Description:

L293D Motor Driver Module is a medium power motor driver perfect for driving DC Motors and Stepper Motors. It uses the popular L293 motor driver IC. It can drive 4 DC motors on and off, or drive 2 DC motors with directional and speed control.

Features:

1. The driver two holes of 3 mm diameter.

2. Male burg-stick connectors for supply, ground and input connection .

3. Screw terminal connectors for easy motor connection .

4. High noise immunity inputs.

Specifications:

- Supply voltage: 4.5 V to 12 V

- Current consumption: 600mA per motor

- Maximum Peak motor current: 1.2A

- Transition time: 300ns (at 5Vand 24V)

- Speed and Direction control is possible of both the motors

- Can be used to run Two DC or stepper motors with the same IC

Pin Configuration:
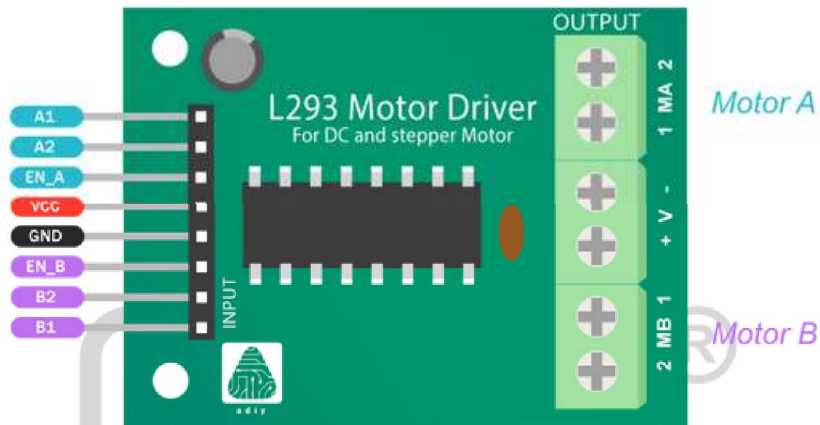
- VCC: 4.5V – 12V Power Supply.
- GND: Ground.
- A1, A2 and B1, B2: input pins used for providing a control signal from the controller to run the motor in different directions.
- EN_A and EN_B: Enable pins. Connect 5v DC to EN_A and EN_B pin to operate the motor
- MA: Motor -1 User can connect motor terminal here.
- MB: Motor -2 User can connect another motor terminals here.

How it works:

The L293D IC receives signals from the microprocessor and transmits the relative signal to the motors. It has two voltage pins, one of which is used to draw current for the working of the L293D and the other is used to apply voltage to the motors. The L293D switches it output signal according to the input received from the microprocessor.

For Example: If the microprocessor sends a 1(digital high) to the Input Pin of L293D, then the L293D transmits a 1(digital high) to the motor from its Output Pin. An important thing to note is that the L293D simply transmits the signal it receives. It does not change the signal in any case.

Applications:

- Solenoids
- Relays
- DC motors
- Bipolar stepper motors
- High-current/high-voltage loads

Note:

1)This L293 motor driver module is designed such that the output voltage will match the input voltage supplied to the VCC pin. For example, if 12V is provided at the VCC pin, the output will also be 12V.

2)There is no onboard voltage regulator to convert any output voltage to 5V. Please consider this before purchasing — this note is based on practical use