

CoreAudio Drivers Guide

Version 7.1.2



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chapter 1

Mbox 2 Pro CoreAudio Driver

The Mbox® 2 Pro CoreAudio Driver lets you use your Digidesign® Mbox 2 Pro hardware interface with third-party applications that support the CoreAudio Driver standard.

Your Pro Tools system's CoreAudio Driver is automatically installed when you install Pro Tools


 *For complete instructions on installing Pro Tools, see the Getting Started Guide for your Pro Tools system.*

Mbox 2 Pro Capabilities

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

Full-duplex recording and playback of 24-bit audio is supported at sample rates up to 96 kHz, depending on your CoreAudio client application.

The Mbox 2 Pro CoreAudio Driver will provide up to six channels of input and eight channels of output on Mbox 2 Pro systems.

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


Limitations of the Mbox 2 Pro CoreAudio Driver

The Mbox 2 Pro CoreAudio Driver has the following limitations:

- When Pro Tools is running, the Mbox 2 Pro is set to the session sample rate. If another application changes the sample rate, Pro Tools will immediately change it back.

System Requirements

This version of the Mbox 2 Pro CoreAudio Driver can be used on Digidesign-qualified Pro Tools Mbox 2 Pro systems running on Mac.

 For complete system requirements, visit the Digidesign Web site (www.digidesign.com).

Compatibility Information

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 Digidesign Web site (www.digidesign.com).

Mbox 2 Pro Driver Control Panel

You can configure the Mbox 2 Pro CoreAudio driver using the Mbox 2 Pro Control Panel, or from within most third-party CoreAudio-compatible client applications (such as BIAS Peak or Logic Audio). Refer to 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 Pro CoreAudio driver.

Accessing the Mbox 2 Pro Control Panel

The Mbox 2 Pro Control Panel can be accessed without opening a third-party application (from the Mac System Preferences folder), or from within some third-party programs.

To access the Mbox 2 Pro Control Panel without opening a third-party application:

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



Mbox 2 Pro Control Panel

To access the Mbox 2 Pro from a third-party application:

- Refer to your program's documentation.

Using the Mbox 2 Pro Control Panel

Use the Mbox 2 Pro Control Panel to identify your Digidesign hardware, check firmware, view or change the Clock Source, and enable S/PDIF mirroring of analog outputs 1 and 2.

- ⚠ *Changing the Clock Source in the Mbox 2 Pro Control Panel will not dynamically update the setting in the Pro Tools Hardware Setup or Session Setup window if it is open. The Pro Tools Hardware Setup and Session Setup window will update when you close and reopen them.*

Digidesign Hardware Connection Status Display and Text

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

If your hardware is not connected or cannot be detected, the text below the display will read “No Hardware Detected.” In this case, check the FireWire connection between the computer and Mbox 2 Pro. If reconnecting the cable does not correct the problem, check that you have installed Pro Tools LE correctly.

Digidesign Firmware


This area displays the firmware version of your Mbox 2 Pro.

Clock Source

This pop-up menu lets you choose the clock source for Mbox 2 Pro:

Internal Use this setting for normal playback of audio, or if you are recording audio through the analog inputs.

S/PDIF Use this setting if you are recording audio through the S/PDIF input.

 *S/PDIF input is only available when S/PDIF is the Clock Source.*

Word Clock Use this setting to clock Pro Tools to a Word clock source connected to the Mbox 2 Pro Word Clock In port.

Mirror Analog 1–2 on S/PDIF

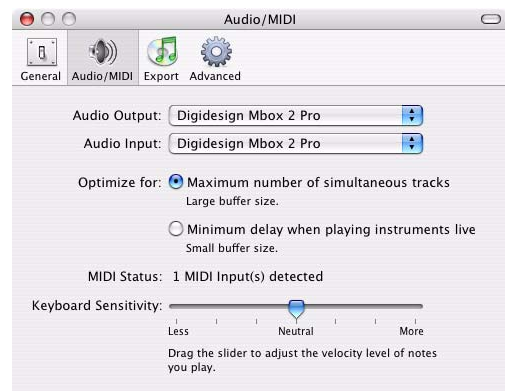
Check this box to set the S/PDIF output channels to always mirror analog outputs 1 and 2.

Configuring Mbox 2 Pro for Third-Party Applications

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

To configure hardware settings through a client application (such as Apple GarageBand):

- 1 Choose Digidesign Mbox 2 Pro for Audio Output and Audio Input.




Mbox 2 Pro settings in Audio/MIDI Preferences for Apple GarageBand

2 Select a 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 Pro 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.

Refer to the documentation for your third-party application to learn more about how these options affect that application.

 *Changing the Buffer Size for the Mbox 2 Pro 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

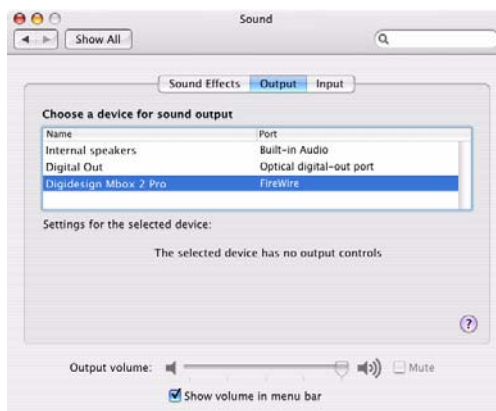
(Required for Using Mbox 2 Pro with Apple iTunes and QuickTime Player)

To use your Mbox 2 Pro with certain 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 Pro 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 Output and select Digidesign Mbox 2 Pro as the device for sound output.



Sound Preferences, Output settings

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



Sound Preferences, Input settings

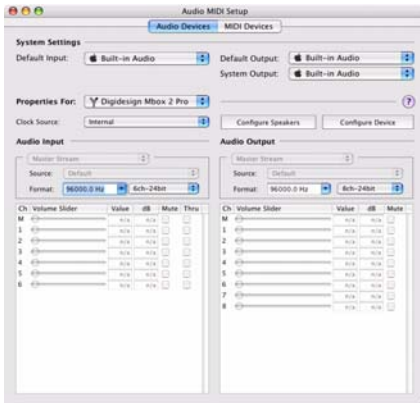
5 Quit System Preferences.

Apple Audio MIDI Setup

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

1 Launch Audio MIDI Setup (located in Home/Applications/Utilities).

2 Click Audio Devices.



Apple Audio MIDI Setup application showing Audio settings for Mbox 2 Pro


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


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

5 If you want to play Mac System sounds through Mbox 2 Pro, click the System Output pop-up menu and select Mbox 2 Pro.

6 From the Properties For pop-up menu, select Digidesign Mbox 2 Pro and select the Clock Source.

7 In the Audio Input or Audio Output section, select the Format (sample rate). Note that the input sample rate and output rate are linked.

 *When Properties For Mbox 2 Pro is selected, you can click the Configure Device button to open System Preferences, where the Mbox 2 Pro Control Panel can be accessed.*

 *For information on configuring MIDI devices in AMS, see the Mbox 2 Pro Getting Started Guide.*

8 Choose Audio MIDI Setup > Quit Audio MIDI Setup.



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