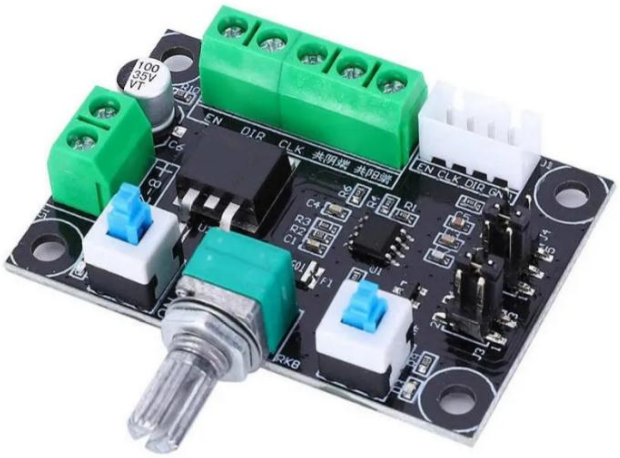
Manual stepper motor controller

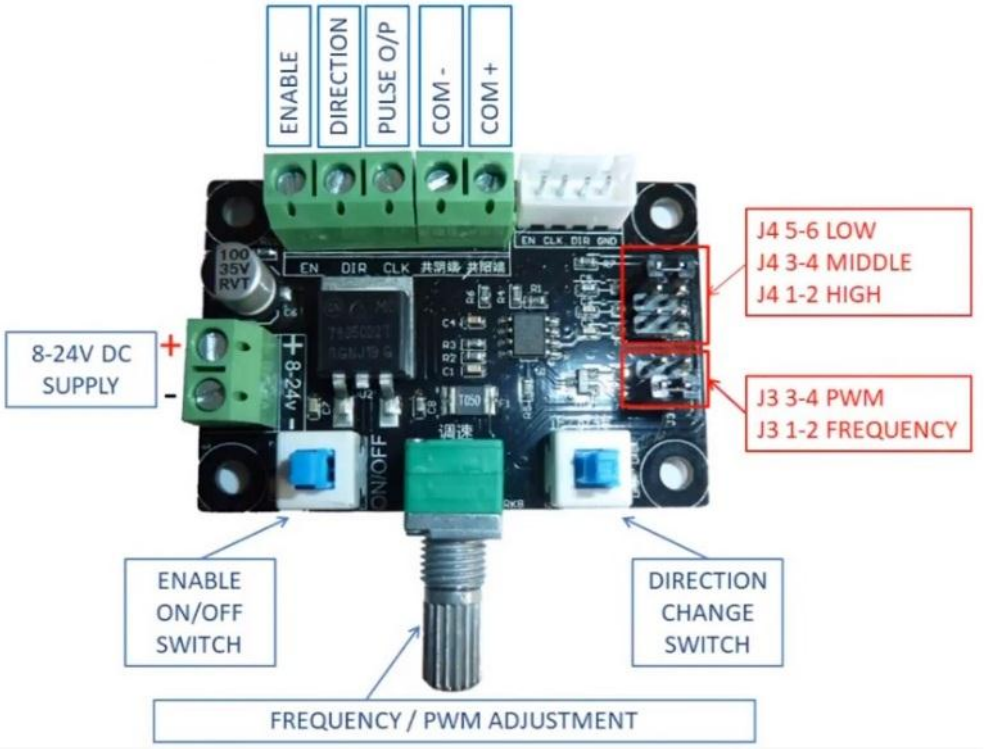


DESCRIPTION

This is a pulse generation module, it supplies the control signal to the controller step by step. To control the stepper motor, it must be equipped with a driver; that is, you need the following components as a minimum: this controller (comes to replace the microcontroller, for example Arduino), it also needs a stepper driver and of course, the stepper motor.
The board can supply a PWM or pulse signal, selectable via jumper (J3), in 3 frequency bands. In frequency mode the controller has three ranges, selectable via jumper (J4); High mode, Medium mode and Low mode. In PWM mode the mark space ratio is adjustable between 4-96%.

Quick Spec

- Signal Type: PWM / Pulse
- Frequency Range
  - High: 5.4k-160khz
  - Medium: 540-16.6khz
  - Low: 80-2.4khz
- PWM Range
  - High: 7.4kHz to 11kHz
  - Medium: 780Hz to 1.2kHz
  - Low: 100Hz to 160kHz
  -
- Direction: clockwise / counterclockwise
- Frequency measurement: the two ports of PUL and common-cathode (or common anode) can be measured
- Voltage: 8 ~ 24V
- Load: 4A (Max.)
- Colour: Black
- Material: PC + metal
- Dimensions: 58 × 38.6mm



Different port sign, but same function

- EN=ENA=FREE Enable
- PUL=PULS=CLK Pulse
- DIR=CW=CWW Direction

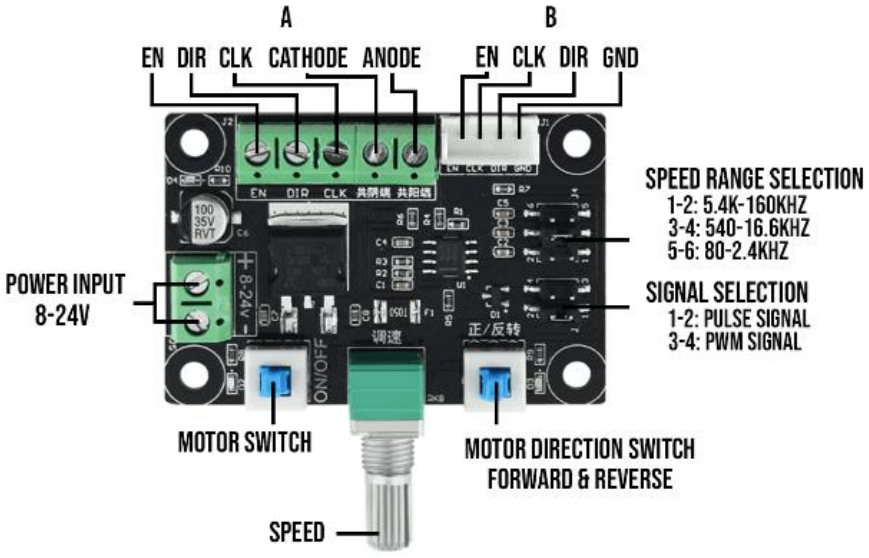
Common anode connection (connect with B)

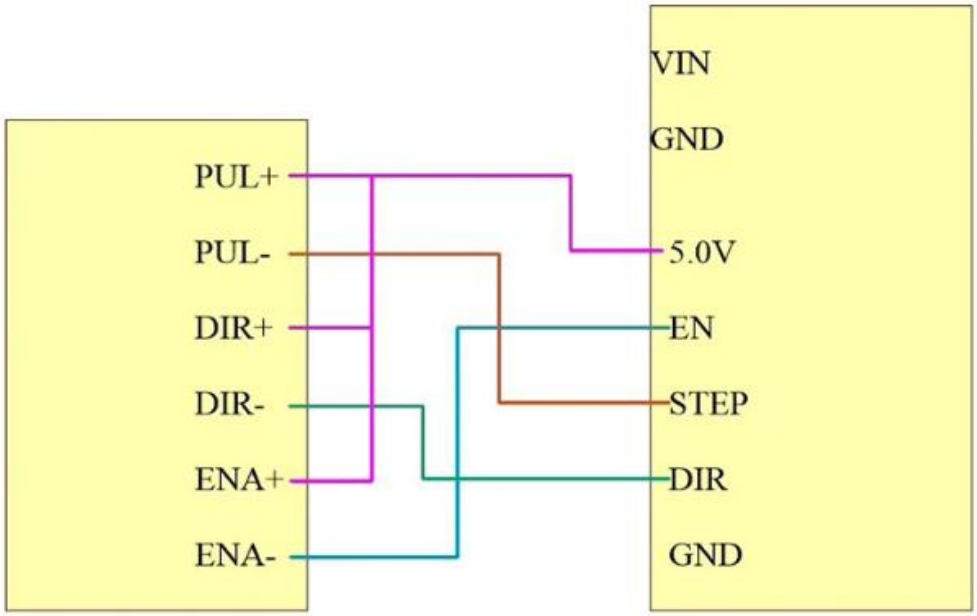
- EN+ PUL+ DIR+ all link together to common anode port
- EN- connect to EN
- PUL- connect to CLK
- DIR- connect to DIR

Common cathode connection (connect with B)

- EN- PUL- DIR- all link together to common cathode port
- EN+ connect to EN
- PUL+ connect to CLK
- DIR+ connect to DIR

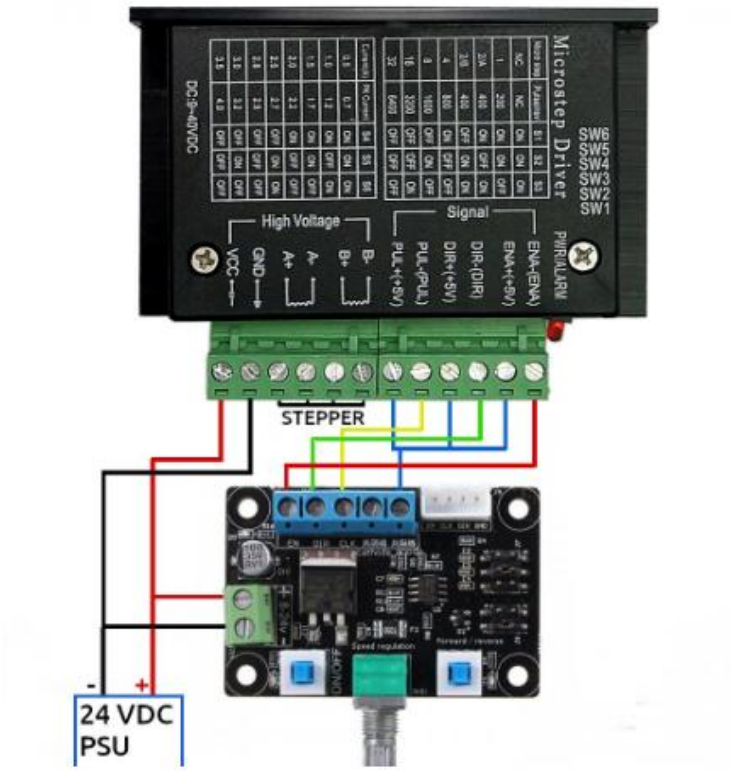
Board Layout

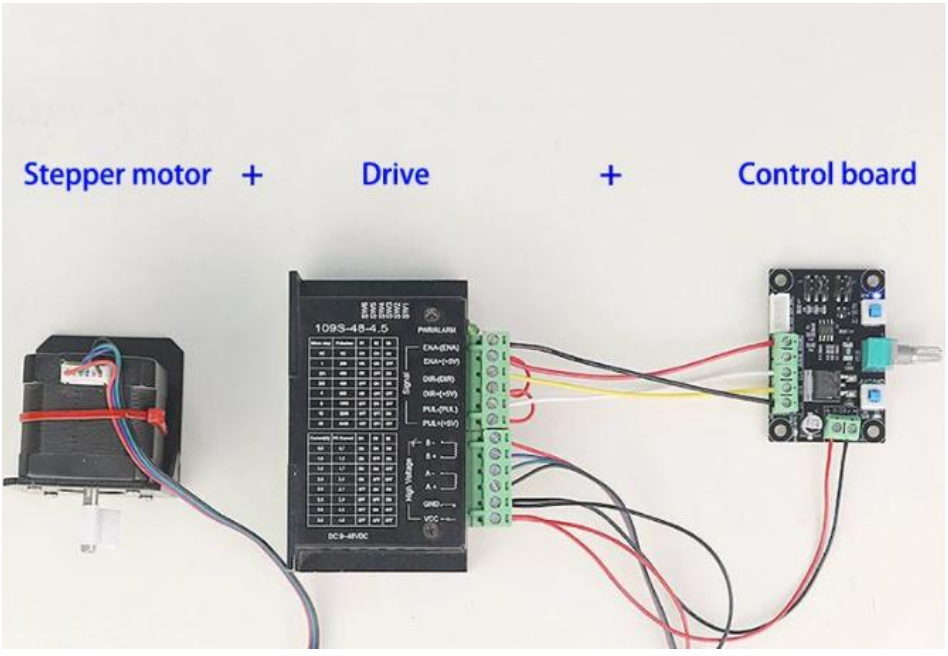




Common anode connection method (B)
EN+PUL+DIR+ connects to com+.
EN - Connect EN
PUL-Connect CLK
DIR - Connect DIR

Connection Diagram





Resources

- [MKS OSC Instruction Video]