

ELEVEN

Eleven™ Free Plug-in

Version 8.0

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Product features, specifications, system requirements, and availability are subject to change without notice.

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Documentation Feedback

At Digidesign, we're always looking for ways to improve our documentation. If you have comments, corrections, or suggestions regarding our documentation, email us at **techpubs@digidesign.com**.

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chapter 1

Introduction

Welcome to Eleven™ Free, Digidesign's free guitar amplifier plug-in for Pro Tools® and Avid® systems. Eleven Free gives you two custom guitar amplifiers and two cabinet models, selected from among the “best of the best” vintage and contemporary gear provided in the full version of Eleven.

Eleven Free Plug-in Features

- Two custom amp models from Digidesign®.
- Two speaker cabinet models.
- Amps and cabinets can be mixed and matched.
- All controls can be automated.
- Noise Gate to control any unwanted noise.
- Settings files (presets) to store and recall factory and custom tones.
- Support of any compatible work surface or MIDI controller. MIDI Learn provides effortless mapping to any continuous controller (CC)-capable MIDI device.
- Support of sample rates of 96 kHz, 88.2 kHz, 48 kHz, and 44.1 kHz.
- Support of up to 8 channel (7.1) operation, in mono or multi-mono plug-in only.
- Available in RTAS® and AudioSuite™

System Requirements

To use Eleven Free you'll need one of the following:

- A Digidesign-qualified Pro Tools|HD[®], Pro Tools LE[®], or Pro Tools M-Powered[™] system (Eleven Free is RTAS and AudioSuite only)
- A qualified Avid system (AudioSuite only)
- A third-party software application that supports the Digidesign RTAS, or AudioSuite plug-in standards

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

For complete system requirements and a list of Digidesign-qualified computers, operating systems, hard drives, and third-party devices, refer to the latest information on the Digidesign website:

www.digidesign.com/compatibility

Working with Plug-ins

Refer to the *Pro Tools Reference Guide* for detailed information on working with plug-ins, including:

- Inserting plug-ins on tracks
- Clip indicators
- Navigating the Plug-in window
- Adjusting plug-in controls
- Automating plug-ins
- Using Plug-in Presets
- Using AudioSuite

Conventions Used in This Guide

All Digidesign 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 (Windows)	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 Pro Tools session data or the performance of your Pro Tools system.



Shortcuts show you useful keyboard or mouse shortcuts.



Cross References point to related sections in the Pro Tools Guides.

Pro Tools M-Powered



References to Pro Tools LE in this guide are interchangeable with Pro Tools M-Powered.

About www.digidesign.com

The Digidesign website (www.digidesign.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 Digidesign Technical Support or Customer Service; download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Answerbase or join the worldwide Pro Tools community on the Digidesign 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 Digidesign 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 Digidesign or sign up for a Pro Tools demo.

Pro Tools Accelerated Videos Watch the series of free tutorial videos. Accelerated Videos are designed to help you get up and running with Pro Tools and its plug-ins quickly.

chapter 2

Installation

Eleven Free is installed automatically along with other free DigiRack™ plug-ins included with your Pro Tools system.

The installer for the Eleven Free plug-in can also be downloaded from the DigiStore (www.digidesign.com)

Installing Eleven Free Download Version

To install the Eleven Free plug-in:

- 1** Download the installer for your computer platform from the Digidesign website (www.digidesign.com). After downloading, make sure the installer is uncompressed (.SIT on Mac or .ZIP on Windows).
- 2** Double-click the Eleven Free Installer (Mac) or Setup (Windows) application.
- 3** Follow the on-screen instructions to complete the installation.
- 4** When installation is complete, click Quit (Mac) or Finish (Windows).

The Eleven Free Installer installs the Eleven Free plug-in in the following location:

- Library/Application Support/Digidesign/Plug-Ins folder (Mac).
- or –
- Program Files/Common Files/Digidesign/DAE/Plug-Ins folder (Windows)

Removing Eleven Free

If you need to remove the plug-in from your system, follow the instructions below for your computer platform.



You can also remove Settings files and documentation for Eleven (Library/Application Support/Digidesign/Plug-In Settings, and Applications/Digidesign/Documentation, respectively).

Mac OS X

To remove the Eleven plug-in:

- 1 Locate and open the Plug-Ins folder on your Startup drive (Library/Application Support/Digidesign/Plug-Ins).
- 2 Do one of the following:
 - To permanently remove a plug-in, drag it to the Trash, then empty the Trash.
 - or –
 - To keep a copy of the plug-in but not load it when you launch Pro Tools, drag it to the Plug-Ins (Unused) folder (Library/Application Support/Digidesign/Plug-Ins (Unused)).

Windows XP

To remove the Eleven Free plug-in:

- 1 From the Start menu, choose Settings > Control Panel and double-click Add or Remove Programs.
- 2 Select the Eleven plug-in from the list of installed applications and click the Change/Remove button.
- 3 Follow the on-screen instructions to remove the plug-in.
- 4 When removal is complete, click OK to close the window.

Windows Vista

To remove a plug-in:

- 1 Choose Start > Control Panel.
- 2 Double-click Programs and Features.
- 3 Select the plug-in from the list of installed applications.
- 4 Click Uninstall.
- 5 Follow the on-screen instructions to remove the plug-in.

chapter 3

Input Calibration and QuickStart

This chapter shows you how to get connected, calibrated, and cranking through Eleven Free.

💡 *Throughout this guide, references to Pro Tools LE also apply to Pro Tools M-Powered.*

Before You Begin

Eleven was designed to model the essential aspects of each amplifier including characteristics of the input stage. Providing an appropriate level of signal delivers the most accurate response from the plug-in.

- If you're working with pre-recorded guitar tracks, see "Working with Pre-Recorded Tracks" on page 12.
- If you're working with a live guitar signal, follow the steps on the next few pages for optimal input level calibration. Input calibration takes only a couple of minutes, and helps ensure the best results with Eleven, its amps, and its factory presets.

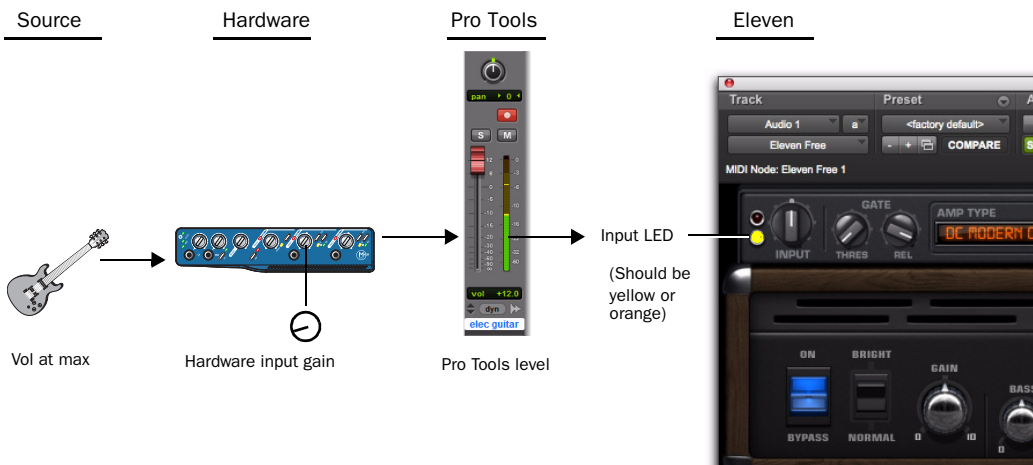


Figure 1. Basic gain stages to calibrate live guitar input for Eleven

1: Connect your Guitar and Configure Source Input


If your setup includes pedals or other gear, it helps to know whether the final output device is providing an instrument- or line-level signal. Choose and configure your input and source settings accordingly. (Check the *Setup Guide* that came with your system for more information.)



Pro Tools LE

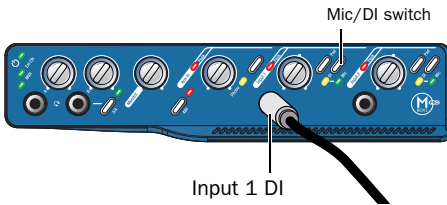
To connect your guitar to a Pro Tools LE system:

1 Plug your guitar into an available DI (direct in) input on your Pro Tools LE audio interface.

 *If you use a direct box to convert your guitar's hi-impedance output to a low-impedance signal, connect the direct box to an Instrument or Line input instead of the DI input.*

2 Make sure to select the correct source input (DI) on your interface.

For example, on Mbox 2 Pro, press the Input 1 Mic/DI switch until the DI indicator LED is lit.



Guitar into Mbox 2 Pro




Pro Tools|HD

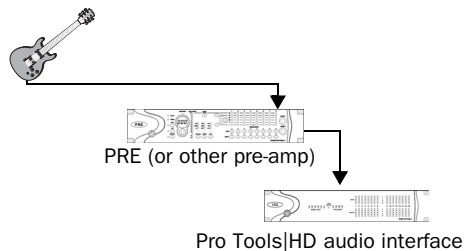
To connect your guitar to a Pro Tools|HD system:

1 Make sure you have a pre-amp (such as a Digidesign PRE) or similar unit connected to a Pro Tools|HD audio interface.

2 Plug your guitar into an available pre-amp input and set its source, impedance, and other settings as needed for your setup.

 *If you use a direct box to convert your guitar's hi-impedance output to a low-impedance signal, set the Line/Inst 1 input to Line source or the equivalent on your particular pre-amp.*

For example, if using a Digidesign PRE you can plug your guitar directly into the front panel Line/Inst 1 input, then set its source to Inst.



Guitar into Digidesign PRE into a 192 I/O

2: Set Hardware and Levels

After plugging in, do the following to set your primary gain and configure your Pro Tools hardware by watching its input indicators (meters). This sets the first stage of your gain structure for Eleven.



Pro Tools LE

To prepare your guitar and Pro Tools LE hardware for input calibration:

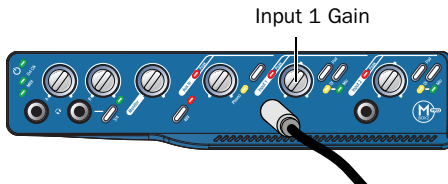
- 1 In Pro Tools, choose Setup > Playback Engine and set your Hardware Buffer to a low enough setting to reduce monitor latency.
- 2 On your guitar, select the highest output pickup or position and set the volume and tone controls to 10 (maximum).
- 3 Strum full chords (your loudest expected playing) while watching the Input indicators on your audio hardware.
- 4 Adjust the Input Gain on your audio interface high enough to indicate a strong signal on the hardware Input LED (but not overloading the input).



Pro Tools|HD

To prepare your guitar and Pro Tools|HD hardware for input calibration:

- 1 On your guitar, select the highest output pickup or position and set all volume and tone controls to the maximum.
- 2 Strum full chords (your loudest expected playing) while watching the Input indicators on your audio hardware.
- 3 Adjust your pre-amp input gain until you see a strong signal on your audio interface Input meters (but not overloading the input).



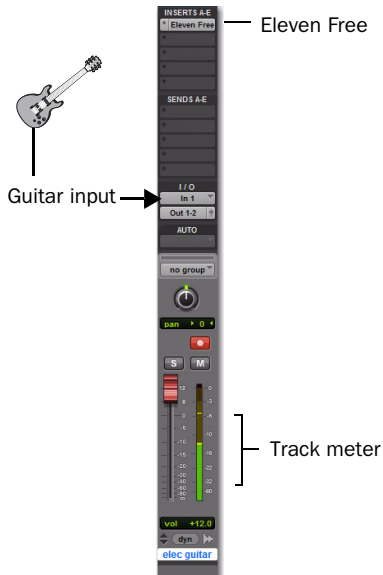
Input 1 Gain on Mbox 2 Pro

3: Set Up a Pro Tools Track

In this step, you'll create and configure an audio track to use for the final stage of input calibration.

To set up and check Track level (all systems):

- 1 Choose Tracks > New, and create one mono Audio track.
- 2 In the Mix window, click the track Input selector and choose your guitar input.
- 3 Click the track Insert selector and select Eleven Free.



One audio track, for input calibration on Pro Tools LE

- 4 Record enable the audio track, or enable its TrackInput monitoring button.

4. Set Up Eleven Free

Use the Input LED in Eleven Free to make your final gain adjustments and complete the input calibration process.

To calibrate your input signal to the Eleven Free plug-in:

- 1 Open the Eleven Free plug-in window by clicking its insert slot. Leave it at its default settings.



Figure 2. Eleven's Input LED

- 2 Strum as hard as you can a few more times and watch Eleven's Input LED to see where your level registers. The Input LED lights green, yellow, orange, or red to indicate the following level ranges:

Green (Off to -8) Indicates signal is present, but too low.

Yellow (-8 to -4) Indicates the best level for low output sources, such as single coil pickups.

Orange (-4 to 0) Indicates the best level for higher output sources, such as humbucker pickups.

Red (0 and above) Indicates that you have clipped the plug-in input. Click the Input LED to clear the clip indicator.

- 3 Leaving the Input control on the plug-in at its default setting of 0 (12:00 position), set the signal level going to the plug-in by adjusting the input gain control on your hardware until Eleven's Input LED shows yellow or orange.

- 4 After calibrating, strum as you normally would and/or back down your guitar volume from the maximum setting used for input calibration. Don't worry about the Input LED showing yellow or orange when playing normally. As long as the plug-in isn't indicating clipping, your gain staging should be established.

- 5 Adjust the Output knob in Eleven's Master section to raise or lower the plug-in output signal.

▲ *Proper input calibration of live guitar does not require any adjustment of Eleven's Input control. To learn how this control was designed to work with the amp models, see "Input" on page 16.*

Working with Pre-Recorded Tracks

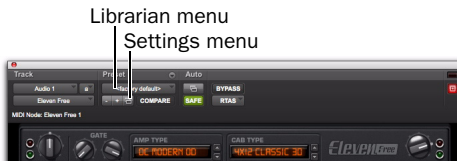
If the pre-recorded tracks weren't calibrated with the Eleven plug-in using the method previously described, you can use the Input control in Eleven to adjust the signal level feeding the input stage of the amp model.

Use your ears as a guide and adjust to taste. Since the Input LED measures the signal level entering the plug-in and precedes the input control, you will not see any changes to the Input LED as you make adjustments.

What to Do Next

To get started playing music with Eleven:

- 1 Make sure you already calibrated your input signal as explained in the previous sections of this chapter.
- 2 Click the plug-in's Librarian menu and choose a factory preset, then play guitar. Take your time to explore — the Presets let you hear all of Eleven's different amps and combos.



Plug-in controls for Eleven Settings files

- 3 Turn to Chapter 4, “Using Eleven Free” for specific details on Eleven's main controls, and for suggested track setups for recording, jamming, and mixing.



Use the Settings menu to save, copy, paste, and manage plug-in settings files. To save a setting, see “Settings (Presets)” on page 15. For additional information, see the Pro Tools Reference Guide.

chapter 4

Using Eleven Free

The following pages introduces you to the main sections and controls in Eleven Free and show you how to use them. You'll also find suggested track setups and signal routing tips to help you get the most out of Eleven Free.

Inserting Eleven Free on Tracks

Eleven Free is an RTAS plug-in that can be inserted on Pro Tools audio, Auxiliary Input, Master Fader, or Instrument tracks for real time processing.

Eleven Free is also available in AudioSuite format for non-real time, destructive processing.

To insert Eleven Free on a track:

- Click an Insert selector on the track and choose Eleven Free.

Channel Formats

Eleven Free is available as a mono or multi-mono RTAS plug-in only. For use in stereo or greater formats up to 7.1/8-channel choose the multi-mono version.

Sample Rates

Eleven Free supports 96 kHz, 88.2 kHz, 48 kHz and 44.1 kHz sample rates.

Category and Manufacturer

When Pro Tools plug-ins are organized by Category or Manufacturer, Eleven Free is listed as follows:

Category Harmonic

Manufacturer Digidesign

Adjusting Eleven Free's Parameters

This section tells you how to adjust parameters using your mouse or a Pro Tools worksurface. For information on MIDI control, see "Using MIDI and MIDI Learn" on page 14.

Editing Parameters Using a Mouse

You can adjust Eleven Free's rotary controls by dragging horizontally or vertically. Parameter values increase as you drag upward or to the right, and decrease as you drag downward or to the left.

Keyboard Shortcuts

- ◆ For finer adjustments, Command-drag (Mac) or Control-drag (Windows) the control.
- ◆ To return a control to its default value, Option-click (Mac) or Alt-click (Windows) the control.


Navigating the Amp and Cab Type Selectors

You can click on the name of the current Amp Type or Cab Type display their pop-up menus and select an item.



Previous/Next arrows (Amp Type shown)

You can also click the Previous/Next arrows to step through choices one at a time.

 You can control the Amp and Cab selectors with MIDI. See “Using MIDI and MIDI Learn” on page 14

Enabling Switches


To enable or disable a switch or button, such as Amp Bypass, click it to toggle its setting.

Groups and Linked Plug-in Controls

Eleven Free’s parameters can follow Pro Tools Groups (Mix, Edit, or Mix/Edit) for linked control of multiple inserts. For more information, see the *Pro Tools Reference Guide*.

Using Automation

All of Eleven Free’s parameters can be automated. When a parameter has been enabled for automation, an LED appears lit near that control.

 See the *Pro Tools Reference Guide* for more information on plug-in automation.

Using a Pro Tools Worksurface

Eleven Free can be controlled directly from any compatible Pro Tools worksurface. Eleven Free appears along with other plug-ins and can be assigned, edited, bypassed and automated using the Insert section as available on the particular worksurface being used.

Using MIDI and MIDI Learn

Eleven Free supports MIDI Control Change (CC) messages, meaning that the Master section, amp, cabinet and mic parameters can be controlled remotely by any CC-capable MIDI device. This includes MIDI controllers, mixers, and instruments, as well as the Digi 003 (in MIDI Mode).

MIDI Learn lets you quickly map plug-in controls to a MIDI foot pedal, switch, fader, knob, or other CC-compatible trigger. You can also manually assign controls to specific MIDI CC values.

It’s a Session Thing


MIDI control assignments are saved and restored with the Pro Tools session in which they are defined. Settings files (presets) for Eleven Free do not store or recall MIDI Learn assignments.

To map a MIDI controller to a parameter:

- 1 Make sure your external MIDI device is connected to your system, and recognized by your Audio MIDI Setup (Mac) or MIDI Studio Setup (Windows).
- 2 Right-click on any control in Eleven Free.



Right-clicking for MIDI Learn

 *If your Mac does not have a two-button mouse, Control-click an Eleven Free parameter to show the MIDI Learn menu. Note that you won't be able to use the Control key modifier to "clutch" a Grouped control.*

3 Do either of the following:

- Click Learn, then move the desired control on your MIDI controller. Pro Tools maps whichever control you touch to that plug-in parameter.
- or –
- If you know the MIDI CC value of your foot controller or other device, select it from the Assign menu.

To clear a MIDI assignment:

- Right-click the control and choose Forget.

Settings (Presets)

You can pick a preset from the plug-in Librarian menu.

To load a preset:

- Click the Librarian menu and select an available Settings file.




Plug-in controls for Eleven Free Settings files

You can save, import, copy, paste, and manage settings using the Settings menu.

To save your settings as an Eleven Free preset:

- 1 Configure Eleven Free for the desired tone.
- 2 Click the Settings menu and choose Save Settings. Name the preset, choose a location, and click Save.

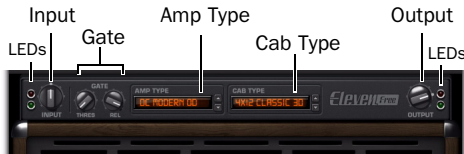
You can scroll through and select preconfigured Eleven Free Settings files (presets) using the plug-in Librarian menu, and the +/- buttons.

 *For more information on Settings files and folders, see the Pro Tools Reference Guide.*

Master Section

The Master section includes plug-in I/O (input/output) and noise gate controls, the Amp Type selector and the Cab Type selector.

The Master section doesn't change when you switch amps. Master section settings are stored and recalled with plug-in presets.



Master section

Input LED


The Input LED shows green, yellow, orange, or red to indicate whether you are under- or over-driving the plug-in. The Input LED is before the Input section of the Master section. To learn more about the Input LED within the Eleven signal chain, see “Eleven Free Signal Flow” on page 26.

Input

The Input knob provides input trim/boost, for tone and distortion control. The Input range is -18 dB to $+18$ dB.


The Input knob provides a great way to increase or decrease gain with amp models that don't have a separate preamp control. It also provides a way to trim or boost the level of pre-recorded tracks you want to treat with Eleven Free

It is important to note that the setting of the Input knob is saved and restored with Settings files (presets).

 To learn more about the Input control, see “Eleven Free Signal Flow” on page 26

Output

The Output control sets the output gain after processing, letting you make up gain or prevent clipping on the channel where the plug-in is being used. Output range is -60 dB to $+18$ dB.

 When you want to adjust Eleven Free's output level, use the Output knob. For tone/distortion, use the amp Master volume.


Gate

Noise Gate Threshold

The Noise Gate Threshold control sets the level at which the Noise Gate opens or closes. At minimum Threshold setting, the Noise Gate has no effect. At higher Threshold settings, only louder signals will open the Gate and pass sound. Threshold range is from Off (-90 dB) to -20 dB.

Noise Gate Release

The Noise Gate Release control sets the length of time the Noise Gate remains open and passing audio. Adjust the Release to find the best setting for the current task (not too fast to avoid cutting off notes, and not too slow to avoid unwanted noise). Release range is from 10 ms to 3000 ms.

 For suggested gate applications, see “Using the Noise Gate” on page 17. For details on where it derives its key (trigger) and applies its gate, see “Eleven Free Signal Flow” on page 26.

Amp Type

Amp Type selects which amplifier model to use (see “Amp Types” on page 17).

Cab Type

This selector lets you select which speaker cabinet model to use (see “Cabinet Types and Controls” on page 20).

Using the Noise Gate

You can use the Noise Gate to silence unwanted signal noise or hum, or just for an effect.

To use the Noise Gate to clean up unwanted, low level noise:

- 1 Connect and calibrate your guitar as explained in Chapter 3, “Input Calibration and QuickStart.”
- 2 For the next steps, hold your guitar but don’t play it (and be sure to leave its volume up). You should hear only the noise that we’ll soon get rid of.
- 3 To make it easier to hear the effect, begin by setting the Release to its middle (12 o’clock) position.
- 4 Now raise the Threshold control to its highest setting, fully clockwise, so that the Gate fully closes (you shouldn’t hear anything coming through Eleven Free).
- 5 Slowly lower the Threshold control until the Gate opens again to find the cutoff (or, threshold) of the noise.
- 6 Raise the Threshold control again slightly, increasing it only enough to once again silence the noise (hold Command (Mac) or Ctrl (Win) while adjusting to be able to fine-tune the setting in tenths of a dB). Now you’re in the ballpark.
- 7 If you lowered the Release setting as suggested in step 3, make sure to return it to its maximum setting (fully clockwise) before continuing.

8 Next, play a full chord and let it ring, and listen to the decay (fade out) of the guitar through Eleven Free. The key to using the Release control is to set it high enough to keep the guitar sounding natural without staying open so long the noise level rises back too much before the Gate completely closes. Adjust the Rel (Release) setting as needed:

- If your chord is “cut off” too quickly, slowly increase the Release setting for a slower closing of the Gate. Higher settings yield more natural results with less chance of cutting off a quiet signal too abruptly.
- Lower the Release to close the Gate faster. This can help give a track a nice choppy feel, but risks cutting off the decay or sustain of notes unnaturally.

Amp Types

The Amp Type selector lets you choose an amp.



Amp Type selector

Choosing an amp from the Amp Type selector

Available Amp Types include the following:

- DC Modern Overdrive
- DC Vintage Crunch



Visit the *Digidesign* website (www.digidesign.com) to learn about each of the amps used to create the full version of *Eleven*.

Amp Controls

Each Eleven Free amp provides a set of controls similar to (and in some cases identical to) those on the actual amp it models. The following sections give an overview of amp controls as they appear in Pro Tools. Keep in mind that not all amp types will show all the controls described in this section.



Figure 1. Amp controls in the default Amp Type

Amp Bypass

The Amp Bypass switch (or lamp) lets you bypass just the amp model, leaving the cab and mic settings in effect. The default setting is On. When set to Bypass, only the amp is bypassed; Master section, cabinet and microphone settings remain active.

Bright

The Bright switch provides extra high frequency response to the input signal, and alters the timbre of the distortion. On some amp models, the effect is most apparent at lower volume settings.

Gain 1

Gain 1 determines the overall gain amount and sensitivity of the amp. When Gain 1 is low it allows for cleaner, brighter sounds with enhanced dynamic response. When set high, the entire personality of the amp changes, becoming fatter and overdriven. Gain 1 responds differently

with each amp model and is designed to have a musical response that closely matches that of its original amp, at all settings. The default setting is 5.0. Gain 1 range is from 0 to 10.

Gain 2

Gain 2 is only available on some amps in the full version of Eleven.

Tone

Tone controls let you shape the highs, mids and lows of the amp sound. Electric guitar pickups tend to have a strong low-mid emphasis and little high frequency response, often producing a mid-range heavy sound that requires some treble boost. The response and interaction of the tone controls are unique to each amp.

Bass

The Bass control determines the amount of low end in the amp tone. The response of this control in some models is linked to the setting of the Treble control. The default setting is 5.0. Bass range is from 0 to 10.

Middle

The Middle control determines the mid-range strength in lower gain sounds. With high gain amp models, the Middle control has a more dramatic effect and can noticeably shape the sound of the amp at both the minimum and extreme settings. The default setting is 5.0. The Middle range is from 0 to 10.

Treble

In most amp models, the Treble control is the strongest of the three tone controls. Its setting determines the blend and strength of the Bass and Middle controls. When Treble is set to higher values, it becomes the dominant tone control, minimizing the effect of Bass and Middle controls. When Treble is set to lower values, the Bass and Middle have more effect, making for a darker amp tone. The default setting is 5.0. The Treble range is from 0 to 10.

Presence

The Presence control provides a small amount of boost at frequencies above the treble control. Presence is applied at the end of each amp model pre-amp stage, acting as a global brightness control that is independent of other tone controls. The default setting is 3.0. The Presence range is from 0 to 10.

Master

The Master control sets the output volume of the pre-amp, acting as a gain control for the power amplifier. In a standard master-volume guitar amp, as the Master volume is increased more power tube distortion is produced. The default setting is 5.0. Master range is from 0 to 10.



Some might assume a Master volume knob capable of silencing the amp completely. Not so. Use the Output knob (in the Master section) to silence the output of the plug-in. Use Master volume for tone and distortion.

Tremolo

Tremolo is achieved through the use of amplitude modulation, multiplying the amplitude of the pre-amp output by a waveform of lower frequency. Tremolo is not available on all amps.

Tremolo Speed

The Speed control sets the rate of the Tremolo effect. The Tremolo Speed LED pulses at the rate of Tremolo Speed. The default setting is 5.0.



Eleven Free does not support Tempo Sync.

Tremolo Depth

The Depth controls the amount of the Tremolo effect. The default setting for this control is 0.0, which is equivalent to off.

Cabinet Types and Controls

The Cab Type selector lets you pick a cabinet to use with the current amp. The selected cabinet and its controls are displayed directly below the amp controls.



Cabinet Type selector in the Master section

Available cabinets include the following:

- 4x12 Classic 30
- 4x12 Green 25W

Cabinets are listed by their number and diameter of their speakers. For example, “4x12” means a cabinet has four 12-inch speakers.

Tracks and Signal Routing for Guitar

The way you set up Pro Tools tracks and signal routing can vary depending on what you want to do while recording and mixing with Eleven Free. This section gives you a few specific examples of some of the many different ways you can choose to work:

- “Recording Dry” on page 20.
- “Recording Eleven Free” on page 21.
- “Recording Dry and Eleven Free Simultaneously” on page 22.
- “Processing Pre-Recorded Tracks” on page 23.

Recording Dry

(Monitor through Eleven Free)

This workflow lets you record dry (clean) while the recorded signal is processed through Eleven Free, letting you hear it but without committing the track to that tone forever.

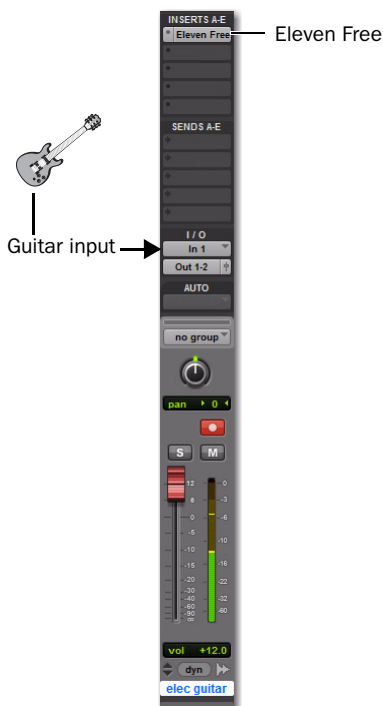
The flexibility to audition and compare different settings and combinations of amps, cabinets and microphones is a very creative and powerful tool for mixing and arranging.

To record dry and monitor through Eleven Free:

- 1** Choose Track > New, configure the New Track dialog to create one mono Audio Track, and click Create.
- 2** Set the track input to the audio interface input your guitar is plugged in to.
- 3** Insert Eleven Free on the track (see “Inserting Eleven Free on Tracks” on page 13).
- 4** Choose a Settings file (preset), or adjust Eleven Free’s parameters to get your tone (see “Settings (Presets)” on page 15).

5 Record enable the track, or enable TrackInput monitoring (Pro Tools HD only) and check your levels.

6 When you're ready, arm the Pro Tools Transport and press Record to record your part.



Audio track for recording dry, while hearing Eleven Free

The audio that is recorded is the dry (unprocessed) signal only, while the audio being heard is processed through Eleven Free and any other plug-ins inserted on the track.

Recording Eleven Free

(Record Processed Track to Disk)

In this workflow, the audio output of Eleven Free is recorded to disk while tracking. Usually, no additional dry track is recorded.

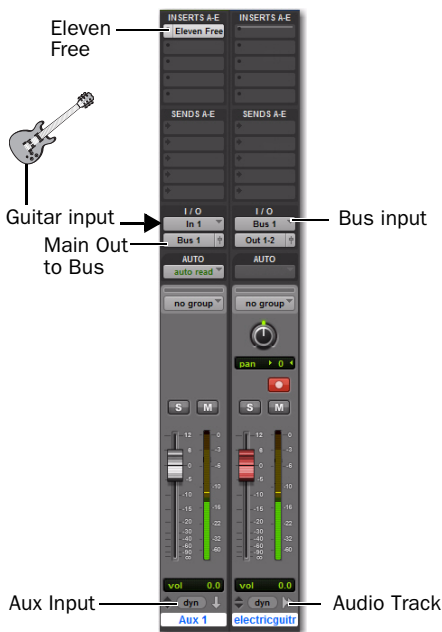
This method commits your track to the original Eleven Free tone used while tracking. It requires two tracks (an Auxiliary Input and an audio track), but after tracking, the plug-in can be deactivated or removed to free up processing resources.

To record guitar with Eleven Free while playing:

- 1 Choose Track > New.
- 2 Configure the New Tracks dialog as follows:
 - Create one mono Auxiliary Input track.
 - Click the Add Row button (+).
 - Create one mono audio track.
 - Click Create.
- 3 In the Mix (or Edit) window, configure the Aux Input by doing the following:
 - Click the Input selector and choose your guitar input (the audio interface input your guitar is plugged in to).
 - Click the Output selector and choose Bus 1.
 - Click the Insert selector and select Eleven Free.

4 Configure the audio track by doing the following:

- Click the Input selector and choose Bus 1.
- and –
- Record enable the audio track.



Recording Eleven Free (printing its output)

5 Make sure you are not overloading your input signal by checking levels in all tracks and Eleven Free's Input LED.

6 When you're ready, arm Pro Tools and begin recording.

The output from Eleven Free is recorded to disk. If you need to conserve RTAS processing resources, you can remove or deactivate Eleven Free after recording.

Recording Dry and Eleven Free Simultaneously

You can record a dry, unprocessed track and an Eleven Free-processed track simultaneously. This method gets the best of both worlds by tracking dry (to experiment with tones later) and at the same time recording the tone used on the original tracking session. It requires two audio tracks, as follows:

To record guitar dry and with Eleven Free live:

- 1 Choose Track > New.
- 2 Configure the New Tracks dialog to create two mono audio tracks. then click Create.
- 3 In the Mix (or Edit) window, configure the first (left-most) new audio track by doing the following:

- Click the Input selector and choose your guitar input (the audio interface input your guitar is plugged in to).
- Click the Output selector and choose Bus 1.
- Click the Insert selector and select Eleven Free.
- Record enable the audio track.

4 Configure the second audio track by doing the following:

- Click the Input selector and choose Bus 1.
- and –
- Record enable the audio track.

5 Make sure you are not overloading your input signal by checking levels in all tracks and Eleven Free's Input LED.

6 When you're ready, arm Pro Tools and begin recording.

The dry guitar is recorded to the first audio track, processed through Eleven Free, then bussed to the second audio track and recorded to disk.

Processing Pre-Recorded Tracks

You can process pre-recorded guitar tracks, or almost any material, through Eleven Free.

To listen to pre-recorded tracks through Eleven Free (without re-recording):

- 1 Import and place your audio in a Pro Tools audio track.
- 2 Assign the audio track Output to Bus 1.
- 3 Create an Aux Input track, and configure it as follows:
 - Click its track Input selector and choose Bus 1.
 - and –
 - Click the Insert selector and select Eleven Free.
- 4 Begin playback and watch Eleven Free's Input LED to check your level. Make sure you're not clipping Eleven Free's input.
- 5 While listening, adjust Eleven Free's Input knob to increase or decrease input level.
- 6 After setting your gain structure, do any of the following:
 - Try different Settings files (presets) to get your basic tone.
 - Adjust amp controls.
 - Try a different cabinet.
- 7 Apply other plug-ins, or bus the Aux Input to another track for additional processing.

To process and re-record tracks through Eleven Free:

- 1 Import and place your audio in a Pro Tools audio track.
- 2 Configure the source audio track by doing the following:
 - Assign the audio track Output to Bus 1.
 - and –
 - Click the Insert selector and select Eleven Free.
- 3 Choose Track > New and create one mono audio track.
- 4 Configure the new audio track as follows:
 - Click its track Input selector and choose Bus 1.
 - and –
 - Click the Insert selector and select Eleven Free.
- 5 Record enable the new audio track (or enable TrackInput monitoring if using Pro Tools HD).
- 6 Begin playback and start listening.
- 7 While listening, adjust Eleven Free's Input knob to increase or decrease input level.
- 8 When everything sounds and looks good, locate to where you want to begin recording (or make a time selection), arm the Pro Tools Transport and press Play to start recording.

Tips and Suggestions

This section leaves you with some tips and suggestions for other ways you can integrate Eleven Free into your sessions.

Managing Plug-In Resources

If system resources need to be conserved or minimized, you can bus record the track with effects to “commit” Eleven Free tones to disk. See “Recording Eleven Free” on page 21.


Or, use the AudioSuite version to print Eleven Free tracks to disk. AudioSuite is especially useful when you’re processing loops or other shorter-form guitar material.

Track Templates and Importing Session Data

With Pro Tools 8.0 and higher, you can use the Quick Start feature for working with templates. See the *Pro Tools Reference Guide* for information on how you can use this feature to build up your own library of session templates and track configurations. These are a great way to make sure your creative moments aren’t interrupted by session chores.

In all versions of Pro Tools, the Import Session Data feature lets you import tracks from one session into another, including their I/O and signal routing assignments, plug-ins, and settings. You can use this feature as a way to store and recall templates for different Eleven Free setups.

When you set up tracks for various Eleven Free applications, keep note of the name of the session. The next time you want to use that same set up, use the Import Session Data command to import the pre-configured tracks into the new session.

 See the *Pro Tools Reference Guide* for more information about Import Session Data.

Beyond Eleven: Some Suggested Effects

If you’re new to guitar or new to Pro Tools, you might want to know about a few simple effects you can add to your Eleven Free guitar tracks using nothing more than a few of the free Digi-Rack plug-ins included with your system.

Bussing and Submixing

Not so much a plug-in or effect as a standard operating procedure, multiple guitar tracks are often submixed to stereo Aux Input for centralized level control of those tracks. This is especially useful for applying compression or limiting, creating stem mixes, and many other practical uses. See your *Pro Tools Reference Guide* for mixing and submixing setups and suggestions, and try them out while exploring some of the following effects suggestions.

Dynamics

Compression, limiting, expansion and gating are all useful effects for guitar. Different results can be achieved using each of the different types of dynamics processing, in combination with signal routing for individual (discrete) versus submix (shared resource) processing. Here are a few examples:

- ◆ If all you seek is the taming of occasional dynamic aberrations within a track (meaning, you just need to clamp a couple “overs”), try putting a limiter on the individual track (after Eleven Free).
- ◆ To “glue” multiple rhythm tracks or tones together, bus them to a stereo Aux Input and apply heavy compression or limiting to that Aux Input. Experiment with different dynamics plug-ins such as Dyn 3 or any of the Bomb Factory processors to find one that works best for the material. Don’t be afraid to use extreme compression ratios to achieve this effect.

EQ

Simple EQ processing can be used to soften “hot spots” in the playing range of some guitars. Using any of the included EQ plug-ins, you can also try applying drastic shelving or band-limiting as a special effect, or automate a filter sweep to simulate a wah-style effect.

Echo and Delay

To add echo to the guitar track, bus an Eleven Free track to an Aux Input and put a Delay plug-in on the Aux. Try other delay plug-ins to unlock the secrets of multi-tap, ping-pong, and other specialized applications.

Consult your other Pro Tools guides (including the *DigiRack Plug-ins Guide* and the *Bomb Factory Plug-Ins* guide) to get other ideas for signal routing, delay, EQ, dynamics, and other processing.

Eleven Free Signal Flow

The following figure shows the signal flow through Eleven Free from its input source to its output destination.

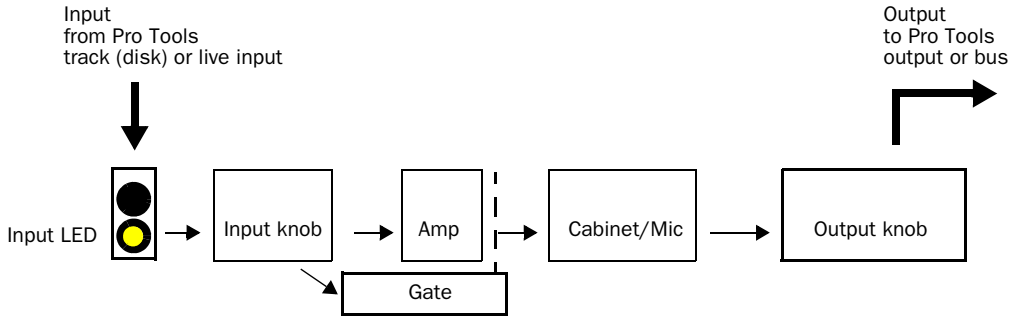


Figure 2. Signal flow through Eleven Free

Notes

Plug-ins are Pre-Fader

Keep in mind that inserts (plug-ins) in Pro Tools are post-disk/live input but pre-fader. The track fader does not affect the signal into any plug-ins inserted on that same track. This is the same for all Pro Tools inserts, not just Eleven Free.

Input LED before the Input Knob

The Input LED is before the Input section of the Master section, which is prior to the first input stage of each amp. This lets you determine whether you're clipping a signal before it enters the Eleven Free signal chain. The Input LEDs will light red when the signal has clipped the input. (If this occurs, insert the Digidesign Trim plug-in before Eleven Free, and use the gain attenuation available in the Trim plug-in to lower the gain.)

Input Knob and Amp Gain

Eleven Free actually gives you two separate input gain stages to the plug in:

- ◆ The Input knob in the Master section, which affects the signal level *before entering* the amplifier model.
- and –
- ◆ The gain knob(s) on each amplifier, which control the *main input stage* of that particular amplifier model.

This makes the Input knob useful for increasing or decreasing gain on amps that don't have a separate preamp.

Noise Gate After the Input Knob

The Noise Gate is keyed (triggered) from the input signal. The gate is applied to the output of the amp; when open it lets sound pass from the amp to the cabinet module, and when closed silences amp output to the speaker cabinet.

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