

XP

XP SC200 Electronic Speed Control (ESC) Product No. #29140

Introduction

Congratulations on your purchase of Team Associated's XP SC200 ESC. Perfect for trucks, buggies, and road racing vehicles, this competition inspired Electronic Speed Control (ESC) utilizes the latest digital technology and features easy programming with LiPo Low Voltage Cutoff and Reverse Lockout modes.

THOROUGHLY READING THIS INSTRUCTION MANUAL PRIOR TO INSTALLATION IS HIGHLY RECOMMENDED.

Features

- Utilizes latest SMD MOS-FETS
- Competition Inspired Engineering
- Easy Setup and Programming
- LiPo Low Voltage Mode
- Short Circuit Protection
- Real-Time Braking
- Reverse Lockout For Competition Use
- Oversized Heatsink
- Compact Size

Specifications

Voltage Range	4.8V-8.4V
Internal Resistance	0.001Ω
Momentary Load (1 sec.)	470A
Brief Load (30 sec.)	270A
Continuous Load (300 sec.)	200A
BEC Voltage	5.0V
BEC Current	1.5A
Frequency	2KHz
Reverse	Yes w/lockout
Reverse Limit	Yes (8 seconds)
Motor Limit	17+ turns
Overload Protection	Yes
Set-Up Procedure	Digital/Push Button
Weight	71.0g
Dimension (mm)	49 x 36 x 28

Precautions

- Before installation of the ESC, read the instruction manual thoroughly.
- Make sure that the suppressor capacitors have been soldered to the motor.
- Install the ESC in a position that allows easy access to all connectors and the set-up button.
- Install the ESC so that the power cables are not in close proximity to the receiver and/or antenna. Interference may result.
- Please also refer to the instruction manual supplied with your radio-control system.

Warnings

- ALWAYS unplug the battery after every use and when the vehicle is not in use.
- NEVER leave the vehicle unattended while the battery is plugged in.
- NEVER run the vehicle through water or wet grass. Water may enter the ESC causing a short circuit and possibly a fire.
- NEVER operate the motor with a separate battery while the motor is connected to the ESC.
- NEVER remove the original battery or motor connectors. Doing so will void the warranty.
- ALWAYS observe the correct polarity when connecting the motor and battery. Reverse polarity will result in damage to the ESC and/or other electronic components.
- DO NOT let the heatsink touch any metal objects or bare wires. Damage to the ESC will result.
- ALWAYS be sure that the ESC is mounted so that ample air flow is available for cooling. Never cover the ESC.
- ALWAYS observe the ESC's motor limit. Use of an incorrect motor will void the warranty.

Set-Up Procedure

Before beginning the setup procedure, be sure to set the transmitter's throttle and brake EPAs to 100%, set the throttle trim to neutral, and set the car on a stand so that the wheels are not touching the ground.

1. Turn on transmitter
2. Plug the battery into the ESC
3. Switch the ESC on
4. Press the SET button for at least 3 seconds using the plastic screwdriver supplied
5. The LED now flashes red/green to indicate that the ESC is in setup mode
6. Leave the throttle at neutral and press the SET button again
7. The neutral setting is now stored and the LED lights green
8. Move the throttle trigger/stick to full throttle and press the SET button again
9. The full-throttle setting is now stored, and the LED lights red
10. Move the brake trigger/stick to the full brake/reverse and press the SET button
11. The full brake/reverse setting is now stored, and the LED lights simultaneously 3 times.
12. Then the red/green LED remains on.

Setup is now complete and the ESC is ready to use.

Special Functions

The XP SC200 can be programmed to disable Reverse for competition driving and to disable the LiPo Low Voltage Cutoff when using NiMH batteries.

Disable Reverse - With the ESC connected to the battery, press and hold the set button and switch the ESC on. Reverse will now be disabled. Follow the same procedure to enable reverse.

Disable Low Voltage Cutoff - While the ESC is on, press the SET button twice. The LED will flash green 5 times to indicate that the ESC is in NiMH mode. To return to LiPo mode, press the SET button 2 times and the LED will flash red 5 times to indicate that the ESC is in LiPo mode.

Special Feature

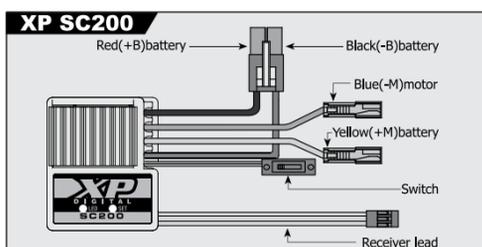
The SC200 ESC features internal protection from overheating. This function protects the SC200 against overheating during operation. If the ESC's temperature exceeds safe levels, operation of the motor will be temporarily suspended. However, steering operation will remain unaffected. During this period, the setup LED will flash green and red simultaneously. Once the ESC has cooled to normal operating temperature, motor operation will be restored.

Overheating may be caused by one or more of the following:

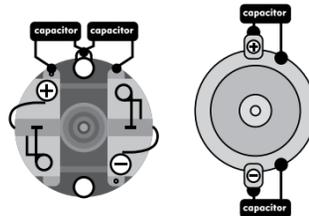
- Driving in reverse in excess of 8 seconds
- Use of a motor that exceeds the factory limit
- Gear mesh or drivetrain components are too tight or other drivetrain problems
- Inappropriate gear ratios
- Repeatedly going from full-reverse to full-forward instantaneously
- Using full brakes too often
- Inadequate air flow to the ESC

Function Check

Function	Position	LED Status
Forward	Partial Throttle	Bright Green
Forward	Full Throttle	Off
Neutral		Dim Green & Red
Brake/Reverse	Partial Throttle	Bright Red
Brake/Reverse	Full Throttle	Off
Low Voltage Cutoff Engaged		Flash Green & Red
Thermal Protection Engaged		Flash Green & Red



Motor Suppression



CAUTION

- Incorrect polarity will damage your ESC and may cause a fire.
- ESC damage or radio interference may occur if the motor is used without suppressor capacitors.
- Never use Schottky diodes with forward/reverse electronic speed controls.

Service

Do not return the equipment to the point of purchase as they are not authorized to honor warranty claims or perform service. Remove the equipment in question from the model. We recommend using a shipper's tracking service. Team Associated is not responsible for any items lost in transit.

Please include the following with your product return:

1. Your full name, mailing address, telephone number.
2. A note, inside the box, describing in detail the problems you are having or the service you are requesting.
3. A copy of the original sales receipt.

Once received, warranty service will be performed and items returned promptly. You will be notified by telephone when an item does not fall under the terms of the warranty and service charges are required.

Please see www.rc10.com/rc/replacexp for details regarding Team Associated's XP Lifetime Product Replacement Policy.

Warranty

Your ESC is guaranteed to be free of manufacturer's defects at the time of purchase. ESCs that have been mishandled, abused, or damaged by the user are not covered under warranty. Associated Electronics, Inc. is not liable for any loss or damage, whether direct or indirect, incidental or consequential, or from any special situation, arising from the use, misuse, or abuse of this product.

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