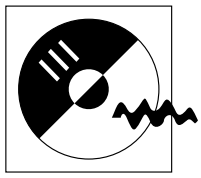

SONIC SOLUTIONS

SonicStudio 5.2

Release Notes

SonicStudio 5.2, Release Notes

Written and designed at Sonic Solutions, 101 Rowland Blvd., Novato, CA. 94945, USA

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Contents

1 New Features Since Version 2.2.6

This chapter describes features and enhancements added to SonicStudio™ since the release of Sonic System Version 2.2.6.

Note – With SonicStudio Version 5.0, the UltraSonic Processor has been renamed SonicStudio 16•24. Both of these product names may appear in the SonicStudio documentation; however, they are the same product.

Note – With SonicStudio 5.2, the term MOFS has been renamed DMFS (Digital Media File System). Both terms may appear in the SonicStudio documentation; however they have the same meaning.

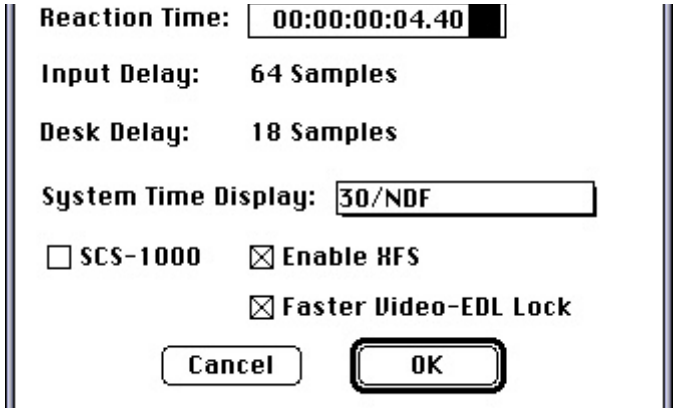
File Handling

External File System

In SonicStudio 5.0, the DMFS (Digital Media File System) volumes that store audio data appear on the Macintosh desktop, and can be accessed using the Finder and Macintosh file utilities, such as Find File. This greatly increases flexibility in using the system. The Sonic Manager is still available and can be used as an alternate mode of access.

Non-MediaNet Systems

On SonicStudio Systems that are not equipped with MediaNet, all DMFS volumes are mounted to the desktop when the SonicStudio application starts if the XFS option is enabled in SonicStudio. The volumes behave in all ways like Macintosh hard disk volumes. You can browse the files and folders using the Finder and search out files using utilities such as the Find File. You can also store non-SonicStudio documents and applications on the DMFS volumes, but remember that these volumes will remain on-line only as long as SonicStudio is running.



When you exit SonicStudio, the DMFS volumes are taken off-line. Be cautious that you do not have documents which reside on a DMFS volume open in other applications when you quit SonicStudio.

MediaNet-Equipped Systems

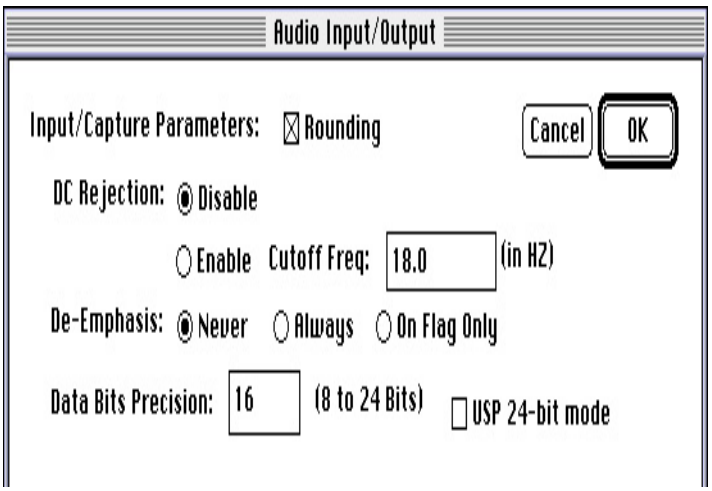
On SonicStudio Systems equipped with MediaNet, DMFS volumes do not appear automatically, but must be mounted from the Chooser, just as in prior versions of SonicStudio. MediaNet systems will behave in all respects as in previous versions with the following exception:

- For the Open Sound File command, the DMFS GetFile dialog box used in previous versions is replaced by a standard Macintosh dialog box. Sound files on DMFS volumes that are not mounted to the desktop are not visible. This means that in order to use Open Sound File on a system equipped with MediaNet, you must mount the DMFS volume to the desktop first.

Note – The above consideration does not apply to opening files from the Sonic Manager, in which sound files are always available, either by dragging, double-clicking, or selecting Open.

True 24-Bit File System

SonicStudio 5.0 supports recording of sound files with a true allocation of 24-bits only in SonicStudio 16•24 (formerly UltraSonic Processor). Previous versions had only the options of 16 or 32 bits, so that 20 or 24-bit files would consume twice the space of 16-bit files. To set the 24-bit allocation, open the Audio I/O Parameters and select the USP 24-bit mode check box next to Data Bits Precision.

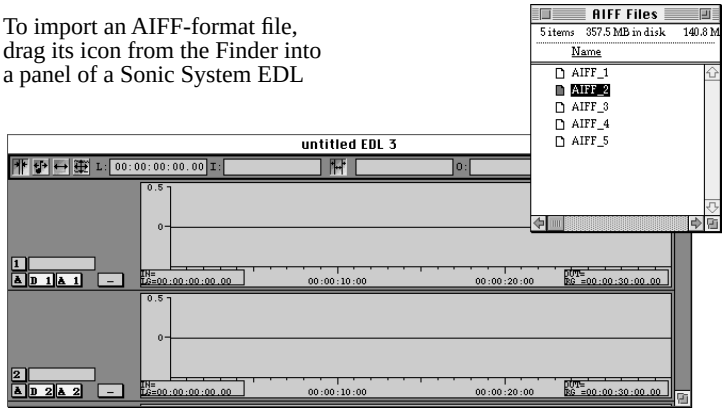


File allocation in 24 bits requires changes to SonicStudio hardware as well as software, and can only be supported on the SonicStudio 16•24 platform. To get the 24-bit allocation, you must have SonicStudio 16•24 hardware version B15 or higher (with a revised SCSI PCD chip). If you have an earlier revision USP card and wish to use the 24-bit allocation, contact Sonic Solutions Customer Support. This feature is compatible with all PCI SonicStudio 16•24 boards.

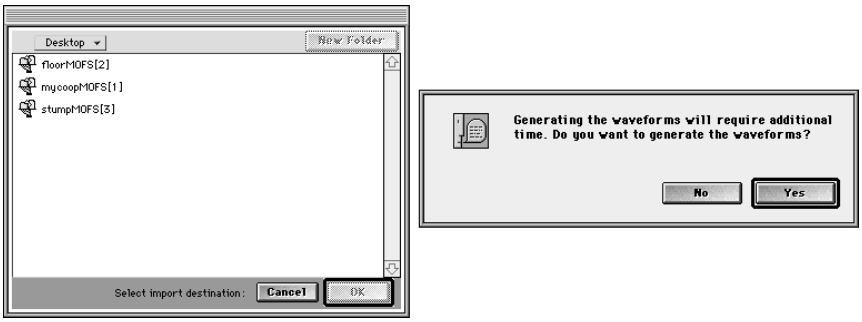
Drag-and-Drop Import of AIFF Files

In Version 5.0, you can open AIFF-format files on the Macintosh hard disk directly into a SonicStudio EDL by dragging it from the Finder.

To import an AIFF-format file, drag its icon from the Finder into a panel of a Sonic System EDL



When you drag an AIFF-type file onto an EDL panel, the system converts the file into SonicStudio soundfile format and copies it onto a DMFS drive volume. It then places the sounds in the EDL based on the settings in the Cue Placement window. You can also select multiple files and import them at one time. The selected files are copied into folders on your DMFS volume with the same name as the source AIFF file. Stereo and multi-channel files are de-interleaved into individual monaural files within the soundfile folder.

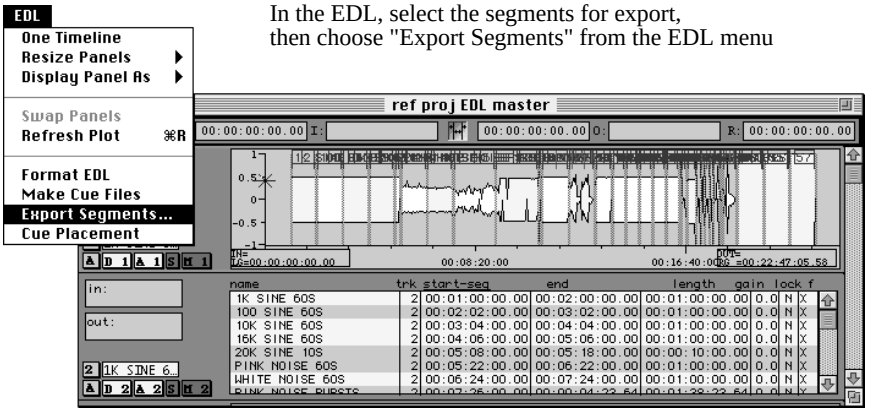


You will be asked to specify the drive and folder into which the dragged files will be copied. Before import commences you are also prompted to specify whether or not you want to generate waveform display data for the imported files.

SonicStudio sound files contain special data not contained in standard AIFF files to display the sound waveform when the display level is zoomed out. If you elect not to generate the waveform data, importing will be somewhat faster, but you will not see the sound waveforms in the display unless you zoom in very close. Instead, the sound will appear as a full-scale *block* of sound. You may always elect to build the waveforms at a later time by using the Waveform Repair utility in the Sonic Manager.

Exporting Audio Segments to Interleaved AIFF Files

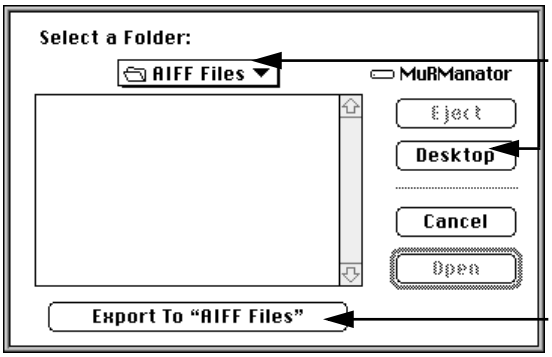
In Version 5.0, you can export any number of selected EDL audio segments to interleaved AIFF files on a Macintosh (HFS) volume in a single operation. Stereo and multi-channel files will be interleaved to create standard AIFF files.



In the EDL, select the segments for export, then choose "Export Segments" from the EDL menu

To export audio segments to interleaved AIFF files:

1. Select the segments you wish to export in the EDL panel. Segments can be selected in waveform, text, or bar mode displays.
2. Select Export Segments from the EDL menu.



3. Select the volume and folder to receive the exported sound file.
4. Select the Export To button to begin the export process.

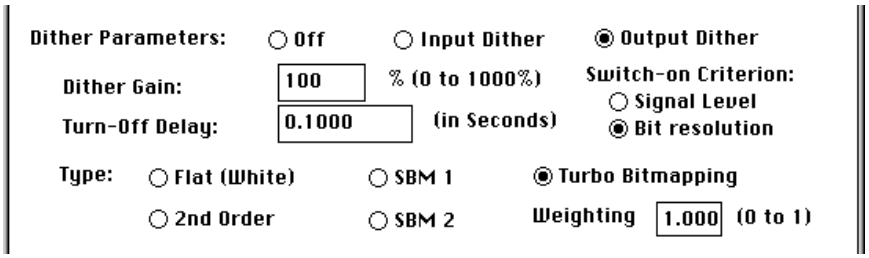
A separate AIFF file is created for each of the segments you selected, using the segment name from the EDL. In this way, you can create many AIFF files in a short time.

Note – The Export Segments command exports only the raw sound file to the HFS drive. If you wish your exported segments to have fades, filters or other edits, you must first capture (re-record) the segments into a new file, then export the desired segment.

Audio I/O

Auto-Sensing of Active Bits for Dither/Bitmapping

In Version 5.0, Flat and Second Order dither types, along with Turbo-Bitmapping, can be set to activate according to activity detected in the lower order bits of the signal. Alternately, as in previous versions, the dither can be activated any time that signal is present.



The auto-sensing function can be used to prevent erroneous redithering of 16-bit material masquerading as high-resolution audio, but perhaps more usefully, it can be used to apply dither any time that a 16-bit signal is shifted in level in the EDL.

Any crossfade or shift in gain of a sound in a SonicStudio EDL causes bits to shift down into the lower order bits. If you select Bit Resolution as the Switch-on Criterion, dither will be applied only at these points.

You can also use this function when you have captured a 16-bit EDL through the desk to a 24-bit file. Any portions that were transferred flat will then be unaffected by dither; while any section that has been equalized, boosted, or attenuated will have the dither applied.

Multi-channel Input Auto-Muting

When using a multi-channel system such as SonicStudio with the SonicStudio 16•24 card, it is common to have more than one device connected to audio input without synchronization between digital clocks. This causes noisy, corrupted audio from the devices whose clocks are not locked.

In Version 5.0, the system automatically detects when one or more digital audio inputs are unsynchronized and mutes these inputs. In addition, you can elect to disable any input pair from the control dialogs for the 8-channel or 4-channel Digital I/O boxes.

To view the status of the audio inputs, and change them manually if needed:

1. Select the Audio I/O Preferences dialog box.
2. Click the interface box you wish to examine.

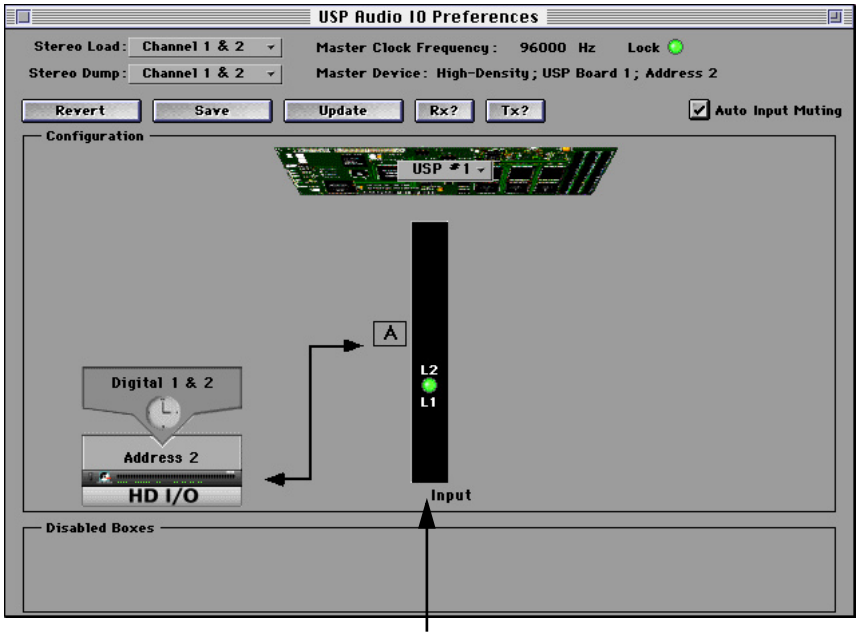
For the 8-channel Digital I/O interface, the designed dialog box contains check boxes for channel-pair input.

Multichannel Channel Status Control

In Version 5.0, you can control the channel status bits of each input and output channel pair separately with both the 4-channel and 8-channel digital I/O interfaces. The redesigned dialog box for the 8-channel interface includes four separate AES/IEC Channel Status buttons. The dialog boxes opened by these are independent. You can read channel status input and set output bits independently for every channel pair.

Input Status Indication

The SonicStudio 16•24 Audio I/O Preferences dialog box shows the status of each digital audio input. If the system detects that audio data input to any channel pair is out of sync with the current system clock, that channel pair is muted (displayed as red with X).



Input Status Indicator

The number of inputs displayed depends on the SonicStudio 16•24 hardware configuration (8- or 16-channel board) and the SonicStudio 16•24 input mode (16-, 8-, 4-, or 2-channel) as selected in the SonicStudio 16•24 configuration dialog.

The indications are coded by color as follows.

Input Status	Indicator color
Input good	Green
Bad input parity, input muted	Red with "x" cross-out
Bad parity, auto-mute disabled	Red, no "x"
Input on, no source	Amber
Input switched off	Gray
No digital input box connected	No indicator shown

Auto-Muting Enable/Disable

In the Audio IO Prefs dialog box, selecting Auto Input Muting globally sets the Input Muting feature to mute inputs when bad parity is sensed. When this box is checked, inputs that show bad parity (or non-synchronous clocks) show a red LED with an ‘X’ through it, and the input is muted. If the box is not checked, bad parity inputs show a red LED, no ‘X’, and the input is not muted. To set individual input pairs to follow the same model, select the respective LEDs for the channels you wish to enable / disable muting.

Identify IO Boxes

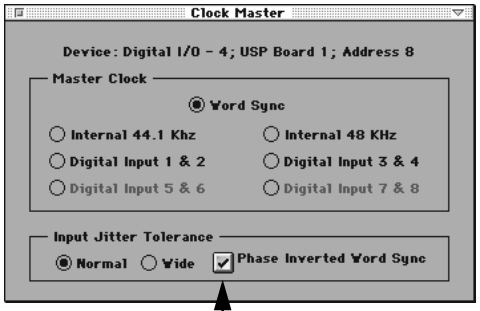
Selecting the Rx button identifies all boxes that are providing input to the currently selected board by flashing all Rx / Tx LEDs at the respective box(es). Selecting the Tx button identifies all boxes providing outputs from the selected board.

When clicking on either of the Identify buttons, the LEDs on the box will flash for 2 seconds. However, when the mouse is placed over the Input Status strip, the Identify LEDs will continue to flash until the mouse is moved away from the strip. To Identify boxes on the A Port, place the mouse over the corresponding Input Status strip for channels 1-8. To

identify boxes on the B Port, place the mouse over the input strip for channels 9-16. You may move the mouse between ports while in Identify mode to examine all boxes attached to both ports.

Phase Inverted Word Sync Option

Many digital audio systems use a Word Sync signal to maintain synchronization in complex digital audio systems. This signal is a square wave (50% duty-cycle pulse) at TTL-level 0 to +5 volts, single-ended at the system sample rate.



This section appears when you select "Word Sync" or "Digital Input"

Use this checkbox if you have trouble with audio input while locked to word sync

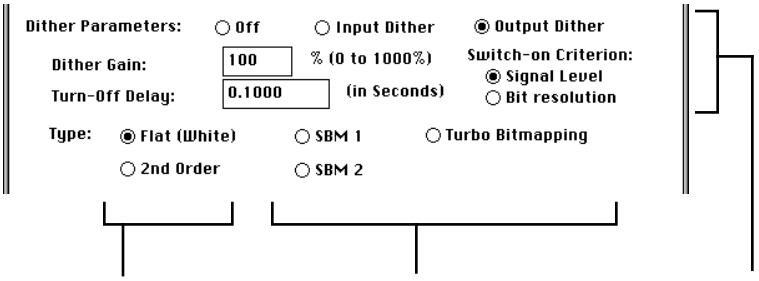
The standards documents for the most common type of digital audio transmission (AES3) do not address the relationship between the Word Sync signal and the digital audio data stream. Some manufacturers have elected to place the *rising* edge of the Word Sync signal at the same time as the start of a sample in the AES stream, while other manufacturer's products place the start of sample data in line with the *falling* edge of the Word Sync signal.

The Audio I/O Preferences dialog box for SonicStudio 16•24 systems addresses this situation in the Clock Master dialog box. In this dialog box, whenever the Master Clock is set to Word Sync, a checkbox is available to invert the phase of the sync signal as it is input to the system.

The Phase Inverted Word Sync option is to be used if you have a digital audio signal that you cannot receive, even though the system and the source device are locked to the same sync signal. In most cases, the problem is caused by an inverted relationship between Word Sync and the start of audio data. Selecting this option will correct it. If selecting this option does not correct the problem, make sure that the audio source is actually receiving sync from the same source as the SonicStudio 16•24 system.

Multi-Channel Dither on Output

In Version 5.0, all audio output channels remain active when output dither is applied. In previous versions, output channels other than 1 and 2 would mute when dither was switched on.



When using Flat or 2nd Order dither, all output channels have dither applied

When using SuperBitmapping (SBM) or Turbo Bitmapping, only the first two channels have dither. Other channels are active but without dither

All audio output channels remain active when Output Dither is engaged

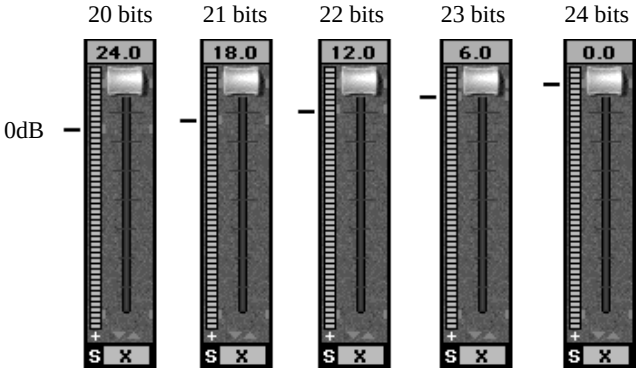
The Flat (White) and Second Order dither types are applied to all channels. If SuperBitMapping (SBM) or Turbo Bitmapping are selected, then dither is applied to channels 1 and 2, while undithered audio output continues from all the remaining channels.

Note – Dithering is not available in SonicStudio 16•24 16- or 2-channel modes. However, dithering is available in 4- or 8-channel modes on the SonicStudio 16•24 and on the SSP3.

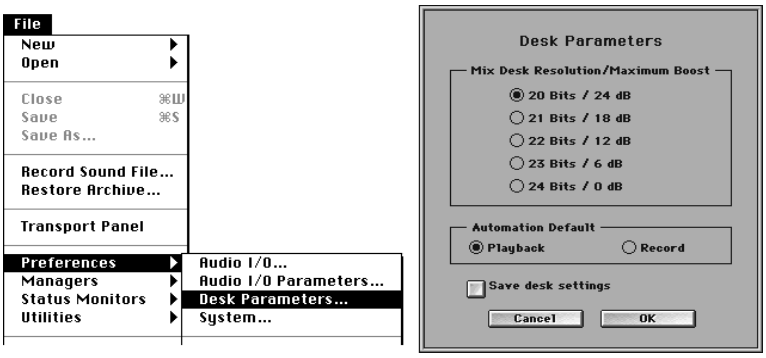
Mixing Desk

High-Resolution Mixing Desk

The SonicStudio Mixing Desk is designed to exploit the full resolution of 24-bit processing, with provision for gain boost or cut (attenuation) on each channel fader. To provide 24 decibels of boost in the channel faders, the desk processing in previous versions represented audio at a unity gain to a precision of 20 bits, well-suited for 16-bit application. But an increasing amount of audio material is now being recorded with a resolution of 20 to 24 bits with the need to maintain this resolution in the archival master.



To provide higher resolution in the mixing path, Version 5.0 lets you specify the resolution for processing in bits. As the *unity gain* resolution increases, the amount of boost available on the channel faders is reduced. On the Mix Desk, maximum boost and the position of the 0 dB hot spot are adjusted automatically. The previous illustration shows the relationship of the 0 dB and maximum channel gain at each resolution setting.



The Mixing Desk resolution is set by selecting Desk Parameters from the Preferences menu. The Desk Parameters dialog box has options you can use to specify a resolution between 20 and 24 bits with maximum channel gain indicated next to each setting. When you select a new setting for the desk resolution, the mix desk image on the screen is redrawn to reset the 0 dB fader position. The top of the channel fader travel will always set the maximum boost available at the current resolution setting.

Desk automation sessions recorded at one resolution setting may be run at a higher resolution. If the session records a channel boost greater than can be supplied at the current resolution, the gain will be limited to the maximum available at the current desk resolution.

Extended Channel Routing

In versions prior to Version 5.0, the selection of inputs to the Mixing Desk channel strips had to be selected in groups of four. For example, Line In 1-4 could be selected for channel strips 1 through 4 but not for 5 through 8 or any other strips. The same constraint applied to Audition (Disk) channels. A1 to A4 were available for strips 1 through 4 only.

In Version 5.0, any line input, audition channel, rolloff channel, or cascade input can be assigned at any strip within a given board. By using a set of modifier keys while making your patching selections, you are able to expand the the input selections.

Access to Desk Input patching appears the same as in previous versions when only a mouse-click is applied. To access expanded patching selections, press the letter key corresponding to the selection you wish to make and click on the Input box.

For example, press the ‘A’ key to access all Audition channels, press the ‘L’ key to access all Line Inputs. The ‘B’ key will give you all the Rolloff channels, the ‘C’ key all Cascade options. In the case of Cascade, all selections are available, but do not select the corresponding Cascade input as the desk strip you are on. Doing so may create a feedback loop.

Global Selection Modes

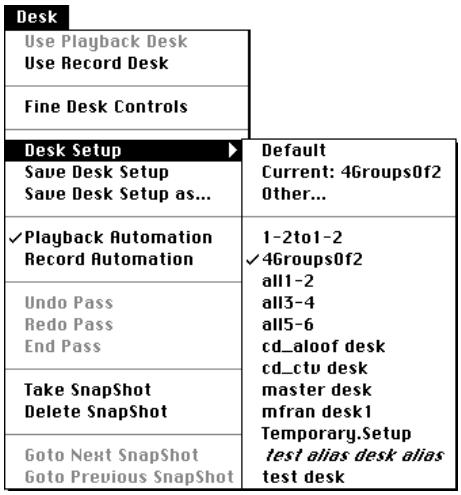
By using the Command, Option and Control keys as modifiers, you can make global patching selections. This feature applies only to Audition, Line Input, Rolloff, and Mix Desk outputs:

- Press the Command / Control keys to set Desk Inputs / Outputs in sequential order. For example, press CMD / CTL and select L1 on Desk strip 1. This selects L1 on strip 1, L2 on strip 2, and on up to L16 on strip 16, providing you are in 16-channel mode.
- Press the Command / Option keys down to select Inputs / Outputs in pairs. Press CMD / OPT and select, for example, A1 on strip 3. This selects A1 on strip 3 and A2 on strip 4.
- Press the Command key to set all Inputs / Outputs to one stereo pair. Press the CMD key and select M1 on strip 1, or on any odd-numbered strip. This sets M1 and M2 on all adjacent strips across the Desk so that all inputs are routed to M1-M2.

Multiple Desk Setups

The Mixing Desk uses two user-defined setups to switch monitoring during recording (EDL record only). In prior versions, only a single set of these was available. In version 5.0, any number of Playback and Record Desks may be saved.

Desk Setup
Save and Recall



The Playback and Record Desks are saved together in pairs. You can recall both the Playback Desk and Record Desk from a single Desk Setup or recall either Desk from two different Setups. To recall both Desks, select the desired Setup. To load only the Playback Desk, press the P key while selecting the Setup. To load only the Record Desk, press the R key while selecting the Setup.The first item in the Desk Setup menu is Default, which corresponds to the factory settings.

The Save Desk Setup command creates a new Desk Setup and asks you for a name and folder destination if no Setup is currently loaded or the Default is the current Desk. Selecting this command also saves any currently loaded Desk Setup (with any changes) to that same file.

The Save Desk Setup As command opens a standard save dialog box you can use to create a new file with the current Playback and Record Desk.

Setups that are saved in the Sonic Preferences folder will appear in the Desk Setups menu. Setups may be saved in folders other than the Sonic Preferences folder and accessed by selecting Desk Setups-Other. In

addition, you may create aliases for Desk Setups and put the aliases in the Sonic Preferences folder. This enables you to access any saved setup from the Desk menu.

When an item from the list is recalled, the selected item is shown as the Current setup. A check mark will also appear next to the selected setup in the list. If the current setup is not saved in the Preferences folder, there will be a check mark next to Other. If any changes are made to the current desk you may restore the setup settings by selecting the Current:desk setup menu item. This will effectively reload the saved setup and clear any unwanted changes.

Mixing Desk Automation

The following describes the enhancements made to SonicStudio's Automation functions.

Playback and Record Automation Settings

SonicStudio now has two modes of Automation: Playback and Record. Each is turned on / off by selecting the item under the Desk Menu. When a Desk Session is open and both Record and Playback are selected, the Automation operates much in the same way as it did in previous SonicStudio versions. All moves, dynamic and snapshot, are played back and recorded at all times. When only Playback is selected, the system will play back all Automation, but none of the current moves will be added to the Automation (Desk) Session. See additional information on this mode of operation in the section below, *Selective Automation Record.*

Snapshots in Playback Mode

It is now possible to Take Snapshot or Delete Snapshot at any time when a Desk Session is open. Previously, you could only take Snapshots when in Automation Record mode. This eliminates the need to turn Automation on and off repeatedly while auditioning settings for inclusion in a Snapshot. Take Snapshot and Delete Snapshot are still invoked in the same manner as before: Choose either command from the menu and a Snapshot will be created at or deleted from the current Now Time (as displayed in the Transport Panel).

Selective Automation Record

Shift-clicking on any automatable portion of the Desk drops that control into record mode, regardless of the current Automation mode.This means, for example, that you could be in Playback only mode (Record mode NOT selected), and still record the movement of any fader by simply holding down the Shift key while click-dragging that fader.

Notice that, when in Playback only mode, simply clicking on and moving a fader has no effect on the recorded Automation. When Shift-clicking on that fader, the fader turns red, indicating that the changes being made to it's position are being added to the current Automation stream. If you want to record all Desk moves but do not want to go to the Desk menu and select Record Automation mode, you can simply press Caps Lock. This is the equivalent of pressing the Shift key.

S-Cue Places Current Desk Settings As a Snapshot at the Cue Time

Clicking on the Cue field while holding the "S" key takes a Snapshot of the current Desk settings and places them at the cue time.

This is especially popular for mastering applications in which Snapshots are often used at the beginning of songs and in situations where the proper desk settings need to be determined by repeated auditions of the material with various filter / gain settings.

Consider the following scenario: You have already placed a single Snapshot at the beginning of the first song in an EDL.

To set the filter settings for the second song:

1. Make sure that you are in Playback only mode.
2. Set the cue point in the Transport Panel to be the beginning of the second song.
   A good way to do this is to play to just before the second song begins, double click on the cue field to highlight the cue, and press the spacebar. This will enter the Now Time into the cue field.

3. Play the second song, setting filters as you playback.
   Remember that you are in playback only mode, so no Automation is being recorded.

4. Once you have played through the song and have the filter settings that you want, simply stop the playback, press the "S" key, and click the Cue button.
   A snapshot containing your desk settings will be placed at the cue time.

Cut and Paste Desk Settings

As in the previous version, Desk settings can be cut and pasted using standard Macintosh Command-C and Command-V key combinations. To copy, make the Desk the active window and select Command-C. To paste, use Command-V. Note that Command-V does not automatically place a Snapshot at the Now Time as it did in the previous version. To place a Snapshot at the Now Time using Command-V, you must be in Automation Record mode or you must be holding down the Shift key when you invoke Command-V. This is another very useful method for placing Snapshots while keeping Automation in Playback only mode.

Fine Desk Control (Formerly Long Faders)

A new Menu selection now invokes Fine Desk Control. When Fine Desk Control is checked in the Desk menu, all Desk settings are in "fine" mode. When it is not checked, all control is at regular resolution. If you want to momentarily switch into fine or regular mode, simply press the Control key while manipulating the Desk. This swaps control resolution mode for as long as the Control key is held. For example, if the Fine Desk Control is checked under the Desk menu, control clicking on the Desk places it into regular resolution mode for as long as the Control key is held. Releasing the Control key sets the Desk back into Fine mode.

Note – The Control key as a modifier in this case is a change from previous versions, where it was the Shift key.

Opening Desk Setups with Session Open

When in Record mode, opening a Desk Setup will automatically insert a Snapshot at the Now Time. This Snapshot will contain all Desk settings (with the exception of patching) loaded from the Desk Setup. When in Playback mode, loading a Desk Setup will load the Setup but a Snapshot will NOT be taken.

Note – Loading a Desk Setup while in Playback only mode is a good method for changing patching configurations. Since patching is not included in a Snapshot, any changes made to the patching setup will not effect other Automation data.

Desk Parameter Preferences

In addition to setting the Desk Resolution (see section *High Resolution Mixing Desk*), both the Automation default mode and the Desk state on reboot can be set here. The Automation mode defaults to either Playback or Record when a new or saved Desk Session is opened.

The checkbox Save desk settings applies to the Desk state upon quitting and rebooting the application. If the box is checked, each time you quit SonicStudio, it will scan all desk settings on both Playback and Record Desks. When the system is rebooted, these settings will be restored. This acts as a second Desk default state separate from the factory defaults and somewhat removed from Desk Setups. Conversely, when ucode changes or Desk Resolution changes are made, the current Desk Setup will be restored (so any changes to the Current Setup are not returned; if these changes are desired please make sure to save the Desk Setup before changing ucode or Resolution).

Using Save desk settings creates a file in your Preferences folder called Last.Desks. Regardless of the state of the Desk Parameter Prefs, once this file is created, SonicStudio will always boot up on whatever the Last.Desks state is. This is what makes it a second default. You could, for example, setup a Desk that is generally what you wish to see as a default

Desk, use the pref 'Save desk settings', quit and restart SonicStudio, then turn off 'Save desk settings'. Now, each time you boot SonicStudio, those saved desk settings will be restored.

In addition, when closing a Desk Session, the Last.Desks settings are restored and the Desk Session settings are cleared.

Recording Functions

Multiple Record/Playback

Version 5.0 supports up to four independent and simultaneous record or play operations, including *background* operations (Project Manager dump/load or Record Soundfile window) and *foreground* operations (playback and/or EDL record).

Multiple simultaneous Record and Play is supported up to the limit of four simultaneous record or play operations and up to the limits of available disk channels. The number of available channels is determined by the audio hardware: 12 disk channels, 2 stereo I/O channels per SSP-3; 24–30 disk channels, 8 stereo I/O channels per SonicStudio 16•24.

If any operation is attempted which would exceed the available disk channels, or incorporate audition channels already engaged, an error message is returned indicating lack of sufficient channels. For example, if a record operation is currently using inputs L1 and L2 and is routed for Monitoring to A1 and A2, any other operation attempting to use these channels will return an error.

Channel allocations can be polled by using the Print System Info command in the Utilities menu of the File menu.

The changes and augmentations that support these simultaneous multiple record operations, affect several areas in SonicStudio:

- Recording Setup
- Naming Procedures
- The Transport Panel, particularly its links to EDLs
- External “Motion” Control (external control of SonicStudio EDLs and SonicStudio control of external transports, such as ATRs and VTRs)
- Monitoring Selection (to switch “Cue channel” monitoring between simultaneous output streams)

Multiple EDLs Slaved to Time Code

In SonicStudio, you may slave up to four different EDLs to the Time Code Reader (TCR). Slaving each EDL to the TCR works much the same way as it has in previous versions with one difference: You must first define which EDL you are slaving.

To do this:

1. Select an EDL from the Windows menu, or select an EDL in the Transport Panel. Choose the EDL you wish in the pop-up menu.
2. Select TCR as Master and EDL as Slave in the TP.
   This slaves that EDL to the TCR and maintains that relationship until you break it.

To slave multiple EDLs, repeat the steps outlined above for each EDL you wish to slave. The Master / Slave relationships you set for each EDL will be remembered.

You may also record in multiple EDLs while they are slaved.

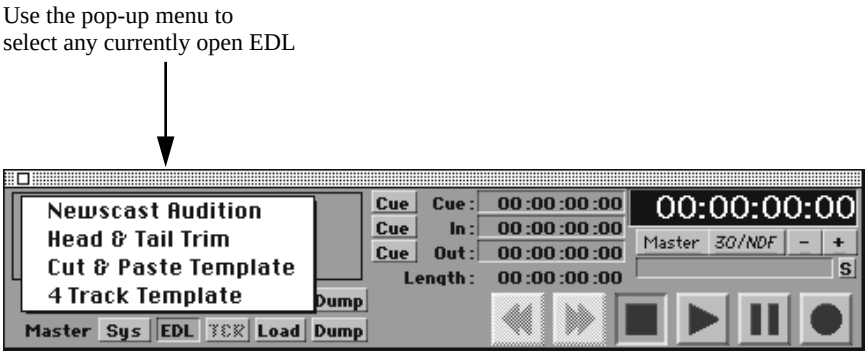
1. Arm the panels you wish to record into before starting the TCR.
2. When the EDL is playing, simply click on it to make it the current window and press the slash key.

You may perform either wild or timed recordings in this manner. In order to record in multiple EDLs, please note that you must put each EDL into record after it has started playing.

Transport Panel

Multiple EDL Control

The Transport Panel in SonicStudio 5.0 provides a selection mechanism for any single EDL from currently open EDLs, using a pop-up menu in the space at upper-left of the panel.



When an EDL is chosen, the Transport Panel reflects the current status of that EDL regarding its relationship to incoming Timecode and/or external transports and the current position of the Playhead. Transport controls affect only the current chosen EDL and any device slave to it (see below).

Separate Slave Transports for Different EDLs

In addition, SonicStudio 5.0 remembers separate Master and Slave relationships for different EDLs. As you select different EDLs from the Transport Panel, the appropriate set of relationships for that EDL is shown by the highlighted buttons in the lower-left portion of the Transport UC panel.

If one EDL is slaved to or is controlling an external transport, that relationship becomes exclusive. The System Panel shows the state of the current EDL including its control relationships and will not interfere with any pre-existing relationships.

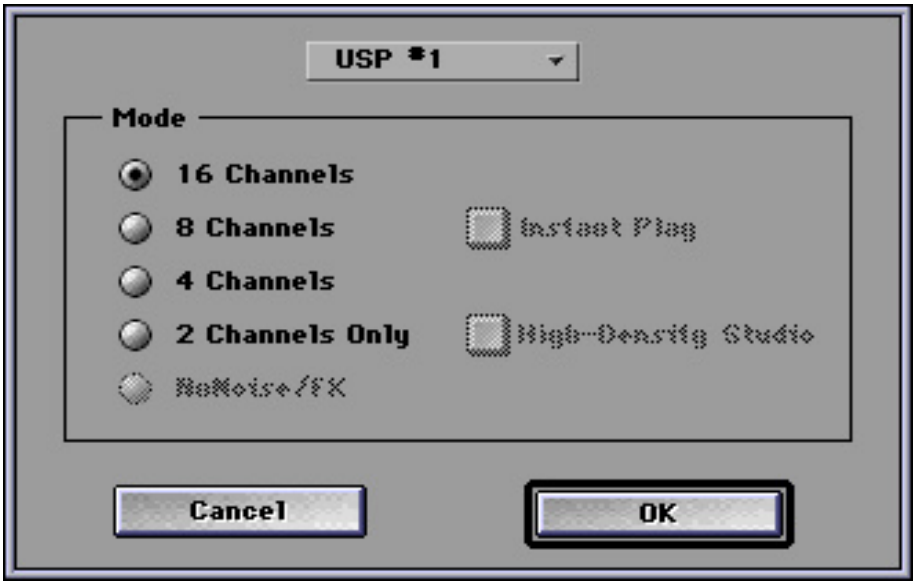
Playback Functions

Cue to Instant Play

This feature is designed to offer instant access to audio that is loaded into an EDL. All customers can take advantage of this feature, however a special SonicStudio 16•24 mode is designed to offer optimal performance.

To use this feature:

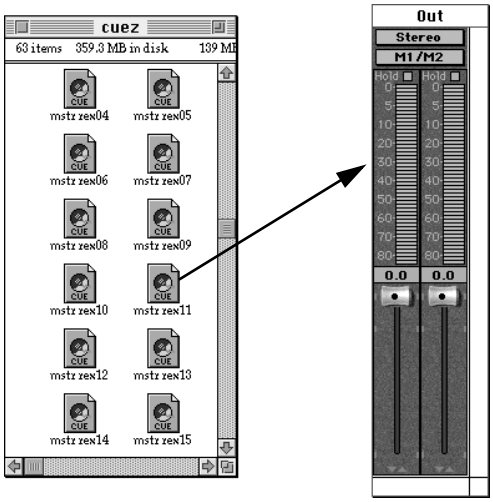
1. Set your SonicStudio 16•24 board to 8 channel mode.
2. Select the Instant Play check box, found to the upper right of the mode checkboxes.
   Please note that checking this box while already in 8 channel mode will redraw your Mixing Desk.
3. Cue to the point you wish to play using the Transport Panel.
4. Click on the PAUSE button, then the PLAY button.
   The audio will begin playing immediately upon selecting the PLAY button.



Use of this feature without using the special SonicStudio 16•24 mode or using an SSP3 will provide faster access to audio but it will not be instantaneous.

Drag-and-Drop Audition

Version 5.0 provides audition of sound and cue files by dragging the file or folder icon's image on top of the Mixing Desk's master output section. Files can be auditioned from the Finder, from the System 7.5 Find File utility, and from the file cataloging application, Cumulus.

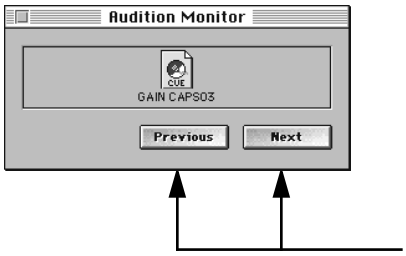


To audition a Cue File, drag its icon from the Mac Finder to the mix desk output strip

Auditioning Cue Files

To audition a cue file from the Finder, locate the file you wish to play and drag its icon to the Mixing Desk's master output strip.

Once you let go, a small dialog box appears and the file plays through the Mixing Desk on audition channels A1, A2, etc. up to the number of channels in the cue file. Routing to the system outputs is determined by the Mixing Desk patching.



The Previous and Next buttons become active when multiple files are queued

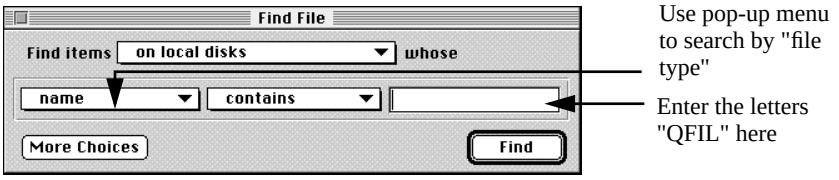
You can select several files and drag them together or drag additional files to the strip as the first file plays to be played in the order added. When multiple files are in the queue, the Next button on the Audition Monitor dialog box can be used to halt the current play and move directly to playback of the next file. Then the Previous button becomes active as well. When a file finishes playing to the end, the queue moves on to the next file automatically. When the last file in the queue finishes playing, the Audition Monitor is dismissed.

Auditioning from Find File

Macintosh System 7.5 includes a utility to locate files anywhere on the computer or on any computer on the network. You can use drag and drop to audition cue files directly from the Find File window.

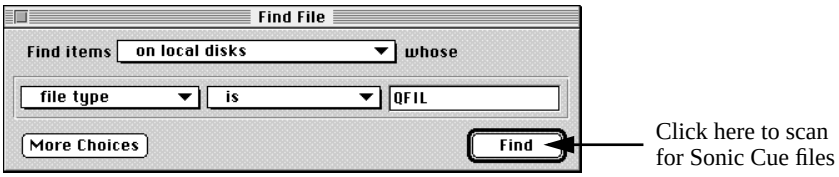
To use audition from Find File:

1. Select Find from the File menu.
   The Find File dialog box initially displays a single option to search by file name.



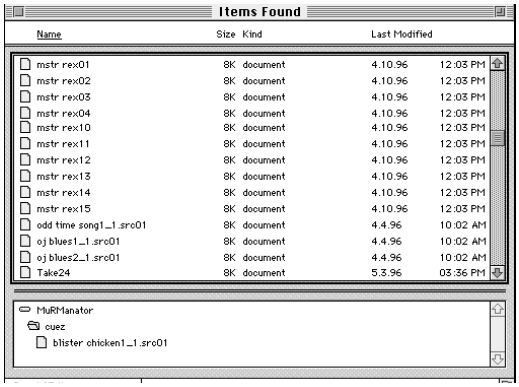
The left-most item in the Find File dialog box is a pull-down menu with a number of options.

2. To locate SonicStudio Cue files, select file type from the left pull down menu.



3. Enter the letters QFIL in the search field on the right.

In the Macintosh system, all files have a 4-character code embedded that identifies what kind of file they are and what program will recognize them. QFIL is the designation for a SonicStudio Cue file.



When you click on the Find button, the system will scan for a moment or two, then produce a window with a list of all cue files available on the local disk. From this window, you can drag any file directly to the mix desk output strip for auditioning. You can use the Find Items pull-down menu to expand the search. The More Choices button can be used to specify additional qualifications for search, such the file name, date, etc.

You can also enter descriptive keywords into the comments field of a file and use these to search.

To enter comments:

1. Select a file icon in the Finder.

2. Choose Get Info from the File menu.

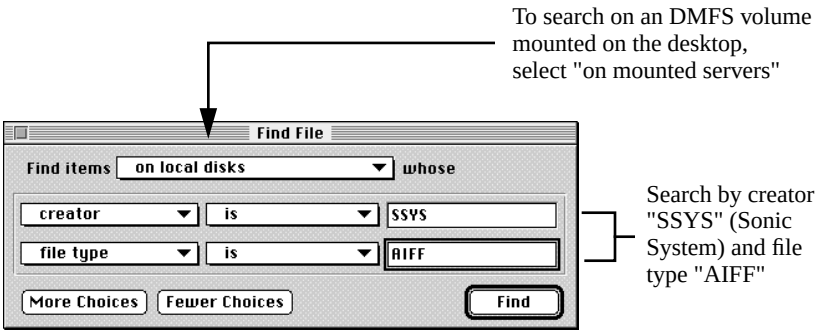
When searching by comments, also search by file type QFIL as above, using More Choices to add the additional specification for comments. This makes the search much faster.

Auditioning from Cumulus

The drag and drop audition technique also works in windows for the file cataloging program *Cumulus*. It is beyond the scope of this document to describe the operation of Cumulus.

Auditioning Sound Files from the Desktop

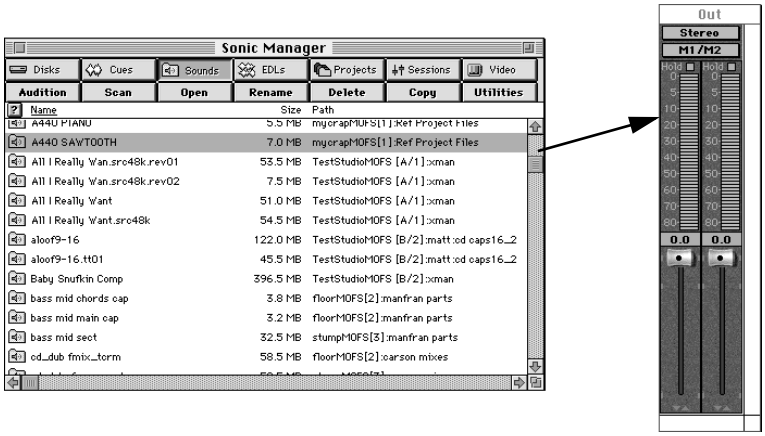
You can audition soundfiles directly from DMFS volumes mounted on your Macintosh desktop. Note that you must drag the actual sound file icon, not the icon of the enclosing folder. All channels of the file will play when you do this, even though you drag only a single channel's icon.



You can also search for sound files using Find File as with Cues, this can be very useful and can eliminate at lot of moving about in the folder hierarchy. SonicStudio sound files are type AIFF, but unlike most AIFF files, they have individual files for each channel, rather than interleaving the channels together. To search for SonicStudio AIFF files, you need to specify the file's “creator” as well. This code for SonicStudio is “SSYS” as shown above. In addition, be sure to the select the “Find Items on mounted servers” at the top of the dialog box.

Audition from the Sonic Manager

You can also audition Sound and Cue Files from the Sonic Manager. The same drag / drop functions, multiple file, and file addition rules apply with one exception. When using drag / drop from the Sonic Manager, first select the file(s) you wish to use. Then apply a second mouse click and drag them onto the desk output strip.

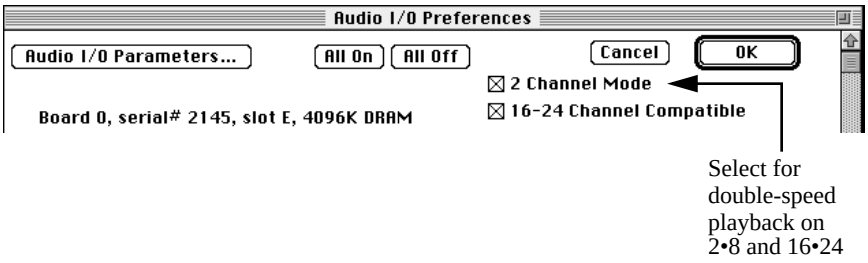


Double-Speed Playback - SonicStudio 2•8 and 4•12

SonicStudio 2-8 and 4-12 cards now have the capability to play back audio at double-speed. To use this feature, you must own Varispeed Sample Rate Conversion (SS-500). This feature allows you to put SonicStudio into a two-channel mode, then use Varispeed to double the sample rate of the system. By auditioning any audio on an EDL, you get clear, clean audio at twice the normal playback rate. This feature works much like the SonicStudio 16•24 version, and is great for dialog or narration editors trying to get through a lengthy file.

To put SonicStudio into two-channel mode, first select the Audio I/O preferences from the Preferences menu in the File menu. When presented with the Audio I/O dialog box, you will see a checkbox for

"Two-channel Mode." Check this box, then click OK. The mixing desk and master faders will disappear for a moment, then return with only two channel strips available.



Note – For double-speed SonicStudio 2•8 or 4•12, the mixing desk will still show four channels, but do not route audio to channels 3 and 4. They are not functional.

Double-Speed Playback - SonicStudio 16•24

Version 5.0 provides increased range for the Varispeed on Playback function in SonicStudio 16•24-based systems, up to two times normal play speed. To access the additional speed range, you must switch the Mixing Desk to a new 2-channel mode to free DSP power needed for double-speed play.

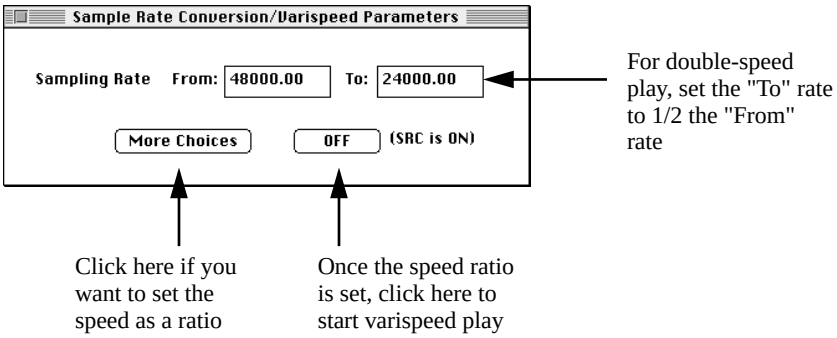
Preparation

To switch the mode of the Mixing Desk to 2-channel (double-speed) mode:

1. Select the Audio I/O Preferences (option-A).
2. Click on the image of the SonicStudio 16•24 card in the center of the dialog box.
   This opens the mode-select dialog box.
3. Select the 2 Channels Only button.
4. Click OK to close the dialog box and redraw the mix desk.

Double-Speed Play

After setting the Mixing Desk to the 2-channel mode, you can start double-speed play by selecting Varispeed on Playback from the Play menu.



The dialog box that appears is the same as used for sample-rate conversion and specifies the speed change as a shift from one sample rate to another. You can set the speed ratio for varispeed playback by entering a sample rate in the “To” field of half the value in the “From” field. Alternately, you can click on the More Choices button to expand the dialog box. In the expanded dialog box, you can express the change in speed in several ways.

Once you set the ratio, click on the On/Off button to switch the speed change in and out. You can leave this dialog box open and switch the speed change in and out even while sound is playing.

CD Mastering

The Sony CD-924 is functionally identical to the CDU-920 with the exception of being able to read a CD at 4x speed. SonicStudio supports the same functions on the 924 as on the 920. There are no procedural changes, so there is no new documentation. You will notice that when the CD-924 is attached to the Sonic SCSI chain that it is recognized as a Sony-924 in the status window during launch. You may also notice that the pre-priming delay is a bit longer for the 924 as it prepares to write a CD. This is normal. Refer to the SonicStudio manual for information on using your CD Recorder.

CD Master Image (CDMI) Files

A CD Master Image (CD File) is a bit-for-bit representation of a CD master that resides on a SonicStudio DMFS volume. When an EDL is transferred to CD in the customary manner through the Project Manager, SonicStudio performs dither, crossfades, gain adjustments, and possibly other processing (as in a Desk Dump) as audio is transferred. This imposes constraints on time and bandwidth. It also precludes bit-by-bit checking of the output, as the output from pass to pass may vary.

The CD File is generated from the Project Manager, in the manner of a dump to tape or CD-R. The file is an exact image of the CD master data and can be transferred directly to other media (CD-R or DDP) without further processing.

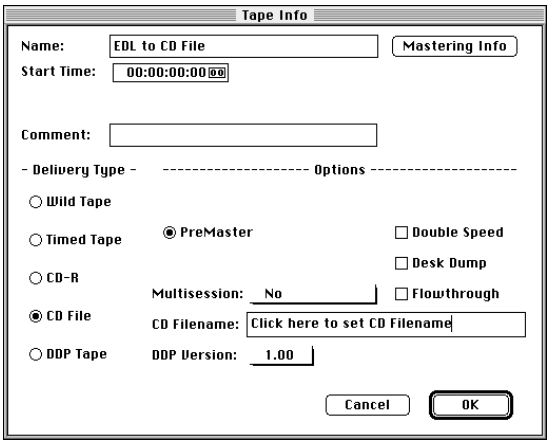
The CD File is actually a folder containing four files corresponding to the four DDP streams present on a DDP tape. These four files are:

- DDPID
- DDPMS
- SD
- The actual data as it is to appear on the CD

The files are organized in this way so that ISRC data can be added to an existing master file that does not yet have ISRC. If all data were combined in a single file this would involve reading and rewriting the entire (possibly 650 Megabyte) file.

Dump from EDL to CD File

The Project Manager Tape Info dialog box now has an extra radio button for dump to CD File. When selected, this button enables other fields relevant for this kind of dump:



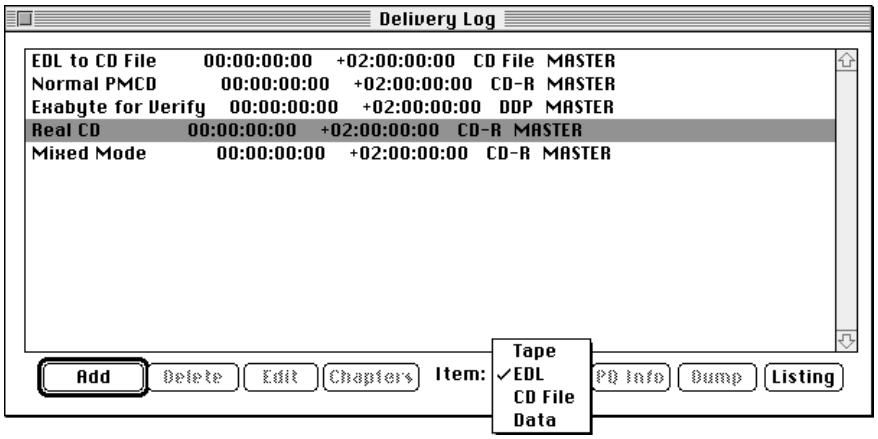
1. A field which allows the user to set the file name and path. Only a DMFS volume mounted as a sound drive on SonicStudio can be the destination. The destination volume can be local or remote.

2. A check box for Double Speed and for Desk Dump. Note that the box for Flowthrough remains active but you should not attempt to do a Flowthrough to CD File dump, it will not work.

You dump to a CD File the same way you dump a Tape to CD-R or DDP.

Dump from CD File to CD Master Device

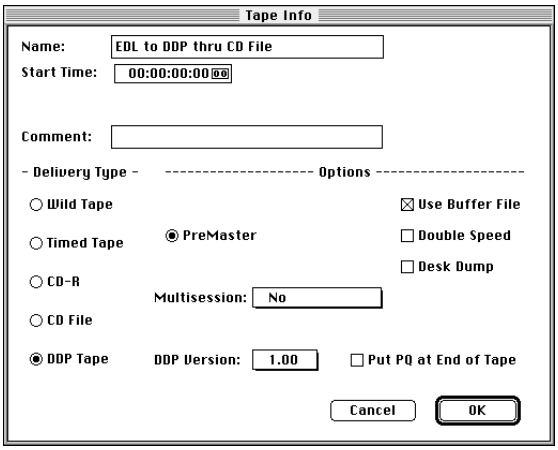
After producing a CD File you can dump it to a CD-R or DDP tape. The Item field in the project manager delivery log dialog box contains a new item called CD File. You add this item to a new tape and then dump it. A Project Manager Tape can contain only one CD File. Of course, dumping from a CD File to a CD File is not possible.



It is possible to make two "tapes", one that goes from EDL to CD File and one that goes from that CD File to the CD or DDP. You can select both of these tapes and click on the "dump" button to perform both dumps in sequence. There may be some non-ideal U.I. issues with this method, but it is possible.

Dump from EDL to CD Master Device (8505)

The Use Buffer File check box is enabled in the Tape Info dialog box when the radio button for CD or DDP is selected.

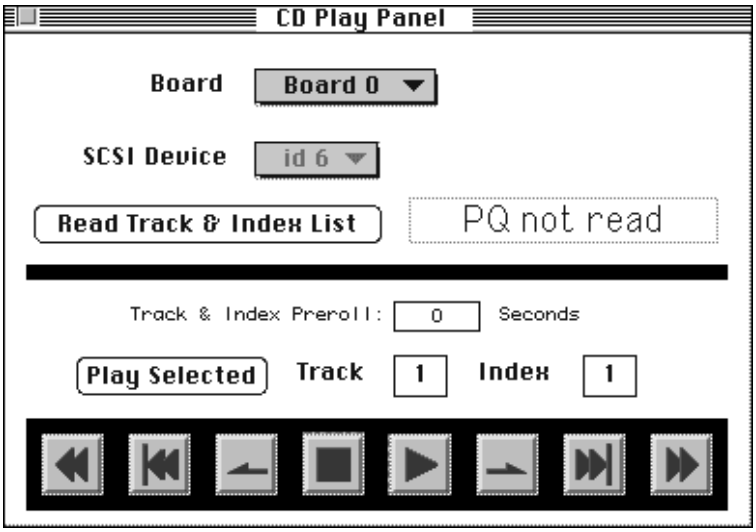


All dumps to CD-R or DDP that have an EDL in the Project Manager tape pay attention to this "Use buffer file" check box. If this box is checked, the dump will proceed through a short (up to four minutes) looping CD File to decouple the EDL play from the data-rate requirements of the destination device. Such dumps use twice the SCSI bandwidth of a similar non-looping dump. So, for example, on the SSP3 such a dump may be in the foreground at single speed.

This feature was designed primarily to allow for EDL dumps to the Exabyte 8505. For this to work, the audio must go through a looping CD File (Buffer File) and then on to the DDP tape. When dumping to CDR or to the Exabyte 8500 from an EDL, using the Buffer File feature is unnecessary.

CD Play Panel for DDP/PMCD Audition

The CD Play Panel is accessed from the Utilities menu. This window is used to select a CD Master SCSI device and audition audio from user-selected PQ points.

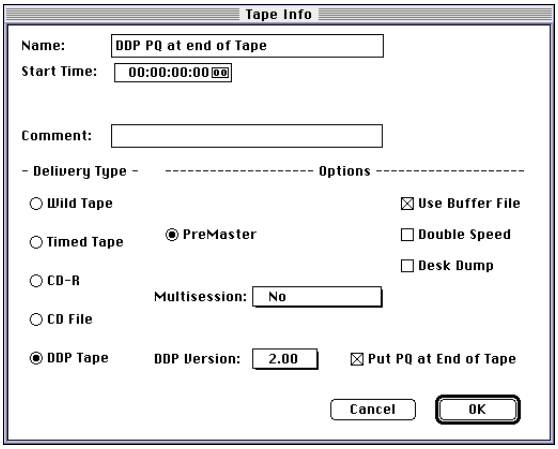


1. Select the SCSI Device to be read from the SCSI Device pop-up menu.
2. Click on the Read Track & Index List button to read the contents of the CD Master.
   When PQ is successfully read, the text to the right of the button reads "Tracks 1 to #". The Track & Index Preroll value is normally left at zero. However, this value can be set to either a positive or negative number.
3. Enter a valid track or index number.
4. Click on Play Selected or press Enter to auditon the audio.

You can also use the transport buttons at the bottom of the window. In left to right order, are: rewind, previous track, previous index, stop, play, next index, next track, fast forward. Rewind and fast forward are only meaningful for tape devices.

DDP PQ at End of Tape

The Put PQ at End of Tape check box on the Project Manager Tape Info dialog box is enabled when the destination is DDP.

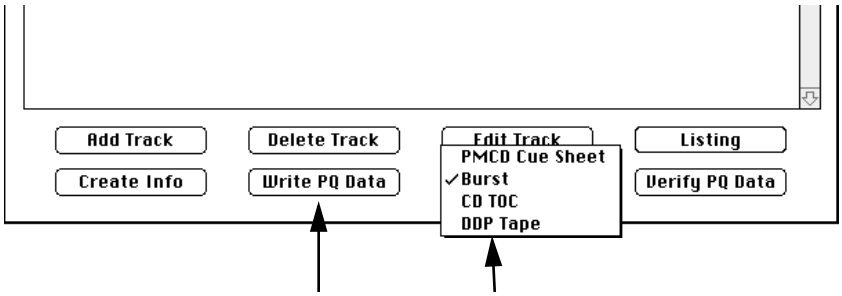


If this box is checked, the dump code will put the DDP PQ stream at the end of the tape rather than near the beginning. This feature should only be used if you need to add your ISRCs after writing the rest of the tape, as using this feature increases the time it takes to verify the tape.

DDP PQ Read-Back/Re-Write

The Project Manager PQ Editing window has two changes. First, the Read PQ Data pop-up menu has an additional selection titled DDP Tape. Second, the existing Create Burst button is replaced with a button titled Write PQ Data. This button serves both the previous Create Burst when creating a PQ Burst for dump to tape, and the new feature DDP Tape for writing edited PQ Data back to the DDP tape.

These changes allow you to read PQ from a DDP tape, add ISRC which was not present, and then quickly rewrite the new PQ info to the tape. Only DDP tapes which have been written with the PQ data at the end of the tape can be rewritten with the Write PQ Data menu.

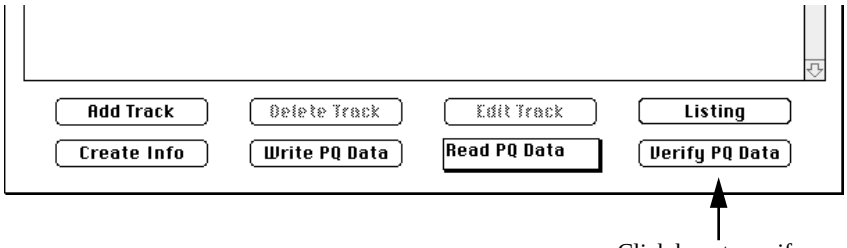


Click here after adding/editing ISRC to write edited PQ Data back to DDP Tape

Click here to read back the written PQ Data from the DDP Tape

Verify PQ Code in DDP Master Tapes

In Version 5.0, you can verify the validity of DDP master tape or Premaster CDs by checking the contents of the PQ code information on the tape against the PQ log open on the system.



Click here to verify PQ data on tape or disk against PQ log

The buttons in the PQ Log window have been rearranged somewhat to accommodate the verification function. Following transfer to CD-R or exabyte from the Delivery Log, return to the PQ Log window and select Verify PQ Data.

PCM 9000 Digital Master Disc Recorder Support

SonicStudio version 5.2 can use the Sony PCM-9000 to master CDs. This section on PCM-9000 describes:

- The basic features of the PCM-9000
- The system requirements needed before the PCM-9000 can be used with SonicStudio 5.2
- How to attach the PCM-9000 to the SonicStudio SCSI bus
- How to configure the PCM-9000 so its ready to accept data for SonicStudio
- Basic procedures for using the PCM-9000 with SonicStudio

If you need more information on the PCM-9000 than appears in this document, contact your local Sony sales office or refer to the documentation Sony supplies with the PCM-9000.

Basic Applications of the PCM-9000

The PCM-9000, Digital Master Disc Recorder is a two-channel digital audio recorder that uses a removable magneto-optical disc as the recording medium. Each disk can record up to 100 minutes of 44.1 KHz, 16-bit audio. The device also supports 48 KHz, 24-bit audio. It also has the ability to lock to timecode or word sync and store PQ data.

The PCM-9000 can be used for a variety of applications as follows:

- A random access recorder for recording sessions
- A final mixdown device for music or program material
- A synchronized playback device for audio post
- A digital master recorder for creating a deliverable master for the duplication plant

Installing and Configuring the PCM-9000

Installing and configuring the PCM-9000 consists of attaching the PCM-9000 to the SonicStudio SCSI bus and then configuring the recorder for use with the SCSI bus. This section has information on:

- System requirements
- Attaching the PCM-9000 to the SCSI bus
- Configuring the recorder

System Requirements

Before you can use the PCM-9000 with SonicStudio 5.2, your system must have installed:

- The SCSI card for the PCM-9000
- Firmware, version 2.11 or higher.

Attaching the PCM-9000 to the SCSI Bus

To attach the PCM-9000:

1. Turn off the power to the Macintosh and its SCSI devices.
2. Connect the PCM-9000 to the SCSI chain using the SCSI-2 connectors (high-density, 50-pin).

Note – The PCM-9000 can be anywhere in the SCSI chain as long as its ID does not conflict with other external devices. If the PCM-9000 is at the end of SCSI chain, terminate either connector.

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3. Turn on power to all the SCSI devices and the PCM-9000.
4. Turn on power to the Macintosh.

Configuring the PCM-9000

After the PCM-9000 has been attached to the SCSI bus, use the front panel of the PCM-9000 to configure it for use with SonicStudio.

To configure the PCM-9000:

1. Insert a blank disc.
   The disc loads automatically. When the disc has been successfully loaded, the STOP key lights.

2. Do one of the following:
   Press the System Control key until the indicator for Remote-2 (SCSI) lights
   or
   Press the Remote-2 (SCSI) key directly.
   You have now configured the PCM-9000.

PCM-9000 and SonicStudio Features

Once the PCM-9000 has been installed and configured for use with SonicStudio's SCSI bus, the PCM-9000 is ready to accept data from SonicStudio. SonicStudio takes over most of the operations of the PCM-9000. Without using the controls of the front panel on the PCM-9000, you can use SonicStudio to read data, write data, set sample and bit rates, and erase old data.

One of the strengths of the PCM-9000 is its flexibility. This section lists some of the things you can do using the PCM-9000 with SonicStudio.

Write, Load-back, and Erase Audio

For audio, you can:

- Choose to work at 44.1, 44.056, and 48 KHz sample rates.
- Use 16-, 20-, or 24-bit resolution. The higher the bit rate, the less recording time available per disc.
- Automatically switch the PCM-9000 to a selected sample rate and bit resolution.
- Write audio to disc at single or double-speed.
- Write audio with or without PQ data in the same pass.
- Write the entire disk at once.
- Load-back the entire disk.
- Erase the disk before overwriting.

Read, Write, or Verify PQ Data

PQ data includes information about a CD, such as:

- Start of a track point
- End of a track point
- Indexes
- Table of contents
- ISRC
- UPC

Hardware Support

The PCM-9000 supports:

- SonicStudio 16•24 NuBus or PCI

The PCM-9000 stores the PQ data in a reserved area of the disc, similar to the way an Exabyte DDP tape stores PQ data.

The PQ information stored on the disc is not used by the PCM-9000 to locate different tracks on the disc. Instead, premastering facilities and mastering plants use this PQ information to write the subcode data to the glass master used to create, stamp, and replicate CDs.

You can use the PCM-9000 to read, write, rewrite, or verify PQ data. More details on reading, writing, rewriting, or verifying PQ data are in the section on using the PCM-9000.

PCM-9000 Track Marks Not Used by SonicStudio

Both SonicStudio and PCM-9000 use track marks, but in different ways. With SonicStudio, PQ Start and PQ End are called track marks.

With PC-9000, track marks can be compared to DAT IDs, which are used to designate individual songs or sections. The PCM-9000 track marks can be seen automatically using signal level thresholds or manually using the front panel controls. Once track marks are set, you can use the front panel to skip from song to song or section to section, much like navigating a CD or DAT. SonicStudio does not place or acknowledge PCM-9000 track marks.

Record IDs Not Used

When recording from the audio inputs on the PCM-9000 and using the front-panel controls, whenever recording starts or stops, the PCM-9000 places a record ID on the disc. You can use the front panel of the PCM-9000 to select a record ID so you can skip between takes, punch-ins, or tracks. SonicStudio does not place or acknowledge these record IDs.

Using the PCM-9000 with SonicStudio

This section has step-by-step procedures for using the PCM-9000 with SonicStudio to work with audio data and image files. Topics include:

- Writing audio data to a disc
- Loading audio data from a disc into SonicStudio
- Reading, rewriting, or verifying PQ data on a disc
- Writing an image file to a disc

If you need more information on basic procedures mentioned in this document, such as creating an EDL, see the SonicStudio *Reference* Manual.

Writing Audio Data to a Disc

You can write audio data with or without its PQ data.

Unlike a dump to a CD or DDP which can only use a 44.1 KHz sample rate, you can dump using 44.1, 44.056, or 48 KHz. The SonicStudio's preset audio clock rate determines the sample rate set on the PCM-9000 when SonicStudio initiates the dump.

The basic procedure for writing audio data is similar to that used to write a CD or DDP tape.

To write audio data:

1. Create and save the EDL.

   When you save the EDL, make sure that the top two panels are destination panels and contain your audio tracks.

2. Start a new project and select the destination device and speed.
   - To start a new project, from the File menu, select New -> New Project.
   - In the dialog box that opens, fill in the Customer, Title, and Project boxes as needed.
   - Click Delivery. The Tape dialog box opens.

- In the Tape dialog box, use the Master Disk Recorder option to select the PCM-9000 as the destination device.
- Select Double-Speed or Desk Dump checkboxes (or single-speed if you leave both checkboxes empty). Double-Speed writes your project at twice real-time. Desk Dump performs a single-speed dump with automation. To write at single-speed, leave both checkboxes unselected. Like other SonicStudio dumps, dither and/or noise-shaping are applied on single-speed dumps, but not double-speed dumps.
- Click OK.

3. Set the bit rate.
   - From the File menu, select Preferences -> Audio I/O Parameters.
   - In the dialog box that opens, change the Output Data Bits Precision to the resolution that you want stored on the PCM-9000 disc (16-24 bits).
   - Click OK.
4. Add the project to your EDL.
   - From the Delivery Log pop-up menu in the Delivery dialog box, select EDL.
   - Click Add.
   - In the dialog box that opens, select the start time, and add any comments.
   - Click where you see the words Click here to Set EDL Name.
   - Use the standard Mac dialog box that opens to select the EDL.
   - Click OK when you are finished with this dialog box.
5. Start the dump.
   - Click to select a tape in the delivery log.
   - If the EDL does not have PQ marks, you can now click Dump to write the EDL to the PCM-9000 disc.

- If the EDL has PQ marks, you must create PQ information. Click PQ Info. The PQ log opens. Click Create Info to extract the PQ data from the EDL and add it to the PQ log. If desired, you can use the PQ log to add, modify, or delete PQ information such as tracks, indexes, ISRC, or UPC.

Note – If the PCM-9000 disc is not blank, SonicStudio will ask if you want to erase the disc.

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6. From the File menu, select Save. Use the dialog box that opens to save and name your project.
7. In the Delivery Log, click Desk Dump to write the CD file to the PCM-9000 disc.

Loading Back Audio Data from a Disc into SonicStudio

Before you begin loading back audio data, make sure that the DMFS sound drive is mounted on the desktop. If the DMFS sound drive is not on the desktop and you try to load back audio data, SonicStudio will generate waveforms, but will not save them. The project files will have neither waveforms or PQ data.

If you are not using a MediaNet system, you can add the DMFS sound drive to the desktop using XFS. If you are using MediaNet, you can add it using the Chooser.

To load back audio data:

1. Open the project that has the tape or disk used to create the disc.

Note – If you are starting a new project, open the File menu and select New -> New Project. Fill in the Customer, Project, and Title boxes as needed. Then click OK to create a default tape.

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2. In the Project dialog box, click Source.
   The Tape dialog box opens.
3. In the Tape dialog box, select the radio button for the Master Disk Recorder (PCM-9000).
4. Select Double-Speed to load the disc back at twice real-time.
5. In the Source Log, click Load.

Reading or Rewriting PQ Data on a Disc

You can read or rewrite PQ data as needed using the PQ Read/Rewrite and Verify features of the Project Manager.

To read PQ data from a PCM-9000 disc:

1. If you dumped an EDL or image file to the PCM-9000 disk, open the project used for that dump.

Note – If you are starting a new project, open the File menu and select New -> New Project. Fill in the Customer, Project, and Title boxes as needed. Then click OK.

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2. In the Project dialog box, click Delivery. The Delivery Log displays.
3. In the Delivery Log, click PQ Info.
4. In the dialog box that opens, use the pop-up menu option to select PCM-9000.
   SonicStudio scans the disc for PQ data and displays the results of its search in the PQ log.

Writing PQ Data on a PCM-9000 Disc

The most common use for this feature is to take the PQ data read from a PCM-9000 disc, edit it, and then write the data back onto the disc.

To write PQ data:

1. Follow the same steps that you used to read the PQ data.
2. In the PQ dialog box, edit any tracks, indexes, ISRC codes or status flags such as Copy Permit.
   To do this, select a track in the PQ Log, then click Edit Track or Add Track to change your PQ data.
3. To write the new PQ data to the PCM-9000, click Write PQ Data.

Verifying the PQ Data on a PCM-9000 Disc

This feature usually is used to check the PQ data on a disc for problems with structure or errors versus the project PQ log.

To verify the PQ data:

1. After writing audio and PQ data or PQ data to the disc, return to the PQ dialog box using the project you wrote the data with.
2. Click Verify PQ Data if you have a project file and then skip the next step. If you do not have a project file, you must create one so go to the next step.
3. To create a new project, go to File menu and select New -> New Project. Fill in the Customer, Project and Title boxes as needed. Then click OK.
4. Click the Delivery button.
5. In the dialog that opens, select the Master Disc Recorder radio button.
6. Click OK.
7. Click PQ Info on the Delivery Log dialog box.
8. In the PQ dialog box that opens, click Verify PQ Data.

Writing an Image File to a Disc

You can write 16-bit, 44.1 KHz CD master image files or CD files to a PCM-9000 disc. Because image files are a bit-for-bit representation of the final master, you can't change the bit resolution, sample rate, dither, or other variables.

To write an image file:

1. From the File menu, select New -> New Project.
2. In the dialog box, fill in the Customer, Title, and Project boxes as needed.
3. Click Delivery. A dialog box opens.
4. In the dialog box, use the Master Disk Recorder option to select the PCM-9000 as the destination device.
5. Select Double-Speed or Desk Dump (optional).
6. Click OK.
7. From the Delivery Log pop-up menu, select CD File.
8. Click Add.
9. In the dialog box that opens, select the CD file you want to write.
10. From the File menu, select Save to save and name your project.
11. In the Delivery Log, click Dump to write the CD file to the PCM-9000 disc.

Editing

A number of enhancements have been added to further refine editing with SonicStudio.

Left Gate to Next Edit

The Left Gate to Next Edit command previously would not move past the position of the right gate. It now moves the right gate as well, so that the range of the left gate is no longer constrained.

Left Edge to Wherever

In earlier versions, if you invoked the Left Edge to Wherever command while only the first segment in the panel was highlighted, all segments in the panel would move. This has been corrected so that only the selected segments move in all circumstances. If no segments are selected, this command moves all segments.

Zoom to Segment

In previous versions, the Zoom to Segment command would zoom only to the first segment. This has been corrected to zoom to the selected segments.

Add Panels to EDL Automatically

If you fill the last channels of an EDL by dragging segments, etc., the system will now automatically add two more channels. Previously, this feature only applied to Insert edits using In and Out points.

Paste Editing

Version 5.2 offers two different Paste editing methods. Using the standard Command-V to Paste a Segment inserts the Segment over any pre-existing audio. Using the newly-implemented command, Shift-V,

creates an overlay of the Pasted Segment on top of any pre-existing audio. Use this new method if you wish to keep the original audio/fades in place under the newly Pasted Segment.

New Features of Version 5.2

This section describes the new features of SonicStudio 5.2:

- 96 KHz High-Density Studio software and support for the Sonic High-Density I/O
- Support for the new PCI version of SonicStudio 4•12
- Support for the Sony PCM-9000 Master Digital Disc Recorder
- OMS support and new MIDI controller integration
- New dialog boxes

High-Density Studio

High-Density Studio allows your SonicStudio 16•24 to run at sample rates of 96 KHz or 88.2 KHz and at 16 to 24 bits for recording, editing, playback, and mixing. With SonicStudio High-Density I/O, you can:

- Record stereo High Density Audio™ at these sample rates
- Edit your material
- Playback up to eight streams of audio simultaneously
- Mix through a special two-channel mixing desk
- Convert the signal down to 44.1 kHz for dump to CD

Many of the features normally available for the standard sample rates in SonicStudio are supported for High-Density Studio.

SonicStudio version 5.2 supports two channels of High-Density Audio in and out, with the High-Density I/O.

Details on setting up the card and I/O box are explained in the manual titled *Installation and Maintenance*. The manual titled *Software Accessories* has a section titled *High-Density Studio* with details on system requirements, installing the software, and configuring the equipment.

SonicStudio 4•12 PCI Card

SonicStudio 5.2 supports the new SonicStudio 4•12 PCI (Peripheral Component Interconnect) card.

Earlier Macintosh systems use an expansion slot called NuBus to extend system functions.

Newer Power Macintosh systems, such as the 9500, 8500, and other MacOS Compatibles use the PCI expansion bus.

Unlike NuBus, PCI directly accesses the CPU, setting up one data transfer while the previous one is still running. Apple states that the PCI card performs about three times faster than NuBus cards.

Since Sonic hardware has been designed to do most of the processing required by the SonicStudio software, the board does not depend on the Apple expansion bus for much of the work. Therefore, there are few speed changes in SonicStudio when using the PCI bus. The real speed increase comes from using the faster, more powerful CPUs that now accompany PCI-based computers.

Further information on installing SonicStudio PCI and NuBus cards is in the *Installation and Maintenance* manual.

Sony PCM-9000 Digital Master Disc Recorder

SonicStudio version 5.2 can use the Sony PCM-9000 Digital Master Disc Recorder to master CDs.

The PCM-9000 is a two-channel digital audio recorder that uses a magneto-optical disc as an external storage device. Each disk can record up to 100 minutes of 44.1 KHz, 16-bit audio.

The PCM-9000 can be used for a variety of applications such as:

- A random access recorder for recording sessions
- A final mix for music or program material
- A synchronized playback device for sound for a picture
- A digital master recorder for creating a deliverable master for the duplication plant

The section on CD Mastering in the Section on New Features Since Version 5.0 has details on:

- The basic features of the PCM-9000
- The system requirements needed before the PCM-9000 can be used with SonicStudio 5.2
- How to attach the PCM-9000 to the SonicStudio SCSI bus
- How to configure the PCM-9000 so its ready to accept data for SonicStudio
- Basic procedures for using the PCM-9000 with SonicStudio

If you need more information on the PCM-9000 than appears in this document, contact your local Sony sales office or refer to the documentation Sony supplies with the PCM-9000.

Audio Loadback

SonicStudio 5.2 now supports Audio Loadback from various SCSI devices. Loadback is the ability to take a CD, DDP tape or PCM-9000 disc and copy the audio into SonicStudio, along with any PQ information contained on the disc. This feature is useful for loading audio from any Red Book CD, or for loading in a customer project that started at another facility, or when the record company requests changes to a master.

The audio can be restored into SonicStudio, re-edited, tracks added, re-equalized, and remarked with new PQ codes, then dumped back to a new master.

The Loadback feature is supported for the following devices:

For CD Loadback:

- Sony CDU-920
- Sony CDU-924

For DDP Loadback:

- Exabyte 8500C
- Exabyte 8505
- Exabyte 8505XL

Master Disc Loadback:

- Sony PCM-9000

Note – There are currently firmware compatibility problems with the Exabyte 8505XL and SonicStudio. We recommend checking with your Sonic dealer or the Sonic Web page at www.sonic.com for the latest information.

Any SonicStudio hardware platform supports Loadback, although only the SonicStudio 16•24 supports loadback on the PCM-9000.

During the loadback process, SonicStudio copies the entire disc or tape in as a single sound file. Any PQ data found on the media is also retrieved. At this time, loading back individual tracks or sections from a disc or tape is not yet supported. The Loadback process itself takes place in the background, but the waveforms for the loaded audio can also be generated, and this process is roughly real-time. Therefore, the total time for a loadback can be as much as 1.5 times the length of the program material.

Note – Dither, DC rejection, or de-emphasis are not applied during an audio loadback. The audio is loaded bit for bit as it exists on the source media.

Also, loadback from any of these devices to an Image File is not yet supported. The loadback will create an EDL and an audio file.

When the loadback process is finished, it automatically opens the EDL into the foreground for you, at which time you are free to save, name, and edit the EDL.

To load back audio from a mastering device:

1. Make sure your DMFS sound drive is mounted on the desktop. This can be done using XFS for non-MediaNet systems or with the Chooser for systems equipped with MediaNet.

Note – If the drives are not mounted on the desktop, SonicStudio will go through the process of generating waveforms but will not be able to save them anywhere, so the files will contain neither waveforms nor PQ data.

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2. Open the project that has the tape or disk used to create the disc.

Note – If you starting a new project, open the File menu and select New. Then select New Project. Fill in the Customer, Project, and Title boxes as needed. Then click OK to create a default tape.

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3. Click the Source button in the Project window. The Tape dialog box opens.
4. In the Tape dialog box, select CD, DDP, or Master Disc Recorder (PCM-9000), depending on the device you're loading from.
5. Click OK.
6. Select Double-speed for CD or PCM-9000 Loadbacks to load at twice real-time. DDP Loadbacks will proceed at roughly 2 to 3 times speed automatically.

7. Click the Load button on the Source Log. If you wish to skip the process of generating waveforms during loadback, hold the Option key down on the keyboard when you press the Load button.
8. Use the background manager to monitor the progress of loadback.

OMS Support

SonicStudio now supports Open Music System™ (OMS).

SonicStudio 5.2 introduces support for the OMS system extension developed by Opcode. OMS has become the MacOS standard for interfacing MIDI hardware and software. OMS replaces the Apple MIDI Manager as the primary software interface for MIDI data between SonicStudio and the Macintosh serial ports. MIDI Manager is no longer developed by Apple and is unlikely to be supported on future Macintosh models or MacOS compatibles.

As part of this new MIDI support, SonicStudio now offers improved integration with MIDI controllers for mixing and editing. SonicStudio 5.2 includes MIDI map support for:

- Standard Volume/Pan MIDI controllers
- the JL Cooper CS-10
- the Penny + Giles DC16
- the Penny + Giles MM16

For more information on using MIDI controllers with SonicStudio, see the chapter on external controllers in the manual titled *Installation and Maintenance.* For additional MIDI maps as they are released, please check the Sonic Website at www.sonic.com.

New Dialog Boxes

The new dialog boxes include:

- The Analog Black to Marks dialog box
- The Video Info dialog box
- MIDI Preferences dialog box

The manual titled *Reference* has details on how to display and use the Analog Black to Marks and MIDI Preferences dialog boxes. For more information on the Video Info dialog box, see the *Digital Video Playback* tab in the manual titled *Software Accessories.*

Operational Notes and Tips

▼ Calculate Folder Sizes

Having the Mac Control Panel 'Views' set to Calculate Folder Sizes can interfere with normal operations in SonicStudio. Typical anomalies include the Playhead skipping or stopping for up to seconds at a time, meters freezing, and general sluggishness. Please check this Control Panel and make sure that this box is not checked.

▼ Removable Media Drives

When using removable media drives, the media must be write-enabled. Having write-protected media in a drive may cause problems in accessing the soundfiles or mounting the drive.

▼ Packed 24-bit Files

Packed 24 bit files are not compatible on SonicStudio 2.8 and 4.12 systems or on SonicStudio 16•24 systems that do not have the correct hardware requirements. Please see the section titled *True 24 bit File System*, for details on hardware requirements.

▼ Creating UFIDs

When copying files in the Finder or restoring sound files from third-party archivers, you must create a Unique File ID (UFID) for each new file created.

To do so:

1. Go to Sonic Manager /Sounds.
2. Select the files you just copied or restored.
3. Press the Utility button.
4. Press the UFID button.
   This will quickly create a valid UFID for each file.

You can also select all files and create UFIDs. Doing this will not damage any existing UFIDs and will assure that all your new files have been accommodated.

▼ **DAT Restore**

On DAT restore, when the system is looking for the next sync mark, it pauses and you hear a buzzing sound if you are performing foreground operations. This is necessary as the system must make sure it is in sync with the tape. You will see a message alerting you that the system is 'pausing to sync with tape'. When this happens, it is best to stop foreground operations until the restore proceeds past the message.

▼ **MediaNet Changes**

If you are using networked systems with MediaNet, Version 5.2 requires that you install MediaNet version 1.6 which is included on the SonicStudio 5.2 CD-ROM.

▼ **Folders on DMFS Volumes**

When you delete soundfiles from DMFS volumes in the Sonic Manager Sounds library, only the actual soundfiles and accompanying reduce files are deleted. The folders in which these files were in will remain on the volume. If you wish to delete both the folders and the soundfiles, you may use the Finder to throw them away or use the Sonic Manager Disks library to delete both the folders and files within.

▼ **File Allocation on DMFS Volumes**

When files that you would normally save to your Macintosh HFS volume are saved to a mounted DMFS volume (such as an EDL), the file allocations will be different. This is due to the file system block size being different on HFS and DMFS file systems. If your document is over 64k, it will take up more space on the DMFS volume than it does on the HFS.

▼ **Using Find File like Sonic Manager**

Earlier in this manual, we describe how to use the application Find File to search for Sonic Soundfiles and Cues. It is also possible to use Find File to search for EDLs, Projects, Desk Sessions, Desk Setups, NoNOISE Estimates, and BG Filter Spec Files. To search for Sonic documents, use the 'File Type' search criterion. The following will detail what to enter into the 'File Type IS' field to search for various Sonic documents:

Soundfile	AIFF
Cues	QFIL
EDLs	SSED
Projects	SPRO
Desk Sessions	SSAS
Desk Setups	SSSU
Estimates	SSET
Filter Specs	FLPR

Please see the section *Auditioning Soundfiles from the Desktop* for further details on searching for Soundfiles.

▼ **Sounds Library Scan**

You may notice a slow-down in the scan process in the Sounds library if the MOFS volumes contain many files other than soundfiles.

▼ **Sonic Manager Copy Utility**

With XFS, it is now possible to use the Finder to copy soundfiles across DMFS volumes. It is recommended that Finder copying be used instead of the Sonic Manager Copy utility as this utility can be very time-consuming and at times unstable.

EDL/Editing

▼ Cut/Copy Paste Editing

The behavior of standard Cut/Copy/Paste editing has changed somewhat in this release. The following lists the areas that are editable in this manner and those that are not.

Cut/Copy Paste editing can be used in the following areas:

- Desk settings
- Segment editing
- Project File header info
- Project Log Tape names
- Track Names in Mark Info
- Delivery Log Comments and Mastering Info
- EDL Comments
- PQ UPC/EAN Code
- Track Names in PQ Track Editor
- ISRCs in Mark Info or PQ Track Editor
- File names in Record Soundfile dialog box
- Tape name in Restore Archive dialog box
- Cue Fields in Transport Panel
- Naming Fields in Record Path Prefs
- Name and Numeric Fields in EDL Prefs [numeric fields are of course restricted to their normal boundary values]
- Nudge Factor in Nudge Prefs
- Adjust Gain Value
- Offset To Wherever... values
- Time values for edit points and segment start/end points
- Varispeed More Choices parameters

Cut/Copy/Paste editing cannot be used in the following areas:

- EDL text mode segment name
- Segment name in Waveform mode
- Edit String Labels in EDL
- Status File data [back into Status File, you may Copy/Paste from Status File to a Text Editor]

- Anything in the Background Manager

When Cut/Copy/Paste editing is used for Time Text fields such as edit point values or Segment start/end points, the keyboard commands are slightly different. To perform a Cut, use only the X key, to Copy, use only the C key, and to Paste use only the V key. Basically, you are leaving out the Command key as a modifier. You may still Copy a time from a Transport Panel cue register using the standard CMD-C, then paste that time into a time text field with the V key. You may also still capture the Now Time into a time text field by pressing the space bar while the field is highlighted.

▼ Sorting Segments in Text Mode

When sorting Segments in Text mode, if two segments have the exact same name, the segment with the larger time code value is sorted in front of the others. You may attain the sort order you wish by changing the segment names.

▼ EDL Sample Rates

Any open EDL sample rates should at all times match exactly the system master clock rate. Doing otherwise will result in errors in placement and edits in the EDL.

▼ Varispeed on Playback

Varispeed on Playback only affects those audition channels routed to M1-M2. If you are auditioning a multi-channel file that is routed to different outputs you may notice unwanted noise present. Route all outputs to M1- M2 in this case.

▼ Varispeed Scrub Operations

Although the User Interface does not prevent you from performing Scrub operations in conjunction with Varispeed, it is not recommended. You may find that the two disable each other when engaged.

▼ Scrub Limits

The duration of any scrub operation has a limit. If you scrub past the duration limit, you will hear a high-pitched whine instead of your audio. In previous versions, this limit was hard-set to begin at time zero and end at approximately 51 minutes. In SonicStudio 5.0, the limit is recalculated each time you initiate a scrub operation. So, when you begin a scrub, you can go forward about 36 minutes and/or backward 16 minutes. When you change the scrub start position, or exit scrub mode and re-enter it later, the new Now Time is noted and the limits are recalculated.

▼ Audition Multiple EDLs

Due to the new feature Multiple Play, it is no longer possible to audition multiple EDLs sequentially by simply selecting play on one while another is playing. In the past, if one EDL was playing and you went to a different EDL and selected play, the first EDL would stop playing. Now you must stop any playing EDL before moving to a different EDL. This is only a factor if you wish to have one EDL playing at any given time.

▼ Power PC Native Code for Waveform Plotting

The underlying code that deals with Waveform redrawing, such as when you zoom in or out, has been rewritten to offer true native PPC processing. Users of PPCs will notice an improvement in speed when zooming around an EDL or when performing any other operation involving Waveform plotting.

▼ Loop and Fill Segment Editing

Loop and Fill edits now apply equally to selected Segments as they do to IN/OUT point edits, and follow the same rules as any other Insert edit. That is, when Segment editing is enabled, selected Segments in the Source panels will take precedence over IN/OUT points to define the area to be inserted.

▼ NoNOISE Processing Speed Improvements

Version 5.2 includes several improvements that speed up background processing for NoNOISE users.

- Production Declicking and Dekrackle speed improvements

  SonicStudio 16•24 has been optimized to provide a speed increase of approximately 10-20% for the Production DeClicking as well as DeKrackle.

- Manual Declicking Optimized for Native PPC

  Manual DeClicking now runs in Native mode for the Power Macintosh, allowing Power Macintosh users to DeClick between approximately 15x to 70x emulation speed. Depending on the system used and the specific manual interpolator used, Manual DeClicking performs anywhere from 25% to 500% faster than identical operations performed on a Quadra 950.

▼ DeClick Restore

Manual and Production DeClicking now have the Restore lists represented on DMFS drives by icons with red bars over a waveform. These two files, designated Soundfilename.dc and Soundfilename.cl, contain the original clicks taken out by DeClicking that are made available in the EDL with the NoNOISE 'Restore Gates' command. Such icons are viewable from within the same MOFS folder containing the soundfiles that have been DeClicked.

Please note that these Click/Restore lists are upward compatible, but not downward compatible. Or, in other words, Sonic version 2.2.6 (or earlier) soundfiles with red Restore bars showing while in the EDL will have the same functional red bars showing when upgrading to version 5.0. However, the opposite is not true. If you take soundfiles DeClicked in 5.0 and go back to an earlier Sonic release, you will have only the DeClicked soundfile with no option to Restore the original clicks from the Restore list into the soundfile.

Mastering

▼ Monitoring a Background Dump

Monitoring a Background Dump on the SonicStudio 16•24 is somewhat different than on SonicStudio 2.8 and 4.12. On the SonicStudio 16•24, any dump port can be selected. The audio from the dump will patch directly to the Output Strip corresponding to the selected dump port. On the SonicStudio 2.8 and 4.12, you may only select dump ports on the main board of the system. The dump audio will not patch directly to the OP Strip. In order to monitor the dump, you will need to set up the desk to monitor the corresponding dump channels.

▼ Dump to CD with Desk Session

When performing a dump to CD with Desk Session, the selected Dump Port defines what desk channels are used for the dump. So, for example, if the dump port is set to channels 3-4, the audio is routed to desk channels 3-4 regardless of what is saved in the desk session or EDL patching. Make sure the dump port agrees with the EDL routing and Desk Session before beginning a dump.

▼ Foreground Layback Operations

Foreground Layback operations will only work if the external device is set up as a slave in the Transport Panel.

To correctly set up this situation:

1. Select the machine as master.
2. Arm the appropriate channels you wish to punch into.
3. Select the EDL as master and the machine as slave.
4. Enter the In and Out points in the Transport Panels Cue Registers.
5. Begin play with a bit of pre-roll.

The machine will punch in at the defined In Cue and out at the Out Cue.

▼ Aborting a CD Dump

If you Abort a CD Dump to the Sony CDU-920 during the Lead-in, the system resets the SCSI bus. This is normal. You may proceed as normal.

▼ EDL to CDR Dump

When dumping an EDL to CDR, the audition channels in the panels containing the edited audio must be set to A1-A2 and they must be destination panels.

▼ Creating PQ Data Manually

When creating PQ data manually, all global offsets are now respected but only applied once. That is, when you enter a new track, it will apply an offset (providing you do not have Disable Offsets turned on). The offset will be determined by the Start time relative to the previous track (Track 1 has its own offset). However, if you wish to change the Start time such that a different offset is applied, you need to delete that track and enter a new one from scratch. For example, if you enter a track that applies a Splice offset (default 6 frames), then decide to move the Start forward such the a standard Start of Track offset should be applied (default 10 frames), you would have to enter that Track from scratch.

▼ Delivery Tape User Interface

Due to the order in which selections are made and the complex combinations of selections in the Delivery Tape dialog box, you are allowed to make certain selections that are, in fact, inoperative and inadvisable to attempt:

Desk Dump to Timed Tape – If you need to dump to a Timed Tape through a Desk Session, use the Foreground Layback method. Please refer to the section *Foreground Layback Operations*.

Flowthrough to CD File – This type of dump has not been implemented.

Double Speed to DDP – When dumping to DDP from a CD File or through a looping CD File, the dump will proceed at greater than double speed to the tape drive, similar to the speed of Exabyte Archiving. Checking the double speed box will not speed up this transfer.

Desk Dump to DDP – If you wish to dump an EDL with Desk Session to a DDP tape, you will first have to make a CD File, then dump the CD File to the DDP Master. You may create a CD File using an EDL with Desk Session.

Data track to either DDP or CD File – This type of dump has not been implemented.

Multi-Session to either DDP or CDR – The User Interface has been implemented but the functions are not yet fully in place. Please do not attempt to make multi-session CDs or DDP masters.

▼ **More Delivery Tape UI**

- You may not use a CD File in a Mixed Mode Dump (with a Data Track).
- When creating a Tape using EDL-CDR, the 'Use Buffer File' checkbox is available. Please ignore this box for this type of dump, the Buffer File is only prevalent in EDL to DDP dumps.
- UI may allow you to select multiple Tapes and put them into a dump queue. For example, you may dump EDL to CD File, then CD File to CDR. The outcome of this operation can be unpredictable and it is not recommended this be done.

▼ **Bandwidth Reservation on CD File**

Please take note of Bandwidth Reservation when dumping to CD File. Remember that you are writing from a DMFS volume to a DMFS volume and available bandwidth will be significantly lower than when dumping from EDL to CDR or DDP.

Audio I/O

▼ **Using External Digital IO Boxes**

When using external digital I/O boxes, such as the TC Electronics M5000 on a SonicStudio 16•24 system, it is advisable to use inputs other than channels 1-2 for the returns of the device. We recommend connecting both the output of SonicStudio to the device and the output of the device back into channels 3-4 of your SonicStudio 16•24 Digital IO box. This way you may clock either from the SonicStudio 16•24 I/O box's internal clock, from an input to channels 1-2, or to Word Sync. The external device should clock to an output of SonicStudio, then provide a synchronous digital signal back into the system when connected in this manner.

To check that the input to SonicStudio is synchronous to the Master Clock, open the Audio I/O Prefs and look at the Input Status corresponding to the input to SonicStudio coming from the external device. You may open the Channel Status and make appropriate changes to accommodate your external device and save these changes, then recall them later. Also note that when making changes to the Master Clock or Channel Status of any source, it may take up to five seconds for inputs to acquire status and show good parity.

Autoconform Enhancements

▼ **Using Get Sounds to Substitute a Pre-recorded Soundfile for an Auto-loaded Soundfile**

If the CMX event you are conforming is an Aud3 Aud4 edit (audio channels 3 and 4 only), SonicStudio expects that the soundfile you are going to use is a four-channel soundfile (with the channel designation of .1, .2, .3 and .4). SonicStudio cannot conform an Aud3 Aud 4 event from a soundfile that contains only channels .3 and .4. In some cases, you may not wish to use a four-channel soundfile to conform an edit event that requires only channels 3 and 4. You may wish to use a stereo file, rather than a four channel file, to conform an Aud3 Aud4 edit.

▼ **Using Stereo Files to Conform Aud3 Aud4 Events**

SonicStudio can use a two channel soundfile which contains channels .1 and .2 to conform an Aud3 Aud4 event. To do this, use the Set Channels dialog box to assign Aud3 Aud4 events to L1 L2. This lets SonicStudio know that whenever the Aud3 Aud4 designation is used in the CMX list, the System is to look at channels .1 and .2 of the soundfile. Because of this fact, we suggest that whenever stereo audio is being preloaded for eventual use in an autoconform, you use L1 L2 to load the material rather than L3 L4. By doing this you ensure that the stereo files you load are designated .1 .2, and, therefore, are able to be used in a Get Sounds process regardless of the CMX edit type.

▼ **Segment marks creating segments using gates will not work if they are within a fade.**

Workaround: Edit the fade to where it does not overlap Segment marks or gates.

▼ **Insert Edits with Selected Segments force cross-fades to default.**

Selecting Insert Edits with selected Segments will move Segment by Segment, place virtual In / Out points around the Segment, then do the Insert edit one by one. The effect of this edit model is such that if you had any custom fades within the group of selected Segments those fades would revert to the default fades as the edits are made.

Workaround: Use Copy / Cut / Caste or place In / Out points on either side (not at the edit) of the selected Segment or group of Segments and Insert.

2 Issues Resolved

This chapter lists the issues resolved with SonicStudio, version 5.2.

▼ **Input dither channel swap**

When using dither on input, the left and right channels become swapped, for example, audio input to the left channel will be recorded on the right and vice versa. In general, we recommend recording at full resolution and dithering only on output. Dither on input may be found useful in situations such as recapturing returns from an external processing device.

This has been fixed. The channels no longer swap.

▼ **Crash if cancel New Project**

If you create a new project, but hit the Cancel button in the initial dialog box, the system still brings up the Project dialog box. However, if you click on one of the three Log buttons, the SonicStudio application will immediately quit.

This has been fixed. When you select Cancel on the New Project dialog box, it dismisses the project correctly.

▼ **Fade Tool Changes Overlap Setting**

The Fade tool occasionally changes the overlap setting of a crossfade when changing duration.

This has been fixed.

▼ **Drag Fade sometimes snaps back to original position**

When dragging a fade, the fade will sometimes snap back to the original position. Workaround: De-select all segments (cmd-D) before dragging fade.

This has been fixed.

▼ **Scrub (Reel-Rock) occasionally goes to wrong speed**

In some situations, the system may try to scrub at higher rates than can be supported, producing anomalous audio output. Jog mode runs away if the mouse key is held down after set. Workaround: Tap the mouse button to position the play point, then jog.

This and other scrub problems have been fixed.

▼ **Delete automation snapshot can produce bad filter setting**

If you have a desk automation snapshot in which a filter goes to setting of None filter type from a setting of an active filter, deleting that snapshot will insert a filter of the type of the previous setting, but with all parameters set to the minimum values.

This has been fixed.

▼ **On the USP, recording with DC Reject turned on causes I/O box Rx and Tx LEDs to go off until I/O Prefs is updated.**

This has been fixed. All LEDs will remain active now.

▼ **DSP edits use wrong default fades.**

This has been fixed. All of the DSP edit commands now use the correct default fades.

▼ **Changing synchronous clock sources from a digital input to Word Sync corrupted part of the channel status of the digital input, causing it to show **No Data Present**.**

This has been fixed. If the clocks are in sync, the channel status of the digital input will show Data Present.

▼ **Record Soundfile did not correctly show record path if Use Project Info was selected and a project was open.**

This has been fixed. It now shows the correct path name with a project open and updates properly when Use Project Info is selected or de-selected.

▼ **Record Soundfile reports that you can use 32 characters when in fact you can only reliably use 26.**

This is due to other symbols used to name files such as '.'. A similar message now informs you that only 26 characters can be used.

▼ **Changing a DA8's output level from Consumer to Professional occasionally causes input channels to move to other channels.**

This has been fixed.

▼ **Group selecting of Mute or Filter Bypass in a Desk Session does not work reliably.**

This has been fixed.

- **Cue Placement tool does not remember its last selection and does not default to it.**

  This has been fixed. The Cue Placement tool now remembers its last selection and defaults to it when changing between EDLs and rebooting Sonic.

- **Using the 'D-Type' manual interpolator returns an esoteric message and error.**

  If the interpolation cannot be done with this type, a clear message now alerts you.

- **Files are corrupted when the end of a DMFS disk's capacity is reached while recording.**

  Files will no longer be corrrupted when you record to the end of a DMFS discs capacity. However, it is recommended that you refrain from doing this in the first place. If you do, the recording will terminate itself when the disk space is exhautsted. In addition, reduce files for these recordings should be made correctly.

- **When clocking to 48kHz, certain combinations of Rounding, Dither and DC reject occasionally do not work due to limited DSP cycles.**

  If you attempt to use any of these combinations, the system now warns you of the problem. Previously, you were allowed to use the system in this state but doing so would cause corruption in the audio.

- **Auto-black shutoff does not work properly when using SBM1 or SBM2-type dither.**

  This has been fixed.

- **External Devices will not recognize the Sony UVW1800P (PAL video deck).**

  This has been fixed.

- **If the Master I/O box is turned off, the system occasionally continued normal operations at the wrong clock rate.**

  You now consistently get a message telling you that there is no clock. You may assign the clock to a different device on the chain at this point and select the Update button to recover.

- **When creating PQ Data for a Timed Tape Master, an erroneous error message relating to the start time of the EDL appears.**

  This message now makes sense and will tell you if the start time of the EDL is incorrect.

- **If you quit the application with an unsaved document in the background and select Cancel on the prompt for a save, the system crashes.**

  This has been fixed. Now, the system is restored to the condition it was in before you attempted to quit.

- **Files exported from SonicStudio are not recognized by the application S-Link.**

  This has been fixed.

- **The Transport Panel does not appear automatically when selecting Load in a Wild Source Log load operation.**

  This has been fixed.

- **In both BGDN and RTDN, estimates saved as default do not load into their registers properly.**

  This has been fixed.

- **Running BG Declick in the BG causes significant interruption to foreground tasks.**

  This has been fixed for 68k Macintoshes.

▼ **When setting EDL sample rate to 44056 and dragging a file from the SonicStudio MGR into the EDL the system crashes.**

This has been fixed.

▼ **When a large Click List is generated occasionally the file header is corrupted.**

This has been fixed.

▼ **Archive tapes made that have multiple EDLs sharing the same files are not restored easily.**

This has been fixed.

▼ **Making a CD+G disc at double speed causes an error.**

There is now an error message if you attempt this process.

▼ **Attempting to delete a file that is in use gives an incorrect error message.**

You will now see a reasonable message if you attempt to delete a file that is in use.

▼ **Clocking to 44.056 KHz produces erroneous error messages.**

This has been fixed. When the system is clocking to a 44.056 KHz sample rate, recording in the EDL will proceed without any erroneous error messages.

▼ **Pitch Shift Settings are not always saved correctly.**

Pitch Shift Settings now are created in Sonic Preferences folder together with other SonicStudio Settings files whenever you select Save As Default in the Pitch Shift Spec dialog box. For convenience during edits, the Pitch Shift Edit Ratio dialog box always defaults to the value previously used by either the Pitch Shift Edit or Pitch Shift Spec dialogs. If Pitch Shift Settings defaults have not been saved, then both Pitch Shift Spec and Edit jobs use the factory defaults of "0" for Quality and "1" for

Ratio, which values have no effect on the audio if processed. In previous versions, Defaults were saved as a Resource and were not always saved correctly.

▼ **2x CD File dump from a remote MediaNet volume or B-bus of MediaNet fails on SonicStudio 2•8 and 4•12.**

This is a limitation of using a Sony CDU-920 with SonicStudio. This may be addressed in the future, but at this time the feature has been disallowed. SonicStudio will not allow you to dump a CD file at 2x to the 920 from a remote volume or the SCSI B-bus of a MediaNet card if the CDR is on the SCSI A-bus. Be sure to write your CD files to a local volume on the A-bus of a MediaNet system. To find out which drives are on the A-bus, launch MediaNet Admin, then select your MediaNet node from the server list (in bold), then select the SCSI Utilities button from the server menu box.

Note – 2x dumps of this nature are not a problem with SonicStudio 16•24, and single-speed dumps from remote volumes or the B-bus work on both systems.

▼ **Communications error -60011 when zooming in or playing back files located on remote volumes.**

MediaNet release 1.6 solves this problem.

▼ **25 fps timecode generation is unstable.**

In previous versions, timecode generation from SonicStudio at 25 frames per second was not entirely stable, and would output incorrect timing values. Timecode generation has been improved, providing a more accurate and stable signal.

▼ **Adjust gain does not work if segment was zero.**

A relative adjust gain of multiple segments did not affect any segment that had a previous gain of zero. Adjust gain now works correctly.

▼ **Both channels of stereo DeNoise operate on a single filter.**

On some SonicStudio 16•24 systems, both audio channels of a stereo real-time Denoise operation would be processed through the same channel of DeNoise, causing strange phasing effects and an incorrect signal. This has been fixed.

▼ **Refresh waveform on background record corrupts waveform.**

On an allocated background record, a sound file can be opened any time after the recording has been initiated. When opened into an EDL, the waveform can be refreshed (Refresh Plot in the EDL menu) to update the display as the recording progresses. Previously, this could corrupt the waveform. This has been fixed. Now, when a sound being recorded is opened into the EDL the entire waveform is shown, as opposed to a white bar that represents the unfinished recording. Keep in mind that this means that a waveform will be generated for parts of the file that have not yet been recorded. The waveforms for the unrecorded sections should be apparent. This feature also enables full zoom-out views of the recording in progress, unlike the earlier implementation.

▼ **System will crash if you change channel modes, then patch audio on EDL panel to newly created desk channels and audition.**

SonicStudio no longer crashes when audio is auditioned through newly created desk channels.

▼ **Scanning EDLs off remotely mounted Macintosh disks never actually finish, giving the appearing of crashing or hanging. - FIXED**

This would previously happen because the file catalog on a volume would change before the Sonic Manager finished the scan. Now, if the Sonic receives errors after two catalog searches, it automatically goes into a file-by-file directory search. Depending on the number of files on your volume, this can take anywhere from 10 seconds to 4 minutes or more. If you find it takes too long to locate the files, try the Finder Find File utility, searching for file type "SSED".

Also, clicking the Stop button during a search will now abort the search two to three seconds after being pressed, as opposed to aborting after finishing the scan of a volume.

▼ **The SCS-1000 can eventually quit with a Type 1 error when starting a recording.**

The SCS-1000 now records properly, even after multiple records.

▼ **Multiple edit Reverse sound files can create state where scrubbing loops and skips, forcing user to quit. This has been fixed.**

▼ **Opening cues from the Sonic Manager with the Open button does not work.**

When opening a cue that was made from a sound file that only had channels 3 and 4, and there are only two panels in the edit group you are trying to open to, the cue would not open. If there were four panels in the edit group, the cue would open to the third and fourth panels. This has been changed to work like sound files in that "empty" channels (1 and 2 in this case) are ignored, and the cue will always be placed in the panels available.

▼ **Text mode colors get corrupted after switching any panel to bar mode.**

Text mode colors for selecting and deselecting segments now works properly.

▼ **2x Dumps to CDR, DDP, or CD Files have distorted audio at the end of fade-outs.**

EDLs containing long fades dumped at double-speed to any device possibly caused distorted audio at the ends of the fades. This now works properly.

▼ **Fast Video/EDL Lock Improved.**

The checkbox “Fast Video/EDL Lock,” found in the System Preferences, was not performing correctly when unchecked, causing the video and audio to be out of sync when playback started. This has been fixed. Video and EDL now start in sync when this box is unchecked.

▼ **Crashing when Auditioning with no Quicktime Extension.**

In previous versions, auditioning a sound file, cueing from the Sonic Manager, dragging and dropping to the output meters caused SonicStudio to crash if Quicktime was not installed. This has been fixed.

▼ **Full Screen record and playback for Radius Video Vision Studio.**

In version 5.1, full screen record and playback with the Video Vision Studio was not possible because of limitations using a 640x480 resolution screen. This has been fixed. You can now record and playback at full screen using the Radius VideoVision Studio card and a 640x480 monitor.

▼ **Instant Play and Archiving.**

Attempting to restore or archive sound files with Instant Play enabled in the Channel Mode dialog box (in the Audio I/O Preferences dialog box) crashed the system with a Type 1 error. This has been fixed.

Take numbers now automatically increase when incremented and decrease when playback stops and no punch-in is made.

Previously, when recording into the EDL, if the EDL panels were armed (orange for record ready), a new folder would be created for each pass and the take number was incremented, even if there was no punch-in, and therefore no actual recording made. This was difficult to follow and left many folders on the sound drive.

This implementation has now changed. If initiating a playback on an EDL with armed record-ready panels, the take number will increment right away, but will decrease again when playback is stopped and no punch-in is made. No empty folder will be created. The take number

must increase during the playback in the event that another recording is initiated on a separate EDL while the first EDL is still playing, so that file names do not conflict.

If you are doing multiple recordings with EDLs, the take number will decrease upon stop if no recording was made, as long as the EDLs are stopped in the order they started. If the EDLs are stopped in a different order than the armed playbacks were started, the take number must remain incremented to avoid conflicting take numbers. This works quite well, however, in the event that you start several EDL recordings, in that the last EDL will always decrease the take number if no recording is made, even though the other EDLs are still playing or recording.

▼ **Menu bar for digital video.**

The Macintosh menu bar had to be on the monitor that was attached to the video board, which often meant that the menu bar was on a composite NTSC or PAL monitor. This has been changed in that the menu bar may now be on any monitor.

▼ **Single-board DSP works correctly.**

When processing sounds using NoNoise, Time Twist, and Pitch Shift, the files appears to be OK, but when scanning, the Sonic Manager produced errors and dialog boxes suggesting the directory was garbled. This has been fixed.

▼ **Changing channel modes on sonicStudio 2,8 and 4.12 and then scrubbing no longer slows or hangs the system.**

In previous versions, when changing between 2-channel mode, 16•24 channel-compatible mode, and normal 4-channel mode, scrubbing audio after the change caused the system to get sluggish and eventually hang. This has been fixed.

▼ **Varispeed automatically turns off when channel modes are switched.**

Changing channel modes with Varispeed on caused a crash, or disabled audio passing through to output. This has been changed so that Varispeed is automatically turned off when changing channel modes. The system no longer crashes and audio is passed correctly.

▼ **Source Log buttons stay selected.**

Previously, the buttons in a source log Edit Tape dialog box did not stay selected if you closed the dialog box, then tried to re-edit the tape. This caused values to be lost and the load to work improperly. This has been fixed.

▼ **Equalization filters adjusted to properly smooth parameter changes.**

Smoothing for equalization filters has been adjusted to properly smooth parameter changes. Previously, under some conditions, jumps could be heard when changing parameter values rapidly.

▼ **Audio boards stay on-line when starting a DSP while auditioning**

If you started a DSP operation when a sound file was being auditioned through the Sonic Manager, the audio boards went off-line. This has been fixed.

▼ **Improved Mezzo archiving support.**

XFS and MediaNet have been improved to better support Mezzo's archiving software, a separate application for archiving Sonic sound files that supports the Sonic EDL format. Changes include:

- Better performance for foreground operations while using Mezzo and XFS systems
- EDLs are now archived and restored properly when using drag and drop to the Mezzo destination media
- MediaNet no longer crashes when running Mezzo software

To access the latest version of Mezzo (2.3 or later) to use with SonicStudio, go to the Mezzo Web site for more information:

www.mezzogmr.com

▼ **Cross-board patching no longer locks in a multi-board configuration.**

SonicStudio 8•16, SonicStudio 16•32, and SonicStudio 16•24 experienced problems when trying to route more than four monitor busses across boards in a multi-board configuration. When routing more than four busses, the system locked into that configuration, causing problems with setting up new routing patches.This has been fixed.

▼ **Conform from Four-Channel CMX List**

Autoconform can now conform a four-channel CMX list. In version 2.2.6, SonicStudio had difficulty conforming CMX lists which had Aud3 and/or Aud4 edits in it. This has now changed and SonicStudio can conform lists with any type of legal CMX audio events: A, A2, AA, Aud3 or Aud4.

Also note that the Set Channels dialog box now defaults to assigning A2 edits to come in from L2, Aud3 edits from L3, and Aud 4 edits from L4. These are the settings that the majority of our Autoconform users desire to be the default. Make sure these are the settings that you desire before loading material during an Autoconform.

3 Remaining Issues

This chapter lists issues that are known to exist with SonicStudio, version 5.2, along with some tips and workarounds.

General

▼ **Operations Exceeding Bandwidth**

Operations that exceed bandwidth restrictions are allowed but are likely to cause errors. This is most prevalent when auditioning a large EDL. In this case, a message is printed to the status file alerting you to the fact that one or more devices are exceeding their available bandwidth, as opposed to a prompt that would require user intervention to clear. Please keep this in mind when editing on a large EDL.

▼ **Input and Desk Delay Parameters**

In the System Prefs, the Input Delay and Desk Delay parameters are locked out on SonicStudio 16•24 systems. They are functional on SonicStudio 2.8 and 4.12 systems.

▼ **SCS1000**

A number of improvements have been made to the SCS 1000. Most notably, the SCS-1000 faders respond more reliably with the newly-enhanced Automation features that are detailed elsewhere in this manual. You may also now change channel modes with an SCS 1000 connected. The SCS 1000 will not work correctly in two-channel mode and is automatically disconnected without warning when you change into 2 channel mode. When you change to another channel mode, the SCS 1000 will automatically be re-enabled.

File System

▼ **Opening Cues from Sonic Manager**

Opening Cues from the Sonic Manager will open them into Source panels regardless of what is set in EDL Prefs-Open Soundfile. Cues may be opened into ANY panel in an EDL via Drag and Drop.

▼ **Drag and Drop Import**

When using the Drag and Drop Import feature, you are asked if you wish to generate the waveforms at that time. If you say YES and proceed, clicking the STOP button while waveform generation is in progress also stops any pending imports, as well as deleting any completed imports. Use care when using the STOP button in conjunction with AIFF Import functions.

▼ **Odd-Numbered Channel Recordings**

If you make an odd-numbered channel recording that begins with an even numbered channel, such as, record channels 2-3-4, the reduce files may not be correct. If there are any errors, use the Repair function to fix the waveforms.

Mastering

▼ Monitoring a Background Dump

Monitoring a Background Dump on the SonicStudio 16•24 is somewhat different than on SonicStudio 2.8 and 4.12. On the SonicStudio 16•24, any dump port can be selected. The audio from the dump will patch directly to the Output Strip corresponding to the selected dump port. On the SonicStudio 2.8 and 4.12, you may only select dump ports on the main board of the system. The dump audio will not patch directly to the OP Strip. In order to monitor the dump, you will need to set up the desk to monitor the corresponding dump channels.

▼ Dumping EDLs at Double-Speed

When dumping an EDL to a CDR at double speed [2x], it is necessary to set the dump port to 1-2. Failure to do so will result in an error message stating:

```
connectR:null patch point.
could not setup the audio board for this cd dump.
```

If you see this message, please check that the dump port is set correctly to 1-2.

▼ Rewriting PQ data at the End of a DDP Master

When rewriting PQ data back to the end of a DDP master, the UPC number is not written if changed. If no UPC was added at the time of the dump, you will not be able to add one later.

Audio Processing

▼ **TimeTwist**

TimeTwist on older soundfiles may exhibit strange behavior due to misplaced out points in the file. If this occurs, capture the audio you wish to process as a new soundfile and use that file as the source for the process.

▼ **Foreground DSP Jobs**

If you are performing foreground DSP jobs (in a one board system for example), please note that the BG MGR automatically comes up but may not initially lock out other menus. If this occurs, click on any menu. This disables the menus correctly so that nothing interferes with the job.

▼ **Auto-Loading of Denoise ucode**

This feature only effects specific system configurations. If you have a two-SonicStudio 16•24 board system with MediaNet and have a SonicStudio 16•24 attached to each bus of MediaNet, you may use this feature. If the SonicStudio 16•24 on MediaNet bus B is set as an IO board, launching a BG DSP job automatically switches it to an effects processor, thus letting the DSP job run in the Background while you edit or do other operations in the Foreground. The board will not switch back to an I/O board upon completion of the job, so this switch is left to you if that is desired.

Audio I/O

▼ **SonicStudio 16•24 Playback Only System**

When using a SonicStudio 16•24 system that has only a DA8 I/O box attached (a playback-only system), you may lock the box to an incoming Word Sync signal. The I/O Prefs do not show a green LED lock light in this case, however. You still see the clock rate and the box indicates that it is locked.

▼ Input Parity Indicator

It is possible that non-synchronous inputs may drift temporarily into sync with the Master Clock. In this case, the Input Status will show good parity for a moment and possibly even unmute the input until such time that the clocks drift back apart. Then the input will show bad parity and mute. If you see this happen, do not be alarmed, it is normal.

▼ SonicStudio 16•24 Two-Channel Mode

The purpose of two-channel mode is to support double-speed playback of EDLs. This is done using Varispeed on Output and raising the ratio to 2.0 [please refer to the section 'Double-Speed Playback' for more details]. In other modes, attempting to raise the varispeed ratio to 2.0 results in clicks because the microcode isn't fast enough. The 2-channel microcode is highly stripped down so it can run fast enough to support Double-Speed playback. Due to this stripping down, there are specific limits to what can and cannot be used in this mode:

- Only two channels per non-denoise SonicStudio 16•24 are available.
- Only one filter per desk strip is available.
- Dither, DC Reject and De-Emphasis are not available.
- Real-time Denoise is not available.
- The mixing desk is limited to a total of two channels, regardless of how many non-denoise SonicStudio 16•24s are installed. This is because the 2-channel microcode does not handle multiple boards correctly.
- All bandwidth reservations are doubled while in two-channel mode.

When the system sampling rate is 44.1 KHz, double-speed playback is possible using the default number of multiplies (29) in the Varispeed filter parameters dialog box. When the system sampling rate is 48 KHz, however, you must reduce the number of multiplies to avoid clicks. We have found that 13 multiplies is about the maximum.

▼ **Paste of snapshot fails if Cue field on Transport Panel is selected.**

If one of the Cue fields on the Transport Panel is highlighted, pasting a snapshot into the mix desk session may not work.

Workaround: Enter the cue field value before taking the snapshot.

▼ **Disks mounted on desktop before booting do not show correct space available and used**

Using MediaNet, you can mount DMFS disk volumes to the Macintosh desktop from the Finder. If you mount a volume prior to launching SonicStudio, however, the Disk library in the Sonic Manager will not show the correct amount of space used and available. This does not affect opening and using sound files.

▼ **On large systems, desk automation may cause delayed playback**

On systems with multiple SonicStudio boards, playback may be delayed when desk automation is engaged. The largest delay observed is a few seconds.

▼ **Unmount disks before remake with MediaNet Admin**

When using MediaNet Admin to remake a DMFS volume while SonicStudio is running, be sure to unmount the disk from the Sonic Manager first. Otherwise, you will get errors and may crash the program.

▼ **EDL library scan function may not work after capture**

Following a “capture” record in the EDL, the scan function in the Sonic Manager ’s EDL library may not function.

▼ **Marks in recorded file are not placed when file is dragged to EDL**

When you open a sound file by dragging it into an EDL from the Sonic Manager, any marks placed during recording of that file will not appear. If the file is opened by any other means (double-click or Open button in Sonic Manager or Open Sound File command), the marks will appear in the correct locations.

▼ **Marks may not travel when groups of segments are dragged between panels**

When dragging a group of segments from one set of panels to another, some marks may not appear in the new location.

▼ **Do not change sample rate of EDL after editing has begun**

If you change the sample rate of an EDL (as shown in EDL Preferences) after the start of editing, the sound will shift within the segments already placed.

▼ **For single-board systems, foreground DSP operation may appear to be running in background.**

When launching DSP processes in a system with a single card, the system normally brings the Background Manager to the front of the screen. On occasion, the system may fail to bring the Manager to the front. Do not attempt to edit or play sound in this situation, but use the Windows menu to bring the Background Manager to the front. Attempting other operations in this situation is likely to crash the system.

▼ **Add EDL/Snds opens onto Desktop but doesn't show EDLs located on the desktop**

"Add EDL/Snds" opens onto what it calls Desktop, but will not show EDLs actually located on the Desktop. To see the EDLs actually located on the Desktop, you have to navigate back to the Desktop Folder of the

appropriate drive. That is, you can go to open the drive where the desktop files are stored and then return up a level to the actual desktop to update the directory shown.

▼ **Audition from Tahiti MO drive during SCSI copy may damage disk**

Auditioning a soundfile from a Tahiti 3 while a SCSI copy job is writing a CD may halt the audition and damage the CD.

Workaround: Foreground operations should not be attempted while performing a SCSI copy due to system memory restrictions.

▼ **On reverse file, start and end times do not match length.**

The defined Start Time and End Times don't correspond to the actual output length of a processed sound file (off by .001 percent or 2 frames a minute). There are no consistencies of how much longer the output becomes, except that it always becomes some extra seconds longer (compared to what's defined in the In & Out selection).

▼ **Performing a SCSI copy of audio CDs appears to be a background operation but in fact is not.**

This is not particularly a bandwidth issue, but rather a system memory one. Attempting to perform foreground operations during any SCSI copy of an audio CD will cause errors and system confusion.

▼ **Dragging segments into negative time across panels produces error messages.**

If a segment is dragged to a different panel and into negative time, you will receive a prompt telling you that the segment was ‘adjusted to accommodate time zero start...’. In fact this segment will now start in negative time and any attempt to play or edit it will result in more prompts and errors. It is advisable, when seeing the first prompt, to UNDO the drag edit and redo it such that the segment does not start in negative time. This is not a problem when dragging a segment across the same panel. In that case, the start time is adjusted properly.

▼ **Pasting text into the Background Manager can lead to a bus error.**

It is possible to Paste text into the Background Manager when you had previously Cut/Copied something and it was still on the Clipboard. This can result in a bus error.

▼ **When performing an Auto-Punch recording in the EDL, the recording fails to engage.**

When performing an Auto-Punch recording in the EDL, you may not have any other panels armed with IN/OUT points in them other than the panels you are recording into. Doing so will cause the recording to fail to engage.

Workaround: Either put other panels in Safe mode, or remove any IN/OUT points from armed panels.

▼ **When using the Import Utility, files are overwritten on the destination drive.**

When using the Import Utility in the Sonic Manager, you are allowed to overwrite an identically named file on the drive you select as your destination. To avoid this, use instead the Drag and Drop Import function, as detailed in the section on File Handling earlier in this manual.

▼ **When I stop the progress of the generate waveform feature during import, all previously imported files are deleted.**

When using the Drag and Drop Import feature, you are asked if you wish to generate waveform for all imported files. If you say YES and allow the job to proceed, but then STOP the progress when the waveforms are being generated, all previously imported files in the current job will be deleted. If you feel that waveform generation can be done at a later time, or do not wish to wait for this process, say NO when prompted to generate waveforms in the Import job. You will always be able to create new waveforms via the Sounds Manager later.

▼ **While exporting files, the job dialogs when disk space is exhausted and leaves partially exported files on the disk.**

Exporting AIFF files will allow files in excess of the available disk space to begin exporting, but the job will discontinue without warning when the disk is out of space and leaves the portion of the sound file exported up to that point. Please take note of available disk space before launching this job.

▼ **Write PQ button not always available when it should be.**

At times, the Write PQ button in the PQ editor will be unavailable when it normally would be.

Workaround: If you see this, close the PQ editor and re-open it. The Write PQ button will be available at this point.

▼ **Loading a Desk Setup may not properly update Filters in both the Play and Record desks.**

If you save a Desk Setup with Filters on the Play Desk, then recall that setup while the Record Desk in the foreground, the Filters from the Play Desk may not load properly. If you load this same Setup with the Play Desk in the foreground, the Filters will load properly into the Play Desk but also may show up in the Record Desk.

Workaround: Load the desired Setup, switch to the background desk and reload the Setup. The proper filters will now be used.

▼ **Desk Monitoring switches globally when performing Multiple EDL Play/Record.**

When performing multiple EDL recordings from line inputs, certain monitoring situations must be considered. After starting an EDL record from line inputs, stopping a second EDL recording from any source will switch the first EDL line-recording channels from the Record Desk back to the Play Desk. The recording will proceed normally but monitoring may be interrupted.

Workaround: Set up the Play Desk the same as the Record Desk for those channels you are using for line input monitoring.

▼ **Segments Disappear with Create Segments w/Delete & Ripple or Create Segments w/Delete when segment marks are within a selected segment.**

If your segment marks are within a selected segment, the portion of the selected segment following the created segment will be deleted. What happens is that SonicStudio first creates cross-fades at the segment marks which leaves the segment in front of the marks with the same name but the segment following the marks is updated to reflect the new segment. The first segment is then still recognized as selected, the last segment is not, and it will be deleted.

▼ **Instant Play behavior with Pause selected:**

1. Transport does not follow Cue points when entered with Pause engaged.

   Workaround: Disengage the Pause button before using the Transport Panel for Cue locates.

2. Entering In/Out points with the brackets when Pause is engaged moves the edit points.

   Workaround: Disengage Pause button when placing edit points.

3. Instant Play does not function if selected EDL panels are armed for recording.
   Pause dis-engages but you are left with the play button highlighted with no playback.

   Workaround: Disengage Pause button when doing EDL recording.

▼ **High Order Dekrackle crashes boards**

Dekrackle jobs that are run with both a high Clip Fraction (.75 to .80) and high Synthesis Order (130-150) may crash SonicStudio audio boards.

Workaround: This problem can be avoided by running such high ordered jobs as two consecutive Dekrackle jobs that both add up to the desired Clip Fraction. For example, to achieve a .75 Clip Fraction and Synthesis Order of 150, run two jobs - the first job at .85/150 and the second at .90/150 for Clip Fraction/Synthesis Order. This creates the identical effect of replacing 25% of the source audio, while still maintaining a high Synthesis Order of 150.

▼ **When Creating Segments with Delete in panels that have locked segments, some segments are not deleted.**

You will now receive a prompt if all segments are not deleted. Undo backs you out of the operation cleanly.

Workaround: Un-lock the segments and re-do the edit with the segment(s) that were selected. Re-lock any segments you wish after completing the edit.

fixed.

▼ **Mezzo and XFS/PCI**

When archiving with Mezzo software, foreground operations are sluggish for SonicStudio 16•24 PCI systems.

▼ **Two-channel mode and 16•24 channel on SSP**

Occasionally, when switching between two-channel mode, 16•24 Channel Compatible, and normal four-channel mode on SonicStudio 2.8 and 4.12-based systems, the output levels from the mixing desk will be boosted, causing distortion.

▼ **Sony PCM-9000 loadback problems**

The Sony PCM-9000 has SCSI problems when attempting to loadback audio from a magneto-optical disc to SonicStudio. We are working with Sony to resolve this problem.

▼ **Rx and Tx not yet functional for High-Density I/O**

The Rx and Tx buttons in the Audio I/O Preferences dialog box are not yet functional for the HD I/O. This is not a problem since there can only be one HD I/O per board and other audio interfaces cannot be active at the same time.

▼ **Channel Status and High-Density I/O**

The sample rate flags for 44.1 KHz and 48 KHz in the AES/IEC CP-340 Channel Status dialog box do not automatically switch when selecting 88.2 KHz and 96 KHz, respectively. Normally, the Channel Status dialog box defaults to Auto, thereby passing the same flag to the output that is received on input.

As a workaround for 96 KHz devices, you can turn on the appropriate flag for the sample rate you are working at in order for the receiving device to lock to the signal output by the HD I/O (44.1 = 88.2 and 48 = 96.) Setting the Channel Status dialog box to Auto in the Sampling Rate box may not actually pass the appropriate flag.

▼ **Full-Screen record and playback for Truvision Targa 2000**

Because of nature of the Truevision Targa 2000 NuBus or PCI video boards, we do not recommend using full-screen record and playback when the RGB monitor attached to the Targa board is set for 640x480 resolution. You may experience errors. The Targa boards supports higher resolutions on any multisync monitor. Set your monitor for any higher resolution setting for the best operation.