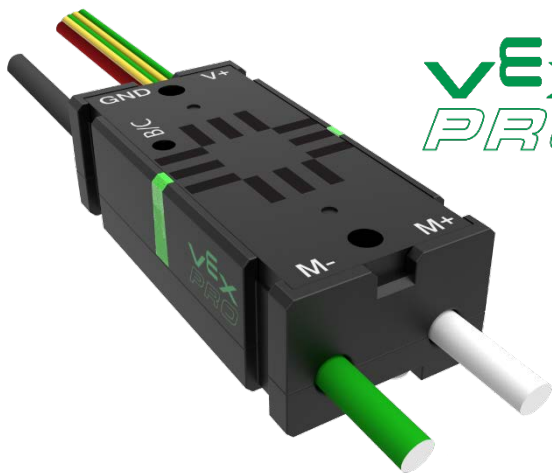
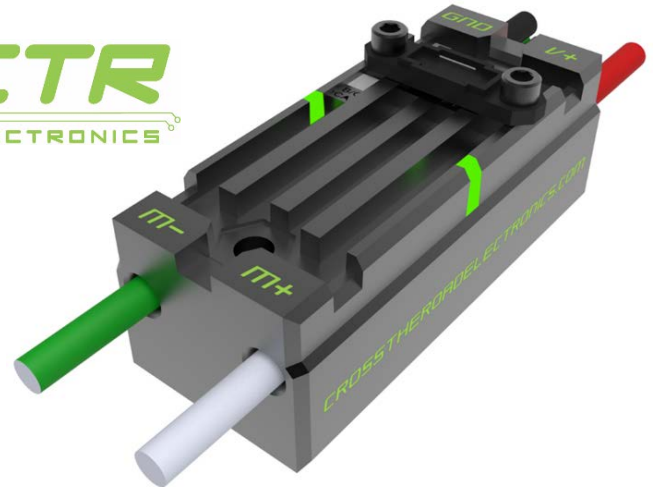


Victor SPX & Talon SRX Info Sheet



VEX
PRO

CTR
ELECTRONICS



Victor SPX: 217-9191

Talon SRX: 217-8080

The Victor SPX and Talon SRX motor controllers were developed for the *FIRST®* Robotics Competition and hobbyist markets through a collaborative partnership between VEX Robotics & CTR Electronics.

Features

- Completely sealed enclosure prevents debris from entering case and causing shorts
- LED indicators blink proportionately to output speed for easy debugging
- Illuminated "Brake/Coast Calibration" button enables one-touch changes and calibration
- Embedded power & output cables will never shake loose during a match
- Sign-magnitude synchronous rectification reduces heat generation at full motor stall
- 15 KHz output switching frequency ensures smooth and precise motor control
- Mirroring of other Victor SPX/Talon SRX controllers (Victors SPX follow Talon SRX, Talon SRX follow Victor SPX, Victor SPX follow Victor SPX)
- Both PWM & CAN support
- Position / Velocity Control using external CAN bus sensor
- Programmable deadband from 0.1% - 25% (4% default)
- Can leverage Pigeon IMU for go-straight/turning/arcing

	Victor SPX	Talon SRX
Housing	Plastic w/ Aluminum Heatsink	Aluminum
Percent output control	✓	✓
Voltage output control	✓	✓
Current limiting & measurement	✗	✓
Ramping	✓	✓
Vbat measurement	✓	✓
Follow the leader (Talons follow Victor, Victor follow Talon, Victor follow Victor, Talon follow Talon)	✓	✓
Data port	✗	✓
On board closed-loop PID control using CAN bus sensors	✓	✓



Motor Speed Controller Technical Comparison

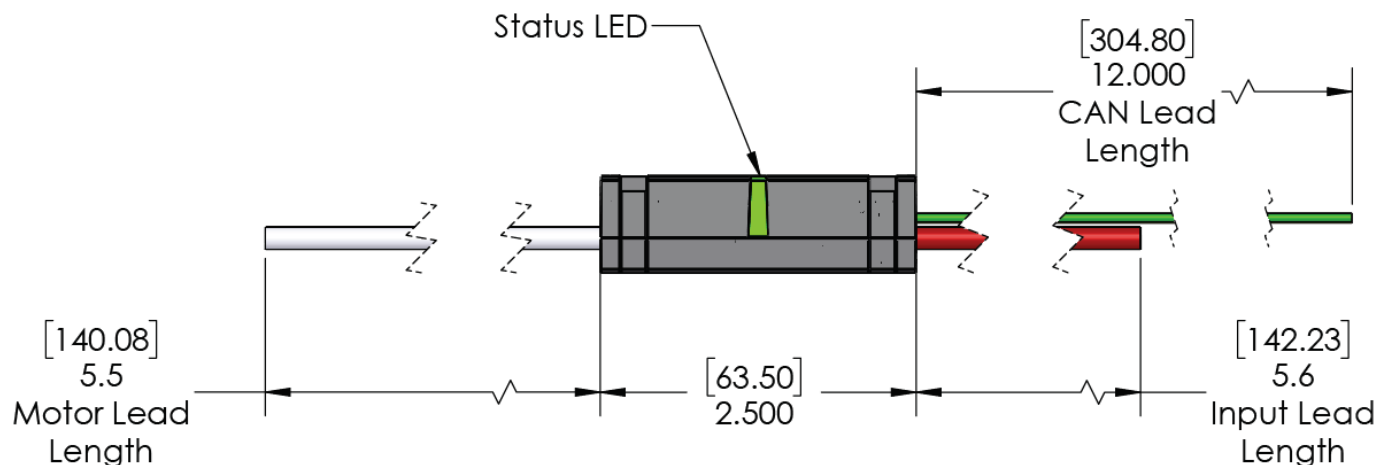
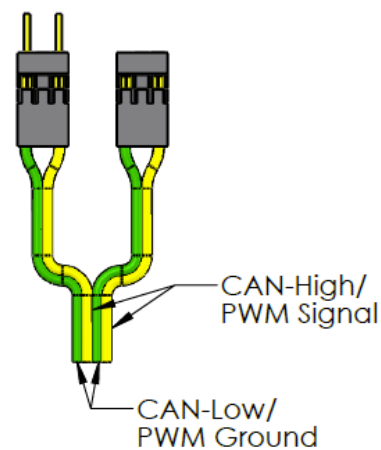
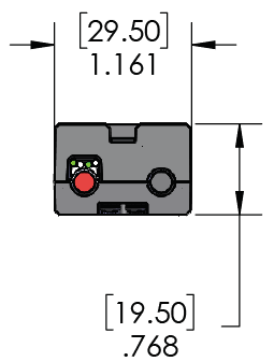
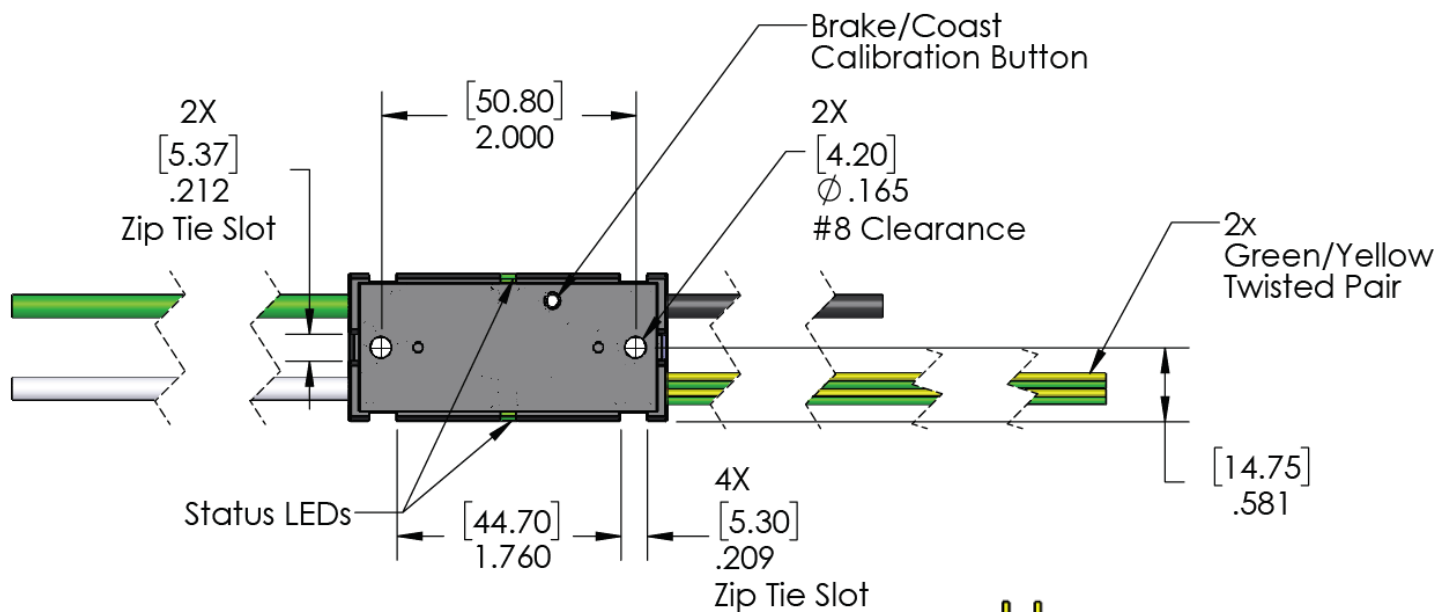


	Victor SPX	Talon SRX	Victor SP
Dimensions	2.50" x 1.16" x 0.77"	2.75" x 1.185" x 0.96"	2.5" x 1.125" x 0.875"
Weight (without wires)	0.12 lb	0.19 lb	0.16 lb
Communication Protocols	PWM, CAN	PWM, CAN, SPI, USART (serial)	PWM
Direct Sensor Input	No	Yes	No
Nominal Voltage	12V	12V	12V
Min/Max Voltage	6 - 16V	6 - 28V	6 - 16V
Continuous Current	60A	60A	60A
Surge Current (2 sec)	100A	100A	100A
PWM Input Pulse (high time)	1 - 2 ms nominal	1 - 2 ms nominal	1 - 2 ms nominal, 0.6 - 2.4 ms max
PWM Input Rate (period)	2.9 - 100 ms	2.9 - 100 ms	2.9 - 100 ms
PWM Output Chop Rate (Switching Frequency)	15 kHz	15 kHz	15 kHz
Minimum Throttle (Deadband)	Adjustable 0.1% - 25% (4% Default)	Adjustable 0.1% - 25% (4% Default)	4%



Victor SPX Interface Dimensions

217-9191





Talon SRX Interface Dimensions

217-8080

