

Oenkestein Audio

RUMBLER COMPACT SYNTHESIZER



Operation Manual

RUMBLER Compact Synthesizer Operation Manual

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1 Introduction

Rumbler Compact Synthesizer is a digital wavetable synthesizer.

1.1 Description

This device of the Rumble series comes with Saw, Square and Wavetable oscillators, an Amp Envelope section with DAHDSR controls, a LFO, an Audio Modulation section with 19 modulation matrixes and 8 effects devices with 23 modulation matrixes. All the modulation matrixes have 12 sources. Rumbler Compact Synthesizer has also audio in, 25 CV inputs, 23 CV through and 2 CV outputs.

Rumbler Compact Synthesizer uses additive wavetable synthesis to generate sounds. The additive synthesis is based on a Wave oscillator using waveforms, one of the in total 3 oscillators that can be introduced in the sound at various times, levels and durations. The sonic results of additive synthesis can vary dramatically; from standard analog type of synthesizer sounds, via emulations of existing instruments, to extremely complex and animated timbres. The other 2 oscillators are Saw and Square wave based oscillators and are mixed with the Wave oscillator. Rumbler Compact Synthesizer features Ring Modulation with an internal Sine oscillator modulating the Wave oscillator.

The Wave oscillator contains 228 waveforms. High quality waveforms and lofi 8 bit waveforms..

Rumbler Compact Synthesizer comes with 211 instrument patches.

The Rumble series derives its name from the legendary guitar 101 hero and inventor of the power chord: Link Wray, who used to poke a pencil in an amplifier speaker to get a gritty, distorted sound.

1.2 Specifications

1. Minimal requirements for the Rack Extension: Duo Core based computer with at least 2 GHz processor, 4 GB of RAM and Reasonstudios Reason 10.2 or higher running on Windows or Mac OSX.
2. Type of device: Digital synthesizer.
3. Method of synthesis: Additive 16 bit wavetable synthesis with amplitude modulation combined with 2 high quality saw and square oscillators.
4. Amount of oscillators: 3 (Wave oscillator, Saw and Square oscillators)
5. Low Frequency Oscillator (LFO)
6. Effects:
 - Ring modulation, Drive, EQ, Low Pass 12 Filter, Glide and Bend on the oscillator's output.
 - Chorus, Delay, Tremolo, Distortion, Convolution Reverb, Linear Reverb, Lofi and Phaser
 - Audio Input to send to the 8 effects
7. Amount of synthesizer modulation matrixes: 17
 - 4 slots in the 3 Oscillators panel
 - 5 slots in the Amplitude Envelope panel
 - 1 slot in the LFO panel
 - 6 slots in the Audio Modulation panel
 - 2 slots in the Output panel
8. Amount of effects modulation matrixes: 23
 - 3 slots in the Distortion panel
 - 4 slots in the Convolution Reverb panel
 - 6 slots in the Linear Reverb panel
 - 4 slots in the Lofi panel
 - 6 slots in the Phaser panel
9. Control Voltage In (CV In): 25 and Through (CV Thr): 23
 1. Saw Oscillator Level
 2. Square Oscillator Level
 3. Saw and Square Oscillator Tune
 4. Saw and Square Oscillator Detune
 5. Wave Oscillator Level
 6. Wave Oscillator Tune
 7. Wave Oscillator Fine Tune

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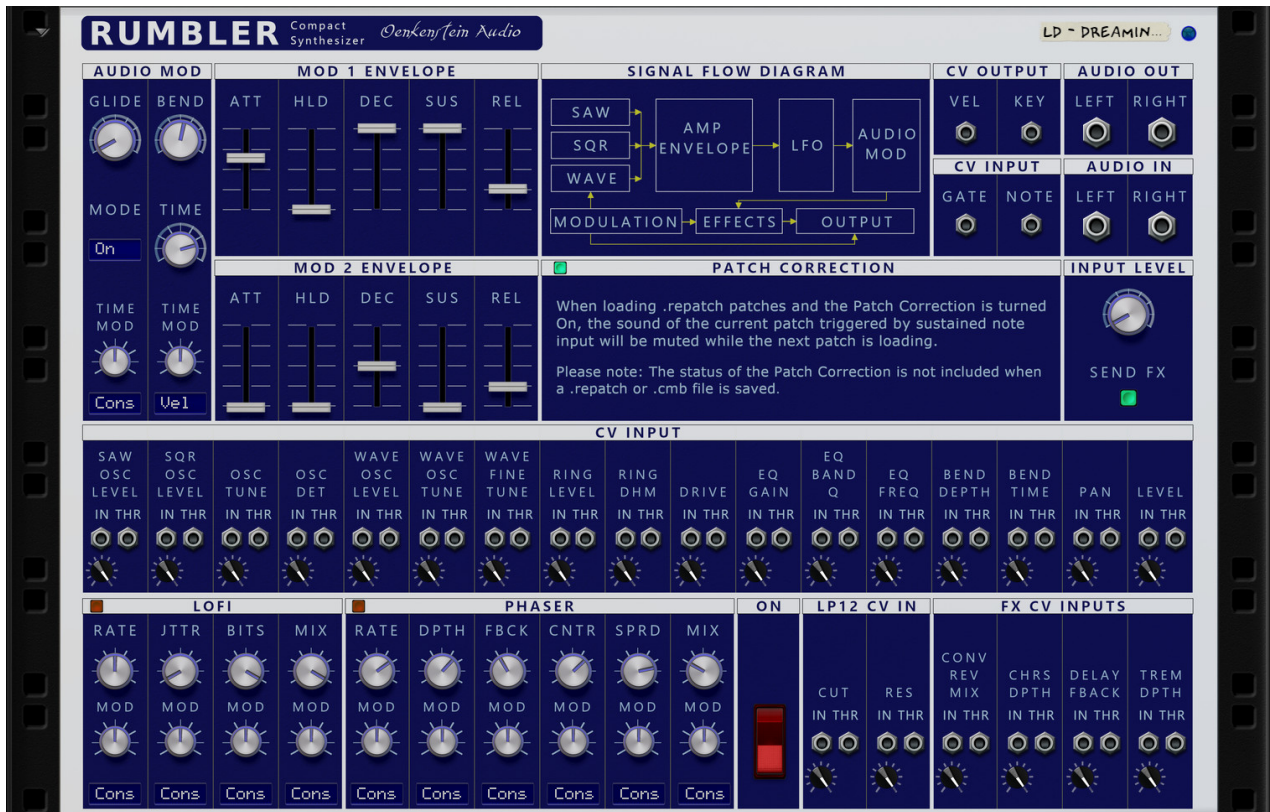
8. Ring Modulation Level
 9. Ring Modulation Disharmonic Tuning
 10. Drive (Level)
 11. EQ Gain
 12. EQ Band Q or EQ Band Width
 13. EQ Frequency
 14. Bend Depth
 15. Bend Time
 16. Pan
 17. Master Level
 18. Low Pass 12 Filter Cutoff
 19. Low Pass 12 Filter Resonance
 20. Convolution Reverb Mix
 21. Chorus Depth
 22. Delay Feedback
 23. Tremolo Depth
 24. Gate
 25. Note
10. Control Voltage Out (CV Out): 2
- Velocity (Vel)
 - Key

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Rumbler Compact Synthesizer front panel:



Rumbler Compact Synthesizer back panel:



2 Front of the device



2.1 Panels overview

- Patch Browser
- Logo
- Device name.
- MIDI Note indicator
- Oscillators Panel (1) with:
 - Oscillator types:
 - Saw oscillator
 - Square oscillator
 - Wave oscillator
 - Oscillator modulation slots
- Amp Envelope panel (2) with:
 - Delay, Attack, Hold, Decay, Sustain and Release (DAHDSR)
 - Amp Envelope modulation slots
- LFO panel (3) with:
 - Drive Shape
 - Rate or Speed
 - Trigger On Off
 - LFO modulation slot
- Audio Modulation panel (4) with:
 - Ring Modulation
 - Drive to change the waveform shaped by the 3 oscillators. Capable of producing distortion and adding harmonics
 - Gain or EQ
 - Filter Cut-off and Resonance
 - Audio modulation slots
- Output panel (5) with:
 - Panning
 - Mater Level
 - High Frequency Correction

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- Poly Mode On Off
- Output modulation slots

Effects Panels.

- **Chorus** panel (6) with:
 - Rate
 - Depth
 - Delay Time
 - Voices amount
 - Mix dry / wet
- **Delay** panel (7) with:
 - Delay Time
 - Feedback
 - Ratio
 - Damp
 - Mix dry / wet
- **Tremolo** panel (8) with:
 - Rate
 - Depth (dry / wet)
 - Attack
 - Release
 - Phase
 - Spread
- **Distortion** panel (9) with:
 - Mode
 - Drive
 - Rectif
 - Mix dry / wet.
- **Convolution Reverb** panel (10) with:
 - Mode
 - Pre Delay
 - Quality
 - Width
 - Decay
 - Mix dry / wet
- **Reverb** panel (11) with:
 - Time
 - Pre Delay
 - Low Cut
 - High Cut
 - Damping
 - Mix dry / wee

3 Panels

Rumbler Compact Synthesizer is divided in panels, each with one or more sections which are separated by thin lines on the panel. A section uses and displays a set of various automatable controllers like rotating knobs, display's, pop up menus, On / Off buttons, and faders. Most panels have one modulation slot.

3.1 Panel 1: Oscillators panel



The Oscillators panel has 3 sections. A Saw oscillator section (1), the Square oscillator section (2) and the Waveform section (3). The output of the Oscillators panel goes to the Amp Envelope panel.

3.1.1 Section 1 and 2: Saw and Square oscillators



The Saw and Square oscillators section adds up to 7 detuned saw waves and square wave oscillators to the Wave oscillator's playback, typically used for creating unison. Unison is created by two or more oscillators that are slightly detuned in correspondence to each other, which makes the

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sound fatter. Changing the Saw oscillators Amount (Amt), Detune (Det) and Tune, will affect the Square oscillator's Amt, Detune and Tune as well.

- **1: Saw - Saw Oscillator Level** (Saw Oscillator Level): Determines the Saw oscillator's volume (Scale: 0 % / 100 %. Default: 0 %).
- **2: Amt – Saw And Square Oscillator Amount** (Saw And Square Oscillator Amount): Determines the number of the saw and square oscillators (Scale: 1 / 7. Default: 4).
- **3: Detune - Saw And Square Oscillator Detune** (Saw And Square Oscillator Detune): Determines the amount of detuning in Cents between the saw and square oscillators (Scale: 0 / 100. Default: 0).
- **4: Level Mod - Saw And Square Osc Lvl Mod Amount** (Saw And Square Osc Lvl Mod Amount): Determines the amount of modulation applied to the Saw and Square oscillators level (Scale: -100 / 100. Default: 0).
- **5: Mod source display - Saw And Square Osc Lvl Mod Source** (Saw And Square Osc Lvl Mod Source): Determines the modulation source applied to the Saw and Square oscillators Level (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).
- **6: Sqr - Square Oscillator Level** (Square Oscillator Level): Determines the Square oscillator's volume (Scale: 0 % / 100 %. Default: 0 %).
- **7: Tune - Saw And Square Oscillator Tune** (Saw And Square Oscillator Tune): Determines the Saw / Square oscillator's tuning or pitch in semitones (Scale: -36 / +36. Default: 0 or C4).
- **8: Tune Mod - Saw And Square Osc Tune Mod Amount** (Saw And Square Osc Tune Mod Amount): Determines the amount of modulation applied to the Saw and Square oscillators tuning (Scale: -100 / 100. Default: 0).
- **9: Mod source display - Saw And Square Osc Tune Mod Source** (Saw And Square Osc Tune Mod Source): Determines the modulation source applied to the Saw and Square oscillators tuning (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).

Each section has 1 modulation slot display with a source pop up menu (**5** and **9**). Rumbler Compact Synthesizer comes with 211 instrument patches.:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.1.2 Section 3: Wave oscillator

Rumbler Compact Synthesizer provides a Wave oscillator with a waveform bank containing 228 different waveforms as a starting point for the creation of sounds. There are two types of waveforms used:

1. 7 High quality basic waveforms for generating Sine, Square, Saw, White noise, Pink noise, Brown noise and Static noise. These are labelled with the numbers 001 – 008.
2. Basic waveforms from a Kawai K1 digital synthesizer from 1985. The bank holds 221 basic 8 bit lo-fi waveforms with 52 single-shots and 176 looped waves. The basic waveforms are labelled with the numbers 009 – 228.

Rumbler Compact Synthesizer uses high quality and lo-fi waveforms combined for a unique character. 2022 meets 1985.

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- **1: Wave - Wave Osc Level** (Wave Osc Level): Determines the level or volume of the Saw, the Square and Wave oscillators (Scale: $-\infty$ / +12 dB. Default: -6,1 dB).
- **2: Wave Select - Wave Osc Select** (Wave Osc Select): Determines the waveform (Scale: 001 / 228. Default: 001 Sine). The waveforms can be selected by clicking on the Wave Osc Select display (A), which is a pop up menu or with the big Wave Osc Select knob (B).



Although you can scroll through the pop up menu list with a mouse, to quickly navigate through the long list of waveforms, you also can use the keyboard.



For example: If you want to choose waveform number 120: Press '1' on the keyboard and the waveform display pop up menu will select waveform number 100 and then use the up and down arrow(s) on the keyboard to scroll down to waveform number 120.

Another example: If you want to select waveform number 256. Press '0' on the keyboard and the pop up menu will select waveform number 001. Now press the arrow up on the keyboard once to select waveform 256.

* Waveforms without mentioning a note like Dis (or D#) behind their name are all tuned C3. Some waveform names like '120 E Piano 1 -1 + 12 Cents' have a number (+12) behind their name followed by the word 'Cents'. The number indicates the Fine Tune correction needed measured in Cents (-2) to make the Waveform sound in tune with the Waveforms names note (E).

* Waveforms marked with an * behind the name are one shot waveforms. All the others are looped waveforms.

- **3: Tune - Wave Osc Tune** (Wave Osc Tune): Determines the tuning or pitch of the Wave oscillator in semitones (Scale: -36 / +36. Default: 0).

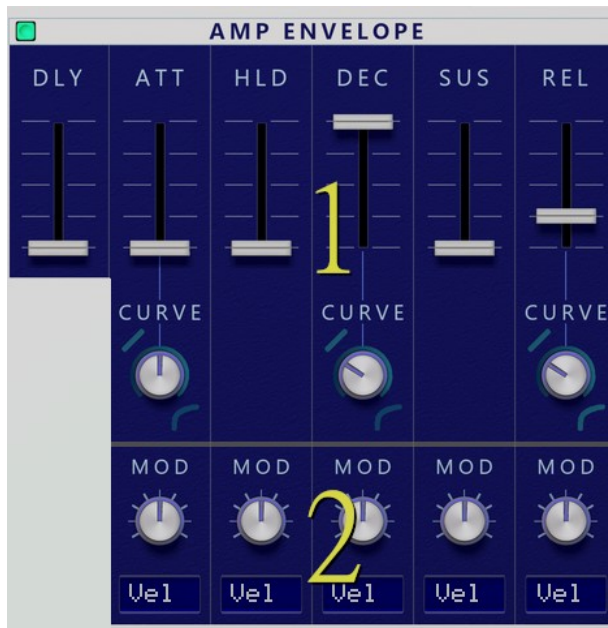
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- **4: Level Mod - Wave Osc Level Mod Amount** (Wave Osc Level Mod Amount): Determines the amount of modulation applied to the Wave oscillator's level (Scale: -100 / 100. Default: 0).
- **5: Mod source display - Wave Osc Level Mod Source** (Wave Osc Level Mod Source): Determines the modulation source applied to the Wave oscillator's Level (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).
- **6: Fine - Wave Osc Fine Tune** (Wave Osc Fine Tune). Provides precise pitch adjustment (Scale: -50 / +50 cents. Default: 0).
- **7: Tune Mod - Wave Osc Tune Mod Amount** (Wave Osc Tune Mod Amount): Determines the amount of modulation applied to the Wave oscillator's (Scale: -100 / 100. Default: 0).
- **8: Mod source display - Wave Osc Tune Mod Source** (Wave Osc Tune Mod Source): Determines the modulation source applied to the Wave oscillator's tuning (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: PB).
The source of the Wave Osc Tune Mod Source is set by default to the Pitch Bend Wheel on your MIDI controller. Moving the Pitch Bend (PB) alters the tuning of all the oscillators (Saw, Square and Wave). If you want to change the scale of the Pitch Bend, set the Wave Osc Tune Mod Amount according to the following table:
 - 029 % = 1 Semitone
 - 041 % = 2 Semitones
 - 050 % = 3 Semitones
 - 058 % = 4 Semitones
 - 065 % = 5 Semitones
 - 071 % = 6 Semitones
 - 076 % = 7 Semitones
 - 082 % = 8 Semitones
 - 087 % = 9 Semitones
 - 091 % = 10 Semitones
 - 096 % = 11 Semitones
 - 100 % = 12 Semitones

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

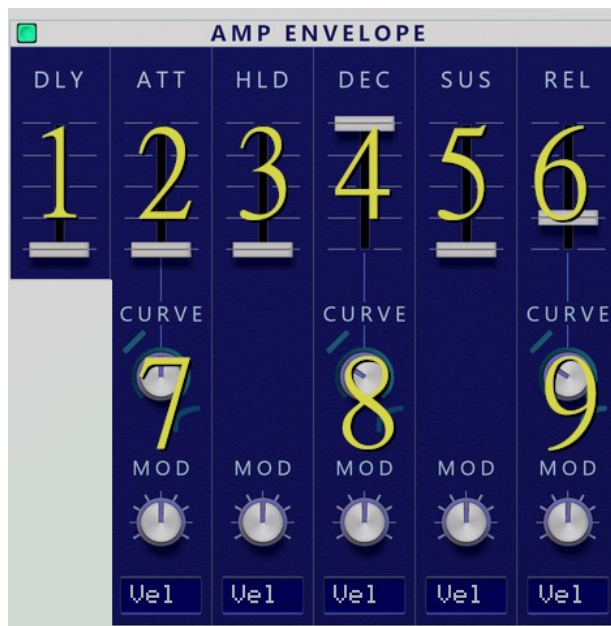
3.2 Panel 2: Amp Envelope panel



The Amp Envelope panel has 2 sections: The first section to set the envelope's Delay, Attack, Hold, Decay, Sustain and Release (1). The second section is the Amp Envelope Modulation matrix (2).

- **Button Display - Amp Envelope To Level On Off** (Amp Envelope To Level On Off): Toggles the Amp Envelope Panel On or Off (Scale: On / Off. Default: On).

3.2.1 Section 1: Faders and curves



- **1: Dly - Envelope Delay Time** (Envelope Delay Time): Determines the amount of delay in seconds between when a note is played and when the effect of the Amp Envelope starts. The sound will start unmodulated and the Amp Envelope will kick in after you have kept the key(s) pressed down for a while (Scale: 0 seconds / 12 seconds. Default: 0 seconds).
- **2: Att - Envelope Attack** (Envelope Attack): Determines the time that a sound takes to peak. When you press a key on your keyboard, the envelope is triggered. The attack parameter then controls how long it should take before the controlled parameter (pitch or filter) reaches the maximum value, when you press a key. By setting attack to a value of 0, the destination parameter would reach the maximum value instantly. By raising the Envelope Attack parameter, the value will instead slowly slide to its maximum (Scale: 0 seconds / 16 seconds).

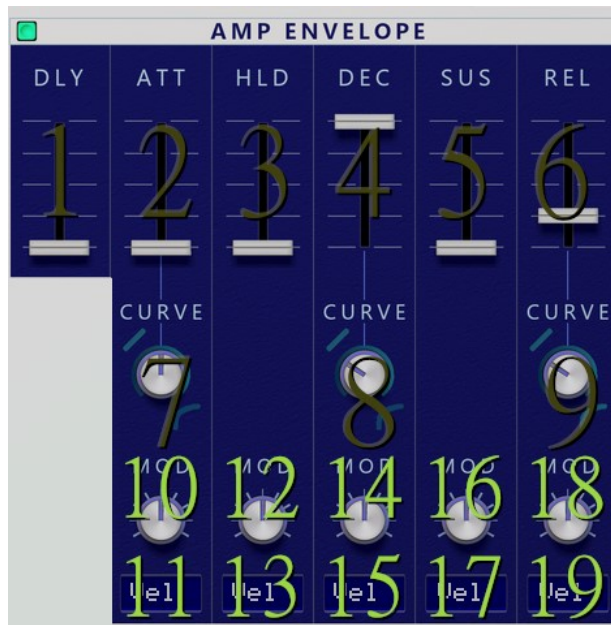
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Default: 0 seconds). Values in seconds (s) shown in the tool tip are based on the Envelope Attack Curve set to 0 %.

- **3: Hold - Envelope Hold** (Envelope Hold): Determines how long the controlled parameter should stay at its maximum value before starting to decrease again. This can be used in combination with the Envelope Attack and Envelope Decay parameters to make a value reach its maximum level, stay there for a while (Envelope Hold) and then start dropping gradually down to the Envelope Sustain level (Scale: 0 seconds / 16 seconds. Default: 0 seconds).
- **4: Dec - Envelope Decay** (Envelope Decay): Determines the time that the sound takes to fall from the peak to the Envelope Sustain level. After the maximum value for a destination has been reached and the Envelope Hold time has expired, the controlled parameter will start to gradually drop down to the Envelope Sustain level. How long it should take before it reaches the Envelope Sustain level is controlled with the Envelope Decay parameter. If the Envelope Decay is set to 0, the value will immediately drop down to the Envelope Sustain level (Scale: 0 seconds / 16 seconds. Default: 16 seconds). Values in seconds (s) shown in the tooltip are based on the Envelope Decay Curve set to -50 %.
- **5: Sus - Envelope Sustain** (Envelope Sustain): Determines the volume (relative to the peak) when the key is held down. The Envelope Sustain parameter determines the value the Amp Envelope should drop back to after the Envelope Decay. If you set Envelope Sustain to full level however, the Envelope Decay setting doesn't matter since the value will never decrease. A combination of Envelope Decay and Envelope Sustain can be used for creating envelopes that rise up to the maximum value, then gradually decrease to, and stay on a level somewhere in-between zero and maximum (Scale: $-\infty$ / 0 dB. Default: $-\infty$ dB).
- **6: Rel - Envelope Release** (Envelope Release): Determines the time the sound takes to die out after the key is released. This works just like the Envelope Decay parameter, with the exception that it determines the time it takes for the value to fall back to zero after the key is released (Scale: 0 seconds / 16 seconds. Default: 63,2 ms or 25).
- **7: Curve - Envelope Attack Curve** (Envelope Attack Curve): Determines the curve for the Envelope Attack from a slow reach to the final value, following a linear curve, to a fast reach of the final value, following a logarithmic curve. (Scale: -100 % / +100 %. Default: 0 %). Typically 75 - 90% for logarithmic curves.
- **8: Curve - Envelope Decay Curve** (Envelope Decay Curve): Determines the curve for the Envelope Decay from a slow reach to the final, following a linear curve, to a fast reach of the final value, following a logarithmic curve. (Scale: -100 % / +100 %. Default: -50 %). Typically 75 - 90% for logarithmic curves.
- **9: Curve - Envelope Release Curve** (Envelope Release Curve): Determines the curve for the Envelope Release from a slow reach to the final, following a linear curve, to a fast reach of the final value, following a logarithmic curve. (Scale: -100 % / +100 %. Default: -50 %). Typically 75 - 90% for logarithmic curves.

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3.2.2 Section 2: Amp Envelope Modulation matrix



The Amp Envelope panel has a one modulation matrix slot per section. Each modulation matrix slot has an amount knob and a source pop up menu. The modulation source display values:

1. Cons = Constant maximum value
 2. Rnd = Random bipolar value between -1 and +1
 3. Rnd+ = Random unipolar value between 0 and 1
 4. PB = Pitch Bend, incoming MIDI pitch bend
 5. Aft = Aftertouch, incoming MIDI channel pressure
 6. MW= Modulation Wheel
 7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
 8. Vel = Velocity, incoming MIDI velocity
 9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
 10. LFO = LFO or Low Frequency Oscillator
 11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
 12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel
- **10: Envelope Attack Mod Amount** (Envelope Attack Mod Amount): Determines the amount of modulation applied to the Amp Envelope's Attack (Scale: -100 / 100. Default: 0).
 - **11: Envelope Attack Mod Source display** (Envelope Attack Mod Source): Determines the modulation source applied to the Amp Envelope's Attack (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).
 - **12: Envelope Hold Mod Amount** (Envelope Hold Mod Amount): Determines the amount of modulation applied to the Amp Envelope's Hold (Scale: -100 / 100. Default: 0).
 - **13: Envelope Hold Mod Source display** (Envelope Hold Mod Source): Determines the modulation source applied to the Amp Envelope's Hold (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).
 - **14: Envelope Decay Mod Amount** (Envelope Decay Mod Amount): Determines the amount of modulation applied to the Amp Envelope's Decay (Scale: -100 / 100. Default: 0).
 - **15: Envelope Decay Mod Source display** (Envelope Decay Mod Source): Determines the modulation source applied to the Amp Envelope's Decay (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).
 - **16: Envelope Sustain Mod Amount** (Envelope Sustain Mod Amount): Determines the amount of modulation applied to the Amp Envelope's Sustain (Scale: -100 / 100. Default: 0).
 - **17: Envelope Sustain Mod Source display** (Envelope Sustain Mod Source): Determines the modulation source applied to the Amp Envelope's Sustain (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).

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- **18: Envelope Release Mod Amount** (Envelope Release Mod Amount): Determines the amount of modulation applied to the Amp Envelope's Release (Scale: -100 / 100. Default: 0).
- **19: Envelope Release Mod Source display** (Envelope Release Mod Source): Determines the modulation source applied to the Amp Envelope's Release (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).

3.3 Panel 3: LFO panel



A Low Frequency Oscillator does not produce sound in the audible range and is often used as a modulation source, whereby its shape and speed can be changed. Other modulation sources which can be shaped are the Amp Envelope (Amp) and the 2 Mod Envelopes (Mod1 and Mod2).

- **1: Shape – LFO Shape** (LFO_Shape): Determines the waveform for the LFO (Scale: Sine, Tri, Sqr, Saw, Rnd and Drft. Default: Sine).
- **2: Rate - LFO Rate** (LFO Rate): Determines the LFO rate or speed in Hz (Scale: 0,01 Hz / 15,85 Hz. Default: 1,00 Hz).
- **3: Trig - LFO Retrigger On Off** (LFO Retrigger On Off): When Off, all voices will be modulated together in sync. When On, the LFO for each voice starts (Scale: On / Off. Default: On).
- **4: Rate Mod - LFO Rate Mod Amount** (LFO Rate Mod Amount): Determines the amount of modulation applied to the LFO's Rate or speed (Scale: -100 / 100. Default: 0).
- **5: Rate Mod Source display - LFO Rate Mod Source** (LFO Rate Mod Source): Determines the modulation source applied to the LFO's Rate or speed (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel

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- 12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.4 Panel 4: Audio Modulation panel



The Audio Modulation Panel has 2 sections: One with Ring (or Amplitude Modulation), Drive (or Shaper), Gain (or EQ) and a Low Pass Filter with Cut-off and Resonance (1). The second section is the Audio Modulation matrix (2).

3.4.1 Section 1: Ring



The Wave oscillator acts as a carrier and gets modulated by an internal sine oscillator. The Saw and Square Oscillators are not affected by Ring Modulation.

- **1: Ring - Ring Modulation Level** (Sine Osc AM On Off): Determines the level of the internal sine oscillator which performs Amplitude Modulation (or Ring Modulation) with the Wave Oscillator (Scale: 0 % / 100 %. Default: 0 %).
- **2: HM - Ring Modulation Harmonic** (Ring Modulation Harmonic): Determines whether the internal sine oscillator will perform Amplitude Modulation (or Ring Modulation) following a

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harmonic scale in semitones with the Waveform oscillator (Scale: -36 semitones / +36 semitones. Default: 0 semitones).

- **3: DHM - Ring Modulation Disharmonic** (Ring Modulation Disharmonic): Determines whether the Sine oscillator will perform Amplitude Modulation (or Ring Modulation) following a disharmonic scale in Hz with the Waveform oscillator (Scale: 2 Hz / 20 kHz. Default: 263,7 Hz).
- **4: Level Mod - Ring Modulation Mod Amount** (Ring Modulation Mod Amount): Determines the amount of modulation applied to the Ring Modulator's (Scale: -100 / 100. Default: 0).
- **6: Ring Mod Source display - Ring Modulation Mod Source** (Ring Modulation Mod Source): Determines the modulation source applied to the Ring Modulation (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.4.2 Section 2: Drive or Shaper



Drive or Shaper is a very powerful sound shaping tool, providing fully customizable wave shaping, capable of producing distortion and harmonics.

- **1: Shaper Mode display** (Shaper Mode): Determines the way of wave shaping. (Scale: None, Clip, Sine and Crsh. Default: None).
- **2: Shaper Drive Mod Amount** (Shaper Drive Mod Amount): Determines the amount of modulation applied to the Drive or Shaper (Scale: -100 / 100. Default: 0).
- **6: Drive Mod Source display - Shaper Drive Mod Source** (Shaper Drive Mod Source): Determines the modulation source applied to the Drive or Shaper (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).

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The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW= Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.4.3 Section 3: Gain or EQ



Gain or EQ is a single parametric equalizer band to cut or boost a desired frequency.

- **1: Gain (EQ Gain):** Determines the attenuation or boost. (Scale: $-\infty$ / +12,0 dB. Default: -6,1 dB).
- **2: Q - EQ Band Width (EQ Band Width):** Determines the slope of the EQ left and right from the center frequency (Scale: 0,33 oct / 3,0 oct. Default: 1).
- **3: Freq - EQ Band Frequency (EQ Band Frequency):** Determines the center frequency of the EQ band (Scale: 0 % / 100 %. Default: 0 %).
- **4: Freq Mod - EQ Band Frequency Mod Amount (EQ Band Frequency Mod Amount):** Determines the amount of modulation applied to the EQ's Frequency (Scale: -100 / 100. Default: 0).
- **5: Source display - EQ Band Frequency Mod Source (EQ Band Frequency Mod Source):** Determines the modulation source applied to the Drive the EQ's frequency band (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Key).

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure

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6. MW= Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.4.4 Section 4: Low Pass 12 Filter



Gain or EQ is a single parametric equalizer band to cut or boost a desired frequency.

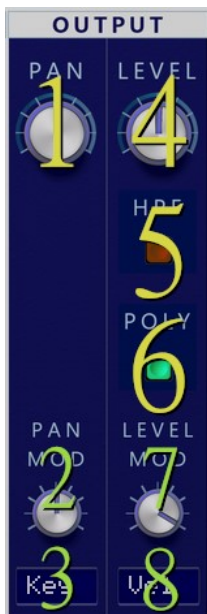
- **1: Cut - Low Pass 12 Cutoff** (Low Pass 12 Cutoff): Determines the cut-off frequency. (Scale: -20,0 Hz / 25 kHz. Default: 25 kHz).
- **2: Button - Low Pass 12 Filter On Off** (Low Pass 12 Filter On Off): Determines whether the filter is On or Off (Scale: On / Off. Default: On).
- **3: Key Track - Low Pass 12 Cutoff Key Track** (Low Pass 12 Cutoff Key Track): Determines the amount of modulation from the keyboard to the filter's cut-off frequency (Scale: -100 / +100. Default: 0).
- **4: Freq Mod - Low Pass 12 Cutoff Mod Amount** (Low Pass 12 Cutoff Mod Amount): Determines the amount of modulation applied to the Low Pass 12 Filter Frequency (Scale: -100 / 100. Default: 0).
- **5: Source display - Low Pass 12 Cutoff Mod Source** (Low Pass 12 Cutoff Mod Source): Determines the modulation source applied to applied to the Low Pass 12 Filter Frequency (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).
- **6: Res - Low Pass 12 Resonance** (Low Pass 12 Resonance): Determines the filter's resonance. (Scale: 0 % / 100 %. Default: 0%).
- **7: Key Track - Low Pass 12 Resonance Key Track** (Low Pass 12 Resonance Key Track): Determines the amount of modulation from the keyboard to the filter's cut-off resonance (Scale: -100 / +100. Default: 0).
- **8: Res Mod - Low Pass 12 Resonance Mod Amount** (Low Pass 12 Resonance Mod Amount): Determines the amount of modulation applied to filter resonance (Scale: -100 / 100. Default: 0).
- **9: Source display - Low Pass 12 Resonance Mod Source** (Low Pass 12 Resonance Mod Source): Determines the modulation source applied to applied to Filter resonance (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).

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The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW= Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

3.5 Panel 5: Output panel



- **1: Pan - Pan (Pan):** Determines the panning of the output (Scale: -50 Left / +50 Right. Default: 0).
- **2: Pan Mod - Pan Mod Amount (Pan Mod Amount):** Determines the amount of modulation applied panning (Scale: -100 / 100. Default: 0).
- **3: Source display - Pan Mod Source (Pan Mod Source):** Determines the modulation source applied to applied to panning (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Key).
- **4: Level - Master Level (Master Level):** Determines the master volume (Scale: $-\infty$ / +12,0 dB. Default: -6,1 dB).
- **5: HF - HF High Pass 12 Filter On Off (High Pass 12 Filter On Off):** This corrects for high frequency loss due to sample playback interpolation (Scale: On / Off. Default: Off).
- **6: Poly - Poly On / Off (Poly On Off):** Select On if you want to play Rumbler Compact Synthesizer polyphonically. The maximum number of voices is 8 and the voice stealing is set to the oldest note. Select Off, if you want to play Rumbler Compact Synthesizer in monophonic mode and retrigger the envelopes as soon as you play a new note (Scale: On / Off. Default: On).
- **7: Level Mod - Master Level Mod Amount (Master Level Mod Amount):** Determines the amount of modulation applied to the master level (Scale: -100 / 100. Default: 100).

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- **8: Source display - Master Level Mod Source** (Master Level Mod Source): Determines the modulation source applied to the master level (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Vel).

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

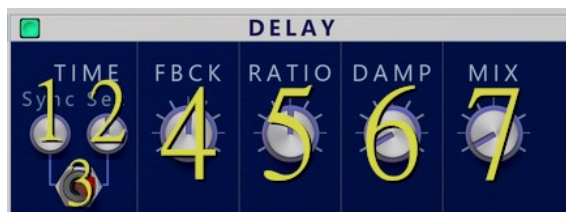
3.6 Panel 6: Chorus



The Chorus effect takes an audio signal and mix it with one or more delayed, pitch modulated copies.

- **Button Display - Chorus On / Off** (Chorus On Off): Determines whether chorus is added to the signal chain (Scale: On / Off. Default: On).
- **1: Rate - Chorus Rate** (Chorus Rate): Determines the modulation rate in Hz (Scale: 0,10 Hz / 10 Hz. Default: 1,00 Hz).
- **2: Dpth - Chorus Depth** (Chorus Depth): Determines the depth of the delay pitch modulation in milliseconds (Scale: 0 ms / 32 ms. Default: 8 ms).
- **3: Dly - Chorus Delay** (Chorus Delay): Determines the initial delay for each voice (Scale: 0 ms / 32 ms. Default: 8 ms).
- **4: Voice - Chorus Voices Amount** (Chorus Voices Amount): Determines the number of chorus voices (Scale: 1, 2 or 3 voices. Default: 3 voices).
- **6: Mix - Chorus Mix** (Chorus Mix): Determines the amount of chorus mixed with the original sound (Scale: 0 % / 100 %. Default: 0 %).

3.7 Panel 7: Delay



Stereo delay effect with adjustable feedback routing and left / right spread.

- **Button Display - Delay On / Off** (Delay On Off): Determines whether delay is added to the signal chain (Scale: On / Off. Default: On).

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- **1: Time Sync- Delay Sync** (Delay Sync): Determines the time of the interval between repeats of the delay based on tempo in the sequencer (Scale: 1/16 bar / 1/1 bar. Default: 1/4 bar).
- **2: Time Sec- Delay Time** (Delay Time): Determines the time of the interval between repeats of the delay in seconds (Scale: 0 seconds / 4 seconds. Default: 1 second).
- **3: Toggle switch - Delay Sync On Off** (Delay Sync On Off): Toggles mode between a synced delay based on quarter notes and a delay in seconds (Scale: On / Off. Default: On).
- **4: Fbck - Delay Feedback** (Delay Feedback): Determines the number of repeats of the delay (Scale: 0 % / 100 %. Default: 50 %).
- **5: Ratio - Delay Ratio** (Delay Ratio): Determines the channel to reduce. Negative values reduce the left channel delay, positive values reduce the right channel delay (Scale: 50:100 / 100:50. Default: 100:50).
- **6: Damp - Delay Damping**(Delay Damping): Determines the progressive loss of high frequencies in the delay tail (Scale: 20 kHz / 1 kHz. Default: 20 kHz).
- **7: Mix - Delay Mix** (Delay Mix): Determines the amount of delay mixed with the original sound (Scale: 0 % / 100 %. Default: 0 %).

3.8 Panel 8: Tremolo / Pan



Apply tremolo and / or auto-pan effects.

- **Button Display - Tremolo On / Off** (Tremolo On Off): Determines whether tremolo is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Rate Sync- Tremolo Sync** (Tremolo Sync): Determines the time of the interval between repeats of the tremolo based on tempo in the sequencer (Scale: 1/16 bar / 1/1 bar. Default: 1/4 bar).
- **2: Rate Sec- Tremolo Rate** (Tremolo Rate): Determines the time of the interval between repeats of the tremolo in Hz (Scale: 0,05 Hz / 20 Hz. Default: 1 Hz).
- **3: Toggle switch - Tremolo Sync On Off** (Tremolo Sync On Off): Switch the modulation rate between cycles per second (Hz) or cycles per beat (Scale: On / Off. Default: Off).
- **4: Dpth - Tremolo Depth** (Tremolo Depth): Adjust the amplitude modulation depth of the tremolo (Scale: 0 % / 100 %. Default: 0 %).
- **5: Att - Tremolo Attack** (Tremolo Attack): Adjust the attack length as a percentage of the 'on' time (Scale: 0 % / 100 %. Default: 50 %).
- **6: Phase - Tremolo Phase** (Tremolo Phase): Adjust the initial phase of the modulation relative to beat positions when sync is on (Scale: 0 % of 360 degrees / 100 % of 360 degrees. Default: 0 % of 360 degrees).
- **7: Sprd - Tremolo Spread** (Tremolo Spread): Adjust the phase of the right channel relative to the left, to add stereo width and create auto-pan effects (Scale: 0 % of 360 degrees / 100 % of 360 degrees. Default: 0 % of 360 degrees).

3.9 Panel 9: Distortion



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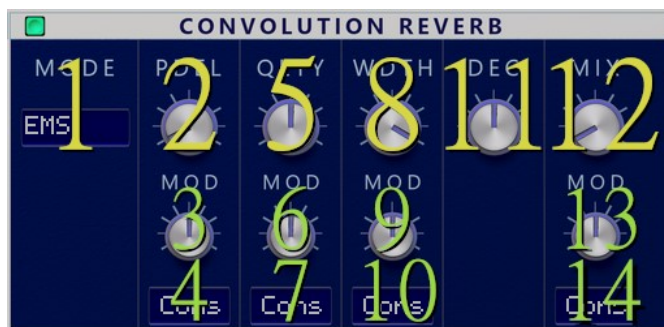
Stereo distortion / overdrive effect.

- **Button Display - Distortion On Off** (Distortion On Off): Determines whether distortion is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Mode - Distortion Mode** (Distortion Mode): Determines the distortion mode between Transistor (stereo hard clipping) or Tube (soft clipping with DC bias) (Scale: Trans / Tube. Default: Trans).
- **2: Drive - Distortion Drive** (Distortion Drive): Determines the input gain to the distortion (Scale: 0 % off 60 dB / 100 % off 60 dB. Default: 50 % off 60 dB).
- **3: Mod - Distortion Drive Mod Amount** (Distortion Drive Mod Amount): Determines the amount of modulation applied to the distortions drive (Scale: -100 / 100. Default: 0).
- **4: Source display - Distortion Drive Mod Source** (Distortion Drive Mod Source): Determines the modulation source applied to applied the master level (Scale: Cons, PB, Aft, MW. Default: Cons).
- **5: Rect - Distortion Rectify** (Distortion Rectify): Degree to which negative signal peaks are converted to positive (Scale: 0 % / 100 %. Default: 50 %).
- **6: Mod - Distortion Rectify Mod Amount** (Distortion Rectify Mod Amount): Determines the amount of modulation applied to the distortions rectify (Scale: -100 / 100. Default: 100).
- **7: Source display - Distortion Rectify Mod Source** (Distortion Rectify Mod Source): Determines the modulation source applied to the the distortions rectify (Scale: Cons, PB, Aft, MW. Default: Cons).
- **8: Mix - Distortion Mix** (Distortion Mix): Mix between dry and wet (Scale: 0 % / 100 %. Default: 0 %).
- **9: Mod - Distortion Mix Mod Amount** (Distortion Mix Mod Amount): Determines the amount of modulation applied to the distortions Mix (Scale: -100 / 100. Default: 0).
- **10: Source display - Distortion Mix Mod Amount** (Distortion Mix Mod Amount): Determines the modulation source applied to the distortions mix (Scale: Cons, PB, Aft, MW. Default: Cons).

The modulation source display values:

1. Cons = Constant maximum value
2. PB = Pitch Bend, incoming MIDI pitch bend
3. Aft = Aftertouch, incoming MIDI channel pressure
4. MW= Modulation Wheel

3.10 Panel 10: Convolution Reverb



A convolution reverb process the incoming audio with an impulse response, to add reverberation or the character of another audio device, acoustic space.

- **Button Display - Convolution On Off** (Convolution On Off): Determines whether the convolution reverb is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Mode - Convolution Mode** (Convolution Mode): Determines the convolution type or impulse response. You can choose from several reverb rooms:
 1. Marshl
 2. Drums
 3. Kitchn
 4. Mesa

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5. Spring
6. String
7. EMS
8. Holy
9. Clap
10. Vocal

(Default: EMS).

- **2: Pdel - Convolution Pre Delay** (Convolution Pre Delay): Determines the initial delay before reverb (Scale: 0 % / 100 %. Default: 0 %).
- **3: Mod - Convolution Pre Delay Mod Amount** (Convolution Pre Delay Mod Amount): Determines the amount of modulation applied to the reverbs pre delay (Scale: -100 / 100. Default: 0).
- **4: Source display - Convolution Pre Delay Mod Source** (Convolution Pre Delay Mod Source): Determines the modulation source applied to applied the reverbs pre (Scale: Cons, PB, Aft, MW. Default: Cons)
- **5: Qlty - Convolution Quality** (Convolution Quality): Determines the quality of the reverb. Reduce bandwidth to save CPU - should be set as low as possible without hearing artefacts (Scale: 0 % / 100 %. Default: 50 %).
- **6: Mod - Convolution Quality Mod Amount** (Convolution Quality Mod Amount): Determines the amount of modulation applied to the reverbs quality (Scale: -100 / 100. Default: 100).
- **7: Source display - Convolution Quality Mod Source** (Convolution Quality Mod Source): Determines the modulation source applied to the the reverbs quality (Scale: Cons, PB, Aft, MW. Default: Cons).
- **8: Wdth - Convolution Width** (Convolution Width): Reduce to mix the left and right inputs together before convolution (Scale: 0 % / 100 %. Default: 100 %).
- **9: Mod - Convolution Width Mod Amount** (Convolution Width Mod Amount): Determines the amount of modulation applied to the reverbs input width (Scale: -100 / 100. Default: 0).
- **10: Source display - Convolution Width Mod Source** (Convolution Width Mod Source): Determines the modulation source applied to the reverbs input width (Scale: Cons, PB, Aft, MW. Default: Cons).
- **11: Dec - Convolution Decay** (Convolution Decay): Applies a volume ramp (decreasing or increasing) to the impulse to adjust the perceived reverb time (Scale: 0 % off 18 dB per sec / 100 % off 18 dB per sec. Default: 50 % off 18 dB per sec).
- **12: Mix - Convolution Mix** (Convolution Mix): Mix between dry and wet signal (Scale: 0 / 100 %. Default: 0).
- **13: Mod - Convolution Mix Mod Amount** (Convolution Mix Mod Amount): Determines the amount of modulation applied to the reverbs mix (Scale: -100 / 100. Default: 0).
- **14: Source display - Convolution Mix Mod Source** (Convolution Mix Mod Source): Determines the modulation source applied to the reverbs mix (Scale: Cons, PB, Aft, MW. Default: Cons).

The modulation source display values:

1. Cons = Constant maximum value
2. PB = Pitch Bend, incoming MIDI pitch bend
3. Aft = Aftertouch, incoming MIDI channel pressure
4. MW= Modulation Wheel

3.11 Panel 11: Reverb



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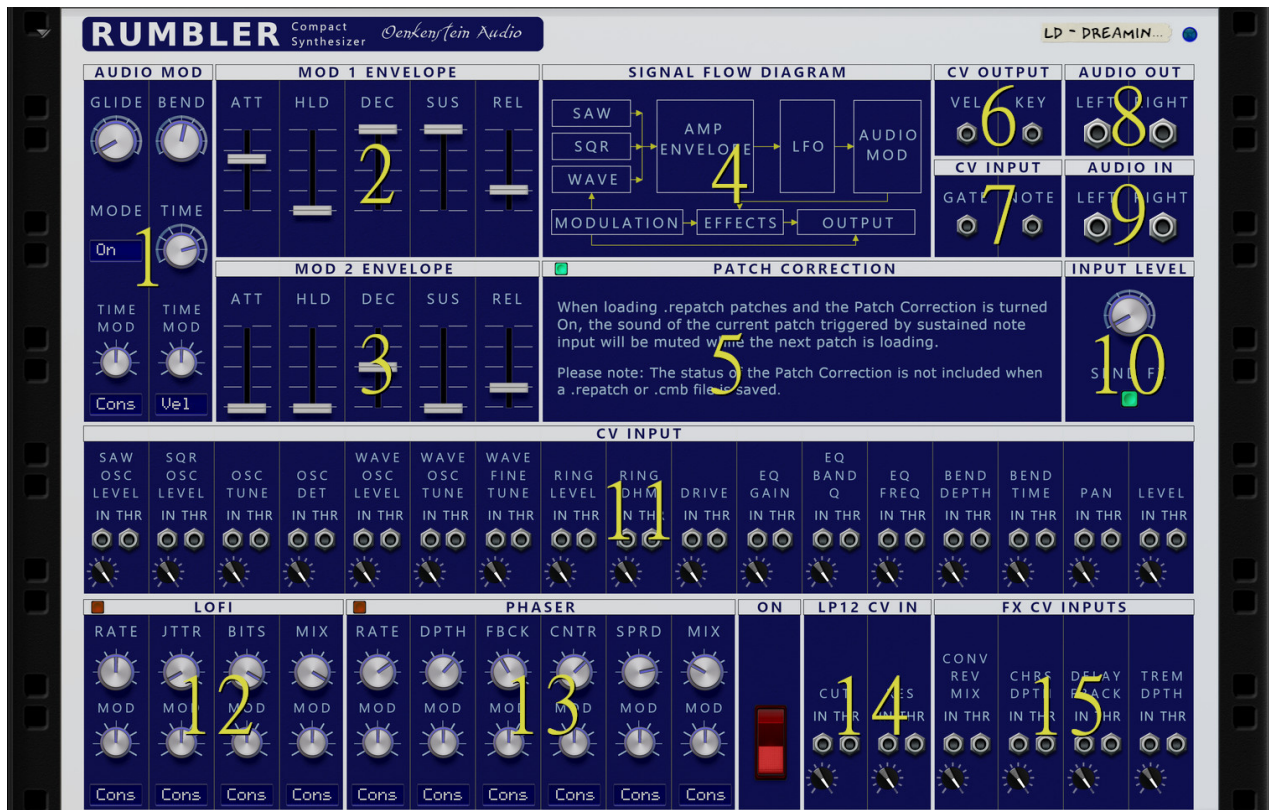
Algorithmic reverb, emulating a digital reverb unit.

- **Button Display - Reverb On Off** (Reverb On Off): Determines whether the linear reverb is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Time - Reverb Time** (Reverb Time): Determines the length of reverb tail (Scale: 0 % / 100 %. Default: 50 %).
- **2: Mod - Reverb Time Mod Amount** (Reverb Time Mod Amount): Determines the amount of modulation applied to the reverbs time (Scale: -100 / 100. Default: 0).
- **3: Source display - Reverb Time Mod Source** (Reverb Time Mod Source): Determines the modulation source applied to the reverbs time (Scale: Cons, PB, Aft, MW. Default: Cons).
- **4: Pdel - Reverb Pre Delay** (Reverb Pre Delay): Determines the initial delay before reverb (Scale: 0 ms / 200 ms. Default: 0 ms).
- **5: Mod - Reverb Pre Delay Mod Amount** (Reverb Pre Delay Mod Amount): Determines the amount of modulation applied to the reverbs pre delay (Scale: -100 / 100. Default: 0).
- **6: Source display - Reverb Pre Delay Mod Source** (Reverb Pre Delay Mod Source): Determines the modulation source applied to applied the reverbs pre (Scale: Cons, PB, Aft, MW. Default: Cons).
- **7: Lcut - Reverb Low Cut** (Reverb Low Cut): Determines the highpass filter cutoff frequency (Scale: 20 Hz / 2 kHz %. Default: 20 Hz).
- **8: Mod - Reverb Low Cut Mod Amount** (Reverb Low Cut Mod Amount): Determines the amount of modulation applied to the reverbs low cut (Scale: -100 / 100. Default: 0).
- **9: Source display - Reverb Low Cut Mod Source** (Reverb Low Cut Mod Source): Determines the modulation source applied to the the reverbs low cut (Scale: Cons, PB, Aft, MW. Default: Cons).
- **10: Hcut - Reverb High Cut** (Reverb High Cut): Determines the lowpass filter cutoff frequency (Scale: 20 kHz / 2 kHz. Default: 20 kHz).
- **11: Mod - Reverb High Cut Mod Amount** (Reverb High Cut Mod Amount): Determines the amount of modulation applied to the reverbs high cut (Scale: -100 / 100. Default: 0).
- **12: Source display - Reverb High Cut Mod Source** (Reverb High Cut Mod Source): Determines the modulation source applied to the reverbs high cut (Scale: Cons, PB, Aft, MW. Default: Cons).
- **13: Damp - Reverb Damping** (Reverb Damping): Determines the progressive loss of high frequencies in the reverb tail (Scale: 20 kHz / 2 kHz. Default: 20 kHz).
- **14: Mod - Reverb Damping Mod Amount** (Reverb Damping Mod Amount): Determines the amount of modulation applied to the reverbs damping (Scale: -100 / 100. Default: 0).
- **15: Source display - Reverb Damping Mod Source** (Reverb Damping Mod Source): Determines the modulation source applied to the reverbs damping (Scale: Cons, PB, Aft, MW. Default: Cons).
- **16: Mix - Reverb Mix** (Reverb Mix): Mix between dry and wet signal (Scale: 0 / 100 %. Default: 0).
- **17: Mod - Reverb Mix Mod Amount** (Reverb Mix Mod Amount): Determines the amount of modulation applied to the reverbs mix (Scale: -100 / 100. Default: 0).
- **18: Source display - Reverb Mix Mod Source** (Reverb Mix Mod Source): Determines the modulation source applied to the reverbs mix (Scale: Cons, PB, Aft, MW. Default: Cons).

The modulation source display values:

1. Cons = Constant maximum value
2. PB = Pitch Bend, incoming MIDI pitch bend
3. Aft = Aftertouch, incoming MIDI channel pressure
4. MW= Modulation Wheel

4 Back of the device



4.1 Panels overview

- Logo
- Device name.
- MIDI Note indicator
- Audio Mod Panel (1) with
 - Glide
 - Bend
- Mod 1 Envelope panel (2) with:
 - Attack, Hold, Decay, Sustain and Release (AHDSR)
- Mod 2 Envelope panel (3) with:
 - Attack, Hold, Decay, Sustain and Release (AHDSR)
- Signal Flow Diagram panel (4)
- Patch Correction panel (5)
- CV Output panel (6)
- CV Input panel (7)
- Audio Out panel (8)
- Audio In panel (9)
- Input Level panel (10)
- CV Input panel (11)
- LoFi panel (12) with:
 - Rate
 - Jitter
 - Bits
 - Mix dry / wet
- Phaser panel (13)
 - Rate
 - Depth
 - Feedback
 - Center
- LP12 CV IN panel (14)
- FX CV INPUTS panel (15)

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- Spread
- Mix dry / wet
- **Power Switch** decoration
- **LP12 CV In** panel (14)
- **FX CV Inputs** panel (15)

5 Panels

Rumbler Compact Synthesizer is divided in panels, each with one or more sections. A section uses and displays a set of various controllers like rotating knobs, display's, pop up menus, On / Off buttons and faders. Some panels have modulation slots.

5.1 Panel 1: Audio Mod



5.1.1 Section 1: Glide

Glide or Portamento makes note pitch glide from previous notes to new ones.

- **1: Time - Glide Time:** The time it takes to glide from one note to the next (Scale: 0 / 100. Default: 0). When Glide Time is set to 0 the glide is turned off and thus modulation in the modulation matrix has no effect as well. Glide or its modulation will occur when the Glide Time value is set to 1 or higher (Zero = No glide, 1 = Start point of the Glide Time).
- **2: Mode - Glide Mode:** Switches pitch glide Off, On or Auto (only glides if a key is already held). Default is On.
 - When Off there will be no glide.
 - When On or Auto the pitch will glide between consecutive notes.
- **3: Time Mod - Glide Time Mod Amount:** Determines whether the Glide Time modulation is added to the signal chain (Scale: On / Off. Default: On).
- **4: Mod Display - Glide Time Mod Source:** Determines the source for the Glide modulation (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).

5.1.2 Section 2: Bend

Bend bends the pitch of a note.

- **5: Depth - Bend Depth:** Determines how much the pitch alters as each key is struck (Scale: -50 / +50. Default: 0).
- **6: Time - Bend Time (Auto Bend Time):** Determines the time for the auto bend (Scale: 0 seconds / 16 seconds. Default: 63,2 milliseconds or 25).
- **7: Time Mod - Bend Time Mod Amount:** Determines whether the bend time modulation is added to the signal chain (Scale: On / Off. Default: On).

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- **8: Mod Display - Bend Time Mod Source:** Determines the source for the bend time modulation (Scale: Cons, Rnd, Rnd+, PB, Aft, MW, Key, Vel, Amp, LFO, Md1, Md2. Default: Cons).

The modulation source display values:

1. Cons = Constant maximum value
2. Rnd = Random bipolar value between -1 and +1
3. Rnd+ = Random unipolar value between 0 and 1
4. PB = Pitch Bend, incoming MIDI pitch bend
5. Aft = Aftertouch, incoming MIDI channel pressure
6. MW = Modulation Wheel
7. Key = Keyboard position relative to C3. Value increases by 1.0 per octave
8. Vel = Velocity, incoming MIDI velocity
9. Amp = Amp Envelope curve shaped by the Delay, Attack, Hold, Decay, Sustain and Release settings
10. LFO = LFO or Low Frequency Oscillator
11. Md1 = Mod 1 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 1 Envelope section on the back panel
12. Md2 = Mod 2 Envelope curve shaped by the Attack, Hold, Decay, Sustain and Release settings in the Mod 2 Envelope section on the back panel

5.2 Panel 2: Mod 1 Envelope



- **1: Att – Mod Envelope Attack:** Determines the time that a sound takes to peak. When you press a key on your keyboard, the envelope is triggered. The attack parameter then controls how long it should take before the controlled parameter (pitch or filter) reaches the maximum value, when you press a key. By setting attack to a value of 0, the destination parameter would reach the maximum value instantly. By raising the Mod Envelope Attack parameter, the value will instead slowly slide to its maximum (Scale: 0 seconds / 16 seconds. Default: 0 seconds).
- **3: Hold – Mod Envelope Hold:** Determines how long the controlled parameter should stay at its maximum value before starting to decrease again. This can be used in combination with the Mod Envelope Attack and Mod Envelope Decay parameters to make a value reach its maximum level, stay there for a while (Mod Envelope Hold) and then start dropping gradually down to the Mod Envelope Sustain level (Scale: 0 seconds / 16 seconds. Default: 0 seconds).
- **4: Dec – Mod Envelope Decay:** Determines the time that the sound takes to fall from the peak to the Mod Envelope Sustain level. After the maximum value for a destination has been reached and the Mod Envelope Hold time has expired, the controlled parameter will start to gradually drop down to the Mod Envelope Sustain level. How long it should take before it reaches the Mod Envelope Sustain level is controlled with the Mod Envelope Decay parameter. If the Mod Envelope Decay is set to 0, the value will immediately drop down to the Mod Envelope Sustain level (Scale: 0 seconds / 16 seconds. Default: 400 ms or 50).
- **5: Sus – Mod Envelope Sustain:** Determines the volume (relative to the peak) when the key is held down. The Mod Envelope Sustain parameter determines the value the Mod Amp Envelope should drop back to after the Mod Envelope Decay. If you set Mod Envelope Sustain to full level however, the Mod Envelope Decay setting doesn't matter since the value will never decrease. A combination of Mod Envelope Decay and Mod Envelope Sustain can be used for creating envelopes that rise up to the maximum value, then gradually decrease to, and stay on a level somewhere in-between zero and maximum (Scale: $-\infty$ / 0 dB. Default: $-\infty$ dB).

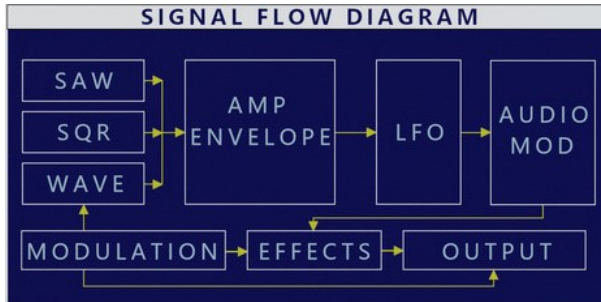
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- **6: Rel – Mod Envelope Release:** Determines the time the sound takes to die out after the key is released. This works just like the Mod Envelope Decay parameter, with the exception that it determines the time it takes for the value to fall back to zero after the key is released (Scale: 0 seconds / 16 seconds. Default: 63,2 ms or 25).

5.3 Panel 3: Mod 2 Envelope

Works as Mod 1 Envelope (see above)

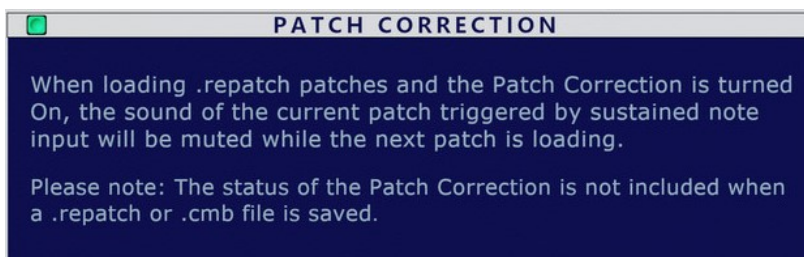
5.4 Panel 4: Signal Flow Diagram



The level output of the Saw and Square oscillators are connected and sums into the Wave oscillator. Please note: If you change the Level on the Wave oscillator, the level of the Saw and Square oscillators will change as well.

The sum of the Oscillators panel will pass through the Amp Envelope panel, the LFO panel, the Audio Modulation panel and then goes through the 8 effects panels to end in the Output Panel.

5.5 Panel 6: Patch Correction



When loading .repatch patches and the Patch Correction is turned On, the sound of the current patch triggered by sustained note input will be muted while the next patch is loading. It also mutes the Wave Oscillator playback when a new Waveform is selected with the Wave Select (Scale: On / Off. Default: On).

Please note: The status of the Patch Correction is not included when a .repatch or .cmb file is saved. Also, when Patch Correction is turned Off, changing .repatch files in the Patch Browser while notes are sustained may cause a sudden jump in volume and will play the oscillators from the old patch with the settings of the new patch. The change disappears when a new note is triggered.

5.6 Panel 6: CV Output



Control Voltage (CV) Output. The Velocity (1) and the position of the Key (2) of your MIDI controller are translated into unipolar control voltage.

5.7 Panel 7: CV Input Gate and Note



Control Voltage (CV) Input for Gate (1) and Note (2).

5.8 Panel 8: Audio Out



These are the main audio Left (1) and Right (2) outputs. When you create a new Rumbler Compact Synthesizer device, these outputs are auto-routed to the first available channel in the Reason main mixer.

5.9 Panel 9: Audio In



New to the Rumbler series is the implementation of Audio Input. The connected device will pass through all the 8 Rumbler Compact Synthesizer effects. It makes Rumbler besides a synthesizer also a unique effects processor.

5.10 Panel 10: Input Level



Determines how a connected device to the Audio Input will behave.

- **1: Knob - Input Level:** Determines the volume of the connected device send to the Rumbler effects (Scale: $-\infty$ / 12,0 dB. Default: -6.1 dB).
- **2: Send FX – Input Send FX On Off:** Determines if the connected device will make use of the Rumbler effects (Scale: On / Off. Default: On).

5.11 Panel 11: CV Input Synthesizer



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Also new to the Rumbler series is the addition of CV In (**In**) and CV Through (**Thr**) for controllers on both the synthesizer and effects. There are 17 CV In and CV Thr to add extra modulation to the following controllers on the synthesizer part of Rumbler.

1. Saw Oscillator Level
2. Square Oscillator Level
3. Saw and Square Oscillator Tune
4. Saw and Square Oscillator Detune
5. Wave Oscillator Level
6. Wave Oscillator Tune
7. Wave Oscillator Fine Tune
8. Ring Modulation Level
9. Ring Modulation Disharmonic Tuning
10. Drive (Level)
11. EQ Gain
12. EQ Band Q or EQ Band Width
13. EQ Frequency
14. Bend Depth
15. Bend Time
16. Pan
17. Master Level

5.12 Panel 12: Lofi



The Lofi effect emulates degraded audio quality (Downsample / Rate Crusher) and can be used as a noise generator.

- **Button Display - Lofi On / Off (Lofi On Off):** Determines whether lofi is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Rate - Lofi Sample Rate:** Determines the down sampling rate (Scale: 2 kHz / 50 kHz. Default: 10 kHz).
- **2: Mod - Lofi Sample Rate Mod Amount:** Determines the amount of modulation applied to the lofi's sample rate (Scale: -100 / 100. Default: 0).
- **3: Source display - Lofi Sample Rate Mod Source:** Determines the modulation source applied to the lofi's sample rate (Scale: Cons, PB, Aft, MW. Default: Cons).
- **4: Jitter - Lofi Jitter:** Determines the random modulation of the down sampling rate (Scale: 0 % / 100 %. Default: 0 %).
- **5: Mod - Lofi Jitter Mod Amount:** Determines the amount of modulation applied to the lofi's jitter (Scale: -100 / 100. Default: 0).
- **6: Source display - Lofi Jitter Mod Source:** Determines the modulation source applied to the lofi's jitter (Scale: Cons, PB, Aft, MW. Default: Cons).
- **7: Bits - Lofi Bit Depth:** Determines the amount of bit reduction (Scale: 0 % off 16 bits / 100 % off 16 bits. Default: 100 % off 16 bits).
- **8: Mod - Lofi Bit Depth Mod Amount:** Determines the amount of modulation applied to the lofi's bit reduction (Scale: -100 / 100. Default: 0).
- **9: Source display - Lofi Bit Depth Mod Source:** Determines the modulation source applied to the lofi's bit reduction (Scale: Cons, PB, Aft, MW. Default: Cons).
- **10: Mix - Lofi Mix:** Determines the amount of lofi mixed with the original sound (Scale: 0 % / 100 %. Default: 100 %).

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- **11: Mod - Lofi Mix Mod Amount:** Determines the amount of modulation applied to the lofi's mix (Scale: -100 / 100. Default: 0).
- **12: Source display - Lofi Mix Mod Source:** Determines the modulation source applied to the lofi's mix (Scale: Cons, PB, Aft, MW. Default: Cons).

5.13 Panel 13: Phaser



The Phaser effect is used to filter the signal by creating a series of peaks and troughs in the frequency spectrum. The position of the peaks and troughs of the waveform being affected are modulated so that they vary over time, creating a sweeping effect.

- **Button Display - Phaser On / Off (Phaser On Off):** Determines whether phaser is added to the signal chain (Scale: On / Off. Default: Off).
- **1: Rate - Phaser Rate:** Determines the modulation rate of the phaser (Scale: 0,01 Hz / 10 Hz. Default: 1 Hz).
- **2: Mod - Phaser Rate Mod Amount:** Determines the amount of modulation applied to the phaser rate (Scale: -100 / 100. Default: 0).
- **3: Source display - Phaser Rate Mod Source:** Determines the modulation source applied to the phaser rate (Scale: Cons, PB, Aft, MW. Default: Cons).
- **4: Dpth - Phaser Depth:** Determines the filter frequency modulation of the phaser (Scale: 0 % / 100 %. Default: 50 %).
- **5: Mod - Phaser Depth Mod Amount:** Determines the amount of modulation applied to the phaser depth (Scale: -100 / 100. Default: 0).
- **6: Source display - Phaser Depth Mod Source:** Determines the modulation source applied to the phaser depth (Scale: Cons, PB, Aft, MW. Default: Cons).
- **7: Fbck - Phaser Feedback:** Determines the amount of feedback (Scale: 0 % / 100 %. Default: 50 %).
- **8: Mod - Phaser Feedback Mod Amount:** Determines the amount of modulation applied to the phaser feedback (Scale: -100 / 100. Default: 0).
- **9: Source display - Phaser Feedback Mod Source:** Determines the modulation source applied to the phaser feedback (Scale: Cons, PB, Aft, MW. Default: Cons).
- **10: Cntr - Phaser Center:** Determines the center filter frequency of the phaser (Scale: 100 Hz / 10 Khz. Default: 1 kHz).
- **11: Mod - Phaser Center Mod Amount:** Determines the amount of modulation applied to the phaser center filter frequency (Scale: -100 / 100. Default: 0).
- **12: Source display - Phaser Center Mod Source:** Determines the modulation source applied to the phaser center filter frequency (Scale: Cons, PB, Aft, MW. Default: Cons).
- **13: Sprd - Phaser Spread:** Determines the offset between left and right center frequencies (Scale: 0 % / 100 %. Default: 50 %).
- **14: Mod - Phaser Spread Mod Amount:** Determines the amount of modulation applied to the phaser spread (Scale: -100 / 100. Default: 0).
- **15: Source display - Phaser Spread Mod Source:** Determines the modulation source applied to the phaser spread (Scale: Cons, PB, Aft, MW. Default: Cons).
- **16: Mix - Phaser Mix:** Determines amount of phaser added to the signal chain (Scale: 0 % / 100 %. Default: 50 %).
- **17: Mod - Phaser Mix Mod Amount:** Determines the amount of modulation applied to the phaser mix (Scale: -100 / 100. Default: 0).

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- **19: Source display - Phaser Mix Mod Source:** Determines the modulation source applied to the phaser mix (Scale: Cons, PB, Aft, MW. Default: Cons).

5.14 Panel 14: LP12 CV In



There are 2 CV In and CV Thr to add extra modulation to the Low Pass 12 Filter of Rumbler.

1. Low Pass 12 Filter Cutoff
2. Low Pass 12 Filter Resonance

5.15 Panel 15: FX CV Inputs



There are 4 CV In and CV Thr to add modulation to the following controllers on the effects part of Rumbler:

1. Convolution Reverb Mix
2. Chorus Depth
3. Delay Feedback
4. Tremolo Depth

6 Waveforms

A list of all the waveforms to use in the Wave Oscillator:

001 Sine
002 Sqr
003 Saw
004 Wht
005 Pink
006 Brwn
007 None
008 Stat
009 French Horn
010 String
011 String
012 String Pad
013 Piano 1

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014 El Grand
015 E Piano 1
016 E Piano 2
017 E Piano 3
018 Clavi
019 Vibe
020 A Guitar
021 F Guitar 1
022 F Guitar 2
023 Ac Bass 1
024 Ac Bass 2
025 Digi Bass 1
026 Pick Bass
027 Digi Bass 2
028 Round Bass
029 Fretless 1
030 Fretless 2
031 Flute
032 Panflute
033 Harmonica
034 Glocken
035 Tine
036 Harp
037 Marimba
038 E Tom
039 Log Drum
040 Jazz Organ 1
041 Mello Pad
042 Synth Solo
043 Synth 2
044 French Horn 1
045 French Horn 2
046 Brass 1
047 Brass 2
048 Brass 3
049 Brass 4
050 Trumpet 1
051 Trumpet 2
052 Violin
053 String
054 Piano 1
055 Piano 2
056 Piano 3
057 Piano 2 - 1
058 Piano 3 - 1
059 Piano 4 - 1
060 Piano 4 - 2
061 El Grand
062 E Piano 1
063 E Piano 2
064 E Piano 2 - 1

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065 Clavi
066 Harpsichord
067 Vibe
068 A Guitar
069 F Guitar
070 Strat 1
071 Strat 2
072 Ac Bass
073 Pull Bass 1
074 Pull Bass 2
075 Round Bass
076 Slap Bass 1
077 Slap Bass 2
078 Slap Bass 3
079 Fretless 1
080 Fretless 2
081 Synth Bass 1
082 Synth Bass 2
083 Harmonica
084 Clarinet 1
085 Clarinet 2
086 Oboe 1
087 Oboe 2
088 Shakuhachi
089 Oriental Bell 1
090 Oriental Bell 2
091 Bell
092 Koto
093 Sitar
094 E Tom
095 Log Drum 1
096 Log Drum 2
097 Steel Drum 1
098 Steel Drum 2
099 Voice 1
100 Voice 2
101 Accordion 1
102 Accordion 2
103 Jazz Organ 2
104 Rock Organ 1
105 Draw Bar 1
106 Draw Bar 2
107 Pipe Organ 1
108 Pipe Organ 2
109 Rock Organ 2
110 Synth Solo 1
111 Synth Solo 2
112 Synth 2 - 1
113 Synth 2 - 2
114 Synth 3
115 Brass 1

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116 Brass 2
117 Orchestra
118 Piano 1
119 Piano 4
120 E Piano 1 - 1 E + 12 Cents
121 E Piano 1 - 2 Ais
122 E Piano 2
123 E Piano 3
124 Clavi
125 Harpsichord 1
126 Harpsichord 2
127 Vibe Dis + 2 Cents
128 Digi Bass 1
129 Digi Bass 2 - 1
130 Digi Bass 2 - 2
131 Pick Bass
132 Glocken 1 E + 15 Cents
133 Glocken 2 G
134 Tine 1 Ais + 25 Cents
135 Tine 2 Fis + 35 Cents
136 Tine 3
137 Tube Bell 1
138 Tube Bell 2
139 Tube Bell 3 C + 28 Cents
140 Xylophone 1 E + 8 Cents
141 Xylophone 2 G
142 Harp E
143 Koto
144 Sitar 1
145 Sitar 2
146 Kalimba 1 Ais + 33 Cents
147 Kalimba 2
148 Kalimba 3 B - 50 Cents
149 Log Drum
150 Steel Drum Ais + 13 Cents
151 Pipe Organ 3 - 1
152 Pipe Organ 3 - 2
153 Synth 1 Cis - 46 Cents
154 Synth 2 Dis - 26 Cents
155 Synth 3 - 1 Cis + 40 Cents
156 Synth 3 - 2
157 Synth 4 - 1
158 Synth 4 - 2
159 Clavi
160 Digi Bass 1 - 1
161 Digi Bass 1 - 2
162 Pick Bass 1
163 Pick Bass 2
164 Round Bass 1
165 Round Bass 2 Gis - 16 Cents
166 Harmonica 1

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167 Harmonica 2 Cis - 20 Cents
168 Harp
169 Koto
170 Sitar
171 Marimba C + 45 Cents
172 Synth 1
173 Bass Drum *
174 Ac Snare *
175 Tight Snare *
176 E Snare *
177 Rim *
178 Ac Tom *
179 H Hat *
180 Crash *
181 Ride *
182 Strat Guitar C - 30 Cents *
183 Fuzz Mute *
184 A Guitar *
185 F Guitar *
186 Guitar Harmo
187 Pull Bass
188 Bass Harmo
189 Bowed String *
190 String Attack *
191 String Sus *
192 Pizzicato *
193 Piano *
194 El Grand *
195 Piano Noise *
196 Trumpet *
197 Shakuhachi Attack *
198 Shakuhachi Sus *
199 Pan Flute Attack *
200 Pan Flute Sus *
201 Voice *
202 White Noise *
203 String Loop C - 15 Cents
204 Shakuhachi Loop C - 18 Cents
205 Pan Flute Loop
206 Voice Loop
207 White Noise Loop
208 Ac Snare Loop
209 F Guitar Loop
210 Pull Bass Loop
211 Omnibus Loop 1
212 Omnibus Loop 2
213 Omnibus Loop 3
214 Omnibus Loop 4
215 Omnibus Loop 5
216 Omnibus Loop 6
217 Omnibus Loop 7

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218 Omnibus Loop 8
219 Ac Snare Rev *
220 Ac Tom Rev *
221 F Guitar Rev
222 H Hat Alt Loop
223 Crash Alt Loop
224 Piano Noise Alt Loop
225 Inverse Saw C
226 Triangle C
227 Random C
228 Snare White *

* Waveforms without mentioning a note like Dis (or D#) behind their name are all tuned C3. Some waveform names like '120 E Piano 1 -1 + 12 Cents' have a number (+12) behind their name followed by the word 'Cents'. The number indicates the Fine Tune correction needed measured in Cents (-2) to make the Waveform sound in tune with the Waveforms names note (E).

* Waveforms marked with an * behind the name are one shot waveforms. All the others are looped waveforms.

7 Patch List

List of all the patches released with the Rumbler Compact Synthesizer Rack Extension. Included are all the 64 single and 32 multi instrument patches from the Kawai K1 ROM pack D, drum kits patches and signature patches made by various sound designers.

7.1 The sound designers

- Loque (LQ)
- Oenkenstein (Oenk)

7.2 Folder structure

- 1 Bass
- 2 Combinator
- 3 Drums
- 4 Effects
- 5 Experimental
- 6 Keys
- 7 LD - Dreaming Strings.repatch
- 8 Lead
- 9 Pad
- 10 Wave Oscillators
- 11 Bass\BA - Bass Feedback MW.repatch
- 12 Bass\BA - Basso.repatch
- 13 Bass\BA - Bite Bass.repatch
- 14 Bass\BA - Bottom.repatch
- 15 Bass\BA - Da Bass - LQ.repatch
- 16 Bass\BA - Double Bass.repatch
- 17 Bass\BA - Round Bass (RM) - LQ.repatch
- 18 Bass\BA - Round Bass - LQ.repatch
- 19 Bass\BA - Slap.repatch
- 20 Bass\BA - Soft Bass.repatch
- 21 Bass\BA - Wassenaar.repatch
- 22 Bass\BA - Wood Bass.repatch
- 23 Bass\BA - Wowblier - LQ.repatch

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- 24 Combinator\001 Kawai K1 Single Instruments
- 25 Combinator\002 Kawai K1 Multi Instruments
- 26 Combinator\003 Reason 12 or higher
- 27 Combinator\CT - Saw - LQ.cmb
- 28 Combinator\CT - Square - LQ.cmb
- 29 Combinator\DR - Big Fat Kick Drum RUN.cmb
- 30 Combinator\DR - Drum Kit.cmb
- 31 Combinator\DR - Snare.cmb
- 32 Combinator\EX - Bass Gutter RUN.cmb
- 33 Combinator\PD - Pluck Pad.cmb
- 34 Combinator\001 Kawai K1 Single Instruments\4 Osc Init.cmb
- 35 Combinator\001 Kawai K1 Single Instruments\SiA-1 Asylum.cmb
- 36 Combinator\001 Kawai K1 Single Instruments\SiA-1 Jakaah Ahn.cmb
- 37 Combinator\001 Kawai K1 Single Instruments\SiA-2 Cembaharp.cmb
- 38 Combinator\001 Kawai K1 Single Instruments\SiA-2 Etherharp4.cmb
- 39 Combinator\001 Kawai K1 Single Instruments\SiA-3 I Am Falling.cmb
- 40 Combinator\001 Kawai K1 Single Instruments\SiA-3 Xylimba.cmb
- 41 Combinator\001 Kawai K1 Single Instruments\SiA-4 Islands 1.cmb
- 42 Combinator\001 Kawai K1 Single Instruments\SiA-4 Moonraker.cmb
- 43 Combinator\001 Kawai K1 Single Instruments\SiA-5 Kalyre Sin.cmb
- 44 Combinator\001 Kawai K1 Single Instruments\SiA-5 Staccato.cmb
- 45 Combinator\001 Kawai K1 Single Instruments\SiA-6 RealRhodes.cmb
- 46 Combinator\001 Kawai K1 Single Instruments\SiA-6 Synthicord.cmb
- 47 Combinator\001 Kawai K1 Single Instruments\SiA-7 Go4Baroque.cmb
- 48 Combinator\001 Kawai K1 Single Instruments\SiA-7 Strings Hi.cmb
- 49 Combinator\001 Kawai K1 Single Instruments\SiA-8 CirrusLuft.cmb
- 50 Combinator\001 Kawai K1 Single Instruments\SiA-8 Lil Italy.cmb
- 51 Combinator\001 Kawai K1 Single Instruments\SiB-1 MusicBoxSq.cmb
- 52 Combinator\001 Kawai K1 Single Instruments\SiB-1 Syn Pad A1.cmb
- 53 Combinator\001 Kawai K1 Single Instruments\SiB-2 FantaSynth.cmb
- 54 Combinator\001 Kawai K1 Single Instruments\SiB-2 NevrlEtDwn.cmb
- 55 Combinator\001 Kawai K1 Single Instruments\SiB-3 Organ 1999.cmb
- 56 Combinator\001 Kawai K1 Single Instruments\SiB-3 Synth Pod.cmb
- 57 Combinator\001 Kawai K1 Single Instruments\SiB-4 Lead Organ.cmb
- 58 Combinator\001 Kawai K1 Single Instruments\SiB-4 RingModPiano.cmb
- 59 Combinator\001 Kawai K1 Single Instruments\SiB-5 Paradise.cmb
- 60 Combinator\001 Kawai K1 Single Instruments\SiB-5 Suspense.cmb
- 61 Combinator\001 Kawai K1 Single Instruments\SiB-6 Mallets.cmb
- 62 Combinator\001 Kawai K1 Single Instruments\SiB-6 StrngRhodes.cmb
- 63 Combinator\001 Kawai K1 Single Instruments\SiB-7 Digi Keys.cmb
- 64 Combinator\001 Kawai K1 Single Instruments\SiB-7 Dokari.cmb
- 65 Combinator\001 Kawai K1 Single Instruments\SiB-8 Flute Lead.cmb
- 66 Combinator\001 Kawai K1 Single Instruments\SiB-8 Zabala.cmb
- 67 Combinator\001 Kawai K1 Single Instruments\SiC-1 Intrigue.cmb
- 68 Combinator\001 Kawai K1 Single Instruments\SiC-1 SpaceTines.cmb
- 69 Combinator\001 Kawai K1 Single Instruments\SiC-2 FenderElec.cmb
- 70 Combinator\001 Kawai K1 Single Instruments\SiC-2 GabrielVox.cmb
- 71 Combinator\001 Kawai K1 Single Instruments\SiC-3 Cyclotron.cmb
- 72 Combinator\001 Kawai K1 Single Instruments\SiC-3 Grunge Bow.cmb
- 73 Combinator\001 Kawai K1 Single Instruments\SiC-4 Chiffit.cmb
- 74 Combinator\001 Kawai K1 Single Instruments\SiC-4 Orch Ensem.cmb
- 75 Combinator\001 Kawai K1 Single Instruments\SiC-5 Bellzy.cmb
- 76 Combinator\001 Kawai K1 Single Instruments\SiC-5 Tubular.cmb
- 77 Combinator\001 Kawai K1 Single Instruments\SiC-6 Metal x Mode.cmb

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- 78 Combinator\001 Kawai K1 Single Instruments\SIC-6 Tine Harp.cmb
- 79 Combinator\001 Kawai K1 Single Instruments\SIC-7 Fender Bass.cmb
- 80 Combinator\001 Kawai K1 Single Instruments\SIC-7 PeopleRppl.cmb
- 81 Combinator\001 Kawai K1 Single Instruments\SIC-8 Dance Bass.cmb
- 82 Combinator\001 Kawai K1 Single Instruments\SIC-8 Mirror Chym.cmb
- 83 Combinator\001 Kawai K1 Single Instruments\SID-1 Mirror Rthm.cmb
- 84 Combinator\001 Kawai K1 Single Instruments\SID-1 Square Pad.cmb
- 85 Combinator\001 Kawai K1 Single Instruments\SID-2 Fat Man.cmb
- 86 Combinator\001 Kawai K1 Single Instruments\SID-2 Sample Pad.cmb
- 87 Combinator\001 Kawai K1 Single Instruments\SID-3 Pianarhode.cmb
- 88 Combinator\001 Kawai K1 Single Instruments\SID-3 Techno Bass.cmb
- 89 Combinator\001 Kawai K1 Single Instruments\SID-4 Analog Horn.cmb
- 90 Combinator\001 Kawai K1 Single Instruments\SID-4 Marktree.cmb
- 91 Combinator\001 Kawai K1 Single Instruments\SID-5 Orchestra4.cmb
- 92 Combinator\001 Kawai K1 Single Instruments\SID-5 Squeez Sqar.cmb
- 93 Combinator\001 Kawai K1 Single Instruments\SID-6 Native Bali.cmb
- 94 Combinator\001 Kawai K1 Single Instruments\SID-6 Orch Hit 5.cmb
- 95 Combinator\001 Kawai K1 Single Instruments\SID-7 String 16 Cb.cmb
- 96 Combinator\001 Kawai K1 Single Instruments\SID-7 Tribal Drum.cmb
- 97 Combinator\001 Kawai K1 Single Instruments\SID-8 Kalimba Man.cmb
- 98 Combinator\001 Kawai K1 Single Instruments\SID-8 Rim and Snare.cmb
- 99 Combinator\002 Kawai K1 Multi Instruments\MIA-1 Jakaah Pan.cmb
- 100 Combinator\002 Kawai K1 Multi Instruments\MIA-2 Bass-Rhode.cmb
- 101 Combinator\002 Kawai K1 Multi Instruments\MIA-3 Bass-EpSt.cmb
- 102 Combinator\002 Kawai K1 Multi Instruments\MIA-4 Space Riff.cmb
- 103 Combinator\002 Kawai K1 Multi Instruments\MIA-5 Techno-Spl.cmb
- 104 Combinator\002 Kawai K1 Multi Instruments\MIA-6 Halcion.cmb
- 105 Combinator\002 Kawai K1 Multi Instruments\MIA-7 BroqStryke.cmb
- 106 Combinator\002 Kawai K1 Multi Instruments\MIA-8 Bass-Guitr.cmb
- 107 Combinator\002 Kawai K1 Multi Instruments\MIB-1 Multi-Perc.cmb
- 108 Combinator\002 Kawai K1 Multi Instruments\MIB-2 Mirror Man.cmb
- 109 Combinator\002 Kawai K1 Multi Instruments\MIB-3 Cussion.cmb
- 110 Combinator\002 Kawai K1 Multi Instruments\MIB-4 Rock-Split.cmb
- 111 Combinator\002 Kawai K1 Multi Instruments\MIB-5 1 Note Huge.cmb
- 112 Combinator\002 Kawai K1 Multi Instruments\MIB-6 Nightmares.cmb
- 113 Combinator\002 Kawai K1 Multi Instruments\MIB-7 Metarrimba.cmb
- 114 Combinator\002 Kawai K1 Multi Instruments\MIB-8 Cussion 2.cmb
- 115 Combinator\002 Kawai K1 Multi Instruments\MIC-1 Sunny Days.cmb
- 116 Combinator\002 Kawai K1 Multi Instruments\MIC-2 Pan Bells.cmb
- 117 Combinator\002 Kawai K1 Multi Instruments\MIC-3 Jokali Pan.cmb
- 118 Combinator\002 Kawai K1 Multi Instruments\MIC-4 Orch Layer.cmb
- 119 Combinator\002 Kawai K1 Multi Instruments\MIC-5 Chorus Str.cmb
- 120 Combinator\002 Kawai K1 Multi Instruments\MIC-6 Oct String.cmb
- 121 Combinator\002 Kawai K1 Multi Instruments\MIC-7 Super Hit.cmb
- 122 Combinator\002 Kawai K1 Multi Instruments\MIC-8 Klank.cmb
- 123 Combinator\002 Kawai K1 Multi Instruments\MID-1 Cathedral.cmb
- 124 Combinator\002 Kawai K1 Multi Instruments\MID-2 Caliochiff.cmb
- 125 Combinator\002 Kawai K1 Multi Instruments\MID-3 Synth Horn.cmb
- 126 Combinator\002 Kawai K1 Multi Instruments\MID-4 Deep Space.cmb
- 127 Combinator\002 Kawai K1 Multi Instruments\MID-5 Mesothylum.cmb
- 128 Combinator\002 Kawai K1 Multi Instruments\MID-6 Vox Hit.cmb
- 129 Combinator\002 Kawai K1 Multi Instruments\MID-7 Big Bow 2v.cmb
- 130 Combinator\002 Kawai K1 Multi Instruments\MID-8 Midi Multi.cmb
- 131 Combinator\003 Reason 12 or higher\DR - Big Fat Kick Drum RUN.cmb

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- 132 Combinator\003 Reason 12 or higher\FX - Low Noise - LQ.cmb
- 133 Combinator\003 Reason 12 or higher\PD - Bright Alley - LQ.cmb
- 134 Drums\DR - Crash.repatch
- 135 Drums\DR - Hihat.repatch
- 136 Drums\DR - Kick Rock.repatch
- 137 Drums\DR - Kick Sub.repatch
- 138 Drums\DR - Ride.repatch
- 139 Drums\DR - Rimshot.repatch
- 140 Drums\DR - Snare Light.repatch
- 141 Drums\DR - Snare Poppy.repatch
- 142 Drums\DR - Snare Tight.repatch
- 143 Drums\DR - Snare White.repatch
- 144 Drums\DR - Snoire.repatch
- 145 Drums\DR - Tom.repatch
- 146 Drums\DR - Vibe.repatch
- 147 Effects\FX - Falling.repatch
- 148 Effects\FX - Hoover Race.repatch
- 149 Effects\FX - Nilfisk.repatch
- 150 Effects\FX - Pan Bend.repatch
- 151 Effects\FX - Radio.repatch
- 152 Effects\FX - Random Noise - LQ.repatch
- 153 Effects\FX - Ritz Rats.repatch
- 154 Effects\FX - Rumblin.repatch
- 155 Effects\FX - Speak.repatch
- 156 Effects\FX - Station To Station.repatch
- 157 Effects\FX - The Rise and Fall of AM.repatch
- 158 Experimental\EX - All LFO Lead.repatch
- 159 Experimental\EX - All Random Lead.repatch
- 160 Experimental\EX - First Glide then Bend.repatch
- 161 Experimental\EX - Woosh.repatch
- 162 Keys\KY - AM House.repatch
- 163 Keys\KY - Bells.repatch
- 164 Keys\KY - Caribbean.repatch
- 165 Keys\KY - Eastern Market.repatch
- 166 Keys\KY - Edgy Keys.repatch
- 167 Keys\KY - Jazz Organ.repatch
- 168 Keys\KY - Light Keys.repatch
- 169 Keys\KY - Light Piano.repatch
- 170 Keys\KY - Organ Keys.repatch
- 171 Keys\KY - Organ Small.repatch
- 172 Keys\KY - Pluck Pan.repatch
- 173 Keys\KY - Saw.repatch
- 174 Keys\KY - Tremolo.repatch
- 175 Keys\KY - Tube Bell.repatch
- 176 Keys\KY - Underworld Bell.repatch
- 177 Lead\LD - Ahh Voice.repatch
- 178 Lead\LD - Buzz.repatch
- 179 Lead\LD - Gritty.repatch
- 180 Lead\LD - In the Western.repatch
- 181 Lead\LD - Nitty.repatch
- 182 Lead\LD - Organ Kaput.repatch
- 183 Lead\LD - Strings.repatch
- 184 Lead\LD - Ting.repatch
- 185 Lead\PL - Heavy Guitar Picker - LQ.repatch

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- 186 Pad\PD - Blue - LQ.repatch
- 187 Pad\PD - Muweh.repatch
- 188 Pad\PD - Square Pad.repatch
- 189 Pad\PD - String Pad.repatch
- 190 Pad\PD - Warm Synth.repatch
- 191 Pad\PD - Wave.repatch
- 192 Pad\PD - Wind.repatch
- 193 Wave Oscillators\001 Basic Waves
- 194 Wave Oscillators\002 Low
- 195 Wave Oscillators\003 Mid
- 196 Wave Oscillators\004 High - Mid
- 197 Wave Oscillators\005 High
- 198 Wave Oscillators\006 PCM
- 199 Wave Oscillators\007 All Waves
- 200 Wave Oscillators\001 Basic Waves\001 Sine.repatch
- 201 Wave Oscillators\001 Basic Waves\002 Square.repatch
- 202 Wave Oscillators\001 Basic Waves\003 Saw.repatch
- 203 Wave Oscillators\001 Basic Waves\004 White Noise.repatch
- 204 Wave Oscillators\001 Basic Waves\005 Pink Noise.repatch
- 205 Wave Oscillators\001 Basic Waves\006 Brown Noise.repatch
- 206 Wave Oscillators\001 Basic Waves\007 None - Silence.repatch
- 207 Wave Oscillators\001 Basic Waves\008 Static.repatch
- 208 Wave Oscillators\001 Basic Waves\225 Inverse Saw C.repatch
- 209 Wave Oscillators\001 Basic Waves\226 Triangle C.repatch
- 210 Wave Oscillators\001 Basic Waves\227 Random C.repatch
- 211 Wave Oscillators\002 Low\009 French Horn.repatch
- 212 Wave Oscillators\002 Low\010 String.repatch
- 213 Wave Oscillators\002 Low\011 String.repatch
- 214 Wave Oscillators\002 Low\012 String Pad.repatch
- 215 Wave Oscillators\002 Low\013 Piano 1.repatch
- 216 Wave Oscillators\002 Low\014 El Grand.repatch
- 217 Wave Oscillators\002 Low\015 E Piano 1.repatch
- 218 Wave Oscillators\002 Low\016 E Piano 2.repatch
- 219 Wave Oscillators\002 Low\017 E Piano 3.repatch
- 220 Wave Oscillators\002 Low\018 Clavi.repatch
- 221 Wave Oscillators\002 Low\019 Vibe.repatch
- 222 Wave Oscillators\002 Low\020 A Guitar.repatch
- 223 Wave Oscillators\002 Low\021 F Guitar 1.repatch
- 224 Wave Oscillators\002 Low\022 F Guitar 2.repatch
- 225 Wave Oscillators\002 Low\023 Ac Bass 1.repatch
- 226 Wave Oscillators\002 Low\024 Ac Bass 2.repatch
- 227 Wave Oscillators\002 Low\025 Digi Bass 1.repatch
- 228 Wave Oscillators\002 Low\026 Pick Bass.repatch
- 229 Wave Oscillators\002 Low\027 Digi Bass 2.repatch
- 230 Wave Oscillators\002 Low\028 Round Bass.repatch
- 231 Wave Oscillators\002 Low\029 Fretless 1.repatch
- 232 Wave Oscillators\002 Low\030 Fretless 2.repatch
- 233 Wave Oscillators\002 Low\031 Flute.repatch
- 234 Wave Oscillators\002 Low\032 Panflute.repatch
- 235 Wave Oscillators\002 Low\033 Harmonica.repatch
- 236 Wave Oscillators\002 Low\034 Glocken.repatch
- 237 Wave Oscillators\002 Low\035 Tine.repatch
- 238 Wave Oscillators\002 Low\036 Harp.repatch
- 239 Wave Oscillators\002 Low\037 Marimba.repatch

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240 Wave Oscillators\002 Low\038 E Tom.repatch
241 Wave Oscillators\002 Low\039 Log Drum.repatch
242 Wave Oscillators\002 Low\040 Jazz Organ 1.repatch
243 Wave Oscillators\002 Low\041 Mello Pad.repatch
244 Wave Oscillators\002 Low\042 Synth Solo.repatch
245 Wave Oscillators\002 Low\043 Synth 2.repatch
246 Wave Oscillators\003 Mid\044 French Horn 1.repatch
247 Wave Oscillators\003 Mid\045 French Horn 2.repatch
248 Wave Oscillators\003 Mid\046 Brass 1.repatch
249 Wave Oscillators\003 Mid\047 Brass 2.repatch
250 Wave Oscillators\003 Mid\048 Brass 3.repatch
251 Wave Oscillators\003 Mid\049 Brass 4.repatch
252 Wave Oscillators\003 Mid\050 Trumpet 1.repatch
253 Wave Oscillators\003 Mid\051 Trumpet 2.repatch
254 Wave Oscillators\003 Mid\052 Violin.repatch
255 Wave Oscillators\003 Mid\053 String.repatch
256 Wave Oscillators\003 Mid\054 Piano 1.repatch
257 Wave Oscillators\003 Mid\055 Piano 2.repatch
258 Wave Oscillators\003 Mid\056 Piano 3.repatch
259 Wave Oscillators\003 Mid\057 Piano 2 - 1.repatch
260 Wave Oscillators\003 Mid\058 Piano 3 - 1.repatch
261 Wave Oscillators\003 Mid\059 Piano 4 - 1.repatch
262 Wave Oscillators\003 Mid\060 Piano 4 - 2.repatch
263 Wave Oscillators\003 Mid\061 El Grand.repatch
264 Wave Oscillators\003 Mid\062 E Piano 1.repatch
265 Wave Oscillators\003 Mid\063 E Piano 2.repatch
266 Wave Oscillators\003 Mid\064 E Piano 2 - 1.repatch
267 Wave Oscillators\003 Mid\065 Clavi.repatch
268 Wave Oscillators\003 Mid\066 Harpsichord.repatch
269 Wave Oscillators\003 Mid\067 Vibe.repatch
270 Wave Oscillators\003 Mid\068 A Guitar.repatch
271 Wave Oscillators\003 Mid\069 F Guitar.repatch
272 Wave Oscillators\003 Mid\070 Strat 1.repatch
273 Wave Oscillators\003 Mid\071 Strat 2.repatch
274 Wave Oscillators\003 Mid\072 Ac Bass.repatch
275 Wave Oscillators\003 Mid\073 Pull Bass 1.repatch
276 Wave Oscillators\003 Mid\074 Pull Bass 2.repatch
277 Wave Oscillators\003 Mid\075 Round Bass.repatch
278 Wave Oscillators\003 Mid\076 Slap Bass 1.repatch
279 Wave Oscillators\003 Mid\077 Slap Bass 2.repatch
280 Wave Oscillators\003 Mid\078 Slap Bass 3.repatch
281 Wave Oscillators\003 Mid\079 Fretless 1.repatch
282 Wave Oscillators\003 Mid\080 Fretless 2.repatch
283 Wave Oscillators\003 Mid\081 Synth Bass 1.repatch
284 Wave Oscillators\003 Mid\082 Synth Bass 2.repatch
285 Wave Oscillators\003 Mid\083 Harmonica.repatch
286 Wave Oscillators\003 Mid\084 Clarinet 1.repatch
287 Wave Oscillators\003 Mid\085 Clarinet 2.repatch
288 Wave Oscillators\003 Mid\086 Oboe 1.repatch
289 Wave Oscillators\003 Mid\087 Oboe 2.repatch
290 Wave Oscillators\003 Mid\088 Shakuhachi.repatch
291 Wave Oscillators\003 Mid\089 Oriental Bell 1.repatch
292 Wave Oscillators\003 Mid\090 Oriental Bell 2.repatch
293 Wave Oscillators\003 Mid\091 Bell.repatch

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- 294 Wave Oscillators\003 Mid\092 Koto.repatch
- 295 Wave Oscillators\003 Mid\093 Sitar.repatch
- 296 Wave Oscillators\003 Mid\094 E Tom.repatch
- 297 Wave Oscillators\003 Mid\095 Log Drum 1.repatch
- 298 Wave Oscillators\003 Mid\096 Log Drum 2.repatch
- 299 Wave Oscillators\003 Mid\097 Steel Drum 1.repatch
- 300 Wave Oscillators\003 Mid\098 Steel Drum 2.repatch
- 301 Wave Oscillators\003 Mid\099 Voice 1.repatch
- 302 Wave Oscillators\003 Mid\100 Voice 2.repatch
- 303 Wave Oscillators\003 Mid\101 Accordion 1.repatch
- 304 Wave Oscillators\003 Mid\102 Accordion 2.repatch
- 305 Wave Oscillators\003 Mid\103 Jazz Organ 2.repatch
- 306 Wave Oscillators\003 Mid\104 Rock Organ 1.repatch
- 307 Wave Oscillators\003 Mid\105 Draw Bar 1.repatch
- 308 Wave Oscillators\003 Mid\106 Draw Bar 2.repatch
- 309 Wave Oscillators\003 Mid\107 Pipe Organ 1.repatch
- 310 Wave Oscillators\003 Mid\108 Pipe Organ 2.repatch
- 311 Wave Oscillators\003 Mid\109 Rock Organ 2.repatch
- 312 Wave Oscillators\003 Mid\110 Synth Solo 1.repatch
- 313 Wave Oscillators\003 Mid\111 Synth Solo 2.repatch
- 314 Wave Oscillators\003 Mid\112 Synth 2 - 1.repatch
- 315 Wave Oscillators\003 Mid\113 Synth 2 - 2.repatch
- 316 Wave Oscillators\003 Mid\114 Synth 3.repatch
- 317 Wave Oscillators\004 High - Mid\115 Brass 1.repatch
- 318 Wave Oscillators\004 High - Mid\116 Brass 2.repatch
- 319 Wave Oscillators\004 High - Mid\117 Orchestra.repatch
- 320 Wave Oscillators\004 High - Mid\118 Piano 1.repatch
- 321 Wave Oscillators\004 High - Mid\119 Piano 4.repatch
- 322 Wave Oscillators\004 High - Mid\120 E Piano 1 - 1 E + 12 Cents.repatch
- 323 Wave Oscillators\004 High - Mid\121 E Piano 1 - 2 Ais.repatch
- 324 Wave Oscillators\004 High - Mid\122 E Piano 2.repatch
- 325 Wave Oscillators\004 High - Mid\123 E Piano 3.repatch
- 326 Wave Oscillators\004 High - Mid\124 Clavi.repatch
- 327 Wave Oscillators\004 High - Mid\125 Harpsichord 1.repatch
- 328 Wave Oscillators\004 High - Mid\126 Harpsichord 2.repatch
- 329 Wave Oscillators\004 High - Mid\127 Vibe Dis + 2 Cents.repatch
- 330 Wave Oscillators\004 High - Mid\128 Digi Bass 1.repatch
- 331 Wave Oscillators\004 High - Mid\129 Digi Bass 2 - 1.repatch
- 332 Wave Oscillators\004 High - Mid\130 Digi Bass 2 - 2.repatch
- 333 Wave Oscillators\004 High - Mid\131 Pick Bass.repatch
- 334 Wave Oscillators\004 High - Mid\132 Glocken 1 E + 15 Cents.repatch
- 335 Wave Oscillators\004 High - Mid\133 Glocken 2 G.repatch
- 336 Wave Oscillators\004 High - Mid\134 Tine 1 Ais + 25 Cents.repatch
- 337 Wave Oscillators\004 High - Mid\135 Tine 2 Fis + 35 Cents.repatch
- 338 Wave Oscillators\004 High - Mid\136 Tine 3.repatch
- 339 Wave Oscillators\004 High - Mid\137 Tube Bell 1.repatch
- 340 Wave Oscillators\004 High - Mid\138 Tube Bell 2.repatch
- 341 Wave Oscillators\004 High - Mid\139 Tube Bell 3 C + 28 Cents.repatch
- 342 Wave Oscillators\004 High - Mid\140 Xylophone 1 E + 8 Cents.repatch
- 343 Wave Oscillators\004 High - Mid\141 Xylophone 2 G.repatch
- 344 Wave Oscillators\004 High - Mid\142 Harp E.repatch
- 345 Wave Oscillators\004 High - Mid\143 Koto.repatch
- 346 Wave Oscillators\004 High - Mid\144 Sitar 1.repatch
- 347 Wave Oscillators\004 High - Mid\145 Sitar 2.repatch

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- 348 Wave Oscillators\004 High - Mid\146 Kalimba 1 Ais + 33 Cents.repatch
- 349 Wave Oscillators\004 High - Mid\147 Kalimba 2.repatch
- 350 Wave Oscillators\004 High - Mid\148 Kalimba 3 B - 50 Cents.repatch
- 351 Wave Oscillators\004 High - Mid\149 Log Drum.repatch
- 352 Wave Oscillators\004 High - Mid\150 Steel Drum Ais + 13 Cents.repatch
- 353 Wave Oscillators\004 High - Mid\151 Pipe Organ 3 - 1.repatch
- 354 Wave Oscillators\004 High - Mid\152 Pipe Organ 3 - 2.repatch
- 355 Wave Oscillators\004 High - Mid\153 Synth 1 Cis - 46 Cents.repatch
- 356 Wave Oscillators\004 High - Mid\154 Synth 2 Dis - 26 Cents.repatch
- 357 Wave Oscillators\004 High - Mid\155 Synth 3 - 1 Cis + 40 Cents.repatch
- 358 Wave Oscillators\004 High - Mid\156 Synth 3 - 2.repatch
- 359 Wave Oscillators\004 High - Mid\157 Synth 4 - 1.repatch
- 360 Wave Oscillators\004 High - Mid\158 Synth 4 - 2.repatch
- 361 Wave Oscillators\005 High\159 Clavi.repatch
- 362 Wave Oscillators\005 High\160 Digi Bass 1 - 1.repatch
- 363 Wave Oscillators\005 High\161 Digi Bass 1 - 2.repatch
- 364 Wave Oscillators\005 High\162 Pick bass 1.repatch
- 365 Wave Oscillators\005 High\163 Pick bass 2.repatch
- 366 Wave Oscillators\005 High\164 Round Bass 1.repatch
- 367 Wave Oscillators\005 High\165 Round Bass 2 Gis - 16 Cents.repatch
- 368 Wave Oscillators\005 High\166 Harmonica 1.repatch
- 369 Wave Oscillators\005 High\167 Harmonica 2 Cis - 20 Cents.repatch
- 370 Wave Oscillators\005 High\168 Harp.repatch
- 371 Wave Oscillators\005 High\169 Koto.repatch
- 372 Wave Oscillators\005 High\170 Sitar.repatch
- 373 Wave Oscillators\005 High\171 Marimba C + 45 Cents.repatch
- 374 Wave Oscillators\005 High\172 Synth 1.repatch
- 375 Wave Oscillators\006 PCM\173 Bass Drum.repatch
- 376 Wave Oscillators\006 PCM\174 Ac Snare.repatch
- 377 Wave Oscillators\006 PCM\175 Tight Snare.repatch
- 378 Wave Oscillators\006 PCM\176 E Snare.repatch
- 379 Wave Oscillators\006 PCM\177 Rim.repatch
- 380 Wave Oscillators\006 PCM\178 Ac Tom.repatch
- 381 Wave Oscillators\006 PCM\179 H Hat.repatch
- 382 Wave Oscillators\006 PCM\180 Crash.repatch
- 383 Wave Oscillators\006 PCM\181 Ride.repatch
- 384 Wave Oscillators\006 PCM\182 Strat Guitar C - 30 Cents.repatch
- 385 Wave Oscillators\006 PCM\183 Fuzz Mute.repatch
- 386 Wave Oscillators\006 PCM\184 A Guitar.repatch
- 387 Wave Oscillators\006 PCM\185 F Guitar.repatch
- 388 Wave Oscillators\006 PCM\186 Guitar Harmo.repatch
- 389 Wave Oscillators\006 PCM\187 Pull Bass.repatch
- 390 Wave Oscillators\006 PCM\188 Bass Harmo.repatch
- 391 Wave Oscillators\006 PCM\189 Bowed String.repatch
- 392 Wave Oscillators\006 PCM\190 String Attack.repatch
- 393 Wave Oscillators\006 PCM\191 String Sus.repatch
- 394 Wave Oscillators\006 PCM\192 Pizzicato.repatch
- 395 Wave Oscillators\006 PCM\193 Piano.repatch
- 396 Wave Oscillators\006 PCM\194 El Grand.repatch
- 397 Wave Oscillators\006 PCM\195 Piano Noise.repatch
- 398 Wave Oscillators\006 PCM\196 Trumpet.repatch
- 399 Wave Oscillators\006 PCM\197 Shakuhachi Attack.repatch
- 400 Wave Oscillators\006 PCM\198 Shakuhachi Sus.repatch
- 401 Wave Oscillators\006 PCM\199 Pan Flute Attack.repatch

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- 402 Wave Oscillators\006 PCM\200 Pan Flute Sus.repatch
- 403 Wave Oscillators\006 PCM\201 Voice.repatch
- 404 Wave Oscillators\006 PCM\202 White Noise.repatch
- 405 Wave Oscillators\006 PCM\203 String Loop C - 15 Cents.repatch
- 406 Wave Oscillators\006 PCM\204 Shakuhachi Loop C - 18 Cents.repatch
- 407 Wave Oscillators\006 PCM\205 Pan Flute Loop.repatch
- 408 Wave Oscillators\006 PCM\206 Voice Loop.repatch
- 409 Wave Oscillators\006 PCM\207 White Noise Loop.repatch
- 410 Wave Oscillators\006 PCM\208 Ac Snare Loop.repatch
- 411 Wave Oscillators\006 PCM\209 F Guitar Loop.repatch
- 412 Wave Oscillators\006 PCM\210 Pull Bass Loop.repatch
- 413 Wave Oscillators\006 PCM\211 Omnibus Loop 1.repatch
- 414 Wave Oscillators\006 PCM\212 Omnibus Loop 2.repatch
- 415 Wave Oscillators\006 PCM\213 Omnibus Loop 3.repatch
- 416 Wave Oscillators\006 PCM\214 Omnibus Loop 4.repatch
- 417 Wave Oscillators\006 PCM\215 Omnibus Loop 5.repatch
- 418 Wave Oscillators\006 PCM\216 Omnibus Loop 6.repatch
- 419 Wave Oscillators\006 PCM\217 Omnibus Loop 7.repatch
- 420 Wave Oscillators\006 PCM\218 Omnibus Loop 8.repatch
- 421 Wave Oscillators\006 PCM\219 Ac Snare Rev.repatch
- 422 Wave Oscillators\006 PCM\220 Ac Tom Rev.repatch
- 423 Wave Oscillators\006 PCM\221 F Guitar Rev.repatch
- 424 Wave Oscillators\006 PCM\222 H Hat Alt Loop.repatch
- 425 Wave Oscillators\006 PCM\223 Crash Alt Loop.repatch
- 426 Wave Oscillators\006 PCM\224 Piano Noise Alt Loop.repatch
- 427 Wave Oscillators\007 All Waves\001 Sine.repatch
- 428 Wave Oscillators\007 All Waves\002 Square.repatch
- 429 Wave Oscillators\007 All Waves\003 Saw.repatch
- 430 Wave Oscillators\007 All Waves\004 White Noise.repatch
- 431 Wave Oscillators\007 All Waves\005 Pink Noise.repatch
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- 433 Wave Oscillators\007 All Waves\007 None - Silence.repatch
- 434 Wave Oscillators\007 All Waves\008 Static.repatch
- 435 Wave Oscillators\007 All Waves\009 French Horn.repatch
- 436 Wave Oscillators\007 All Waves\010 String.repatch
- 437 Wave Oscillators\007 All Waves\011 String.repatch
- 438 Wave Oscillators\007 All Waves\012 String Pad.repatch
- 439 Wave Oscillators\007 All Waves\013 Piano 1.repatch
- 440 Wave Oscillators\007 All Waves\014 El Grand.repatch
- 441 Wave Oscillators\007 All Waves\015 E Piano 1.repatch
- 442 Wave Oscillators\007 All Waves\016 E Piano 2.repatch
- 443 Wave Oscillators\007 All Waves\017 E Piano 3.repatch
- 444 Wave Oscillators\007 All Waves\018 Clavi.repatch
- 445 Wave Oscillators\007 All Waves\019 Vibe.repatch
- 446 Wave Oscillators\007 All Waves\020 A Guitar.repatch
- 447 Wave Oscillators\007 All Waves\021 F Guitar 1.repatch
- 448 Wave Oscillators\007 All Waves\022 F Guitar 2.repatch
- 449 Wave Oscillators\007 All Waves\023 Ac Bass 1.repatch
- 450 Wave Oscillators\007 All Waves\024 Ac Bass 2.repatch
- 451 Wave Oscillators\007 All Waves\025 Digi Bass 1.repatch
- 452 Wave Oscillators\007 All Waves\026 Pick Bass.repatch
- 453 Wave Oscillators\007 All Waves\027 Digi Bass 2.repatch
- 454 Wave Oscillators\007 All Waves\028 Round Bass.repatch
- 455 Wave Oscillators\007 All Waves\029 Fretless 1.repatch

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- 456 Wave Oscillators\007 All Waves\030 Fretless 2.repatch
- 457 Wave Oscillators\007 All Waves\031 Flute.repatch
- 458 Wave Oscillators\007 All Waves\032 Panflute.repatch
- 459 Wave Oscillators\007 All Waves\033 Harmonica.repatch
- 460 Wave Oscillators\007 All Waves\034 Glocken.repatch
- 461 Wave Oscillators\007 All Waves\035 Tine.repatch
- 462 Wave Oscillators\007 All Waves\036 Harp.repatch
- 463 Wave Oscillators\007 All Waves\037 Marimba.repatch
- 464 Wave Oscillators\007 All Waves\038 E Tom.repatch
- 465 Wave Oscillators\007 All Waves\039 Log Drum.repatch
- 466 Wave Oscillators\007 All Waves\040 Jazz Organ 1.repatch
- 467 Wave Oscillators\007 All Waves\041 Mello Pad.repatch
- 468 Wave Oscillators\007 All Waves\042 Synth Solo.repatch
- 469 Wave Oscillators\007 All Waves\043 Synth 2.repatch
- 470 Wave Oscillators\007 All Waves\044 French Horn 1.repatch
- 471 Wave Oscillators\007 All Waves\045 French Horn 2.repatch
- 472 Wave Oscillators\007 All Waves\046 Brass 1.repatch
- 473 Wave Oscillators\007 All Waves\047 Brass 2.repatch
- 474 Wave Oscillators\007 All Waves\048 Brass 3.repatch
- 475 Wave Oscillators\007 All Waves\049 Brass 4.repatch
- 476 Wave Oscillators\007 All Waves\050 Trumpet 1.repatch
- 477 Wave Oscillators\007 All Waves\051 Trumpet 2.repatch
- 478 Wave Oscillators\007 All Waves\052 Violin.repatch
- 479 Wave Oscillators\007 All Waves\053 String.repatch
- 480 Wave Oscillators\007 All Waves\054 Piano 1.repatch
- 481 Wave Oscillators\007 All Waves\055 Piano 2.repatch
- 482 Wave Oscillators\007 All Waves\056 Piano 3.repatch
- 483 Wave Oscillators\007 All Waves\057 Piano 2 - 1.repatch
- 484 Wave Oscillators\007 All Waves\058 Piano 3 - 1.repatch
- 485 Wave Oscillators\007 All Waves\059 Piano 4 - 1.repatch
- 486 Wave Oscillators\007 All Waves\060 Piano 4 - 2.repatch
- 487 Wave Oscillators\007 All Waves\061 El Grand.repatch
- 488 Wave Oscillators\007 All Waves\062 E Piano 1.repatch
- 489 Wave Oscillators\007 All Waves\063 E Piano 2.repatch
- 490 Wave Oscillators\007 All Waves\064 E Piano 2 - 1.repatch
- 491 Wave Oscillators\007 All Waves\065 Clavi.repatch
- 492 Wave Oscillators\007 All Waves\066 Harpsichord.repatch
- 493 Wave Oscillators\007 All Waves\067 Vibe.repatch
- 494 Wave Oscillators\007 All Waves\068 A Guitar.repatch
- 495 Wave Oscillators\007 All Waves\069 F Guitar.repatch
- 496 Wave Oscillators\007 All Waves\070 Strat 1.repatch
- 497 Wave Oscillators\007 All Waves\071 Strat 2.repatch
- 498 Wave Oscillators\007 All Waves\072 Ac Bass.repatch
- 499 Wave Oscillators\007 All Waves\073 Pull Bass 1.repatch
- 500 Wave Oscillators\007 All Waves\074 Pull Bass 2.repatch
- 501 Wave Oscillators\007 All Waves\075 Round Bass.repatch
- 502 Wave Oscillators\007 All Waves\076 Slap Bass 1.repatch
- 503 Wave Oscillators\007 All Waves\077 Slap Bass 2.repatch
- 504 Wave Oscillators\007 All Waves\078 Slap Bass 3.repatch
- 505 Wave Oscillators\007 All Waves\079 Fretless 1.repatch
- 506 Wave Oscillators\007 All Waves\080 Fretless 2.repatch
- 507 Wave Oscillators\007 All Waves\081 Synth Bass 1.repatch
- 508 Wave Oscillators\007 All Waves\082 Synth Bass 2.repatch
- 509 Wave Oscillators\007 All Waves\083 Harmonica.repatch

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- 510 Wave Oscillators\007 All Waves\084 Clarinet 1.repatch
- 511 Wave Oscillators\007 All Waves\085 Clarinet 2.repatch
- 512 Wave Oscillators\007 All Waves\086 Oboe 1.repatch
- 513 Wave Oscillators\007 All Waves\087 Oboe 2.repatch
- 514 Wave Oscillators\007 All Waves\088 Shakuhachi.repatch
- 515 Wave Oscillators\007 All Waves\089 Oriental Bell 1.repatch
- 516 Wave Oscillators\007 All Waves\090 Oriental Bell 2.repatch
- 517 Wave Oscillators\007 All Waves\091 Bell.repatch
- 518 Wave Oscillators\007 All Waves\092 Koto.repatch
- 519 Wave Oscillators\007 All Waves\093 Sitar.repatch
- 520 Wave Oscillators\007 All Waves\094 E Tom.repatch
- 521 Wave Oscillators\007 All Waves\095 Log Drum 1.repatch
- 522 Wave Oscillators\007 All Waves\096 Log Drum 2.repatch
- 523 Wave Oscillators\007 All Waves\097 Steel Drum 1.repatch
- 524 Wave Oscillators\007 All Waves\098 Steel Drum 2.repatch
- 525 Wave Oscillators\007 All Waves\099 Voice 1.repatch
- 526 Wave Oscillators\007 All Waves\100 Voice 2.repatch
- 527 Wave Oscillators\007 All Waves\101 Accordion 1.repatch
- 528 Wave Oscillators\007 All Waves\102 Accordion 2.repatch
- 529 Wave Oscillators\007 All Waves\103 Jazz Organ 2.repatch
- 530 Wave Oscillators\007 All Waves\104 Rock Organ 1.repatch
- 531 Wave Oscillators\007 All Waves\105 Draw Bar 1.repatch
- 532 Wave Oscillators\007 All Waves\106 Draw Bar 2.repatch
- 533 Wave Oscillators\007 All Waves\107 Pipe Organ 1.repatch
- 534 Wave Oscillators\007 All Waves\108 Pipe Organ 2.repatch
- 535 Wave Oscillators\007 All Waves\109 Rock Organ 2.repatch
- 536 Wave Oscillators\007 All Waves\110 Synth Solo 1.repatch
- 537 Wave Oscillators\007 All Waves\111 Synth Solo 2.repatch
- 538 Wave Oscillators\007 All Waves\112 Synth 2 - 1.repatch
- 539 Wave Oscillators\007 All Waves\113 Synth 2 - 2.repatch
- 540 Wave Oscillators\007 All Waves\114 Synth 3.repatch
- 541 Wave Oscillators\007 All Waves\115 Brass 1.repatch
- 542 Wave Oscillators\007 All Waves\116 Brass 2.repatch
- 543 Wave Oscillators\007 All Waves\117 Orchestra.repatch
- 544 Wave Oscillators\007 All Waves\118 Piano 1.repatch
- 545 Wave Oscillators\007 All Waves\119 Piano 4.repatch
- 546 Wave Oscillators\007 All Waves\120 E Piano 1 - 1 E + 12 Cents.repatch
- 547 Wave Oscillators\007 All Waves\121 E Piano 1 - 2 Ais.repatch
- 548 Wave Oscillators\007 All Waves\122 E Piano 2.repatch
- 549 Wave Oscillators\007 All Waves\123 E Piano 3.repatch
- 550 Wave Oscillators\007 All Waves\124 Clavi.repatch
- 551 Wave Oscillators\007 All Waves\125 Harpsichord 1.repatch
- 552 Wave Oscillators\007 All Waves\126 Harpsichord 2.repatch
- 553 Wave Oscillators\007 All Waves\127 Vibe Dis + 2 Cents.repatch
- 554 Wave Oscillators\007 All Waves\128 Digi Bass 1.repatch
- 555 Wave Oscillators\007 All Waves\129 Digi Bass 2 - 1.repatch
- 556 Wave Oscillators\007 All Waves\130 Digi Bass 2 - 2.repatch
- 557 Wave Oscillators\007 All Waves\131 Pick Bass.repatch
- 558 Wave Oscillators\007 All Waves\132 Glocken 1 E + 15 Cents.repatch
- 559 Wave Oscillators\007 All Waves\133 Glocken 2 G.repatch
- 560 Wave Oscillators\007 All Waves\134 Tine 1 Ais + 25 Cents.repatch
- 561 Wave Oscillators\007 All Waves\135 Tine 2 Fis + 35 Cents.repatch
- 562 Wave Oscillators\007 All Waves\136 Tine 3.repatch
- 563 Wave Oscillators\007 All Waves\137 Tube Bell 1.repatch

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- 564 Wave Oscillators\007 All Waves\138 Tube Bell 2.repatch
- 565 Wave Oscillators\007 All Waves\139 Tube Bell 3 C + 28 Cents.repatch
- 566 Wave Oscillators\007 All Waves\140 Xylophone 1 E + 8 Cents.repatch
- 567 Wave Oscillators\007 All Waves\141 Xylophone 2 G.repatch
- 568 Wave Oscillators\007 All Waves\142 Harp E.repatch
- 569 Wave Oscillators\007 All Waves\143 Koto.repatch
- 570 Wave Oscillators\007 All Waves\144 Sitar 1.repatch
- 571 Wave Oscillators\007 All Waves\145 Sitar 2.repatch
- 572 Wave Oscillators\007 All Waves\146 Kalimba 1 Ais + 33 Cents.repatch
- 573 Wave Oscillators\007 All Waves\147 Kalimba 2.repatch
- 574 Wave Oscillators\007 All Waves\148 Kalimba 3 B - 50 Cents.repatch
- 575 Wave Oscillators\007 All Waves\149 Log Drum.repatch
- 576 Wave Oscillators\007 All Waves\150 Steel Drum Ais + 13 Cents.repatch
- 577 Wave Oscillators\007 All Waves\151 Pipe Organ 3 - 1.repatch
- 578 Wave Oscillators\007 All Waves\152 Pipe Organ 3 - 2.repatch
- 579 Wave Oscillators\007 All Waves\153 Synth 1 Cis - 46 Cents.repatch
- 580 Wave Oscillators\007 All Waves\154 Synth 2 Dis - 26 Cents.repatch
- 581 Wave Oscillators\007 All Waves\155 Synth 3 - 1 Cis + 40 Cents.repatch
- 582 Wave Oscillators\007 All Waves\156 Synth 3 - 2.repatch
- 583 Wave Oscillators\007 All Waves\157 Synth 4 - 1.repatch
- 584 Wave Oscillators\007 All Waves\158 Synth 4 - 2.repatch
- 585 Wave Oscillators\007 All Waves\159 Clavi.repatch
- 586 Wave Oscillators\007 All Waves\160 Digi Bass 1 - 1.repatch
- 587 Wave Oscillators\007 All Waves\161 Digi Bass 1 - 2.repatch
- 588 Wave Oscillators\007 All Waves\162 Pick bass 1.repatch
- 589 Wave Oscillators\007 All Waves\163 Pick bass 2.repatch
- 590 Wave Oscillators\007 All Waves\164 Round Bass 1.repatch
- 591 Wave Oscillators\007 All Waves\165 Round Bass 2 Gis - 16 Cents.repatch
- 592 Wave Oscillators\007 All Waves\166 Harmonica 1.repatch
- 593 Wave Oscillators\007 All Waves\167 Harmonica 2 Cis - 20 Cents.repatch
- 594 Wave Oscillators\007 All Waves\168 Harp.repatch
- 595 Wave Oscillators\007 All Waves\169 Koto.repatch
- 596 Wave Oscillators\007 All Waves\170 Sitar.repatch
- 597 Wave Oscillators\007 All Waves\171 Marimba C + 45 Cents.repatch
- 598 Wave Oscillators\007 All Waves\172 Synth 1.repatch
- 599 Wave Oscillators\007 All Waves\173 Bass Drum.repatch
- 600 Wave Oscillators\007 All Waves\174 Ac Snare.repatch
- 601 Wave Oscillators\007 All Waves\175 Tight Snare.repatch
- 602 Wave Oscillators\007 All Waves\176 E Snare.repatch
- 603 Wave Oscillators\007 All Waves\177 Rim.repatch
- 604 Wave Oscillators\007 All Waves\178 Ac Tom.repatch
- 605 Wave Oscillators\007 All Waves\179 H Hat.repatch
- 606 Wave Oscillators\007 All Waves\180 Crash.repatch
- 607 Wave Oscillators\007 All Waves\181 Ride.repatch
- 608 Wave Oscillators\007 All Waves\182 Strat Guitar C - 30 Cents.repatch
- 609 Wave Oscillators\007 All Waves\183 Fuzz Mute.repatch
- 610 Wave Oscillators\007 All Waves\184 A Guitar.repatch
- 611 Wave Oscillators\007 All Waves\185 F Guitar.repatch
- 612 Wave Oscillators\007 All Waves\186 Guitar Harmo.repatch
- 613 Wave Oscillators\007 All Waves\187 Pull Bass.repatch
- 614 Wave Oscillators\007 All Waves\188 Bass Harmo.repatch
- 615 Wave Oscillators\007 All Waves\189 Bowed String.repatch
- 616 Wave Oscillators\007 All Waves\190 String Attack.repatch
- 617 Wave Oscillators\007 All Waves\191 String Sus.repatch

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- 618 Wave Oscillators\007 All Waves\192 Pizzicato.repatch
- 619 Wave Oscillators\007 All Waves\193 Piano.repatch
- 620 Wave Oscillators\007 All Waves\194 El Grand.repatch
- 621 Wave Oscillators\007 All Waves\195 Piano Noise.repatch
- 622 Wave Oscillators\007 All Waves\196 Trumpet.repatch
- 623 Wave Oscillators\007 All Waves\197 Shakuhachi Attack.repatch
- 624 Wave Oscillators\007 All Waves\198 Shakuhachi Sus.repatch
- 625 Wave Oscillators\007 All Waves\199 Pan Flute Attack.repatch
- 626 Wave Oscillators\007 All Waves\200 Pan Flute Sus.repatch
- 627 Wave Oscillators\007 All Waves\201 Voice.repatch
- 628 Wave Oscillators\007 All Waves\202 White Noise.repatch
- 629 Wave Oscillators\007 All Waves\203 String Loop C - 15 Cents.repatch
- 630 Wave Oscillators\007 All Waves\204 Shakuhachi Loop C - 18 Cents.repatch
- 631 Wave Oscillators\007 All Waves\205 Pan Flute Loop.repatch
- 632 Wave Oscillators\007 All Waves\206 Voice Loop.repatch
- 633 Wave Oscillators\007 All Waves\207 White Noise Loop.repatch
- 634 Wave Oscillators\007 All Waves\208 Ac Snare Loop.repatch
- 635 Wave Oscillators\007 All Waves\209 F Guitar Loop.repatch
- 636 Wave Oscillators\007 All Waves\210 Pull Bass Loop.repatch
- 637 Wave Oscillators\007 All Waves\211 Omnibus Loop 1.repatch
- 638 Wave Oscillators\007 All Waves\212 Omnibus Loop 2.repatch
- 639 Wave Oscillators\007 All Waves\213 Omnibus Loop 3.repatch
- 640 Wave Oscillators\007 All Waves\214 Omnibus Loop 4.repatch
- 641 Wave Oscillators\007 All Waves\215 Omnibus Loop 5.repatch
- 642 Wave Oscillators\007 All Waves\216 Omnibus Loop 6.repatch
- 643 Wave Oscillators\007 All Waves\217 Omnibus Loop 7.repatch
- 644 Wave Oscillators\007 All Waves\218 Omnibus Loop 8.repatch
- 645 Wave Oscillators\007 All Waves\219 Ac Snare Rev.repatch
- 646 Wave Oscillators\007 All Waves\220 Ac Tom Rev.repatch
- 647 Wave Oscillators\007 All Waves\221 F Guitar Rev.repatch
- 648 Wave Oscillators\007 All Waves\222 H Hat Alt Loop.repatch
- 649 Wave Oscillators\007 All Waves\223 Crash Alt Loop.repatch
- 650 Wave Oscillators\007 All Waves\224 Piano Noise Alt Loop.repatch
- 651 Wave Oscillators\007 All Waves\225 Inverse Saw C.repatch
- 652 Wave Oscillators\007 All Waves\226 Triangle C.repatch
- 653 Wave Oscillators\007 All Waves\227 Random C.repatch
- 654 Wave Oscillators\007 All Waves\228 Snare White.repatch

8 Credits

- Kawai JP for permission, Kawai US for .sysex files and manual
- Reasonstalk, beta test forum hosting
- Reasonstudios for their support
- Loque, signature patches
- Danny Kegel for the demo songs
- All the beta testers

9 Appendixes

Browsing patches

Changing .repatch files in the Patch Browser while notes are sustained may cause a sudden jump in volume and will play the oscillators from the current patch with the settings of the new patch. The change disappears when a new note is triggered or when Patch Correction on the back panel is turned On.

Envelope decay

A few Waveforms may produce a short click when the Envelope Attack and / or Envelope Decay are set to 0. The click will be gone when the Envelope Decay is set to 10 milliseconds or higher.

Waveforms

A waveform with a number higher than 172 and that are marked with an * have their loop mode set to Off internally. These are one shot waveforms.

Aliasing

The Kawai K1 is notorious for its aliasing, which is regarded as a technical minus, but the aliasing makes the Kawai K1 have its own character. Also note that the Kawai K1 has low quality 8 bit short cycled waveforms and a lot of noise is added by the electric circuit when sampled from the Kawai's K1 Output . You can correct the noise and hiss by using the Low Pass 12 Filter.

CPU load

To reduce CPU load, on the Output panel:

- Set Poly to Off

. To reduce CPU load, on the Convolution Reverb panel:

- Reduce the Qlty (Quality) value

10 MIDI Implementation Chart

In the table below, first the MIDI CC Number is mentioned and is followed by the name of the function in Rumbler Compact Synthesizer:

- 12 Saw Oscillator Level
- 13 Saw And Square Oscillator Amount
- 14 Saw And Square Oscillator Detune
- 15 Saw And Square Osc Lvl Mod Amount
- 16 Saw And Square Osc Lvl Mod Source
- 17 Square Oscillator Level
- 18 Saw And Square Oscillator Tune
- 19 Saw And Square Osc Tune Mod Amount
- 20 Saw And Square Osc Tune Mod Source
- 21 Wave Osc Level
- 22 Wave Osc Level Mod Amount
- 23 Wave Osc Level Mod Source
- 24 Wave Osc Select
- 25 Wave Osc Tune
- 26 Wave Osc Fine Tune
- 27 Wave Osc Tune Mod Amount
- 28 Wave Osc Tune Mod Source
- 29 Amp Envelope To Level On Off
- 30 Envelope Delay Time
- 31 Envelope Attack
- 33 Envelope Attack Curve
- 34 Envelope Attack Mod Amount
- 35 Envelope Attack Mod Source
- 36 Envelope Hold
- 37 Envelope Hold Mod Amount
- 39 Envelope Hold Mod Source
- 40 Envelope Decay
- 41 Envelope Decay Curve
- 42 Envelope Decay Mod Amount
- 43 Envelope Decay Mod Source
- 44 Envelope Sustain
- 45 Envelope Sustain Mod Amount
- 46 Envelope Sustain Mod Source
- 47 Envelope Release
- 48 Envelope Release Curve
- 49 Envelope Release Mod Amount
- 50 Envelope Release Mod Source
- 51 LFO_Shape
- 52 LFO Rate
- 53 LFO Retrigger On Off
- 54 LFO Rate Mod Amount
- 55 LFO Rate Mod Source
- 56 Ring Modulation Level
- 57 Ring Modulation Harmonic
- 58 Ring Modulation Disharmonic
- 59 Ring Modulation Mod Amount
- 60 Ring Modulation Mod Source
- 61 Shaper Mode

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- 62 Shaper Drive Mod Amount
- 63 Shaper Drive Mod Source
- 65 EQ Gain
- 66 EQ Band Width
- 67 EQ Band Frequency
- 68 EQ Band Frequency Mod Amount
- 69 EQ Band Frequency Mod Source
- 70 Low Pass 12 Filter On Off
- 71 Low Pass 12 Cutoff
- 72 Low Pass 12 Cutoff Key Track
- 73 Low Pass 12 Cutoff Mod Amount
- 74 Low Pass 12 Cutoff Mod Source
- 75 Low Pass 12 Resonance
- 76 Low Pass 12 Resonance Key Track
- 77 Low Pass 12 Resonance Mod Amount
- 78 Low Pass 12 Resonance Mod Source
- 79 Chorus On Off
- 80 Chorus Rate
- 81 Chorus Depth
- 82 Chorus Delay
- 83 Chorus Voices Amount
- 84 Chorus Mix
- 85 Delay On Off
- 86 Delay Sync On Off
- 87 Delay Sync
- 88 Delay Time
- 89 Delay Feedback
- 90 Delay Ratio
- 91 Delay Damping
- 92 Delay Mix
- 93 Tremolo On Off
- 94 Tremolo Sync On Off
- 95 Tremolo Sync
- 102 Tremolo Rate
- 103 Tremolo Depth
- 104 Tremolo Attack
- 105 Tremolo Release
- 106 Tremolo Phase
- 107 Tremolo Spread
- 108 Distortion On Off
- 109 Distortion Mode
- 110 Distortion Drive
- 111 Distortion Drive Mod Amount
- 112 Distortion Drive Mod Source
- 113 Distortion Rectify
- 114 Distortion Rectify Mod Amount
- 115 Distortion Rectify Mod Source
- 116 Distortion Mix
- 117 Distortion Mix Mod Amount
- 118 Distortion Mix Mod Source
- 119 Convolution On Off
- 128 Convolution Mode
- 129 Convolution Pre Delay
- 130 Convolution Pre Delay Mod Amount

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- 131 Convolution Pre Delay Mod Source
- 132 Convolution Quality
- 133 Convolution Quality Mod Amount
- 134 Convolution Quality Mod Source
- 135 Convolution Width
- 136 Convolution Width Mod Amount
- 137 Convolution Width Mod Source
- 138 Convolution Decay
- 139 Convolution Mix
- 140 Convolution Mix Mod Amount
- 141 Convolution Mix Mod Source
- 142 Reverb On Off
- 143 Reverb Time
- 144 Reverb Time Mod Amount
- 145 Reverb Time Mod Source
- 146 Reverb Pre Delay
- 147 Reverb Pre Delay Mod Amount
- 148 Reverb Pre Delay Mod Source
- 149 Reverb Low Cut
- 150 Reverb Low Cut Mod Amount
- 151 Reverb Low Cut Mod Source
- 152 Reverb High Cut
- 153 Reverb High Cut Mod Amount
- 154 Reverb High Cut Mod Source
- 155 Reverb Damping
- 156 Reverb Damping Mod Amount
- 157 Reverb Damping Mod Source
- 158 Reverb Mix
- 159 Reverb Mix Mod Amount
- 160 Reverb Mix Mod Source
- 161 Pan
- 162 Pan Mod Amount
- 163 Pan Mod Source
- 164 Master Level
- 165 High Pass 12 Filter On Off
- 166 Poly On Off
- 167 Master Level Mod Amount
- 168 Master Level Mod Source

11 Device Remote information

Scope

Manufacturer	Model
Oenkenstein Audio	nl.oenkenstein.RUMBLER

Remotable	Min	Max	Input type	Output type
Saw Oscillator Level	0	4194304	Value	ValueOutput
Saw And Square Oscillator Amount	0	6	Value	ValueOutput
Saw And Square Oscillator Detune	0	4194304	Value	ValueOutput
Saw And Square Osc Lvl Mod Amount	0	4194304	Value	ValueOutput
Saw And Square Osc Lvl Mod Source	0	11	Value	ValueOutput
Square Oscillator Level	0	4194304	Value	ValueOutput
Saw And Square Oscillator Tune	0	72	Value	ValueOutput
Saw And Square Osc Tune Mod Amount	0	4194304	Value	ValueOutput
Saw And Square Osc Tune Mod Source	0	11	Value	ValueOutput
Wave Osc Level	0	4194304	Value	ValueOutput
Wave Osc Level Mod Amount	0	4194304	Value	ValueOutput
Wave Osc Level Mod Source	0	11	Value	ValueOutput
Wave Osc Select	0	227	Value	ValueOutput
Wave Osc Tune	0	4194304	Value	ValueOutput
Wave Osc Fine Tune	0	4194304	Value	ValueOutput
Wave Osc Tune Mod Amount	0	4194304	Value	ValueOutput
Wave Osc Tune Mod Source	0	11	Value	ValueOutput
Amp Envelope To Level On Off	0	1	Toggle	ValueOutput
Envelope Delay Time	0	99	Value	ValueOutput
Envelope Attack	0	100	Value	ValueOutput
Envelope Attack Curve	0	4194304	Value	ValueOutput
Envelope Attack Mod Amount	0	4194304	Value	ValueOutput
Envelope Attack Mod Source	0	11	Value	ValueOutput
Envelope Hold	0	100	Value	ValueOutput
Envelope Hold Mod Amount	0	4194304	Value	ValueOutput
Envelope Hold Mod Source	0	11	Value	ValueOutput
Envelope Decay	0	100	Value	ValueOutput
Envelope Decay Curve	0	4194304	Value	ValueOutput
Envelope Decay Mod Amount	0	4194304	Value	ValueOutput
Envelope Decay Mod Source	0	11	Value	ValueOutput
Envelope Sustain	0	4194304	Value	ValueOutput
Envelope Sustain Mod Amount	0	4194304	Value	ValueOutput
Envelope Sustain Mod Source	0	11	Value	ValueOutput
Envelope Release	0	100	Value	ValueOutput
Envelope Release Curve	0	4194304	Value	ValueOutput
Envelope Release Mod Amount	0	4194304	Value	ValueOutput
Envelope Release Mod Source	0	11	Value	ValueOutput
LFO_Shape	0	5	Value	ValueOutput
LFO Rate	0	80	Value	ValueOutput
LFO Retrigger On Off	0	1	Toggle	ValueOutput
LFO Rate Mod Amount	0	4194304	Value	ValueOutput
LFO Rate Mod Source	0	11	Value	ValueOutput
Ring Modulation Level	0	4194304	Value	ValueOutput

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Ring Modulation Harmonic	0	72	Value	ValueOutput
Ring Modulation Disharmonic	0	100	Value	ValueOutput
Ring Modulation Mod Amount	0	4194304	Value	ValueOutput
Ring Modulation Mod Source	0	11	Value	ValueOutput
Shaper Mode	0	3	Value	ValueOutput
Shaper Drive Mod Amount	0	4194304	Value	ValueOutput
Shaper Drive Mod Source	0	11	Value	ValueOutput
EQ Gain	0	4194304	Value	ValueOutput
EQ Band Width	0	100	Value	ValueOutput
EQ Band Frequency	0	100	Value	ValueOutput
EQ Band Frequency Mod Amount	0	4194304	Value	ValueOutput
EQ Band Frequency Mod Source	0	11	Value	ValueOutput
Low Pass 12 Filter On Off	0	1	Toggle	ValueOutput
Low Pass 12 Cutoff	0	4194304	Value	ValueOutput
Low Pass 12 Cutoff Key Track	0	4194304	Value	ValueOutput
Low Pass 12 Cutoff Mod Amount	0	4194304	Value	ValueOutput
Low Pass 12 Cutoff Mod Source	0	11	Value	ValueOutput
Low Pass 12 Resonance	0	4194304	Value	ValueOutput
Low Pass 12 Resonance Key Track	0	4194304	Value	ValueOutput
Low Pass 12 Resonance Mod Amount	0	4194304	Value	ValueOutput
Low Pass 12 Resonance Mod Source	0	11	Value	ValueOutput
Chorus On Off	0	1	Toggle	ValueOutput
Chorus Rate	0	100	Value	ValueOutput
Chorus Depth	0	100	Value	ValueOutput
Chorus Delay	0	100	Value	ValueOutput
Chorus Voices Amount	0	2	Value	ValueOutput
Chorus Mix	0	4194304	Value	ValueOutput
Delay On Off	0	1	Toggle	ValueOutput
Delay Sync On Off	0	1	Toggle	ValueOutput
Delay Sync	0	12	Value	ValueOutput
Delay Time	0	100	Value	ValueOutput
Delay Feedback	0	4194304	Value	ValueOutput
Delay Ratio	0	100	Value	ValueOutput
Delay Damping	0	100	Value	ValueOutput
Delay Mix	0	4194304	Value	ValueOutput
Tremolo On Off	0	1	Toggle	ValueOutput
Tremolo Sync On Off	0	1	Toggle	ValueOutput
Tremolo Sync	0	12	Value	ValueOutput
Tremolo Rate	0	100	Value	ValueOutput
Tremolo Depth	0	4194304	Value	ValueOutput
Tremolo Attack	0	4194304	Value	ValueOutput
Tremolo Release	0	4194304	Value	ValueOutput
Tremolo Phase	0	4194304	Value	ValueOutput
Tremolo Spread	0	4194304	Value	ValueOutput
Distortion On Off	0	1	Toggle	ValueOutput
Distortion Mode	0	1	Toggle	ValueOutput
Distortion Drive	0	4194304	Value	ValueOutput
Distortion Drive Mod Amount	0	4194304	Value	ValueOutput
Distortion Drive Mod Source	0	3	Value	ValueOutput
Distortion Rectify	0	4194304	Value	ValueOutput
Distortion Rectify Mod Amount	0	4194304	Value	ValueOutput
Distortion Rectify Mod Source	0	3	Value	ValueOutput
Distortion Mix	0	4194304	Value	ValueOutput
Distortion Mix Mod Amount	0	4194304	Value	ValueOutput

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Distortion Mix Mod Source	0	3	Value	ValueOutput
Convolution On Off	0	1	Toggle	ValueOutput
Convolution Mode	0	9	Value	ValueOutput
Convolution Pre Delay	0	4194304	Value	ValueOutput
Convolution Pre Delay Mod Amount	0	4194304	Value	ValueOutput
Convolution Pre Delay Mod Source	0	3	Value	ValueOutput
Convolution Quality	0	4194304	Value	ValueOutput
Convolution Quality Mod Amount	0	4194304	Value	ValueOutput
Convolution Quality Mod Source	0	3	Value	ValueOutput
Convolution Width	0	4194304	Value	ValueOutput
Convolution Width Mod Amount	0	4194304	Value	ValueOutput
Convolution Width Mod Source	0	3	Value	ValueOutput
Convolution Decay	0	4194304	Value	ValueOutput
Convolution Mix	0	4194304	Value	ValueOutput
Convolution Mix Mod Amount	0	4194304	Value	ValueOutput
Convolution Mix Mod Source	0	3	Value	ValueOutput
Reverb On Off	0	1	Toggle	ValueOutput
Reverb Time	0	4194304	Value	ValueOutput
Reverb Time Mod Amount	0	4194304	Value	ValueOutput
Reverb Time Mod Source	0	3	Value	ValueOutput
Reverb Pre Delay	0	100	Value	ValueOutput
Reverb Pre Delay Mod Amount	0	4194304	Value	ValueOutput
Reverb Pre Delay Mod Source	0	3	Value	ValueOutput
Reverb Low Cut	0	100	Value	ValueOutput
Reverb Low Cut Mod Amount	0	4194304	Value	ValueOutput
Reverb Low Cut Mod Source	0	3	Value	ValueOutput
Reverb High Cut	0	100	Value	ValueOutput
Reverb High Cut Mod Amount	0	4194304	Value	ValueOutput
Reverb High Cut Mod Source	0	3	Value	ValueOutput
Reverb Damping	0	100	Value	ValueOutput
Reverb Damping Mod Amount	0	4194304	Value	ValueOutput
Reverb Damping Mod Source	0	3	Value	ValueOutput
Reverb Mix	0	4194304	Value	ValueOutput
Reverb Mix Mod Amount	0	4194304	Value	ValueOutput
Reverb Mix Mod Source	0	3	Value	ValueOutput
Pan	0	100	Value	ValueOutput
Pan Mod Amount	0	4194304	Value	ValueOutput
Pan Mod Source	0	11	Value	ValueOutput
Master Level	0	4194304	Value	ValueOutput
High Pass 12 Filter On Off	0	1	Toggle	ValueOutput
Poly On Off	0	1	Toggle	ValueOutput
Master Level Mod Amount	0	4194304	Value	ValueOutput
Master Level Mod Source	0	11	Value	ValueOutput
Mod Wheel	0	127	Value	ValueOutput
Breath Control	0	127	Value	ValueOutput
Expression	0	127	Value	ValueOutput
Sustain Pedal	0	127	Value	ValueOutput
Aftertouch	0	127	Value	ValueOutput
Pitch Bend	-8192	8191	Value	ValueOutput
Device Name	0	0	-	TextOutput
Patch Name	0	0	-	TextOutput
Select Patch Delta	0	0	Delta	TextOutput
Select Previous Patch	0	0	Trig	TextOutput
Select Next Patch	0	0	Trig	TextOutput