

Sabertooth dual 12A motor driver

Product Code: DRI0003

Supplier: DFRobot

Introduction

Out of the box, the Sabertooth can supply two DC brushed motors with up to 12A each. Peak currents of 15A are achievable for a few seconds.

Overcurrent and thermal protection means you'll never have to worry about killing the driver with accidental stalls or by hooking up too big a motor.

Sabertooth allows you to control two motors with: analog voltage, radio control, serial and packetized serial. You can build many different robots of increasing complexity for years to come with a Sabertooth.

Sabertooth has independent and speed+direction operating modes, making it the ideal driver for differential drive (tank style) robots and more.

The operating mode is set with the onboard DIP switches so there are no jumpers to lose.

Sabertooth features screw terminal connectors - making it possible for you to build a robot without even soldering.

Sabertooth is the first synchronous regenerative motor driver in its class. The regenerative topology means that your batteries get recharged whenever you command your robot to slow down or reverse. Sabertooth also allows you to make very fast stops and reverses - giving your robot a quick and nimble edge.

Sabertooth has a built in 5V BEC that can provide power to a microcontroller or R/C receiver. The lithium cutoff mode allows Sabertooth to operate safely with lithium ion and lithium polymer battery packs - the highest energy density batteries available.

Sabertooth's transistors are switched at ultrasonic speeds (32kHz) for silent operation.

Specification

- Up to 18V in: 12A continuous, 15A peak per channel.
- 24V in: 12A continuous, 25A peak per channel.
- Synchronous regenerative drive
- Ultra-sonic switching frequency
- Thermal and overcurrent protection
- Lithium protection mode
- Input modes: Analog, R/C, simplified serial, packetized serial
- Size: 2.3" x 3" x .7"
- 59 x 75 x 17 mm

