

High Quality 4-in / 4-out
USB Audio Interface



User's Guide



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www.esi-audio.com

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1. Introduction

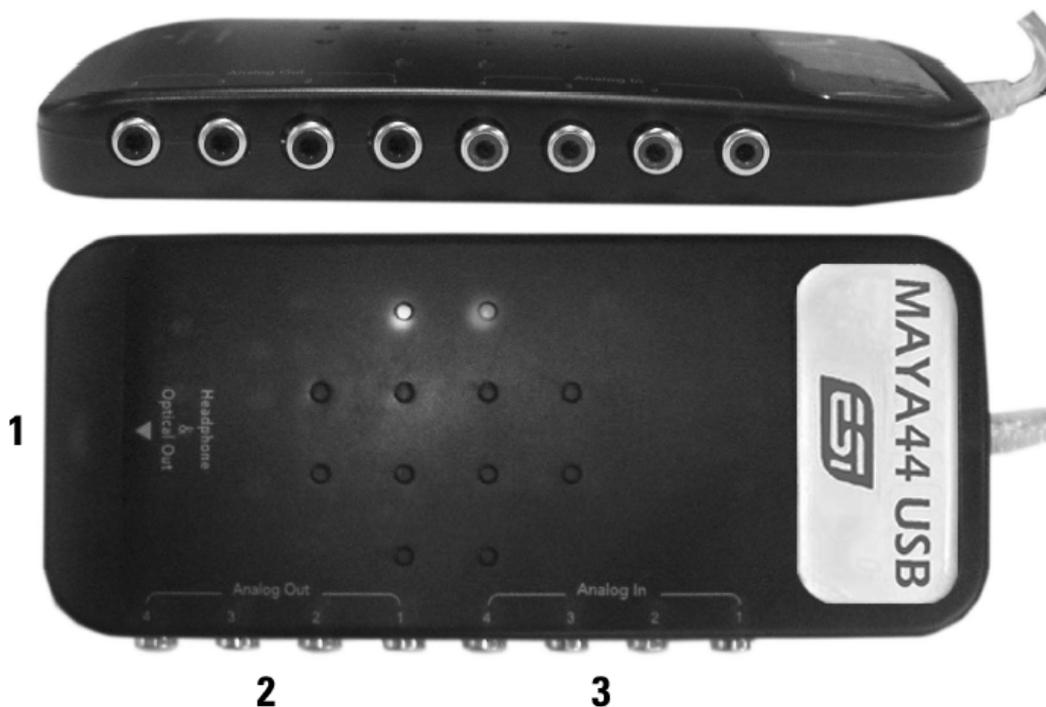
Congratulations on your purchase of the ESI MAYA44 USB.

MAYA44 USB is a powerful portable audio interface, that provides 4 analog input and 4 analog output channels plus a stereo digital output and amplified headphone output. It is very easy to use, small and powerful. With our ASIO driver support MAYA44 USB works perfect with all current recording and sequencer applications, as well as professional DJ applications. The USB connection makes installation extremely simple.

Just plug it in and it works!

Features

MAYA44 USB is connected to the computer with a fixed USB connection cable. In addition the product has these features:



1. S/PDIF optical output plus headphone output (channel 1 and 2)
2. 4 analog outputs (Line Out 1, 2 – channel 1 to 4)
3. 4 analog inputs (Line In 1, 2 – channel 1 to 4)

The cool compact design allows you to take MAYA44 USB with you, wherever you go. As companion to a notebook computer, you can take your projects with you. MAYA44 USB is simple to install and even easier to use. Working with samples, as a DJ or with software synthesizers has never been easier, with the help from MAYA44 USB. The hardware works perfectly with important ASIO compatible software applications such as Cubase, Reaktor, Reason or Live and with most professional DJ applications such as MixVibes, BPM Studio or Traktor DJ Studio.

2. Installation

System Recommendation

MAYA44 USB is not simply a standard digital audio interface card, but a high-resolution device capable of advanced processing of audio content. Even though MAYA44 USB is built to have low-CPU resource dependability, system specifications play a key part in the MAYA44 USBs performance. Systems with more advanced components are generally recommended.

Minimum System Requirements

PC

- Intel Pentium II 450MHz CPU or comparable AMD CPU (or equivalent) – we recommend at least a Pentium III CPU with 600 MHz
- Windows 98SE, ME, 2000, XP operating system
- 1 available USB port
- at least 128MB RAM
- high quality audio software with ASIO support strongly recommended

Mac

- Power Macintosh G3 or higher
- 1 available USB port
- at least 256MB RAM
- Mac OS X 10.3 or higher

Hardware Installation

MAYA44 USB is simply connected to an available USB port of your computer. A separate power supply is not required, as MAYA44 USB is a USB powered device. Simply install the hardware by plugging it into your computer.



USB port of a computer

Driver Installation

After the connection of MAYA44 USB, the operating system automatically detects it as a new hardware device. Modern operating systems like Windows XP or Mac OS X usually detect the hardware directly and are installing the correct USB audio drivers automatically.

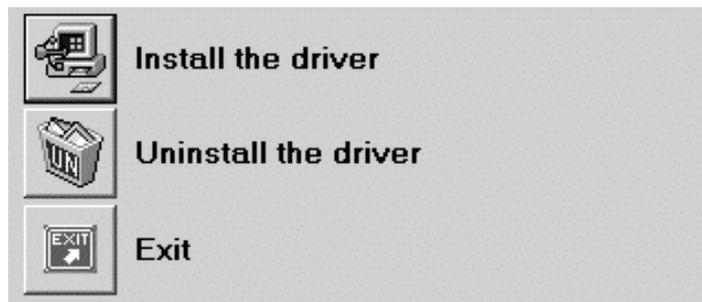
You can use MAYA44 USB already now in some consumer audio applications that do not need special professional ASIO driver support. Under Windows XP this could be for example programs

that don't require ASIO like more simple DJ applications. Under Mac OS X this could be applications like Garageband.

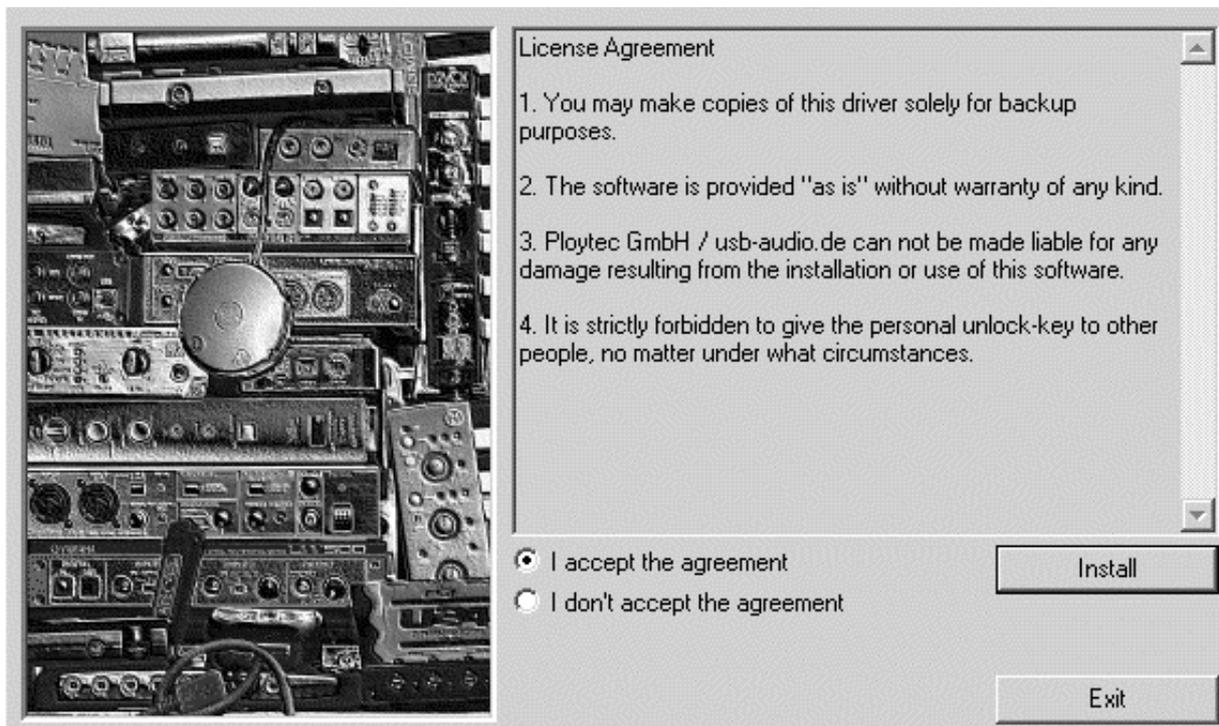
The following section describes the installation of our ASIO compatible special driver software under Windows XP. The procedure is similar with other versions of Windows.

Installation under Windows XP

Unplug the device before you start the installer. Then launch *setup.exe* from the *ESI/MAYA44USB* folder of the included driver CD or from a download of a recent driver from our website. You can select the language used for installation, then the following dialog appears:



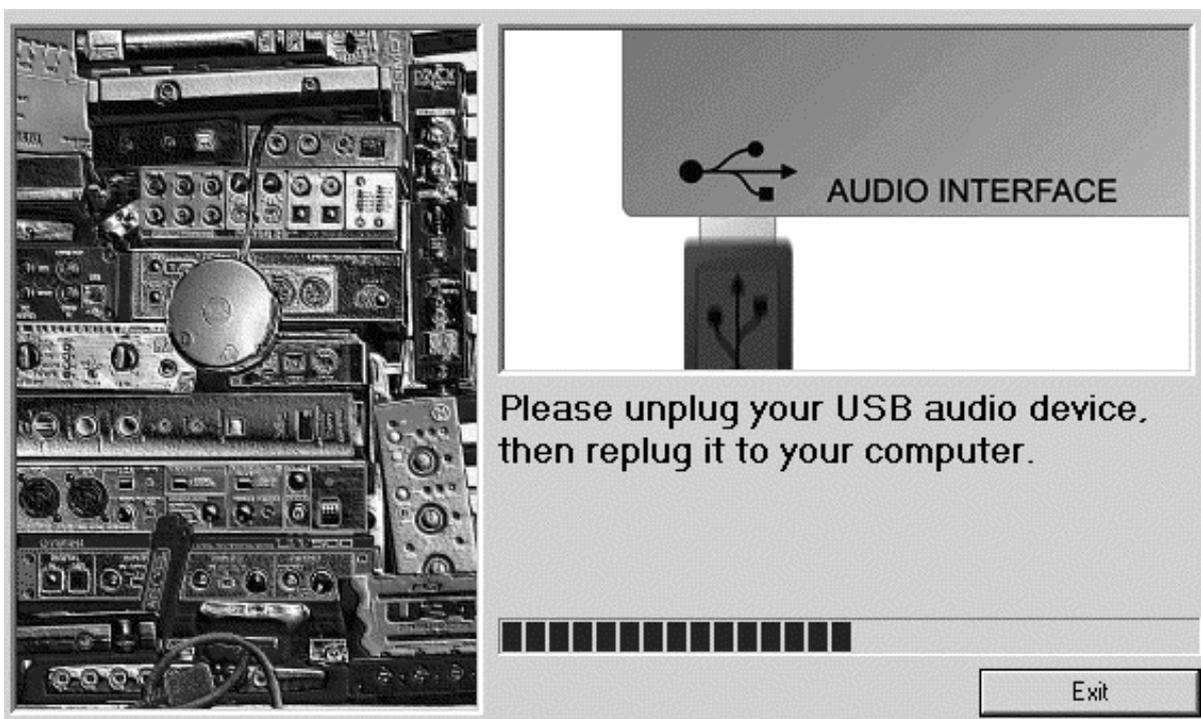
Choose *Install the driver*. The following window appears:



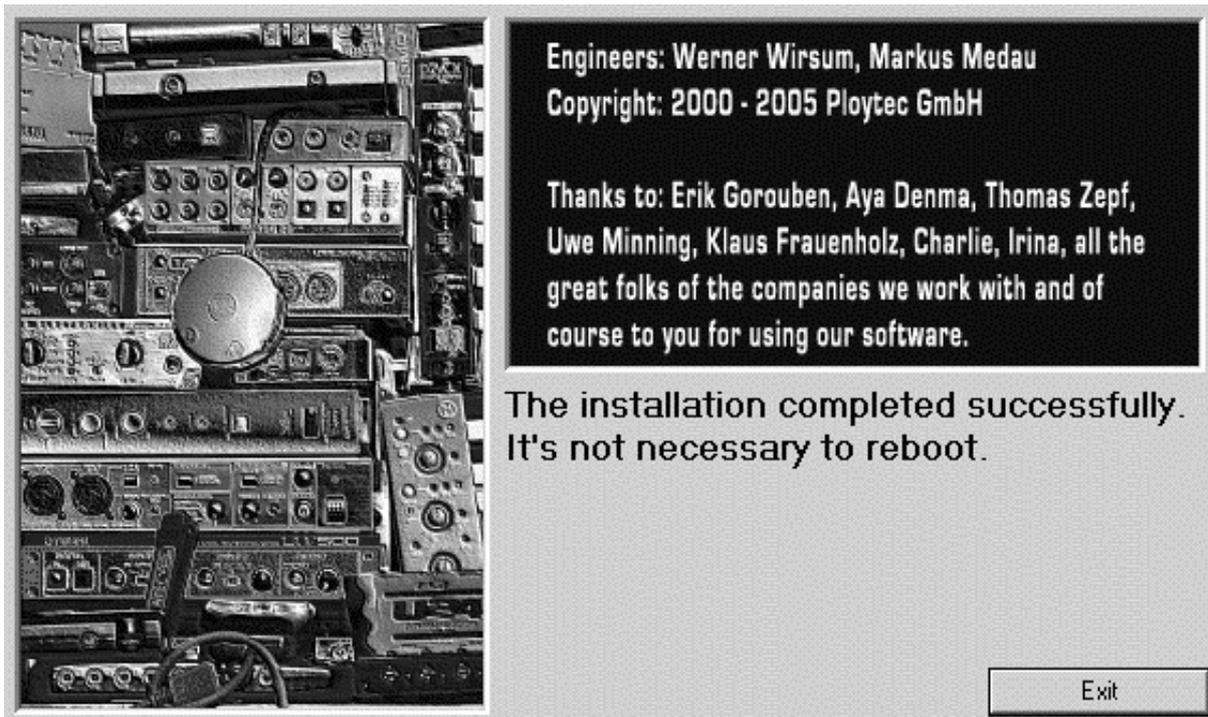
Accept the license agreement and then click on *Install*. Now 1:1 follow the instructions on screen through out the installation process.



The installer will instruct you to plug-in the USB device to the computer. The detection can always take a moment.



If you are told to do so like seen above, please unplug the device again, before you will be told to plug it in again. If that happens, please wait again until the detection (like described above) is completed.



The completion of the installation can be confirmed on the screen above with *Exit*.

Congratulations! You have now completed the installation of the special ASIO driver successfully and the installation of MAYA44 USB has been completed now.

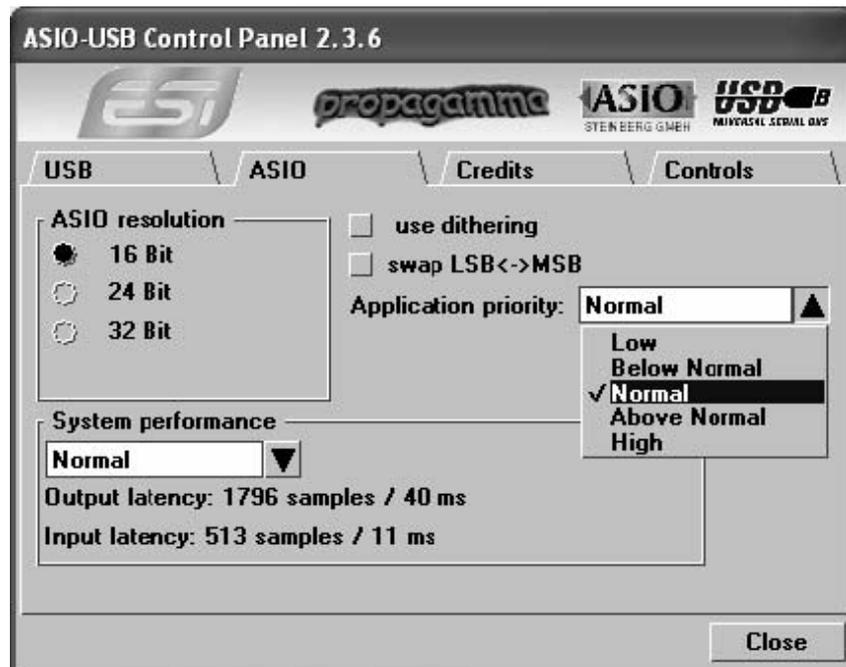
With the installer, you can also remove the driver again. If you want to do that, launch *setup.exe* again and then choose the option *Uninstall the driver*.

3. Setting in Applications

This chapter contains basic configuration examples for some popular software applications. Please always also refer to the manual of every audio software you use for detailed information.

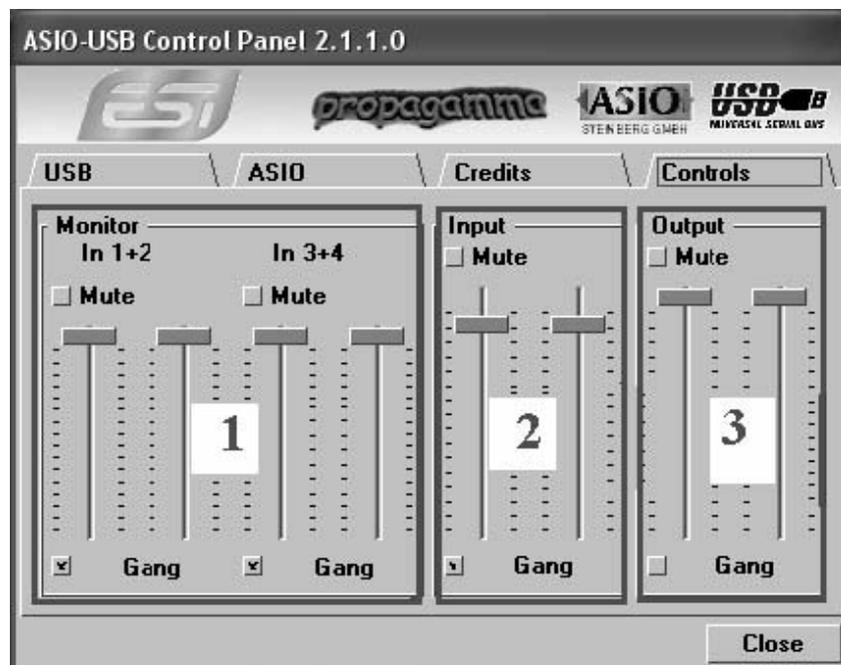
ASIO Control Panel

Nearly all ASIO applications provide a button labeled *ASIO Control Panel* in the audio device settings dialog that allows you to open the control panel window of the ASIO driver. The settings done there are used for all ASIO applications, even though the dialog is only opened directly from within an application:



System Performance changes buffer sizes and latencies. Higher values allow the use of more plug ins, effects etc. at the same time but aren't fun playing virtual instruments live.

If you open the *Controls* tab within the ASIO control panel, you'll see the mixer window that is explained below:



You can control the input monitor level, the input level and the output level from here. If you're not clear with this chapter, please refer to the block diagram on the following page.

1. Monitor Level Control Section

This section can be used to control the input monitor level. You can monitor the signals through the input channel 1,2 and input channel 3,4 individually and/or simultaneously. It will not affect the actual input level from the source. Even if these faders are muted, you can still record the signals from the source, but you are not able to listen to (= monitor) the input source through the analog output.

2. Input Level Control Section

This section controls the real input level through the input ports. You can control all 4 inputs using the one set of the stereo faders.

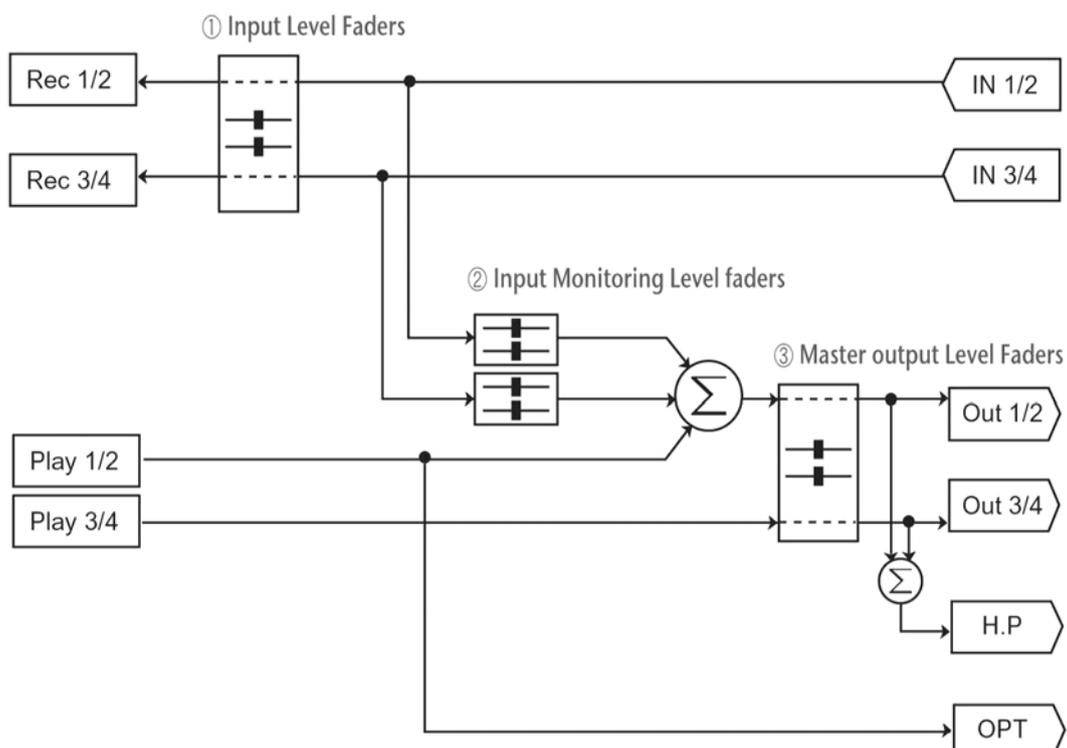
3. Output Level Control Section

These are the master output level faders. You can control all the outputs using the single set of the stereo master fader, except the digital optical output. You can control the monitoring level of the input source through the input ports and/or the playing out level of the wave file through the analog output ports.

Please note that the headphone output signal is the mixed signal from analog out 1, 2 and analog out 3, 4. Please also note that the analog headphone output and the digital optical output share the same connector, i.e. they cannot be used simultaneously.

The *Gang* mode links the left and right faders of each channel together for easier stereo operation. Deselect *Gang* if you need to control the left and right levels independently.

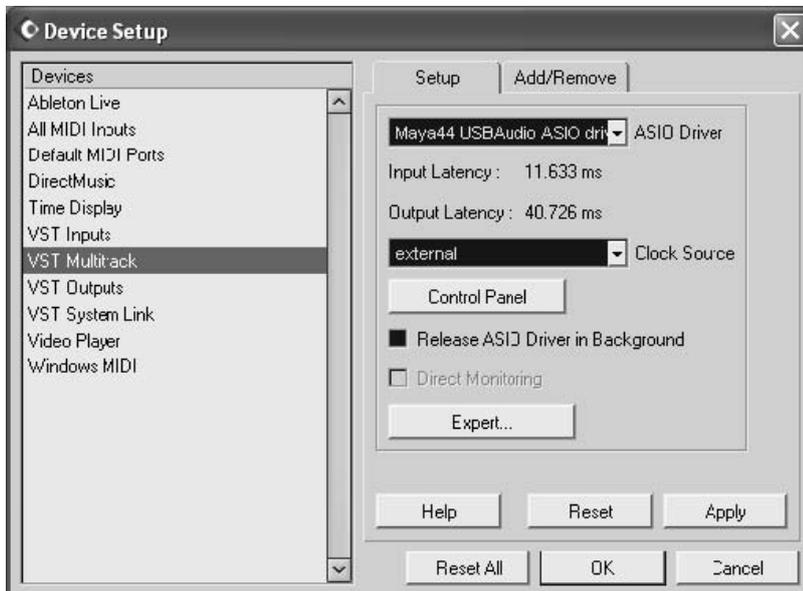
Block Diagram



Cubase SX / Nuendo

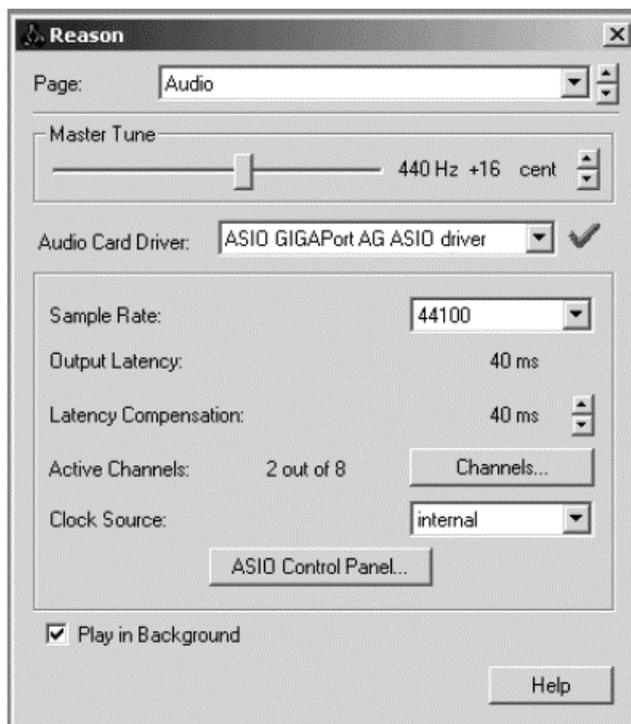
After launching Cubase SX or Nuendo, go to *Device -> Device Setup -> VST Multitrack*.

Select *MAYA44 USB Audio ASIO driver* as ASIO device.



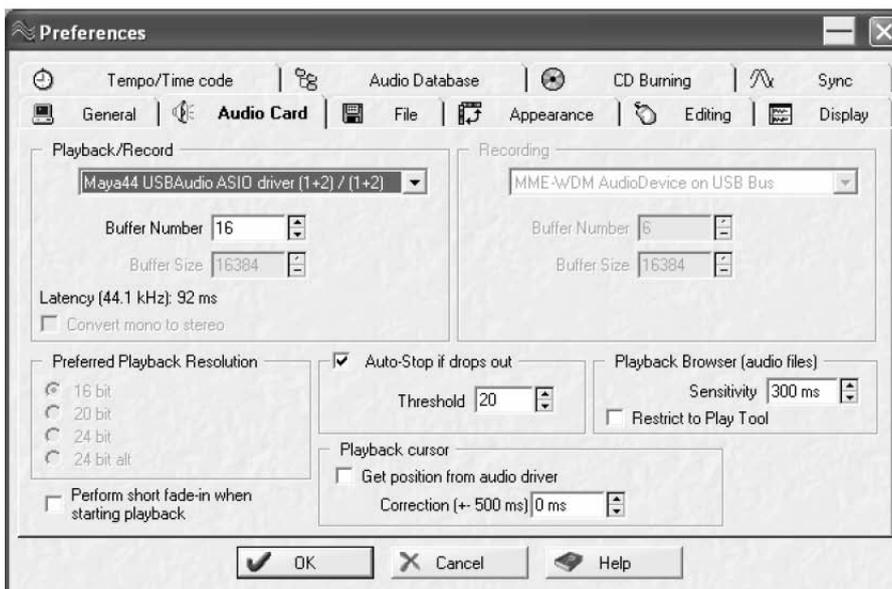
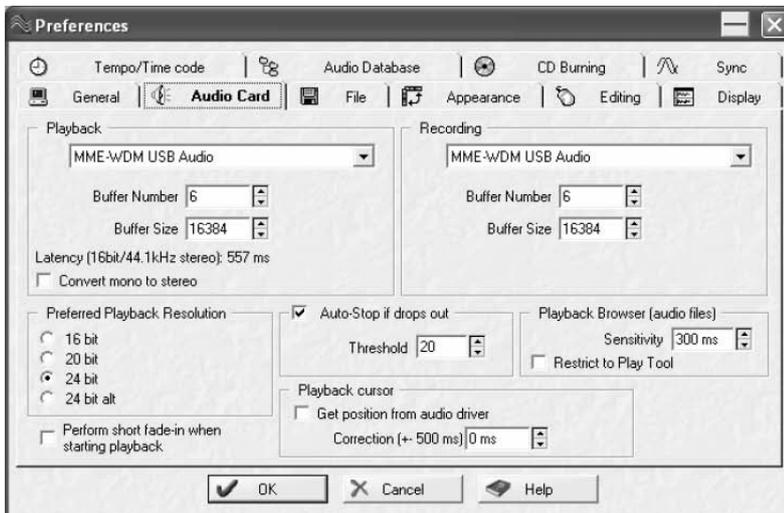
Reason

Launch Reason and go to *Edit > Preferences > Page > Audio*, then choose the *MAYA44 USB Audio ASIO driver*.



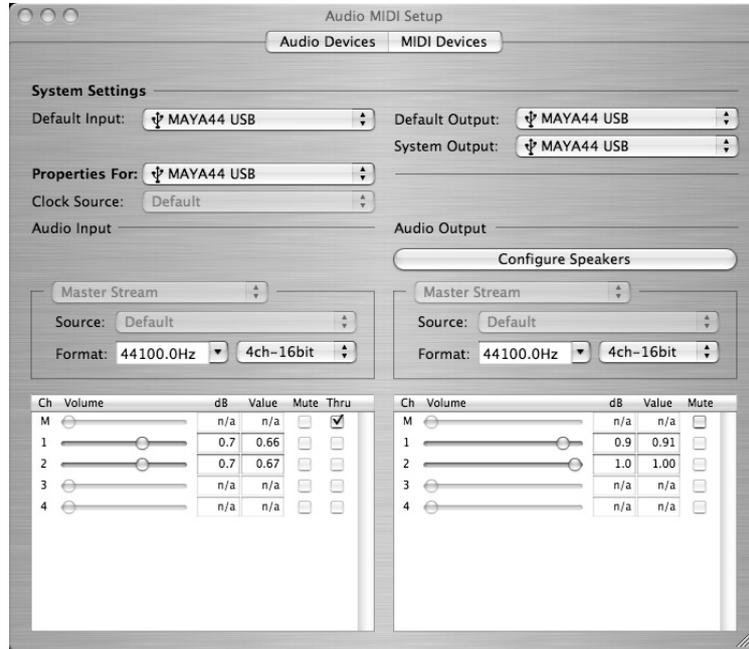
WaveLab

To use MAYA44 USB with WaveLab, open the application and select *Option -> Preferences -> Audio Card*. Choose *MME-WDM USB Audio* as *Playback and Record device* as shown in the following diagram. Or you can also choose *Maya44 USB Audio ASIO driver* as playback and Record device as shown in the second following diagram.

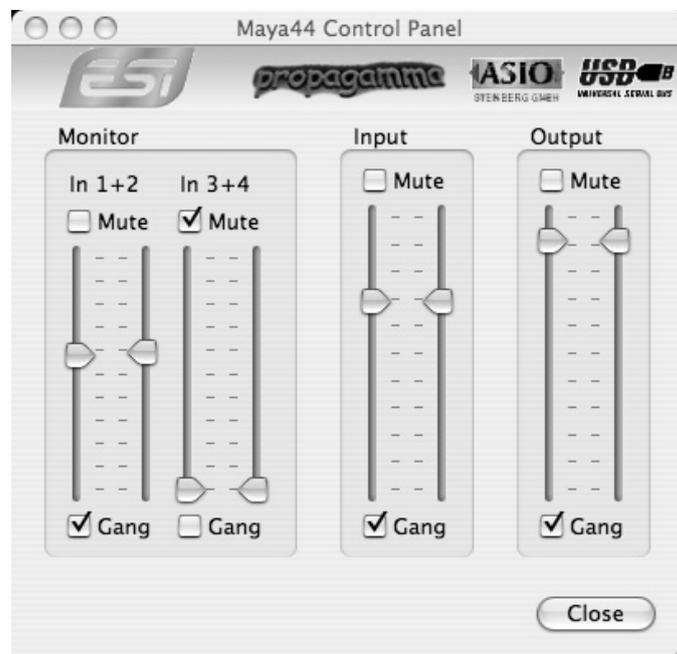


Mac OS X

After connecting your MAYA44 USB to your Macintosh, open your Audio MIDI setup panel and select your *MAYA44 USB* as default audio device for *Default Input* and *Default Output*.



Install MAYA44 USB control panel from the driver CD.



The controls are identical to the Mixer controls (for the ASIO driver under Windows) as described on Page 8.

4. Specifications

HARDWARE

1. Interface

- USB spec version 1.1
- USB audio class spec version 1.0

ANALOG AUDIO

1. Sample Rates

- 44.1kHz, 48kHz

2. Analog Input

- 1) connector type: 4 channel analog inputs
 - * 4 RCA connectors (line in 1 and 2)
- 2) -10dBV input level, unbalanced
- 3) impedance: 10K Ohm

4. Analog Output

- 1) connector type: 4 channel analog line outputs
 - * 4 RCA connectors (line out 1 and 2)
- 2) -10dBV output level, unbalanced
- 3) impedance: 100 Ohm

4. Headphone Amplifier

- 1) THD+N/S: -70dB, 0.03% (typical)
- 2) output power: 60mW max
- 3) signal to noise ratio: 110dB (typical)

DIGITAL AUDIO

1. Sample Rates

- 44.1kHz, 48kHz

2. A/D Converter

- 1) resolution: 18-bit
- 2) dynamic range: 85dBA
- 3) frequency response: 20~20KHz (@ fs=48kHz)

3. D/A Converter

- 1) resolution: 20-bit
- 2) dynamic range: 87dBA
- 3) frequency response: 20~20KHz (@ fs=48kHz)

4. Digital Output

- 1) connector type: miniplug optical connector
- 2) format: IEC-958 Consumer (S/PDIF)
- 3) resolution: 16-Bit
- 4) sample rates: 44.1kHz, 48kHz

DRIVER SOFTWARE

1. ASIO 2.0 support (Windows)

- 4 input channels / 4 output channels

2. CoreAudio support (Mac OS X)

- 4 input channels / 4 output channels

3. MME/WDM support (Windows)

- 2 input channels / 2 output channels

5. General Information

Trademarks

ESI, and MAYA44 USB are trademarks of Ego Systems Inc. and ESI Audiotechnik GmbH. Windows is a trademark of Microsoft Corporation. Other product and brand names are trademarks or registered trademarks of their respective companies.

The FCC and CE Regulation Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Caution : Any changes or modifications in construction of this device with are not expressly approved by the party responsible for compliance, could void the user's authority to operate equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. If necessary, consult an experienced radio/television technician for additional suggestions.

Correspondence

For technical support inquiries, contact your nearest dealer, local distributor or ESI support online at www.esi-audio.com.

Disclaimer

All features and specifications subject to change without notice.

Parts of this manual are continually being updated. Please check our web site www.esi-audio.com occasionally for the most recent update information.

