

# Mbox 2 CoreAudio Driver (Macintosh Only)

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## Introduction

The Mbox 2 CoreAudio driver is a multi-client, multichannel sound driver that allows CoreAudio compatible applications to record and play back through Mbox 2.

Full-duplex recording and playback of 24-bit audio is supported at sample rates up to 48 kHz, depending on your CoreAudio client application. The Mbox 2 CoreAudio driver will provide up to 4 channels of input and 2 channels of output.

 Check the Digidesign Web site ([www.digidesign.com](http://www.digidesign.com)) for the latest third-party drivers for Pro Tools hardware, as well as current known issues.

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## Compatibility

The Digidesign Mbox 2 CoreAudio driver can only be used on Digidesign-qualified Pro Tools Mbox 2 systems running on Digidesign-qualified versions of Macintosh.

## Compatible Software

For a list of CoreAudio driver-compatible software, refer to the Digidesign Web site ([www.digidesign.com/compato](http://www.digidesign.com/compato)).

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.

For a list of Digidesign hardware systems, Digidesign-qualified computers, operating systems, and devices, and Digidesign-qualified third-party CoreAudio-compatible applications, refer to the compatibility page of the Digidesign Web site ([www.digidesign.com/compato](http://www.digidesign.com/compato)).

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## Installing the Mbox 2 CoreAudio Driver

The Mbox 2 CoreAudio driver is installed by default when you install Pro Tools.

## Removing the Mbox 2 CoreAudio Driver

In order to remove the Mbox 2 CoreAudio driver, you must uninstall Pro Tools LE.

### To uninstall the Mbox 2 CoreAudio Driver:

- 1 Power on your system.
- 2 Do one of the following:
  - On the Pro Tools Installer CD, locate and double-click the Install Pro Tools LE file.
  - or –
  - From the Digidesign Web site, download, locate, and double-click the Install Pro Tools LE file.
- 3 In the Install window, select Uninstall from the Custom Install pop-up menu.
- 4 When the uninstall is complete, quit the Pro Tools Installer and restart your computer.

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## Configuring the Mbox 2 CoreAudio Driver

You can configure the Mbox 2 CoreAudio driver using the Digidesign Mbox 2 Control Panel, or from within most third-party CoreAudio-compatible client applications (such as BIAS Peak or Logic Audio). Consult the manufacturer's documentation for more information.

Some applications (such as Apple's iTunes or QuickTime Player), also require that you configure either the Apple Sound Preferences or Apple Audio MIDI Setup to use the Mbox 2 CoreAudio driver.

### Digidesign Mbox 2 Control Panel

Use the Digidesign Mbox 2 Control Panel to identify your Digidesign hardware, view or change the Clock Source, enable or disable AC-3 mode, and check firmware.

#### To access the Digidesign Mbox 2 Control Panel:

- In the System Preferences window, click Digidesign Mbox 2.



Figure 1. Digidesign Mbox 2 CoreAudio Setup

### Digidesign Hardware and Firmware

This area displays the firmware version of your Mbox 2. If your hardware is not connected or cannot be detected, this will display "Unable to connect to Mbox 2." Check that you have installed Pro Tools LE correctly, check your USB connection between the computer and Mbox 2, and try again.

### Clock

This pop-up menu lets you choose the clock source for Mbox 2. Choices include Internal and S/PDIF. Use Internal whenever you are playing back audio through Mbox 2. Use S/PDIF when you are recording into Mbox 2 from a digital device through the Mbox 2 S/PDIF inputs.

### AC-3 Mode

This option lets you enable AC-3 mode. When enabled, the Mbox 2 S/PDIF output switches to a 24-bit clean passthrough mode for AC-3 or DTS encoded audio from a DVD or other media player application (Mbox 2 analog output is muted whenever AC-3 mode is enabled).

**⚠** *Enabling AC-3 mode in the Control Panel will prevent Pro Tools LE from being able to access the Mbox 2. Always turn off AC-3 mode before attempting to use Pro Tools LE.*

### Connection Status and Device

This display area shows the hardware detected by the Control Panel (Mbox 2).

## Configuring Mbox 2 for Third-Party Applications

When using Mbox 2 with an application other than Pro Tools LE (such as GarageBand), you can configure hardware settings through the audio preference settings available in that application.



Figure 2. Mbox 2 settings in Audio/MIDI Preferences for GarageBand

Choose Digidesign Mbox 2 for Audio Output and Audio Input. Select the optimal buffer size for your system by choosing an Optimize For option (Maximum/Large buffer size, or Minimum/Small buffer size).

- ◆ Small buffers have the advantage of low latency in the record monitor path, but also are more taxing on your computer's CPU and could contribute to dropouts in your audio during record or playback. (Latency is the time delay between a signal entering the audio inputs and leaving the outputs during recording.)
- ◆ Larger buffers have the advantage of making the Mbox 2 CoreAudio driver more immune to audio dropouts during playback and recording, but can cause a noticeable delay when monitoring your inputs in the recording process. In some CoreAudio-client applications, performing various tasks will interrupt the CoreAudio driver and may result in clicks and pops in audio playback or recording. Choosing a large buffer can help alleviate this problem.

Consult the documentation that came with your third-party application to learn more about how these options affect that application. Changing the Buffer Size for the Mbox 2 CoreAudio driver does not affect the H/W Buffer Size settings in the Pro Tools Playback Engine dialog.

## Configuring the Apple Sound Preferences or Apple Audio MIDI Setup

To use your Digidesign Mbox 2 with common CoreAudio-compatible playback applications (such as Apple iTunes or QuickTime Player), you will need to configure either Sound Preferences or Audio MIDI Setup in addition to the Mbox 2 Control Panel. However, for most CoreAudio-compatible client applications (such as BIAS Peak or Cubase SX) this is unnecessary because you can configure hardware settings, and input and output channels from within the application.

### Apple Sound Preferences

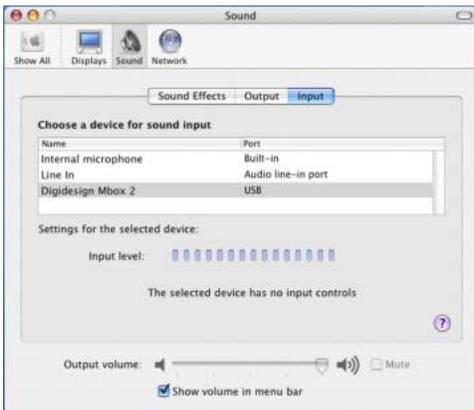
To configure the Apple Sound Preferences:

- 1 Launch System Preferences (Apple menu > System Preferences).
- 2 Click Sound.
- 3 Click the Output tab and select Digidesign Mbox 2 as the device for sound output.



*Sound Preferences, Output tab*

- 4 Click the Input tab and select Digidesign Mbox 2 as the device for sound input.



*Sound Preferences, Input tab*

- 5 Quit System Preferences.

## Apple Audio MIDI Setup

### To configure the Apple Audio MIDI Setup for Mbox 2 audio:

- 1 Launch Audio MIDI Setup (located in Home/Applications/Utilities).
- 2 Select the Audio Devices tab.

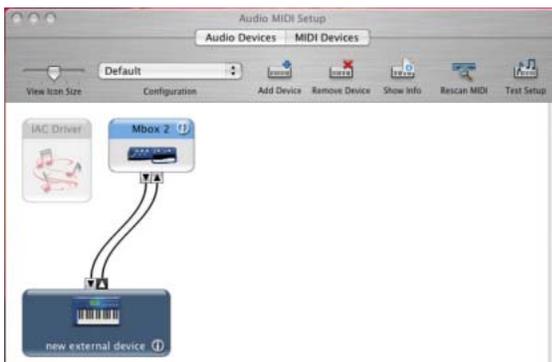


Apple Audio MIDI Setup application, Audio Devices tab, for Mbox 2

- 3 From the System Settings Default Input pop-up menu, select Digidesign Mbox 2.
- 4 From the System Settings Default Output pop-up menu, select Digidesign Mbox 2.

### To configure the Apple Audio MIDI Setup for Mbox 2 MIDI:

- 1 Launch Audio MIDI Setup (located in Home/Applications/Utilities).
- 2 Select the MIDI Devices tab. AMS scans your system for connected MIDI interfaces. If Mbox 2 correctly installed and connected, it appears in the window.
- 3 For any MIDI devices connected to the MIDI ports on Mbox 2, click Add Device. A new external device icon with the default MIDI keyboard image will appear.
- 4 Connect the MIDI device to the Mbox 2 MIDI ports by clicking the arrow for the MIDI output port of the device and dragging a connection or “cable” to the input arrow of the Mbox 2 MIDI In port.
- 5 Click the arrow for the MIDI input port of the device and drag a cable to the Mbox 2 MIDI Out port. Your AMS MIDI Devices window should look similar to the following.



Apple Audio MIDI Setup application, MIDI Devices tab, for Mbox 2

For additional information about configuring devices in AMS, see the AMS chapter in the *Getting Started with Mbox 2 Guide*.