



# Eleven<sup>®</sup> Rack User Guide

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# Contents

## Part I            **Playing Guitar through Eleven Rack**

<b>Chapter 1. Introduction</b> . . . . .	3
Quick Start Instructions . . . . .	3
System Requirements and Compatibility . . . . .	5
Getting Around This Guide . . . . .	5
Conventions Used in This Guide . . . . .	6
About <a href="http://www.avid.com">www.avid.com</a> . . . . .	7
<b>Chapter 2. Hardware Overview</b> . . . . .	9
Eleven Rack Front Panel . . . . .	9
Eleven Rack Back Panel . . . . .	13
<b>Chapter 3. Exploring Rigs</b> . . . . .	17
Overview . . . . .	17
Rig Input . . . . .	17
Rig Select Mode . . . . .	18
Rig Organization . . . . .	19
Selecting Rigs Live . . . . .	19
What's In A Rig? . . . . .	20
Rig View . . . . .	21
Signal Chain Devices and Utility Settings in Rig View . . . . .	21
Signal Routing . . . . .	24
Rig Edit Mode . . . . .	24
Saving Your Work . . . . .	25
The Amps . . . . .	26
DC Custom Amps . . . . .	32
General Amp Controls . . . . .	33
The Speaker Cabinets . . . . .	35
Speaker Breakup . . . . .	36

The Microphones . . . . .	37
The Effects . . . . .	38
General Effects Controls . . . . .	49
Don't Forget to Save! . . . . .	49
<b>Chapter 4. Eleven Rack Live Setup . . . . .</b>	<b>51</b>
Basic Live Setup . . . . .	52
Using an Amp Onstage . . . . .	53
Effects and Foot Controllers . . . . .	55
External Foot Controllers . . . . .	56
Display Mode and Visibility . . . . .	57

## **Part II                   Setting Up and Using Pro Tools with Eleven Rack**

<b>Chapter 5. Installing and Connecting Eleven Rack . . . . .</b>	<b>61</b>
---	-----------

<b>Chapter 6. Eleven Rack Studio Setup . . . . .</b>	<b>63</b>
--	-----------

Using Eleven Rack as Your Pro Tools Interface . . . . .	63
Listen to Your Sound from Pro Tools . . . . .	64
Analog Audio Inputs . . . . .	65
Digital Audio Input and Output . . . . .	66
MIDI Connections . . . . .	67
Using Eleven Rack with an Existing Pro Tools System . . . . .	68

<b>Chapter 7. Using Eleven Rack with Pro Tools . . . . .</b>	<b>73</b>
--	-----------

Pro Tools Interface Capabilities . . . . .	73
External Processor Capabilities . . . . .	73
The Eleven Rack Control Window . . . . .	74
Accessing the Eleven Rack Control Window . . . . .	75
Rig View Section . . . . .	76
Master Control Section . . . . .	80
Guitar Recording with Pro Tools . . . . .	81
Recording Wet and Dry Signals when Using Eleven Rack as an External Processor . . . . .	82
Embedding Rig Settings in Audio Regions . . . . .	83
Re-Amping . . . . .	86
Controlling Eleven Rack Parameters with MIDI Data . . . . .	87

<b>Chapter 8. User Options</b> .....	89
Exploring the User Options .....	89
User Options .....	89

**Part III                    Reference**

<b>Chapter 9. Eleven Rack MIDI Controls</b> .....	97
General/Frequently Used Controls .....	97
Amplifier Controls .....	98
Effects .....	113
Utility Settings .....	123
Miscellaneous MIDI Controls .....	124

<b>Chapter 10. Resources</b> .....	125
About the Pro Tools Guides .....	125
About <a href="http://www.avid.com">www.avid.com</a> .....	126

<b>Chapter 11. Compliance Information</b> .....	127
Environmental Compliance .....	127
EMC (Electromagnetic Compliance) .....	128
Safety Compliance .....	129



# **Part I: Playing Guitar through Eleven Rack**



# Chapter 1: Introduction

## Quick Start Instructions

### You've Got Eleven Rack, You've Got Your Guitar. What's Next?

Eleven Rack is a high-quality audio and MIDI interface, with classic guitar amp and effects processing built right in. This means that Eleven Rack is useful when recording, gigging, and practicing.

At home or in the studio, you can plug guitars, microphones, and other instruments into Eleven Rack, and record directly into a Pro Tools session on your computer. You can use the amp and effects modelling capabilities of Eleven Rack to process signals as you record them, or to process previously recorded audio.

When away from the computer, you can use Eleven Rack as a standalone guitar processor, sending classic guitar tones straight to a venue's PA system, to a guitar amp, or both. You can also simply plug in a pair of headphones and practice by yourself.

You're probably excited to start playing with your new Eleven Rack right away, so let's get started!

### To play guitar with Eleven Rack:

- 1 Connect outputs from Eleven Rack to your monitors or headphones:
  - If you're connecting to self-powered studio monitors, a stereo power amp and speakers, or mixer inputs, use the Main outputs.



Eleven Rack Main outputs (back panel)

**⚠** The Main outputs are line-level, rather than mic-level outputs. When connecting to a mixer or other device with microphone pre-amps, it is best to use the device's line-level inputs, if provided. If only inputs with pre-amps are available, adjust the preamp gain on each channel to avoid clipping.

- If you're using a pair of headphones, connect them to the Phones output.



Phones output (front panel)

**2** Connect your guitar to the Guitar Input on the front panel of Eleven Rack.



*Guitar input (front panel)*

**3** Connect the power cable.

**4** Make sure any connected amplifiers or powered monitors are turned off or muted.

**5** Set the Eleven Rack Power switch to On. The Eleven Rack logo will appear, and the Eleven Rack will begin its warm-up process.

**6** When the name of the first preset sound (or Rig) is displayed, turn your amp or powered speakers back on.

**7** Try playing your guitar. Make sure the guitar's volume is turned up. How's it sound? You may want to adjust the output volume of Eleven Rack by turning the Volume knob on the front panel.



*Volume knob (front panel)*

 *If you aren't getting sound when you play your guitar, make sure that the Rig Input User Option is set to Guitar. For more information, see "Rig Input" on page 17.*

**8** You can browse through Eleven Rack's various Rigs, by turning the Scroll wheel.



*Scroll wheel (front panel)*

**9** Try adjusting the lit Control Knobs to change the featured amp or effects settings. You can see what kind of control each knob is assigned to on the display. In the following example, the left-most knob controls Gain, the second knob controls Bass, and so on.



*Control knobs and displayed knob assignments*

**10** Press some of the Effects Bypass buttons (such as Dist, Mod, or Delay) to toggle the various effects on and off.



*Effects Bypass buttons*

---

## System Requirements and Compatibility

To use Eleven Rack as a standalone preamp and processor for a Guitar or other instrument, you need:

- A guitar, bass, or other electric instrument
- One or more of the following, for monitoring:
  - A guitar amplifier
  - A set of speakers, with an amplifier
  - A set of headphones
- Cables to connect your chosen devices

To use Eleven Rack with Pro Tools, you need:

- One of the following:
  - A qualified Mac or Windows computer running Pro Tools 8.0.1 or higher (when using Eleven Rack as a Pro Tools interface)
  - or –
  - A qualified Mac or Windows computer running Pro Tools 8.0.1 or higher with an Avid-qualified interface (when using Eleven Rack as an external signal device).
- Included USB and power cables for use with Eleven Rack
- Internet access for registration purposes

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

For complete system requirements and a list of qualified computers, operating systems, hard drives, and third-party devices, visit:

[www.avid.com/compatibility](http://www.avid.com/compatibility)

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## Getting Around This Guide

There are two main ways to use Eleven Rack. It can be used as a live guitar processor (see Part I, “Playing Guitar through Eleven Rack.”) Or, Eleven Rack can be used as an audio interface and effects processor with Pro Tools (see Part II, “Setting Up and Using Pro Tools with Eleven Rack.”)

### Part 1: Playing Guitar through Eleven Rack

You’re looking at it. Part 1 gives you an overall view of Eleven Rack, its features and basic operation.

- Chapter 1, “Introduction”
- Chapter 2, “Hardware Overview”
- Chapter 3, “Exploring Rigs”
- Chapter 4, “Eleven Rack Live Setup”

### Part 2: Setting Up and Using Pro Tools with Eleven Rack

In Part 2, you can learn how to set up and use Eleven Rack as part of a Pro Tools recording and mixing system.

- Chapter 5, “Installing and Connecting Eleven Rack”
- Chapter 6, “Eleven Rack Studio Setup”
- Chapter 7, “Using Eleven Rack with Pro Tools”
- Chapter 8, “User Options”

## Part 3: Reference

In Part 3, we get into the technical (and very useful) details behind the scenes.

- Chapter 9, “Eleven Rack MIDI Controls”
- Chapter 10, “Resources”

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## Registration

Review the enclosed Registration Information Card and follow the instructions on it to quickly register your purchase online. By registering, you become eligible to receive the following:

- Information regarding technical support
- Software update and upgrade notices
- Limited warranty on hardware

## Warranty

Your warranty can be found on the Registration Information Card.

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## Conventions Used in This Guide

Pro Tools guides use the following conventions to indicate menu choices and key commands:

Convention	Action
File > Save	Choose Save from the File menu
Control+N	Hold down the Control key and press the N key
Control-click	Hold down the Control key and click the mouse button
Right-click	Click with the right mouse button

The names of Commands, Options, and Settings that appear on-screen are in a different font.

The following symbols are used to highlight important information:

 *User Tips are helpful hints for getting the most from your Pro Tools system.*

 *Important Notices include information that could affect your data or the performance of your system.*

 *Shortcuts show you useful keyboard or mouse shortcuts.*

 *Cross References point to related sections in this guide and other related guides.*

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## About [www.avid.com](http://www.avid.com)

The Avid website ([www.avid.com](http://www.avid.com)) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

**Product Registration** Register your purchase online.

**Support and Downloads** Contact Avid Customer Success (technical support); download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Knowledge Base or join the worldwide Pro Tools community on the User Conference.

**Training and Education** Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

**Products and Developers** Learn about Avid products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

**News and Events** Get the latest news from Avid or sign up for a Pro Tools demo.



# Chapter 2: Hardware Overview

## Eleven Rack Front Panel



Figure 1. Eleven Rack front panel

The Eleven Rack front panel provides the following:

### Power Switch

Use the heavy-duty Power switch to turn Eleven Rack on and off. Eleven Rack will take a few seconds to warm up. When the Rig name appears on the display, you're ready to rock.

- ⚠ Before you power on Eleven Rack, make sure any powered monitors or amplifiers are turned off or muted, and take off any headphones.

### Volume Knob

Turning the Volume knob will simultaneously adjust the output level of the Main outputs and the Headphone output.

- ⚠ The Volume knob can also be set to control other output volume settings in Eleven Rack. For more information, see "Volume Control" on page 94.

## Edit/Back and Save Buttons

Use the Edit/Back button to enter Rig View, which gives you access to the inner workings of the current Rig (preset). When in Rig View or any other non-default view, you can Press Edit/Back to step backwards to the previous view. When you're satisfied with the changes you've made, press the Save button to save your settings.

 For more information on Rig View, see Chapter 3, "Exploring Rigs."

## User Options Mode

Hold the Edit/Back button to enter User Options mode, where many settings that change the behavior and configuration of Eleven Rack can be found.

 For information on User Options mode, see Chapter 8, "User Options."

## SW1 and SW2 Buttons

Use the SW1 and SW2 buttons to toggle various switched behaviors on and off, and to navigate through editing views in Eleven Rack. The part of the display next to the SW1 and SW2 buttons shows the current function of the buttons.

When one of the SW buttons are actively usable in the current screen, it will be lit.

## Scroll Wheel

Use the Scroll wheel to browse through Rigs, navigate through sections in Rig View, and manipulate applicable parameters throughout Eleven Rack.

## Effects Control Buttons

Use the Effects Control buttons to toggle effects on and off by type. Press and hold any of the effects buttons to access the controls for that effect. Pressing the FX1 and FX2 buttons simultaneously toggles the Wah effect on and off.

## Tap Tempo/Tuner Button

Tap the Tap Tempo/Tuner button at quarter-note intervals to set the current Rig's FX tempo. Time-based effects (such as Delay and Tremolo) can be set to synchronize with the new tempo.

Most Rigs are not set up to sync to Rig or Session tempo by default. You may need to turn on the Sync parameter in the effect you want to sync.

 For more information on syncing effects, see "Sync" on page 49.

If you want to save the new tempo setting with the current Rig, press the Save button.

To access the built-in guitar tuner, hold the Tap Tempo/Tuner button down for one second. The display shows the Tuner view.



*Tuner view*

The guitar signal can be muted by pressing SW1. The reference pitch can be adjusted by turning the lit Control knob. The default reference pitch is A-440 Hz. This pitch is the standard reference pitch that most tuners are calibrated to.

When you're finished tuning, press any button to return to the previous screen.

## Mic Input and Controls

Use the Mic input to record and/or process mic-level signals. Controls for preamp gain, phantom power, and pad are provided.



*When using Eleven Rack as a standalone preamp and processor, it's important to note that only one input type can run through the Rig at one time. The Rig Input User Option setting must be set to the correct input type, or no audio will pass to the outputs. For more info on selecting the input that feeds the rig, see "Rig Input" on page 90.*

*When using Eleven Rack as an audio interface with Pro Tools, all inputs are usable simultaneously (though the Rig is still limited to processing one input type at a time).*

### 48V (Phantom Power)

Use this switch for microphones that require phantom power.

Most *condenser* microphones (such as an AKG C3000) *do* require phantom power to operate. *Dynamic* microphones (such as a Shure SM57) do not require phantom power, but are not harmed by it.



*Although phantom power is safe for most microphones, it is possible to damage some ribbon mics with it. Always turn off phantom power and wait at least ten seconds before connecting or disconnecting a ribbon microphone.*

If you are not sure about the phantom power requirements for your microphone, consult your microphone's documentation or contact the manufacturer.

## Display

The Display is an LCD screen used to show Rigs, settings, and data (such as firmware version). It also works in tandem with the front panel Control knobs and buttons, displaying the currently-controllable parameters and their settings.



*For more information on the interaction between the display and the physical controls on Eleven Rack, see Chapter 3, "Exploring Rigs."*

## Control Knobs

Use the Control knobs to access amp and effects controls, as well as other Eleven Rack settings. The controls are pre-assigned, depending on the current mode. The knobs light up in different colors, depending on their state:

**Amber** The current knob is assigned to an amp, cab, or FX loop parameter.

**Green** The current knob is assigned to an effects parameter.

**Red** The current knob is positioned differently than the assigned control's saved position in the current Rig. You can match the knob position to the saved parameter by turning the knob until it lights Amber or Green again. If you want to save your new settings to the current preset or a new preset, press the Save button.



*The above only applies when you are still viewing the page you're adjusting. For example, if you adjust Amp Gain, then scroll to Distortion, then back to Amp, the Gain control will not show as red. Keep an eye on the Save light to be sure.*

When a Control knob isn't active in the current screen, it is not lit.

## Phones Output

The Phones output is a 1/4-inch TRS jack that drives a pair of headphones with the same signal that is being sent out of the Main outputs of Eleven Rack. This can be either the output signal of the current Rig when using Eleven Rack as a standalone device, or the output signal of Pro Tools or other applications when using Eleven Rack as an audio interface.

The headphone output level is adjusted in tandem with the Main volume when you turn the Volume knob on the front panel of Eleven Rack or adjust the Main volume from within Pro Tools. If you want the headphone volume to differ from that going to your speakers, you can adjust the Headphone Offset setting in User Options mode.

 For more information on Headphone Offset, see “Headphone Volume” on page 93.

## Output To Amp 1 (L)

The Output To Amp 1 (L) is one of two outputs specifically designed for connecting to the input of a guitar amplifier or effects unit. It is an instrument-level output. Since most amplifier input jacks are located on the amp’s front panel, we put one of these jacks on the front panel of Eleven Rack for easy patching.

The Output to Amp 2 jack, which outputs the right channel signal, is located on the back of Eleven Rack. It can be used independently of Output 1, or along with it for stereo amplifier configurations.

The Output to Amp jacks can output a live guitar signal in real time as you play, or a pre-recorded signal from Pro Tools, for re-amping purposes.

You can select from specific points in the signal chain to feed each Output To Amp jack. This lets you choose the type of processing you want on the output signal.

## Guitar Input with True-Z

The Guitar input is a 1/4" TS, instrument-level input. Designed for electric guitars, the jack also works well with bass guitars, acoustic guitars with pickups, and even vintage electric pianos.

 Most recent keyboards have line-level outputs and should be connected to the Line inputs on the back panel of Eleven Rack.

Eleven Rack features a special variable-impedance circuit called True-Z, which automatically changes the input impedance of the Eleven Rack guitar input depending on which amp or effects model is first in the chain of the current Rig.

True-Z alters the frequency response of your guitar signal by loading your pickups in the same manner as plugging into a real amp or effect. This setting only effects instruments with passive pickups.

When using an instrument with active (battery-powered) pickups, we recommend setting the True-Z setting to 1M. This feature can be manually controlled and saved as part of a Rig setting.

 When using Eleven Rack as a standalone preamp and processor, it’s important to note that only one input type can run through the Rig at one time. The Rig Input User Option setting must be set to the correct input type, or no audio will pass to the outputs. For more info, see “Rig Input” on page 90.

When using Eleven Rack as an audio interface with Pro Tools, all inputs are usable simultaneously (though the Rig is still limited to processing one input type at a time).

## Eleven Rack Back Panel

Figure 2 identifies each port on the back panel of the Eleven Rack.

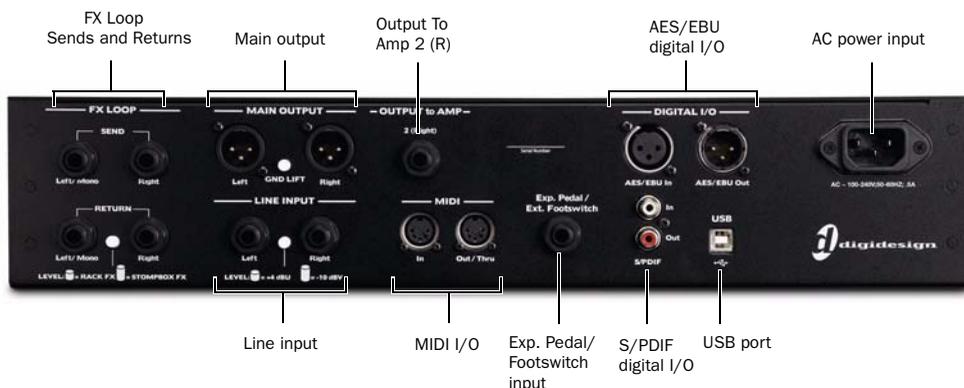


Figure 2. Eleven Rack back panel

The Eleven Rack back panel provides the following:

### FX Loop Sends and Returns

The FX Loop Sends and Returns are a pair of 1/4-inch TRS inputs and outputs, which can be used to insert a mono or stereo external effects processor into the guitar signal.

 *When sending and receiving mono signals, use the Left/Mono input and output. You can set the FX Loop to mono in this case, by visiting User Options > FX Loop. For more information, see “FX Loop” on page 92.*

The Level switch lets you adjust the signal level to be suitable for either a line-level effects processor (Rack FX) or a guitar-level effects processor (Stompbox FX).

### Main Outputs

The Main output section includes a stereo, XLR, line-level analog output pair. Connect these to studio monitors, a power amp, mixer, or PA system.

 *When using the Main outputs to feed a live sound console, alert the sound engineer that the signal you’re sending is line-level, rather than mic-level.*

 *Use caution when connecting the Main Outputs to devices (such as mixers), which provide 48V phantom power over the connection. We recommend that you make sure 48V phantom power is disabled on these devices before connecting your Eleven Rack.*

The Gnd Lift switch is useful for suppressing hum in some situations, but should usually be left switched off unless it is really needed.

## Output To Amp 2 (R)

The Output To Amp 2 (R) is one of two outputs specifically designed for connecting to the input of a guitar amplifier or effects unit. Like Output to Amp 1 (L), it is an instrument-level output. It can be used independently of Output 1 (located on the front panel), or along with it for stereo amplifier configurations.

The Output to Amp jacks can output a live guitar signal in real time as you play, or a pre-recorded signal from Pro Tools, for re-amping purposes.

You can select from specific points in the signal chain to feed each Output To Amp jack. This lets you choose the amount of processing you want on the output signal.

## Digital Inputs and Outputs

Eleven Rack can support AES/EBU and S/PDIF digital formats, but not both at once. For information on switching between digital formats, see “Digital Clock/Input” on page 91

### AES/EBU

The AES/EBU In and Out ports are balanced three-conductor XLR connectors that can support up to 24-bit, 96 kHz audio.

The AES/EBU format is used in many professional digital converters, recorders, and signal processors.

### S/PDIF

The S/PDIF In and Out ports are unbalanced two-conductor phono (RCA) connectors that can support up to 24-bit, 96 kHz resolution.

The Sony/Philips Digital Interface Format (S/PDIF) is used in many professional and consumer CD recorders and DAT recorders. To avoid RF interference, use 75-ohm coaxial cable for S/PDIF transfers and keep the cable length to a maximum of 10 meters.

## AC Power Input

The AC power input accepts a standard IEC power cable (included with Eleven Rack). The power supply in Eleven Rack is universal, so wherever you go, all you need is a standard IEC power cable with the correct plug for your region.

## Line Inputs

The Line inputs accept one stereo or two mono line-level analog signals. The Level switch lets you select between +4 (for professional gear) or -10 dBV (for consumer gear).

## MIDI I/O

The MIDI In and MIDI Out ports are standard 5-pin MIDI ports, each providing 16 channels of MIDI input or output. These ports can interface with a variety of MIDI devices.

When Eleven Rack is used as a standalone processor, the MIDI jacks are used to communicate with MIDI foot controllers, sending and receiving program changes and continuous controller data.

When Eleven Rack is used with Pro Tools, you can connect a MIDI keyboard or controller and send MIDI data to Eleven Rack to control virtual instruments in your Pro Tools session. You can also send MIDI data from Pro Tools to your MIDI-equipped gear.

## **Exp Pedal/Ext Footswitch Input**

The Exp Pedal/Ext Footswitch input supports an expression pedal or a momentary footswitch (single or dual). You can control sweepable parameters (such as Wah, Volume and Multi FX) with an expression pedal, or switchable settings (such as Rig switching, amp channel switching, and effects on/off) with a footswitch.

## **USB Port**

The USB port lets you connect Eleven Rack to your computer for use with Pro Tools software, another Pro Tools system, or for maintenance tasks like updating firmware.

We recommend using the included USB cable to connect Eleven Rack. If the included cable isn't available, use a high-quality USB cable, five meters (16 feet) or shorter.



# Chapter 3: Exploring Rigs

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## Overview

Eleven Rack is a powerful guitar signal processor that delivers tones from a wide variety of amplifiers, speaker cabinets, microphones, and effects units. The combination of all of this gear and their control settings make up a *Rig*.

Eleven Rack comes loaded with over 100 Rigs that showcase the range of tones our amps and effects can achieve. The built-in Rigs are a good place to start, but the power of Eleven Rack really comes into play when you create your own.

You can audition, manage, edit and create Rigs from the front panel of Eleven Rack. When using Eleven Rack with Pro Tools, the built-in Eleven Rack Control window offers another convenient way to do this work.

 *For details on working with Rigs from within Pro Tools, see “The Eleven Rack Control Window” on page 74.*

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## Rig Input

The Amp/Effects processor inside Eleven Rack can process one input signal at a time. To hear your audio when using Eleven Rack as a stand-alone signal processor, you must set the Rig Input User Option to the input you plan to use (such as Guitar, Mic, or Line).

**To set the Rig Input User Option to match your input type:**

- 1 Hold the Edit/Back button for one second to enter User Options Mode.
- 2 Scroll to Rig Input using the Scroll wheel.
- 3 Press SW1 to enter the Rig Input User Option.
- 4 Use the illuminated Control knob to set the input to the type you want to run through the current Rig.
- 5 Press the Edit/Back button twice to return to your previous view.

## Rig Input and Pro Tools

When using Eleven Rack as an audio interface with Pro Tools, all of the inputs on Eleven Rack, as well as the output of the Rig, are available as separate channels for recording.

The Rig Input setting is then used to choose which input channel is processed by the Rig. That input's dry signal is still available for recording separately.

---

## Rig Select Mode

When you turn on Eleven Rack, it's already in Rig Select mode. In this mode, you can turn the Scroll wheel to find and select a Rig.

## Rig Select Display Modes

The Rig Select page can be viewed four different ways. To cycle through the display modes, press the SW1 button.

### Default Mode



This mode shows the Rig number and name, and provides a set of amp or effects controls that you can change without entering Rig View.

 For more information about Rig View, see "Rig View" on page 21.

### Simple Mode



This mode shows the Rig number and name in the largest typeface possible. It's perfect for seeing from across a dark stage.

## Details Mode



This mode lists the amp, cabinet, and effects models that are used in the current Rig, plus their on/off status.

## Outputs Mode



This mode offers fast access to the output settings for the current Rig. It provides four lit control knobs. These are labeled TO AMP 1 (Output To Amp 1 volume), TO AMP 2 (Output To Amp 2 volume), AMP OUT (amp output volume), and RIG VOL (Rig output volume).

---

## Rig Organization



Eleven Rack has storage for 208 Rigs. Half of these are user-editable Rigs, and the other half are factory preset Rigs. You can also save and store an unlimited number of your favorite Rigs as plug-in settings files on your computer.

The 208 Rigs in Eleven Rack are arranged into two sets of 26 banks, each containing four Rigs. Each bank is marked with a letter from A to Z, and a numeral from 1 to 4. Banks with uppercase letters are user banks, and those with lowercase letters are factory banks. For example, the third preset in user bank D is referred to as "D3."

## User Rigs and Factory Rigs

By default, all 104 user Rigs are copies of the 104 factory Rigs. This gives you a place to start when you set out to make your own Rigs. As you scroll through, notice that when you get past the end of the uppercase (user) Rigs, you'll then begin to see the lowercase (preset) Rigs.

The user Rigs are yours to edit, change, copy, and mangle as you see fit. The preset Rigs will always stay the same. If you make changes to a preset Rig and want to save it, you can save it as a new User Rig.

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## Selecting Rigs Live

When using Eleven Rack in live performance situations, we recommend using a footswitch accessory or a dedicated MIDI foot controller to switch from Rig to Rig. This lets you switch Rigs more quickly and conveniently.

 *For info on using a footswitch accessory, see "External Pedals" on page 92. For info on using a MIDI controller, see Chapter 9, "Eleven Rack MIDI Controls."*

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## What's In A Rig?



Figure 3. Example of a common Eleven Rack Rig signal chain

Each Rig in Eleven Rack contains the following devices for processing your guitar signal from input to output. Each device has settings you can control. Also, some devices can be moved to different points in the signal chain.

 For more information on changing the order of devices, see “Signal Routing” on page 24.

### Signal Chain Devices

Each Rig contains a group of devices that make up the processing signal chain. You can sculpt, manipulate, and optimize the sound you’re running through the Rig by adjusting settings in the following devices.

**Input** Lets you manipulate the True-Z input impedance circuitry. In the Eleven Rack Rig, this device is represented by the INPUT icon.

**Amplifier** Lets you select and tweak the amp of your choice. In the Eleven Rack Rig, this device is represented by the AMP icon.

**Speaker Cabinet and Microphone** Lets you choose cabinet and microphone models to suit the desired tone, and add realistic speaker breakup effects to your signal. In the Eleven Rack Rig, this device is represented by the CAB icon.

**Effects** Lets you choose and manipulate an extensive set of guitar effects, including Distortion, Modulation (such as Chorus and Flanger), and Reverb. In the Eleven Rack Rig, Effects are represented by a variety of icons, such as DIST (for distortion) and DLY (for delay).

**Output** Lets you change the Rig volume and To Amp output volume, and switch the Rig output between mono and stereo. In the Eleven Rack Rig, this device is represented by the OUTPUT icon.

### Utility Settings

Each Rig also contains the following “Utility” settings, which can be found to the right of the Output device in Rig View:

**Display** Lets you set the device whose controls are displayed in Rig Select view (such as Amp, Mod, or FX1). In the Eleven Rack Rig, this device is represented by the DISPLY icon.

**Tempo** Lets you set the Rig tempo. In the Eleven Rack Rig, this device is represented by the TEMPO icon.

**Pedal** Lets you configure an external footswitch or expression pedal accessory. In the Eleven Rack Rig, this device is represented by the PEDAL icon.

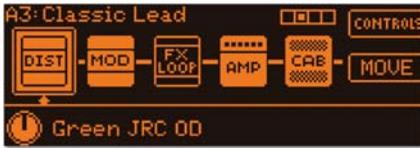
**Meter** Lets you meter the signal level at various points inside the Rig and at the inputs and outputs (analog, digital, and USB) of Eleven Rack. This device is represented by the METERS icon.

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## Rig View

Rig View lets you access every aspect of the current Rig, from the amp, cabinet, and microphone type, all the way to choosing effects, and changing their order in the signal chain.

You can switch to Rig View from Rig Select View by pressing the Edit/Back button on the front panel of Eleven Rack.



### Rig View

Once you've entered Rig View, you'll see a selection of icons, each representing a different device or utility setting within the current Rig. Turn the Scroll wheel to select the element you want to access.

As you scroll through the list, certain functions will be assigned to the lit Control Knobs, (such as choosing the type of amp or effect you want to use).

When you're finished editing, press the Edit/Back button again to get back to the main Rig Select mode.

**A** *If you make changes you want to save, be sure to use the Save button before switching to a different Rig. For details, see "Saving Your Work" on page 25.*

## Page Indicator

In Eleven Rack's editing screens, a Page indicator appears on the display if there is more than one page of controls. The Page indicator shows the number of pages, as well as the name of the page you're viewing. Turn the Scroll wheel to switch between pages.



Page indicator, showing page two of four

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## Signal Chain Devices and Utility Settings in Rig View

This section describes the functions of the signal chain devices and utility settings pages found in Rig View.

If the device or setting you select in Rig View has additional controls, pressing SW1 (labeled CONTROLS) takes you to a special page of additional controls for that device. When you're finished, press Edit/Back to go back to Rig View.

 *For more details on accessing additional controls, see "Rig Edit Mode" on page 24.*

## Input

Turn the lit Control knob to manipulate the True-Z impedance circuitry in Eleven Rack. When set to Auto, the input impedance is determined by the first active effect or amp in the signal chain. You can also choose a specific load value to best match your pickups.

## Amplifier, Cabinet, and Microphone

### AMP

Turn the lit Control knob to select the type of simulated amp you want to use. Press CONTROLS to access additional amp settings.

### CAB

By default, when Cab is selected in Rig View, you can access the following controls:

**CAB and MIC** Turn the lit Control knobs to select the type of cabinet and microphone you want to use.

**ON AXIS/OFF AXIS** Press SW2 to toggle the microphone position on or off-axis.

**CONTROLS** Press SW1 to reach two additional pages of Cab controls. You can then scroll between control pages with the Scroll wheel.

The two control pages let you access the following additional controls:

**BYPASS** (Page One) Press SW1 to bypass the current cabinet and microphone model.

**SPEAKER BREAKUP** (Page Two) Turn the lit Control knob to dial in the appropriate amount of the Speaker Breakup simulation.



*When playing Eleven Rack through a guitar amp, you may want to bypass the Cab and Mic simulations. With some amplifiers, the additional tone shaping of the Eleven Rack Cab and Mic processing may cause the tone to sound “fizzy” or “muddy.”*

## Effects

### VOL

Press CONTROLS to access a Control page where you can adjust the position and minimum volume of the Volume pedal, using the lit Control knobs.

### WAH

Turn the lit Control knob to select the type of Wah pedal you want to use. Press CONTROLS to access a Control page, where you can adjust the position of the Wah pedal.

### DIST

Turn the lit Control knob to select the type of Distortion effect you want to use. Press CONTROLS to access additional settings for the chosen Distortion effect.

### MOD

Turn the lit Control knob to select the type of Modulation effect you want to use. Press CONTROLS to access additional settings for the chosen Modulation effect.

### FX1 and FX2

The FX1 and FX2 pages let you choose two additional effects not found in the other categories (such as compressor or graphic EQ) as well as a variety of modulation effects, using the lit Control knob. Press CONTROLS to access additional settings for the chosen effect.

### REV

Turn the lit Control knob to select the type of Reverb effect you want to use. Press CONTROLS to access additional settings for the chosen Reverb effect.

## DLY

Turn the lit Control knob to select the type of Delay effect you want to use. Press CONTROLS to access additional settings for the chosen Delay effect.

## FX LOOP

Press CONTROLS to access a Control page where you can adjust the gain and blend settings of the FX Loop, using the lit Control knobs.

 *Effects and the FX Loop can be moved to different locations in the signal chain of the Rig. For that reason, when an effect or the FX Loop is selected in Rig View, SW2 is labeled MOVE. For more details, see "Signal Routing" on page 24.*

## Output

### RIG VOL

This volume setting is a tonally transparent volume control, intended for making fine adjustments to the relative volume levels of different Rigs.

### TO AMP 1 and TO AMP 2

These volume settings let you optimize signal level for the amp(s) or external processors you are sending signal to.

**MONO/STEREO** Press SW1 to toggle between mono or stereo or mono output.

## Utility Settings

### DISPLAY

Turn the lit Control knob to specify what controls are displayed in the Default view of Rig Select mode.

## TEMPO

Turn the lit Control knob to set the Rig tempo. Any amp or effects settings that have a control set to sync to a specific subdivision of Rig tempo will lock to this tempo.

Press MIDI to toggle sync of Rig tempo to incoming MIDI clock (from the MIDI input of Eleven Rack) on or off.

Press FINE to toggle fine tempo editing mode on or off. In this mode, turn the Scroll wheel to adjust the Rig tempo in tenths of a BPM, rather than the coarse adjustments that are made with the Control knob. Press FINE again to return to the normal mode.

## PEDAL

Turn the lit Control knob to choose the parameter controlled by an external expression pedal, if attached. The following choices are available:

**Wah** Lets you control the sweep of the Wah effect.

**Volume Pedal** Lets you control the sweep of the Volume Pedal effect.

**Rig Volume** Lets you control the overall Rig volume.

**Multi FX** Lets you control up to four different amp and/or effects parameters at once. Press SW1 for options. There are four pages of options, each one addressing one parameter that is to be controlled.

On each page, set the device you want to control and the parameter you want to sweep. The Toe and Heel settings govern the range of the control that is able to be swept.

 *If you set the Heel number higher than the Toe number, the control can be swept in reverse.*

**None** No parameter will be affected when the pedal is moved.

 For information on toggling Eleven Rack between expression pedal and footswitch control, see “External Pedals” on page 92.

## METER

Turn the lit Control knob to choose which signal the meter shows. You can meter various points within the Rig, or the input or output level of any of the analog, digital, or USB (Pro Tools) I/Os on Eleven Rack. This function is useful for troubleshooting purposes (such as finding clipping in the signal chain, or identifying a bad guitar cable).

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## Signal Routing

The position of many of the devices in the signal chain can be changed. The order that devices are plugged into each other can make a large difference in the sound you get.

Most effects can be moved anywhere before or after the amp and cabinet models. The FX Loop can be moved to one of four places:

- The beginning of the chain
- Immediately before the amp and cab
- Immediately after the amp and cab
- Immediately before the final output

### To move an effect:

- 1 Turn the Scroll wheel to select the effect you want to move.
- 1 Press SW2 to enter Move mode.
- 2 Turn the Scroll wheel to move the effect to a different position in the signal chain.
- 3 Press SW2 again to keep the change, or SW1 to cancel the move.

---

## Rig Edit Mode

When there are additional controls available for the device or utility setting you’ve selected, pressing SW1 (labeled CONTROLS) takes you to a special editing screen for that device, called Rig Edit Mode.



Control page for Green JRC OD effect

The Control knobs that are assigned to controls in the current device will light amber, if you’re editing Amp, Cab, or FX Loop settings, or green, if you’re editing an effect. The display shows what parameter each knob is assigned to, and the current setting of each parameter.

When you turn a knob away from its saved setting, it will light red, to show you that the setting has changed. If you want to return a control to its saved setting, turn the knob until it goes back to amber or green.

SW1 and SW2 are assigned to various functions, (such as BYPASS), which toggles the current element on and off, and other switched behaviors, such as BRIGHT (bright switch).

 Individual effects may be toggled on and off at any time by pressing the corresponding Effects Control button on the front panel of Eleven Rack. The Wah effect can be toggled on and off by pressing FX1 and FX2 simultaneously.

If there is more than one page of controls available for the current device or utility setting, a Page indicator is displayed. Turn the scroll wheel to switch between pages. You can also use the Scroll wheel to scroll quickly through all of the devices in the current Rig.

When you're finished editing, press Edit/Back to go back to Rig View. Don't forget to save your work!

---

## Saving Your Work

When you're done editing the current Rig, you may want to save its settings, or save the new settings to a different user Rig without affecting the current Rig.

Keep in mind that if you switch to another Rig before saving, the edits you've made will be lost.



*Save page*

### To save the new settings to the current Rig:

- 1 Press the Save button. The display will show the Save View.
- 2 Press Save again to save the updated settings to the current Rig.

### To create a new Rig with the new settings:

- 1 Press the Save button. The display will show the Save View.
- 2 Turn the scroll wheel to select a preset Rig that you don't mind overwriting.
- 3 Choose a name for your new Rig, using the lit Control knobs and SW switches:
  - The first lit knob moves the cursor from left to right.
  - The second knob lets you choose an upper-case letter from A-Z.
  - The third knob lets you choose a lower-case letter from a-z.
  - The fourth knob lets you choose a number or symbol.
  - SW1 lets you insert a space.
  - SW2 lets you delete an unwanted character.
- 4 Press Save again to save the new Rig.

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## The Amps

This section takes you through all of the emulated amplifiers available in Eleven Rack, and touches on any special features and controls each amp offers.

### '59 Tweed Lux



Based on a classic late-50s tube combo amp with a single 12-inch speaker and a pair of 6V6 tubes delivering 15 watts, the '59 Tweed Lux model is the picture of vintage simplicity. With just a simple treble-cutting tone control, the Tweed Lux delivers crunchy clean sounds when used with single-coil pickups, and fat leads when driven with humbucking pickups.

The inputs on this model are “jumped” so you can feed both the Instrument and Mic inputs in parallel.

### '59 Tweed Bass



Based on a late-50s low-wattage tube bass combo amp, the '59 Tweed Bass model has a tight bass response and a warm, twang-friendly high-end. Along with controls for Bass, Middle (midrange), and Treble, a negative feedback Presence control lets you tweak high-end frequency response.

Just like the Tweed Lux, the Tweed Bass is also “jumped,” so you can feed both the Bright and Normal inputs in parallel.

### '64 Black Panel Lux Vibrato and Normal



The amp we based the '64 Black Panel Lux Vibrato and Normal models on is regarded by some as the ultimate small club amp. A 60s tube combo with a single 12-inch ceramic-magnet speaker and a pair of 6V6s putting out just over 20 watts, this amp has long been a standard in the studio as well as onstage.

At low volumes its crisp, clean high-end has been favored by country rockers, but push the amp past 7 with a humbucking pickup, and you've got an amazingly dynamic lead tone. For Eleven, we've modeled both channels of this classic blackface-era amp.

The Lux Vibrato model has two gain stages and the tremolo effect is toggled using SW2. Lux Normal has a single gain stage and tremolo is always on, unless the Intensity control is rolled all the way off.

## '64 Black Vib



Produced for a short time in the mid-60s, the amp we based the '64 Black Vib model on is another one of the all-time great US-made smaller club amps. With an easy-to-overdrive but still not over-loud 40-watt 6L6GC-based power section and a single 15-inch speaker in an open-back cabinet, this amp strikes a great compromise between the crunch of the smaller models in the line and the hall-filling clean tones of the larger models.

We added a midrange control for further tonal versatility. Set it to ~7 to match the flat response of the original amp.

## '65 Black SR



This amp model is based on a US-made 60s-era 40-watt combo amp, with four 10-inch speakers in an open-back configuration. This amp offered both tremolo and spring reverb effects. Known for chiming clean tones at comparatively high volumes, this amp is a favorite of country pickers, blues players, and other aficionados of high-volume clean tones.

Toggle the Bright switch on and off with the SW2 button.

## '65 Black Mini



The '65 Black Mini amp model is based on a US-made 60s era 6-watt tube combo amp, with a single eight-inch speaker in an open-back configuration.

Though small both in stature and volume, this amp offers sweet gently driven tones and straight-ahead spank in droves. Its ability to produce classic tube amp sounds at low volumes has made this amp a studio standard for decades.

Toggle the Bright switch on and off with the SW2 button.

## '65 J45



This amp model is based on a British-made 60s era 45-watt tube head, the very first amp made by this company. It was known for its then-fresh take on a classic US-made bass amp (which was used primarily by guitarists). It features two bridged input channels, each with its own volume setting.

Those two channels, which can be blended together using the Volume1 and Volume 2 controls, have different tonalities. Channel 1 has a fairly flat tonal response, while Channel 2 is somewhat darker-sounding.

## '66 AC Hi Boost



Originally released in 1958, the British amp we based our '66 AC Hi Boost model upon went through a few design changes that would eventually define the sound of British pop/rock in the '60s.

First available as a modification mounted in the back of the amp, the "Top Boost" circuit added an extra tube and controls for Treble and Bass. It became so popular that it eventually became a part of the standard componentry of the amp.

The glassy high-end and chime of the AC Hi Boost lends a classic propulsion to rhythm guitar parts, and at higher gain settings, singing lead tones are a snap to achieve.

For our model, we've "jumped" the Normal and Brilliant channels. The Cut (presence) control is active on both channels. However, just like the original, the Treble and Bass controls are only part of the Brilliant channel, and have no effect on the Normal channel.

Go to the second Control page and press SW2 to toggle the tremolo on and off.

## '67 Black Panel Duo



Without a doubt, the blackface-era amp we based our '67 Black Panel Duo model upon is considered one of the greatest combo amps ever made. With two 12-inch ceramic-magnet speakers and a quartet of 6L6 tubes pushing 80 watts, no concert stage has been complete without one since it was introduced in the late 60s.

One of the main reasons for the amp's popularity is that it can maintain classic vintage clean sounds even at high volume levels. Another special Black Duo feature is the inclusion of a Bright switch.

For our model, just like the original, as you turn the Volume knob up, the Bright switch has less of an effect. Dial the Volume knob around 3 or 4 with the Bright switch on, and you'll get that ultra-clean snap that it's famous for.

On the first Control page, SW2 is set to toggle the Bright switch on and off. On the second page, SW2 toggles vibrato on and off.

## '67 Plexiglas Vari



This amp model is based on a British-made, 1967-vintage 100-watt tube head, similar to the 1969-vintage amp we used as the basis for our '69 Plexiglas 100w model. This new model simulates that amp having its voltage reduced by a variable transformer called a Variac. The voltage reduction changes the amp's tone and sustain characteristics dramatically, producing the much-loved Brown tone some famous users of this amp were known for.

The amp's two channels, which can be blended together using the Volume1 and Volume 2 controls, have different tonalities. Channel one has a fairly flat tonal response, while Channel two is somewhat darker-sounding.

## '68 Plexiglas 50w

This amp model is based on a British-made, 60s era 50-watt tube head, the lower-wattage version of the amp that was the basis for our Plexiglas model. This amp was designed with a lower power tube plate voltage, and thus is known to break up at lower levels than its 100-watt counterpart.

For our model, we've based it on the legendary 50-watt 1968 version. We've also "jumped" both channels, for further gain.

## '69 Plexiglas 100w

Based on one of the most highly sought-after high-volume amplifiers of the late 1960s, our '69 Plexiglas model delivers no-nonsense British crunch. The original amp's dual 4x12 cabinets and 100-watt head offered unprecedented volume and power for the time, helping to usher in the era of the Guitar God.

For our model, we've based it on the legendary 100-watt 1968/69 version. We've also "jumped" both channels, for further gain.

## '69 Blue Line Bass



This amp model is based on a US-made, late-60s 300-watt tube bass head. This amp originally sold with a pair of 8x10 speaker cabinets, and was known for its massive volume and wide range of usable tones.

The U-Lo and U-Hi controls add low or high harmonics to the signal. On the original amp, these controls were on-off switches. Here, the U-Lo and U-Hi controls are continuously variable.

The Mid Freq control, which selects the center frequency affected by the Mid control, was a three-way switch on the original amp. Here, the frequency setting is continuously variable.

## '82 Lead 800



Based on the early-80s descendent of the amp we based our Plexiglas model upon, the '82 Lead 800 adds a higher-gain cascaded preamp design and a master volume control. Unlike the high-volume heads of the 60s, which needed to be on 10 to achieve an overdrive sound, this amp could conjure up real distortion at any volume level, and that made it very popular in the burgeoning 80s heavy metal scene.

## '85 M-2 Lead



Based on a classic mid-80s high-end tube combo amp, the '85 M-2 Lead model delivers hot-rodded overdrive and searing solo tones. With a full complement of tone controls and independent input volume, overdrive and master volume controls, the gain structure can be tweaked to your heart's content.

The M-2 Lead emulation is based on the lead channel with the fat, bright, and gain boost options on.

## '89 SL100 Drive, Crunch, and Clean



Our '89 SL100 model is based on a late-80s high-gain 100-watt tube head, which was popular for its singing sustain and clear articulation. The Bright switch on the Clean and Crunch models boosts the high-end for lead lines and cutting tones.

For the Drive model, we simulated a bright switch modification that was popular for this amp. Set to Normal, the amp is stock. With Bright engaged, the treble boost that would normally happen at lower gain settings is removed, which leads to a rounder, thicker sound. The Bright switch circuit has progressively less effect as the gain is raised, and no effect when the pre-amp is set to 10.

Toggle the Bright switch on and off with the SW2 button.

## '92 Treadplate Modern and Vintage



Released in 1989, the amp that inspired our '92 Treadplate Modern and Vintage models seemed cooler than a high-performance racecar. With more tone-tweaking options and distortion than any amp before it, the amp became the industry standard for players looking to achieve a massive sound.

With the ability to run on either 6L6 or EL34 tubes, this amp offered a choice between either tube or silicon diode rectifier circuits. On top of that, an AC power selection switch offered a Bold or a Spongy option, which would drop the voltage like a Variac for a more “brown” sound.

For our Treadplate, we modeled two different channels and selected the appropriate rectifier and AC power switch setting. For Treadplate M (for Modern), we set it on the Red channel using 6L6s, a silicon rectifier, and the Bold power setting for a tight, aggressive tone. For Treadplate V (for Vintage), we modeled the orange channel with 6L6s, a tube rectifier, and the spongy power setting for a more fluid lead tone.

## '93 MS-30



The MS-30 amp model is based on a US-made, early-90s boutique combo amp, the first design by its manufacturer. Featuring a 30-watt EL84-based power section and two twelve-inch speakers in an open-back configuration, it excels at a range of sounds, from squeaky-clean all the way to beautifully-overdrive high-gain tones.

Known for finely-tuned, interactive tone controls, and a fresh take on classic “Class-A” amp topologies, this amp claims a long list of celebrity fans.

## '97 RB-01b Red, Blue, and Green



These amp models are based on the three distinct channels in a US-made, late-90s 100-watt boutique tube head.

At a time when racked-up multi-preamp/external power amp setups seemed *de rigueur* for variety-hungry guitarists, this amp was designed to cover a huge range of vintage amp tones without the tonal and ergonomic issues of modular amp setups. To that end, it came with three separate, distinct preamp circuits, one for each channel.

The Red channel excels at high-gain lead tones, while the Blue is suited to chunky rhythm playing, and the Green focuses on clean tones.

The Boost control simulates the Boost and Structure switches on the original amp. Setting Boost to 10 simulates both Boost and Structure switches on. A setting of 5 simulates Boost on/Structure off. A setting of 0 simulates both switches off.

Toggle the Bright switch on and off with the SW2 button.

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## DC Custom Amps

This section describes the DC Custom amp models that come with Eleven Rack. These include The DC Modern Overdrive (and its offshoot models, the DC Modern SOD, Modern 800, and Modern Clean), the DC Vintage Crunch (and its offshoot models, the DC Vintage OD and Vintage Clean), and the DC Bass model.

Rather than base these models on specific amps, we blended the characteristics and features of many of our favorite amps to create some absolute monsters.

### DC Custom SW1 and SW2 Switch Functions

On the first Control page, SW2 is set to toggle the Bright switch on and off. On the second page, SW2 toggles vibrato on and off.

## DC Modern Overdrive



The Modern model augments a modified high-gain British amp flavor with a Bright switch and classic American-style Tremolo.

## DC Modern SOD

This amp is loosely based on a US-made, late-80s 100-watt tube head. It features a tight, extended low-end and high-gain capability, perfect for players of extended-range guitars.

## DC Modern 800

This amp model is a variant of our Lead 800 model, itself based on a British-made, 80s-era high-gain tube head. A couple of simple component swaps change the tone significantly, and the added Bright switch provides additional tonal range.

## DC Modern Clean

This amp is loosely based on US-made, 60s-era 85-watt tube combo amp. It has been tweaked to provide shimmering clean tones.

## DC Vintage Crunch



The Vintage model combines tonal attributes of 50s and 60s-era American tube amps, with added gain potential and a Bright switch.

## DC Vintage OD

This amp is loosely based on a combination of two British-made tube amps. It takes the preamp section from our Plexiglas model and marries it to the power section of our AC Top Boost model, with further tonal enhancements.

## DC Vintage Clean

This amp is loosely based on the same British-made tube amp we used as the basis for our AC Top Boost model. It has been further refined to offer a range of tones from very clean (cleaner than the original amp) to a slight amount of breakup.

## DC Bass

This bass amp is based on the same US-made 300-watt bass head we used as the basis for the Blue Line Bass model. It is designed with a scooped lower-midrange response, adding the capability for bigger lows with a tighter response than the original amp. It also, unconventionally for a bass amp, offers a tremolo circuit.

 *Eleven Rack is not affiliated with, sponsored, or endorsed by the makers of the amplifiers that it emulates.*

## General Amp Controls

The Amp controls can be accessed by selecting the AMP device in Rig View and pressing CONTROLS. There are two pages of controls for every amp. These controls are configured and named to closely match the amps we modeled for Eleven Rack.

When you view the Amp controls, a Page indicator is displayed to show you which page of controls you're viewing. Turn the Scroll wheel to switch pages.



*Amp Control page*

## Tremolo Controls

Some amps, (such as the '64 Black Panel Lux Vibrato, '66 AC Hi Boost, and DC Modern Overdrive), feature authentic Tremolo circuits. These controls include:

**Speed** Lets you set the speed of the Tremolo effect's amplitude modulation.

**Sync** When set to a rhythmic value, the SYNC control sets the Tremolo's speed to cycle at the selected rhythmic interval, in sync with the Rig tempo. When set to "OFF", the speed is not synchronized and can be manually set with the SPEED control.

**Depth** Sets the amount of amplitude modulation.



*When using Eleven Rack with Pro Tools, you can choose to sync tremolo and other effects to either the Rig tempo or the tempo of the Pro Tools session. For more details, see “Rig Tempo” on page 77.*

## Noise Gate Controls

Each of the amps in Eleven Rack has a Noise Gate, which can be used to suppress noise coming from the instrument before the signal reaches the amp model. Noise can be especially problematic when boosted heavily at high-gain settings. Its controls are:

**Noise Gate** Lets you set the threshold of the Noise Gate. Adjust this control until you find a good balance between effective gating and cutting off the signal prematurely on sustained notes.

**Rel** Sets the release time for the envelope that runs the Noise Gate. A longer release time can sound more natural, while a shorter release can help to rein in a really noisy signal.



*The Noise Gate remains usable even when the amp model has been bypassed.*

## Amp Output

The amp models in Eleven Rack are so faithful to the classics they’re based on that the output level can increase significantly as the preamp, volume or master controls are cranked. Also, from one amp the next, output levels will vary depending on their design.

The OUTPUT control lets you compensate for those differences with no coloration added to the tone you’re getting.



*The amp output volume can also be accessed in Rig View, by selecting AMP and manipulating the Amp Out Vol Control knob.*

## Bypass

The Bypass control toggles the amp simulation on and off, leaving any effects in the Rig unchanged.

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## The Speaker Cabinets

This section describes all of the emulated speaker cabinets available in Eleven Rack.



*The Cab page in Rig View*

### 1x8 Custom

This cabinet model is based on a small speaker cabinet with a single 8-inch ceramic-magnet speaker in an open-back configuration. It sounds especially great with the '65 Black Mini amp model.

### 1x12 Black Lux

This cab model is based on the original speaker and cabinet that match the Lux Vibrato and Lux Normal amp models. With a single 12-inch ceramic speaker in an open back cabinet, it offers a bright, warm, dynamic sound.

### 1x12 Tweed Lux

This cab model is based on the original speaker and cabinet that match the Tweed Lux amp model. With a single 12-inch alnico speaker in an open-back cabinet, it offers mellow, sweet warm tones with a hint of vintage grit.

### 1x15 Open Back

This cabinet model is based on the speaker cabinet of a classic US-made combo amp. It features a single 15-inch alnico-magnet speaker in an open-back configuration. Pairs well with the '64 Black Vib amp model.

### 2x12 AC Blue

This cab model is based on the original speakers and cabinet that match the AC Hi Boost amp model. With two British ceramic 12-inch speakers in an open-back cabinet, it offers chimy, mid-focused tones.

### 2x12 Black Duo

This cab model is based on the original speakers and cabinet that match the Black Duo amp model. With two ceramic 12-inch speakers in an open-back cabinet, it offers bright, full-range tones.

### 2x12 B30

This cabinet model is based on a US-made boutique 2x12 cabinet. It features two 30-watt 12-inch ceramic-magnet speakers in an open-back configuration.

A strong contender for any high-gain amp, this cabinet pairs especially well with the '97 RB01b amp model.

### 2x12 Silver Cone

This cabinet model is based on the speaker cabinet of a classic Japanese solid state combo amp. It features 12-inch ceramic-magnet speakers in an open-back configuration. It excels at sparkling clean tones, and pairs especially well with the DC Modern Clean amp model.

### 4x10 Tweed Bass

This cab model is based on the original speakers and cabinet that match the Tweed Bass amp model. With four alnico 10-inch speakers in an open-back cabinet, it offers warm, bright, tones with tight bass.

### **4x10 Black SR**

This cabinet model is based on the speaker cabinet of a classic US-made tube combo amp. It features four 10-inch alnico-magnet speakers in an open-back configuration.

### **4x12 Classic 30**

This cab model is based on a classic 1960s 4x12 British closed-back cabinet. The classic 30 watt speakers we modeled for this unit give it a wide frequency response and major power.

### **4x12 65W**

This cabinet model is based on a classic British-made 4x12 cabinet. It features four 65-watt 12-inch ceramic-magnet speakers in a closed-back configuration. This cabinet is strongest for Metal and Hard Rock tones.

### **4x12 Green 25W**

This cab model is based on a classic 1960s 4x12 British closed-back cabinet. The vintage 25 watt speakers we modeled for this unit give it a smooth, thick tone, perfect for soulful leads.

### **4x12 Green 20W**

This cabinet model is based on a classic British-made 4x12 cabinet. It features four 20-watt 12-inch ceramic-magnet speakers in a closed-back configuration. It pairs very well with the J45 amp model, providing perfect tones for electric blues and classic rock.

### **8x10 Blue Line**

This cabinet model is based on a classic US-made 8x10 bass cabinet. It features eight 10-inch ceramic-magnet speakers in a chambered, closed-back configuration. It works well with the '69 Blue Line Bass and DC Bass amp models.

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## **Speaker Breakup**

Also worth mentioning is the new inclusion of Speaker Breakup emulation (first offered in the plug-in version of Eleven Rack). This function can be reached using the front panel controls by selecting the Cab block in Rig View, pressing SW1 to access Cab controls, and scrolling one step to the right with the Scroll wheel. The illuminated control knob then works as the Speaker Breakup control.



*Speaker Breakup control*

The Speaker Breakup setting lets you specify how much distortion is produced by the current speaker model. Increasing the Speaker Breakup control adds distortion that is a combination of cone breakup and other types of speaker distortion.

## Sonic Effects of Speaker Breakup

The range of the control is 0 to 10. We recommend starting with a setting between 4 and 6. Around 1-2, the algorithm adds a relatively subtle “smoothing” of the high-end. By about 3, natural speaker “compression” of the high-end kicks in fully, which results in a somewhat darker sound.

Above 8, the speaker breakup modeling starts to become more extreme than what occurs in an actual guitar speaker. These higher settings tend to work better with darker-sounding cabs. As a general rule, high gain amps work better with lower breakup settings, while low-to-medium-gain amps often work well with higher breakup settings.

Below certain frequencies, the speaker cone vibrates as one unit. Above those frequencies (typically between 1 kHz and 4 kHz), the cone vibrates in sections. By the time a wave travels from the apex at the voice coil out to the edge of the speaker cone, a new wave has started at the voice coil. The result is comb filtering and other anomalies that contribute to the texture of the overall sound.

## Speaker Breakup with External Amps and Cabinets

We found that the Speaker Breakup emulation in Eleven Rack can be useful even when using an external amp and cabinet, with the internal Cab simulation off.

Actual speaker breakup usually requires playing through an amp at high volume. However, dialing a bit of the Eleven Rack Speaker Breakup simulation can help simulate those tones at lower volumes.

---

## The Microphones

This section describes all of the emulated microphones available in Eleven Rack.

### Dyn 7

Based on a large-diaphragm American dynamic microphone, the Dyn 7 model has a smooth, powerful tone quality.

### Dyn 57

Based on a midsize-diaphragm American dynamic mic, the Dyn 57 model has a classic aggressive tone with a bright edge and pronounced mids.

### Dyn 409

Based on a midsize-diaphragm German dynamic mic, the Dyn 409 offers a detailed mid-range and a focused, tight pickup pattern.

### Dyn 421

Based on a large-diaphragm German dynamic mic, the Dyn 421 model offers deep bass, solid mids, and smooth treble.

### Cond 67

Based on a classic German tube condenser mic, the Cond 67 model offers a warm, crisp sound.

### Cond 87

Based on a solid-state German condenser mic, the Cond 87 model lacks the fuzzy tube warmth of Cond 67, but retains a high level of treble detail and nuanced midrange.

## Ribbon 121

Based on a modern ribbon microphone, the Ribbon 121 model offers rounded, sweet highs and mids, and solid, deep lows.

## Bass Cabinet Microphones

The following two mics are specifically for mic-ing bass cabinets, so they work exclusively with the 8x10 Blue Line cabinet model.

### Dyn 12

This mic model is based on a classic Austrian large-diaphragm dynamic bass drum microphone. It offers a rounded, extended sub-bass response, and a pronounced peak around 3k, which emphasizes attack and string noise.

### Dyn 20

This mic model is based on a classic US-made large-diaphragm dynamic mic. It is known for a lack of bass-exaggerating proximity effect, and a smooth, near-linear frequency response.



*Eleven Rack is not affiliated with, sponsored, or endorsed by the makers of the speaker cabinets or microphones that are emulated in this product.*

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## The Effects

This section takes you through the effects available in Eleven Rack.

## Volume Pedal



The Volume Pedal is a sweepable volume control. You can use it to fade notes or chords in and out, or to vary the volume of your signal in real time, for timbral or rhythmic effects.

The Volume Pedal is most useful when controlled with an expression pedal or MIDI foot controller.



*For more information about using external foot controllers, see “External Foot Controllers” on page 56.*

## Wah Effects

### Black Wah



Black Wah is a standard wah pedal effect, offering a sweepable resonant filter that lets you add animation and special timbral effects to the guitar signal.

Like the Volume Pedal, wah effects (such as Black Wah) are particularly useful when controlled with an expression pedal or MIDI foot controller.

### Shine Wah



Shine Wah works and sounds similar to Black Wah, but with a vintage-style filter circuit and sweep response.

## Distortion Effects

### Tri-Knob Fuzz



The pedal that inspired Tri-Knob Fuzz was a transistor-based unit, originally popular with lead guitarists searching for ever-higher gain in the 70s. It shone again in the 90s grunge rock scene, probably pushed further into woolly grind than its makers would have ever anticipated.

**Volume** Sets the overall output volume of the effect.

**Sustain** Sets the gain of the fuzz circuit.

**Tone** Changes the tonal balance of the effect, from deep and full of sub-bass to high and shrill.

### BlackOp Distortion



Inspired by an 80s-era op-amp-based distortion pedal, BlackOp Distortion offers massive crunch and power. Its hard-clipping drive can squeeze aggressive rhythm and lead tones out of soft-sounding vintage amps, and create surprisingly hard-edged tones when paired with more modern amps.

## Green JRC Overdrive



Green JRC Overdrive was inspired by a low-gain 70s overdrive pedal, loved by blues and blues-rock players the world over for its sweet, singing sting. It can be used to simply drive an amp's input section into gentle clipping, or supply some dirty glow of its own.

## White Boost



This booster effect, based on a well-loved clean booster pedal with 20 dB of gain boost and a built-in EQ, is useful for driving the preamp section of any amp model into a gentle (or not so gentle) overdrive. The EQ controls boost and cut frequencies as normal, but in this usage, they help shape the overdrive response as well.

**Gain** Controls the amount of boost added to the signal.

**Treble** Adds treble to the boosted signal.

**Bass** Adds bass to the boosted signal.

**Volume** Controls final output volume.

## DC Distortion



This distortion effect, a custom model built just for Eleven Rack, offers a range of overdriven tones, aided by its built-in Bass and Treble EQ, which help shape the response of the clipping circuit.

**Distortion** Controls clipping level.

**Treble** Adds treble to the boosted signal.

**Bass** Adds bass to the boosted signal.

**Volume** Controls final output volume.

## Modulation Effects

### Flanger



Originating from the act of pressing on the flanges of tape reels, and becoming even more popular with the advent of analog pedals, the Flanger effect can be coaxed into bell-like resonant sweeps, or add a silky, shimmering sheen. This effect works well when positioned before or after the amplifier in the signal chain.

**Pre-DI** Sets the amount of pre-delay, which changes the phase relationship between the dry signal and the delayed signal, with timbral results.

**Depth** Sets the amount of delay. The higher the setting, the more “jet-engine” artifacts will be introduced.

**Fdback** Sets the amount of signal fed back into the modulated delay. Higher settings introduce more ringing, whistling artifacts.

### C1 Chorus/Vibrato



Based on a heavyweight late-70s analog chorus/vibrato pedal, CI Chorus/Vibrato offers warm, liquid modulation effects. In Chorus mode, the signal is routed through a modulated short delay, which is mixed with the dry signal, creating a washy, doubled sound.

In Vibrato mode, the dry signal is absent and there is more control over the depth of pitch modulation, allowing for everything from an understated “wobble” to wacky, synth-like pitch modulation.

**Chorus** Sets the intensity and speed of the Chorus effect, only when the Chorus/Vibrato switch is set to Chorus.

**Depth** Sets the depth of the Vibrato effect, only when the Chorus/Vibrato switch is set to Vibrato.

**Rate** Controls the Vibrato rate, only when the Chorus/Vibrato switch is set to on.

**Chorus/Vibrato** Toggles the effect between Chorus and Vibrato.

💡 *When set to CHORUS, the Vibrato's Rate and Depth controls are inactive. Inversely, when set to VIBRATO, the Chorus control will not function.*

## Multi-Chorus



This modulation effect is based on the Air Multi-Chorus plug-in that comes with Avid's Pro Tools recording software. It offers the ability to stack multiple layers of chorusing, for thick, swirling sound.

**Rate** Controls the rate of the internal modulating LFO.

**Sync** Controls synchronization of the internal LFO to Rig or Pro Tools Session tempo. Ranges from OFF (no sync, set rate with Rate control) to a variety of rhythmic note values.

**Depth** Controls the amount of delay time modulation caused by the internal LFO.

**Pre-Delay** Sets the amount of time between an incoming transient signal and the start of modulation.

**Mix** Sets the wet/dry balance of the effect.

**Tri/Sine Switch** Sets the waveform of the internal LFO to either a triangle or sine wave.

**Voices** Sets the number of layered chorus voices in the effect.

**Width** Controls the stereo width of the effect.

## Vibe Phaser



The psychedelic-era phaser that inspired our Vibe Phaser effect was traditionally paired with an expression pedal that could be used to vary the rate of pitch modulation over time. Like the C1, you can choose to run it as a Chorus, with the modulated and dry signals mixed together, or in Vibrato mode, which leaves the pitch-modulated signal alone, with rippling, disorienting effects.

**Chorus/Vibrato** Toggles the dry signal on (Chorus) and off (Vibrato).

## Orange Phaser



Don't let that single knob fool you. Inspired by a ubiquitous 70s analog phaser pedal, Orange Phaser offers a deep, warm phasing effect that ranges from a slow harmonic sweep to out-of-control wobbles.

**Speed** Controls the Phaser effect's rate of modulation.

**Sync** Synchronizes the modulation rate to the Rig tempo by a specific rhythmic subdivision.

## Roto Speaker



Inspired by the rotating speaker cabinets that made classic tonewheel organs roar, Roto Speaker offers added motion and vintage grit.

**Speed** Sets the speed of the rotating speaker effect in three increments: Slow, Fast, and Brake.

**Balance** Sets the blend between the upper and lower rotors of the rotating speaker.

**Type** Chooses between various types of rotary speakers.

## Reverb Effects

### Blackpanel Spring Reverb



Blackpanel Spring Reverb was inspired by a classic outboard tube-driven spring reverb. It can add a surfy twang and dark, warm ambience to your signal.

**Mix** Controls the blend between dry and reverbed signal.

**Decay** Controls the length of the reverb's decay.

**Tone** Applies a high-cut EQ, making the reverb tone darker.

### Eleven SR (Stereo Reverb)



A smooth, clean digital reverb, Eleven SR is based on the popular Reverb One Pro Tools plug-in from Avid.

**Pre-Dly** Sets the amount of pre-delay, which changes the time relationship between the dry signal and the reverbed signal. As this setting is turned higher, the apparent size of the synthesized reverb “room” grows larger.

**Type** Selects from a variety of different reverb types.

## Delay Effects

### Tape Echo



Inspired by the ultimate vintage solid state tape echo unit, Tape Echo supplies supple, crunchy echoes, and can, with a flick of the wrist, can be pushed into swells of wild self-oscillation, each repeat more murky, dusty, and gritty than the next. A classic.

**Rec Lev** Controls the signal level running to the tape circuitry. Higher settings create a more distorted tone color.

**Head** Simulates the alignment (or misalignment) of the tape head with the tape, which affects the tone of the delay.

**Wow** Controls the amount of wow and flutter in the tape mechanism. Lower settings minimize fluctuations of pitch and tone color, and higher settings accentuate it.

**Hiss** For some serious authenticity in your tape echo tone, this switch Toggles modeled analog tape hiss in or out of the signal. With high feedback settings, the tape hiss can push the echo into self-oscillating mayhem.

### BBD Delay



When “bucket brigade” analog delays arrived in the mid-70s, their relatively small size and solid-state reliability made them a godsend to tape loop-addled guitarists. It went on to become a classic of its own, with a smooth, round delay sound and a Chorus-Vibrato mode that let it double as a modulation effect.

**Input** Sets the input level to the delay effect. Cranked up, it can push the signal into useful distortion.

**Mod** Switches the modulation effect between Vibrato (only the delayed signal is passed) and Chorus (both the dry and delayed signal are passed.)

**Depth** Controls the level of modulation of the delayed signal.

**Noise** Toggles modeled analog hiss in or out of the signal.

 *When Hiss or Noise is turned on in one of the delay effects and the feedback level is sufficiently high, the delay will self-oscillate and make sound of its own, even when bypassed. If this effect is not desired, turn down the feedback control.*

## Dyn Delay



This stereo delay effect is based on the Air Dynamic Delay plug-in that comes with Avid's Pro Tools recording software. A powerful effect, Dyn delay can be synchronized to Rig or Session tempo, and offers an envelope follower, that lets you modulate various parameters, based on the amplitude envelope of incoming signal. This effect includes the following controls:

**Delay** Sets the length of the delay, in milliseconds.

**Sync** Controls synchronization of the delay time to Rig or Session tempo. Ranges from OFF (no sync, set delay time with the Delay control) to a variety of rhythmic note values.

**Feedback** Sets the amount of delay feedback. Ranges from just one repeat, to a long-lasting cascade of repeats.

**Mix** Sets the wet/dry balance of the effect.

**Fine** Toggles finer control of delay time in or out. Toggled by SW2 in page one of the controls.

**Mode** Switches between the following four feedback routing options:

- **Mono:** Sums the incoming stereo signal to mono, then offers separate left and right delay output taps from that signal.
- **Stereo:** Processes the left and right channels of the incoming stereo signal independently and outputs the processed signal on the corresponding left and right channels.
- **Cross:** Processes the left and right channels of the incoming stereo signal independently, and feeds the each side's delayed signal back to the opposite channel.
- **Pong:** Acts much like Cross, but the incoming left and right signals are summed and output from the left channel only. Due to the cross-channel feedback, the signal moves back and forth across the stereo spectrum.

**Ratio** Sets the ratio of left to right delay times. Move the control all the way down, and the left channel delay time is half the right channel delay time. Move the control all the way to the up, and the right channel delay time is half the left channel delay time.

**Hi-Cut** Adjusts the frequency for the High Cut filter. For less treble, lower the frequency.

**Lo-Cut** Adjusts the frequency for the Low Cut filter. For less bass, raise the frequency.

**Width** Lets you adjust the width of the delay effect in the stereo field.

**Em Rate** Sets how quickly the Feedback and Mix parameters respond to input from the Envelope follower.

**Em Feedback** Sets how much the Envelope follower affects the Feedback amount.

**Em Mix** Sets how much the Envelope follower affects the wet/dry mix.

## EQ & Compressor Effects

### Graphic EQ



Useful for simple frequency sculpting, a good Graphic EQ can find a place in almost any pedalboard. Graphic EQ can wring a variety of tones out of other pedals (such as when placed before Distortion effects). The EQ can also be used as a signal booster when positioned in front of amps.

### Para EQ



This effect provides a high-quality 4-band EQ, with adjustable gain, frequency, Q (bandwidth), and output for each band. The Low and High bands let you switch between the following functions:

- Shelf: Boost or cut of all frequencies below (in the Low band) or above (in the High band) the chosen frequency.
- Peak: Boost or cut of a band of frequencies centered on the chosen band frequency, the width of which is controlled by the Q control.
- Low-Pass (High band) or High-Pass (Low band): Cuts frequencies above (Low-Pass) or below (High-Pass) the selected frequency, with a choice between 6 dB, 12 dB, or 24 dB-per-octave curves.
- Notch: Rejects frequencies around the chosen EQ frequency, with bandwidth control via the Q control.

This effect includes the following controls:

**L Gain** Sets the gain of the low-frequency EQ band.

**L Frequency** Sets the center frequency of the low EQ band.

**L Q** Sets the bandwidth of the low EQ band.

**L Type** Sets the mode of the low EQ band. Choose between Shelf, Peak, High-Pass (in 6, 12, and 24 db curves), or Notch.

**Output** (Accessible from every page) Sets the final output level of the EQ'd signal.

**LM Gain** Sets the gain of the low-midrange frequency EQ band.

**LM Frequency** Sets the center frequency of the low-midrange EQ band.

**LM Q** Sets the bandwidth of the low-midrange EQ band.

**HM Gain** Sets the gain of the upper-midrange frequency EQ band.

**HM Frequency** Sets the center frequency of the upper-midrange EQ band.

**HM Q** Sets the bandwidth of the upper-midrange EQ band.

**H Gain** Sets the gain of the high-frequency EQ band.

**H Frequency** Sets the center frequency of the high-frequency EQ band.

**H Q** Sets the bandwidth of the high-frequency EQ band.

**H Type** Sets the mode of the high-frequency EQ band. Choose between Shelf, Peak, Low-Pass (in 6, 12, and 24 db curves), or Notch.

## Gray Comp



Inspired by a well-loved solid-state 70s compressor pedal, Gray Comp can add singing sustain to leads or lend power and girth to chunky rhythm guitar parts.

**Sustain** Sets the threshold, and thus, the amount of compression, in the Compressor effect.

**Level** Sets the overall output volume of the effect.

 *Eleven Rack is not affiliated with, sponsored, or endorsed by the makers of the effects that are emulated by this product.*

## Dyn III Compressor



This effect is based on the Compressor plug-in from the Dynamics III plug-in set that comes with Pro Tools. It lets you control the dynamics of your guitar signal, much like Gray Comp. However, while Gray Comp emulates a classic guitar-specific compressor pedal with a smooth, liquid tone, Dyn3 Comp is more versatile, acting more like an outboard compressor used in recording situations. This effect includes the following controls:

**Threshold** Sets the level that your signal must exceed to trigger compression or limiting. Signals that go above this level will be compressed. Signals that are below it, will not.

**Attack** Sets the attack time, or the rate at which gain is reduced after the input signal crosses the threshold you've set. The smaller the value, the faster the attack. The faster the attack, the more rapidly the Compressor reduces the signal's volume.

If you use fast attack times, you should generally use a proportionally longer release time, particularly when the material contains many fast peaks, (such as a staccato palm-muted guitar part). Very fast attack times (especially below 1 ms) can produce undesirable distortion on guitar.

**Release** Sets the length of time it takes for the Compressor/Limiter to be fully deactivated after the input signal drops below the threshold you've set.

Release times should be set long enough that if signal levels repeatedly rise above the threshold, the gain reduction "recovers" smoothly. If the release time is too short, the gain can rapidly fluctuate as the compressor repeatedly tries to recover from the gain reduction.

If the release time is too long, a loud section of the audio material could cause an effect called "pumping and breathing" in which quieter parts of the signal are affected in ways that may or may not be desirable.

**Gain** Lets you boost overall output gain to compensate for heavily compressed or limited signals.

**Ratio** Sets the compression ratio, or the amount of compression applied as your signal goes above the threshold. For example, a 2:1 compression ratio means that a 2 dB increase of level above the threshold produces a 1 dB increase in output.

**Knee** Sets the sharpness of the gain curve the compressor follows when reducing gain.

As you increase this control, it goes from applying "hard-knee" compression to "soft-knee" compression:

- With hard-knee compression, compression begins when the input signal exceeds the threshold. This can sound abrupt and is ideal for limiting.

With soft-knee compression, gentle compression begins and increases gradually as the input signal approaches the threshold, and reaches full compression after exceeding the threshold. This creates smoother compression.

---

## General Effects Controls

### Sync

The time-based effects in Eleven Rack (such as Chorus, Delay and Flanger) can be set to synchronize with Rig or Session tempo (including tempos set with the Tap Tempo button).

Most Rigs are not set up to sync to Rig or Session tempo by default. You may need to turn on the Sync parameter in the effect you want to sync.

When the Sync control on these effects is set to a rhythmic subdivision of the incoming tempo, the effect locks to it. When Sync is set to Off, or the Rate or Delay control is moved, the control takes over, and the rate of modulation or delay can be set by hand.

### Delay+ and Fine

You'll see these two controls when working with some delay effects. Delay+ quadruples the available delay time, for when longer echoes are needed. Fine switches the delay's Rate control into a fine-adjust mode, where the delay time can be set by the millisecond with the Scroll wheel. Press Fine again to return the Scroll wheel to normal operation.

---

## Don't Forget to Save!

When you've got things tweaked just right, make sure to save your settings. If you switch to a different Rig before saving, you'll lose your changes. To save the current state of the Rig you're working on to the same Rig memory location, press the Save button, then press it again.

 See "Saving Your Work" on page 25.



# Chapter 4: Eleven Rack Live Setup

In live performance or practice, Eleven Rack can be used as a standalone guitar preamp and processor, connected to an amplifier and/or direct to a PA system. This chapter will describe how to make the necessary connections.



Figure 4. Eleven Rack Live Setup

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## Basic Live Setup



Figure 5. Eleven Rack connected directly to the PA mixer

### Plugging in Your Guitar

Connect your guitar to the Guitar input on the front of Eleven Rack with a 1/4" TS cable.

### Connecting Eleven Rack to a PA System

The simplest way to play live with Eleven Rack is to connect it directly to the PA mixer using the Main XLR outputs. When doing so, it is recommended to tell the person running the PA system that you are providing a line-level signal, rather than a mic-level signal, so that they can correctly set the input on the console.

If a buzz or hum occurs, try toggling the Gnd Lift switch.

## Using an Amp Onstage



Figure 6. Eleven Rack connected to the PA mixer and an onstage amplifier

In some cases, having an amplifier onstage can be handy for monitoring or tone reasons. Eleven Rack makes it easy to feed your signal to both a PA mixer and an amp.

### Connecting Eleven Rack to a Guitar Amplifier

The Output To Amp outputs on Eleven Rack can be connected to one or more guitar amplifiers using standard 1/4" TS cables.

- If using a single, mono amplifier, use the Output To Amp 1 (L) output.

- If using two amplifiers, or an amp with stereo inputs, connect each Output To Amp output to a separate amp or channel input.

**⚠** Before you power on Eleven Rack, make sure any connected amplifiers or mixer channels are turned off or muted.

### Sending the Correct Signal

Eleven Rack lets you choose the point in the signal path that feeds each Output To Amp jack. If you're using an amplifier with a distinct tone of its own, you may want to send it a signal with little processing (for example, only the effects) so the sound of the amp can ring through clearly.

If you prefer to use the amp simulations in Eleven Rack to set your tone, you will want to send the signal just after the amp simulation, but before the cabinet simulation, to your amplifier.

**To set the type of signal to send to the amp:**

- 1 Press and hold the Edit/Back button to show the User Options mode.
- 2 Scroll to Outputs To Amp with the Scroll wheel.
- 3 Press SW1 to enter the Outputs To Amp screen.
- 4 Choose the output you plan to use to feed the amp, with the Scroll wheel.
- 5 Set the Signal control to one of the following, using the first lit Control knob:
  - Rig Input (no processing)
  - Amp Input (pre-amp effects only)
  - Amp Output (pre-amp effects and amp simulation)
  - Rig Output (all processing)
  - Rig Out No Cab (all effects, amp, and Speaker Breakup simulation, no cabinet or microphone simulation)

 *When the Signal control is set to Rig Output or Rig Out No Cab, the Rig Volume setting no longer has any effect. Output volume must be set using the To Amp controls in the Output section in Rig View.*

6 Press Edit/Back twice to leave User Options mode.

 *The signal level running to each Output To Amp output can be set on a per-Rig basis in the Output section in Rig View or in the Eleven Rack Control window. For more details, see “Output” on page 23, or “Output to Amp Selectors” on page 78.*

 *Because Eleven Rack simulates various pre-amps and tone circuits, you may want to bypass your amp’s preamp and tone circuitry by plugging into the amplifier’s effects return jack(s), if available, rather than the standard input(s).*

*If your amp does not have an effects loop, try setting the amp controls for maximum transparency (EQ flat, gain stages set to clean.)*

## Effects and Foot Controllers

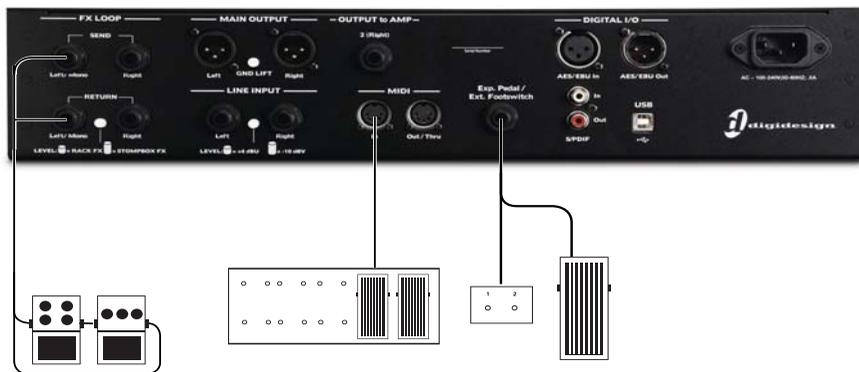


Figure 7. Effects and foot controller connections

### Connecting Effects

Use the FX loop jacks to connect stomp boxes, rack effects, or other external processors to the live guitar signal. These can be either rack or stompbox effects, or a combination thereof, in mono or stereo. The FX Loop accepts 1/4" plugs.

#### To connect external effects to Eleven Rack:

- 1 Connect the FX Loop Send output on Eleven Rack to the input of your first (or only) effects unit. If the unit is mono, use the Left/Mono output. If the unit is stereo, use both outputs.

- 2 Connect the output of the final (or only) effects unit to the FX Loop Return input on Eleven Rack. If the unit is mono, use the Left/Mono input. If the unit is stereo, use both inputs.

💡 *If using a combination of mono and stereo effects, it is usually best to put the mono effects units first in the chain, with the final mono unit connected to the mono input on the first stereo unit.*

- 3 If using a line-level rack effect, toggle the Rack FX/Stompbox FX switch to the Rack FX position. If using a guitar-level stompbox effect, toggle the switch to the Stompbox FX position.

💡 *If using a combination of guitar-level (stompbox) and line-level (rack) effects, it may be preferable to put the guitar-level unit(s) first in the chain. If your line-level unit(s) have guitar-level outputs available, the order is not important. See your effects unit(s) documentation for more details.*

📖 *The User Options and Rig View modes in Eleven Rack contain a variety of settings that control the behavior of the FX loop. For more information, see “The Amps” on page 26 and “FX Loop” on page 92.*

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## External Foot Controllers

Eleven Rack has a 1/4" TRS input that can accept input from an expression pedal or a single or dual momentary footswitch.

### Expression Pedal

An expression pedal can be used to control continuously variable parameters within Eleven Rack (such as volume or wah position).

In addition to commonly-used expression pedals, a standard volume pedal with a "Y" adapter cable (two 1/4-inch TS plugs to one 1/4-inch TRS plug) can be used, though keep in mind that the taper of the potentiometer in a volume pedal is exponential, rather than linear as in an expression pedal.

### Expression Pedal Calibration

The response of expression pedals vary slightly from model to model, and even unit to unit, so it is important to calibrate Eleven Rack to follow your pedal's sweep correctly.

#### To calibrate Eleven Rack to your expression pedal:

- 1 Hold the Edit/Back button to enter User Options mode.
- 2 Use the Scroll wheel to navigate to External Pedals.
- 3 Press Select to access the External Pedals settings page.
- 4 Turn the Scroll wheel to select Expression Pedal.
- 5 Turn the lit Control knob to select your pedal type. If in doubt, use Normal.
- 6 Press Calib to enter calibration mode.

7 Move the expression pedal to its heel position, and press Next.

8 Move the expression pedal to its toe position, and press Next.

9 Sweep the pedal to test its functionality. If the pedal is working correctly, the Active indicator on the display will light up.

10 Press Done to exit calibration mode.

11 Press Edit/Back twice to return to the previously chosen screen.

## Momentary Footswitch

### (Single or Dual)

Most single or dual momentary footswitches can be used to toggle various switched functions within Eleven Rack (such as effects on/off and cycling through Rigs).

Choose a momentary footswitch with a 1/4-inch TS (single switch) or 1/4-inch TRS (dual switch) connection.



*For more information on the use of pedals and footswitches with Eleven Rack, see "External Pedals" on page 92.*

## MIDI Foot Controller

You can connect a MIDI foot controller to the MIDI input on Eleven Rack, providing control over a larger range of simultaneous parameters.

 *For details on Eleven Rack controls that you can control with a MIDI foot controller, see “Eleven Rack MIDI Controls” on page 97.*

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## Display Mode and Visibility

When playing live, you may find it easier to keep track of what Rig is selected by switching the display to Simple mode.

 *For information on switching display modes, see “Rig Select Mode” on page 18.*



## **Part II: Setting Up and Using Pro Tools with Eleven Rack**



# Chapter 5: Installing and Connecting Eleven Rack

To use Eleven Rack with Pro Tools or any other CoreAudio- or ASIO-compatible applications, you must install the Eleven Rack hardware drivers on your computer.

This chapter provides instructions on installing the drivers on Mac and Windows, and connecting the Eleven Rack to your computer.

 *For Pro Tools installation instructions, see the Pro Tools Installation Guide.*

 *Do not start this procedure with your Eleven Rack connected to your computer.*

 *Before installing the hardware drivers, refer to the Read Me information included with the drivers installer for your device.*

## To install the drivers and connect the Eleven Rack:

**1** Make sure you are logged in as an Administrator for the account where you want to install the drivers.

 *For details on Administrator privileges, see the documentation for your computer.*

**2** Do one of the following:

- Insert the Drivers Installer disc that came with your Pro Tools software package into your computer.

– or –

- Download the Eleven Rack drivers installer for your computer platform from [www.avid.com/drivers](http://www.avid.com/drivers). After downloading, make sure the installer is uncompressed (.dmg on Mac or .ZIP on Windows).

**3** Run the installer and follow onscreen instructions to install the driver.

**4** When installation is complete, click Restart.

**5** Connect the Eleven Rack to a grounded power outlet with the included IEC power cable

**6** Flip the Power Switch on Eleven Rack to On.

**7** After the computer has restarted, connect the small end of the included USB cable to the USB port on Eleven Rack and connect the other end to any available USB port on your computer.

 *Eleven Rack must be connected to a dedicated port on the computer in order to function properly. Do not connect Eleven Rack to a USB hub.*

You can now use your Eleven Rack with Pro Tools, or with any other CoreAudio- or ASIO-compatible application.

# Chapter 6: Eleven Rack Studio Setup

## Using Eleven Rack as Your Pro Tools Interface

This section will take you through connecting and configuring Eleven Rack to work at its best with Pro Tools software and the other gear in your recording setup (such as speakers, headphones, instruments and microphones).



Figure 8. Studio Setup with Eleven Rack as your Pro Tools audio interface

For information on using Eleven Rack as a standalone processor with other Pro Tools systems, see “Using Eleven Rack with an Existing Pro Tools System” on page 68.

---

## Listen to Your Sound from Pro Tools

To hear audio from Pro Tools, you will need to connect a set of speakers or a pair of headphones to Eleven Rack. Sound from Pro Tools *cannot* be played through your computer's speakers or your computer's sound output.

### Connecting the Main Outputs

The Main outputs on the back of Eleven Rack are male XLR connectors. To listen to audio coming from Eleven Rack, these outputs should be connected to a set of monitor speakers (self-powered or with an external amplifier) or a mixer or monitor controller system.

Main outputs Left and Right output the audio that is routed to the Main Out L/R output path within Pro Tools.

 *The signal coming out of the Main outputs is at line level (+4 dbu). Take care to use line-level (not mic-level) inputs when connecting Eleven Rack to a mixer.*

### Connecting a Pair of Headphones

On the front panel of the Eleven Rack is a 1/4-inch jack to connect a pair of headphones.

The Phones jack outputs the audio that is routed to the Main Out L/R output path within Pro Tools.

### Setting Monitor Volume

The Volume knob on the front of Eleven Rack adjusts the output volume of the Main outputs and the Headphone Outs simultaneously. You can offset the Headphone volume from the

Main output volume (higher or lower) by changing the setting in User Options Mode. For more details, see “Headphone Volume” on page 93.

### Configuring Your Inputs

Eleven Rack provides connectors that support a variety of devices that generate or reproduce sound. These include analog devices (such as mics and instruments), digital devices (such as keyboards), and even a signal line dedicated for re-amping (see “Re-Amping” on page 86).

All inputs, as well as the output of the current Rig, are available from within Pro Tools as separate channels for recording. One input at a time can be routed through the Rig. That input's clean signal will still be available in Pro Tools for separate recording or processing.



*When using Eleven Rack as a standalone preamp and processor, it's important to note that only one input type can run through the Rig at one time. The Rig Input User Option setting must be set to the correct input type, or no audio will pass to the outputs. For more info, see “Rig Input” on page 90.*

*When using Eleven Rack as an audio interface with Pro Tools, all inputs are usable simultaneously (though the Rig is still limited to processing one input type at a time).*

#### To choose which input is routed through the Rig:

- 1 Hold the Edit/Back button for one second to bring up the User Options screen.
- 2 Use the scroll wheel to select the Rig Input User Option.
- 3 Press the SW1 button to enter the Rig Input menu.
- 4 Set the input you wish to route through the Rig with the illuminated control knob.

5 Press Edit/Back twice to return to your original view.

**⚠** *To ensure you hear your audio when using Eleven Rack as a standalone signal processor, be sure to set the Rig Input User Option to the type of input you plan to use (Guitar, Mic, Line).*

---

## Analog Audio Inputs

Eleven Rack features three types of analog inputs that can be used with Pro Tools. There is a dedicated guitar (instrument-level) input, a stereo line input, and a mic-level input. All three are available as inputs for recording in Pro Tools.

You can route one of those inputs through the Rig at a time, and route the output of the Rig to Pro Tools. For more info on selecting the input that feeds the rig, see “Rig Input” on page 90.

### Connecting Your Guitar

Use the Guitar input for instruments (such as electric guitar or electric bass) that usually have a lower level of output than line level instruments.

**To connect a guitar or other instrument-level device to Eleven Rack:**

- Connect your instrument to the Guitar input on the front panel of Eleven Rack using a standard 1/4-inch TS guitar cable.

### Connecting Line-Level Devices

Use the Line inputs for line level devices (such as keyboards, mixers, and mic preamps).

**To connect a keyboard, mixer or other line-level device to Eleven Rack:**

1 Plug your device into the Line inputs on the back panel of Eleven Rack using one or two standard 1/4-inch (TRS or TS) cables. If the device is mono, plug it into one of the Line inputs. If the device is stereo, plug it into both the left and right Line inputs with two cables.

2 Set your device’s output volume to its optimal level. For example, the optimal level for most keyboards is between 80% and 100% of maximum volume.

3 If your device has unbalanced (TS) outputs, set the line inputs on Eleven Rack to –10 dVB by toggling the Level switch between the Line input jacks to its outward position. If your device has balanced (TRS) outputs, set the Line inputs to +4 dVB by toggling the Level switch to its inward position.

### Connecting a Microphone to Eleven Rack

Eleven Rack provides an XLR mic input. It can accept a microphone, DI box, or any other mic-level device.



*Eleven Rack mic-level input and controls*

### To connect a microphone or other mic-level device to Eleven Rack:

- 1 If using a microphone that may be damaged by phantom power (some ribbons, some tube condensers), flip the Phantom Power switch (labeled 48V) to OFF.
- 2 Plug your microphone cable into the Mic input on the front of Eleven Rack.
- 3 If your microphone requires phantom power, make sure the microphone is connected, then flip the Phantom Power switch to ON.
- 4 Carefully turn the Gain control up to increase the input level of your microphone signal.
- 5 If the incoming signal seems too loud or sounds distorted, even with the Gain knob all the way down, flip the Pad switch to ON to engage the -20 dB pad.
- 6 On the front of the Eleven Rack, carefully turn the Gain control to the right to increase the input level of your microphone signal.

---

## Digital Audio Input and Output

Eleven Rack provides digital inputs and outputs for AES/EBU and S/PDIF format digital audio devices. You can use these connections to record from digital sources, use external digital effects, or send Pro Tools audio to an external digital recorder.

**⚠** *Eleven Rack can have devices connected to both the AES/EBU and S/PDIF ports simultaneously, but only one format of device can be used at one time. You can switch between these two formats from within Pro Tools, or from the front panel of Eleven Rack, if using it as a standalone processor.*

### To connect a digital device to Eleven Rack, do one of the following:

- Connect the AES/EBU output on the device to the AES/EBU input on Eleven Rack, and the device's AES/EBU input to Eleven Rack's AES/EBU output, with two AES/EBU-format XLR cables.  
– or –
- Connect the S/PDIF output on the device to the S/PDIF input on Eleven Rack, and the device's S/PDIF input to Eleven Rack's S/PDIF output port, using two 75-ohm coaxial cables with male RCA connectors on both ends.

## Digital Device Sample Rates

When connecting to external gear digitally, Eleven Rack and Pro Tools must be set to the same sample rate and digital format as your digital device. Pro Tools must also be set to clock from the digital device, or no audio can pass between them.

### To configure Pro Tools to interface with a digital device:

- 1 Choose Setups > Hardware Setup.
- 2 Select AES External or S/PDIF External from the Clock Source pop-up menu, to match with the device.
- 3 Change the sample rate of your external device to match the rate you are using or plan to use in your Pro Tools session. If your device operates in a limited range of sample rates, you'll need to stay within that range when choosing the sample rate for your Pro Tools session.
- 4 Click OK.

At this point, you can try to record some signal from the digital device (if it is a sound source, such as a keyboard or CD player), or try inserting it onto a pre-recorded track (if it's an effects processor), and so on.

 *If you get no signal or a compromised signal, double-check that Pro Tools and your external device are set to the same sample rate and digital I/O format, and that Pro Tools is set to receive sync from the external device.*

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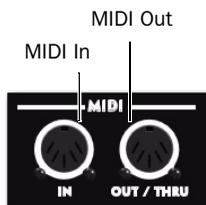
## MIDI Connections

The two MIDI ports on Eleven Rack let you take advantage of all the MIDI features of Pro Tools, including recording and editing MIDI data for to automate controls on Eleven Rack, and/or compose using virtual or hardware MIDI sound sources.

If you need additional MIDI ports you can add a compatible USB-based MIDI interface to your system.

### To connect a MIDI device to Eleven Rack:

- 1 Connect a standard 5-pin MIDI cable from the MIDI Out port of your device to the MIDI In port on the back of Eleven Rack.
- 2 If the device has a MIDI input and you plan to send MIDI signals to it from Pro Tools, connect another MIDI cable from the MIDI Out port on the back of Eleven Rack to the MIDI In port of your device.



*Eleven Rack MIDI connections*

## Using Eleven Rack with an Existing Pro Tools System



Figure 9. Eleven Rack connected to a Pro Tools|HD system

Apart from its roles as a Pro Tools interface and standalone guitar processor, Eleven Rack can also be used alongside an existing Pro Tools system, acting as a remote-controlled processing system and guitar preamp.

You'll need a digital or analog audio connection to and from the Pro Tools system to run audio through Eleven Rack. If you want to use the Eleven Rack Control window in Pro Tools to control Eleven Rack and manage Rigs, Eleven Rack must be connected to the computer using USB.

For info on which versions of Pro Tools software support Eleven Rack, visit the compatibility section of our website:

[www.avid.com/compatibility](http://www.avid.com/compatibility)

## Audio Connections

### To connect Eleven Rack to your Pro Tools interface using analog I/O:

- 1 Connect the Main outputs on Eleven Rack to an open pair of analog line inputs on your audio interface.
- 2 Hold the Edit/Back button on Eleven Rack to enter Edit mode.
- 3 Choose the input you need for the current task:
  - If you want to re-amp pre-recorded signals through Eleven Rack, choose Line L+R.
  - or –
  - If you want to record an analog signal using Eleven Rack's input circuitry and Rig processing, choose the Guitar, Mic, or Line option, to match the input you're using.
- 4 Connect the Line inputs on Eleven Rack to an open pair of analog line outputs on your audio interface.

Press Edit/Back twice to return to the main Rig Select Screen.

### To connect Eleven Rack to your Pro Tools interface using AES/EBU or S/PDIF digital I/O:

- 1 Connect the Eleven Rack to an open pair of digital inputs and outputs on your audio interface, either AES/EBU or S/PDIF.
- 2 Hold the Edit/Back button on Eleven Rack to enter User Options mode.
- 3 Select Rig Input, and press the SW1 button.
- 4 Choose the input you need for the current task:
  - If you want to re-amp pre-recorded signals through Eleven Rack, choose Digital L+R.
  - If you want to record an analog signal using the input circuitry and Rig processing in Eleven Rack, choose the Guitar, Mic, or Line option, to match the input you're using.
- 5 Press Edit/Back to move back to the previous screen.
- 6 Select Digital Clock/Input, and press SW1.
- 7 Set the Clock Source to External.
- 8 Set the Digital Input to AES/EBU or S/PDIF, to match the type of connection you're using.
- 9 Press Edit/Back to move back to the previous screen.
- 10 Select Digital Output, and press SW1.
- 11 Choose Rig Outputs.
- 12 Press Edit/Back twice to return to the main Rig Select Screen.

## Configuring Your Existing Pro Tools System

First, you'll need to install the correct Pro Tools software and connect Eleven Rack to your computer using USB.

### To configure your Pro Tools system to interface with Eleven Rack:

**1** If your existing Pro Tools system is not yet running at least version 8.0.1, install the included Pro Tools software update from the supplied DVD.

 *A pre-existing installation of Pro Tools version 8.0 or higher is required to install this update.*

**2** If the Eleven Rack driver is not installed on your Pro Tools system, install it. For more information, see “Eleven Rack Driver Install” on page 70.

**3** Use the supplied USB cable (or another high-quality USB 2.0 cable, shorter than five meters) to connect Eleven Rack to an open USB 2.0 port on your computer.

**4** Launch Pro Tools. If the software has been installed correctly and Eleven Rack is connected via USB, the Eleven Rack Control window will open, giving you access to the controls and Rig management features.

 *For more information on controlling Eleven Rack from Pro Tools, see “The Eleven Rack Control Window” on page 74.*

## Eleven Rack Driver Install

When installing Pro Tools, Eleven Rack drivers are not installed by default. If you do not have current drivers installed, you will need to install them.

 *Although these downloads are labeled “Pro Tools 9,” these drivers will work with Pro Tools 8.0.5 and 8.1.1 as well.*

### To install the newest Eleven Rack Driver:

**1** Using a web browser, visit <http://www.avid.com/drivers>.

**2** Scroll down to the Pro Tools USB Device Drivers section and click on Eleven Rack Drivers.

**3** Select and download the Mac or Windows driver installer,

**4** Run the installer and follow onscreen instructions to install the driver.

## Setting Eleven Rack Sample Rate and Clock Source

When Eleven Rack is connected to a digital device, the sample rate must match between the two devices, and the clock relationship (one device internally clocked, the other receiving external clock) must be established.

If the device is a standalone unit (such as a signal processor or digital console), you must set the sample rate and clock behavior of Eleven Rack using the Digital Clock/Input User Options page, accessed from the front panel of Eleven Rack.

 *For more information on setting the sample rate and clock source of Eleven Rack using the front panel controls, see “Digital Clock/Input” on page 91.*

The same sample rate and clock rules apply when connecting Eleven Rack digitally for use as a standalone processor with an existing Pro Tools system.

However, when Eleven Rack is connected to your computer via USB (in this case, for control reasons), the sample rate and clock source can no longer be set from the front panel.

Instead, use the Digidesign Eleven Rack System Preferences page (Mac) or Control Panel (Windows) to change these settings.

**To access Eleven Rack's sample rate and clock source settings when connected via USB:**

**1** Open the Digidesign Eleven Rack settings:

- On Mac, open System Preferences from the Apple menu and choose Digidesign Eleven Rack.

– or –

- On Windows, click the Start button, choose Control Panel and double-click Digidesign Eleven Rack.

**2** The Digidesign Eleven Rack Properties window will appear.

**3** Choose the desired clock source and sample rate.

**4** Close the System Preferences window (Mac) or the Digidesign Eleven Rack Properties dialog (Windows) when finished.



# Chapter 7: Using Eleven Rack with Pro Tools

This chapter shows you how to take advantage of some of the unique features that Eleven Rack brings to Pro Tools. If you've never recorded with Pro Tools before, be sure to check out the *Intro to Pro Tools Guide* that comes with Eleven Rack.

---

## Pro Tools Interface Capabilities

When used as a Pro Tools audio interface, Eleven Rack provides the following capabilities:

- Eight channels of simultaneous audio input:
    - Stereo Rig output
    - All analog inputs
    - Stereo digital input
  - Six channels of simultaneous audio output:
    - Main/Phones outputs
    - Output To Amp outputs
    - Stereo digital output
  - Re-amping of signals from Pro Tools using the Output To Amp outputs
  - Full control of Eleven Rack using the Eleven Rack Control Window.
  - Playback of up to 48 mono or stereo digital audio tracks, or a combination of playing back and recording up to 48 mono or stereo digital audio tracks, depending on your computer.
- Up to 128 audio tracks (with up to 48 active tracks), 128 Auxiliary Input tracks, 64 Master Fader tracks, 256 MIDI tracks, and 32 Instrument tracks per session.
  - 16-bit or 24-bit audio resolution, at sample rates up to 96 kHz.
  - Non-destructive, random-access editing and mix automation.
  - Audio processing with up to 10 inserts per track (RTAS® plug-ins or hardware inserts).
  - Up to 10 sends per track.
  - Up to 32 internal mix busses.

 For complete information on recording in Pro Tools, see the *Pro Tools Reference Guide*.

---

## External Processor Capabilities

When used as an external preamp and processor with an existing Pro Tools system, Eleven Rack provides the following capabilities:

- Processing of one analog or digital input type through the Eleven Rack Rig
- Full control of Eleven Rack using the Eleven Rack Control Window (USB connection and updated Pro Tools software required)

## The Eleven Rack Control Window



Figure 10. Eleven Rack Control window (in Pro Tools)

The Eleven Rack Control window is a special window in Pro Tools that lets you control Eleven Rack entirely from your computer when Eleven Rack is connected to your computer's USB port. It can be accessed whether Eleven Rack is your Pro Tools interface or you have Eleven Rack connected to an existing Pro Tools system as a standalone preamp and processor.

 You can open the Eleven Rack Control window by choosing Window > Eleven Rack.

---

## Accessing the Eleven Rack Control Window

In Pro Tools, you can access the Eleven Rack Control Window by clicking Window > Eleven Rack. This applies whether you are using Eleven Rack as an audio interface for Pro Tools, or as a preamp and processor along with an existing Pro Tools system.

The Eleven Rack Control window can be minimized to a basic floating window. When minimized, it shows the Rig Library menu, basic monitoring controls and a button which activates the Tuner.



*Eleven Rack Control window, minimized*

Similar controls can be accessed from the Guitar panel in the top bar of controls in the Edit window. Click the small amplifier-shaped icon in the Guitar panel to open the Eleven Rack Control window.



*Guitar panel in Edit window control toolbar*

 *The Guitar panel can be hidden and/or moved within the toolbar. For more details, see the Pro Tools Reference guide by selecting Help > Pro Tools Reference Guide.*

## Rig View Section

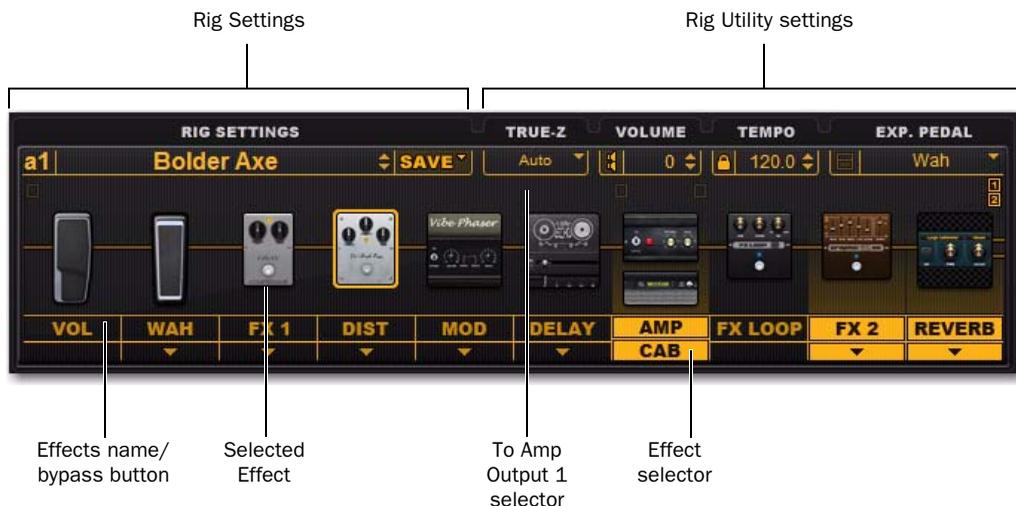


Figure 11. Eleven Rack Control window (in Pro Tools)

In the Rig View section, you can access all of the amp, cab, effects, and utility parameters of the current Rig, as well as load and save Rigs to and from your computer.

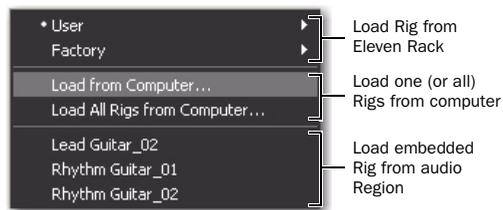
### Rig Settings



The Rig Settings section lets you load, access, and save Rigs to and from Eleven Rack and your computer.

If you want to save this Rig into Eleven Rack for later use, be sure to save it using the Eleven Rack Control Window or the Save button on the front panel of Eleven Rack.

Clicking on the Rig name brings up a menu where you can call up any Rig stored in the memory of Eleven Rack or in your computer, or load a Rig setting from an audio file with embedded Rig data.



The chosen Rig will be loaded into Eleven Rack temporarily, and can then be edited via the Eleven Rack Control window or the front panel of Eleven Rack.

 For info on embedding Rig data in audio, see “Embedding Rig Settings in Audio Regions” on page 83.

Clicking on the Rig number brings up the Rig Librarian, an all-in-one view of all Rigs currently stored in the memory of Eleven Rack.

The name shown in the Rig Librarian is that of the most recently loaded Rig. When changes are made to the Rig, the Save button turns red and the Rig number and name are shown in italics.

#### To save the current state of your Rig Settings:

- Click on the Save button. You can choose to save the changes you've made to a Rig on Eleven Rack, to a file on your computer, or save all of the Rigs currently on Eleven Rack to the computer in one folder.

The files you save to the computer can be sent to collaborators or brought with you as you work at other computers, so you always have access to your settings.

## Rig Utility Settings

The Rig Utility settings section lets you control the True-Z impedance-matching circuitry, volume, tempo, and expression pedal functions for the current Rig.

### Rig Tempo



The Rig Tempo menu sets the tempo of the current Rig. Set a tempo, and the time-based effects (tremolo, delay, etc) that are set to sync will follow the new tempo. You can also choose to have Rig tempo sync to the tempo of your Pro Tools session.

When Pro Tools is set to manual tempo (ignoring the Conductor track), and Eleven Rack is set to lock to Session tempo, changes in Rig tempo will shift the tempo of your Pro Tools session, and vice versa.

When Pro Tools is set to follow the Conductor track, and Eleven Rack is locked to Session tempo, any changes made in the Conductor track over time will be followed by Eleven Rack.

#### To lock Rig tempo to Pro Tools session tempo:

- Click the small Lock icon next to the tempo display.

### Exp. Pedal



The Exp. Pedal menu lets you set the behavior and assignment of an external expression pedal.

### Multiple FX

When set to Multiple FX, the button to the left of the assignment name will highlight. Clicking this button will bring up a window where you can edit up to four parameters that will be swept by the pedal simultaneously.



Each of the four Configs can be set to one parameter of one of the devices in the Rig. The Toe and Heel settings govern the top and bottom of the sweep of the control.

 *If you set the Heel number higher than the Toe number, the control can be swept in reverse.*

## Output to Amp Selectors

The Output to Amp selectors let you choose what point in the signal path feeds Output To Amp outputs one and two, and set the output volume for each, to better match the input sensitivity of the external amp or processor.



**To set the volume of the signal sent to each To Amp output:**

Left-click the chosen To Amp output selector, and adjust the volume using the fader.

**To choose what signal feeds each To Amp output:**

- Right-click one of the To Amp Output selectors, and do one of the following:
  - If the selector you click is not yet assigned (greyed out), a menu is displayed, letting you choose to send the signal at the chosen location to Output to Amp output one, two, or both in stereo.
- or –
- If the selector you click is already assigned to an Output to Amp out (highlighted), you get a menu letting you assign that To Amp output to another point in the signal chain.

## Amp/Cab, Effects and Pedal Settings



This section of the Rig View pane lets you reveal, select, move, and bypass all of the amp, cabinet, effects, and pedals in the current Rig. Click on a piece of gear to highlight it, and it will show up in the Control section below.



 *For more information on the functions of the amp, cab, and effects controls, see “The Amps” on page 26, and see “The Effects” on page 38.*

## Bypassing Amps, Cabs, and Effects

You can toggle the various gear in the current Rig on and off by clicking the name of the desired element.

## Changing The Order

In the Rig View pane, you can change the order of the pedals and effects in the current Rig just like you can in the Rig View on Eleven Rack. Visualize the signal travelling from left to right through the signal chain.

### To change the order of gear in the signal path:

- 1 Click and drag a device.
- 2 Drop it into the desired position.

 *Some items in the Rig have restrictions about where they can be placed. When dragging a restricted item (such as the FX Loop), it will snap between the allowed spots.*

## Selecting Effects

Most of the effects have more than one available model.



### To select a different effect:

- Click the Effect selector beneath the desired Effect type, and choose a new model from the menu.

This section will take you through the features of the Control window.

## Control Section

When a device is highlighted in the Rig View pane, the controls of the device are shown in the Control section.



On the displayed device, you can turn the knobs, toggle the switches, and rock the pedals, and everything you do is transmitted to Eleven Rack, so you can hear the changes you make in real time.

## Effects Preset Selector



The Effects preset selector lets you save and recall preset settings for individual Eleven Rack effects, within Pro Tools.

For example, if you've dialed in the perfect lead tone on the Tri-Knob Fuzz, you can save the settings for that effect and recall them without having to save or load a new Rig.

These presets are handled by the same system (using the same file types and functions) that manages plug-in presets in Pro Tools.

 *For more information on working with presets, see the Pro Tools Reference Guide.*

---

## Master Control Section



Figure 12. Master Control section

The Master Control section houses the controls and features that apply to all of Eleven Rack.

## Tuner

This tuner works like the one you can access using the front panel of Eleven Rack, but is much larger and easier to see when working in Pro Tools.



Figure 13. Tuner section

 For more information on the Tuner controls, see “Tap Tempo/Tuner Button” on page 10.

## Input Selector

This menu lets you choose which input on Eleven Rack will be fed through the Rig. This can be a physical input, or the Re-Amp outputs from Pro Tools.

## User Options Mode

Pressing the User Options button in the Master Control section brings up User Options mode, which lets you access many of the under-the-hood options you normally would access using the User Options mode on Eleven Rack.

 For more information on User Options Mode and the settings it provides access to, see “Exploring the User Options” on page 89.

## Output Mute Buttons

These two buttons let you mute the Headphone output and the Main outputs on Eleven Rack from within Pro Tools.

This comes in handy when recording with a microphone while wearing headphones (mute the main outputs to cut out bleed from the speakers), or when headphones might bleed into a recording track (mute the headphones).

## Main Volume Knob

This knob acts just like the Volume knob on the front panel of Eleven Rack, varying the overall output volume of the Main and Headphone outputs.

 For more information on these controls, see “Eleven Rack Front Panel” on page 9, and see “User Options” on page 89.

---

## Guitar Recording with Pro Tools

### (Eleven Rack as Pro Tools Interface Only)

This section provides information on recording guitars using Eleven Rack as your Pro Tools audio interface.

The simplest way to record guitar with Eleven Rack is to simply plug in your guitar, create a track in Pro Tools, and record the sound coming from the Rig.

### To record guitar through the Rig to a track in Pro Tools:

- 1 Click on the Track menu in Pro Tools and select New.
- 2 In the New Tracks dialog, create one stereo audio track.
- 3 Using the Input Selector, assign the input on the stereo track you've created to Interface > Eleven Rig L/R.
- 4 Record-enable the track.
- 5 Select a Rig in the Eleven Rack Control window, and tweak its settings, if necessary.
- 6 Press Record, then Play, in the Pro Tools transport.
- 7 Record your guitar part.

## Recording Wet and Dry Signals



### Example of Dry and Processed tracks in Pro Tools

The Guitar Input on Eleven Rack shows up in Pro Tools as a standard mono input path (Guitar In). This input passes the guitar signal, unprocessed, to Pro Tools, where it can be recorded as normal.

The guitar signal also passes through the processing features of Eleven Rack, and the processed stereo output from the amp, cabinet, mic and effects simulations shows up as a second, stereo input path in Pro Tools for monitoring and/or recording (Eleven Rig L and R). Thus, the dry guitar signal and the output of the Rig can be recorded onto separate tracks, for processing and editing flexibility.

This means that when recording guitars with Eleven Rack, you can decide on a tone you enjoy and record your parts, but retain a clean version of those parts as well.

Later, if you decide you want a different sound, or simply want to stack different tones on top of one another, you can re-amp those original, unaffected guitar tracks through a different set of Rig characteristics on Eleven Rack, or even another external guitar setup.

 For information on the re-amping process, see “Re-Amping” on page 86.

### **To record wet and dry versions of a guitar part simultaneously for future re-amping:**

- 1 Click on the Track menu in Pro Tools and select New.
- 2 In the New Tracks dialog, do the following:
  - Create one mono audio track
  - and –
  - Create one stereo audio track.
- 3 Assign the input on the mono track you’ve created to Interface > Guitar In.
- 4 Assign the input on the stereo track you’ve created to Interface > Eleven Rig L/R.
- 5 Record-enable the two tracks.
- 6 Select a Rig in the Eleven Rack Control window.
- 7 Tweak the settings of the Rig, if necessary.
- 8 Press Record, then Play, in the Pro Tools transport.
- 9 Record your guitar part.
- 10 Press Stop to stop recording.

If you don’t plan to use the dry signal right away, you can make the mono track inactive and hide it.

The dry track will be hidden and will not play, but Pro Tools will retain the data for later use. You can access the track again at any time.

 For more info on inactive and hidden tracks, see the Pro Tools Reference Guide.

 The Guitar In input signal will look quite low when compared to other recorded signals in Pro Tools. This is because the input signal is optimized for future re-amping through Eleven Rack. If you need to do intricate rhythmic editing and find the audio hard to visualize, you may want to increase the vertical zoom level in the Edit window.

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## **Recording Wet and Dry Signals when Using Eleven Rack as an External Processor**

You can even record separate wet and dry tracks when using Eleven Rack as an external processor with an existing Pro Tools system.

The wet and dry tracks will be mono, and must be routed into your Pro Tools system using one of the digital outputs on Eleven Rack.

### To send wet and dry channels to your existing Pro Tools system:

- 1 Connect one of the digital outputs on Eleven Rack to one of the digital inputs on your Pro Tools interface using a S/PDIF or AES/EBU cable.
- 2 Connect one of the digital inputs on Eleven Rack to one of the digital outputs on your Pro Tools interface using a S/PDIF or AES/EBU cable.
- 3 Press and hold the Edit/Back button on Eleven Rack for one second to open User Options Mode.
- 4 Use the Scroll wheel to select Rig Input.
- 5 Press SW1 to enter the Rig Input User Option.
- 6 Turn the lit Control knob to set Rig Input to the type of input you plan to use (such as Guitar, Mic, or Line).
- 7 Press the Edit/Back button to return to the previous view.
- 8 Use the Scroll wheel to select Digital Clock/Input.
- 9 Press SW1 to enter the Digital Clock/Input User Option.
- 10 Set the Clock Source control to External.
- 11 Set the Digital Input control to match the input type coming from the Pro Tools system (S/PDIF or AES/EBU).
- 12 Press the Edit/Back button to return to the previous view.
- 13 Use the Scroll wheel to select Digital Output.
- 14 Press SW1 to enter the Digital Output User Option.
- 15 Set the Output control to Split In/Out.
- 16 Press Edit/Back twice to return to the original view.

---

## Embedding Rig Settings in Audio Regions

### (Eleven Rack as Pro Tools Interface or with Existing Pro Tools System)

Despite the fact that we designed Eleven Rack to store Rig settings to your computer and to its internal memory, we felt there had to be a better way to keep track of which Rig settings you use as you track your guitar.

Pro Tools lets you embed the current Rig's settings into audio regions as you record them, so that you can retrieve that same setting for further use later.

 *This feature is also available when Eleven Rack is connected to an existing Pro Tools system using USB.*

This can also be helpful when collaborating or bringing sessions or regions to a different system using Eleven Rack, because your settings travel with the files.

### To embed Rig settings in recorded audio:

- 1 Open the Eleven Rack Control window.
- 2 Click the User Options button. The Embed Setting From menu appears.

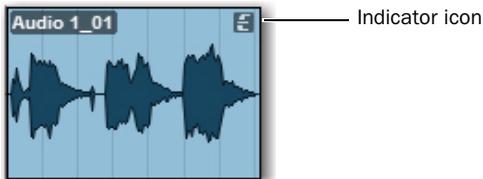


- 3 Set the Embed Setting From menu to the input you plan to record through.
- 4 Create an audio track, and set its input to the input you've chosen, using the Input selector.
- 5 Record enable the track.
- 6 Press Record, then Play, in the Pro Tools transport.

- 7 Record your part.
- 8 Press Stop to stop recording.

The settings of the currently loaded Rig (as of the moment you stop recording) will be embedded in each audio region that is recorded from the input you select in the Embed Setting From menu.

Audio regions with embedded Rig data are marked with a small Eleven Rack logo icon in both the Edit Window and the Region Browser in Pro Tools.



*Audio region with Eleven Rack logo indicator icon*

## Retrieving Embedded Rig Settings

You can access Rig settings from any region with embedded settings that has been recorded or imported into your Pro Tools session. You can do this by selecting regions directly in the Edit window, or you can access any embedded region in the session using the Eleven Rack Control Window.

### To load a Rig setting from a region in the Edit window:

- 1 Open the Edit window by clicking Window > Edit.
- 2 Locate the region you want to load Rig Settings from.
- 3 Right-click the region and choose Load Guitar Rig Settings, at the bottom of the menu.

- 4 The Rig is loaded into Eleven Rack and is ready to use.



*Loading settings from a region in the Edit window*

**To load an embedded Rig setting from within the Eleven Rack Control Window:**

- 1 Open the Eleven Rack Control window by clicking Window > Eleven Rack.
- 2 Click the Rig Settings menu.
- 3 Any regions with embedded Rig data will show up as a list at the bottom of the menu.
- 4 The Rig is loaded into Eleven Rack and is ready to use.



**Choosing a region from the Rig Settings menu**

💡 *Once you have retrieved a Rig setting from a region, you may want to save it to your computer or the Eleven Rack memory.*

⚠️ *Rig settings data can only be embedded in .WAV or .AIFF files. MP3 encoding strips audio files of their embedded Rig data, so be sure to choose .WAV or .AIFF format when exporting audio files with embedded Rig data.*

---

## Re-Amping

### (Eleven Rack as Pro Tools Interface Only)

This section describes the Re-Amping process when using Eleven Rack as your Pro Tools audio interface.

Re-Amping is the process of sending pre-recorded audio (in this case, from within Pro Tools,) to an external guitar amplifier or effects unit, and then re-recording the processed audio to a new track.

This is sometimes done when a guitar track is recorded dry and the amp and effects sound is to be decided upon later (see “Guitar Recording with Pro Tools” on page 81).

In the case of Eleven Rack, re-amping can be done one of two ways.

- Tracks can be sent from Pro Tools into the on-board guitar processor in Eleven Rack, and re-recorded to a new track.  
– or –
- Tracks can be sent from Pro Tools, out through the Output To Amp outputs on Eleven Rack, into one or more external guitar amps or processors, and then re-recorded through the microphone, line, or guitar inputs on Eleven Rack, depending on the type of external devices being used.

#### To re-amp a signal using the guitar processor in Eleven Rack:

- 1 Choose the track in Pro Tools to be re-amped.
- 2 Assign the output of the track to one of the following:
  - Interface > ReAmp L/R (if signal is stereo)
  - Interface > ReAmp L or ReAmp R (if signal is mono)

- 3 Set the Rig Input on Eleven Rack to Re-Amp, using the Rig Input setting in User Options, or the Eleven Rack Control Window in Pro Tools.
- 4 Create a new audio track, and assign its input to Interface > Eleven Rig.
- 5 In Pro Tools Edit window, click with the Selector tool at the beginning of the first audio region on the track to be re-amped.
- 6 Select a Rig in the Eleven Rack Control window, and adjust the settings as desired.
- 7 Start recording in Pro Tools.
- 8 The audio from the chosen track will be processed through Eleven Rack, and re-recorded to the new stereo Audio track.



*By default, the re-amped signal is muted when you press Play on the transport, but are not recording. If you want to hear the re-amped signal while in playback, turn on Input Only Monitoring mode by clicking Track > Input Only Monitoring. For more information on Input Only Monitoring mode, see the Pro Tools Reference Guide.*

#### To re-amp a signal using the Output To Amp outputs on Eleven Rack:

- 1 Choose the track in Pro Tools to be re-amped.
- 2 In the Eleven Rack Control window, choose what point in the signal chain will be fed to one or both of the To Amp outputs using the To Amp Output selectors.



*See “Output to Amp Selectors” on page 78 for details.*

- 3 Create a new audio track, and assign its input to match the device you are using to re-amp, as follows:
  - If re-amping through a guitar amp and microphone, or a device with an XLR DI output, select Interface > Mic In.

- If re-amping through a guitar-level stompbox or processor, select Interface > Guitar In.
  - If re-amping through a processor with a line-level output, select Interface > Line Input L.
- 4 Set up and connect your chosen external amp and microphone and/or processor to the Output To Amp 1 (L) output and the appropriate input on Eleven Rack.
    - If using the mic input, ensure that the gain and other settings (such as phantom power and pad) are set correctly.
    - If using an amplifier and microphone in the same room as your Pro Tools system, be sure to turn off or mute your monitor speakers, to avoid feedback.
  - 5 Record-enable the new mono track.
  - 6 In Pro Tools Edit window, click with the Selector tool at the beginning of the first audio region on the track to be re-amped.
  - 7 Start recording in Pro Tools.
  - 8 The audio from the selected track is sent out of Eleven Rack, processed through your amp or processor, and then re-recorded to the new Audio track.

---

## Controlling Eleven Rack Parameters with MIDI Data

### (Eleven Rack as Pro Tools Interface Only)

When using Eleven Rack as your Pro Tools audio interface, you can record real time changes to your Rig settings, edit them, and play them back to Eleven Rack, all using MIDI tracks. This can be quite powerful when re-amping signals through Eleven Rack.

In the following example, you'll control the Rig Volume parameter in Eleven Rack with MIDI data from Pro Tools.

### To control the Rig Volume on Eleven Rack with MIDI CC data from Pro Tools:

- 1 Create a MIDI track in Pro Tools.
- 2 Assign its output to Predefined > Eleven Rack > channel-1.
- 3 On Eleven Rack, press and hold the Edit button for 1 second to enter User Options mode.
- 4 Scroll with the Scroll wheel to MIDI, and press the SW1 switch.
- 5 Use the lit Control knob to choose a MIDI receive channel. In this example, use channel 1.
- 6 In the Pro Tools Edit window, select CC 17 in the Track View menu for the MIDI track you've created. You'll see a line running across the track. This is the MIDI CC envelope that controls Rig Volume.
- 7 With the Pencil tool, draw a curving line from the beginning of the track to a point around 10 seconds later.
- 8 Press Play on the Pro Tools transport. You will see the Rig Volume setting on the Eleven Rack Control window move in time to match the curve you've drawn.

This technique can be used for any of the MIDI CC controls Eleven Rack can respond to.

 For a full list of MIDI CC data that Eleven Rack can accept, see Chapter 9, "Eleven Rack MIDI Controls."

 For more information on using MIDI CC data in Pro Tools, see the Pro Tools Reference Guide, which can be accessed from within Pro Tools by selecting Help > Pro Tools Reference Guide.



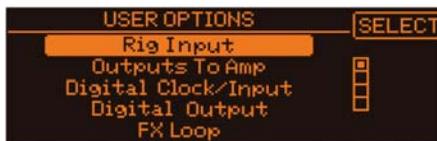
# Chapter 8: User Options

This section describes the details of the User Options mode within Eleven Rack. User Options mode lets you access the behind-the-scenes controls in Eleven Rack.

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## Exploring the User Options

Let's start looking into the changes you can make using User Options.



*User Options mode*

### To explore User Options mode from the front panel of Eleven Rack:

- 1 Press and hold the Edit/Back button until the User Options screen appears.
- 2 Turn the Scroll wheel to select the option you want to change.
- 3 Press the SW1 button to access the controls for that option.
- 4 Press Edit/Back once to return to the User Options menu, or twice to exit User Options mode and return to the previous screen.

### To explore User Options mode when using Eleven Rack with Pro Tools:

- 1 Show the Eleven Rack Control window, by clicking Window > Eleven Rack.
- 2 Press the User Options button on the Control window.

---

## User Options

This section lists and defines the available options in the User Options menu.



*These descriptions and parameter names match those within the display on Eleven Rack. The Eleven Rack Control window's User Options mode contains most of these controls, but some are named slightly differently.*

## Rig Input

This setting lets you specify which input on Eleven Rack will be routed through the Rig. This can be set to any of the analog or digital inputs on Eleven Rack, or the signal sent to the Re-Amp output in Pro Tools.

 For more information on Re-Amping, see “Re-Amping” on page 86.

 *Running the mic input through the Rig with your monitor speakers on can result in severe feedback, due to the amount of gain available in the amp and effects emulations. Be sure to mute or turn down the main outputs before proceeding.*

## Outputs To Amp

In this page, you can what signal feeds the Output To Amp outputs. Turn the Scroll wheel to switch between controlling Output 1 or Output 2. If you want to use the Outputs To Amp in stereo, you may want to match the controls for both channels.

### Signal

Using the Signal control, you can set what point in the signal path feeds each Output to Amp output:

**Rig Input** The clean, unprocessed guitar signal, as is present at the input of the Rig.

**Amp Input** The signal after any processing that occurs before the Amp model in the signal chain.

## Cabinet Resonance

Part of what's captured in the speaker cabinet emulation of Eleven Rack is the acoustical nature that a cabinet will resonate when driven by an amplifier.

It is a phenomenon particular to the type of amplifier used as well the type of cabinet used. Each combination reacts in a different way depending on the gain settings of the amp.

The button labeled RESO (SW2) will indicate the continued presence of cabinet resonance even when the cabinet is bypassed. If the Output to Amps User Option is set to Amp Output or Rig Output No Cab, the cabinet resonance will still affect the signal feeding the Output to Amp.

If the continued presence of cabinet resonance is disengaged by pressing SW2, bypassing the cabinet will also turn off the resonance. If the Output to Amps User Option is set to Amp Output, the signal feeding the Output to Amp will not be affected by cabinet resonance.

In either case, it is not possible to remove cabinet resonance when the cabinet is not bypassed.

By default, when an Output to Amp is set to Amp Output, the signal is fed directly from the amp model to the output. When RESO is switched on, the signal is fed from the amp model, through the cabinet resonance model, and then to the output.

Depending on settings, this can produce a fatter, thicker sound, especially with high amp gain.

**Amp Output** The signal after passing through the amp emulation, but before the cab, mic, and any effects emulations placed after the amp in the signal path.

**Rig Output** The fully processed signal, run through every part of the current Rig (including cab and mic emulation).

**Rig Out No Cab** The fully processed signal, with the Cab model automatically bypassed.



*When either Output to Amp is set to Rig Output or Rig Out No Cab, the other will be set to the same setting. Output to Amp 1 will output the left channel of the Rig, and Output to Amp 2 will output the right channel.*



*When feeding signal to a external guitar amplifiers, it is generally preferred to apply no cab and mic emulation to the signal. Since the speaker being driven by the amplifier will naturally shape the tone of your signal, using the cab and mic emulations in Eleven Rack could produce compromised-sounding results.*

*Keep in mind that the Speaker Breakup simulation is always on, so when looking for minimum coloration, turn the Speaker Breakup control down. It can be found in the Cab section in Rig View*

## Digital Clock/Input

When Eleven Rack is being used standalone and is not plugged into a computer, it lets you choose the clock source (internal or external), sample rate (if using internal clock), and digital format you want to work with.

**Clock Source** Lets you choose between the following clock sources:

- Int 44.1 kHz (Internal clock)
- Int 48 kHz (Internal clock)
- Int 88.2 kHz (Internal clock)
- Int 96 kHz (Internal clock)
- External

**Digital Input** Lets you choose the digital format you want to use for input, either AES/EBU, or S/PDIF.

When Eleven Rack is plugged into a computer with USB for use with Pro Tools, these options must be set in the host software (Pro Tools or other). The Digital Clock/Input screen will just show the current settings and whether or not there is a valid clock signal present at the currently chosen digital input.



*For more information on how to access these controls from within Pro Tools, see the Pro Tools Reference Guide.*

## Digital Output

Adjust the Output control to choose the type of signal being passed to the digital outputs.

**DAW** The output from the Digital Out L/R output path in Pro Tools will be sent to the digital outs.

**Mirror Analog** The same signal that is being sent to the Main Outputs will be sent to the digital outs.

**Rig Outputs** The left and right Rig outputs are sent to the left and right digital outputs respectively.

**Split In/Out** The left and right Rig outputs are summed and sent to the left digital output, and the signal as present at the Rig input (the “dry” signal) is sent to the right digital output.

## FX Loop

The FX Loop screen is where you control the mono/stereo behavior of the FX loop. Set the control to Mono if using a mono effect, to Mono to Stereo, if using an effect that takes a mono signal but has a stereo output, or Stereo, if using a true stereo effects unit.

## External Pedals

This screen lets you set up an expression pedal or a dual footswitch, plugged into the Exp Pedal/Ext Footswitch jack on the back of Eleven Rack.

Turn the Scroll wheel to select the type of pedal you’ll be using. In expression pedal mode, you can press SW1 to enter calibration mode. Follow the on-screen instructions to calibrate your expression pedal. In Dual Footswitches mode, you can use the Tone Control knobs to select a function for each footswitch.

Each footswitch can be set to do one thing, whether it’s cycling through Rigs, turning a certain effect on and off or just bringing up the tuner.

## MIDI

The MIDI page lets you set up how Eleven Rack responds to MIDI data.

**Channel** Sets the MIDI receive and send channel, from 1-16.

**Thru** Toggles MIDI thru on and off.

**CC** When engaged, front-panel control changes will send corresponding MIDI CC messages to Pro Tools, and be output through the MIDI output jack.

## Rig Balancing

This screen lets you adjust the relative signal level of each of the saved Rigs. If you find that a certain Rig is much louder or quieter than the others, you can tweak it here.

Turn the scroll wheel to select a Rig to adjust, and use the lit Tone Control knob to adjust the volume.

When you’re done editing these settings and you back out of the Rig Balancing screen, a “Saving” message appears on the display for a few moments as the new settings are saved.

## Amp/Cab Linking

This parameter toggles the linking of amplifier and cabinet models that were historically used together. With Amp/Cab Linking on, when you choose certain amps in Rig View, the cabinet that goes with it will also be chosen. You can still change the cabinet you want to use later.

## Display Contrast

This control allows you to set the contrast of the LCD display to match your viewing angle or light conditions.

## Knob Display/Action

This screen lets you configure the way knob settings are displayed onscreen, and how they act.

### Display

This control lets you see the current positions of the control knobs as either graphic knobs or as numeric values. If you choose to display the controls as knobs, keep in mind that you can see the exact numeric value of a control temporarily by turning the knob slightly.

### Action

This control lets you choose between the following knob behaviors:

**Normal** Moving a Control knob will cause the currently assigned setting to immediately follow the knob's position.

**Latch** When a Control knob is positioned differently than the current value of the assigned control, the control's setting will not update until the knob is swept past the current setting.

### Blink

The Tempo button on the front panel of Eleven Rack can be set to blink in time with the current Rig tempo. The Blink control toggles this behavior on and off.

## Headphone Volume

This control sets the volume of the Headphone outputs on Eleven Rack, as an offset from the Main output volume.

## Persistent Volume Pedal

By default, the Volume Pedal setting is stored as a fixed setting just like the other amp and effects settings in a Rig. This can be handy when the fixed setting is used to affect gain staging within the Rig in a manner that you would want to recall each time you used that Rig.

Engaging the Persistent Volume Pedal behavior will allow you control the Volume Pedal in manner more like using a real volume pedal. With an external pedal or MIDI controller set to control the Volume Pedal setting, its position will override the stored setting in each Rig. Even as you switch Rigs, the position of your external pedal will determine the Volume Pedal setting.

To make the most of this feature, use it with Rigs that have the same Taper and Minimum Volume settings so the behavior is consistent when you switch Rigs. For even more consistency, make sure the Volume Pedal is located in the same place in the signal chain.

In the Persistent Volume Pedal User Option page, pressing SW1 will toggle the Persistent Volume Pedal behavior on and off. When the PERSIST label is lit, the Volume pedal setting will stay with your foot pedal position, regardless of Rig setting.

## Volume Control

In this screen, use the lit control knob to choose which output volume is controlled by the Volume knob on the front panel of Eleven Rack.

The choices are as follows:

- Main Outputs (default setting)
- Output to Amp 1
- Output to Amp 2
- Outputs to Amp 1 & 2
- Main + Outputs to Amp 1 & 2

**⚠** *If the Volume knob is set to control one or both Output to Amp settings, the main and headphone outputs will be reset to their highest output level.*

## Reset Memory

In this screen, pressing SW1 will reset the memory of Eleven Rack back to factory specs. All user-created Rigs and settings will be erased.

You can exit this screen without resetting the memory by pressing the Edit/Back button.

## MIDI CC Reference

This screen contains a chart of all MIDI continuous controllers that are assigned to controls in Eleven Rack. This is useful when setting MIDI controllers when you don't have a copy of the manual handy.

Scroll up and down the list with the Scroll Wheel.



*This reference chart can also be found in Chapter 9, "Eleven Rack MIDI Controls."*

## Firmware Version

On this screen, you can check to see what firmware version is running on your Eleven Rack.

# Part III: Reference



# Chapter 9: Eleven Rack MIDI Controls

Many of the parameters in Eleven Rack can be controlled using MIDI. This opens up the possibility of using both external MIDI devices (such as foot controllers) and the MIDI capabilities of Pro Tools to vary Eleven Rack's tonal aspects in real time.

This section lists the available MIDI controls for use with Eleven Rack. If you use external MIDI controllers or record/automate Rig settings in Pro Tools, use the list below to determine which MIDI Continuous Controller numbers are assigned to specific Eleven Rack amp or FX settings.

---

## General/Frequently Used Controls

DIST BYPASS	25	(0–63="Off": 64–127="On")
MOD BYPASS	50	(0–63="Off": 64–127="On")
DELAY BYPASS	28	(0–63="Off": 64–127="On")
REVERB BYPASS	36	(0–63="Off": 64–127="On")
FX LOOP BYPASS	107	(0–63="Off": 64–127="On")
FX1 BYPASS	63	(0–63="Off": 64–127="On")
FX2 BYPASS	86	(0–63="Off": 64–127="On")
WAH BYPASS	43	(0–63="Off": 64–127="On")
AMP BYPASS	111	(0–63="Off": 64–127="On")
AMP OUTPUT	92	
VOLUME PEDAL POSITION	7	
WAH POSITION	4	
MULTI FX CONTROL	11	
TAP TEMPO	64	

---

## Amplifier Controls

### Applies to all amps

AMP BYPASS	111	(0–63=“Off”: 64–127=“On”)
AMP OUTPUT	92	
CAB/MIC BYPASS	71	(0–63=“Off”: 64–127=“On”)

### Tweed Lux

TONE	13	
INSTRUMENT VOLUME	14	
MIC VOLUME	15	
NOISE GATE THRESHOLD	16	
NOISE GATE RELEASE	21	
OUTPUT	10	

### Tweed Bass

PRESENCE	13	
MIDDLE	14	
BASS	15	
TREBLE	16	
BRIGHT VOLUME	21	
NORMAL VOLUME	10	
NOISE GATE THRESHOLD	112	
NOISE GATE RELEASE	3	
OUTPUT	84	

### Black Panel Lux Vibrato

VOLUME	13	
TREBLE	14	
BASS	15	
VIBRATO SPEED	16	
VIBRATO SYNC	21	
VIBRATO INTENSITY	10	
VIBRATO ON/OFF	112	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

### Black Panel Lux Normal

VOLUME	13	
TREBLE	14	
BASS	15	
VIBRATO SPEED	16	
VIBRATO SYNC	21	
VIBRATO INTENSITY	10	
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

## Black Vib

VOLUME	13	
TREBLE	14	
MID	15	
BASS	16	
BRIGHT SWITCH	21	(0-63="Off": 64-127="On")
VIBRATO SPEED	10	
VIBRATO SYNC	112	
VIBRATO INTENSITY	3	
VIBRATO ON/OFF	22	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	24	
OUTPUT	23	

## Black SR

VOLUME	13	
TREBLE	14	
MID	15	
BASS	16	
BRIGHT SWITCH	21	(0-63="Off": 64-127="On")
VIBRATO SPEED	10	
VIBRATO SYNC	112	
VIBRATO INTENSITY	3	
VIBRATO ON/OFF	22	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	24	
OUTPUT	92	

## Black Mini

VOLUME	13	
TREBLE	14	
BASS	15	
VIBRATO SPEED	16	
VIBRATO SYNC	21	
VIBRATO INTENSITY	10	
VIBRATO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

## J45

PRESENCE	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
VOLUME 1	21	
VOLUME 2	10	
NOISE GATE THRESHOLD	112	
NOISE GATE RELEASE	3	
OUTPUT	84	

## AC Hi Boost

NORMAL VOLUME	13	
BRILLIANT VOLUME	14	
BASS	15	
TREBLE	16	
CUT	21	
TREMOLO SPEED	10	
TREMOLO SYNC	112	
TREMOLO DEPTH	3	
TREMOLO ON/OFF	22	(0–63=“Off”; 64–127=“On”)
NOISE GATE THRESHOLD	84	
NOISE GATE RELEASE	24	
OUTPUT	23	

## Black Panel Duo

VOLUME	13	
TREBLE	14	
MIDDLE	15	
BASS	16	
BRIGHT	21	(0–63=“Off”; 64–127=“On”)
VIBRATO SPEED	10	
VIBRATO SYNC	112	
VIBRATO INTENSITY	3	
VIBRATO ON/OFF	22	(0–63=“Off”; 64–127=“On”)
NOISE GATE THRESHOLD	84	
NOISE GATE RELEASE	24	
OUTPUT	23	

## Plexiglas Vari

PRESENCE	13
BASS	14
MIDDLE	15
TREBLE	16
VOLUME 1	21
VOLUME 2	10
NOISE GATE THRESHOLD	112
NOISE GATE RELEASE	3
OUTPUT	84

## Plexiglas - 50w

PRESENCE	13
BASS	14
MIDDLE	15
TREBLE	16
VOLUME 1	21
VOLUME 2	10
NOISE GATE THRESHOLD	112
NOISE GATE RELEASE	3
OUTPUT	84

## Plexiglas - 100W

PRESENCE	13
BASS	14
MIDDLE	15
TREBLE	16
VOLUME 1	21
VOLUME 2	10
NOISE GATE THRESHOLD	112
NOISE GATE RELEASE	3
OUTPUT	84

## Blue Line Bass

VOLUME	13	
TREBLE	14	
MID	15	
BASS	16	
U-LO	10	
U-HI	21	
MID FREQ	3	
BRIGHT ON/OFF	112	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	84	
NOISE GATE RELEASE	24	
OUTPUT	23	

## Lead 800 - 100W

PRESENCE	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PREAMP VOLUME	10	
MASTER VOLUME	21	
NOISE GATE THRESHOLD	112	
NOISE GATE RELEASE	3	
OUTPUT	84	

## M-2 Lead

VOLUME	13	
TREBLE	14	
BASS	15	
MIDDLE	16	
DRIVE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
PRESENCE	3	
NOISE GATE THRESHOLD	84	
NOISE GATE RELEASE	24	
OUTPUT	23	

## SL-100 Drive

PREAMP	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
MOD	112	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

### SL-100 Crunch

PREAMP	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

### SL-100 Clean

PREAMP	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	3	
NOISE GATE RELEASE	84	
OUTPUT	24	

### **Treadplate Modern**

MASTER	13
PRESENCE	14
BASS	15
MIDDLE	16
TREBLE	21
GAIN	10
NOISE GATE THRESHOLD	112
NOISE GATE RELEASE	3
OUTPUT	84

### **Treadplate Vintage**

MASTER	13
PRESENCE	14
BASS	15
MIDDLE	16
TREBLE	21
GAIN	10
NOISE GATE THRESHOLD	112
NOISE GATE RELEASE	3
OUTPUT	84

### **MS-30**

VOLUME	13
TREBLE	15
BASS	14
CUT	16
MASTER	21
NOISE GATE THRESHOLD	10
NOISE GATE RELEASE	112
OUTPUT	3

### **RB01b Red, Blue, and Green**

VOLUME	14
TREBLE	15
MID	16
BASS	21
PRESENCE	13
GAIN	10
BOOST	3
NOISE GATE THRESHOLD	84
NOISE GATE RELEASE	24
OUTPUT	23

## DC Modern Overdrive

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Modern SOD

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Modern 800

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Modern Clean

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Vintage Crunch

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Vintage Overdrive

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Vintage Clean

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

## DC Bass

GAIN	13	
BASS	14	
MIDDLE	15	
TREBLE	16	
PRESENCE	21	
MASTER	10	
BRIGHT	112	(0-63="Off": 64-127="On")
TREMOLO SPEED	3	
TREMOLO SYNC	84	
TREMOLO DEPTH	24	
TREMOLO ON/OFF	45	(0-63="Off": 64-127="On")
NOISE GATE THRESHOLD	23	
NOISE GATE RELEASE	22	
OUTPUT	44	

---

# Effects

## Compression

### Dyn3 Compressor

	(as FX1)	(as FX2)
THRESHOLD	20	113
ATTACK	42	114
RELEASE	60	115
BYPASS	63	86
GAIN	77	96
RATIO	116	97
KNEE	117	98

### Gray Compressor

	(as FX1)	(as FX2)
BYPASS	63	86
SUSTAIN	20	113
LEVEL	42	114

## Delay

### BBD Delay

BYPASS	28	
DELAY	62	
SYNC	33	
MIX	85	
FEEDBACK	35	
INPUT LEVEL	87	
MOD	34	(0-63="Chorus": 64-127="Vibrato")
DEPTH	48	
NOISE	55	(0-63="Off": 64-127="On")
EXPANDED DELAY	49	(0-63="Off": 64-127="On")

### Dyn Delay

BYPASS	28	
SYNC	33	
L/R RATIO	34	
FEEDBACK	35	
HI-CUT	48	
LO-CUT	49	
WIDTH	55	
ENV MOD RATE	59	
DELAY	62	
EM FEEDBACK	72	
EM MIX	73	
MIX	85	
MODE	87	(chooses between four delay modes)

## Tape Echo

BYPASS	28	
DELAY	62	
SYNC	33	
MIX	85	
FEEDBACK	35	
REC LEVEL	87	
HEAD	34	
WOW	48	
HISS	55	(0-63="Off": 64-127="On")
EXPANDED DELAY	49	(0-63="Off": 64-127="On")

## **Distortion**

### **Black Op Distortion**

BYPASS	25
DISTORTION	27
CUT	78
VOLUME	79

### **DC Distortion**

BYPASS	25
DISTORTION	27
TREBLE	78
BASS	79
VOLUME	80

### **Green JRC Overdrive**

BYPASS	25
DRIVE	27
TONE	78
LEVEL	79

### **Tri-Knob Fuzz**

BYPASS	25
VOLUME	27
SUSTAIN	78
TONE	79

### **White Boost**

BYPASS	25
DISTORTION	27
TREBLE	78
BASS	79
VOLUME	80

## EQ

### Graphic EQ

	(as FX1)	(as FX2)
BYPASS	63	86
100 Hz	20	113
370 Hz	42	114
800 Hz	60	115
2 kHz	77	96
3.25 kHz	116	97
OUTPUT	117	98

### Para EQ

	(in FX1)	(in FX2)
BYPASS	63	86
L Q	5	37
LM Q	9	47
HM FREQ	12	58
L GAIN	20	113
HM Q	26	109
H FREQ	29	110
H Q	30	70
LM GAIN	42	114
HM GAIN	77	96
H GAIN	116	97
OUTPUT	117	98
L FREQ	118	99
LM FREQ	119	46

## Modulation

### C1 Chorus/Vibrato

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
CHORUS	61	20	113
RATE	52	42	114
SYNC	53	60	115
DEPTH	54	77	96
CHORUS/VIBRATO	57	116	97
(0-63="CHORUS" 64-127="VIBRATO")			

### Flanger

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
PRE-DELAY	61	20	113
DEPTH	52	42	114
RATE	53	60	115
SYNC	54	77	96
FEEDBACK	57	116	97

### Orange Phaser

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
RATE	61	20	113
SYNC	52	42	114

## Multi-Chorus

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
TRI/SINE	51	117	98
SYNC	52	42	114
DEPTH	53	60	115
PRE-DELAY	54	77	96
VOICES	56	118	99
MIX	57	116	97
RATE	61	20	113
LO CUT	89	5	37
WIDTH	90	119	46

## Roto Speaker

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
SPEED	61	20	113
BALANCE	52	42	114
TYPE	53	60	115

<b>SPEED Setting</b>	<b>Value</b>
Slow	0–31
Brake	32–95
Fast	96–127

<b>TYPE Setting</b>	<b>Value</b>
120	0–9
122	10–27
21H	28–45
Foam Drum	46–63
Rover	64–82
Memphis	83–100
Wolf	101–118
Watery	119–127

## Vibe Phaser

	(as MOD)	(as FX1)	(as FX2)
BYPASS	50	63	86
VOLUME	61	20	113
DEPTH	52	42	114
RATE	53	60	115
SYNC	54	77	96
CHORUS/VIBRATO	57	116	97
(0-63="CHORUS" 64-127="VIBRATO")			

## Reverb

### Blackpanel Spring Reverb

BYPASS	36
MIX	18
DECAY	38
TONE	40

## Eleven SR (Stereo Reverb)

BYPASS	36
MIX	18
DECAY	38
TONE	40
PRE-DELAY	39
TYPE	76

<b>TYPE Setting</b>	<b>Value</b>
Echo Room	0-2
Studio	3-7
Small Room	8-13
Jazz Club	14-18
Small Club	19-23
Garage	24-29
Medium Room	30-34
Tiled Room	35-39
Wood Room	40-45
Small Theater	46-50
Medium Theater	51-55
Large Theater	56-61
Rich Hall	62-66
Concert Hall	67-71
Bright Hall	72-77
Church	78-82
Cathedral	83-87
Arena	88-93
Small Plate	94-98
Medium Plate	99-103
Large Plate	104-109
Canyon	110-114
Supa Long	115-119
Early Reflect 1	120-125
Early Reflect 2	126-127

## Volume Pedal

BYPASS	75	
POSITION	7	

## Wah

### Black Wah

BYPASS	43
POSITION	4

### Shine Wah

BYPASS	43
POSITION	4

---

## Utility Settings

### BYPASS Setting Values

Bypass	0–63
Un-bypass (ON)	64–127

### FX Loop

BYPASS	107
SEND	19
RETURN	108
MIX	88

### FX SYNC Setting Values

Off	0–4
Whole Note	5–14
Dotted Half Note	15–24
Half Note	25–34
Half Note Triplet	35–44
Dotted Quarter Note	45–54
Quarter Note	55–63
Quarter Note Triplet	64–73
Dotted Eighth Note	74–83
Eighth Note	84–93
Eighth Note Triplet	94–103
Dotted Sixteenth Note	104–113
Sixteenth Note	114–123
Sixteenth Note Triplet	124–127

### Tap Tempo

TAP	64	(0–63="tap"; 64–127="tap")
-----	----	----------------------------

### Tuner

BYPASS	69
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---

## Miscellaneous MIDI Controls

### Multiple FX Control (MULTI FX)

PEDAL POSITION	11		
----------------	----	--	--

### Rig Volume

PEDAL POSITION	17		
----------------	----	--	--

### User/Factory Bank Change (Precedes Program Change)

Bank Change	32	Value 1 = Factory Rigs	0= User Rigs
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# Chapter 10: Resources

Whether you are new to Pro Tools or just starting out with your new system, we encourage you to read and utilize the many guides that Pro Tools provides. There are also useful online resources available, giving you everything from Pro Tools tips to Pro Tools answers.

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## About the Pro Tools Guides

In addition to any printed guides included with your system, PDF versions of the printed guides and many additional Pro Tools guides and Read Mes are installed automatically during Pro Tools installation (see “Documentation Installed Automatically with Pro Tools” on page 126). The PDFs are located in the Digidesign/Documentation folder on your local drive.

 *Printed copies of the Pro Tools Reference Guide and other guides in the Pro Tools guide set can be purchased separately from the Avid Store (<http://shop.avid.com>).*

## User Guide

The *User Guide* for your system gives you detailed instructions for setting up and configuring software and hardware for optimum performance.

## Printed Intro to Pro Tools Guide

The printed *Intro to Pro Tools* has tutorials on using Pro Tools (such as recording in a Pro Tools session, importing audio from a CD, and creating an audio CD from a Pro Tools session).

## Guides Accessible in Pro Tools

The main Pro Tools guides are accessible from the Pro Tools Help menu. (Choose Help, then select a guide.)

These include:

- *Pro Tools Shortcuts* provides a complete list of keyboard and Right-click shortcuts for Pro Tools.
- *Audio Plug-Ins Guide* describes the audio plug-ins included with Pro Tools for both real-time and file-based audio processing as well as many other paid plug-in option offered from Avid.
- *Pro Tools Menus Guide* covers all the Pro Tools on-screen menus.
- *Pro Tools Reference Guide* explains Pro Tools software in extensive detail.

## Documentation Installed Automatically with Pro Tools

When you install Pro Tools, you get useful PDF versions of many Pro Tools guides and Read Mes. This documentation can be found in the following locations:

**Mac** Applications/Digidesign/Documentation

**Windows** C:\Program Files\Digidesign\Documentation

 *To view or print PDF guides, you can use Adobe Reader (recommended) or Apple Preview (Mac only).*

### Read Me Files

These contain late-breaking information and known issues pertaining to Pro Tools software and hardware configurations. Read Me files are installed in the Documentation folder when you install Pro Tools.

### Helpful Online Resources

Once you get going, here are some helpful online resources:

- For questions about installation, visit Avid's online Knowledge Base. Go to: <http://www.avid.com/onlinesupport>
- Get useful information, help, and tips from the worldwide community of Pro Tools users at the online User Conference. Go to: <http://duc.avid.com>
- If you can't find your answer on the User Conference or the Knowledge Base, contact Avid email support. Go to: <http://www.avid.com/support>

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## About [www.avid.com](http://www.avid.com)

The Avid website ([www.avid.com](http://www.avid.com)) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

**Product Registration** Register your purchase online.

**Support and Downloads** Contact Avid Customer Success (technical support); download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Knowledge Base or join the worldwide Pro Tools community on the User Conference.

**Training and Education** Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

**Products and Developers** Learn about Avid products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

**News and Events** Get the latest news from Avid or sign up for a Pro Tools demo.

# Chapter 11: Compliance Information

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## Environmental Compliance

### Disposal of Waste Equipment by Users in the European Union



This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

### Proposition 65 Warning

**⚠** *This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.*

### Perchlorate Notice

This product may contain a lithium coin battery. The State of California requires the following disclosure statement: "Perchlorate Material – special handling may apply. See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)."

### Recycling Notice



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## EMC (Electromagnetic Compliance)

Avid declares that this product complies with the following standards regulating emissions and immunity:

- FCC Part 15 Class B
- EN55022 Class B
- EN55024 Class B
- AS/NZS CISPR 22 Class B
- CISPR 22 Class B

## FCC Compliance for United States

### Radio and Television Interference

#### Communication Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or locate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any modifications to the unit, unless expressly approved by Avid, could void the user's authority to operate the equipment.

## Argentine Compliance



## Australian Compliance



## Canadian Compliance

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## CE Compliance

### (EMC and Safety)



Avid is authorized to apply the CE (Conformité Européenne) mark on this compliant equipment thereby declaring conformity to EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.

## Korean EMC Regulations

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

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# Safety Compliance

## Safety Statement

This equipment has been tested to comply with USA and Canadian safety certification in accordance with the specifications of UL Standards: UL60065 7th /IEC 60065 7th and Canadian CAN/CSA C22.2 60065:03. Avid Inc., has been authorized to apply the appropriate UL & CUL mark on its compliant equipment

## Warning



## Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this equipment near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect power cords from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
- 11) Only use attachments/accessories specified by the manufacturer.

12) For products that are not rack-mountable: Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.

13) Unplug this equipment during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) For products that are a Mains powered device: The equipment shall not be exposed to dripping or splashing and no objects filled with liquids (such as vases) shall be placed on the equipment.

**Warning!** To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

16) For products containing a lithium battery:  
**CAUTION!** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

17) For products with a power switch:  
The main power switch is located on the front panel of the Eleven Rack. It should remain accessible after installation.

Before you power on Eleven Rack, make sure any connected amplifiers or powered monitors are turned off or muted. When powering on studio equipment, it is common practice to turn the power on for any amplifiers or powered monitors only after all the other equipment has been powered on. This is to avoid any loud noises that could result from powering on the other devices. This practice is highly recommended for Eleven Rack.

18) The equipment shall be used at a maximum ambient temperature of 40° C.



# Index

## A

- AES/EBU 14
- amp models 26
  - DC Modern & DC Vintage 31
  - Lead 800 29
- Amp Output control 34
- Amplifier 22
- amps
  - '57 Tweed Lux 26
  - '59 Tweed Bass 26
  - '64 Black Panel Lux 26
  - '64 Black Vib 27
  - '65 Black Mini 27
  - '65 Black SR 27
  - '65 J45 27
  - '66 AC Hi Boost 28
  - '67 Black Panel Duo 28
  - '67 Plexiglas Vari 29
  - '68 Plexiglas 50w 29
  - '69 Blue Line Bass 29
  - '82 Lead 800 30
  - '85 M-2 Lead 30
  - '93 MS-30 31
  - '97 RB-01b 31
  - DC Bass 33
  - DC Modern 800 32
  - DC Modern Clean 32
  - DC Modern Overdrive 32
  - DC Modern SOD 32
  - DC Vintage Clean 33
  - DC Vintage Crunch 33
  - DC Vintage OD 33
  - Plexiglas 100w 29
  - SL100 30
  - Treadplate 31
- audio
  - digital connections 66
- Avid
  - customer success 126

## B

- banks 19
- Black Wah 39
- bypass 34

## C

- Control knobs 4, 11, 21
- Control pages 21, 24
- Control window 74

## D

- Display 20

## E

- Edit/Back button 10, 21
- Effects 22
- Effects Bypass buttons 4
- Effects Control buttons 10
- effects models 38
  - delay 44
    - BBD Delay 44
    - Dyn Delay 45
    - Tape Echo 44
  - distortion 39
    - Black Op Dist 39
    - DC Distortion 40
    - Green JRC OD 40
    - Tri Fuzz 39
    - White Boost 40
- EQ & compressor effects 46
  - Dyn III Compressor 48
  - Graphic EQ 46
  - Gray Comp 47
  - Para EQ 46

- modulation 41
  - C1 Chor/Vib 41
  - Flanger 41
  - Multi-Chorus 42
  - Orange Phaser 42
  - Roto Speaker 43
  - Vibe Phaser 42
- reverb 43
  - Blackpanel Spring Reverb 43
  - Eleven SR 43
- Volume Pedal 38
- wah 39
  - Black Wah 39
  - Shine Wah 39
- Eleven Rack Control Window 74
- Eleven Rack Control window 17
  - accessing 75
- Embedded Rig settings 83
- Exp. Pedal/Footswitch input 15
- Expression pedal 56
  - calibration 56
  - configuring from within Pro Tools 77

## **F**

- footswitch accessory 19
- FX Loop 24
- FX Loop I/O 13

## **G**

- guitar amp outputs (Output to Amp) 12
- Guitar input 12

## **H**

- headphones 3

## **I**

- input and output connectors 14
- installing Pro Tools 61

## **K**

- key commands 6

## **L**

- Line inputs 14
- live setup 51

## **M**

- Main outs 13
- Master Control section 80
- Mic input 11
- microphone models 37
  - Cond 67 37
  - Cond 87 37
  - Dyn 12 38
  - Dyn 20 38
  - Dyn 409 37
  - Dyn 421 37
  - Dyn 57 37
  - Dyn 7 37
  - Ribbon 121 38

## **MIDI**

- connections 67
- controlling Eleven Rack with 87
- I/O ports 14
- MIDI foot controller 19

## **N**

- Noise 34
- Noise Gate 34

## **O**

- Output to Amp outputs 12, 14

## **P**

- Page indicator 21
- phantom power 66
  - when to use 11
- Phones output 12
- power switch 4, 9
- Pro Tools
  - installing 61
  - using Eleven Rack as external processor 68

## **R**

- re-amping 86
- Rig devices
  - Amp 22
  - Cab 22
  - Dist 22
  - Dly 23
  - FX Loop 23
  - FX1 and FX2 22

- Mod 22
- moving 24
- Rev 22
- Vol 22
- Wah 22
- Rig Input 90
- Rig Select mode 18
  - Default display mode 18
  - Details display mode 18
  - Simple display mode 18
- Rig View 21
- Rigs 17, 19
  - devices 20
  - embedding in audio regions 83
  - moving devices 24
  - organization 19
  - User & Factory rigs 19

## **S**

- S/PDIF 14
- Save button 10, 25
- saving 25
- Scroll wheel 4, 10, 21
- Shine Wah 39
- signal routing 24
- Speaker Breakup 36
- speaker cabinet models
  - 1x12 Black Lux 35
  - 1x12 Tweed Lux 35
  - 1x15 Open Back 35
  - 1x8 Custom 35
  - 2x12 AC Blue 35
  - 2x12 B30 35
  - 2x12 Black Duo 35
  - 2x12 Silver Cone 35
  - 4x10 Black SR 36
  - 4x10 Tweed Bass 35
  - 4x12 65W 36
  - 4x12 Classic 30 36
  - 4x12 Green 20W 36
  - 4x12 Green 25 Watt 36
  - 8x10 Blue Line 36
- Stereo Width control 67
- studio monitors 3
- studio setup 63
- SW1 and SW2 switches 10

## **T**

- Tap Tempo 10
- technical support 126
- Tremolo 33
- True-Z 12
- Tuner view 10

## **U**

- User Options mode 10
  - settings 89
- Utility settings
  - Display 23
  - Input 20, 21
  - Output 20, 23
  - Pedal 20, 23
  - Tempo 20, 23

## **V**

- volume knob 4, 9

## **W**

- website 126







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**Technical Support (USA)**  
Visit the Online Support Center at  
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