

Waves GTR

Stomp 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 new Waves plugin, please take a moment to read this user guide.

To install software and manage your licenses, you need to have a free Waves account. Sign up at www.waves.com. With a Waves account you can keep track of your products, renew your Waves Update Plan, participate in bonus programs, and keep up to date with important information.

We suggest that you become familiar with the Waves Support pages: www.waves.com/support. There are technical articles about installation, troubleshooting, specifications, and more. Plus, you'll find company contact information and Waves Support news.

1.2 Product Overview

Waves GTR Stomp is a virtual pedalboard plug-in that hosts multiple Stomp effects. Stomp effects are chosen by clicking on the space assignment button below the slot, or by right-clicking in an empty slot. Once loaded, Stomps may be rearranged by dragging-and-dropping them into place.

1.3 Components

WaveShell technology enables us to split Waves processors into smaller plug-ins, 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 GTR Stomp includes Mono, Mono-to-Stereo (m>s), and Stereo components, in 2, 4, and 6 Stomp configurations.

1.4 WaveSystem Toolbar

Use the bar at the top of the plugin to save and load presets, compare settings, undo and redo steps, and resize the plugin. To learn more, click the icon at the upper-right corner of the window and open the WaveSystem Guide.

1.5 Concepts and Terminology

Waves GTR Stomp appears in host application plug-in menus as follows:

- **Stomp 2:** Stomp 2 Mono, Stomp 2 m>s, and Stomp 2 Stereo.
- **Stomp 4:** Stomp 4 Mono, Stomp 4 m>s, and Stomp 4 Stereo.
- **Stomp 6:** Stomp 6 Mono, Stomp 6 m>s, and Stomp 6 Stereo.

Stomps may be placed in any order, and multiple instances of the same Stomp may be chained together.

Stomps, chains, and their settings can be saved as presets, and are saved with your session files. They can also be saved as PedalBoard setup files, which contain two presets, “A” and “B”.

GTR STOMP CONTROLS

In addition to the standard WaveSystem controls, GTR Stomp has input gain, output meters and an output clip indicator.

The Stomp selection menu will display all available Stomps.

Each GTR Stomp configuration launches fully loaded with its default setup. Each setup has two presets (“A” and “B”) which consist of the same chain of Stomps, in the same order, but with different settings.

TDM Notes

In TDM systems, the list displays Stomps according to availability. Only Stomps that can fit the DSP chip on which the Stomp PedalBoard is loaded will appear as available. Stomps that require more than your available system resources will be grayed out.

Please note: In the drop-down menu, an asterisk () next to the Stomp name indicates a Stomp that may be repositioned within the chain for better memory allocation.*

AUTOMATION

The Input Gain, Setup A/B, Previous Setup, and Next Setup controls are not automatable but they can be controlled or automated by MIDI controller.

Additionally, the PedalBoard features a bypass and 7 Expression elements per Stomp Space for a total of 48 automatable elements. The Expression elements automate the controls of any assigned Stomp. The Expression elements are expressed as control numbers within Stomp spaces (e.g. Stomp 1 Bypass, Stomp 1 Control 1, Stomp 1 Control 2, etc.)

After the bypass, the next expression element will be assigned to the upper left hand control of the stomp. Additional elements will be assigned in order to the right of that control and then lower than the control.

For example, on the Flanger Stomp, the automation control order would be: 1 – Depth 2 – Manual Rate, 3 – Sync Rate, 4 – Sync On/Off , 5 – Delay, 6 – Feedback, 7 – Stereo.

MIDI SUPPORT

Stomp controls may be assigned to external MIDI controllers.

- Continuous control scales are mapped to the full MIDI controller resolution 0 = min and 127 = max.
- Toggle action buttons (such as the sync rate button or bypass activate pedal) can receive a note-on command or get linear mapping to MIDI resolution over a 128 value range. A 2-state control will toggle when it receives the value 127 from its attached controller.

The Input Gain, Setup A/B, Previous Setup, and Next Setup controls are all automatable by assigning them to a MIDI note or controller.

All MIDI assignments are saved with presets.

MIDI ASSIGNMENT INTERFACE

Each Stomp control can be assigned to a single MIDI controller at a time. However, a single MIDI controller can be assigned to multiple Stomp controls.

The easiest way to link a MIDI event to a Stomp control is the Learn command. Right-clicking on any of the Stomp controls will display a MIDI assignment menu:



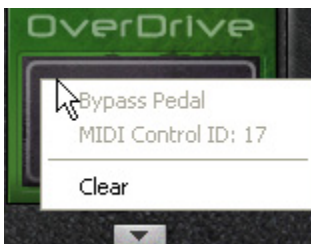
The first line in the menu will display the Stomp control name, e.g. “Drive”. The second line displays the currently assigned MIDI controller.

When no control is assigned, it will display “Learn”. When Learn is selected, the menu will disappear and the control will wait for the first MIDI event that it detects. Once a change is made to any control on your MIDI controller, this control will be assigned to the corresponding Stomp control.

Once the control is assigned, right-clicking on the control will display the linked MIDI control ID below the control name:



Similarly, Toggle controls may be assigned to MIDI controllers or notes and displayed as follows:



Selecting Clear will clear any current assignment and sets the control's assigned MIDI controller to “None”.

WAVESYSTEM TOOLBAR

Use the bar at the top of the plugin to save and load presets, compare settings, undo and redo steps, and resize the plugin. To learn more, click the icon at the upper-right corner of the window and open the WaveSystem Guide.

SYNC EFFECTS

Certain Stomps have parameters which can synchronize to your host BPM. When in Sync mode, musical note durations (ranging from 2 whole notes to 1/32nd note triplets) are used to represent the rate or time of the parameter.



TIPS

- To eliminate pickup buzz, signal noise, etc., place a Gate or Gate/Comp Stomp first in your chain. This is especially useful when using distortion setups or when going into a driven or high gain amp.
- To save DSP power, use Mono Stomps at the beginning of a chain, using Mono-to-Stereo later on in the chain as needed. Then feed the Stereo output to a Stereo Amp.
- In general, Distortion Stomps sound good early in the chain, while Delay and Reverb Stomps sound better later.
- Try opening a Stereo PedalBoard after your amp for delays, reverbs, vibrato, panning, and/or corrective EQ.
- Since switching between Setups A and B is instantaneous, you can switch between them for different sections within the same song.
- While Waves GTR Stomps are designed especially for electric guitar, they can sound great on other tracks as well!

Chapter 2 – Controls and Interface

Stomps are divided into four categories: Distortion, Modulation, Space & Ambience, and Basics.

2.1 Distortion Effects

OVERDRIVE



DRIVE controls the amount of effect applied to the signal.
Range: 0 – 100
Default: 50

LEVEL controls the output level.
Range: 0 – 100
Default: 50

TONE controls the output timbre.
Range: 0 – 100
Default: 50

DISTORTION



DRIVE controls the amount of distortion applied to the signal.
Range: 0 – 100
Default: 50

LEVEL controls the output level.
Range: 0 – 100
Default: 50

CONTOUR controls the output character.
Range: 0 – 100
Default: 50

TONE controls the output filter cutoff.
Range: 700Hz – 10 kHz.
Default: 3.9 kHz

Fuzz



SUSTAIN controls the duration of the effect.

Range: 0 – 100

Default: 50

LEVEL controls output level.

Range: 0 – 100

Default: 50

TONE controls the output timbre.

Range: 0 – 100

Default: 50

Buzz



DRIVE controls the amount of distortion applied to the signal.

Range: 0 – 100

Default 50

TONE controls the resonant low pass filter cutoff.

Range: 0 – 100

Default: 34

LEVEL controls the output level.

Range: 0 – 100

Default 50

Hint: Using an expression pedal to control the Tone transforms Buzz into a Distortion / Wah-Wah hybrid.

METAL



DIST controls the amount of distortion applied to the signal.

Range: 0 – 100

Default 50

LEVEL controls the output level.

Range: 0 – 100

Default 50

Low controls the low frequencies.

Range: -12 to +18dB (Bell)

Default +2.4dB

High controls the high frequencies

Range: -30dB to 0dB (High Shelf)

Default -12dB

FREQ controls the midrange bell filter cutoff frequency.

Range: 250Hz to 1500Hz

Default: 400Hz

GAIN controls the midrange bell filter gain.

Range: -36 to +12

Default: -6

2.2 Modulation Effects

FLANGER



DEPTH controls the depth or amount of flanging.

Range: 0 to 100

Default: 50

SYNC controls synchronization to host tempo.

Range: On/Off

Default: Off

SYNC RATE controls the speed of the synchronized effect.

Range: 2 to 1/32t

Default: 1/4t

MANUAL RATE controls the speed of the effect when not synchronized to host tempo.

Range: 0 to 20Hz

Default: 0.20

DELAY controls the length of the delay added to the signal.

Range: 1.5 to 10ms

Default: 3.0

FEEDBACK controls the amount of resonance.

Range: 0 to 100

Default: 50

STEREO controls the LFO (Low Frequency Oscillator) phase difference between the left and right channels.

Range: 0 to 100

Default: 50

VIBROLO



WAVEFORM

Range: Sine, Triangle, SawUp, SawDown, Square
Default: Sine

SYNC controls synchronization to host tempo.

Range: On/Off
Default: Off

SYNC RATE controls the speed of the synchronized effect.

Range: 2 to 1/32t
Default: 1/4t

MANUAL RATE controls the speed of the effect when not synchronized to host tempo.

Range: 1 to 20Hz
Default: 8Hz

VIBE controls Frequency Modulation depth.

Range: 1 to 100
Default: 0

TREM controls Amplitude Modulation depth.

Range: 1 to 100
Default: 50

PANNER



WAVEFORM

Range: Sine, Triangle, SawUp, SawDown, Square
Default: Sine

SYNC controls synchronization to host tempo.

Range: On/Off
Default: Off

SYNC RATE controls the speed of the synchronized effect.

Range: 2 to 1/32t
Default: 1/4 t

MANUAL RATE controls the speed of the effect when not synchronized to host tempo.

Range: 0.1 to 20Hz
Default: 8Hz

WIDTH controls the width of the panning effect, in degrees.

Range: 0 to 100
Default: 50

PHASER



DEPTH controls the amount of effect applied to the signal.

Range: 0 to 0.80
Default: 0

SYNC controls synchronization to host tempo.

Range: On/Off
Default: Off

SYNC RATE controls the speed of the synchronized effect.

Range: 2 to 1/32t
Default: 1/4t

MANUAL RATE controls the speed of the effect when not synchronized to host tempo.

Range: 0 to 20
Default: 1

STEREO varies the LFO (Low Frequency Oscillator) phase for the left and right channels.

Range: 0 to 100
Default: 0

OCTAVER



DIRECT controls the volume of the direct signal.

Range: 0 - 100

Default: 75

OCT1 controls the gain of the tone one octave below the direct signal.

Range: 0 - 100

Default: 75

OCT1 PAN controls the position of the tone one octave below the direct signal.

Range: +/-45 degrees

Default: 22.5

OCT2 controls the gain of the tone two octaves below the direct signal.

Range: 0 - 100

Default: 75

OCT2 PAN controls the position of the tone two octaves below the direct signal.

Range: +/-45 degrees

Default: -22.5

Please note: Octaver works best with a monophonic input.

WAHWAH



SENSITIVITY controls the sensitivity of the envelope follower

Range: 0 to 100

Default: 50

SPEED controls both the Attack and Release controls of filter modulation.

Range: 0 to 100

Default: 50

RANGE controls the frequency around which the Wah works.

Range: 0 to 100

Default: 50

MODE Auto turns the effect into an Auto Wah. Manual enables MIDI or mouse control of the effect.

Range: Auto/Manual

Default: Auto

WAH controls the frequency of the Wah filter in Manual mode.

Range: 0 to 1

Default: 0.5

CHORUS



DEPTH controls the amount of detune effect applied to the signal.

Range: 1 to 100

Default: 10

RATE controls the speed of the detune effect's modulation time.

Range: 0.10 to 10

Default: 0.77

DOUBLER



MIX controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

DETUNE controls the amount of detuned chorus effect, in cents.

Range: 1 to 25 Cents

Default: 8

DELAY controls the length of the Delay effect added to the signal.

Range: 12 to 100ms

Default: 12ms

FEEDBACK controls the amount of energy fed back from the output back to the input.

Range: 0 to 100

Range: Default: 0

STEREO controls the position of the doubled sounds. At 100, the doubled signals are fully panned to left and right; at 0 they are panned to center.

Range: 0 to 100

Default: 50

PITCHER



Mix controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

MIN (Shift)

Range: -12.00 to +12.00 semitones

Default: -12.00

MAX (Shift)

Range: -12.00 to +12.00 semitones

Default: +12.00

PITCH controls the range of pitch shift.

Range: 0 - 100

Default: 50

BASS PITCHER



Mix controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

MIN (Shift)

Range: -12.00 to +12.00 semitones

Default: -12.00

MAX (Shift)

Range: -12.00 to +12.00 semitones

Default: +12.00

PITCH controls the range of pitch shift.

Range: 0 - 100

Default: 50

2.3 Space and Ambience Effects

DELAY



MIX controls the balance between Wet and Dry signal. At 50, the Wet and Dry paths mixed are mixed evenly at -3dB.

Range: 0 to 100

Default: 50

SYNC controls synchronization to host tempo.

Range: On/Off

Default: Off

SYNC TIME controls the speed of the synchronized effect.

Range: 2 to 1/32t

Default: 1/16

MANUAL TIME controls the speed of the effect when not synchronized to host tempo.

Range: 0.01 to 2.0

Default: 0.5

FEEDBACK controls the amount of energy fed back from the output back to the input. Please note: Feedback levels above 8.7 may result in clipping or feedback.

Range: 0 to 10

Default: 5

Hi CUT rolls off high frequencies.

Range: 0.1 to 7

Default: 7

STEREO controls the position of the delay regenerations within the stereo field. (0 = Mono, 100 = Full Stereo “ping pong” effect)

Range: 0 to 10

Default: 10

LAY-D



MIX controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

SYNC controls synchronization to host tempo.

Range: On/Off

Default: Off

SYNC TIME controls the speed of the synchronized effect.

Range: 1/32 to 1/2

Default: 1/16

MANUAL TIME controls the speed of the effect when not synchronized to host tempo.

Range: 0.01 to 1 (seconds)

Default: 0.5

PITCH controls the amount of pitch shifting that will take place on the first regeneration of the delay; consecutive regenerations will shift by the same amount

Range: -1200 to +1200

Default: 0

FEEDBACK controls the amount of energy fed back from the output back to the input.

Range: 0 to 100

Default: 50

STEREO controls the position of the delay regenerations within the stereo field.

Range: 0 to 100

Default: 100

REVERSE controls the reversed regenerations that create a backward effect.

Range: On/Off

Default: On

REVERB



Mix controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

PREDELAY controls the delay between the start of the direct signal and the reverb.

Range: 11 to 160ms

Default: 80

TIME controls the reverb's decay time.

Range: 0.2 to 10 (seconds)

Default: 1.4

TONE controls the reverb's high frequency damping ratio.

Range: 0.1 to 2

Default: 0.60

SPRING



Mix controls the balance between Wet and Dry signal.

Range: 0 to 100

Default: 50

TIME controls the reverb decay time.

Range: 0.2 to 10 seconds

Default: 3.6

PREDELAY controls the delay between the start of the direct signal and the reverb.

Range: 20 to 170ms

Default: 20ms

2.4 Basic Effects

COMPRESSOR



COMP controls the amount of compression applied to the signal.

Range: 0 to 100

Default: 0

ATTACK controls the speed at which compression begins.

Range: 1 to 50

Default: 4.99

RELEASE controls the speed at which compression stops.

Range: 50 to 2000ms

Default: 752ms

AXXPRESS



PRESS controls threshold and makeup gain simultaneously. Higher settings result in increase loudness.

Range: 0 - 100

Default: 0

ATTACK controls the speed at which compression begins once the input exceeds the press threshold.

Range: 0ms – 50ms

Default: 5ms.

OUTPUT controls the output volume of the compressor.

Range: -30 – 0dBfs

Default: 0dBfs

GATE



THRESHOLD controls the sensitivity of the gate.

Range: inf to 0dB (FS)

Default: -50

ATTACK controls the speed at which the gate opens when the level exceeds the threshold.

Range: 0.01 to 1000

Default: 0.05

RELEASE controls the speed at which the gate closes when the level falls below the threshold

Range: 1 to 10,000ms

Default: 100

HOLD controls the amount of time the gate remains open after the last attack.

Range: 0.01 to 5000ms

Default: 0.20

GATE/COMP



GATE controls the sensitivity of the gate.

Range: inf to 0dB (FS)

Default: -60

COMP controls the amount of compression applied to the signal.

Range: 0 to 100

Default: 50

TONE



Low controls the low frequencies.
Range: ± 18 dB Low Shelf @ 310Hz
Default: 0dB

Mid controls the midrange frequencies.
Range: ± 18 dB Mid Bell @ 1kHz
Default: 0dB

High controls the high frequencies.
Range: ± 18 dB Hi Shelf @ 4kHz
Default: 0dB

LowCut controls the high pass filter cutoff frequency.
Range: 16 to 310Hz
Default: 40Hz

HiCut controls the low pass filter cutoff frequency.
Range: 4kHz to 18kHz
Default: 14kHz

EQ



Frequencies: 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz
Range: ± 12 dB (Q=10)

Please note: EQ's hidden low frequency attenuator reduces unwanted rumble.

VOLUME



VOLUME BAR (HI > LO) controls output level. The position between Hi and Lo determines output volume according to the selected scaling.

SCALE controls the way the volume range is distributed by the Volume bar fader.

Settings: Log or Lin

Default: Lin

MIN controls the Lo volume setting, or the volume that is set when the Volume bar is in Lo position.

Range: -144dBfs – 0dBfs.

Default: -24dBfs.

MAX controls the Hi volume setting, or the volume that is set when the Volume bar is in the Hi position.

Range: -144dBfs – +12dBfs.

Default: 0dBfs.

Please note: Since Max control limits the Min control, Min value may not exceed Max value.