

Court Recorder 9

INSTALLATION GUIDE



About This Manual

This manual covers the installation procedures for the SoniClear Court Recorder 9.

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Installation

Hardware Requirements

Court Recorder 9 is a computer-based system for recording court proceedings, depositions, and administrative hearings. See the Court Recorder User Guide for detailed operating instructions.

Court Recorder 9 software runs on a Windows computer with additional audio interface hardware. For reliable operation, and to ensure effective support, Court Recorder 9 software should be used with the recommended hardware, when possible. Other types of equipment may work as well, but satisfactory results are not assured for untested devices.

Computer Hardware

Court Recorder 9 requires the following computer hardware:

- Laptop or Desktop Computer
- Windows 10, or Windows 7.
Windows 7 or Windows 10 IoT/LTSB recommended for multichannel recording
- Supports 32 bit versions and 64 bit versions of Windows
- Single Core Processor, 1.5GHz or faster
Dual Core Processor, 1.5 GHz required for multichannel recording.
- Adequate disk space for recording (see “Disk Storage Space” below).

Computers with slower processors can be used in some cases, however, not all features will be supported (such as speed up during playback), and reliability will be reduced.

Note: For multichannel recording using the Motu audio interface the computer has special requirements:

1. The computer must pass DPC Latency testing to ensure error-free recording. See *DPC Latency Validation Testing* in the *Court Recorder Multichannel Installation* section this manual.
2. Some computers are incompatible with Motu audio interface devices. In particular, some USB port chipsets are defective or require special driver installation. Testing the unit to be used is the only way to ensure compatibility.
3. Windows 7 is recommended for more reliable operation.
4. In most cases the Motu unit must be plugged into a USB 2.0 port. Motu does not work with every USB 3.0 chipset.

Disk Storage Space

Court Recorder 9 stores the recorded audio data on the disk drive of the laptop computer that is running the program. A network or remote drive cannot be used for storage during recording. Playback from a network drive is possible for files converted to MP3 format, but this will depend on the speed of the network and shared server involved. Storage requirements for the various recording modes are as follows:

2 Channel WAV	316 Megabytes per hour
4 Channel WAV	948 Megabytes per hour
6 Channel WAV	1264 Megabytes per hour
8 Channel WAV	1580 Megabytes per hour
12 Channel WAV	2212 Megabytes per hour
2 Channel MP3	44 Megabytes per hour
4 Channel MP3	132 Megabytes per hour
6 Channel MP3	352 Megabytes per hour
8 Channel MP3	440 Megabytes per hour
12 Channel MP3	528 Megabytes per hour

Audio Hardware

SoniClear uses the audio circuitry of the computer system for recording and playback of audio data. Audio devices that are supported by SoniClear include:

- Internal computer microphone
- Computer-compatible microphone connected to the internal sound system
- External line-level audio source connected to internal sound system (if a line-in connection is available)
- Add-on Sound Card (PCI, PCIe, or ExpressCard)
- USB Audio Device
- Firewire Audio Device
- Dante Device with Virtual Sound Card driver

SoniClear supports selection from multiple sound card devices and can be configured to record from a specific sound card and optionally to detect the availability of removable USB audio devices. Playback can be configured to use the same device as that used for recording, or it can be a different device. For example, the laptop can be configured to record from an internal microphone, or automatically switch to a removable USB device, and always play using the internal speaker system.

The following audio hardware is recommended for use with SoniClear:

One or Two-Channel Recording: Any Windows computer sound card

SoniClear SC10D or SC10Q USB Microphone
Audio Technica USB Interface
MXL MicMate USB Interface
Roland 2-channel USB Interface
Griffin Technology iMic USB Interface
Andrea USB Interface
VXI USB Interface

Four-Channel Recording:

Motu 4Pre USB Interface
Dante Virtual Sound Card

Eight or 12-Channel Recording:

Motu 8Pre USB Interface
Dante Virtual Sound Card

Optional Backup Recorder:

Zoom H2n
Zoom H6

Floating License System

SoniClear is sold as a boxed product incorporating the Floating License System. This allows for the purchased license to be locked to a specific machine, moved to another machine, or “floated” from machine to machine, using the supplied USB Key device. The Floating License System offers the greatest flexibility.

The Floating License System uses the SoniClear USB Key to deliver and manage the software license. When the user receives the software initially, the SoniClear software license is stored on the USB Key. The software can be installed on any number of computers. SoniClear will only run when the USB Key device holding the “floating license” is plugged into the computer prior to running the software.

The user has the option to leave the floating license stored in the USB Key, or lock the license to a specific computer. Once the license is locked, the USB Key device does not need to be plugged into the computer.

The USB key is provided with either a single license, or a license with a backup.

- **Key with Single License:** once a license has been locked to a computer, it cannot be used as a floating license with the USB Key. The user has the option of unlocking the license from the computer at any time. Then the license reverts to floating status, stored in the USB Key device. The USB Key can then be used to authorize use of the software on other machines, either as a Floating License, or locked to another computer.
- **Key with Single License and Backup license:** In addition to the features of a Single License Key, the backup license can be used in a second computer in the event of a computer failure. The backup license does not authorize two users at the same time and cannot be locked to a computer. The presence of a backup license is indicated by having two licenses shown in the Preferences/License dialog.

The status of the SoniClear license is managed using the License tab of the Preferences dialog. See the section *Editing Program Preferences* in this manual for more information.

Technical Support

Contact your Court Recorder dealer or view the SoniClear Support Page at www.soniclear.com for current release and technical support information.

Court Recorder 9 Deployment

Court Recorder 9 Overview

SoniClear Court Recorder 9 can be deployed in a variety of configurations to meet requirements. Court Recorder 9 can be used by a single individual or a group of users for capturing meeting information for archival purposes, producing meeting minutes, and researching meeting details at a later time. It can also be configured for central recording in a shared meeting room, with playback and transcription on computers at offices in various departments.

Computer Options

Any computer with Windows 10 or Windows 7 can be used for recording and playback with Court Recorder 9 for one or two channel recording. Court Recorder 9 also supports multichannel recording.

Court Recorder 9 has features to work well with any size screen, from 800 x 600 netbook computers, up to large displays. Court Recorder 9 also supports Windows touch screen computers. Minimum recommended screen size is 1024 x 600.

System Setup and Licensing

Court Recorder 9 is sold as a suite of software programs:

- Court Recorder 9 software, licensed per computer for recording and playback, and for managing recording archives.
- Transcriber Live for transcription.
- SoniClear Player for distributing recordings for review.

The Court Recorder 9 license allows one person at a time to use the software for recording, playback, note editing and exporting. The license is validated by plugging in a USB Key with an available license, or by locking a license to the machine (so that the USB Key is not required at run time). See “Floating License System” section in the Installation Overview chapter.

The free Transcriber Live program is included for performing transcription work from recordings created by Court Recorder 9. Transcriber Live incorporates all of the features included in Court Recorder 9 for transcribing and editing of notes. Transcriber Live will also open files created with Gov Recorder 9 and Interview Recorder 9. It will not open files created using Meeting Recorder 9.

There are no fees for installing Transcriber Live on any number of computers. When installed on a computer with the Court Recorder 9 license, Transcriber Live also includes all exporting and editing features, such as Auto Archive, Export to MP3, Create Edited Copy, etc.

The free SoniClear Player is provided for playing recordings produced by the LAN Archive feature and the Export CD Image feature. This does not require a license, and may be distributed without charge with recordings made using SoniClear. It includes all transcription features, but does not allow editing of notes.

Sound Card Options

Court Recorder 9 can be used to record one or two channels of audio, and multichannel recording with up to 12 channels of audio.

For one or two channel recording, any Windows compatible sound card is supported. Some sound card chips included in laptop and desktop computers have poor sound quality. In these cases, an external USB audio interface will be required for best results.

For multichannel recording a SoniClear-compatible audio interface device must be used. See *Hardware Requirements* section above for a list of supported devices, or contact SoniClear for the latest news on multichannel interfaces that work with Court Recorder 9.

Recording File Type and Location

The software creates files using standard WAV, or standard stereo MP3 files. Recordings should always be captured to the local disk drive. Recording to a remote drive can risk loss of audio data in the event of network failures.

The Auto Backup feature can be enabled to automatically back up the original recording files to a second disk drive location, such as a network drive. The backup process runs in the background independently from the recording process. In the event a failure occurs in the backup process, the Auto Backup process automatically handles retrying the backup until the file is closed. For example, if the network becomes disconnected, the backup process will continue when the network becomes available again. Similarly, if a disk drive runs out of space, backup will continue if the disk full condition is resolved. See the *Edit Preferences* section in this manual for details on enabling this feature.

Archiving Options

After recordings have been completed the files can be manually copied onto any digital medium such as the computer hard drive, flash drive, network drives, CD, or DVD. Court

Recorder 9 also includes a wide variety of options for controlling the archiving and sharing recordings from within the program.

Auto Archive

For systems that are in a central meeting room, or when using a shared laptop, the Auto Archive feature can be configured to transfer recordings to a network server after the recording is completed. This keeps the recording computer clear of files and allows users from multiple departments to access the recordings using the free SoniClear Player and Transcriber Live programs, or additional Court Recorder 9 licenses.

MP3 File Conversion

For files recorded in WAV format, it is easy to convert the original recording files to MP3 format for distribution to interested parties. This can be done using any of the following features:

- Auto Archive
- Manage LAN Archives
- Create Edited Copy
- Export to MP3
- Export to CD Image

Files created by any of these methods can be burned to CD for distribution to staff and the public. When using Auto Archive, Manage LAN Archives or Export to CD Image, the resulting files include the free SoniClear Player program. When a CD is made from those files, the CD will automatically play the meeting recording from the CD when it is inserted into a Windows computer. For playback on Macintosh or Linux computers, the MP3 recording file on the CD can be accessed using any audio media player.

Video Recording

SoniClear 9 has the capability to record video from an Axis IP camera device. The software supports H.264 video and AAC audio capture, as well as MJPEG encoded video (without audio). The video stream is synchronized with the audio recording from microphones installed on the system.

The video recording feature requires an additional software license and specific hardware that has been certified to work with SoniClear 9 software. Contact SoniClear regarding options for installing video recording.

Computer Setup – Windows 7

Following are recommended steps to ensure that the computer will operate reliably when using Court Recorder on a computer running Windows 7.

How To Open The Control Panel

The Control Panel is used for most of the system configuration steps described in this manual. It can be opened from the Windows Start button (in lower left corner of screen). The click-by-click instructions assume that you are viewing the control panel as a list. When you open the Control Panel the controls may instead be grouped by category. This can be corrected by setting the “View by:” field to “Small icons” (in the upper right corner of the Control Panel window).

Required Setup Steps

For reliable operation, the following setup steps should be performed for any computer that is running SoniClear. Additional steps are listed in the next section “*Recommended Additional Setup Steps*”.

Disable Windows Automatic Updates

Turn off Windows Automatic Update service.

1. Click Start -> Control Panel -> Windows Update.
2. Click the link “Change settings” on the left.
3. Under “Important updates” select “Check for updates but let me choose whether to download and install them”.
4. Under “Recommended updates” select “Give me recommended updates the same way I receive important updates”.
5. Click OK.

NOTE: You must regularly apply Windows updates on your computer to ensure security of the system. Failure to update Windows can lead to the computer being attacked by a virus. This recommended setting will ensure that the user will be alerted to perform an update at a time that will not interfere with the recording processes. End users should be instructed on how to perform this update operation.

Microphone Settings

Follow the configuration steps for the microphone type that you are using, listed elsewhere in this Installation Guide.

For hardware configurations using the internal sound card (and some USB devices), there may be a problem with low audio level. This may be the result of an incorrect setting in the Windows sound card control panel. Verify that the microphone setting for Microphone Boost is set to maximum. How this is done will vary depending on the type of sound card.

The generic method for setting the Microphone Boost is:

1. Click Start -> Control Panel -> Sound
2. Click the Recording tab
3. Select the microphone input and click the Properties button.
4. Click on the Levels tab.
5. If the sound card supports a Microphone Boost setting, it may be shown here. Select the highest boost option given.

On computers using the Realtek chip, it is necessary to set up the microphone options from the special control panel specific for Realtek, in addition to the steps listed above:

1. Click Start -> Control Panel -> Realtek HD Audio Manager.
2. Click on the Microphone tab and disable the Noise Suppression and Acoustic Echo Cancellation options.
3. Click on the Microphone Boost option button (next to the speaker icon) and select maximum boost (such as +20db or +30 db).
4. Close the Microphone Boost dialog and the Realtek control panel using the window close button.

NOTE 1: Some Realtek control panels will be slightly different from this description. If you need assistance with these settings, contact SoniClear Support.

NOTE 2: Some systems containing the Realtek audio chipset will not perform properly. In some cases the audio level will be too low and in other cases the Noise Suppression setting cannot be disabled, even though it is shown as disabled in the control panel. If this happens you will have to record using an external USB audio interface device, such as the Griffen Technology iMic. Contact SoniClear for recommendations.

NOTE 3: Some laptop and tablet computers have a single audio jack that is designed for use with headsets that have both an ear piece for listening and a microphone for talking. This type of jack may not be compatible with standard computer microphones. If you have this type of jack and it does not work with the supplied microphone, you will have to use a USB microphone or a USB adapter (such as the Griffen Technology iMic).

Power Options

Adjust power management options so that recording will run at maximum speed and also ensure that the USB ports will not be turned off while recording. This setting prevents glitches in audio and also fixes erratic behavior of the optional SoniClear USB Foot Pedal.

To prevent the system from powering down to reduce power usage:

1. Click Start -> Control Panel -> Power Options
2. Click "Create a power plan" (the link in left column of this control panel).
3. Select the "High performance" power scheme.
4. Enter in the Plan name field: "SoniClear.
5. Click Next button.
6. Set the value "Dim the display" fields (for On battery and Plugged in columns) to "Never".
7. Set the "Turn off the display" fields (for On battery and Plugged in columns) to "Never".
8. Set the "Adjust plan brightness" to the desired brightness level. This is not shown immediately, so you may have to adjust this again later after the SoniClear plan is created.
9. Click the Create button.
10. Click "Change plan settings" (the link to the right of the new SoniClear power plan).
11. Readjust the brightness to the desired value.
12. Click the link "Change advanced power settings"
13. Open the USB settings section by clicking on the + sign next to that label.
14. Open the USB selective suspend setting by clicking on the + sign.
15. Select Disabled option for "On battery" and the "Plugged in" combo box fields.
16. Click the OK button.
17. Click Cancel to close the Edit Plan Settings display (the advanced power settings have already been saved, so it is OK to click Cancel at this step).

Recommended Additional Windows 7 Setup Steps

For best operation, the following setup steps should be performed in addition to the “*Required Setup Steps*” listed above.

Auto Play

Turn off Auto Play feature. This protects the computer from accidentally running virus software hidden on flash disk drives that may be used with the computer.

1. Click Start -> Control Panel -> AutoPlay
2. Uncheck the box at the top of the screen labeled “Use AutoPlay for all media and devices”.
3. Click Save button.

Folder Display Options

The options for viewing files on Windows File Explorer should be changed to make file extensions visible. This is because it can be confusing when looking at recordings where there is one file that is a WAV or MP3 audio file and a second file of the same name that is the BKM or BKC file. Adjust the Folder Options using these steps:

1. Click Start -> Control Panel -> Folder Options -> View
2. The item labeled “Hide extensions for known file types” should be unchecked.
3. Click OK button.

Indexing Options

To avoid recording problems caused by Windows Search automatically indexing the disk drive while recording, turn off drive indexing for all NTFS drives.

1. Click Start -> Computer to open the display of disk drives.
2. Right Click on Drive C and click the Properties button.
3. Uncheck “Allow files on this drive to have contents indexed in addition to file properties”.
4. Click Apply.
5. In the confirmation dialog, select “Apply Changes to drive C:\, subfolders and files” (the default option).
6. You will get a security warning “Access Denied”. Click Continue to allow this operation.

7. If you get the error message “Error Applying Attributes”, click Ignore All. This step will take several minutes to reset all files on the system to prevent indexing (slow machines may even take hours to complete this step).

Repeat these steps for all drives in the system.

NOTE: Windows Search feature relies on the automatic indexing of drives to quickly locate information. When drive indexing is turned off, searching the drive will be much slower. The reason drive indexing is turned off is to prevent the system from indexing a drive while recording. If fast file searching is required on a computer that will also be used for recording, you can skip this step. Then make test recordings prior to deployment to ensure that no errors occur. If you receive errors indicating “Buffer Overrun” and the CPU settings need to be adjusted, the drive indexing process is one of the potential causes for that error. If this happens, it is recommended that you turn off drive indexing.

Advanced Setup Instructions: Indexing can also be disabled by disabling Windows Search in the Services control panel. This is a very technical setting that should be attempted only by a computer technician.

Personalization

For system configured for multichannel recording, it is recommended to turn off the “Aero” desktop themes and the screen saver, which can interfere with recording on some computers. For systems recording 1-2 channels, this will not normally be necessary. However, if you experience clicks, pops, or missing audio in response to moving windows on the screen or when the screen saver is displayed, these settings should be used.

Note: this setting does not apply to Windows 7 Starter Edition, because Aero is not supported on that version of the operating system.

To disable the Aero feature, follow these steps:

1. Click Start -> Control Panel -> Personalization
2. Scroll down to the section displaying “Basic and High Contrast Themes and select one of the choices shown, such as Windows 7 Basic.
3. Click on the Screen Saver button at the bottom of the screen and select “None” from the “Screen saver” selection combo box control.
4. Click OK button.

System Sounds

Turn off System Sounds to prevent these from becoming recorded:

1. Click Start -> Control Panel -> Sounds.
2. Click the Sounds tab.
3. Set the Sound Scheme to “No Sounds”.
4. Click OK to save this setting.

Communication Sound Setting

Turn off the automatic volume adjustment for sounds:

1. Click Start -> Control Panel -> Sound.
2. Select the Communications tab.
3. Set the option “When Windows detects communications activity:” to “Do nothing”.
4. Click OK to save this setting.

Desktop Gadgets

It is recommended that you disable all Desktop Gadgets. Search on the Internet for a reference such as this: Windows 7 disable desktop gadgets. Be sure to select a reliable reference source, such as one that is provided by Microsoft. This is a more technical step, so it may need to be performed by a technician.

Optional Software

Computers are often shipped with various software products already installed. These may be trial software or features added by the manufacturer. It is recommended that you disable or uninstall any software that is not needed for operation of the computer.

Anti-Virus Software

All Windows computers must be protected from attack by virus and other types of “malware.” This is accomplished using an add-on software product. There are many types of protection programs available. The current recommendation is to use the NOD32 anti-virus protection program from Eset. In several years of use it has been found that it does not interfere with recording. Other products may interfere. In particular, some users have reported that the Norton Antivirus product will cause lost audio on occasion. If you experience error messages indicating loss of audio recording data, one source of this program may be interference from the anti-virus software. Contact SoniClear Support for assistance if you encounter this problem.

Computer Setup – Windows 10

Following are recommended steps to ensure that the computer will operate reliably when using Court Recorder 9 on a computer running Windows 10.

Required Setup Steps

For reliable operation, the following setup steps should be performed for any computer that is running SoniClear. Additional steps are listed in the next section “*Recommended Additional Setup Steps*”.

Automatic Windows Updates

Set schedule for Windows Automatic Update service:

1. Click on the Windows Start button.
2. Click on the Settings link.
3. Click on "Update and security" category.
4. Click on the "Advanced options" link.
5. Under "Choose how updates are installed", select "Notify to schedule restart".
6. Click on "Choose how updates are delivered" link
7. Turn off the "Updates from more than one place" option.

NOTE: You must regularly apply Windows updates on your computer to ensure security of the system. Failure to update Windows can lead to the computer being attacked by a virus. This recommended setting will ensure that the user will be alerted to perform an update at a time that will not interfere with the recording processes. End users should be instructed on how to respond to the update reboot prompt.

System Power Settings

Make sure that the system will not turn off while recording:

1. Click on the Windows Start button.
2. Click on the Settings link.
3. Click on "Display, notifications, apps, power" category.
4. Click on the "Power & sleep" tab.
5. Set all Screen and Sleep options to "Never".
6. Click on the "Additional power settings" link.
7. Click “Create a power plan” (the link in left column of this control panel).
8. Enter in the Plan name field: “SoniClear.
9. Click Next button.
10. Set the “Turn off the display” fields (for On battery and Plugged in columns) to “Never”.

11. Set the “Put the computer to sleep:” fields (for On battery and Plugged in columns) to “Never”.
12. Set the “Adjust plan brightness” to the desired brightness level. This is not shown immediately, so you may have to adjust this again later after the SoniClear plan is created.
13. Click the Create button.
14. Click “Change plan settings” (the link to the right of the new SoniClear power plan).
15. Readjust the brightness to the desired value.
16. Click the link “Change advanced power settings”
17. If there is a section labeled “USB” in the list of advanced options, continue with the next step. If there is no USB setting displayed, continue to the steps described under “*Alternate USB Power Settings*” below.
18. Open the USB settings section by clicking on the + sign next to that label.
19. Open the USB selective suspend setting by clicking on the + sign.
20. Select Disabled option for “On battery” and the “Plugged in” combo box fields.
21. Click the OK button.
22. Click Cancel to close the Edit Plan Settings display (the advanced power settings have already been saved, so it is OK to click Cancel at this step).

Alternate USB Power Settings

If you are using a USB microphone for recording, and USB power settings cannot be adjusted in the Power Plan (see above), make sure that the system will not turn off USB power while recording using these alternative steps:

1. Click on the search box next to the Windows Start button.
2. Type "Device Manager".
3. Click the "Device Manager" option in the search results.
4. Open the Universal Serial Bus controllers section by clicking the arrow character next to that title.
5. For each item on this list that has the word "USB Hub" in the title, perform the following steps:
 - a. Right click on item and select "Properties".
 - b. Click on the "Power Management" tab.
 - c. Deselect the option "Allow the computer to turn off this device to save power".
 - d. Click OK.
 - e. Repeat for all of the USB Hub devices.

Disable Automatic App Updates

Prevent Window 10 from installing App updates while recording:

1. Click the Windows Start button.
2. Select the Windows Store app from the Store tile, or from the All Apps option.

3. Click on the User icon in the upper right corner of the Store window (next to Search box).
4. Click "Settings".
5. Set "Update apps automatically" to Off.
6. Under Live Tile, set "Show products on tile" to Off.

Recommended Additional Windows 10 Setup Steps

For best operation, the following setup steps should be performed in addition to the “*Required Setup Steps*” listed above.

Auto Play

Turn off Auto Play feature. This protects the computer from accidentally running virus software hidden on flash disk drives that may be used with the computer.

1. Type "auto play" in the Windows search field (next to Start button).
2. Select "Turn AutoPlay on or off" from the search results.
3. Switch off the option “Use AutoPlay for all media and devices”.
4. Close the Settings dialog.

Folder Display Options

The options for viewing files on Windows File Explorer should be changed to make file extensions visible. This is because it can be confusing when looking at recordings where there is one file that is a WAV or MP3 audio file and a second file of the same name that is the BKM or BKC file. Adjust the Folder Options using these steps:

1. Type "folder options" in the Windows search field (next to Start button).
2. Select the option "File Explorer Options" in the search results.
3. Select the View tab.
4. The item labeled “Hide extensions for known file types” should be unchecked.
5. Click OK button.

System Sounds

Turn off System Sounds to prevent these from becoming recorded:

1. Right click on the speaker icon in the task bar and select Sounds.
2. Click the Sounds tab.
3. Set the Sound Scheme to “No Sounds”.
4. Click OK to save this setting.

Communication Sound Setting

Turn off the automatic volume adjustment for sounds:

1. Right click on the speaker icon in the task bar and select Sounds.
2. Select the Communications tab.
3. Set the option “When Windows detects communications activity:” to “Do nothing”.
4. Click OK to save this setting.

Optional Software

Computers are often shipped with various software products already installed. These may be trial software or features added by the manufacturer. It is recommended that you disable or uninstall any software that is not needed for operation of the computer.

Antivirus Software

All Windows computers must be protected from attack by virus and other types of “malware.” This is accomplished using an add-on software product. There are many types of protection programs available.

The current recommendation is to use the NOD32 antivirus protection program from Eset. For SoniClear video systems, the NOD32 antivirus software is required to prevent problems.

In many years of use it has been found that it does not interfere with recording. Other products may interfere. In particular, some users have reported that the Norton Antivirus, Kaspersky, and MacAfee products will cause lost audio or data corruption on occasion. If you experience error messages indicating loss of audio recording data, one source of this program may be interference from the antivirus software.

Contact SoniClear Support for assistance if you encounter any problems with antivirus software.

Computer Setup – Microsoft Surface

The Microsoft Surface Pro 4 computer includes audio features that are non-standard. This requires special steps to configure SoniClear to work properly on the Surface Pro 4.

Required Setup Steps

The Microsoft Surface Pro 4 computer should be configured following the instructions above for Windows 10 systems.

Recommended Setup Steps

On the Surface Pro 4 the headphone jack is a completely separate playback device. Most computers treat the headphone jack as an additional output of a single sound card playback device. On those systems, when the headphone is plugged in the audio to the speaker is turned off and sent to the headphone jack. SoniClear can approximately simulate the behavior of a traditional headphone jack using these recommended settings.

Headphone Playback Setup

Applies to Court Recorder 9, Transcriber Live, SoniClear Player

Configure the headphone to receive audio playback automatically when it is plugged in. This is accomplished with these configuration steps:

1. Plug a headphone into the Surface Pro 4 headphone jack.
2. Start SoniClear.
3. Select Edit/Preferences from the pulldown menu.
4. Click on Hardware tab.
5. In the Playback Device Setup section (right column of the Preferences dialog) click on the Default Speaker Device combo section box and select the “Headphones” device.
6. Click the button “Set Default Device as Removable”. This will display the “Headphones” device option in the Removable Playback Device section.
7. Check the box “Removable Device If Present”
8. Make sure the option “Automatically Set Removable Device” is Unchecked.

Headphone Monitoring Setup

Applies to Transcriber Live

For monitoring of audio while recording, configure the headphone to receive audio playback. This is accomplished with these additional configuration steps:

1. In the Playback Device Setup section (right column of the Preferences dialog) if there is a field called “Enable Live Monitoring”, make sure it is checked.
2. Click the combo selection box “Monitor Device” and select the “Headphone” option.

Court Recorder General Configuration

Overview

Court Recorder features can be configured for a number of different applications to provide optimal operation. These configurations apply for all of the different hardware setups described in this manual. For example, when using SoniClear with computers that have small screens, there are several options that can make the user interface more functional. Also, when running SoniClear on a computer with a touch screen the software to be operated much like a conventional tape recorder, pressing the “buttons” on the screen with the finger.

This section describes the typical setup for a system, excluding the steps regarding the audio device. Follow the instructions in this section, and then continue the setup according to the additional instructions in the *Recording Configuration* section of this manual.

SoniClear Software Installation

Installation from CDROM

To install SoniClear from CDROM, insert the SoniClear Disk in the computer. The install program should automatically start. If the install program does not start, manually start installation: press the Task Bar START button and select "Run". At the prompt enter D:\InstallSoniClear9xxx.exe (where "D" is the CDROM drive letter, and xxx is the build number), and press Enter. Follow the installation instructions presented on the screen.

Administrator and Non-Administrator Rights

The installation process requires that the user account have full Administrator Rights. This allows for installation of the USB Key device drivers and for writing information into the system registry to control standard uninstall procedures (Add/Remove Programs in the Control Panel).

Adding the SoniClear Icon to Your Desktop

SoniClear automatically adds a program icon to the desktop for the user who installs the program, and SoniClear can also be started from the Windows Start button.

If you want to add a program icon to the desktop of another user, follow these instructions:

1. Right click on the Windows Start button (in the Task Bar).
2. Select "Explore" from the pop-up menu.
3. Open the SoniClear program folder:
 \Documents and Settings\Username\Start Menu\Programs\SoniClear9.
4. Right click on the SoniClear icon.
5. Select "Copy" from the pop-up menu.
6. Right click on the desktop.
7. Select "Paste Shortcut" from the pop-up menu.

Preference File Management

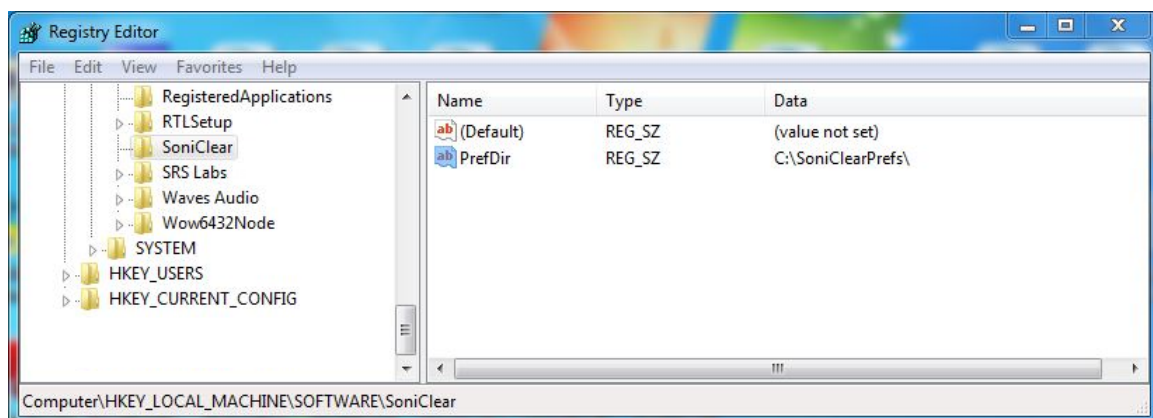
SoniClear saves the program preferences in a preference file. By default this is located in the user Documents/SoniClear folder of the currently logged in user (or \MyDocuments\SoniClear folder in some cases). If multiple users log onto the machine, each will have their own preference settings.

A new preference file is created with default settings the first time the program is run for a particular user. If multiple accounts are being used and custom preference settings are required, the preference file for each of the users must be initialized separately.

Directory Override for Preference File Location

The location of the preference file can be forced to a single location. This is useful for systems that will have multiple user accounts that will be used with SoniClear. Using a single preference file for all users will simplify setup. Use the following registry setting to set a single preference file location:

HKEY_LOCAL_MACHINE/Software/SoniClear/PrefDir (string with path name)



For example, if the PrefDir value is set to “C:\SoniClearPrefs”, the preference file will be stored in “C:\SoniClearPrefs\SoniClear”. The directory specified in PrefDir must have been created before starting SoniClear, and every user account with access to the SoniClear software must have read/write privileges for that PrefDir directory.

Multiple Preference Files using Profiles

The system can be configured with up to ten user-selectable preference files, referred to as “Profiles”. Profiles allow the user to select a configuration with the desired settings from a list of available Profiles. Profiles are typically used for selecting different recording equipment and/or recording directories, depending on the type of recording being made. However, profiles can be used for customizing any of the settings available in the preferences.

The configuration of the Profile options available to the user is specified using an INI file, which is unique for each version of SoniClear:

Meeting Recorder 9	soniclearMR9.ini
Gov Recorder 9	soniclearGR9.ini
Court Recorder 9	soniclearCR9.ini
Interview Recorder 9	soniclearIR9.ini
Gov Video Recorder 9	soniclearGVR9.ini
Court Video Recorder 9	soniclearCVR9.ini
Interview Video Recorder 9	soniclearIVR9.ini
Recording Manager 9	soniclearRM9.ini
Transcriber Live 9	soniclearTL9.ini
SoniClear Player 9	sonicclearPlayer9.ini

By default the INI files are located in the User Documents directory in a folder named “SoniClear”. The preferences folder may also be set to a different location. See the section above “*Directory Override for Preference File Location*”. If the INI file does not exist, create a new file of the appropriate name for the software being configured. If the INI file already exists, edit it to include the Profile configuration information.

Format for the INI file is:

```
[application]
currentprofile=x (where x is a digit 0-9, where 0 is default profile)

[profile]
profilename=titlestring

[profile1]
profilefolder=foldername
profilename=titlestring

...
```

```
[profile9]
profilefolder=foldername
profilename=titlestring
```

Note: The section [profile] shown in the Profile selection list is the “default” profile. This is the same preference file that is used when the system has not been configured for multiple profiles. Each additional profile is stored in a directory below the default preference file directory.

Example Court Recorder 9 Profile Configuration

An example multiple profile option could be a configuration containing three profiles, named “Criminal Court Session”, “Large Deposition Room”, and “Small Deposition Room”.

This configuration is specified by adding the following lines to a file named “soniclearCR9.ini”:

```
[application]
currentprofile=0

[profile]
profilename=Criminal Court Session

[profile1]
profilefolder=depo1
profilename=Large Deposition Room

[profile2]
profilefolder=depo2
profilename=Small Deposition Room
```

SoniClear will read this INI file at startup and perform the following actions:

- The default profile (“Criminal Court Session”) will be read from the default profile directory (“\MyDocuments\SoniClear”). If there is no default preference file already, it will be created.
- The first additional profile (“Large Deposition Room”) will be read from the folder “depo1” under the default profile directory (“\MyDocuments\SoniClear\depo1”). If this file does not already exist, it will be created by copying the existing default preference file (from the “MyDocuments\SoniClear” folder).
- The second additional profile (“Small Deposition Room”) will be read from the folder named “depo2” (“\MyDocuments\SoniClear\depo2”). If this file does not already exist, it will also be created by copying the existing default preference file (from the “MyDocuments\SoniClear” folder).

- The initially selected profile shown to the user in this case is the default preference file (“currentprofile=0”). If the currentprofile was set to 1, it would select the first alternate preference file. If it was set to 2, the second alternate preference file would be used.

Using Environment Variables in a Folder Name

The foldername string may include a system or user environment variable. The current value for a environment variable will be substituted into the foldername string when it is needed.

This allows for flexibility in the presentation of profile options based on system settings and/or user login settings.

Note: If an environment variable is added to a folder name in the soniclear.ini file it must be present when program runs. If the variable is missing SoniClear will display an error message and revert the setting for that folder name to the default preference file location.

Editing Program Preferences

Various actions of SoniClear can be customized through the settings in the program Preferences. Select Edit/Preferences from the pulldown menu to display the Preferences dialog. Preferences are divided into tabbed groups, "Files", "Recording Options", "Hardware", "Markers", "Options", "Foot Pedal", and "License".

Files Preference Tab

The Files tab provides for control over the management of sound files by SoniClear while creating, opening, and recording.

Files - Default Directory

Recordings should always be stored on a local drive of the machine that is running Court Recorder. If a network drive is specified, it is possible that network communication failures and slowness could cause loss of audio data.

The Default Recording Directory is set to the current user's Documents directory. This can be changed by editing the "Preferred output file location." This field can be set by navigating to the desired directory (using the Browse button), or entered directly in the field.

When entering the directory location manually, it is also possible to enter a system environment variable. That variable will be retrieved from the operating system at the time the recording is created or opened. For example, the directory can be specified with the name of the logged on user:

```
C:\SoniClearRecordings\%user%
```

When determining the actual folder location, for the user account "JSmith", this would expand to:

```
C:\SoniClearRecordings\JSmith
```

The directory must exist before it can be accessed. SoniClear will not create a new directory if the folder name does not exist.

If an environment variable is entered in the Default Recording Directory field it must already be present for this user login. Otherwise an error will be displayed when exiting the preferences dialog and the value will be reset to the default value.

Checking the "Always use last directory" option will cause the program to remember the last directory used in the Open or New file dialogs, and this information is saved between sessions.

Files - File Prefix

A file name dialog is shown when clicking the New button (or selecting the File/New menu item). Entry of a file name is optional. A default file name is created automatically using the File Prefix followed by the date. If both the File Prefix is blank, the default file name is create automatically using the recording type followed by the date (such as "Meeting 090410" for Meeting recording type, "Conference 090410" for CF3 files, "Dictation 090410" for dictation recording, etc.).

An environment variable may be included in the entered file prefix. The current value of the environment variable will be substituted for each user when a new file is created. Note: if an environment variable is included in this field and is not present when SoniClear runs, an error will be displayed and the default field value will be used instead.

NOTE: The program will append a numeric value, such as "(2)", when the file name (either automatically generated, or user entered) is not unique. This makes it easy to quickly create a new file without having to be concerned with making the file name unique.

LAN Archive Directory

The LAN Archive Directory is used for manual and automatic posting of recordings to the LAN Archive. This directory location can be set using the Browse button, or by manually entering a directory path. It can also use an environment variable, just like the Default Recording Directory, subject to the same behavior and limitations.

Backup Directory

The Backup Directory is used for backups initiated by the user (File/Make Backup) and with the Auto Archive feature (File/Auto Archive, or Archive File button). This can be a network drive. It may also be a local Flash disk or external hard drive, allowing the user to physically store and transport the file.

The backup directory location can be set using the Browse button, or by manually entering a directory path. It can also use an environment variable, just like the Default Recording Directory, subject to the same behavior and limitations.

Enable Auto Archive Button

When this option is checked, the user interface will display a button that says “Archive File”. Clicking the button initiates the same actions as selecting File/Auto Archive from the pulldown menu. If this option is unchecked, the button on the main display will show “Backup File” and perform the same action as File/Make Backup.

File Sealing

SoniClear also performs a “file seal” process while recording. The seal information is a special cryptographic digital signature for each recording file. If someone attempts to edit a file after it has been recorded in SoniClear, the file seal digital signature can be used to detect that alteration using the Validate File Seals feature on the File pulldown menu.

The file seal information is also used with the Validate Backups feature to ensure that all of the backed up information is accurate.

Digital signatures for audio (WAV, MP3), video (SCV, SCI), and notes (BKC) are stored in the file "FileSeal.scs". The digital signature for the BKM notes file used by Transcriber Live and Recording Manager is store in the file "BKMFileSeal.scs".

The file sealing process occurs automatically and cannot be turned off.

Smart Mirror – Automatic Backup

This feature applies only to SoniClear Gov Recorder 9 and Interview Recorder 9.

When the “Smart Mirror” automatic backup feature is enabled, the program will automatically create a backup image of the recording files to an alternate file location. This could be an external drive, or a network drive. The backup process runs in the background, and will not affect the recording process in any way. In the event of an error occurring with the backup folder drive, SoniClear will notify the user of the problem, log an error message in the notes, and retry the backup action to try to complete the backup process, if possible.

To enable this feature, check the box “Enable Auto Backup” in the preferences dialog. The folder location where the automatic backup files should be stored is specified in the Backup Location field. To backup both the audio file and the BKM notes file, check the box “Back up BKM file.” To backup only the audio file, uncheck that option.

The automatic backup directory location can be set using the Browse button, or by manually entering a directory path. It can also use an environment variable, just like the Default Recording Directory, subject to the same behavior and limitations.

When entering the directory location manually, it is also possible to enter a system environment variable. This variable will be retrieved from the operating system at the time the recording is created or opened. For example, the directory can be specified with the name of the logged on user:

```
C:\SoniClearAutoBackup\%user%
```

When determining the actual folder location, for the user account “JSmith”, this would expand to:

```
C:\SoniClearAutoBackup\JSmith
```

If an environment variable is entered in the Backup Location field it must already be present for this user login.

Recording Options Tab

The Recording Options tab provides for control over the type of recording to be made (WAV or MP3) and the number of channels (2-12). Refer to the *Recording Configuration* section of this manual for detailed configuration instructions.

Hardware Tab

The Hardware tab specifies what type of audio hardware is being used with SoniClear. Refer to the *Recording Configuration* section of this manual for detailed configuration instructions.

Markers Tab

The Markers tab specifies the default values for markers. When a new file is created the Marker values in the preference file is copied to the new recording file.

To edit a Marker value, select the Marker and click the Edit button (or double click the Marker). The dialog allows you to enter a text value for this Marker.

- If “Don’t Export This Note To Archive” is checked, this feature will automatically be checked in the note that is created when this Marker is entered into recording notes.
- If “Add as separate note” is checked, the text value of the Marker will be entered as a complete note immediately when the Marker is selected for note taking (from the menu or the function key). If this option is unchecked, the text of the Marker will be added to the New Note field and leave the cursor positioned at the end of that field. This allow the user to type additional text on the same note line.

Markers text can be cleared using the Delete button. The Clear All button removes the text for all Markers.

The Save button will copy the Marker values to a text file. These values can then be loaded into SoniClear at a later time using the Load button.

Options Tab

Enable Small Popup Window

In the preference dialog Edit/Preferences/Options, the Enable Small Popup Window feature can be enabled. With “Enable Small Popup Window” is checked, the main window will display an additional check box labeled “Popup”. When the user checks the Popup option, the main window will shrink to a small size and always display on top, even when other applications are being used (such as word processing).

An additional option is the “Smaller” setting. When this option is selected, the size of the popup display window is as small as it can be made, to save space on the screen.

The popup feature is useful when monitoring recording or playback while another program is running (such as an Agenda Management application, or Microsoft Word while transcribing).

Optimize for Touch Screen

In the preference dialog Edit/Preferences/Options, the check box “Optimize for touch screen” turns on a number of changes to the program behavior that makes it work better on touch screen computers. For example, double click actions are disabled and spacing on the Marker and Docket popup windows is set to double to make it easier to pick an item. This option is disabled (unchecked) by default and should be enabled only for use on touch screen computers.

Force Display to Full Screen Only

In the preference dialog Edit/Preferences/Options, the check box “Force display to full screen only” makes the program always display as a “maximized” window that fills the entire screen. With this option enabled, the user will not be able to resize the window to an arbitrary size. It will always be displayed at maximum size. This feature is useful for running the program on computers with small screens. It can also be helpful for computers that are set up to only run SoniClear. The recording computer can be configured by the IT staff or computer consultant to run SoniClear automatically when Windows boots up. The user only needs to turn on the computer to see a ready-to-use recording screen.

Enable Accessibility Controls

When this option is checked, an additional pulldown menu option will be displayed. This allows users of accessibility features to be able to control all of the SoniClear features without the need to position a mouse over specific buttons on the screen.

Selection Window Options

In the preference dialog Edit/Preferences/Options, the controls labeled “Options for Selection Windows” controls how Marker and Docket popup windows behave.

“Display Floating Popups” is the default behavior and is how SoniClear has worked on previous versions. When the user clicks the Marker or Docket buttons, the appropriate popup window is displayed and remains visible until the user explicitly closes the window. This is the recommend setting for most computers with medium and large displays.

“Display Floating Popups, Close on Selection” is a useful option when using very small screens (such as 800x600). The advantage of this setting is that the popup closes as soon as the user selects an item to add to the notes, or closes the window manually. This allows the popup window to be displayed over the main window, but be hidden when the note taking action has been made.

“Display Popups over Main Window” is useful for smaller displays with at least 1024x600 pixels (such as most netbook computers). The Marker and Docket windows are displayed inside the main window on the right hand side. This keeps them available at all times, neat and out of the way of other program controls. This option is also suitable for touch screen computers, to simplify note taking without a keyboard or mouse.

Display Font Size

In the preference dialog Edit/Preferences/Files, the Font Size can be adjusted to any size between 10 and 18 points. Choose a size that looks good on the type of screen being used. The size setting applies only to input fields in the main window. Text in buttons and various popup displays display using the system font size, regardless of the font size selected in preferences.

Enable Notes

Check the Enable Notes check box to allow the user to take notes within Court Recorder. For court reporting where the Transcriber Live program is used for taking notes, this can be unchecked to avoid confusion between the two programs. However, with the Notes

feature enabled in Court Recorder, the Transcriber Live program can still be used for taking notes, monitoring, and readbacks.

Enable Transcriber Live

Check the Enable Transcriber Live check box to allow the user to see the Transcriber button. This allows the user to invoke the Transcriber Live program from within Court Recorder. For court reporting where the Transcriber Live program is used for taking notes, this should be checked to make it easy to switch between the two programs. With the Transcriber button disabled in Court Recorder, the Transcriber Live program can still be started from a desktop icon or the Start menu. However, when starting Transcriber Live this way, the user will have to manually select the current recording file to open using the Open button (or File/Open pulldown menu selection).

Clock Time

When this option is enabled, all timestamps on notes are displayed using the system clock time of that location in the recording. In addition, the time counter will default to displaying the system clock time.

When this option is disabled, the timestamps on notes display Elapsed Time (time from the beginning of the recording file), and the time counter also defaults to Elapsed Time.

Note that the time counter can be manually switched between Clock Time and Elapsed Time using the button next to the time counter field.

LED Clock Display

SoniClear supports connecting an external LED clock display, the Applied Technical Systems model CC186. This must be connected either to an internal RS232 serial port installed in the computer, or using a standard USB to Serial adapter.

There are three options for the LED Clock:

Disabled – The external clock feature is disabled. This is the default setting.

Display Clock Time – When SoniClear is recording the clock will display the system clock time. When SoniClear is not recording, it will display either dashes, or “Stop”.

Display Elapsed Time – When SoniClear is recording the clock will display the elapsed time of the recording from the beginning of the recording file (the current length of the recording). When SoniClear is not recording, it will display either dashes, or “Stop”.

Notes Timestamp Offset

The value in this field is specified in milliseconds and will be subtracted from the timestamp location when clicking on a note. Typical use would be to accommodate the time lag between when the user hears someone speaking and when they start entering a note. For example, entering Question and Answer notes in a deposition, readbacks will be easier with this value set to a value that positions before the Question or Answer started. A typical setting would be zero for Court Recorder and 4000 (4 seconds) for Transcriber Live (to adjust for the delay between the two programs).

Foot Pedal Tab

The Foot Pedal tab in the Preferences dialog allows you to tailor the action of the foot pedal to suit personal preferences.

X-Key Foot Pedal

Test All X-keys Devices

When installing a SoniClear USB accessory (X-Keys foot pedal or X-Keys Remote Control), this button allows the user to verify that the device is operating correctly.

Left Foot Pedal

Enabled when the Enable check box is selected. Rewinds the audio playback by the number of seconds indicated. Default value is Enabled, with a value of 10 seconds of rewind time when the left pedal is pressed.

Alternatively, the left foot pedal switch (or virtual foot pedal) can be used to toggle between channels of a 2-Channel or Stereo recording. Select Enable and Left/Right Toggle to specify this option.

Center Foot Pedal

Enabled when the Enable check box is selected. Default action is to play audio while the pedal is pressed, with a rewind value of 5 seconds when the pedal is lifted. Alternative action is to play audio only when the center foot pedal is pressed. The number of seconds can be changed, if desired.

Right Foot Pedal

Enabled when the Enable check box is selected. Fast forwards the audio playback by the number of seconds indicated. Default value is Enabled, with a value of 10 seconds of fast forward time when the right pedal is pressed.

Like the left foot pedal, the right foot pedal switch (or virtual foot pedal) can also be used to toggle between channels of a 2-Channel or Stereo recording. Select Enable and Left/Right Toggle to specify this option.

When Recording Options

Each foot pedal can have a default action to take when pressed while the program is recording. The choices are:

- Do Nothing
- Edit Note (add a note and pop up the Edit Note dialog).

- Add Note (adds a blank note, not Edit Note dialog).
- Add Next Agenda Item (only available for middle foot pedal).

Virtual Foot Pedal Options

Check the "Enable Virtual Foot Pedal Keys" option to allow keystrokes to simulate foot pedal actions. The Left, Center, and Right foot pedal actions can be assigned to any key. The default key settings are suitable for use with Microsoft Word.

License Tab

This feature applies to all versions of SoniClear that are supplied with the Floating License System.

The Floating License System manages the software licenses that are shipped to the customer on a USB Key device (sometimes referred to as a USB “dongle”). Each USB Key device can store up to 5 separate licenses. From the License tab of the Edit Preferences dialog, a license stored on the USB Key device can be locked to the computer. Once the license is locked on the computer, the USB Key device does not need to be plugged into the computer to run the software.

If the USB Key is plugged into the computer before running SoniClear, the License Status will be shown (number of licenses on the USB Key and a list of Computer Licenses). If the USB Key was not inserted at the time the SoniClear program was started, the Check for USB Key button can be clicked after plugging the device into the computer. This will update the License Status information.

The total number of licenses included on the USB Key is shown. If no USB Key is inserted, the number will default to one license, which may not match the number of licenses on the actual device used to lock this license.

In the Computer Licenses section, each computer that has a license locked from the USB Key is shown with the computer name and the lock status. A button next to the current computer will show either Lock or Unlock, depending on the status. If the license needs to be locked to this computer, click the Lock button. Once it has been locked to the computer, the button will show Unlock. Clicking the Unlock button will move the license back to the USB Key, where it can be used on other computers. Unlocking requires having the same USB Key used to lock the license. If more than one USB Key is available, using the wrong key will disable the Unlock feature.

Important Notes:

- The user account that is active when locking the license must have Administrative Privileges, to allow for access to the system registry.
- Windows 8 and Windows 7 require an additional step to invoke Administrative Privileges when locking a license to the computer: start SoniClear by right clicking on the desktop icon. Then select the “Run as Administrator” option.
- For systems that use Active Directory to manage user accounts, the Lock button may be visible, but disabled. In this case it will be necessary to remove the computer from the domain, and log in using a local administrative account on that machine. Once the license has been locked to the machine, it can be reconnected to the domain for normal login use.

Configuring Export to CD Image

Export Image Directory

CD image files are stored in a single directory. The directory location is specified in the Edit/Preferences dialog. On the Files tab of the Preferences dialog, set the CD Image Folder directory using the Browse button. The directory must already exist before setting it as the export directory. Alternatively, check the box “Store Export Folders in Original File’s Location”. This will result in the CD Image folders being created in a subfolder under the location where the file being processed resides.

Archive CD Files

The export process will generate a.MP3 file, regardless of the original recording type. The export process also copies a set of files from the CDPlayer directory under the program directory (c:\Program Files\SoniClear9\CDPlayer), and the SoniClearPlayer directory (c:\Program Files\SoniClear9\SoniClearPlayer). These files are used for playing the recording on a computer and include:

- **Autorun.inf** – auto runs the SoniClearPlayer.exe program when the CD is inserted into a Windows computer.
- **SoniClearPlayer.exe** - The SoniClear Player program is a reduced-feature version of the SoniClear products that only plays .AF3 files.
- **SoniClearPlayer.exe.manifest** - The Windows program manifest file required for display compatibility.
- **mp3dec.dll** – MP3 decoding library required by SoniClearPlayer.exe.

You can add additional files to the CDPlayer folder that you want to include on every disk, such as a readme file or other instructions or information that needs to be included with the recording.

Auto Archive

Auto Archive Setup

When enabled, the Auto Archive feature can be selected by the user clicking the “Archive” button in the program main window. This causes the program to back up the original file to the default backup directory, and then to add the recording to the LAN Archive directory. If both of these processes are completed successfully, the program then deletes the original file from the default recording directory.

By default, the Auto Archive button is disabled. To enable the Auto Archive button, the check box “Enable Audio Archive Button” (in Edit/Preferences/Files dialog) must be checked. If the check box is not checked, the “Archive” button is hidden (showing the Backup button instead). The user can always invoke Auto Archive feature from the File/Auto Archive option in the pulldown menu, irrespective of how this check box is set.

Recording Configuration

Overview

Court Recorder must be configured specifically for the hardware that will be used to capture the audio from microphones or a sound system. The following sections describe the setup for a number of supported hardware configurations. Additional configurations are also possible. Contact SoniClear support for more details.

Court Recorder 2-Channel Configuration

Overview

Court Recorder can be set up to record one or two channels of audio. This could be a single microphone, two microphones, or a single microphone and a stenomask for voice reporting. The microphone connection feeds the audio into the computer using either the built-in sound card, or an external audio interface device. Playback can be monitored using headphones. If an external audio device is used, the software controls whether audio is played through headphones or through speakers using a selection check box on the screen.

One of the following configurations is typically used:

- Built-In Sound Card (single microphone channel)
- Samson GoMic (single channel USB microphone)
- SC10 USB Microphone Kit (two channel, stereo)
- Voice Tracker I (single channel microphone with external USB Interface)
- Voice Tracker II (single channel USB microphone)
- Audio Technica USB Interface (single microphone, headphone channel)
- MXL MicMate (single XLR microphone input)
- iMic USB Interface (single microphone/line input, headphone monitor channel)
- Roland 2-Channel USB Interface (one or two professional microphones)
- SoniClear Professional Sound System Interface (Mic Mate single channel USB)
- Other USB Interface Devices (various models)

Select the interface option that includes the features that are needed for the type of court reporting work involved. The Roland Duo-Capture interface is generally the best option for court reporting. It provides professional microphone inputs (using reliable XLR connectors). It also provides convenient control of levels using knobs on the interface box.

When recording with a single computer-compatible microphone, either the built-in sound card option or the iMic are good choices. The advantage of the iMic interface is that it is known to provide good sound quality, whereas some built-in sound cards have poor quality. The iMic also provides a second playback channel that can be dedicated to headphones for monitoring.

For recording more than two channels and/or more than a single audio device, see the section of this manual on multichannel recording configuration, “*Court Recorder Multichannel Installation*”.

Contact SoniClear support for additional information on configuration options that might not be covered in this manual. Audio interface devices are constantly being updated, providing new options for configuring court reporter systems.

Built-In Sound Card Configuration

This is the recommended setup for recording in situations that require a single microphone (such as the computer microphone that may be supplied with the Court Recorder software), or where you are trying to reduce the size and weight of items to carry and a less advanced microphone is adequate. The computer-compatible microphone connects directly to the internal sound card in the computer.

Note that many internal sound cards provide substandard audio quality. If this is the case for your computer you can use a USB audio adapter instead. Also, inexpensive computer microphones are only suitable for use in very small rooms with a few participants and no background noise. Most court reporting applications will require a more advanced microphone.

The typical hardware for this configuration consists of the following items:

- Laptop or Desktop Computer
- Windows 7
- Standard computer microphone
- Speakers and/or Headphones

Software Installation

Court Recorder is installed from the supplied software CD. Insert the CD into the computer drive. The system should automatically start the installation program. If it does not start, run the installation program manually from the CD.

The internal sound card does not require a driver to be installed, as it uses the Windows audio driver that is built into every Windows system.

Hardware Installation

Once the Court Recorder software has been installed, the microphone can be plugged directly into the microphone jack on the computer. This is a 1/8" audio input jack that can be used only with microphones designed specifically to work with computers. Microphones intended for use with cassette recorders will not work correctly. Be sure to

connect the microphone to the correct jack, as it is easy to confuse with the headphone jack on most computers.

The recorded audio can be played back into the room through speakers using the sound card in the computer. When using a laptop computer, if the speakers are not high enough quality, use a portable external speaker. A suitable speaker would be the type used for portable music players, connected to the headphone output of the computer.

Setup using Roland 2-Channel Interface

Overview

This is the recommended setup for recording in situations that require professional microphones, such as two conference microphones that use XLR connections and require phantom power.

The Roland 2-Channel interface (such as the Duo-Capture EX or Rubix 22) is a professional audio interface. Microphones are connected to the XLR connectors on the interface and the audio signal is sent to the computer through a USB cable.

The Roland interface is also suitable for stenomask recording, with one room microphone connected to Channel 1, and the stenomask connected to Channel 2. To make this connection you will normally require an adapter for the XLR input. Contact SoniClear for assistance with stenomask setup.

The typical hardware for this configuration consists of the following items:

- Laptop or Desktop Computer
- Windows 10 Professional
- Roland 2-Channel Audio Interface
- Conference microphones (one or two)

Software Installation

SoniClear is installed from the supplied software CD. Insert the CD into the computer drive. The system should automatically start the installation program. If it does not start, run the installation program manually from the CD.

The Roland driver software must be installed from the disk supplied with the unit. Alternatively, the latest version can be downloaded and installed from the Roland website (www.roland.com). Follow the instructions provided.

Hardware Installation

Once the SoniClear and the Roland software have been installed, the Roland interface can be plugged directly into the USB port of the computer. You should not connect the Roland interface to a USB hub, as this may result in unreliable audio recording.

The microphones must be connected to the XLR connectors of the Roland interface. For microphones that do not have the correct connector, an adapter must be used. Normally you will not connect a microphone to the ¼" phone jacks, as these are designed for guitar and line level signals.

The method of setting the Roland 2-Channel interface will vary depending on the particular model. Typically the switch settings on the back of the unit should be set as follows:

- Phantom Power: ON (for phantom powered condenser microphones)
- INST: Lo-Z
- Computer: 44.1
- Direct Monitor: OFF (or ON if you want to hear a live feed from the microphones while recording)

Software Configuration

After installation of the software and hardware, SoniClear must be configured to match the hardware in use. To do this, start SoniClear and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. It should be set to the Roland interface driver.

Removable Recording Device

The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how recording is processed. These fields should only be changed in the event of problems with recording using the default settings. Consult SoniClear support for assistance.

Recording Process Priority

Default value should be set to High or Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The default value should be set to Checked.

Playback Device Setup

The Playback Device Setup section of the Hardware tab controls the usage of the sound cards in the computer during playback.

Default Speaker Device

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). This should be set to the device driver of the computer internal sound card.

Removable Recording Device

The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Enable Live Monitoring

Set to Checked.

Monitor Device

This is the sound card that will be used for playback through headphones. It should be set to the Roland device driver.

Advanced Playback Options

These options control how playback is processed. These fields should only be changed in the event of problems with playback using the default settings. Consult SoniClear support for assistance.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to the default value of Unchecked.

Recording Options Tab - Sound Quality

In the Recording Options preferences tab, set the Sound Quality recording type: Multichannel WAV or Multichannel MP3 with 2 channels.

Adjusting Roland 2-Channel Interface Recording and Playback Volume

Microphone level for recording is controlled using the Roland volume control knobs on the front of the unit. Playback volume on the headphones is also set using the Output volume knob on the front of the unit.

Volume for playback through the computer speakers is adjusted using the Play Level slider in SoniClear. In some cases, SoniClear will not be able to adjust the volume settings because of non-standard audio device drivers. In that case, see the section below: *“Adjusting USB Interface Recording and Playback Volume”*.

SC10 Microphone Configuration

Overview

This configuration based on the SoniClear SC10D and SC10Q USB microphone kit.

The SC10 kit includes a single base microphone that plugs into the computer using a standard USB connector. One, two or three additional extension microphone can be plugged into the base unit. The SC10D kit includes one extension microphone. The SC10Q has three extension microphones.

The typical hardware for this configuration consists of the following items:

- Laptop Computer
- Windows 10
- SC10Q Microphone Kit (4 microphones)
or SC10D Microphone Kit (2 microphones)
- USB Speaker for Readbacks
- Digital backup recorder

Software Installation

Court Recorder is installed from the supplied software CD. Insert the CD into the computer drive. The system should automatically start the installation program. If it does not start, run the installation program manually from the CD.

The SC10 base USB microphone does not require a driver to be installed, as it uses the Windows USB audio driver that is built into every Windows system.

Hardware Installation

Once the Court Recorder software has been installed, the SC10 base microphone can be plugged directly into the USB port of the computer. You should not connect the SC10 to a USB hub, as this may result in unreliable audio recording.

When no extension microphones are connected to the base unit it will act like a stereo microphone with two microphone capsules inside the base unit feeding into the left and right channels.

The extension microphones can be configured in various combinations to cover a large meeting room, with the base microphone and extension microphones being mixed into either the left of right channel.

No drivers need to be installed, since the SC10 base microphone uses the USB drivers built into Windows. However, for Windows 8 and Windows 7 the microphone properties must be set to record in stereo. See the section below: “*Setting SC10 Properties in Windows.*”

The SC10 base microphone includes two 1/8” audio input jacks that can be used for connecting the extension microphones to the base. The left jack (when looking at the front of the unit) will run the extension microphone into the left channel. The right jack will feed into the right channel. When any extension microphone is plugged into the base, the base unit microphone feeds only into the left channel.

Refer to the installation instruction guide included with the microphone kit for examples of how the microphones can be configured.

Normally the recording level is adjusted using the Rec Level slider control in SoniClear. In cases where more than one SC10 base microphone is being used at the same time, the recording levels must be set in the Windows Volume control panel. See detailed instructions in the section, “*Adjusting USB Interface Recording and Playback Volume*”.

The recorded audio can be played back into the room through speakers using the sound card in the computer. When using a laptop computer, if the speakers are not high enough quality, use a portable external speaker. A suitable speaker would be the type used for portable music players, connected to the headphone output of the computer. USB speakers can also be used.

Setting SC10 Properties in Windows 8

The default setting in Windows will create recordings with just one channel. This mixes all of the microphones into a single channel. The SC10 microphone is capable of recording in stereo (two channels). This requires the following additional setting change:

1. Open the Control Panel (see “*How To Open The Control Panel*” for the version of Windows that you are using).
2. Click the Sounds icon to open the Sounds control panel.
3. Click the Recording Devices tab.
4. Select the SC10 device, labeled “Microphone (USB PnP Audio Device” (or similar phrase).
5. Click the Properties button.
6. Click the Advanced tab.
7. Select the Stereo recording option from the combo box (at 22kHz sample frequency, which is referred to as “AM Quality”).

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to match the hardware in use. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according to the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the two audio channels stored in the recording file. It should be set to the SC10 USB driver (“Microphone (USB PnP Audio Device)”, or similar wording). When this is selected it will automatically set the Input Source to the correct value (not user selectable).

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how recording is processed. The default settings are correct for this configuration:

Recording Process Priority

Default value should be set to Medium.

Buffer Size

The default value should be set to Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The default value should be set to Unchecked.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback. It should be set to the internal audio card for playback through the computer speakers.

Speaker Device Selection

This is the sound card that will be used for playback through speakers when playing a recording in Court Recorder. This should be set to the device driver of the computer's internal sound card.

Headphone Monitor Device Selection

This selection does not apply to Court Recorder. Recordings are monitored in Transcriber Live.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The "Use Removable Device If Present" and "Automatic Removable Device Selection" check boxes should be unchecked.

Advanced Playback Options

These options control how playback is processed. The default settings are correct for this configuration:

Playback Buffers

The default value should be set to 2 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels: 2 (the microphone kit provides a stereo audio signal).

Adjusting Microphone Recording Level

The recording level is adjusted using the “Rec Level” slider control in SoniClear (displayed when in recording mode). All the way to the left is no sound and all the way to the right is maximum recording level.

If there is a problem with recording level, it may be necessary to adjust the recording level for the specific device using the Windows control panel. See the section below, *“Adjusting USB Interface Recording and Playback Volume.”*

Transcriber Live Software Configuration

In addition to Court Recorder, the Transcriber Live program must be configured to match the hardware in use. To do this, start Transcriber Live and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

This is not used for Transcriber Live, as it is a playback-only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer.

Default Speaker Device Selection

The Default Speaker Device is the device used for playback when the Speaker option is checked in the main window. For playback through speakers in the computer, select the internal sound card. For playback through an external USB speaker, select that device instead.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. It should be set to the internal sound card.

Removable Recording Device

In this configuration, Transcriber Live does not use the automatic removable devices selection feature. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

These options control how playback is processed. The default settings are correct for this configuration:

Playback Buffers

The default value should be set to 2 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Adjusting Playback Level

The playback level is adjusted using the Play Level control in SoniClear. When playing through the headphones, the Play Level slider controls the headphone device. When playing through the speakers, it controls the speaker device.

If there is a problem with playback level, it may be necessary to adjust the playback level for the specific device using the Windows control panel. See the section below, *“Adjusting USB Interface Recording and Playback Volume.”*

iMic Audio Interface Configuration

Overview

This configuration based on the Griffin Technology iMic audio interface is the recommended setup when using a computer compatible microphone and when readback feature is going to be used.

The iMic is a consumer-grade audio interface for recording using a computer-compatible microphone. The microphone is connected to the 1/8" input jack on the iMic and the audio signal is sent to the computer through a USB cable. The input can also be used with "consumer" line level signals, which could be supplied by a sound system or a portable microphone mixer.

The iMic also includes a headphone output that can be configured for monitoring while recording, with the computer speakers configured to play back into the room for readbacks.

The typical hardware for this configuration consists of the following items:

- Laptop or Desktop Computer
- Windows 10
- Griffin Technology iMic
- Digital backup recorder
- Speakers

Software Installation

Court Recorder is installed from the supplied software CD. Insert the CD into the computer drive. The system should automatically start the installation program. If it does not start, run the installation program manually from the CD.

The Griffin Technology iMic does not require a driver to be installed, as it uses the Windows USB audio driver that is built into every Windows system. Support information for the iMic can be obtained from the Griffin Technology website (www.griffintechology.com).

Hardware Installation

Once the Court Recorder software has been installed, the iMic can be plugged directly into the USB port of the computer. You should not connect the iMic to a USB hub, as this may result in unreliable audio recording.

The iMic includes a single 1/8" audio input jack that can be used either as a mono microphone input (for use with computer-compatible microphones only), or as a line level input. The function of the input jack is set using the switch on the side of the iMic unit.

The first time the software is run after installing the device drivers and plugging in the unit, the recording and playback levels must be set in the Windows Volume control panel. See detailed instructions below, "Adjusting iMic Recording and Playback Volume".

For monitoring audio from the computer on headphones, connect the headphones to the headphone jack on the iMic. Playback from the computer will be heard on the headphones when the Speaker check box is unchecked in the Transcriber Live screen. Volume can be adjusted using the volume control slider displayed in the Transcriber Live main window.

The recorded audio can be played back into the room through speakers using the sound card in the computer. When using a laptop computer, if the speakers are not high enough quality, use a portable external speaker. A suitable speaker would be the type used for portable music players, connected to the headphone output of the computer.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to match the hardware in use. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according to the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the two audio channels stored in the recording file. It should be set to the iMic USB driver (“iMic USB audio system”, or similar wording). When this is selected it will automatically set the Input Source to “Capture” (or similar wording).

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how recording is processed. The default settings are correct for this configuration:

Recording Process Priority

Default value should be set to Medium.

Buffer Size

The default value should be set to Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The default value should be set to Unchecked.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback. It should be set to the internal audio card for playback through the computer speakers.

Speaker Device Selection

This is the sound card that will be used for playback through speakers when playing a recording in Court Recorder. This should be set to the device driver of the computer's internal sound card.

Headphone Monitor Device Selection

This selection does not apply to Court Recorder. Recordings are monitored in Transcriber Live.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The "Use Removable Device If Present" and "Automatic Removable Device Selection" check boxes should be unchecked.

Advanced Playback Options

These options control how playback is processed. The default settings are correct for this configuration:

Playback Buffers

The default value should be set to 2 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels: 2 (the stereo audio provided by the iMic driver).

Adjusting Microphone Recording Level

The recording level is adjusted using the “Rec Level” slider control in SoniClear (displayed when in recording mode). All the way to the left is no sound and all the way to the right is maximum recording level.

If there is a problem with recording level, it may be necessary to adjust the recording level for the specific device using the Windows control panel. See the section below, *“Adjusting USB Interface Recording and Playback Volume.”*

Transcriber Live Software Configuration

In addition to Court Recorder, the Transcriber Live program must be configured to match the hardware in use. To do this, start Transcriber Live and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according to the following instructions.

Recording Device Selection

This is not used for Transcriber Live, as it is a playback-only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). This should be set to the device driver of the computer's internal sound card so that the built-in speakers can be used for playback into the room.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. It should be set to the iMic device driver.

Removable Recording Device

In this configuration, Transcriber Live does not use the automatic removable devices selection feature. The "Use Removable Device If Present" and "Automatic Removable Device Selection" check boxes should be unchecked.

Advanced Playback Options

These options control how playback is processed. The default settings are correct for this configuration:

Playback Buffers

The default value should be set to 2 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Adjusting Playback Level

The playback level is adjusted using the Play Level control in SoniClear. When playing through the headphones, the Play Level slider controls the headphone device. When playing through the speakers, it controls the speaker device.

If there is a problem with playback level, it may be necessary to adjust the playback level for the specific device using the Windows control panel. See the section below, *“Adjusting USB Interface Recording and Playback Volume.”*

Other USB Adapter Configurations

It is possible to use any standard USB audio adapter device with Court Recorder. The choice of adapter will depend on factors such as size, availability, and personal preference.

Setup may be similar to the Griffin Technology iMic or the Roland 2-Channel interface. Contact SoniClear support for assistance.

Adjusting USB Interface Recording and Playback Volume

In most cases, the recording and playback volume will be set using the sliders displayed in Court Recorder and Transcriber Live. In the event that the software does not recognize the USB Audio device volume controls, the levels must be set using the Windows Volume Control panel. In some cases, the Windows Volume Control panel will also need to be adjusted to obtain proper levels, even when the USB Audio device volume controls are recognized.

Recording Volume

To access the recording panel for the USB audio adapter, follow these instructions:

- Right click on the speaker icon in the system tray (lower right corner of screen) and select “Recording devices”.
- Select the USB device that you want to adjust.
- Click the Properties button.
- Click on the Levels tab.
- If available, adjust the Microphone Boost to maximum.
- Adjust the recording level slider to a suitable level.

Playback Volume

Volume for playback through the computer speakers is set using the Windows Volume Control Panel. The default Windows Volume Control that is displayed when using an external audio interface may or may not be the internal sound card.

To access the volume control panel for the USB audio adapter, follow these instructions:

- Right click on the speaker icon in the system tray (lower right corner of screen) and select “Playback devices”.
- Select the USB device that you want to adjust.
- Click the Properties button.
- Click on the Levels tab.
- Adjust the recording level slider to a suitable level.

Playback Mixer Adjustment

Configure display of playback level control for the devices that will be used for playback:

- Right click on the speaker icon in the system tray (lower right corner of screen) and select “Volume control options” from the popup menu.
- Make sure field “All devices currently playing sound” is checked.
- Check the box next to each device that will be used for playback.
- Click OK.

Adjust the output audio mixer for each playback device:

- Left click on the speaker icon in the system tray (lower right corner of screen) and select “Mixer” from the popup menu for the playback device.
- Adjust the level shown for the SoniClear program to the maximum.
- Adjust the master volume slider for the speakers to the desired level.
- Close the control panel (click X in upper right corner of the control panel).

If there is more than one playback device, it will be necessary set the Mixer levels for each of those devices.

Court Recorder Multichannel Installation

Overview

Court Recorder can be configured to capture multiple channels of audio into separate channels in the recorded file.

Most installations will use an audio interface (also sometimes called a “mixer”) that uses a USB connection. An older method of connecting to the audio interface to the computer was with a Firewire connection. This is now rarely supported, having been replaced with USB.

Advanced audio processing systems (such as automated DSP mixers and PA systems) now offer the option of an IP connection to the recording computer through the Ethernet jack using the Dante communication standard.

Another alternative for desktop computers is to use a multichannel PCI or PCIe sound card.

Following sections describe several supported configurations. For assistance with multichannel audio interface devices that are not listed, contact SoniClear support.

DPC Latency Validation Testing in Windows 7

Older Windows 7 computer have often exhibited problems with multichannel audio recording, because of the requirement to move a very large quantity of digital information from the interface device (or card) into the computer memory. Because most Windows 7 computers have not been designed for multichannel recording applications, there may be problems with recording.

To avoid problems such as missing sound, clicks, pops, or stutters, the computer used for multichannel recording must be selected on the basis of having passed a stringent test of the I/O processing. This is determined using a program that measures DSP Latency, an indication of the speed that the computer is able to receive and store audio data.

The simplest program available to test DPC Latency is provided free from a German consulting company. The download address (at the time of preparing this edition of manual) is:

http://www.thesycon.de/eng/latency_check.shtml

This program will display a graph of the latency behavior of the computer and provide a pass/fail indication of compatibility with audio recording. It only works with Windows 7.

The DPC Latency problem has not been observed in Windows 10 computers, so we do not currently have a recommendation to test Windows 10 computers for this issue.

Contact SoniClear support for assistance with compatibility testing.

USB Connections

Some multichannel audio interface devices are capable of connecting the computer using USB 2.0. This type of interface requires more power than is available from the USB port, so an external power source will be necessary. Check with the manufacturer's directions about USB port compatibility.

Some audio interfaces will not work with newer USB 3.0 ports. The solution in some cases is to disable USB 3.0 support in the system BIOS settings. Contact SoniClear for the latest compatibility information.

You will need to ensure that the method of connecting the cable to the computer is physically sound so that the cable cannot be accidentally disconnected from the computer during recording. Loose connectors or situations where the cable can become snagged and pulled out of the plug need to be addressed in the setup of the equipment. In addition, use of an inflexible USB cable for connection to a laptop may result in unreliable recording and damage to the laptop connector.

SoniClear recommends using the “High Flex” USB cables available at www.usbfirewire.com. These are high quality cables that are flexible and resistant to static discharges, resulting in higher reliability.

Firewire Connections

If the computer has a built-in Firewire port, it must be compatible with the supplied interface. If the built-in interface is incompatible, or if the computer does not have a Firewire interface, a Firewire card must be added to the computer. Contact Trio Systems for a current list of supported Firewire interface card options.

Built-in Firewire Connections

Many computers include a built-in Firewire interface. This can be used provided that it has a chipset that compatible with the Firewire audio interface being used.

When using the Motu 4Pre or the Motu 8Pre (with the Firewire connection), Firewire chipsets made by Texas Instruments, Via, and Lucent are supported. For the RME Fireface 800 interface, most Firewire 400 or Firewire 800 chipsets are supported. Definitely incompatible in all cases are NEC chipsets (found in older computers). In general, the newer Ricoh Firewire chipsets are also not compatible with audio recording. The best choice is to use a computer with a Texas Instruments chipset.

Laptop Firewire Add-On Cards

If a laptop computer is being used for recording that does not include a Firewire port, an add-on Firewire PCMCIA PC Card or ExpressCard can be added to the computer. The card plugs into the PCMCIA card slot. No device drivers need to be installed.

When using a PCMCIA or ExpressCard Firewire device, it is extremely important that the card and the cable be protected from physical movement while recording. Otherwise the connection to the interface device may be lost and SoniClear will stop recording. When this happens, SoniClear will still be in recording mode, but the time counter will stop moving. Because of this potentially delicate configuration, use of a PCMCIA or ExpressCard Firewire adapter is not recommended.

Be sure the laptop is turned off when plugging it in. It is also recommended that the computer and Firewire interface be turned off when connecting the laptop to the audio interface to avoid damage from static discharge between the computer and the interface.

Note: the Firewire interface may not work correctly if the computer has gone into a power saving mode, such as sleep mode or hibernation. You will need to reboot the computer before using the Firewire interface if this should occur.

Desktop Firewire Add-On Cards

If a desktop computer is being used for recording that does not include a Firewire port, an add-on Firewire PCI or PCIe card can be added to the computer. No device drivers need to be installed. Because this type of card is securely fastened into the computer, this is a reliable option for connecting to a Firewire interface device. Use a card that has the Texas Instruments chipset.

Dante IP Audio Sources

When recording from modern installed sound systems, it may be possible to use the Dante audio standard. This is a method for sending multichannel audio from one location to another over Ethernet connections. The SoniClear recording computer must have a Dante Virtual Sound Card driver installed (licensed from Audinate). Then the sending audio hardware must be configured to transmit a stereo mix and individual microphone channels for capture in the SoniClear software.

Motu 4Pre Configuration

Motu 4Pre Installation

The Motu 4Pre audio interface is used for connecting microphone and line-level audio signals to the computer. It is a “hybrid” device that allows connection to the computer by either Firewire or USB. When connecting to user-supplied computer systems, the 4Pre device drivers must be installed and the system configured for use with the Court Recorder software.

USB 2.0 and USB 3.0 Compatibility

The Motu 4Pre USB connection was originally designed for USB 2.0. Windows 7 and Windows 10 computers can connect to the 4Pre reliably using USB 2.0

Compatibility with USB 3.0 is less assured. For Windows 7 computers, the compatibility will depend on the type of chipset and the drivers. If you encounter problems with connection of the 4Pre to Windows 7, check to see if the USB 3.0 feature can be disabled in BIOS, reverting the ports to USB 2.0 behavior. This will slow down moving files to and from Flash drives, but may be necessary to achieve compatibility.

In the case of Windows 10 computers, the Motu 4Pre is usually compatible with USB 3.0 ports. However, with the Spring Creators Update, an incompatibility was introduced. If the 4Pre is left on while the computer is turned off, the next time the computer is turned on the 4Pre will not be able to communicate properly with the computer. The solutions are:

- Always turn off the 4Pre when the computer is turned off.
- For installed systems, use an “eco” power strip to automatically turn off the 4Pre when the computer is turned off.
- When possible, use Windows 10 LTSB or Windows 10 IoT for the recording computer, since that does not include the code that was introduced in the Spring Creators Update (and therefore does not have a compatibility problem).

Contact SoniClear support for the latest information on compatibility information.

Power and Data Interface Cables

The Motu 4Pre can be powered directly from 6-pin and 9-pin Firewire ports that provide power to the jack. For Firewire ports that have 4-pin connections the 4Pre requires an external power source. When connecting to the computer using the USB interface, power must also be supplied to the 4Pre. A power adapter brick is included with the 4Pre for connection to an outlet for this purpose.

You will need to ensure that the Firewire or USB cable is connected to the computer in a physically sound way so that the cable cannot be accidentally disconnected from the computer during recording. Loose connectors or situations where the cable can become snagged and pulled out of the plug need to be addressed in the setup of the equipment.

In addition to the positioning of the cable, it is important to use thinner, a more flexible Firewire or USB cables. Using of an inflexible Firewire or USB cable may increase the chance for disconnection, resulting in unreliable recording and possibly damage to the laptop connector.

Motu 4Pre Software Installation

Driver and Control Panel Installation

The Motu 4Pre provides drivers and control panel software with the product on CDROM. Installation of drivers should be performed by a qualified computer technician.

When installing a new system, the CDROM drivers can be used. It is recommended, however, that you download the latest Windows software available from the Motu website if there are more recent updates (see www.motu.com).

To install from the supplied CD, insert the disk and follow the instructions in the manual and on screen. To install the downloaded drivers follow the instructions provided on the Motu support website.

After installing the drivers, reboot the computer to complete the installation process. Depending on the driver version, it will normally display additional installation messages after rebooting. If the system prompts you to install the new hardware, do not select the option to search Windows Update, and in the following dialog, use the Automatic Install option. This prompt may occur several times. Carefully follow the written in the manual and/or online instructions to ensure proper installation.

If you are upgrading a system that has an older Motu driver, it is important to uninstall to original Motu driver before installing the newer driver.

Driver Configuration

Once driver installation is complete, run the Motu Audio Console control panel from the Start/All Programs menu. The following settings are required:

- General Tab
 - 44100 Sample Rate
 - Samples/Buffer 256
 - Master Clock Source: Internal

- Use stereo pairs for Windows Audio – checked
- Use WaveRT for Windows Audio – checked
- 4Pre Tab
 - Phones Assignment – Phones 1-2

After the Audio Console setup, run the CueMix control panel from the Start/All Programs menu. Adjust the level controls for the mix to create a 2-channel mix that will be suitable for transcription and archive review. This will generally involve panning each microphone to the same spatial location in the stereo mix as the location of the microphone in the meeting room. This mix can be adjusted after completing installation of the Court Recorder software. See the Motu 4Pre documentation for more details about how these controls can be adjusted.

IMPORTANT NOTE

The volume control knobs on the front of the Motu 4Pre also have a push button function that will perform various actions. The default action is to mute the microphone. Be sure to locate the interface unit where it cannot be accidentally bumped, causing a microphone to mute.

SoniClear offers a modified version of the Motu 4Pre that physically disables the push button function. Contact SoniClear to purchase a modified 4Pre, or for instructions on modifying an existing unit.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to work with the Motu 4Pre interface. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. The default value should be set to 4Pre Mix Input source.

First Recording Array Device

Multichannel recordings use audio input from a series of audio interface channels that are numbered sequentially by the operating system. Click the Edit button, select “Motu Mic/Line 1-2” in the first array device and “Motu Mic/Guitar 1-2” for the second array device. Then click OK to save.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how recording is processed. These fields should only be changed in the event of problems with recording using the default settings. Contact SoniClear support for assistance.

Recording Process Priority

Default value should be set to Medium.

Buffer Size

The default value should be set to Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The value should be set to Checked.

Playback Device Selection

Normally the Transcriber Live program will be used for playback. However, Court Recorder must be configured correctly in the event that playback is selected by the user. The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback from the Court Recorder program.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers. The default value should be set to the internal sound card device.

Headphone Monitor Device Selection

This does not apply to Court Recorder.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. In this case, the correct value is 6 (2 for the stereo mix, plus 4 for each individual microphone channel).

Transcriber Live Software Configuration

To configure Transcriber Live, start the program and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section does not apply to Transcriber Live, as it is a playback only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). Normally this is set to the internal sound card device for playback through the speakers in the computer.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. The value is normally set to “Motu Phones 1-2”.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to the default value of Checked.

Motu 4Pre Audio Connections

Using Microphones

Microphones are attached to the Motu 4Pre using standard balanced XLR connectors. If the microphones require phantom power, this must be turned on using the CueMix software control panel installed with the Motu drivers. Detailed setup information is included with the 4Pre product manual.

When connecting the 4Pre to the microphone-level output of a sound system (instead of microphones), isolation transformers may be required to prevent ground loop hum problems. Consult with an audio installation technician regarding this application.

Using Analog Line Input or Digital Input

Line-level analog audio connections to the Motu 4Pre use ¼" TRS balanced line connections. Digital inputs and outputs are also provided using standard SPDIF optical connections.

When connecting the Motu 4Pre to a sound system using analog line-level signals, isolation transformers may be required to prevent ground loop problems. Consult with an audio installation technician regarding this application.

Motu 8Pre USB Configuration

Motu 8Pre Installation

The Motu 8Pre USB audio interface is used for connecting microphone and line-level audio signals to the computer. When connecting to user-supplied computer systems, the 8Pre device drivers must be installed and the system configured for use with the Court Recorder software.

Note: if you are using an older version of the Motu 8Pre, it will connect using Firewire. All of the instructions in this section will apply except the method of connection and the phantom power and input pad are controlled using toggle switches instead of buttons.

USB 2.0 and USB 3.0 Compatibility

The Motu 8Pre USB connection was originally designed for USB 2.0. Windows 7 and Windows 10 computers can connect to the 8Pre reliably using USB 2.0

Compatibility with USB 3.0 is less assured. For Windows 7 computers, the compatibility will depend on the type of chipset and the drivers. If you encounter problems with connection of the 4Pre to Windows 7, check to see if the USB 3.0 feature can be disabled in BIOS, reverting the ports to USB 2.0 behavior. This will slow down moving files to and from Flash drives, but may be necessary to achieve compatibility.

In the case of Windows 10 computers, the Motu 8Pre is usually compatible with USB 3.0 ports. However, with the Spring Creators Update, an incompatibility was introduced. If the 8Pre is left on while the computer is turned off, the next time the computer is turned on the 8Pre will not be able to communicate properly with the computer. The solutions are:

- Always turn off the 8Pre when the computer is turned off.
- For installed systems, use an “eco” power strip to automatically turn off the 8Pre when the computer is turned off.
- When possible, use Windows 10 LTSB or Windows 10 IoT for the recording computer, since that does not include the code that was introduced in the Spring Creators Update (and therefore does not have a compatibility problem).

Contact SoniClear support for the latest information on compatibility information.

Power and Data Interface Cables

The Motu 8Pre requires a connection to a power outlet. It does not support battery operation. Be sure to obtain extension power cables for providing power to the audio interface unit and the computer in the meeting room where recordings will be made.

The Motu 8Pre connects to the computer using a standard USB cable. In some cases it must be plugged into a USB 2.0 port, and will not work correctly with a USB 3.0 port. Check with Motu for updates to the driver software to support USB 3.0 in the future.

Motu 8Pre Software Installation

Driver and Control Panel Installation

The Motu 8Pre provides drivers and control panel software with the product on CDROM. Installation of drivers should be performed by a qualified computer technician.

When installing a new system, the CDROM drivers can be used. It is recommended, however, that you download the latest Windows software available from the Motu website if there are more recent updates (see www.motu.com).

To install from the supplied CD, insert the disk and follow the instructions in the manual and on the screen. To install the downloaded drivers follow the instructions provided on the Motu support website.

After installing the drivers, reboot the computer to complete the installation process. Depending on the driver version, it will normally display additional installation messages after rebooting. If the system prompts you to install the new hardware, do not select the option to search Windows Update, and on a subsequent step, use the Automatic Install option. This prompt may occur several times. Carefully follow the written and on-screen instructions to ensure proper installation.

If you are upgrading a system that already has a Motu driver installed, it is important to uninstall the original driver before installing the new driver.

Driver Configuration

Once driver installation is complete, run the Motu Audio Console control panel from the Start/All Programs menu. The following settings are required:

- General Tab
 - 44100 Sample Rate
 - Samples/Buffer 256
 - Master Clock Source: Internal
 - Use stereo pairs for Windows Audio – checked
 - Use WaveRT for Windows Audio – checked
- 8Pre Tab
 - Optical Input – off
 - Optical Output – off
 - Phones – Phones 1-2

After performing the Audio Console setup, run the CueMix control panel from the Start/All Programs menu. Adjust the level controls for the mix to create a 2-channel mix that will be suitable for transcription and archive review. This will generally involve panning each microphone to the same spatial location in the stereo mix as the location of the microphone in the meeting room. This mix can be adjusted after completing installation of the Court Recorder software.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to work with the Motu 8Pre unit. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. The default value should be set to 8Pre Mix Input source.

First Recording Array Device

Multi-channel recordings accept audio input from a series of audio interface channels that are numbered sequentially. The value in this field should be set to the first input source in the sequence (“Array” of inputs). The default value should be set to 8Pre channels 1+2. Click the Edit button, select the 8Pre channels 1+2 in the first array device and click the Default button to set the remaining devices. Click OK to save.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how recording is processed. These fields should only be changed in the event of problems with recording using the default settings. Contact SoniClear support for assistance.

Recording Process Priority

Default value should be set to Medium.

Buffer Size

The default value should be set to Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The default value should be set to Checked.

Playback Device Selection

Normally the Transcriber Live program will be used for playback. However, Court Recorder must be configured correctly in the event that playback is selected by the user. The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback from the Court Recorder program.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). The default value should be set to the internal sound card device.

Headphone Monitor Device Selection

This does not apply to Court Recorder.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to the default value of Checked.

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. In this case, the correct value is 10 (2 for the stereo mix, plus 8 for each individual microphone channel).

Transcriber Live Software Configuration

To configure Transcriber Live, start the program and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section does not apply to Transcriber Live, as it is a playback only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). The default value should be set to the internal sound card device.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. The default value should be set to Motu 8Pre Phones.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to the default value of Checked.

Motu 8Pre Audio Connections

Using Microphones

Microphones are attached to the Motu 8Pre using standard balanced XLR connectors. If the microphones require phantom power, this must be turned on using the front panel button for each microphone channel. In addition, the Pad button should be turned Off.

When purchasing Court Recorder as a complete system, the 8Pre unit may be supplied with a microphone “snake” cable. This will allow placement of the microphones at a greater distance from the recording system. The snake can be left connected to the interface unit. For portable recording applications, the snake can be rolled up and stored inside the portable case. Care should be taken to avoid physical damage to the microphone cables and microphone snake, such as smashing or crimping the cable. If the cables are not kept in good condition, hum and/or intermittent signal may result.

When connecting the 8Pre to a microphone-level output from a sound system (instead of microphones), isolation transformers may be required to prevent ground loop hum problems. Consult with an audio installation technician regarding this application.

Using Analog Line Input or Digital Input

Line-level analog audio connections to the Motu 8Pre use ¼” TRS balanced line connections. Digital inputs and outputs are also provided using standard ADAT optical connections.

When connecting the Motu 8Pre to a sound system using analog line-level signals, isolation transformers may be required to prevent ground loop problems. Consult with an audio installation technician regarding this application.

Antex Electronics DMX-4 Configuration

DMX-4 Installation

The DMX-4 USB audio interface is used for connecting up to four microphones or line-level inputs to the computer. When connecting to user-supplied computer systems, the DMX-4 device drivers must be installed, and the system configured for use with the Court Recorder software.

Power and Data Interface Cables

The DMX-4 requires a connection to a power outlet. It does not support battery operation. Be sure to obtain extension power cables for providing power to the audio interface unit and the computer in the meeting room where recordings will be made.

The DMX-4 connects to the computer using a standard USB cable. You will need to ensure that the method of connecting the cable to the computer is physically sound so that the cable cannot be accidentally disconnected from the computer during recording. Loose connectors or situations where the cable can become snagged and pulled out of the plug need to be addressed in the setup of the equipment. In addition, use of an inflexible USB cable for connection to a laptop may result in unreliable recording and damage to the laptop connector.

DMX-4 Software Installation

Driver and Control Panel Installation

The DMX-4 provides drivers and control panel software with the product on CDROM or by download from the manufacturer's website. Installation of drivers should be performed by a qualified computer technician.

To install from the supplied CD, insert the disk and follow the instructions in the manual and on the screen. To install the downloaded drivers, follow the instructions provided on the Antex Electronics support website.

Driver Configuration

Once driver installation is complete, run the DMX-4 Configuration program from the Start/All Programs menu. Set the following values:

- Select Line or Microphone input type
- Turn the channels button to ON for each channel that is used.
- Click Phantom Power for microphones requiring power.
- Assign a recording channel for each. Normally this would be assigning input #1 to Recording Channel 1, input #2 to Channel 2, and so forth.
- Adjust the Input Level to appropriate recording levels, depending on the type of microphone used and the recording situation.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to work with the DMX-4 unit. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according to the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. The default value should be set to “Antex Electronic” source.

First Recording Array Device

Multi-channel recordings accept audio input from a series of audio interface channels that are numbered sequentially. The value in this field should be set to the first input source in the sequence (“Array” of inputs). The default value should be set to the second stereo pair provided by the DMX-4, labeled with “Antex Electronic (1)” in the title.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

These options control how the recording is processed. These fields should only be changed in the event of problems with recording using the default settings. Contact SoniClear support for assistance.

Recording Process Priority

Default value should be set to Medium.

Buffer Size

The default value should be set to Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

Force Recording at 44.1KHz.

The default value should be set to unchecked.

Playback Device Selection

Normally the Transcriber Live program will be used for playback. However, Court Recorder must be configured correctly in the event that playback is selected by the user. The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback from the Court Recorder program.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). The default value should be set to the internal sound card device.

Headphone Monitor Device Selection

This does not apply to Court Recorder.

Removable Playback Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. In this case, the correct value is 4 (2 for the first stereo pair, 2 for the second stereo pair).

Transcriber Live Software Configuration

To configure Transcriber Live, start the program and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section does not apply to Transcriber Live, as it is a playback only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). The default value should be set to the internal sound card device.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. The default value can be set to the internal sound card. For monitoring separate from playback, a separate playback device will need to be connected to the system.

Removable Playback Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be set to 4 buffers.

Buffer Size

The default value should be set to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

DMX-4 Audio Connections

Using Microphones

Microphones are attached to the DMX-4 using standard balanced XLR connectors. If the microphones require phantom power, this must be turned on using the screen control displayed in the DMX-4 Configuration program.

When purchasing Court Recorder as a complete system, the DMX-4 unit may be supplied with a microphone “snake” cable. This will allow placement of the microphones at a greater distance from the recording system. The snake can be left connected to the interface unit. For portable recording applications, the snake can be rolled up and stored inside the portable case. Care should be taken to avoid physical damage to the microphone cables and microphone snake, such as smashing or crimping the cable. If the cables are not kept in good condition, hum and/or intermittent signal may result.

When connecting the DMX-4 to a sound system (instead of microphones), isolation transformers may be required to prevent ground loop hum problems. Consult with an audio installation technician regarding this application.

DMX-8 Audio Interface

The Antex Electronics DMX-8 USB audio interface can be used for connecting up to eight microphones or line-level inputs to the computer. When connecting to user-supplied computer systems, the DMX-8 device drivers must be installed, and the system configured for use with the Court Recorder and Transcriber Live software. The same instructions for the DMX-4 apply to the DMX-8. The only difference is that there are 8 microphone channels that mix down to 4 recording channels. These microphone settings can be seen on the DMX-8 control panel.

DMX-4 and DMX-8 Alternative Configuration

SoniClear was designed with the expectation that the audio interface device will provide a stereo mix of all of the channels. Unfortunately, the DMX-4 or DMX-8 interfaces do not provide a stereo mix. This can be accomplished feeding the PA speaker mix from the DMX-4 or DMX-8 unit back into the computer for recording.

If you are configuring a desktop computer, connect the monitor mixer output to the line input of the computer. This will require a cable with two RCA plugs on one end (for left and right channels) and a 1/8” stereo mini plug on the other end. If you are using a laptop, a separate USB adapter that accepts line-level signals must be used to send the stereo mix signal to the computer.

The iMic USB adapter could also be used. See the instructions in a section above for that option. The following instructions are for recording from an MXL Line Level USB interface.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. The default value should be set to “USB audio CODEC” as the source.

First Recording Array Device

Multi-channel recordings accept audio input from a series of audio interface channels that are numbered sequentially. Click the Edit button. The value for the First Recording Array Device should be set to the first stereo pair provided by the DMX-4 (or DMX-8), labeled with “Antex Electronic” in the title. The value for the 2nd Recording Array Device should be set to the second stereo pair provided by the DMX-4 (or DMX-8), labeled with “Antex Electronic (1)” in the title. The rest of the array device settings are not used and will be disregarded.

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. In this case, the correct value is 6 (2 for the stereo mix, 4 for each individual microphone channel).

RME Fireface Configuration

Court Recorder and Transcriber Live can be configured to use the RME Fireface audio interface for recording and playback of audio data. A typical multichannel Court Recorder system using the RME Fireface includes the following components:

- Laptop or Desktop Computer
- Windows 7 (32 bit or 64 bit)
- RME Fireface 800 Audio Interface
- Marantz backup recorder
- Conference microphones
- Optional stenomask for voice reporting
- Optional Microphone Preamplifier for additional microphone channels
- Speakers
- Desktop or rolling equipment rack mount case

The RME Fireface 800 audio interface is a professional quality product for connecting a wide variety of audio sources to the computer. SoniClear products are certified to work with the Fireface, provided it has been set up according to these instructions.

When installing the Fireface, it will include default settings for recording using conventional recording studio audio products. Court Recorder requires that the equipment be configured specifically for the Court Recorder product. For recording with two channels, the Fireface can be configured to mix any or all of the input channels into a mono or stereo source for recording. For multi-channel recording, the Fireface can be configured for recording more than two channels at a time, with a variety of mixing options, depending on the application requirements.

Installation and configuration of the Fireface should be performed by audio technicians or computer support staff familiar with professional audio equipment.

Operation Notes

The Firewire interface may not work correctly if the computer has gone into a power saving mode, such as hibernation. You will need to reboot the computer before using the Firewire interface if this should occur.

RME Fireface Hardware Installation

Firewire Interface Requirements

The Fireface requires a reliable Firewire connection on the computer. The manufacturer claims that their system will work reliably with any computer using a Firewire 400 interface. However, RME also lists many examples of improperly designed Firewire 800 circuitry. For that reason, Court Recorder is only certified to work with Firewire 400 connections, and only with the patches and fixes listed in these instructions.

For up-to-date compatibility information, consult the support section of the SoniClear website, or contract SoniClear support.

Power and Cables

The Fireface includes a universal power supply for connection to a power outlet. It does not support battery operation.

The Fireface connects to the computer using a standard Firewire cable. Because power is not derived from the Firewire bus, both 4 and 6 pin connectors are satisfactory. You will need to ensure that the method of connecting the cable to the computer is physically sound so that the cable cannot be accidentally disconnected from the computer during recording. Loose connectors or situations where the cable can become snagged and pulled out of the plug need to be addressed in the setup of the equipment.

Microphones are connected using standard balanced XLR connectors. All other analog audio connections use ¼" TRS balanced line connections. Digital inputs and outputs are provided using ADAT, SPDIF, and AES digital standards.

Software Installation

Drivers and Flash Update

The Fireface provides drivers and control panel software with the product on CDROM. It is recommended, however, that you download the latest Windows software available from the RME website if there are more recent updates (see www.rme-audio.com). The site also includes a download for updating the Flash memory in the unit to the latest firmware revision, which may be required for using the latest drivers. Consult the Court Recorder release Readme.txt file for any additional driver requirements that may apply to the current Court Recorder software.

To install from the supplied CD, insert the disk and follow the instructions in the manual and on screen.

To install the downloaded drivers you need to first unzip them into a directory where the files can be located during the installation process. Then plug in the Firewire cable and turn on the Fireface power. The Windows New Hardware Wizard will be displayed. Select NO to the request to use Windows Update, select “Install from a list or specific location”, and then choose the directory where the downloaded files have been extracted.

To update the firmware, follow the instructions provided in the firmware update download. You must perform the exact sequence of steps indicated, or the update will not be installed correctly. In particular, ensure that you specify the downloaded version of driver, do not let Windows pick the driver it thinks is best.

After installing the drivers and updating the firmware, reboot the computer to ensure the installation is correct and to see the driver and mixer control panels in the task bar.

Driver Configuration

After rebooting, double click on the Fireface Settings icon in the system tray to open the configuration dialog. The following are the correct values for each field of this dialog.

Fireface (1) Tab

Buffer Size:	256 Samples
Inputs (1):	Rear
Inputs (7):	Front+Rear
Inputs (8):	Front+Rear
Limit Bandwidth:	Analog+SPDIF+ADAT1
SPDIF In:	Coaxial

SPDIF Out: nothing checked

Input Level: +4 dBu
Output Level: +4 dBu

Phantom Power: Check Mic 7-10 to turn on phantom power, if needed.
If using dynamic or self-powered microphones, do no check.

Instrument Options: NA (any setting is OK)

Word Clock Out: Unchecked

Options

Check Input: Unchecked
SyncAlign: Check
TMS: Check
Interleaved: Unchecked

Clock Mode: Master
Pref. Sync Ref: Word Clock

DDS Tab

DDS Active: Checked
Frequency: 44.100
Freq. Multiplier x1
Coarse: 0
Active: Unchecked
Fine: 0
Active: Unchecked

After entering and confirming these settings, click the Store in Flash Memory (on the Fireface (1) tab) and click OK to close the settings dialog.

Recording Mixer Configuration

Court Recorder supports either two-channel recording or multi-channel recording, depending on the configuration of the software. Right click on the Fireface Mixer icon in the system tray and select Mixer to display the mixer control panel. If this is the first time setting up the system, click the Preset 5 button to load that preset provided by RME. Then select View/Matrix from the pulldown menu to display the patching matrix display. Click once on each of the matrix cells that shows a green background. This will turn off those matrix connections and you will have a completely blank set of connections.

Mixer Presets

The SoniClear software includes a set of preset controls stored in a .FPR Fireface mixer setting file (such as RME_Presets_RevM.fpr). For release versions of SoniClear these preset files are copied into the SoniClear program directory when SoniClear is installed. You load all of the presets for the type of recording software at once using File/Open All Presets, then select the correct preset from the Mixer panel.

Preset 4

This preset is designed to mix four microphone sources from the internal microphone channels (connectors 7-10 on the front panel). These are panned evenly across the stereo “field” The microphones are then fed into the computer as the audio driver selection FireFaceAN1+2. This two-channel mix is available from the Analog outputs on the back of the unit (channels 1 and 2) for feeding into a PMD 560 digital backup recorder. This mix is also fed into the SPDIF output for input into a PMD 570 digital backup recorder.

Preset 8

This preset is designed to mix eight microphone sources (from an external microphone preamp) connected into analog lines 1-8. The eight signals are panned evenly across the stereo “field” to give the sense of microphones coming from a stage with the source of the speaking distributed from left to right. The front panel microphone inputs 9 and 10 are also included in the mix, panned to the left and right channels, respectively.

The 8 input channels are available as individual input sources for the Court Recorder “recording array” devices as ADAT1, channels 1-8. This is specified in the Hardware preferences by selecting the first ADAT1 sound card (channels 1+2).

The 8 inputs are then fed into the computer as the audio driver selection FireFaceAN1+2. This two-channel mix is available from the Analog outputs on the back of the unit (channels 1 and 2) for feeding into a PMD 560 digital backup recorder. This mix is also fed into the SPDIF output for input into a PMD 570 digital backup recorder.

The option is available to feed external audio into the Fireface using ADAT input. The ADAT1 channels 1-8 are mixed into the output channels 1-8. In addition, the odd numbered ADAT channels are fed into the left channel of the stereo mix, and the even numbered ADAT channels are fed into the right channel of the stereo mix.

Presets 1-3 and 5-7

Reserved for future use.

Manual Two-Channel Setup

You can also recreate the Court Recorder preset mixer settings manually. To accomplish the two-channel mix, the Mixer and Matrix control panels require the following adjustments:

Mixer Settings

The two channel input submix set up in the Matrix control panel needs to be “looped back” as an input value for recording. Using a control-click command in the Mixer window enables Loopback mode. In the mixer strip section labeled “AN 1” (first mixer column of the output section, which is the bottom row of strips), Control-Click the white label below the mixer slider (hold down Control key while clicking on the white text that says “AN 1”). This will turn this label to a red color, indicating the loopback mode is on.

Matrix Settings

Set up the new patch connections in the Matrix control panel using the following table. The first number is input channel, listed on SIDE of matrix. The second number is the output channel, shown on TOP of matrix display. Turn each of the patch connections on by clicking once on the intersection of the input (row) and output (column). This will set the value to 0.0, shown on a green background color. To set the level, hold down the control key and click on the cell. While holding down the mouse button, slide mouse up or down to adjust to the desired value.

Stereo Mix Matrix Settings				
Input Row	Output Column Left	Mix (Pan) Value	Output Column Right	Mix (Pan) Value
In 1	AN 1	0.0		
In 2	AN 1	-1.3	AN 2	-16.9
In 3	AN 1	-2.5	AN 2	-12.0
In 4	AN 1	-5.4	AN 2	-6.7
In 5	AN 1	-6.7	AN 2	-5.4
In 6	AN 1	-12.0	AN 2	-2.5
In 7	AN 1	-16.9	AN 2	-1.3
In 8			AN 2	0.0
In 1	SP L	0.0		
In 2	SP L	-1.3	SP R	-16.9
In 3	SP L	-2.5	SP R	-12.0
In 4	SP L	-5.4	SP R	-6.7
In 5	SP L	-6.7	SP R	-5.4
In 6	SP L	-12.0	SP R	-2.5
In 7	SP L	-16.9	SP R	-1.3
In 8			SP R	0.0

In 9	SP L	0.0		
In 10			SP R	0.0
Out 1	PH L	0.0		
Out 2			PH R	0.0
Out 3	PH L	0.0	AN 3	0.0
Out 4	PH R	0.0	AN 4	0.0

Yamaha Dante Hardware Installation

SoniClear supports recording from the Dante interface provided in the Yamaha MRX7-D and MTX5-D DSP mixer systems. Audio is digitized in the mixer and transmitted to SoniClear over Ethernet cable. On the recording computer the Dante audio signals are captured in SoniClear using the Audinate Virtual Sound Card driver.

Yamaha System Setup

Refer to the Yamaha documentation for instructions on setting up the mixer.

The Yamaha mixer must be connected to the network for access from the SoniClear recording computer. Although it is possible to configure the Yamaha mixer using static IP addressing, it is relatively complex. Much simpler is to connect the mixer to a network that has a router that can assign an IP address via a DHCP server. The Yamaha device will register the required Dante devices automatically.

Use the Yamaha-supplied MTX-MRX Editor to configure the DSP mixing processes. Once the required audio mix has been configured, the output signals from the individual microphones are assigned in the editor to the Dante output, along with the output of the mixer stage in the DSP chain.

The Yamaha mixer will show up automatically in the Dante Controller (see below), for routing to the Dante Virtual Soundcard driver on the SoniClear computer.

Software Installation

Audinate Dante Virtual Sound Card

Audinate, the company that created and licenses the Dante digital audio standard, sells the Dante Virtual Soundcard driver (“DVS”) for utilizing Dante audio devices on a Windows computer. The Windows computer uses the driver to connect to the Yamaha mixer device over an Ethernet connection (WiFi is not supported). When properly configured, the Dante signals will appear to the SoniClear software as a set of stereo pair audio devices.

The required software and license is available from the Audinate website:

www.audinate.com

Sign up for an account and purchase a license for the DVS software. Then navigate to the Virtual Soundcard page from the Products menu. Download the appropriate driver for the SoniClear computer.

Next, navigate to the Dante Controller page from the Products menu. Download the appropriate Dante Controller software for the SoniClear computer.

Firewall Configuration

Firewall configuration for Windows Firewall built-in firewall is automatically handled during installation of the Audinate software, and on system boot (every time the Dante Virtual Soundcard services start). However, if you are using a third-party firewall product, use the following port information to configure the firewall exceptions.

The Dante Virtual Soundcard communicates over UDP using the following ports:

- Dante Clock Synchronization: 319, 320
- Dante Audio Routing: 4440, 4444, 4445, 4455
- Dante Control and Monitoring: 8700-8708, 8800
- Dante Multicast and Unicast Audio: 4321, 14336 – 14600

DVS Installation and Licensing

Install the DVS software from the download, following the installation instructions. After installing the drivers, reboot the computer to ensure the installation is complete.

After the reboot, launch the Dante Virtual Soundcard control panel from the Start menu and enter the license purchased from Audinate.

****Important Note: DO NOT MAKE ANY CHANGES TO SETTINGS AT THIS STEP.** If the SoniClear software is installed on a Windows 10 computer, a bug in the DVS driver will cause a misconfiguration of the software if you change any settings at this step. If this happens by accident, follow the directions for reinstalling the software in the section below: *“Reinstalling DVS on Windows 10”*.

Dante Controller Installation and Configuration

Install the Dante Controller software, following the installation instructions. Click Launch to start the Controller software. Configure the Dante Control panel following these steps:

1. From the Device pulldown menu, select Device View. This will display a Device View popup window.
2. Select the Device Config tab.
3. Select the SoniClear recording computer (DVS driver device) from the device selection combo box.
4. Change the Sample Rate to 44.1K and accept the warning message.
5. Select the Yamaha MRX7-D or Yamaha MTX5-D from the device selection combo box.
6. Change the Sample Rate to 44.1K and accept the warning message.
7. Close the Device popup window.
8. In the Dante Receivers selection (left column) click the plus sign next to the SoniClear recording computer name. This will open up a set of sound card inputs for receiving signals on the recording computer.
9. In the Dante Transmitters section (top row) click the plus sign above the Yamaha mixer name. This will open up the list of mixer outputs available for recording.
10. Click on the cross point between the input source on the Yamaha mixer and the desired DVS source for recording in SoniClear. For example, Dante channel 1 could be connected to DVS channel 1, and so forth for all 16 Dante channels.
11. When the connection between the Yamaha mixer and the recording computer are correctly configured, a green Check symbol will be displayed. If the connection failed, it will show a red Stop symbol.

DVS Configuration

After the Dante Controller has been configured, open the DVS control panel (from the Start menu) and perform these steps:

1. Click the Stop button to disable the device.
2. Change the Audio Interface setting from ASIO to WDM.
3. Click the Start button to renable the device.

Windows Recording Device Configuration

After the DVS driver has been configured, configure the recording device properties for each DVS device with these steps:

1. Right click on the Speaker icon in the system tray (icons next to the Time and Date in the lower right corner of the computer screen)

2. Select Recording Devices.
3. Select DVS Receive 1-2 device and click the Properties button.
4. Click the Advanced tab.
5. Change the Default Format to “2 channel, 16 bit, 44100 Hz (CD Quality)”.
6. Click OK to save this setting.
7. Repeat Steps 3-6 for each of the DVS devices.

This will cause Windows to deliver the DVS audio in the optimal format for recording in SoniClear.

Reinstalling DVS on Windows 10 Computers

Some Windows 10 users may encounter an issue that prevents the changing of the sample rate for Dante Virtual Soundcard in WDM mode.

Symptoms

On Windows 10, to change the sample rate for Dante Virtual Soundcard, you must first change it in Dante Controller, and then change it for each DVS device in the Windows Playback and Recording device settings.

This is typically done by right-clicking the speaker icon in the system tray and selecting ‘Playback devices’ (or ‘Recording devices’), double-clicking the DVS devices, and changing the sample rate in the ‘Advanced’ tab for each device.

However, depending on the version of Windows 10 you have, one of the following conditions may be observed:

- The Advanced tab of the device properties panel is not visible, which prevents the changing of the sample rate for Dante Virtual Soundcard in Windows.
- The Advanced tab is visible, but Dante Virtual Soundcard cannot play or receive audio when the sample rate has been changed.

Workaround

The workaround involves uninstalling Dante Virtual Soundcard and reinstalling it, then setting the required sample rate in ASIO mode BEFORE it is started.

1. Uninstall Dante Virtual Soundcard.
2. Reinstall Dante Virtual Soundcard.
3. Open the Dante Virtual Soundcard control panel.
4. Dante Virtual Soundcard will be currently unlicensed, and therefore not running. Do NOT license Dante Virtual Soundcard yet.
5. Click the ‘Settings’ tab in the Dante Virtual Soundcard control panel and change the Audio Interface to ASIO.

6. Go back to the 'Licensing' tab, and license Dante Virtual Soundcard using your existing license ID. It will start automatically in ASIO mode.
7. In Dante Controller, open the Dante Virtual Soundcard device (double-click the device or hit CTRL+D) and select the 'Device Config' tab.
8. Change the sample rate to the desired rate.
9. Wait a second or two.
10. Go back to the Dante Virtual Soundcard control panel and stop Dante Virtual Soundcard.
11. Select WDM mode.
12. Start Dante Virtual Soundcard.

Dante Virtual Soundcard should now be operating at the new sample rate.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to work with the Dante Virtual Soundcard driver. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels stored in the primary recording file. The default value should be set to DVS channel pair that corresponds to the stereo mix from the Yamaha mixer (for example, “DVS Receive 15-16”).

Recording Array Devices

Multi-channel recordings accept audio input from a series of audio interface channels that are numbered sequentially. Click the Edit button. From the popup dialog, set the value in first device field to the DVS channel pairs that correspond to channels 1-12 (depending on how many channels are being used). For example, First Recording Array Device could be “DVS Receive 1-2”, Second Recording Array Device could be “DVS Receive 3-4”, etc.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

Recording Process Priority

Default value should be set to Automatic or High.

Disk Update Time

Default value should be set to 5000.

Force Recording at 44.1KHz

Value should be changed to ON (Checked).

Playback Device Selection

Normally the Transcriber Live program will be used for playback. However, Court Recorder must be configured correctly in the event that playback is selected by the user. The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback from the Court Recorder program.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers. Select the internal sound card device for playback through the computer speakers.

Headphone Monitor Device Selection

This does not apply to Court Recorder.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Monitor Delay

Monitor Delay should be set to the default of 3 seconds (the default value).

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. For eight independent inputs to be recorded, select 10 (8 for each individual microphone channel, plus 2 for the stereo mix).

Transcriber Live Software Configuration

To configure Transcriber Live, start the program and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section does not apply to Transcriber Live, as it is a playback only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). Default Speaker Device can be set to the internal sound card device of the computer. In that setting, playback when the Speaker option is checked will be heard through the computer speakers.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. Selection of the monitoring device will depend on the computer and hardware configuration.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to the default value of Checked (ON) if playing back through a Dante device, otherwise, set it to Unchecked (OFF) if playing through the computer headphone jack.

RME HDSP 9632 Configuration

Court Recorder and Transcriber Live can be configured to use the RME HDSP 9632 PCI audio interface for recording and playback of audio data. A typical multichannel Court Recorder system using the RME HDSP 9632 includes the following components:

- Desktop Computer
- Windows Windows 7 Professional
- RME HDSP 9632 Audio Interface
- Presonus Digimax D8 Microphone Preamplifier with ADAT output
- Gooseneck microphones
- Rane AM2 Automatic Mixer
- PA Speakers
- Desktop or rolling equipment rack mount case

The RME HDSP 9632 audio interface is a professional quality product for connecting a wide variety of audio sources to the computer through a standard ADAT digital audio connection. SoniClear products are certified to work with the HDSP 9632, provided it has been set up according to these instructions.

When installing the HDSP 9632, it will include default settings for recording using conventional recording studio audio products. The HDSP9632 be reconfigured specifically for the Court Recorder product.

Installation and configuration of the HDSP 9632 should be performed by audio technicians or computer support staff familiar with professional audio equipment. Contact SoniClear Support for assistance.

RME HDSP 9632 Hardware Installation

PCI Interface Card Requirements

The Fireface HDSP 9632 PCI card is designed for installation in standard Intel-based desktop computer systems. It requires a single, full-height, half-length PCI slot for installation in the card.

Audio Connections

Audio signals are sent to the HDSP 9632 using a standard ADAT “lightpipe” optical cable. This delivers 8 channels of 44K/16 bit audio to the card from a microphone preamp or other ADAT audio source. Consult the documentation for the microphone preamp or other audio source for instructions on how to connect the ADAT cable.

The HDSP 9632 includes a breakout cable for connecting analog signals to the card. The Line In inputs (left and right) are not used in this configuration. The Headphone and Line Out (left and right) can be used for monitoring audio from Transcriber Live (see Transcriber Live configuration below).

The HDSP 9632 also includes a breakout cable for connecting digital devices to the card through SPDIF connections. This usage is not covered in these instructions. Contact SoniClear Support if you need assistance with this type of connection.

Software Installation

Drivers and Flash Update

The HDSP 9632 card is shipped with drivers and control panel software on CDROM. You can install this software from the supplied CDROM. However, it is recommended that you download the latest Windows software available from the RME website if there are more recent updates (see www.rme-audio.com). The site also includes a download for updating the Flash memory in the unit to the latest firmware revision, which may be required for using the latest drivers. Consult the RME website for details.

To install from the supplied CD, insert the disk and follow the instructions in the manual and on the screen.


To install from a download, unzip the driver files into a directory where the files can be located during the installation process. With the computer power off, install the HDSP 9632 PCI card. Then turn on the computer. The Windows New Hardware Wizard will be displayed. Select NO to the request to use Windows Update, select “Install from a list or specific location”, and then choose the directory where the downloaded driver files have been extracted. Additional installation instructions may be provided with the downloaded drivers in a “Readme” text file.

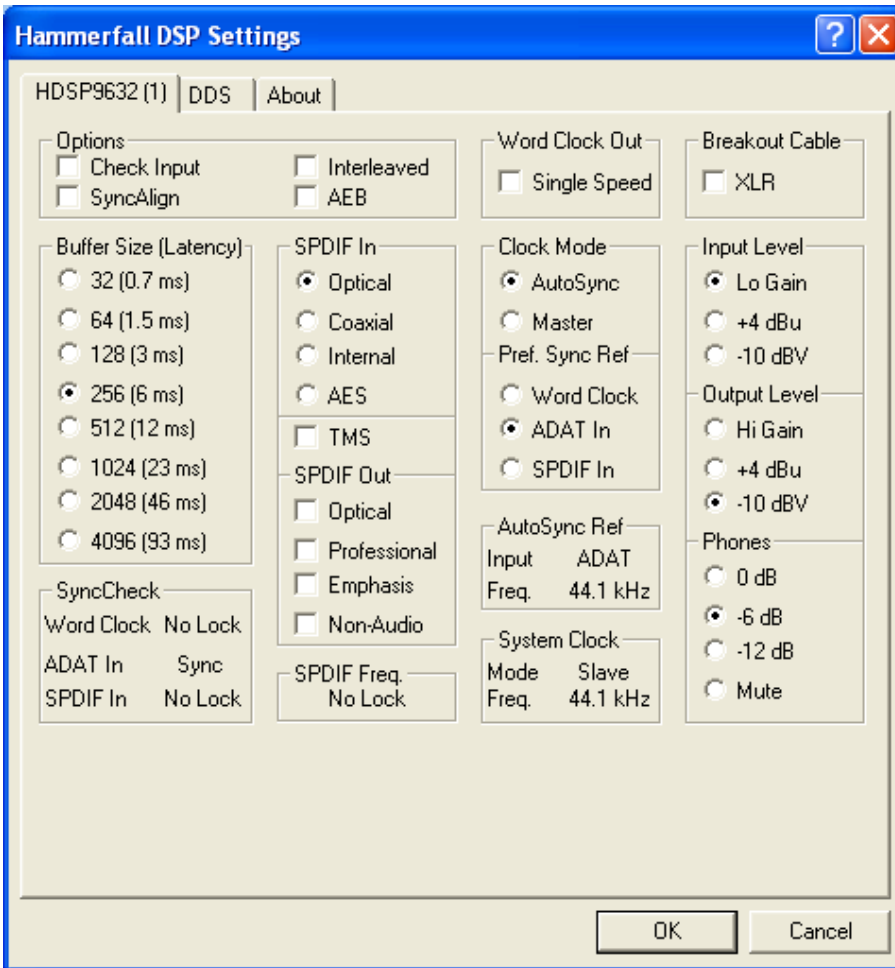
While installing the driver you may get security warnings from Windows. Select Continue if this happens.

To update the firmware, follow the instructions provided in the firmware update download. You must perform the exact sequence of steps indicated, or the update will not be installed correctly.


After installing the drivers and updating the firmware, reboot the computer to ensure the installation is correct and to see the driver and mixer control panels in the task bar.

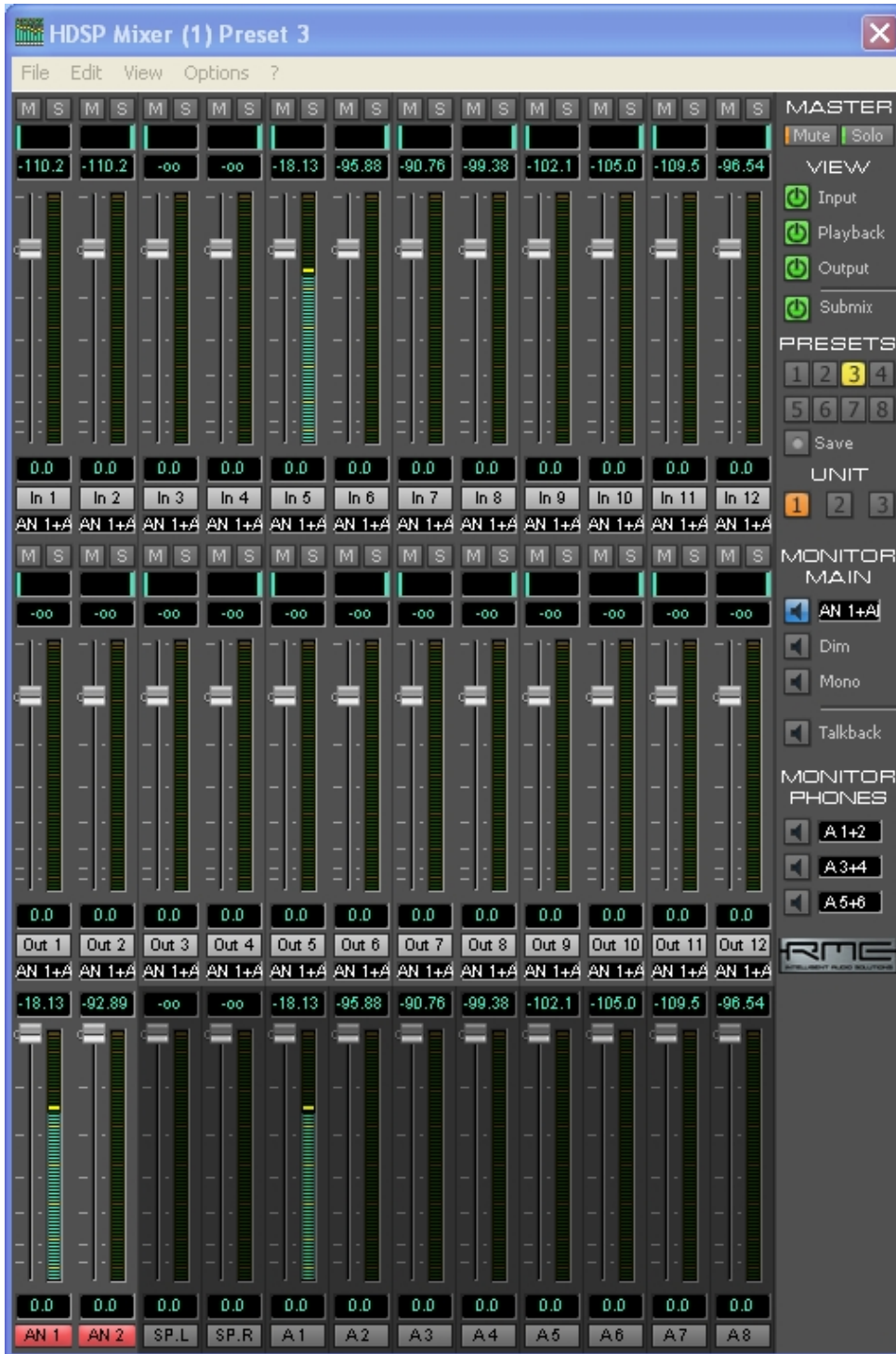
Driver Configuration

Right click on the driver icon in the system tray  and select Settings to display the driver settings control panel. The default settings from the driver installation are normally the correct ones for use with Court Recorder. Confirm that the setting match those shown in this screen shot:



Recording Mixer Configuration

Right click on the Mixer icon in the system tray  and select Mixer to display the mixer control panel. The Mixer control panel will look something like this:



Note: this screen shot was taken while there was audio being fed into Channel 1 of the microphone preamplifier. If you do not have a signal feeding into the system, the audio levels will all be blank.

Set Options

From the Options pulldown menu, enable “Deactivate Screensaver” (a check mark next to that item indicates that it is active), and enable “Ignore Position”. Also on the Options menu, disable (uncheck) the ASIO Direct Monitoring option.

Load Presets

SoniClear includes a set of preset controls stored in a .MPR mixer setting file. The preset files are copied into the SoniClear program directory when SoniClear is installed (such as the file RME9632_Presets_RevO.mpr). Load the configuration presets for the card using the File/Open All Presets menu selection.

Select Preset 8

Preset 8 is designed to mix eight audio sources connected into ADAT lines 1-8 (such as an external microphone preamp). The eight signals are sent individually to be recorded in SoniClear as separate channels, and combined into a Stereo Mix.

In the Stereo Mix the eight signals are panned evenly across the stereo “field” to give the sense of microphones coming from a stage with the source of the speaking distributed from left to right. The Stereo Mix is accessed in Court Recorder software using the “SPDIF” audio device as the default recording device in the Hardware preferences. This two-channel mix is available from the Analog outputs on the breakout cable (channels 1 and 2) for feeding into a digital backup recorder.

The 8 input channels are accessed in the Court Recorder software as individual input sources using ADAT channels 1-8. This is specified in the Hardware preferences under the Recording Array device selection.

Presets 1-7

Reserved for future use.

Recording Matrix Configuration

From the Mixer control panel, select View/Matrix from the pulldown menu to display the patching matrix display. You should see a Matrix configuration with these values:

HDSP Matrix (1) Preset 8 - Default													
	AN 1	AN 2	SP.L	SP.R	A1	A2	A3	A4	A5	A6	A7	A8	
In 1			0.0										In 1
In 2				0.0									In 2
In 3			0.0										In 3
In 4				0.0									In 4
In 5			0.0		0.0								In 5
In 6				0.0		0.0							In 6
In 7			-1.3	-16.9			0.0						In 7
In 8			-16.9	-1.3				0.0					In 8
In 9			-2.5	-12.0					0.0				In 9
In 10			-12.0	-2.5						0.0			In 10
In 11			-5.4	-6.7							0.0		In 11
In 12			-6.7	-5.4								0.0	In 12
Out 1	0.0												Out 1
Out 2		0.0											Out 2
Out 3	0.0		0.0										Out 3
Out 4		0.0		0.0									Out 4
Out 5	0.0				0.0								Out 5
Out 6		0.0				0.0							Out 6
Out 7	0.0						0.0						Out 7
Out 8		0.0						0.0					Out 8
Out 9	0.0								0.0				Out 9
Out 10		0.0								0.0			Out 10
Out 11	0.0										0.0		Out 11
Out 12		0.0										0.0	Out 12
AN 1	AN 2	SP.L	SP.R	A1	A2	A3	A4	A5	A6	A7	A8		

If the Matrix settings do not match what is shown, manually reset them by clicking the mouse in each matrix cell to turn on or off the value at that crosspoint. For matrix crosspoints that are panned in the stereo mix (set to a value other than 0.0), click on the crosspoint to set 0.0. Then adjust the exact pan value using the pan sliders in the Mixer panel. To do make this panning adjustment, click on the SP.L/SP.R output volume slider. This will activate the mix for the SPDIF Stereo Mix. Then adjust the pan control with the mouse. The pan control is the small vertical line above each input volume control slider.

Court Recorder Software Configuration

After installation of the software and hardware, Court Recorder must be configured to work with the RME HDSP 9632 card. To do this, start Court Recorder and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section of the Hardware tab adjusts the usage of the sound cards in the computer during recording.

Default Recording Device

This is the default sound card that will be used as the audio source for the Stereo Mix channels that will be stored in the primary recording file. The value should be set to “HDSP9632 SPDIF”. Input source will automatically be set to “Not user selectable.” Note that the Stereo Mix that is recorded to the computer is also available on the SPDIF on the optional digital output breakout cable for sending to a backup recording device.

Recording Array Devices

Multichannel recordings require audio input from a series of audio interface channels that are represented in the software as stereo pairs and numbered sequentially. Click the Edit button. From the popup dialog, set the value in first device field to “HDSP9632 ADAT (1+2)”. Click the Defaults button to set the rest of the devices in the recording array, which will be numbered sequentially for channels 1-8. Notice that the 5th and 6th Recording Array Device will be set to channels 7+8. This is not a problem because these channels are not used for 8-channel recording.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Recording Options

Recording Process Priority

Default value should be set to Medium.

Buffer Size (mSec)

Default value should be set to Automatic.

Disk Update Time

Default value should be set to 5000.

Force Recording at 44.1KHz

Value should be changed to ON (Checked).

Playback Device Selection

The Playback Device Selection section of the Hardware tab controls the usage of the sound cards in the computer during playback from the Court Recorder program.

Typically the Transcriber Live program will be used for playback. However, Court Recorder must be configured correctly in the event that playback is selected by the user, instead of playing in Transcriber Live.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers. Select the internal sound card device for playback through the computer speakers.

Headphone Monitor Device Selection

This does not apply to Court Recorder.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The “Use Removable Device If Present” and “Automatic Removable Device Selection” check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The default value should be changed to 4 buffers.

Buffer Size

The value should be changed to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Recording Options - Sound Quality

In the Recording Options preferences tab, set the recording type to Multichannel (MP3). Then set the combo box to the number of channels. In this case, the correct value is 10 (2 for the stereo mix, plus 8 for each individual microphone channel).

If you have some users who require only a two-channel recording, the number of channels can be set to 2. This will create a recording with just the Stereo Mix from the HDSP 9632.

Transcriber Live Software Configuration

To configure Transcriber Live, start the program and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according the following instructions.

Recording Device Selection

The Recording Device Selection section does not apply to Transcriber Live, as it is a playback only program.

Playback Device Selection

The Playback Device Selection section of the Hardware tab adjusts the usage of the sound cards in the computer during playback.

Default Speaker Device Selection

This is the sound card that will be used for playback through speakers (when the Speaker option is checked in the main window). The default value should be set to the computer's internal sound card. Plug speakers into the computer line output or headphone output for playback into the room.

Headphone Monitor Device Selection

This is the sound card that will be used for playback through headphones. The default value should be set to HDSP9632 Analog (1+2). Monitoring headphones should be connected to the headphone jack provided on the breakout output cable. The output cable connects to the 15 pin D-type connector on the bottom of the bracket. The headphone audio is also available from the Line Out jacks on the breakout cable.

Removable Recording Device

Court Recorder does not use the automatic removable devices selection feature in this configuration. The "Use Removable Device If Present" and "Automatic Removable Device Selection" check boxes should be unchecked.

Advanced Playback Options

Playback Buffers

The value should be changed to 4 buffers.

Buffer Size

The default value should be changed to 1000mSec.

Monitor Delay

Monitor Delay should be set to the default of 3 seconds.

Force Recording at 44.1KHz.

This field should be set to Unchecked (the default value).

Using Court Recorder With Dragon Voice Recognition

It is possible for voice writer court reporters to use Court Recorder in conjunction with Nuance Dragon voice recognition software. This allows a draft transcript to be produced from dictation spoken into a stenomask microphone.

For real-time usage, the Court Recorder, Transcriber Live, and Dragon programs run at the same time.

For batch transcription, Court Recorder can record both the room microphone and the stenomask in separate tracks during the session. After completing the recording, the two channels can be split into separate files. The room microphone channel can be stored in a file for delivery to clients. The stenomask channel can be stored in a file to be opened in the Dragon software for processing into a draft transcript.

Dragon will not be able to convert the room microphone audio into a transcript. At this time there is no product or technology able to recognize unlimited voices and unlimited vocabularies. The only way that voice recognition software can convert speaking to text is with a known speaking voice and with a known vocabulary. By speaking into a stenomask during the session (or repeating words spoken in the recording into a microphone at a later time), the software voice recognition software will be able to translate into text with a usable level of accuracy.

Using Dragon requires the development of special speaking techniques that will be recognized by the Dragon voice recognition processing. The user must also train the Dragon software to create a user profile to recognize the characteristics of the user's voice. Trio Systems does not support the Dragon software, nor does it offer assistance in developing the Dragon profile. Consult with Nuance and court reporting support groups for suggestions on how this can be accomplished.

Real Time Voice Writing

The key to making Court Recorder and Dragon work together in real time is to ensure that two uniquely named audio input devices are being used. Typically this will be a MobilePre for the Court Recorder recording and an Andrea USB audio interface connected to a stenomask. It is also possible to use the iMic connected to a Voice Tracker, with the stenomask connected to an Andrea USB adapter, or the computer sound card. What will not work is using two USB adapters of the same make (such as two Andrea adapters or two iMic adapters). In that case Court Recorder and Dragon cannot recognize which device is the correct one to access for audio input.

Once you have selected the input devices that will work together, install and configure Court Recorder as directed above in this Installation Guide. Then follow the Dragon

installation and configuration instructions for the stenomask audio adapter. You should then be able to run both programs at the same time, switching between the two program windows as required.

Court Recorder software and Dragon automatic voice recognition software both require significant computer processing power. Not all computers will be fast enough to support both programs running at the same time. You will need to test your system to determine if it is capable of doing this.

Batch Transcription

For batch transcription of stenomask audio after a recording session using Dragon, you will need to record the mask audio in a separate channel from the room microphone. This requires using the MobilePre audio interface, which has separate jacks for each input channel.

Connect the room microphone to the left channel (labeled “Channel 1” on the MobilePre) and the stenomask microphone to the right channel (labeled “Channel 2” on the MobilePre). The reason for using room microphone on the left channel is that the File/Export to Image Folder function will export only the left channel when creating the archive disk for distribution, which should be the room microphone.

When using a MobilePre as the interface device, the stenomask must be connected to the XLR microphone input #2. Do not use the line level ¼” phone input.

Marantz PMD 560 Recorder Configuration

Overview

The Fireface configuration listed above is set up to feed the PMD 560 recorder with a stereo mix of all microphones as a backup recording system. When the Fireface starts up, it will automatically load the last configuration setting from internal memory. If the computer is not functioning for any reason, the PMD 560 can continue to record from the Fireface without the need for control from the computer.

Power and Cables

The PMD 560 includes an internal power supply that can be used with US or European standards, depending on the model. It does not operate from battery power.

The PMD 560 should be connected from the Analog output channels 1 and 2 of the Fireface to the consumer line-level input on the PMD 560 (left and right, respectively). Use a stereo cable that has TRS or TS ¼" male phone plugs on one end and RCA male plugs on the other.

The option exists to connect the PMD 560 directly to the computer for accessing the data on the flash memory drive. It is recommended instead that when you need to access the backup recording on the flash disk that you remove the flash card from the PMD 570 and plug it into a computer using an appropriate CF Flash Card adapter.

Setup

Follow the PMD 560 installation manual to program the unit for recording from the analog input at the sample rate of 44.1K, storing in MP3 stereo with 128kbps encoding. This will provide for over 17 hours of recording time on a 1 Gigabyte flash card.

Recording and Playback

Consult the PMD 560 instruction manual for directions on how to record and play back recordings. The headphone jack can be used to monitor recording.

Marantz PMD 570 Recorder Configuration

Overview

The Fireface configuration listed above is set up to feed the PMD 570 recorder with a stereo mix of all microphones as a backup recording system. When the Fireface starts up, it will automatically load the last configuration setting from internal memory. If the computer is not functioning for any reason, the PMD 570 can continue to record from the Fireface without the need for control from the computer.

The unit can be connected using input and output signals that use SPDIF, balanced professional line, and consumer line standards. These instructions are specified using the SPDIF connection from the Fireface to reduce the number digital to analog conversions needed in the signal chain.

Power and Cables

The PMD 570 includes an internal power supply that can be used with US or European standards, depending on the model. It does not operate from battery power.

The SPDIF connection is made using an RCA male to RCA mail cable designed specifically for digital use. Connect the Fireface SPDIF output to the PMD 570 input, and Fireface SPDIF input to the PMD 570 output.

The option exists to connect the PMD 570 directly to the computer for accessing the data on the flash memory drive. It is recommended instead that when you need to access the backup recording on the flash disk that you remove the flash card from the PMD 570 and plug it into a computer using an appropriate CF Flash Card adapter.

Setup

Follow the PMD 570 installation manual to program the unit for recording from the SPDIF input at the sample rate of 44.1K, storing in MP3 stereo with 128kbps encoding. This will provide for over 17 hours of recording time on a 1 Gigabyte flash card.

Recording and Playback

Consult the PMD 570 instruction manual for directions on how to record and play back recordings. The headphone jack can be used to monitor recording.

Export Notes using a Word Template

SoniClear 9 has the ability to export notes directly to a Word document. When the user selects to export the notes in .DOC format, SoniClear uses a default template to format the output the notes and store the information as a standard Word Doc file.

The Export Notes feature defaults to exporting in Microsoft Word .DOC format. This is enabled when there is a default SoniClear Word export template installed. If the template folder is not present the .DOC export option will not be shown to the user, only the text export option.

Default Template

The default template location is a folder called “template” located under the SoniClear 9 installation folder (such as c:\Program Files (x86)\SoniClear9\template). Additional sample templates are installed in the folder “SampleTemplates”, also located under the SoniClear 9 installation folder. To use one of the sample templates, copy the contents of the specific sample template folder into the default template folder (“template”).

Customize the Export Template

The Word template is based on a feature of .DOC files that supports standard HTML formatting. The HTML markup file and additional support files are packed into a single .DOC file. The SoniClear 9 export process formats the file and note information into the HTML format using the layout in the template.

There are three files that control the export process, plus any additional files such as images, needed by the template the user sets up.

1. `filelist.xml` lists ALL files and is needed by HTML. It includes the `template.htm`, `filelist.xml`, and any image files.
2. `template.lst` is for SoniClear to manage processing and it contains the extra files setup in the template (e.g. images) and provides the content type.
3. `template.htm` is the HTML layout for the template.

Additional image files and CSS files can be included to create the desired document format. The `headerimage.jpg` file is the logo image used in the default template. It is the SoniClear logo by default and can be replaced with any JPG file.

Template.htm File

The template.htm file is a standard html file. The default template installed with SoniClear contains all of the pieces to properly display the exported notes in a Word document.

The header should not be modified, with the exception of the <title> section.

The user can change the layout of the <body> section to suit. Display of content in the body is controlled by four "variables" that are embedded using special purpose tags in the template.htm file: MeetingTitle, StartRecording, Notes, and EndRecording.

Variable tags are unique to SoniClear and are defined in the template.htm file using an start variable tag and end variable tag.

"<!***" is the start of the variable

"!>" is the end of the variable

Following the start of variable tag is the name of the variable being specified. After the variable name is a single space. Following the space is a vertical bar character, "|". After the vertical bar is the start of the html for displaying the variable. Any legal HTML markup can be used in this section. This exact format for entering the variables must be followed exactly. The export process does not handle variations, such as two spaces before the vertical bar or misspelled variable names.

Within the html section of the variable definition there can be parameter values specified by a percent sign followed by a number, such as %1, %2, etc. The application of the parameter depends on the type of variable involved.

Here are example variables defined using the special SoniClear tags:

```
<!***MeetingTitle |<p><b>%1</b></p>!>
```

```
<!***Notes |<p>%2:: %3</p>!>
```

The variable tags can be surrounded by additional HTML code to control the appearance of the overall document.

Meeting Title Tag

The "MeetingTitle" variable tag controls the output of the Title field from the SoniClear recording. MeetingTitle has one parameter - %1 - which is the title of the meeting.

Example usage:

```
<!***MeetingTitle |<p><b>%1</b></p>!>
```

This will display the meeting title field from the recording in bold text in a separate paragraph.

Notes Tag

The Notes variable tag has four parameters:

%1 - Elapsed Time

%2 - Title

%3 - Notes detail

%4 - Time of day

The Notes variable tag displays the information from a note in the file. The export process sequentially outputs the formatted HTML markup for each note in the file.

Example usage:

```
<!***Notes |<p>%2:: %3</p>!>
```

This will output each note in a separate paragraph showing the Title and the Detail fields from the note, separated by "::".

Running SoniClear from the Command Line

SoniClear can be run from a command line statement. This is useful for integrating SoniClear with other programs that need to control the management of files and workflow.

The general command line syntax is:

<program path>SoniClear9.exe <command> <output file> <input file >

The commands available are:

Action	Command
Create Docket Template	CreateAgenda
Create New File	CreateRecording
Create New File and Start Recording	StartRecording
Stop and Exit Program	StopExit
Stop, Auto Archive, and Exit Program	StopArchiveExit

Input Data Format

SoniClear will accept Docket and Marker data from a text file when that file is specified in the command line statement. The text file is a “tab delimited ascii” file in the following format:

Column	Value
1	Item Type: “A” – Agenda item (display in Agenda items popup) “M” – Marker item (display in Marker items popup) “T” – Title item (add to Title field automatically) “H” – Header item (add to notes automatically)
2	Title text
3	Detail text
4	Don’t Export This Note To Archive (1=True, 0=False)
5	Add as separate note (1=True, 0=False)
6	Key Value (Markers Only) – F1, Shift-F1, Num1, etc
7	Macro Code (Markers Only) text that triggers macro

Notes:

- “Agenda” items are Docket items in Court Recorder 9.
- The Title and Detail text fields can incorporate the RTF markup for New Paragraph: “\par”, where the backslash functions as a escape character. To include the backslash character in the text string, it must also be escaped, i.e: “\\”.
- The Header items are added to a new file as soon as it is created, or a Docket Template is imported into an existing file. Header items are not displayed in the Agenda item popup dialog.
- Macro codes can be any string of characters except Space. Be careful to select a string of characters that will not normally be typed (such as an abbreviation, or a period character followed by a unique value).
- Marker function key number is indicated by the following key codes:

Function Keys 1 through 12

F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12

Function Keys Shift F1 through Shift 12

Shift-F1
Shift-F2
Shift-F3
Shift-F4
Shift-F5
Shift-F6
Shift-F7
Shift-F8
Shift-F9
Shift-F10
Shift-F11
Shift-F12

Function Keys Control F1 through Control 12

Ctrl-F1
Ctrl-F2
Ctrl-F3
Ctrl-F4
Ctrl-F5
Ctrl-F6
Ctrl-F7
Ctrl-F8
Ctrl-F9
Ctrl-F10
Ctrl-F11
Ctrl-F12

Number Pad Keys 0 through 9

Num-0
Num-1
Num-2
Num-3
Num-4
Num-5
Num-6
Num-7
Num-8
Num-9

Number Pad Keys Control 0 through Control 9

Ctrl-Num-0
Ctrl-Num-1
Ctrl-Num-2
Ctrl-Num-3
Ctrl-Num-4
Ctrl-Num-5
Ctrl-Num-6
Ctrl-Num-7
Ctrl-Num-8
Ctrl-Num-9

Sample Import File

Following is an example data import text file including Docket items and markers:

T	Courtroom 1 – June 14, 2018					
H	Cases Scheduled for June 14, 2018		0	1		
A	Court In Session		0	1		
A	Case #123		0	1		
A	Case #456		0	1		
A	Case #789		0	1		
A	Case #101		0	1		
A	Court Dismissed		0	1		
M	Judge's Order		0	1	F1	.jo

Create Docket Template

SoniClear can create a docket template automatically from a specially formatted text file. The command line syntax is:

```
<program path>SoniClear9.exe CreateAgenda <output file> <input file >
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” CreateAgenda  
“c:\My Documents\SampleAgenda.agd”  
“c:\BatchImports\SampleAgenda.txt”
```

Create New File

SoniClear can create a new file and leave the program displayed and ready to start recording. The command line syntax is:

```
<program path>SoniClear9.exe CreateRecording <output file>
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” CreateRecording  
“c:\My Documents\MeetingXYZ.wav”
```

Notes:

- The output file type must match the default recording type set in the SoniClear preferences.

Create New File and Import Docket

SoniClear can create a new file and leave the program displayed and ready to start recording. The command line syntax is:

```
<program path>SoniClear9.exe CreateRecording <output file> <input file >
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” CreateRecording  
“c:\My Documents\MeetingXYZ.wav”  
“c:\BatchImports\SampleAgenda.txt”
```

Notes:

- The output file type must match the default recording type set in the SoniClear preferences.
- The input file is the Docket and Marker information in a text file in the format required for importing data.

Create New File and Start Recording

SoniClear creates a new file and starts recording. The command line syntax is:

```
<program path>SoniClear9.exe StartRecording <output file>
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” StartRecording  
“c:\My Documents\MeetingXYZ.wav”
```

Notes:

- The output file type must match the default recording type set in the SoniClear preferences.

Create New File, Import Docket, and Start Recording

SoniClear creates a new file, imports the docket and marker data, and starts recording. The command line syntax is:

```
<program path>SoniClear9.exe StartRecording <output file> <input file >
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” StartRecording  
“c:\My Documents\MeetingXYZ.wav”  
“c:\BatchImports\SampleAgenda.txt”
```

Notes:

- The output file type must match the default recording type set in the SoniClear preferences.
- The input file is the Docket and Marker information in a text file in the format required for importing data.

Stop and Exit Program

SoniClear stops recording or playing (if in one of those modes) and then exits the program. The command line syntax is:

```
<program path>SoniClear9.exe StopExit
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” StopExit
```

Notes:

- If SoniClear is not already running, no action is taken.

Stop, Archive, and Exit Program

SoniClear stops recording or playing (if in one of those modes), performs Auto Archive action, and then exits the program. The command line syntax is:

```
<program path>SoniClear9.exe StopArchiveExit
```

For example (enter on one line):

```
“c:\Program Files\SoniClear9\SoniClear9.exe” StopArchiveExit
```

Notes:

- If SoniClear is not already running, no action is taken.
- When Auto Archive completes successfully, it displays a completion dialog requiring confirmation by user.
- If an error occurs while performing Auto Archive, displays an error dialog requiring confirmation by user.

Sample Batch File

For convenience, the SoniClear command can be included in a text file with the .BAT extension. Then the user can double click on that file each time the command should be run. Following is a sample batch file that launches SoniClear and generates an agenda template from a text file:

```
cls
@ECHO OFF
ECHO. *****
ECHO. ** Create Agenda Import Data
ECHO. *****
“c:\Program Files\SoniClear9\SoniClear9.exe” CreateAgenda “c:\My
Documents\SampleAgenda.agd” “c:\BatchImports\SampleAgenda.txt”
cls
EXIT
```

Using Windows Scheduler Tasks to Start and Stop Recording

SoniClear recording can be run on a timed basis using the Windows Scheduled Tasks feature. The SoniClear command to run the program and start recording process (StartRecording) is added as a scheduled task, set to run when the recording should start. A command to exit SoniClear (StopExit) is added as a second scheduled task, set to run at the time when the recording should stop.

Windows 7 and Windows 8 Instructions

To set up the scheduled tasks in Windows 7 or Windows 8, follow these instructions:

1. For Windows 7, Click the Start button, Select All Programs, Accessories, System Tools and then Task Scheduler.
For Windows 8, start the Control Panel (see *“How To Start The Control Panel”* in the Windows 8 Setup section of this manual), select Administrative Tools, and then Task Scheduler.
2. Add the StartRecording command task to initiate recording at the desired time:
 - 2.1. Click on “Create Task”.
 - 2.2. Enter a suitable title, such as “Start SoniClear for Monday Meeting”
 - 2.3. Click the Trigger tab.
 - 2.4. Click the New button.
 - 2.5. Select when you want the recording to start and click OK
 - 2.6. Select the Actions tab.
 - 2.7. Click New button.
 - 2.8. Click Browse button.
 - 2.9. Navigate to the SoniClear program directory (usually Local Disk (C:), Program Files, SoniClear9).
 - 2.10. Select SoniClear9.exe and click Open button.
 - 2.11. In the “Add arguments” field, enter “StartRecording”.
 - 2.12. Click OK button.
 - 2.13. Click OK to store the new task.
3. Add the StopExit command task to stop recording at the desired time:
 - 3.1. Click on “Create Task”.
 - 3.2. Enter a suitable title, such as “Stop SoniClear for Monday Meeting”
 - 3.3. Click the Trigger tab.
 - 3.4. Click the New button.
 - 3.5. Select when you want the recording to start and click OK
 - 3.6. Select the Actions tab.
 - 3.7. Click the New button.
 - 3.8. Click Browse button.
 - 3.9. Navigate to the SoniClear program directory (usually Local Disk (C:), Program Files, SoniClear9).
 - 3.10. Select SoniClear9.exe and click Open button.
 - 3.11. In the “Add arguments” field, enter “StopExit”.
 - 3.12. Click OK button.

- 3.13. Click OK to store the new task.
4. You can test that the program will record and stop by manually activating these scheduled tasks:
 - 4.1. Right click the start recording task (that you labeled “Start SoniClear for Monday Meeting”, or whatever)
 - 4.2. Select Run – SoniClear should run and start recording immediately.
 - 4.3. Right click the stop recording task and select Run – SoniClear should stop recording and exit.

Using Windows Command Line to Schedule SoniClear

A batch file to schedule recording could be created using the Windows `schtasks` command. This command could be used to set up the SoniClear tasks for starting and stopping recording. The syntax for `schtasks` is:

```
schtasks /create /tn TaskName /tr TaskRun /sc schedule [/mo modifier] [/d day] [/m month,month...] [/i IdleTime] [/st StartTime] [/sd StartDate] [/ed EndDate] [/s computer] [/u [domain\]user /p password] [/ru {[Domain\]User | "System"}] [/rp Password] /?
```

Consult with the Windows documentation for more details.