

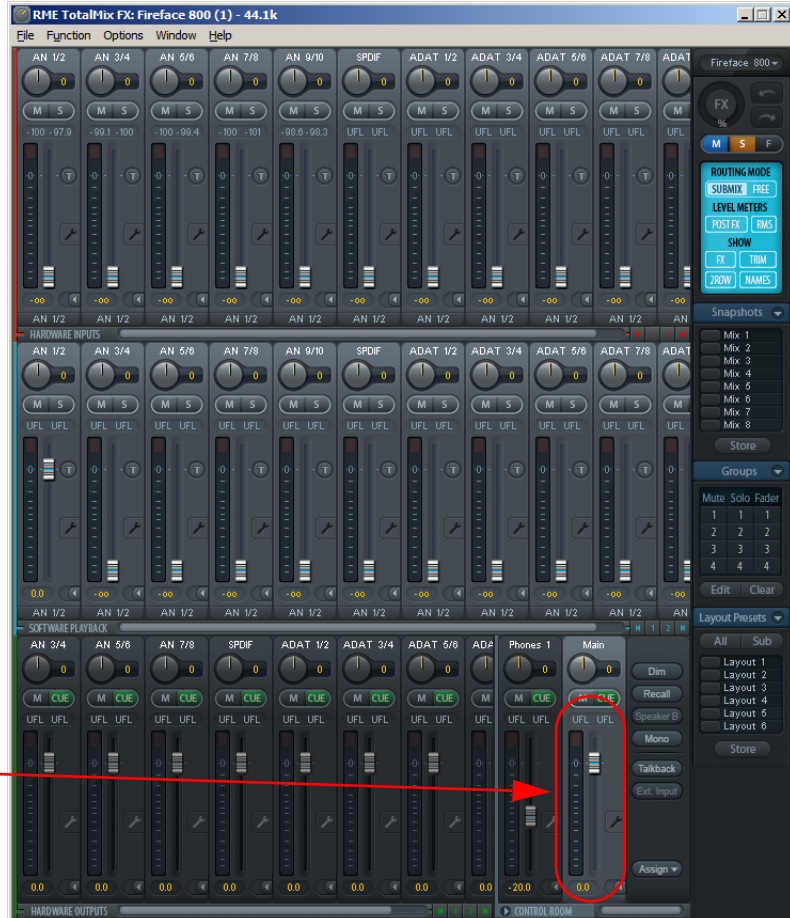


Fireface 800 Setup in Windows

Always use the approved driver from the SoundCheck DVD or from our website:

<https://support.listeninc.com/hc/en-us/sections/200370694-Drivers>

Main Output
(AN 1/2) must
be set to 0dB.



Mixer

Figure 1-1: Mixer Screen

Note: Input and Output channels should be set to the default value of +4dBu. See [Figure 1-3](#).

Main Output is also known as AN 1/2. This must be set to 0 dB as shown in [Figure 1-1](#).

The TotalMix application for the Fireface 800 should be configured as shown [Figure 1-1](#). A preset for this has been saved with the example sequence. From the mixer screen click **"File"** then click **"Open"**. Navigate to the Multichannel Self Test Package folder, open the folder for the audio interface and open **"SoundCheck Config FF800Gain"** should be +4dBu.tmws".

The mixer is set to:

- Hardware Inputs: All channels used in SoundCheck must be turned down to prevent feedback
- Hardware Outputs: All channels used in SoundCheck set to 0 dB - Unity Gain
- Software Playback: All channels used in SoundCheck set to 0 dB

Matrix

The Matrix allows for routing of software playback channels to the necessary output channels to create a one to one relationship.

The Matrix page of the mixer should be set as shown in [Figure 1-2](#). This is also included in the workspace file:

"SoundCheck Config FF800.tmws".

- Software Playback channels (vertical) are routed to Hardware outputs (horizontal). (Green cells set to 0dB.)

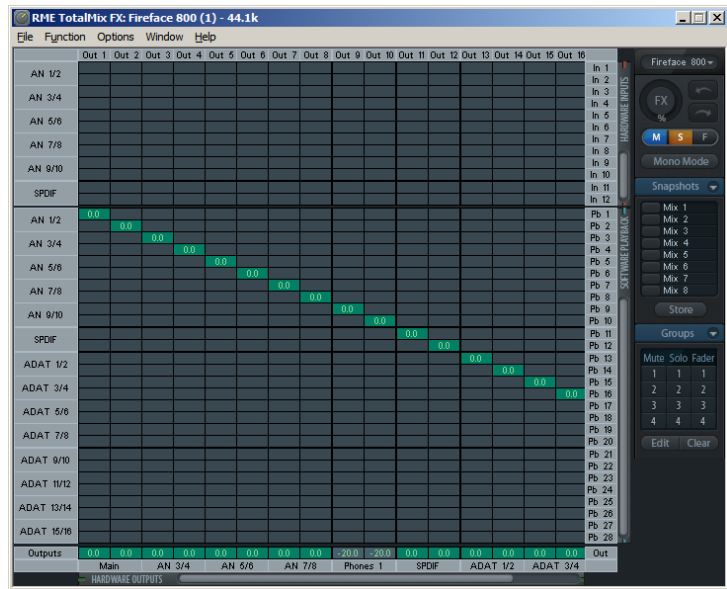


Figure 1-2: Matrix Screen

ASIO Buffer

The ASIO buffer is set in the ASIO Control Panel which is launched separately from the Mixer Utility.

The ASIO control panel can be opened by right clicking on a **Fireface 800** Channel Name in the SoundCheck Hardware Editor - Audio Tab.

The **default Buffer** is set to **256** samples. The Latency in the SoundCheck Hardware Editor is different for USB connection vs Firewire.

Connection	Buffer	Latency
Firewire	256	653

More channels of measurement may require a larger buffer.

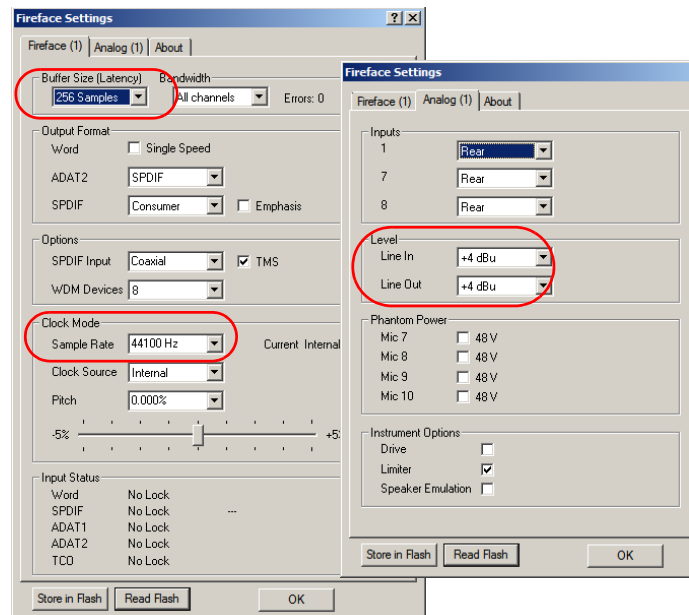


Figure 1-3: ASIO Control Panel

The sample rate of the **Fireface 800** will automatically update to the rate set in the SoundCheck Hardware Editor (see [Figure 1-4](#)). The sample rate set in the SoundCheck Hardware Editor will update in the **Fireface 800** mixer when the sequence runs.

The **Analog Tab** of the ASIO Control Panel shows the Line In and Line Out levels to set to the default value: +4 dBu.

Note: When you change to a higher Sample Rate in the Hardware Editor, the audio interface driver will automatically change to a larger buffer. This can cause performance problems with SoundCheck. After changing the Hardware Editor Sample Rate you should change the ASIO Buffer back to the default value shown in [Figure 1-3](#). Follow the steps in [Latency Changes on page 3](#) to get the new Latency Value for the Hardware Editor fields.

SoundCheck Hardware Editor

The Hardware Editor in [Figure 1-4](#) shows the general settings for the Input and Output Vp values as well as the Latency when using a buffer of 256 for the Fireface 800 using a USB connection.

Note that the default Calibration Configuration (.CAL) file in SoundCheck has only 2 signal paths of direct input and output. New signal paths will need to be created in Calibration if you plan to use the additional hardware channels.

Channel Name	Driver	Device Name	Select Ch	Vp	Analog/Digital	Sampling Rate	Alias Freq	Bit Depth	Latency
Input 1	ASIO	ASIO Fireface	Analog 1 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 2	ASIO	ASIO Fireface	Analog 2 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 3	ASIO	ASIO Fireface	Analog 3 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 4	ASIO	ASIO Fireface	Analog 4 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 5	ASIO	ASIO Fireface	Analog 5 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 6	ASIO	ASIO Fireface	Analog 6 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 7	ASIO	ASIO Fireface	Analog 7 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653
Input 8	ASIO	ASIO Fireface	Analog 8 (1)	5	Analog	44100 Hz	20948 Hz	24 bit	653

Channel Name	Driver	Device Name	Select Ch	Vp	Analog/Digital	Sampling Rate	Alias Freq	Bit Depth	Latency
Output 1	ASIO	ASIO Fireface	Analog 1 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 2	ASIO	ASIO Fireface	Analog 2 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 3	ASIO	ASIO Fireface	Analog 3 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 4	ASIO	ASIO Fireface	Analog 4 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 5	ASIO	ASIO Fireface	Analog 5 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 6	ASIO	ASIO Fireface	Analog 6 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 7	ASIO	ASIO Fireface	Analog 7 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78
Output 8	ASIO	ASIO Fireface	Analog 8 (1)	4.78	Analog	44100 Hz	20948 Hz	24 bit	4.78

Figure 1-4: Hardware Editor

- **Sampling Rate:** Only one rate can be selected for all Input and Output channels of an interface

Important! Do not use different input and output driver types for an audio interface, e.g.: ASIO for Inputs and WASAPI for outputs. Doing so will result in an Acquisition Step error.

Latency Changes

1. Open the Hardware Editor. Change the Sample Rate to the value you need to measure Latency for. Click on the drop down arrow next to the value in the **Latency** field of the Hardware Editor. Select **Edit** and the Latency Table will open.
2. Set the **Latency** for the desired sample rate to 0 (zero) and click OK
3. Make sure the sample rate of the audio interface has updated. Change the ASIO Buffer/USB Streaming mode for the audio interface in the **ASIO Control Panel** (if applicable). Typically there is no buffer control for WDM / WASAPI.
4. Run the **Self Test** sequence from the Calibration folder in SoundCheck. The Result window shows the **Audio Interface Latency** for the new Buffer size or Sample Rate.
5. Enter this value in the Latency field of the Hardware Editor Sample Rate/ Latency Table. Repeat this for other required Sample Rates.
6. All channels, analog or digital, must have the same latency value per sample rate for that audio interface. This insures the system will work correctly if they are used simultaneously in a sequence.
7. Run the Self Test sequence again to verify that the Audio Interface Latency is 0 (zero)

Sampling Rate (Hz)	Latency (Samples)
44100	653
48000	0
88200	0
96000	0
176400	0
192000	0

Figure 1-5: Edit Latency Table