

# V-MUTES



V-MUTES is an expander for the VORTICES character mixer. This module retains the full functionality of the V-CV expander that was included with your VORTICES, and adds click-less muting on all 7 of the VCA controlled inputs as well as a MASTER mute function that can mute all 7 channels simultaneously. Channels are muted upon release of the mute buttons, allowing for more precisely timed muting and un-muting during a performance. Muted channel status is indicated by a RED button LED on each channel. The MASTER mute button will mute all channels at once while preserving individual channel mute status indication, allowing the user to preset active or muted channels before deactivating the MASTER mute.

V-MUTES requires the 10-10pin expander cable that came with VORTICES and includes a power cable which is to be connected to the power header on the bottom of the V-MUTES PCB. Please follow the instructions written below to install your V-MUTES expander:

1. Turn off your system power and remove VORTICES (and V-CV if installed).
2. Double check that the switch located between VORTICES front panel and PCB is set in the EXP position.
3. Attach the expansion cable to VORTICES if not already attached via use with V-CV. Position the cable with the RED STRIPE down.
3. Locate the provided power cable. Make sure to orient the RED STRIPE of the included power cable with the 'POWER RED' label on the PCB header and install the cable on V-MUTES.
4. Connect the other end of the 10-10pin expansion cable to the V-MUTES expander header on the PCB. Cable should already be positioned with the RED STRIPE down. Verify that the cable is connected correctly.
5. Connect the V-MUTES power cable to your systems PSU header, finish mounting both modules and power on.

*Note - V-MUTES utilizes analog logic states referenced via the PSU rails. In most cases all channels will be muted on power up but this behavior is not guaranteed and can depend on your PSU startup and other variables in your modular system.*

