



1.0.1 User Manual

Overview

Mark VIII is a voltage-controlled amplifier with eight sets of stereo inputs and one set of stereo outputs. It features panning and gain for each channel, a parametric EQ, and analog level meters. Mark VIII is typically used as the amplifier module for a Polymodular System synthesizer but may also be used as a standalone eq.

Inputs Section



Lamps

The channel lamp indicates the amplitude of the signal in the channel.

Pan

Each channel can be individually panned. This can be used to create a fuller sounding synthesizer patch.

Gain

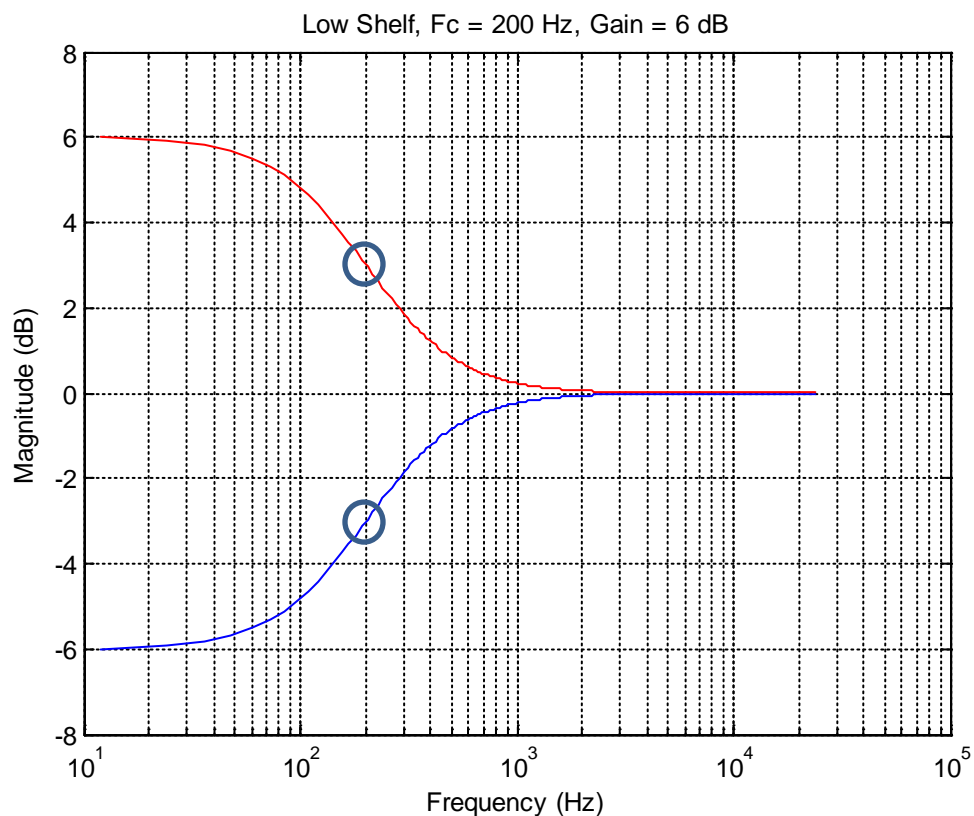
Each channel has a gain control. The gain controls are stepped like those found on high-end hardware amplifiers.

EQ Section



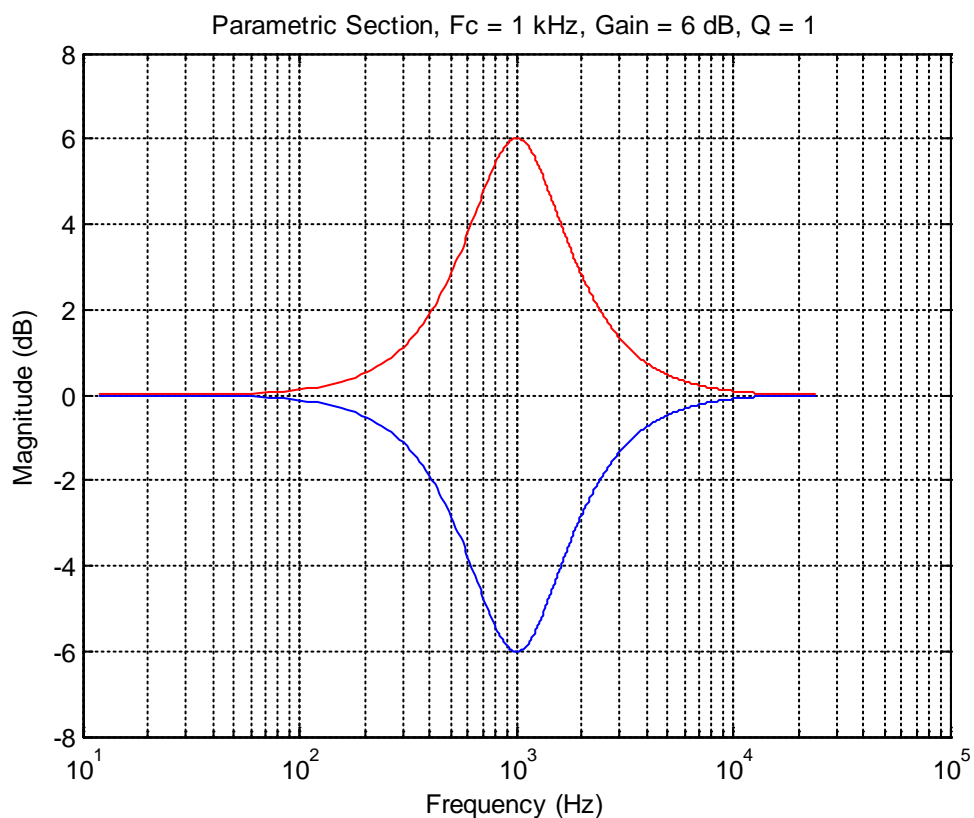
Low

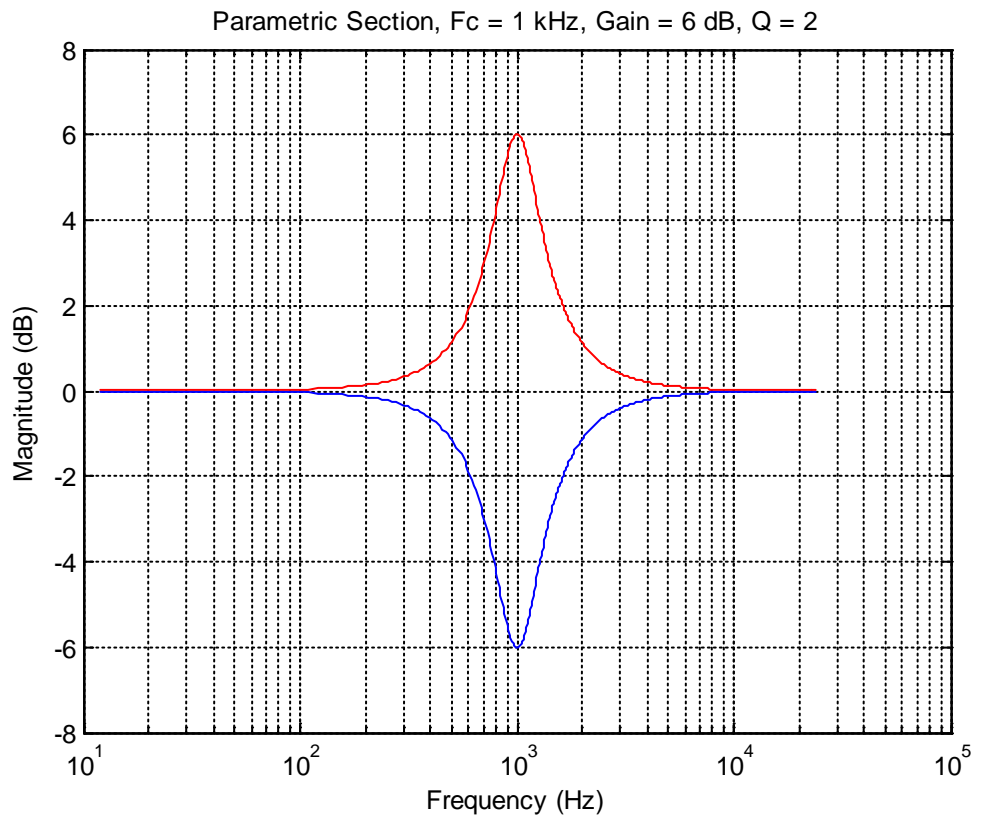
The low frequency gain and frequency controls adjust a low shelf filter. In the frequency plot, you can see that the gain is set at 6 dB and -6 dB and the frequency is 200 Hz. The frequency response passes through exactly half of the gain setting at the chosen frequency.



Mid

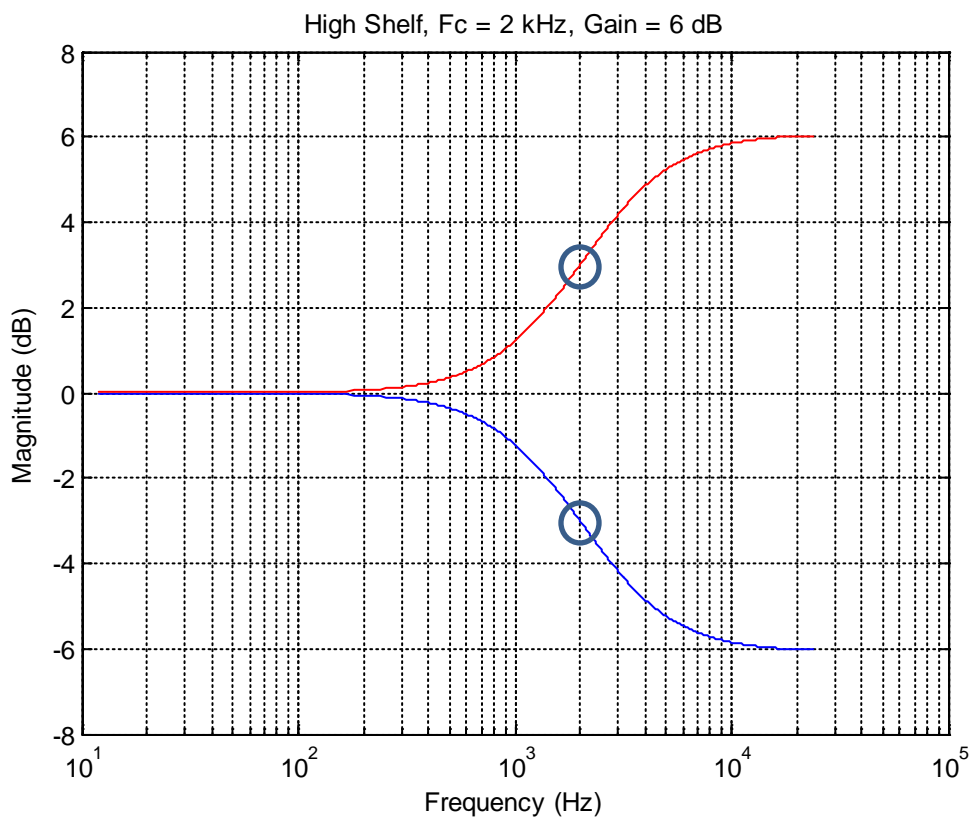
The mid frequency gain and frequency controls adjust a parametric section. In the frequency plot, you can see that the gain is set at 6 dB and -6 dB, and the frequency is 1 kHz. Q adjusts the width of the pass band. The first plot shows a lower Q, resulting in a wider bandwidth, while the second plot shows a higher Q, resulting in a narrower bandwidth.





High

The high frequency gain and frequency controls adjust a high shelf filter. In the frequency plot, you can see that the gain is set at 6 dB and -6 dB, and the frequency is 2 kHz. The frequency response passes through exactly half of the gain setting at the chosen frequency.



Outputs Section



Level Meters

The level meters give an indication of amplitude of the output signals. They are similar to Reason's VU meter. These meters are helpful for visualizing the relative output amplitude but are not recommended for precise measurements.

Spread

The Spread knob controls the panning of the outputs. 100% spread means the outputs are separated completely into left and right channels. As the spread is turned down, the left and right channels are mixed together. At 0% spread the result is a mono signal.

Level

The Level knob adjusts the output gain and can boost or cut the mixed stereo output.

Amp Curve



On the back of the device, there is a slider to adjust the amplifier curve. This setting adjusts how the envelope inputs affect the volume. The setting can be adjusted from a straight line to a very slow curve. The default setting of 4 best adjusts for human perception of loudness and allows the envelope to be perceived as its actual shape.

Inputs



Envelope Inputs

The envelope inputs control the volume of their corresponding audio input. A cable from the output of an envelope generator should be connected here.

Audio Inputs

Eight stereo channels of audio can be mixed, each with its own individual envelope. The audio from another device should be connected here.

Pan

The pan of the stereo outputs can be modulated by either CV or audio.

Level

The level of the stereo outputs can be modulated by either CV or audio.

Outputs



Audio Outputs

The amplifier outputs are a mixed stereo pair.