

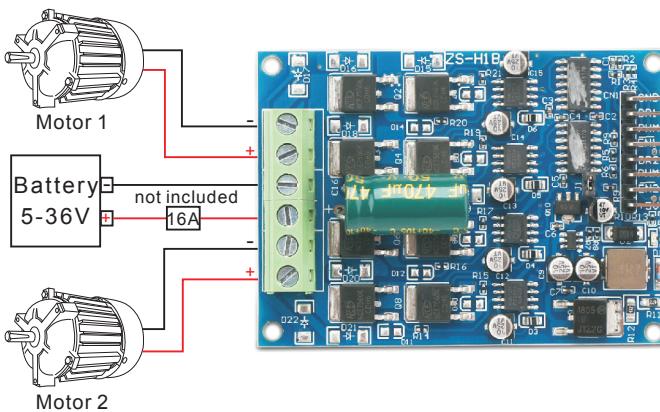
## DROK DC 2-way H-Bridge Brush Motor Driver

### Introduction:

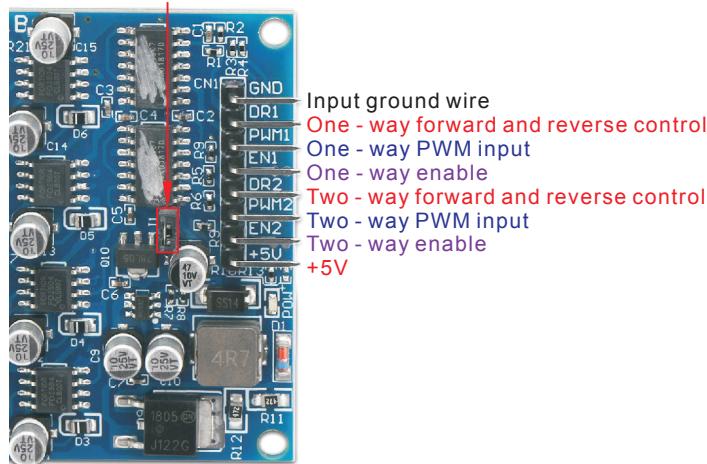
The driver consists of a complete two-chip H-bridge driver chip + N-channel MOSFET with very low internal resistance, which minimizes the switching loss of the MOSFET and improves the power utilization ratio compared with the integrated power chip solution.

### Parameters:

Output channel: 2-way  
 Working voltage: 5-36V (40V max)  
 2 channel max current: 16A  
 Each channel rated current: 8A  
 Each channel output rated power: 96W (12V input); 288W (36V input).  
 Control signal voltage: 3-5V  
 Each channel control signal current: 2-10mA  
 Support PWM frequency range: 2-20K  
 Support PWM duty ratio range: 0-99%  
 Min. PWM effective pulse width: 10US  
 Working temperature: -10°C-80°C  
 Dimension: 70\*51mm



**5V Switch Jumper**  
 (Connected--5v power will be supplied by the board;  
 Disconnected--5v power will be supplied by other external power supply)



### Switch Jumper:

The built-in 5V power supply of the board can be used to supply power to the external control board (such as the single-chip plc system), but it can only provide 20-30MA current and cannot be overloaded. It can also switch to the external 5V power by the wire jumper to power the board. Please supply power strictly according to the connection status of the wire jumper.

### Signal Logic Truth Table:

#### 1 way control signal logic truth table:

Motor forward: EN1=1 DIR1=1 PWM1=PWM (0-99%)

Motor reverse: EN1=1 DIR1=0 PWM1=PWM (0-99%)

Brake (stop immediately with resistance): EN1=1 DIR1=X PWM1=0

Stop (stop slowly by inertia): EN1=0 DIR1=X PWM1=X

#### 2-way control signal logic truth table:

Motor forward: EN2=1 DIR2=1 PWM2=PWM (0-99%)

Motor reverse: EN2=1 DIR2=0 PWM2=PWM (0-99%)

Brake (stop immediately with resistance): EN2=1 DIR2=X PWM2=0

Stop (stop slowly by inertia): EN2=0 DIR2=X PWM2=X

### Note:

1 = high level;

0 = low level;

X = any;

EN1 (2) = enable;

DIR = Forward and reverse control;

PWM duty cycle;

Adjust duty cycle to change speed.

### Cautions:

1. It is recommended adding the fuses, as without fuses on the power supply circuit of the motherboard. The reversed connection will cause some of the chip permanent damage.
2. In the normal operation, the motor output has no short-circuit protection. Please do not man-made short-circuit, because the module power current is large. Once short-circuit, has the possibility of burning circuit and tube. Please use low current low-voltage testing in the first wiring test; then connect the larger current and voltage. Due to the bare board module sold, please attention wiring thread insulation and prohibited strong voltage touch on board parts.
3. Do not connect the drive motor which has obviously inconsistent voltage, current, power, to avoid the unreasonable damage.
4. When switching between positive and negative rotation, it is better to save buffer time on software control, so as to avoid the impact of powerful reverse electromotive force on the MOS tube on the board and reduce the risk of damage.