

Sabertooth 2x32 Quick Start Guide



Congratulations on your purchase of a Sabertooth 2x32 regenerative dual motor driver. Sabertooth 2x32 is a highly flexible and configurable motor driver that supports a number of operating modes. Basic configuration is done with the DIP switches. Advanced setup is done using the Sabertooth 2x32's USB port and a no cost PC program called DEScribe.

DIP Switches used to setup the Sabertooth 2x32

USB port this is used for setup or control

0V is internally connected to B-. It provides a ground (GND) for control circuitry

5V is a regulated 5 volt supply generated by the 2x32. 1 amp current max

S1 is a signal input

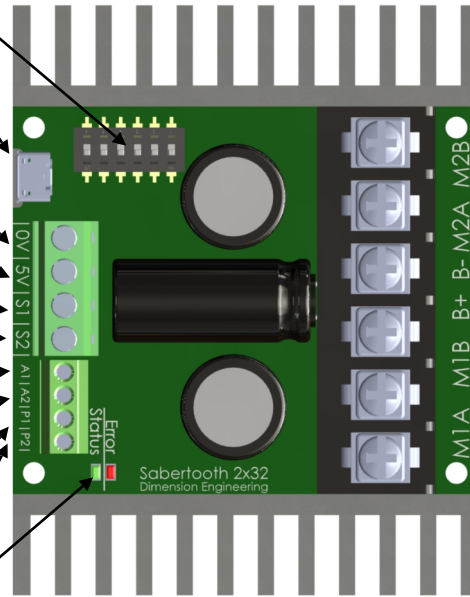
S2 is a signal input

A1 is an auxiliary signal input

A2 is an auxiliary signal input

P1 and **P2** are power outputs. They are used to clamp regenerative voltage, operate motor brakes, or as extra power outputs. 8A max.

Status and Error LEDs indicate conditions



M2A and **M2B** connect to Motor 2

B- connects to the negative terminal of your battery or power supply. It is internally connected to the 0V terminal.

B+ connects to the positive terminal of Your battery or power supply. Max voltage 30V nominal/33.6V absolute

M1A and **M1B** connect to Motor 1

For the full product manual and DEScribe PC software www.dimensionengineering.com/products/sabertooth2x32



Sabertooth 2x32 Operating Mode Reference

Dimension Engineering

Operating modes are selected with the DIP switches. More options are available using the DEScribe software

Analog Control	Radio Control	Serial Control	USB Control
<p>ON ON Power Supply Mixed Linear Bi-direction</p> <p>Battery Independent Exponential One Direction</p>	<p>ON Power Supply Mixed Linear Transmitter</p> <p>OFF Battery Independent Exponential Microcontroller</p>	<p>Power Supply Packet/Plain Text Serial Address 128 No Emergency Stop</p> <p>OFF OFF Battery Legacy Simplified Serial Alternate Address (129) Emergency Stop</p>	<p>ON Power Supply ON USB commands No Emergency Stop</p> <p>OFF Battery Serial Converter Mode Emergency Stop</p>

A complete description of each mode can be found in the manual

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