

The Mind Meld is an expansion module for the Livewire Vulcan dual LFO. This module performs three primary tasks:

1. Replace the rear jumpers used for selecting waveforms on the Vulcan with 3-position switches.
2. Allow external input to the logic circuits.
3. Add reset control to each LFO.

**MAX**

- 1 Input to the Vulcan MAX circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO A. The output of the MAX circuit is on the Vulcan.
- 2 Input to the Vulcan MAX circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO B. The output of the MAX circuit is on the Vulcan.
- 3 Switch to select internal signal source for left side of Vulcan MAX circuit. Signals are taken from Vulcan LFO A as long as nothing is plugged into the Jack for external signals.
- 4 Switch to select internal signal source for left side of Vulcan MAX circuit. Signals are taken from Vulcan LFO B as long as nothing is plugged into the Jack for external signals.

**MIN**

- 5 Input to the Vulcan MIN circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO A. The output of the MIN circuit is on the Vulcan.
- 6 Input to the Vulcan MIN circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO B. The output of the MIN circuit is on the Vulcan.
- 7 Switch to select internal signal source for left side of Vulcan MIN circuit. Signals are taken from Vulcan LFO A as long as nothing is plugged into the Jack for external signals.
- 8 Switch to select internal signal source for left side of Vulcan MIN circuit. Signals are taken from Vulcan LFO B as long as nothing is plugged into the Jack for external signals.

**SUM**

- 9 Input to the Vulcan SUM circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO A. The output of the SUM circuit is on the Vulcan.
- 10 Input to the Vulcan SUM circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO B. The output of the SUM circuit is on the Vulcan.
- 11 Switch to select internal signal source for left side of Vulcan SUM circuit. Signals are taken from Vulcan LFO A as long as nothing is plugged into the Jack for external signals.
- 12 Switch to select internal signal source for left side of Vulcan SUM circuit. Signals are taken from Vulcan LFO B as long as nothing is plugged into the Jack for external signals.

**DIFF**

- 13 Input to the Vulcan DIFF circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO A. The output of the DIFF circuit is on the Vulcan.
- 14 Input to the Vulcan DIFF circuit. Plugging an external signal here will bypass the Vulcan's internal connection from LFO B. The output of the DIFF circuit is on the Vulcan.
- 15 Switch to select internal signal source for left side of Vulcan DIFF circuit. Signals are taken from Vulcan LFO A as long as nothing is plugged into the Jack for external signals.
- 16 Switch to select internal signal source for left side of Vulcan DIFF circuit. Signals are taken from Vulcan LFO B as long as nothing is plugged into the Jack for external signals.

**RESET**

- 17 Reset pulse input A. The reset circuit is positive edge triggered and will hold the Vulcan LFO in reset while the signal is high. It is recommended to use a short pulse here. The input A is normalled to input B which means if nothing is plugged into input B, both LFO A and LFO B will reset. To break this normal plug a cable into input B.
- 18 Reset pulse input B. The reset circuit is positive edge triggered and will hold the Vulcan LFO in reset while the signal is high. It is recommended to use a short pulse here. The input A is normalled to input B which means if nothing is plugged into input B, both LFO A and LFO B will reset. To break this normal plug a cable into input B.

