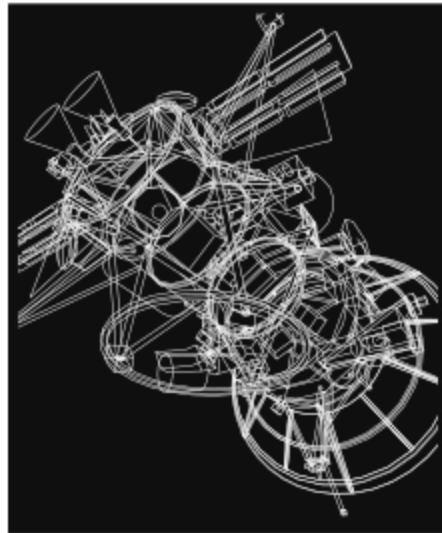


ORBIT



Orbit v1.0.0 User Manual

Vain Audio 2024

Getting Started

Orbit is a multi-delay plugin inspired by the moons of Jupiter. Harness the power of the delay lines Thalassa, Cordelia, and Titan to craft exciting spatial audio effects.

Many of Orbit's features will be familiar to users with experience using other delay plugins. If you're less familiar, we encourage you to read this manual and then browse through our bank of presets to see what Orbit has to offer. Tweaking presets can be a great way to learn how to use a plugin. Regardless of your experience level we hope this manual serves as a good starting point and reference.

The Orbit user interface can be separated into five distinct sections:



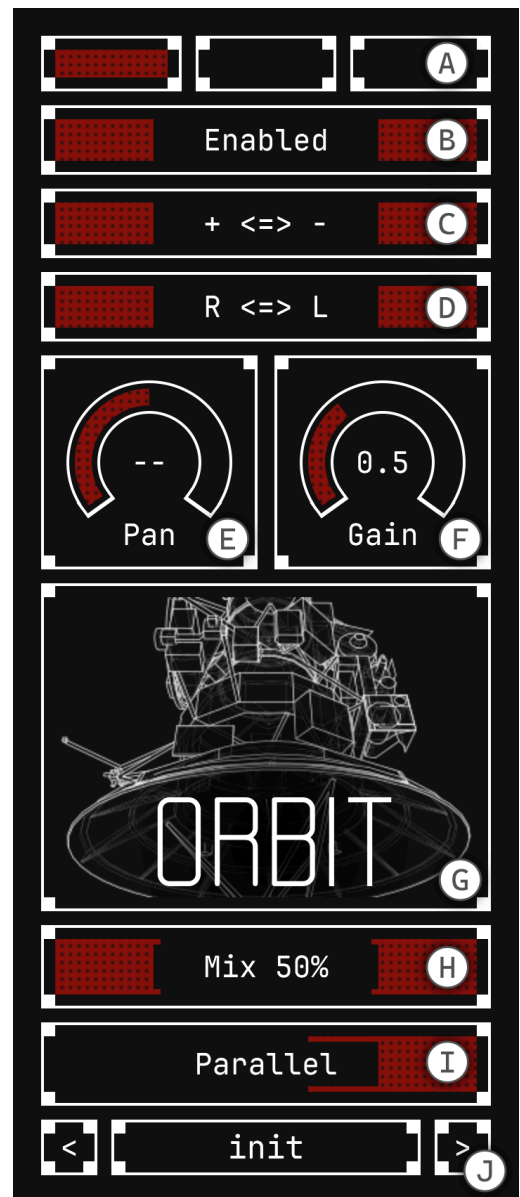
- A. **Modulation Controls** - The modulation section adds a chorus effect to the delayed signal giving it extra motion and dimension.
- B. **Main Controls** - The center of the UI offers a combination of delay line, global, and interface controls.
- C. **Delay Controls** - The input audio is sent through the delay processor first. Use the delay control panel to affect the core of your sound.
- D. **Tone Controls** - The tone section applies various effects to the delayed signal. These effects vary from soft and subtle to harsh and abusive. Use with care.
- E. **Moon Selector** - Use this control panel to switch between the three available moons: Thalassa, Cordelia, and Titan.

Main Control Panel

The main control panel contains various types of controls:

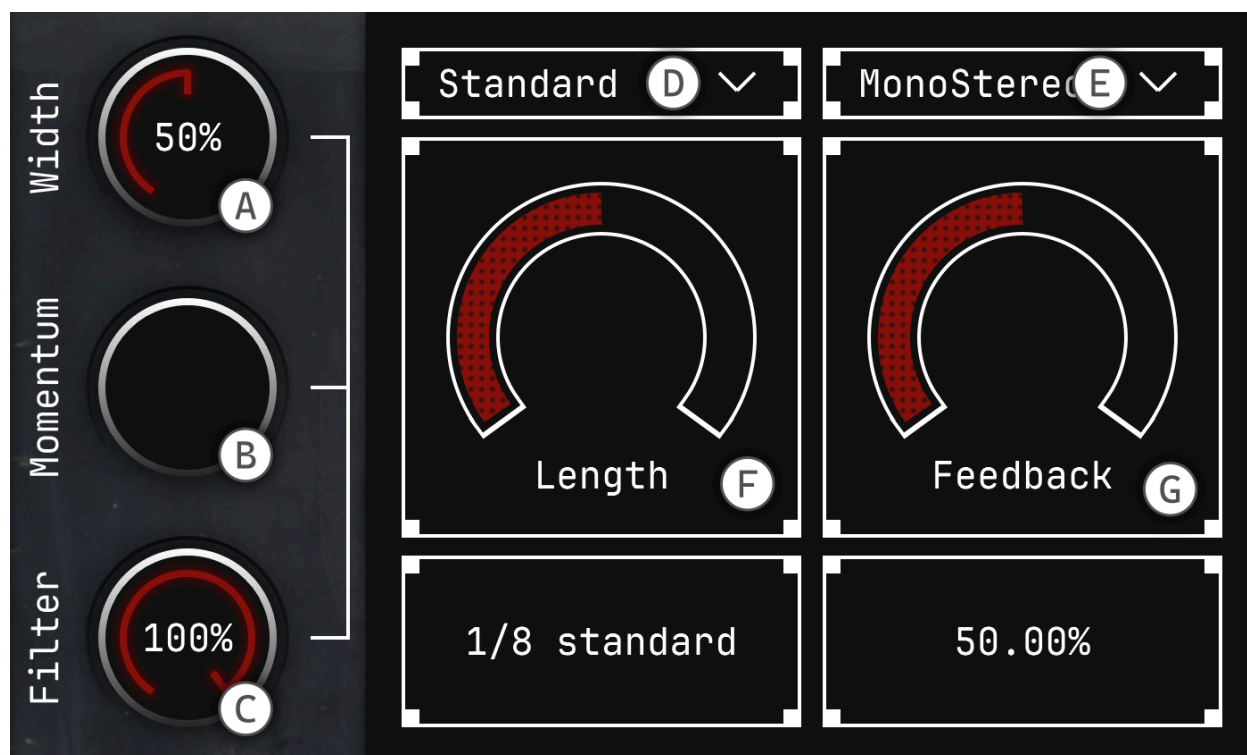
- B, C, D, E, and F are applied to the selected delay line.
- H and I are global controls.
- A and G only affect the user interface.
- J contains preset selection and other preset related operations.

- Selector** - Selects which delay line is focused.
- Enable Toggle** - Enables and disables the currently selected delay line.
- Polarity Switch** - Flips the polarity of the right channel.
- Left Right Switch** - Swaps the left and right output channel.
- Pan** - Balances the signal between the left and right channel. When this knob is turned all the way to the left, the right channel will be muted completely. Likewise, turning this knob to the right will mute the left channel.
- Gain** - Controls the output gain applied at the end of delay processing.
- Orbit Logo Button** - Opens the about page. This page contains a signal flow diagram as well as the UI scaling controls.
- Global Mix** - Changes the total amount of effect that is applied to the incoming audio.
- Serial/Parallel Toggle** - Toggles serial and parallel processing modes. In serial mode Orbit sends the incoming audio through each delay line in succession. In parallel mode each delay line processes the incoming audio independently before each output is summed at the end.
- Preset Selector** - Switches between available presets. Use the left and right arrows to quickly change presets or click the preset name to view a dropdown menu with additional preset options.



Delay

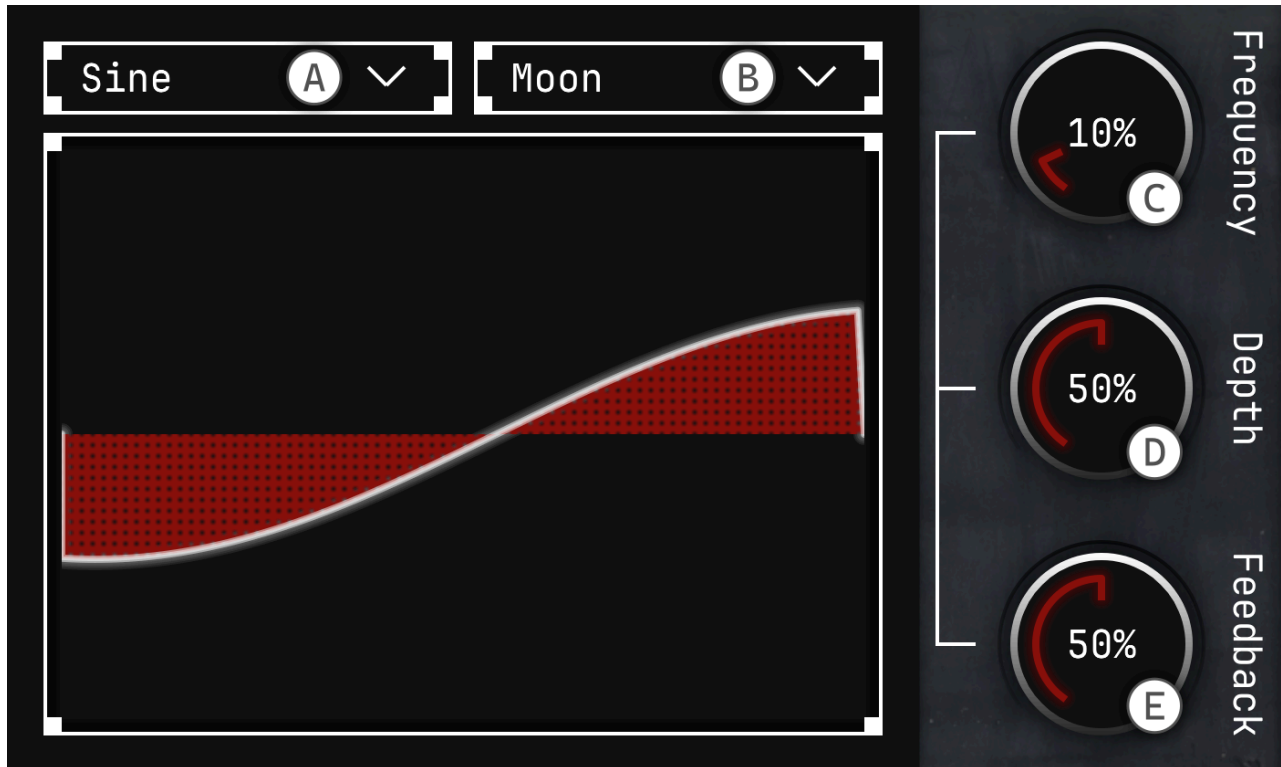
A delay is commonly referred to as an echo. How and when these echos repeat defines the base of your sound. The delay control panel is found at the top right of the user interface and controls Orbit's delay engine.



- A. **Width** - Adjusts the stereo width of the output signal. Adjusted all the way left outputs a mono signal, all the way right is an expanded signal, and directly in the center is completely dry.
- B. **Momentum** - Adjusts orbital motion. Only available when the delay type is set to 'Orbit'.
- C. **Filter** - Applies a lowpass filter to the delayed signal.
- D. **Sync Type** - Syncs the delay to the beats per minute of your DAW in Normal, Triplet, or Dotted modes. Free sync is also available.
- E. **Delay Type** - Selects the type of delay to be used. Choose from Mono to Stereo, Ping Pong, and Orbit modes
- F. **Length** - Adjusts the length of the delay.
- G. **Feedback** - Feeds the output signal back into the input signal. Use this control to achieve longer delay tails.

Modulation

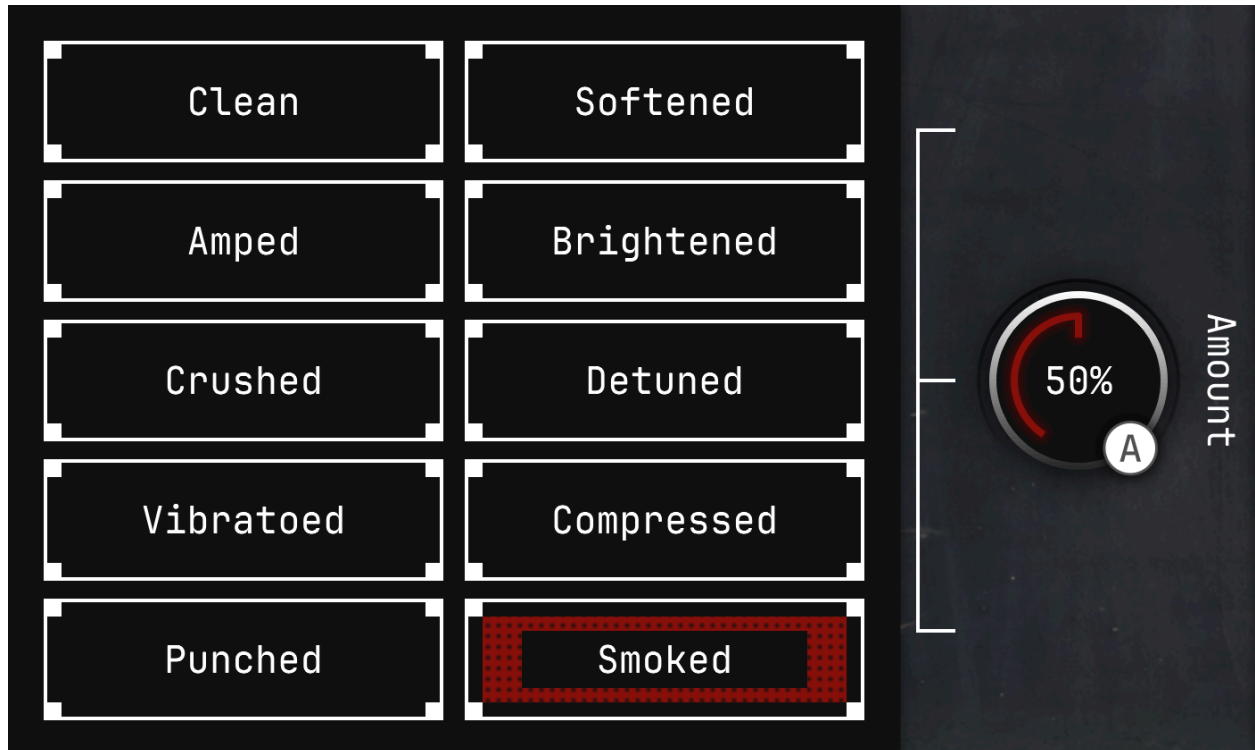
The modulation section uses various chorus processors to add fluidity and motion to your sound. Find the modulation controls in the top left of the Orbit user interface.



- A. **Lfo Type** - Changes what kind of wave drives the modulation. Select from sine, saw, triangle, and random.
- B. **Chorus Type** - Choose from Moon, Planet, Solar System, Galaxy, and Universe. Each type has a larger perceived size than the last. Moon creates a smaller, more phased sound while Universe offers an expansive reverb-like effect.
 - a. **Void** - No effect.
 - b. **Moon** - Mono flanger.
 - c. **Planet** - Stereo flanger.
 - d. **Solar System** - Basic chorus.
 - e. **Galaxy** - Multi chorus.
 - f. **Universe** - Expansive pseudo reverb.
- C. **Frequency** - Sets the speed of the Lfo that drives the modulation.
- D. **Depth** - Use this to adjust how much movement you hear in the modulation.
- E. **Feedback** - Cycles the output signal back into the chorus algorithm. A high feedback value will result in longer and spacier tails.

Tone

The bottom left of the user interface is home to the Tone control panel. Each of the tones add various effects to your sound. They can be used to subtly enhance your sound or to destroy it altogether.



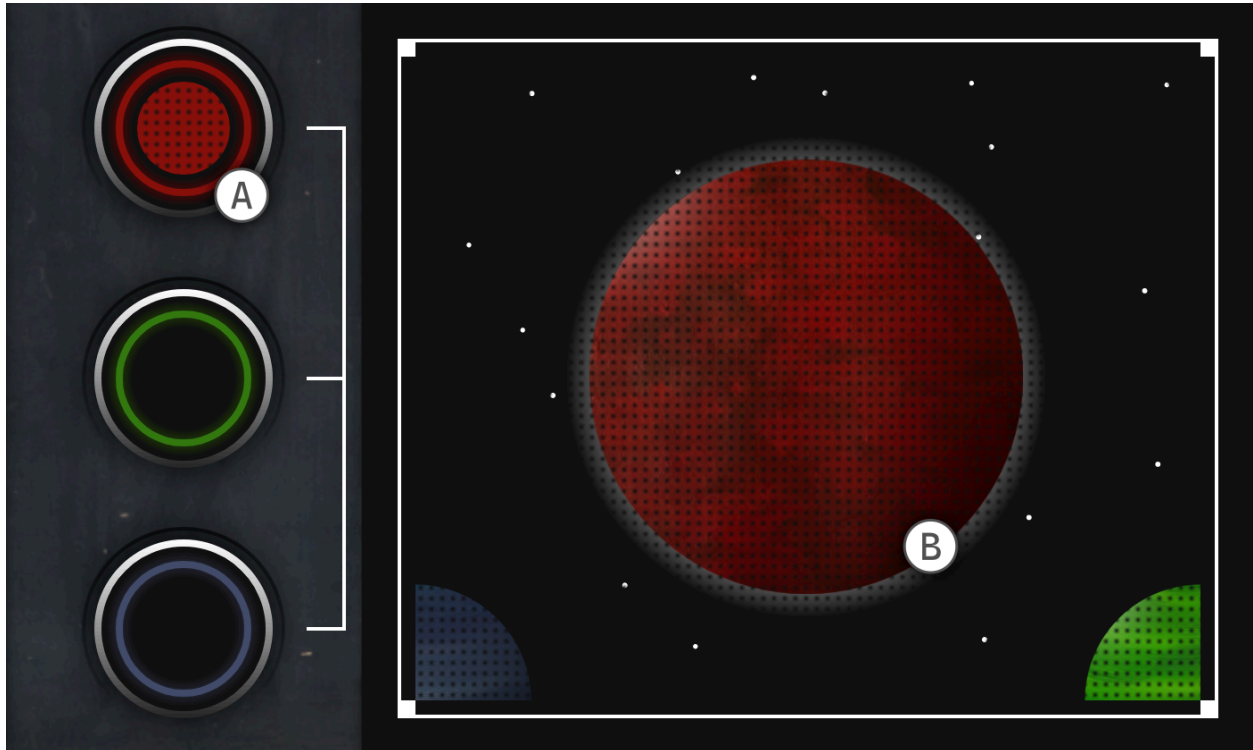
A. Adjust the degree to which the selected tone is applied to your sound.

Each of the tone algorithms adds unique characteristics to your sound.

- Clean - No effect.
- Amped - Filtered distortion with detuning.
- Crushed - Bit crushing.
- Vibratoed - Modulates the volume of the delay line.
- Punched - Filtered distortion with detuning.
- Softened - Soft clipping.
- Brightened - Soft clipping with filtering to provide a brighter sound.
- Detuned - Detunes the delay line.
- Compressed - Compresses the delay line, the compressor's threshold is automatically set based on the RMS of the incoming signal.
- Smoked - Rectifier.

Moon Selector

The moon selector is a quick way to switch between the three available delay lines. Each color coded moon belongs to a specific delay line. The selector is found in the bottom right of the Orbit user interface.



- A. **Moon Selector Button** - Each button selects the moon that matches its color. Click a button to select the delay line.
- B. **Moon Selector** - Click on the images of each moon to select the corresponding delay line.

Preset Browser

Open the preset selector dropdown at the bottom center of the user interface and select 'Presets' to access the preset browser. This popup provides a file browser to view all available presets. Close the browser by clicking the 'X' icon in the top right.



- A. **Save** - Save the current plugin configuration to a preset file.
- B. **Refresh** - Orbit will automatically refresh the browser's file listing when you save a preset. If you make manual changes through your own file manager, use the refresh button to rebuild Orbit's file listing.
- C. **Preset Folder (Selected)** - The square icon indicates a folder. Use the right arrow key or double click to expand the selected folder.
- D. **Preset File (Unselected)** - Preset files have an icon with two semi circles. Use the arrow keys or your mouse to select new presets. Orbit will load the selected preset automatically.

Additional Help

Infinite Delay Effect

Infinite delay tails are most likely caused by high feedback values. Check the feedback sliders in the delay and modulation sections for each delay line.

User Interface Scale

To change Orbit's scale factor click the magnifying glass icon on the about page. To reach the about page either click on the main Orbit logo at the center of the interface or click the preset name at the bottom middle of the main ui and select 'About' from the dropdown.

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Support

Contact us at vainaudio@gmail.com for any other questions and we will be happy to answer.

Acknowledgments



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