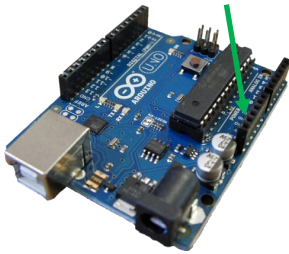


GRBL SPD

CONNECTION DIAGRAM

POWER CONNECTOR

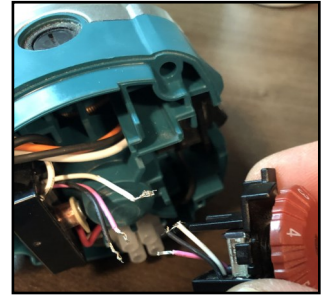
Connect +5V to 5V and GND to GND on Arduino or other controller.



Router Speed Control

Cut red, black and white wire from Makita dial leaving enough to connect to wires from GRBL_SPD board and remove dial.

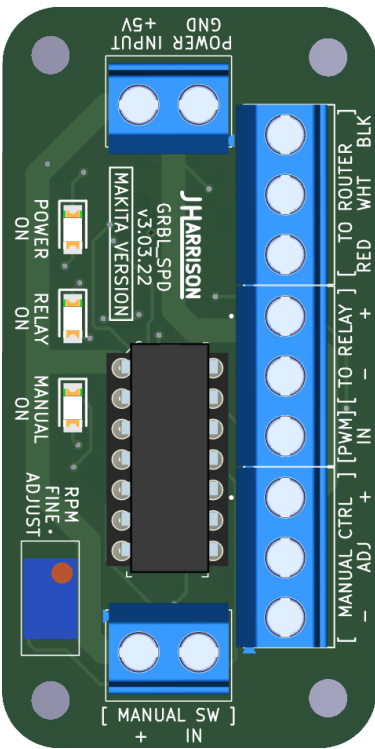
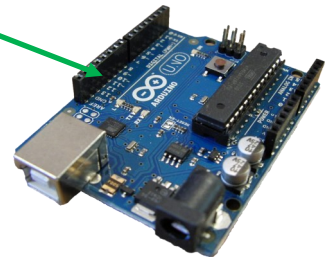
Makita black wire — (BLK)
Makita white wire — (WHT)
Makita red wire — (RED)



PWM INPUT

Connect to PWM Output of Controller. Pin 11 @ 1kHz on GRBL 1.1 with Arduino)

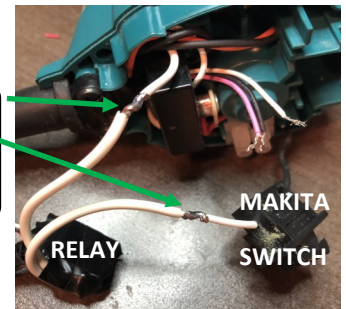
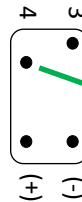
Be sure to check the PWM is present with a voltmeter. Should see 0v to 5v fluctuating when adjusting rpm in your sender software. If not reflash GRBL 1.1 to your controller with variable spindle enabled.



Router On/Off Relay

(Negative switched)

UNDER THE HOOD METHOD:
Cut white output wire from switch and connect the two wires (3&4) from relay to each end. This allows the original switch to still turn the router off for safety. The relay can be placed where the dial was. (Relay included)



EXTERNAL METHOD:

Many relays are available online to break connection to power. Use whichever best suits your needs. ([+] is +5v and [-] is ground trigger)



(Leave switch in on position for normal operation)

CAUTION!! 120v/240v UNPLUG FROM ROUTER FROM POWER SOURCE BEFORE CONNECTING! IF YOU'RE NOT COMFORTABLE DOING THIS...DON'T!

Manual Mode Switch

Two pin switch for manual mode on/off control. Lots of choices as long as its not momentary. (not included)



Manual Speed Control

Potentiometer for manual mode rpm adjustment. 5k,10k,20k and so on. Functions as a voltage divider for the analog input so value is not critical. (not included)

