The Q142 pedal interface offers a way for foot pedals (actually any switch or potentiometer) to control your synthesizer. Each of the two independent sections allow simple switch pedals or variable pedals to create control voltages that can be used to control virtually any module in the system. Control volume, filter sweep, pitch bend, pan/fade, and more. Various voltage levels and polarities are produced for each pedal.

Connectors

Input

Accepts switch or variable pedal inputs.

0/+5 Out

Provides an output from 0v to +5v.

+5/0 Out

Provides an output from +5v to 0v.

-5/+5 Out

Provides an output from -5v to +5v.

Specifications

Panel Size: Single width 2.125"w x 8.75"h. Input Type: Dry contact switch, or 10k-100k potentiometer Output Voltages: 0V to 5V, 5V to 0VDC, -5V to +5V Power: +15V@8ma, -15V@8ma.

Usage and Patch Tips

Basics

There are 2 independent sections to the Q142 pedal interface.

Switch Pedals

Many switch pedals have an option for normally closed or normally open operation. This is not very important because the Q142 can offer both polarity of output voltages at the same time. Use the 0/+5 outputs to start/stop the Q119 sequencer, envelope generators, or to control a slew limiter or switch modules. The +5 output can also be used to turn on an amplifier or select a Pan/Fade condition.

Variable Pedals

Variable pedals provide continuous control of a parameter. Normally this will be the -5/+5 output, then attenuate the signal on the module. If the module doesn't have an attenuator, use the Q125 Signal Processor. Variable pedals are great for controlling filter frequency and resonance. You can also control an amplifier to mix in another patch or a Pan/Fade module to switch between voices. Variable pedals can also be used to trigger modules. Most modules that accept a gate signal will trigger at 1.5 volts.









Calibration and Testing

No calibration is required for this module.

- 1. Connect a variable foot pedal to the Pedal input connector.
- 2. Use a voltmeter or oscilloscope to view the outputs.
- 3. Each output should show a swing the amount shown on the panel printing.
- 4. Test both sections.

PC Board Layout



Power Connector

6 pin .1" MTA type connector made by AMP. Available from Mouser Electronics or Digi-Key. Modules have a male PCB mount connector and cable harnesses have a female.

Part Numbers:

Female cable mount: #6404416 Male PCB mount: #6404566

Pinout:

- 1 = +15v
- 2 = key (pin removed)
- 3 = +5v
- 4 = gnd
- 5 = -15v

Not all voltages are used on all modules.

