HB-25 Motor Controller (#29144)

General Description

The HB-25 motor controller combines the power of an H-bridge with the simplicity of a servo. The HB-25 is more than just a motor driver chip connected to some logic and high current on a PCB. A quality H-bridge involves an efficient thermal design, which is what the HB-25 has accomplished through a machined heat sink and fan to draw air over the H-bridge. Additionally, it uses a thermal bonding agent to transfer heat from the motor driver chip to the heat sink. The result is a high-current motor controller with great thermal characteristics and requiring no additional hardware for cooling.

Before using your HB-25 Motor Controller, read and understand this entire document, including the Precautions section beginning on page 4.

Features

- 25 A continuous current, 35 A surge @ 13.8 VDC
- Works with any size motor up to ½ HP
- Control a DC motor just like a continuous rotation servo
- A single pulse required to set motor speed
- Compatible with all Parallax microcontrollers
- 2 operation modes: control 1 or 2 HB-25's independently from a single I/O line
- Built-in automatic shut-off if invalid pulse widths are received
- Communication Timeout mode option for automatic shutoff

Application Ideas

- Robotics
- Automotive Applications

Resources and Downloads

Check out the HB-25 Motor Controller product page for the example source code and other resources:

http://www.parallax.com/detail.asp?product_id=29144

Interface Connections

+12	Power input terminal, +6 to +16 VDC
GND	Negative side of battery terminal
M1 &	Motor connectors
M2	(Polarity reverses direction)
W	Servo pulse input
R	Not connected
B	Servo ground
J	Mode jumper pins