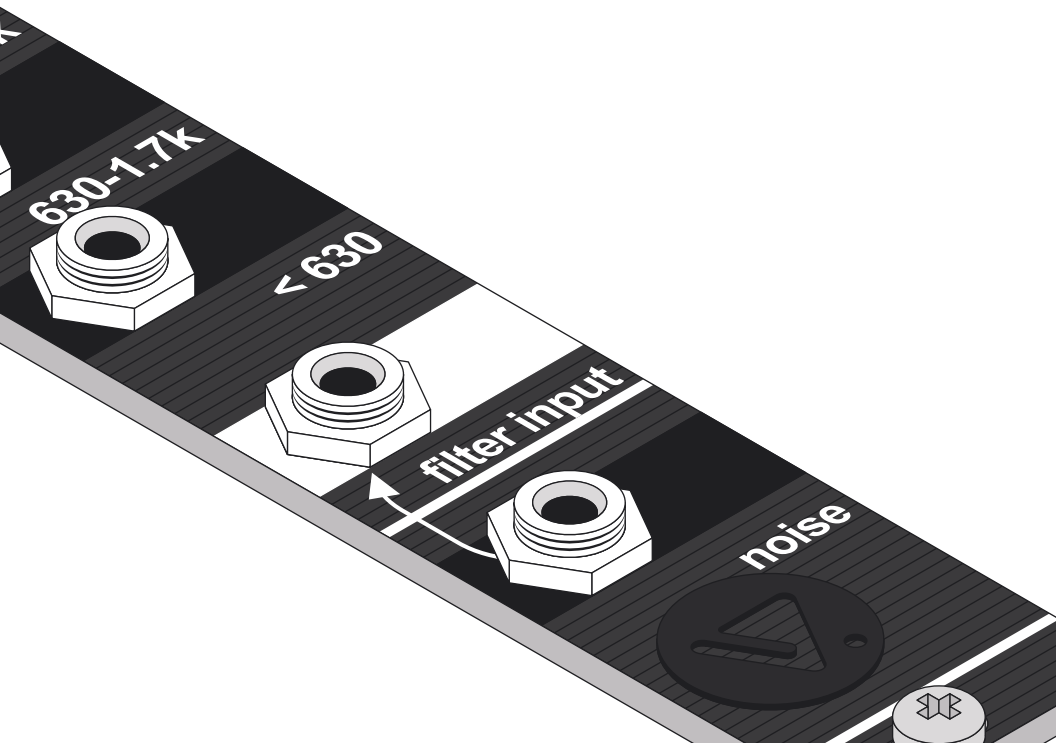




VERBOS ELECTRONICS

Noise & Filter



Congratulations on obtaining your new Verbo Electronics Noise & Filter. This module is a small and powerful addition to your system. At only 4HP, it offers several unique tools to your Euro-Rack system.

The Noise Generator

The bottom most jack is a pink noise output. This is generated by a 23 stage Pseudo Random Sequence Generator. Though technically not random, it takes many minutes to repeat. It uses digital filtering to make the signal content roughly equal in all octaves, or Pink Noise. This type of signal is usefull for making percussion sounds as well as noise beds and sweeps. The Noise output is normalled to the Filter Bank input.

The Filter Bank

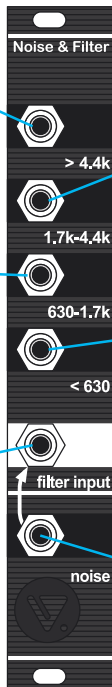
The Filter section of the Noise & Filter is a 4 band fixed filter bank. When a signal is patched into the filter input, it goes to all 4 filters. Each of the filters pass only the signal in the their range. The band frequencies are on the Bark Scale. So, if the 12 bands on a Bark Filter were divided into groups of 3, they would be the 4 bands in this filter. Below 630Hz, from 630Hz-1.7kHz, from 1.7kHz to 4.4kHz and above 4.4kHz can be thought of as low, low-mid, high-mid and high frequency ranges. The real power of this simple module is released when it is patched together with other modules. The bands can be mixed, faded between and panned using a Scan & Pan, for instance. The filter is also quite interesting when used in the feedback path on the Multi-Delay.

4HP • 80g • +12v 85mA • -12v 40mA

*above 4.4kHz
filter output*

*630Hz-1.7kHz
filter output*

Filter input



*1.7kHz-4.4kHz
filter output*

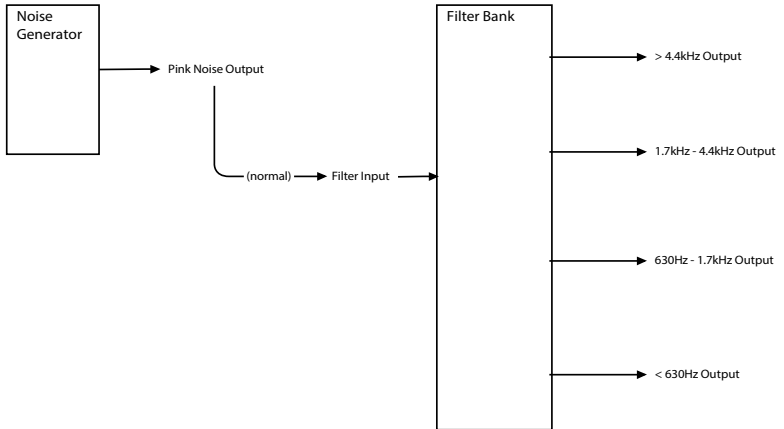
*below 630Hz
filter output*

Noise Output



VERBOS ELECTRONICS

designed and assembled in Berlin, Germany



Verbos Electronics GmbH
info@verboselectronics.com
www.verboselectronics.com