

SEM

12dB State Variable Filter

Thank you for purchasing the SEM filter cartridge!

The SEM filter is based on the state variable filter design of the Oberheim™ Synthesizer Expander Module. The SEM cartridge is a faithful reproduction utilizing surface mount technology. The SEM filter is known for its *musical* character and state variable capability.

OPERATION

1. Filter cartridges can be hot-swapped, simply plug in the cartridge and press the **FILT B** button to select. When the cartridge is selected the filter section LED is lit.
2. To select a filter mode press **[FUNCTION] + [FILT MODE]** while in **PATTERN WRITE MODE**. When mode 1 is selected the **[FILT MODE LED]** is unlit. When mode 2 is selected the LED is lit. Filter mode is a pattern modifier that is saved with each pattern.
 - *Mode 1 is a continuously variable LP / Notch / HP mode. The thumbwheel dial varies the response from Low-Pass to Notch to High-Pass as it is rotated clockwise.*
 - *Mode 2 is Band-Pass mode.*

TECHNICAL NOTES

The SEM filter cartridge is compatible with the Avalon™ Bassline as well as other products from Abstrakt Instruments™. In order to support multiple products, this cartridge has a cutoff CV calibration specific to the Avalon synth. The **CUTOFF** control of the Avalon (and the original TB-303) has a limited range. In order to allow for a greater range, trimmer **TM3** on the cartridge can be adjusted to increase the cutoff CV scaling. The scaling can be adjusted from 1V/Oct (standard) to 1.5V/Oct. The factory setting is 1.25V/Oct.

To adjust the Avalon cutoff CV scaling:

1. Remove the bottom screw from the cartridge assembly.
2. Remove the top half of the cartridge shell.
3. Adjust trimmer **TM3**. Adjust clockwise to increase scaling.
4. Replace the top cover and carefully screw the casing back together. **Do not overtighten!**

This setting only applies for use with the Avalon synth, it does not affect the standard 1V/Oct scaling when the cartridge is used with other products.

***Abstrakt
Instruments®***

Vintage Sound. Modern Design.™

00221-01 10-2016