

Sabertooth 2X12 Quick Start Guide

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Congratulations on your purchase of a Sabertooth 2X12 regenerative motor driver. Sabertooth 2X12 is one of the most flexible and configurable motor drivers on the market. As a result, it must be set to the correct operating mode before use. Below is a generalized hookup diagram of a Sabertooth 2X12. On the reverse side is a chart of some of the most commonly used operating modes.



For full product documentation and manual, please visit http://www.dimensionengineering.com/Sabertooth2X12.htm



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Operating mode quick reference chart All options are set via the switches

0 0 512 U 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Analog control, linear, independent:
	a 0V to 5V analog input is connected to
	terminals S1 and S2. 0V is full reverse,
	5V is full forward, 2.5V is stop.
CT 3 045	Microcontroller pulses, independent
	linear control: An R/C servo signal is
	connected to terminals S1 and S2. A
	1000us – 2000us pulse controls speed
	and direction. 1500us is stop.
ON CTS 095	Radio control, differential drive,
	exponential: An R/C servo signal is
	connected to terminals S1 and S2. The
	Sabertooth will autocalibrate the center
	and endpoints of the signal.
0N CTS 045	Simplified Serial, 38400 Baud: A
	TTL level 8N1 serial data stream is
	connected to terminal S1. Control is
	with single byte commands.
	Motor 1: 1 is full reverse, 64 is stop and
	127 is full forward.
	Motor 2: 128 is full reverse, 192 is stop
	and 255 is full forward.
0 CTS 0 5 6 6 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7	Packetized Serial, address 128: A
	TTL level 8N1 serial data stream is
	connected to terminal S1. Control is via
	a multi-byte packet.
ON CTS	Lithium cutoff option: When switch 3
	is in the down position (in any
	operating mode) the Sabertooth will
	shut down at 3.0V per cell. This
	protects lithium batteries from damage.

Sabertooth features many more operating modes and options not shown here. For the full manual, please visit http://www.dimensionengineering.com/