

Dub Siren

Dub Siren is an electronic synthesizer pedal used to produce pitch sweeps, bleeps and laser noise effects with its momentary switch, inspired by Dub music.

Dub Siren consists of three different waveforms (sine, triangle and square) which then run into a delay line.

The oscillator's volume is modulated with an LFO that can be dialed in with the "Shape" and "Skew" knobs. The LFO's waveshape can range from a ramp, triangle, sine, square and everything else in between depending on how the knobs are positioned. This LFO is turned on and off with the momentary "Siren" stompswitch on the right side of the pedal.

The signal then runs into a delay line. This delay line has modulation which can be enabled with dipswitch 2 either at 0%, 50% or 100% intensity. This modulation affects the delay time and delayed signal's pitch.

Hardware Functions

Frequency (Knob 1) - Attenuates the maximum pitch for the dub siren, which is mapped to the LFO. The range of the pitch is from 32Hz to 8372Hz.

Delay (Knob 2) - Controls the amount of delay time. At 0% it produces no delay and at 100% it provides one second of delay.

Feedback (Knob 3) - Controls the feedback for the delay. At 0% it produces no feedback and at 100% it provides a near infinite feedback. It uses a onepole filter to damp the feedback

Rate (Knob 4) - Controls the rate for the internal LFO, which is mapped to the oscillator's pitch.

Shape (Knob 5) - Controls the shape of the LFO. When at 0% it produces a descending saw wave. At 50% it's a triangle wave shape. At 100% it's a rising saw wave.

Skew (Knob 6) - Controls the shape of the LFO. At 0% it provides no kinking to the waveshape. At 50% it provides curves to the wave form allowing for sine waves. At 100% it bends every waveform into a square wave.

Waveshape (Toggle 1) - Choose between a sine, saw wave or squarewave oscillator for the main voice. With dip switch three enabled these waveshapes are then folded. With the exception of the sawwave, which instead becomes a triangle wave.

Delay Modulation (Toggle 2) - Controls the amount of modulation applied to the delay line's time (0%-50%-100%). This adds extra rhythmic and pitch variety to the delayed signal.

Decay (Toggle 3) - Choose between short, medium or long decay times for the delay (5, 10, 20 seconds).

Dipswitch 1 - Expression pedal routing for either the “rate” or “frequency” knobs.

Dipswitch 2 - Waveshape unfolded or folded

Dipswitch 3 - Oscillator pitch range. C1-C8 or C1-C4.

Dipswitch 4 - VCA Mode. Enables the volume to also be controlled via the LFO.

Stomp Switch Left (Echo Kill) - Kills the delayline by setting the feedback to 0% when held down.

Stomp Switch Right (Siren) - Enables the Dub Siren. As it's a momentary switch, the oscillator will only be heard when the stomp switch is pressed down.

Expression Pedal (left side) - This is mapped to either the cutoff or speed function. You can attenuate the expression pedal's range with the second dipswitch. Use a ¼" TRS to ⅛" TRS cable for this function. It MUST be TRS and not TS for the expression pedal to work properly.

MIDI (right side) - All knobs, toggle switches, dip switches and stomp switches are mapped to MIDI CC controls. Use a MIDI DIN to ⅛" TRS cable to access this function. It MUST be TRS and not TS for the MIDI to work properly.

When MIDI CC data is sent the physical knobs position is then ignored in favour of the MIDI CC data. However, if the MIDI CC data remains static moving the knob, toggle switch, dip switch or stop switch will reengage the value as dictated by the hardware's position.

Dub Siren is set to MIDI channel 4 by default.

If you would prefer a specific MIDI channel and CC setup, please feel free to email me and I'll send over a custom tailored MIDI CC bin file.

MIDI CC Mapping

Dub Siren is set to MIDI Channel 4 by default.

Knob 1 - CC1 - Frequency

Knob 2 - CC2 - Delay

Knob 3 - CC3 - Feedback

Knob 4 - CC4 - Rate

Knob 5 - CC5 - Shape

Knob 6 - CC6 - Skew

Toggle 1 - CC7 - Waveshape

Toggle 2 - CC8 - Delay Modulation

Toggle 3 - CC9 - Decay Length

Dipswitch 1 - CC10 - Expression pedal: attenuation or speed

Dipswitch 2 - CC11 - Waveshape folding

Dipswitch 3 - CC12 - Oscillator pitch range

Dipswitch 4 - CC13 - VCA mode

Stomp Switch Left - CC14 - Echo Kill

Stomp Switch Right - CC15 - Siren