HA8 Hybrid Audio Kit

with the Focusrite 18i20 Gen 4

OPERATION GUIDE

About This Manual

This manual covers the installation and usage of the SoniClear Hybrid 4 Audio Kit, based on the Focusrite 18i20 4th Gen model. This kit is designed for use with all SoniClear digital recording software products.

Revision Date: 6/24/25
Printed in the United States.

Contents

HA8 Operation 7
Overview 7
Using Microphones 8
Adjusting Remote Participant Volume 9
Listening using Headphones 11
Listening using Speakers 11
Using a Backup Recorder 11
Playback from Windows Software 12
Additional Usage Notes 12
Preparation Before Each Meeting 12
SoniClear Recording Channel Layout – Hybrid Recording 13
SoniClear Recording Channel Layout – Non-Hybrid Recording 14
Resetting All Controls 15
Focusrite 18i20 Loopback Kit Installation 17
Hardware Installation 17
Overview 17
USB Interface 17
Power Connection 17
Microphone Connections 17
Headphone Connection 18
Speaker Connection 18
Backup Recorder Connection 18
Hardware Loopback Connections 18
Focusrite 18i20 Software Installation 23
Drivers 23
Saving Presets 23
Focusrite 18i20 Manual Configuration 24
Overview 24
Software and Hardware Loopback Signals 24
How to Open Focusrite Control Panels 25
Settings For Hybrid Recording 26
Inputs 26
Mixer 27
Routing 32

Settings For 8-Channel Non-Hybrid Recording 34
Inputs 34
Mixer 35
Routing 40
Additional Settings 42
Focusrite Driver Settings 45
Streaming Settings 45
Expose Windows Channels 46
Windows Sound Settings 47
Default Playback Device 47
Default Recording Device 48
SoniClear Software Preferences for Hybrid Recording 49
Overview 49
Recording Options Tab - Sound Quality 49
Hardware Tab – Audio Device Selection 51
SoniClear Software Preferences for Non-Hybrid Recording 55
Overview 55
Recording Options Tab - Sound Quality 55
Hardware Tab – Audio Device Selection 57
Transcriber Live Software Preferences 61
Hardware Tab – Audio Device Selection 61
Playback Device Selection 62
Zoom Conferencing Software Configuration 63
Disable Auto Startup 63
Configure Audio Devices 64
Software Updates 64
GoToMeeting Conferencing Software Configuration 65
Disable Auto Startup 65
Configure Audio Devices 66
Software Updates 66
Teams Conferencing Software Configuration 67
Disable Auto Startup 67
Configure Audio Devices 68
Software Updates 69
WebEx Conferencing Software Configuration 70
Disable Auto Startup 70

Configure Audio Devices 71
Software Updates 71
Other Communication Software Configuration 72
Windows App Software Playback Configuration 72

HA8 Operation

Overview

The SoniClear HA8 Hybrid Audio Kit uses the Focusrite 18i20 4th Generation USB audio interface to make it easy to record in-person meetings, computer-based teleconferences, and hybrid meetings with high audio quality. It will work with any conferencing software, such as Zoom, Cisco WebEx, or Microsoft Teams. It also works with softphone programs, such as 8x8 Work, Vonage, and Avaya.

The kit includes the Focusrite 18i20 USB audio interface for connecting microphones and headphones to the computer. Up to six microphones, headphones, and a speaker can be attached.

The Focusrite 18i20 must be installed correctly before use. See the section below, “Focusrite 18i20 Loopback Kit Installation”. After installation, the Focusrite driver and control software will be ready to use when the computer is started, making it immediately ready for teleconferencing and for recording in SoniClear.

Using Microphones

When working in-person without the Hybrid feature, plug in up to eight microphones in the back of the mixer. When using the Hybrid feature where two channels are looped back from the online conference call, plug in up to six microphones on the back and plug in the two loopback TRS cables as described below in this manual.

Position the microphones in the meeting room to pick up all the participants. When working remotely, place one microphone so that it is close to where you are sitting.

Microphone levels are adjusted using the single large “Input” knob on the front of the Focusrite 18i20. Select the channel to adjust using the push buttons to the left of the Input button, then use the knob to adjust the level.

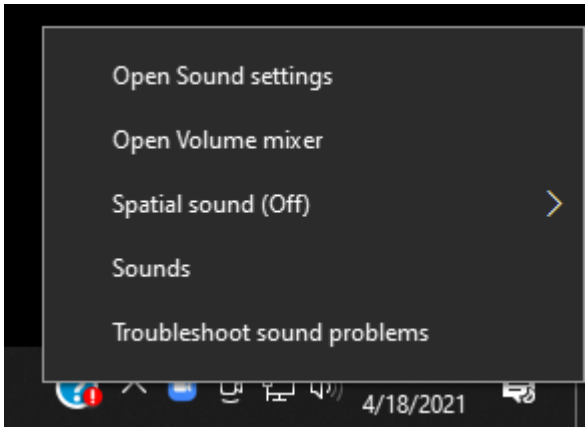
A typical microphone and conference feed will require the level to be set between 12 and 4 O’clock on the Input knob (as indicated by the white ring light around the volume knob. The level of the audio being captured is shown in the level meter section on the front of the 18i20.

When a microphone is connected to one of the inputs, the Input Level should be set to minimum (fully counterclockwise) to avoid picking up noise from the unused microphone jack.

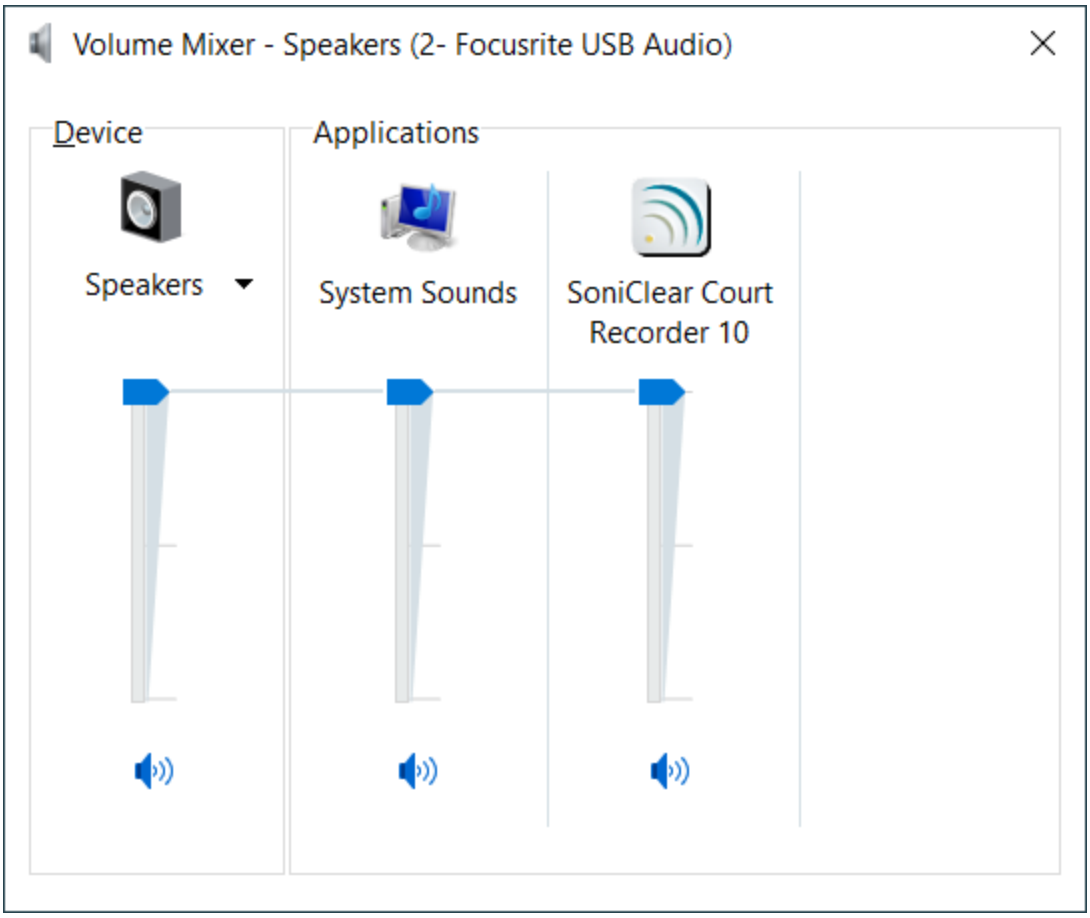
Adjusting Remote Participant Volume

There are no controls on the Focusrite 18i20 for adjusting the playback level of Windows apps. To adjust the volume of remote participants, use the speaker control in the Windows Volume Mixer control panel.

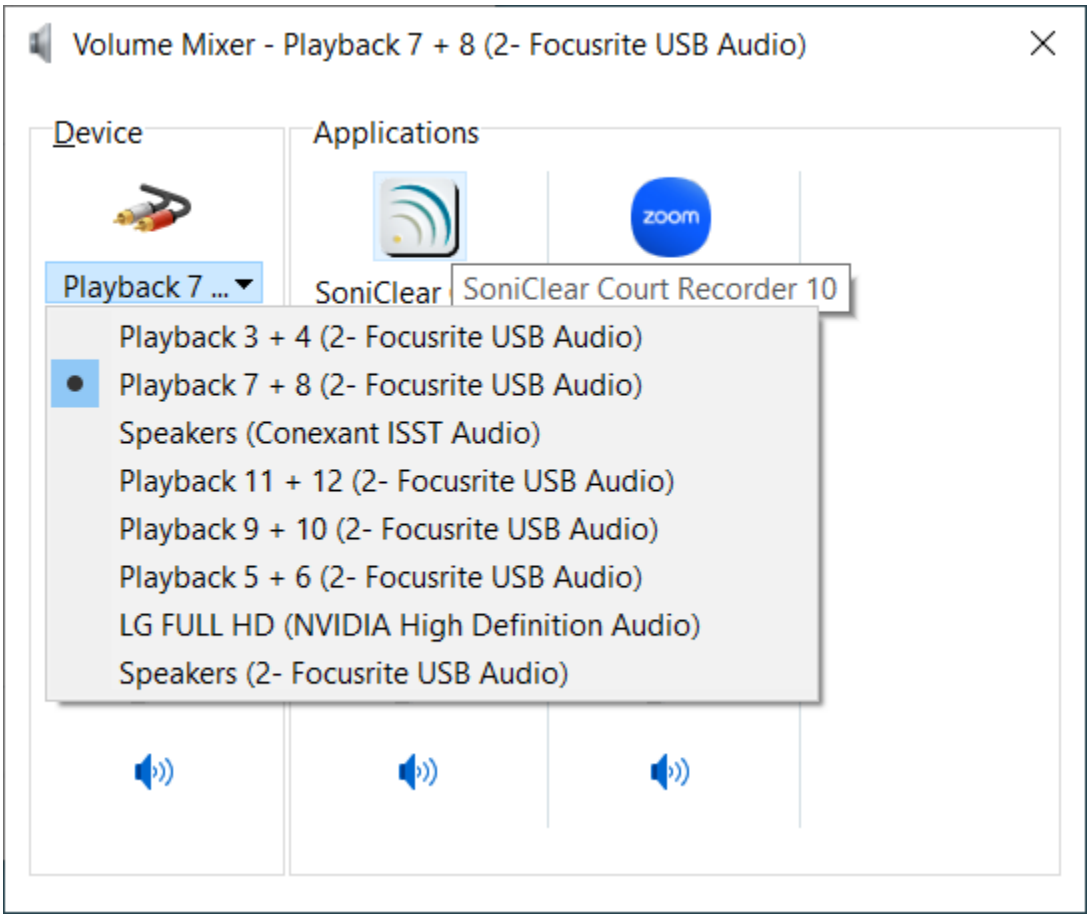
Right click on the Speaker icon in the lower right corner of the screen (next to the Time and Date):



Then left click on Open Volume Mixer to display the mixer that controls playback levels:



Then select the Playback 7+8 option in the Device section of the volume mixer window and to adjust the overall level or the level of just the conference software (such as Zoom):



Listening using Headphones

There are two headphone jacks on the front of the 18i20 interface. Headphone 1 is used for listening to participants and monitoring audio from SoniClear. Plug the monitor headphone into the Headphone1 jack. A ¼" to 3.5mm adapter is included for headphones that use a 3.5mm plug. Adjust the headphone loudness using the level knob above the jack.

Listening using Speakers

If you want to listen to remote participants without headphones. a powered speaker can be attached to the Focusrite. The large "MONITOR" knob is provided for controlling the level of the speaker.

Using a Backup Recorder

The second headphone jack can be used to connect to a backup recorder. The mix on this output includes all four microphones, the audio from the online participants, and any readback or audio playback heard by the online participants. Unlike the Stereo Mix recording in SoniClear the backup audio output on the headphone jack has the same audio as heard on the first headphone jack, including the monitor audio.

To set up a backup recorder, connect a 3.5mm to 3.5mm stereo cable to the Headphone 2 jack, using the included ¼" to 3.5mm adapter. Set the volume of Headphone 2 to about the 12 O'clock position. Connect that cable to the Line-In jack on the backup recorder. Adjust the backup recorder input to get the correct recording level. Always check the audio quality being captured by the backup recorder after setting it up, to ensure a good backup.

Playback from Windows Software

You can play audio from any Windows program for remote participants to hear. For example, presentations that contain video can play back directly into the conference feed.

Additional Usage Notes

1. The INST, SAFE, and AIR lights should be off. If they appear lit on the front panel, the settings can be changed in the Focusrite control panel. See the section "Resetting All Control" below for instructions.
2. The "48V" light for each microphone that requires phantom power should always be on (illuminated green). Turning off the 48-volt phantom power will result in the microphone audio turning off.
3. Any type of monitoring headphone that you prefer can be used for listening to the Focusrite.

Preparation Before Each Meeting

Before recording, follow these steps in preparation:

- Start the computer from a cold start or Reboot it if still running.
- Make sure Windows Update is not running in the background, and if it is, select the Pause option.
- Plug in and connect the 18i20 audio interface to the computer. Always use the same USB port on the computer to ensure consistent operation. Connecting to a docking station or USB Hub is not recommended.
- Plug in the microphones that will be used and verify that the cables on the Focusrite 18i20 audio interface match the pictures shown below in the Installation section of this Guide.
- If meeting online, start the conferencing software and confirm that the audio settings are correct. Then run a test recording using the test feature of the conferencing software in the audio settings control panel for that software.
- Run a test recording to check the in-room microphones that will be used.

SoniClear Recording Channel Layout – Hybrid Recording

The SoniClear recordings created with this kit using the Hybrid preset will have the following channels:

SoniClear Channel	Audio Recorded on Channel
Stereo Mix	Microphones 1 - 6
	Remote Conference or Softphone Participants
	SoniClear Readback Audio (Left/Right)
	Windows Program Playback (Left/Right)
Left	Microphones 1, 2, 3
	Remote Conference or Softphone Participants
	SoniClear Readback Audio – Left
	Windows Program Playback – Left
Right	Microphones 4, 5, 6
	Remote Conference or Softphone Participants
	SoniClear Readback Audio – Right
	Windows Program Playback – Right
1	Microphone 1
2	Microphone 2
3	Microphone 3
4	Microphone 4
5	Microphone 5
6	Microphone 6
7	Conference Call/Softphone – Left
8	Conference Call/Softphone – Right

SoniClear Recording Channel Layout – Non-Hybrid Recording

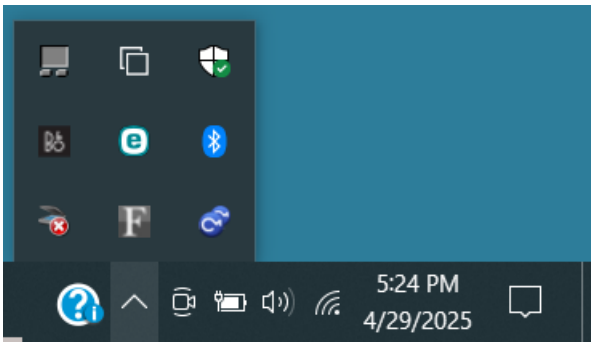
The SoniClear recordings created with this kit using the 8-Channel preset will have the following channels:

SoniClear Channel	Audio Recorded on Channel
Stereo Mix	Microphones 1 - 8
	SoniClear Readback Audio (Left/Right)
	Windows Program Playback (Left/Right)
Left	Microphones 1, 2, 3, 4
	Remote Conference or Softphone Participants
	SoniClear Readback Audio – Left
	Windows Program Playback – Left
Right	Microphones 5, 6, 7, 8
	SoniClear Readback Audio – Right
	Windows Program Playback – Right
1	Microphone 1
2	Microphone 2
3	Microphone 3
4	Microphone 4
5	Microphone 5
6	Microphone 6
7	Microphone 7
8	Microphone 8

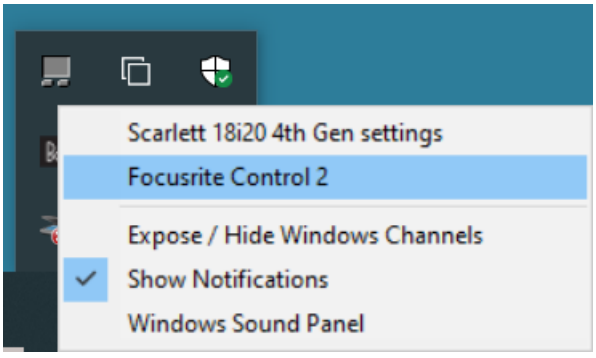
Resetting All Controls

If any of the required Focusrite 18i20 settings are accidentally changed, the default settings can be restored with the following steps:

Left click on in the “Windows System Tray”. This is the little up-arrow icon in the lower right corner of the computer screen (next to the Time and Date):



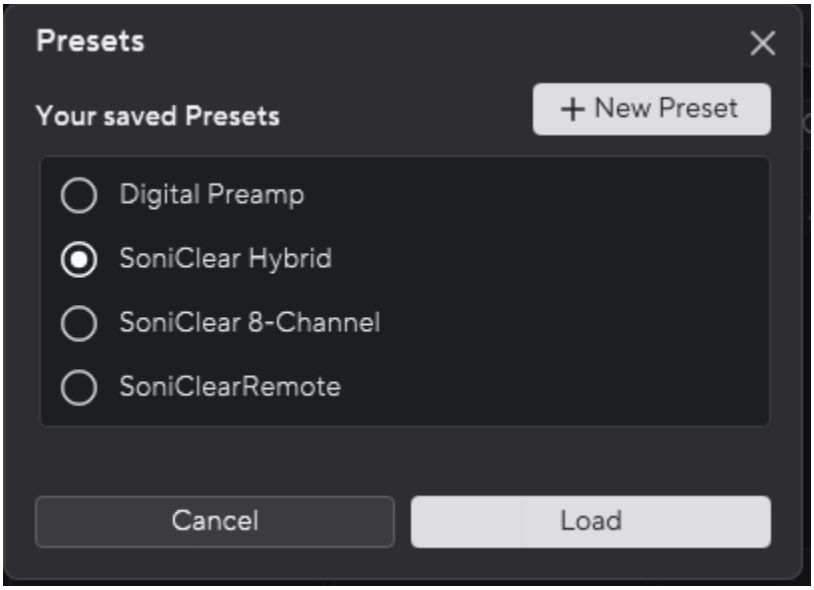
Then right click on the Focusrite control icon  :



This will display the list of options for controlling the Focusrite interface.

Select “Focusrite Control 2” to display the Focusrite control panel:

Click on the Presets button in the lower left corner of the window to select the appropriate preset, such as “SoniClear Hybrid” or “SoniClear 8-Channel”. It is also possible that the settings have been customized during installation. Consult with your installation team or SoniClear if you have questions about which preset file to use.



Focusrite 18i20 Loopback Kit Installation

Hardware Installation

Overview

The Focusrite 18i20 Loopback Kit includes the parts needed for recording Windows communication software, such as a Zoom online conference, or VOIP ("softphone") call. Included in the kit are:

- Focusrite 18i20 USB audio interface mixer
- Microphone or Headset Options:
    - Samson C02 microphone and desk stand
    - Audio Technica Pro44
    - Noise Cancelling Headset with Rode VXLR+ Adapter
- Speaker Y cable, ¼" TRS to 3.5mm mini stereo jack
- Short S/PDIF Digital RCA to RCA loopback cable
- Short ¼" TRS audio loopback cable (2)
- Headphone adapter, 3.5mm to ¼" stereo plug (2)

USB Interface

The Focusrite 18i20 interface requires a USB 3.0 connection on the computer using the included USB C to USB A cable. The 18i20 should only be connected directly to a port on the computer. Connecting it to a USB hub may result in unreliable operation. If the computer has a USB C port, a user supplied USB C to USB C cable can be used instead.

Power Connection

The Focusrite 18i20 is powered using the included Focusrite power adapter.

Microphone Connections

The HA8 Hybrid Kit can be configured with up to 6 microphones in Hybrid mode, 8 microphones in non-Hybrid mode, or with a noise cancelling headset for remote work.

Any professional microphone with an XLR connector can be used with the 18i20. Up to six microphones can be connected.

The microphone input jacks are the XLR and ¼" TRS "Combo" style. Use a standard XLR plug for connecting a microphone. Any input jack can alternatively be used to plug in line-level audio using a ¼" TRS balanced signal cable. This would be useful in cases where an audio feed is provided from a sound system in the meeting room.

Headphone Connection

The noise cancelling headset, or a user supplied monitoring headphone can be plugged into Headphone 1 jack on the front of the 18i20 interface, using the supplied ¼" to 3.5mm adapter.

Speaker Connection

A user-supplied speaker can be connected to the 18i20 using a standard stereo mini audio cable plugged into the included speaker Y cable. The speaker Y cable plugs into the ¼" TRS "Line Outputs 1 and 2 jacks on the back of the 18i20.

Backup Recorder Connection

The user-supplied backup recorder connects to the 3.5mm Headphone 2 jack, or to the ¼" TRS analog outputs 9/10 on the back. The backup recorder must have a line-level input jack.

Hardware Loopback Connections

Two audio loopback circuits are set up using cables:

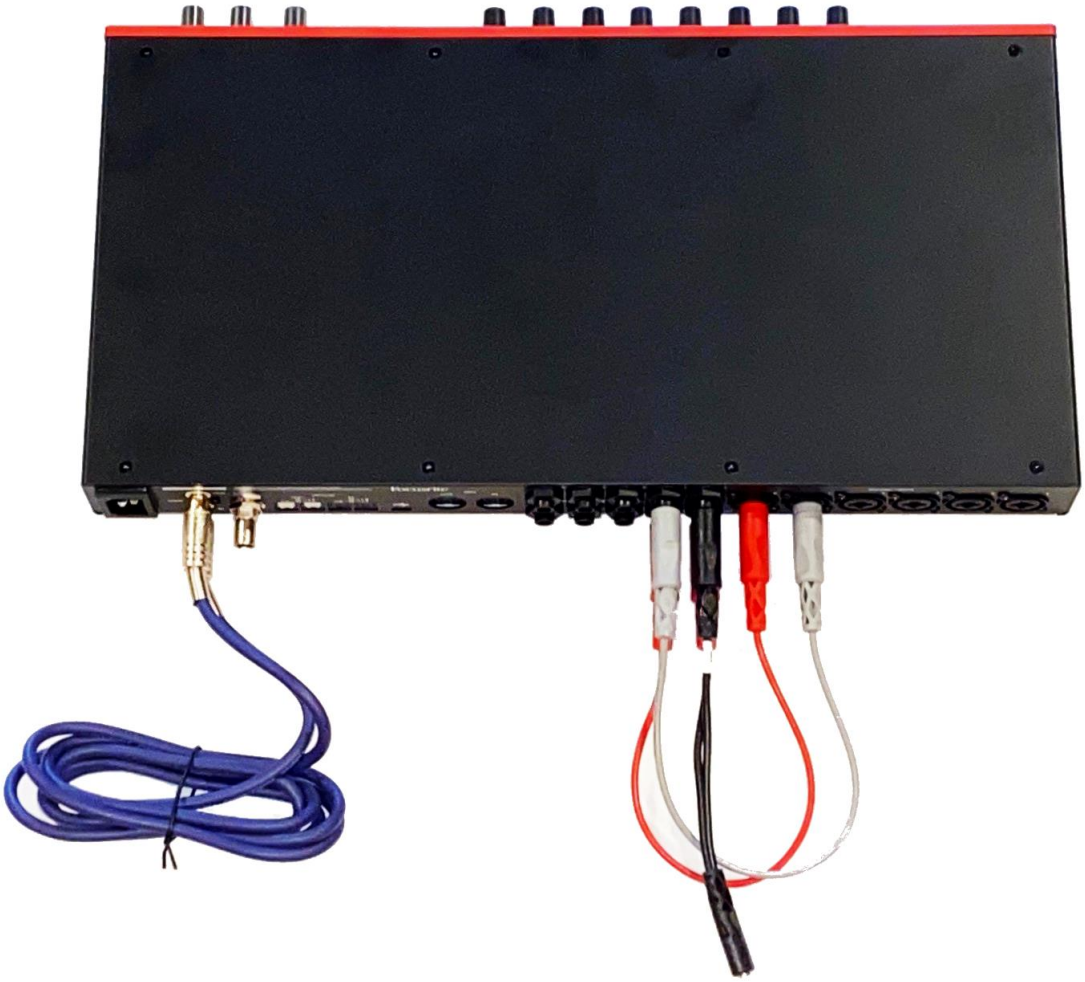
- The "Mix Minus" audio feed (microphones, readback audio, and playback audio) is needed to send audio to the online communication software.
- The conference audio is sent back to the computer using a second loopback cable for recording the online conference participants.

For the Mix-Minus audio feed, connect the two analog ¼" TRS cables on the back of the 18i20 interface:

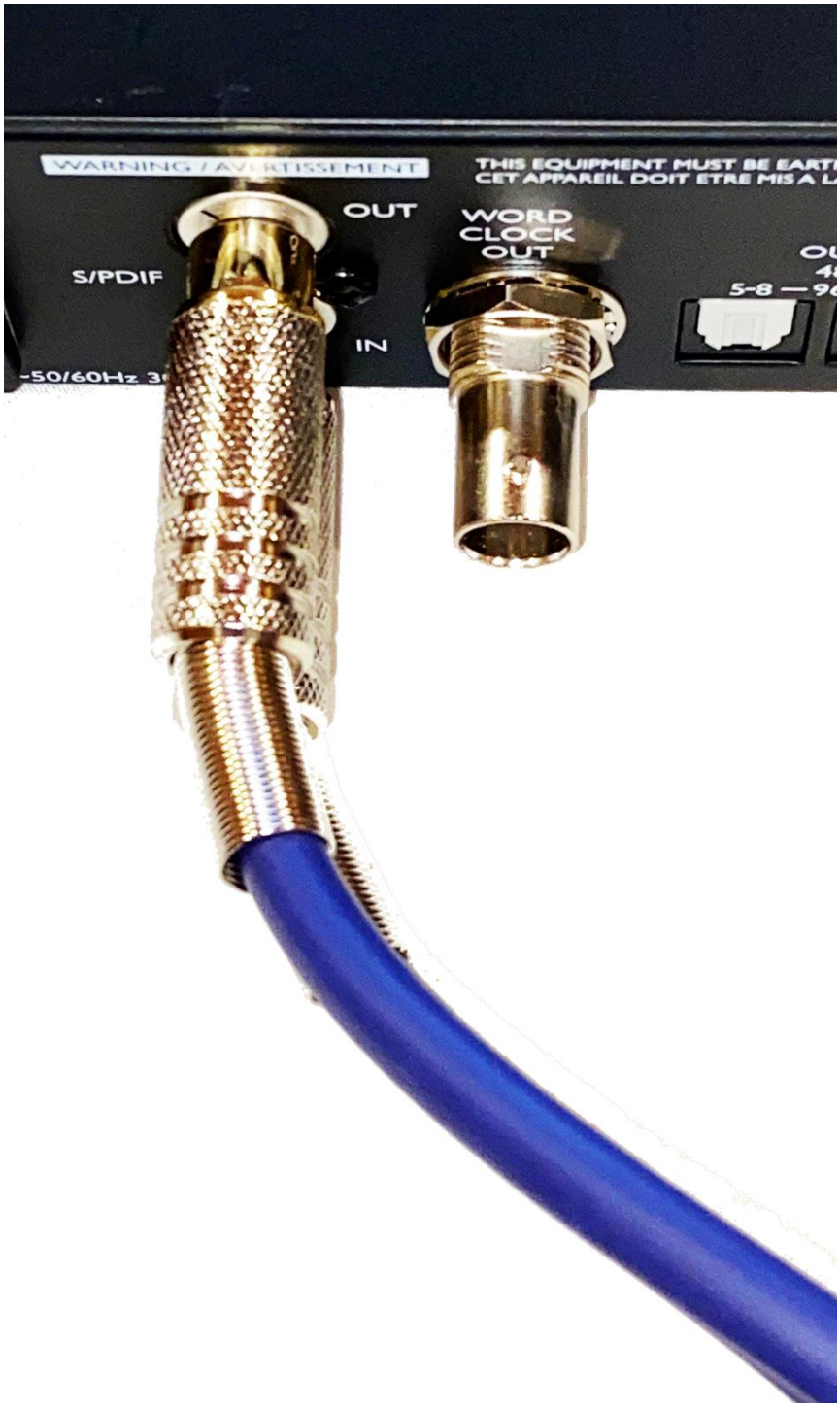
- Line Output 3 to the Line Input 7
- Line Output 4 and the Line Input 8

For the conference audio loopback, use the included digital RCA to RCA cable, connected between the S/PDIF Output and Input jacks on the back of the 18i20 interface.

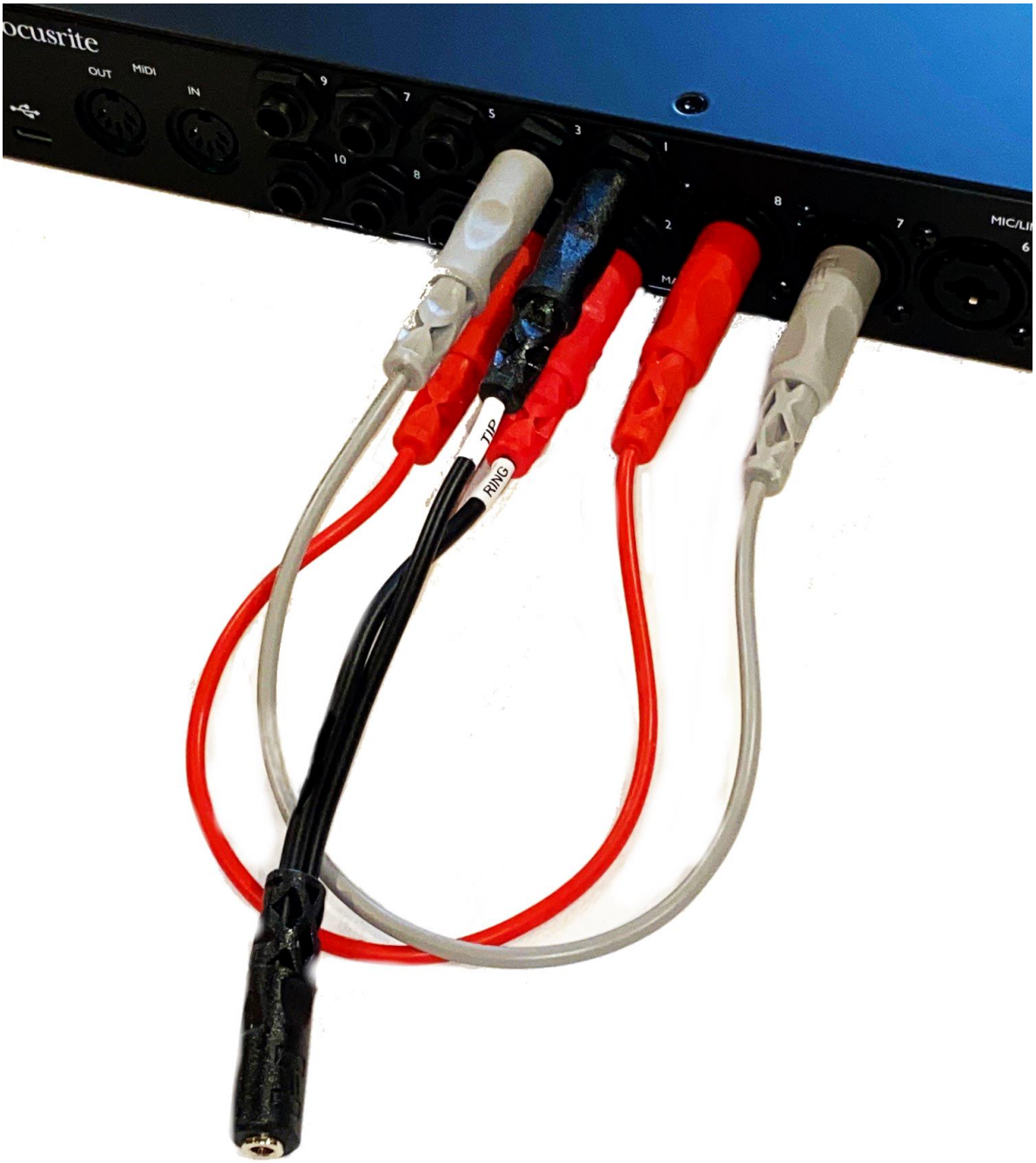

Out
SPDIF
In
Optical
Word Clock
Out
1
2
In
USB
Out
MIDI
In
Outputs
Alt
Mon
Focusrite
Inputs



Loopback Cables
Note: Color of cables is irrelevant and may vary from what is shown.



S/PDIF Loopback Cable



¼”

TRS Loopback Cables

Focusrite 18i20 Software Installation

Drivers

The Focusrite 18i20 requires manual installation of product-specific Windows drivers. This provides custom control panel software for configuring the device. As of the last update to this manual, the download link for the driver installer was:

https://us.focusrite.com/software/focusrite-control-2

Only install software downloaded from the official Focusrite website. Do not install software from a third-party service.

The driver will automatically check for updates and offer to install new versions.

Saving Presets

The Control 2 software does not currently provide a method for saving settings to a preset file. The system must be configured manually and then save the preset in the Control 2 panel.

To store the preset, click on the Presets button in the lower left corner of the Control 2 window. If storing a new preset, click the New Preset button. If updating an existing preset, hover the mouse over the title of the preset and click the button that looks like three dots, which will appear at the end of the same line. Select the Overwrite option to save the updated presets settings. You can also rename and delete presets using the same three dot menu.

Focusrite 18i20 Manual Configuration

When using the 18i20 mixer for the first time, you will need to manually configure the settings. Open the Focusrite 18i20 Mixing / Routing control panel and then follow the instructions provided in this section of the guide.

Overview

To goal is to make it possible to use one setup for three different applications:

- In-Person Meetings
- Remote Meetings
- Hybrid Meetings

This requires the ability to capture audio from microphones in the room, and from any computer-based conferencing software. It is also necessary to be able to play back recorded audio to the participants (local and remote) and to play audio from other Windows applications.

Software and Hardware Loopback Signals

To accomplish all of the functions of the HA8 kit, the Focusrite 18i20 is configured with three loopback signals.

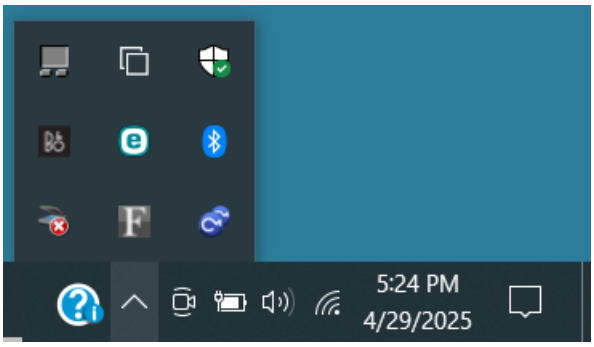
SoniClear uses the loopback audio channel built-in 18i20 audio drivers for recording a mix of the local microphone(s), combined with the audio from the remote participants.

In addition, this kit uses a set of hardware audio loopback cables:

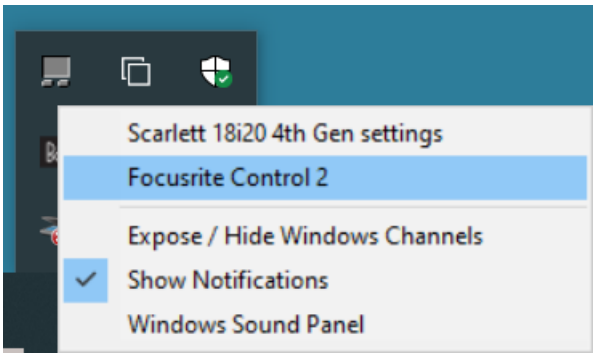
- A “mix minus” version of the audio to the online conference software. This excludes the output of the conferencing software to prevent echo or feedback. This is accomplished using the supplied ¼” audio cables (short cable with male TRS ¼” plugs at both ends).
- A second hardware loopback for recording the conference participants in a separate track in SoniClear. This is accomplished using a S/PDIF digital RCA cable.

How to Open Focusrite Control Panels

Left click on in the “Windows System Tray”. This is the little up-arrow icon in the lower right corner of the computer screen (next to the Time and Date):



Then right click on the Focusrite control icon  :



This will display the list of options for controlling the Focusrite interface.

Select “Focusrite Control 2” to display the Focusrite control panel.

Settings For Hybrid Recording

The option to record both local microphones and remote conference participants can be accomplished with these “Hybrid” settings.

Inputs

Select the Inputs button on the left of the Control 2 window to display the input settings:

The microphone input channels 1-6 are set to a gain of 50db by default. These will need to be adjusted based on the types of microphones used, the microphone placement, and how loudly the participants are speaking. Ideal level will be keeping the maximum volume in the range of -12db to -6db.

By default, the first six microphone channels have the 48 volt Phantom Power enabled to send power needed by most microphones. The inputs 7 and 8 do not need Phantom Power because they are used for the mix-minus loopback audio sent to the conferencing software.

The volume of Mix Minus channels 7 and 8 need to be optimized based for the conferencing software to get the level needed for best sound quality for remote participants. Those two channels are set to a default level of 7db.

The Inst, Safe, and Air button should be left off.

Mixer

The following five mixes need to be configured:

- Mix A - Headphone 1 and 2 For monitor headphone and backup recorder
- Mix B - Loopback Outputs 3-4 Mix Minus loopback to conference software
- Mix C – Recording Loopback Stereo Mix of all channels for recording
- Mix D - Monitor Output 1-2 Main mix for feeding to a powered speaker
- Mix E - Video Outputs 5-6 Mix of all signals, optional for a video recorder

Mix A - Headphones 1 and 2

The Headphone 1 and Headphone 2 mix is sent to the headphone jacks on the front of the 18i20 unit. This is the signal that allows the SoniClear user to hear everything in the conference call, as well as for monitoring through the headphones from SoniClear.

Microphones 1-6	On
Line-In 7-8 (conference call mic feed)	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	On
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

Microphones 1 – 6 are paned left to right (Left 1: 75%, 2: 50%, 3: 25%, Right 4: 25%, 5: 50%, 6: 75%)

Mix B – Conference Loopback on Analogue Outputs 3-4

Mix B is sent to the Line-Out 3-4 jacks, providing the “Mix-Minus” signal of the audio to be sent to the remote participants. These jacks are connected back to the 18i20 hardware line inputs on the back of the 18i20 unit (Analog 7-8) using the two ¼” TRS loopback cables. This creates, in effect, a hardware loopback of the audio, making the signal available for the conference software.

Mic 1-6	On
Line-In 7-8 (conference call mic feed)	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	Mute
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All channels are panned to the middle to provide a mono signal on both channels.

Mix C - Loopback

Mix C contains the loopback mix contains the audio being recorded in SoniClear.

Routed to: Loopback

Mics 1-6	On
Line-In 7-8 (conference call mic feed)	Mute
S/PDIF (conference call participants)	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

Microphones 1 – 6 are paned left to right (Left 1: 75%, 2: 50%, 3: 25%, Right 4: 25%, 5: 50%, 6: 75%)

Mix D – Main Monitor Output on Analogue Outputs 1-2

The Monitor Outputs 1-2 mix is sent to the Line-Out 1-2 jacks on the back of the 18i20 unit. This is the signal that can be connected to speakers. The microphone inputs must be excluded from this mix, with just computer playback being sent to the speaker output.

Mic 1-6	Mute
S/PDIF (conference call participants)	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All channels are panned to the middle to provide a mono signal on both channels.

Mix E – Video Mix on Analogue Outputs 5-6

Mix E is sent to the Line-Out 5-6 jacks. This provides the same output as is sent to the SoniClear recording software for use as an audio feed for a video recording system.

Routed to: Output 5-6

Mics 1-6	On
Line-In 7-8 (conference call mic feed)	Mute
S/PDIF (conference call participants)	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All of the signals are panned to the center, allowing a single mono feed to the video system.

Mix F – Not Used

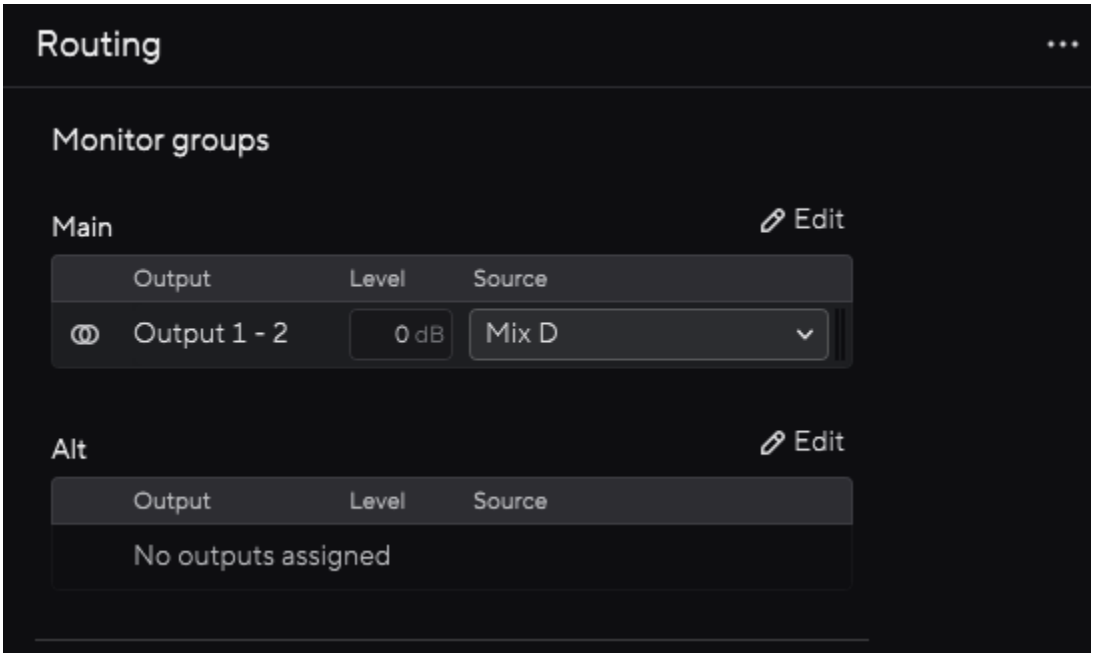
This mix is not used in the default settings. It could be used to create an additional mix.

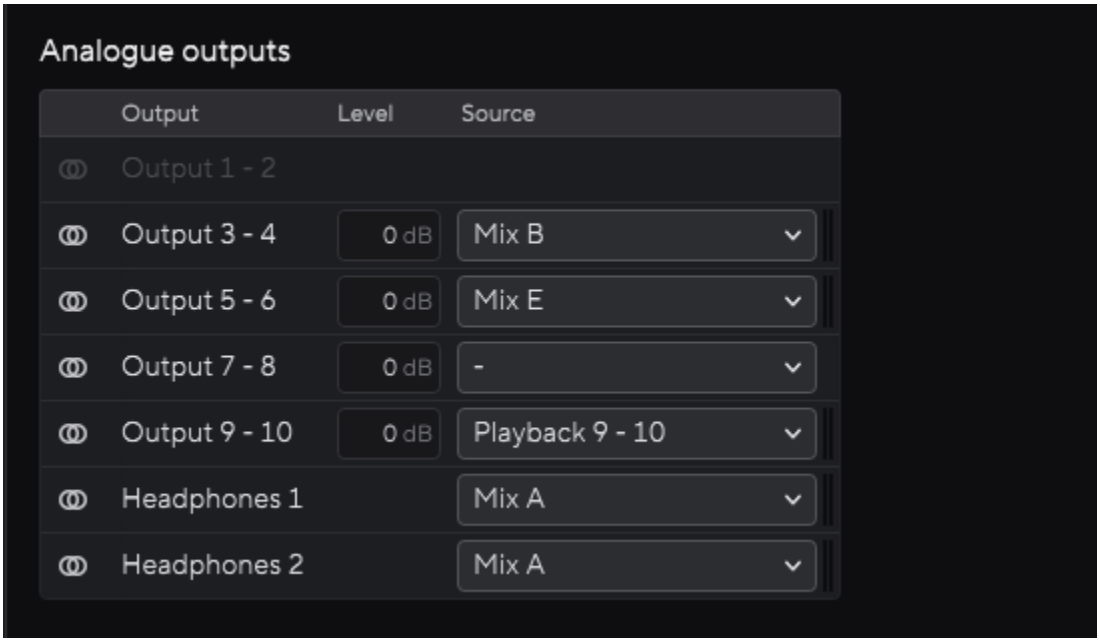
Routing

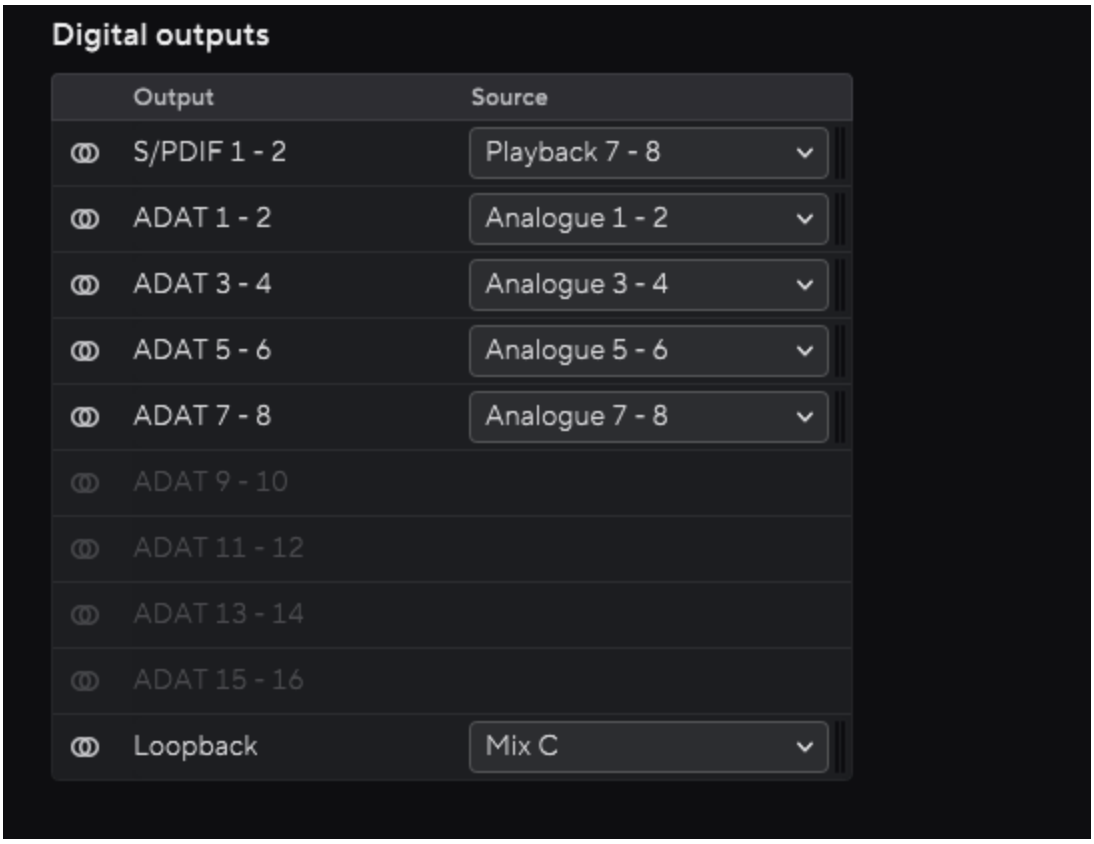
The Routing section can be selected by clicking on the Routing button on the left side of the Control 2 window. All of the routing settings are set in the Mixer section, except this:

- S/PDIF Loopback of conference audio for recording

Here is what the routing settings should look like:






Digital outputs
Output
Source
S/PDIF 1 - 2
Playback 7 - 8
ADAT 1 - 2
Analogue 1 - 2
ADAT 3 - 4
Analogue 3 - 4
ADAT 5 - 6
Analogue 5 - 6
ADAT 7 - 8
Analogue 7 - 8
ADAT 9 - 10
ADAT 11 - 12
ADAT 13 - 14
ADAT 15 - 16
Loopback
Mix C

Settings For 8-Channel Non-Hybrid Recording

The option to record up to eight channels of audio from participants meeting in person can be accomplished with these “8-Channel” settings.

Inputs

Select the Inputs button on the left of the Control 2 window to display the input settings:

The input channels 1-8 are set to a gain of 50db by default. These will need to be adjusted based on the types of microphones used, the microphone placement, and how loudly the participants are speaking. Ideal level will be keeping the maximum volume in the range of -12db to -6db.

By default, all eight microphone channels have the 48 volt Phantom Power enabled to send power needed by most microphones.

The Inst, Safe, and Air button should be left off.

Mixer

The following five mixes need to be configured:

- Mix A - Headphone 1 and 2 For monitor headphone and backup recorder
- Mix B - Loopback Outputs 3-4 Mix Minus loopback to conference software
- Mix C – Recording Loopback Stereo Mix of all channels for recording
- Mix D - Monitor Output 1-2 Main mix for feeding to a powered speaker
- Mix E - Video Outputs 5-6 Mix of all signals, optional for a video recorder

Mix A - Headphones 1 and 2

The Headphone 1 and Headphone 2 mix is sent to the headphone jacks on the front of the 18i20 unit. This is the signal that allows the SoniClear user to hear everything in the conference call, as well as for monitoring through the headphones from SoniClear.

Microphones 1-8	On
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	On
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

Microphones 1 – 8 are paned left to right:
Left 1: 80%, 2: 60%, 3: 40%, 4: 20%, Right 5: 20%, 6: 40%, 7: 60%, 8: 80%

Mix B – Conference Loopback on Analogue Outputs 3-4

Mix B is sent to the Line-Out 3-4 jacks, providing the “Mix-Minus” signal of the audio to be sent to the remote participants. The audio from Line 3 or Line 4 can be used to connect this signal to another computer or sound system.

Microphones 1-8	On
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	Mute
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All channels are panned to the middle to provide a mono signal on both channels.

Mix C - Loopback

Mix C contains the loopback mix contains the audio being recorded in SoniClear.

Routed to: Loopback

Microphones 1-8	On
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

Microphones 1 – 8 are paned left to right:
Left 1: 80%, 2: 60%, 3: 40%, 4: 20%, Right 5: 20%, 6: 40%, 7: 60%, 8: 80%

Mix D – Main Monitor Output on Analogue Outputs 1-2

The Monitor Outputs 1-2 mix is sent to the Line-Out 1-2 jacks on the back of the 18i20 unit. This is the signal that can be connected to speakers. The microphone inputs must be excluded from this mix, with just computer playback being sent to the speaker output.

Microphones 1-8	Mute
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All channels are panned to the middle to provide a mono signal on both channels.

Mix E – Video Mix on Analogue Outputs 5-6

Mix E is sent to the Line-Out 5-6 jacks. This provides the same output as is sent to the SoniClear recording software for use as an audio feed for a video recording system.

Routed to: Output 5-6

Microphones 1-8	On
Playback 1-2 (Windows App Playback)	On
Playback 3-4 (Readback Playback)	On
Playback 5-6 (Headphone Monitor)	Mute
Playback 7-8 (Conference Call Participants)	On
Playback 9-10 (not used)	Mute
S/PDIF	Mute
ADAT 1-8	Mute

All of the signals are panned to the center, allowing a single mono feed to the video system.

Mix F – Not Used

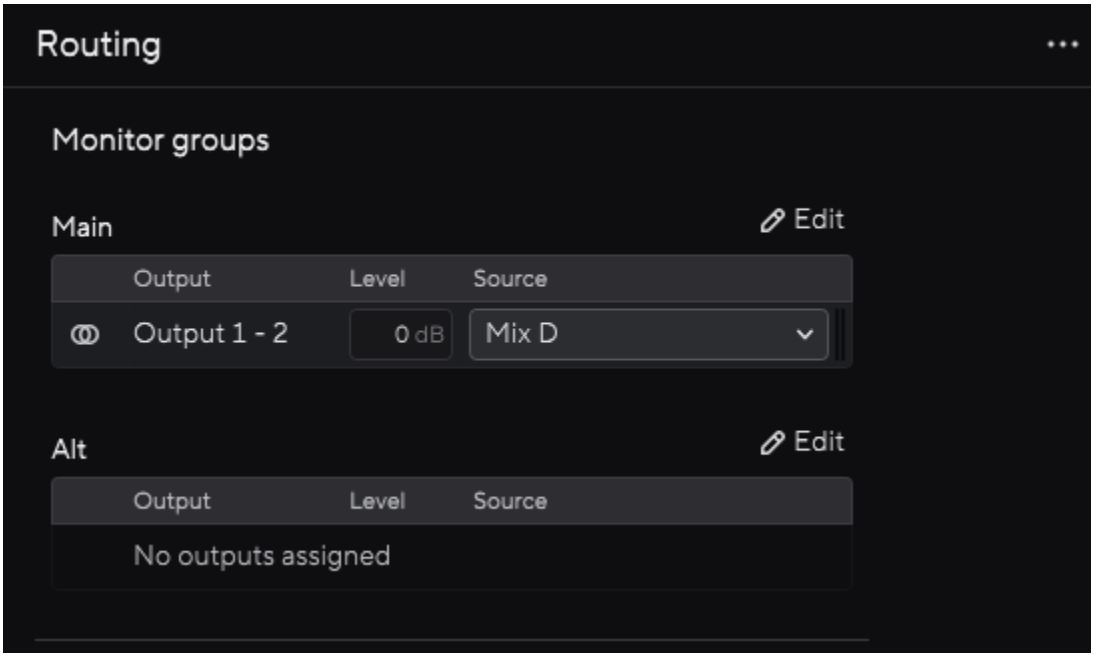
This mix is not used in the default settings. It could be used to create an additional mix.

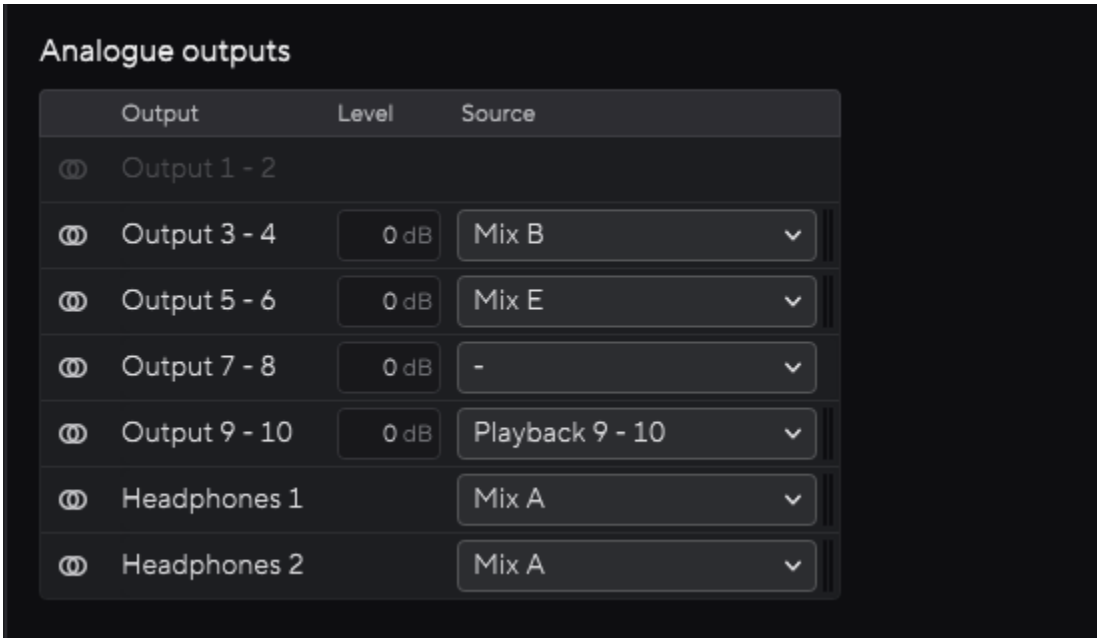
Routing

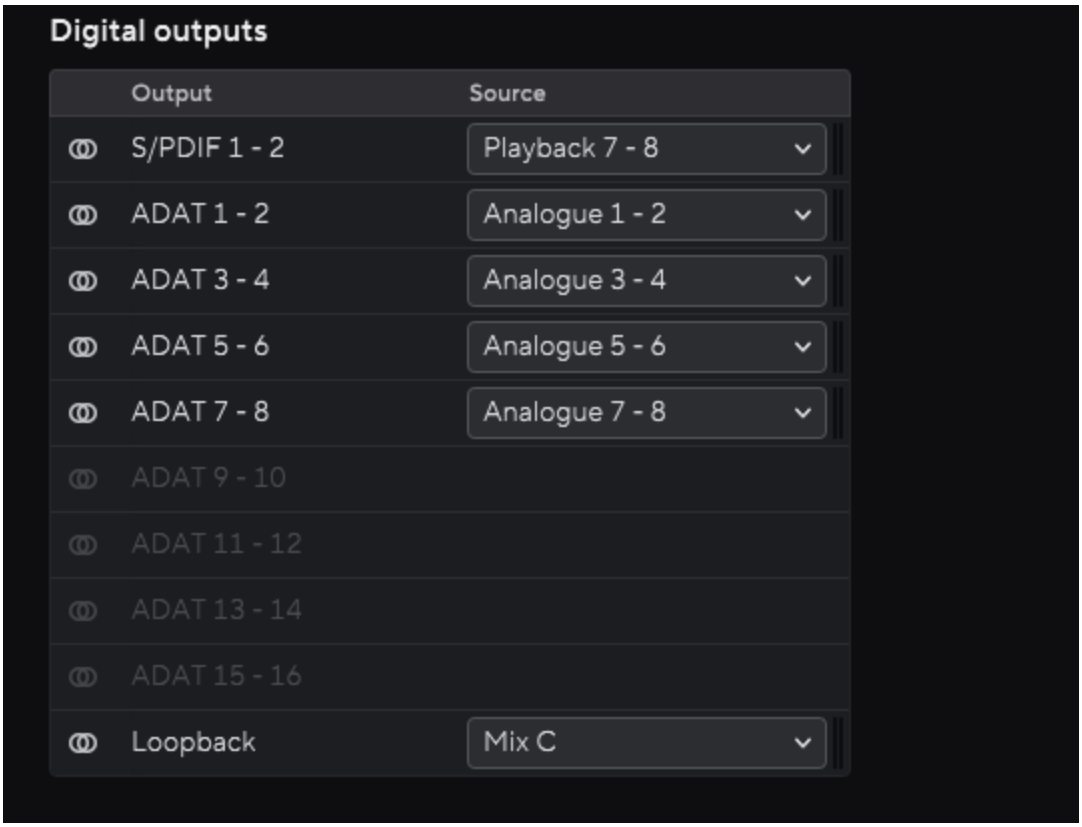
The Routing section can be selected by clicking on the Routing button on the left side of the Control 2 window. All of the routing settings are set in the Mixer section, except this:

- S/PDIF Loopback of conference audio for recording

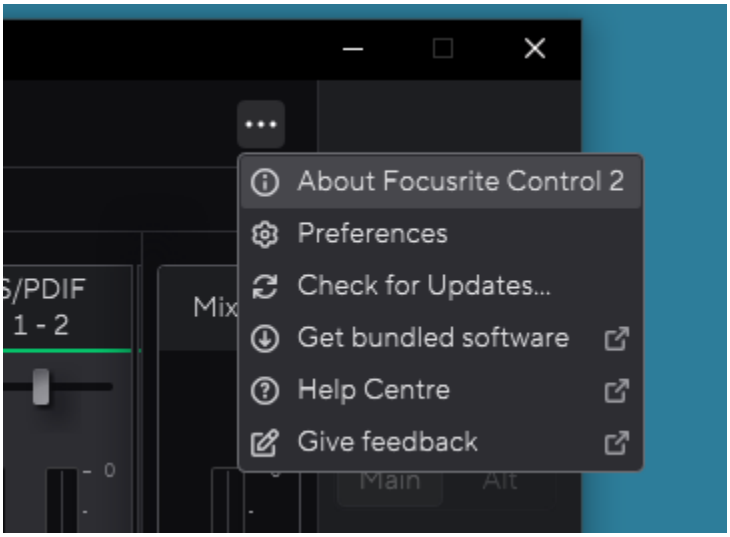
Here is what the routing settings should look like:



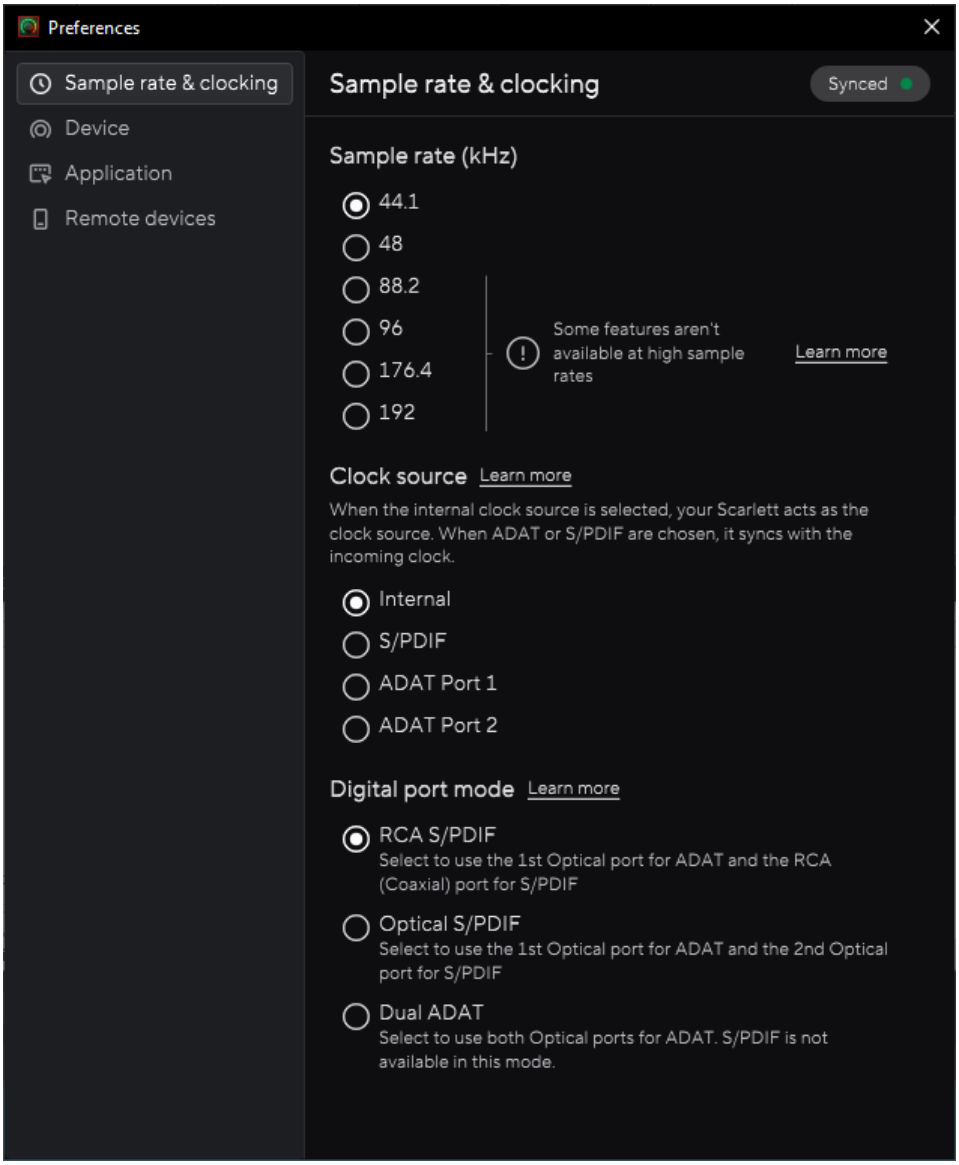



Digital outputs
Output
Source
S/PDIF 1 - 2
Playback 7 - 8
ADAT 1 - 2
Analogue 1 - 2
ADAT 3 - 4
Analogue 3 - 4
ADAT 5 - 6
Analogue 5 - 6
ADAT 7 - 8
Analogue 7 - 8
ADAT 9 - 10
ADAT 11 - 12
ADAT 13 - 14
ADAT 15 - 16
Loopback
Mix C

Additional Settings



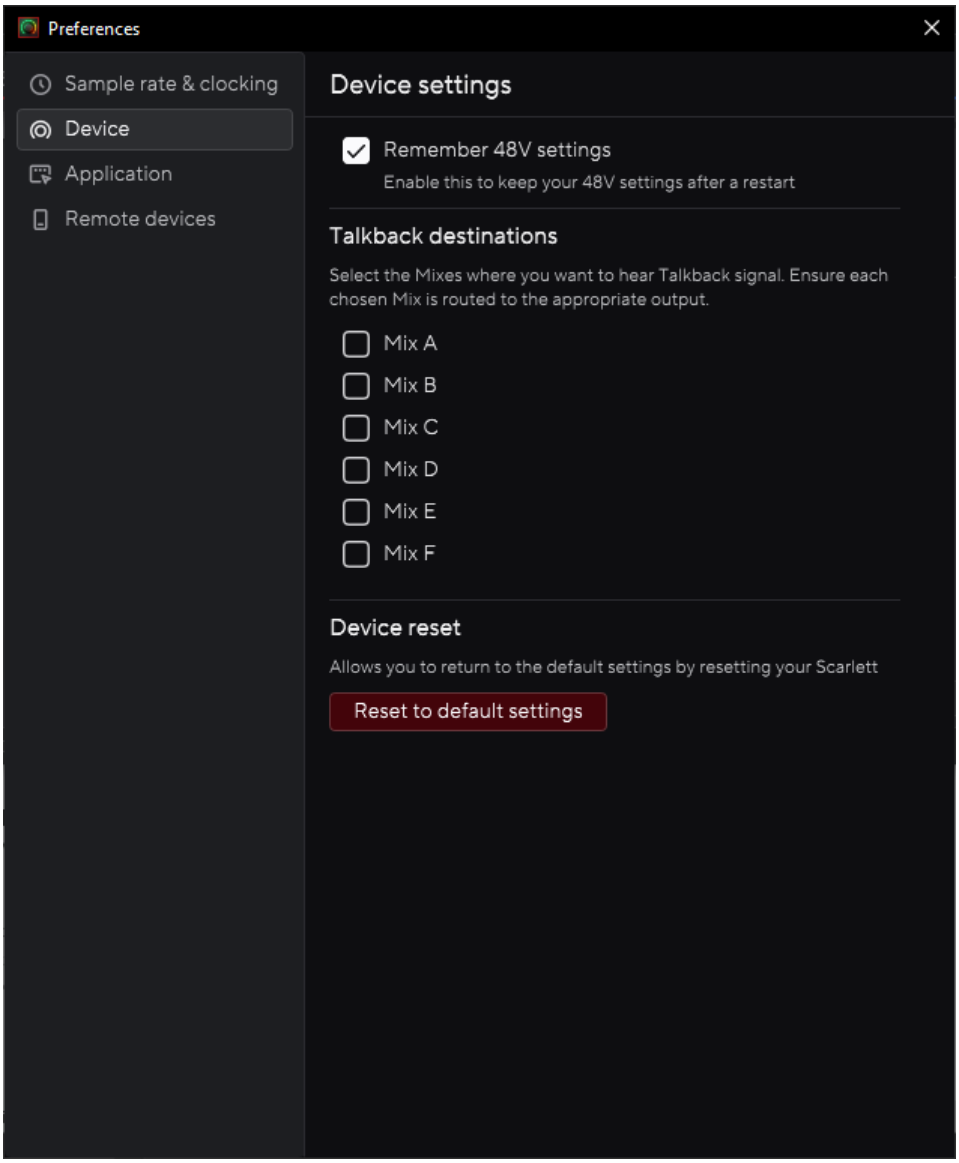
While in the Focusrite Mixing / Routing Control panel, click on the Settings menu button (three dots at the top right of the Control 2 window), and then select Preferences. This will display several additional driver hardware controls.



Set these control options as follows:

Under “Sample rate & clocking:

Sample Rate = 44.1 kHz
Internal Clock
RCA S/PDIF

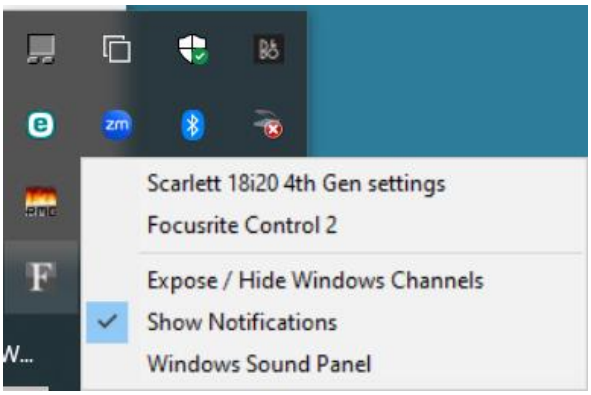


Under Device Settings:

Enable “Remember 48V settings

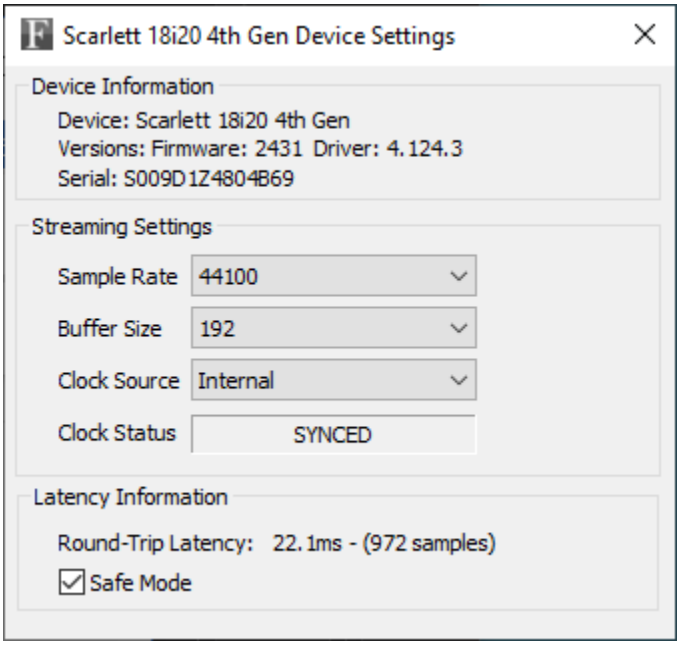
Focusrite Driver Settings

In addition to the mixer settings, the driver settings must be configured from the Focusrite control panels. Access the control panels by clicking on the system tray up-arrow icon, then left click on the Focusrite icon  :



Streaming Settings

Select the "Scarlett 18i20 (4th Gen) settings" option from the Focusrite control icon in the system tray. This will display the Streaming Settings control panel:

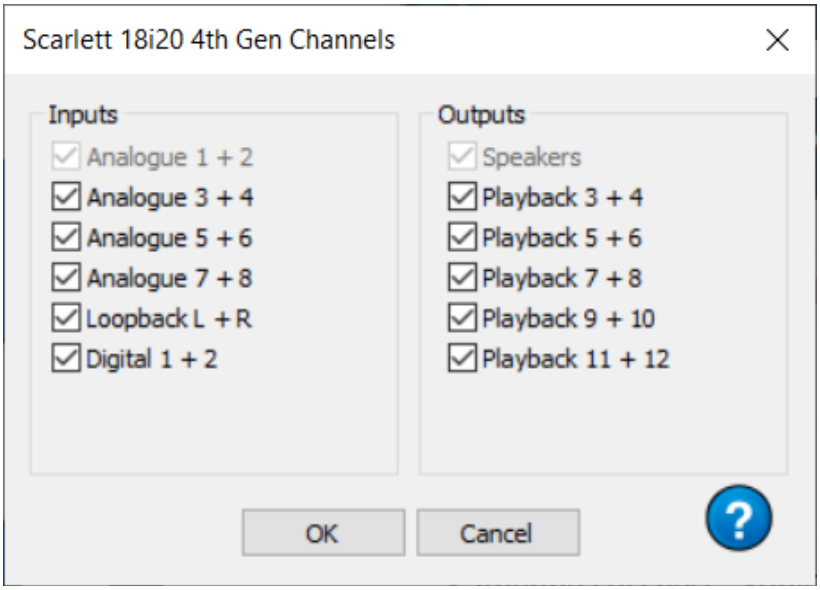


Set the following values:

Sample Rate	44100
Buffer Size	192
Clock Source	Internal

Expose Windows Channels

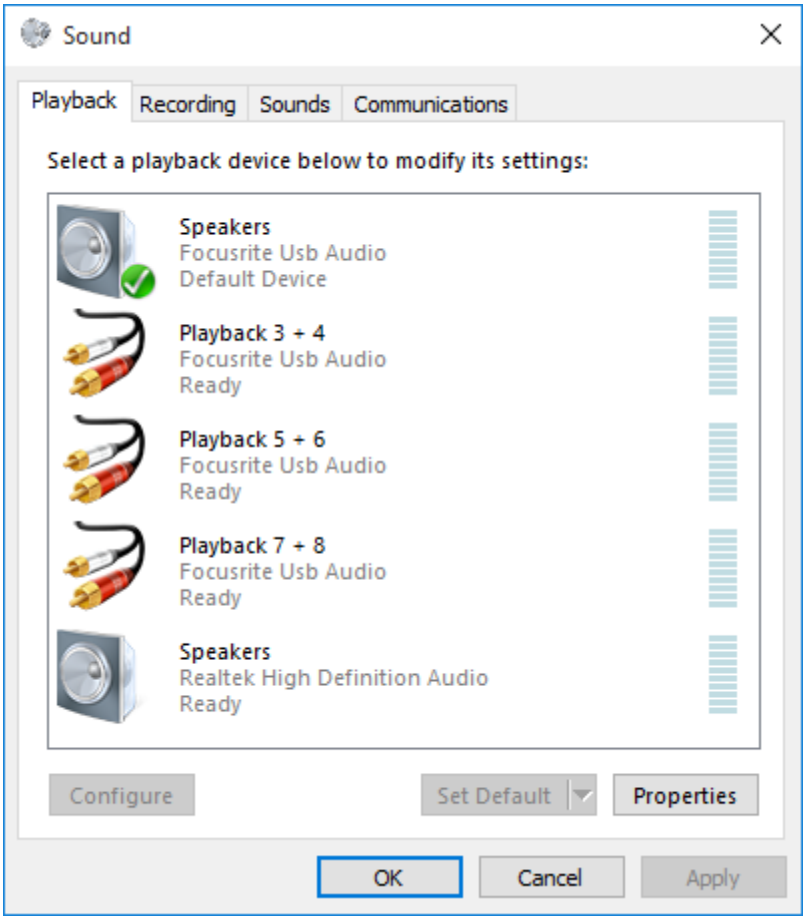
Open the Focusrite Control 2 icon as described above and then select the “Expose / Hide Windows Channels” option from the Focusrite control icon in the system tray. This will display the Windows driver channels control panel. Enable (check) all inputs and outputs shown.



Windows Sound Settings

Default Playback Device

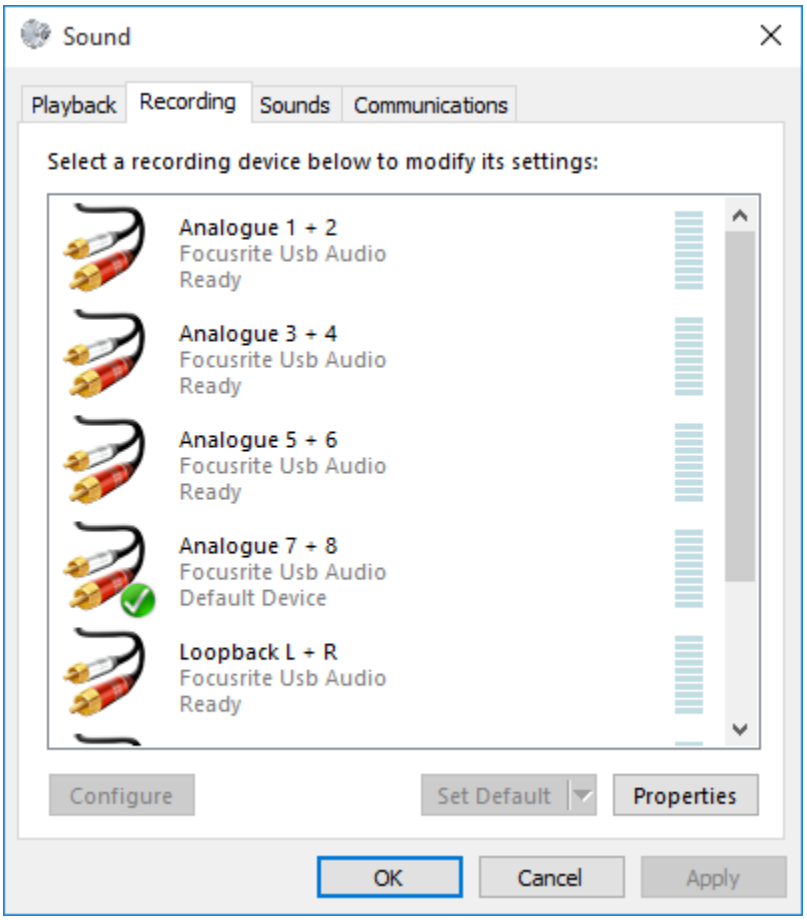
Select the “Windows Sound Panel” option from the Focusrite control icon in the system tray. This will display the Windows Playback settings control panel:



Set the Focusrite 18i20 Playback 1-2 audio to be the default playback device for Windows. Select the Focusrite Usb Audio and click the Set Default button.

Default Recording Device

Set the Windows Sound Recording defaults by clicking on the Recording tab of the Sound panel:



Set the Analogue 7 + 8 device as the default recording device for Windows programs by clicking on that driver and then clicking the Set Default button.

SoniClear Software Preferences for Hybrid Recording

Overview

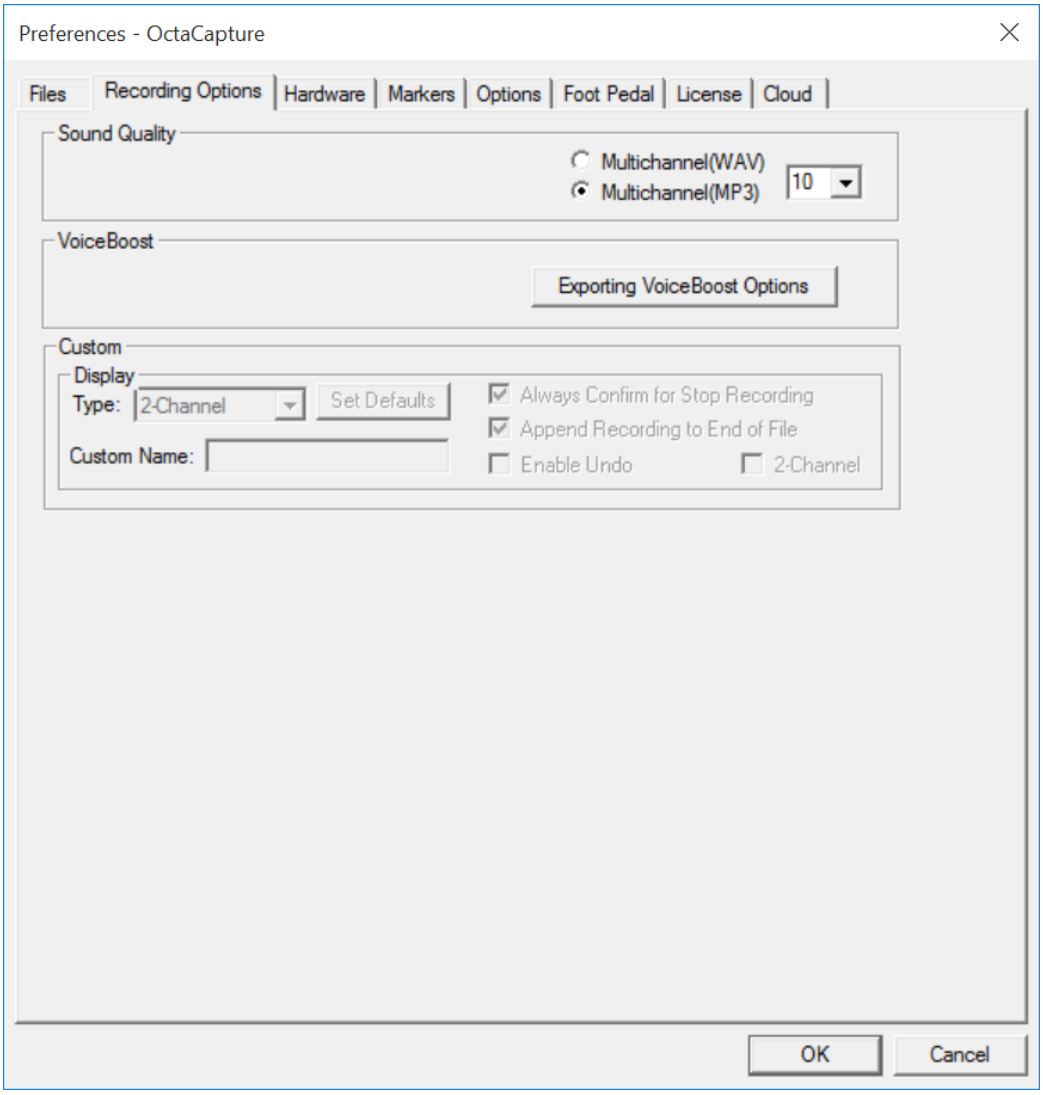
The SoniClear software preferences must be configured to work with the Focusrite 18i20 interface. To do this, start SoniClear and select Edit/Preferences from the pulldown menu.

The recordings created with this configuration will have the following channels:

SoniClear Channel	Audio Recorded on Channel
Stereo Mix	Microphones 1 – 6
	SoniClear Readback Audio (Left/Right)
	Windows Program Playback (Left/Right)
Left	Microphones 1, 2, 3
	SoniClear Readback Audio – Left
	Windows Program Playback – Left
Right	Microphones 4, 5, and 6
	SoniClear Readback Audio – Right
	Windows Program Playback – Right
1	Microphone 1
2	Microphone 2
3	Microphone 3
4	Microphone 4
5	Microphone 5
6	Microphone 6
7	Microphone 7
8	Microphone 8

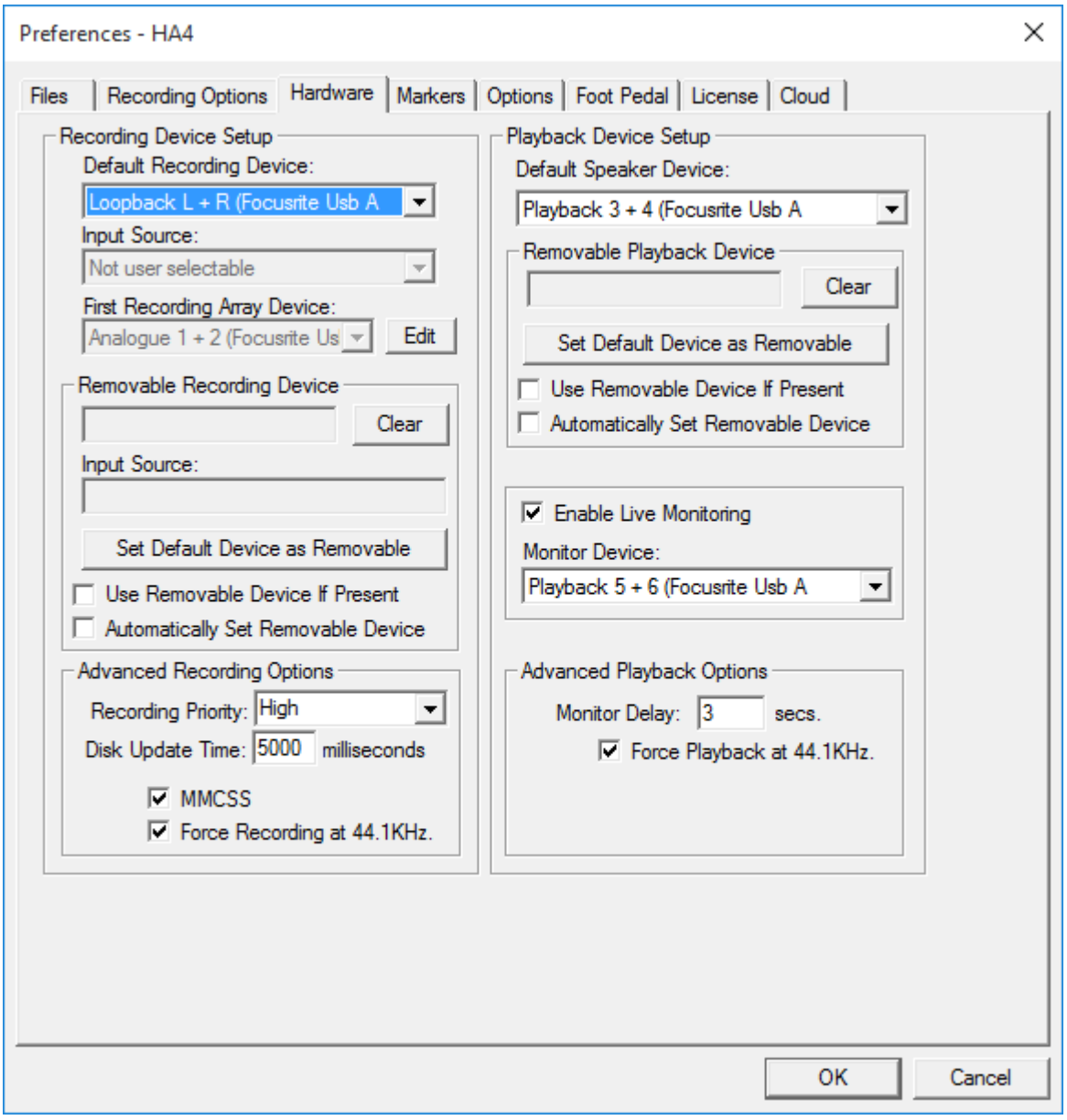
Recording Options Tab - Sound Quality

In the Recording Options preferences tab, set the recording format. For Meeting Recorder 10 select Meeting (Stereo WAV). For All other SoniClear products, select Multichannel (MP3) and set the channels selector to 10 channels.


Preferences - OctaCapture
Files
Recording Options
Hardware
Markers
Options
Foot Pedal
License
Cloud
Sound Quality
Multichannel(WAV)
Multichannel(MP3)
10
VoiceBoost
Exporting VoiceBoost Options
Custom
Display
Type:
2-Channel
Set Defaults
Always Confirm for Stop Recording
Append Recording to End of File
Custom Name:
Enable Undo
2-Channel
OK
Cancel

Hardware Tab – Audio Device Selection

Select the Hardware tab and modify the settings according to the following instructions.



Recording Device Setup

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

Default Recording Device

This is the sound card input for recording the stereo mix of all the participants. It should be set to "Loopback L+R". Note that the name may have an additional number included in that phrase. This indicates that the 18i20 interface has been plugged into more than one USB jack on the computer at some point in time.

Once the Default Recording Device field has been set, the 18i20 must be plugged into the same USB jack on the computer each time it is used.

First Recording Array Device

See below, "Recording Array Setup".

Removable Recording Device

"Use Removable Device If Present" and "Automatically Set Removable Device" options should be unchecked.

Advanced Recording Options

These options control how recording is processed.

Recording Process Priority

Default value should be set to High or Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

MMCSS

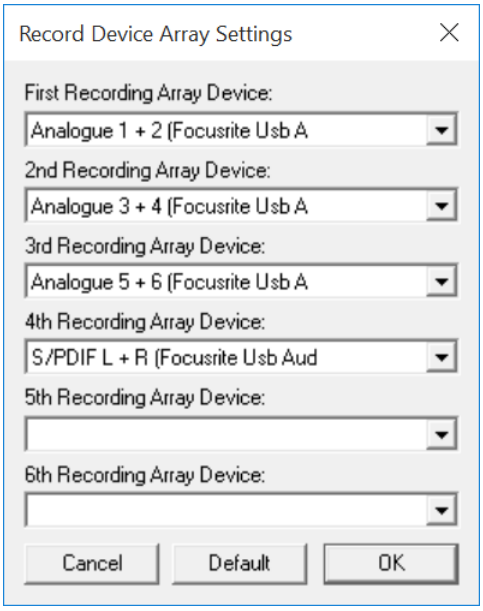
The value should be set to Checked.

Force Recording at 44.1KHz

The value should be set to Checked.

Recording Array Setup

Click on the Edit button next to the “First Recording Array Device” field to display the setup dialog for the individual microphone channels. This set of options controls how the individual inputs are recorded separately in SoniClear.



Set each of the recording array devices to the corresponding stereo pair device in the 18i20:

1. Recording Channels 1-2: Analogue 1 + 2 (Microphones 1 and 2
2. Recording Channels 3-4: Analogue 3 + 4 (Microphones 3 and 4)
3. Recording Channels 5-6: Analogue 5 + 6 (Microphones 5 and 6)
4. Recording Channels 7-8: S/PDIF L + R (Remote Participant Audio Only)

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 to the participants in the room (through the speaker), and to the remote participants (through the conference software). It also sends the audio for playback to the headphones.

Set the Speaker Device Selection to “Playback 3 + 4”.

Removable Recording Device

“Use Removable Device If Present” and “Automatically Set Removable Device” options should be unchecked.

Enable Live Monitoring

Live monitoring should be enabled and the headphone device set to “Playback 5 + 6”.

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 Checked.

SoniClear Software Preferences for Non-Hybrid Recording

Overview

The SoniClear software preferences must be configured to work with the Focusrite 18i20 interface for use with up to 8 microphones and no conference software loopback setup. To do this, start SoniClear and select Edit/Preferences from the pulldown menu.

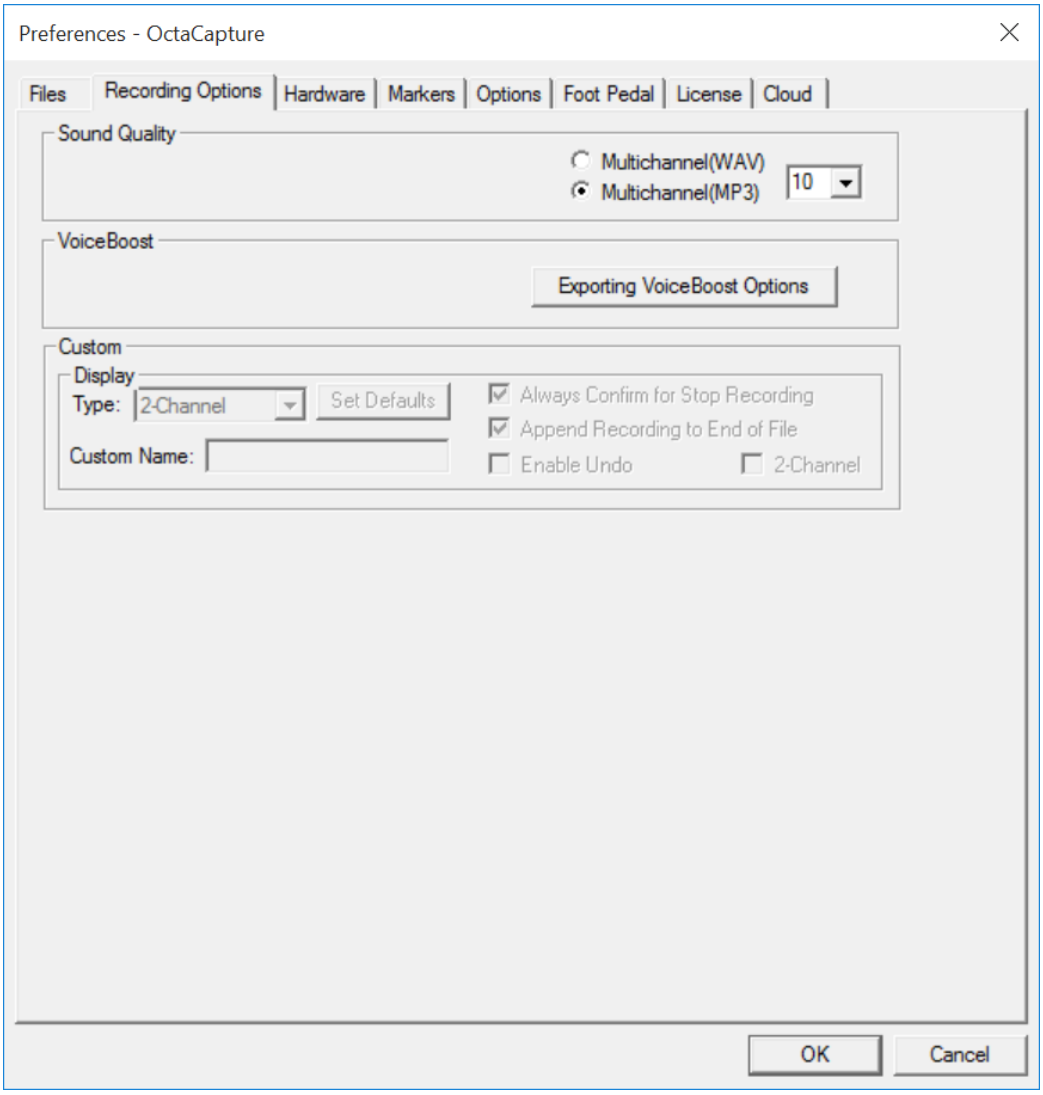
IMPORTANT: do not connect the two TRS audio loopback cables to inputs 7-8 with these settings. Doing so will cause a feedback loop and could damage the equipment.

The recordings created with this configuration will have the following channels:

SoniClear Channel	Audio Recorded on Channel
Stereo Mix	Microphones 1 – 8
	Remote Conference or Softphone Participants
	SoniClear Readback Audio (Left/Right)
	Windows Program Playback (Left/Right)
Left	Microphones 1, 2, 3
	Remote Conference or Softphone Participants
	SoniClear Readback Audio – Left
	Windows Program Playback – Left
Right	Microphones 4, 5, and 6
	Remote Conference or Softphone Participants
	SoniClear Readback Audio – Right
	Windows Program Playback – Right
1	Microphone 1
2	Microphone 2
3	Microphone 3
4	Microphone 4
5	Microphone 5
6	Microphone 6
7	Conference Call/Softphone – Left
8	Conference Call/Softphone – Right

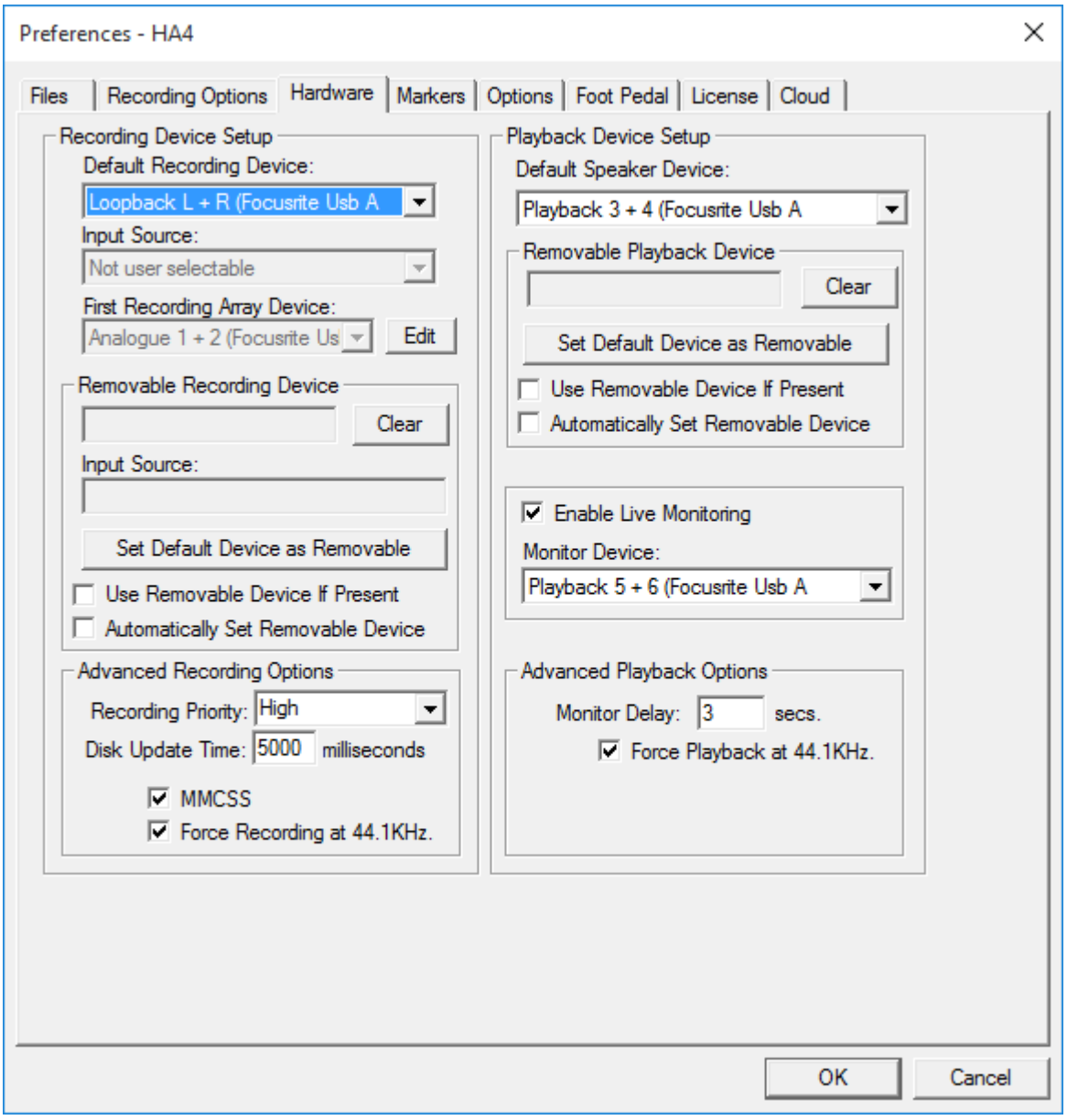
Recording Options Tab - Sound Quality

In the Recording Options preferences tab, set the recording format. For Meeting Recorder 10 select Meeting (Stereo WAV). For All other SoniClear products, select Multichannel (MP3) and set the channels selector to 10 channels.


Preferences - OctaCapture
Files
Recording Options
Hardware
Markers
Options
Foot Pedal
License
Cloud
Sound Quality
Multichannel(WAV)
Multichannel(MP3)
10
VoiceBoost
Exporting VoiceBoost Options
Custom
Display
Type:
2-Channel
Set Defaults
Always Confirm for Stop Recording
Append Recording to End of File
Custom Name:
Enable Undo
2-Channel
OK
Cancel

Hardware Tab – Audio Device Selection

Select the Hardware tab and modify the settings according to the following instructions.



Recording Device Setup

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

Default Recording Device

This is the sound card input for recording the stereo mix of all the participants. It should be set to "Loopback L+R". Note that the name may have an additional number included in that phrase. This indicates that the 18i20 interface has been plugged into more than one USB jack on the computer at some point in time.

Once the Default Recording Device field has been set, the 18i20 must be plugged into the same USB jack on the computer each time it is used.

First Recording Array Device

See below, "Recording Array Setup".

Removable Recording Device

"Use Removable Device If Present" and "Automatically Set Removable Device" options should be unchecked.

Advanced Recording Options

These options control how recording is processed.

Recording Process Priority

Default value should be set to High or Automatic.

Disk Update Time

The default value should be set to 5000 milliseconds.

MMCSS

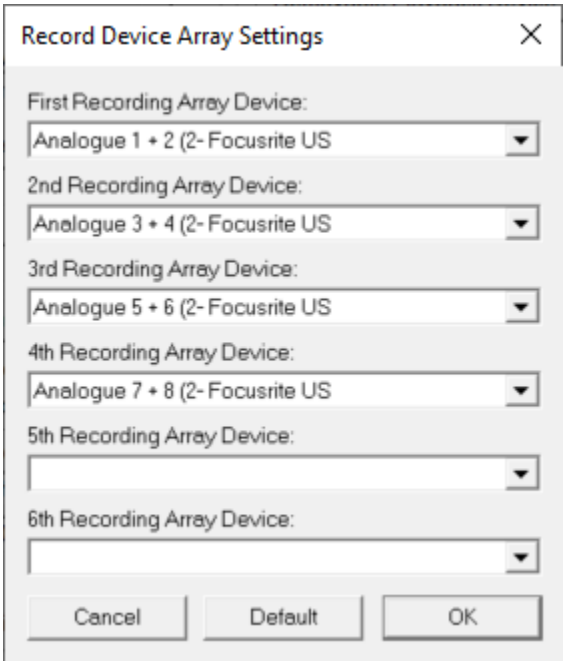
The value should be set to Checked.

Force Recording at 44.1KHz

The value should be set to Checked.

Recording Array Setup

Click on the Edit button next to the “First Recording Array Device” field to display the setup dialog for the individual microphone channels. This set of options controls how the individual inputs are recorded separately in SoniClear.



Set each of the recording array devices to the corresponding stereo pair device in the 18i20:

1. Recording Channels 1-2: Analogue 1 + 2 (Microphones 1 and 2
2. Recording Channels 3-4: Analogue 3 + 4 (Microphones 3 and 4)
3. Recording Channels 5-6: Analogue 5 + 6 (Microphones 5 and 6)
4. Recording Channels 7-8: Analogue 7 + 8 (Microphones 7 and 8)

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 to the participants in the room (through the speaker), and to the remote participants (through the conference software). It also sends the audio for playback to the headphones.

Set the Speaker Device Selection to “Playback 3 + 4”.

Removable Recording Device

“Use Removable Device If Present” and “Automatically Set Removable Device” options should be unchecked.

Enable Live Monitoring

Live monitoring should be enabled and the headphone device set to “Playback 5 + 6”.

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.

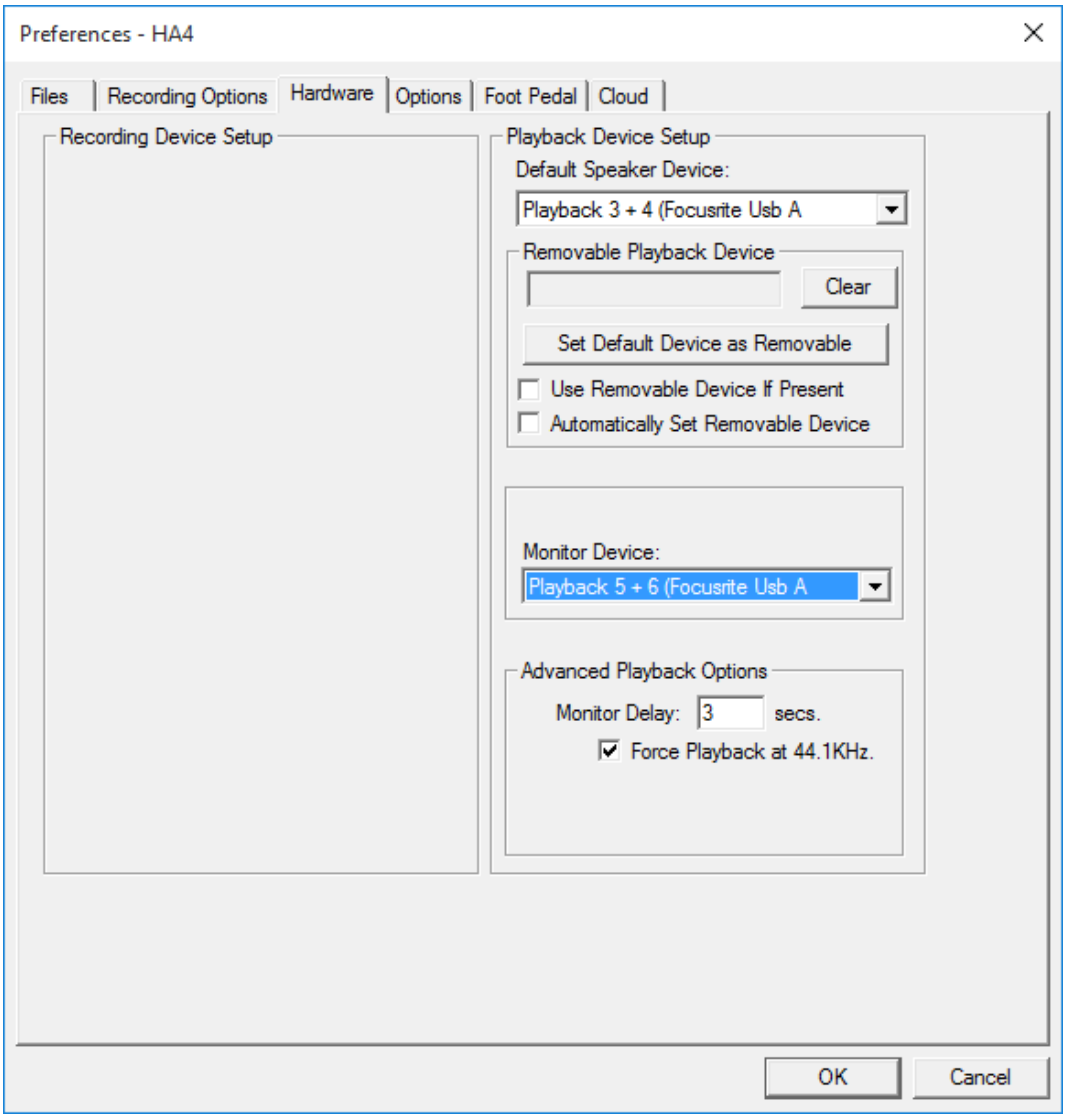
Force Recording at 44.1KHz.

This field should be set to Checked.

Transcriber Live Software Preferences

When Transcriber Live is used with SoniClear Court Recorder 10, the Focusrite 18i20 headphone can be used to monitor audio, and readbacks can be played so that the readback audio is heard by the teleconference participants. These settings apply to both Hybrid and Non-Hybrid modes of recording.

Hardware Tab – Audio Device Selection



Configure Transcriber Live for using the Focusrite 18i20 interface. Select Edit/Preferences from the pulldown menu, click on the Hardware tab, and set the options according to the following instructions.

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 into the teleconference call (like playing into speakers in the room when meeting in person). Set the device to “Playback 3 + 4”.

Removable Recording Device

The “Use Removable Device If Present” and “Automatically Set Removable Device” check boxes should be unchecked.

Enable Live Monitoring

Enable live monitoring by checking this option. Set the Headphone device to “Playback 5 + 6”.

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 if this happens.

Monitor Delay

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

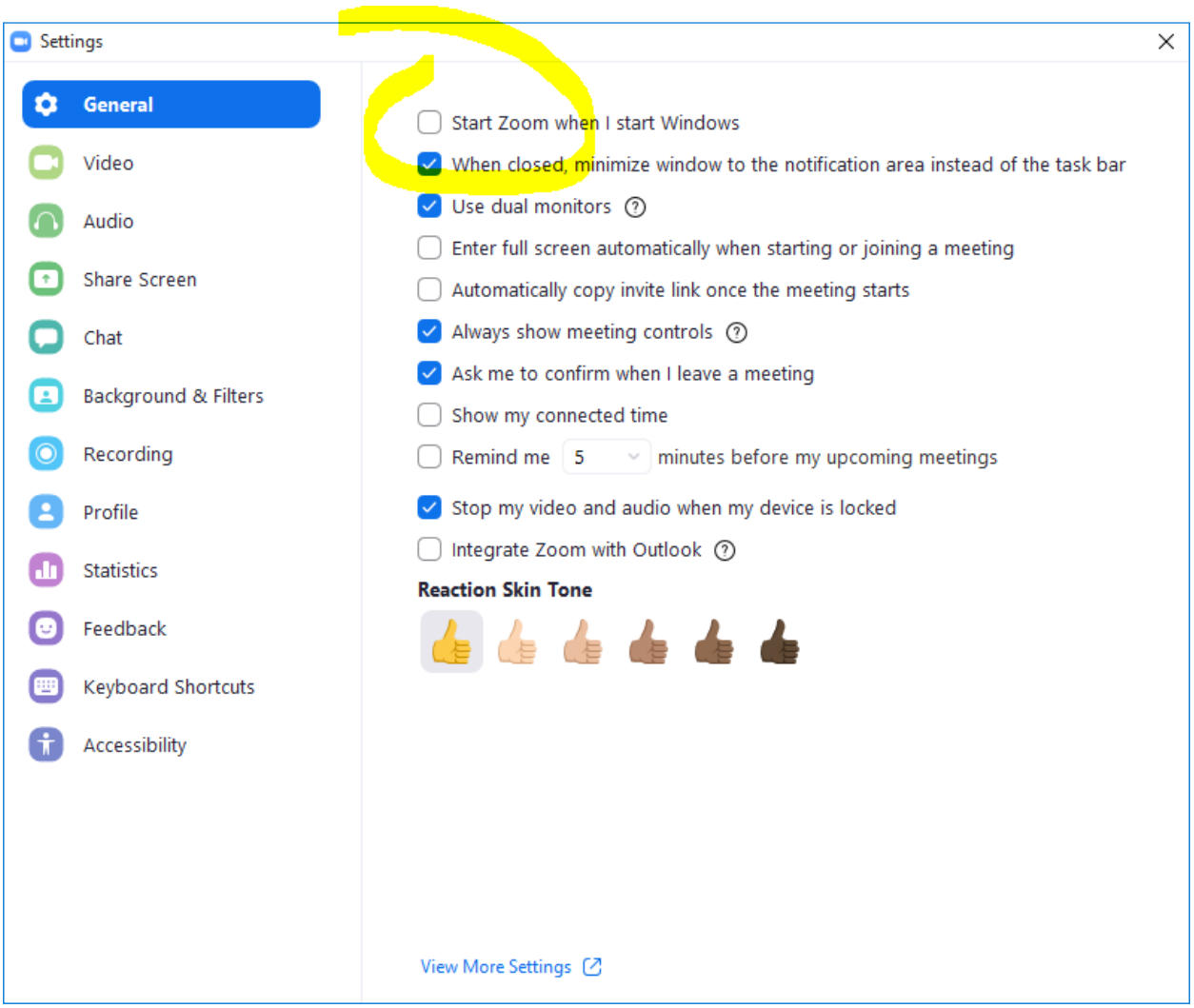
Force Recording at 44.1KHz.

This field should be set to Checked.

Zoom Conferencing Software Configuration

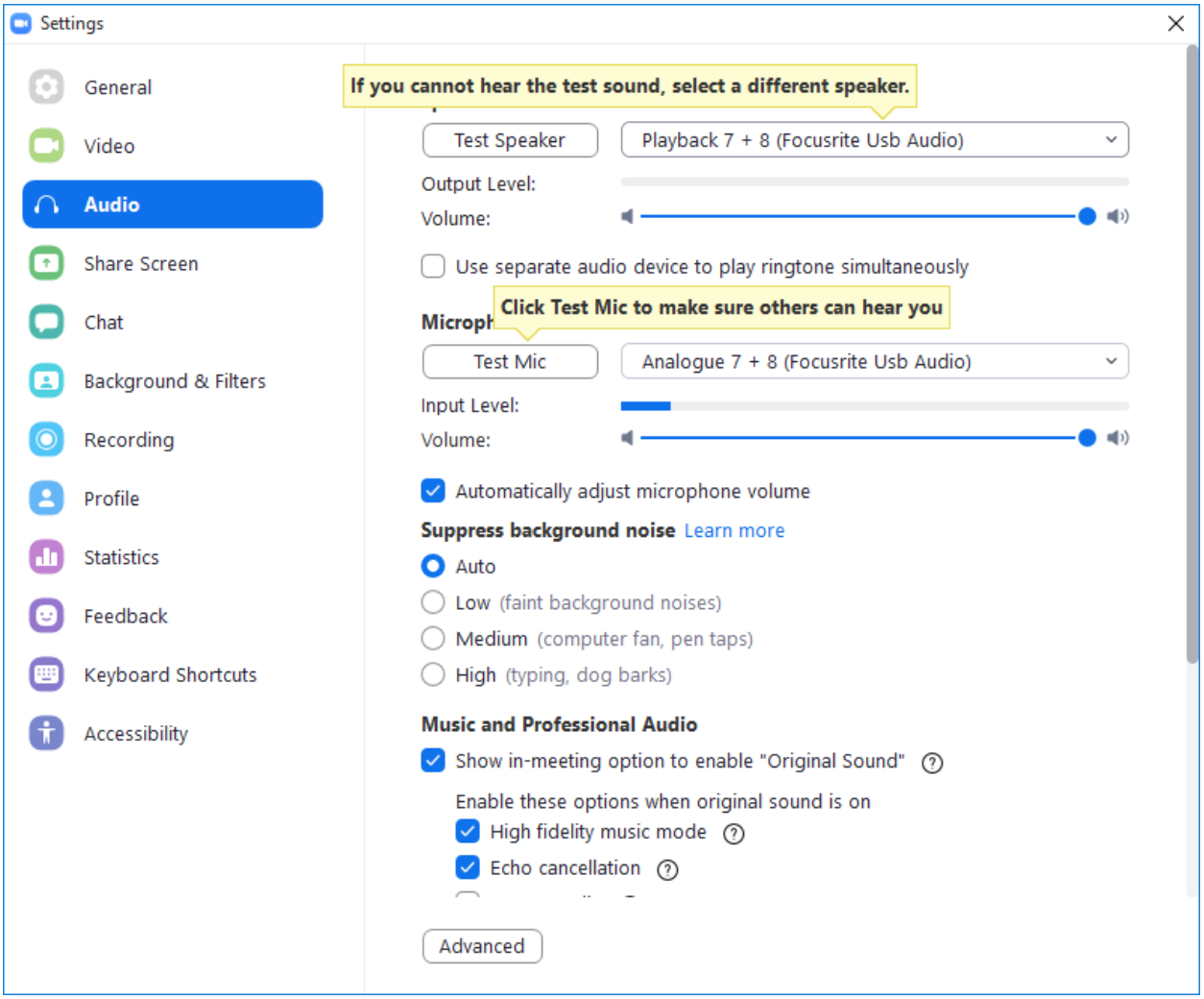
The Zoom conferencing application must be manually set to the correct configuration to work with the Focusrite 18i20 interface.

Disable Auto Startup



The Zoom Settings General tab allows for disabling loading at startup. Make sure the “Start Zoom when I Start Windows” option is unchecked. If this option is set incorrectly the Zoom software may load before the Focusrite 18i20 drivers get installed during the bootup process. This can cause Zoom to select the wrong audio devices, resulting in audio problems.

Configure Audio Devices



In the Audio settings tab, select the audio devices:

- Set the Speaker device to “Playback 7 + 8”.
- Set the Microphone device to “Analogue 7 + 8”.

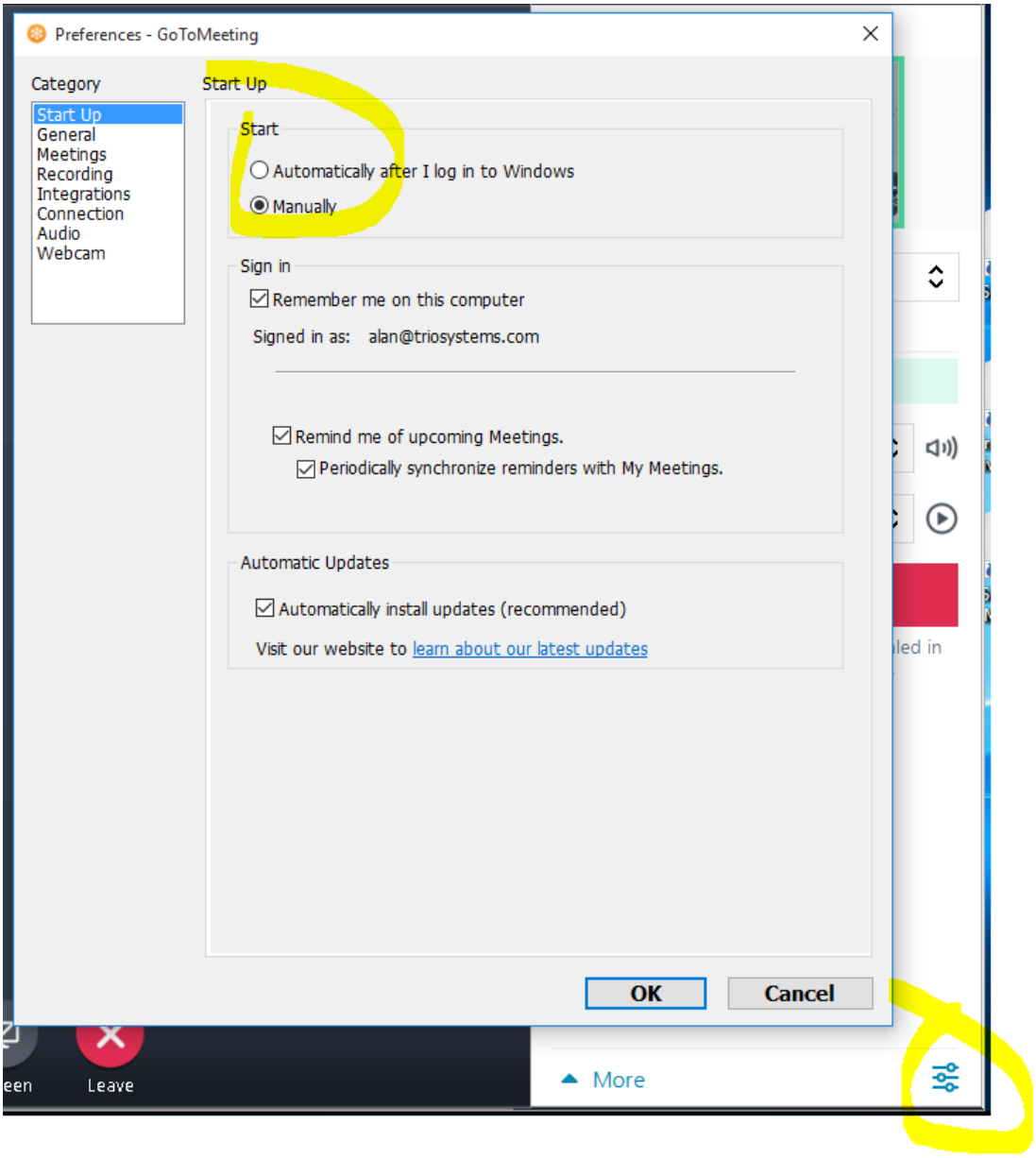
Software Updates

Changes are made regularly to the Zoom software, and it may not update automatically when new versions are shipped. Verify that the version of Zoom does not get out of date, since there are often fixes to the program, and new features that users will expect to be available (such as new and more advanced audio or video processing). At the same time, be aware that when Zoom changes, it may result in the program changing how it works with SoniClear. Always thoroughly test SoniClear with new versions of Zoom before using in production.

GoToMeeting Conferencing Software Configuration

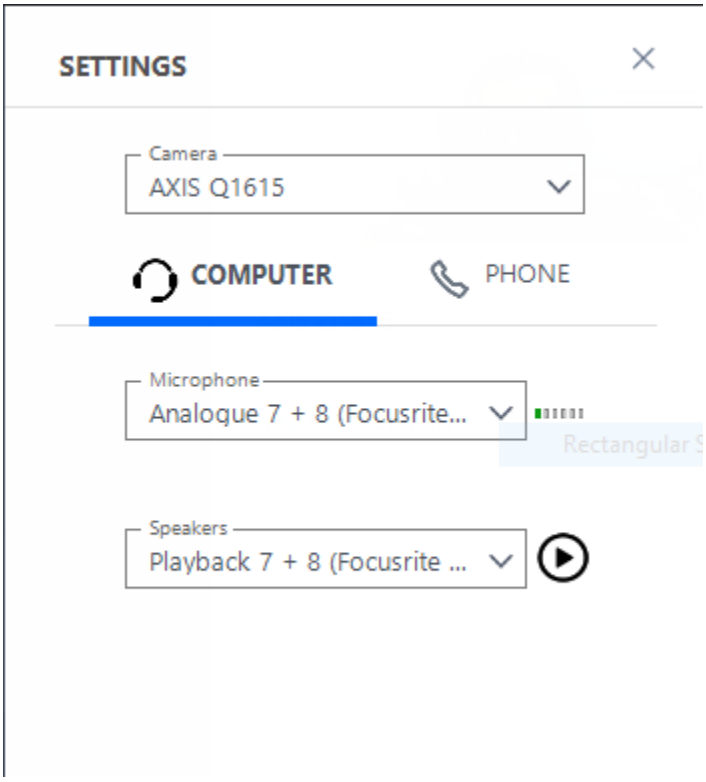
The GoToMeeting conferencing application must be manually set to the correct configuration to work with the Focusrite 18i20 interface.

Disable Auto Startup



The Preferences Start Up tab allows for disabling loading at startup. Make sure the "Automatically after I log in to Windows" option is unchecked. If this option is set incorrectly the GoToMeeting software may load before the Focusrite 18i20 drivers get installed during the bootup process. This can cause GoToMeeting to select the wrong audio devices, resulting in audio problems.

Configure Audio Devices



In the main settings tab, select the audio devices:

- Set the Microphone device to “Analogue 7 + 8”.
- Set the Speakers device to “Playback 7 + 8”.

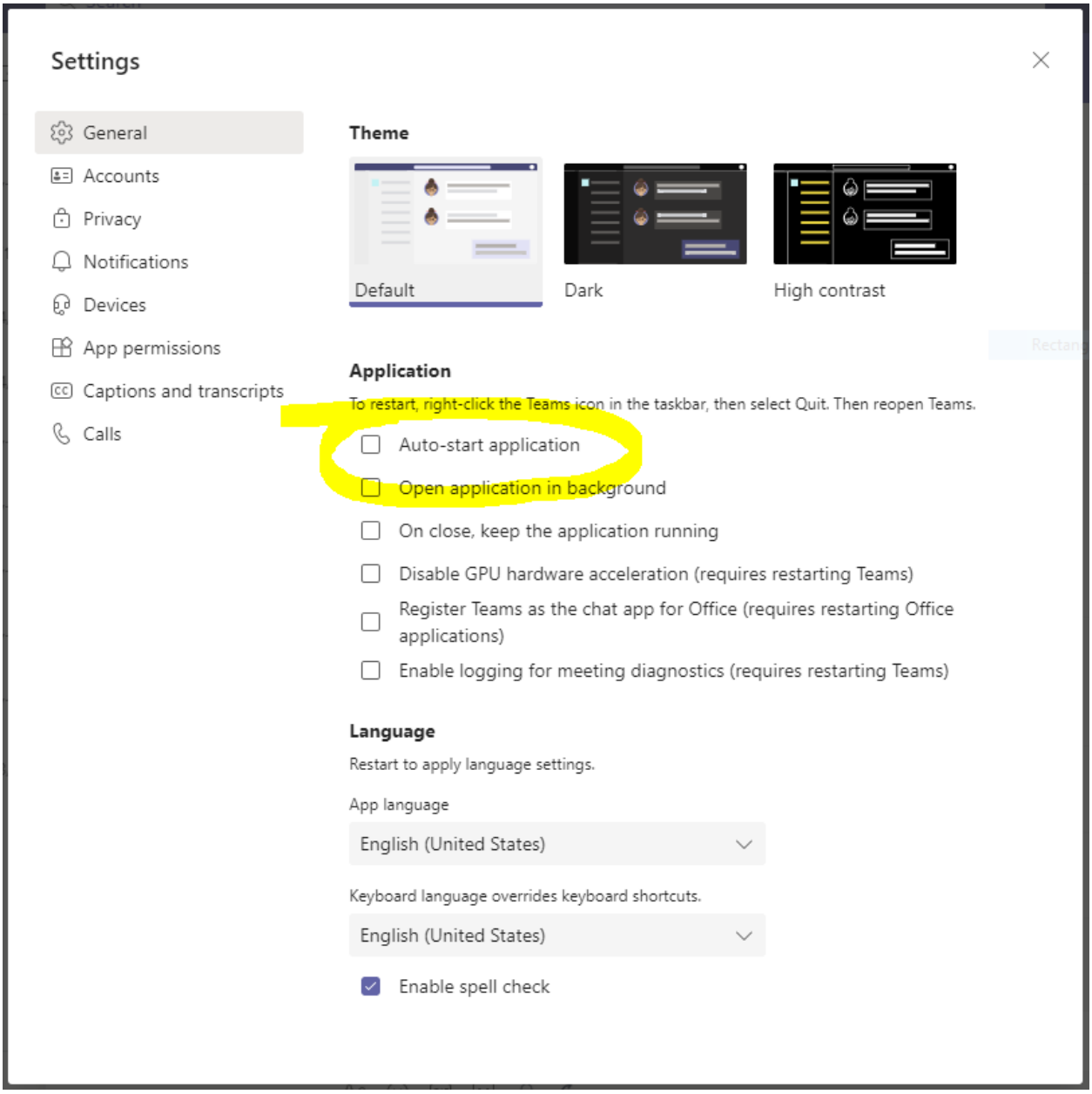
Software Updates

Changes are made regularly to the GoToMeeting software. The software normally auto-updates the software to the latest version, providing fixes to the program, and new features that users will expect to be available (such as new and more advanced audio or video processing). Periodically verify that the version of GoToMeeting is not getting out of date. At the same time, be aware that when GoToMeeting changes, it may result in the program changing how it works with SoniClear. Always thoroughly test SoniClear with new versions of GoToMeeting before using in production.

Teams Conferencing Software Configuration

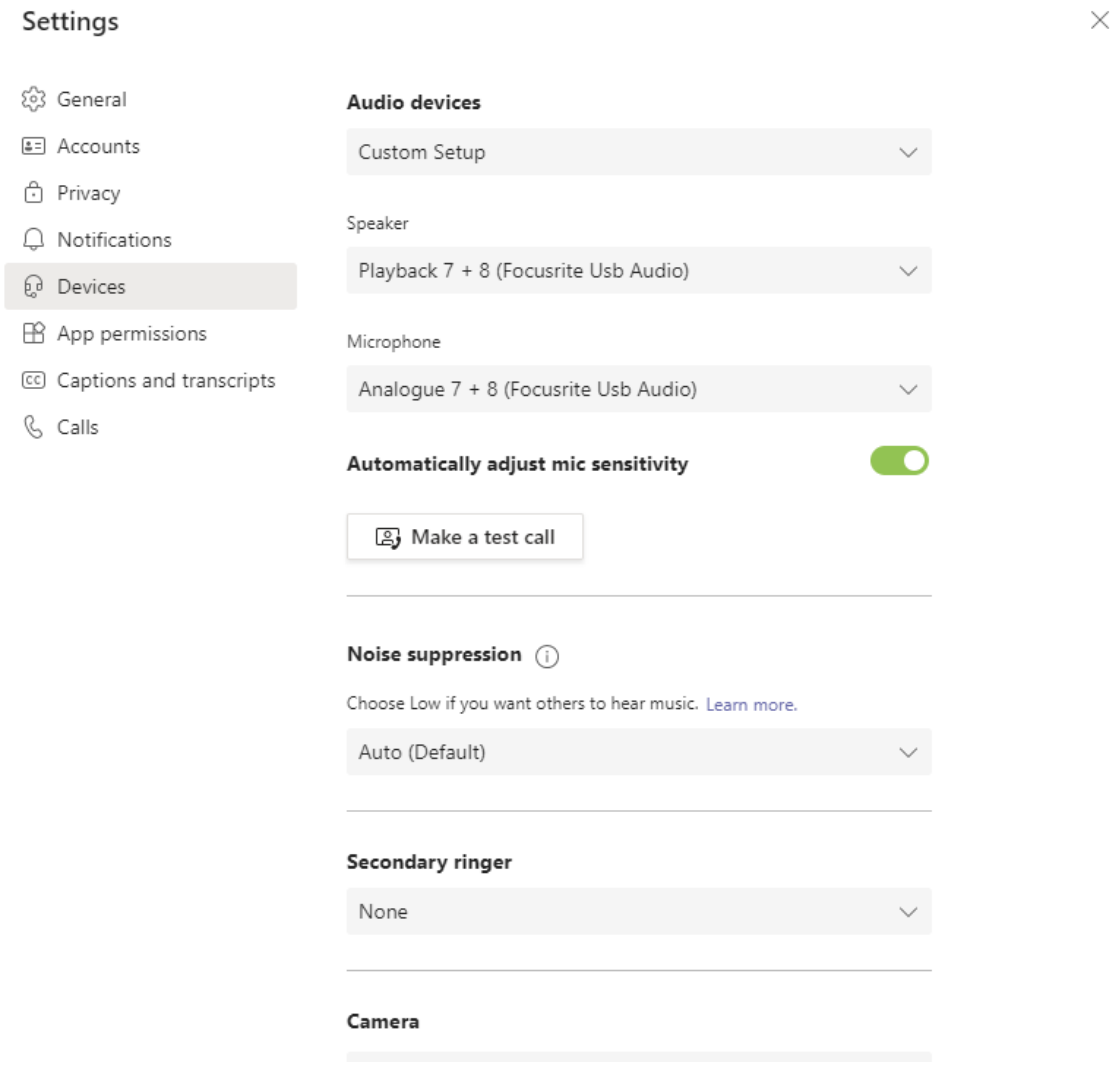
The Microsoft Teams conferencing application must be manually set to the correct configuration to work with the Focusrite 18i20 interface.

Disable Auto Startup



The Teams Settings General tab allows for disabling loading at startup. Make sure the “Auto-start application” option is unchecked.. If this option is set incorrectly the Teams software may load before the Focusrite 18i20 drivers get installed during the bootup process. This can cause Teams to select the wrong audio devices, resulting in audio problems.

Configure Audio Devices



In the Settings Devices tab, select the audio devices:

- Set the Speaker device to “Playback 7 + 8”.
- Set the Microphone device to “Analogue 7 + 8”.

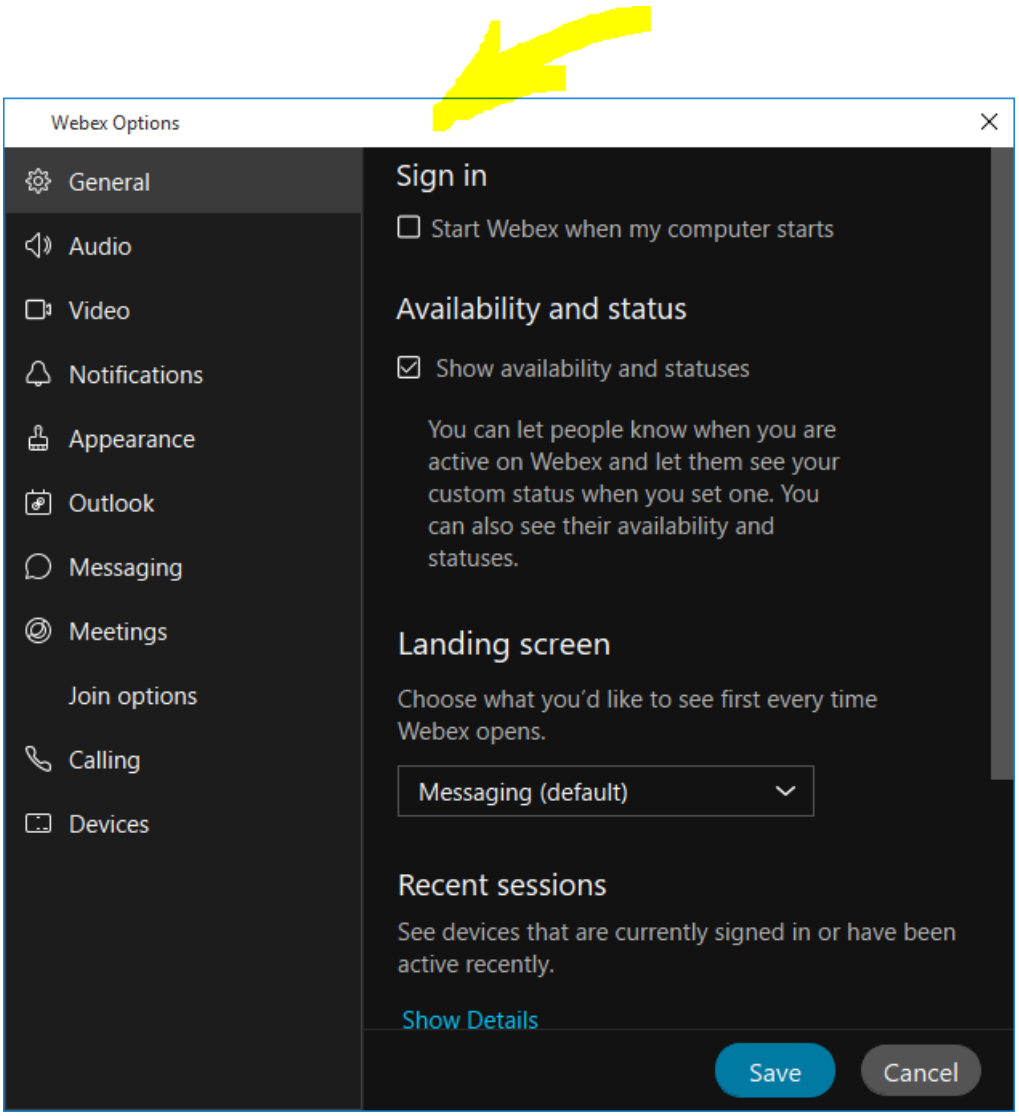
Software Updates

Changes are made regularly to the Teams software. The software normally auto-updates the software to the latest version, providing fixes to the program, and new features that users will expect to be available (such as new and more advanced audio or video processing). Periodically verify that the version of Teams is not getting out of date. At the same time, be aware that when Teams changes, it may result in the program changing how it works with SoniClear. Always thoroughly test SoniClear with new versions of Teams before using in production.

WebEx Conferencing Software Configuration

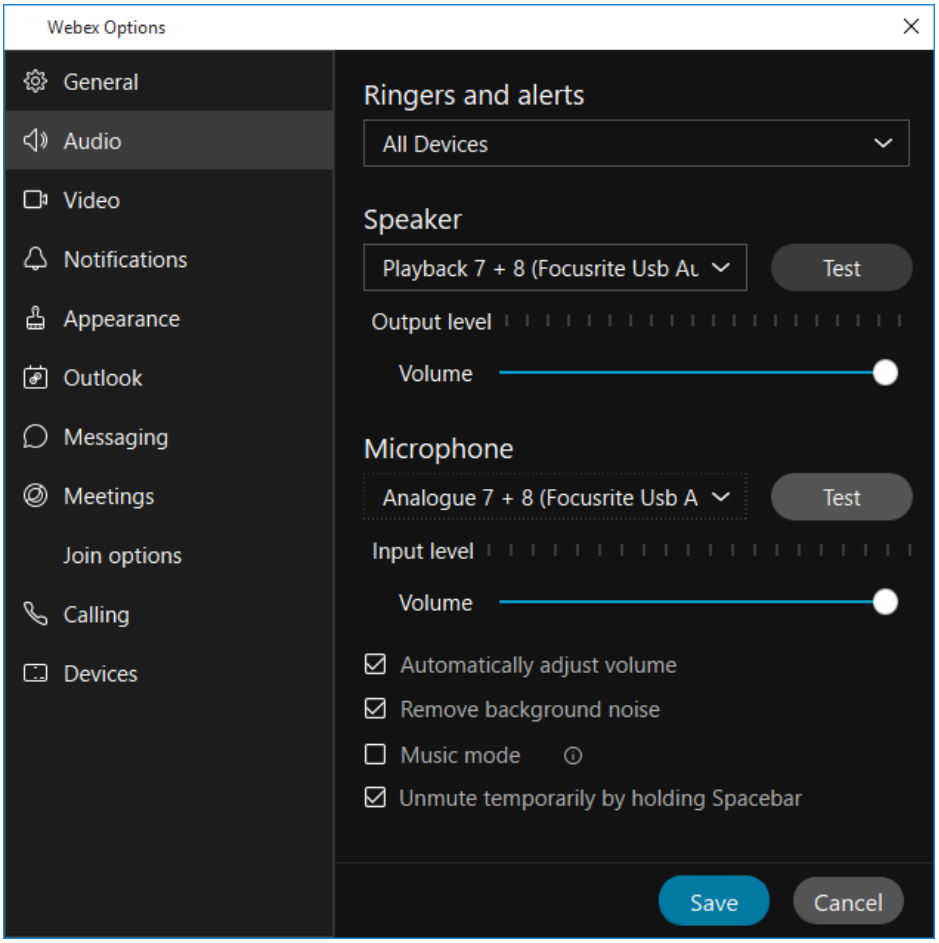
The Cisco WebEx conferencing application must be manually set to the correct configuration to work with the Focusrite 18i20 interface.

Disable Auto Startup



The Webex Options General tab allows for disabling loading at startup. Make sure the “Start Webex when my computer starts” option is unchecked. If this option is set incorrectly the Webex software may load before the Focusrite 18i20 drivers get installed during the bootup process. This can cause Webex to select the wrong audio devices, resulting in audio problems.

Configure Audio Devices



In the Webex Options Audio tab, select the audio devices:

- Set the Speaker device to “Playback 7 + 8”.
- Set the Microphone device to “Analogue 7 + 8”.

Software Updates

Changes are made regularly to the Webex software, and it may not update automatically when new versions are shipped. Verify that the version of Webex does not get out of date, since there are often fixes to the program, and new features that users will expect to be available (such as new and more advanced audio or video processing). At the same time, be aware that when Webex changes, it may result in the program changing how it works with SoniClear. Always thoroughly test SoniClear with new versions of Webex before using in production.

Other Communication Software Configuration

The communication software (such as a softphone app) must be set up to work with the Focusrite 18i20 interface. To do this, follow the instructions provided for the communication software for configuring audio devices.

Set speaker device to “Playback 7 + 8”.

Set the microphone device to “Analogue 7 + 8”.

Windows App Software Playback Configuration

The Focusrite 18i20 can be used to play back audio from software programs on the computer. With this configuration the audio being played back can be heard by the conference call participants and on the 18i20 monitoring headphones. The playback audio will also be recorded in SoniClear.

A typical application would be to play a video file on the computer for conference participants to hear. Any software that plays to the default speaker will be heard and recorded properly.