O MASSIVE

USER'S GUIDE



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Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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1 About this document

This manual addendum covers all feature changes and additions that have been made to MASSIVE since version 1.0, starting with the latest news. For information on basic functionalities please read the MASSIVE main manual that was included in delivery. Additional information is available in the MASSIVE section of the Native Instruments User Forum.

2 New in MASSIVE 1.1.4

Welcome to Massive 1.1.4! The following functions have been added:

- ► Control Menu for Master Volume
- ► Control Menu for Synced LFO Ratio Values
- Switch to decouple LFO from the Song Position

2.1 Master Volume

The Master Volume can now be assigned to a MIDI controller. Assigning a CC controller to the Master Volume is done in the same way as with other assignable controls in MASSIVE: Right-click on the Master Volume knob. This opens the corresponding context menu as shown in the screenshot below. Click on the *MIDI Learn* menu entry. If you change a MIDI controller value, that controller's CC ID will automatically be assigned to the Master Volume knob. If no controller value was received and you decide that you don't want to assign a MIDI controller to the Master Volume, select the *Stop Midi Learn* menu entry. The currently assigned controller's CC ID is shown at the top of the menu under *Midi CC ID*. To remove the assignment, right-click on the Master Volume knob and select the *Remove Midi CC* menu entry.



2.2 Synced LFO

2.2.1 Assigning Controllers to LFO Ratio

MASSIVE now offers the possibility to assign MIDI controllers to the numerator- and denominator-values of a synced LFO. In order for these controls to become relevant, the Sync switch needs to be engaged. If this is the case, you should see two number fields under the GUI text Ratio in the LFO modulation page. The top number field is called Num (short for numerator) and the bottom number field is called Den (short for denominator).

Assigning a CC controller to Num and Den is done in the same way as with other assignable controls in Massive: Right-click on the corresponding number field. This opens the context menu as shown in the screenshot below. The number 5 here refers to the fifth modulation page, this depends on the modulation page the addressed LFO is in. Click on the *Midi Learn* menu entry. If you change a MIDI controller value, that controller's CC ID will automatically be assigned to the corresponding number field. If no controller value was received and you decide that you don't want to assign a MIDI controller to the number field, click on the *Stop Midi Learn* menu entry. The currently assigned controller's CC ID is shown at the top of the menu under *Midi CC ID*. To remove the assignment, right-click on the Master Volume knob and choose the *Remove Midi CC* menu entry.

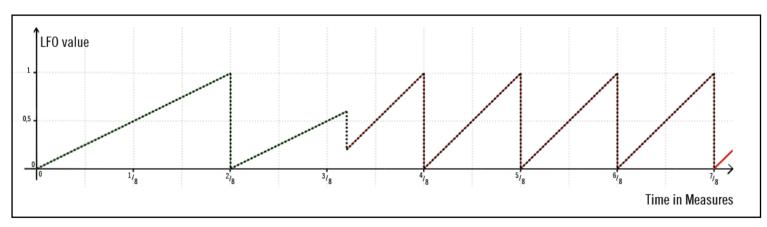


2.2.2 The Pos Switch

The Pos switch lets you decouple the synced LFO from the song position. This is relevant when the Sync switch is engaged and the ratio is changed.

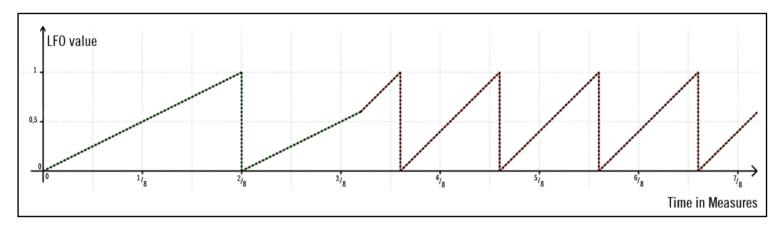


When the Pos switch is engaged (MASSIVE's behavior for previous versions) and the LFO ratio is changed, the waveform jumps to the new ratio with the phase remaining locked to the song position. The figure below illustrates a synced sawtooth LFO running at first with the Ratio Control set to 1/4 (green dotted line) and then set to 1/8 (red dotted line). As seen on the figure, changing the Ratio Control with the Pos switch engaged can cause abrupt changes in the LFO waveform.



Changing the LFO ratio with the Pos switch engaged.

Changing the LFO ratio while the Pos switch is disengaged causes a smooth change in the waveform, but the phase is not locked to the song position. Depending on the point in time when the ratio is changed, the LFO can be in phase with the beat or not. The figure below illustrates a synced sawtooth LFO running at first with the Ratio Control set to 1/4 (green dotted line) and then set to 1/8 (red dotted line). After changing the RATIO CONTROL at a point in time between two eighth-notes, the LFO will not start on the quarter note.



Changing the LFO ratio with the Pos switch disengaged.

3 New in MASSIVE 1.1

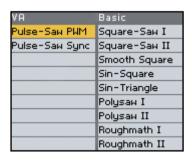
Welcome to Massive 1.1! Here are the great new features:

- ► Virtual Analogue Oscillator mode
- ▶ New Filter: Acid
- ► Hardclipper Insert effect
- Randomize for Performer

3.1 Virtual Analogue Oscillators

A new mode has been added to the oscillator section which expands Massive's sound spectrum to create Pulse width modulation and sync sounds.

A "VA" column has been added to the Wavetable drop-down list containing 2 new virtual analogue oscillator modes.

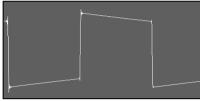




"WT-Position" changes to "Pls-Saw Pos" and will fade between a Pulse Wave in the left knob position and a Saw wave in hard right position.

The second knob controls the "Sync" parameter in "Pulse-Saw Sync" mode and the "Pulse width" when in "Pulse-Saw PWM" mode. Both parameters can be modulated as in the Wavetable mode. The "Spectrum" playback mode menu then disappears.





VA Square Wave / 50% pulse width



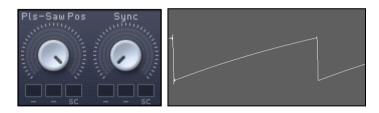


VA Square Wave / small pulse width

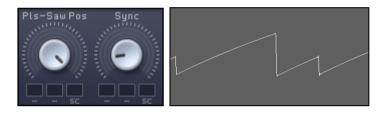
Note that the Pulse PWM rotary controller is bipolar. A 12 O' clock position corresponds to 50% Pulse width modulation, which delivers the fattest sound. If you cannot hear a sound the PWM indicator may be in the hard left or right position. In that case, the Pulse wave might shorter than one sample and therefore inaudible.

3.2 Sync

The sync parameter defines the rate at which the oscillator is reset. The played tone is the same pitch in both screenshots.



No reset audible



The saw wave restarts after 70% of the wave cycle.

3.3 Acid Filter

A new filter called "Acid" has been added to the filter section. This particular filter was modelled after a famous little silver box.

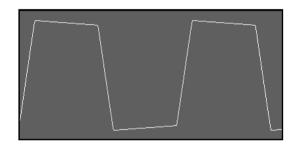


3.4 Hardclipper insert effect

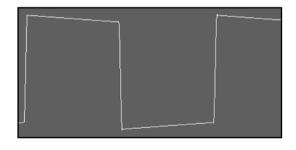
A new distortion insert effect, the Hardclipper, can be selected from the corresponding drop-down menu.



As the name implies, the signal clips hard at the set threshold defined by the drive knob. The audible distortion is much more radical than with the Sinus or Parabolic shaper. A standard Sine wave is turned into waveforms like this:



Moderate setting on sine wave

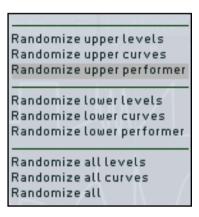


High input gain setting on sine wave

3.5 Performer randomize section



You can now quickly create new performer patterns by pushing the "Rndm" button in the Performer header. Here you will find a selection of different randomize modes which should be self explanatory.



3.6 Wavetables

Three new Wavetables have been included in this latest Massive Update: Melancholia (FXChords), Woody (Basic), Lunacy (Fxchords).

Please note that insert effects are calculated per voice, which means that the number of played voices does not influence the amount of distortion.

Note that the Load Curve button has moved to the right. Randomization is executed as soon as you select a menu entry or push the "Rndm" button.

3.7 Noises

You also have three new Noises at your disposal: Hi-Metallic (Hi-Met), Murmur (Mur) and Aluminium (Alu).

3.8 Usability Improvements

3.8.1 Quality mode menu in header

It is now possible to select your desired engine quality directly from the header menu.



Preset quality can be switched between three modes, Ultra, High and Eco. Ultra consumes the most CPU power but assures the highest sound quality.

3.8.2 "Snap to Grid" in Stepper

You can now change Stepper values incrementally by selecting the "Snap to grid" button directly from the Stepper view. Before, this was only possible using the "alt-drag" function.



3.8.3 Improved Randomize section

The Randomize section found in the Global view has also been improved. New features include Connection, Matrix and Keep OSC Pitch. The pitch of all the oscillators stays constant to preserve your sound.



3.8.4 Variable number of breakpoints in Keytracking curves

It is now possible to create multiple Breakpoints (up to 16 in total) in the Keytracking curves (KTR center windows). You can place and delete the points with a simple right mouse click on the curve.



3.8.5 Envelope parameters editable in curve display

Envelope parameters can now be edited in the envelope curve display by clicking directly on the curve to change its run. Dragging left and right changes Time whilst up and down changes Level.

