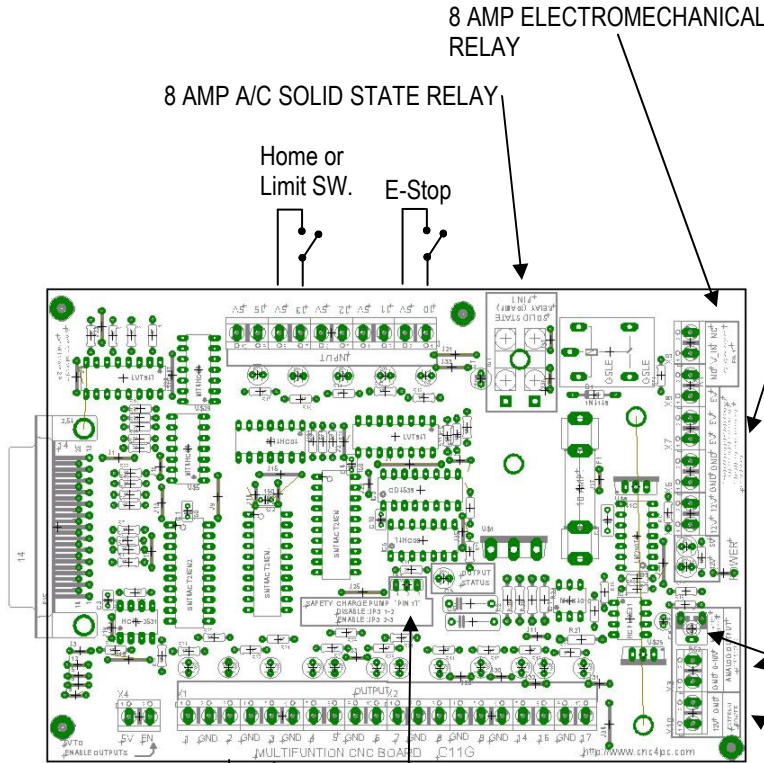


# C11G - MULTIFUNCTION CNC BOARD

## WIRING GUIDE

### C11G Rel 1



This board requires a total of 2 power sources.

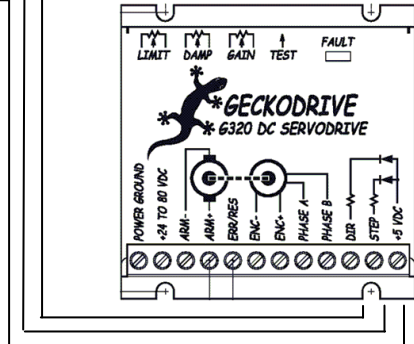
1. +5vdc @ 2 amps to power your cnc circuit.
2. +12vdc @ 300 milliamps to power some components of the cnc circuit. This ground and the ground the 5 volts that power the cnc side of the circuit are common.

Analog 0-10vdc output.

Adjustment pot for fine tuning the analog signal.

Power the analog circuit with an external 12vdc power supply to keep the analog output optoisolated

You can use the built in safety charge pump circuit as a means to enable the output pins by placing the jumper in the 2-3 position. The board will enable outputs when you send a 12.5khz pulse through pin 17. In all cases you must provide +5 to EN pin to enable outputs. You can hardwire the connection if you are not going to use this safety feature. That way can choose which safety feature to implement, or a combination of both, or no safety feature at all.



**NOTES:**

1. All inputs and outputs are provided with pull-down resistors.
2. If you need to connect a device that outputs more than 5vdc, you can use a resistor to limit the current. Use the following resistor values:  
 10 vdc - 1 MOhm  
 12 vdc - 1.5 MOhm  
 24 vdc - 3.9 MOhm.

To use these resistor values your card must be powered with 5vdc. If you are powering your board with a different voltage unexpected results can happen., including damage to the board.



This card must be powered while your system is under power. Keep in mind noise can be transmitted into output signals that could trigger unwanted actions in your system.