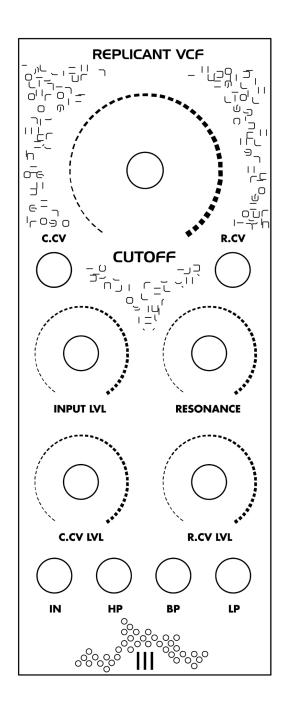
Tre Modular - Replicant VCF User Manual

Thank you for choosing Tre Modular - Replicant VCF Eurorack module!

This guide will walk you through the features, and usage of this module.



Features:

- Multimode filter with low-pass, band-pass, and high-pass outputs.
- Fully analog signal path.
- Voltage control over Cutoff Frequency and Resonance.
- Compact 10 HP size.

Filter:

Tre Modular - Replicant VCF is a multimode filter based on classic Yamaha - CS80 synthesizers filter. This module is a -12 dB per octave second-order state variable filter. It offers low-pass, band-pass, and high-pass outputs.

Replicant VCF is designed to replicate the sound characteristics of the Yamaha CS80 filter. The CS80 is known for its warm and mellow sound, and the Replicant VCF aims to reproduce those distinctive characteristics in Eurorack format. If you want that classic CS80 sound in your Eurorack system, this is it.

IG00156 vs AS2164:

Yamaha's CS series synthesizers used IG00156 IC. Nowadays it is hard to come by and it is expensive. So we have replaced it with a much more affordable AS2164. We have designed the surrounding circuitry to mimic the one that IG00156 had inside of it and what CS80 had surrounding this IC. We not only technically replicated it but also made sure that it sounds as close to CS80 as possible.

Replicating CS80

CS80 had two filters in series. First filter is set up as a high pass filter and second as a low pass. If you want to replicate what CS80 did you can chain two of Replicant VCFs together. If you want a more authentic filter response using two filters, you can set high pass filters CV input to be half of the low pass. This is what CS80 did in its filter section.

Specifications:

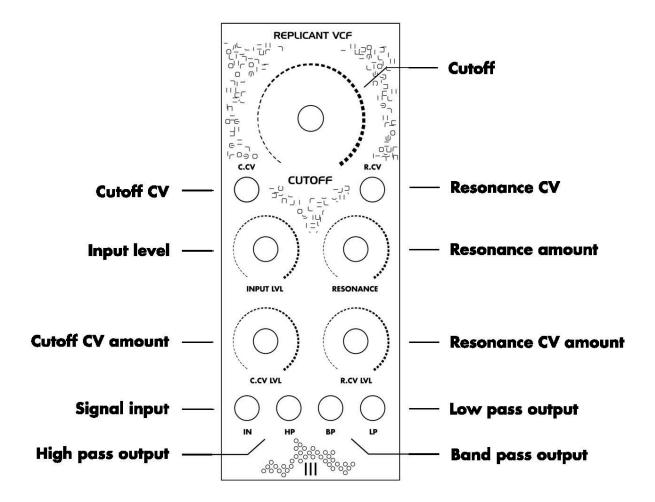
Module width: 10 HP

Module depth: 25mm

CV: -5v to +5v

Power Consumption: 33mA at +12V / 30mA at -12V

Reversed polarity protection



Controls:

Cutoff: Adjusts the cutoff frequency of the filter.

Resonance amount: Controls the resonance of the filter, introducing emphasis and character to the selected frequency. Higher resonance settings result in a more pronounced peak at the cutoff frequency.

Input Level: Controls the input level, determining the strength of the incoming signal entering the Replicant VCF.

Cutoff CV amount: Controls the level of influence that external voltage control has on the cutoff frequency.

Resonance CV amount: Controls the level of influence that external voltage control has on the resonance parameter.

Voltage-Controlled Features:

Cutoff CV: Voltage control over the filters cutoff.

Resonance CV: Voltage control over the resonance of the filter.

Inputs:

Signal input: Audio signal input.

Outputs:

High pass output: High pass output.

Band pass output: Band pass output.

Low pass output: Low pass output.

Installation:

Power off your Eurorack system.

Insert the module into an available slot.

Connect the power cable, ensuring correct polarity.

Power on your Eurorack system.

Enjoy!

Additional Information:

For any additional questions or support, please contact Tre Modular at support@tremodular.com .

Happy patching!

