

WAVES: ABBEY ROAD

REDD.37-.51

USER GUIDE



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Chapter 1 – Introduction

1.1 Welcome

Thank you for choosing Waves. In order to get the most out of your Waves processor, please take the time to read through this manual.

In conjunction, we also suggest you become familiar with www.wavesupport.net. There you will find an extensive **Answer Base**, the latest **Tech Specs**, detailed **Installation** guides, new **Software Updates**, and current information on **Authorization** and **Registration**.

By signing up at www.wavesupport.net, you will receive personalized information on your registered products, reminders when updates are available, and information on your authorization status.

1.2 Product Overview

London's Abbey Road Studios were at the epicenter of a seismic shift that rocked the world of music during the 1960s, and changed the course of popular culture forever. The Beatles, The Hollies, Pink Floyd and countless other luminaries made musical history at Abbey Road Studios, trailblazing a revolution that resonates to this day.

And at the heart of it all: The REDD consoles, custom-designed, built by and named for Abbey Road Studios' in-house Record Engineering Development Department. Renowned for their silky smooth EQ curves, extraordinary warmth and lush stereo imagery, there's something magical about the REDDs that sound like no other console.

Waves meticulously recreated the color, character and tonal complexity of the original desks: The REDD.17 which still belongs to Abbey Road Studios, and the REDD.37 console now owned by Lenny Kravitz. The result is an impressive pair of plugins that deliver the dimension, depth and richness of these console classics.

1.3 About REDD

Since its opening in 1931, Abbey Road Studios have been known as a bastion of recording excellence and innovation. EMI's Recording Engineer Development Department (REDD) was established in 1955 by Abbey Road Studios technical engineer Lenn Page to address the needs of the then-burgeoning stereophonic format. Within a year, the team's efforts had led to the production of the REDD.1 console, Abbey Road Studios' first dedicated stereo mixing system, which consisted of a REDD.8 mixer and a rack that housed its amplifiers and other components.

In 1957, its successor was created: The REDD.17, designed by Peter Burkowitz of EMI's German affiliate, was one of the first desks to conform to the design we've come to expect from mixing consoles, with EQ on each of its eight channels. Like the REDD.1 before it, the REDD.17 was a mono/stereo board.

Later the following year, in response to the growing popularity of the four track recording format, the third in the series, the REDD.37, was released. Both the REDD.17 and REDD.37 were powered exclusively by legendary Siemens V72 valve amplifiers and, in the case of the REDD.37, at least 31 of them!

The REDD.37 was followed by the REDD.51, which used newer REDD.47 amps, and offered lower distortion and more headroom than the V72s. Originally created in 1959, it was not until 1963 that the .51 found its way to Abbey Road Studios. Four of the .51 desks were ultimately built; by 1968, they were slowly phased out by EMI's next generation of solid-state eight and sixteen track consoles, the TG series.

1.4 Components

WaveShell technology enables us to split Waves processors into smaller plugins, which we call **components**. Having a choice of components for a particular processor gives you the flexibility to choose the configuration best suited to your material. REDD.37-.51 includes the following components:

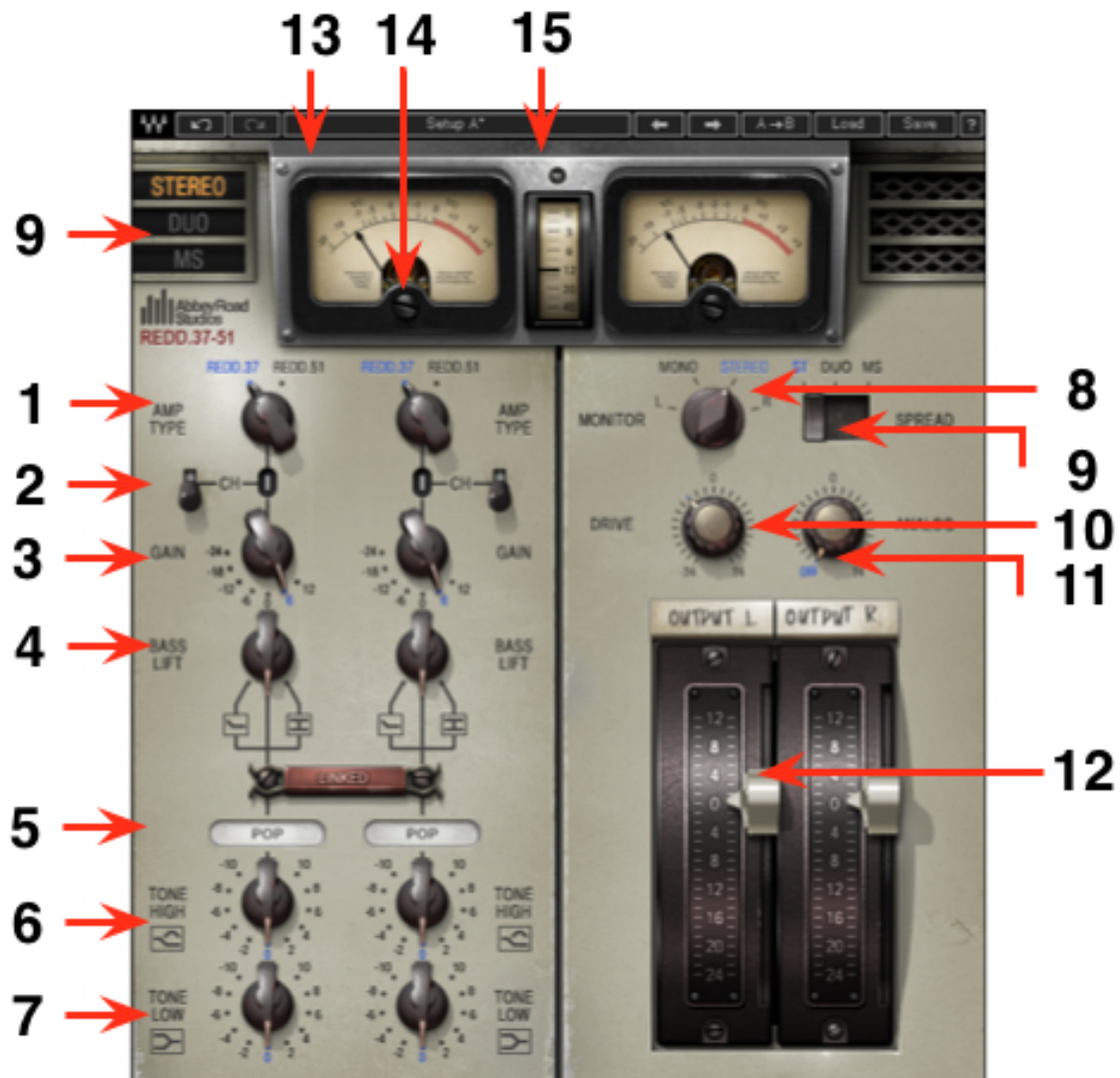
- REDD.37-.51 Mono
- REDD.37-.51 Stereo

Chapter 2 – Quick Start Guide

1. Open REDD.37-51 on a track.
2. Select Amp type.
3. Select EQ type: Pop or Classic
4. Adjust Tone Low and/or Tone High as needed.
5. Adjust the drive control to increase or decrease the distortion level until the desired result is achieved.
6. Using the output control, adjust the output level as needed.

Chapter 3 – Interface and Controls

3.1 Interface



3.2 Controls

1. **Amp Type** determines the type of amplifier.

Range: .37(Siemens V72), .51(REDD .47)

2. **Channel Select** determines the channel configuration.

In order to replicate the true stereo sound of the original desk, Waves modeled two individual console channels. The differences are subtle but audible, and add richness to the sound. To maintain optimal stereo consistency, select the same channel settings for both left and right channels.

3. **Gain** controls the input gain.

Range: -24 dB – +12 dB

4. **Bass Lift** controls the 9 dB low shelf that compensates for low frequency loss caused by using condenser microphones in a Figure 8 configuration.

Range: 10 dB pad (left), bypass (center), and 9 dB low shelf (right)

5. **EQ Select** toggles between Classic and Pop EQ types. Classic uses high and low shelf topologies; Pop uses low shelf and high bell topology when boosting, and high shelf topology when cutting. The Classic treble EQ features a shelf boost or cut at 10 kHz, while the Pop EQ is a peak boost centered around 5 kHz, with a shelf cut centered at 10 kHz. Both Pop and Classic settings feature a continuous 10 dB of boost or attenuation at 100 Hz.

Range: Classic, Pop

6. Tone High controls high shelf equalization.

Range: -10 – +10 dB (in .01 increments)

7. Tone Low controls low shelf equalization.

Range: -10 – +10 dB (in .01 increments)

8. Monitor controls the source of the monitor output. *(Stereo component only)*

Stereo (ST) and Duo modes:

- L (left side only)
- Mono (stereo signal summed to mono)
- Stereo
- R (right side only)

MS mode:

- M (left plus right)
- Mono (stereo signal summed to mono)
- Stereo
- S (left minus right)

9. Spread selects stereo processing mode. *(Stereo component only)*

- **Stereo** links the channels and applies the same processing to both.
- **Duo** unlinks the channels and offers the option of applying different processing to each.
- **MS** applies an MS encoding matrix on the input to the plugin. The signal enters the EQ for separate processing to Mid and Side information, which is subsequently decoded back to stereo on the output.

10. Drive controls the amount of drive added to the signal. Lower values result in a cleaner sound; higher values result in a more distorted sound.

Range: -24 – +24 dB

11. Analog controls the level of modeled noise and the hum.

Range: -24 (off) – +24 dB

12. Output controls the output level of the signal. Unlike the Gain control, Output level does not affect the amount of distortion added to the signal.

Range: -24 – +12 dB

13. VU Meters display output VU readings.

Range: -20 – +3 dB

14. VU Level Calibration sets the dBFS level that appears as 0 VU.

Range: -24 – -8 dBFS

15. Peak Meter displays signal peak output levels.


Range: -40 – 0 dBFS

Chapter 4 – The WaveSystem

4.1 The WaveSystem Toolbar

All Waves plugins feature the WaveSystem toolbar which takes care of most administrative functions you will encounter while working with your Waves software. The features of the WaveSystem toolbar are the same on practically all Waves plugins, so familiarity with its features will be helpful whichever plugin you are using.

Toolbar Functions

	Opens the plugin About box
Undo	Undoes the last 32 actions
Redo	Redoes the last 32 undone actions
Setup A/B	Toggles between two presets, useful for comparison of parameter settings
L/R Arrows	Move to the previous or next preset
Copy A→B	Copies the current settings to the second preset register
Load	Recalls presets from file
Save	Saves presets in the Waves file formats
?	Opens the PDF manual for the plugin you are using

4.2 Preset Handling

Preset Types

Factory Presets are permanent presets in the Load menu. Factory presets cannot be overwritten or deleted. When applicable, different component plugins may have different factory presets.

User Presets are your favorite settings of the plugin saved as a preset in the Load menu, under 'User Presets'. User Presets can be overwritten and deleted.

Setup Files may contain more than one preset. For example, a single file can contain all the presets for a session. When you open a Setup File, all its setups become part of your Load pop-up menu for fast access. This can be particularly useful with multiple instances of a plugin in a single session. By saving all the settings you create into a single Setup File, they can all be quickly available for every instance of that plugin.

Loading Presets and Setups



Click on the Load button to see the Load pop-up menu. The menu is divided into four sections. If a section is not currently available it will not appear in the Load pop-up menu.

Open Preset File... Select to open any setup or preset file, whether from the Library or your own creations.

'Filename.xps': Displays any currently loaded Setup File and its presets.

Factory Presets: Displays the default Factory Presets.

User Presets: Displays any loaded User Presets.

Saving Presets and Setups



Click on the Save button to see the Save pop-up menu. Four options are available. If an option is not currently available it will be grayed out and inaccessible.

Save to New File... Select this to start a new Setup file. There are two prompts - first for the setup filename, then for the preset name. You must provide a name for both the setup file and the preset. Click OK (ENTER) to complete the save. It is a good idea to create a folder in which to save several setup files for a project.

Save 'File Name' – "Preset Name" Overwrites the settings of the loaded preset (whether a User Preset or a preset from a Setup File) with the current settings. If a Setup File is

Save to 'File Name' As...

currently loaded, the name of the Setup File is displayed followed by the name of the preset itself. If a User Preset is loaded, its name is displayed. Saves the current settings as a new preset into the Setup file that is open (if one is not open, the option is grayed out). You will be prompted to give the preset a name.

Put into Preset Menu As...

Save the current settings into a User Preset that will always be in your Load menu (until deleted). You will be prompted to give this preset a name. User Presets are stored in the plugin's preference file.

Deleting Presets

You may delete User Presets and presets within a Setup File. Factory Presets and Setup Library files cannot be deleted or overwritten.

1. Hold the Command (Mac)/Control (PC) key down.
2. Click-and-hold the Load button to see the pop-up menu.
3. While still holding the Command/Control key, select the preset or setup to delete.
4. A confirmation box will appear, allowing you to cancel or 'OK' the deletion.

A/B Comparison and Copying

The Setup A/Setup B button may be clicked to compare two settings. If you load a preset in the Setup B position, this will not affect the preset loaded into the Setup A position, and vice-versa.

If you want to slightly modify the settings in Setup A, you can copy them to Setup B by clicking on the Copy to B button, then alter Setup A and compare with the original Setup B.

The name of the current setup will be shown in the title bar (on platforms which support it), and will switch as you change from Setup A to Setup B.

Note: an asterisk will be added to the preset name when a change is made to the preset.

4.3 Interface Controls

Controls can be in one of three states:

1. **Not Selected** where the control is not the target of any user entry
2. **Selected** where the control is the target of mouse control entry only
3. **Selected and Active** where the control is the target for both mouse and keyboard entry

Toggle Buttons

Toggle buttons display the state of a control, and allow switching between two or more states. **Single-click** to change the control's state. Some toggle buttons have a text display which updates with the current setting, and others (bypass, solo, or monitoring toggles) illuminate when the control is active.

Some plugins have **link buttons** between a pair of toggle buttons, allowing click-and-drag adjustment while retaining the offset between the controls.

Value Window Buttons

Value windows display the value of a control and allow **click-and-drag** adjustment, or **direct control via the keyboard**.

- ❖ **Using the mouse**, click-and-drag on the value window to adjust. Some value windows support left/right, some up/down (as you hover over a button, arrows will appear to let you know which direction of movement that button supports). You may also use your mouse-wheel to adjust parameter values.
- ❖ **Using the arrow keys**, click once with mouse to select the button, and then use up/down – left/right (depending on the direction supported by that button) to move in the smallest incremental steps across the button's range (holding down

the arrow keys will move faster through the range).

- ❖ **Using key entry**, double click on the button to open the value window, and directly enter the value from your keyboard. If you enter an out of range number, the button stays selected but remains at the current setting. (System beeps if system sounds are on.)

Some plugins have **link buttons** between a pair of value windows, allowing click-and-drag adjustment while retaining the offset between the controls.

Sliders

Click or scroll the mouse-wheel on the slider itself or anywhere within the sliders track. The numerical value of the slider settings is displayed in a hover window above the slider path.

Hover Box

Hovering boxes will appear and display the control value when hovering with the mouse over the control.

Multiple Control Selection

One of the most powerful features of the WaveSystem is the ability to select and adjust multiple controls simultaneously. Using the mouse, drag-select the desired group of buttons or graphic controls by clicking and holding at a point outside the controls, and forming a rectangle that includes the controls you wish to adjust. Alternatively, press and hold Shift while clicking the mouse on any control you wish to link. This method is useful when you want to select two or more controls that are not adjacent to one another.

TAB Functions

TAB moves the 'selected' status to the next control, with shift-TAB moving in the reverse direction.

Additionally, the Mac has an option-TAB function for 'down' movement and shift-option-TAB for 'up' movement where applicable.

If you have several Value Window Buttons selected, TAB functions will take you through the selected controls only.

Hitting Esc or Return will return the 'focus' to the DAW application.

4.4 Waves Preferences (Pro Tools only)

When launching Pro Tools, hold Shift to view the Waves plugin Preferences window.

The following options are available:

- Don't use AudioSuite plugins
- Don't use RTAS plugins
- Rescan all plugins
- HUI control surface support (low resolution)
- Enable single-click text entry