WAVES

VITAMIN

SONIC ENHANCER

USER GUIDE





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CHAPTER 1: INTRODUCTION

1.1 Welcome

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

We also suggest you become familiar with the resources available to you at waves.com. There you will find an extensive Answer Base, the latest Tech Specs, detailed Installation Guides, new Software Updates, and up-to-date information on Activation and Registration.

1.2 Product Overview

Waves Vitamin is a multiband harmonic enhancer and tone-shaping plugin that can make any track sound powerful and full of spark by mixing an enriched version with the original signal.

Vitamin's controls are intuitive and easy to use. Each band has a gain fader which ranges from 0 to 48 dB. Input and output faders allow some gain staging – a necessary feature given the non-linear and additive nature of the Vitamin process. The input and output can be increased or padded by 18 dB. Padding the input control is handy for making some headroom in order to add energy in one or more of the bands. Input gain can be increased to reinforce a low signal, ensuring that the dynamics and clipping work properly. Output gain is applied after the process and provides linear gain for levelling.

The frequency range of each band can be determined using the four crossover frequency controls, which are located above and between the five band gain faders.

Solo buttons are available for each band. These can be helpful when articulating the band range: you can solo the band and then use the crossover frequencies to bind it from below and above in context with the input audio. The resulting signal will reach outside the determined range due to the added harmonics – but that's exactly part of the sonic magic of Vitamin.

Vitamin's Stereo mode features another special spice: You can control the stereo image width per band. For example, you can collapse the stereo width for the low band (especially important when mastering for vinyl) and add some width in the high band, leaving the mid-range tight and focused. This can work wonders on stem mixes and help you make room for concentric lead vocals.

Note that the stereo width controls affect both the direct and the processed parts of the signal.

1.3 Components

WaveShell technology enables us to split Waves 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.

Waves Vitamin includes two components:

- Vitamin Mono
- Vitamin Stereo

CHAPTER 2: QUICK START

- Open Waves Vitamin on a track.
- Listen to the track on its own.
- Check whether anything sounds weak or remote and which frequency range is lacking.
- When you identify the lacking range, push up the corresponding Vitamin band fader.
- Listen carefully to the sound and continue the process until you get a tone that you like.
- Fine-tune the mix between the dry signal and the wet multiband signal. Fix your output level so that you don't go too far overboard. You can use the Trim control to achieve this after you have gone through the track's louder parts.
- Bypass the effect to compare your enhanced version with the original signal.

Note: Vitamin processes and outputs 32-bit floating point audio. This means that the plugin output is not clipped at 0 dBFS. You can use other plugins after you use Vitamin in order to address these overshoots. If your output level is excessive and you do not attenuate it to the full digital scale, it will clip your D/A converter and you will not have control over the clipping.

Presets: Vitamin comes preloaded with a nice collection of presets. As in EQs and compressors, the presets are there to help you get started. Load a preset that corresponds with what you are trying to achieve, but remember that it will probably need to be tweaked depending on the context.

Once you find a preset that generally works for you, you may want to go into finer tunings. In this case, setting the crossover frequencies correctly can go a long way. Use the solo buttons to hear the individual sound of each band. When you just press "solo," you will hear both the enhanced version and the direct signal of the selected band. Pressing "bypass" will allow you to hear the direct signal alone, without the processed signal. This will help you determine which frequency range to use Vitamin on in order to improve the overall sound.

CHAPTER 3: INTERFACE AND CONTROLS

3.1 Interface

Vitamin Mono



Vitamin Stereo



3.2 Controls

Input gain: -18 to +18 dB, default 0

Output gain: -18 to +18 dB, default 0

Direct Gain: -48 to 0 dB and Off (mute)

Bands:

A - LO

B – LOMID

C - MID

D - HIMID

E – HI

XOver Frequencies: 20 to 18000 Hz. Defaults: LO - 90 Hz, LM - 500 Hz, HM - 2594 Hz, HI - 9310 Hz

The XOver Frequency controls bind each other, so that each control can reach up to the value in the crossover frequency above or down to the value of the crossover frequency below it.

Band Gains: 0-48 dB, default 0

Each of the five bands has its own gain control. Each gain control modifies the gain of the band's *processed signal only*.

Band Solo (S): On/Off, default Off

Soloing a band lets you hear both the direct and the processed parts of the signal for that band.

Band Bypass (Byp): On/Off, default Off

The Bypass function silences the processed (but not the direct) part of the selected band's signal. You can simultaneously solo and bypass a band in order to hear just the direct part of that band's signal only.

Punch: 0-5, default 3

The punch control allows you to add presence to transient events in order to get a punchier, crisper sound, or to attenuate the presence of transient events in order to get a warmer, smoother sound.

Stereo Width (Vitamin Stereo only): 0-3, default 1

The stereo width knobs (at the bottom of the Stereo component) control the stereo image width of each band separately. 0 = mono; 1 = neutral (the original stereo image). Above 1, the stereo image is widened so that the center phantom image is attenuated and the discrete side signals are enhanced. The stereo width controls affect both the direct and the processed parts of the signal.

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 with whichever plugin you are using.

Toolbar Functions

₩ Opens the plugin About box

Undo Undoes the last action (up to 32 actions)

Redo Redoes the last action (up to 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, which 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 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.

Save to 'File Name' As... 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 modify the settings in Setup A slightly, 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
- 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 clickand-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 10 or below only)

When launching Pro Tools, hold Shift to view the Waves Plugin Preferences window. The following options are available:

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