Lynx Aurora 8 and 16 LT-USB 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

Driver signing error in Windows 10

Starting with Build 23f (LT-TB) and the February 20, 2018 release (USB), Lynx drivers are both signed by Lynx (with a SHA2 certificate) and counter-signed by Microsoft (for Windows 10 installation). This should allow easy installation on any version of Windows operating system from Windows Vista through Windows 10. On some installations of Windows 10, Secure Boot must be disabled to allow third-party drivers to be installed. This is done in the UEFI BIOS on your computer.

- To disable Secure Boot: From within Windows 10, hold the Shift key while selecting Restart. Go to Troubleshoot > Advanced Options: UEFI Firmware Settings.
- Find the Secure Boot setting, and if possible, set it to Disabled. This option is usually in either the Security tab, the Boot tab, or the Authentication tab.
- Save changes and exit.
- When the computer restarts you should be able to install the driver.

Windows 7

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*** for more information.

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

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.

Lynx Mixer

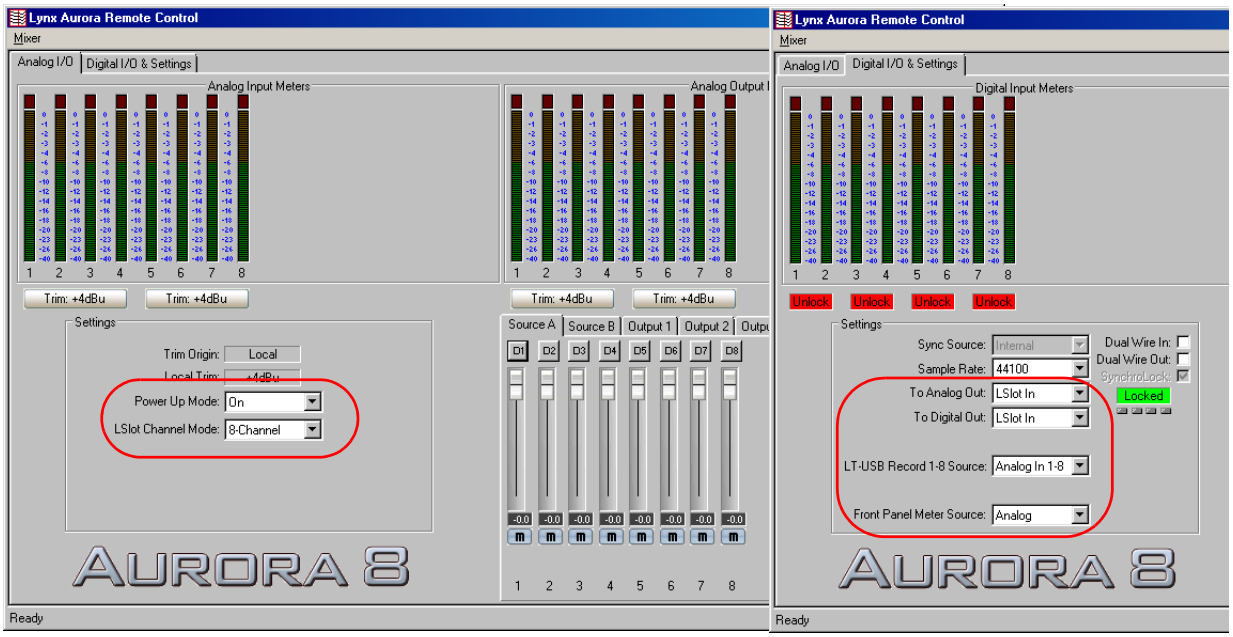

Figure 1-1: Mixer Screen

The remote control application for the Lynx Aurora should be configured as shown ***Figure 1-1***. The Aurora 16 mixer is the same but with 16 channels.

Analog I/O Tab

- Analog Trim should be set to “+4 dBu FS” for Inputs and Outputs
- Power Up Mode: On
- LSlot Channel Mode: 8 Channel

Digital I/O Tab

- To Analog Out: Set to LSlot In
- To Digital Out: Set to LSlot In

Aurora ASIO Control Panel Settings

The ASIO Control Panel is launched separately from the Mixer Utility. The ASIO control panel can be opened by right clicking on an Aurora Channel Name in the SoundCheck Hardware Editor - Audio Tab.

The **default Buffer** is set to:

USB Streaming = **Reliable** and ASIO Buffer = **Auto**

This is not compatible with SoundCheck and must be changed as shown in Figure 1-2.

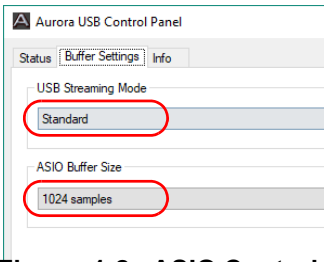

Figure 1-2: ASIO Control Panel

USB Streaming = **Standard** and ASIO Buffer = **1024**

More channels of measurement may require a larger buffer. See ***Latency Table on page 3***.
The sample rate of the Lynx Aurora (and Lynx mixer) will automatically update to the rate set in the SoundCheck Hardware Editor when the sequence runs. See ***Figure 1-3***.

The Hardware Editor in ***Figure 1-3*** shows the general settings for the Input and Output Vp values as well as the Latency. Interfaces sold by Listen include a data sheet with more precise Vp values that you can enter in the Hardware Editor.

- 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.

The Aurora 16 will use the same settings but with 16 channels.

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

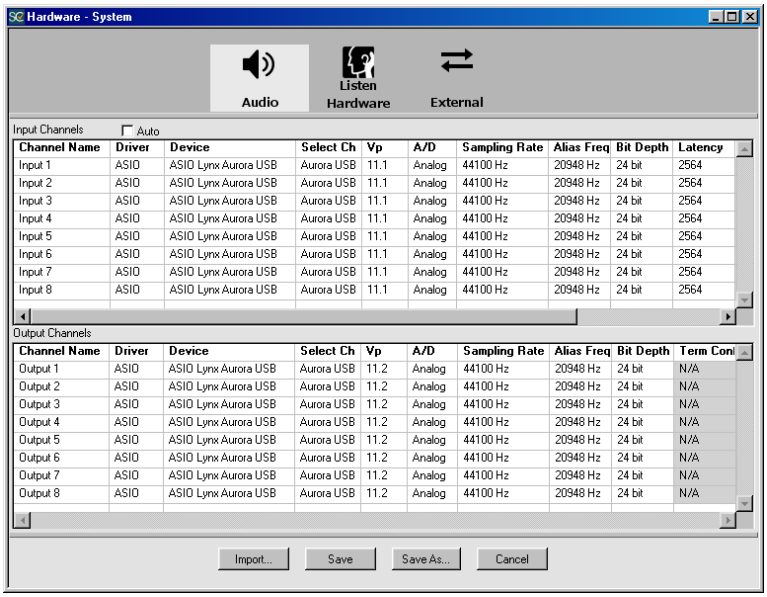

Figure 1-3: Hardware Editor

Latency Table

Latency in Samples for Typical Sample Rate and Buffer Values				
USB Connection	**44.1 kHz**	**48 kHz**	**96 kHz**	**192 kHz**
ASIO/USB Buffer	1024/Standard	1024/Standard	1024/Standard	2048/Standard
Samples	2564	2583	2948	5754
Enter the **Samples** value in the Hardware Editor Latency field for the selected Sample Rate.				

Figure 1-4: Latency in Samples

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)

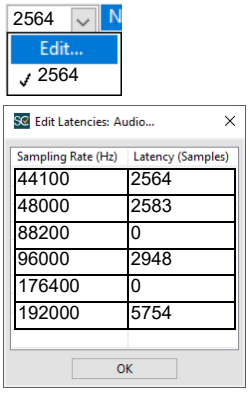

Figure 1-5: Edit Latency Table