

# **ClearScribe 6.0**

## **INSTALLATION GUIDE**



## **About This Manual**

This manual covers the installation procedures for the following SoniClear digital recording software products:

- ClearScribe Dual-Channel, Rev 6.0
- ClearScribe MX Multi-Channel, Rev 6.0

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# Installation

## Hardware Requirements

ClearScribe is a hardware and software system for recording court proceedings, administrative hearings, and depositions. See the ClearScribe User Guide for detailed operating instructions.

ClearScribe software runs on a Windows computer with additional audio interface hardware. For reliable operation, and to ensure effective support, ClearScribe software should be used with the recommended hardware, as it is not designed to run on any other equipment.

### Computer Hardware

ClearScribe requires the following computer hardware:

- Laptop or Desktop Computer
- Windows XP (XP Professional recommended)
- Single Core Processor, 1.5GHz or faster  
Dual Core Processor, 1.5 GHz recommended for ClearScribe MX.
- Adequate disk space for recording (see “Disk Storage Space” below).

### Disk Storage Space

ClearScribe 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
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

## **Audio Hardware**

ClearScribe works with the following audio hardware:

ClearScribe Dual-Channel:	M-Audio MobilePre Griffin Technology iMic
ClearScribe MX Multi-Channel:	RME Audio Fireface 800 M-Audio Delta 44 M-Audio Delta 1010
Optional Backup Recorder:	Marantz PMD 660 or PMD 560

## **Technical Support**

Contact your ClearScribe dealer or view the ClearScribe Support Page at [www.soniclear.com](http://www.soniclear.com) for current release and technical support information.

# Computer Setup

The computer must be configured specifically for audio recording. Following are recommended steps to ensure that the computer will run reliably when running ClearScribe.

## Power Management

Turn Off all Hibernation, Screen Saver, and Power Saving options:

To prevent the system from powering down to reduce power usage, from Control Panel – > Power Options, activate the “Always On” power scheme. For Plugged in and Running on Batteries alternatives, set “Turn off monitor”, “Turn off hard disks”, and “System standby” to Never.

To prevent hibernation, from Control Panel -> Power Options -> Hibernate tab, Uncheck “Enable Hibernation”.

Turn off Screen Saver, Right Click on Desktop -> Properties -> Screen Saver tab, select “(None)” for the type of screen saver.

Some manufacturers use the default power management included in Windows XP. However, some systems include extra control panels for this purpose. Consult the computer documentation for more details.

## System Sounds

Turn off System Sounds to prevent these from becoming recorded, from Control Panel -> Sounds and Audio Devices.

In the Audio tab, set Default device to internal sound card.

In the Sounds tab, under Sound Scheme, choose “No Sounds” (select No to saving the previous Scheme). Then click Apply

## Drive Indexing

Turn off drive indexing for all NTFS drives. Open My Computer, right click on the NTFS drive and select Properties. Uncheck “Allow Indexing Service...” and click Apply. In the confirmation dialog, select “Apply Changes to C:\subfolders and files”. If you get the Access Denied error message, click Ignore All.

## Performance

Performance options are set in the dialog Control Panel -> System -> Advanced -> Performance -> Settings.

In the Visual Effects tab, select “Let Windows choose what’s best for my computer”. On slower computers, moving a window around on the screen can cause interruption of recording. If that occurs, uncheck “Show Window contents while dragging”. This will automatically switch the type to Custom and will change the display to optimize the performance of window movement. This may also change the appearance of windows on the screen.

In the Advanced tab, set Processor scheduling to “Program”.

In the Advanced tab, set Memory Usage to “Program”.

In the Advanced tab, Virtual memory, click Change, select Custom size and enter the same size in both Initial size and Maximum size. The required value will depend on how much memory is installed and how many programs are used simultaneously. As a minimum value, enter the following:

- For 256MB RAM - Enter 512 for Min and Max
- For 512MB RAM - Enter 768 for Min and Max
- For 1024MB RAM - Enter 1536 for Min and Max

## Automatic Updates

Turn off Windows Automatic Update service. From Control Panel -> System -> Automatic Updates tab, select “Turn off Automatic Updates”. For systems that are always network connected, it may be safer to select “Notify me but don’t automatically download or install them.” This will ensure that the user is away of the need to perform an update, without interfering with recording processes.

## Internet Time

Turn off the automatic updating of the system time with a central server. From Control Panel -> Date and Time -> Internet Time, Uncheck “Automatically synchronize with an Internet time server”. Click Apply.

### Desktop Cleanup Wizard

Disable the automatic Desktop Cleanup Wizard. From Control Panel -> Display -> Desktop -> Customize Desktop -> Uncheck “Run Desktop Cleanup Wizard every 60 days”.

# ClearScribe Dual-Channel Installation

## Overview

ClearScribe Dual-Channel software uses an audio interface device to capture microphone audio and monitor playback through headphones. The audio playback to speakers is through the sound card of the computer itself. The ClearScribe Dual-Channel system is typically configured in one of these two setups using either with the MobilePre or the Voice Tracker for audio input.

### MobilePre Configuration

This is the recommended setup for recording in situations that require professional microphones, such as two conference microphones, or a conference microphone on one channel and a stenomask microphone on the second channel.

The M-Audio MobilePre is a professional audio interface. Microphones are connected to the XLR connectors on the MobilePre and the audio signal is sent to the computer through a USB cable.

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

- Laptop or Desktop Computer
- Windows XP Professional
- M-Audio MobilePre Audio Interface
- Conference microphones (one or two)
- Optional stenomask for voice reporting
- Digital backup recorder
- Speakers

### iMic Configuration

This is the recommended setup for recording in situations that require a Voice Tracker, or where you are trying to reduce the size and weight of items to carry and a less advanced microphone is adequate.

The Griffin Technology iMic is a consumer-grade audio interface that works well when connecting either a line-level microphone (such as the Acoustic Magic Voice Tracker), or a computer-compatible microphone (such as the Labtec 333 or Centrum Sound CM-3). 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 typical hardware for this configuration consists of the following items:

- Laptop or Desktop Computer
- Windows XP Professional
- Griffin Technology iMic
- Acoustic Magic Voice Tracker
- Digital backup recorder
- Speakers

# MobilePre Setup

## Software Installation

ClearScribe Dual-Channel version 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 M-Audio MobilePre driver software must be installed from the disk supplied with the unit. Alternatively, the latest version can be downloaded and installed from the M-Audio website ([www.m-audio.com](http://www.m-audio.com)). Follow the instructions provided by M-Audio.

## Hardware Installation

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

The microphones must be connected to the XLR connectors of the MobilePre. For microphones that do not have the correct connector, an adapter must be used. Do not connect a microphone to the 1/4" phone jacks, as these are designed for line level signals.

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 MobilePre control panel (the control panel is installed automatically along with the device drivers). Double click on the M-Audio icon in the system tray to bring up this control panel (a small round icon that looks like a greater-than ">" symbol on a red background).

The USB Record setting should be set to zero (near the middle of the scale), and with the mute button Unchecked. The Direct Monitor must be muted (Mute check box Checked). The Device Output must be set to zero (top of the scale, maximum volume). Device Output should have the mute option off (Mute check box Unchecked).

## Software Configuration

After installation of the software and hardware, ClearScribe must be configured to match the hardware in use. To do this, start ClearScribe 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 M-Audio MobilePre driver. When this is selected it will automatically set the Input Source to Wave In.

## **Removable Recording Device**

ClearScribe does not normally use the automatic removable devices selection feature. 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 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.

### **Default Playback Device Selection**

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

### **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 internal sound card.

### **Removable Recording Device**

ClearScribe does not normally 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. These fields should only be changed in the event of problems with playback using the default settings. Consult SoniClear support for assistance.

#### **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 the default value of Unchecked.

## Adjusting MobilePre Recording and Playback Volume

Volume for recording is controlled using the MobilePre volume control knobs on the front of the unit. Playback volume on the headphones is also set using the volume knob on the front of the unit.

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 is not the internal sound card. To display the correct panel, follow these instructions:

- Double click on the speaker icon in the system tray. If the speaker icon is not visible:
  - Click the Start button and select Control Panel
  - Double click “Sounds and Audio Devices”.
  - Make sure the option “Place volume icon in the taskbar” is checked and click Apply.
  - The Volume icon should appear in the system tray of the taskbar. If this does not cause the speaker icon to be displayed, consult with technical support for the computer. In any case you will be able to select the Audio tab and click the Volume button to display it from this dialog.
- When the Volume Control dialog is displayed:
  - From the Options pulldown, select from the Properties command.
  - In the Mixer device control, select the sound card in your computer, and make sure the “Adjust volume for” control is set to Playback. This will display the system sound card playback Volume Control panel.
  - In the Volume Control panel, make sure that the Wave output is not muted and that the rest of the audio sources are muted.
  - The Wave and Volume Control sliders control the volume of the playback. Adjust to a suitable level.

# **iMic Setup**

## **Software Installation**

ClearScribe Dual-Channel version 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 XP system. Support information for the iMic can be obtained from the Griffin Technology website ([www.griffintechnology.com](http://www.griffintechnology.com)).

## **Hardware Installation**

Once the SoniClear 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 (the control panel is installed automatically along with the device drivers). Double click on the speaker icon in the system tray to bring up this control panel. See detailed instructions below, "Adjusting iMic Recording and Playback Volume".

For monitoring audio off of the computer, connect headphones to the headphone jack on the MobilePre. Playback from the computer will be heard on the headphones. Volume can be adjusted using the volume control knob on the MobilePre unit.

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.

# Software Configuration

After installation of the software and hardware, ClearScribe must be configured to match the hardware in use. To do this, start ClearScribe 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 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

ClearScribe does not normally use the automatic removable devices selection feature. 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 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.

### **Default Playback Device Selection**

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

### **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 internal sound card.

### **Removable Recording Device**

ClearScribe does not normally 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. These fields should only be changed in the event of problems with playback using the default settings. Consult SoniClear support for assistance.

### **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 the default value of Unchecked.

# Adjusting iMic Recording and Playback Volume

## Recording Volume

Volume for recording is controlled using the Windows Volume Control panel. To access the recording panel for the iMic, follow these instructions:

- Double click on the speaker icon in the system tray. If the speaker icon is not visible:
  - Click the Start button and select Control Panel
  - Double click “Sounds and Audio Devices”.
  - Make sure the option “Place volume icon in the taskbar” is checked and click Apply.
  - The Volume icon should appear in the system tray of the taskbar. If this does not cause the speaker icon to be displayed, consult with technical support for the computer. In any case you will be able to select the Audio tab and click the Volume button to display it from this dialog.
- When the Volume Control dialog is displayed:
  - From the Options pulldown, select from the Properties command.
  - In the Mixer device control, select the iMic driver, set the “Adjust volume for” control to Recording, and make sure the Capture volume control is checked. This will display the iMic Record Volume Control panel for the “Capture” device (the input audio source).
  - In the Volume Control panel, make sure that the Capture device is not muted.
  - The Volume slider controls the volume of the recording signal. Adjust 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 is not the internal sound card. To display the correct panel, follow these instructions:

- Double click on the speaker icon in the system tray. If the speaker icon is not visible:
  - Click the Start button and select Control Panel
  - Double click “Sounds and Audio Devices”.
  - Make sure the option “Place volume icon in the taskbar” is checked and click Apply.
  - The Volume icon should appear in the system tray of the taskbar. If this does not cause the speaker icon to be displayed, consult with technical

support for the computer. In any case you will be able to select the Audio tab and click the Volume button to display it from this dialog.

- When the Volume Control dialog is displayed:
  - From the Options pulldown, select from the Properties command.
  - In the Mixer device control, select the sound card in your computer, and make sure the “Adjust volume for” control is set to Playback. This will display the system sound card playback Volume Control panel.
  - In the Volume Control panel, make sure that the Wave output is not muted and that the rest of the audio sources are muted.
  - The Wave and Volume Control sliders control the volume of the playback. Adjust to a suitable level.

## **Using ClearScribe With Dragon Voice Recognition**

It is possible for voice writer court reporters to use ClearScribe 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 ClearScribe and Dragon programs run at the same time. For batch transcription, SoniClear 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 feed into Dragon 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 ClearScribe 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 SoniClear 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 SoniClear 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 ClearScribe 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.

## **Batch Transcription**

For batch transcription of stenomask audio after a 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. Do not use the line level 1/4” phone input.

# ClearScribe MX Installation

## Overview

ClearScribe MX (Multi-Channel) uses the RME Fireface audio interface for recording and playback of audio data. The multi-channel ClearScribe MX system typically includes the following components:

- Laptop or Desktop Computer
- Windows XP Professional
- RME Fireface 800 Audio Interface
- Marantz backup recorder
- Conference microphones
- Optional stenomask for voice reporting
- Optional Microphone Preamplifier
- 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. SoniClear requires that the equipment be configured specifically for the SoniClear product being used. For recording with two channel versions of SoniClear, 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 versions of SoniClear, 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 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, SoniClear 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 Trio Systems 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 1/4" 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](http://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 SoniClear release Readme.txt file for any additional driver requirements that may apply to the current SoniClear 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.

## Windows XP Firewire Patch

A patch is required for Windows XP when recording using a Fireface interface device. When Microsoft released Service Pack 2 for Windows XP, they changed the handling of the firewire port in such a way as to render it unusable for audio recording. Instead of handling the full 400 Megabits/sec transfer rate, it only reportedly runs at 100 Megabits/sec. This is insufficient for reliable audio recording when there are many channels involved.

A patch for this problem is available from Microsoft that must be installed as part of the driver installation process. Consult the Microsoft article on the subject and follow their directions to fix this problem: <http://support.microsoft.com/kb/885222/en-us>.

## 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**

SoniClear supports either two-channel recording or multi-channel recording, depending on the version 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 ClearScribe “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 SoniClear 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.

<b>Stereo Mix Matrix Settings</b>				
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

# Software Configuration

After installation of the software and hardware, ClearScribe MX is configured automatically to work with the RME Fireface 800 unit. If the automatic configuration has been changed for some reason, it can be manually reset to the correct configuration. To do this, start ClearScribe MX and select Edit/Preferences from the pulldown menu. Then select the Hardware tab and modify the settings according to the following instructions. Modifications to the configuration should only be made by a qualified SoniClear technician.

## 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 Fireface 800 Analog (1+2). Input source will automatically be set to Recording Control.

### 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 Fireface 800 ADAT (1+2).

### Removable Recording Device

ClearScribe does not normally use the automatic removable devices selection feature. 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 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.

### **Default Playback Device Selection**

This is the sound card that will be used for playback through headphones. The default value should be set to Fireface 800 Analog (1+2).

### **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 Fireface 800 Analog (3+4).

### **Removable Recording Device**

ClearScribe does not normally 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. These fields should only be changed in the event of problems with playback using the default settings. Consult SoniClear support for assistance.

### **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 the default value of Unchecked.

# **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.