àradh

Instruō

6HP • 3U • 27mm deep • +12V: 60mA • -12V: 40mA

Made with RackDocs

àradh

Instruō

Bias Knob
The Bias Knob sets the level of the VCA.
• If no CV is present, unity gain of the VCA is achieved when the Bias Knob is set to its centre position.
• The Bias knob can also set the threshold voltage of the comparator

Filter Cutoff Knob
The Filter Cutoff Knob controls the cutoff frequency of the low pass filter.
• Turning the knob CW will increase the cutoff frequency.
• Turning the knob antiCW will decrease the cutoff frequency.
• If àradh is used as a sine waveform osc, the knob controls the frequency of the osc.

1V/Oct Input
The 1V/Oct Input is a bipolar CV input that is calibrated for 1 volt per octave tracking. It is implemented to achieve traditional keyboard tracking, where higher notes will have an increased cutoff frequency.
• This is traditionally used with pitch-related CVs sent from a sequencer or keyboard.
• Control voltage is summed with the value set by the Filter Cutoff Knob.

Pre/Post Switch
The Pre/Post Switch configures the internal routing of the VCA in relation to the low pass filter.

The Pre/Post switch can also determine where the envelope follower signal is derived from.

Gate/Follow Output
Based on the position of the Gate/Follow Toggle, the Gate/Follow Output will output either the comparator-based gate signal, the envelope follower signal, or no signal at all.

Input (In)
The Input is an AC coupled audio input to the low pass filter and VCA.

Strike Input
The Strike Input is a gate/trigger input for the impulse envelope. Rising edge signals present at the Strike Input will trigger the impulse envelope which modulates both the cutoff frequency of the low pass filter and the amplitude of the VCA.
• Mod will occur with a fixed mod depth.
• The Strike Input can be triggered at audio rate.
• Signal present at the Strike Input is indicated by white illumination of the Strike Button

CV Attenuverter
The CV Atten determines the depth of mod applied to the targeted primary and/or secondary user-defined parameter(s).
• Turning the knob CW will increase the depth of mod in relation to the CV signal.
• Turning the knob antiCW will increase the depth of mod with inverted polarity in relation to the CV signal.
• Centering the knob will fully attenuate the CV signal.

CV Input (CV/FM)
The CV Input is a bipolar CV input for the amplitude of the VCA, the cutoff frequency of the low pass filter, the resonance of the low pass filter, and/or the decay time of the impulse envelope, based on the targeted primary and/or secondary user-defined parameter(s).

CV Assign Button
The CV Assign Button is used for assigning targeted primary and/or secondary user-defined parameter(s) controlled by the signal present at the CV Input.
• This setting is retained in between power cycles.

Resonance (Q) Knob
The Resonance Knob determines the amount of emphasis applied to the cutoff frequency.
• Turning the knob CW will increase the resonance.
• Turning the knob antiCW will decrease the resonance.
• To battle the natural drop in level that usually occurs when the resonance of a low pass filter is increased, auto-gain compensation has been added to maintain a more consistent output level.
• If the knob is set to its fully CW position, àradh will self-oscillate and generate a sine waveform.
• The Resonance Knob can also set the attack time of the envelope follower

Output (Out)
The Output is an AC coupled audio output from the low pass filter and VCA.

Gate/Follow Toggle
• If the toggle is in its centre position, the Gate/Follow Output is disabled.
• If the toggle is in its downward position, the Gate/Follow Output is set to output an envelope follower signal.

Decay Knob
The Decay Knob controls the decay time of the impulse envelope triggered by the Strike Input and Strike Button.
• Turning the knob antiCW will decrease the decay time of the impulse envelope.
• Turning the knob CW will increase the decay time of the impulse envelope.
• The Decay Knob can also set the decay time of the envelope follower

Strike Button
The Strike Button is a manual control for triggering the impulse envelope
• Button presses are indicated by white illumination of the Strike Button.
• The Strike Button is also used to access additional functionality