

**RBX-1** 3-Channel Opto-isolated Relay Board



The RBX-1 is a three-channel opto-isolated relay board which can be used to switch high voltage devices such as spindle, coolant pumps, and vaccuums, from your CNC control software and in your g-code files. Each relay is rated for 12 amps at 120VAC (or 6 amps at 240VAC). There is an LED for each relay to indicate when they are on.

The opto-isolators which drive the relays are common ground and fed with a +5VDC signal from any un-used output pins from the breakout board. If your parallel port does not output 5 volts or enough current to drive the LEDs inside of the opto-couplers, a buffer chip needs to be used between the parallel port and the opto-coupler. The best solution for this is the PBX-RF isolated breakout board, which has the power to drive the opto-couplers.

The signals for the RBX-1 can be suppled through screw clamps on the RBX-1. Also, there is an included PBX-header which makes connection to an empty drive header on one of our breakout boards a snap.

The relay side of the opto-couplers require a 5VDC power supply. A 1 amp or greater 5VDC wall-wart type power supply works well for this. When driven from the PBX-RF isolated breakout board and using the PBX-header, JP1 can be installed along with a ground jumper wire eliminating the need for the 5V power supply.

Schematic Diagram



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