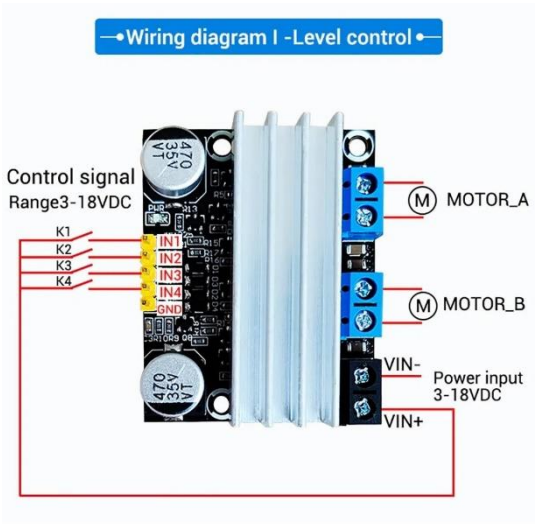
DC 3V-18V 10A PWM Motor Drive Control Module

DC 3V-18V 10A Dual Channel DC Motor Drive Module Forward and Reverse PWM Speed Regulator Dimmer can trigger and control the forward and reverse rotation of the controlled equipment according to needs, such as automatic curtain switch, automatic control of running stroke.

Features:

- Two motors can be controlled independently, each of which can output current 10A with a peak value of 15A.
- Wide power supply range 3-18V, wide signal power supply range 3-18V, 3.3V, 5V level and power supply voltage can be used as control signals
- Low-voltage low-resistance MOS tube is used, which can support low-voltage and high-current, which is very suitable for model competitions.
- Widely used

Wiring Diagram:



Operation Logic table:

Motor drive logic table

IN1,IN2,IN3,IN4 connect to the microcontroller IO or other signal source, MOTOR_A,MOTOR_B connected to the motor.

Motor	Motor status	IN1	IN2	IN3	IN4
MOTOR_A	Forward rotation (speed regulation)	1/PWM	0		
	Reverse (speed regulation)	0	1/PWM		
	Stop	0	0		
	Brake	1	1		
MOTOR_B	Forward rotation (speed regulation)			1/PWM	0
	Reverse (speed regulation)			0	1/PWM
	Stop			0	0
	Brake			1	1

Note: '1' represents a high level,'0' represents a low level,'PWM' represents a pulse width modulated wave,adjusting the duty cycle to change the speed. Wide signal range 3-18v is supported. If the signal is not connected, the default input is 0.

Specifications:

- Dual-channel H-bridge motor drive, which can drive two DC motors or a 4-wire two-phase stepper motor at the same time, or the load can be grounded at one end to control four channels;
- Module power supply voltage: 3V-18VDC;
- Power supply range of signal terminal: 3V-18VDC;
- Single-channel working current is 10A, peak current is 15A, and it is recommended to enhance heat dissipation when current is above 8A;
- Support PWM frequency range: O-2KHz
- Support duty cycle range: 0-100%
- Mounting hole diameter: 3 mm.
- Size: 49*39*14mm
- Weight: 28g

Note:

- **The motor stops first and then reverses :** When the motor is commutation, the motor needs to stop or brake. The recommended time is greater than 0.5 seconds, otherwise the instantaneous current of the immediate commutation may burn the module;
- **Do not reverse the positive and negative poles :** Do no connect the positive and negative poles of the power supply in reverse, otherwise it will burn. Do not connect the power supply to the motor interface.
- **The frequency should not be too high** : In order to improve the effective work efficiency, a small DC motor generally uses 400HZ. The maximum PWM frequency is recommended to be within 2KHZ. If the frequency is too high, the module will easily generate heat.

Package Includes:

- 1 x DC 3V-18V 10A Dual Channel DC Motor Drive Module

Dimensions: