

# OS PARSER FILTER

## Ocean Swift Synthesis Parser Filter Operational Manual



2 Sonic Core Poly Filters in parallel or serial mode. This filter provides the option for an amazing 25 types. The filter works by only loading the currently selected filter onto the dsp boards. Thus, there is a tiny hesitation as you change filters, and you might get a click sound as the audio path is routed through your new choice. Be mindful of this and avoid changing filters when on high volume to avoid nasty and loud clicks.

## Controls



**Type:** Choice of 25 filter types.

**Cut:** The cutoff point of the filter.

**Res:** The resonance quality of the filter.

**Drive:** Mild distortion on the filter output.

**LFO One:** The amount of modulation applied to the filter from LFO One.

**LFO Two:** The amount of modulation applied to the filter from LFO Two.

**KBT:** Keyboard note tracking of the filter. On Center position no tracking occurs.

### Filter Mix:

**Route:** Switches between serial and parallel filter modes. When in serial filter outputs to filter two. When in parallel the filter outputs are mixed and controlled by the Mix knob.

**Mix:** Mixes the outputs of the filters when they are in parallel mode.



### LFOs:

**Wave:** The waveform of the LFO. The wave is a choice between a sine, square, saw up, saw down, triangle, and random - 6 shapes in total.

**Rate:** The speed of the lfo when not in sync mode. From 0.01 to 400hz.

**Div:** The speed of the lfo when in sync mode. Measure divisions based on the device's BPM setting. Provided are 19 divisions: 64bar, 32bar, 16bar, 8bar, 4bar, 2bar, 1bar, 1/2p, 1/2, 1/2t, 1/4p, 1/4, 1/4t, 1/8p, 1/8, 1/8t, 1/16p, 1/16, 1/32.

**Phase:** The starting phase of the lfo. Noticeable when the LFO is in retrigger mode.

**Mild:** Tames the lfo's waveform. In general only useful when the Random waveform is selected in order to avoid clicks (smooth the steps).

**Sync:** Turns sync mode on and off.

**Retrig:** Retrigger the osc to start at the point specified by the phase knob with each new midi gate.

*When in sync mode, the divider will let you set really long times, up to 64 bars. Take into consideration that the Scope system can not go lower than 0.01hz. Very low bpm's coupled with long division times can result in the LFO not going slow enough to be in sync with your tempo.*



**Main Controls:**

Main controls are not saved with presets.

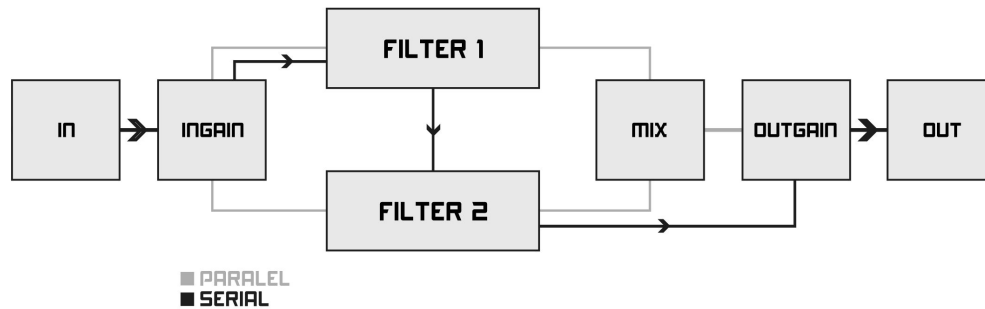
**Midi Channel:** Sets the midi channel the device will respond to. Relates to the keyboard tracking of the filters and the retriggering of the LFOs.

**BPM:** Sets the BPM for the device. This is the tempo from which the LFO divisions will divide from.

**In Gain:** Up to 18db of gain or attenuation of the incoming signal. The center position means no attenuation.

**Out Gain:** Up to 18db of gain or attenuation of the outgoing signal. The center position means no attenuation.

## Audio Signal Flow Chart



# OS PARSER FILTER

**Circuit Design:** Yaron Eshkar

**Gui Design:** Fernando Abreu

**Lead Beta Tester:** Martin Cayless

**Beta Team:** Marco Heger, Kyle Ramos, Mottl Popcorn, Ybot Namwen

**Special Thanks:** Holger Drenkelfort, Mehdi Touzani

**Web:**

<http://www.oceanswift.net/>

<https://www.facebook.com/oceanswifthsynthesis/>