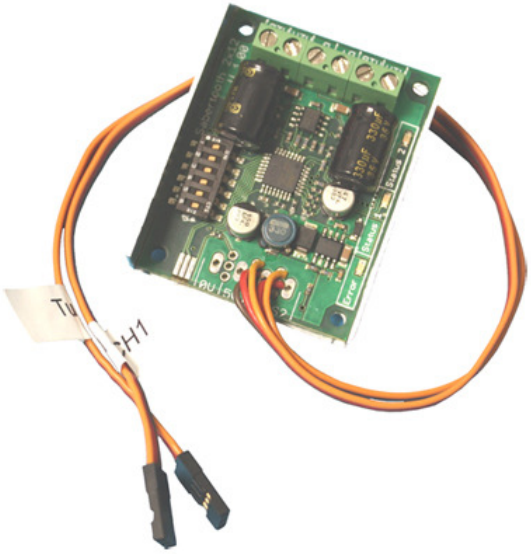
RB-Dim-43
Sabertooth Dual 12A 6V-24V Regenerative Motor Driver



New Features/Updates:

1 Amp Switching BEC
- Can now power your receiver and multiple servos

12 Amp Continuous/25A Peak Power Rating
- A redesigned power stage increases current handling capabilities

Acceleration Ramping
- Selectible by DIP switches. *Replaces the flip function.*

Sabertooth 2X12 R/C is a dual motor driver specifically optimized for use in radio controlled vehicles. It is suitable for medium powered robots, cars and boats. The Sabertooth 2x12 RC replaces our 2x10 RC controllers.

Out of the box, it can supply two DC brushed motors with up to 12A each. Peak currents of 25A 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.

This special R/C edition of our motor driver comes with options for exponential control, autocalibration and built-in mixing. The operating mode is set with the onboard DIP switches so there are no jumpers to lose.

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 vehicle a quick and nimble edge.

Sabertooth has a built in 5V Switching BEC that can provide power to a microcontroller or R/C receiver and a servo or two. 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.

If you need more advanced control features, check out Sabertooth 2X12. For something smaller, check out Sabertooth 2X5 R/C.

Use of our motor drivers with cheap AC adapters is not recommended. **Use a battery or at least put a battery in parallel with a DC supply.**

Need to control a weapon too? BattleSwitch can help.

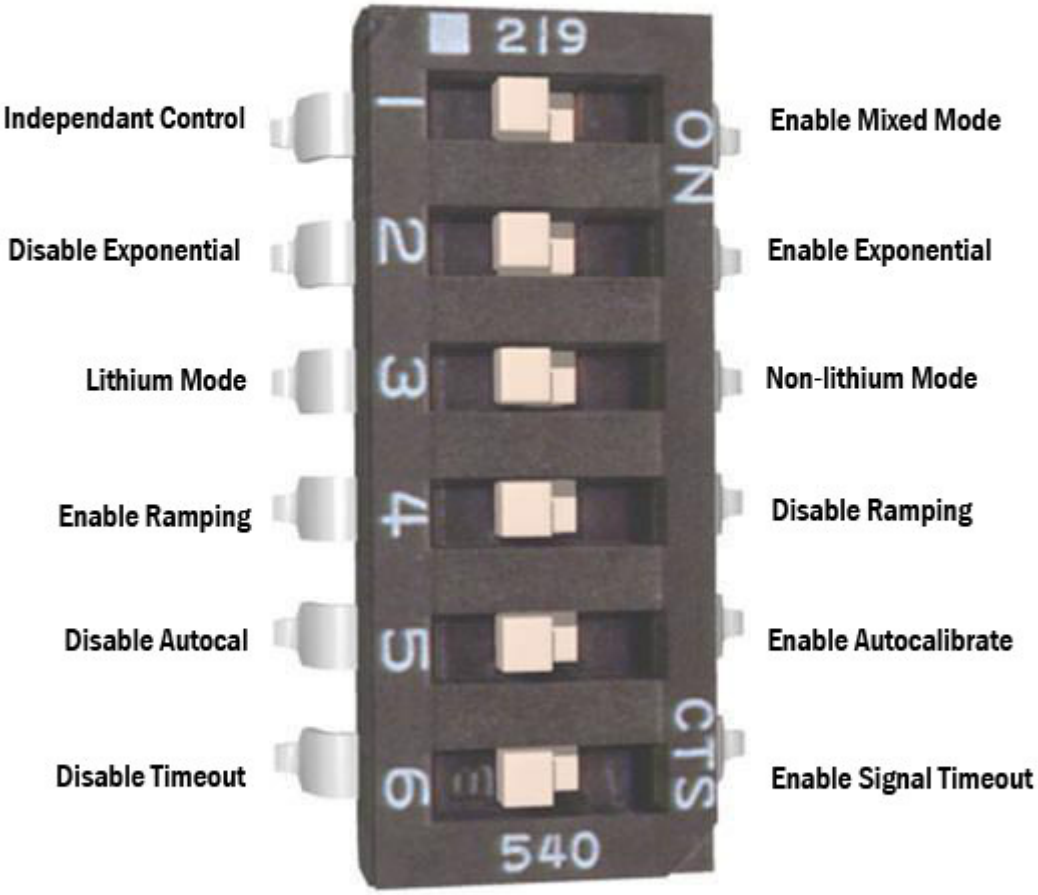
Specifications:

- Up to 24V in: 12A continuous, 25A peak per channel.
- 24V in: 10A continuous, 12A continuous with additional heatsinking/airflow, 25A peak per channel.
- Synchronous regenerative drive
- Ultra-sonic switching frequency
- Thermal and overcurrent protection
- Lithium protection mode

Applications

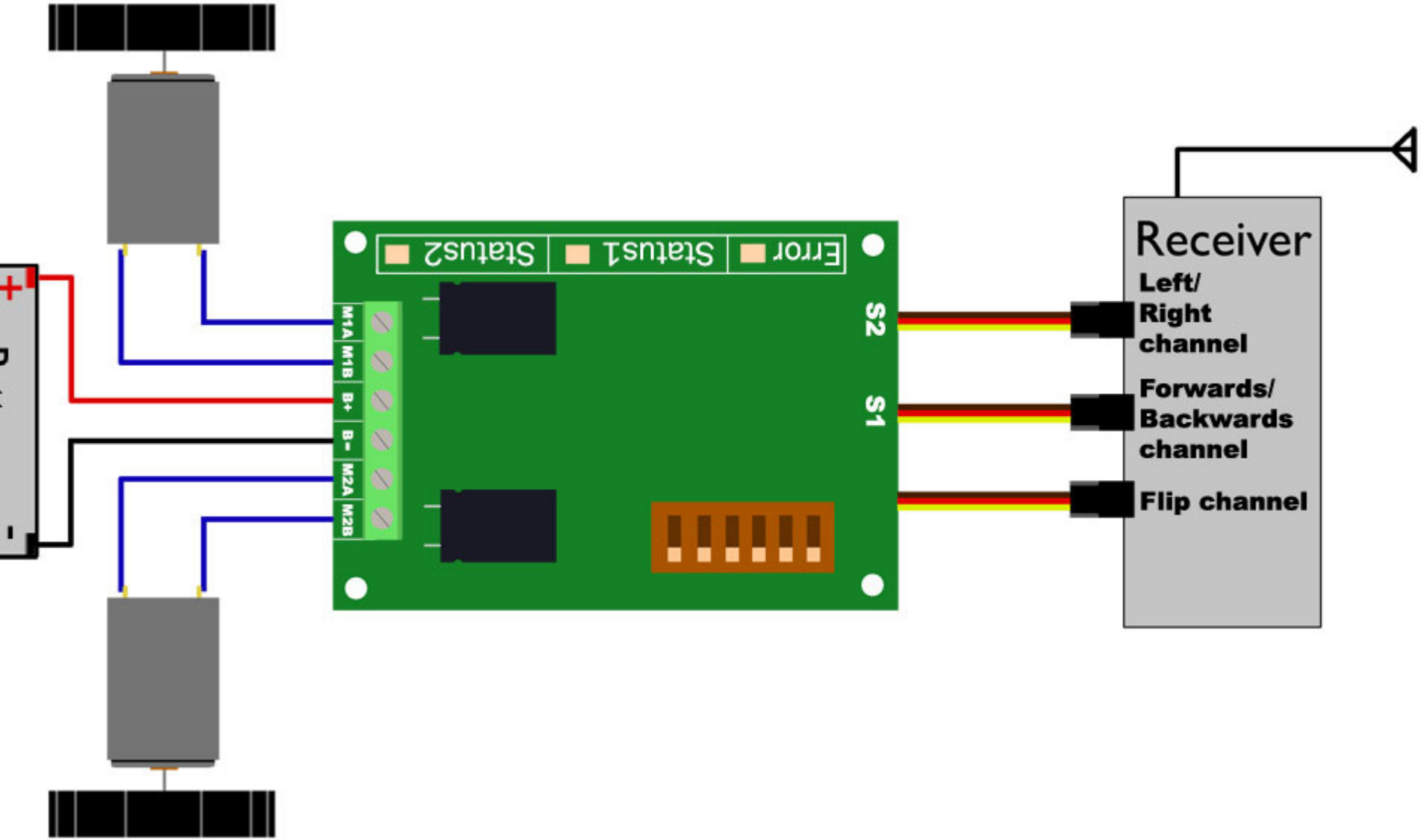
- Combat robots up to 30lb
- Differential drive robots
- Radio controlled tanks, cars and boats
- Roving cyborg bobcats

Option Switch Quick Reference



DimensionEngineering

Sabertooth R/C


Receiver
Left/
Right
channel
Forwards/
Backwards
channel
Flip channel
S2
S1
Error
Status1
Status2
M1A
M1B
B+
B-
M2A
M2B