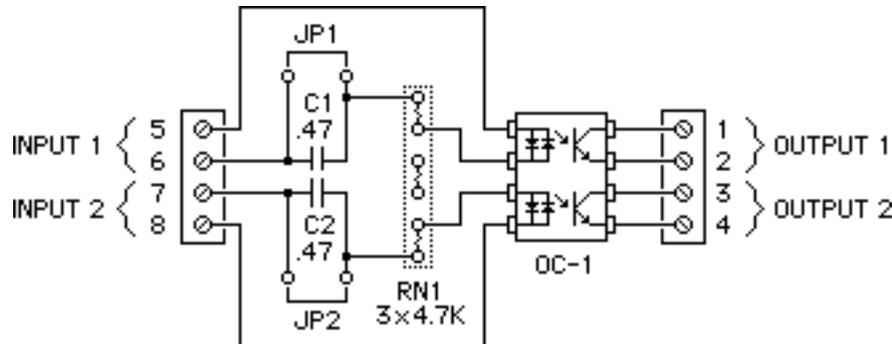


Description

The model OC-2 Two-Channel Optocoupler consists of a dual optoisolator with current-limiting resistors and optional DC blocking capacitors on the inputs. It is useful for ground isolation, conversion of logic-level voltage or polarity, and telephone ring detection.



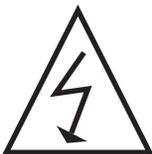
Installation

For all applications except telephone ring detection, the jumper across the input capacitors (JP1 and JP2) should remain in place. Output terminals 2 and 4 should be connected to the electrical ground (or circuit common) of the outboard equipment. Output terminal 1 will provide a pull-down to ground (when connected to a +5 volt supply through a 22K pull-up resistor), when there is between 4 and 30 volts across input terminals 5 and 6. Pin 1 will remain high when there is less than 1.5 volts across terminals 5 and 6. The same is true for output terminal 3 and input terminals 7 and 8.

The input LEDs in the optoisolator are bipolar so AC inputs are acceptable as well as DC voltage of either polarity can be applied to the input terminals. Continuous application of greater than 30 volts DC or RMS AC across the inputs will overheat the resistor network RN1. This should be avoided.

For applications where a single output is required when either input is activated, the output terminals can be connected in parallel (i.e. 1 connected to 3 and 2 connected to 4).

For telephone ring detection, cut the capacitor inhibit jumper (JP1 on input 1 or JP2 on input 2). An analog telephone line can be connected directly to the input terminals when the appropriate jumper has been removed.



High Voltage!

The OC-2 has exposed electrical contacts on both sides of the module. If the module is used for telephone ring detection, it should be insulated to prevent contact with the telephone line input terminals. OC-2 modules can be insulated with a 3.5-inch-length of 1-inch-diameter heat-shrinkable tubing.