

## **SOLID STATE RELAY BOARD 4**

#### **Overview**

This card is to be used as a multipurpose switch for controlling your AC devices. It's very basic design allows you to connect it in many ways, giving you the options you need. This card works with 110VAC or 220VAC voltages.

#### **Features**

#### • Opto-Isolated Inputs.

Isolates input connections to protect your computer from shorts circuits. An opto-isolator is an integrated circuit that transmits the signal through an encapsulated LED and photo-transistor, when the signal is present, the LED lights, and the photo-transistor captures it, and relays the signal. That way your computer's electronics is completely isolated from your circuitry.

# • Easy installation of an On/Off Switch. You can control the card externally.

An On/Off switch or a Safety Charge Pump can easily be installed, to enable or disable the card. CNC machines could be dangerous equipment, and remember, safety comes first. Having the power supplied externally, gives you the ability to turn on or off your system.

## • All TTL 5VDC Signals.

Interface directly with parallel port interface products and other CNC4PC cards. 5VDC (TTL) signals are very common among automation devices.

## • Works directly with popular CNC hardware and software.

Such as Geckodrive, DeskCNC or Rutex, and parallel port control software, such as mach2, Linux EMC, TurboCNC, CNCPlayer, CNCZeus and others (Not all tested)

#### Screw-On connections for all terminals.

You only have to screw-on the wires to make all your connections.

## • Works as a switch for powering your hardware.

You can use this to turn or off routers, vacuum motors, spindles, enabling contactors for large spindles, coolant pumps, electro valves, etc.

- Controls 4 AC devices per card.
- One 40 am triac and three 12 amp triacs.

### Installation

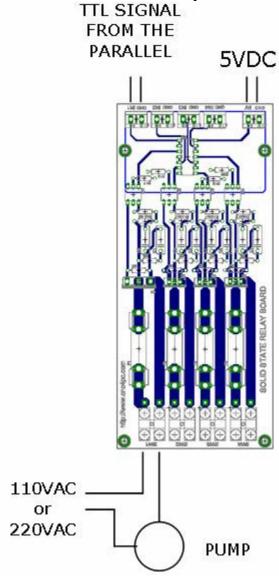
Use the switch with the 40 amp triac for up to 13 amp motors and the 12 amp triacs for up to 5 amp motors. When using 220, use only  $\frac{1}{2}$  of the recommended amperage.

### Requirements:

It requires a 5VDC power supply to operate.

#### Wiring:

This card works as a set of 4 normally open switches that enables the connection if the power is supplied to the card, and a signal is provided to the appropriate input pin. Please make a note that this card works only for AC devices.



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## Tips:

#### Use as many cards as you need.

You can control as many devices as output signals you have available.

#### Use a switch to control the card.

It is a very good practice to install a switch to control the power supply to the card, or cards. This improves the safety of your equipment. If you are using this card with the Parallel Port Interface Card, and you are already controlling the status of this card, then you do not need to control the Solid State Relay Board, because it is safety is already controlled by the first card.

#### Connect inputs in parallel to enable more that one switch with one input signal.

You might want to configure your equipment to have several devices activated with one input signal, or you might want to replace a manual switch that has more than one connection.

#### **Dimensions:**

This is the actual size of the card

## Disclaimer:

Use caution, CNC machines are dangerous machines. DUNCAN USA, LLC nor Arturo Duncan are not responsible for accidents caused by improper use of these devices.