DC 12-24 V 10 A PWM & Analog (Pot) Input DC Motor

This DC motor driver module is designed for brushed DC motors operating in the 12-24 V DC voltage range. Thanks to its compact design, it can be easily used in various applications. It supports a wide power range with a maximum output current capacity of 10 A and offers the user precise speed control via potentiometer or PWM interface.

From hobby projects to R&D prototypes, this product offers an ideal solution for reliable and flexible motor control.

Applications:

It addresses a wide range of applications from hobby robotics to electric mobile platforms, from R&D prototypes to test benches. With the ability to control speed via potentiometer or PWM input, the drive offers a flexible and reliable solution to meet motor control requirements in laboratory and industrial test environments. It stands out with the advantage of stable operation, high current capacity and precise control, especially in low and medium power motor applications.

Connection and Protection:

The product is protected in a compact box. A cable set with connectors for power input and motor output is provided, so that connections can be made quickly and reliably. Integration with external controllers is facilitated by providing two jumper cables for the PWM signal including PWM+ and GND pins. In addition, a function selector switch is provided to allow the user to control the motor speed via potentiometer or PWM input.

Compatibility:

This DC motor driver module is compatible with two-wire brushed DC motors operating in the 12-24 V voltage range. Precise speed and torque control can be achieved with a PWM signal from the processor or an external source. This feature enables flexible use in motor control systems, providing high efficiency in prototype development and industrial applications.

MECHANICAL DIMENSIONS





DC MOTOR DRIVER

Specifications:

- Input voltage: 12-24V DC
- Continuous Motor Current: 10A
- Peak Motor Current: 13 A (short duration)
- Control Inputs: Potentiometer or PWM
- Connectors: Screw terminals (Input/Output), Header pins (PWM/POT/Switch)
- Dimensions: 55 x 40 x 25 mm
- Weight (Wired): 50g
- Cable Length: 10cm
- Operating Temperature: -40/+80 °C

Pinout and Connections:

Pin (Color)	Signal	Voltage
INPUT+	VIN+	+12–24 V DC
INPUT-	VIN-	GND
OUTPUT+	M+	Motor Output (VIN+)
OUTPUT-	M-	Motor Output (VIN–)
PWM	PWM IN	3.3 V / 5 V Logic
GND	PWM GND	GND
SW1 - Pin 1	Mode Select	POT Control Mode
SW1 - Pin 2	Mode Select	PWM Control Mode



Switch Control Mode Settings:



LEFT POSITION (POT CONTROL MODE)



RIGHT POSITION (PWM MODE)