

# Tilt EQ

Rack Extension User Manual  
Version 1.1



**dustydevices**

# Introduction

Tilt EQ is a Rack Extension effect device by Dusty Devices. It is a filter that neutrally shifts the tonal balance of the signal toward either the low or high end without coloring the sound. This is useful for brightening up a sound or adding more weight to the low end.

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## Front Panel

### Bypass/On/Off

Standard Reason feature. Bypass lets the signal through without applying any processing, On is the normal processing mode, Off doesn't process the signal and silences the outputs.

### Display

Visualizes the tilting slope, the Pivot frequency and the change in dB, and optionally the frequency analysis of the signal after the filtering. The frequency analysis is auto-fitted to the display, and the dB values are a relative reference point, not actual dB Full Scale values. Out Gain doesn't affect the tilting slope graphic.

### Unity

Unity is related to the Pivot control. By default, with Unity at the maximum setting ("Pivot"), the unity gain is at the Pivot frequency. However, sometimes this causes a lot of unwanted boost at one of the frequency extremes, especially if Tilt is automated or controlled with a CV. When Unity is set to minimum ("0 dB"), any tilting applied will attenuate the signal so that either extreme of the frequency response stays at unity gain. The extreme points chosen are 31.25 Hz and 16 kHz.

Unity can also be set to anything in between the two settings, where both behaviors are smoothly mixed.

### Pivot

Controls the frequency which stays at unity gain when tilting is applied (with Unity in the "Pivot" position).

### Tilt

The filter slope in decibels per octave. Positive values boost frequencies above the Pivot frequency and attenuate frequencies below the Pivot frequency. Negative values do the opposite.

**Out Gain** Gain of the outgoing signal. Can be used to compensate for any changes in the signal gain caused by the filtering.

**Level Meter** Displays the signal peak level.

**Monitor Switch** Located to the right of the level meter, this button cycles the Level Meter display between the Input signal peak level, the Output signal peak level, or display off, in case you are easily distracted by pretty flashing lights.

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## Rear Panel

**Audio In & Out** Stereo input, stereo output. Tilt EQ processes the channels independently.

**Modulation In** CV inputs and corresponding scaling knobs for modulating the device parameters. Pivot and Tilt modulation is limited to their knob extreme values. Gain can be modulated past its knob extremes.

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## Latency

Tilt EQ introduces a short latency of 2 samples at all sample rates. If Tilt EQ is used in a parallel chain that is being mixed with the original signal without automatic latency compensation, you can properly align the signal by adding a Tilt EQ to the dry signal without any tilting applied after it is fed to the parallel chain.

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## Thanks

All the beta testers.  
Laatikko for being my rubber duck during development.