

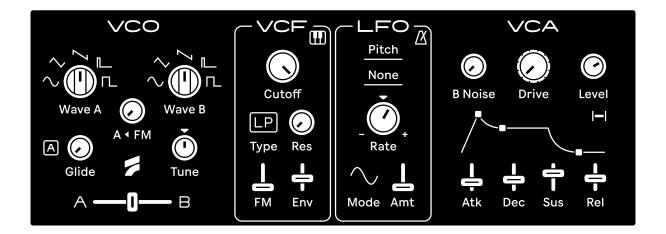
## Para User guide



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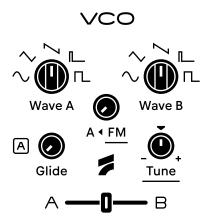
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## Introduction

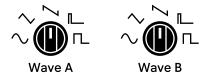


Para is the sister synthesizer to Dyad. Based on the same virtual analog core, it expands on the oscillator's functionality and frames the components in a classic monosynth setting that puts focus on the directness and simplicity of its controls.

While Para is not modeled on any real world piece of equipment, it's inspired by experiences and fond memories of working with analog gear. It's a synthesizer that is imbued with character and history.



The VCO section consists of parameters controlling the two oscillators in Para. Both oscillators are based on the same virtual analog thru-zero core and are capable of linear FM and ring modulation.



**Wave A** and **Wave B** selects the waveshape of each oscillator. Available shapes are Sine, Triangle, Saw, Pulse and Square.

The bottom slider controls the output balance of the two oscillators.



The Mod dial controls the depth of modulation received by oscillator A with oscillator B being used as the modulator. By default this is set to Frequency Modulation (FM). By clicking on the underlined label the modulation type can be changed to Ring Modulation (RM)



**Tune**/Ratio/Fixed controls the frequency of the B oscillator. This parameter has three different modes:

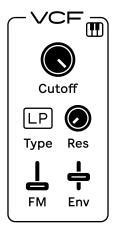
Tune – the oscillator frequency is set in relative semitones, from -24 to +24.

Ratio - the oscillator frequency is set in multiples of the MIDI note frequency.

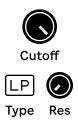
Fixed - the oscillator is set to a fixed frequency in Hz.



Glide controls the time it takes for one note to glide to the other, otherwise known as portamento. A glide occurs by default when two notes overlap (legato), but this can be changed to always gliding if the A option is activated.



The filter in Para is a virtual analog resonant 24dB multi-mode filter with Lowpass, Bandpass and Highpass filter types.



Cutoff controls the cutoff frequency of the filter and Res adjusts the level of resonance, up to near self-oscillation.

Type lets you switch between the Lowpass, Bandpass and Highpass outputs.

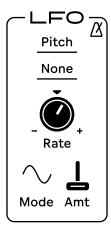


FM controls the depth of frequency modulation with oscillator B as a modulator.

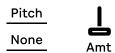
Env controls the depth of modulation received from the Amp Envelope.



The keyboard toggle toggles keytracking of the cutoff frequency on and off.



The LFO section in Para controls a Low Frequency Oscillator which can be used to modulate the various parameters in the different sections. The LFO is can act as a continuous oscillator and an envelope as well as a random generator.



The LFO has two modulation destinations that you select by clicking either option.

Amt sets the modulation depth received by both destinations.

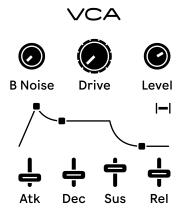


The Rate/Rhythm parameter controls the speed of the LFO. The speed can be synced to the host BPM by pressing the metronome icon. This will change the rate to Rhythm mode where the speed is set in musical note values (e.g 1/16).

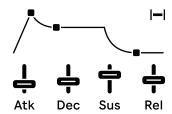
Bipolar values will cause the oscillator to play "backwards", meaning some shapes like Saw will be reversed.



**Mode** selects type of oscillator used. Sine, Saw and Square all behave like a normal oscillator while S&H uses latched noise and Decay turns the LFO into an envelope.



The VCA section controls the dynamics of the synthesizer.



The **ADSR envelope** is a straightforward Attack Decay Sustain Release envelope with logarithmic attack and exponential decay. Each stage of the envelope is controlled by its respective parameter.

By toggling the top-right Gate icon the envelope Sustain level will not affect the output amplitude, which is useful for creating fast filter plucks while retaining a loud sound.



B Noise adjusts the level of a noise source routed to the B oscillator.



Drive controls a distortion effect applied to the final output of the synthesizer.



Leve

Level controls the output level of the device.

This concludes Para, we hope you enjoy using it.

## Ess Mattisson Felisha Ledesma

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