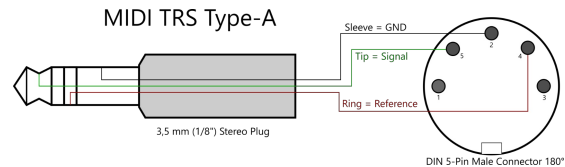


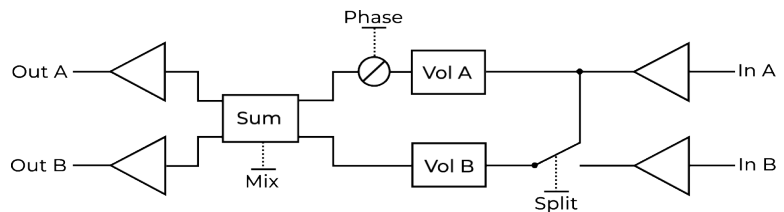
Connections

- **Input A/B:** Two 1/4" mono jacks. Check chapter Input Sensitivity for high input levels like active pickups.
- **Output A/B:** Two 1/4" mono jacks for outputs.
- **Power:** 9VDC only, Center Negative, Boss Style power supply. Min. 150mA.
- **MIDI In:** 3.5mm (1/8") MIDI Input according to MIDI Standard **MIDI TRS Type-A**.
- **MIDI Thru:** 3.5mm (1/8") , latency free MIDI Thru according to MIDI Standard **MIDI TRS Type-A**



Overview

- **Phase:** With the Phase function, the phase of Channel A is flipped.
- **Split:** The Split function connects Channel A with Channel B BEFORE the volume control.
- **Mix:** The Mix function blends Channel A with Channel B AFTER the volume control. The blended signal is provided on Out A and Out B.



To select the Split and Mix settings press and hold the *PHASE* button until it starts flashing. By repeatedly pressing the *PHASE* button, you can scroll through any combination of Split and Mix shown by the orange light of the LEDs. Press and hold the *PHASE* button to save the selection.

Input Sensitivity

Upon delivery the **SIREN** is set to +6dB pre-gain. With that the knobs at noon is unity gain. When running hot signals into the **SIREN**, for example active pickups or already boosted levels, said pre-gain can be set to 0dB to avoid clipping. Unscrew the backplate and set the DIP switch between the sockets to either On (0dB) or Off (+6dB) for each channel separately.

Controlling Volume

MIDI commands override the knob settings (except the MIDI command for relative volume). When turned, the knobs override MIDI commands.

CC				Function
Channel A	Channel B	Channel A+B	#	
20	40	60	0-127	Volume of respective channel. 0 = Mute, 64 = Unity Gain, 127 = +32dB (at +6dB input sensitivity)
29	49	69	0-127	Volume of respective channel relative to the setting of the knob (only version 1.0.1)

Tremolo/LFO

To set the Tremolo two commands are necessary. One for waveform and depth, and one for speed.

CC				Function
Channel A	Channel B	Channel A+B	#	
21	41	61	0-127	Sine Wave Tremolo (0 = Off, 127 = Full Depth)
22	42	62	0-127	Triangular Wave Tremolo (0 = Off, 127 = Full Depth)
23	43	63	0-127	Rectangular Wave Tremolo (0 = Off, 127 = Full Depth)
24	44	64	0-127	Sawtooth Tremolo, Ramp Forward (0 = Off, 127 = Full Depth)
25	45	65	0-127	Sawtooth Tremolo, Ramp Backward (0 = Off, 127 = Full Depth)

Commands for speed(1/4th note MIDI Clock is default, no command needed)

CC				Function
Channel A	Channel B	Channel A+B	#	
30	50	70	0	Tremolo off
			1	Synced to MIDI Clock 1/4th note (Default)
			2	Synced to MIDI Clock 1/8th note
			3	Synced to MIDI Clock triplets
			4	Synced to MIDI Clock 1/16th note
			5	Synced to MIDI Clock dotted 1/8th note
			6	Synced to MIDI Clock half note
			7	Synced to MIDI Clock whole note
			8	Synced to MIDI Clock 1/32th note (only version 1.0.1)
			10-127	Free Running from 100ms (=10) to 1.27s (=127)

Delay the tremolo of one channel in relation to the other channel in steps of 1/24th of one duration.

CC				Function
Channel A	Channel B	Channel A+B	#	
31	51	71	0-24	Delay the tremolo by 1/24th of a full duration (0 = in sync, 12 = half etc.)

Fade and Swell

Fade stays at the target volume when done. *Swell* snaps back to the initial volume, when finished.

CC				Function
Channel A	Channel B	Channel A+B	#	
26	46	66	0-127	One Shot Swell. Starts at current volume ends at the CC value of this command
27	47	67	0-127	Fade. Fade to CC value of this command (e.g. 0 for a fade out, or 127 to fade to full volume)

The time it takes for the fade and swell to complete is set with the same commands like the Tremolo.

MIDI Channel

The **SIREN** ships in omni mode (i.e. it responds to any channel).

To change the MIDI channel, proceed as follows:

1. Disconnect the device from the power supply
2. Press and hold the **PHASE-Button** and restore the power while the button is pressed.
3. After the boot process is complete, the PHASE LED starts to flash. Press the PHASE-button according to the number of the desired channel (e.g. twice for channel 2). The **SIREN** acknowledges this by emitting short flashing pulses corresponding to the number of the channel.
4. Once the desired channel is set, press the PHASE-button and hold it down until the LED stops flashing.
5. Disconnect the supply voltage. The next time the **SIREN** is started, it reacts to the selected MIDI channel.

To put the **SIREN** in omni mode skip step 3.

For the complete set of commands and functions download the user manual at: <https://oscillatordevices.com/siren>