# Dual H-Bridge Driver Motor Controller Board

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- Dual-channel H-bridge driver working mode creates higher working efficiency. Large capacity filter capacitance, after flow protection diode, more stable and reliable.
- Upgraded product comes with heat sink to improve the reliability and current detection circuit to realize a perfect PID closed-loop design.
- This board has a high speed switch. General coreless motors need 60kHz PWM frequency and this board is designed with a 200kHz switch.
- Suitable for all kinds of toy car motors, semi-conductor refrigeration control, DC motors, electromagnetic deflection coil control.
- This board can withstand high current overload and has brake function which can stop motor quickly. Single power source input voltage range of this board is 3 to 15V, if you use a power source less than 12V, this board is very useful. It can still work even the voltage of a 12V battery is as low as 3V.





### **Description:**

This driver board is specially designed for coreless motor and will work great with coreless motors. It support forward & reverse motor control and PWM speed control. This board uses MOSFET with extremely low internal resistance, with dead band control that minimizes the MOSFET switch losses and improves the utilization rate of power supply. MOSFET driver chip has built-in hardware brake function and energy feedback function. It is a good choice for ordinary DC motor and coreless motor, etc.

### **Specification:**

Model: DBH-1A

Rated Voltage: 5-12 V/DC(14.6V Max.)

Quiescent Current: <30mA±5mA

Operation Current: 0A-30A per channel Max. Internal Resistance (per channel):  $12m\Omega$ 

Impedance Load: 200kHz

PWM Control Duty Cycle: 0%~98%

### **Recommended Frequency:**

Normal motor: 16 KHZ
Coreless motor: 80 KHZ

3. Semi-conductor Refrigeration: 500hz~80kHz

## **Input Voltage Level:**

1. Lower Voltage Level:0 to 5V

2. Higher Voltage Level:2.5-13 V (board is compatible with typical 3.3 V, 5 V, 12 V)

## **Sampled Output Current:**

Sampled output power current for single chip micro controllers sampling to do current-limiting processing.

CT Output Voltage(V)=Current(A) x 0.155 Size:7.2 x 5.7 x 2cm / 2.83 x 2.24 x 0.78"

#### Note:

- 1. Input PWM duty cycle cannot be more than 98%, or the board won't work stably or even be damaged.
- 2. Select PWM frequency according to load type, please use recommended frequency.