FWx FireWire Record/Playback Option Guide

Version 1.1 for D-Show

digidesign

Contents

Chapter 1: Overview

Welcome to the FWx FireWire Record/Playback Option for D-Show systems. The FWx Option lets you integrate a Digidesign Pro Tools LE system with D-Show for multitrack recording and playback.

FWx Capabilities and Features

The FWx Option provides the following features:

- Direct digital connection (24-bit, 48 kHz) between D-Show and a computer running Pro Tools LE
- Recording of up to 18 channels of D-Show audio directly to Pro Tools
- Playback of up to 18 Pro Tools tracks into D-Show
- Can be used with compatible versions of Pro Tools LE (included)
- Support for Windows XP and Mac OS X-based systems
- Connects with a standard FireWire cable (included)

Only one FWx card can be installed in the D-Show FOH Rack.

A FWx FireWire Option Card and HDx TDM Option Card cannot be used simultaneously.

FWx Components

The FWx Option package includes the following items:

- FWx Card (installs into the D-Show FOH Rack)
- FWx card ribbon cable
- Pro Tools LE software
- Registration card

System Requirements

The following are required to use the FWx Recording/Playback Option:

- A D-Show system that has already been installed and configured.
- A compatible laptop or other computer running Windows XP or Mac OS X, with an available FireWire port.
- A compatible version of Pro Tools LE version 6.7 or higher (Windows) or 6.9.2 or higher (Macintosh). Digidesign Pro Tools LE hardware is not required.

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-qualified computers, operating systems, hard drives, and third-party devices, refer to the latest compatibility information on the Digidesign Web site (www.digidesign.com/compato).

Conventions Used in This Guide

All Digidesign guides use the following conventions to indicate menu choices and key commands in D-Show and Pro Tools:

Convention	Action
File > Save Session	In Pro Tools, choose Save Session from the File menu
Options > System Config	In the D-Show software screen, click Options to display the Options page, then click the System Config tab.
Ctrl+N	Hold down the Control key and press the N key
Ctrl-click	Hold down the Control key and click the mouse button

The following symbols are used to highlight important information:

User Tips are helpful hints for getting the most from your D-Show system.

Important Notices include information that could affect data or performance.

Shortcuts show you useful keyboard or mouse shortcuts.

Cross References point to related sections in the D-Show or Pro Tools Guides.

Chapter 2: Installing FWx

Installing the FWx Card

The FWx card is installed in the FOH Rack.

To install the FWx card:

1 Shut down D-Show.

2 Turn off power on the FOH Rack.

3 Disconnect all power, audio, FOH Link, and any MIDI cables attached to the FOH Rack.

4 Remove the front panel faceplate by unscrewing its mounting screws (#1 Phillips). Keep the screws nearby for remounting the front panel later.
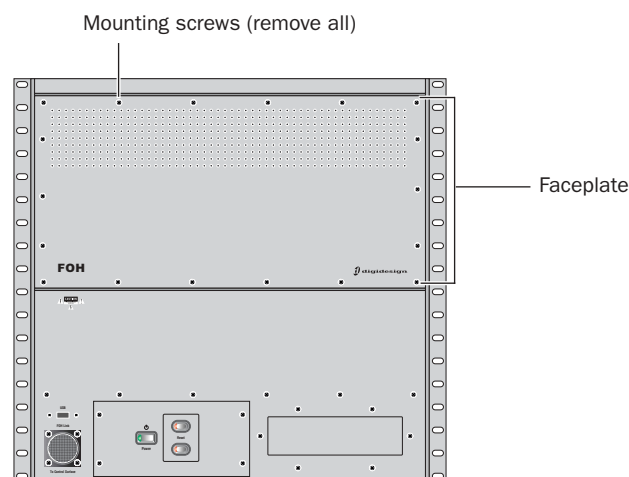
Front panel of the FOH Rack

5 On the back panel of the FOH Rack, remove the faceplate on any available expansion slot by removing the screws holding it in place. Keep the screws nearby for securing the FWx Card to the FOH Rack later.
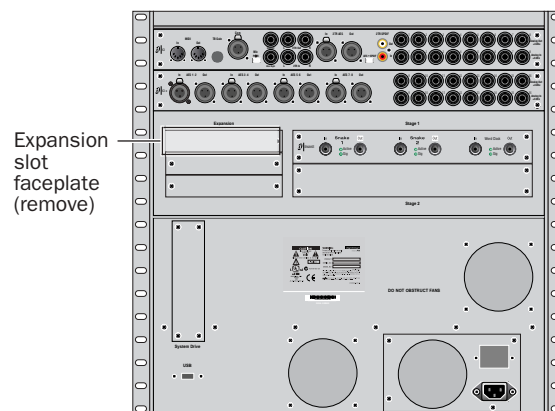
Back panel of the FOH Rack

6 Remove the FWx card from its packing material. Hold the card by its edges.
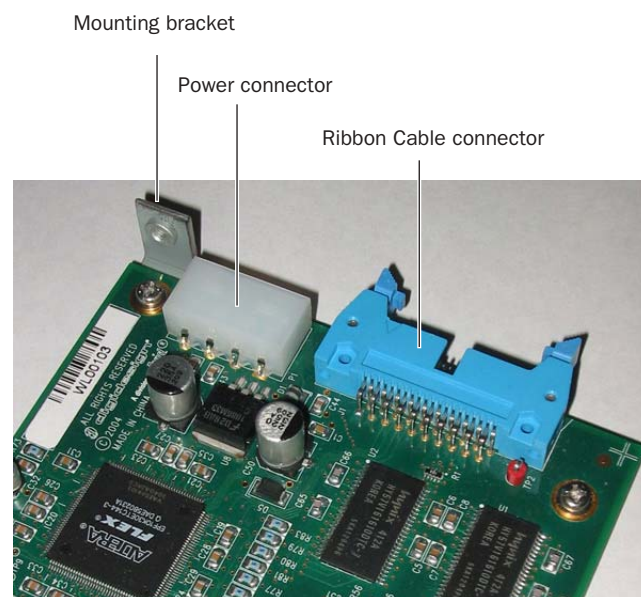
FWx card showing bracket and connectors

7 Free the FWx Ribbon cable from its retaining screw inside the FOH Rack, and hold it out of the way.

8 Gently slide the card into the FWx Expansion Slot. Make sure it is oriented right-side up.

Installing the FWx card in the FOH Rack

9 When the card is seated in its slot, secure it to the FOH chassis with the mounting screw at the end of the FWx mounting bracket (accessible from the open front panel of the FOH Rack).

10 Secure the FWx card to the back panel of the FOH Rack using the two screws that held the faceplate.
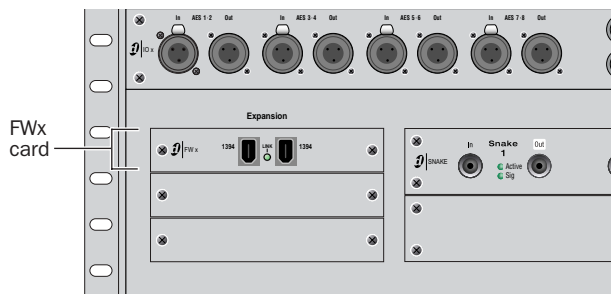
Securing the FWx Card to the back panel of the FOH Rack

11 Attach the included ribbon cable to the ribbon connector on the FWx card and to the "FireWire" connector on the first Mix Engine card (the rear-most card when viewed from the open front panel). Make sure the pins are oriented correctly, and that each connector is attached securely.
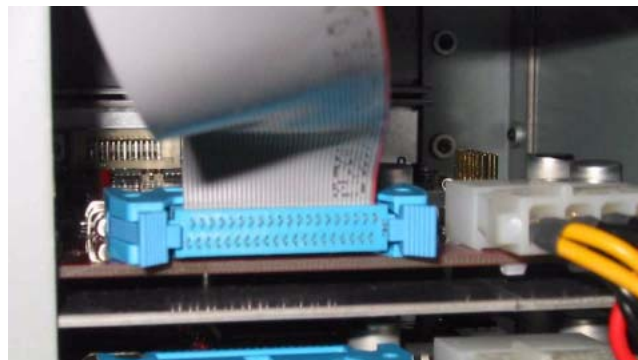
Attaching the ribbon cable to the FWx card
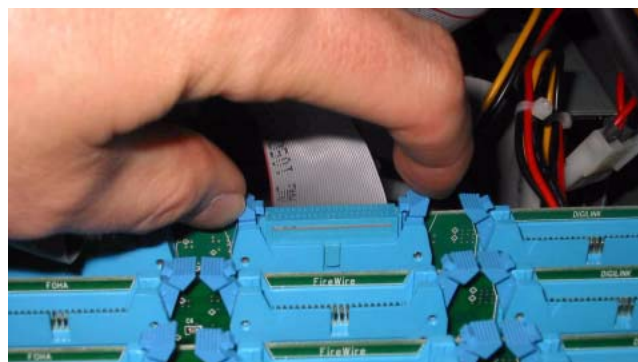
Attaching the ribbon cable to the Mix Engine card

12 Attach an available internal power cable plug to the power socket on the FWx card. Make sure it is connected securely.

13 Reattach the FOH Rack faceplate using its screws.

14 Reconnect power, audio, FOH Link, and any MIDI cables to the FOH Rack.

15 Power on all D-Show components.

Checking FWx Card Installation

To check the FWx card installation, go to the Options > Devices page to view D-Show hardware status. When successfully installed, the FWx card is detected and "FWx" is shown on-screen in the lower right of the FOH Rack icon.

If the FWx card is not displayed, power down the system and check all cables and connections.

FWx card indicated in the FOH Rack icon in the Devices page

Power Sequence

Whenever you are using a Pro Tools LE system with D-Show and FWx, power up the system

Power up and connect D-Show and the Pro Tools system in the following order:

1 Power up D-Show components in the following order: Main Unit, Sidecars, Stage Racks, and FOH Rack.

2 Connect the FireWire cable between D-Show and the Pro Tools computer.

3 Power up any external audio drives connected to the Pro Tools computer.

4 Start up the Pro Tools computer.

5 Launch Pro Tools.

Power down and disconnect D-Show and the Pro Tools system in the following order:

1 Quit Pro Tools.

2 Shut down the Pro Tools computer.

3 Disconnect the FireWire cable between D-Show and the Pro Tools computer.
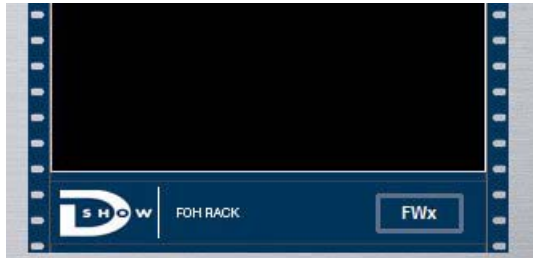
4 Shut down D-Show in the following order: FOH Rack, Stage Rack, Main Unit, and Sidecars.

⚠ *Always shut down Pro Tools and disconnect FireWire before shutting down D-Show.*

Installing Pro Tools LE

The following sections explain how to configure the operating system and install Pro Tools LE software on Windows and Macintosh computers.

◆ If you are installing Pro Tools LE for the first time on a computer, use the Pro Tools LE Installer CD-ROM included with the FWx Option to install all software and drivers for FWx recording and playback.

◆ If you are upgrading a Pro Tools LE system to version 6.7 or higher, use the Pro Tools LE Installer CD-ROM that came with your upgrade or the installer CD-ROM included with the FWx Option, whichever has the most recent version.

Installing Pro Tools LE with Hardware Present

To install Pro Tools LE software along with the proper software device driver for FWx, the Pro Tools computer must be connected to D-Show.

Installing Pro Tools LE without Hardware Present

You can also install Pro Tools LE software on a computer without a hardware connection, and postpone installation of the software device driver until you are at a D-Show system. This method requires that the Pro Tools LE Installer CD-ROM be available when you connect the computer to the D-Show system.

Installing Pro Tools on a Windows Computer

Windows System Settings

To ensure optimum performance with Pro Tools LE, configure the following Control Panel settings for your version of Windows XP before you install Pro Tools software.

Disabling Hyper-Threading

For Pentium IV computers with Hyper-Threading, disable Hyper-Threading in the BIOS.

Refer to your computer's documentation for steps on how to enter your computer's BIOS and disable Hyper-Threading.

Enabling DMA

Enabling your computer's DMA (Direct Memory Access) frees up CPU bandwidth so your computer can do other Pro Tools tasks.

In most cases the DMA option will already be set correctly, as Windows XP detects and activates DMA mode by default.

To enable DMA for any IDE hard drives:

1 Choose Start > Control Panel.

2 Launch System.

3 Click the Hardware tab.

4 Under Device Manager, choose Device Manager.

5 In the Device Manager window, double-click IDE ATA/ATAPI controllers, then double-click the Primary IDE Channel for your IDE hard drive.

6 Click the Advanced Settings tab.

7 For each device, set the Transfer Mode to "DMA if available," and click OK.

In most cases, this will already be set correctly as Windows XP will detect and activate DMA mode by default.

8 Repeat steps 5–7 for any additional IDE Channels.

9 Close the Computer Management window.

Disabling System Standby and Power Management

When using Pro Tools, the Windows System Standby power scheme must be set to Always On. This helps prevent long record or playback passes from stopping due to system resources powering down.

To configure Windows Power Management:

1 Choose Start > Control Panel.

2 Launch Power Options.

3 Click the Power Schemes tab.

4 From the Power Schemes pop-up menu, select Always On.

5 Click OK.

This sets System Standby, System Hibernate, and "Turn off hard disks" to Never.

On AMD processors, be sure to check and disable Cool N'Quiet in the System BIOS (in the Cool & Quiet Configuration section). Refer to the manufacturer's documentation for instructions on disabling this power option.

Disabling ClearType Font Smoothing

When using Pro Tools, the Effects "Clear Type" setting must be disabled.

To disable ClearType font smoothing:

1 Choose Start > Control Panel.

2 Launch Display.

3 Click the Appearance tab.

4 Click Effects.

5 Deselect "Use the following methods to smooth edges of screen fonts."

6 Click OK to save your settings and close the Effects dialog.

7 Click OK.

Disable Data Executive Prevention (DEP)

When using Pro Tools, Data Executive Prevention should be disabled to prevent system crashes.

To disable Data Execution Prevention: (DEP)

1 Choose Start > Control Panel.

2 Launch System.

3 Click the Advanced tab.

4 From the Startup and Recovery section, click Settings.

5 Click on the down arrow in the Default Operating System pop-up menu, and note if the "/NoExecute=" line reads as follows (spacing and case-sensitive):

/NoExecute=AlwaysOff

6 Do one of the following:

- If the "/NoExecute=" reads "/NoExecute= AlwaysOff," data prevention is disabled, and you do not need to change any settings. Click OK to close the Startup and Recovery dialog, click OK to close the Systems Property dialog, and continue with "Completing Required Windows System Settings" on page 9.

– or –

- If the "/No Execute=" does not read "/NoExecute=AlwaysOff" (for example, it reads "NoExecuteOptIn"), continue with the following steps.

7 Click Edit to edit the startup options file manually.

8 Change the "/NoExecute=" line to read as follows:

/NoExecute=AlwaysOff

9 Save the boot.ini file if it was changed.

10 Choose File > Exit.

11 From the Startup and Recovery dialog, click OK.

12 From the System Properties dialog, click OK.

Completing Windows System Settings

When finished updating required Windows system settings, restart your computer.

Installing Pro Tools

To install Pro Tools LE for FWx on a Windows computer:

1 If you are installing with hardware present, connect one end of a FireWire cable to an FWx port on the back of the D-Show FOH Rack. Connect the other end to an available FireWire port on the Pro Tools host computer.

2 Start up Windows, logging in with Administrator privileges. If you do not have Administrator privileges or do not know how to set them up, see your Windows documentation.

3 Wait for the Found New Hardware Wizard dialog to appear and leave it open (do not click Next).

4 Insert the Pro Tools LE Installer CD-ROM into the CD-ROM drive of the Pro Tools computer. The Installer CD-ROM needs to remain in the CD-ROM drive throughout the entire installation procedure. Locate and open the Pro Tools Installer folder, and double-click the Setup icon.

5 Click Next to begin installation.

6 Select the components you want to install and click Next.

⚠ *If you get a warning dialog about the driver not passing Windows Logo testing, click Continue Anyway.*

7 Wait for the installer to finish installing all software components, drivers, and PACE System files before proceeding to the next step.

8 Click Quit when prompted to install QuickTime. If required, you can install QuickTime later.

9 Restart your computer.

10 After installation is completed, launch Pro Tools LE. Upon starting, Pro Tools LE detects the presence of FWx and automatically installs the FWx driver from the Pro Tools LE Installer CD-ROM.

11 Remove the Pro Tools LE Installer CD-ROM from the CD-ROM drive.

12 If you are using a FireWire hard drive, connect it to a separate FireWire port on the Pro Tools computer. If using an external FireWire hard drive and only one FireWire port is available on the Pro Tools computer, connect the hard drive between Pro Tools and FWx. (Though the FWx Card provides two FireWire ports, connecting a hard drive to the second port on the FWx card is not supported.) When connected in this way, be sure to quit Pro Tools before disconnecting or changing hard drives.

Installing QuickTime

(Optional)

QuickTime 6.5 or later is required for Pro Tools if you plan to include movie files in your sessions. QuickTime is available as a free download from the Apple Web site (www.apple.com).

Installing Pro Tools on a Macintosh Computer

Macintosh System Settings

To ensure optimum performance with Pro Tools LE, configure the following settings for your version of Mac OS X before you install Pro Tools software.

To configure Mac OS X for Pro Tools LE:

1 Make sure you are logged into an administrator account where you want to install Pro Tools LE. For details on Administrator privileges in Mac OS X, refer to your Mac OS X documentation.

2 Choose System Preferences from the Apple Menu and click Energy Saver.

3 Click the Sleep tab and turn off the Energy Saver feature by setting the sleep feature to Never.

4 Return to the System Preferences and click Software Update.

5 Deselect "Automatically check for updates when you have a network connection."

6 Close the Software Update dialog box.

Installing Pro Tools

To install Pro Tools LE for FWx on a Macintosh computer:

1 If you are installing with hardware present, connect one end of a FireWire cable to an FWx port on the back of the D-Show FOH Rack. Connect the other end to an available FireWire port on the Pro Tools host computer.

2 Make sure you are logged in as an Administrator for the account where you want to install Pro Tools. For details on Administrator privileges in Mac OS X, refer to your Apple Mac OS X documentation.

3 Insert the Pro Tools LE Installer CD-ROM into the CD-ROM drive of the Pro Tools computer. The Installer CD-ROM needs to remain in the CD-ROM drive throughout the entire installation procedure. Locate and double-click the "Install Pro Tools LE" icon.

4 Enter your Administrator password and click OK to authenticate the installation.

5 Follow the on-screen instructions to continue and accept installation.

6 In the Installer window, make sure the Install Location is on the startup drive of your Pro tools computer.

7 In the Installer window, choose Custom Install from the pop-up menu, and click Install.

8 Follow the remaining on-screen instructions to install Pro Tools.

9 When installation is complete, click Restart.

10 After installation is completed, launch Pro Tools LE. Upon starting, Pro Tools LE detects the presence of FWx and automatically installs the FWx driver from the Pro Tools LE Installer CD-ROM.

11 Remove the Pro Tools LE Installer CD-ROM from the CD-ROM drive.

12 If you are using a FireWire hard drive, connect it to a separate FireWire port on the Pro Tools computer. If using an external FireWire hard drive and only one FireWire port is available on the Pro Tools computer, connect the hard drive between Pro Tools and FWx. (Though the FWx Card provides two FireWire ports, connecting a hard drive to the second port is not supported.) When connected in this way, be sure to quit Pro Tools before disconnecting or changing hard drives.

Chapter 3: Using FWx

Overview

Up to 18 channels of audio can be recorded into or played back from Pro Tools through FWx. Signal routing must be configured for recording or playback in D-Show and in Pro Tools.

D-Show Settings

FWx Outputs (Recording)

FWx provides 18 assignable outputs for recording of D-Show channels into Pro Tools.

◆ Use the Patchbay > Outputs page (or Directs page) to route any D-Show output busses or Direct Outputs to FWx channels 1–18 for recording.

FWx Inputs (Playback)

FWx provides 18 assignable inputs for playback of Pro Tools tracks through D-Show.

◆ Use the Patchbay > Inputs page to route FWx channels 1–18 to any available D-Show Input Channels or FX Returns.

Pro Tools Settings

The connection to the FWx card is reflected in the Pro Tools Hardware Setup dialog, and FWx inputs and outputs appear in the Pro Tools I/O Setup dialog, allowing you to assign track inputs and outputs to FWx.

When using FWx, Pro Tools session bit depth and sample rate are fixed at 24-bit/48 kHz, and cannot be changed.

See Chapter 4, "Pro Tools Basics for FWx."

For complete instructions on using the D-Show Patchbay, see the D-Show Guide. For complete instructions on using Pro Tools, see the Pro Tools Reference Guide. An electronic PDF version of the Reference Guide is installed along with Pro Tools LE software.

D-Show Signal Routing for FWx Recording

You can assign any mono or stereo D-Show channel to FWx channels, including channel Direct Outputs, Mains, Auxes, mono or stereo Groups, Matrix outputs, and PQ outputs.

◆ Using Direct Outputs lets you record discrete channels from the pickoff point you choose.

◆ Using Mains, Aux, Group, Matrix, or PQ outputs lets you record a stereo main mix, one or more stereo submixes, or any combination of these, up to the number of available FWx channels.

⚠ *If you configure the D-Show Patchbay for playback as well as recording through FWx, be sure to check Pro Tools track outputs for any potential feedback loops before record enabling tracks.*

To route multiple D-Show Direct Outputs to Pro Tools for a multitrack recording:

1 In the D-Show Patchbay, click the Directs tab.

2 Click the tab at the left of the grid for the channel or bus type you are routing.

3 Click the Pro Tools tab at the top right of the grid to show the available FWx channels.

4 Click in the channel grid to assign a channel or bus (listed on the left) to FWx channels (listed across the top).

Routing a Direct Output to an FWx channel

5 Activate and set the level for each Direct Output by clicking its In button and dragging its on-screen encoder in the Direct Out section.


Activating a Direct Output in the Directs page of the Patchbay

6 Click the Pickoff column in the Patchbay to specify one of the following the pickoff sources for each Direct Output:

- top of channel (indicated by a "T")
- pre-fader (indicated by a lowercase "p")
- post-fader (indicated by an uppercase "P")

💡 *The available Direct Output pickoff points for Input Channels and FX Returns can configured globally as pre- or post-fader in the Options > Pickoffs page.*
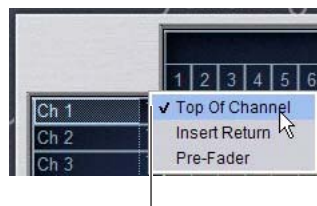

Click to display Pickoff menu

Specifying the channel Pickoff source

7 Configure Pro Tools tracks for multitrack recording. See Chapter 4, "Pro Tools Basics for FWx."

To route the L/R main mix to Pro Tools for a stereo recording:

1 In the D-Show Patchbay, go to the Outputs page.

2 Click the Mains tab to the left of the channel grid.

3 Click the Pro Tools tab at the top right of the grid to show the available FWx channels.

4 Click in the channel grid to route the Main Left and Right outputs to FWx channels 1–2.
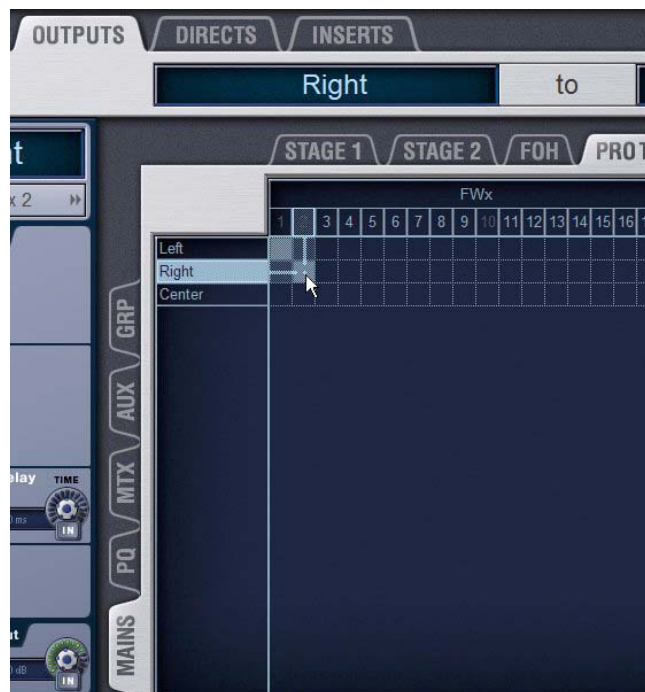
Routing the Mains bus to FWx channels for recording

5 Configure Pro Tools for stereo recording. See Chapter 4, "Pro Tools Basics for FWx."

To use an Output bus to route a submix to Pro Tools:

1 In the D-Show Patchbay, go to the Outputs page.

2 Click the Mains, Aux, Group, Matrix, or PQ tab to the left of the grid to display the type of bus you want to use.

💡 *Pickoff points for output busses in the Outputs tab are always post-fader. Use the Directs tab and select the pickoff point to record output busses pre-fader.*

3 Click the Pro Tools hardware tab at the top right of the grid to show the available FWx channels.

4 Click in the grid to route busses (listed on the left) to FWx channels (listed across the top).

💡 *D-Show does not support using FWx channels for insert processing through Pro Tools.*

5 Configure Pro Tools for recording. See Chapter 4, "Pro Tools Basics for FWx."

D-Show Signal Routing for FWx Playback

You can route channels from Pro Tools to D-Show Input Channels and FX Returns to include pre-recorded tracks in your mix. This lets you use recorded tracks for soundcheck purposes, use prerecorded click tracks or other material in performance, or mix down the Pro Tools session using D-Show.

To route FWx channels to D-Show Input Channels and FX Returns:

1 In the D-Show Patchbay, go to the Inputs page.

2 Click the Channels or FX Returns tab to the left of the grid to display the type of channels you want to use.

3 Click the Pro Tools tab at the top right of the grid to show the available FWx channels.

4 Click in the grid to route FWx channels to D-Show Input or FX Return channels.

Patching FWx channels to D-Show FX Returns for playback

5 From the ACS or channel Input screens, assign routing for each FWx channel as needed:

- Assign to the main L/R bus to include FWx audio in the main mix of a performance.
- Assign to a Group, Aux, Matrix, or PQ bus for submixing and monitoring.

You can leave FWx channels unassigned and still monitor them in the Solo bus and headphones.

⚠ *To avoid potential feedback loops, make sure no D-Show channels are simultaneously routing to and receiving from any record-enabled Pro Tools tracks.*

Monitoring FWx Recordings

To monitor the recording from D-Show, configure Pro Tools signal routing to play back the main stereo mix through two available Input or FX Return channels. In D-Show, leave the Input or FX Return signal routing unassigned and use Solo to monitor the recording.

To monitor FWx recording from D-Show:

1 In Pro Tools, check the output assignment shown for the currently record-enabled tracks, as follows.

- If Pro Tools is only being used for recording, make sure the recording tracks are assigned to an available FWx channel pair.

– or –

- If simultaneously using Pro Tools to record and play back audio, check output routing to avoid potential feedback loops. Make sure record-enabled tracks do not share the same output assignment as any playback tracks. Assign output of the recording tracks to a discrete pair of FWx channels.

2 In the D-Show Patchbay, route the FWx channels to D-Show Input Channels or FX Returns. See "To route FWx channels to D-Show Input Channels and FX Returns:" on page 11.

3 Using the ACS or channel Input screens, make sure the FWx record monitoring channels are not assigned to any D-Show bus or output, as follows:

- Make sure no Group Bus indicators are lit; press any lit or flashing indicators to unassign.
- If you selected multiple channels, the LEDs flash to indicate a mixed state of assignments among all the currently selected channels.
- Press a flashing indicator LED once to reset all selected to the same setting (usually, assigned). Press again to toggle and unassign all selected channels in unison.

Using Synchronization and Time Code with FWx

The FWx Option only communicates audio data between D-Show and Pro Tools.

If you plan to use Pro Tools as a MIDI Time Code master or slave, a separate MIDI connection for the Pro Tools host computer is required. Use a USB MIDI interface with Pro Tools, and connect its ports to the MIDI In/Out ports on the FOH Rack.

For complete information on D-Show synchronization and time code features, see the *D-Show Guide*.

Chapter 4: Pro Tools Basics for FWx

This chapter explains the minimum settings needed in Pro Tools for D-Show recording and playback with FWx. You can record up to 18 tracks from D-Show to Pro Tools, while simultaneously playing back up to 18 tracks from Pro Tools through D-Show.

📖 *For Pro Tools operational instructions, see the Pro Tools Reference Guide.*

Preparing Your Pro Tools Computer

Double-check the following before you begin:

◆ Make sure you have installed a compatible version of Pro Tools software. To confirm that your system can record and play back audio, check the Digidesign Web site for the latest compatibility information (www.digidesign.com).

– and –

◆ Make sure the FWx card is installed, connected, and operating correctly. See Chapter 2, "Installing FWx" for more information.

Hardware Setup

After assigning D-Show routing to/from FWx, you can check to make sure Pro Tools recognizes a connected D-Show using the Hardware Setup dialog.

To configure Pro Tools for FWx:

1 In Pro Tools, choose Setups > Hardware Setup.

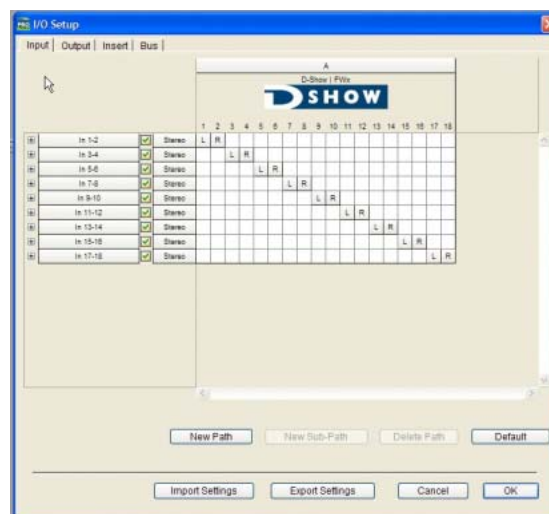**2** In the Peripherals list you should see D-Show FWx.
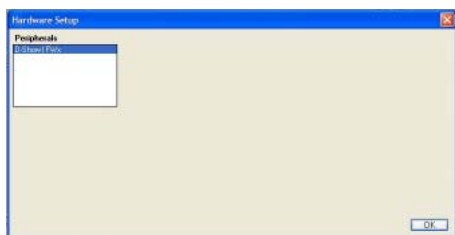
Pro Tools Hardware Setup dialog

3 Click OK.

I/O Setup

The I/O Setup window lets you name and configure signal paths within Pro Tools. By default, FWx channels appear as sequentially numbered inputs and outputs.

I/O Setup

To view or edit the I/O Setup:

1 Choose Setups > I/O Setup

2 Click the Inputs, Outputs, Inserts, or Busses tabs to display paths of that type.

3 Rename, repatch, or reformat input and output signal paths, if desired. See "Additional Pro Tools Recording Tips" on page 14 for more information, or see the *Pro Tools Reference Guide* for details.

Session Setup

The Pro Tools Session Setup window lets you configure session Start Time and other session settings.

💡 *When using FWx, Pro Tools session bit depth and sample rate are fixed at 24-bit/48 kHz, and cannot be changed.*

Session Setup window

Additional Pro Tools Recording Tips

Naming

Recorded files are named according to the names of their parent Pro Tools audio tracks. For example, recording audio in a track named Audio 1 creates an audio file named "Audio 1." Double-click on a track name in Pro Tools to rename tracks before recording, in order to have Pro Tools name files accordingly (such as "kick" "lead vocal" or "horns").

Disk Usage

Pro Tools provides many settings to optimize disk performance and usage.

- If recording to multiple drives, use the Disk Allocation dialog to manage data writing among drives (choose Setups > Disk Allocation).

- Check the Record Allocation option and make sure it is set to the optimal amount of time for the current project and hard drives (choose Setups > Preferences and click the Operation tab).

Gain and Recording Levels

Pro Tools has no input attenuation. Level faders during recording are post-disk monitoring levels only. Raise or lower the level of recorded signals at their source (for example, by adjusting the channel Direct Out levels in D-Show).

Keyboard Shortcuts for Recording

Use the following shortcuts on the Pro Tools keyboard to simplify recording.

To arm the transport and start recording simultaneously:

■ Press Control+Spacebar (Windows) or Command+Spacebar (Macintosh) on the Pro Tools computer keyboard.

To record-enable all tracks at once:

■ Alt-click (Windows) or Option-click (Macintosh) the Record Enable button on any track.

**To cancel recording and not save any audio to disk:**

■ Press Control+period (Windows) or Command+period (Macintosh) before the Transport is stopped.

📄 *See the Pro Tools Reference Guide for complete instructions.*

Recording with FWx

To record D-Show audio into Pro Tools with FWx:

1 Make sure your system is installed and operating correctly (see Chapter 2, "Installing FWx").

2 Make sure you have configured D-Show and its signal routing for FWx (see Chapter 3, "Using FWx").

3 Open or create a 24-bit, 48 kHz session. (FWx supports 24-bit, 48 kHz only.)

4 Choose File > New Tracks and create new audio tracks for all D-Show channels you plan to record.

5 Use the track Input selectors to assign an FWx channel to each Pro Tools record track.
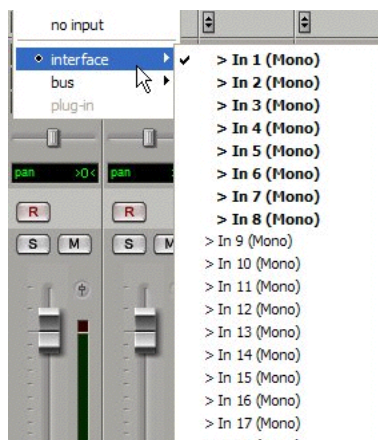
Assigning a Pro Tools track input to an FWx channel

⚠ *If you configured the D-Show Patchbay for playback as well as recording, be sure to check Pro Tools track outputs for any potential feedback loops before record-enabling tracks.*
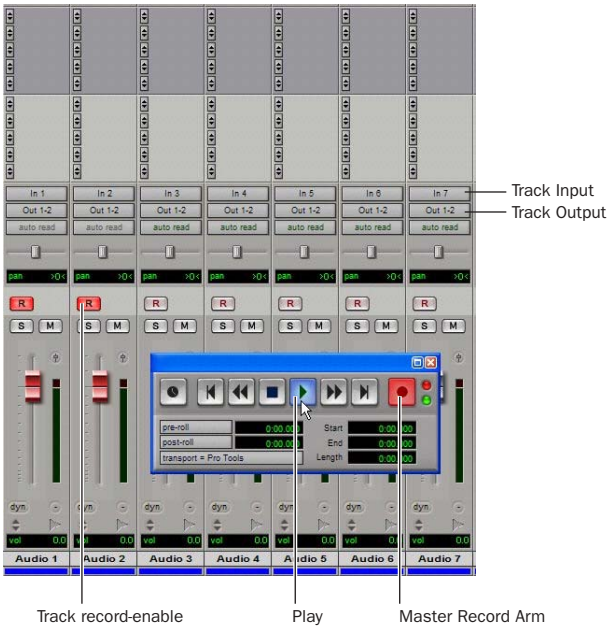
6 Record-enable Pro Tools tracks.

7 Click the Record button in the Pro Tools Transport window, then click Play to begin recording.

The Pro Tools Transport window

Pro Tools LE should look similar to the following when properly recording.

*The Pro Tools Mix window while recording*

📖 *See the Pro Tools Reference Guide for more information about basic recording.*

Playback with FWx

FWx can route up to 18 channels from Pro Tools directly into D-Show channels. In order to play back through FWx, sessions must be 24-bit/48kHz.

To play back Pro Tools tracks through FWx:

1 Make sure your system is installed and operating correctly (see Chapter 2, "Installing FWx").

2 Make sure you have configured Pro Tools and D-Show for FWx (see Chapter 3, "Using FWx").

3 Open a 24-bit/48 kHz Pro Tools session.

4 Use the Pro Tools track Output selectors to assign track outputs to available FWx channels.
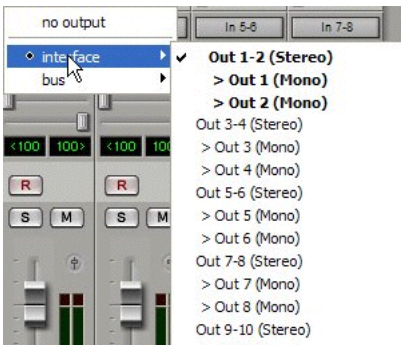
Assigning track output to FWx channels 1-2

⚠️ *If you are using FWx to record and play back audio, avoid feedback loops by making sure no D-Show channels are simultaneously routed to and receiving from any record-enabled Pro Tools tracks.*