

SpectroMorph

Dual-Bank 16 Band Filter Array

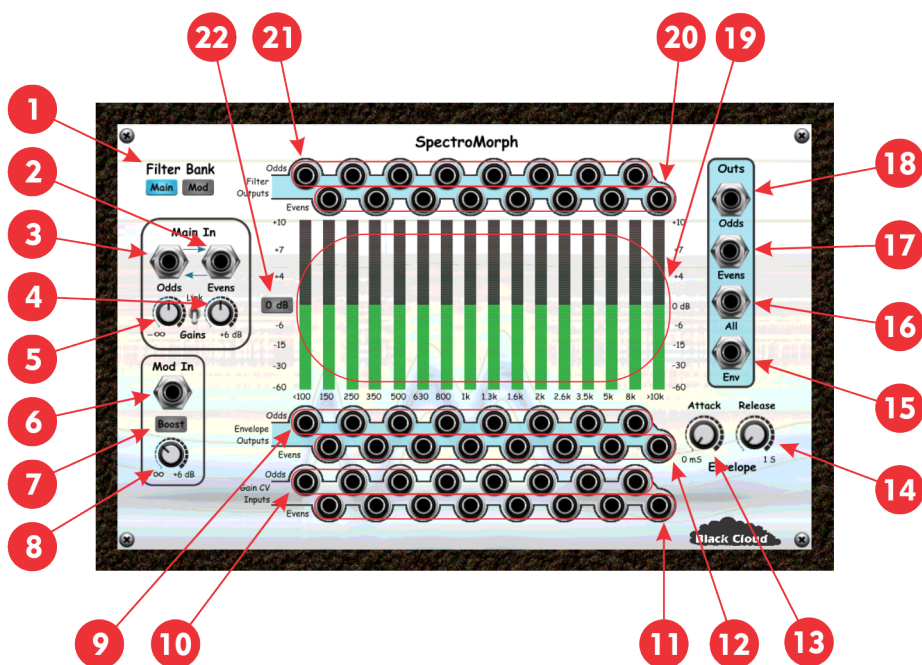
Introduction

SpectroMorph is a 16 band filter array inspired by the likes of the [Buchla 296e Spectral Processor](#) and the [FRAP Tools FUMANA](#). It has two independent banks of 16 filters, separate “Odd”, “Even” and modulation inputs with gain adjustment for each input.

The Main filter bank has “Odd” and “Even” inputs, outputs for each individual filter, as well as summed outputs for odd, even, and all filters. It also has individual envelope follower outputs (with adjustable attack and release times) and gain CV inputs.

The Modulation filter bank has a dedicated input has it’s envelope follower outputs connected to the CV inputs of the Main filter bank, allowing “spectral transfer” between the two banks (making it a primitive vocoder!).

Knobs, Buttons and Sliders



1	Filter Bank Display Switches between displaying the “Main”	12	Envelope Outputs, “Events” Individual filter envelope follower outputs
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	and “Modulation” filter gain sliders.		for odd numbered filters.
2	Main Input, “Evens” Input signal distributed to even numbered filters (2, 4, 6, etc.).	13	Envelope Attack Time Adjust envelope follower attack time for all envelope followers (filter and master).
3	Main Input “Odds” Input signal distributed to odd numbered filters (1, 3, 5, etc.).	14	Envelope Release Time Adjust envelope follower attack time for all envelope followers (filter and master).
4	Main Input Gain, “Evens” Adjust gain for even numbered filters.	15	Envelope Output, “All” (Master) Envelope follower output for the “All”/Master output channel.
5	Main Input Gain Link Links the Odd and Even input gain knobs.	16	Main Filter Bank Output, “All” Summed output of all filters in the main filter bank.
6	Modulation Input Input signal routed to the Modulation filter bank.	17	Main Filter Bank Output, “Odds” Summed output of all odd numbered filters in the main filter bank.
7	Modulation Boost Boosts modulation input level by 10dB. Useful with low-level audio inputs.	18	Main Filter Bank Output, “Evens” Summed output of all odd numbered filters in the main filter bank.
8	Modulation Gain Adjust gain for the modulation input.	19	Filter VCA Gain Controls The VU Meters are “touch sensitive” and adjust the VCA gain for individual filters.
9	Envelope Outputs, “Odds” Individual filter envelope follower outputs for odd numbered filters in the main bank.	20	Filter Outputs, “Evens” Individual filter outputs for even numbered filters in the main bank.
10	VCA CV Inputs, “Odds” Individual VCA gain CV inputs for odd numbered filters in the main bank.	21	Filter Outputs, “Odds” Individual filter outputs for odd numbered filters in the main bank.
11	VCA CV Inputs, “Evens” Individual VCA gain CV inputs for even numbered filters in the main bank.	22	0 dB Reset Reset currently displayed gain sliders to 0 dB position.