R:OTA
12dB/24dB Low-Pass Filter
Thank you for purchasing the R:OTA filter cartridge!
The R:OTA filter is based on the classic Roland™ OTA design used in several of the classic SH and JP-series synths. R:OTA is a faithful reproduction incorporating OTA’s and the same FET buffers as the original designs.

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 24dB Low-Pass mode.
   • Mode 2 is 12dB Low-Pass mode.
The R:OTA 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 **TM1** 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 **TM1**. 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.*