#29138 XP SC500-BL
Brushless ESC

## Features
- Adjustable LiPo Low-Voltage Cutoff
- LiPo Cell Count Auto Detect
- Reversible With Reverse Lockout
- Fully Proportional Brakes
- Adjustable Drag Brakes
- Adjustable Throttle Profile
- Hard Case with Aluminum Heat Sink
- Water Resistant
- Heavy Duty Silicone Wires
- Deans® Ultra Plug® Connector
- 3.5mm Motor Connectors
- Pre-Wired For Optional Cooling Fan

## Specifications
- Description: XP SC500-BL
- Cells: 2-10 LiPo, 6-24 NiMH
- On Resistance: 2.0 mΩ
- Brakes: Proportional
- Motor Limit: 2.55 (1S), 3.33 (3S)
- Reversible: Yes, w/Reverse Only Option
- Low Voltage Cutoff: Adjustable, w/Cell Auto Detect
- Dimensions: 48mm x 62mm x 26mm
- Weight: 105g (Duty)
- Power Wires: 14-Gauge Silicone
- Connector Type: Battery/Deans®, Motor/3.5mm Connectors

## Introduction
Congratulations on your XP Brushless Electronic Speed Control (ESC) purchase. The latest electronics technology along with the design and engineering experience that is responsible for multiple World Championship titles has been incorporated into its design.

Your XP Brushless ESC is water-resistant for maximum durability. Its light and compact design allows for easy installation in most 1/10 vehicles. Simple calibration and a wide variety of tuning options make this ESC perfect for both casual enthusiast and racers. When paired with a RedEye Brushless Motors, you create a potent combination of power and efficiency that brings performance to a new level. More power and less maintenance elevate the motors, you create a potent combination of power and efficiency that brings fun factor by increasing top speeds and reducing down time.

Please read the following before installing and operating your new ESC.

## Programmable Settings
Your ESC comes with pre-programmed default settings. But you can also change the settings based on the type of vehicle and battery used as well as personal performance preferences based on the track you are driving on and your driving style.

### Drag Brake
- Drag brake is the amount of braking achieved when the throttle is returned to neutral. A setting of 0% will make the vehicle free wheel to a stop while higher settings will stop the car faster. Please note that regardless of the drag brake setting, you will still be able to use the brake trigger to manually slow the car.

### Throttle Profile
- This setting adjusts the power delivery of your ESC/motor combination. The Very Soft setting can be used on loose or bumpy track to reduce wheel spin while the Maximum setting works well when high traction is available. Four settings provide options for any track condition.

### Run Mode
- This option of using reverse or eliminating it completely (for competition). With reverse activated, you will still have fully proportional braking. To make settings adjustments, you must first follow the calibration procedure.

### Throttle/Brake Calibration
- You will encounter the Drag brake mode first at 0% and your throttle trim to neutral. Then follow the steps outlined below. Once the calibration procedure is complete, turn on your transmitter, then on the ESC, and begin operating your vehicle. Note: If you choose to make settings adjustments at this time, you can do so immediately after step #6 of the throttle calibration procedure.

### Vehicle Operation
To operate the vehicle, pull back on the throttle trigger to move forward and push forward on the throttle trigger to engage brakes. To engage reverse, push forward on the throttle trigger to maximum brakes. Hold the trigger in this position for at least 3 seconds before returning the throttle trigger to neutral. Now push the throttle trigger forward to reverse the vehicle.

## Battery Management System
- A choice of either LiPo mode or NiMH mode adjusts the low voltage cutoff point. This is critically important when using LiPo batteries that should not, for performance and safety reasons, be discharged below 3.0V per cell. In LiPo mode, the ESC detects whether you are using 2 or 3 cells and adjusts the cutoff accordingly.

## Throttle/Brake Calibration Procedure
1. Power ON transmitter
2. Connect RT to receiver (hold)
3. Power ON ESC
4. Power OFF ESC, then transmitter
5. Power OFF transmitter and ESC

## Installation
- Mount your ESC securely using double-taped tape.
- Install your ESC in a position that allows easy access to all connectors.
- Plug the ESC's receiver wire into the receiver (refer to radio manufacturer's manual).
- To prevent radio interference, arrange ESC wiring so that it is not in close proximity to the receiver antenna wire.
- Connect the three motor leads exiting the ESC to the three leads exiting your motor. If the motor runs backwards when giving it forward throttle, reverse any two motor leads. The motor will now run in the desired direction.
- Always power ON your transmitter before the ESC and power OFF the ESC before the transmitter.

## Safety Precautions
This product is a sophisticated hobby product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or property. This product is not intended to be used by children without direct adult supervision. It is essential to read and follow all instructions and warnings found in this manual prior to installation, set-up, and use, in order for the product to operate properly and to avoid damage or injury.

---

**Associated Electric, Inc.**
2601 Commerce Centre Dr.
Lake Forest, CA 92630 USA
www.teamassociated.com
www.rc10.com
call: (949) 544-7500
toll free: (800) 544-7500