on any project in the file list to select it for conversion. In this case, you will need to manually select the destination project disk before the conversion is performed.

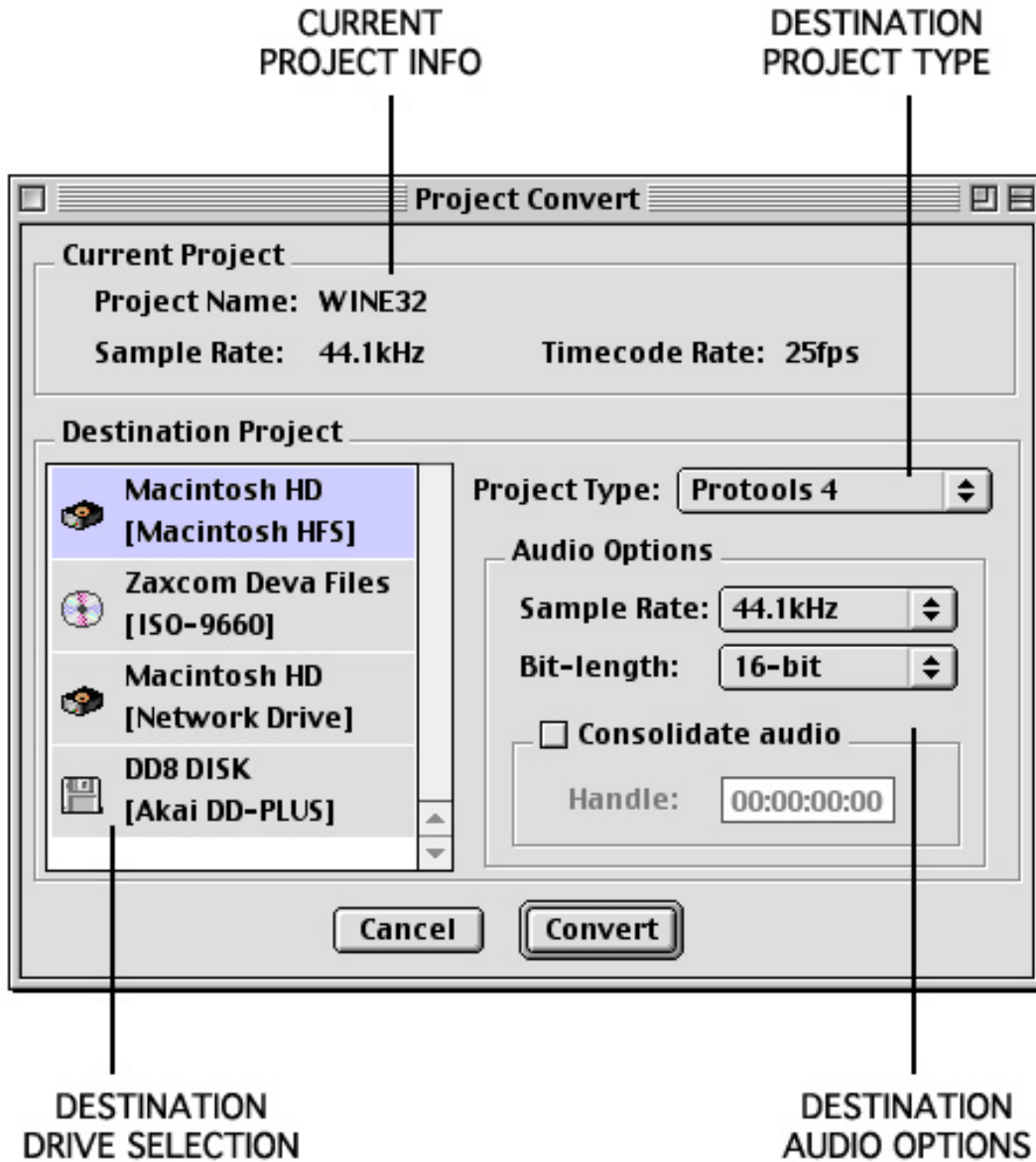
After selecting a file for conversion, it will be loaded into memory ready for conversion. During this process, Media Magic will try to locate all the audio data associated with the project. In some cases, Media Magic may not be able to automatically find an audio file needed by the project. In this case, the following window will be shown to allow you to manually locate the correct file:



Project Conversion

Project Convert Window

Once a project has been selected and loaded, the Project Convert window will be displayed. This window shows details of the project being converted as well as allowing various options to be selected for the conversion.



Project Conversion

CURRENT PROJECT INFO

This area of the Project Convert window shows details of the source project being converted. This includes the project name, sample rate and timecode rate.

DESTINATION DRIVE SELECTION

This panel allows you to select the target drive onto which the converted project files will be saved.

DESTINATION PROJECT TYPE

This menu allows you to select the file format of the destination project. Note that the options available in this menu will depend on the format of the selected destination drive (e.g only Waveframe projects can be created on a Waveframe formatted drive).

DESTINATION AUDIO OPTIONS

This panel allows you to select various options relating to the audio files that will be created during the project conversion process.

Press the CONVERT button to start the project conversion process or CANCEL to return to the PROJECT EXPLORER window.

Project Conversion

If the destination drive supports sub-directories, you will next be asked to choose a folder into which the converted project will be saved:



Select the directory into which you want the converted project files to be saved and press the CHOOSE button.

During the project conversion process, each audio (media) file referenced by the source project will be converted and saved into a new audio file in a format suitable for the selected target project format. Finally, the project file will be converted and saved in the correct format. A progress dialog will be displayed during the conversion process:



Converting To OMF

OMF Export Options

If OMF is selected as the destination project type in the PROJECT CONVERT window, you will be able to choose some further options before the conversion process begins about the type of OMF file that is created.



The OMF EXPORT OPTIONS window allows you to choose the following:

OMF VERSION

This allows you to select if Media Magic will create a file compliant with version 1 or 2 of the OMF specification.

Note 1: Most OMF files used for transferring audio to or from Avid products are OMF1 format.

Note 2: Clip gain information can only be exported in OMF 2.x

EDIT RESOLUTION

When AUDIO SAMPLE is selected, all clips and edits in the destination OMF file will be exactly where they were in the original source project. When VIDEO FRAME is selected, Media Magic will adjust edits onto frame boundaries to maintain compatibility with video editing systems.

Converting To OMF

OMFI FILE OPTIONS

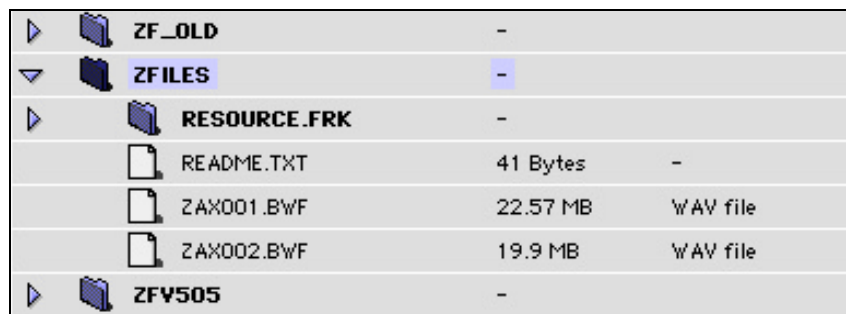
By selecting OMF COMPOSITION WITH EXTERNAL AUDIO FILES, Media Magic will create an OMF file which references external SD-II media files. Alternatively, selecting SINGLE OMF FILE WITH EMBEDDED AUDIO will cause Media Magic to create one big OMF file that includes both edit information and embedded audio data.

The Zaxcom DEVA hard disk field recorder can create files on an external DOS (FAT16) formatted disk in either B-WAV (Broadcast Wave) or SD-II (Sound Designer II) formats.

Unlike other systems, the DEVA does not create a specific project file. Instead, all the audio files associated with a particular project are saved into a single directory usually called ZFILES.

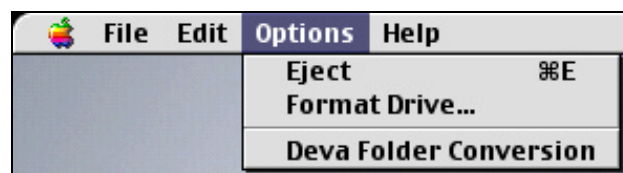
Media Magic is able to convert audio files created on a Zaxcom DEVA into projects suitable for use on other systems. Media Magic uses information from both the audio file's contents and file name to determine how audio should be arranged in the target project.

To perform this type of conversion, first select the folder containing the B-WAV or SD-II audio files in the FILE/DIRECTORY LIST on the PROJECT EXPLORER window. This directory will normally be called ZFILES unless it has been renamed:



▶	ZF_OLD	-	
▼	ZFILES	-	
▶	RESOURCE.FRK	-	
	README.TXT	41 Bytes	-
	ZAX001.BWF	22.57 MB	WAV file
	ZAX002.BWF	19.9 MB	WAV file
▶	ZFY505	-	

Next, go to the OPTIONS menu in the menu bar and select DEVA FOLDER CONVERSION:



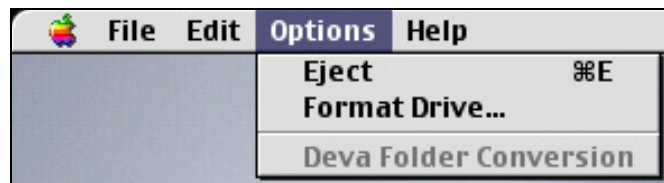
Media Magic will now look at each B-WAV or SD-II file in the selected directory and display the PROJECT CONVERT WINDOW described previously ready to perform a conversion.

Formatting Drives

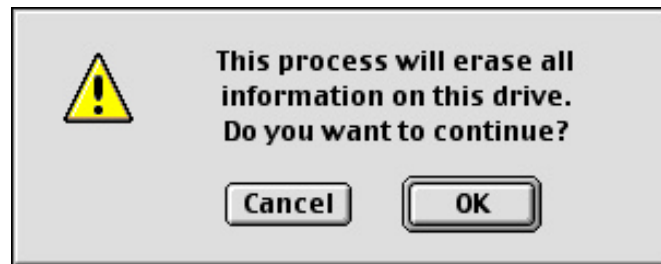
Media Magic is able to format empty drives (or re-format existing drives) in a variety of formats according to the type of project conversions you want to perform.

First, select the drive you want to format from the list of available drives shown in the PROJECT EXPLORER WINDOW.

Next, go to the OPTIONS menu in the menu bar and select FORMAT DRIVE.



Formatting a drive will cause any existing files on that disk to be erased. You will be shown the message below to warn you of this. Press OK to continue with the format operation or CANCEL to abort.



Finally, you will be shown the following dialog which allows you to choose options about the drive being formatted:



Formatting Drives

FORMAT TYPE

This menu allows you to select the type of format information that will be created when the disk is initialized.

DRIVE NAME

This field allows you to enter a name for the drive being formatted. (Note that the maximum number of characters in the name will depend on the type of format selected in the FORMAT TYPE field).

Press the FORMAT button to begin the format process or CANCEL to exit.

Formatting Drives

Media Magic is able to format SCSI drives in the following formats:

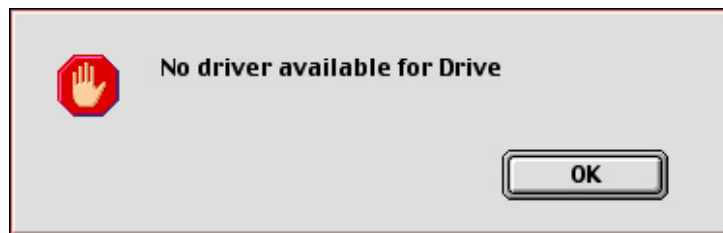
AKAI DD-PLUS	This is the format used by the Akai DD8, DD16PB and DD1500
FAIRLIGHT FLFS	This is the format used by the Fairlight MFX3+ and other Fairlight products.
WAVEFRAME	This is the format used by the Tascam MMR8/MMP16 as well as Waveframe workstations.

Media Magic is also able to format drives in HFS, HFS+ or DOS (FAT16/FAT32) formats through the Mac OS.

Note: Media Magic initializes drives in HFS, HFS+ or DOS (FAT16/FAT32) formats through the Mac OS rather than through direct access to the drives. In order to do this, the Mac OS must have a suitable driver available for the disk.

FAT16/FAT32 drives will normally be accessed through the FILE EXCHANGE control panel which is part of Mac OS8.6 (or later).

If you attempt to format a drive for which no driver is available in either HFS, HFS+ or DOS (FAT16/FAT32) format you will be shown an error message:



In this case, you may be able to format the drive using other third-party software that provides a suitable driver for the disk (e.g FWB Software's Hard Disk Toolkit").

Disk Formats Supported

Storage media - including hard drives, MO disks, CD-ROMs or other removeable media – are usually formatted with a file system specific to the type of operating system or program that they are intended to work with. The disk file system is a method for cataloging the contents of a disk so that data can be stored and retrieved.

Media Magic includes dedicated support for accessing the following format SCSI drives.

FORMAT	READ	WRITE
Akai DD1000	✓	-
Akai Normal/Extended	✓	-
Akai DD-PLUS	✓	✓
Fairlight (OS-9/RBF)	✓	-
Fairlight (FLFS)	✓	✓
Waveframe/Tascam	✓	✓

Media Magic is also able to format media for use on Akai, Fairlight or Waveframe/Tascam systems.

Media Magic will also read and write files to any drive mounted on the Macintosh desktop. This includes any HFS or HFSplus formatted drive, FAT formatted drives (using PC Exchange/File Exchange) or any network drive.

File Format Information

Media Magic is able to read and/or write projects in a variety of file formats used by audio equipment in common use in post-production.

FORMAT	READ	WRITE
AES-31	✓	✓
Akai	✓	✓
Fairlight DL	✓	-
Fairlight ML	✓	✓
OMF 1	✓	✓
OMF 2	✓	✓
Protools 3.2	✓	-
Protools 4.x/Protools 24	✓	✓
Protools 5.0	✓	✓
Waveframe/Tascam MMR/MMP	✓	✓
Zaxcom Deva	✓	✓

Media Magic is able to convert from any format marked as readable to any format marked as writeable in the table above. Some of these file formats are proprietary to specific systems and can only be stored on disks formatted with the appropriate file system.

AES-31

The AES-31 interchange format was developed by the Audio Engineering Society in conjunction with many audio equipment manufacturers and users. It is intended to provide a simple and consistent method of interchanging audio projects between different systems. It uses ADL (Audio Decision List) files to save edit information referencing B-WAV (Broadcast Wave) audio files.

To fully comply with the AES-31 specification, these files should be created on FAT32 format disks. Media Magic also allows AES-31 files to be created and accessed on HFS format disks in order to allow them to be transferred across a network.

File Format Information

Akai

Media Magic is able to read and write files for use with the Akai DD8, DD16PB and DD1500 systems. These systems use several proprietary disk formats (referred to as NORMAL, EXTENDED and DD-PLUS) and proprietary file formats for storing audio data, settings and edit information (QLISTs).

Fairlight ML/DL

The Fairlight MFX3+ system uses .MT, .ML, and .DL files for storing edit information. The .MT file is the Fairlight MultiTrack file that a project is recorded with. The .MT file can be exported to a .DL, DubberLanguage file, or a .ML, File Exchange file (also called a MultiLanguage file) for use on other systems.

These files are saved onto either RBF format disks (on older MFX3+ systems) or typically onto FLFS format disks. FLFS (Fairlight File System) is Fairlight's proprietary disk format based on Windows NT. Some recent Fairlight system also allow these files to be stored on FAT32 format drives.

The Tascam MMR-8 and MMP-16 support playback of the .ML file from FLFS format disks. The Akai DD8/DD1500 support playback of the .DL file from either an RBF or FLFS format disk.

In addition to reading both .ML and .DL files, Media Magic is able to create projects with a .ML file that reference B-WAV (Broadcast WAV) audio files. These files can be either created on FLFS or FAT32 disks and can be read on all current revisions of Fairlight software.

Media Magic is also able to save .ML files (with B-WAV audio files) to any HFS or network drive to allow access directly from a Fairlight system connected to the network.

File Format Information

OMF

The Open Media Framework Interchange format was developed by Avid Technology as a means for interchanging files between different video and audio workstations. There are several different implementations of OMF in both Avid products as well as other manufacturer's products. Media Magic has been designed to be compatible with as many of these implementations as possible.

Protools Session Files

Media Magic will work with Digidesign Protools Session files saved to Mac HFS or HFS+ formatted disks. Protools Session files typically reference SD-II (Sound Designer II) audio files. (Note that Media Magic does not include direct support for Protools 5.1 Session Files which can optionally reference B-WAV audio files).

Waveframe/Tascam MMR/MMP

Waveframe files use special formats for storing audio data, edit information or other settings. These files can be read and written only to disks formatted with the proprietary Waveframe disk file system.

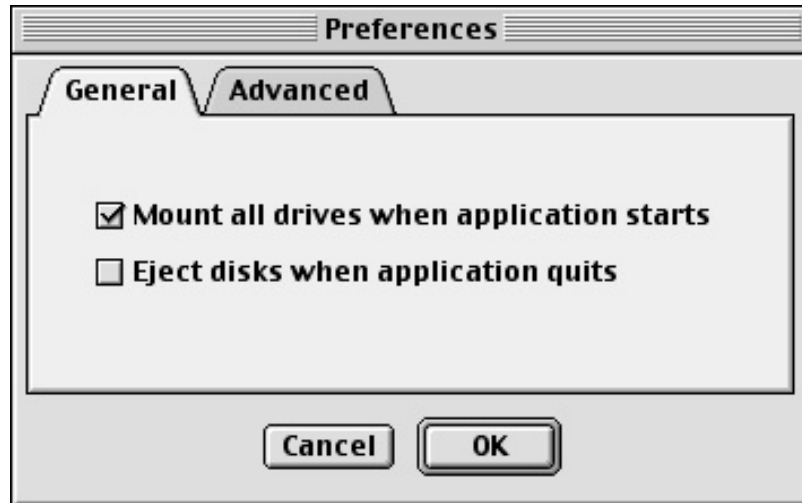
The Tascam MMR8 and MMP16 use the Waveframe file system as their native format.

Zaxcom Deva

The Zaxcom DEVA hard disk field recorder can create files on an external DOS (FAT16) formatted disk in either B-WAV (Broadcast Wave) or SD-II (Sound Designer II) formats. The DEVA does not produce any specific file with edit information. Instead, this is encoded into the B-WAV files and their filenames.

Media Magic is able to access files created on the Zaxcom DEVA as described in the section called 'Converting DEVA files'.

The preferences window is accessed from the EDIT menu or by typing OPTION+R on the keyboard.



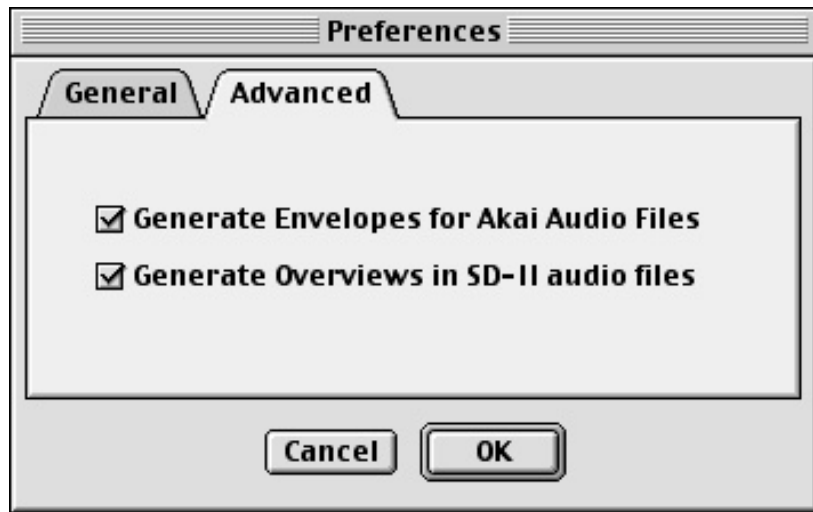
MOUNT ALL DRIVES WHEN APPLICATION STARTS

When this option is checked, Media Magic will scan and mount all available drives automatically when the application is launched. You can also use the DRIVE SCAN button on the main PROJECT EXPLORER window to manually scan for drives.

EJECT DISKS WHEN APPLICATION QUILTS

When this option is checked, Media Magic will automatically eject any removeable media when the application is closed. This is useful for drives that are handled directly my Media Magic rather than through the MacOS. When the application is running, any selected disk can be ejected either from the OPTIONS menu or by typing OPTION+E on the keyboard.

Preferences



Some systems store a special representation of each audio file which is used to provide a graphical overview of the audio in the file. By default, Media Magic will generate these representations automatically for Akai audio files (with Akai projects) and SD-II audio files (with Protools Sessions).

If you do not want Media Magic to automatically generate this data, you can disable it in the 'Advanced' Preferences page.

Note that if you disable the generation of Envelopes for Akai Audio Files, it will not be possible to view a graphical representation of the audio on Akai systems.

If you disable the generation of Overviews in SD-II audio files, Protools will automatically generate these overviews when the files are opened. However, this can be a lengthy process so you may find it more efficient to generate the overviews during Media Magic's conversion process.

Clip Level Information

When converting between project formats that store 'clip-based' level information (such as Akai, Fairlight or Waveframe), Media Magic will convert the clip-level information into a format suitable for use on the target system.

When converting from project formats that include 'clip'-based level information to Protools Session files, Media Magic will generate a Protools volume automation graph with breakpoints at the start and end of each clip at which a level change occurs..

Disk Drivers

In normal situations, each HFS or HFS+ format drive mounted on a Macintosh will have a driver associated with it. The driver is a small piece of software that is often written by a format program to a reserved area of disk and loaded when the disk is mounted by the Mac OS. The driver is responsible for all access to the disk itself.

When Media Magic accesses Akai, Fairlight or Waveframe format drives, it needs to do so directly as these drive formats are not recognised by the Mac OS. In most cases, you don't need to worry if Media Magic is accessing a SCSI disk directly or through a Mac OS driver.

However, some disk drivers may include code that will interfere with the intended operation of Media Magic. This is most likely to occur with removable media (e.g MO) and may result in one of the following problems:

- A disk that is not recognised by the Mac OS (e.g Akai, Fairlight or Waveframe format) may be ejected automatically by the driver before Media Magic can access it.

Or

- The Mac OS may detect that a disk in an unrecognized format (e.g Akai, Fairlight or Waveframe format) has been inserted into a drive and prompt the user to reformat it.

Other Features

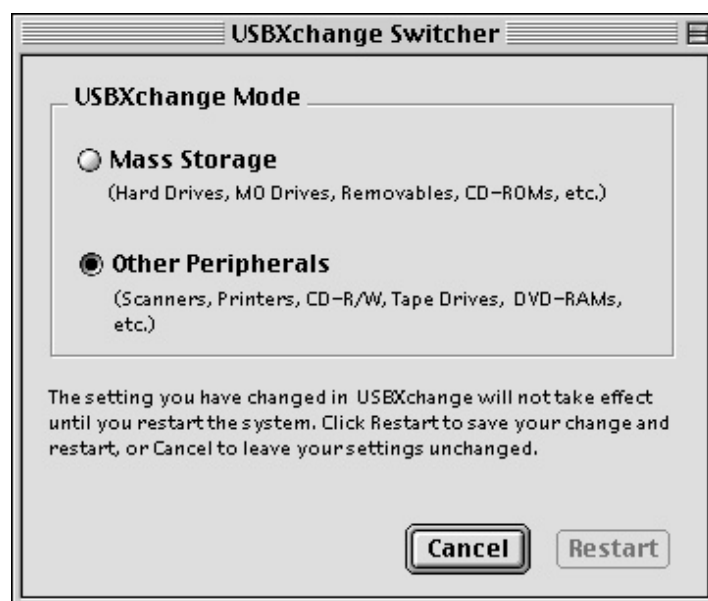
The solution to this problem is to reboot the Macintosh without any disk in the drive that is causing the problem. This will prevent a Mac OS driver being loaded for the drive and allow Media Magic to access it directly.

USB<->SCSI Interfaces

Media Magic will work correctly with SCSI drives attached to a USB/SCSI converter (such as Adaptec's 'USBXChange'). However, this is not recommended for normal operation due to the relatively slow transfer rates of USB compared to SCSI.

If you do want to use a USB<->SCSI converter, please read the section above on disk drivers. The USB<->SCSI converter will have its own driver software which is needed for correct operation. In order to allow Media Magic to access drives that are not recognised by the Mac OS (e.g drives in Akai, Fairlight or Waveframe format), you may need to setup the USB<->SCSI driver for access to devices other than hard disks.

With Adaptec's USBXChange, this is done in the 'USBXchange Switcher' Control panel. The OTHER PERIPHERALS option should be selected to allow access to drives that are not recognised by the Mac OS (e.g drives in Akai, Fairlight or Waveframe format). The MASS STORAGE option will need to be selected again if you want to access drives though the Mac OS (e.g drives in HFS, HFS+ or FAT16/FAT32 format).



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