# $B \Delta B Y L O N 2$

Synthesizer Plugin Manual

### Website: waproduction.com

### **Email: info@waproduction.com**

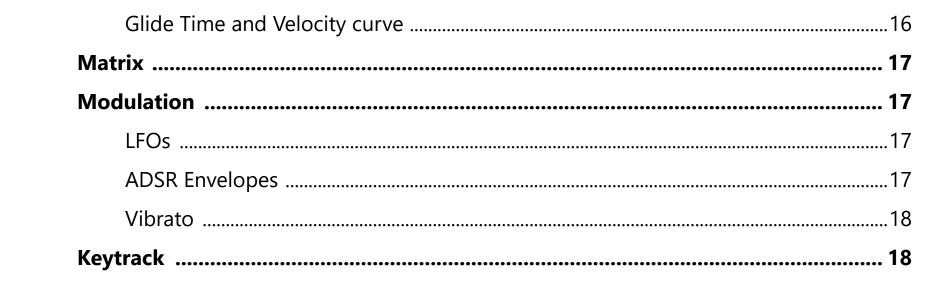
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## **1. Introduction**



**Babylon 2** is a versatile and powerful virtual synthesizer plugin designed to meet the needs of modern music production. Babylon combines a rich set of features with an intuitive interface, making it suitable for both beginners and experienced producers and sound designers.

Building on the robust foundation of its predecessor, Version 2 introduces a host of new features and enhancements. These elevate the plugin to a whole new level. With feature-packed dual main oscillators, that offer new Multi and Quad modes, an innovative wavetable creator, an advanced filter section, an arpeggiator with smart pattern generation, upgraded modulators, and a comprehensive FX suite, Babylon 2 is capable of producing any sound you can dream of. Whether you're crafting intricate soundscapes, piercing leads, growling basses, ethereal pads, punchy drums, or complex sound effects, this plugin provides all the tools you need to get the job done.

Babylon is designed to be a practical and reliable tool for any genre of music, offering a balance of advanced features and ease of use. We hope you enjoy exploring the creative possibilities that Babylon 2 has to offer.

### **Key Features**

#### **Advanced Oscillators**

Babylon 2 features multi-voice oscillators with stereo unison and detuning capabilities. The new version introduces two additional modes: Multi, which allows blending of multiple waveforms, and Quad, which enables morphing between four waveforms simultaneously.

#### Wavetable Editor

In Version 2, you are no longer limited to the built-in waveforms. The new Wavetable Editor allows you to create your own wavetables using an easy-to-use line editor. You can start from scratch, modify existing waveforms, or even import your own WAV file. This will provide a high degree of creative freedom to explore a wide range of sonic possibilities.

### **Enhanced Filters and Effects**

Babylon now offers a broader range of filter types, including SVF, IIR, and Bi-quad filters, as well as classic and more experimental options, providing even greater freedom to shape your sound. The effects section has also been expanded, featuring improved reverb, delay, and distortion modules, along with a newly added Phaser effect.

### **Modulation Capabilities**

The new curve editor for envelope modulators offers unprecedented control over the dynamics of your sound, making it easier than ever to create complex and evolving sounds. In addition to existing LFO, vibrato, and envelope modulations, Version 2 also adds two extra envelope followers and two new key-track modulators, each equipped with intuitive line editors for precise control.

### **Microtonal Tuning and Scale Helper**

One of Babylon's standout features is its microtonal tuning section, which allows for the tuning of individual notes to play quarter-tone and microtonal scales. The Scale Helper includes standard scales and also features traditional tunings, modes and scales from the Middle East, making it easy to explore, learn and incorporate exotic scales into your compositions.

### **User Interface and Performance**

The user interface has been redesigned with improved scaling and customization options. A preset browser section has also been added, making it easier to search and manage your presets. Performance improvements ensure that Babylon runs smoothly, even with complex patches and projects.

### Arpeggiator

Another new addition to Version 2 is the new Arpeggiator. It supports different time signatures and includes an intelligent pattern generator with manual control over parameters like population and complexity.

### Additional Enhancements

Other notable improvements include eight additional noise types for the noise generator, new detune modes with extended range option, a customizable pitch pedal parameter, improved legato and portamento modes and increased number of polyphony notes up to 64. Each oscillator now also features a stereo ping pong effect providing more spacial options to play with.

### **Detailed Feature List**

### **Oscillators**:

• Dual main oscillators, with 9x stereo unison, frequency modulation (FM), ring modulation (RM), amplitude modulation (AM), hard sync (Oscillator 1 to Oscillator 2) and multiple modes

#### as followed.

- **Single:** Use a single waveform as the source.
- **Multi:** Blend multiple waveforms.
- **Quad:** Morph between 4 waveforms simultaneously.
- **W-LAB:** Create your own oscillator source.
- An additional oscillator which can also be used as a modulator.
- Stereo noise generator with 9 different noise types (e.g., White, Pink, etc.).



- Free run for all oscillators and LFOs.
- Multiple detune modes with extended range allowing for more experimental sound design.
- Ping pong effect that alternates notes from side to side with width control.

### **Filters:**

- State variable filter: LP, HP, BP, Notch, Peak and Formant.
- Three stage IIR Filter: LP (6, 12, 24), HP (6, 12, 24), BP (6, 12, 24), Notch, Peak and Formant.
- **Bi-quad:** LP, HP, BP, Notch (6, 12, 24), Peak (6, 12, 24), Lowshelf (6, 12, 24) and Highshelf (6, 12, 24).
- **Classic:** LP, LP (High Quality), HP, BP, Notch and peak.
- **RMG A, RMG B, RMG C:** LP, HP and BP. Each include 8 different tuning (e.g., Clean, Break, Extreme, etc.).

### **Modulators:**

- Six ADSR Envelope Followers: With easy-to-use curve editor to shape each stage.
- **Two LFOs:** With poly and mono modes, LFOs can use the same wavetables as the other oscillators (single mode).
- A Vibrato: Combines an Envelope follower and a LFO with delay, attack and speed controls in order to simulate a natural vibrato effect.
- **Two Key-Trackers:** Modulate parameters based on the input midi note with precision and ease.

### Matrix:

• 8 slots, 12 modulators, and 38 internal parameters for modulation.

### **Playing modes:**

- Poly, Legato Retrigger, Legato, Portamento and Poly Portamento.
- Up to 64 note polyphony.

### **FX Suite:**

Featuring 8 audio effects:

• **Distortion:** Includes saturation, overdrive and distortion effects with gain and threshold controls.

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- Lofi: Bit rate and sample rate reduction with mix control.
- Filter: Fast LP, HP and BP filters.
- Phaser: A newly added effect with tempo sync option.
- Chorus.
- EQ.
- Delay: With stereo separation control, ping pong mode and LP and HP filters.
- **Reverb:** With pre-delay and LP and HP filters.
- **Soft limiter:** Used at the end of the chain.



### **Tuning and Scale Helper**

- **Tuning:** Allows you to tune individual notes and play scales that require micro-tuning.
- Scale Bank: Contains 23 standard scales (e.g., Major, Dorian, Spanish) and 34 exotic scales and modes from the Middle East, including traditional Persian, Arabian, and Turkish scales that use quarter tones.
- Scale Helper: Choose a scale and key to see the correct notes highlighted on a virtual keyboard. Micro-tuning will be applied automatically if needed.

### Wavetable Editor

- Line editor: With a variety of curve types and an intuitive workflow, create any shapes easily. Combine the two lines to create complex shapes or animated frames quickly.
- **Secondary source:** Load and mix any of the existing wavetables with the main shape.
- Import WAV: Import your own wavetable and mix it with others.

### Arpeggiator

- Supports various time signatures.
- Smart pattern generator with manual control over population and complexity.
- Three octave range.
- Up, down, up-down, down-up and poly modes.

### Interface:

- Scaling from 100% to 160%.
- Dark and light modes with different color options.

### **Presets:**

• Babylon 2 comes with an extensive preset library, including main presets, numerous wavetables, and presets for individual components like arpegiator and FX. They are carefully designed and categorized to make it as easy as possible to find the sounds you need.

### 2. Installation

### System Requirements

- Windows: 7 or later.
- MacOS: 10.11 or later.
- CPU: Multicore 2GHz or higher.
- **RAM:** 2GB or higher.
- Display Resolution: 1920x1080 or higher.
- Formats: The plugin is compatible with VST, AU, and AAX host applications on both Windows (64-bit) and MacOS (32-bit, 64-bit and ARM). Please refer to your host's manual for instructions on loading third-party instrument plugins.

### **Notice:**

Running on older systems may be possible but is not guaranteed.

We recommend trying the demo version before purchasing to ensure compatibility with your system and host.

### Installing the plugin

Run the installer and follow the instructions to install the plugin. The default plugin directories typically are:

- Windows:
  - VST 64-bit: 'C:\Program Files\vstplugins'
  - VST3 64-bit: 'C:\Program Files\Common Files\VST3'
  - AAX 64-bit: 'C:\Program Files\Common Files\Avid\Audio\Plug-Ins'

### • MacOS:

- VST2: '/Library/Audio/Plugins/VST'
- VST3: '/Library/Audio/Plug-ins/VST3'
- AU: '/Library/Audio/Plugins/Components'
- AAX: '/Library/Application Support/Avid/Audio/Plug-Ins'

### **Installing presets**

- **Windows:** The presets will be installed with the main installer.
- **MacOS:** Run the preset installer (if available) or manually copy the preset folder provided in the installer folder and paste it in the plugin's preset folder.
- To manage your presets manually, use the 'Open Preset Folder' option from the plugin's main menu to reveal the preset folder in your file browser.

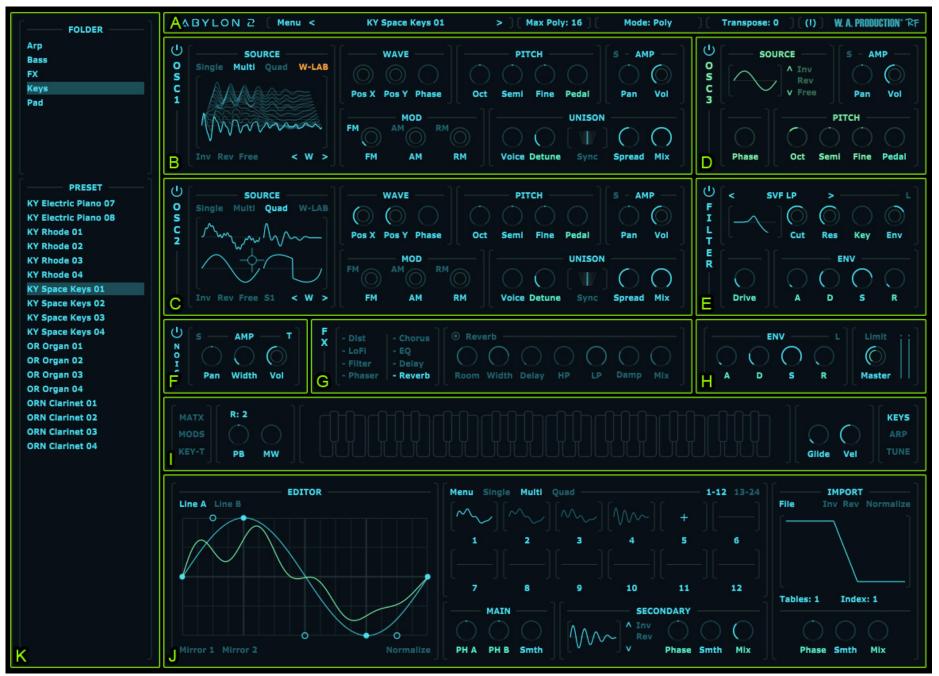
### **Demo Version Limitations**

The demo version is fully functional but the DAW will be unable to load the saved settings with the project. Additionally, there will be periodic noise bursts and volume dips.

### **Authorization**

If you have purchased the plugin and finished the payment process, you will receive information to unlock the full version. If you encounter any issues, please contact us at info@waproduction.com or visit our support page for assistance.

## 3. Reference



### **Interface Overview**

**Tips:** 

- Double click or ALT+Click on knobs to reset them to their default values.
- When tweaking the knobs, hold down SHIFT or CTRL keys for increased accuracy.

### A. Top Bar

BABYLON 2	Menu <	KY Space Keys 01	> ] [ Max Poly: 16 ] [	Mode: Poly	Transpose: 0	ງ ( ແ) ງ
1	_2	3	<u> </u>	5	6	-7-

- A.1. Plugin logo. Click to open the about/Authorization page.
- A.2. Main Menu. Options are:
  - Save: Save changes to the current preset. If a file with current preset name doesn't exist, it

creates one. Please note that a any changes you make to the presets wont be saved unless you save them yourself.

- **Rename and Save:** Rename current preset and save all the changes.
- **Save As:** Save current preset as a new file instead of overwriting the current one.
- **Load Preset:** Browse and load a preset file from the drive.
- **Copy and Paste Preset.** Can copy and paste presets between two instances of the plugin as well.
- **Reset Preset:** Reset all parameters and controls to their default values.

- **Delete Preset:** Remove the current preset file from the drive (if exists).
- **Open Preset Folder:** Reveal and find the preset folder in your file browser (Windows Explorer or MacOS Finder) for manual preset management.

### • **UI Settings**:

- **UI Size:** Scaling up to 160%.
- **Theme:** Offering different themes and colors.
- **Show Preset Browser:** Show or hide the preset browser section.
- **Warning Toggle:** If disabled the plugin wont warn about unsaved presets.
- **Default Tab:** Pick which tab will be on when you first load the plugin.
- **About:** Open the About/Authorization page where you can authorize the plugin and find some information about the developers.
- **A.3. Preset Menu:** Browse and load presets stored in the presets folder on the drive. The plugin searches for one layer of sub folders, so by creating folders, you can organize your presets better. Notice that folders inside folders will be ignored.
- **A.4. Max Poly:** The maximum number of simultaneous notes processed at the same time. If the number of input notes exceed this number the oldest note will be replaced by the new one. Lower numbers will limit CPU usage.

### • A.5. Playing Mode:

- **Poly:** Play normally with no pitch sliding.
- **Legato Retrigger:** Pitch slide from current note to the next overlapping note. In this mode ADSR envelopes will trigger with the new note.
- **Legato:** Similar to legato but the envelopes will not reset when sliding to the new note.
- **Portamento:** Similar to Legato but two notes don't have to be overlapped for pitch sliding to happen.
- **Poly Portamento:** Similar to Portamento, but you can play multiple notes simultaneously.
- **Lock Porta and Glide:** Prevent playing mode and glide time from changing when loading a new preset.
- **A.6. Transpose.** Transpose the main pitch up or down.
- A.7. Kill Switch. Stops all the sounds.

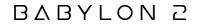
### B & C. Oscillator 1 and 2





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- C.1. Oscillator Switch: Turn the oscillator on or off.
- C.2. Oscillator Source: This is the heart of the oscillator where we pick the source.
  - C.2.a. Modes:



- **Single:** Single wavetable.
- **Multi:** Multiple wavetables. Using Pos X parameter to go through them in series.
- Quad: Four wavetables. Using Pos X and Pos Y parameters to morph between them.
- **W-LAB:** Use Wavetable Editor to edit wavetables or create your own.
- **C.2.b. Wave Display:** Click to choose a wavetable.
- **C.2.c. Invert and Reverse Switches: Inv** inverts the waveform vertically and **Rev** inverts it horizontally.
- **C.2.d. Free Run Switch.** When enabled oscillator phase will not reset on note start.
  - Note: Even when the free run mode is off, unison voices will have randomized phases.
     Turning on the Sync All will sync all the voices.
- C.2.e. Hard Sync Switch (S1): Syncs Oscillator 2 to Oscillator 1. When enabled every time Oscillator 1 reaches its end of the cycle, it will reset the phase for Oscillator 2 as well. This might create some interesting results, for example with a bit of pitch offset.
- **C.2.f. Wavetable Browser:** Lists all the wavetables available for the selected mode.

### • C.3. Position and Phase

- **Pos X:** Used in multi and quad modes.
  - **Multi:** When there is more than one wavetable loaded, Pos X goes through them.
  - **Quad:** In this mode there are four wavetables and we can use Pos X and Pos Y parameters to morph them in both directions.
- **Pos Y:** Used in quad mode only.
- **Phase:** Starting point offset. Please note that this only has a meaningful effect when free run mode is not enabled.

• **C.4. Pitch Controls.** Octave, semitone and fine controls as well as a snap-free Pedal control with customizable start and end pitch values.

- C.5. Pan, Volume and Stereo Effect controls.
  - **Note:** Toggle the **S** button on to show the Ping-Pong effect control.

• **C.6. FM, AM and RM:** Frequency and amplitude of the two main oscillators can be modulated using the 3rd oscillator.

- **Frequency Modulation:** The frequency of the oscillator will be modulated using the output of the modulator (Oscillator 3).
- **Ring Modulation:** The amplitude of the oscillator will be modulated using the output of the modulator.
- **Amplitude Modulation:** Similar to ring modulation but the modulator signal will be converted to unipolar values (0-1) before being used.
- C.7. Unison:
  - **Voices:** Two main oscillators can run up to 9 voices in unison. You can set the number of voices using this knob.
  - **Detune:** Detunes the pitch of the unison voices around the center pitch. There are slightly

different detune modes and also an extended range option available to provide more flexibility.

- **Sync All:** Syncs all the unison voices so they will have the same starting phase. When turned off they will have their own random phase offsets, creating a smoother and more organic super saw style sound.
- **Spread:** Controls the stereo separation of the unison voices.
- **Mix:** Volume control for unison voices surrounding the center voice(s).

### D. Oscillator 3



Oscillator 3 works both as an audio generator and a modulator.

- When turning on FM, AM, or RM controls on the other two oscillators, oscillator 3 becomes active.
- Oscillator 3 doesn't have to be turned on when being used by other oscillators. However you can turn it on and use its output too normally.
- The volume and pan controls on oscillator 3 will not affect the modulation signal.

### E. Filter



- E.1. Filter Switch. Enable or disable the filter.
- E.2. Filter Type. Choose a filter type (Low Pass, High Pass, etc.).
- E.3. Lock. When enabled loading a new preset will not change the Filter sections.
- E.4. Main Controls.
  - Cutoff Frequency and Resonance.
  - **Key Track.** Cutoff multiplier based on the MIDI input notes.
  - **Env.** Envelope depth control. Note that negative values will invert the envelope from (0-1) to (1-0).
- **E.5. Effect:** Load a polyphonic effect in the filter section.
  - **Effect List:** Soft limit, Hard Limit, Saturation, Overdrive, Distortion, Bit Rate Reduction, Sample Rate Reduction, LP, HP and BP filters.
- E.6: Envelope. Filter section has a dedicated envelope follower. You can edit curve shapes by

clicking on A, D, and R buttons.

### F. Noise



- F.1: Noise Switch
- F.2: Pan, Volume, Width and Stereo Effect controls.
- F.3: Toggle the S button (F.3) to show the Ping-Pong effect control.
- F.4: Noise Type

### G. FX

• G.1. Menu: Manage FX preset.

F	- Dist 2	- Chorus	Reverb		3			
x	- LoFi - Filter	- EQ						
м	- Phaser	- Reverb	Room Wi	dth Delay	HP	LP	Damp	Mix

• G.2. FX Tab. Switch between different effects and change the FX order by dragging them around.

- **Tip 1:** The order is from top to button and left to right.
- **Tip 2:** The '+' sign before the name means the effect is on, and '-' means its off.
- G.3. Effects:
  - **Distortion**

+ Dist	- Chorus	• Dist –				
- LoFi	- EQ			0	<b>D</b> 1-1	
- Filter	- Delay		$\sim$	$\bigcirc$	Dist	
- Phaser	- Reverb		Gain	Thresh	Туре	

- **Gain:** Distortion amount.
- **Threshold:** The level at which the distortion effect starts to limit the sound.  $\diamond$
- **Type:** Includes distortion, overdrive, and saturation effects.

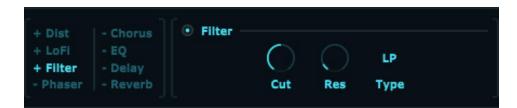
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- Sample: Sample rate reduction amount.  $\diamond$
- Bit: Bit rate reduction amount.
- **Mix:** Dry-Wet control.



• Filter



- **Cut:** Cut off frequency.
- **Res:** Resonance amount.
- **Type:** Filter type (LP, HP, etc.).

• Phaser



- **Sync:** Sync to host tempo.
- Min: Range start.
- **Max:** Range end.
- **Rate:** Modulation speed.
- **Offset:** Stereo separation.
- **Feed:** Feedback amount.
- **Depth:** Modulation depth amount.

### • Chorus

- + Dist
   + Chorus

   + LoFi
   EQ

   + Filter
   Delay

   + Phaser
   Reverb

   • Chorus

   • Chorus

   • Delay

   • Ratio
   Depth

   Delay
   mix
- **Ratio:** Modulation speed.
- **Depth:** Modulation depth.
- **Delay:** Pre-delay amount.
- **Mix:** Dry-Wet control.
- **EQ.** Three band equalizer.





### • **Delay:**



- **Sync:** Sync to host tempo.
- **Ping:** Ping Pong mode.
- **Delay:** Delay time.
- Feed: Feedback amount.
- **Width:** Stereo width control.
- **HP and LP:** High Pass and Low Pass filters.
- **Mix:** Dry-Wet control.

### • Reverb



- **Room:** Room size and reverb length.
- Width: Stereo width control.
- **Delay:** Pre-delay time.
- **HP, LP:** High Pass and Low Pass filter.
- **Damp:** Dampening amount.
- **Mix:** Dry-Wet control.

### H. Main Envelope



- H.1. ADSR controls for the main envelope. Click on A, D, or R labels to adjust curve shape.
- H.2. Lock (L). When on changing presets wont change the envelope.
- H.2. Main Volume control and Soft Limiter switch.

### I. Tabs

• I.1. Keyboard tab



- **1. Pitch bend** and **Mod Wheel** controls.
- 2. Glide time for legato and porta modes, and Velocity Curve.

### I.2. Matrix



- **1. Source.** Modulation source (LFO, Envelope, etc.) 0
- **2. Modulation Amount.** Determines the depth of the modulation. 0
- **3. Target.** Modulation Target (Volume, Cutoff, etc.). 0



### **Notes:**

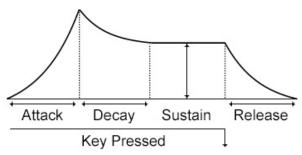
- Additive and Multiplicative: For pitch, phase, and pan parameters, modulation in Babylon is additive. For other parameters (such as volume, cutoff, FM, etc.), modulation is multiplicative. This should provide a more predictable range when modulating these parameters.
- Inner indicator inside sliders shows the modulation range. For these parameters their current value determines the top of the modulation range.
- Negative amounts will change the modulation direction. For example if the source is an LFO with a Sawtooth waveform, negative amounts will invert the shape to a ramp instead (see picture above).

#### I.3. Modulators •

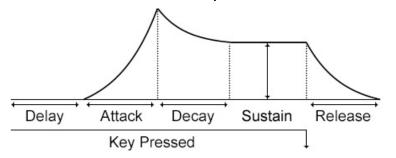


### • **1. LFOs.** Controls:

- LFO shape: Can load any of the single mode wavetables.
  - **Tip:** use Wavetabe Editor to create new shapes for the LFOs.
- Inv and Rev: Inv inverts the waveform vertically, and Rev inverts it horizontally.
- Mono: Switch between mono and poly modes. In mono mode, all voices share the same LFO phase.
- Sync: Sync to host's tempo.
- Speed: Modulation speed.
- **Phase:** Starting point of the cycle.
- 2. Envelopes. Four envelopes with A (Attack), D (Decay), S (Sustain), and R (Release) controls. To edit A, D, and R curves, click on the labels.

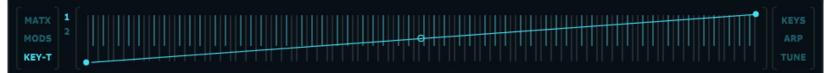


• **3. Vibrato:** Combines an LFO with an envelope to simulate a natural vibrato effect.



- Vibrato Shape: Can load any of the single mode wavetables.
- **Inv and Rev:** Inv inverts the waveform vertically, and Rev inverts it horizontally.
- **Sync:** Sync to host's tempo.
- **Rate:** Vibrato speed.
- **Delay:** Time before the vibrato starts.
- **A**, **D**, **S**, and **R**: Attack, decay, sustain and release controls.

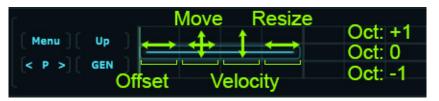
• **I.4. Keytrack:** Use keytrack modulators to adjust parameters according to the pitch of the input note.



### • I.5. Arpeggiator



- **1. Menu:** Manage presets and settings.
- **2. Mode Selector:** Up, down, poly, etc.
- 3. Preset Browser
- **4. Pattern Generator:** Procedurally generate new patterns.
- 5. Pattern Editor

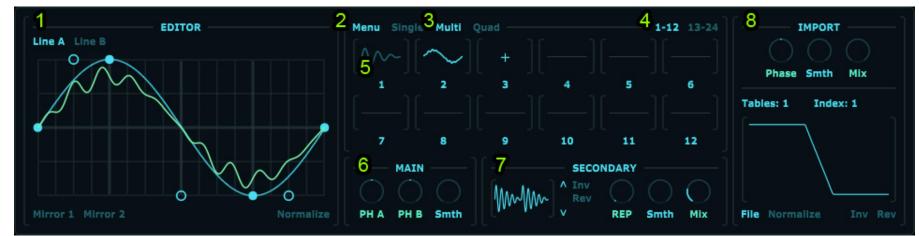


- **Creating Note:** Left-click.
- **Deleting a Note:** Right-click on a note to remove it.
- **Moving Notes:** Drag from the middle section of the note.
- **Resizing Notes:** Drag from the right end of the note.
- **Selecting Notes:** Hold down Control key and drag over the notes.
- **I.5. Tuner:** Tune notes individually.



- **1. Menu:** Save and load tuner state. Ο
- 2. Link Octaves: When linked, every octave will have the same tuning. Unlink to adjust tuning for each octave independently.
- **3. Lock Tuning:** Prevents tuning change when loading presets.
- **4. Tuners:** Tune notes up or down. 0
- 5: Octave: Displays the tuning for each octave and allows selecting different octaves when they're not linked.
- 6. Scale Helper: Includes a database of scales that can be used as a guide or reference. Pick a root note and select a scale to see the note's of that scale highlighted, and the right tuning applied (if required).
- **7. Reload:** Discard all the changes and reload the originally selected scale.

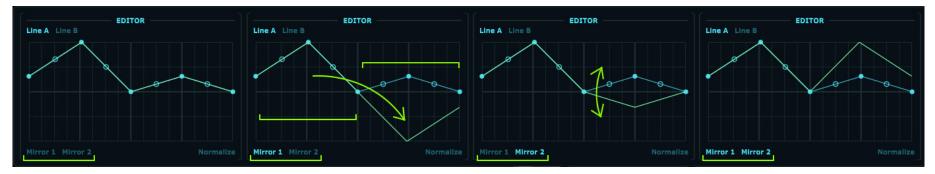
### J. Wavetable Editor



Edit existing wavetables or create a new one using the Wavetable Editor. To open the editor click on the **W-LAB** button on one of the two main oscillators.

- J.1. Line Editor: Use the line editor to create new shapes.
  - Shape A and B: Combining two shapes can help create more complex shapes quickly.
  - **Create Points:** Right-click on empty space to create new points.
  - **Move Points:** Left-click drag. 0
  - **Delete Points:** Right-click and choose the 'Delete' option from the pop up menu. Ο
  - Change Curve Type: Right-click on the point to change its curve type. 0
  - **Change Curve Amount:** Drag the Curve Handle (circle between two points). 0
  - **Reset Curve:** Right-click on the Curve Handle. 0
  - **Mirror 1:** Mirror the first half of the shape on the other side and flips it vertically. 0

Mirror 2: Flips the second half of the shape vertically (see picture below). 0



- **J.2. Menu:** Includes a number of options for managing tables and shapes.
  - Save As Oscillator Source: This' option allows you to save the current wavetable that you have created or edited. The saved wavetable is stored in the wavetable path, making it easily accessible at anytime directly from the oscillators without the need to reopen the editor. Additionally, single-mode wavetables can be utilized in Oscillator 3, LFOs, and vibrato.



- **Save, Load, and Reset Editor:** Preserve your progress or create a template by saving the current editor state. Use the Reset option to reset the editor back to its default state.
- **Line A and Line B** include options to copy, paste, or reset lines, with the flexibility to apply these actions to the line only, the modifiers only, or both. Additionally, there are options to copy lines to all tables.

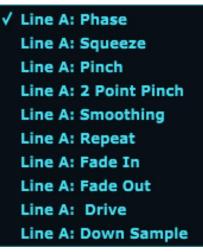
Save ss OSC source	$\bigcirc \bigcirc $			
Save Editor Load Editor Reset Editor	ipread Mix			
Line A 🔶 🕨	Copy Line			
Line B 🔶 🕨	Paste Line			
Secondary >	Paste Modifiers			
Import +	Paste Line and Modifiers			
Copy Smoothing To All	Copy Line To All			
Copy Table To All	Copy Modifiers To All			
Open Folder	Copy Line and Modifiers To All			
Ladd Company	Reset Line			
✓ Add: Copy Previous	Reset Modifiers			
	Reset Line and Modifiers			

- **Secondary:** Copy, paste or reset the Secondary wavetable section.
- **Import:** Copy, paste or reset the Wave Import section.
- **Copy Smoothing To All:** Copy the current table's smoothing value to all other tables.
- **Copy Table To All:** Copy the entire table to all other tables.
- **Open Folder:** Reveals the default Wavetable Editor folder in the OS browser.
- Add Copy Previous: When enabled, the new table is initialized by the previous table.
- J.3. Wavetable Mode: Single, Multi, and Quad modes.
- J.4. Wavetable Page

- J.5: Current Wavetable
  - **Right-click**: Options for copying, resetting, and deleting the table.
  - **Add Table:** In Multi mode, click on the '+' button to add a new table.

• **J.6: Main Control:** Includes modifiers for each line and main smoothing control. Click on the buttons/labels under the sliders to view all the options and switch between different modifiers.

• **Note:** All modifiers can be used simultaneously, and the order is from top to bottom.



• **J.7: Secondary:** Use the secondary wavetable section to load an existing wavetable. You can modify it and mix it with the other sections.

- **Mix:** Click on the Mix label to see different mix types.
- **Modifiers:** Similar to line A and B, secondary wavetable also has a number of modifiers.

• J.8: Import: Use the Import section to load a wave file, modify it, and mix it with the other sections.

- File Menu:
  - **Import Single Cycle:** Optimized for single-cycle wavetables.
  - **Import Multi Cycle:** Optimized for multi-cycle wavetables.
  - **Clear:** Remove the file and free resources.
- **Tables:** Set the number of tables that the imported wave file should be divided into.
- **Index:** Select which table to use.
- **Modifiers:** Similar to other sections, these modifiers allow you to edit and shape the imported wavetable.

### Credits

Code and graphics by Rahman Fotouhi (rfmusic.net).

Please visit waproduction.com for latest updates and news.

Don't hesitate to contact us if you have any questions, feedback, or issues to report.

Support: info@waproduction.com

We hope you find the plugin useful and thank you very much for your support.