

The Q147 Distributor is used to simplify the process of distributing a signal to many destinations. Also known as a reverse mixer or a splitter. Three of the output signals have attenuators and inverters, and one is fixed at 100%. Great for routing one envelope to several places or sending a waveform to amplifiers, oscillators, and filters. Distributors can be daisy-chained if more destinations are needed. Can also be used as a multiple, adjustable voltage source, and to route and invert Gate signals.

## Controls and Connectors

### Attenuation/Inversion Controls

Used to adjust the signal level and polarity of the first three outputs.

### Input Connector

The signal to be distributed

### Output Connectors

Output signals. #4 is the buffered input signal.

## Specifications

**Panel Size:** Single width 2.125"w x 8.75"h.

**Input/Output Voltage Levels:** 10V PP.

**Power:** +15V@8ma, -15V@8ma.



## Usage and Patch Tips

### Basics

The Q147 Distributor simply takes one input signal and sends it to four outputs. This is useful when you want one signal source to control many other modules.

### Use with Envelope Generators

Patch the output of your envelope generator to the distributor, then the outputs from the distributor to an amplifier, filter, and an oscillator. Since these outputs can be attenuated and inverted right on the distributor, you can patch the signals into the unattenuated control inputs on the other modules. The amount of impact that the envelope will have on each module can be adjusted right on the distributor.

### Distribute Modulation Oscillators

As with envelopes, use the Q147 to distribute a sine wave or other waveform to many different modules such as an amplifier for tremolo, another oscillator for vibrato, or the filter for vibrating sweeps.

### As a Multiple Voltage Source

Without an Input signal, the Q147 can act as a voltage source. Outputs #1, #2, #3 produce various voltages from -5V to +5V. Output #4 produces a fixed +5V.

### Many More Possibilities

Use your Q147 Distributor to route outputs from your sequencer to various locations or to route the output of the Q118 Instrument Interface to several filters. Can also be used to route and invert Gate signals.

# Q147 Distributor

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Adjustments for the signal level and polarity of the first three outputs.

Input signal that is delivered to the outputs. Without an input signal, the outputs become voltage levels set by the controls.



Outputs #1,2 and 3 are adjustable.

Output #4 is fixed at 100%.

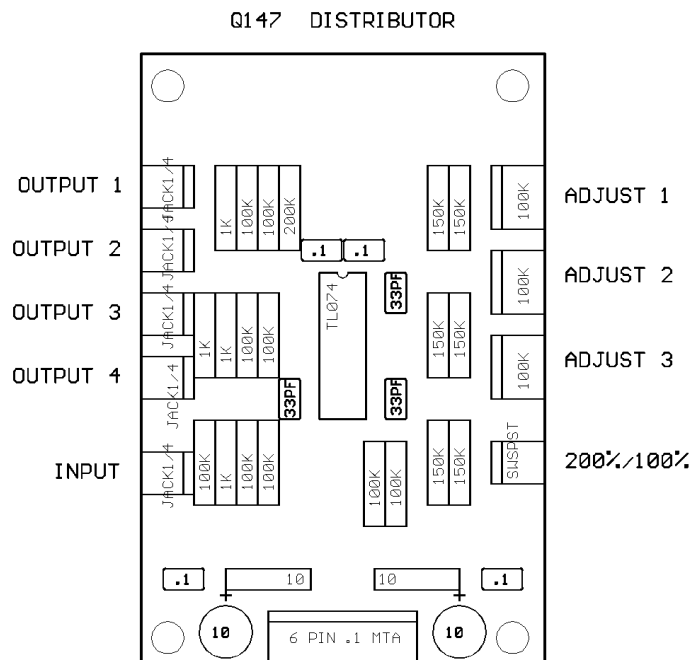
## Calibration and Testing

No calibration is required for this module.

1. Apply a 0 to +5V waveform to the input.
2. Attach the scope to output #1.
3. Adjust #1 control and check for change in amplitude and polarity.
4. Do the same test for outputs #2 and #3.
5. Output #4 should be a buffered copy of the input waveform.

Done.

## PCB 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.