



LynxTwo Model A Setup for Windows

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

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

The current driver is signed with a SHA-2 digital certificate. Early versions of Windows 7 do not support SHA-2 digital certificates, so Windows 7 requires a specific patch to support SHA-2 digital certificates. Please see [Microsoft Security Advisory 3033929](https://technet.microsoft.com/en-us/library/security/3033929) for more information.

<https://technet.microsoft.com/en-us/library/security/3033929>

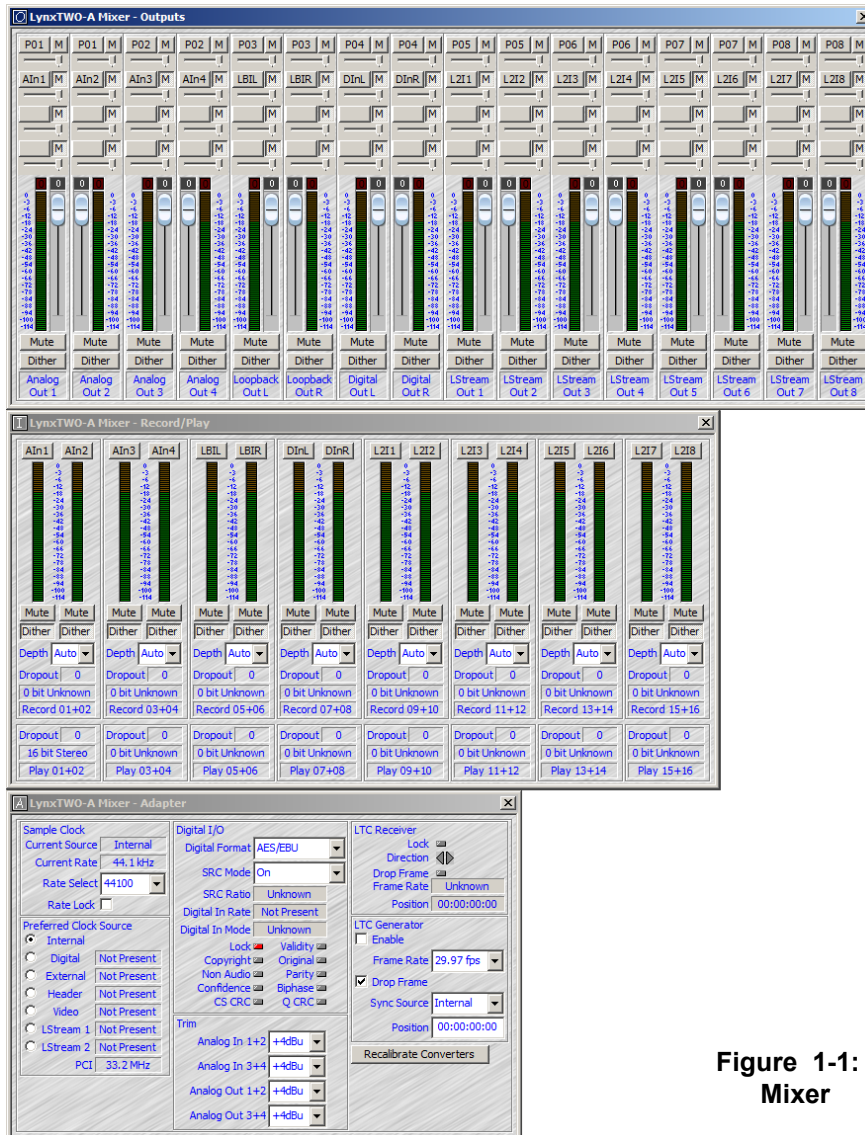


Figure 1-1:
Mixer

The mixer application for the LynxTwo should be configured as shown [Figure 1-1](#).

Click 'File' then click 'Restore Defaults' to reload the mixer settings for SoundCheck.

You will then need to change the Buffer as show in [Figure 1-2](#).

The mixer is set to:

- Hardware Outputs: All channels used in SoundCheck set to 0 dB – Unity Gain

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 **Lynx** Channel Name in the SoundCheck Hardware Editor - Audio Tab.

The buffer for 2 channels of measurement is usually set to 256 samples. More channels of measurement will require a larger buffer. For 4 channels of testing we recommend a buffer of 512. This will require a different Latency value in the Hardware Editor. See [Latency Changes on page 3](#).

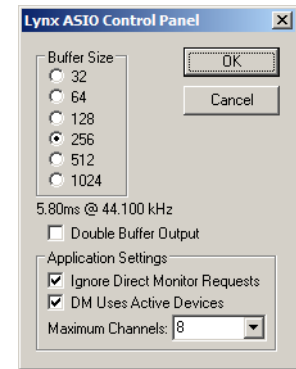


Figure 1-2: ASIO Control Panel

Connection	Buffer	Latency
Internal	256	618

Double Buffer Output

This must be turned off to avoid dropouts.

Maximum Channels

This should be decreased to 4 channels when using high sample rates, e.g.: 192 kHz.

Sample Rate

The sample rate of the Lynx Model A will automatically update to the rate set in the SoundCheck Hardware Editor (see [Figure 1-3](#)). The sample rate set in the SoundCheck Hardware Editor will update in the Lynx mixer when the sequence runs. Only one rate can be selected for all Input and Output channels of an interface.

SoundCheck Hardware Editor

The Hardware Editor in [Figure 1-3](#) shows the general settings for the Input and Output Vp values as well as the Latency when using a buffer of 256.

- 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.

Interfaces sold by Listen include a data sheet with more precise Vp values that you can enter in the Hardware Editor.

Channel Name	Driver	Device Name	Select Ch	Vp	Analog/Digital	Sampling Rate	Alias Freq	Bit Depth	Latency
Input 1	ASIO	ASIO Lynx	LynxTWO-A Record 01	11	Analog	44100 Hz	20948 Hz	24 bit	618
Input 2	ASIO	ASIO Lynx	LynxTWO-A Record 02	11	Analog	44100 Hz	20948 Hz	24 bit	618
Input 3	ASIO	ASIO Lynx	LynxTWO-A Record 03	11	Analog	44100 Hz	20948 Hz	24 bit	618
Input 4	ASIO	ASIO Lynx	LynxTWO-A Record 04	11	Analog	44100 Hz	20948 Hz	24 bit	618
Output 1	ASIO	ASIO Lynx	LynxTWO-A Play 01	11	Analog	44100 Hz	20948 Hz	24 bit	
Output 2	ASIO	ASIO Lynx	LynxTWO-A Play 02	11	Analog	44100 Hz	20948 Hz	24 bit	
Output 3	ASIO	ASIO Lynx	LynxTWO-A Play 03	11	Analog	44100 Hz	20948 Hz	24 bit	
Output 4	ASIO	ASIO Lynx	LynxTWO-A Play 04	11	Analog	44100 Hz	20948 Hz	24 bit	

Figure 1-3: Hardware Editor

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)

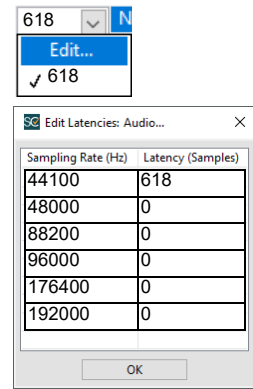


Figure 1-4: Edit Latency Table