

The Thor SC (Spin Controller) is a standard Thor 883 speed controller reprogrammed to function as a single direction spinning-mass controller. The Thor SC can handle up to 150A continuous. This is achieved by reworking the controller so that both the forward and reverse components are now dedicated to a single direction.

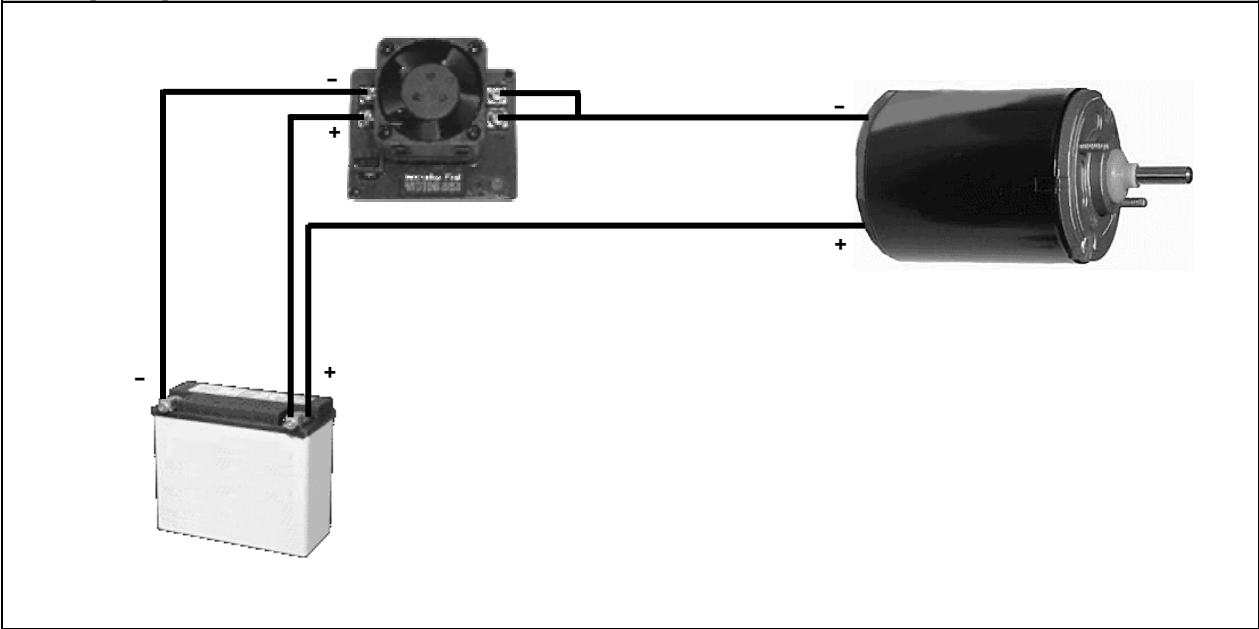
The Thor SC has several major benefits for a spinning robot or an inertia device.

- The first benefit is a user controlled soft start-up. This will help conserve battery capacity since a motor is basically stalled at startup.
- The second benefit is the ability for a spinning robot to spin at a variable rate. This becomes very important if your robot is out of balance or unstable at full speed.
- The final and most important benefit is a special ramp down feature that takes over if you loose your control signal. When the signal is lost, or you turn off your transmitter, the controller softly ramps the dynamic braking from 0% to 100% over a ten second time period, then remains at 100% braking indefinitely (or until the control signal returns). This allows designers to make their inertia devices or spin-bots spin faster and more freely than previously possible. The automatic proportional braking feature enables the robot to meet the spin down time rule during inspection and competition.
- The Thor SC has a special fail-safe so that even if input power is lost it will still go into 'shunt braking' mode to spin down quickly.

<b>Joystick Position</b>	<b>Function</b>
Full Forward	Full Speed Forward
Variable Forward	Proportional Forward
Neutral	Coast or Full Brake based on jumper setting (Coast is recommended)
Variable Reverse	Proportional Braking
Full Reverse	Full Braking

<b>Technical Info</b>	
Part Number	IFI-TSC-24
Control Signal	Standard R/C Type PWM (Pulse Width Modulation)
Thor Operating Voltage	6V to 30V (does not include the fan)
12V Fan Operating Voltage	6V to 16V
24V Fan Operating Voltage	16V to 30V
Maximum Current	150A continuous
Surge Current	200A for < 2 second 300A for < 1 second
Power Connector Type	8-32 Screw Terminals
Signal Connector Type	Use a standard non-shrouded PWM cable (3 wires)
Typical Application	Power one motor with variable speed forward, Variable braking, or off
Weight	0.25 lbs

**Wiring Diagram**



**Thor SC Details**

