

ORBASYNTH

OSC 2

OSC 1

DETUNE

FREQ MULTIPLIER

VIBRATO

MODE

DETUNE

FREQ MU

START

SAW / TRIANGLE

END

TRANSITION TIME

START

SAW / T

EN

PULSE WIDTH

START

END

TRANSITION TIME

START

SYNC

EN

ORBASYNTH

USER MANUAL

V. 1.3

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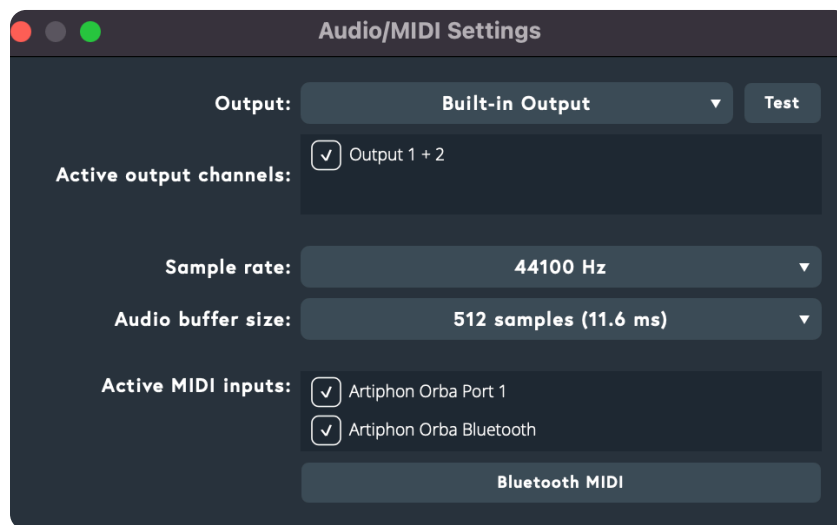
Welcome

With the Orbasynt app, you can now connect your Orba and quickly see how expansive your instrument becomes. Tweak sounds or completely reinvent instruments to your liking. You'll be able to map Velocity, Press, Radiate, Tilt, and Move to control multiple synth parameters at once. Because Orba is an MPE controller and Orbasynt is an MPE synth, every pad you tap can independently control several MIDI CCs for any of Orba's three melodic modes: Bass, Chord, and Lead.

Compatible with Mac and Windows.



Getting Started



1. Connect your Orba to Orbasynth via Bluetooth or USB.
2. To connect via Bluetooth click on the gear icon in the upper left corner, then click "Bluetooth MIDI" at the bottom.
3. Make sure your output is set to the desired output source. We recommend using your built-in output of your computer or audio interface
4. Turn your Orba volume all the way down. Sounds from Orbasynth will be coming from your desired output.

The Oscillators

Orbasynt's two oscillators can produce two different morphing wave shapes at the same time. Each oscillator can be set to either produce a sawtooth/ triangle and a rectangle/ pulse or sync shape with varying harmonics with an adjustable start, end, and time ramp.

Per oscillator:

The first morphing shape is always a triangle/ sawtooth

The second morphing shape can be set with the mode switch at the top right to either a rectangular/ pulse shape or to a sync- like shape that can morph through different harmonics.





OSC 1 & OSC 2

DETUNE

Adjust the pitch per oscillator by small amounts to change the character of the overall sound.

FREQUENCY MULTIPLIER

Set the oscillator pitch to the harmonics of the musical note.

VIBRATO

Amount of vibrato at the LFO speed.

Saw/ Triangle

MODE

Change the second morphing wave shape between rectangle/ pulse and sync/ harmonic.

START

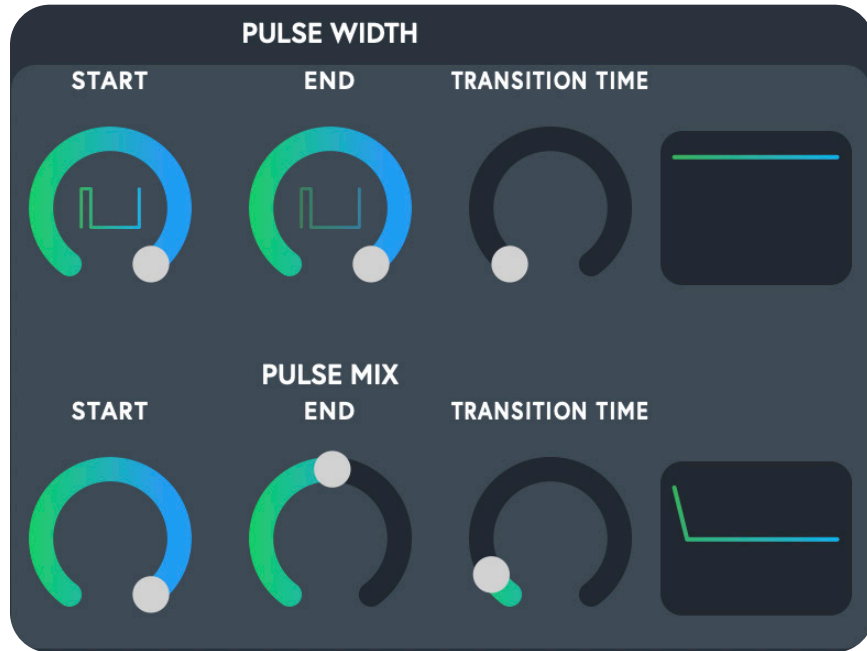
Wave shape at the start of the morphing (sawtooth or triangle).

END

Wave shape at the end of the morphing.

TRANSITION TIME

Time ramp for morphing from start wave shape to end wave shape.



PULSE WIDTH/ SYNC SHAPE

START

Wave shape at the start of the morphing (rectangle/ pulse or sync/ harmonic depending on mode switch).

END

Wave shape at the end of the morphing (rectangle/ pulse or sync/ harmonic depending on mode switch).

TRANSITION TIME

Time ramp for morphing from start wave shape to end wave shape.

PULSE / SYNC MIX

START

Start mix between amount of morphing shape one (saw/ triangle) and morphing shape two (rectangle/ pulse or sync/ harmonics).

END

End mix between amount of morphing shape one (saw/ triangle) and morphing shape two (rectangle/ pulse or sync/ harmonics).

TRANSITION TIME

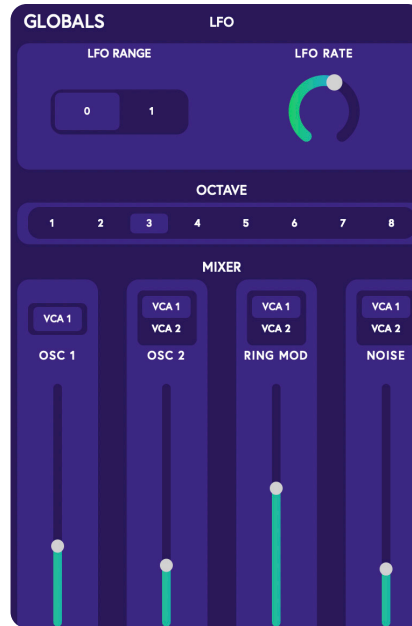
Time ramp to go from the start mix to the end mix.

Tip:

The time ramp is a visual representation of the time it takes for the wave shape to transition from its starting shape to its end shape.

Globals

LFO, Mixer, and Octave



GLOBAL LFO

LFO RANGE

Switches the LFO (affecting vibrato) between a slow and a fast range.

LFO RATE

Adjust the LFO speed (affecting vibrato and waveguide chorus).

OCTAVE & MIXER

OCTAVE

Set the overall octave for all oscillators.

OSC 1 LEVEL

Oscillator 1 mix level.

OSC 2 LEVEL

Oscillator 2 mix level.

VCA SWITCH

Select VCA 1 or VCA 2 for each oscillator, the ring modulator, and the noise generator.

RING MOD

Ring modulator mix level.

NOISE

Noise generator mix level.

Voltage Controlled Amplifier (VCA)

The VCA determines how a sound's level changes at the beginning or how soft or hard it starts (attack), how long it takes to go down to a sustained level (decay) how loud the sustained level is (sustain) and how long it takes to fade out when the pad is released (release) There are two envelopes (VCA 1 and VCA 2) that can be assigned per oscillator in the globals module. Orbasynt's VCA's have an added feature that allows you to control the shape by velocity (how hard or soft you press or release a pad).





ENVELOPE 1 & 2

ATTACK

How long it takes to reach the peak level.

DECAY

How long it takes to reach the sustained level.

SUSTAIN

How loud the sound is as a note is held.

RELEASE

How long the sound takes to fade out after a note is released.

VELOCITY PEAK

Depending on how hard or soft a note is played, the peak after the attack gets louder for dynamic playing.

VELOCITY SUSTAIN

Depending on how hard or soft a note is played, the sustained level gets louder for dynamic playing.

VELOCITY RELEASE

Depending on how fast the note is released, a peak before the release gets louder for dynamic playing.

ENVELOPE 2: A second, different VCA envelope curve that can be assigned per oscillator in the GLOBALS Mixer settings.

Tip:

Visualizer: Shows the ADSR (attack, decay, sustain, release) envelope with the dynamic ranges

Resonant Filter

The resonant filter applies either a lowpass or high-pass filter to the signal. The frequency of the filter can be modulated with its own dynamic envelope.



Low Pass / High Pass Switch

Sets the filter mode between a low pass and a high pass filter

CUTOFF

Sets the cutoff frequency for the resonant filter.

CUTOFF KEY

Scales the cutoff frequency with note frequency. At max, high notes have a higher cut-off than low notes.

RESONANCE

Controls the resonance of the filter.

RES VCA2 MODULATION

Set how much the VCA2 curve modulates resonance.

ENVELOPE VISUALIZER

Displays the shape of the envelope.

VELOCITY SUSTAIN

Depending on how hard or soft a note is played, the sustained level gets louder for dynamic playing.



ENVELOPE MODULATION

Sets how much the envelope curve affects the filter.

ATTACK

How hard or soft the filter comes in when a note is pressed.

DECAY

How long it takes to go to the sustained level.

SUSTAIN

How high the filter frequency is continued after the decay phase.

RELEASE

How long the filter takes to return to the default after a note is released.

VELOCITY SUSTAIN

Depending on how hard the pad is played, the sustained filter frequency gets higher or lower for dynamic playing.

DYNAMIC ENVELOPE

VELOCITY PEAK

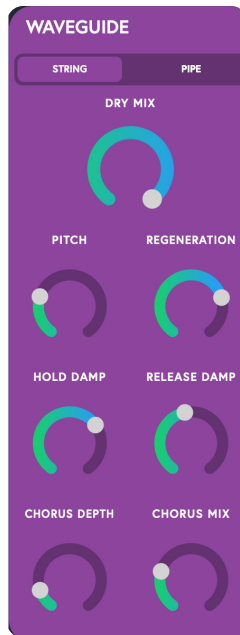
Depending on how hard or soft a note is played, the peak after the attack gets higher for dynamic playing.

VELOCITY RELEASE

Depending on how fast a note is released, a peak before the release gets higher for dynamic playing.

Waveguide

The waveguide adds a physical modeling module that uses both oscillators, noise, and the ring modulator to stimulate a resonating waveguide. The character of these sounds is more acoustic-like.



String/ Pipe Switch

Selects the physical modeling mode

DRY MIX

Adjusts how much of the signal enters the waveguide.

PITCH

Adjusts the pitch the waveguide is tuned to in relation to note frequency.

REGENERATION

Adjusts the waveguide's tendency to resonate.

HOLD DAMP

Controls the amount of high-frequency damping applied while a note is held.

RELEASE DAMP

Controls how much high-frequency damping is applied after the note is released.

CHORUS DEPTH

The LFO controls the Waveguide's delayed output, and this controls how much the LFO modulates the delay time.

CHORUS MIX

Controls how much of the waveguide's delayed output is fed back into itself.

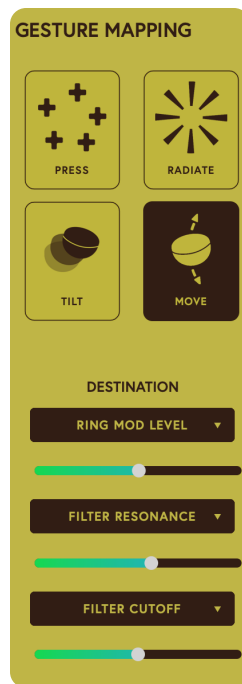
VELOCITY RELEASE

Depending on how fast a note is released, a peak before the release gets higher for dynamic playing.

Gesture Mapping

Here you can map the four different gestures to the parameter of your choosing.

You can map a total of three parameters to one gesture. When the slider is in the middle, the gesture will not affect the parameter. Moving the slider to the right will adjust the parameter in a positive direction, and moving the slider to the left will adjust the parameter in a negative direction.



PRESS

Select to assign gesture mappings.

RADIATE

Select to assign gesture mappings.

TILT

Select to assign gesture mappings.

MOVE

Select to assign gesture mappings.

DESTINATION

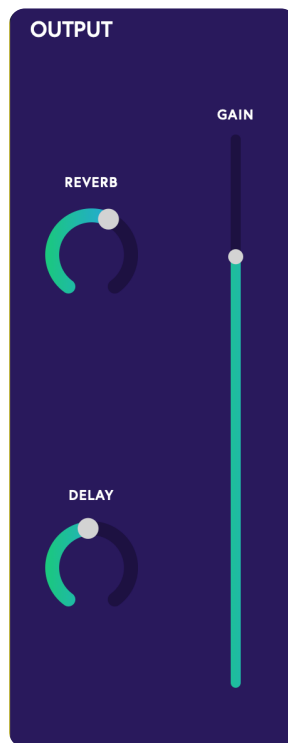
Select which synth parameters will be controlled by the selected gesture.

Tip:

Set how much this synth parameter is controlled by the selected gesture. The modulation can be positive or negative, with the middle position being zero.

Output

The output mixer for Orbasynt. Effects and the overall volume can be adjusted.



REVERB

Add reverb effect.

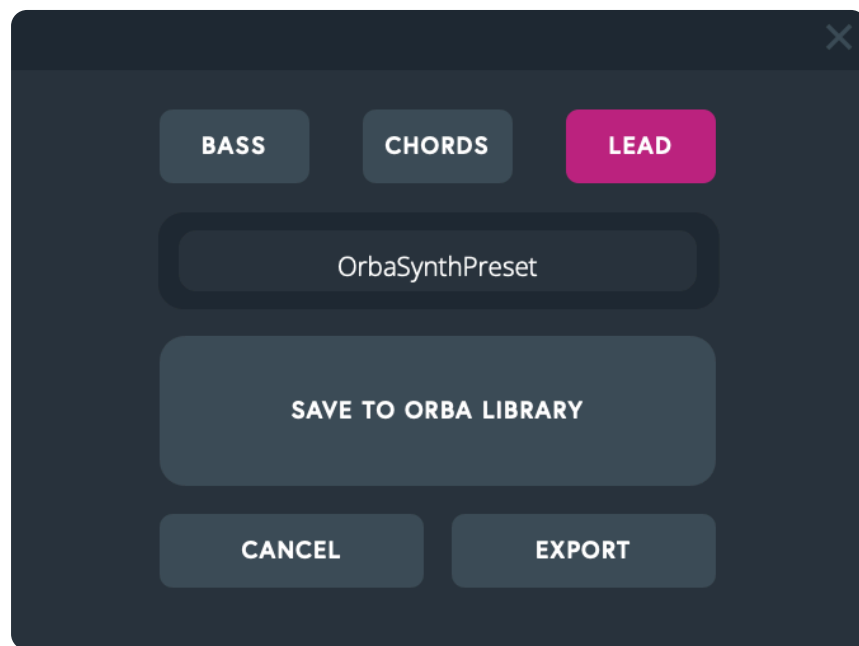
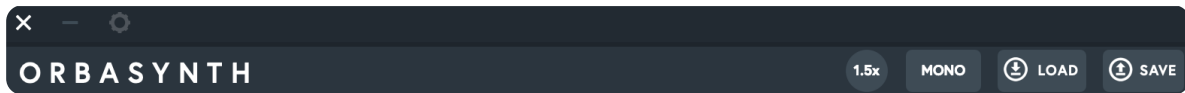
DELAY

Add delay effect.

GAIN

The overall output volume level of Orbasynt.

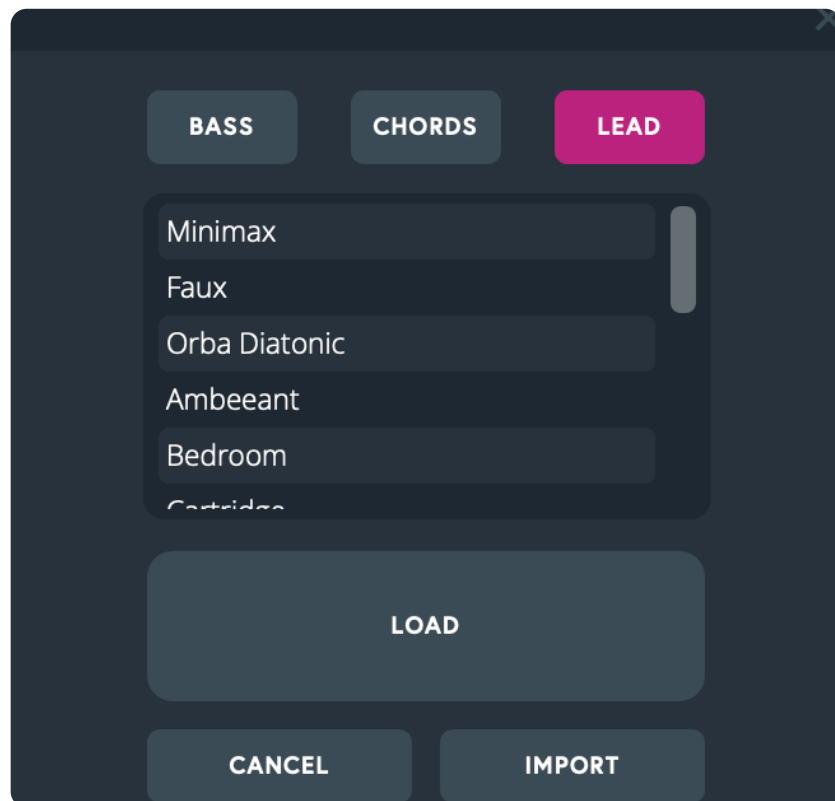
Saving / Exporting Presets



To save a preset into your Orba app, just click **Save to Orba library**. And you should see that preset next you open the Orba app.

To save a preset to a folder to share with your friends, click **Export** and select desired location.

Loading Presets into Orbasynth



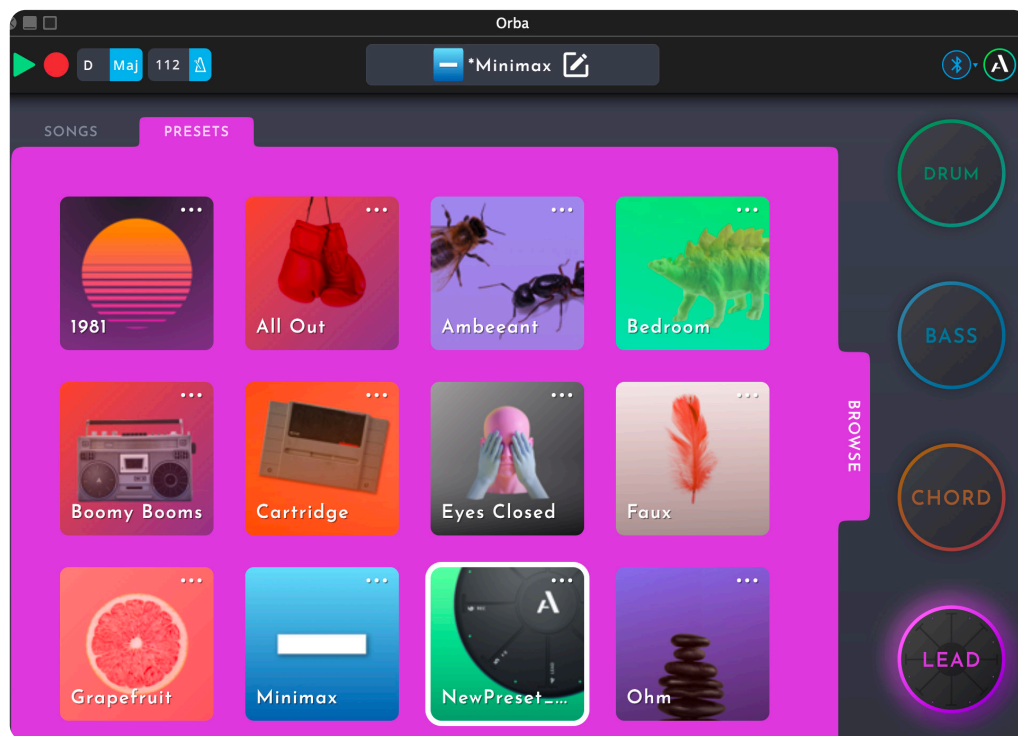
The **Load** button allows you to load any preset directly from the Orba app.

The **Import** button lets you upload any .orbapreset file from your computer.

Loading a preset onto your Orba

Say your friend sends you their new preset over Discord. To load their preset from your computer onto your Orba:

1. Download their preset
2. Load the preset into Orbasynth
3. Save it to Orba Library
4. Open Orba app
5. Select the new preset





Get in touch, stay in touch!

Got questions? We love answering them. Reach out any time at support@artiphon.com.