2144 LPF



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Description

The Electrosmith 2144 LPF is a classic analog filter with a 24dB per octave slope in the MU format.

It uses our 2144 submodule which features a reissue of the renowned SSM-2044 IC that formed the filter section for countless vintage synths. The filter's tone is warm and creamy at low resonance settings and moves into fat, over-driven squelches at the higher end of its range. It will self oscillate when resonance is cranked and outputs a pure sine tone. In addition, the frequency CV input tracks volt per octave allowing it to double as a sine wave VCO.

Available assembled or full DIY kit with all SMT installed.

- Analog 4-pole low pass filter
- Renowned SSM-2044 filter topology
- CV over frequency and resonance
- Frequency CV tracks volt per octave
- Capable of self oscillation
- Doubles as sine wave VCO with V/Oct tracking

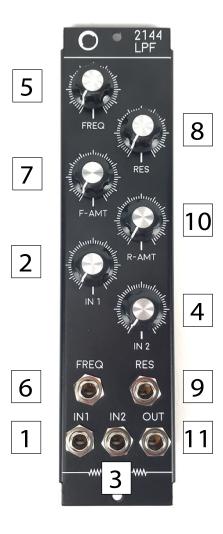
Installation

To install, locate 1 MU of space in your 5U case. Locate the power headers on both your power supply unit and on the back of the 2144 LPF. Connect both via power cable (note that the power header on the 2144 LPF is polarized and cannot be plugged into incorrectly).

Specifications

- Size: 1 MU
- Depth 42mm
- Current Consumption:
 - +15V: 23 mA
 - -15V: 20 mA

Diagram



Functional Overview

1. Input 1

Audio Input

2. Input 1 Knob

Acts as an attenuator for incoming audio at Input 1

3. Input 2

Audio Input slightly attenuated to prevent phase cancellation.

4. Input 2 Knob

Acts as an attenuator for incoming audio at Input 2

5. Freq Knob

Controls the cutoff frequency of the filter.

6. Freq CV

Controls the cutoff frequency of the filter.

Adds to the knob position.

-8V to +8V input range.

7. Freq Amount Knob

Acts as an attenuator for incoming CV at Freq CV input

8. Res Knob

Controls the resonance of the filter.

9. Res CV

Controls the resonance of the filter.

Adds to the knob position.

-5V to +5V input range.

10. Res Amount Knob

Acts as an attenuator for incoming CV at Res CV input

11. Out

Filtered audio output