



CSENSE_ADJUST will allow you to set your reference voltage for the current sense comparator. Depending on the resistor value of RSENSE you will be able to set a voltage here that will trip the comparator when a certain current is reached.

*note: actual current limiting is done in software by the Controller...

Red LED indicates that the current limit has been detected.

Optocouplers isolate the Controller's +5V power source from the Driver's +12V & +V_MOTOR Power sources.
*note: H11L2's have active low output..

You can drive a treadmill motor with full wave rectified 120VAC. If your DC motor has some other voltage requirement you will need to Modify this area removing the bridge rectifier and connecting the motor drive voltage to +V_MOTOR & GND

Gate Drive Resistor. Combined 3 - 10ohm low wattage (1/4) to get a 3.3ohm equivalent with higher power handling capacity. Could just get a 1W 3ohm resistor, but this is what I had on hand

12VREG is simply a bridge that can be jumped if POWER_IN already has a regulated 12V power source

Green LED Indicates That PWM Is On. Depending On Duty Cycle, LED's brightness will vary.

The 25k White LED was a high brightness LED that I had on hand. You can replace with whatever you have and adjust R4 accordingly.

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