



VERSION 3.5

RECORDING SETUP GUIDE

Using Line 6 Hardware & GearBox with Popular Recording Applications

TABLE OF CONTENTS

Getting Started.....	1•1
Installing Line 6 Audio Drivers and GearBox Software	1•1
About GearBox.....	1•1
Updating & Registering with Line 6 Monkey.....	1•2
About This Guide.....	1•3
Additional Online Resources	1•4
Audio Driver & GearBox Settings	2•1
Line 6 Audio Driver Configuration.....	2•1
Mac® Driver Settings	2•1
Mac® OS X® System Preferences Settings.....	2•11
Configuration as an Aggregate Device (Mac® only).....	2•13
Windows® Driver Settings	2•18
Windows® XP® Sound Device Settings	2•27
S/PDIF Digital Output from Line 6 Hardware to an External Device.....	2•30
GearBox Recording Settings	2•31
Choosing Your GearBox Source	2•31
Record Send Controls in GearBox.....	2•33
TonePort UX8 - Multiple Record Sends	2•35
ToneDirect™ Monitoring	2•36
Using the Line 6 GearBox™ Plug-In	3•1
Activation & USB Hardware.....	3•1
Using the GearBox VST or AU Plug-In - Ableton Live 7.....	3•2
Using the RTAS GearBox Plug-In - Digidesign Pro Tools LE 7.....	3•11
Mac® Audio Applications	4•1
Ableton Live® 7 Setup.....	4•2
Apple GarageBand® '08 Setup	4•7
Apple Logic® Pro 8 Setup	4•12
Digidesign® Pro Tools® LE™ 7 Setup	4•17
MOTU Digital Performer® 5 Setup.....	4•32
Propellerhead Reason® 4 Setup	4•39
Sonoma Wire Works RiffWorks® 2, Line 6 Edition Setup.....	4•45
Steinberg Cubase®/Cubase® Studio 4 Setup.....	4•49
Windows® Audio Applications	5•1
Ableton Live® 7 Setup.....	5•2

Adobe® Audition® 3 Setup	5•8
Cakewalk SONAR® 7 Studio/Producer Setup.....	5•19
Digidesign® Pro Tools® LE™ 7 Setup	5•26
Image Line Software FL Studio® 7 Setup	5•41
Propellerhead Reason® 4 Setup	5•46
Sonoma Wire Works RiffWorks® 2, Line 6 Edition Setup.....	5•53
Steinberg Cubase®/Cubase® Studio 4 Setup.....	5•57

Line 6, GearBox, GuitarPort, GuitarPort Online, POD, TonePort, TonePort UX1/UX2/UX8/KB37, Custom Tone, the Line 6 logo and the GearBox logo are trademarks of Line 6, Inc. © 2007 Line 6, Inc. All rights reserved.

Apple, Mac, Mac OS X, AU, Logic, GarageBand, Safari and QuickTime are trademarks of Apple Computer, Inc.;
Windows, Windows XP, Windows Vista and Internet Explorer are trademarks of Microsoft Corporation;
Intel and Pentium are trademarks of Intel Corporation;
Ableton and Ableton Live are trademarks of Ableton AG;
Adobe Audition and Adobe Soundbooth are registered trademarks of Adobe Systems, Incorporated;
Cakewalk and SONAR are trademarks of Twelve Tone Systems, Inc.;
Cubase, Nuendo, ASIO and VST are trademarks of Steinberg Media Technologies GmbH;
Digidesign, RTAS, Pro Tools and Mbox 2 are either trademarks or registered trademarks of Avid Technology, Inc.;
MOTU, Mark of the Unicorn and Digital Performer are trademarks of MOTU, Inc.;
Reason, ReWire and Remote are trademarks of Propellerhead Software AB;
RiffWorks is a trademark of Sonoma Wire Works;
Fl Studio is a trademark of Image Line Software;

All other product names, trademarks, and artists' names are the property of their respective owners, which are in no way associated or affiliated with Line 6.

GETTING STARTED

Before we dive right into the world of recording, here are some helpful tips about getting your Line 6 gear setup, as well as links to other related resources for you...

Installing Line 6 Audio Drivers and GearBox Software

To use your Line 6 TonePort®, GuitarPort®, POD® X3 or POD®xt with your computer, you'll need to install the Line 6 USB audio driver for your device. A "driver" is a software component that installs on a Mac® or Windows® computer that allows a hardware device to work with the computer's operating system. For TonePort, GuitarPort or PODxt, just pop in the GearBox® software CD that came with your Line 6 device and you can simply install GearBox and it will automatically install the Line 6 drivers for you. For POD X3 (as well as for any Line 6 device), you can go to the Line 6 web site and download the GearBox installer, or just the driver installer for your specific hardware:

www.line6.com/software/

Since this document covers GearBox version 3.5, you'll of course want to be sure you've updated to this version of GearBox (or a later version, if available) - no worries, it's a free update! You can grab the GearBox installer from the Line 6 site link above, or, if you already have Line 6 Monkey installed you can launch it with your Line 6 USB hardware connected and it will sniff out your current version and offer to walk you through an update if needed (see the following [Line 6 Monkey section](#)).

POD X3 owners... GearBox 3.5 does not yet include support for POD X3 devices. But you can download the Line 6 USB audio driver for your Mac or Windows PC - please visit the [GearBox Online Help](#) site for the latest news and developments for GearBox and driver support.

GuitarPort owners... You'll need to use Line 6 Monkey to update the USB Firmware of your GuitarPort device to version 2.07 (or later) to allow full compatibility with GearBox 3.5. You'll benefit from several new models and additional GearBox features too! See the following [Line 6 Monkey section](#) for more about running Monkey to check for updates.

About GearBox

Line 6 GearBox is the free Mac and Windows software companion for all Line 6 TonePort, GuitarPort, and PODxt devices. You can think of GearBox as an elaborate "user interface" for your Line 6 device, where you can load, customize and save presets of your Tones, fiddle about with amp & effects knobs and switches on your computer, and access the optional GuitarPort Online membership service. With TonePort and GuitarPort USB devices, GearBox is of course a necessary "front-end" since all the Tone models and processing run on your computer.

For POD X3 & PODxt devices, GearBox is really optional, since POD units perform their processing internally and already include all their own knobs, switches and LCD display. If you install only the Line 6 audio device driver on your computer, then you can certainly use POD X3 or PODxt as your USB audio device and tweak all your settings strictly on the POD unit itself. But you'll likely find that using GearBox along with your POD is very convenient, since it makes it quite easy to tweak, save and recall Tones and settings... and just looks pretty darn cool too! If you want to take things further and invest in the GearBox Plug-in Add-On or subscribe to the GuitarPort Online service, then you will need to install GearBox.

GearBox Plug-in

The GearBox Plug-in is an optional Add-on software component you can purchase for TonePort, GuitarPort and PODxt devices that additionally allows GearBox to function as a Mac AU, Windows VST or Pro Tools RTAS audio effect plug-in. This of course offers some very nice advantages for use of your tones with your recording software. We go into more detail about using the GearBox Plug-in in the chapter aptly titled [Using the GearBox Plug-in](#). You can launch Line 6 Monkey and purchase it directly from the Add-Ons page, or head to the Line 6 site now if you want to see about how to get your hands on it:

[Line 6 GearBox Plug-in](#)

Updating & Registering with Line 6 Monkey

OK, so maybe you already read about doing this updating & registration stuff for your Line 6 hardware, but in case you were too excited with your new gear to get to that yet, now is the time to do it! This is all very easy using Line 6 Monkey on your computer with an Internet connection...

Line 6 Monkey is the intelligent updater software utility that is installed automatically along with the Line 6 GearBox software. Alternatively, you can also get Line 6 Monkey free from the Line 6 web site:

www.line6.com/monkey/

Go ahead and connect your Line 6 USB device to your computer's USB port, power it on, and then launch Line 6 Monkey (on Mac, go to **Applications > Line6**, on Windows, go to **Start > Program Files > Line 6**).

Login Account

You'll need to Login so that Line 6 Monkey can communicate with the online Line 6 Server to provide the specific product updates for your gear. It's just a few clicks, and it's free!



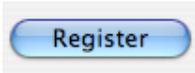
- If you have a Line 6 account, type in your User Name and Password at the top of the Monkey dialog.
- If you have not yet created an account, click the New User button and you'll be walked right through the steps.

Register Your Hardware

Registering your Line 6 hardware is important because it insures that you're dialed in for warranty service and makes it possible for us to contact you if new software versions or other cool enhancements are offered - cutting edge technology and such!

If you have not already done so, you'll be prompted to Register your connected Line 6 hardware. It's a

painless process really, so click that Register button and fill in the blanks on the web page. This page will list all your registered Line 6 gear in one place.



Once you've logged into your account, Monkey will automatically check to see if you have all the latest updates to allow you to get the most out of your Line 6 hardware, and check to make sure you have the latest versions of the audio device driver, as well as the GearBox software itself. Be sure to choose any recommended updates and choose the Install/Reinstall Latest button at the right to allow Monkey to update these items for you. It's also a great idea to do this every so often to keep things up to date.

The screenshot shows the Monkey software interface. At the top, it says 'Welcome!' with 'Logout' and 'My Account' buttons. A message states 'There are no new updates available.' Below this, there are tabs for 'Updates', 'Compatibility', and 'Optional Add-Ons'. The 'Updates' tab is active, displaying a table of items to be updated:

Item	Installed	Newest
▼ Driver		
✓ Drivers	3.6.0	3.6.0
▼ Device Firmware		
✓ USB Firmware	1.00	1.00
✓ Flash Memory	1.01	1.01
▼ Applications		
✓ Line 6 Monkey	1.21	1.21
✓ GearBox	3.50	3.50

To the right of the table is a 'Reinstall Latest' button. On the left side of the interface, it identifies the device as 'TonePort UX8' with a 'Change Device...' button. It also shows 'Connection: USB' and 'ESN:'. At the bottom, there is a 'Help and Info:' section with a text box containing the instruction 'Select an item that needs updating and click the 'Update Selection' button.' and buttons for 'Support...' and 'Quit'.

About This Guide...

This guide is intended to provide basic setup information for Line 6 USB hardware and GearBox software with most popular audio recording applications. The following sections provide setup information for both Mac® and Windows® systems. Use the Table of Contents or the Acrobat® Reader® Bookmarks to jump directly to the chapter and sections relevant to your setup. Remember, more GearBox info can be found by going to Help > Open Help within the GearBox application, and just read on for more resources...

Additional Online Resources

Hungry for more info? We've got plenty of helpful resources just a click away...

-Several more Help documents covering the latest GearBox news and support info, MIDI Control, product Release Notes and more are available here:

[GearBox Online Help](#)

-For technical support, choose from the many options listed on the Line 6 Support page:

[Line 6 Support](#)

-Official Line 6 hardware Product Manuals can be downloaded here:

[Line 6 Product Manuals](#)

AUDIO DRIVER & GEARBOX SETTINGS

Now that you have your Line 6 USB audio device driver and GearBox software installed, its time to get take a look at the settings and options for using your Line 6 gear in a computer recording setup!

Note that there are some different options available in GearBox depending on which Line 6 USB hardware you are using. Be sure to refer to the details covering your specific Line 6 device in the following sections.

Line 6 Audio Driver Configuration

In the world of computer recording, the audio driver is the key element of your audio hardware that you will see referred to by software applications, control panels and know-it-all computer audio geeks, so it's a good idea that you learn a few things about your Line 6 device's audio driver and its options! Things are a bit different on Mac[®] versus Windows[®] systems, and there are some feature differences between the specific Line 6 devices, so it is recommended that you refer to the GearBox Help documentation, as well as the product manual for your specific device for the full info. To get you going, we'll run through the main points here regarding the audio driver and its settings.

Attention POD X3 owners... As of GearBox version 3.50, POD X3 devices are not yet supported by the GearBox software. But, like PODxt devices, POD X3 processes all its tones onboard and includes a USB audio device driver, so you can certainly connect to your Mac or Windows computer and record with all the same audio applications! Please refer to the POD X3-specific steps in the following sections. Please also check out the [GearBox Online Help](#) site for the latest breaking news regarding GearBox and POD X3 support!

Mac[®] Driver Settings

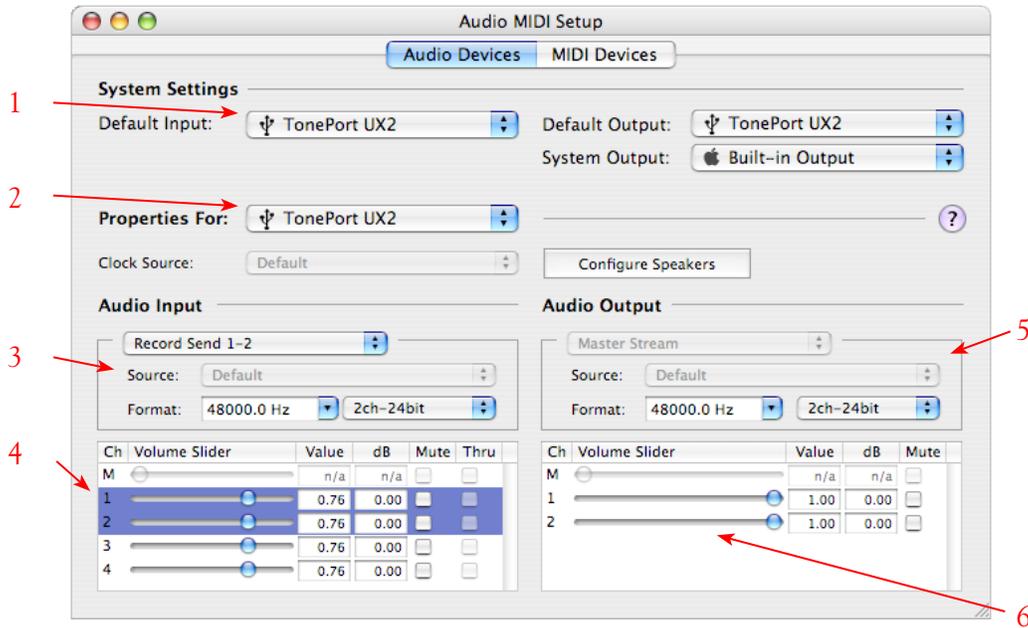
Driver settings for your Line 6 hardware are configured within the Mac OS X Audio-MIDI Setup dialog and the Line 6 Audio-MIDI Settings dialog.

Note - GearBox version 3.5 is not officially supported to run on Apple's OS X version 10.5 (Leopard) - please check the [GearBox Online Help](#) site for the latest news regarding GearBox and OS X support.

OS X[®] Audio-MIDI Setup Dialog

Once you've installed the Line 6 audio driver on your Mac and have your Line 6 hardware connected to your computer's USB port (a USB 2.0 port is required for TonePort UX8 and POD X3 devices, all other Line 6 devices can use a USB 1.1 or USB 2.0 port), go to the **Audio-MIDI Setup Dialog**. To launch this dialog, go into the **Mac System Preferences**, select the **Line 6 Audio-MIDI Devices** (in the **Other** category), and in the **Driver** tab of the Line 6 dialog, click on the **Run Audio MIDI Setup** button.

Note: For TonePort UX8, please see the following [UX8 Audio-MIDI Settings](#) section.



1 – System Settings:

- The **Default Input** and **Default Output** options allow you to choose the sound card you want ALL audio applications to use by default. If you want this to be your Line 6 device, select it here.
- The **System Output** option allows you to choose which sound card the Mac System Settings are played through. You may *NOT* want to choose this to be your Line 6 device, since it can be rather annoying to hear those dings, beeps or frogs croaking at blaring volumes in your headphones or monitors when working in your audio application! Even better, you can turn these system settings off completely in the *System Preferences > Sounds* dialog.

2 – Properties For: Choose your Line 6 device here to allow the Audio Input and Audio Output options display its settings.

3 – Audio Input:

- In the top selector, you will be able to choose a Record Send for your Line 6 device to configure its Format options below.
 - **TonePort & GuitarPort** devices show Record Send 1-2 and Record Send 3-4 here.
 - **TonePort UX8** shows several Sends and more options - please see next section.
 - **PODxt** devices show a “fixed” Master Stream here as the only option.
 - **POD X3** devices show four stereo Record Sends here.
- The **Format** selectors show you the Sample Rate* and Bit Depth that the Line 6 device will be operating at for recording. The Bit Depth for all Line 6 devices is fixed at 24 bit.

*It is recommended that you do not use the Sample Rate selector here in the Mac Audio-MIDI Setup dialog to set your sample rate when your recording software is running. Typically, your recording software will offer a Sample Rate option per project within its own “Preferences” or “Audio Setup” settings. It is best to configure the Sample Rate within the recording software, and you will see the device’s sample rate switch automatically to match it.

4 – Volume sliders (audio input): These sliders 1 - 12 are not functional with UX8 - use the GearBox Record Send knob and/or Tone volume instead of using these sliders to set your Record Send levels for Line 6 devices.

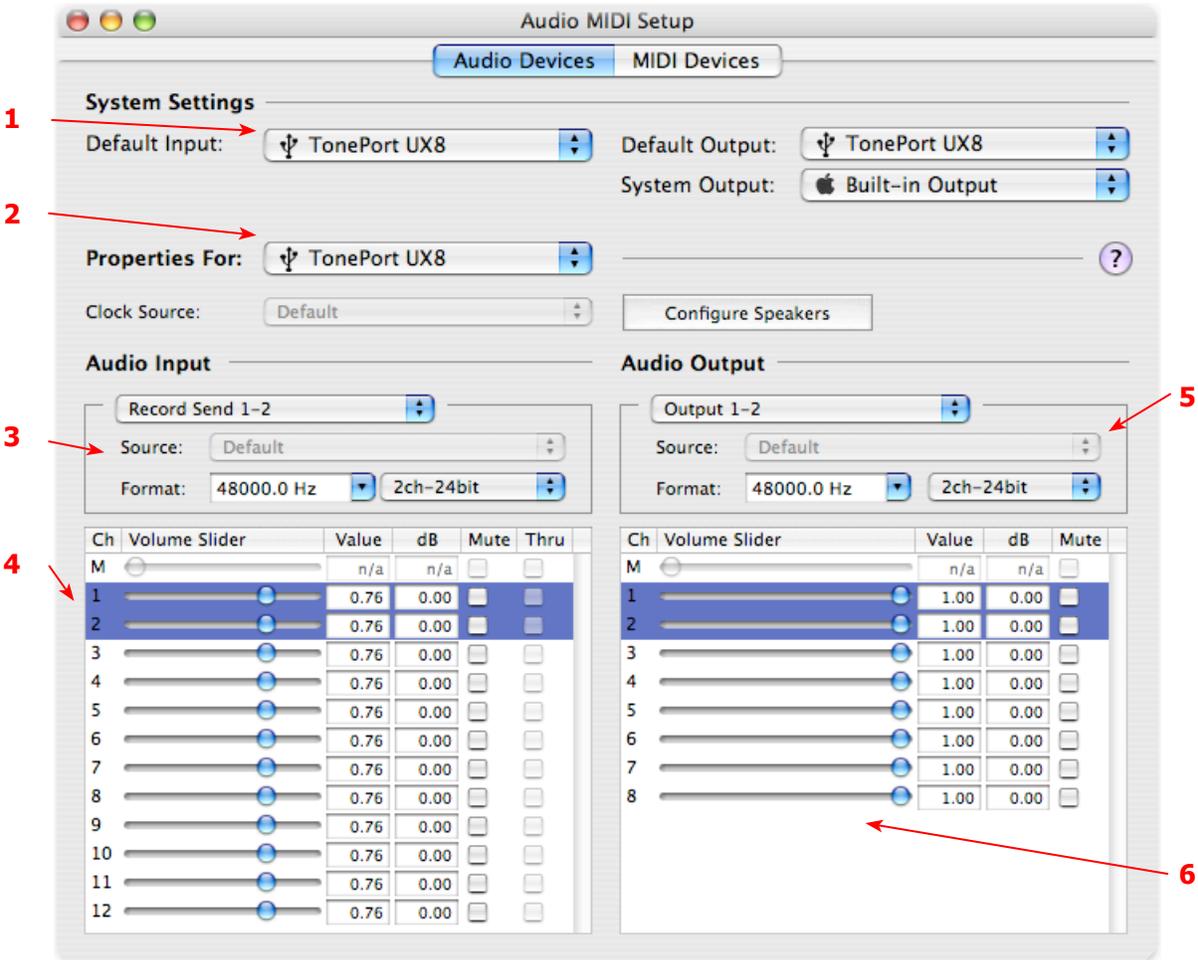
5 – Audio Output:

- The **Format** selectors show you the Sample Rate* and Bit Depth that the Line 6 device will be operating at for playback. The Bit Depth for all Line 6 devices is fixed at 24 bit.

6 – Volume sliders (audio output): These sliders are not functional for Line 6 hardware - use the GearBox Out To Monitor controls (or the Volume knobs on your Line 6 hardware) instead of these sliders to adjust output levels.

Mac OS X Audio-MIDI Setup Dialog - TonePort UX8

To launch this dialog, go into the **Mac System Preferences**, select the **Line 6 Audio-MIDI Devices** (in the **Other** category), and in the **Driver** tab of the Line 6 dialog, click on the **Run Audio MIDI Setup** button.



1 – System Settings:

- The **Default Input** and **Default Output** options allow you to choose the sound card you want ALL your audio applications to use by default. If you want this to be your Line 6 device, select your UX8 here.
- The **System Output** option allows you to choose which sound card the Mac System Settings are played through. You may **NOT** want to choose this to be your UX8, since it can be rather annoying to hear those dings, beeps or frogs croaking at blaring volumes in your headphones or monitors when working in your audio application! Even better, you can turn these system settings off completely in the *System Preferences > Sounds* dialog.

2 – **Properties For:** Choose your TonePort UX8 here to allow the Audio Input and Audio Output options display its settings.

3 – Audio Input:

- In the top selector, you will be able to choose your Record Send for the TonePort UX8 to configure its Format options below.
- The **Format** selectors show you the Sample Rate* and Bit Depth that the Line 6 device will be operating at for recording. The Bit Depth is fixed at 24 bit.

*It is recommended that you do not use the Sample Rate selector here in the Mac Audio-MIDI Setup dialog to set your sample rate when your recording software is running. Typically, your recording software will offer a Sample Rate option within its own “Preferences” or “Audio Setup” settings. It is best to configure the Sample Rate within the recording software, and you will see the device’s sample rate switch automatically to match it.

4 – Volume sliders (audio input):

These sliders 1 - 12 are not functional with UX8 - use the GearBox Record Send knob and/or Tone volume instead of using these sliders to set your Record Send levels for Line 6 devices.

5 – Audio Output:

- The **Format** selectors show you the Sample Rate* and Bit Depth that the TonePort UX8 is operating at for playback. The Bit Depth for all Line 6 devices is fixed at 24 bit.

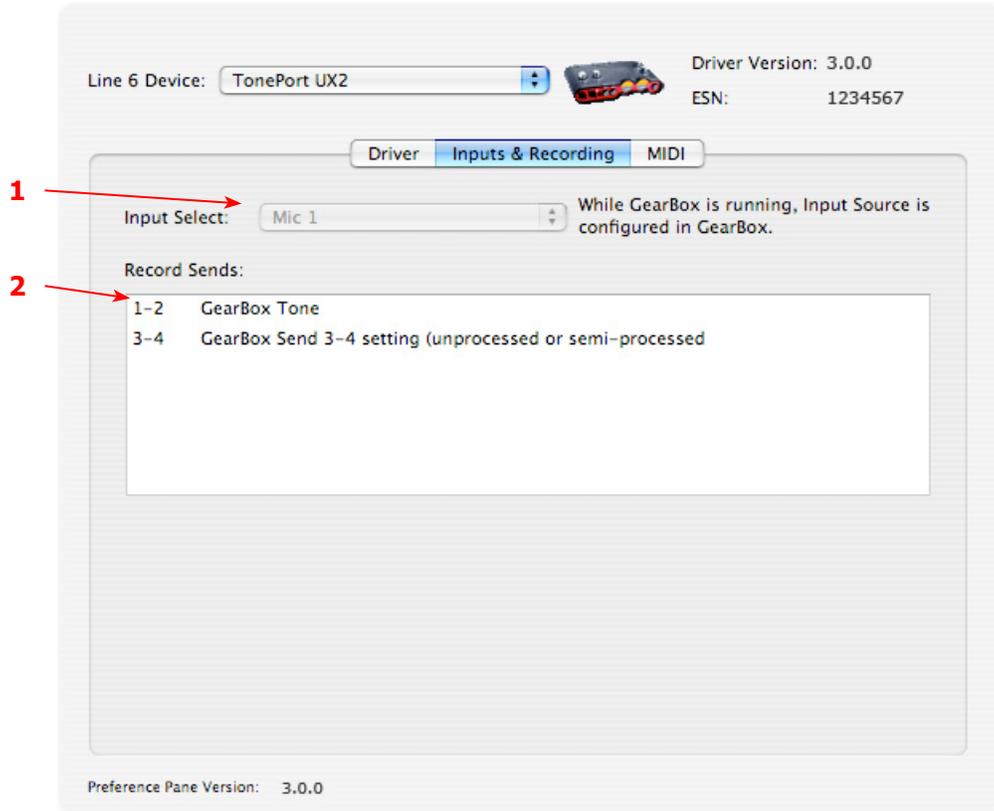
6 – Volume sliders (audio output):

These sliders are not functional for Line 6 hardware - use the GearBox Out To Monitor controls (or the Volume knobs on your Line 6 hardware) instead of these sliders to adjust output levels.

Line 6 Audio MIDI Settings Dialog - Inputs & Recording Tab

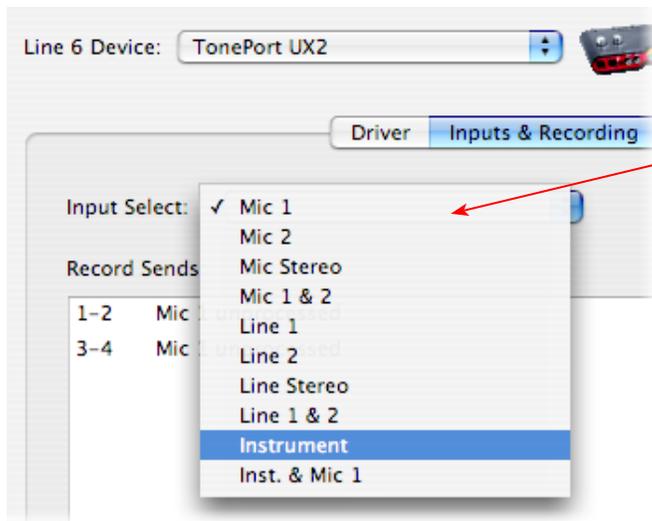
To launch this dialog, go into the Mac System Preferences, select the Line 6 Audio-MIDI Devices (in the Other category).

Note: For TonePort UX8, please see the following [UX8 Inputs & Recording Tab](#) section.



1 – Input Source Select: This is a mirrored control for the Source Select within the GearBox application where it allows you to select which physical input is used on the device. Note that this control is ONLY selectable when the GearBox software is not in use by the current device. When GearBox is in use, this selector remains grayed out, but displays the current Source that is selected within GearBox.

When GearBox is not launched, this Input Source Select, like the Source Select in the GearBox application, offers a list of input options. The list of options will match those offered by your specific Line 6 device. TonePort UX2 displays the following:



When GearBox is not in use, the **Input Select** menu is available. As shown here, TonePort devices offer several input Sources to choose from. The selected Source is what gets routed to the Device Sends

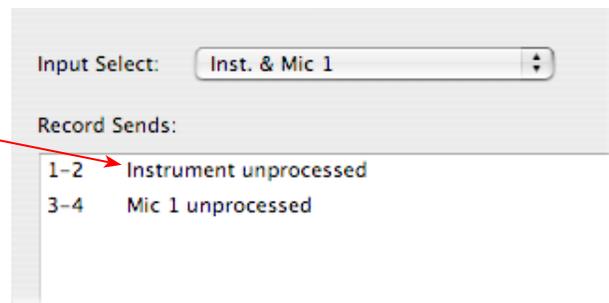
TonePort GX, DI and GuitarPort devices offer only an “instrument” 1 /4 input, therefore, this Input Select list shows only “Instrument” as the source.

PODxt & POD X3 devices do not offer an Input Source menu in this dialog.

TonePort UX8 has a larger set of options - see the next section for its Inputs & Recording tab.

2 – Device Sends info box: One line for each GearBox Record Send appears here along with a description for exactly what signal each Send is carrying.

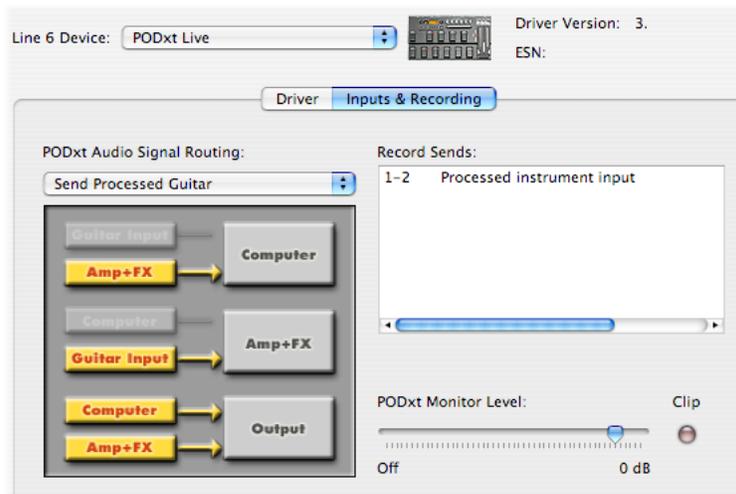
The Record Sends description shows the input Source, and informs you if that signal is “processed” or not. Shown here, since GearBox is not running, the Send 1-2 signal is unprocessed.



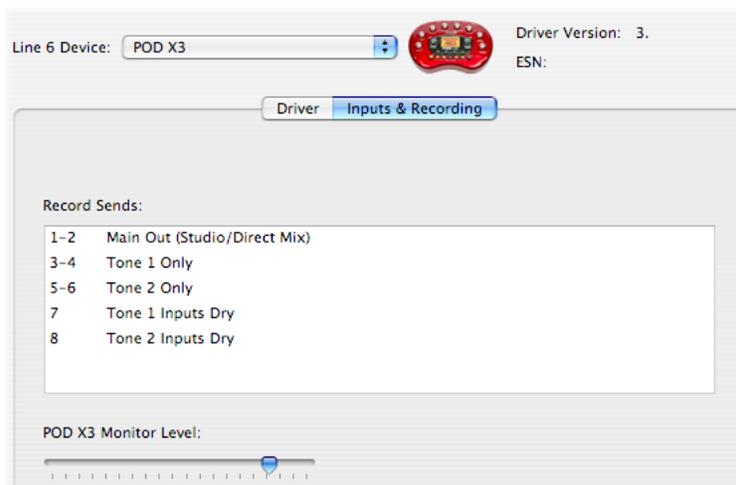
TonePort & GuitarPort devices display Sends information as follows (for TonePort UX8 please see the following TonePort UX8 Inputs & Recording Tab section):

- **Single Tone Source (Mono/Stereo):** When the GearBox application is not running, Record 1-2 and 3-4 both carry a raw, unprocessed signal. When GearBox is running, Record Send 1-2 will carry the fully GearBox-processed signal. For Record Send 3-4, you can choose between a “semi-processed” signal with no post-effects, and a fully unprocessed signal. These options are available in the GearBox software.
- **Dual-Tone Source:** If you’ve selected one of the dual input configurations from the input menu, Record 3-4 will always carry the signal from the second audio source. When GearBox is running, these sends will carry the Tone 2 signal of a Dual-Tone configuration. Please see the GearBox Help documentation for more about Dual-Tone operation. (TonePort GX, D.I. and GuitarPort devices do not support Dual-Tone operation and run only in Single-Tone configuration).

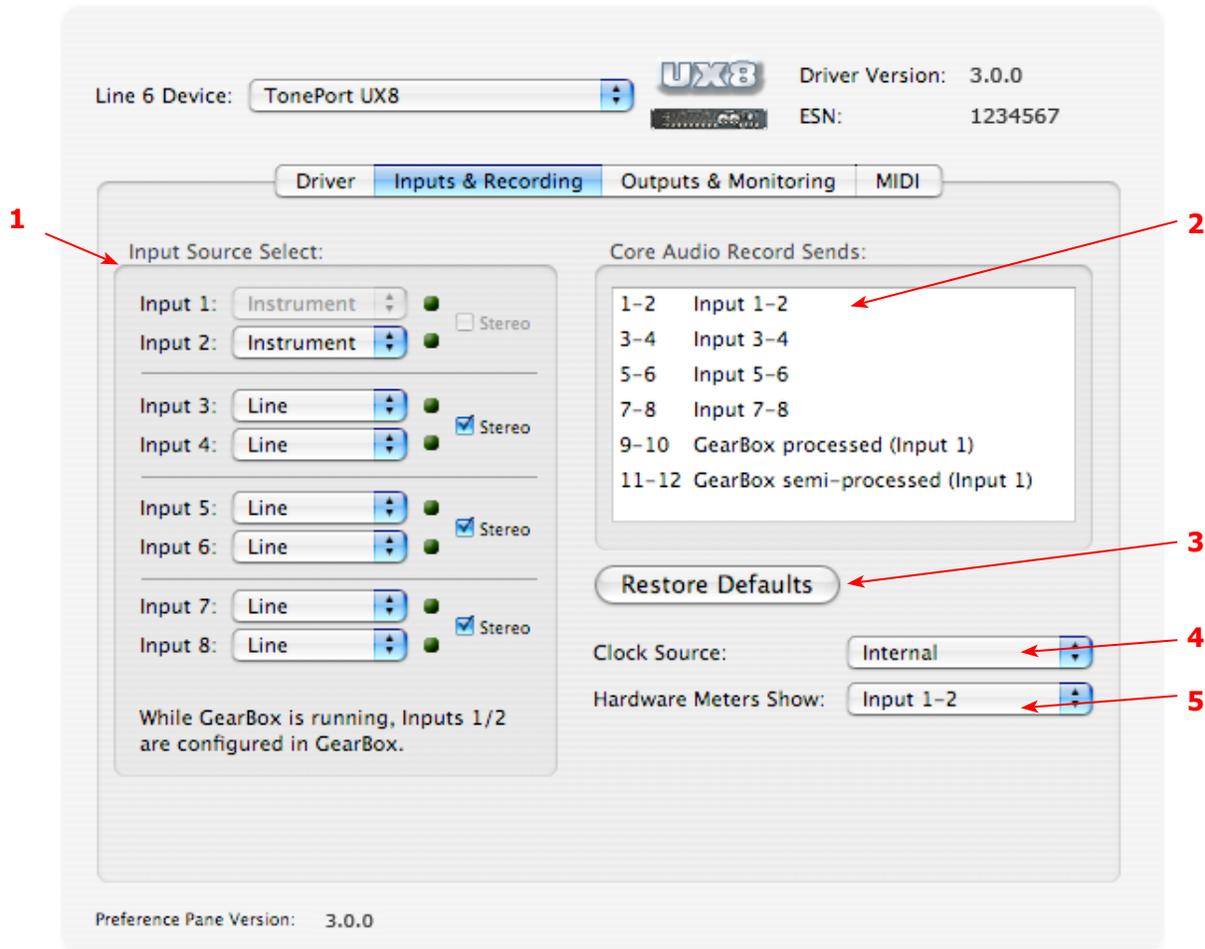
PODxt devices show only one Record Send (Record 1-2). The type of signal that is routed to the Record Send 1-2 is determined by the PODxt Signal Routing menu option. Note that this Audio Signal Routing determines this signal routing regardless if GearBox is running or not for PODxt devices. Please refer to your [PODxt Pilot's Handbook](#) for the information regarding the PODxt Signal Routing options and "Re-amping". Note that PODxt also offers a **Monitor Level** slider in this tab as well - this slider only affects the monitor volume and not the level fed to the Record Sends so you can use this to independently adjust your monitor signal while recording.



POD X3 devices show a list of 5 Record Sends, which are configured on the POD X3's on-board Outputs settings screen. Please refer to your [POD X3 Pilot's Handbook](#) for details on how to configure the signal routed out each Send. Note that POD X3 also offers a **Monitor Level** slider in this tab as well - this slider only affects the monitor volume and not the level fed to the Record Sends so you can use this to independently adjust your monitor signal while recording.



Inputs & Recording Tab - TonePort UX8

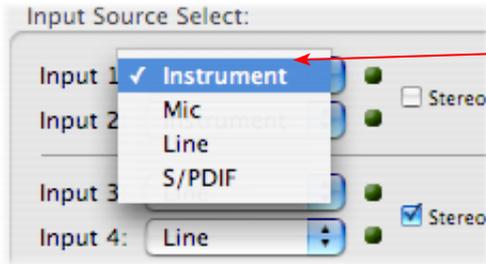


1 – **Input Source Select:** TonePort UX8 offers 8 individual input sources, each with its own selector where you can choose which physical input is to be used for each. Input source options are as follows:

- Input 1:** Instrument 1 or XLR 1 or Line 1 or S/PDIF (L)
- Input 2:** Instrument 2 or XLR 2 or Line 2 or S/PDIF (R)
- Input 3:** XLR 3 or Line 3
- Input 4:** XLR 4 or Line 4
- Input 5:** XLR 5 or Line 5
- Input 6:** XLR 6 or Line 6
- Input 7:** XLR 7 or Line 7
- Input 8:** XLR 8 or Line 8

Using Inputs 1 & 2 with GearBox

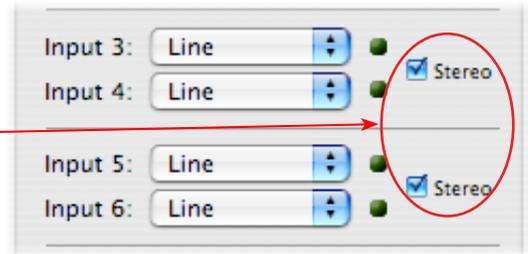
The GearBox application works with the TonePort UX8 driver to provide ultra-low latency via ToneDirect™ monitoring for Inputs 1 & 2 of the UX8, which includes two high-Z Instrument inputs, two XLR inputs, two Line level inputs and stereo S/PDIF input. GearBox’s ToneDirect Monitoring is ideally suited for recording guitar and bass with amp and effects processing, providing the instantaneous feel necessary for competent performance while tracking.



When GearBox is not in use, the Input 1 & input 2 selectors are available. As shown here, TonePort UX8 offers several input Sources to choose from. The selected Source is what gets routed to the Device Send.

Stereo Paired Inputs

You can also link inputs into stereo pairs. This affects hardware monitoring controls in the Outputs & Monitoring tab (see below).



2 - **Device Sends info box:** One line for each GearBox Record Send appears here along with a general description for each Send.

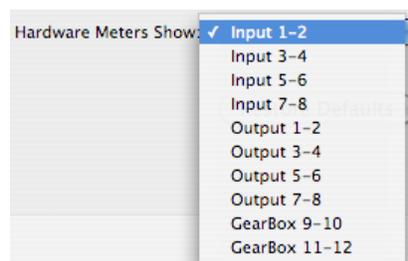
1-2	Input 1-2
3-4	Input 3-4
5-6	Input 5-6
7-8	Input 7-8
9-10	GearBox processed (Input 1)
11-12	GearBox semi-processed (Input 1)

On UX8, Send 9-10 carries the GearBox -processed signal, so you can select this Send as the track input in your audio software to record the full GearBox Tone. Send 11-12 carries the “semi-processed” Tone, which can vary depending on what GearBox effects you select as either “Pre” or “Post” the Send 11-12. All other Sends carry an unprocessed signal of whatever is plugged into the respective Input jack on the UX8 hardware.

3 - **Restore Defaults** - click this button to restore all this tabs settings to their original default values.

4 - **Clock Source** - Set your preferred TonePort UX8 clock source with this menu. Select S/PDIF to sync the UX8 to an external S/PDIF clock source from another device’s digital output. If you are not connecting anything into UX8’s digital S/PDIF input, then keep this set to Internal to use the UX8’s own clock.

5 - **Hardware Meters Show** - This selector allows you to choose what the VU meters on the front of the UX8 are measuring. Note that these hardware meters function even if the GearBox software is not currently running.

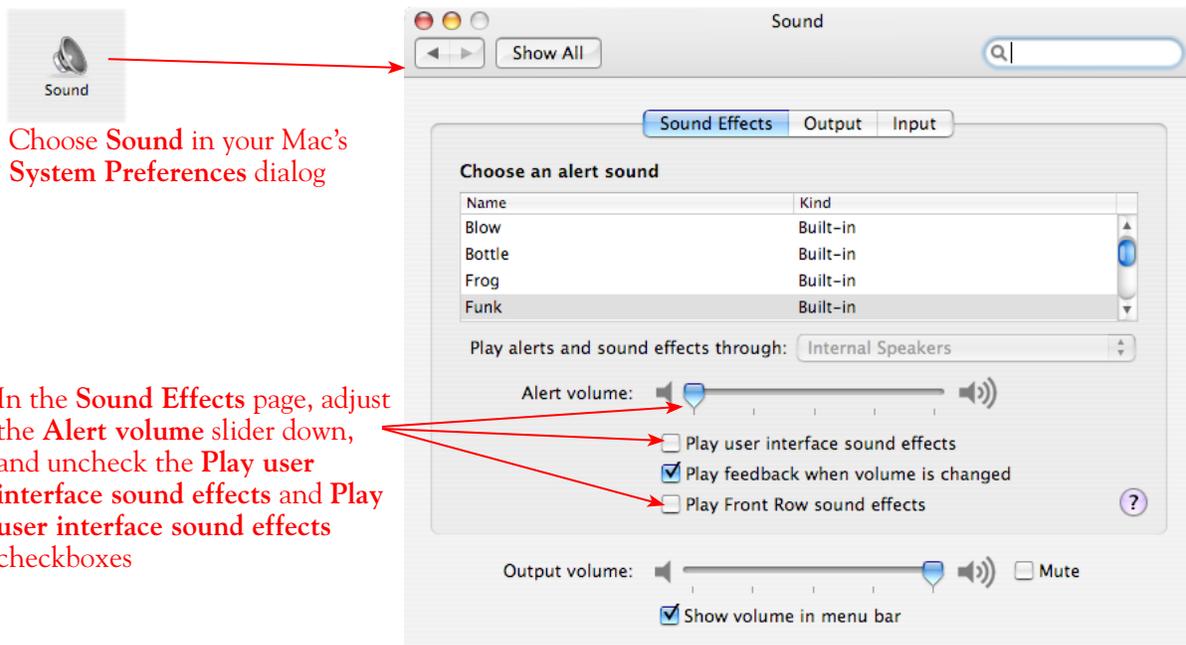


Mac® OS X® System Preferences Settings

There are a few System Preferences that you should configure when using your Mac for audio recording. Launch the Mac OS X **System Preferences** dialog to make the following settings.

System Sounds and Alerts

When using your Line 6 USB hardware as your audio device, you likely will not want to hear these system sounds, and you certainly don't want to end up recording them by mistake! You can adjust the volume independently for these system sounds and alerts by going to the **Sound** page.



Energy Settings

It is also a good idea to configure your Energy settings so that critical computer components do not go to “sleep” or run at less than full.

Choose Energy Saver in the System Preferences dialog

Choose Power Adapter

You can also select Battery if you have a laptop and repeat all the steps in this section, but you may want your settings to conserve battery power - just keep these settings in mind if recording when running on battery power.

Set the top slider all the way to Never so that the computer is not allowed to enter “sleep” mode

Uncheck the box so that your hard disk does not go to sleep

Configuration as an Aggregate Device (Mac® only)

Combine your Line 6 TonePort, GuitarPort, POD X3 or PODxt with other Core Audio devices using the Mac® OS X® Aggregate Device feature.

Note - The OS X Aggregate Devices functionality is not fully supported by Line 6 or most audio hardware manufacturers since of course it is not feasible to test the great number of combinations of devices possible. However, it is possible to combine one Line 6 USB device with another (non-Line 6) audio device for the combined functionality as described here - your exact performance may vary with different hardware.

Mac® OS X® version 10.4.x (Tiger) allows you to configure two or more Core Audio sound card devices into one **Aggregate Device**. As the name suggests, this makes it possible to combine multiple connected audio devices allowing audio applications to utilize all inputs and outputs as one virtual Core Audio device. The Aggregate Device feature also provides the ability to sync the devices, and resample if needed to allow them to work together with your audio applications. This can be quite useful if you have another Core Audio sound card and want to use your Line 6 hardware along with it to provide additional inputs for recording, or additional outputs for sending multiple playback or monitoring mixes.

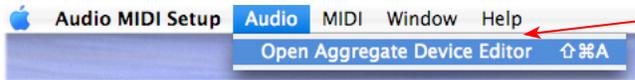
In this section, we'll be showing you how to create a simple Aggregate Device using your Line 6 hardware and your Mac's Built-in Audio device Inputs and Outputs. The steps are similar for combining Line 6 hardware with other models of audio devices, as long as they offer a Core Audio driver that supports this OS X feature.

Be sure to connect the USB cable from your Line 6 hardware into your computer's USB port, and then proceed with the following steps...

Creating an Aggregate Device

First, connect and your Line 6 hardware to your Mac USB port (a USB 2.0 port is required for TonePort UX8 and POD X3 devices, all other Line 6 devices can use a USB 1.1 or USB 2.0 port). All the required settings you need to make to create an "Aggregate" device are made within the **Aggregate Device Editor** window, which is found in the Mac **Audio MIDI Setup** dialog.

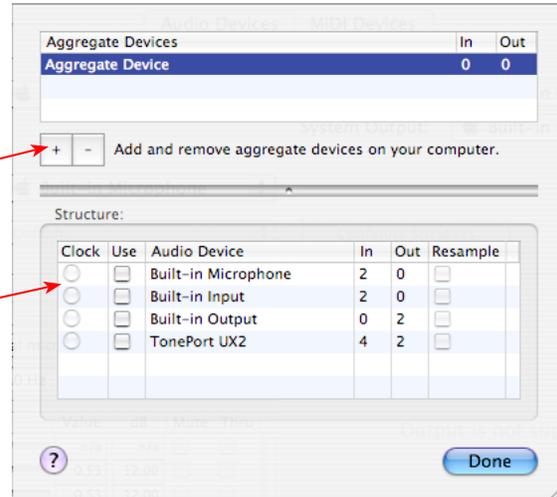
Go into the **Mac System Preferences**, select the **Line 6 Audio-MIDI Devices** (in the **Other** category), and in the **Driver** tab of the Line 6 dialog, click on the **Run Audio MIDI Setup** button.



Select **Open Aggregate Device Editor** from the **Audio** menu

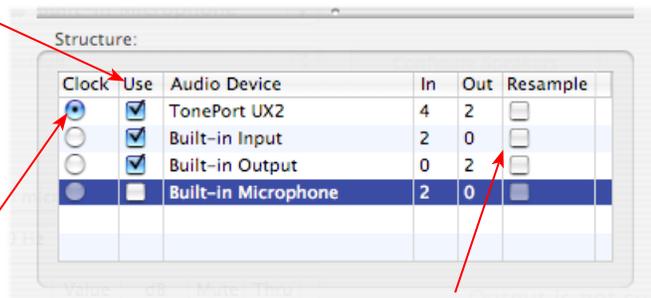
Click on the “+” button to create a new Aggregate Device - it will then appear in the above pane

All detected Core Audio devices are then listed in the **Structure** pane



Click on the **Use** boxes for all Audio Devices to activate them. (Click your Line 6 device's Use box first to make it the first device in the list). Check the boxes for both the Built-in Input and Output so they can be used for both recording and playback.

IMPORTANT! Always set your **Line 6 hardware** to be the assigned **Clock device**



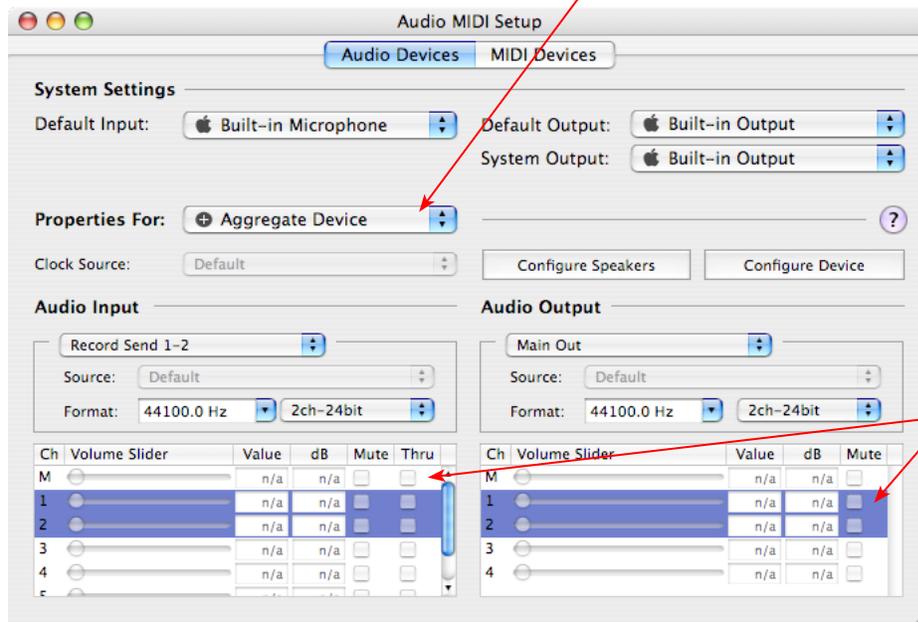
Keep the **Resample** checkboxes unchecked unless necessary *

When creating an Aggregate Device, only one audio device can be designated as the “**Clock**”. This means that this device acts as the “master” and all other devices follow its digital clock, thus keeping all your audio in sync. Even though the Aggregate Device dialog allows you to set any individual Audio Device as the Clock, be sure that your Line 6 hardware is set as the clock as shown above to ensure proper sync.

***The Aggregate Device Resample function** - When combining audio devices, the sample rates must match to allow them to be used together. But if you run into sync problems when using some devices together, or in the case where you need to choose a sample rate not commonly supported by all audio devices, you can check the **Resample** checkbox for the device. This instructs the Aggregator to automatically perform a sample rate conversion to allow the audio devices to sync.

Once above settings are made, click the **Done** button to return to the **Audio MIDI Setup** dialog...

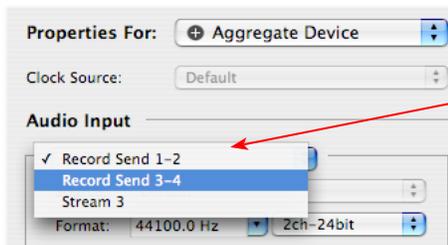
You are now able to choose this new **“Aggregate Device”** in the menus of the **System Settings**. Choose your new **Aggregate Device** as the **Properties For** device



Now you will be able to access settings for all combined inputs and outputs!

For the device we created, this totals **6 Audio Inputs** and **4 Audio Outputs**.

The Audio Input and Audio Output sections each have a selector to allow you to choose each Stereo device, and then make settings for each with the set of controls below.



You will now see all devices' inputs in the **Audio Input** selector. Likewise, you will see all outputs in the **Audio Output** selector

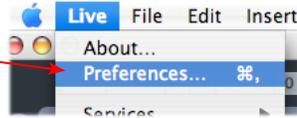
Note of the order of how all these Inputs and Outputs appear in the Audio-MIDI Setup dialog. In our example, Line 6 device “Record Send” inputs are listed first because we made it the first device in the Aggregate Device Editor dialog. The “Stream 3” input is from the Built-in Audio device, and appears last. These input and output ports will also appear in this same order within your audio recording software, but likely will not have any other identifying name other than their order number.

Using an Aggregate Device with Audio Recording Software

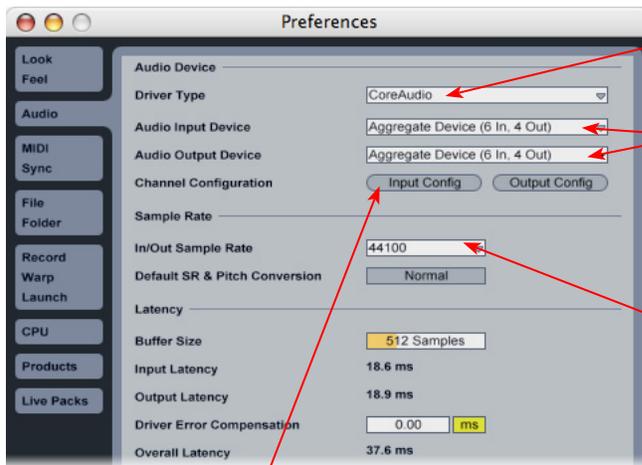
Once an Aggregate Device is created on your Mac, you should then be able to access it in your recording software. As an example, we'll be showing you how it appears in the included Ableton Live software...

Launch the Ableton Live software and open the **Preferences** dialog to configure the audio device.

Go to the Live menu and choose **Preferences**



Go to the **Audio** tab



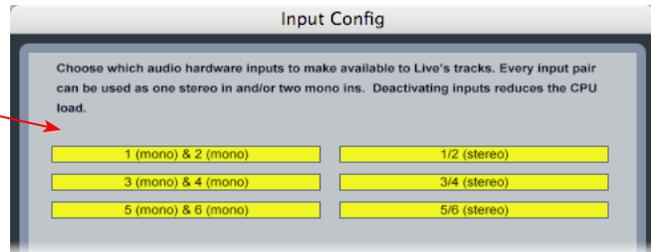
Choose **CoreAudio** as the driver type...

Then choose the **Aggregate Device** that was just created for both the **Input** and **Output Audio Device**. Note that this appears along with the individual audio devices in these menus as an additional selectable device.

Set a **Sample Rate** – preferably this should be one supported by all the audio devices that make up your Aggregate Device. Once all other settings are complete, click the **Input Config** button

Just as with most Multitrack recording software, in Live you also need to configure the individual inputs and outputs once a Multi-in/out device is selected. Click on the **Input Config** button to access the Inputs.

By default, Live will usually have only the first device enabled. Activate the desired devices here to allow them to be available as recording inputs in the Live software. Note that each additional active device utilizes more CPU, so only activate the ones you need!



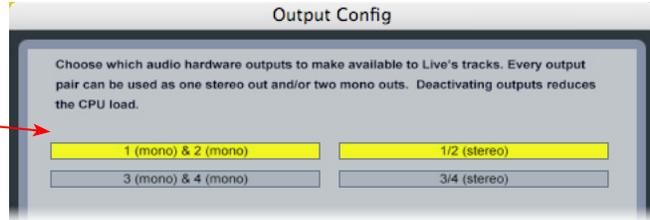
Click **OK** when done

As noted earlier, you'll need to refer to the order of the devices in the Audio MIDI Setup dialog to know which are Line 6 hardware ins, and which are from the other device since Live does not show the individual device names.

Next, click the **Output Config** button in the Live **Preferences** dialog to similarly activate multiple outputs...

Click on additional output devices to make them available as playback outputs in Live if desired.* Here again, activate only the ones you need to avoid excess CPU usage.

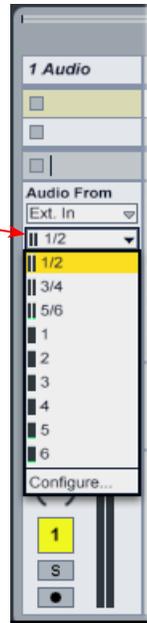
Click **OK** when done



Note - The Ableton Live Lite 5, Line 6 version has a restriction that allows only one stereo output to be used at a time. To be able to choose two or more different output devices in a Live Set, you must switch into Demo mode, or upgrade to a full version of Ableton Live

You can now continue to use Ableton Live and all inputs and outputs will appear within the audio track menus, just as if all exist on one sound card!

All inputs appear in the Live audio track input menu



For more information regarding the Aggregate Device feature, check your Mac® OS X documentation.

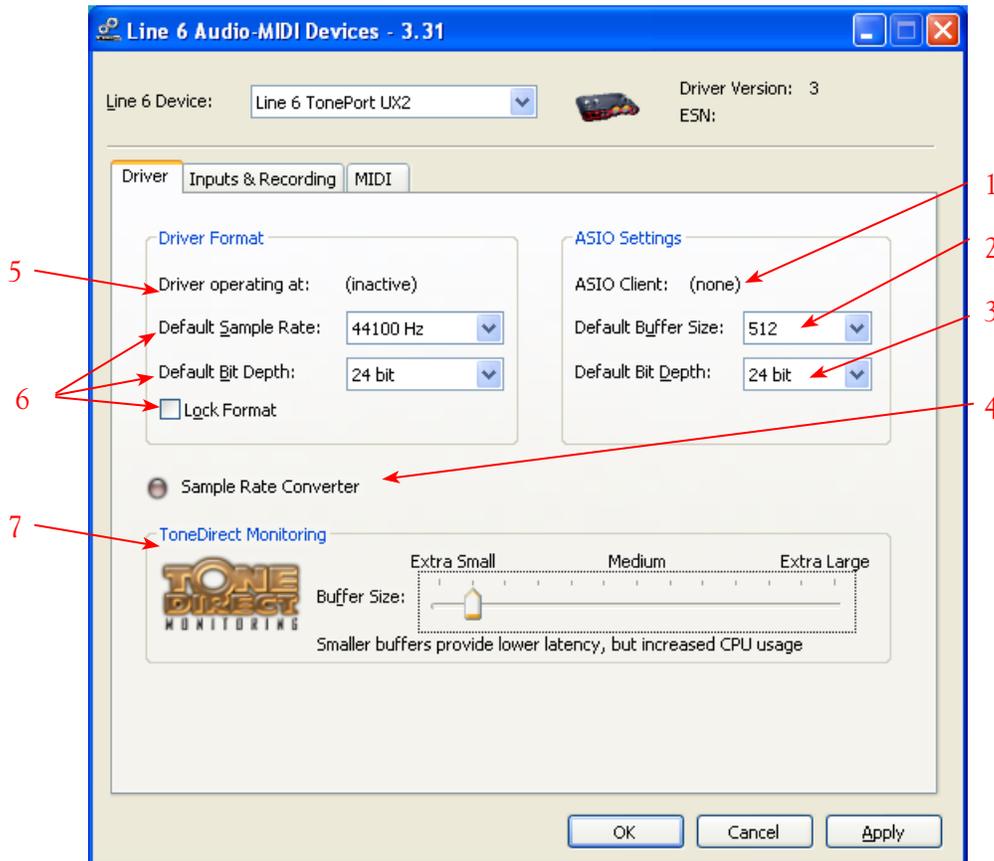
Windows® Driver Settings

Be sure to first connect your Line 6 hardware directly to your computer's USB port (a USB 2.0 port is required for TonePort UX8 and POD X3 devices, all other Line 6 devices can use a USB 1.1 or USB 2.0 port). You can launch the Line 6 Audio-MIDI Devices dialog from within the Windows® Control Panel (Start button > Settings > Control Panel). This is the place where you can access the audio driver settings for your connected device to see and configure things such as the current Sample Rate, Bit Depth, Buffer settings, Record Sends, etc. For the Windows recording software applications covered in this document, it is always recommended that you use the ASIO audio driver. When prompted for ASIO driver settings, this is where you will make them. This dialog offers controls specifically for your connected Line 6 hardware.

Driver Tab

TonePort & GuitarPort: This following screenshot shows TonePort UX2 as the connected device - the options in this tab are the same for all TonePort and GuitarPort devices.

PODxt & POD X3: Options for PODxt & POD X3 family devices are called out where they differ in this section.



1 – ASIO Client indicator: If you are running audio software that is using this Line 6 device as its ASIO sound card, the name of the software will appear here. If not in use by an ASIO software, “none” is displayed here as shown.

2 – Buffer Size: The ASIO buffer size in use. As your Windows audio software documentation will likely tell you, the ASIO Buffer Size will affect the “responsiveness” and “latency” of the audio. The lower the setting, the faster the response, but with the trade-off of higher processor usage and the risk of audio dropouts. Raise the value if you are getting inconsistent playback or recording in the audio software. 512 is a good starting value, and you can try a lower value if your computer is snappy enough to support it.

3 – Bit Depth: The ASIO bit depth in use. It is recommended that you always use the 24 Bit option and configure your audio software to record at 24 Bit (or 32 Bit if your audio software offers the option). If you NEED to set your audio software to record at 16 bit (such as to reserve hard disk space) then it is recommended that you also set this Line 6 driver bit setting to 16 Bit to match.

4 – Sample Rate Converter: For all Line 6 USB devices, for recording you can simply choose any one of the supported sample rates (44,100, 48,000, 88,100 or 96,000 Hz) within your audio recording software, and your Line 6 gear will switch automatically. (Note that the **Lock Format** option changes this behavior - see #6 below). A little info for you on what this light means...

TonePort & GuitarPort devices support 44,100 Hz and 48,000 Hz sample rates natively. However, they will also support 88,200 and 96,000 Hz sample rates by way of an internal sample rate converter. This indicator lights up to show you when this converter is active, which can be any time your ASIO software is requesting a different sample rate you’re your device “natively” supports or is “fixed” at.

PODxt & POD X3 devices operate at their own internal sample rates. They will automatically use an internal converter when needed, and you’ll see this little light on when that is happening.

5 – Driver Operation Indicator:

TonePort & GuitarPort devices display the sample rate and bit depth the current device is operating at (or with no text if not in use).

PODxt devices do not utilize this feature and therefore no text will appear here when a **PODxt** is the selected device.

6 - Lock Format & Default options: When checked, the Lock Format forces the Line 6 audio driver to operate at the Sample and Bit rate settings entered in the two default settings fields above (as opposed to following the sample rate requested by a host audio application). In most cases you’ll want to leave the Lock box unchecked and choose the Sample Rate in your audio software - the Line 6 ASIO driver will follow the application’s sample rate.

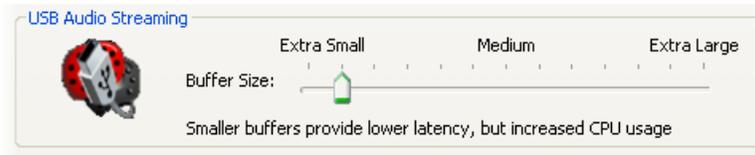
Note – These default options and Lock checkbox will remain grayed-out while the current Line 6 device is in use by the GearBox application and/or any 3rd party audio application. To access the Lock Driver Format feature, you will need to exit GearBox as well as any audio software that might be using the currently selected Line 6 device as its audio device. This checkbox will then be selectable. This can be useful for using S/PDIF digital connections.

7 - ToneDirect™ Monitoring/USB Audio Streaming Buffer Slider:

TonePort & GuitarPort devices offer the Line 6 exclusive ToneDirect™ Monitoring feature, which provides an ultra low latency audio signal path for you to hear your GearBox tone, even while

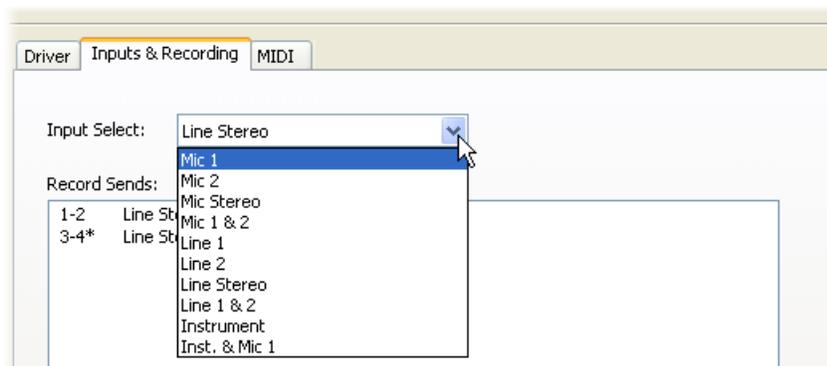
recording. ToneDirect Monitoring has its own buffer to allow you to keep your ASIO Buffer Size at a high value, for more solid performance and more efficiency with your ASIO-based audio software. The initial default is one tick to the right of “Extra Small” as shown. Raise this slider if you are getting any dropouts in your monitor signal.

PODxt & POD X3 devices utilize a USB audio buffer (similar to ToneDirect™ Monitoring) which provides an independent, direct monitor signal with its own buffer adjustment. When a PODxt or POD X3 device is selected as the Line 6 device in this dialog, the “USB Audio Streaming” buffer slider is displayed. The initial default is just a few ticks to the right of “Extra Small” as shown. Raise this slider if you are getting any dropouts in your monitor signal.



Inputs & Recording Tab

Input Source Select menu: This is a mirrored control for the Source Select within the GearBox application where it allows the user to select which physical input is used on the device. Note that this control is ONLY selectable when the GearBox software is not open. When GearBox is in use, it remains grayed out, but displays the current Source that is selected within GearBox as shown here:



When GearBox is not in use by the selected Line 6 device, this Input Source Select, like the Source Select in the GearBox application, shows the list of input options offered by the connected Line 6 hardware.

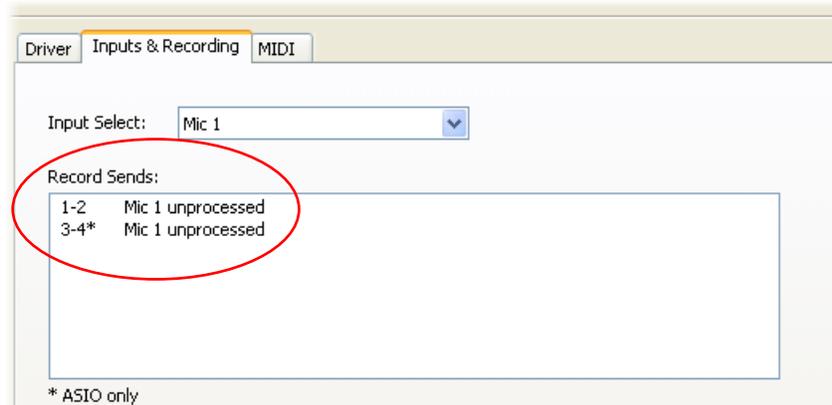
TonePort GX, DI and GuitarPort devices offer only an “instrument” 1 / 4 input, therefore, this Input Source Select list offers only “Instrument” as the source.

PODxt & POD X3 devices do not offer an Input Source menu in this dialog.

TonePort UX8 has a larger set of options - see the next section for its Inputs & Recording tab.

Record Sends info box: One line for each Record Send appears here along with a description for exactly what signal each Send is carrying. This information is useful in that it tells you what will

actually be recorded in your audio application when you select one of these Record Sends as your track input.

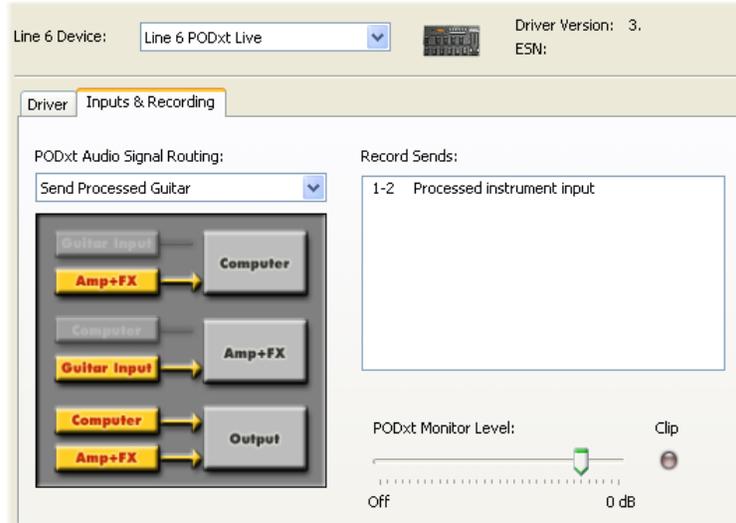


TonePort & GuitarPort devices display Sends information as follows (for TonePort UX8 please see the following [TonePort UX8 Inputs & Recording Tab](#) section):

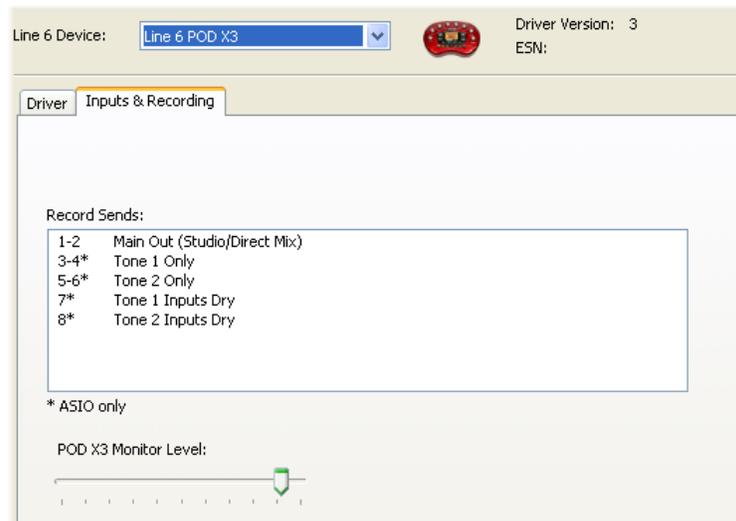
- **Single Tone Source (Mono/Stereo):** When the GearBox application is not running, Record 1-2 and 3-4 both carry a raw, unprocessed signal. When GearBox is running, Record Send 1-2 will carry the fully GearBox-processed signal. For Record Send 3-4, you can choose between a “semi-processed” signal with no post-effects, and a fully unprocessed signal. These options are available in the GearBox software.
- **Dual-Tone Source:** If you’ve selected one of the dual input configurations from the input menu, Record 3-4 will always carry the signal from the second audio source. When GearBox is running, these sends will carry the Tone 2 signal of a Dual-Tone configuration. Please see the GearBox Help documentation for more about Dual-Tone operation. (TonePort GX, D.I. and GuitarPort devices do not support Dual-Tone operation and run only in Single-Tone configuration).

NOTE: If using TonePort or GuitarPort with an audio recording software that is configured to use the device’s WDM or DirectSound drivers, then only one Send will be available in the recording software (Send 1-2). You must access TonePort via its ASIO driver on Windows to utilize the additional Send 3-4.

PODxt devices show only one Record Send (Record 1-2). The type of signal that is routed to the Record Send 1-2 is determined by the PODxt Signal Routing menu option. Note that this Audio Signal Routing determines this signal routing regardless if GearBox is running or not for PODxt devices. Please refer to your [PODxt Pilot’s Handbook](#) for the information regarding the PODxt Signal Routing options and “Re-amping”. Note that PODxt also offers a Monitor Level slider in this tab as well - this slider only affects the monitor volume and not the level fed to Send 1-2 so you can use this to independently adjust your monitor signal while recording.

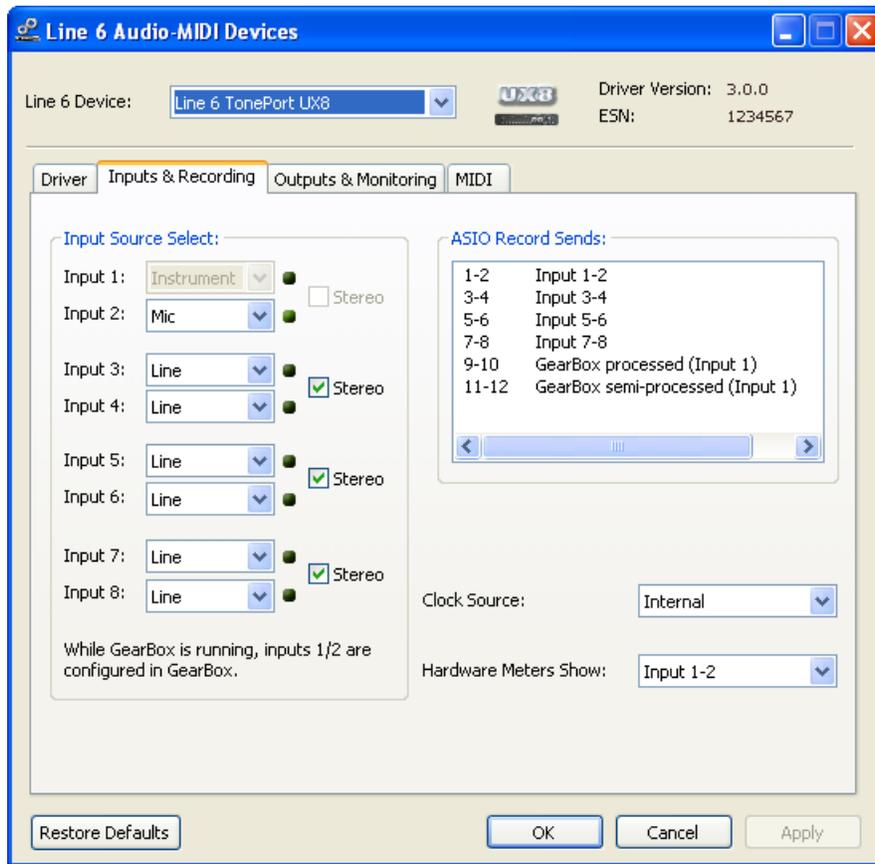


POD X3 devices show a list of 5 Record Sends, which are configured on the POD X3's on-board Outputs settings screen. Please refer to your [POD X3 Pilot's Handbook](#) for details on how to configure the signal routed out each Send. Note that POD X3 also offers a Monitor Level slider in this tab as well - this slider only affects the monitor volume and not the level fed to the Record Sends so you can use this to independently adjust your monitor signal while recording.



NOTE: If using POD X3 with an audio recording software that is configured to use the device's WDM or DirectSound drivers, then only one Send will be available in the recording software (Send 1-2, which will carry the combined Tone 1 and Tone 2 processed signals). You must access TonePort via its ASIO driver on Windows to utilize the additional, individual Record Sends.

Inputs & Recording Tab (TonePort UX8 only)



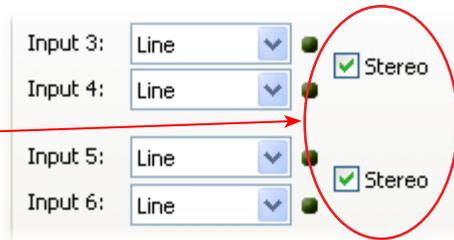
TonePort UX8 offers many additional options to control its multiple inputs and Sends. The Inputs & Recording tab lets you select specific inputs for recording. To follow is a brief description - for more information please see the TonePort UX8 sections in the [GearBox Help documentation](#).

Input Source Select drop-downs

Here is where you choose specifically which type of physical input you are plugging into for each input channel on the UX8:

- Input 1:** Instrument 1 or XLR 1 or Line 1 or S/PDIF (L)
- Input 2:** Instrument 2 or XLR 2 or Line 2 or S/PDIF (R)
- Input 3:** XLR 3 or Line 3
- Input 4:** XLR 4 or Line 4
- Input 5:** XLR 5 or Line 5
- Input 6:** XLR 6 or Line 6
- Input 7:** XLR 7 or Line 7
- Input 8:** XLR 8 or Line 8

You can also link inputs into stereo pairs. This affects hardware monitoring controls in the Outputs & Monitoring tab (see below).

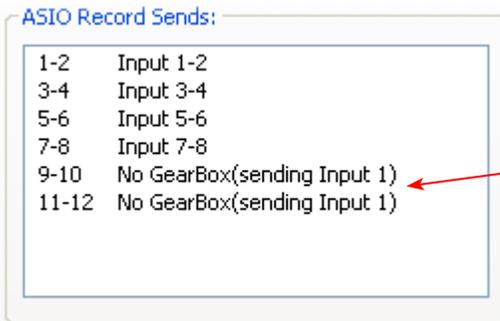


Using Inputs 1 & 2 with the GearBox standalone application

The GearBox standalone application works with the TonePort UX8 driver to provide ultra-low latency via ToneDirect™ monitoring for Inputs 1 & 2 of the UX8, which includes two high-Z Instrument inputs, two XLR inputs, two Line level inputs and stereo S/PDIF input. GearBox's ToneDirect Monitoring is ideally suited for recording guitar and bass with amp and effects processing, providing the instantaneous feel necessary for competent performance while tracking.

ASIO Record Sends

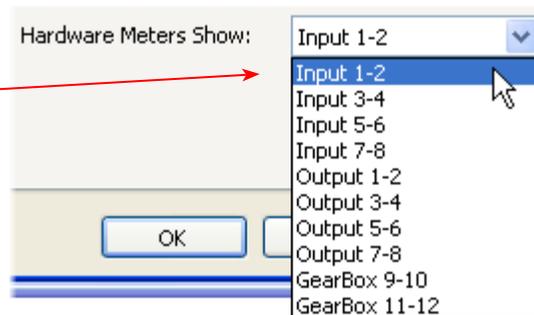
This box displays the ASIO names of the UX8's input sources as they appear in recording applications utilizing the UX8's audio drivers.



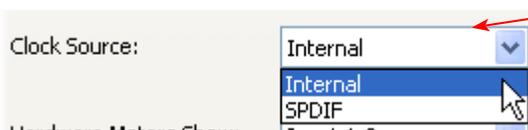
On UX8, Send 9-10 carries the GearBox -processed signal, so you can select this Send as the track input in your audio software to record the full GearBox Tone. Send 11-12 carries the "semi-processed" Tone, which can vary depending on what GearBox effects you select as either "Pre" or "Post" the Send 11-12. All other Sends carry an unprocessed signal of whatever is plugged into the respective Input jack on the UX8 hardware.

Hardware Meters Show

Use this menu to select the input and output levels you want the UX8's hardware meters to display.



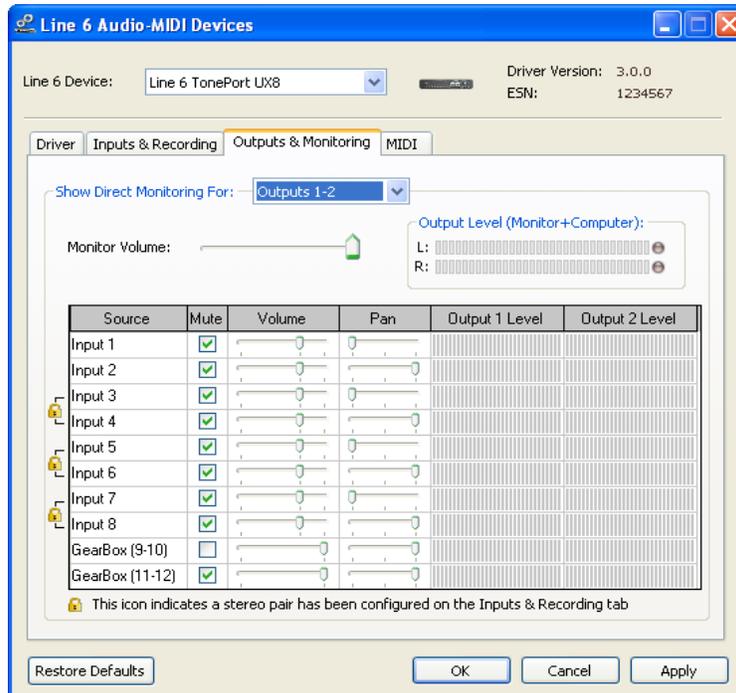
Clock Source



Set your preferred TonePort UX8 clock source with this menu - typically this should be set to **Internal**. Select SPDIF to sync the UX8 to S/PDIF clock source from another device's digital output.

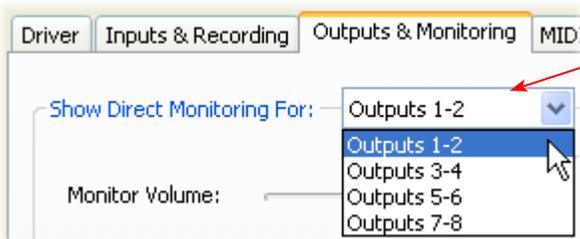
Outputs & Monitoring Tab

Important: Note that the Outputs & Monitoring tab provides control over monitoring levels, specifically, monitor level controls for what you plug into UX8. These controls do not affect Send levels, the audio that streams into your recording software. In other words, volume and pan levels here are purely analog, intended for monitoring live input levels (from instruments, mics, etc), in order to facilitate the recording process. Note that the level of audio coming from your computer (e.g. - the playback of your audio software session) is not controlled by these sliders.



The **Outputs & Monitoring** tab provides control over hardware monitoring settings, including input source volume, pan and mute states. You can specify different mix settings for each pair of UX8 outputs if you like.

By default, the only sounds that come out of the UX8 are the computer’s output and GearBox 9-10 signal (fully processed), all through Main Outs 1-2. You can directly monitor other UX8 inputs by unmuting the corresponding input source in this tab. The UX8 provides monitoring through the hardware with zero latency, which is ideal for tracking with multiple sources simultaneously.



Use the drop-down menu at the top to select the output pair for which you want to mix. Each output pair can have different mix settings.

Mix Controls

All Sources offer the following controls:

Mute (On/Off) Monitor Volume (-100dB to +6dB)

Source	Mute	Volume	Pan	Output 1 Level	Output 2 Level
Input 1	<input checked="" type="checkbox"/>				
Input 2	<input checked="" type="checkbox"/>				

Monitor Pan (100% Left - 100% Right) Stereo Monitor Meters

Main Monitor Volume

Monitor Volume:

Output Level (Monitor+Computer):

L:

R:

This slider controls the overall monitoring volume for the current output pair. What you hear is displayed in the adjacent level meter and includes the combination of input sources and computer-generated signals, such as those assigned to the current output from within your recording software.

Windows® XP® Sound Device Settings

Note - GearBox version 3.5 will also install and run on Windows® Vista®. Please go to the [GearBox Online Help](#) site for and reference the Gearbox *Release Notes* documentation known issues related to Windows® Vista®, as well as the *Windows Optimization Guide* which offers more settings tweaks for Windows® XP® and Vista®!

Windows® Default Sound Device

Windows XP itself also makes use of a sound card device to be able to play all those dings, beeps and other system alerts. Additionally, many multimedia programs such as Windows® Media Player®, WinAmp®, iTunes® etc., will automatically set themselves to use the Windows default device for audio playback as well. Your Line 6 device can be set to be this default device if you want to utilize its high quality audio for playing your CD's or DVD's, for example.

Click on your Windows **Start** button and go to **Settings > Control Panel > Sounds and Audio Devices > Audio** tab. In the **Sound playback** section, choose your Line 6 device as the **Default device**.



TonePort set as the Windows Default device for playback

Considerations when setting your line 6 device as the Windows® default device:

Surround playback – TonePort, GuitarPort, PODxt and POD X3's playback capabilities are designed for stereo. If you already have a sound card that provides surround sound via multiple speakers, this would also be a feature that you would lose by making your Line 6 device your preferred audio device.

Note that TonePort UX8 offers multiple physical outputs and can actually be configured for multi-channel surround output playback! Please see the documentation for your audio application and configuring a multi-channel sound card for Surround output.

On-board synth sounds - Some sound cards also have synthesizer chips onboard that will receive MIDI content and play audio directly out of the card. These sounds might also not be available to you if using your Line 6 device as the Windows default device, since your speakers will be connected to your Line 6 device. If your sound card has one of these synthesizer chips, one solution is to connect the audio output from your other sound card to the Monitor In jack on the back of your Line 6 device.

Windows System Alert sounds - It can actually be quite annoying to have all those Windows system alert sounds blaring at high volume through your Line 6 device when you are trying to focus on more musical endeavors. Fortunately you can independently turn off these system sounds and still keep your Line 6 device as your Windows default playback device. Click on your **Start** button and go to **Settings > Control Panel > Sounds and Audio Devices > Sounds** tab. For the **Sounds Scheme** setting, choose

No Sounds. Click OK to exit the dialog.

Accelerated 3D audio – Computer games may also set themselves to use the Windows default device, and some can have multi-channel or specific accelerated 3D audio playback requirements. Your Line 6 device does not support this and may not perform properly with these types of applications.

The Windows® Mixer

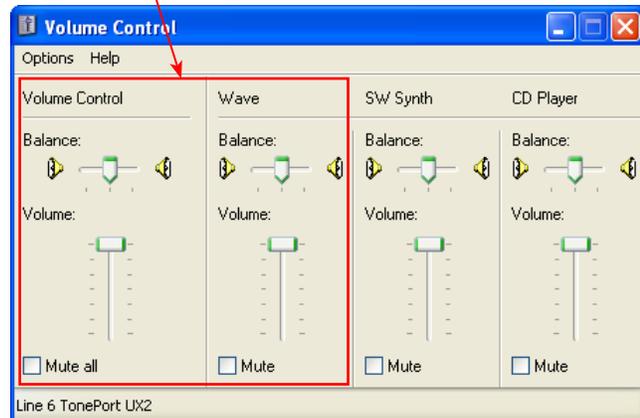
The Windows Mixer utility also defaults to controlling the Windows default device. This is not necessarily a problem, but it is important to be aware of the fact that this means all the controls in the Windows Mixer’s Wave and main Volume sections (Pan, vertical Level slider and Mute checkbox) will affect your Line 6 device’s monitor output. Likewise, the Windows Mixer also controls the default device’s **Recording** Pan/Level/Mute settings as well. You may want to just keep all these Windows Mixer settings at “unity” settings so that they do not affect your Line 6 device’s monitor signal – that is, keep the Pan set to center, the Level sliders to all the way up, and the Mute checkboxes off. Then you can just use the Line 6 Audio-MIDI Settings dialog or GearBox software controls to adjust these Monitor functions.

Note - if you have one of the fancier computer keyboards or a laptop that include volume and mute buttons, then they likely will adjust these same Windows Mixer controls.

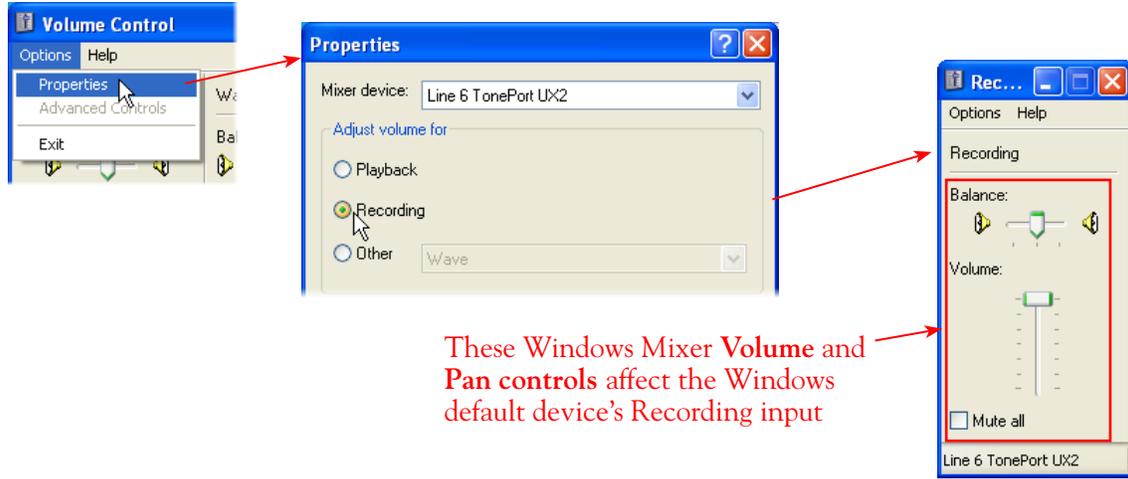
To Launch the Windows Mixer, click on your Start button and go to **Settings > Control Panel > Sounds and Audio Devices > Volume** tab. From the previous step, your Line 6 device should already be set as the Default device (if not, set it in the Sounds tab). Click the Advanced button to launch the Mixer...



These Windows Mixer **Volume** and **Wave** controls affect the Windows default device’s playback output



To access the Windows Mixer **Recording** controls, go to the **Options** menu > **Properties** and choose the **Recording** option...



S/PDIF Digital Output from Line 6 Hardware to an External Device

TonePort UX2, UX8, KB37, POD X3 and PODxt Pro devices all include a S/PDIF digital output, which allows you to connect to digital devices such as a DAT recorder, Minidisk, sound card, or most any device that offers a S/PDIF format digital input. PODxt Pro also includes an AES/EBU digital out, which can be used to connect to hardware that offers this type of digital input as well. Connecting digitally is the preferred method to connect to external devices that support it since this does not require the added digital-to-analog-to-digital signal conversion process as required with using analog outs.

One type of recording setup where you might use the S/PDIF output of your Line 6 hardware is with a Digidesign[®] Pro Tools[®] or Pro Tools LE[™] system. With any Pro Tools setup, your Line 6 hardware would not be the assigned sound card for the Pro Tools software (since Digidesign requires proprietary hardware), but you can still utilize it by connecting the Line 6 S/PDIF output into the S/PDIF input of the Pro Tools hardware. Likewise, if you prefer to use a different sound card with other audio applications and the unit includes a S/PDIF input, then you can still utilize GearBox and your Line 6 device connected digitally. This way you are simply routing the digital audio from your Line 6 gear right into Pro Tools or other software with no signal degradation!

We've provided detailed steps specifically for connecting a Line 6 device's S/PDIF output to a Digidesign Mbox[®] 2 device in the Recording with DigiDesign Pro Tools chapters - try the links below to jump to these chapters. The steps are very similar if you are connecting to the S/PDIF inputs of other manufacturer' sound card devices as well.

[Mac - Digidesign Pro Tools LE chapter](#)

[Windows - Digidesign Pro Tool LE chapter](#)

Considerations When Using S/PDIF or AES/EBU Output

- Some digital devices may only support one sample rate (some DAT and video machines are fixed at 48 kHz, for example), so you will want to be sure to choose a sample rate supported by both units.
- When TonePort UX2/UX8/KB37 and PODxt Pro are operating at their 96 kHz “compatible” sample rate mode with GearBox, they send data out the S/PDIF outputs at 48 kHz. The S/PDIF output is always sent as 24 bit.
- Remember that if you are connecting your TonePort, POD X3 or PODxt Pro digital output to another sound card, you are not limited to the other sound card being on the same computer. You can use your TonePort + GearBox on one computer as your “Tone Machine” - or POD X3/PODxt by itself - and then send the fully baked Tone digitally to a completely different setup for recording!
- For more specifics on digital input and output operation for TonePort, POD X3 or PODxt Pro please see the device's [User Manual](#).

GearBox Recording Settings

The GearBox 3.5 software application is available for all TonePort, GuitarPort and PODxt devices and is another great tool for your Mac or Windows computer recording setup! To follow is information covering the features of GearBox you'll find most useful for use with audio recording software.

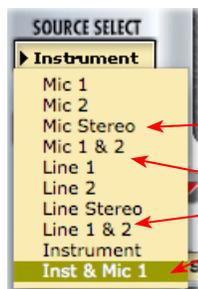
Choosing Your GearBox Source

In GearBox speak, your "Source" is the instrument or mic you are connecting to your Line 6 hardware, and the physical input path it is plugged into.

- For Line 6 devices that offer a single input and single tone capability (GuitarPort, TonePort GX & D.I., GuitarPort and PODxt devices) your Source is of course fixed to whatever you have plugged into the device's Instrument Input.
- For all other TonePort UX1/UX2/KB37/UX8 devices, there are multiple inputs and dual tone capabilities and, therefore, selectable Sources. Once you have your mic, instrument or line level item(s) plugged into your device, click on the **Source Select** menu to choose which of these "sources" you want to create a tone for.

GearBox Source Select Menu

TonePort UX1/UX2/KB37: Options within the **Source Select** menu provide the ability to create a tone for the Mic, Line or Instrument inputs separately, as well as the ability to choose a "Stereo" or "Dual-Tone" Source.

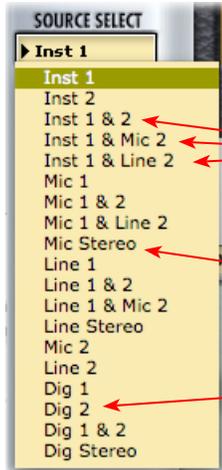


Stereo sources include "Stereo" in their names

Dual-Tone sources include the "&" symbol in their names

The TonePort UX1/UX2/KB37 Source Select menu

TonePort UX8: Options within the **Source Select** menu provide the ability to create a tone for the Mic 1/2, Line, Instrument 1/2 and Digital 1/2 inputs separately, as well as the ability to choose a "Stereo" or "Dual-Tone" Source.



Dual-Tone sources include the “&” symbol in their names

Stereo sources include “Stereo” in their names

Digital sources include “Dig” in their names

The TonePort UX8 Source Select menu

Source Select and Choosing Tones in GearBox

Since there are different types of Input Sources, to follow are a few guidelines for setting up your tones for these types of Sources.

- **Single Input Source:** When a Single Input Source is selected, the GearBox displays the last tone preset that was in use for this Source. You can of course choose any preset from the Tone menu, or customize the tone by selecting your desired amp, preamp and effects models.
- **Stereo Input Source:** A Stereo source accepts the inputs from the selected “Stereo” TonePort ins and processes them as one Stereo signal. This means that you still choose and edit one tone setting, just as you do for a single source, but the tone is applied to both channels, providing a stereo output.
- **Dual-Tone Input Source:** If you select one of the Dual-Tone sources, then you are able to choose a tone independently for each. For example, if you want to record a performance using an instrument and a mic that are plugged into TonePort’s Guitar/Bass and Mic inputs, you likely want to use separate Guitar Amp and Mic Preamp tones. To edit the separate tone settings, use two buttons that appear at the left of the Tones menu – both tones remain audible regardless which tone is displayed

Two tone buttons appear when a Dual-Tone Input Source is in use



- **Digital Input Source (TonePort UX8 only):** A Digital source accepts the inputs from the selected S/PDIF TonePort ins. As shown in the above screenshot of the UX8 Source Select menu, there is a stereo pair of Digital inputs, which means they can be selected each as a Single Source, as a Stereo Source, or as a Dual-Tone Source.

Record Send Controls in GearBox

About Sends...

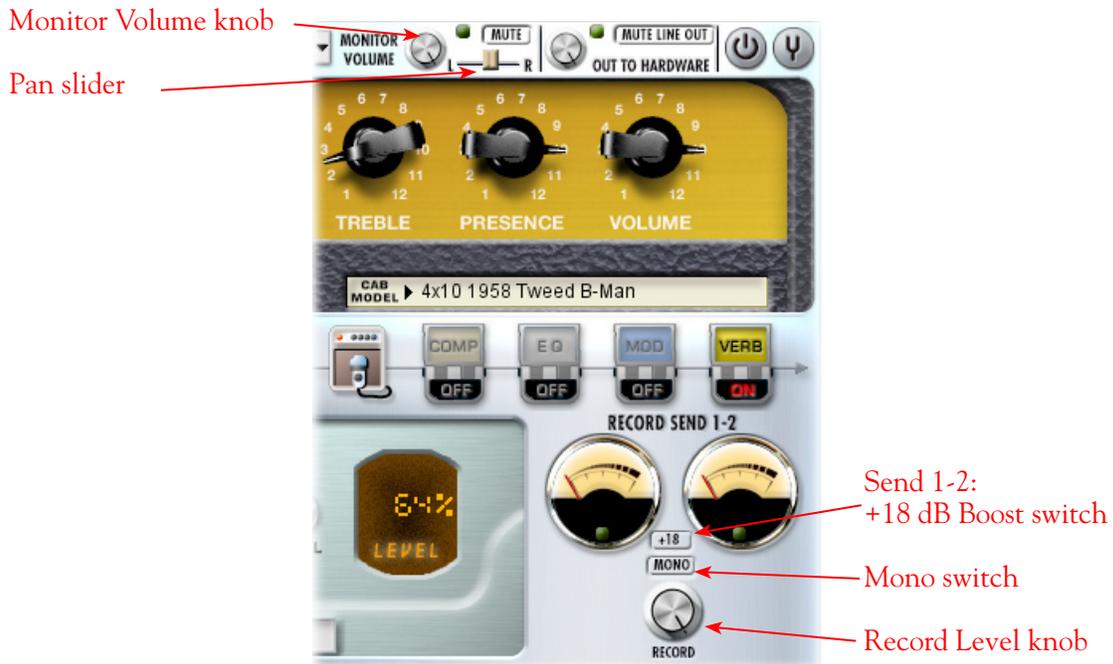
All Line 6 TonePort, GuitarPort and PODxt devices utilize “Sends” - you can think of Sends as the virtual “plumbing” for the different audio channels your device provides and makes available to audio software on your computer for recording and playback. The Record Sends carry the output signals, which include the audio signals that run to the device’s physical outputs as well as those that run out the USB connection to your computer. Once you’ve installed the Line 6 USB audio device driver and connect the USB cable, these Sends are established on your computer and accessible within the Line 6 Audio-MIDI Control Panel dialog. Note that these Sends carry audio back and forth regardless if you are using GearBox software or not, and for PODxt devices (which do not require GearBox, but optionally can use it) you can still access these Sends within audio software on your computer to utilize your device as a sound card for high quality audio recording and playback. For all TonePort devices and GuitarPort, the Record Sends carry “unprocessed” signals at all times, but of course if you launch GearBox you can process whatever signal you are inputting into your Line 6 device with all those luscious Tones!

The Line 6 TonePort, GuitarPort and PODxt devices differ as to the number of input options offered, and some also offer a different number of Record Sends that will appear as discrete audio channels for your audio software to record from. When using GearBox, you’ll have access to Record Send controls right inside GearBox - we’ll cover these first in this section. In the section that follows, we’ll cover the Send and additional audio controls that are also available for all Line 6 USB devices within the Line 6 Audio-MIDI Control Panel on your computer. Please see the [Mac Driver Settings](#) and [Windows Driver Settings](#) sections at the start of this chapter for details.

GearBox Record Send 1-2

GearBox displays controls for the primary Record Sends offered by your connected Line 6 device. Your GearBox-processed Tones are automatically routed to these Sends and you use these Send pan and level controls to configure the stereo placement and recording level sent to your audio software and monitoring outputs.

The functionality of the **Record Send 1-2** controls are the same for TonePort, GuitarPort and PODxt devices, with a few differences as called out in the following descriptions.



- **Record Volume knob & +18 Boost switch:** The Record knob adjusts the level of the signal routed out to Send 1-2, and directly affects the amplitude of your recorded audio into any software that is set to receive input from Send 1-2. Additionally, the Boost switch can be activated if the signal needs an additional 18 dB of gain. The rule for recording levels and digital audio is to always avoid clipping, yet keep the level at least above half to capture a nice strong signal. Use these controls and reference the meters above to adjust this level accordingly. Your audio software likely has meters that will reflect this level as well.
- **Mono switch:** The Mono button will sum the GearBox stereo Tone to Mono (actually, a “dual-mono” signal since it is the same mono signal fed to both the Left and Right audio channels of the stereo Send). Note that PODxt devices do not include this Mono switch and the Send 1-2 signal is always routed as Stereo.
- **Pan slider:** The Pan slider adjusts the left/right balance of the signal before it is routed to the Send, and therefore will affect what levels your recording software receives on the left and right channels.
- **Monitor level:** The Monitor knob adjusts the level of the Tone Direct Monitoring signal fed to TonePort’s outs. You can activate the Mute switch to mute the Tone Direct monitoring signal completely. These controls do not affect the Record level that is sent to your recording software. This allows you to balance the listening volume of your GearBox tone signal and the playback of tracks coming from your recording software.

Gearbox Record Send 3-4 (TonePort GX/D.I./UX1/UX2/KB37 & GuitarPort)

These Line 6 devices offer an additional **Record Send 3-4**, therefore, GearBox displays an additional set of controls for them when a TonePort or GuitarPort device is in use. (See the following section regarding [TonePort UX8](#) and its multiple Sends).

When using GearBox with one of these devices, you can access a set of controls for Send 3-4 by clicking on the Send 3-4 icon in the row above the effects panel display. When GearBox is set to a single input Source (such as “Instrument”) you can set your recording software to receive the Send 3-4

signal, while you are monitoring the Send 1-2 signal. In this configuration, it allows you to record a dry or semi-processed signal into its own, independent audio track while monitoring a fully GearBox-processed tone*.



The Effects Panel with Send 3-4 selected

*TIP - Configuring Send 3-4 this way is a great feature if you own the optional GearBox Plug-in! This allows you to monitor yourself recording with whatever GearBox Tone and effects you want for inspiration, but without “committing” the Tone to your recorded track. You can then load the GearBox Plug-in on the track in your recording software and choose whatever amp, cab & effects you like, as well as change the settings at any time to best suit the mix.

This set of Record Send 3-4 controls are independent of the Record Send 1-2 controls. Note that by default the Send 3-4 **Mute** button is engaged – you probably want this Send muted when using TonePort in a single input source configuration, since Send 3-4 then carries the tone without the Post effects and you likely want to hear the only the Send 1-2 signal as your monitor signal, with the Post effects active only on the Send 1-2 monitor signal you are hearing.

Send 3-4 is also very useful when you are using a Dual-Tone Input Source in GearBox (available with TonePort UX1, UX2 & KB37 devices), since each Tone is routed to a separate Record Send – Tone 1 goes to Send 1-2, and Tone 2 to Send 3-4. This then allows your recording software to access these two Tones as separate, discrete signals and record those on separate tracks within the same recording take.

TonePort & GuitarPort devices offer a set of mixer controls in the Line 6 Audio Control Panel, and that is where you can further control signal routing monitoring volume & pan levels, as well as independently mute/un-mute Sends. Please see the [Mac Driver Settings](#) and [Windows Driver Settings](#) sections at the start of this chapter for details.

TonePort UX8 - Multiple Record Sends

Unique to TonePort UX8 is its set of multiple physical inputs & outputs and multiple Sends. For UX8, each physical input 1-8 has its own dedicated Send that carries the signal of whatever is plugged into its (Mic or Line) input jack. TonePort UX8 allows you to assign physical input channels 1 & 2 (these two inputs are selectable for Mic, Line or Instrument) to be processed by GearBox, and this GearBox-processed signal is carried on **Record Send 9-10**. You can choose to audibly monitor Send 9-10 and choose Send channels 9 and/or 10 within your recording software’s audio tracks to record the signal.

GearBox also offers an additional two-channel **Record Send 11-12**. You can access a set of controls for this Send in GearBox by clicking on the Send 11-12 icon in the row above the effects panel display. By setting Send 11-12 to “**Pre**”, it will grab the signal of your connected instrument *before* it is processed by the GearBox amp and effects models, thus carrying an “un-processed” signal. Or, you can alternatively set Send 11-12 to “**Post**” and then choose to individually place your Mod, Delay or Reverb effects models to be Pre or Post themselves to apply each or not on the Send 11-12 signal. It is

possible to configure your recording software to record the Send 11-12 signal, while you are monitoring the (GearBox-processed) Send 1-2 signal. In this configuration, it allows you to record an unprocessed or semi-processed signal into its own, independent audio track while monitoring a fully GearBox-processed tone*. Note that UX8's **Send 1-2** also carries the unprocessed signal of whatever is plugged into the selected physical inputs 1-2 (Mic, Line or Instrument), therefore, it is also possible to choose Send 1-2 in your recording software tracks if you wish to record a signal unprocessed by GearBox, independent of what you are actually hearing as your monitor signal coming out of GearBox!



The Effects Panel with Send 11-12 selected

Note that by default the Send 11-12 **Mute** button is engaged – you probably want this Send muted when using TonePort if you prefer to hear only the (Send 9-10) GearBox-processed signal.

***TIP -** Configuring Send 11-12 this way is ideal for using the GearBox Plug-in! This allows you to monitor yourself recording with whatever GearBox Tone and effects you want for inspiration, but without “committing” the Tone to your recorded track. You can then load the GearBox Plug-in on the track in your recording software and choose whatever amp, cab & effects you like, as well as change the settings at any time to best suit the mix.

Send 11-12 is also very useful when you are using a Dual-Tone Input Source in GearBox, since each of the two GearBox Tones is routed to a separate Send – Tone 1 goes to Send 9-10, and Tone 2 to Send 11-12. This then allows your recording software to access these two Tones as separate, discrete signals and record them on separate tracks within the same recording take.

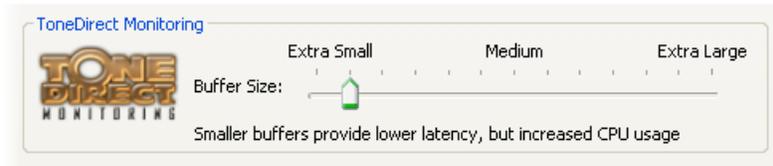
TonePort UX8 offers a complete set of mixer controls in the Line 6 Audio Control Panel, and that is where you can further control monitoring volume & pan levels, as well as independently mute/unmute all the UX8 Sends. You can look back at the start of this chapter for the [Mac Driver Settings](#) and [Windows Driver Settings](#) sections that cover the UX8 options.

ToneDirect™ Monitoring

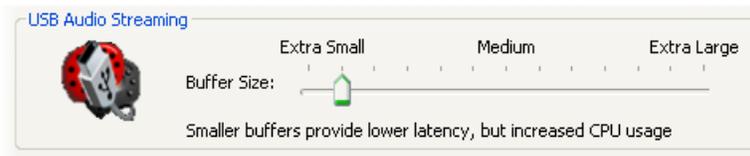
A unique feature of Line 6 TonePort & GuitarPort devices with GearBox is **ToneDirect™ Monitoring**. The ToneDirect Monitoring signal is a separate audio path that allows you to monitor your Mic/Line/Instrument signal fully GearBox processed with the lowest possible latency for uncompromised feel and responsiveness when recording or jamming. The ToneDirect Monitoring feature also allows you to set the audio buffer size in your recording application at a large value for efficient use of your computer, yet still enjoy extreme low latency monitoring while recording. POD X3 and PODxt devices of course utilize their own on-board processing to create those lush Tones, so they do not require the same ToneDirect Monitoring feature, however, the benefits on these devices are much the same - the signal you use to monitor yourself while recording does not suffer from long latency delays and you can optimize the computer's buffer settings for stable performance with your recording application!

ToneDirect™ Monitoring Buffer Slider (Windows®)

For TonePort & GuitarPort devices, the Line 6 ToneDirect™ Monitoring audio path has its own buffer to allow you to keep your ASIO Buffer Size at a high value, for more solid performance and more efficiency with your ASIO-based audio software. The initial default is one tick to the right of “Extra Small” as shown. Raise this slider if you are getting any dropouts in your monitor signal.



PODxt devices utilize a USB audio buffer (rather than ToneDirect™ Monitoring) which provides an independent, direct monitor signal with its own buffer adjustment. When a PODxt/Live/Pro is selected as the Line 6 device in this dialog, the ToneDirect™ Monitoring section of the dialog is replaced by a PODxt-specific “USB Audio Streaming” buffer slider:



Attn. Mac Users... No ToneDirect Monitoring or USB Audio Streaming buffer settings are required on Mac systems - this is handled automatically for you!

USING THE LINE 6 GEARBOX™ PLUG-IN

The GearBox™ Plug-In is really an amazing tool for computer recording since it allows you to non-destructively apply entire GearBox Tones on any of your recorded tracks, without needing to commit the settings until your final mixdown! The GearBox Plug-In is available as an Add-On purchase to your Line 6 hardware (or, already comes included if you own a TonePort D.I. or UX8). The GearBox Plug-In supports three formats, making it compatible with just about any Mac® or Windows® recording software “host” - AU®, VST®, and RTAS® for Digidesign Pro Tools™/Pro Tools LE™. You can grab it now without even getting out of your chair! Just run Line 6 Monkey with your Line 6 USB device connected and go to the Optional Add-Ons tab. Or, you can read all about it here:

[Line 6 GearBox Plug-In](#)

Using the GearBox Plug-in with your favorite recording software gives you the freedom to change your tone as often as needed and automate amp and effects settings with surgical precision. If you have experience with host applications like Steinberg Cubase®, Ableton Live™, or Digidesign Pro Tools LE™, then you probably have used effects plug-ins. Using the GearBox Plug-In in your host is no different from using any other. Unlike most other plug-ins however, the GearBox Plug-In is not just a one-trick pony! It is really a full suite of amp, cab, mic and effects models that you can apply as a complete GearBox Tone on guitar, bass or vocals - or you can apply individual GearBox models or effects on any types of instruments, as many tracks as you like, and even fully automate the parameters!

If you're new to the world of recording software and plug-ins, read the following examples of using the GearBox Plug-In in Ableton Live (AU or VST) and Digidesign Pro Tools LE (RTAS).

Note: TonePort KB37 and other products come included with Ableton Live Lite - Line 6 Edition software for Mac or Windows, and the GearBox Plug-In is of course supported by this application. If you have Live Lite version 4, Ableton offers a Live Lite version 5, Line 6 Edition as a free update for your version. To get it, launch your Live Lite 5 Line 6 Edition version and choose Check for Updates from the Help menu. In the following example, we'll be showing the Ableton Live 7 version, but the steps are very similar for using the GearBox Plug-In with the Live Lite 5 - Line 6 version.

Activation & USB Hardware

The Help document included with GearBox and available from the ? button at the top of the GearBox Plug-In window provides information on activation. You must activate on each computer that you will use GearBox Plug-In with. GearBox and the GearBox Plug-In do not utilize iLok® or other, similar “dongle” devices for copy protection. When you purchase the GearBox Plug-In, it is established as an “Add-On” for the specific Line 6 USB device you purchased it for and this Line 6 USB hardware must be connected to your computer for the GearBox Plug-In to operate.

Note: You do not necessarily need to use your Line 6 USB hardware as the assigned sound card for your audio software to allow use of the GearBox Plug-In, but your Line 6 device **MUST** be connected directly to your computer's USB port. You should always connect directly to one of your computer's USB port and not to a USB hub.

If your other audio recording software or hardware requires the use of an iLok® or other USB dongle

then it is no problem to have it connected to your computer at the same time. If possible, you might try moving any USB dongle, mouse or keyboard to a USB hub to free up a direct computer USB port for your Line 6 hardware.

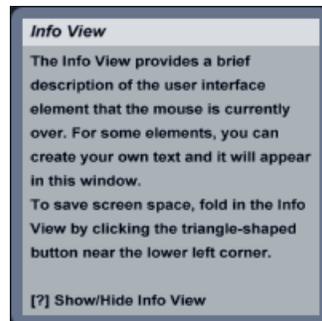
Using the GearBox VST or AU Plug-In - Ableton Live 7

Once you have the GearBox Plug-In Add-On activated for your Line 6 hardware, you are ready to jump right into a whole new level of GearBox possibilities right within your Mac or Windows audio software! If you are using a Mac, then the GearBox Plug-In is supported by any audio software that hosts the Mac Audio Units (AU) plug-in format. If you are using a Windows PC, then the GearBox Plug-In is supported by any audio software that supports the VST plug-in format. The use of the GearBox Plug-In with a Mac AU and Windows VST host application is much the same. There are of course some differences as to how each host application works with 3rd party plug-ins specifically, so you should consult your host's documentation for all the fine points. To follow we've provided a step-by-step guide for the GearBox Plug-In within Ableton Live 7.01 on both Windows XP and Mac 10.4 (Tiger) systems. This should provide a great example for how to insert, configure and automate parameters for the GearBox Plug-In on most any Windows VST or Mac AU host!

Note - This documentation is for Windows® XP® and Apple OS X® 10.4 (Tiger). GearBox 3.5 and the GearBox Plug-In will also install and run on Windows® Vista® and Apple OS X® 10.5 (Leopard) but with some known issues. See the [GearBox Online Help](#) page for the latest news regarding the support for these operating systems.

Info View

First a handy tip... if you are new to Ableton Live then you might want to turn on the **Info View** panel. This displays a brief description of the user interface element within Live that your mouse is currently over. You can show/hide this panel by choosing it from Live's **View** menu:

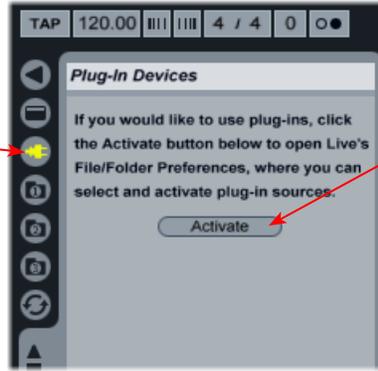


The Ableton Live interactive Info View panel

Activating the GearBox Plug-In in Live

Launch Ableton Live and make the following settings:

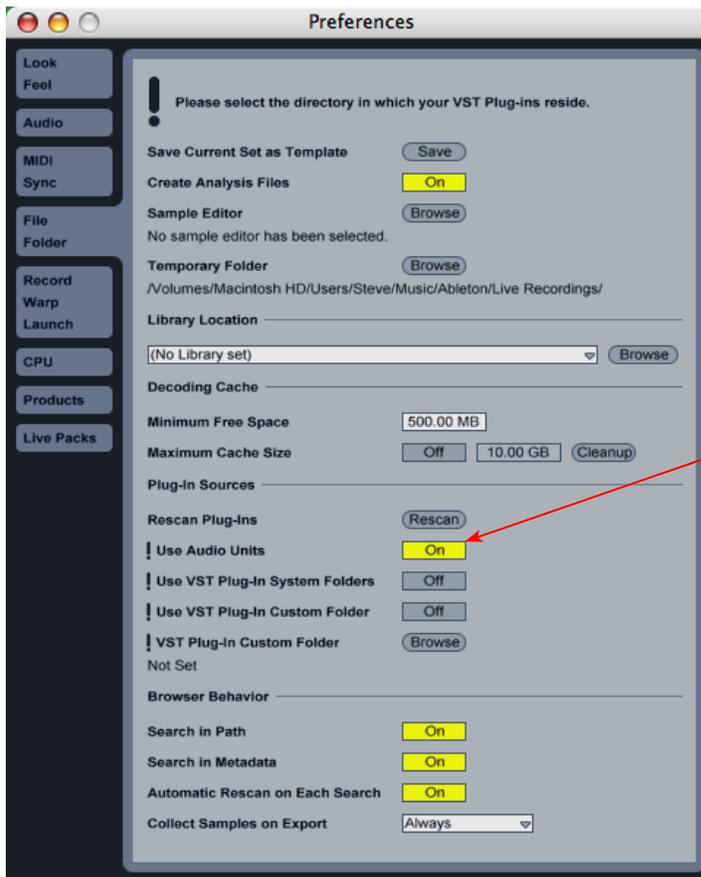
Click on the button to display the **Plug-In Device Browser**



Click the **Activate** button

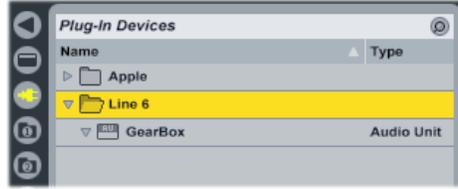
Clicking the **Activate** button will display the **Preferences** dialog with several options - we'll be setting the **Plug-In Sources** options. Note there are some differences if you are using Live on Mac versus Windows here:

Mac - AU Plug-In Activation



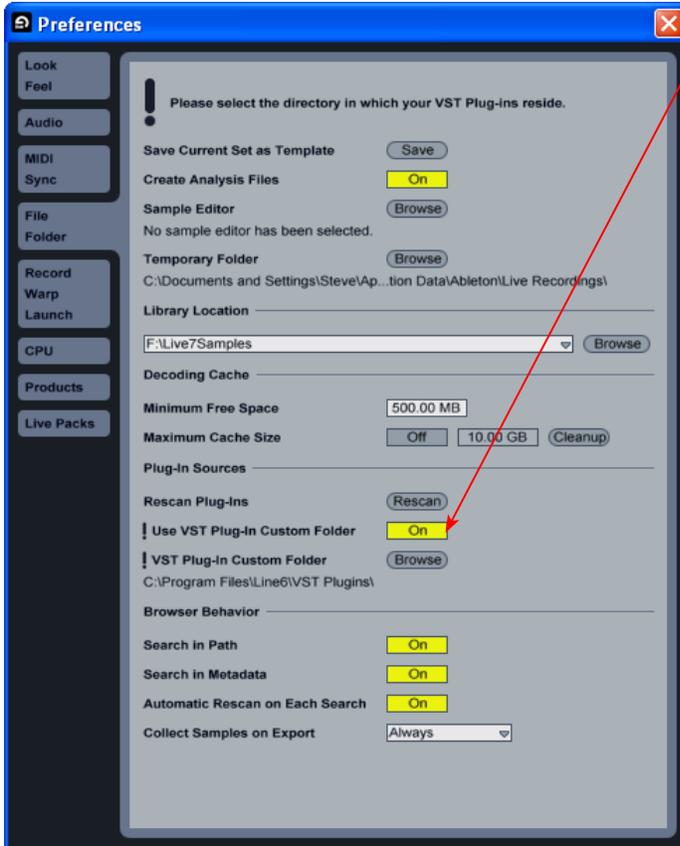
Click the **Use Audio Units** button so that it becomes "On"

Once the Use Audio Units is enabled, Live will scan your Mac and display all found plug-ins in the **Plug-In Devices** browser panel like this:

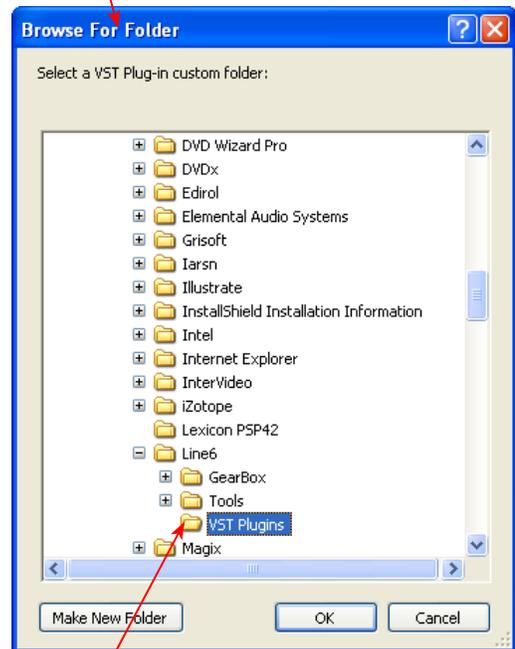


Live's Plug-In Devices browser showing AU Plug-Ins (Mac)

Windows - VST Plug-In Activation



Click the **Use VST Custom Folder** button so that it becomes "On", then click **Browse** to choose the folder where the GearBox Plug-In lives



Choose the **Program Files>Line 6>VST Plugins** folder* and click OK

*Note: The Program Files>Line 6>VST Plugins path is the default location where the GearBox Plug-In is installed if you have no other VST Plug-Ins. When you installed GearBox, you may have chosen another location where additional VST Plug-Ins were already installed. For example, if you have a Steinberg host application, it might be Program Files>Steinberg>VSTPlugins. Browse to where your common VST Plugin folder is located if you want Live to find all your VSTs, otherwise you can use the default Line 6 location.

Once the appropriate folder is selected, Live will scan it and display all found plug-ins in the **Plug-In Devices** browser panel like this:



Live's Plug-In Devices browser showing VST Plug-Ins (Windows)

Inserting the GearBox Plug-In on an Audio Track

To apply the GearBox Plug-in to an audio track, follow these steps...

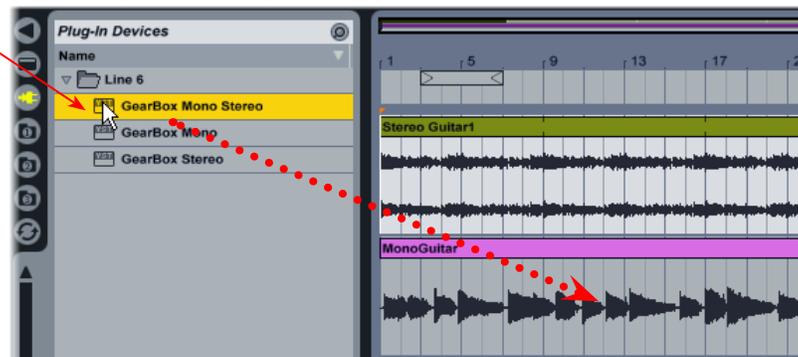


Click her to switch to Live's Arrange View

If your audio track is set up for stereo audio clips, click on the **GearBox Stereo** Plug-In and drag and drop it onto the track.



If your audio track is set up for mono audio clips, click on the **GearBox Mono Stereo** Plug-In and drag and drop it onto the track*



*Note: This assumes the track is also set up to output to a stereo destination. If the track is set to a mono output, then you should insert the GearBox Mono Plug-In - please see the Live Help documentation about mono/stereo track configurations and signal routing for details.

Once inserted, you'll see a GearBox Plug-In "Device" panel loaded in the lower pane of Live.

Enable/Bypass the Plug-In

Click this button to show/hide the GearBox Plug-in parameter controls embedded in Live's UI (although you'll likely find it easier to use the GearBox Plug-In UI window to tweak parameters)

Click this button to show/hide the GearBox UI window

This "X-Y" graphic display allows you to control 2 plug-in parameters in real-time. The two parameters are selected in the menus below. Please refer to Ableton Live's help documentation for more info

To remove the GearBox Plug-In from the Track, simply right click (Windows) or Ctrl + click (Mac) directly on the GearBox Plug-In's title bar and choose **Delete**

Remember that it is a good idea to save your GearBox Plug-In settings as a Preset inside the GearBox Plug-IN UI window before removing the plug-in so that you can recall the settings another time!

Configuring the GearBox Plug-In

Once loaded as an Insert, the GearBox Plug-In dialog is automatically launched. Here you can choose from any of your saved GearBox Tone presets, or edit the individual amp, cab, mic and effects settings exactly as you would within the GearBox stand-alone application. Additionally there is a set of in/out level controls and meters specifically for the audio levels in and out of the Plug-In.



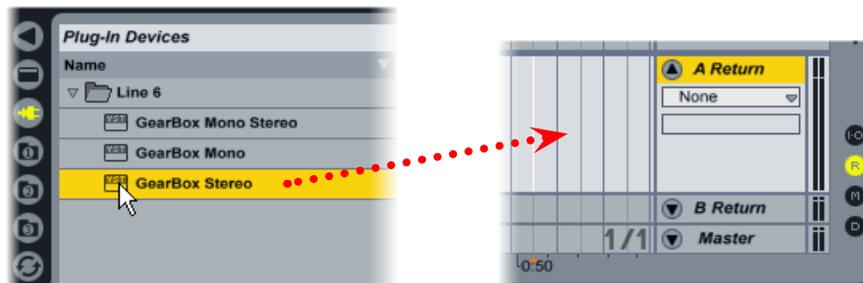
The GearBox Plug-In UI Window

It is important to watch your levels in and out of the Plug-In. If the audio recorded in the audio track is already rather high, then adding some GearBox amp and effects models (especially distortion and compressor effects) can raise the gain further, resulting in clipping. Use the amp & effects' volume and gain controls moderately, and then use the Input and Output knobs with in the GearBox Plug-In dialog to keep the levels at a nice hot level, but without clipping on the meters. For more details about the Plug-In UI, please click on the “?” button in the Plug-In window for the GearBox Plug-In Help documentation.

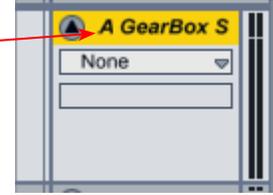
Inserting the GearBox Plug-In on a Send Return

Each instance of any Plug-In you add in your Live Set of course utilizes CPU power. Therefore, if you have the situation in your Live Set where you want to apply the same exact GearBox Plug-In settings to more than one audio track, it is a better practice to insert one instance of the GearBox Plug-In on a Send Return and route the desired audio tracks' Send outputs to it. Here is how to set this up...

In Live's Arrange View, drag and drop the GearBox Stereo Plug-In onto the **A Return** track



Once the Plug-In is loaded as an insert on the Return track, you'll see the track name is automatically changed to **A GearBox Send**



Configure the GearBox Plug-In with any combination of effects you like. For example, maybe you just want to use a Stereo Delay and Reverb effect so that it is applied to multiple tracks.

Next, switch Live's Session View where you can easily see and adjust the Send A levels from multiple tracks. In this scenario, we've set the Send A controls for both audio tracks 1 and 2. The result is that each of these tracks will have part of their output routed to the return track, and therefore, through the inserted GearBox Plug-In.

Adjust the **Send A knob** on each audio track to determine the level sent to the A GearBox Return track

Adjust the **Track Volume** for the amount of "dry" track signal



Adjust the **Track Volume** on the **A GearBox Return** track to determine how much "GearBox-effected" audio you will hear

You can choose how much effect is applied for each audio track by how much you raise the Send A level. Additionally, the main output of each audio track is still routed to the main stereo Out 1-2, so you can adjust the vertical Track Volume slider for each audio track to also determine how much "dry" track signal is also heard at the main output.

Note that it also possible to insert the GearBox Plug-In on the Master tack of your Live Set - just drag the GearBox Plug-in onto the Master track to do so. This allows you to run all your audio tracks through a common plug-in effect, such as the GearBox Compressor, Delay or Reverb! Ableton Live offers a great deal more signal routing options, allowing you to be even more creative with the use of the GearBox Plug-In and the mix of your Live Sets. Please go to the Live **Help** menu and choose **Read the Live Manual** for more info.

Automating GearBox Plug-In Parameters

Ableton Live can automate any number of GearBox Plug-In parameters. As an example, let's suppose you want to increase the GearBox Delay effect's mix level in a particular section of a stereo guitar track you've recorded in Live, such as Audio Track 1 from bar 13 through 20. You'll need to create an envelope for the GearBox Delay-Mix parameter, following these steps...



In the Arrangement View, click on the track's **Device Chooser** and select the inserted **GearBox Stereo Plug-In**



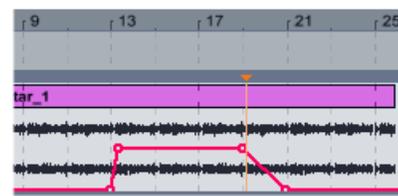
Next, click on the track's **Control Chooser** and select the **Delay-Mix** parameter

Once a parameter is selected, a red envelope line will appear across the track - you can click and drag this line up/down to adjust the selected parameter

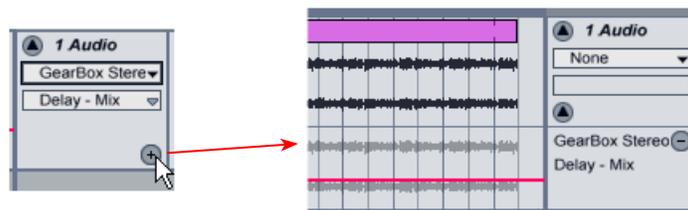


Double click on the envelope line to create a **"breakpoint"**. Here breakpoints are added where we want to start and end the parameter change. Note that when the mouse cursor is over a breakpoint, the parameter value at this position is displayed.

Now you can add additional breakpoints and drag them up/down to have the GearBox Delay Mix change over time. Here the result is no Delay effect is heard until bar 13, then it goes to a 50% Delay Mix, and gradually back to no Delay by the end of Bar 20

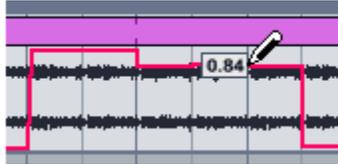


You can create any number of envelopes to control as many GearBox Plug-in parameters as desired. To show more parameters, click on the little **"+"** button at the bottom right of the track header. This places the parameter envelope you just created in its own "lane", expanded below the waveform lane.



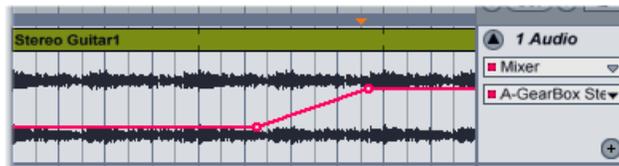
Now you can choose the **GearBox Stereo** Plug-in again in the **Device Chooser**, and desired parameter in the **Control Chooser** for a 2nd parameter envelope.

Ableton Live also features a **Draw Mode** tool, which literally allows you to draw the parameter envelope right over the track. You can select the Draw Mode tool if you right click (Windows) or Ctrl + click (Mac) anywhere in the track's waveform display area. For more information, please refer to your Ableton Live help documentation.



The Draw Mode tool in use

As discussed in the previous section, you can also utilize Live's Sends to route a track signal to a return that has the GearBox Plug-In inserted on it. Note that you also have the option within the Control Chooser menu to show an envelope for each Send return. If you choose the Return track where the Plug-In is loaded, you can adjust it's envelope to determine how much signal goes out the Send, thus determining how heavy the active GearBox Plug-In settings will be applied to this track's signal.



The Send A volume parameter automation envelope adjusted on an Audio track

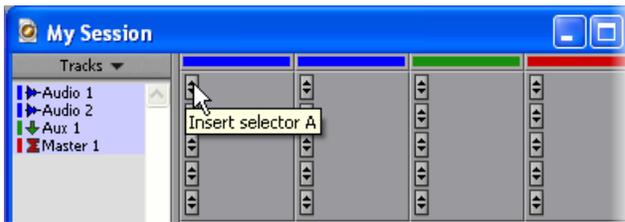
But wait... there's more! If you take a look at the options for your Return track that has the GearBox Plug-In inserted, you'll see that you also have all the same options as for an Audio track when the Plug-In is inserted. Therefore, you can also use the Return track's Control Chooser to show envelopes for individual GearBox Plug-In parameters and automate them too. Think of the possibilities!

Using the RTAS GearBox Plug-In - Digidesign Pro Tools LE 7

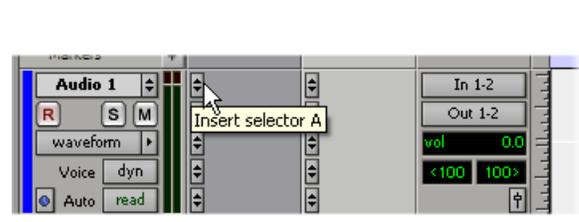
The GearBox Plug-In supports the Digidesign Real Time Audio Suite (RTAS) Plug-In format for Pro Tools and Pro Tools LE software on both Mac and Windows. Once you have the GearBox Plug-In Add-On activated for your Line 6 hardware, you are ready to jump right into a whole new level of GearBox possibilities right within your Pro Tools software! To follow we've provided a step-by-step guide for using the GearBox RTAS Plug-In within Digidesign Pro Tools LE 7.3.1 on Windows XP. This should provide a great example for how to insert, configure and automate parameters for the GearBox Plug-In on any Windows or Mac Pro Tools RTAS host version. There are of course some differences for using RTAS plug-ins on different Pro Tools software versions, so you should also consult your Digidesign documentation for all the fine points.

Inserting the Plug-In

The most common way to apply an RTAS effect plug-in within Pro Tools LE is to add it as an **insert** on the audio track where you are recording your guitar or other instrument. You can access the insert slots either directly on an audio track's channel strip in the **Mix** window, or at the left of the track in the **Edit** window (you may need to enable the "insert" module to be visible from the Track View Menu).

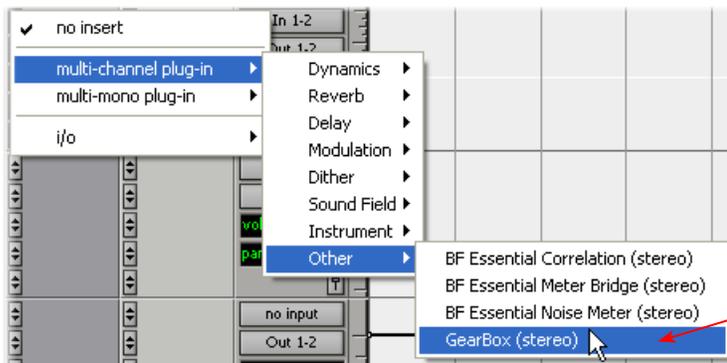


Mix window Insert slot



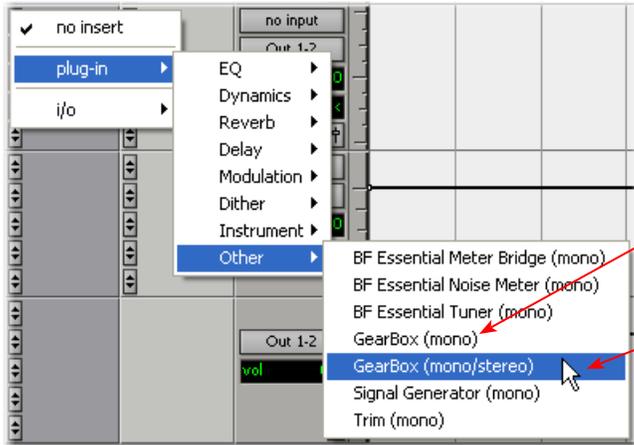
Edit window Insert slot

When you click on a track's **Insert Selector**, you'll find the GearBox Plug-In selectable within the **Other** sub-menu. Note that the plug-in options will be different if your track is a stereo or mono track...



Stereo audio track

On a stereo track, you'll have the option for the **GearBox (stereo) Plug-In**



On a mono track, you'll have two options:

If your track's output is set to a mono Interface or Bus, then it is best to choose **GearBox (mono)** retain a mono channel signal

If your track's output is set to a stereo Interface or Bus, then it is best to choose **GearBox (mono/stereo)** to feed to the stereo output

Mono audio track

You'll then see the GearBox Plug-In loaded in the Insert slot in both the Mix & Edit windows...

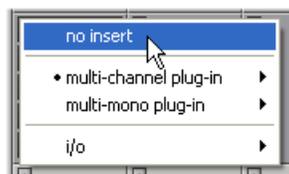


Mix window



Edit window

To remove the GearBox Plug-In, simply click on the Insert Selector where the plug-in is loaded and choose No Insert from the menu.



TIP: You might want **SAVE** the settings of your GearBox Plug-In instance as preset before you remove it so you can recall the same settings again easily any time you load the plug-in again!

You can load as many instances of the GearBox Plug-In as you like in your session. Note that each instance you load will utilize more of your computer's resources since RTAS plug-ins are powered by you computer's CPU. You are not limited to just using the plug-in for guitar, bass or vocal tones - you can load the GearBox Plug-In and just use individual models, such as just the great vintage sounding Delays, Stompbox or Reverbs, on any instrument!

Presets and Saved Settings

When you save your Pro Tools session, the loaded GearBox Plug-In instances, as well as all Plug-In

settings, are saved as part of the session. However, note that adjustments made to GearBox Plug-In instances may not trigger Pro Tools to recognize that you have changed your Pro Tools session, and therefore Pro Tools may not prompt you to save changes when closing your the session if you haven't made other changes since the last save. Manually saving before closing a Session file will ensure that the adjustments you've made to the GearBox Plug-In get saved with the Session.

The Session saved by Pro Tools' **Save Session Copy** function may not properly capture GearBox Plug-In settings. After using **Save Session Copy**, also do a **Save As** to that same destination so your copied Session has the parameter values for GearBox Plug-In instances in your Session.

Configuring the GearBox Plug-In

Once loaded as an Insert, the GearBox Plug-In dialog is automatically launched. Here you can choose from any of your saved GearBox Tone presets, or edit the individual amp, cab, mic and effects settings exactly as you would within the GearBox stand-alone application. Additionally there is a set of in/out level controls. You'll see that the plug-in dialog is contained within an RTAS plug-in window, and at the top are some Pro Tools LE specific controls. These are the same controls for all RTAS plug-ins and allow you to switch to other tracks, save session-related presets, and more. Please check your Pro Tools LE documentation for more on these controls.



It is important to watch your levels in and out of the Plug-In. If the audio recorded in the audio track is already rather high, then adding some GearBox amp and effects models (especially distortion and compressor effects) can raise the gain further, resulting in clipping. Use the amp & effects' volume and gain controls moderately, and then use the Input and Output knobs with in the GearBox Plug-In dialog to keep the levels at a nice hot level, but without clipping on the meters.

Monitoring with the GearBox Plug-In

As described in the Digidesign Pro Tools LE Setup chapters ([Mac](#) and [Windows](#)) of this document, there are some specifics to configuring your audio track and Mbox 2 (or other Digidesign hardware) to monitor your input signal while recording. Here are a few options for monitoring when using the GearBox Plug-In.

Pro Tools LE Software Monitoring

One practice is to plug your instrument or mic directly into your Mbox 2 and record it's unprocessed signal into the audio track so that you can use a plug-in on the track to then non-destructively add amp, cab and effects to it. The GearBox Plug-In is of course the perfect type of plug-in for this task! For this setup you'll need to load the GearBox Plug-In on the audio track Insert first, and then arm the track and keep it un-muted so that you can adjust the Mbox 2 Mix knob to hear your input signal running through the track.



Pro Tools LE audio track - armed, with GearBox Plug-In loaded as an Insert

You can of course use any GearBox settings you like since it is only acting upon the monitor signal so you can hear it live, while the raw, unprocessed signal gets recorded.

The drawback with this setup is that it takes a fraction of a second for the input signal to pass through the software, through any insert plug-ins and then back out your speakers or headphones. This amount of delay is referred to as “latency” and what you hear all the computer recording geeks rant about on all the computer audio forums. You can minimize the latency by lowering your Pro Tools audio engine buffer size, but note that the lower the buffer setting the more CPU demands are placed on your computer.

Using Line 6 Hardware for Monitoring Externally

Another option is to use an external hardware mixing console as follows to allow you to split the input of your instrument or Mic into two signals so that you can plug one into your Line 6 TonePort, POD X3 or PODxt, and the other input into your Digidesign interface:

- Plug your Instrument or Mic into a channel on your mixing console.
- From this mixer channel, route the signal out a Send so that you can then plug one into the Mic/Instrument input of your Line 6 hardware, and the other into the Mic/Line In of your Mbox or other Digidesign hardware.
- Connect the Analog Outs from your Line 6 hardware back into another channel of mixing console and route the channel to your monitor system. This channel will monitor only the output of your Line 6 device.
- Connect the Mon Outs from your Mbox into its own channel on the mixing console and route the channel to your monitor system. This channel will monitor the playback of your Pro Tools session.
- Launch the GearBox stand alone application and dial in whatever tone you want for your monitoring signal, which you'll be able to hear with nearly zero latency. (Or, if you are using a PODxt or POD X3, you of course do not need the GearBox software, or even to connect your

POD to your computer's USB port).

- Configure your audio track in Pro Tools to record from the Mic/Line In you are connected to and Arm the track for recording. You should keep the track Muted while recording since you do not want to hear the unprocessed signal coming into the track.
- Once you are done recording, you can then un-mute the Pro Tools LE track and load the GearBox Plug-In as an insert on the track. It is now up to you to either call up the same settings you used in the GearBox stand-alone application (or PODxt/POD X3) to monitor with, or tweak the plug-in to achieve any tone you want for the track.

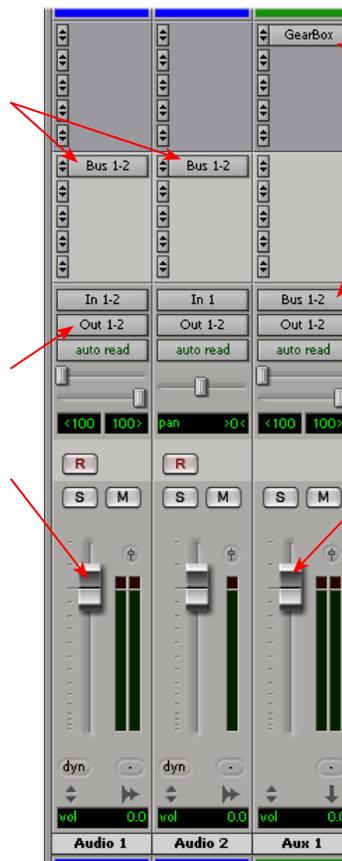
Using the GearBox Plug-In with Sends

Another method to using plug-ins in Pro Tools LE is to add one instance of a plug-in as an Insert on an **Aux** track, and then route a **Send** from multiple audio tracks to the feed into the Aux track so that all the tracks can be processed with the same, single plug-in. This can be very useful if you want to do something like use the same Analog Delay effect on several different tracks - it would be a very inefficient use of CPU power to load several separate instances of the GearBox Plug-In as inserts on multiple audio tracks. The better practice is to load one GearBox Plug-In instance on an Aux track, and then route a Send - this can all be done in the Pro tools LE Mix window as shown here...

In this example, both Audio Track 1 and 2 each have a **Send** established, with the output set to **Bus 1-2**. This allows the playback signal of the tracks to be "tapped" and routed to a common destination track.

Note that the **Track Output** is still set to the Mbox 2 Interface **Out 1-2**.

The track slider will still control the playback level of the (non-effected) Audio track that is routed to the main output.

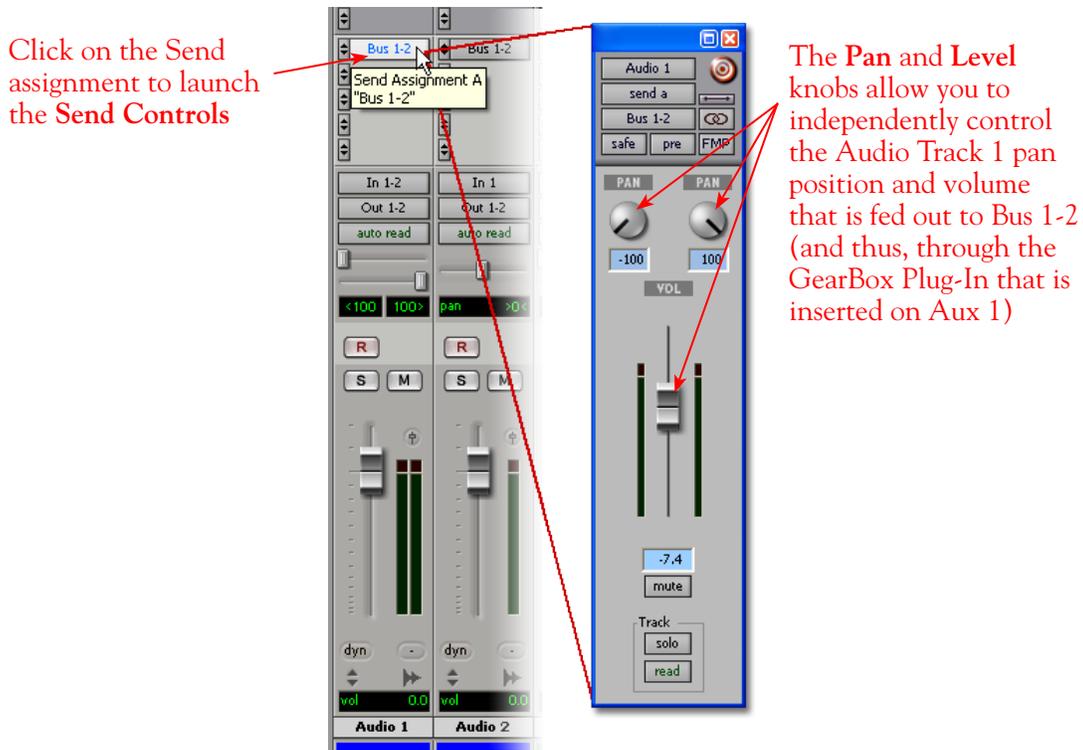


The **GearBox Plug-In** is added as an **Insert** only on this stereo **Aux 1** track.

The Input for this **Aux 1** track is set to **Bus 1-2**, therefore, the Send signals coming from Audio Tracks 1 and 2 will now be fed into this Aux 1 track, and both effected by the GearBox Plug-In.

Use the **Aux 1** track's volume slider to blend the GearBox-effected signal in with the (non-effected) Audio Track 1 and 2 signals at the main Mbox **Out 1-2**.

The Pro Tools LE 7 Mix window - Two Audio Tracks routed to a Send, returning into Aux 1



The Send Controls for Send A routed from Audio Track 1

It is also possible to add the GearBox Plug-In as an Insert effect on a Master track in your session, which can then effect *all* the audio tracks in the session! Pro Tools LE offers quite a few more signal routing options that allow you to get very creative with the mix of your session - please check your Digidesign documentation for details.

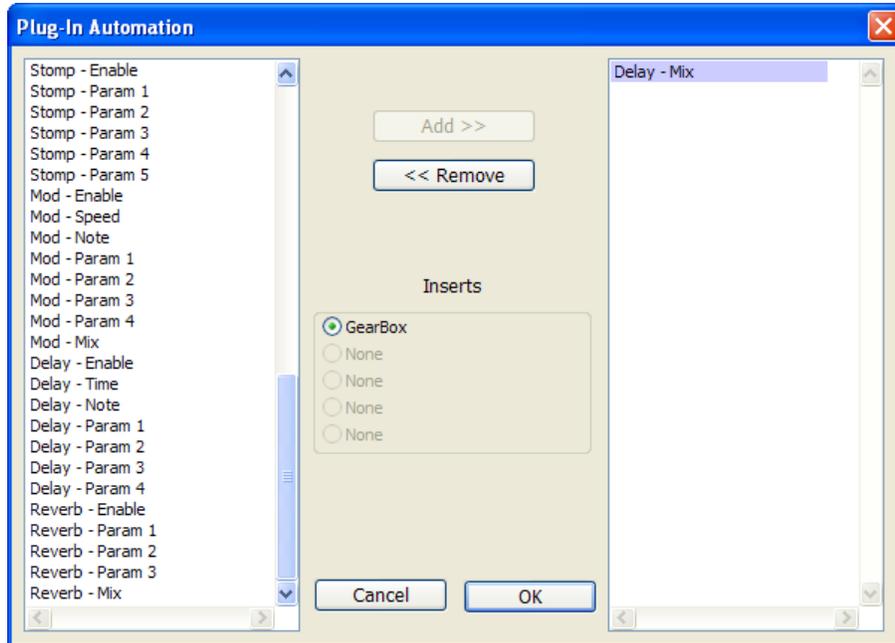
Automating GearBox Plug-In Parameters

Once the GearBox Plug-In is loaded on any type of track as an Insert, you can further configure the track to automate many of the GearBox parameters. Parameter automation can be done by manually shaping an envelope across the track, or even in real-time by recording parameter moves! Here is an example on how to configure a Pro Tools LE track to automate the GearBox Analog Delay - Mix parameter so that the amount of delay effect changes over time on the track...

With the GearBox Plug-In loaded as an Insert on the Audio 1 track, launch the Plug-In dialog and click on the **auto** button to launch the **Plug-In Automation** dialog.



You'll see all the automatable GearBox parameters listed in the left column of the dialog. Select the **Delay - Mix** parameter in the left column and click the **Add >>** button to enable it. In the screenshot below, the GearBox Delay-Mix parameter has been "added" as an automatable parameter for the Audio 1 track. You can add as many parameters as you like for the track and automate any of them, but for this example we'll keep it simple.



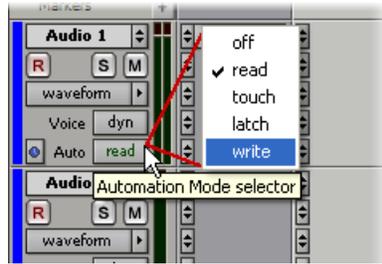
The Plug-In Automation dialog, showing all the available GearBox parameters that can be automated

Once the **Delay-Mix** parameter is added, click on the Track Selector button for Audio Track 1 and select it. This will display an editable envelope line across the audio track display.

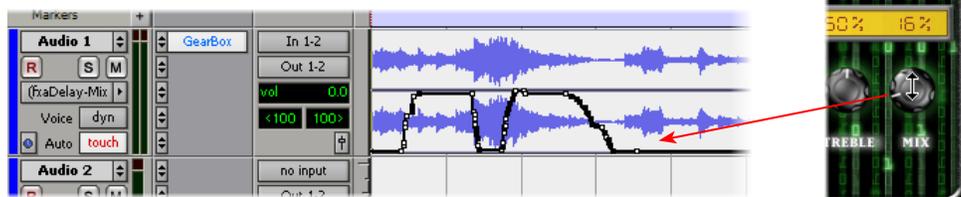


Click on the Envelope line to create edit points, and then drag an point up/down to adjust the Delay-Mix level. Play the session to hear the changes

Or, you can set the track to "write" automation in real time. Click on the **Automation Mode Selector** for the Audio 1 track and choose one of the **write** modes (**touch**, **latch** or **write** - please see your Pro Tools LE documentation about the differences for these modes).



Launch the GearBox Plug-In dialog and select the Delay effect so that you can access the Delay - Mix knob. Now when you hit Play in your Pro Tools session, adjust the GearBox Plug-In Delay - Mix knob in real-time while listening to the session. The moves you make will be “written” to the envelope line in the track. Stop playback to stop writing automation.



You can set the Automation Mode to **read** if you are done writing automation on the track. You can of course manually click and drag the envelope edit points to further fine-tune things if you like.

Note: The GearBox Plug-In dialog does not visually indicate what parameters are ‘armed’ for automation, and does not allow automation of some parameters, including model select and pre/post switches. Please see the [GearBox Online Help](#) page for additional info on known issues and compatibility.

Using Control Surface Devices

GearBox Plug-In parameters can be controlled remotely from some control surface hardware units, but does not provide easily readable parameter names for hardware LCD displays, and does not support all control surface possibilities. Please see the [GearBox Online Help](#) page for additional info on known issues and compatibility.

MAC[®] AUDIO APPLICATIONS

The following chapters cover the setup of Line 6 GearBox software and TonePort, GuitarPort, POD X3 and PODxt devices with several popular Mac audio recording applications. The examples used in these Setup chapters all utilize Apple OS X version 10.4 (Tiger).

Note that GearBox version 3.5 and the Line 6 audio device drivers do not officially support Apple OS X[®] version 10.5 (Leopard). For the latest news and developments on GearBox, audio drivers and OS X[®] support, please visit the [GearBox Online Help](#) site.

You can use the following links to jump to the chapter that covers your specific application...

[Ableton Live[®]](#)

[Apple GarageBand[®]](#)

[Apple Logic[®] Pro](#)

[Digidesign[®] Pro Tools[®] LE](#)

[MOTU Digital Performer[®]](#)

[Propellerhead Reason[®]](#)

[Sonoma Wire Works RiffWorks[®]](#)

[Steinberg Cubase[®]](#)

[Windows audio applications](#)

ABLETON LIVE® 7 SETUP

For this document, we'll show how to configure Ableton Live® version 7.01 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device. The steps are very similar for the setup of other Live versions as well, including the Ableton Live Lite 5, Line 6 Edition version that comes included with some Line 6 TonePort packages.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Mac® to Use Your Line 6 Hardware

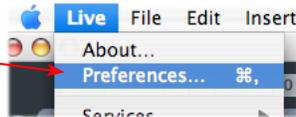
If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Configuring Live to Use the Line 6 Core Audio Driver

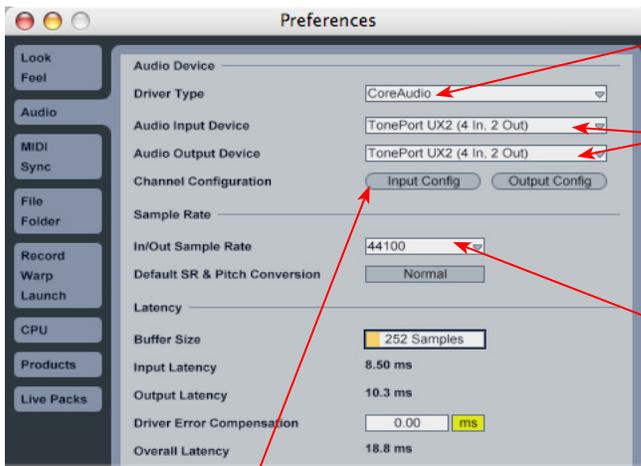
Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the Ableton Live Preferences dialog:

Go to the Live menu and choose **Preferences**



Go to the **Audio** tab



Choose **CoreAudio** as the driver type...

Then choose your Line 6 device for both the **Input** and **Output Audio Device**. In this example, we'll choose our connected **TonePort UX2**

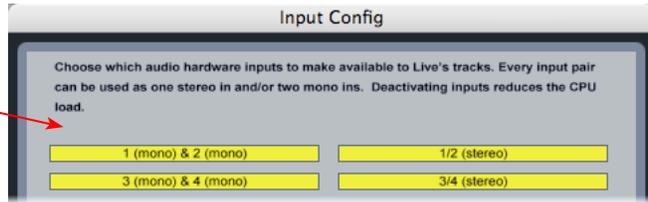
Set a **Sample Rate** – **44, 100** is a good choice here, or you can use 48,000, 88,200 or 96,000 Hz if your Project requires a higher sample rate

Just as with most Multitrack recording software, in Live you also need to configure the individual inputs and outputs once a Multi-in/out device is selected. Click on the **Input Config** button to access the Inputs.

Activate Inputs:

Here you can “activate” all the inputs from your Line 6 hardware that you want to be accessible for any audio track as a track input for recording

Click **OK** when done



You’ll want at least the **1 (mono) & 2 (mono)** and the **1/2 (stereo)** inputs activated. Each additional activated input utilizes more CPU, so only activate the ones you need!

Note that you’ll see a different number of inputs listed in the **Input Config** dialog depending on the specific Line 6 device you are using. Typically these enumerated inputs correspond to the Line 6 device’s Sends of the same number (i.e. - Live’s input “**3/4 (stereo)**” is the TonePort UX2/GearBox Send 3-4). More about this when we get to the part about setting up your audio track.

TonePort GX, D.I. UX1, UX2 and KB37: You will see 4 Mono inputs and 2 Stereo inputs, as pictured above.

TonePort UX8: You’ll see 12 Mono inputs and 6 Stereo inputs.

TonePort UX8’s driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

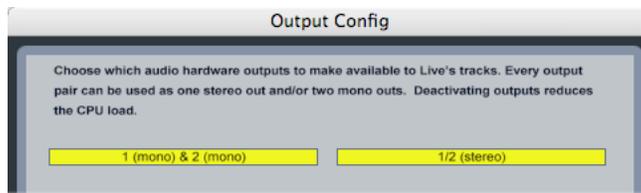
POD X3 devices: You’ll see 8 Mono inputs and 4 Stereo inputs.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog’s Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot’s Handbook*.

PODxt devices: You’ll see 2 Mono inputs and 1 Stereo input.

Activate Outputs:

To access the outputs, click the Output Config button back in the Live Preferences > Audio tab. This will show you all outputs available for your selected Line 6 Output Device.



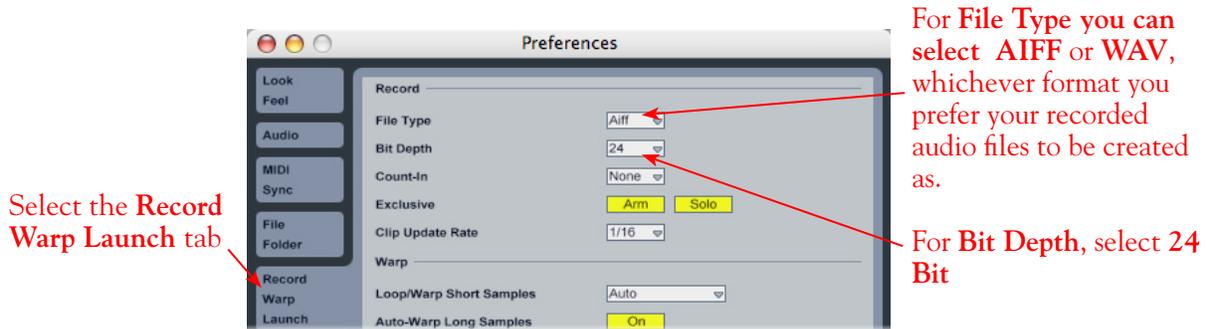
For all Line 6 devices (except TonePort UX8), the CoreAudio driver offers is only Output 1/2, therefore the dialog will show its two mono and 1 stereo output options, and they will automatically be selected.

TonePort UX8: You'll see 8 mono and 4 stereo outputs. For most Live projects, you likely only need to enable the Output 1/2 mono and stereo options and assign all track playback to one common output. UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Mac Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Note - The Ableton Live Lite 5, Line 6 version has a restriction that allows only one stereo output to be used at a time. To be able to choose two or more different output devices in a Live Set, you must switch into Demo mode, or upgrade to a full version of Ableton Live

Configure Record Options...

Back to the Live Preferences dialog, now select the Record options.



Configuring an Audio Track for Recording

Now that your Line 6 hardware is set up, you are ready to start working in a Live Set! Create a new Live Set (or open an existing one) and insert a new audio track to record into...



In the following example, we've inserted two audio tracks, assigned their outputs to the "Master" track, and assigned the Master Output to the stereo Main 1/2 output of our Line 6 device (TonePort UX2). For Audio Track inputs, note that you can select from the mono or stereo inputs of your Line 6 device, which you "activated" in the previous steps. If you choose a stereo input, a stereo audio file will be recorded into the track, and likewise, if you choose a singular mono input, a mono file will be recorded.

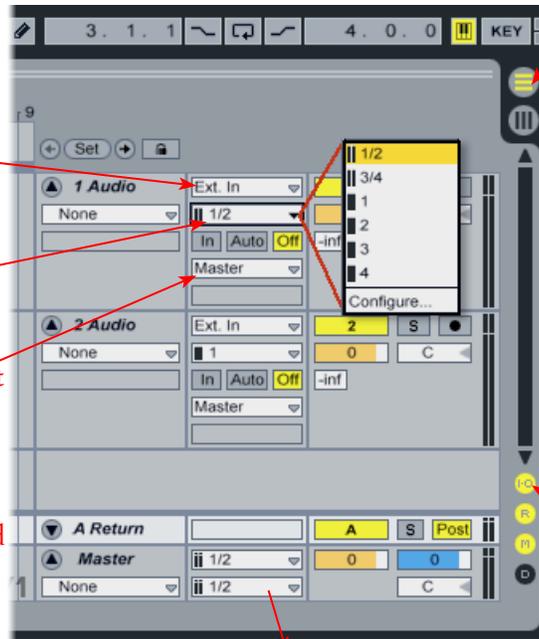
To configure your Audio tracks...

Choose **Ext. In** for the **Input Type**

Then choose the stereo or mono input you want to record from

Set your Audio tracks' **Output** to **Master**

Note that here we've chosen to record from TonePort's Send 1-2 for track 1, and Send 1 for track 2



Choose the **Arrangement View**

(Alternatively, you can access all these same settings in the **Session View** if you prefer)

Click the **I-O** toggle button to display the Input/Output settings for the tracks



On the **Master** track, choose the stereo **Out 1/2** of your Line 6 device for both the **Cue Out** and **Master Out**

* Note that the Master Track offers two Output selectors. The top selector is to set a "Cue Out", which allows you to route a separate output for playback of browser clips and previews. If you have a TonePort UX8, then you can set this Cue Out to a different stereo output to allow you to listen to previews on a completely separate headphone or speaker out. Please see Live's documentation regarding the Cue Out feature. For all other Line 6 hardware, set both Master Outs to the same Out 1/2.

Set Input Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable Ableton Live's **Input Monitoring** option so that the input monitor signal is not additionally fed through the software*.



Click the audio track's **Monitor Off** button

* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your Live audio track and turn Monitoring to "Auto" to monitor your input signal through the software, and thus through the GearBox Plug-in processing. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In with Ableton Live!.

Arm Your Track & Set Your Levels...



Click the Arm button to arm the audio track for recording

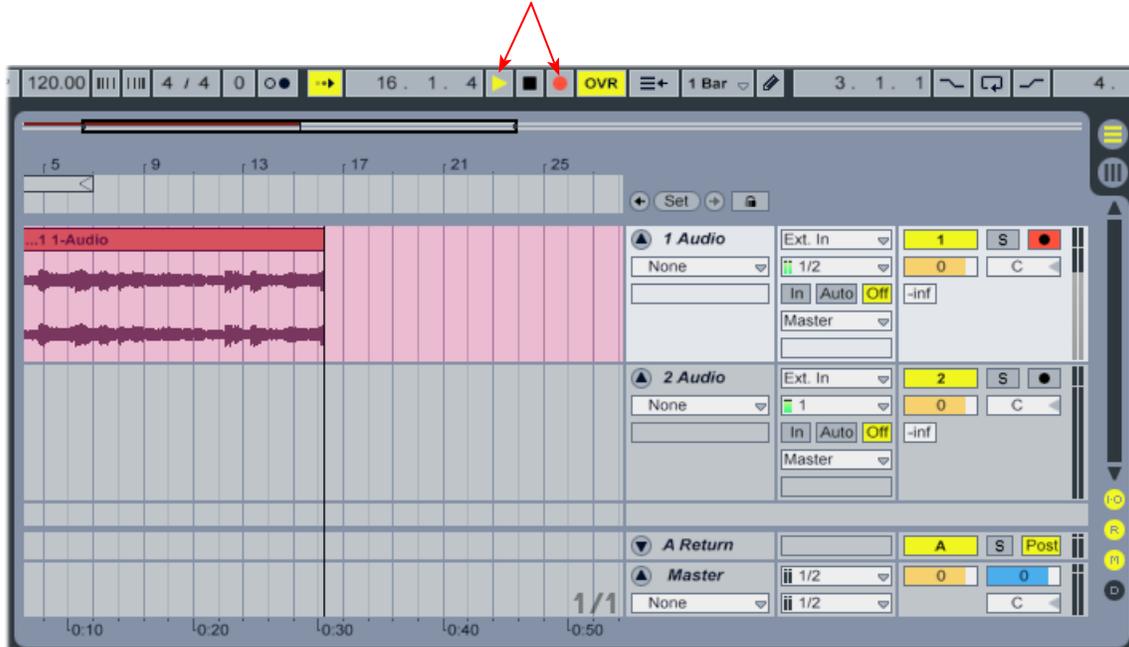
Note that you'll see the meters measure your input recording level once the track is armed



If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Live

Start Recording!

Once your record level is set, click on Live's transport **Record** button to put it into Record Mode, then press **Play** and start riffing!



APPLE GARAGEBAND® '08 SETUP

For this document, we'll show how to configure Apple GarageBand '08® to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

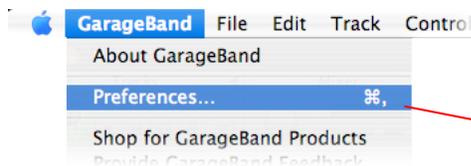
Configure Your Mac® to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

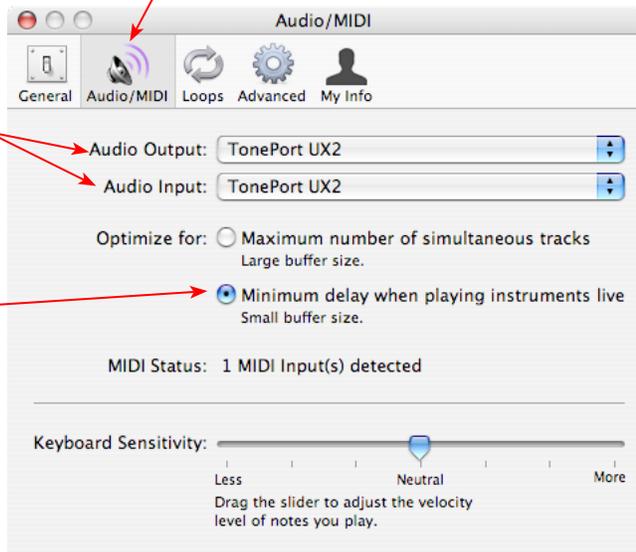
Configuring GarageBand to Use the Line 6 Core Audio Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch GarageBand and choose Preferences from the menu:



Select **Audio/MIDI**



Select your Line 6 device for both the **Audio Output** and **Audio Input**

Set the **Optimize for** option to **Minimum delay...** for the best performance. If your session is large and you start getting audio drop-outs, come back here and choose the **Maximum...** option

Note that after selecting your device each time you will be prompted if you want to change the audio driver - click **Yes** for this prompt



Configuring an Audio Track for Recording

Now that your Line 6 hardware is set up, you are ready to start working in a new project!

Open or create a new GarageBand song project and make the following settings...

Select **New Track** from the GarageBand **Track** menu

Select **Real Instrument**

Choose **Basic Track**

For the **Input Source**, you'll see all the available **Mono** and **Stereo** Inputs for your **Line 6** device - choose the one you want to record from.

Leave **Monitor** set to **off** *

Adjust the **Recording Level** slider to around **75%** - this will affect the amplitude of the signal being fed into the GarageBand Track, but it is best to keep it at this moderate setting and use your **Line 6** hardware and/or **GearBox Send** controls to adjust your level

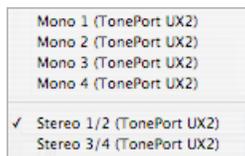
Keep the **Automatic Level Control** unchecked

* Optionally, if you are using the **GearBox Plug-In**, you can load the **Plug-In** on your GarageBand audio track and turn **Monitoring "ON"** to monitor your input signal through the software, and thus through the **GearBox Plug-in** processing. See the [Using the GearBox Plug-In](#) chapter for more info.

About Input Source Options...

In the GarageBand **Input Source** menu, you will see slightly different options depending on your specific **Line 6** device:

TonePort GX, D.I. UX1, UX2 and KB37: You'll see options similar to this...

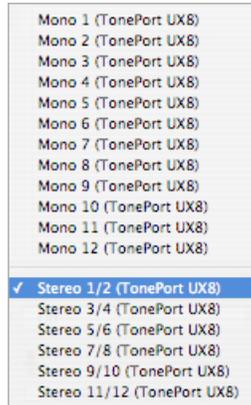


- The individual **Mono 1** thru **4** options will receive input from the respective **GearBox Send 1**

thru 4, and will record a mono file.

- The Stereo 1/2 and Stereo 3/4 options will receive input from the respective GearBox Send 1-2 and 3-4, and will record a stereo file.

TonePort UX8: You'll see the following options:



- The individual Mono 1 thru 8 options will receive input from the respective TonePort UX8 Send 1 - 8, and will record a mono file.
- The individual Mono 9 thru 12 options will receive input from the respective GearBox Send 9 thru 12, and will record a mono file.
- The Stereo 1/2 thru Stereo 7/8 options will receive input from TonePort UX8's respective Send 1-2 thru Send 7-8, and will record a stereo file.
- The Stereo 9/10 and Stereo 11/12 will receive input from the respective GearBox Send 9-10 and Send 11-12 and will record a stereo file.

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more info.

POD X3 devices: You'll see the following options:



- The individual Mono 1 thru 8 options will receive input from the respective POD X3 Send 1 thru 8, and will record a mono file.
- The Stereo 1/2 thru Stereo 7/8 options will receive input from the respective POD X3 Send 1-2 thru 7-8, and will record a stereo file.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

PODxt devices: You'll see the following options:



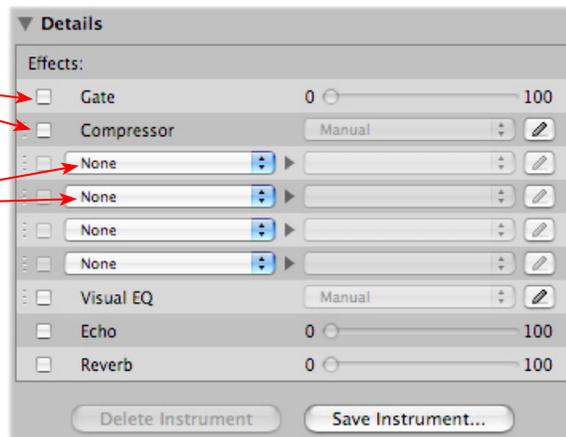
- The individual Mono 1 and 2 options will receive input from the respective PODxt Send 1 and 2 (or GearBox Sends 1 and 2 if GearBox is in use), and will record a mono file.
- The Stereo 1/2 will receive input from the respective PODxt Send 1-2 (or GearBox Send 1-2 if GearBox is in use) and will record a stereo file.

Turn off any Track effects...

GarageBand offers a number of optional track effects, and some are typically on by default on a new Audio Track. You probably want to toggle them off if you prefer to use just the effects of GearBox or your POD device (or if you are using the GearBox Plug-In). To get to the track effects, click on the Details twirl-down arrow:

The "built-in" track effects can be enabled/disabled via the checkboxes.

To load your own Audio Units Plug-In (such as the optional GearBox Plug-In) access one of the effect slot menus



Arm your track...

Click here and type in name for your track

Press the Arm button to prepare your track for recording

Note that the track meters measure the device/GearBox input signal once the track is armed





Click on the transport **Record** button and start recording!

APPLE LOGIC[®] PRO 8 SETUP

For this document, we'll show how to configure Apple Logic[®] Pro 8 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device on a Mac[®] OS X[®] 10.4 (Tiger) system. The steps are very similar for the setup of Apple Logic[®] 8 Express, as well as other recent Logic versions.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

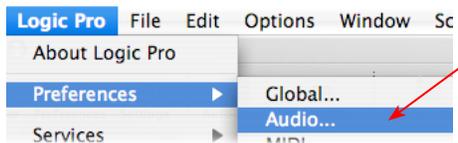
Configure Your Mac[®] to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

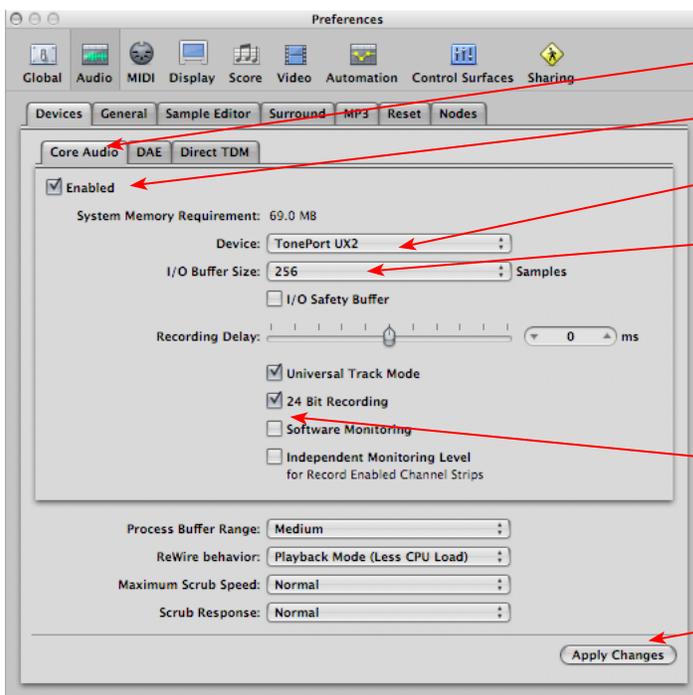
Configuring Logic Pro to Use the Line 6 Core Audio Driver

Launch the Logic Pro application. If a project opens, go to Logic's **File** menu and select **Close Project** to exit it.

Open the Logic Preferences...



Go to the **Logic Pro** menu and choose **Audio...**



Click on the **Core Audio** tab

Check the **Enable** box

Select your Line 6 device

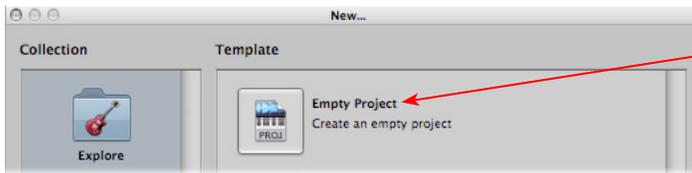
Set the **I/O Buffer Size** to 256. If you encounter audio drop-outs in your Logic Pro Projects, come back here and raise this to a slightly higher value

Check the box for **24 Bit Recording**

Click **Apply Changes** when done

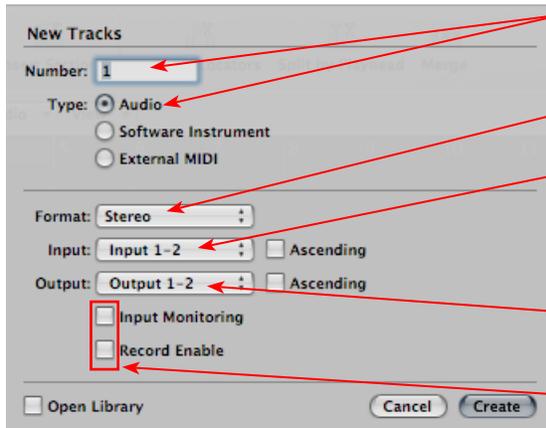
Create & Configure a New Project

Go to the File menu and select New...



In the New... dialog, choose **Empty Project**

Typically, Logic will immediately prompt you with the **New Track** dialog, where you can create one or more audio tracks, and designate the track's input and output.



Type in the number of tracks and type to be created - we'll just add one audio track...

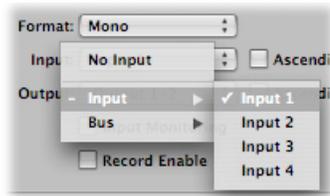
Choose **Mono** or **Stereo** for the track **Format**

For the **Input** options, you'll be able to select either an individual mono input or stereo input, depending on your **Format** selection*

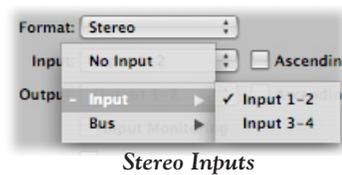
The Audio tracks' **Output** Routing should default to your Line 6 device's **Output 1-2** (see below regarding TonePort UX8's Output options)

Keep **Input Monitoring** and **Record Enable** unchecked

*When the **Mono Format** is chosen, you'll see one mono Input option for each Send channel that your Line 6 device offers. Likewise, if the **Stereo Format** is chosen, you'll see one stereo Input option for each Stereo Send your hardware offers. Since we're using a TonePort UX2, the track Input options appear like this...



Mono Inputs



Stereo Inputs

You'll have a different number of track Input and Output options available depending on your specific Line 6 device:

TonePort & GuitarPort devices (except TonePort UX8): You will see 4 Mono Inputs and 2 Stereo Inputs, as pictured above.

TonePort UX8: You'll see 12 Mono inputs and 6 Stereo inputs.

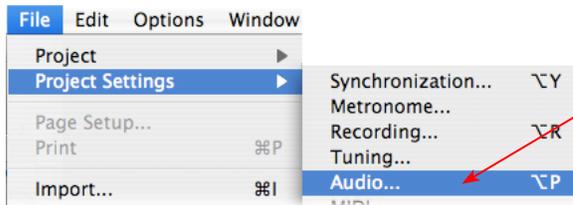
TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

POD X3 devices: You'll see 8 Mono inputs and 4 Stereo inputs.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

PODxt devices: You'll see 2 Mono inputs and 1 Stereo input.

Next, we need to select a sample rate for our Project...

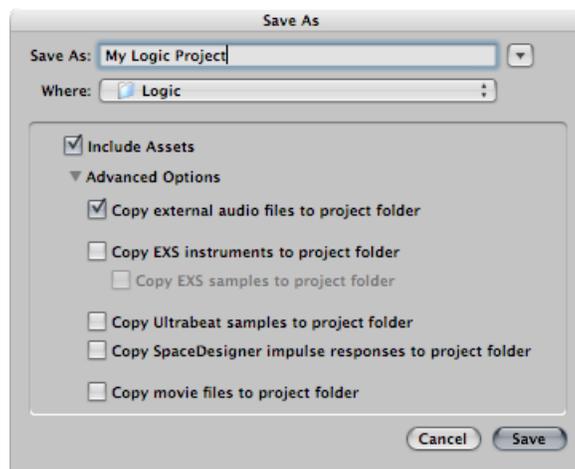


Select the Project Settings > Audio dialog from the File menu

44,100 Hz is a good choice for your Sample Rate, or you can choose 48,000, 88,200 or 96,000 Hz if your project specifically requires one of these higher rates



Now that the Project is all configured, it's a good time to Save It! Go to File > Save and type in a name and choose a directory to Save to.

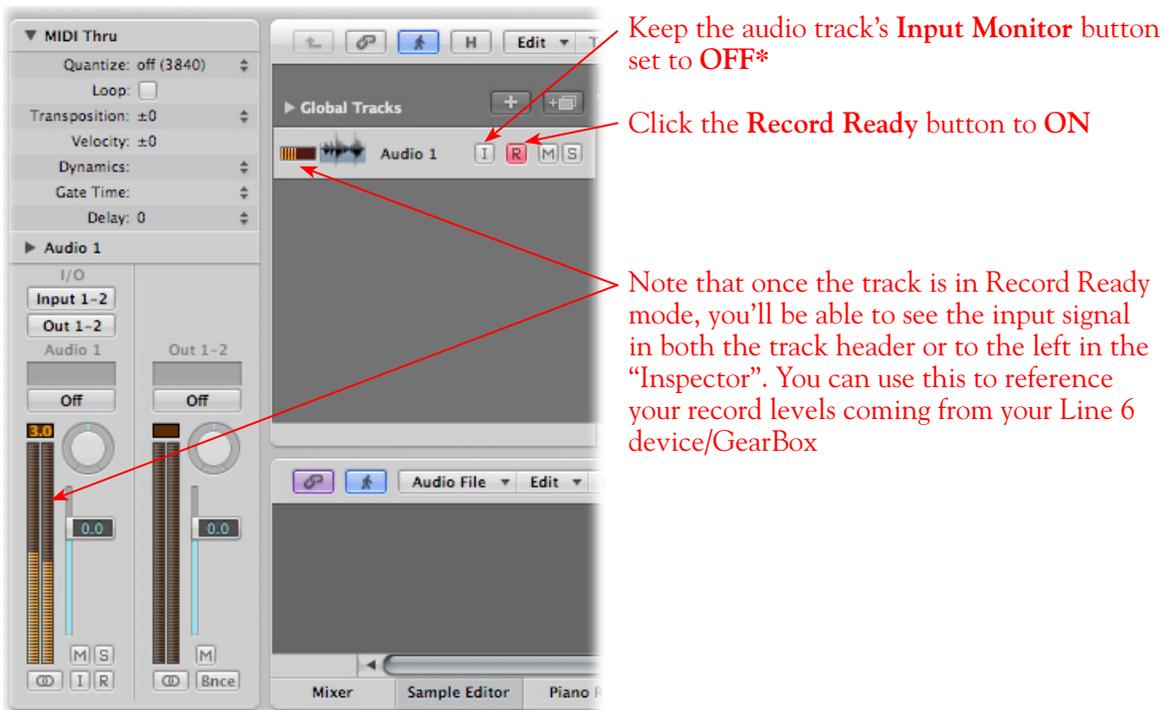


Configuring an Audio Track for Recording

A few more quick settings to cover for the audio track...

Set Input Monitoring Options and Get Armed and Ready...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable the Cubase "Monitor" option on our Audio track so that the input monitor signal is not additionally fed through the software*.



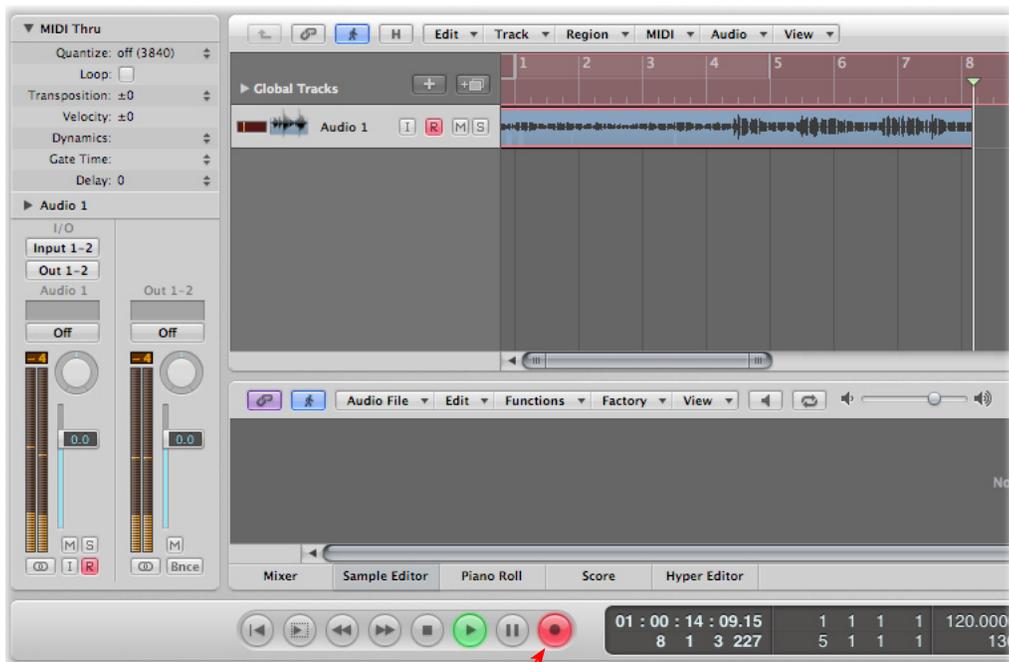
* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your audio track and turn the Input Monitor button "ON" to monitor your input signal through the software, and thus through the GearBox Plug-in processing. Please see the Logic Pro Help documentation for Input Monitoring options. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In!

Be sure to set your record levels before you start recording...

If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Cubase



Start Recording!



Once your record level is set, click on the transport **Record** button and start riffing!

DIGIDESIGN[®] PRO TOOLS[®] LE[™] 7 SETUP

Digidesign[®] has designed Pro Tools[™] software so it can only be used with a Digidesign[®] or M-Audio[®] audio interface; you cannot use your Line 6 hardware as the primary audio interface for a Pro Tools system. But you can still enjoy the benefits of your Line 6 USB device and legendary tones by connecting to the Digidesign interface's inputs. TonePort UX2, UX8, KB37, POD X3 and PODxt PRO even let you do this with a direct, digital connection.

For this document, we'll be showing how to connect to the Digidesign[®] Mbox[®] 2 unit with Pro Tools LE[™] 7.3.1, but these steps are similar for connecting to the Digi 002[®] or other Digidesign and M-Audio hardware as well. There are two methods described here – Recording from a Line 6 USB device's analog outputs or digital S/PDIF outputs.

Note that it is not necessary to have both your Line 6 hardware and Digidesign hardware connected to the same computer. You can alternatively have your Line 6 and Digidesign hardware on separate computers since the two devices are indeed operating individually!

Recording[®] from Your Line 6 Hardware's Analog Outputs

In this setup example, we'll show how to connect a TonePort UX2 to a Digidesign Mbox 2 unit, but it is of course possible to record from the analog output of any Line 6 device in much the same way. We will call out where different steps might be necessary for other Line 6 hardware.

Note that if you are using a POD X3 or PODxt device it is not necessary to connect your POD to a computer via USB at all for this type of analog connection. GearBox is not necessary for any POD, PODxt or POD X3 unit since Tones can be by called up, edited and output levels configured completely on your POD device! However, if you want to use GearBox with any PODxt family device, you certainly can if you connect to the USB port of a computer - as mentioned above, it does not necessarily have to be the same computer that Pro Tools is running on.

Be sure to connect the USB cable from TonePort into your computer's USB port, and then proceed with the following steps...

Connect the Analog Outputs* from your Line 6 hardware to the Digidesign Mbox 2:

Connect a USB cable to your device & computer's USB port

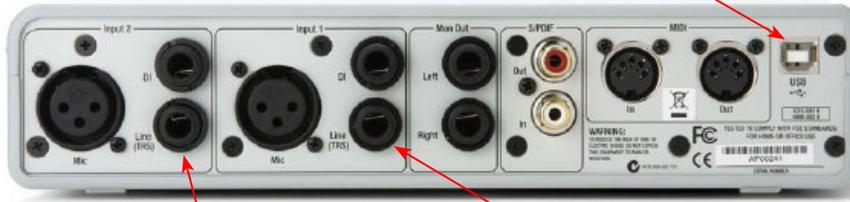
Using two ¼" to ¼" shielded TS or TRS audio cables, plug each into the Analog Outs of your device



*Note - If you are using a GuitarPort device the Analog Outs are the RCA style jacks labelled "L" and "R". If using a TonePort UX8, you should connect to the "Out 1" and "Out 2" jacks on the back.

Plug the other end of the left audio cable into the Mbox Input 1 input, and the right audio cable into the Mbox Source 2 input.

Connect a USB cable to your Mbox 2 & computer's USB port



From your Line 6 device's **Right Analog Out** (or "Out 2"), connect to the Mbox 2 **Input 2 - Line input**

From your Line 6 device's **Left Analog Out** (or "Out 1"), connect to the Mbox 2 **Input 1 - Line input**

You will still use the Mbox 2 **Mon Outputs** (or Headphone Output) to hear playback of all Pro Tools LE audio. The Line 6 Hardware/GearBox audio will be mixed with the Pro Tools LE audio as well. Therefore, if you are using headphones, you'll want to plug them into the Mbox 2 headphone jack to hear everything:



From the Mbox **Mon Out** jacks, connect to the Left and Right inputs for your powered speakers or monitoring system

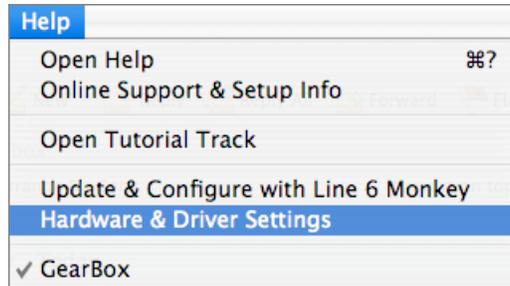
If you want to use headphones for monitoring, plug them in to the Mbox 2 **Headphone Out**



Next, before you launch Pro Tools LE, make sure that your Mac is configured properly for your Line 6 hardware. This configuration is slightly different depending on which specific Line 6 hardware you are using:

TonePort, GuitarPort and PODxt Devices

Since you will be using GearBox along with your device, you'll want to consult the *GearBox Help* PDF that is installed with GearBox - just launch GearBox and select **Open Help** from the Help menu. In the *GearBox Help* document, please reference the **Driver Panel & Recording** chapter and the details for your specific Line 6 device. (For more info about POD X3's driver & Sends, please see the earlier [Audio Driver & GearBox Settings](#) chapter.)

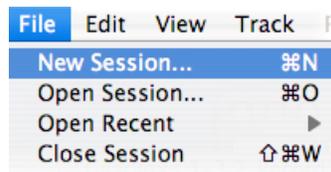


POD X3 Devices

Please check the POD X3 Pilot's Handbook that came in the box with your POD X3. Or, you can download this Handbook in PDF form from the [Line 6 User Manual downloads](#) page. In particular, the **Reference: Configuration & Setup** chapter covers the options for choosing your inputs (Mic, Line, Instrument, or multiple input sources) as well as things such as a Tone Blend versus Tone Pair tone setting, panning tones and effects, etc. Basically, this is the point where you'll want to have your instrument or mic plugged into POD X3 and have your tone sounding the way you want it be recorded. You'll also want to be sure the panning and levels of the tones and effects feeding to the POD X3 Left and Right analog outs are the way you want each to be recorded into your Pro Tools track(s). (For more info about POD X3's driver & Sends, please see the earlier [Audio Driver & GearBox Settings](#) chapter.)

Creating a New Pro Tools LE Session

Once you have your Line 6 hardware and GearBox configured (if using GearBox), then the next step is to launch Pro Tools LE and set up a Session for recording...



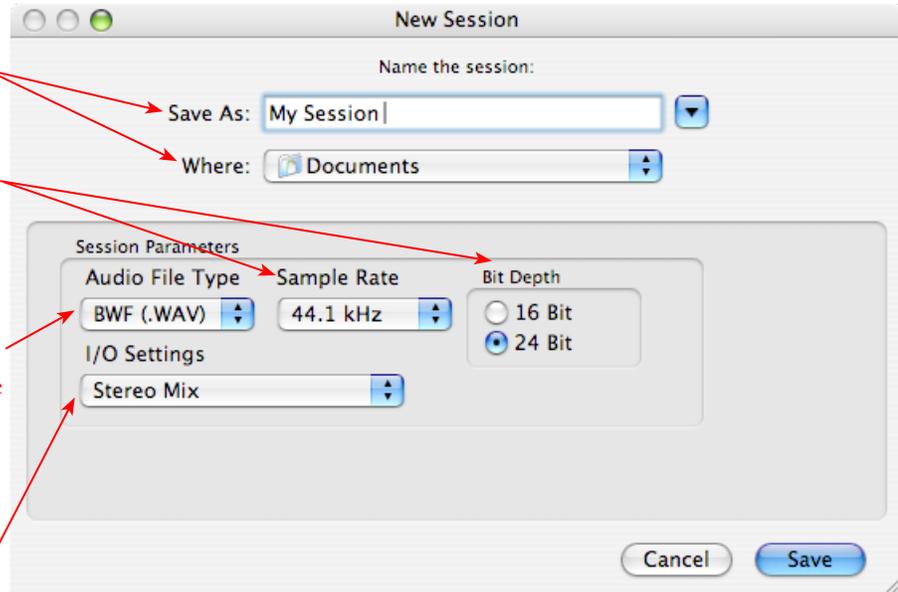
To start a new Session in Pro Tools LE, choose **New Session** from the **File** menu

Type in a title for the Session and choose where to save it

Choose the **Sample Rate** and **Bit Depth** - 44.1 kHz and **24 Bit** are good choices unless you have specific needs for your project

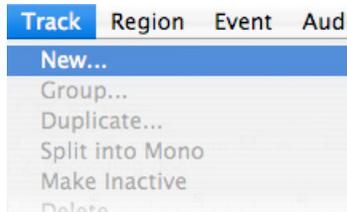
File Type - BWF (.WAV) is a good choice here since this file type is compatible with both Mac and Windows

For **I/O Settings**, **Stereo Mix** is best



Create and Configure a New Audio Track

Next you'll need to create at least one new audio track in the session to record into. You can of course also create more audio tracks if you want to import existing audio files into this session...



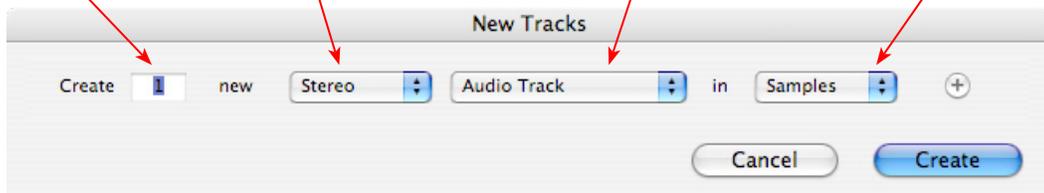
In the **Track** menu, select **New...**

Choose how many Tracks to create

Choose **Mono** or **Stereo*** for your audio track format

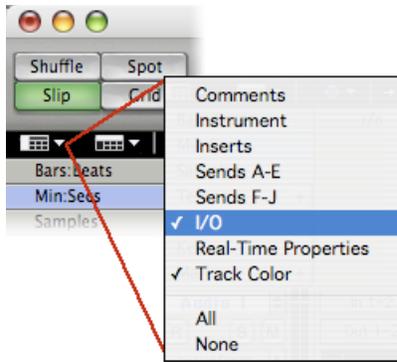
Choose **Audio Track** for the Track type

Choose **Samples**



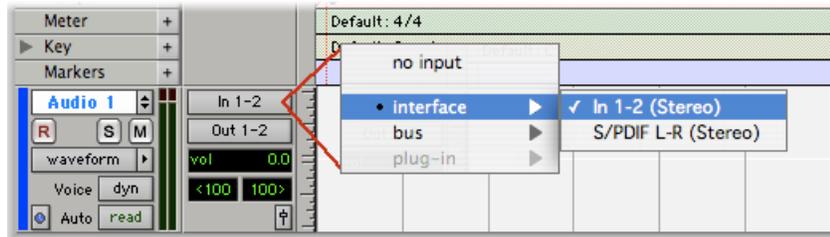
...Then click **Create**

*You'll need to decide before creating your recording track here if you want to record the output from your Line 6 hardware/GearBox as Mono or Stereo. Mono will of course only record one of your Line 6 device's (Left or Right) outputs, and you'll choose which once the track is created. If you have stereo effects active on your GearBox or POD tone, then you'll probably want to choose Stereo to record both channels into a stereo track.



At the top left of the Edit Window, click the View selector and enable the I/O View

On the new audio track, click on the **Input Selector** and choose the Mbox **Interface** input source. Since we created a Stereo track here, we'll select the **In 1-2 (Stereo)** to record from the Mbox Mic/Line (analog) inputs



Or... if you created a mono audio track, you'll have the option for the track input to choose either **In 1 (Mono)** to capture the LEFT signal, or **In 2 (Mono)** to capture the RIGHT signal:



Click the **R** button to arm the audio track for recording

The track meters will now measure the Line 6 Device/GearBox signal level



Click the **M** button to mute the track while recording*

*Muting the track during recording disables the Pro Tools LE software monitoring feature, which allows your Line 6 Hardware/GearBox analog input signal to be monitored with the lowest latency possible. Adjust the Mbox MIX knob to balance the session audio playback with the input audio (see your Mbox documentation for details). Once you are done recording, un-mute the track so you can hear playback.

Note to Digi 002 users... when using the Digi 002 hardware with Pro Tools LE, an additional Low Latency Monitoring option is available within Pro Tools LE Operations menu. You can alternatively keep your track un-muted and activate this option to hear your input monitoring signal when recording (see your Digi 002/Pro Tools LE documentation for more on this feature).

Set your Recording Levels - As shown above, once your audio track is armed, you can use the track's meters to gauge your recording levels. Note that the levels coming into the track are affected by a few different controls. If you are using GearBox, then the output level is affected by the Tone volume as well as the main Monitor volume. Also, the main Output or Master Volume knob on your Line 6 hardware unit affects the signal level going out the Analog Outs. Finally, the Mbox unit includes level knobs for Inputs 1 & 2 to adjust the incoming signal level. The best practice is to set all of these controls to roughly half way to start, and then adjust each of them slightly to achieve the optimum level. You want to avoid setting any one control very high or very low to avoid excess noise or degrading the signal quality.

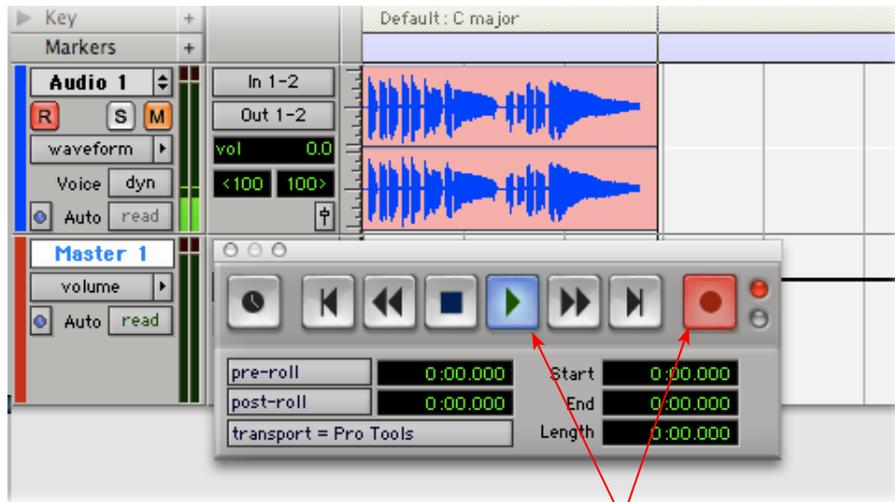
Be sure the input switches are set so that the green **Mic** light is illuminated for both Inputs 1 & 2 (since we're plugging into these Mic/Line inputs)



Keep both the **Mono** and **48V** (phantom power) switches off

Use the **Input 1 & 2** knobs to adjust the recording levels

Start Recording...



Click the transport **Record** button to place Pro Tools LE into record mode, then press the **Play** button to start recording!

Recording from Your Line 6 Hardware's S/PDIF Outputs

TonePort UX2, UX8, POD X3 and PODxt Live units all include S/PDIF outputs, therefore you can optionally connect these outputs to your Digidesign or M-Audio hardware to record digitally into Pro Tools or Pro Tools LE! In this setup example, we'll show how to connect a TonePort UX2 to a Digidesign Mbox 2 unit, and will call out where different steps might be necessary for the other Line 6 devices.

For more information regarding using your Line 6 device's S/PDIF connections, please also see the earlier section titled [S/PDIF Digital Output from Line 6 Hardware to an External Device](#). The *Pilot's Handbook* that came with your Line 6 device includes more useful information as well.

Connect Your Hardware...



Using a 75-Ohm, coaxial S/PDIF cable, plug one end into the **S/PDIF Digital Out** of your Line 6 device



Plug the other end of the S/PDIF cable into the Mbox **S/PDIF In**

If you want to use headphones for monitoring, plug them in to the Mbox 2 **Headphone Out**

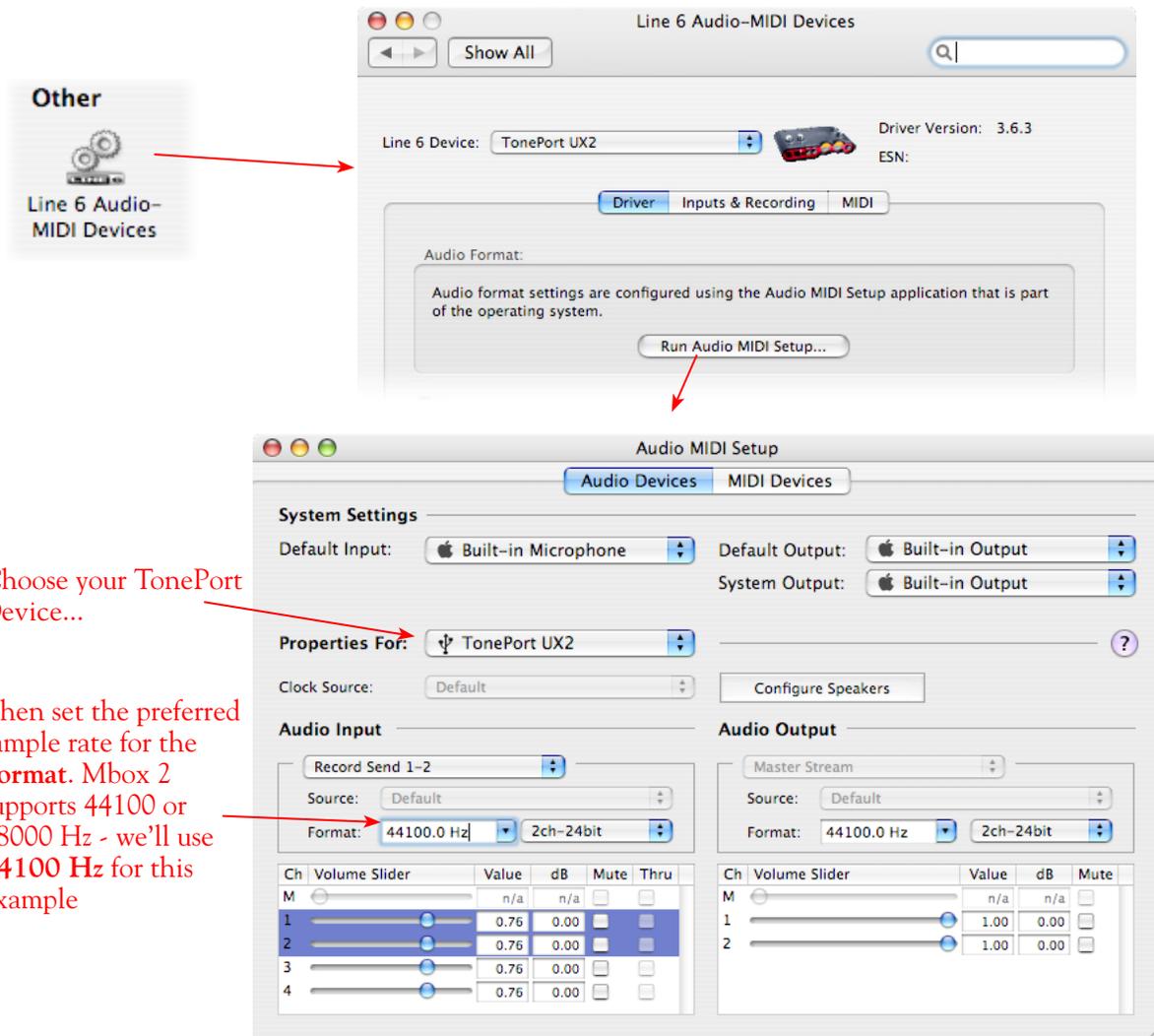
From the Mbox **Mon Out** jacks, connect to the Left and Right inputs for your powered speakers or monitoring system



You will still use the Mbox Monitor Outputs (or Headphone Output) to hear playback of all Pro Tools LE audio. The Line 6 Hardware/GearBox audio will be mixed with the Pro Tools LE audio if you use the Pro Tools software monitoring function. See the later section regarding monitoring for more on this.

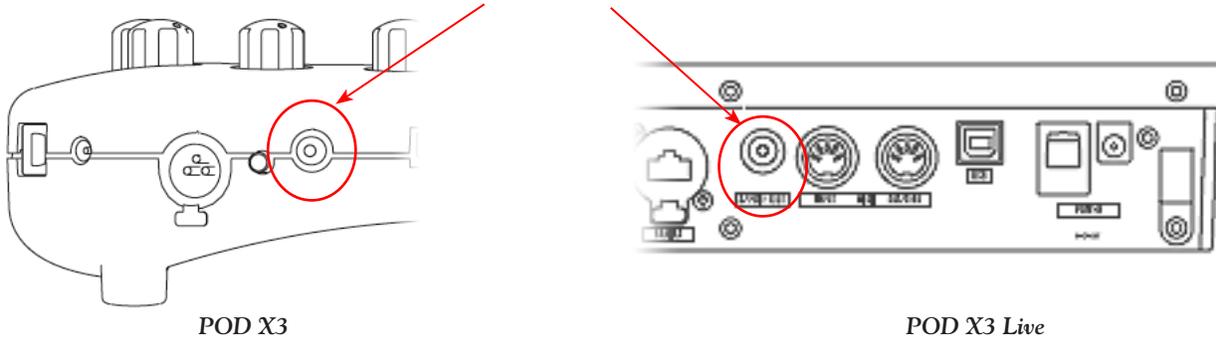
TonePort UX2, UX8 & KB37 Configuration

When connecting two hardware devices digitally, it is necessary that both units are set to operate at the same sample rate. For TonePort devices, this is configured in the Mac Audio-MIDI Setup dialog. To get to this dialog, launch your Mac **System Preferences** and choose the **Line 6 Audio-MIDI Device** item in the “Other” category. In the Driver page, click the **Run Audio MIDI Setup** button:

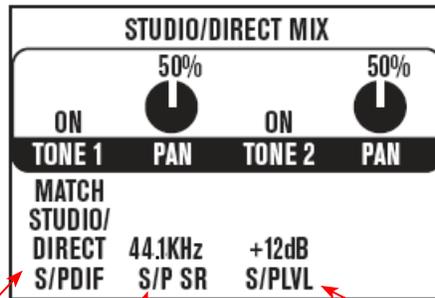


POD X3 S/PDIF Configuration

Connect the **S/PDIF Out** on the rear panel of your POD X3 device to the **S/PDIF Input** on the Mbox



The S/PDIF Out sends out 24-bit digital versions of the Left & Right Outputs. Press the **OUTPUTS** button to access additional S/PDIF options:



For **S/PDIF**, you likely want the **MATCH STUDIO/DIRECT** option*

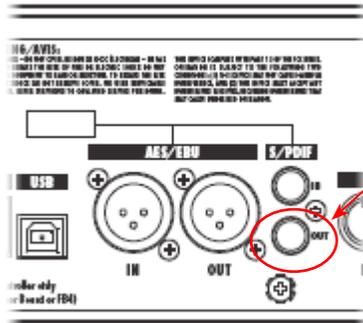
For the **S/P SR** options, set the sample rate to the same as your Pro Tools Session (**44.1 kHz** is a good option)

Use the **S/PLVL** if you need to slightly raise or lower the S/PDIF signal level for optimum recording levels

*This S/PDIF setting defines what type of audio is sent out the S/PDIF Out. These options are:

- **Match Studio/Direct** – S/PDIF outputs the Tone and Pan settings as shown.
- **Studio/Direct Tone 1** – S/PDIF outputs Tone 1 only, panned center.
- **Studio/Direct Tone 2** – S/PDIF outputs Tone 2 only, panned center.
- **Dry Inputs** – S/PDIF Left outputs the unprocessed input(s) to Tone 1, and S/PDIF right outputs the unprocessed input(s) to Tone 2.

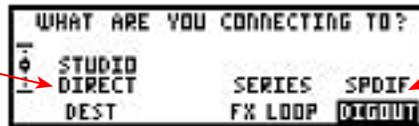
PODxt Pro - Digital Output Configuration



Connect the **S/PDIF Out** on the rear panel of your device to the **S/PDIF Input** on the Mbox

Press the **Tune/System** button and turn the **Select** knob clockwise until the display reads, **What are you connecting to?**

Set the **DEST** option to **STUDIO DIRECT**



Set the **DIGOUT** option to **SPDIF**

Press the **I/O & Dig Select** button once to access the **Digital Out** page:



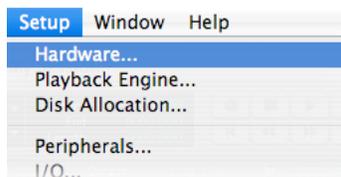
For the **FORMAT** options, set the sample rate to the same as your Pro Tools Session (**44.1 kHz** is a good option) and **24 BIT**

Set the **MODE** to **NORMAL** for your fully processed tone to be sent out the S/PDIF connection (or to **DRYGTR** for an unprocessed signal)

Use the **GAIN** if you need to slightly raise or lower the S/PDIF signal level for optimum recording levels

Configure Mbox 2/Pro Tools LE for Digital Recording

Now, launch the Pro Tools LE application and set it up to receive the S/PDIF Digital Input as follows:



From the Pro Tools LE **Setup** menu, select **Hardware...**

Choose **S/PDIF** as the **Clock Source** so that the Mbox 2 follows the digital clock of your Line 6 hardware

Click **OK** when done



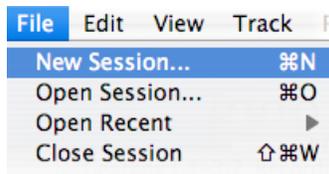
You will now see the **S/PDIF** light solidly illuminated on the front of the Mbox 2, indicating it is in S/PDIF digital input mode



Note that when receiving S/PDIF input, the Input 1 & 2 level knobs on the front of the Mbox 2 do not adjust the digital signal level. To adjust the recording level, use the GearBox software's Tone volume and output level controls or your POD's S/PDIF Gain control.

Creating a New Pro Tools LE Session

Once you have your Line 6 hardware and GearBox configured (if using GearBox), then the next step is to launch Pro Tools LE and set up a Session for recording...



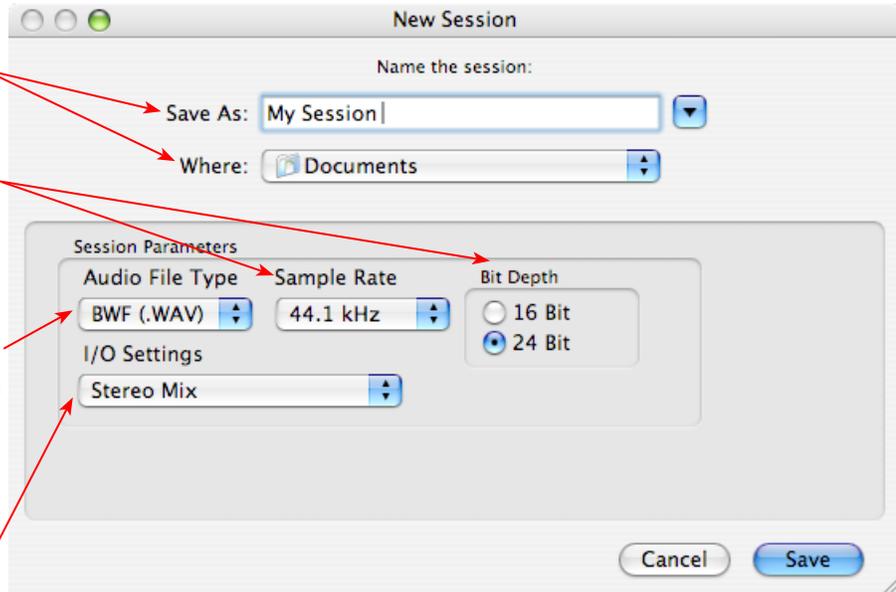
To start a new Session in Pro Tools LE, choose **New Session** from the **File** menu

Type in a title for the Session and choose where to save it

Choose the **Sample Rate and Bit Depth** - 44.1 kHz and **24 Bit** are good choices unless you have specific needs for your project

File Type - BWF (.WAV) is a good choice here since this file type is compatible with both Mac and Windows

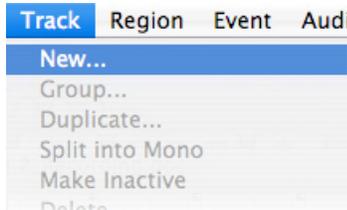
For **I/O Settings**, **Stereo Mix** is best



Note: If you prefer to use the 48 kHz Sample Rate, then you can choose these here in the Pro Tools dialog, but you will need to also go back to the Mac Audio-MIDI Setup dialog (or to your POD X3 or PODxt S/PDIF settings) and set the sample rate value for your Line 6 hardware to match. Matching sample rates are required on both hardware units with a digital connection.

Create and Configure a New Audio Track

Next you'll need to create at least one new audio track in the session to record into. You can of course also create more audio tracks if you want to import existing audio files into this session...



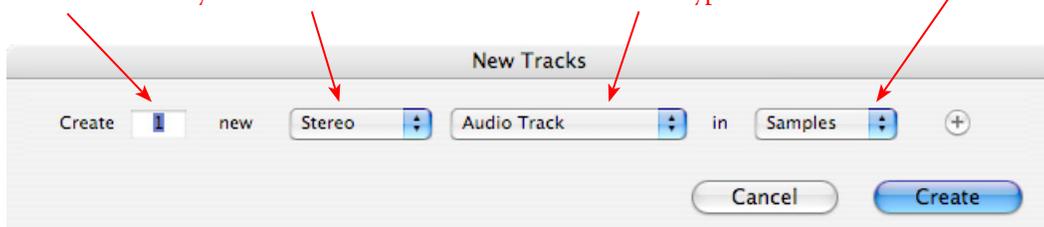
In the **Track** menu, select **New...**

Choose how many Tracks to create

Choose **Mono** or **Stereo*** for your audio track format

Choose **Audio Track** for the Track type

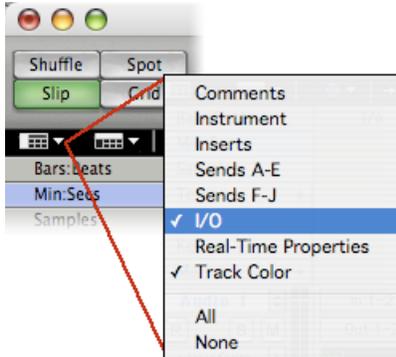
Choose **Samples**



...Then click **Create**

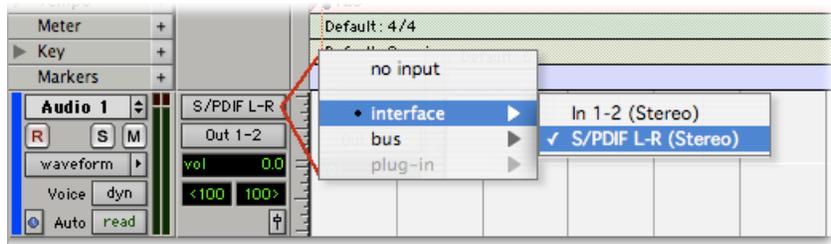
*You'll need to decide before creating your recording track here if you want to record the output from

your Line 6 hardware/GearBox as Mono or Stereo. Mono will of course only record one of your Line 6 device's (Left or Right) outputs, and you'll choose which once the track is created. If you have stereo effects active on your GearBox or POD tone, then you'll probably want to choose Stereo to record both channels into a stereo track.

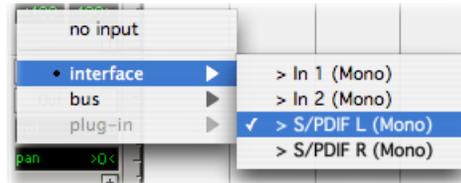


At the top left of the Edit Window, click the View selector and enable the I/O View

On the new audio track, click on the Input Selector and choose the Mbox input source. Since we created a Stereo track here, we'll select the S/PDIF In L-R (Stereo)



Or... if you create a mono audio track, you'll have the option for the track input to choose either S/PDIF L (Mono) to capture the LEFT signal, or S/PDIF R (Mono) to capture the RIGHT signal



Click the R button for to Arm the track for recording

Once armed, the track's meters will measure the Line 6 device/ GearBox S/PDIF signal level

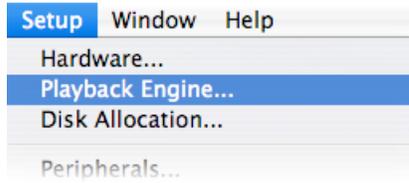


Keep the track's Mute button set to un-muted to monitor your TonePort/GearBox signal*

*When receiving a S/PDIF input, the Mbox 2 will only allow the signal to be monitored through the Pro Tools LE software. With the audio track armed and not muted, the track's volume control will adjust the monitor signal coming from your Hardware/Gearbox, allowing you to balance your listening levels independently of your recording level. The Pro Tools LE software monitoring is also subject to latency, which is affected by your Pro Tools LE Hardware Buffer settings (see your Mbox documentation for more information regarding latency and monitoring).

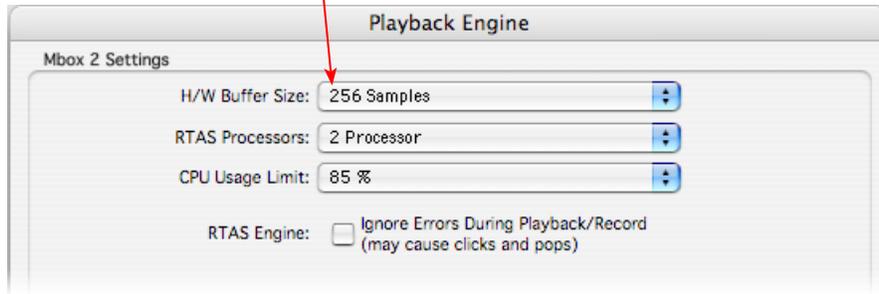
Note to Digi 002 users... when using the Digi 002 hardware with Pro Tools LE, an additional Low Latency Monitoring option is available in the Pro Tools LE Operations menu. It is best to activate this option to hear your input monitoring signal with the lowest latency when recording (see your Digi 002/Pro Tools LE documentation for more about this feature).

Adjusting the Pro Tools LE Hardware Buffers



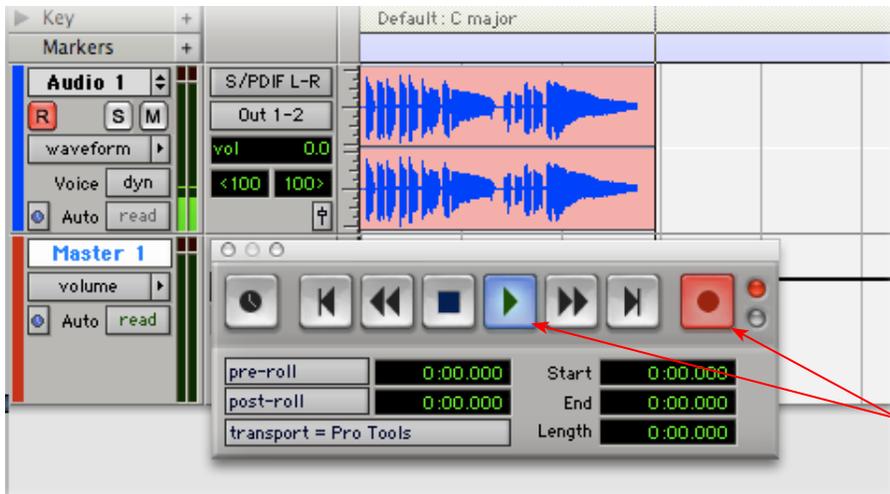
Go to the Pro Tools LE Setup menu and choose **Playback Engine...**

The lower the **H/W Buffer Size** value that is selected, the lower the latency. However, lower values can also result in less stability for session playback and recording. **256 Samples** is a good starting value to try.



TIP: Alternative Mbox monitoring option... If monitoring your Line 6 Hardware recording signal through the Pro Tools LE software results in excessive latency, you can alternatively connect you device's Analog Outs to an external Mixing Console and manually mix the device signal with the output of your Mbox. This allows you to hear the Line 6 device signal with no added latency from Pro Tools LE. In this configuration, you should Mute your Pro Tools LE track while recording to silence its software monitoring signal.

Start Recording...



Click the transport **Record** button to place Pro Tools LE into record mode, then press the **Play** button to start recording!

GearBox RTAS Plug-in

The GearBox Plug-in is really a great tool for Pro Tools and Pro Tools LE users! Like any RTAS Plug-In, it can be added on any track insert, allowing you to non-destructively apply entire GearBox Tones on any of your Pro Tools sessions. The GearBox Plug-In is available as an Add-On purchase to your Line 6 hardware (or, already comes included if you own a TonePort D.I. or UX8), and works with Mac or Windows. You can grab it now without even getting out of your chair! Just run Line 6 Monkey with your Line 6 USB device connected and go to the Optional Add-Ons tab. Or, you can read all about it here:

[Line 6 GearBox Plug-In](#)

We've included a complete setup section on using the RTAS GearBox Plug-In specifically with Pro Tools LE 7 within the GearBox Plug-In chapter.

MOTU DIGITAL PERFORMER® 5 SETUP

For this document, we'll show how to configure **Mark of the Unicorn Digital Performer®** version 5.11 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device. The steps are very similar for the setup of other earlier Digital Performer versions as well.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

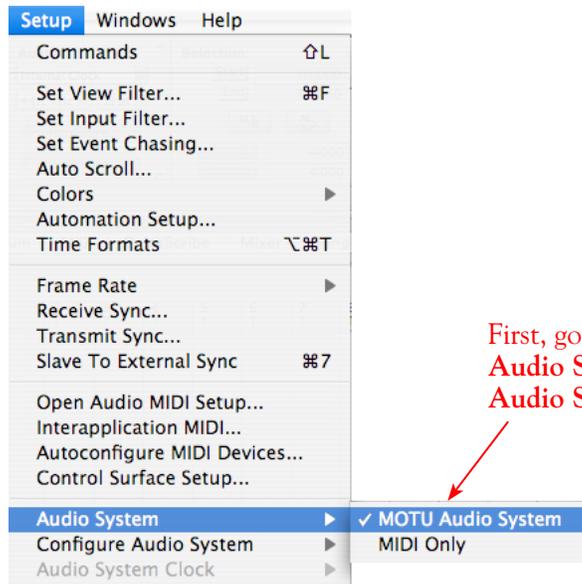
Configure Your Mac® to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Configuring Digital Performer to Use the Line 6 Core Audio Driver

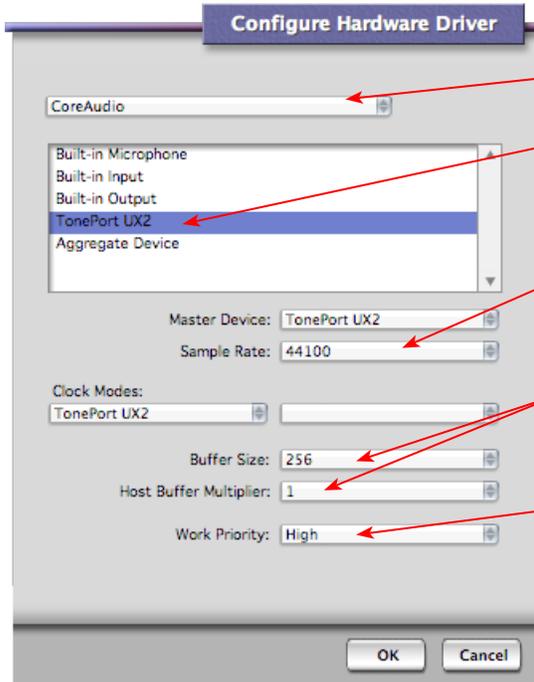
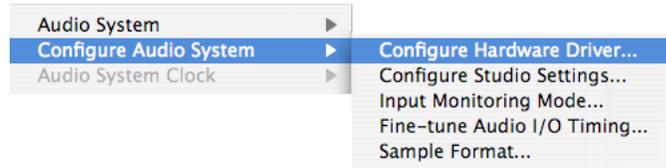
Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch Digital Performer and click on the Setup menu:



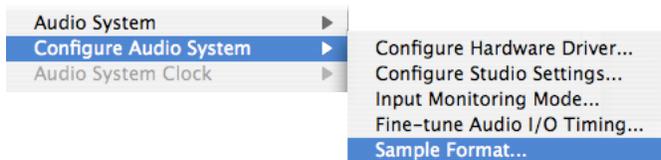
First, go to the Digital Performer **Setup > Audio System** menu and select **MOTU Audio System** so that it is active

Next, choose Configure Audio System > Configure Hardware Driver from the Setup menu...

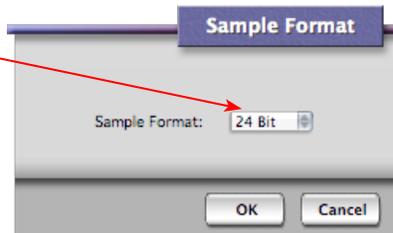


- Select **CoreAudio** as your driver type
- Choose your Line 6 hardware
- Choose **44100** as the Sample Rate - alternatively 48000, 88200 or 96000 can also be used if your project requires it
- A **Buffer Size** of 256 and **Multiplier** of 1 are good settings to start with*
- Set **Work Priority** to **High** for snappy performance
- Click **OK** to exit

Choose Configure Audio System > Sample Format from the Setup menu



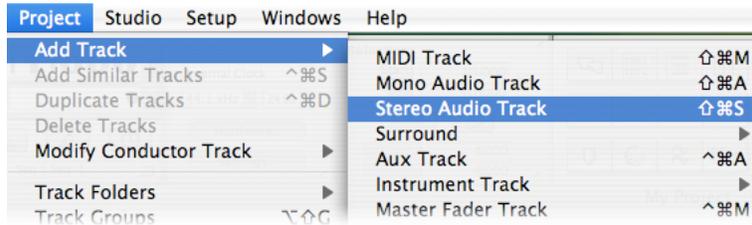
Select **24 Bit** as the Sample Format



Configuring an Audio Track for Recording

Now that your Line 6 hardware is set up, you are ready to start working in a DP Project!

Create a New DP Project (or open an existing one) and create a new audio track to record into. You can choose to add either a Mono or Stereo audio track to your current Project. This track type also determines which Line 6 device's Record Sends become available to choose from as the track's input (Mono or Stereo).



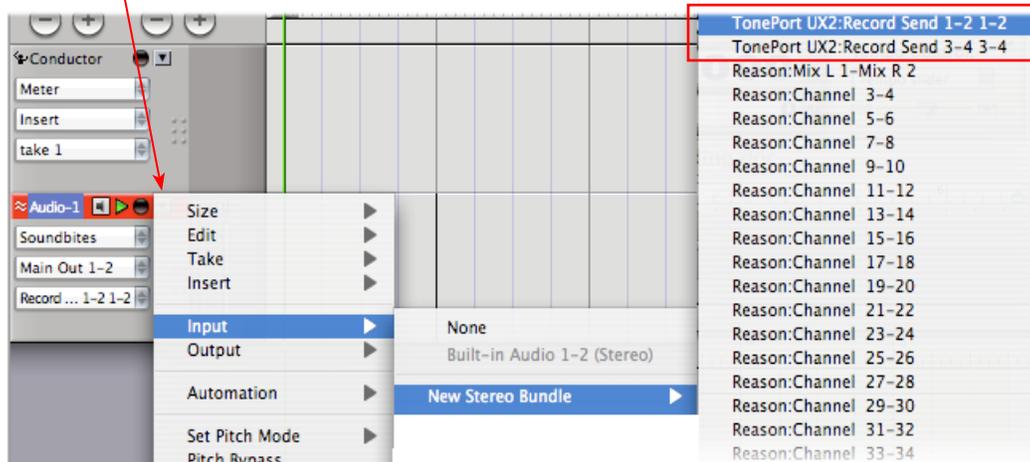
Selecting Track Input and Output Devices

Once your Audio Track is created, you can select your track Input and Output device for Recording and Playback specifically for this track. (Note that the following screenshots show DP's "Sequence" view layout - this makes it easy to see your track settings at the left of the work area). We've created a Stereo track in our example here.

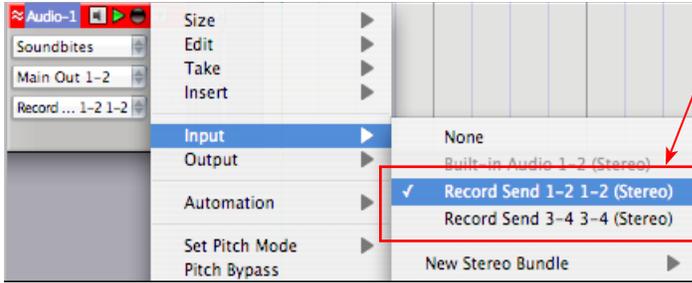
Note that when you first set up your Project with your audio hardware, you'll need to select one or more **New Stereo Bundles** (or **Mono Bundles** if your track is Mono) to make them available as selectable track inputs. To do this, open the **Track Menu** for your audio track and select **Input > New Stereo Bundle**. You will see a list of all available items that can be assigned. Your Line 6 stereo inputs should appear at the top of this list, as shown here for a TonePort UX2:

Click the **Track Menu** button for your audio track

Line 6 device stereo input options



Select each Line 6 hardware input that you'll potentially want to record from for your Project to create each as a "Stereo Bundle" input. Once you do, you'll then see them as selectable in the track **Input** menu and you can choose the one you want here for all future audio tracks.



New Stereo Bundles created now appear here in the Input menu. We've selected **TonePort Record Send 1-2 1-2** as this stereo audio track's input

About Input Options for Your Device

In the **Input > New Mono/Stereo Bundle** menus for audio tracks in DP, you will see slightly different options depending on your specific Line 6 device...

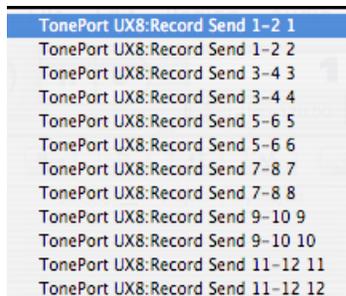
TonePort GX, D.I. UX1, UX2 and KB37: You'll see the following

- The Stereo “Record Send 1-2 1-2” and “Record Send 3-4 3-4” options will receive input from the respective GearBox Send 1-2 and 3-4, and will record a stereo file (See above screenshots).
- The individual “Record Send 1-2 1” thru “Record Send 3-4 4” options will receive input from the respective GearBox Send 1 thru 4, and will record a mono file.

TonePort UX8: You'll see the following.



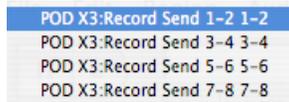
- The Stereo “Send 1-2 1-2” thru “Send 7-8 7-8” options will receive input from TonePort UX8's respective Send 1-2 thru Send 7-8, and will record a stereo file.
- The Stereo “Send 9-10” and “Send 11-12 11-12” options will receive input from the respective GearBox Send 9-10 and Send 11-12 and will record a stereo file.



- The individual Mono “Send 1-2 1” thru “Send 7-8 8” options will receive input from the respective TonePort UX8 Send 1 - 8, and will record a mono file.
- The individual Mono “Send 9-10 9” thru “Send 11-12 12” options will receive input from the respective GearBox Send 9 thru 12, and will record a mono file.

TonePort UX8’s driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more info.

POD X3 devices: You’ll see the following options:



- The Stereo “Send 1-2 1-2” thru “Send 7-8 7-8” options will receive input from the respective POD X3 Send 1-2 thru 7-8, and will record a stereo file.



- The individual “Send 1-2 1” thru “Send 7-8 8” options will receive input from the respective POD X3 Send 1 thru 8, and will record a mono file.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog’s Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot’s Handbook*.

PODxt devices: You’ll see the following options:



- The Stereo “Main In 1-2” will receive input from the respective PODxt Send 1-2 (or GearBox Send 1-2 if GearBox is in use) and will record a stereo file.



- The individual “Main In 1” and “Main In 2” options will receive input from the respective PODxt Send 1 and 2 (or GearBox Sends 1 and 2 if GearBox is in use), and will record a mono file.

Select a Track Output...

Choosing a track output is much the same process as described above for the track input - you may need to first create the New Stereo/Mono Bundle for each Output you’ll want to be available for your audio tracks. In most cases, this will just be the “Main Out 1-2” for your Line 6 device. TonePort UX8 offers multiple Output options and can be configured for many different monitoring or even multi-channel Surround operation - please see your [TonePort UX8 Pilot’s Handbook](#) and [GearBox Help](#)

documentation for more about these advanced features.

For our example, we'll choose the **Main Out 1-2** for our TonePort UX2 as the track Output for our stereo audio track:

Audio track output set to the TonePort
Main Out 1-2



Set Input Monitoring Options...

When recording using GearBox, it is recommended to use the ToneDirect Monitoring feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable the Digital Performer **Input Monitoring** option so that the input monitor signal is not additionally fed through the software.

Input Monitoring On/Off button



* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your DP audio track and turn Monitoring "ON" to monitor your input signal through the software, and thus through the GearBox Plug-in processing. See the [Using the GearBox Plug-In](#) chapter for more info.

Arm Your Track & Set Your Levels...

Press the **Arm** button to prepare your track for recording

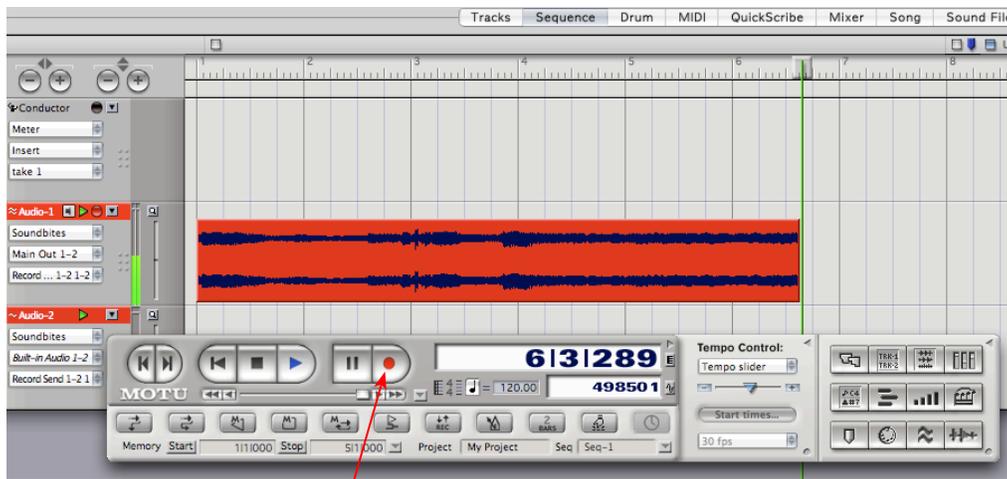
Note that the track meters measure the device/ GearBox input signal once the track is armed





If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into DP.

Start Recording!



Once your record level is set, just click on the Digital Performer transport **Record** button and start riffing!

PROPELLERHEAD REASON[®] 4 SETUP

Propellerhead Software's Reason[®] is an amazing virtual studio filled with synthesizers, drums and effects, all combined with a MIDI sequencer for easy pattern-based music creation. Reason does not offer a feature for recording audio; therefore, GearBox and Line 6 USB audio devices cannot be used for input directly into Reason. However, you do of course need a sound card device for playback, and your TonePort, GuitarPort, POD X3 or PODxt is a perfect high quality audio interface for this task!

When using your Line 6 device, you can also simultaneously plug in your instruments and jam along with the playback of your Reason project. Or, utilize Reason's ReWire technology to combine a Reason project with that of another ReWire-capable audio software host, and use your Line 6 device in this setup for playback and recording with the host software! For this document, we'll be showing how to set up a Line 6 USB audio device with Propellerhead Reason ver. 4.0 - setup is similar with earlier Reason versions as well.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

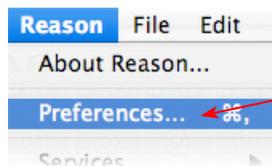
Configure Your Mac[®] to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. Please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configuring Reason to Use the Line 6 Core Audio Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the Reason's Preferences dialog:



Select **Preferences** from the Reason menu

Select the **Audio** page

For **Audio Output**, choose your Line 6 device

Choose a **Sample Rate** – 44100 is a good choice for most projects, but you can choose 4800, 88200, or 96000 if your project requires one of these specific sample rates

Set the **Buffer Size** to 256 as a good starting point. If your Reason playback starts experiencing audio drop-outs, come back and raise the slider slightly

Close the Preferences dialog when done

Now just hit the **Play** button in Reason's transport and to hear the Reason playback through your Line 6 hardware!



To Jam Along with Reason...

You can also of course still use GearBox or configure your POD X3 for your Mic and Instrument tones while Reason is playing back if you want to sing or jam along. Just plug in your Mic or Instrument and use GearBox or your POD just as you normally do. Note that you can adjust the level of your Mic or Instrument independently of the level of the Reason playback.

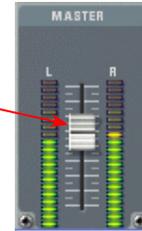
If you are using GearBox, you can adjust the **Monitor Volume** and **Out to Hardware** controls within GearBox to balance out your Mic/Instrument volume versus the Reason playback:

The **Monitor Volume**, **Pan** and **Mute** controls act only upon your Mic/Instrument tone signal



The **Out to Hardware Volume** and **Mute** controls act on the combined Mic/Instrument + Reason output sent to your speakers or headphones

Of course you can also the **Master** slider in the **Reason Mixer** to control Reason's playback volume



If you are using **POD X3**, then you can adjust **Tone Volume** and **Master Volume** on the POD X3 unit to balance out your Mic/Instrument volume versus the Reason playback:



The **Tone Volume** knob affects only your Mic/Instrument Tone level

The **Master Volume** knob controls the combined Mic/Instrument + Reason output sent to your speakers or headphones

With this configuration, both the Reason project playback and your Mic/Instrument GearBox/POD tones are heard through your speakers, and sent to all your device's outputs. This also allows you to connect the Line 6 hardware's outputs to an external device, such as a tape recorder, mixer, P.A. system, etc., to record or amplify this stereo output signal!

Using your Line 6 Hardware with Reason 3 in a ReWire Setup

The Propellerhead **ReWire**[®] technology allows the Reason modules' outputs to be directly routed into any ReWire "Host" application. Using ReWire, the Host application can send MIDI tracks to Reason's synth. modules, and Reason then sends audio playback directly into the ReWire Host, which is mixed with the audio of the Host application. When Reason is configured as a ReWire "Slave" in this manner, it is controlled by the Host application and does not utilize a sound card connection itself. Therefore, if you want to use your Line 6 hardware as your sound card device in a ReWire setup like this, it is necessary for you to choose your device as the assigned audio device within the ReWire Host application. To read more about the ReWire technology and the latest about ReWire Host support, please visit the [Propellerheads](http://www.propellerheads.com) web site.

Using Reason with Ableton Live as a ReWire Host

The Ableton Live audio software is capable of functioning as a ReWire Host application. The following steps show you how to set TonePort as the audio device for the Ableton Live 7 software, and then configure Live to connect with Reason 4 as a ReWire Slave device. This enables you to do audio recording and playback with Ableton Live, allowing Reason's output(s) to be automatically played in sync and channeled through Live's audio tracks via ReWire. The setup process is similar in other

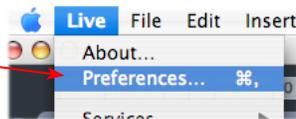
ReWire Host applications as well (Steinberg Cubase®, Apple Logic®, etc.) and you can certainly use your Line 6 hardware with these other ReWire Host applications with Reason as well!

Some Line 6 TonePort packages come with a special Ableton Live Lite, Line 6 version software included. This Live version also supports Propellerheads ReWire technology! Configuring the Live Lite Line 6 version is much the same as the following steps for the Ableton Live 7 version.

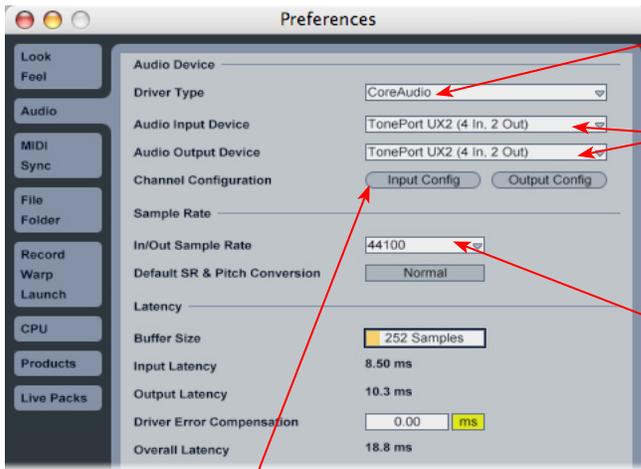
You first want to be sure to exit Reason if it is currently running. The ReWire Host application must always be launched first. Launch Ableton Live and make the following settings to set your Line 6 hardware as the Live audio device...

Launch the Ableton Live Preferences dialog:

Go to the Live menu and choose **Preferences**



Go to the **Audio** tab



Choose **CoreAudio** as the driver type...

Then choose your Line 6 device for both the **Input** and **Output Audio Device**. In this example, we'll choose our connected **TonePort UX2**

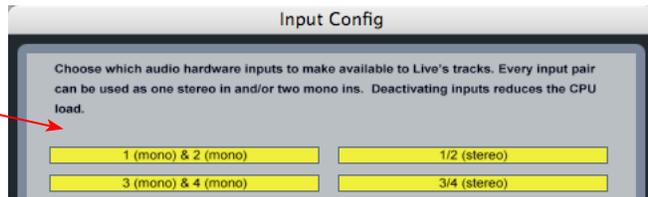
Set a **Sample Rate** – **44,100** is a good choice here, or you can use 48,000, 88,200 or 96,000 Hz if your Project requires a higher sample rate

Just as with most Multitrack recording software, in Live you also need to configure the individual inputs and outputs once a Multi-in/out device is selected. Click on the **Input Config** button to access the Inputs.

Activate Inputs:

Here you can “activate” all the inputs from your Line 6 hardware that you want to be accessible for any audio track as a track input for recording

Click **OK** when done



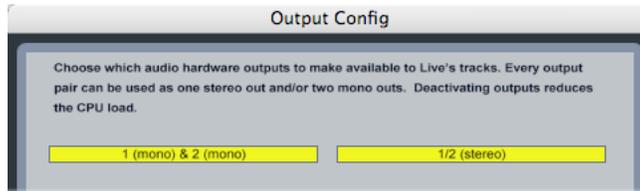
You'll want at least the **1 (mono) & 2 (mono)** and the **1/2 (stereo)** inputs activated. Each additional activated input utilizes more CPU, so only activate the ones you need!

Note that you'll see a different number of inputs listed in the **Input Config** dialog depending on the specific Line 6 device you are using. Typically these enumerated inputs correspond to the Line 6

device's Sends of the same number (i.e. - Live's input "3/4 (stereo)" is the TonePort UX2/GearBox Send 3-4).

Activate Outputs:

To access the outputs, click the Output Config button back in the Live Preferences > Audio tab. This will show you all outputs available for your selected Line 6 Output Device.

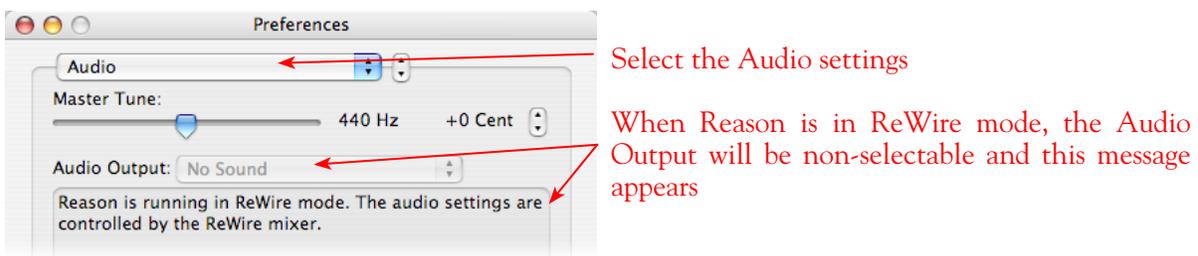


For all Line 6 devices (except TonePort UX8), the CoreAudio driver offers is only Output 1/2, therefore the dialog will show its two mono and 1 stereo output options, and they will automatically be selected.

TonePort UX8: You'll see 8 mono and 4 stereo outputs. For most Live projects, you likely only need to enable the Output 1/2 mono and stereo options and assign all track playback to one common output. UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Mac Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Note - The Ableton Live Lite 5, Line 6 version has a restriction that allows only one stereo output to be used at a time. To be able to choose two or more different output devices in a Live Set, you must switch into Demo mode, or upgrade to a full version of Ableton Live

Now that Ableton Live is configured to use your Line 6 device, launch Reason. Reason will automatically set itself to ReWire Slave Mode. You can check this mode in the Reason **Preferences**:



Now in Ableton Live, you can simply access the **Output** menu of any MIDI track to route its MIDI to any of the Reason synth modules.

In any of Live's MIDI tracks, choose **Reason** as the **MIDI To** output...

Then click on the **Output Channel** selector to choose any Reason module



To receive the audio output from Reason, set the **Input** of any of Live's audio tracks to receive the audio from any of Reason's outputs.

In one of Live's Audio tracks, choose **Reason** as the **Audio From** input...

Then click on the **Input Channel** selector to choose any Reason output

(Note that the **1/2 Mix L, Mix R** channel receives the full Reason project audio mix)



Now just hit the Play button in either Live or Reason, and both projects will play in sync, with all the audio being routed into Ableton Live and played through your Line 6 hardware!



You can utilize your Line 6 device/GearBox to also plug in a Mic or Instrument, dial in your tone, and record audio tracks right into the Ableton Live Set. This ReWire configuration is especially slick since the Reason audio can be treated as part of your Live Set - you can mix, add effects plug-ins (such as the GearBox Plug-In) on the incoming Reason audio track, and all will be incorporated into your audio mix-down when you do an Export from Live! It is important to note, however, that running all these programs at one time can require some hefty usage of your computers processor, RAM and disk access, especially as you add more tracks, Reason modules and real-time effects. Your actual performance will depend on the specifications of your computer.

SONOMA WIRE WORKS RIFFWORKS® 2, LINE 6 EDITION SETUP

For this document, we'll show how to configure **Sonoma Wire Works, RiffWorks®** version 2.1 to work with Line 6 TonePort, GuitarPort, or PODxt. The steps are very similar for the setup of other earlier RiffWorks versions as well. The RiffWorks, Line 6 Edition is available as an Add-On that you can purchase from the [Line 6 Online Store](#) - just a click away! For RiffWorks full retail version and info, please visit the [Sonoma Wire Works](#) site.

Note that Line 6 TonePort UX8 and POD X3 family devices do not support the RiffWorks Line 6 Edition software. Please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Mac® to Use Your Line 6 Hardware

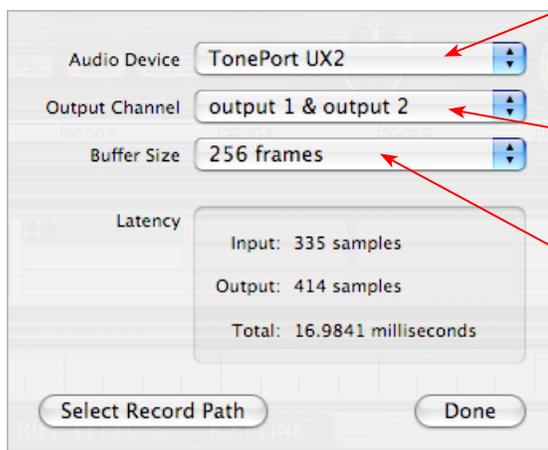
If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Configuring RiffWorks to Use the Line 6 ASIO Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the RiffWorks Audio Setup Dialog:

In the bottom right area of the RiffWorks main screen, select the **Audio Setup** button



Select your Line 6 device as the **ASIO Device**, if not automatically selected for you already

Set the Output Channel to **Output 1+Output 2** (the stereo Output 1-2 of your Line 6 hardware)

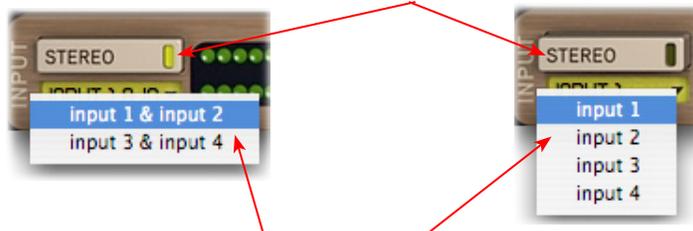
Set the **Buffer Size** to **256 frames** as a starting value. If you experience audio drop-outs in RiffWorks, then come back here and raise this to a slightly higher value

Press **Done** when settings are complete

Inputs Options for Recording

You can choose to record from any of your Line 6 Devices mono or stereo Sends into RiffWorks, which appear as “Inputs” within the RiffWorks input selector. These RiffWorks Inputs 1 thru 4 equate to the GearBox Sends 1 thru 4*. A mono Input will record a mono audio file, and a stereo Input will record a stereo file. These selections are made in the Input section of the RiffWorks main screen, at the bottom left. First toggle the “Stereo” button to switch between mono/stereo, and then click the menu beneath to select from the desired Line 6 device Input.

Click the Stereo button - when the light is on, this indicates Stereo input mode, when off, the input mode is Mono

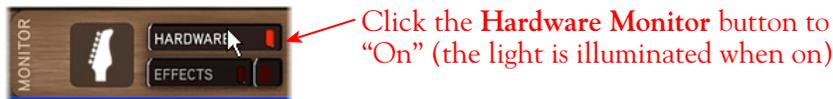


You'll then be offered **Stereo** or **Mono** input options in the menu

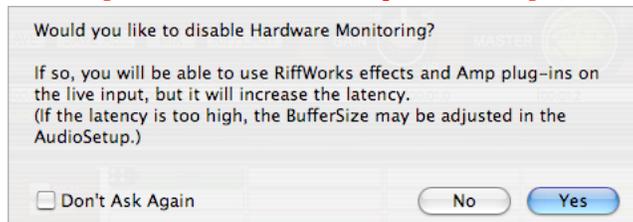
*Note - if you are using a PODxt device, you'll see only Inputs 1 + Input 2 for Stereo and Input 1 and Input 2 for Mono since PODxt offers only one stereo Record Send.

Hardware Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. In order to fully utilize ToneDirect Monitoring, you must turn on the RiffWorks **Hardware Monitoring** as shown below so that the input signal is not fed through the software. Keep in mind that you won't hear any of RiffWorks' plug-in effects if you monitor the input thru your Line 6 device. Please refer to your RiffWorks documentation for more info on its internal effects.



You see the following alert after enabling the **Hardware Monitoring** - read it's message and click **Yes** to accept the setting

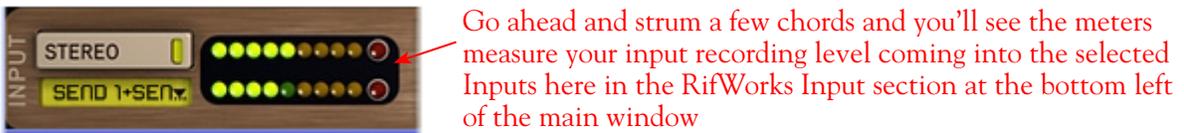


Prepare Your RiffWorks Session...

Open a new RiffWorks Session, and follow these steps...



Before you click that record button, it's a good idea to check your recording levels.

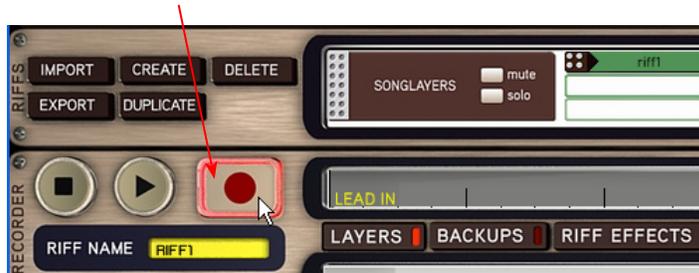


You can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into RiffWorks



Start Recording Your Riffs

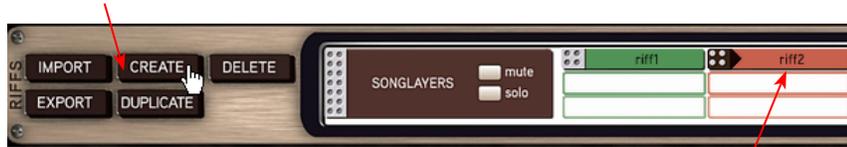
Once your record level is set, click on the RiffWorks transport **Record** button and lay down your first Riff!



The Riff you just recorded will appear in the Riff recorder window as "Take 001". You can record several takes of the same riff, which will appear underneath this one

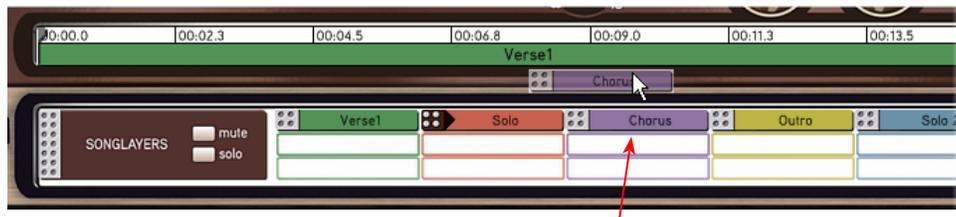


When ready to record another section of your song, click Create in the Riffs panel



The newly created Riff will appear as riff2 in the Riff window. You can now record this Riff as described above

Once you've laid down all your Riffs, it's time to piece them all together in the Song panel...



Drag each Riff into the Song panel above in any order to build a song

And you've got a new song - it should look something like this...



RiffWorks 2, Line 6 Edition lets you import, export and manipulate your Riffs all kinds of ways. For more information, please refer to your RiffWorks Help documentation.

STEINBERG CUBASE®/CUBASE® STUDIO 4 SETUP

For this document, we'll show how to configure Steinberg Cubase® 4.02 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device. The steps are very similar for the setup of Steinberg Cubase® Studio 4 & Nuendo® 4, as well as previous Cubase® SE/SX/SL 3 and Nuendo® 3 versions.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

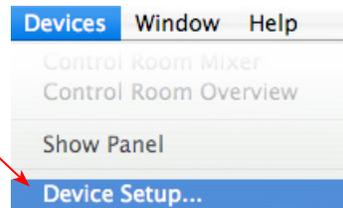
Configure Your Mac® to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Mac **System Preferences** and select the **Line 6 Audio-MIDI Devices** dialog to access the Audio Driver settings. If needed, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

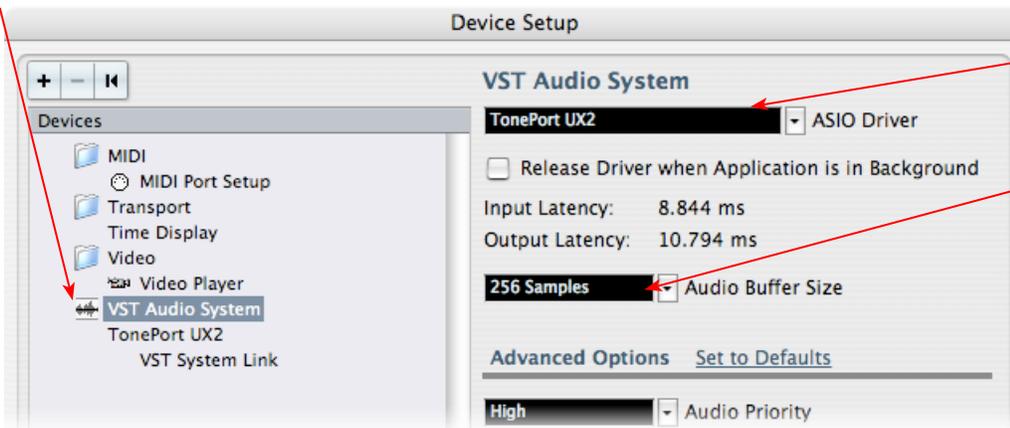
Configuring Cubase to Use the Line 6 Audio Driver

Launch Cubase and Open the Device Setup Dialog:

Go to the Cubase **Devices** menu and choose **Device Setup**



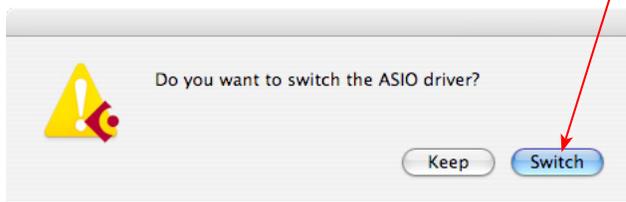
Click on **VST Audio System**



Select your Line 6 device for the **ASIO Driver**

Select **256** for your **Audio Buffer Size**. If you experience any audio drop-outs in your Cubase Project, you can come back and set this to a slightly higher value

If you are prompted to “switch the ASIO driver” after selecting your Line 6 device, go ahead and click on **Switch**



You can now exit the VST Connections dialog.

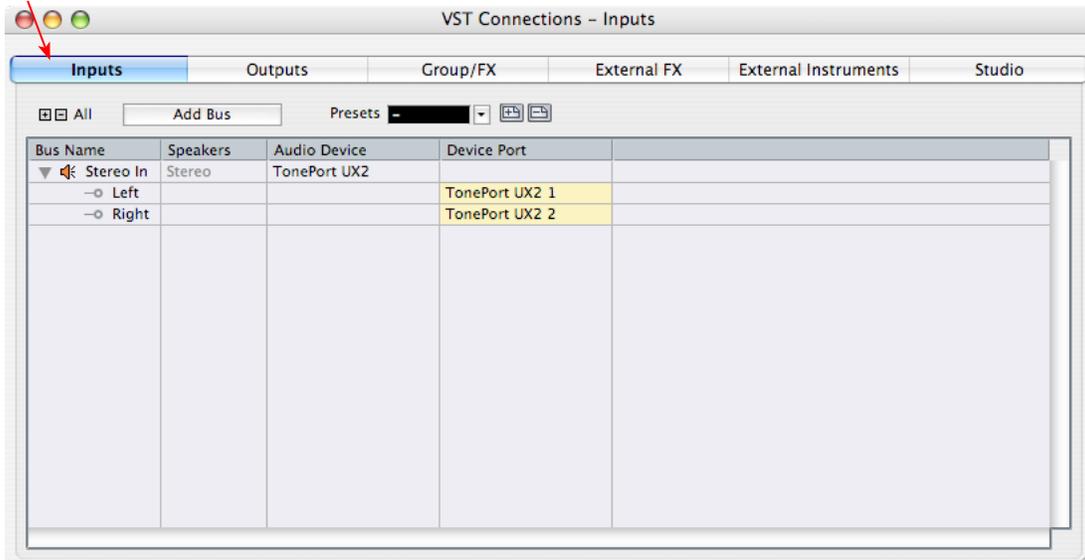
Establish Your Inputs and Outputs:

Next we need to configure the Inputs and Outputs from the Line 6 hardware so they can be accessed within your Cubase Projects. This can get a bit fiddly in Cubase, but you only need to do this once for your audio device, so hang in there!



Return the Cubase **Devices** menu and select **VST Connections**

Go to the **Inputs** tab...



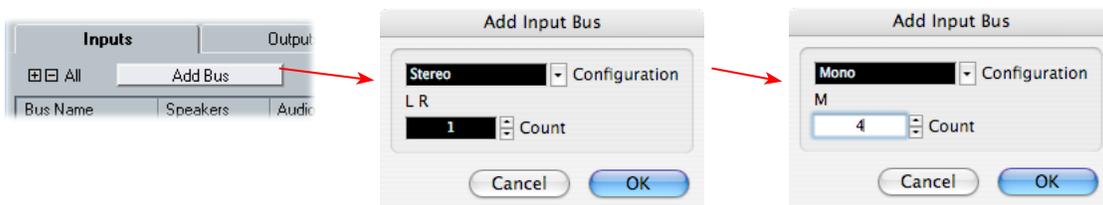
Initially, you’ll see that one **Stereo In** “Bus” has already been created for you. You should see your Line 6 device listed, and its Send 1 and 2 audio channels each assigned as the **Left** and **Right** channels for this initial Bus. TonePort and POD X3 devices offer more than just the one stereo Send 1-2, however,

so for these devices you'll want to create an additional stereo Bus for each Send. Also, you may want to create mono Buses for all the individual Send audio channels to allow you to record from any one of them as a mono input to a Cubase audio track. In our example we're using a TonePort UX2, and just like TonePort GX, D.I., UX1, KB37 and GuitarPort devices, there is also a Send 3-4 available. TonePort UX8 offers 6 stereo Sends, and POD X3* offers 4 stereo Sends.

*POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Mac Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

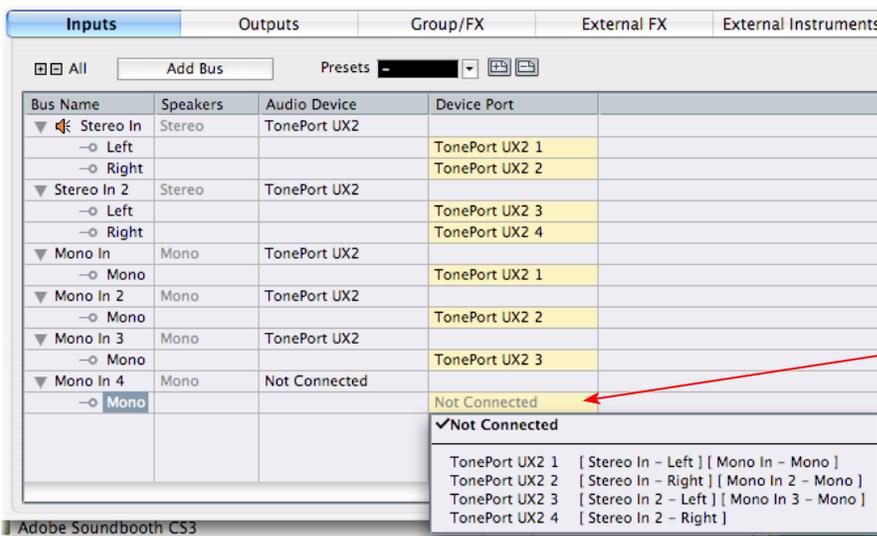
You can follow these steps in this dialog to add additional Buses for all your device's Sends...

Add Buses

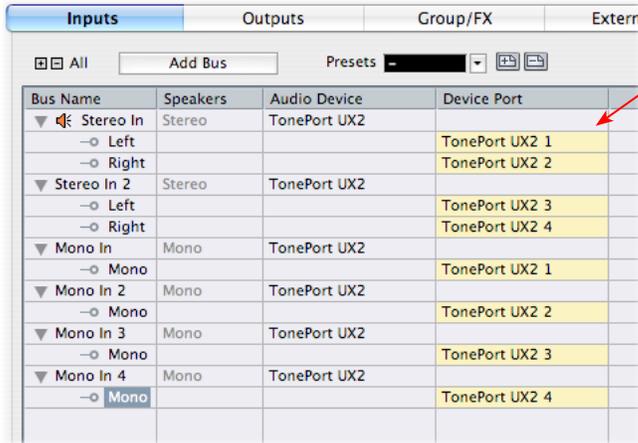


Press the **Add Bus** button, create 1 Stereo Bus, then repeat and add 4 Mono Buses using the **Add Input Bus** dialog...

Next, each Bus channel needs to be correctly assigned to the desired hardware Send. The **Stereo In 2** Bus likely already assigned itself to the Line 6 device's next stereo Send (Send 3-4 for our TonePort), which is what we want. But the **Mono In** Buses all defaulted to "Send 1", which we need to edit. Click directly on the **Device Port** field for each of the Mono Buses and select a different Send channel for each. For our TonePort UX8, we'll assign one each to Send 1, 2, 3, & 4 to give us a dedicated Mono input for each of our TonePort UX2's 4 mono Send channels.



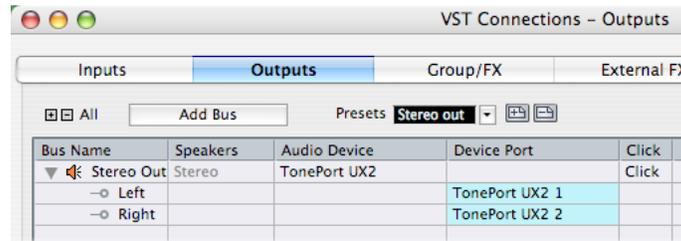
Click on the **Device Port** to choose the desired Line 6 device Send channel assignment - do this for each Mono Bus



The result should now look like this, with each **Stereo In** and **Mono In** Bus assigned to its own specific Line 6 hardware Send.

(Make a mistake? No worries, you can right click on any Bus Name and "Remove" it and add another if needed).

Now to the **Outputs** tab... the procedure is the same here. You should see a **Stereo Out** Bus already created here for you and correctly assigned to your Line 6 device's main **Output 1 & 2** for its **Left** and **Right** channels...



This one Stereo Out Bus is fine as is for most Cubase Projects, since you'll likely just assign all audio tracks to this one, common stereo output. But you can optionally create Mono Buses for each of these Outputs if you need them. Or, if you have a TonePort UX8, your device includes 8 outputs which means you can do the Add Bus thing here and create Stereo and Mono Buses utilizing all the additional Outputs if you like - even for a 5.1 Surround system if needed!

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

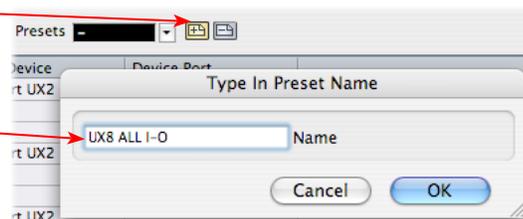
Create a Preset...

Finally, it's a good idea to now save all these settings as a Preset. You can even create several different Bus scenarios for your Line 6 hardware and save each as a different Preset to recall them easily any time!

Click the little Add button

Then type in a name for your Preset and click OK to finish it up

You can now exit the **VST Connections** dialog

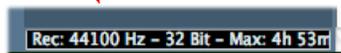


TIP! Be sure to open the VST Connections window and select this Preset before you open or create a Cubase Project so that it will use this set of Inputs and Outputs! It's also pretty handy to create a Project Template with a Cubase Project so that you don't need to go through the repetitive task of creating a bunch of tracks and assigning them to the same Ins & Outs every time you start a new Project. See the Cubase documentation regarding creating a Project Template.

Open or Create a New Cubase Project...

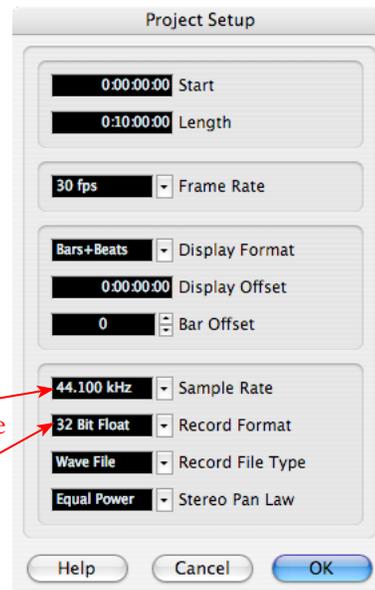
Go to **File > New Project** to start a new Cubase Project. Once your Project is open, look at the bottom left of the Cubase screen to check its **Sample Rate & Bit Depth**. If these are not what you want, then you can go to the **Project > Project Setup** dialog.

Look at the Cubase Project's **Sample Rate & Bit Depth** here



44,100 Hz is a good choice for your Sample Rate, or you can choose 48,000, 88,200 or 96,000 Hz if your project specifically requires one of these higher rates

Choose **32 Bit** as your Record Format



Configuring an Audio Track for Recording

Now that your Line 6 hardware and Cubase Buses are set up, you are ready to start working in your Cubase Project!

Add a New Audio Track...

Select Your Audio Track's Input and Output

Click on the Audio track's **Input Routing** selector to choose the recording input. You'll see all the **Input Buses** here that you created in the **VST Connections - Input** dialog. You can choose either a stereo or mono input*

The Audio tracks' **Output** Routing should default to your Line 6 device's **Output 1** (Or, if you created additional Output Buses in the VST Connections dialog, you can choose the preferred one here)

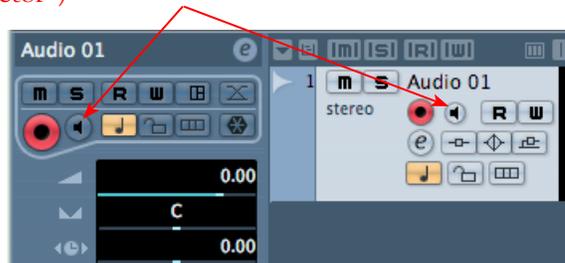


*Note that for a stereo audio track, choosing a Stereo Input Bus will record a stereo file. Choosing a Mono Input Bus will record a mono file. If you create a mono audio track, then you can only choose a Mono Input Bus (or only one channel of your Stereo Bus) as the track input, and this will record a mono file.

Set Input Monitoring Options...

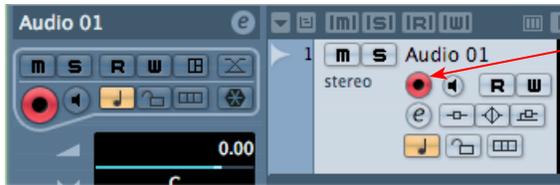
When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable the Cubase "**Monitor**" option on our Audio track so that the input monitor signal is not additionally fed through the software*.

Keep the audio track's **Monitor** button set to **OFF**
 (You can access this and most other track controls on both the Track Header or to the left in the "Inspector")



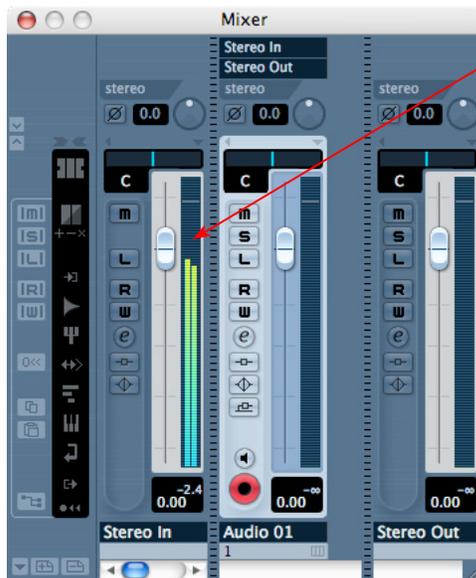
* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your audio track and turn the Cubase Monitor button "ON" to monitor your input signal through the software, and thus through the GearBox Plug-in processing. Please see the Cubase Help documentation for Global and Track Input Monitoring options. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In!

Arm Your Track & Set Your Levels...



Click the **Record Enable** button "ON" to arm the audio track for recording*

*Note that the track meters in Cubase will not measure the input signal unless the Input Monitoring feature is on (which of course we just turned OFF in the last step). You can display the Cubase Mixer and the level meters there are active for inputs with the Monitor function on or off.



If desired, launch the Mixer and you can view the meters for the respective Audio track to gauge your input levels before you start recording

If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Cubase



Start Recording!



Once your record level is set, click on the transport **Record** button and start riffing!

WINDOWS® AUDIO APPLICATIONS

The following chapters cover the setup of Line 6 GearBox software and TonePort, GuitarPort, POD X3 and PODxt devices with several popular Windows® audio recording applications. The examples used in these Setup chapters all utilize Windows® XP®, Service Pack 2.

Note that GearBox version 3.5 and Line 6 audio device drivers can also be used with Windows® Vista®, and most setup instructions in the following chapters are very similar. For the latest news and developments on GearBox, audio drivers and Windows® Vista® support, please visit the [GearBox Online Help](#) site.

You can use the following links to jump to the chapter that covers your specific application...

[Ableton Live®](#)

[Adobe® Audition®](#)

[Cakewalk SONAR®](#)

[Digidesign® Pro Tools® LE™](#)

[Image Line FL Studio®](#)

[Propellerhead Reason®](#)

[Sonoma Wire Works RiffWorks®](#)

[Steinberg Cubase®](#)

[Mac® audio applications](#)

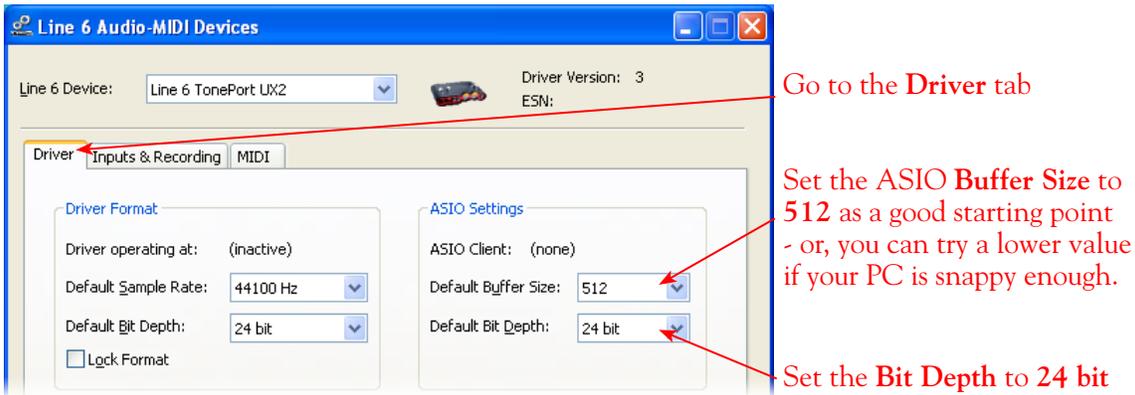
ABLETON LIVE® 7 SETUP

For this document, we'll show how to configure Ableton Live® version 7.01 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device. The steps are very similar for the setup of other Live versions as well, including the Ableton Live Lite 5, Line 6 Edition version that comes included with some Line 6 TonePort packages.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows® PC to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Windows Control Panel and select the Line 6 Audio-MIDI Devices to access the Audio Driver settings.



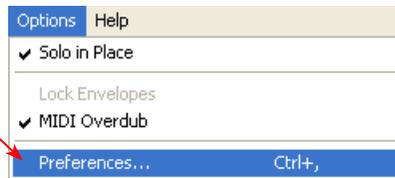
Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configure Live to Use the Line 6 ASIO Driver

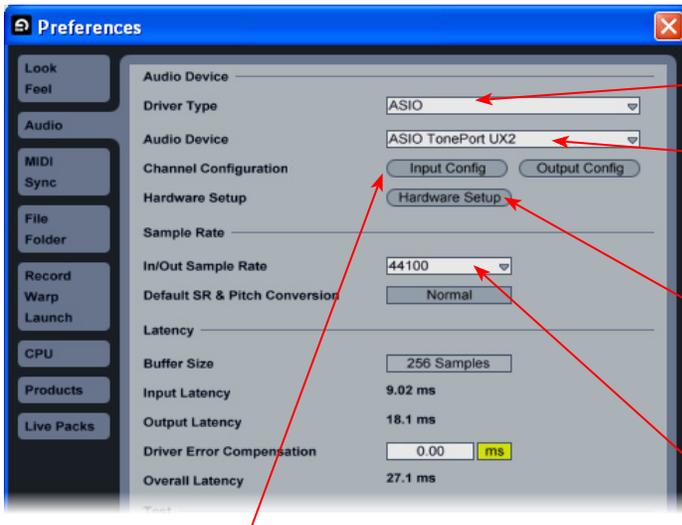
Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the Ableton Live Preferences dialog:

Go to the Live Options menu and choose Preferences



Make the following settings within the Preferences - Audio tab...



Go to the **Audio** tab

Choose **ASIO** as the driver type...

Then choose your Line 6 device for the **Audio Device**. In this example, we'll choose our connected **TonePort UX2**

Since we're using the ASIO driver, the **Buffer Size** is adjusted in the **Line 6 Audio-MIDI Devices** dialog - click the **Hardware Setup** button to launch it*

Set a **Sample Rate** – **44, 100** is a good choice here, or you can use 48,000, 88,200 or 96,000 Hz if your Project requires a higher sample rate

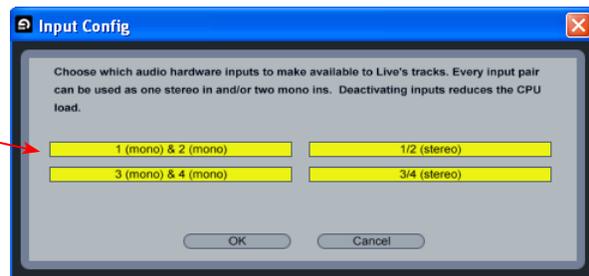
Just as with most Multitrack recording software, in Live you also need to configure the individual inputs and outputs once a Multi-in/out ASIO device is selected. Click on the **Input Config** button to access the Inputs.

*For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Activate Inputs:

Here you can “activate” all the inputs from your Line 6 hardware that you want to be accessible for any audio track as a track input for recording

Click **OK** when done



You'll want at least the **1 (mono) & 2 (mono)** and the **1/2 (stereo)** inputs activated. Each additional activated input utilizes more CPU, so only activate the ones you need!

Note that you'll see a different number of inputs listed in the **Input Config** dialog depending on the specific Line 6 device you are using. Typically these enumerated ASIO inputs correspond to the Line 6 device's Sends of the same number (i.e. - Live's input “**3/4 (stereo)**” is the TonePort UX2/GearBox Send 3-4). More about this when we get to the part about setting up your audio track.

TonePort GX, D.I. UX1, UX2 and KB37: You will see 4 Mono inputs and 2 Stereo inputs, as pictured above.

TonePort UX8: You'll see 12 Mono inputs and 6 Stereo inputs.

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

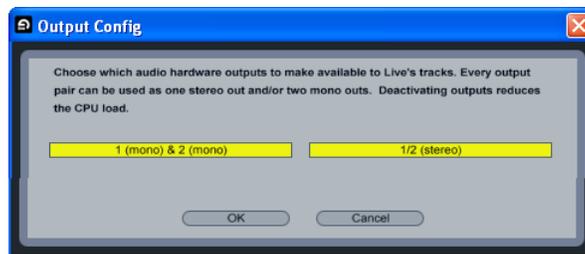
POD X3 devices: You'll see 8 Mono inputs and 4 Stereo inputs.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

PODxt devices: You'll see 2 Mono inputs and 1 Stereo input.

Activate Outputs:

To access the outputs, click the Output Config button back in the Live Preferences > Audio tab. This will show you all outputs available for your selected Line 6 Output Device.



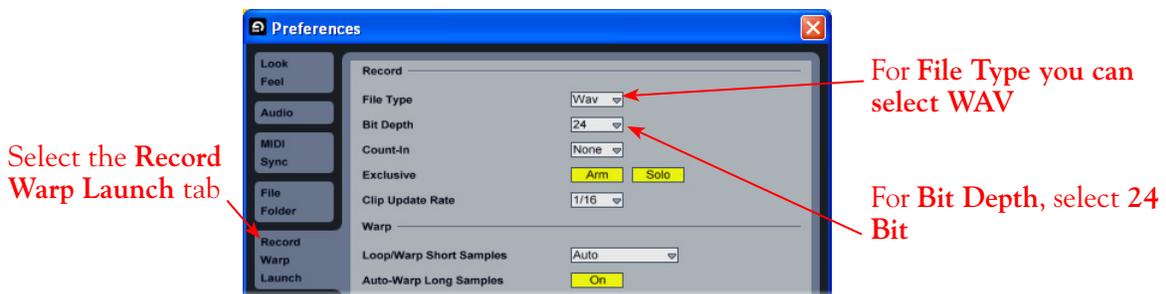
For all Line 6 devices (except TonePort UX8), the ASIO driver offers only Output 1/2, therefore the dialog will show its two mono and 1 stereo output options, and they will automatically be selected.

TonePort UX8: You'll see 8 mono and 4 stereo outputs. For most Live projects, you likely only need to enable the Output 1/2 mono and stereo options and assign all track playback to one common output. UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Windows Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Note - The Ableton Live Lite 5, Line 6 version has a restriction that allows only one stereo output to be used at a time. To be able to choose two or more different output devices in a Live Set, you must switch into Demo mode, or upgrade to a full version of Ableton Live

Configure Record Options...

Back to the Live Preferences dialog, now select the Record options.



Configure an Audio Track for Recording

Now that your Line 6 hardware is set up, you are ready to start working in a Live Set! Create a new Live Set (or open an existing one) and insert a new audio track to record into...



Choose **Insert Audio Track** from Live's **Insert** menu

In the following example, we've inserted two audio tracks, assigned their outputs to the "Master" track, and assigned the **Master Output** to the stereo Main 1/2 output of our Line 6 device (TonePort UX2). For Audio track inputs, note that you can select from the mono or stereo ASIO inputs of your Line 6 device, which you "activated" in the previous steps. If you choose a stereo input, a stereo audio file will be recorded into the track, and likewise, if you choose a singular mono input, a mono file will be recorded.

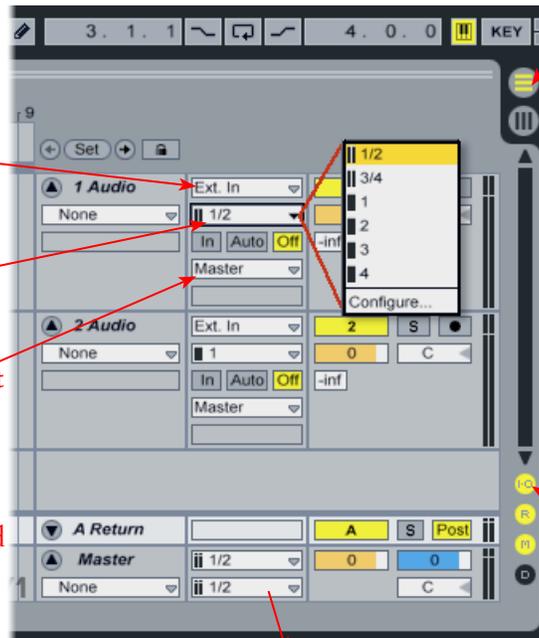
To configure your Audio tracks...

Choose **Ext. In** for the **Input Type**

Then choose the stereo or mono input you want to record from

Set your Audio tracks' **Output** to **Master**

Note that here we've chosen to record from TonePort's Send 1-2 for track 1, and Send 1 for track 2



Choose the **Arrangement View**

(Alternatively, you can access all these same settings in the **Session View** if you prefer)

Click the **I-O** toggle button to display the Input/Output settings for the tracks



On the **Master** track, choose the stereo **Out 1/2** of your Line 6 device for both the **Cue Out** and **Master Out***

* Note that the Master Track offers two Output selectors. The top selector is to set a "Cue Out", which allows you to route a separate output for playback of browser clips and previews. If you have a TonePort UX8, then you can set this Cue Out to a different stereo output to allow you to listen to previews on a completely separate headphone or speaker out. Please see Live's documentation regarding the Cue Out feature. For all other Line 6 hardware, set both Master Outs to the same Out 1/2.

Set Input Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware’s output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable Ableton Live’s **Input Monitoring** option so that the input monitor signal is not additionally fed through the software*.



Click the audio track's **Monitor Off** button

* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your Live audio track and turn Monitoring to “Auto” to monitor your input signal through the software, and thus through the GearBox Plug-in processing. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In with Ableton Live!.

Arm Your Track & Set Your Levels...



Click the Arm button to arm the audio track for recording

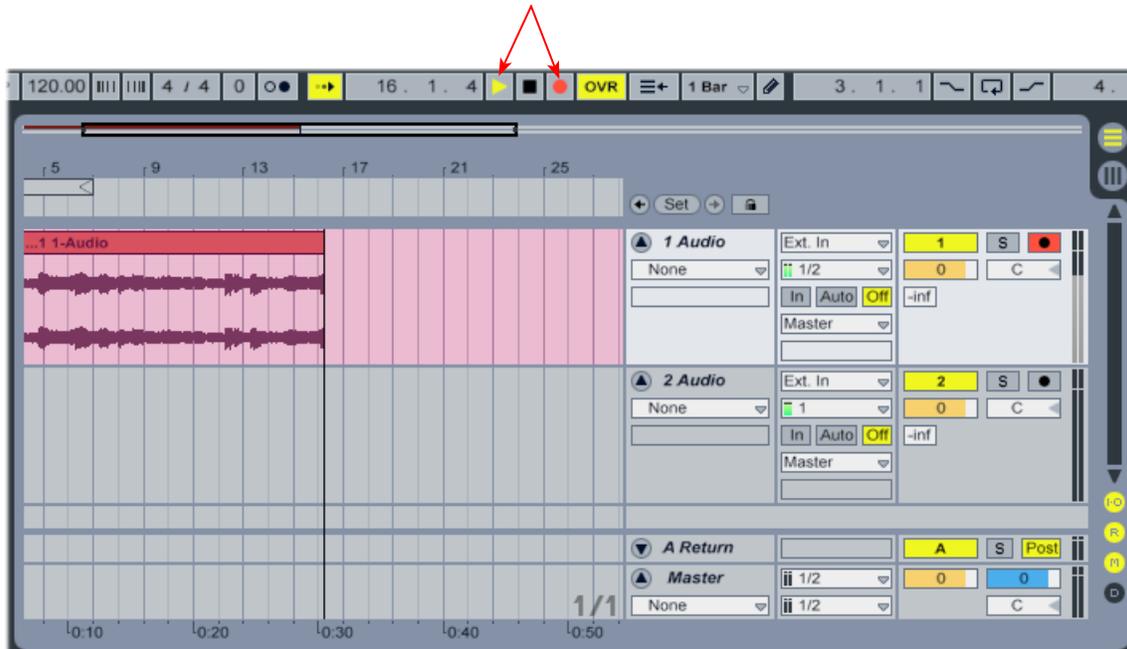
Note that you'll see the meters measure your input recording level once the track is armed



If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Live

Start Recording!

Once your record level is set, click on Live's transport **Record** button to put it into Record Mode, then press **Play** and start riffing!



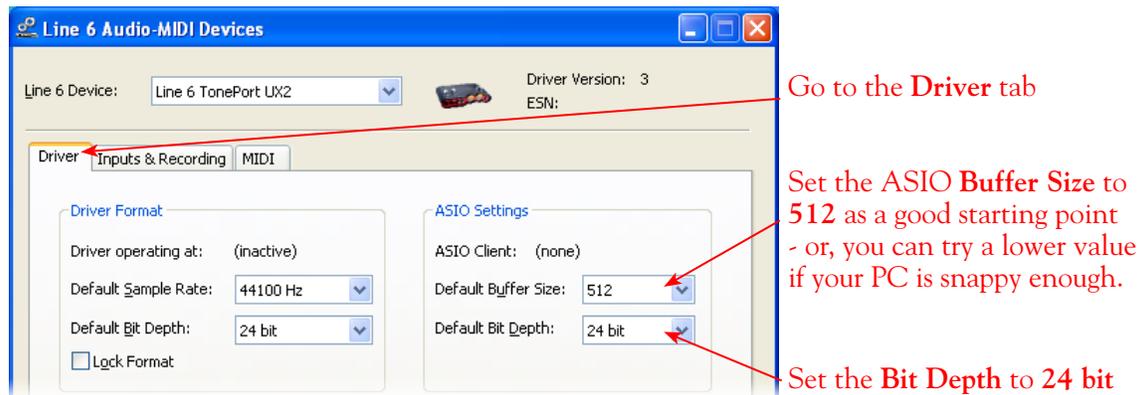
ADOBE® AUDITION® 3 SETUP

For this document, we'll show how to configure Adobe® Audition® 3.0 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device on a Windows® XP® (32-bit) system. The steps are very similar for the setup previous Adobe® Audition® versions as well.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows® PC to Use Your Line 6 Hardware

Be sure to connect the USB cable from your Line 6 device into your computer's USB port. If you have not already done so, the first step is to go to the Windows® Control Panel and select **Line 6 Audio-MIDI Devices** to configure the ASIO driver settings for your Line 6 device.



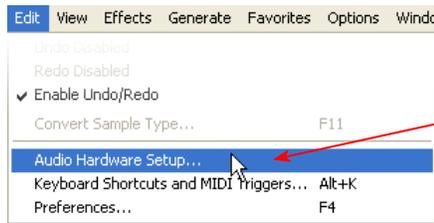
For more information, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configure Adobe Audition's Audio Driver Settings

Adobe Audition is unique in that it is actually two audio applications in one - the **Edit View** (a stereo Wave Editor), and the **Multitrack View** (a full Audio/MIDI Multitrack). These two "Views" have individual settings for the audio driver and input/output. We'll configure both Views to use a Line 6 TonePort UX2, and we'll point out where things might be different for other Line 6 hardware.

Edit View Audio Driver & Input/Output Settings

Launch Audition and open the Audio Hardware Setup dialog:



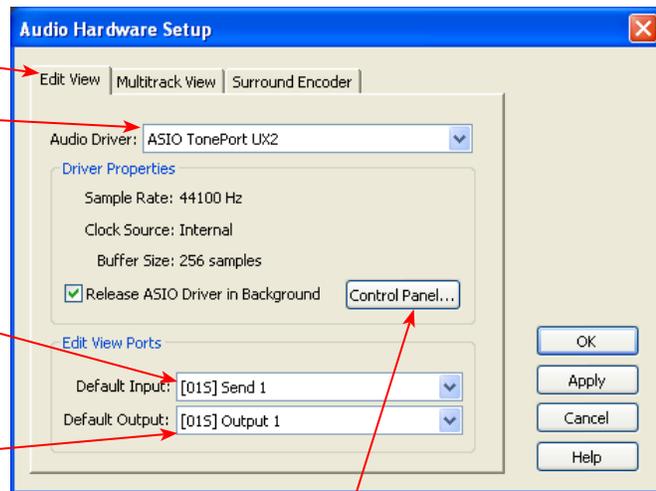
Go to the Audition **Edit** menu and choose **Audio Hardware Setup**

Go to the **Edit View** tab

For the **Audio Driver**, select the one named "ASIO" followed by the name of your specific Line 6 device*

For **Default Input**, choose the mono or stereo Send that you want to record from in the Edit View**

For **Default Output**, you probably want to choose the [01S] Output 1, which is your Line 6 device's primary stereo Output 1/2. With this setting all Edit View playback will be routed to the main outputs



The **Control Panel** button will launch the **Line 6 Audio-MIDI Devices** dialog, which is where you can make Sample Rate and Bit Depth settings (see the previous section)

*For the **Audio Driver** setting, it is also possible to alternatively use the "Audition Multimedia" (DirectSound) driver for the Edit View audio driver. This does offer some convenience since it will allow you to record or playback at just about any Sample Rate, where ASIO is limited to 44100, 48000, 88200 or 96000 only. The Line 6 "ASIO" driver option does offer snappier performance. For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

The **Default Input is an important setting for the Edit View since it determines what Line 6 Sends you are recording from. You can come back to this dialog any time to switch this - which you might need to do if, for example, you want to record a mono vocal from TonePort Send 1 versus a stereo file from the output of your stereo receiver on TonePort Send 1-2.

For details as to what you are actually selecting in these Default Input and Output menus, please see the [Line 6 Device ASIO Input & Output Options Within Audition](#) section.

When the above Edit View tab settings are complete, click Apply and then go to the Multitrack tab.

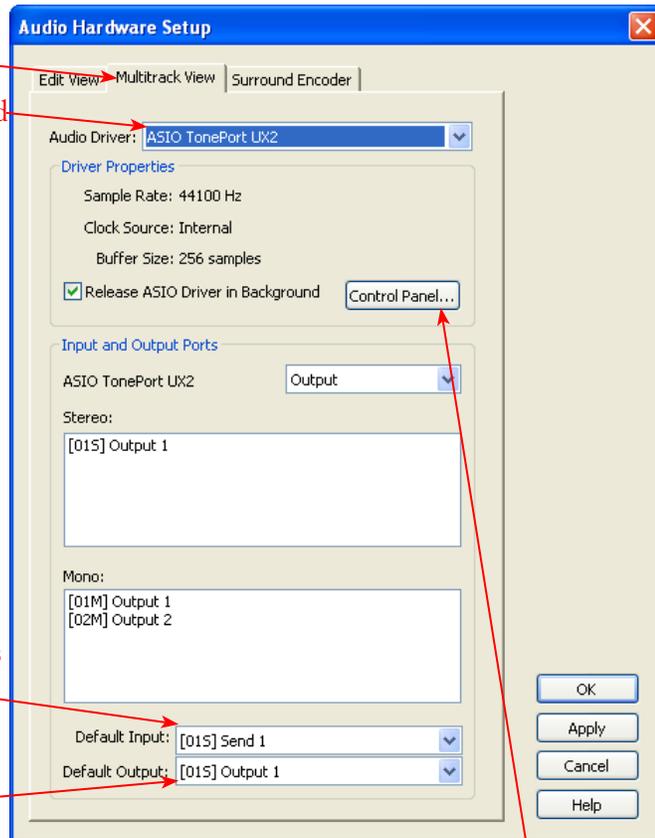
Multitrack View Audio Driver & Input/Output Settings

Go to the **Multitrack View** tab

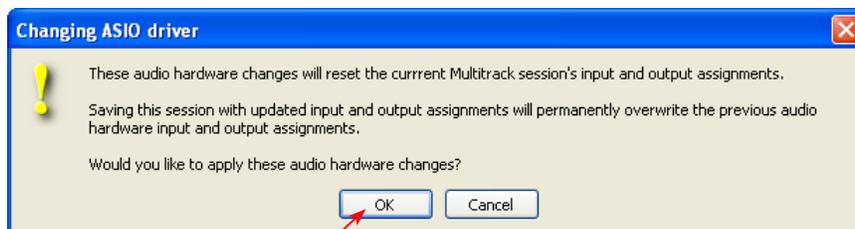
For the **Audio Driver**, select the one named **“ASIO”** followed by the name of your specific Line 6 device*

For **Default Input**, choose the mono or stereo Send that you want your audio tracks to use as the default **

For **Default Output**, choose the **[01S] Output 1**, which is your Line 6 device’s primary stereo Output 1/2



The **Control Panel** button will launch the **Line 6 Audio-MIDI Devices** dialog, which is where you can make Sample Rate and Bit Depth settings



If you receive this alert when changing the Audio Driver to ASIO, just note its message and click OK. If you already have some Audition Sessions you created and saved with a different Audio Driver then you might need to check that its audio track inputs & outputs match up with the new Line 6 ASIO inputs and outputs - if not then just change the audio track ins and outs in that Session

*For the **Audio Driver** setting, it is also possible to alternatively use the “Audition Multimedia” (DirectSound) driver for the Multitrack View audio driver. This does offer some convenience since it will allow you to record or playback at just about any Sample Rate, where ASIO is limited to 44100, 48000, 88200 or 96000 only. BUT, the Line 6 “ASIO” driver option is highly recommended for the Multitrack will provide an individual input for each Send and offer much snappier performance. For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the **Audio Driver and GearBox Settings** chapter.

The **Default Input is really just a convenience for the Multitrack View - you can still manually set the input for each audio track within your Session to record from any other Send.

For details as to what you are actually selecting in these Default Input and Output menus, please see the [Line 6 Device ASIO Input & Output Options Within Audition](#) section.

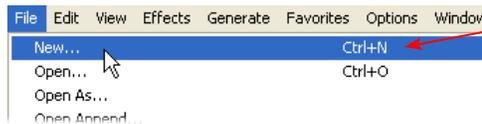
Recording in Audition's Edit View

Once the above driver and input/output settings are complete, you are ready to put Audition to work! First let's look at recording in the Edit View. Use the View buttons at the top of the Audition screen to toggle to the Edit View.



Open or Create a New File...

Go to **File > New Project** to create a new, blank audio file to record into. You'll be prompted to define the file's properties.



In Audition's **Edit View**, select **New** from the **File** menu

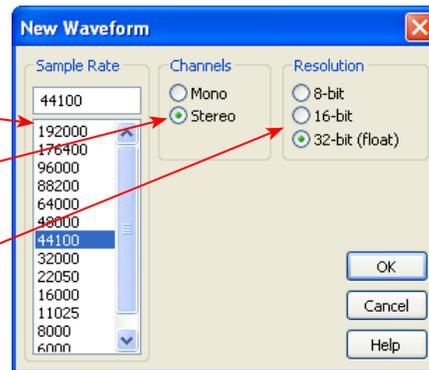
Choose the properties for your new file:

Your preferred **Sample Rate - 44100** is typically a good choice

Choose **Mono** or **Stereo** as preferred

Choose **32-bit** (since this is the Bit Depth we already set in the Line 6 Audio-MIDI Devices dialog)

Click **OK** and the file will be created



A few tips about Edit View recording and these settings...

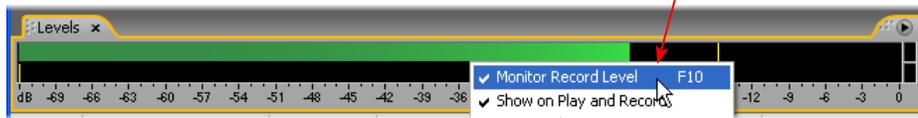
- **Sample Rate support:** If you are using the ASIO Audio Driver for Edit View that you are limited to a sample rate of 44100, 48000, 88200 or 96000 for recording or playback. If you need any other sample rate you'll need to switch to the "**Audition Multimedia**" driver. See the [Edit View Driver Settings](#) section above.
- **Mono/Stereo Channels:** You can to create a new Mono or Stereo audio file here, but note that what gets recorded into this new file is still determined by your **Edit View's Default Input** selection in the Audition Audio Hardware Setup dialog. For example, if you create a Stereo

audio file and your Default Input is set to a Mono input (such as [01M] Send 1) then this will grab the mono signal from your Line 6 hardware's Send 1 channel only and record it into both the left and right channels of your stereo file! It is best to choose a mono Default Input for recording a mono file, and stereo Default Input for a stereo file. See the [Edit View Driver Settings](#) section above.

Check your Edit View Recording Levels

Before you hit that Record button, it is of course a good idea to play your instrument with your desired GearBox/POD settings and check the level coming into Audition.

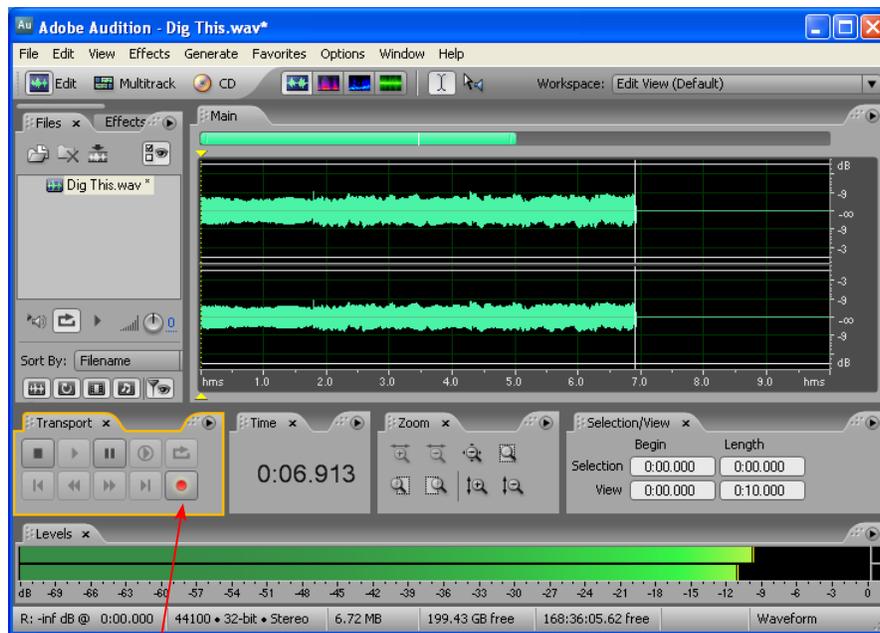
To activate the input metering, **right** click on Audition's Level meter and choose **Monitor Record Level** - repeat to toggle it off



If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Cubase



Start Recording!



Once your record level is set, click on the transport **Record** button and start recording!

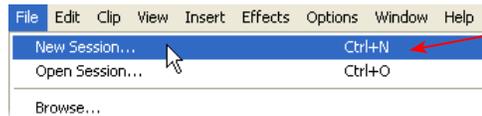
Recording in Audition's Multitrack View

Now let's look at recording in the Edit View. Use the View buttons at the top of the Audition screen to toggle to the Multitrack View.



Open or Create a New Session...

Go to **File > New Session** to create a new, blank Multitrack Session to record into. You'll be prompted to define the Session's Sample Rate.

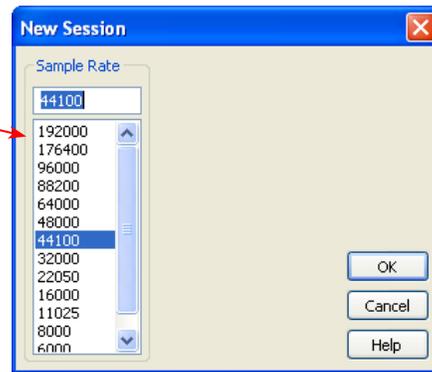


In Audition's **Multitrack View**, select **New Session** from the **File** menu

Choose the properties for your new file:

Your preferred **Sample Rate - 44100** is typically a good choice, or you can select 48000, 88200, or 96000 if your project requires one of these specific rates. (Other sample rates are not supported by the ASIO driver)

Click **OK** and the new Session will be created



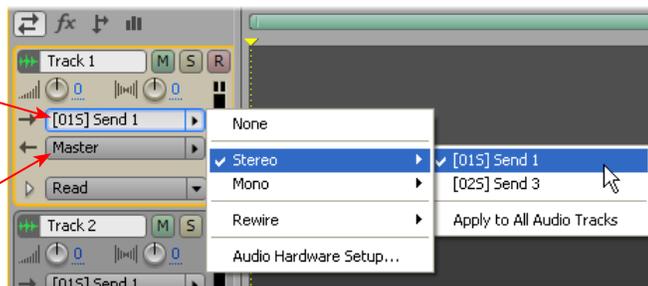
Once your Session is created, it's a good idea to go ahead and do **File > Save Session**, type in a name and choose a directory to save it in where you have lots of free hard disk space.

Set your Audio Track Input and Output...

In a new Session, you'll already have several empty audio tracks ready for you. if needed, you can go to the Insert menu and select New Audio Track if you need to create another. You'll see that all audio tracks' Input and Output options will already be set to the Default Input and Default Output options you selected earlier in the Audition Audio Hardware Setup dialog. But if you want to change the Input to record from a different Send, just click on the Track Input selector at the left of the track.

Choose a Line 6 device Send to record from in the Track Input Selector*

For Track Output, set this to Master track (and then we'll set the Master track output next)

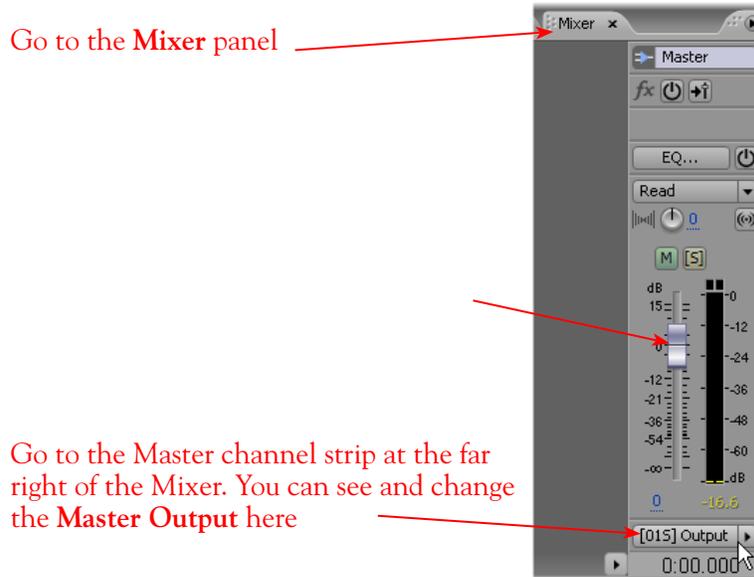


*You can choose a Stereo or Mono Send as your audio track input - a Stereo input will record a stereo

file into the track. A Mono input will record a mono file. The track output is always stereo.

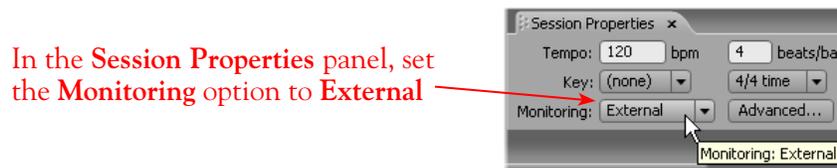
Set the Session’s Master Output...

By setting the audio tracks’ Output to **Master**, as shown above, this allows you to use the Master track’s volume, pan, effects inserts etc. on all tracks’ mixed output before it goes to your Line 6 hardware. By default, your Master track Output should already be assigned to **[01S] Output 1** (your Line 6 device’s Output 1-2). But, to check this, or if you have a TonePort UX8 and want a different Master Output, you can check this setting in the Audition **Mixer** panel.



Set Input Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware’s output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will set the Audition Session to “External Monitoring” so that the input monitor signal is not additionally fed through the software*.

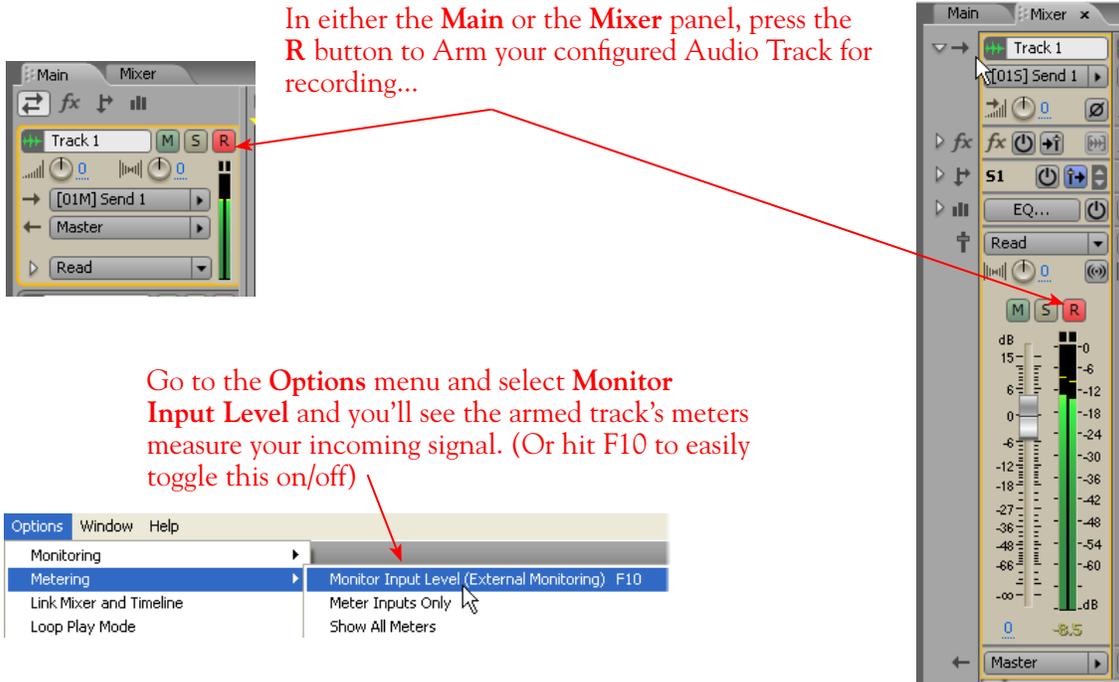


* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your audio track and set this option to “Audition Mix” to monitor your input signal through the software, and thus through the GearBox Plug-in processing. Please see Audition’s Help documentation for more about the Audition Mix Monitoring options. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In!

Arm Your Track and Check Your Recording Levels...

Before you can record into a track you need to “arm” it, and of course it’s a good idea to play your instrument with your desired GearBox/POD settings and check the level coming into the Audition track before you start rolling. You can access these Audio Track options either in the Mixer panel, or back in the Main panel.

In either the **Main** or the **Mixer** panel, press the **R** button to Arm your configured Audio Track for recording...



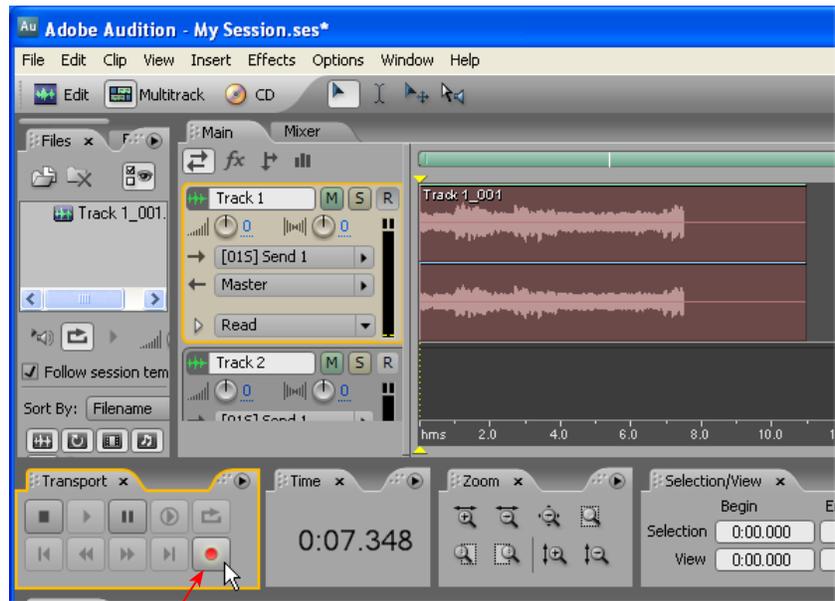
Go to the **Options** menu and select **Monitor Input Level** and you’ll see the armed track’s meters measure your incoming signal. (Or hit F10 to easily toggle this on/off)



If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send’s **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Cubase



Start Recording!



Once your record level is set, click on the transport **Record** button and start Recording!

Line 6 Device ASIO Inputs & Outputs Within Audition

As mentioned in the previous sections, you will see a different number of options in Audition's **Audio Hardware Setup** dialog's **Default Input** and **Default Output** menus depending on your specific Line 6 device. When using the Line 6 ASIO driver, each Send is offered both as individual mono Sends and as paired stereo Sends. To follow is a description of these ASIO Inputs and Outputs so you can decipher them within Audition!

Audition Default Input Options

TonePort and GuitarPort devices (except TonePort UX8): You will see the following ASIO Inputs...

- [01M] Send 1 = TonePort/GearBox Send 1, mono
- [01M] Send 2 = TonePort/GearBox Send 2, mono
- [01M] Send 3 = TonePort/GearBox Send 3, mono
- [01M] Send 4 = TonePort/GearBox Send 4, mono
- [01S] Send 1 = TonePort/GearBox Send 1-2, stereo
- [01S] Send 3 = TonePort/GearBox Send 3-4, stereo

TonePort UX8: You will see the following ASIO Inputs...

- [01M] Send 1 = TonePort Send 1, mono
- [01M] Send 2 = TonePort Send 2, mono
- [01M] Send 3 = TonePort Send 3, mono
- [01M] Send 4 = TonePort Send 4, mono
- [01M] Send 5 = TonePort Send 5, mono
- [01M] Send 6 = TonePort Send 6, mono
- [01M] Send 7 = TonePort Send 7, mono
- [01M] Send 8 = TonePort Send 8, mono
- [01M] GearBox Send 9 = GearBox Send 9, mono
- [01M] GearBox Send 10 = GearBox Send 10, mono
- [01M] GearBox Send 11 = GearBox Send 11, mono
- [01M] GearBox Send 12 = GearBox Send 12, mono
- [01S] Send 1 = TonePort Send 1-2, stereo
- [01S] Send 3 = TonePort Send 3-4, stereo
- [01S] Send 5 = TonePort Send 5-6, stereo
- [01S] Send 7 = TonePort Send 7-8, stereo
- [01S] GearBox Send 9 = GearBox Send 9-10, stereo
- [01S] GearBox Send 1 = GearBox Send 11-12, stereo

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

POD X3 devices: You will see the following ASIO Inputs...

- [01M] Send 1 = POD X3 Send 1, mono
- [01M] Send 2 = POD X3 Send 2, mono
- [01M] Send 3 = POD X3 Send 3, mono
- [01M] Send 4 = POD X3 Send 4, mono
- [01M] Send 5 = POD X3 Send 5, mono
- [01M] Send 6 = POD X3 Send 6, mono
- [01M] Send 7 = POD X3 Send 7, mono
- [01M] Send 8 = POD X3 Send 8, mono
- [01S] Send 1 = POD X3 Send 1-2, stereo
- [01S] Send 3 = POD X3 Send 3-4, stereo
- [01S] Send 5 = POD X3 Send 5-6, stereo
- [01S] Send 7 = POD X3 Send 7-8, stereo

*POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

PODxt devices: You will see the following ASIO Inputs...

- [01M] Input 1 = PODxt/GearBox Send 1, mono
- [01M] Input 2 = PODxt/GearBox Send 2, mono
- [01S] Input 1 = PODxt/GearBox Send 1-2, stereo

Also important to note is that the signal carried on the Line 6 device's Sends will differ depending on if GearBox is running or not, since GearBox offers options to slather on amp, cab and effects models onto your Mic or Instrument signal before that signal gets routed out the Sends. You can launch the Line 6 Audio-MIDI Devices dialog at any time and take a look in the Inputs & Recording tab - the Record Sends pane there provides handy descriptions of what is actually carried on each Send. Need a refresher on all that? Head on back to the [Windows Driver Settings](#) section.

Audition Default Output Options

For Outputs things are much simpler! All Line 6 devices offer one ASIO stereo Output, which appears as:

[01S] Output 1

This is of course sent to your Line 6 hardware's Output 1-2, and typically this is automatically selected as Audition's Default Output for both the Edit View and Multitrack View. This is all good since for most projects you'll simply want all audio being routed to the same common stereo output on your Line 6 device so that you can connect your stereo monitor speakers to the Output 1-2 jacks.

The one exception to this is the **TonePort UX8** - this fancy device offers multiple outputs. Therefore, you'll see the following options in Audition's Default Output menus:

- [01S] Output 1 = TonePort UX8 Outputs 1-2, stereo
- [01S] Output 3 = TonePort UX8 Outputs 3-4, stereo
- [01S] Output 5 = TonePort UX8 Outputs 5-6, stereo
- [01S] Output 7 = TonePort UX8 Outputs 7-8, stereo

CAKEWALK SONAR® 7 STUDIO/PRODUCER SETUP

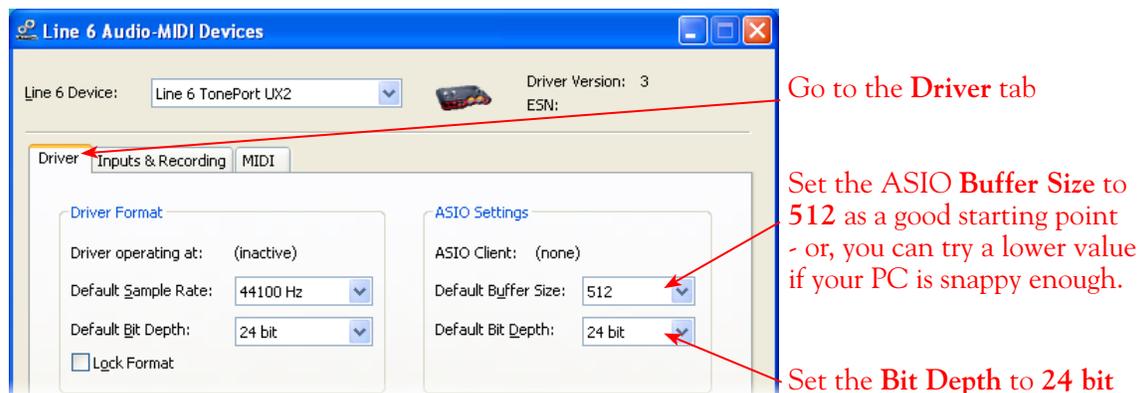
For this document, we'll show how to configure Cakewalk SONAR® 7.01 Producer Edition to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device on a Windows® XP® (32-bit) system. The steps are very similar for the setup of other Cakewalk SONAR Producer, Studio, Home Studio® & Guitar Tracks Pro® versions as well. (The SONAR 64-bit version is not currently supported by Line 6 audio device drivers or GearBox software).

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows® PC to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Windows® Control Panel and select the Line 6 Audio-MIDI Devices to access the Audio Driver settings.

IMPORTANT! For all Cakewalk SONAR, Home Studio and Guitar Tracks applications, the highest ASIO bit depth supported by this application with Line 6 devices is 24 bit. Before launching your Cakewalk software, be sure to set the bit depth in the Line 6 Audio-MIDI Devices dialog specifically to 24 bit.



For more information, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configuring SONAR to Use the Line 6 ASIO Driver

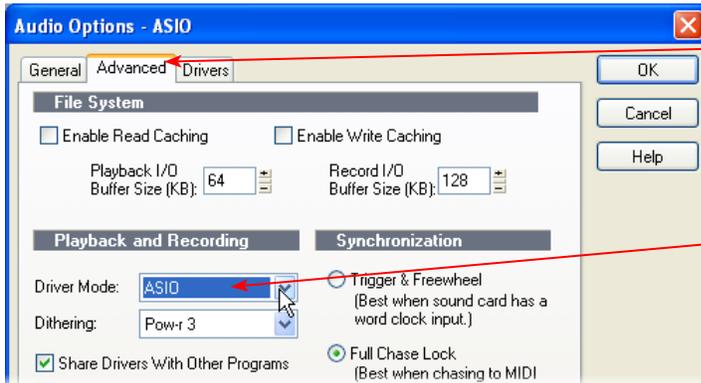
Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the SONAR Audio settings:

Go to the SONAR Options menu and choose Audio



First, go to the Advanced tab and select the ASIO driver



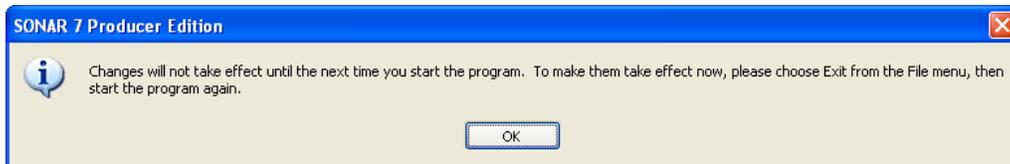
Go to the Advanced tab

Choose ASIO as the Driver Mode*

Click OK when done

*It is possible to use the WDM or MME driver modes, but using the ASIO driver type is recommended since it offers the best performance and multiple input/output channels. For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Important: If you are switching to ASIO Driver Mode from a different Mode, you will be prompted with the following alert to exit and restart SONAR - if prompted, you must do so before making the next settings.



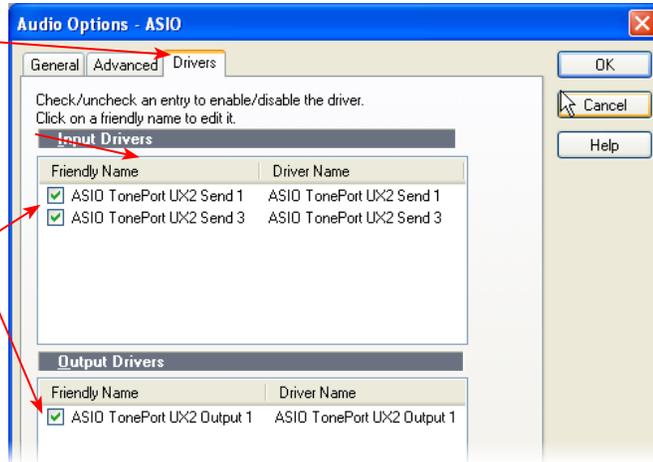
Activate Inputs & Outputs:

Once you've restarted SONAR, go to **Options > Audio** once again and go to the **Drivers** tab...

Go to the **Drivers** tab

Here you will see all ASIO Inputs and Outputs for your Line 6 hardware*

You can "activate" all the **Input Drivers & Output Drivers** for your Line 6 hardware that you want to be accessible for any audio tracks within a SONAR Project



***Input Drivers:**

Note that you'll see a different number of inputs depending on the specific Line 6 device you are using. Each Input Driver represents one stereo pair of (or two mono) audio channels, which are the same as the numbered device Sends (i.e. - "ASIO TonePort UX2 Send 1" is the UX2/GearBox stereo **Record Send 1-2**). You can select as many as you think you'll want to record from into SONAR audio tracks, but keep in mind that each additional activated input utilizes more CPU, so only activate the ones you need!

TonePort GX, D.I. UX1, UX2 and KB37: You will see 2 TonePort Input Drivers, as pictured above.

TonePort UX8: You'll see 6 TonePort UX8 Input Drivers.

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

POD X3 devices: You'll see 4 POD X3 Input Drivers.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

PODxt devices: You'll see 1 PODxt Input Driver.

Output Drivers:

For all Line 6 devices (except TonePort UX8), the ASIO driver offers only one stereo output, therefore, you'll see one Output Driver, and it will likely already be automatically selected.

TonePort UX8: You'll see 4 UX8 Output Drivers. For most SONAR projects, you likely only need to enable the first "Output 1" options and assign all track playback to this one common output. However, TonePort UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Windows Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Additional Audio settings...

Now click on the General tab in the Audio dialog to make a few final settings.

Click OK when done

For the **Playback Timing Master**, select the primary ASIO "Output 1" of your Line 6 device

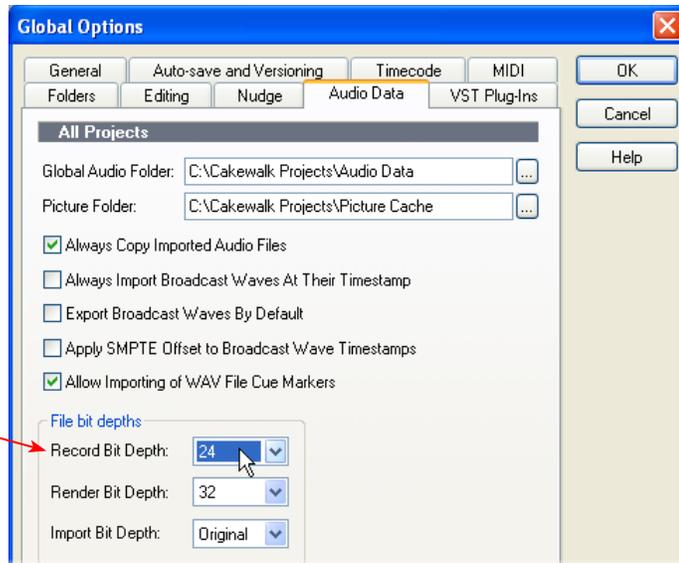
For the **Recording Timing Master**, select the primary ASIO "Send 1" of your Line 6 device

The **Audio Driver Bit Depth** likely is grayed out here. You'll want to set it to **24 bit** if it is not already. If needed, go to the **Global Options** to change this setting*

44100 is a good **Sampling Rate** to choose, or you can select 48000, 88200, or 96000 if your Project requires a higher, specific rate

The **ASIO Panel** button launches the **Line 6 Audio-MIDI Devices** dialog, where you can adjust the ASIO Buffer or Bit Depth if needed

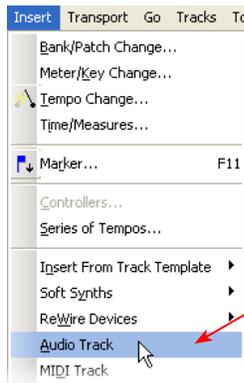
*If the **Audio Bit Depth** was not automatically set to 24 Bit in the previous step, then you can go to SONAR's **Options > Global... > Audio Data** tab and change this setting...



For the **Record Bit Depth**, select **24**.
Click **OK** when done to exit

Configuring an Audio Track for Recording

Now that your Line 6 hardware is set up, you are ready to start working in a SONAR Project! Create a new Project File (or open an existing one) and insert a new audio track to record into...



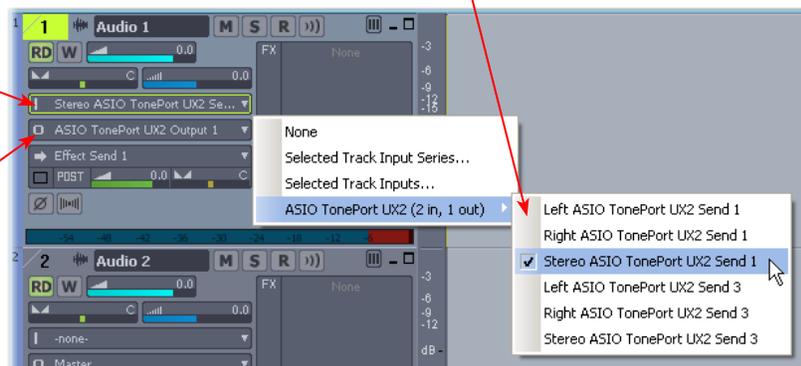
Choose **Insert Audio Track** from SONAR's **Insert** menu

Select your Audio track's Input and Output

You'll see that you have the option of choosing either a "Left" or "Right" mono, or a "Stereo" input for any Audio track's recording input*

Click on the Audio track's Input selector to choose a mono or stereo input

Set your Audio tracks' **Output** to your Line 6 device's stereo **Output 1**



*Note that the “Left” and “Right” labeled ASIO TonePort Send 1 and ASIO TonePort Send 3 options will record from either the Line 6 Device Send 1-2 or Send 3-4, respectively, where “Left” is always the odd-numbered channel and “Right” is always the even-numbered channel of the Send. These “Left” and “Right” labeled inputs will record a mono file.

The “Stereo” labeled options will record from the correspondingly numbered Line 6 hardware’s Send 1-2, Send 3-4, etc., and will record a stereo file.

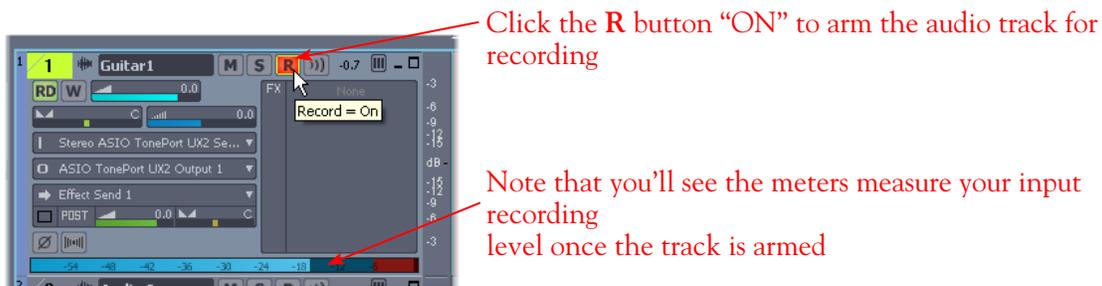
Set Input Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware’s output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable SONAR’s “Input Echo” option on our Audio track so that the input monitor signal is not additionally fed through the software*.



* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your Live audio track and turn SONAR’s Input Echo button “ON” to monitor your input signal through the software, and thus through the GearBox Plug-in processing. Please see SONAR’s Help documentation for Global and Track Input Monitoring options. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In!

Arm Your Track & Set Your Levels...



If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send’s **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into SONAR



Start Recording!

Once your record level is set, click on the transport **Record** button and start riffing!

DIGIDESIGN® PRO TOOLS® LE™ 7 SETUP

Digidesign® has designed Pro Tools® software so it can only be used with a Digidesign or M-Audio® audio interface; you cannot use your Line 6 hardware as the primary audio interface for a Pro Tools system. But you can still enjoy the benefits of GearBox by connecting your Line 6 device to the Digidesign interface's inputs. TonePort UX2, UX8, KB37, POD X3 and PODxt PRO even let you do this with a direct, digital connection.

For this document, we'll be showing how to connect to the Digidesign® Mbox® 2 unit with Pro Tools LE™ 7.3.1, but these steps are similar for connecting to the Digi 002® or other Digidesign and M-Audio hardware as well. There are two methods described here – Recording from a Line 6 USB device's analog outputs or digital S/PDIF outputs.

Note that it is not necessary to have both your Line 6 hardware and Digidesign hardware connected to the same computer. You can alternatively have your Line 6 and Digidesign hardware on separate computers since the two devices are indeed operating individually!

Recording from Your Line 6 Hardware's Analog Outputs

In this setup example, we'll show how to connect a TonePort UX2 to a Digidesign Mbox 2 unit - it is of course possible to record from the analog output of any Line 6 device in much the same way. We will call out where different steps are needed for other Line 6 hardware.

Note that if you are using a POD X3 or PODxt device it is not necessary to connect your POD to a computer via USB at all for this type of analog connection. GearBox is not necessary for any POD, PODxt or POD X3 unit since Tones can be by called up & edited, and output levels configured completely on your POD device! However, if you want to use GearBox with any PODxt family device, you certainly can if you connect to the USB port of a computer - as mentioned above, it does not necessarily have to be the same computer that Pro Tools is running on.

Be sure to connect the USB cable from TonePort into your computer's USB port, and then proceed with the following steps...

Connect the Analog Outputs* from your Line 6 hardware to the Digidesign Mbox 2:

Connect a USB cable to your device & computer's USB port

Using two ¼" to ¼" shielded TS or TRS audio cables, plug each into the Analog Outs of your device



*Note - If you are using a GuitarPort device, the Analog Outs are the RCA style jacks labelled "L" and "R". If using a TonePort UX8, you should connect to the "Out 1" and "Out 2" jacks on the back.

Plug the other end of the Left audio cable into the Mbox Input 1 input, and the right audio cable into the Mbox Source 2 input.

Connect a USB cable to your Mbox 2 & computer's USB port



From your Line 6 device's **Right Analog Out** (or "Out 2"), connect to the Mbox 2 **Input 2 - Line input**

From your Line 6 device's **Left Analog Out** (or "Out 1"), connect to the Mbox 2 **Input 1 - Line input**

Use the Mbox 2 **Mon Outputs** to hear playback of all Pro Tools LE audio. The Line 6 Hardware/GearBox audio will be mixed with the Pro Tools LE audio as well. Therefore, if you are using headphones, you'll want to plug them into the Mbox 2 headphone jack to hear everything:



From the Mbox **Mon Out** jacks, connect to the Left and Right inputs for your powered speakers or monitoring system

If you want to use headphones for monitoring, plug them in to the Mbox 2 **Headphone Out**



Next, before you launch Pro Tools LE, make sure that your Windows PC is configured properly for your Line 6 hardware. This configuration is slightly different depending on which specific Line 6 hardware you are using:

TonePort, GuitarPort and PODxt Devices

If you are using GearBox along with your device, you'll want to consult the *GearBox Help* PDF that is installed with GearBox - just launch GearBox and select **Open Help** from the Help menu. In the *GearBox Help* document, please reference the **Driver Panel & Recording** chapter and the details for your specific Line 6 device.

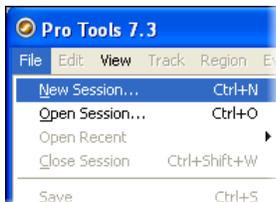
POD X3 Devices

If you will using GearBox along with your POD X3, you'll want to consult the *GearBox Help* PDF

that is installed with GearBox - just launch GearBox and select **Open Help** from the Help menu. In the *GearBox Help* document, please reference the **Driver Panel & Recording** chapter and the details for your specific Line 6 device. It may also be helpful to read through the *POD X3 Pilot's Handbook* that came in the box with your POD X3. Or, you can download this Handbook in PDF form from the [Line 6 User Manual](#) downloads page. In particular, the **Reference: Configuration & Setup** chapter covers the options for choosing your inputs (Mic, Line, Instrument, or multiple input sources) as well as things such as a Tone Blend versus Tone Pair tone setting, panning tones and effects, etc. Basically, this is the point where you'll want to have your instrument or mic plugged into POD X3 and have your tone sounding the way you want it be recorded. You'll also want to be sure the panning and levels of the tones and effects feeding to the POD X3 Left and Right analog outs are the way you want each to be recorded into your Pro Tools track(s).

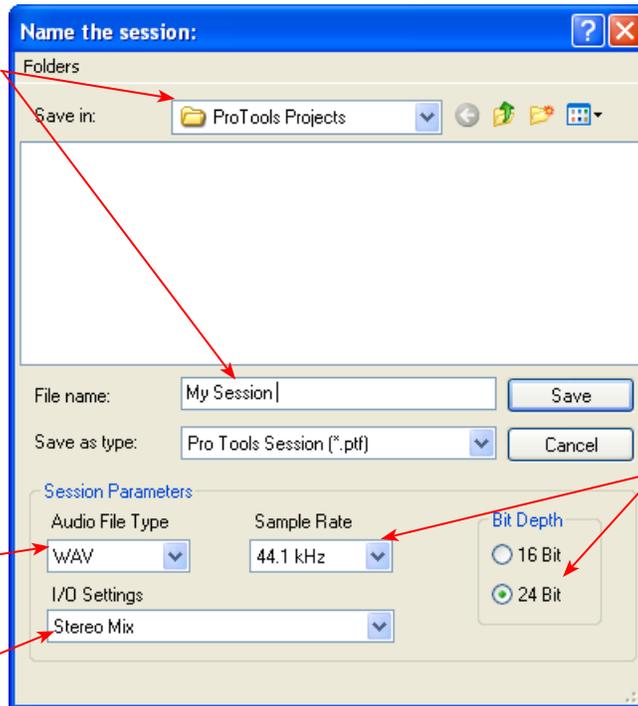
Creating a New Pro Tools LE Session

Once you have your Line 6 hardware and GearBox configured (if using GearBox), then the next step is to launch Pro Tools LE and set up a Session for recording...



To start a new Session in Pro Tools LE, choose **New Session** from the **File** menu

Choose a directory where to save your new Session and type in a name for it



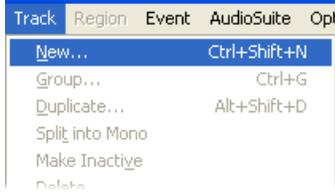
File Type - WAV is a good choice here for Windows

For I/O Settings, Stereo Mix is best

Choose the **Sample Rate and Bit Depth, 44.1 kHz and 24 Bit** are good choices unless you have specific needs for your project

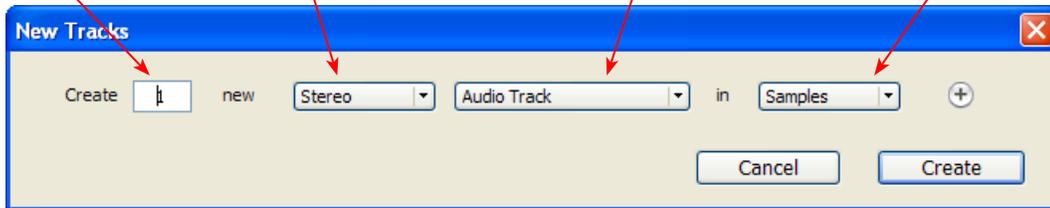
Create and Configure a New Audio Track

Next create at least one new audio track in the session to record into. You can of course also create more audio tracks if you want to import existing audio files into this session...



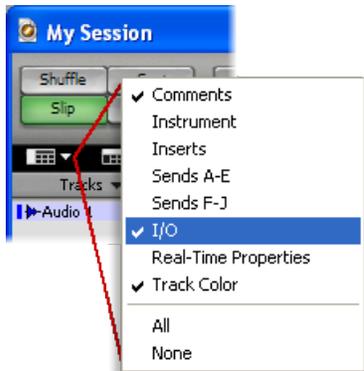
In the **Track** menu, select **New...**

Choose how many Tracks to create Choose **Mono** or **Stereo*** for your audio track format Choose **Audio Track** for the Track type Choose **Samples**



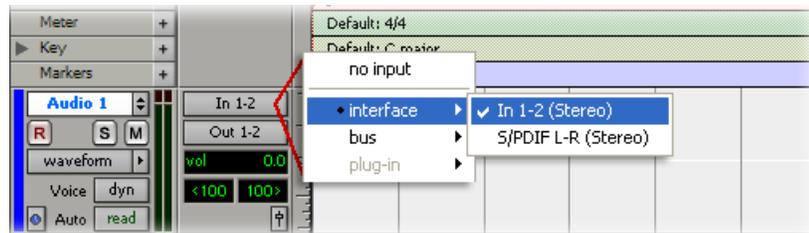
...Then click **Create**

*You'll need to decide before creating each recording track here if you want to record the output from your Line 6 hardware/GearBox as Mono or Stereo. Mono will of course only record one of your Line 6 device's (Left or Right) outputs, and you'll choose which once the track is created. If you have stereo effects active on your GearBox or POD tone, then you'll probably want to choose Stereo to record both channels into a stereo track.

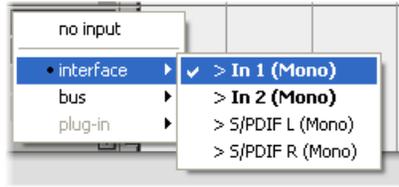


At the top left of the Edit Window, click the **View** selector and enable the **I/O View**

On the new audio track, click on the **Input Selector** and choose the Mbox **Interface** input source. Since we created a Stereo track here, we'll select the **In 1-2 (Stereo)** to record from the Mbox Mic/Line (analog) inputs



Or... if you created a mono audio track, you'll have the option for the track input to choose either **In 1 (Mono)** to capture the LEFT signal, or **In 2 (Mono)** to capture the RIGHT signal:



Click the **R** button to arm the audio track for recording

The track meters will now measure the Line 6 Device/GearBox signal level



Click the **M** button to mute the track while recording*

*Muting the track during recording disables the Pro Tools LE software monitoring feature, which allows your Line 6 Hardware/GearBox analog input signal to be monitored with the lowest latency possible. Adjust the Mbox MIX knob to balance the session audio playback with the input audio (see your Mbox documentation for details). Once you are done recording, un-mute the track so you can hear playback.

Note to Digi 002 users... when using the Digi 002 hardware with Pro Tools LE, an additional Low Latency Monitoring option is available within Pro Tools LE Operations menu. You can alternatively keep your track un-muted and activate this option to hear your input monitoring signal when recording (see your Digi 002/Pro Tools LE documentation for more on this feature).

Set your Recording Levels - As shown above, once your audio track is armed, you can use the track's meters to gauge your recording levels. Note that the levels coming into the track are affected by a few different controls. If you are using GearBox, then the output level is affected by the Tone volume as well as the main Monitor volume. Also, the main Output or Master Volume knob on your Line 6 hardware unit affects the signal level going out the Analog Outs. Finally, the Mbox unit includes level knobs for Inputs 1 & 2 to adjust the incoming signal level. The best practice is to set all of these controls to roughly half way to start, and then adjust each of them slightly to achieve the optimum level. You want to avoid setting any one control very high or very low to avoid excess noise or degrading the signal quality.

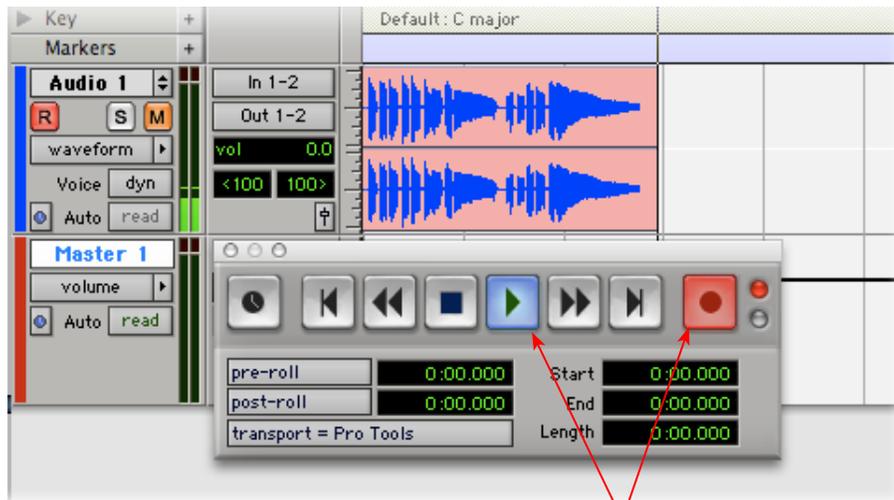
Be sure the input switches are set so that the green **Mic** light is illuminated for both Inputs 1 & 2 (since we're plugging into these Mic/Line inputs)



Keep both the **Mono** and **48V** (phantom power) switches off

Use the **Input 1 & 2** knobs to adjust the recording levels

Start Recording...



Click the transport **Record** button to place Pro Tools LE into record mode, then press the **Play** button to start recording!

Recording from Your Line 6 Hardware's S/PDIF Outputs

TonePort UX2, UX8, POD X3 and PODxt Live units all include S/PDIF outputs, therefore you can optionally connect these outputs to your Digidesign hardware to record digitally into Pro Tools or Pro Tools LE! In this setup example, we'll show how to connect a TonePort UX2 to a Digidesign Mbox 2 unit, and we'll call out where different steps might be necessary for the other Line 6 devices.

For more information regarding using your Line 6 device's S/PDIF connections, please also see the earlier section titled [S/PDIF Digital Output from Line 6 Hardware to an External Device](#). The *Pilot's Handbook* that came with your Line 6 device includes more useful information as well.

Connect Your Hardware...



Using a 75-Ohm, coaxial S/PDIF cable, plug one end into the **S/PDIF Digital Out** of your Line 6 device



Plug the other end of the S/PDIF cable into the Mbox **S/PDIF In**

From the Mbox **Mon Out** jacks, connect to the Left and Right inputs for your powered speakers or monitoring system

If you want to use headphones for monitoring, plug them in to the Mbox 2 **Headphone Out**



You will still use the Mbox Mon Out jacks (or Headphone Output) to hear playback of all Pro Tools LE audio. The Line 6 Hardware/GearBox audio will be mixed with the Pro Tools LE audio if you use the Pro Tools software monitoring function. See the later section regarding monitoring for more on this.

TonePort UX2, UX8 & KB37 Configuration

When connecting two hardware devices digitally, it is necessary that both units are set to operate at the same sample rate. For TonePort devices, this is configured in the **Line 6 Audio-MIDI Settings** dialog. Note that you will need to have your TonePort connected to your computer's USB port, **but you must not have the GearBox application running** - this is necessary to change sample rate settings. To get to this dialog, go to the Windows Control Panel and launch the **Line 6 Audio-MIDI Devices**. In the dialog, go to the **Driver** tab:

Line 6 Audio-MIDI Devices

Line 6 Audio-MIDI Devices

Line 6 Device: Line 6 TonePort UX2 Driver Version: ESN:

Driver Inputs & Recording MIDI

Driver Format

Driver operating at: (inactive)

Default Sample Rate: 44100 Hz

Default Bit Depth: 24 bit

Lock Format

ASIO Settings

ASIO Client: (none)

Default Buffer Size: 256

Default Bit Depth: 24 bit

Sample Rate Converter

ToneDirect Monitoring

Buffer Size: Extra Small Medium Extra Large

Smaller buffers provide lower latency, but increased CPU usage

OK Cancel Apply

Choose your connected Line 6 Device...

Then set the preferred sample rate for the **Format**. Mbox 2 supports 44100 or 48000 Hz - we'll use **44100 Hz** for this example

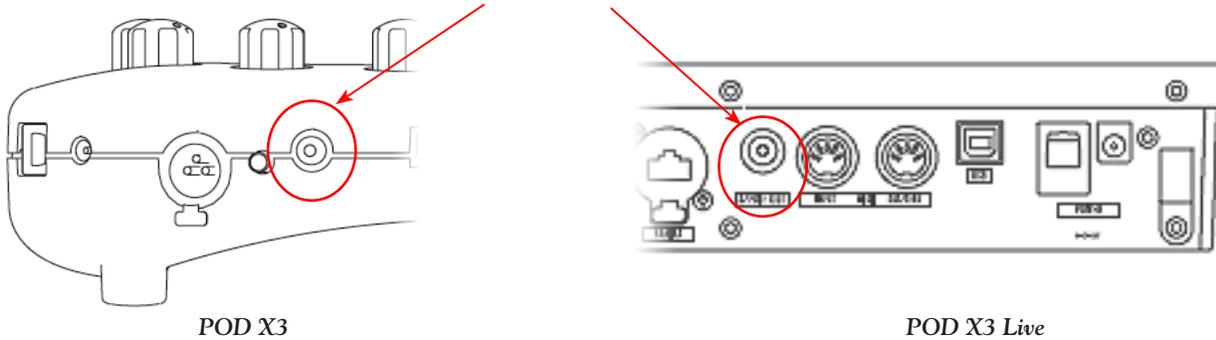
Choose **24 bit**

Check the box so that the settings are **locked**

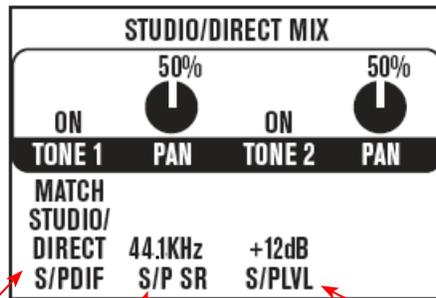
Click **OK** when done

POD X3 S/PDIF Configuration

Connect the **S/PDIF Out** on the rear panel of your POD X3 device to the **S/PDIF Input** on the Mbox



The S/PDIF Out sends out 24-bit digital versions of the Left & Right Outputs. Press the **OUTPUTS** button to access additional S/PDIF options:



For **S/PDIF**, you likely want the **MATCH STUDIO/DIRECT** option*

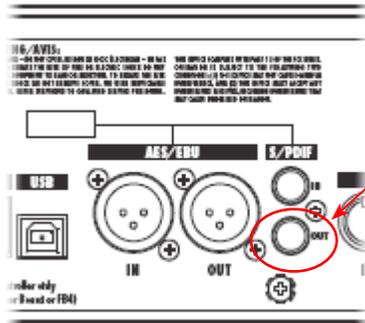
For the **S/P SR** options, set the sample rate to the same as your Pro Tools Session (**44.1 kHz** is a good option)

Use the **S/PLVL** if you need to slightly raise or lower the outgoing S/PDIF signal level for optimum recording levels

*This S/PDIF setting defines what type of audio is sent out the S/PDIF Out. These options are:

- **Match Studio/Direct** – S/PDIF outputs the Tone and Pan settings as shown.
- **Studio/Direct Tone 1** – S/PDIF outputs Tone 1 only, panned center.
- **Studio/Direct Tone 2** – S/PDIF outputs Tone 2 only, panned center.
- **Dry Inputs** – S/PDIF Left outputs the unprocessed input(s) to Tone 1, and S/PDIF right outputs the unprocessed input(s) to Tone 2.

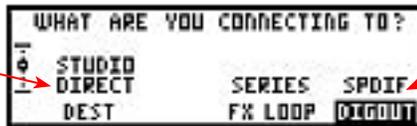
PODxt Pro - Digital Output Configuration



Connect the **S/PDIF Out** on the rear panel of your device to the **S/PDIF Input** on the Mbox

Press the **Tune/System** button and turn the **Select** knob clockwise until the display reads, **What are you connecting to?**

Set the **DEST** option to **STUDIO DIRECT**



Set the **DIGOUT** option to **SPDIF**

Press the **I/O & Dig Select** button once to access the **Digital Out** page:



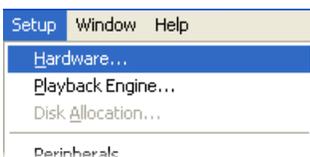
For the **FORMAT** options, set the sample rate to the same as your Pro Tools Session (**44.1 kHz** is a good option) and **24 BIT**

Set the **MODE** to **NORMAL** for your fully processed tone to be sent out the S/PDIF connection (or to **DRYGTR** for an unprocessed signal)

Use the **GAIN** if you need to slightly raise or lower the S/PDIF signal level for optimum recording levels

Configure Mbox 2/Pro Tools LE for Digital Recording

Now, launch the Pro Tools LE application and set it up to receive the S/PDIF Digital Input as follows:



From the Pro Tools LE **Setup** menu, select **Hardware...**

Choose **S/PDIF** as the **Clock Source** so that the Mbox 2 follows the digital clock of your Line 6 hardware

The **Sample Rate** option here is determined by the Session setting (next step)

Click **OK** when done



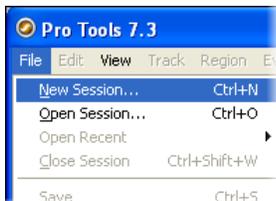
You will now see the **S/PDIF** light solidly illuminated on the front of the Mbox 2, indicating it is in S/PDIF digital input mode



Note that when receiving S/PDIF input, the Input 1 & 2 level knobs on the front of the Mbox 2 do not adjust the digital signal level. To adjust the recording level, use the GearBox software's Tone volume and output level controls, or your PODxt or POD X3 S/PDIF Gain control.

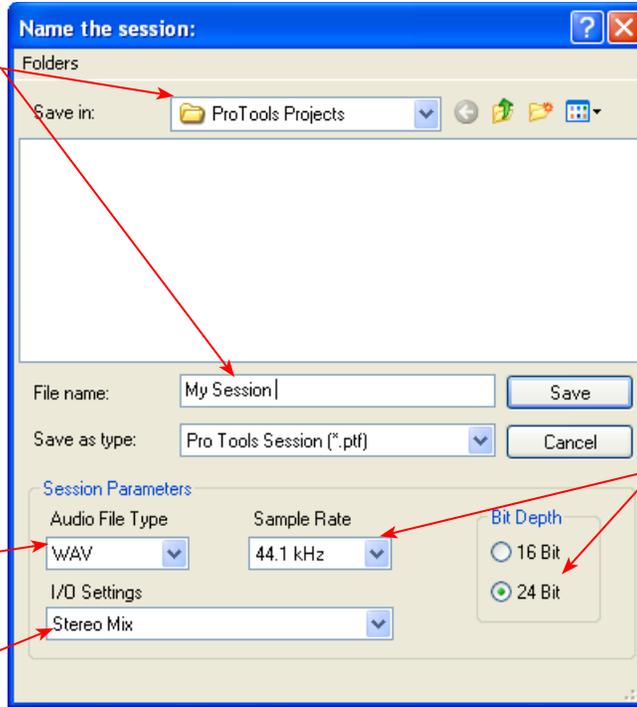
Creating a New Pro Tools LE Session

Once you have your Line 6 hardware and GearBox configured (if using GearBox), then the next step is to launch Pro Tools LE and set up a Session for recording...



To start a new Session in Pro Tools LE, choose **New Session** from the **File** menu

Choose a directory where to save your new Session and type in a name for it



File Type - WAV is a good choice here for Windows

For I/O Settings, Stereo Mix is best

Choose the Sample Rate* and Bit Depth 44.1 kHz and 24 Bit are good choices unless you have specific needs for your project

*Note: If you prefer to use the 48 kHz Sample Rate, then you can choose these here in the Pro Tools dialog, but you will need to also go back to the Mac Audio-MIDI Setup dialog (or to your POD X3 or PODxt S/PDIF settings) and set the sample rate value for your Line 6 hardware to match. Matching sample rates are required on both hardware units with a digital connection.

Create and Configure a New Audio Track

Next you'll need to create at least one new audio track in the session to record into. You can of course also create more audio tracks if you want to import existing audio files into this session...



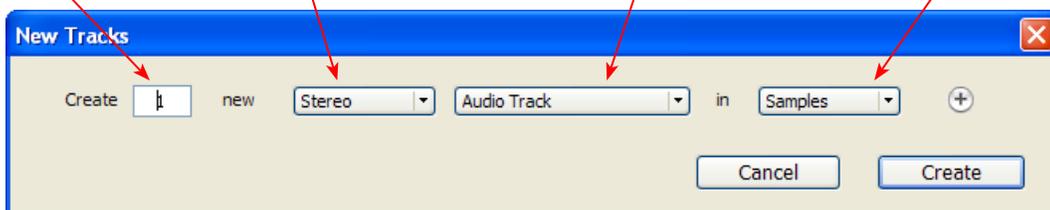
In the Track menu, select New...

Choose how many Tracks to create

Choose Mono or Stereo* for your audio track format

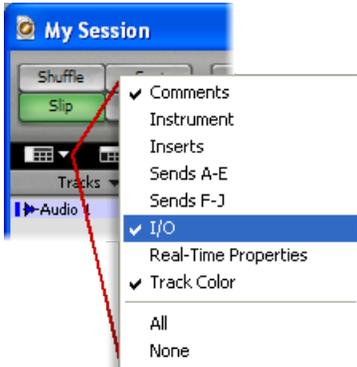
Choose Audio Track for the Track type

Choose Samples



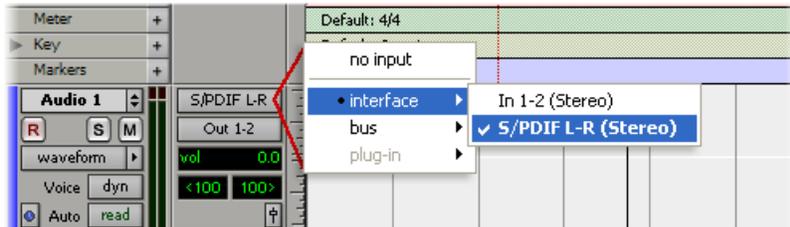
...Then click Create

*You'll need to decide before creating your recording track here if you want to record the output from your Line 6 hardware/GearBox as Mono or Stereo. Mono will of course only record one of your Line 6 device's (Left or Right) outputs, and you'll choose which once the track is created. If you have stereo effects active on your GearBox or POD tone, then you'll probably want to choose Stereo to record both channels into a stereo track.

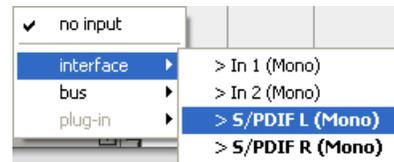


At the top left of the Edit Window, click the View selector and enable the I/O View

On the new audio track, click on the Input Selector and choose the Mbox Interface input source. Since we created a Stereo track here, we'll select the S/PDIF In L-R (Stereo)



Or... if you create a mono audio track, you'll have the option for the track input to choose either S/PDIF L (Mono) to capture the LEFT signal, or S/PDIF R (Mono) to capture the RIGHT signal



Click the **R** button for to Arm the track for recording

Once armed, the track's meters will measure the Line 6 device/ GearBox S/PDIF signal level



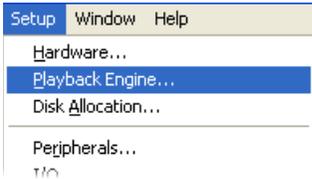
Keep the track's Mute button set to un-muted to monitor your TonePort/GearBox signal*

*When receiving a S/PDIF input, the Mbox 2 will only allow the signal to be monitored through the Pro Tools LE software. With the audio track armed and not muted, the track's volume control will adjust the monitor signal coming from your Hardware/Gearbox, allowing you to balance your listening levels independently of your recording level. The Pro Tools LE software monitoring is also subject to latency, which is affected by your Pro Tools LE Hardware Buffer settings (see your Mbox documentation for more information regarding latency and monitoring).

Note to Digi 002 users... when using the Digi 002 hardware with Pro Tools LE, an additional Low Latency Monitoring option is available in the Pro Tools LE Operations menu. It is best to activate this

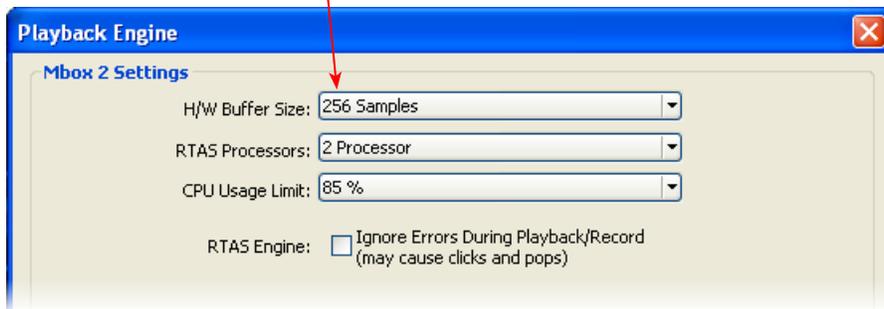
option to hear your input monitoring signal with the lowest latency when recording (see your Digi 002/Pro Tools LE documentation for more about this feature).

Adjusting the Pro Tools LE Hardware Buffers



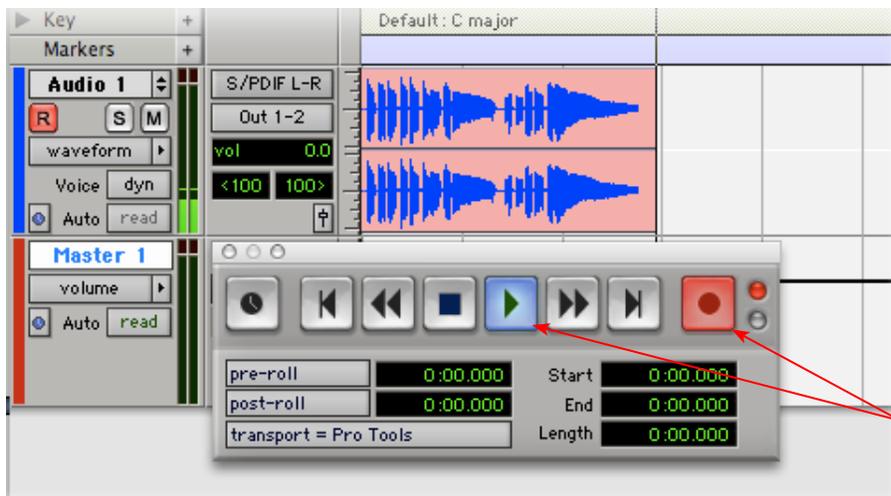
Go to the Pro Tools LE Setup menu and choose Playback Engine...

The lower the H/W Buffer Size value that is selected, the lower the latency. However, lower values can also result in less stability for session playback and recording. 256 Samples is a good starting value to try.



TIP: Alternative Mbox monitoring option... If monitoring your Line 6 Hardware recording signal through the Pro Tools LE software results in excessive latency, you can alternatively connect you device's Analog Outs to an external Mixing Console and manually mix the device signal with the output of your Mbox. This allows you to hear the Line 6 device signal with no added latency from Pro Tools LE. In this configuration, you should Mute your Pro Tools LE track while recording to silence its software monitoring signal.

Start Recording...



Click the transport Record button to place Pro Tools LE into record mode, then press the Play button to start recording!

GearBox RTAS Plug-In

The GearBox Plug-In is really a great tool for Pro Tools and Pro Tools LE users! Like any RTAS Plug-In, it can be added on any track insert, allowing you to non-destructively apply entire GearBox Tones on any of your Pro Tools sessions. The GearBox Plug-In is available as an Add-On purchase to your Line 6 hardware (or, already comes included if you own a TonePort D.I. or UX8), and works with Mac or Windows. You can grab it now without even getting out of your chair! Just run Line 6 Monkey with your Line 6 USB device connected and go to the Optional Add-Ons tab. Or, you can read all about it here:

[Line 6 GearBox Plug-In](#)

We've included a complete setup section on using the RTAS GearBox Plug-In with Pro Tools LE 7 within the [GearBox Plug-In chapter](#).

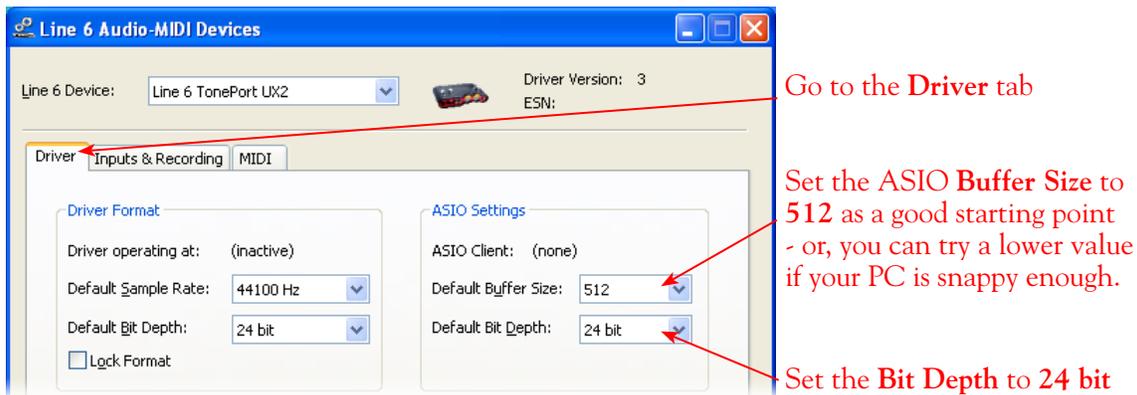
IMAGE LINE SOFTWARE FL STUDIO® 7 SETUP

For this document, we'll show how to configure Image Line Software FL Studio® version 7 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows® PC to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Windows Control Panel and select the Line 6 Audio-MIDI Devices to access the Audio Driver settings.

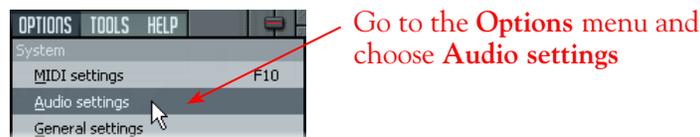


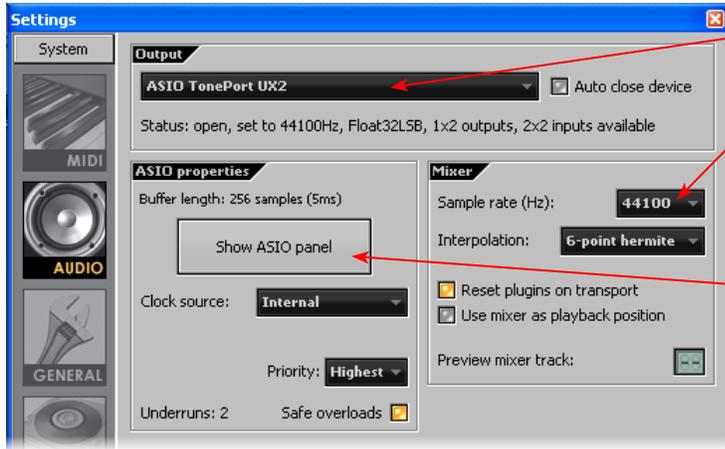
Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configure FL Studio 7 to Use the Line 6 ASIO Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the FL Studio Audio Settings dialog:





Choose **ASIO** driver that includes the name of your specific Line 6 device

Set a **Sample Rate** – **44,100** is a good choice here, or you can use 48,000, 88,200 or 96,000 Hz if your Project requires a higher sample rate

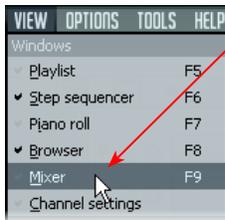
Since we're using the ASIO driver, any Buffer Size adjustment is made in the **Line 6 Audio-MIDI Devices** dialog - click the **Hardware Setup** button to launch it*

Close the dialog when done

*For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

FL Studio Mixer Options...

Most settings for recording are made in the Mixer.



Select the **Mixer** from the **View** menu



In the **Mixer** panel, click the **Options** button and make sure **32Bit float recording** is enabled

In FL Studio, you can record into any “**Insert**”, and you can choose your Input independently for each Insert...

First, select an **Insert** to record into, we’ll use **Insert 1**



Choose the input for the selected **Insert** here. You’ll see all available **Sends** from your Line 6 device. You can choose to record from a **Stereo** or **Mono Send***

Set the **Out** for your selected Insert here. You likely want this Insert (as well as the **Master** channel and all other Inserts you use for this project) set to **Output 1 - Output 2**

***About Inputs and Outputs...**

Note that you’ll see a different number of Sends and Outputs listed in the **In** and **Out** menus depending on the specific Line 6 device you are using.

Sends

TonePort & GuitarPort device (except TonePort UX8): You will see 2 Stereo and 4 Mono Sends, as pictured above.

TonePort UX8: You’ll see 6 Stereo and 12 Mono Sends.

TonePort UX8’s driver offers multiple Inputs jacks and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

POD X3 devices: You’ll see 4 Stereo and 8 Mono Sends.

POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog’s Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot’s Handbook*.

PODxt devices: You’ll see 1 Stereo and 2 Mono Sends.

Outputs:

For all Line 6 devices (except TonePort UX8), the ASIO driver offers only Output 1/2, therefore the dialog will show its 1 stereo **Output 1 - Output 2**.

TonePort UX8: You'll see 4 stereo outputs. For most FL Studio projects, you likely only need to use the **Output 1 - Output 2** for Inserts and all other modules' outputs so that all playback gets routed to one common destination. UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Windows Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Set Your Recording Level & Monitoring Options...

While Insert 1 is selected, click to **disable** the **Send from Insert 1** control (so that the knob gets hidden, as shown here). This eliminates the Insert 1 input signal from being routed through the software*

With **Insert 1** still selected, now you can start strumming your instrument to check your recording level - you'll see the input level measured on the Insert meters

Click to turn off the little light here to **Mute** the Insert during recording. Toggle it back on for playback

Note that the Insert **Volume slider** and **Pan knob** actually affect the recorded signal. Best to keep the Volume close to 100% and then use your GearBox/POD level controls to adjust your record level (see next step)

*When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable FL Studio's **Send from Insert** option so that the input monitor signal is not additionally fed through the software, which would result in two monitor signals being heard, often causing an "echo" or potential feedback loop.

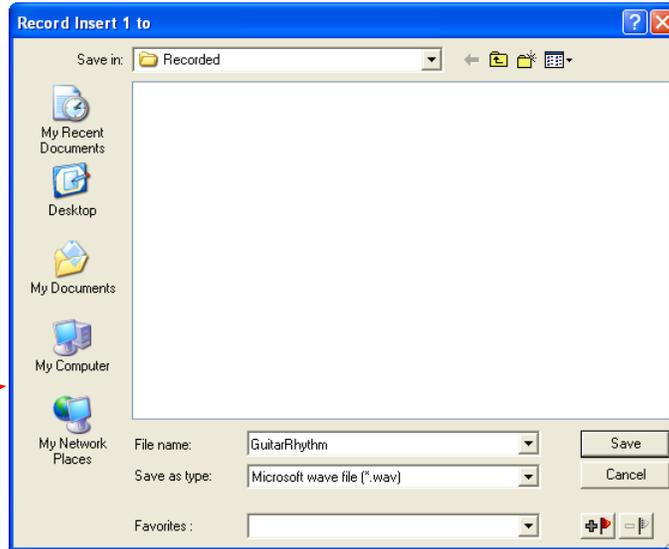


If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Live

Get Armed & Ready...



Click the little **Disk button** at the bottom of Insert 1 to “Arm” it for recording. This will launch a dialog where you must name and Save a WAV file to record into



Click **Save** when done and you should now see the Disk button lit, indicating it is Armed.

Note you do not want any other Inserts Armed, or they will be recorded into as well!

Start Recording!

Use the **Tempo** button to edit the project's tempo if needed. Then press the transport **Recording Mode** button to “ON”



Now press the **Play** button and start riffing!



PROPELLERHEAD REASON[®] 4 SETUP

Propellerhead Software's Reason[®] is an amazing virtual studio filled with synthesizers, drums and effects, all combined with a MIDI sequencer for easy pattern-based music creation. Reason does not offer a feature for recording audio; therefore, GearBox and Line 6 USB audio devices cannot be used for input directly into Reason. However, you do of course need a sound card device for playback, and your TonePort, GuitarPort, POD X3 or PODxt is a perfect high quality audio interface for this task!

When using your Line 6 device, you can also simultaneously plug in your instruments and jam along with the playback of your Reason project. Or, utilize Reason's ReWire[®] technology to combine a Reason project with that of another ReWire-capable audio software host, and use your Line 6 device in this setup for playback and recording with the host software! For this document, we'll be showing how to set up a Line 6 USB audio device with Propellerhead Reason ver. 4.0 - setup is similar with other Reason versions.

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows[®] PC to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Windows **Control Panel** and select the **Line 6 Audio-MIDI Devices** to access the Audio Driver settings. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

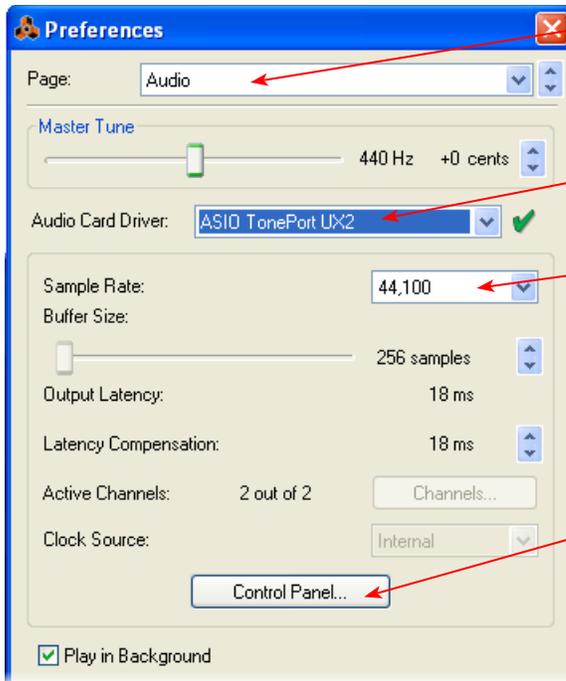
Configuring Reason to Use the Line 6 ASIO Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the Reason's Preferences dialog:



Select Preferences from the Reason menu



Select the **Audio** page

For **Audio Output**, choose the **“ASIO”** driver for your Line 6 device

Choose a **Sample Rate** – **44100** is a good choice for most projects, or you can choose 4800, 88200, or 96000 if your project requires one of these specific sample rates

Since we’re using the ASIO driver, the **Buffer Size** is adjusted in the **Line 6 Audio-MIDI Devices** dialog - click the **Control Panel** button to launch it*

Close the Preferences dialog when done

Now just hit the **Play** button in Reason’s transport and to hear the Reason playback through your Line 6 hardware!



*For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

To Jam Along with Reason...

You can also of course still use GearBox or configure your POD X3 for your Mic and Instrument tones while Reason is playing back if you want to sing or jam along. Just plug in your Mic or Instrument and use GearBox or your POD just as you normally do. Note that you can adjust the level of your Mic or Instrument independently of the level of the Reason playback.

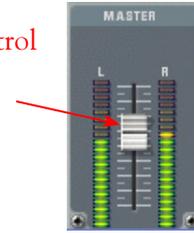
If you are using GearBox, you can adjust the **Monitor Volume** and **Out to Hardware** controls within GearBox to balance out your Mic/Instrument volume versus the Reason playback:

The **Monitor Volume**, **Pan** and **Mute** controls act only upon your Mic/Instrument tone signal



The **Out to Hardware Volume** and **Mute** controls act on the combined Mic/Instrument + Reason output sent to your speakers or headphones

Use the **Master** slider in the **Reason Mixer** to control Reason's playback volume



If you are using **POD X3**, then you can adjust **Tone Volume** and **Master Volume** on the POD X3 unit to balance out your Mic/Instrument volume versus the Reason playback:



The **Tone Volume** knob affects only your Mic/Instrument Tone level

The **Master Volume** knob controls the combined Mic/Instrument + Reason output sent to your speakers or headphones

With this configuration, both the Reason project playback and your Mic/Instrument GearBox/POD tones are heard through your speakers, and sent to all your device's outputs. This also allows you to connect the Line 6 hardware's outputs to an external device, such as a tape recorder, mixer, P.A. system, etc., to record or amplify this stereo output signal!

Using your Line 6 Hardware with Reason 3 in a ReWire Setup

The Propellerhead **ReWire**[®] technology allows the Reason modules' outputs to be directly routed into any ReWire "Host" application. Using ReWire, the Host application can send MIDI tracks to Reason's synth. modules, and Reason then sends audio playback directly into the ReWire Host, which is mixed with the audio of the Host application. When Reason is configured as a ReWire "Slave" in this manner, it is controlled by the Host application and does not utilize a sound card connection itself. Therefore, if you want to use your Line 6 hardware as your sound card device in a ReWire setup like this, it is necessary for you to choose your device as the assigned audio device within the ReWire Host application. To read more about the ReWire technology and the latest about ReWire Host support, please visit the [Propellerheads](http://www.propellerheads.com) web site.

Using Reason with Ableton Live as a ReWire Host

The Ableton Live audio software is capable of functioning as a ReWire Host application. The following steps show you how to set TonePort as the audio device for the Ableton Live 7 software, and then configure Live to connect with Reason 4 as a ReWire Slave device. This enables you to do audio recording and playback with Ableton Live, allowing Reason's output(s) to be automatically played in sync and channeled through Live's audio tracks via ReWire. The setup process is similar in other ReWire Host applications as well (Steinberg Cubase[®], Cakewalk SONAR[®], etc.) and you can certainly

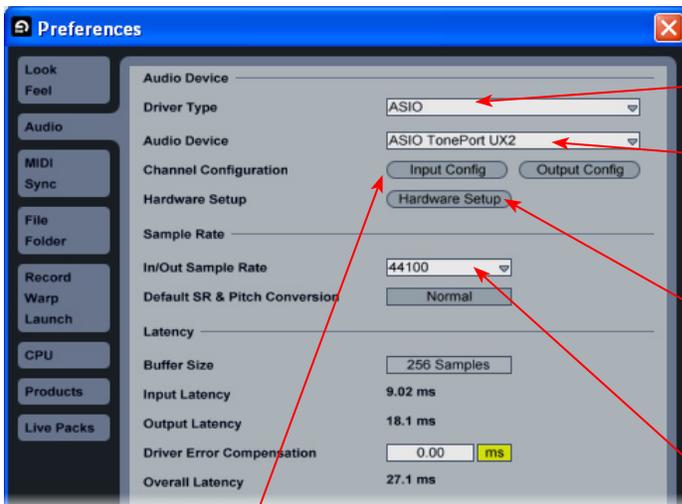
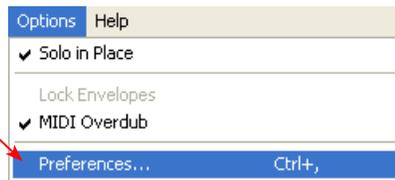
use your Line 6 hardware with these other ReWire Host applications with Reason as well!

Some Line 6 TonePort packages come with a special Ableton Live Lite, Line 6 version software included. This Live version also supports Propellerheads ReWire technology! Configuring the Live Lite Line 6 version is much the same as the following steps for the Ableton Live 7 version.

You first want to be sure to exit Reason if it is currently running. The ReWire Host application must always be launched first. Launch Ableton Live and make the following settings to set your Line 6 hardware as the Live audio device...

Launch the Ableton Live Preferences dialog:

Go to the Live **Options** menu and choose **Preferences**



Go to the **Audio** tab

Choose **ASIO** as the driver type...

Then choose your Line 6 device for the **Audio Device**. In this example, we'll choose our connected **TonePort UX2**

Since we're using the ASIO driver, the **Buffer Size** is actually adjusted in the **Line 6 Audio-MIDI Settings** dialog - click the **Hardware Setup** button to launch it*

Set a **Sample Rate** – **44,100** is a good choice here, or you can use 48,000, 88,200 or 96,000 Hz if your Project requires a higher sample rate

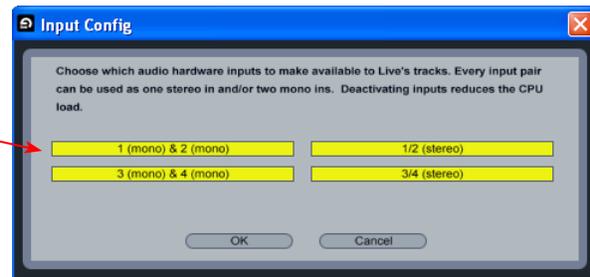
Just as with most Multitrack recording software, in Live you also need to configure the individual inputs and outputs once a Multi-in/out device is selected. Click on the **Input Config** button to access the Inputs.

*For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Activate Inputs:

Here you can “activate” all the inputs from your Line 6 hardware that you want to be accessible for any audio track as a track input for recording

Click **OK** when done

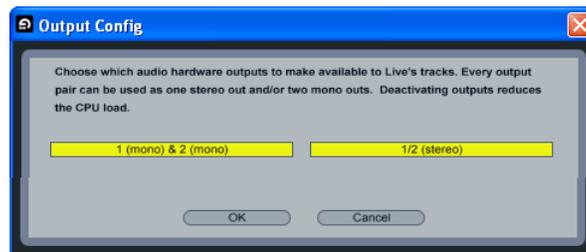


You'll want at least the **1 (mono) & 2 (mono)** and the **1/2 (stereo)** inputs activated. Each additional activated input utilizes more CPU, so only activate the ones you need!

Note that you'll see a different number of inputs listed in the **Input Config** dialog depending on the specific Line 6 device you are using. Typically these enumerated inputs correspond to the Line 6 device's Sends of the same number (i.e. - Live's input “**3/4 (stereo)**” is the TonePort UX2/GearBox Send 3-4).

Activate Outputs:

To access the outputs, click the Output Config button back in the Live Preferences > Audio tab. This will show you all outputs available for your selected Line 6 Output Device.

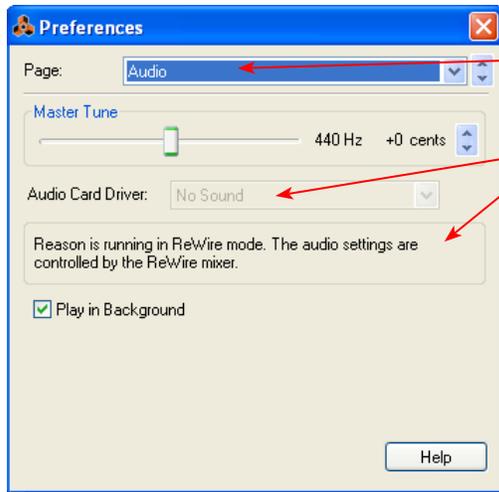


For all Line 6 devices (except TonePort UX8), the ASIO driver offers only Output 1/2, therefore the dialog will show its two mono and 1 stereo output options, and they will automatically be selected.

TonePort UX8: You'll see 8 mono and 4 stereo outputs. For most Live projects, you likely only need to enable the Output 1/2 mono and stereo options and assign all track playback to one common output. UX8 does offer some very flexible monitoring and signal routing options using its additional outputs - please see the [Windows Driver Settings](#) section, as well as your [TonePort UX8 Pilot's Handbook](#) for more information.

Note - The Ableton Live Lite 5, Line 6 version has a restriction that allows only one stereo output to be used at a time. To be able to choose two or more different output devices in a Live Set, you must switch into Demo mode, or upgrade to a full version of Ableton Live

Now that Ableton Live is configured to use your Line 6 device, launch Reason. Reason will automatically set itself to ReWire Slave Mode. You can check this mode in the Reason **Preferences**:



Select the Audio settings

When Reason is in ReWire mode, the Audio Output will be non-selectable and this message appears

Now in Ableton Live, you can simply access the **Output** menu of any MIDI track to route its MIDI to any of the Reason synth modules.



In any of Live's MIDI tracks, choose Reason as the MIDI To output...

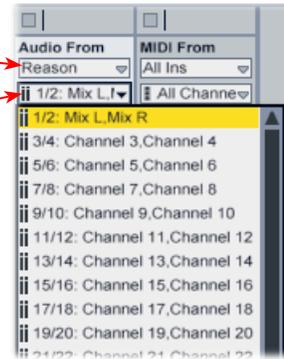
Then click on the **Output Channel** selector to choose any Reason module

To receive the audio output from Reason, set the **Input** of any of Live's audio tracks to receive the audio from any of Reason's outputs.

In one of Live's Audio tracks, choose **Reason** as the **Audio From** input...

Then click on the **Input Channel** selector to choose any Reason output

(Note that the **1/2 Mix L, Mix R** channel receives the full Reason project audio mix)



Now just hit the **Play** button in either Live or Reason, and both projects will play in sync, with all the audio being routed into Ableton Live and played through your Line 6 hardware!



You can utilize your Line 6 device/GearBox to also plug in a Mic or Instrument, dial in your tone, and record audio tracks right into the Ableton Live Set. This ReWire configuration is especially slick since the Reason audio can be treated as part of your Live Set - you can mix, add effects plug-ins (such as the GearBox Plug-In) on the incoming Reason audio track, and all will be incorporated into your audio mix-down when you do an Export from Live! It is important to note, however, that running all these programs at one time can require some hefty usage of your computers processor, RAM and disk access, especially as you add more tracks, Reason modules and real-time effects. Your actual performance will depend on the specifications of your computer.

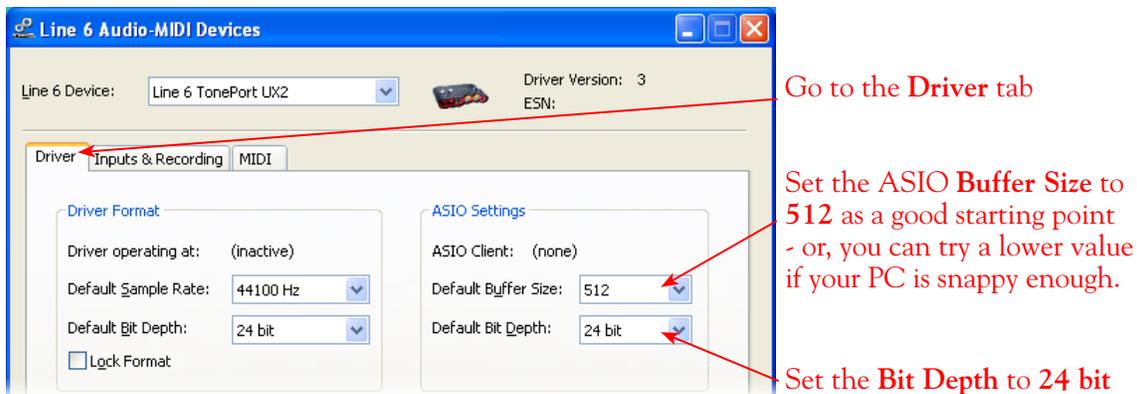
SONOMA WIRE WORKS RIFFWORKS® 2, LINE 6 EDITION SETUP

For this document, we'll show how to configure **Sonoma Wire Works, RiffWorks®** version 2.1 to work with Line 6 TonePort, GuitarPort, or PODxt. The steps are very similar for the setup of other earlier RiffWorks versions as well. The RiffWorks, Line 6 Edition is available as an Add-On that you can purchase from the [Line 6 Online Store](#) - just a click away! For RiffWorks full retail version and info, please visit the [Sonoma Wire Works](#) site.

Note that Line 6 TonePort UX8 and POD X3 family devices do not support the RiffWorks Line 6 Edition software. Please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configuring Your Windows® PC to Use Your Line 6 Hardware

If you have not already done so, the first step is to go to the Windows **Control Panel** and select the **Line 6 Audio-MIDI Devices** to access the Audio Driver settings.



Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

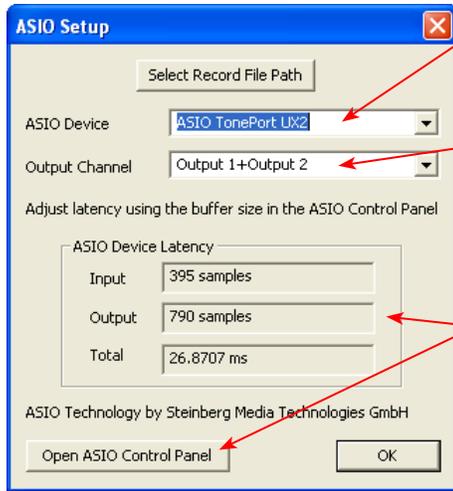
Configuring RiffWorks to Use the Line 6 ASIO Driver

Be sure to connect the USB cable from your Line 6 device into your computer's USB port, and then proceed with the following steps...

Launch the RiffWorks Audio Setup Dialog:

In the bottom right area of the RiffWorks main screen, select the **Audio Setup** button





Select your Line 6 device as the **ASIO Device**, if not automatically selected for you already

Set the Output Channel to **Output 1+Output 2** (the stereo Output 1-2 of your Line 6 hardware)

The **ASIO Device Latency** fields provide info to you on the latency amounts, which are directly affected by your **ASIO Buffer Size**. You can adjust the ASIO Buffer Size in the **Line 6 Audio-MIDI Devices** dialog - press this button to launch it*

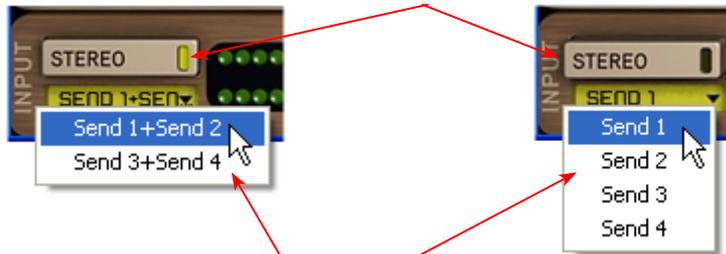
Press **OK** when settings are complete

*For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

Inputs Options for Recording

You can choose to record from any of your Line 6 Devices mono or stereo Sends into RiffWorks. A mono Send will record a mono audio file, and a stereo Send will record a stereo file. These selections are made in the Input section of the RiffWorks main screen, at the bottom left. First toggle the “Stereo” button to switch between mono/stereo, and then click the menu beneath to select from the desired Line 6 device Send.

Click the Stereo button - when the light is on, this indicates Stereo input mode, when off, the input mode is Mono



You'll then be offered **Stereo** or **Mono** Send options in the menu

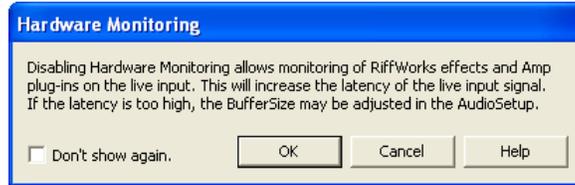
Hardware Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware’s output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. In order to fully utilize ToneDirect Monitoring, you must turn on the RiffWorks **Hardware Monitoring** as shown below so that the input signal is not fed through the software. Keep in mind that you won’t hear any of RiffWorks’ plug-in effects if you monitor the input thru your Line 6 device. Please refer to your RiffWorks documentation for more info on its internal effects.



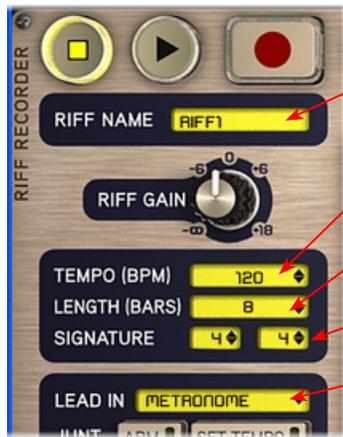
Click the **Hardware Monitor** button to "On" (the light is illuminated when on)

You see the following alert after enabling the **Hardware Monitoring** - read it's message and click **OK** to accept the setting



Prepare Your RiffWorks Session...

Open a new RiffWorks Session, and follow these steps...



Enter a name for your riff here (Intro, Verse, Chorus, etc...)

Choose the **Tempo**

Choose the **Length** (in bars) of your riff

Choose the **Time Signature** of your riff

Choose whether you want the **Lead In** count to be the metronome, a drummer, or nothing at all

Before you click that record button, it's a good idea to check your recording levels.



Go ahead and strum a few chords and you'll see the meters measure your input recording level coming into the selected Inputs here in the RiffWorks Input section at the bottom left of the main window

If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into RiffWorks



Start Recording Your Riffs

Once your record level is set, click on the RiffWorks transport **Record** button and lay down your first Riff!



The Riff you just recorded will appear in the Riff recorder window as "Take 001". You can record several takes of the same riff, which will appear underneath this one

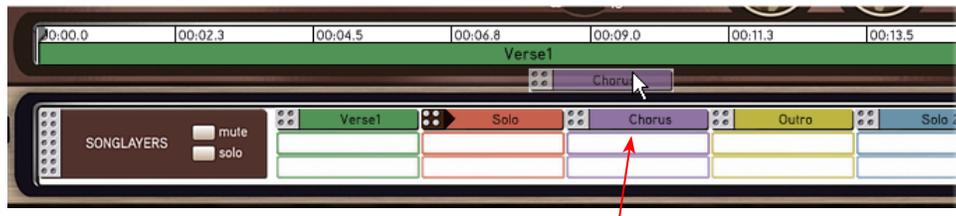


When ready to record another section of your song, click Create in the Riffs panel



The newly created Riff will appear as **riff2** in the Riff window. You can now record this Riff as described above

Once you've laid down all your Riffs, it's time to piece them all together in the Song panel...



Drag each Riff into the Song panel above in any order to build a song

And you've got a new song - it should look something like this...



RiffWorks 2, Line 6 Edition lets you import, export and manipulate your Riffs all kinds of ways. For more information, please refer to your RiffWorks Help documentation.

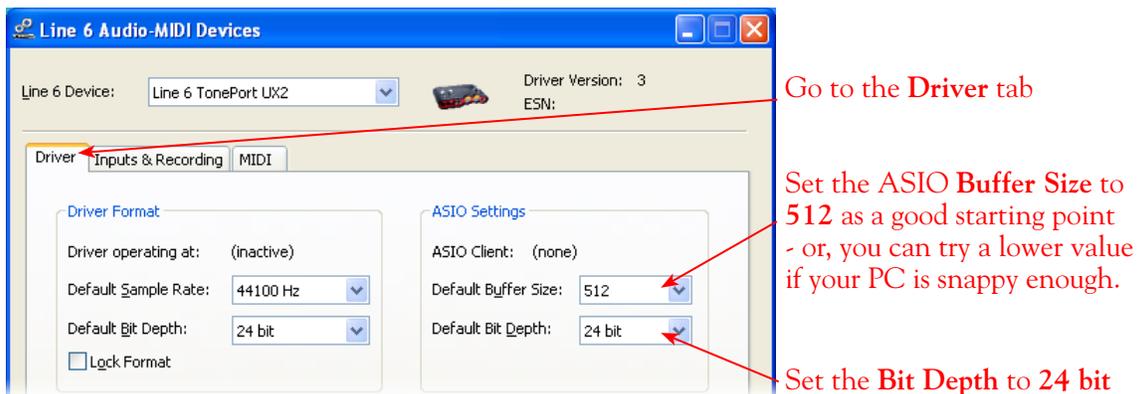
STEINBERG CUBASE®/CUBASE® STUDIO 4 SETUP

For this document, we'll show how to configure Steinberg Cubase® 4.1 to work with Line 6 TonePort, GuitarPort, POD X3 or PODxt as the USB audio device on a Windows® XP® (32-bit) system. The steps are very similar for the setup of Steinberg Cubase® Studio 4 & Nuendo® 4, as well as previous Cubase® SE/SX/SL 3 and Nuendo® 3 versions. (Steinberg's Cubase® & Nuendo® 64-bit versions are not currently supported by Line 6 audio device drivers or GearBox).

Note that the features of Line 6 hardware models differ slightly, so we'll call out where specific instructions apply per device type. If you are using a POD X3 device, it is not yet supported as of GearBox version 3.5 - please check the Line 6 [GearBox Online Help](#) site for the latest news and developments.

Configure Your Windows® PC to Use Your Line 6 Hardware

Be sure to connect the USB cable from your Line 6 device into your computer's USB port. If you have not already done so, the first step is to go to the Windows® Control Panel and select **Line 6 Audio-MIDI Devices** to configure the ASIO driver settings for your Line 6 device.



For more information, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for details on Driver settings for your specific Line 6 hardware.

Configuring Cubase to Use the Line 6 ASIO Driver

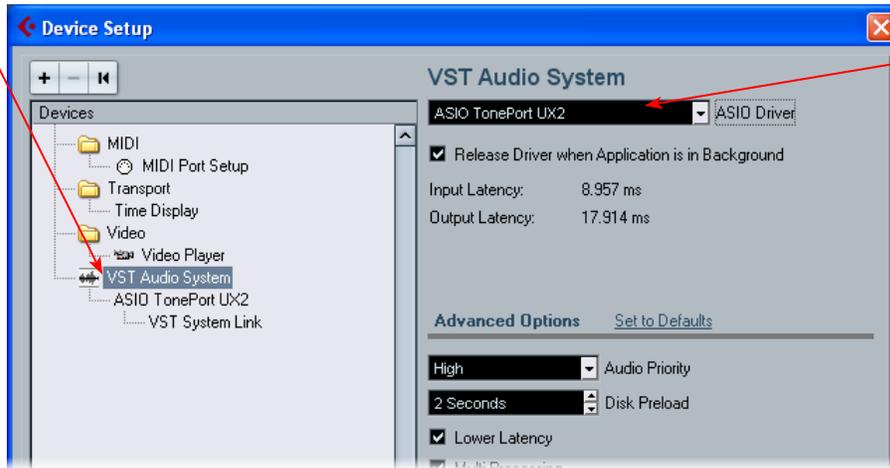
Launch Cubase and Open the Device Setup Dialog:

Go to the Cubase **Devices** menu and choose **Device Setup**



First, we need to switch to the ASIO driver mode:

Click on **VST Audio System**

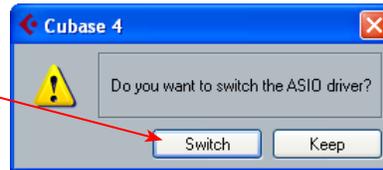


Select the **ASIO** driver for your Line 6 device

Note you do NOT want the “ASIO Multimedia” driver, but the one with “ASIO” + the name of your device!*

Select **Switch** if you are prompted to “switch the ASIO driver...”

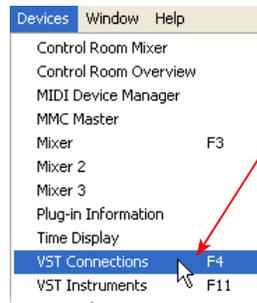
Then click **OK** to exit the **Cubase Device Setup** dialog



*It is possible to use the “ASIO Multimedia” driver mode, but using the Line 6 ASIO driver option is recommended since it offers the best performance and multiple input/output channels. For more about ASIO Buffer settings, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter.

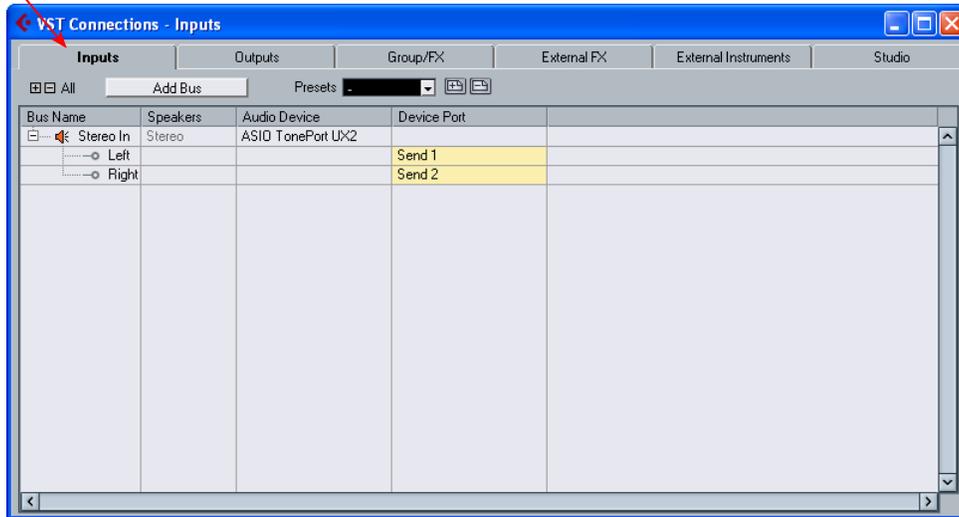
Establish Your Inputs and Outputs:

Next we need to configure the Inputs and Outputs from the Line 6 hardware so they can be accessed within your Cubase Projects. This can get a bit fiddly in Cubase, but you only need to do this once for your audio device, so hang in there!



Return the Cubase **Devices** menu and select **VST Connections**

Go to the **Inputs** tab...

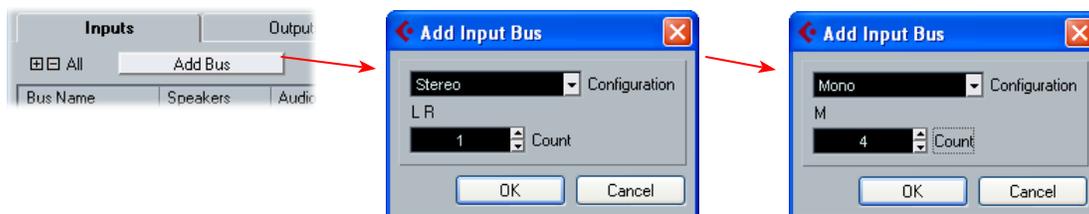


Initially, you'll see that one **Stereo In** "Bus" has already been created for you. You should see your Line 6 device listed, and its Send 1 and 2 audio channels each assigned as the **Left** and **Right** channels for this initial Bus. TonePort and POD X3 devices offer more than just the one stereo Send 1-2, however, so for these devices you'll want to create an additional stereo Bus for each Send. Also, you'll want to create mono Buses for all the individual Send audio channels to allow you to record from any one of them as a mono input to a Cubase audio track. In our example we're using a TonePort UX2, and just like TonePort GX, D.I., UX1, KB37, and GuitarPort devices, there is also a Send 3-4 available. TonePort UX8 offers 6 stereo Sends, and POD X3* offers 4 stereo Sends.

*POD X3 offers several onboard options for the type of signal that is assigned to each Send. Look in the Line 6 Audio-MIDI Settings dialog's Inputs screen to see the current POD X3 Send descriptions. For more info about POD X3 Sends, please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter, and your *POD X3 Pilot's Handbook*.

You can follow these steps to add additional buses for all your device's Sends...

Add Buses



Press the **Add Bus** button, create 1 Stereo Bus, then repeat and add 4 Mono Buses using the **Add Input Bus** dialog...

Next, each Bus channel needs to be correctly assigned to the desired hardware Send. The **Stereo In 2** Bus likely already became correctly assigned to the Line 6 device's next stereo Send (Send 3-4 for our TonePort). But the **Mono In** Buses all defaulted to "Send 1", which is not what we want. Click directly on the **Device Port** field for each of the Mono Buses and select a different Send channel for each. For our TonePort UX8, we'll assign one each to Send 1, 2, 3, & 4.

Bus Name	Speakers	Audio Device	Device Port
[-] Stereo In	Stereo	ASIO TonePort UX2	
[-] Left			Send 1
[-] Right			Send 2
[-] Stereo In 2	Stereo	ASIO TonePort UX2	
[-] Left			Send 3
[-] Right			Send 4
[-] Mono In	Mono	ASIO TonePort UX2	
[-] Mono			Send 1
[-] Mono In 2	Mono	ASIO TonePort UX2	
[-] Mono			Send 1
[-] Mono In 3	Mono	ASIO TonePort UX2	
[-] Mono			Send 1
[-] Mono In 4	Mono	ASIO TonePort UX2	
[-] Mono			Send 1

Click on the **Device Port** to choose the desired Line 6 device Send channel assignment - do this for each Mono Bus

Not Connected	
<input checked="" type="checkbox"/>	Send 1 [Stereo In - Left] [Mono In - Mono] ...
<input type="checkbox"/>	Send 2 [Stereo In - Right]
<input type="checkbox"/>	Send 3 [Stereo In 2 - Left]
<input type="checkbox"/>	Send 4 [Stereo In 2 - Right]

Bus Name	Speakers	Audio Device	Device Port
[-] Stereo In	Stereo	ASIO TonePort UX2	
[-] Left			Send 1
[-] Right			Send 2
[-] Stereo In 2	Stereo	ASIO TonePort UX2	
[-] Left			Send 3
[-] Right			Send 4
[-] Mono In	Mono	ASIO TonePort UX2	
[-] Mono			Send 1
[-] Mono In 2	Mono	ASIO TonePort UX2	
[-] Mono			Send 2
[-] Mono In 3	Mono	ASIO TonePort UX2	
[-] Mono			Send 3
[-] Mono In 4	Mono	ASIO TonePort UX2	
[-] Mono			Send 4

The result should now look like this, with each **Stereo In** and **Mono In** Bus assigned to its own specific Line 6 hardware Send.

(Make a mistake? No worries, you can right click on any Bus Name and "Remove" it and add another if needed).

Now to the **Outputs** tab... the procedure is the same here. You should see a **Stereo Out** Bus already created here for you and correctly assigned to your Line 6 device's main **Output 1 & 2** for its **Left** and **Right** channels.

Bus Name	Speakers	Audio Device	Device Port	Click
[-] Stereo Out	Stereo	ASIO TonePort UX2		Click
[-] Left			Output 1	
[-] Right			Output 2	

This one Bus is fine as is for most Cubase Projects, since you'll likely just assign all audio tracks to this one, common stereo output. But you can optionally create Mono Buses for each of these Outputs if you need them. Or, if you have a TonePort UX8, your device includes 8 outputs which means you can do the Add Bus thing here and create Stereo and Mono Buses utilizing all the additional Outputs if you like - even for a 5.1 Surround system if needed!

TonePort UX8's driver offers multiple Inputs and Sends with many flexible options for routing and monitoring GearBox Tones. Please reference the [Windows Driver Settings](#) section of the *Audio Driver and GearBox Settings* chapter for more details

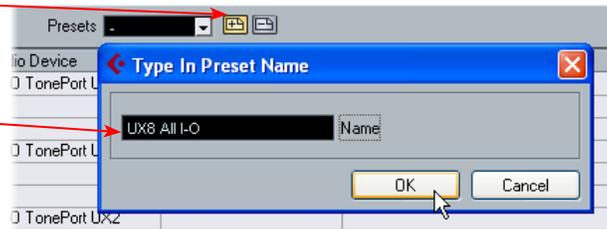
Create a Preset...

Finally, it's a good idea to now save all these settings as a Preset. You can even create several different Bus scenarios for your Line 6 hardware and save each as a different Preset to recall them easily any time!

Click the little Add button

Then type in a name for your Preset and click OK to finish it up

You can now exit the **VST Connections** dialog



TIP! Be sure to open the VST Connections window and select this Preset before you open or create a Cubase Project so that it will use these settings! It's also pretty handy to create a Project Template with a Cubase Project so that you don't need to go through the repetitive task of creating a bunch of tracks and assigning them to the same Ins & Outs every time you start a new Project. See the Cubase documentation regarding creating a Project Template.

Open or Create a New Cubase Project...

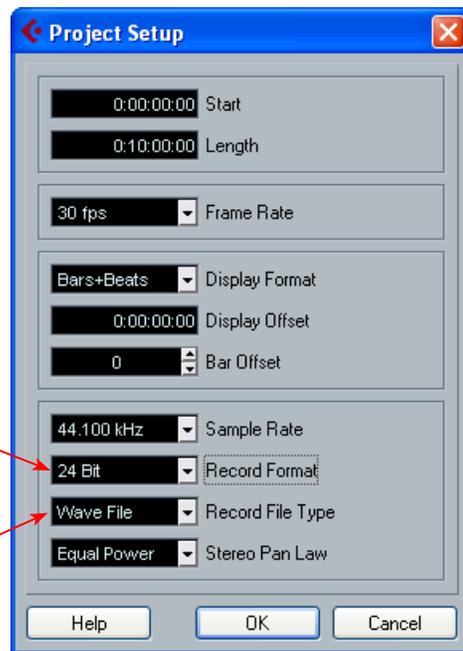
Go to **File > New Project** to start a new Cubase Project. Once your Project is open, look at the bottom left of the Cubase screen to check its **Sample Rate & Bit Depth**. If these are not what you want, then you can go to the **Project > Project Setup** dialog. (Note that it is best to set the Sample Rate and Bit Depth first in the **Line 6 Audio-MIDI Devices**, as shown in the first step of this chapter - you did follow that step, right?)

Look at the Cubase Project's **Sample Rate & Bit Depth** at the bottom left of the main Cubase window



44,100 Hz is a good choice for your Sample Rate, or you can choose 48,000, 88,200 or 96,000 Hz if your project specifically requires one of these higher rates.

Choose **32 Bit** as your Record Format -it is best if you match this **32 Bit** format as the **Bit Depth** setting for your device in the **Line 6 Audio-MIDI Devices** dialog (see the [Windows Driver Settings](#) section)

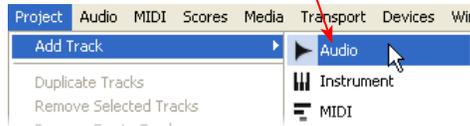


Configuring an Audio Track for Recording

Now that your Line 6 hardware and Cubase Buses are set up, you are ready to start working in your Cubase Project!

Add a New Audio Track...

In the Cubase **Project** menu, select to add an **Audio** track...



This launches the **Add Audio Track** dialog, where you can choose the type of track, and how many to add. We'll add one **Stereo** track for our example



Select Your Audio Track's Input and Output

You'll see all the **Input Buses** here that you created in the **VST Connections - Input** dialog. You can choose either a stereo or mono input*

Click on the Audio track's **Input Routing** selector to choose the recording input

The Audio tracks' **Output Routing** should default to your Line 6 device's **Output 1** (Or, if you created additional Output Buses in the VST Connections dialog, you can choose the preferred one here)



*Note that for a stereo audio track, choosing a Stereo Input Bus will record a stereo file. Choosing a Mono Input Bus will record a mono file. If you create a mono audio track, then you can only choose a Mono Input Bus (or only one channel of your Stereo Bus) as the track input, and this will record a mono file.

Set Input Monitoring Options...

When recording using GearBox, it is recommended to use its ToneDirect Monitoring™ feature, where your input monitoring signal is passed directly back out of your Line 6 hardware's output. This allows you to hear the GearBox tone you have selected for your Mic or Instrument with the lowest possible latency. Likewise with POD X3 and PODxt, these devices offer a super low latency USB audio monitoring. Therefore, we will disable the Cubase "**Monitor**" option on our Audio track so that the input monitor signal is not additionally fed through the software*.

Keep the audio track's **Monitor** button set to **OFF**
(You can access this and most other track controls on both the Track Header or to the left in the "Inspector")



* Optionally, if you are using the GearBox Plug-In, you can load the Plug-In on your audio track and turn the Cubase Monitor button "ON" to monitor your input signal through the software, and thus through the GearBox Plug-in processing. Please see the Cubase Help documentation for Global and Track Input Monitoring options. See the [Using the GearBox Plug-In](#) chapter for a detailed guide on configuring the Gearbox Plug-In!

Arm Your Track & Set Your Levels...



Click the **Record Enable** button "ON"
to arm the audio track for recording*

*Note that the track meters in Cubase will not measure the input signal unless the Input Monitoring feature is on (which of course we just turned OFF in the last step). You can display the Cubase Mixer and the level meters there are active for inputs with the Monitor function on or off.



If desired, launch the Mixer and you can view the meters for the respective Audio track to gauge your input levels before you start recording

If you are using GearBox with your Line 6 hardware, you can adjust your recording level in using the assigned Send's **Record** knob within the GearBox window. Note that your **Amp** and **Tone Volume** knobs in GearBox and on POD devices will also affect the recording level into Cubase



Start Recording!



Once your record level is set, click on the transport **Record** button and start riffing!