

# REEDY POWER

## SC480X

BRUSHED CRAWLER ESC

### OWNER'S MANUAL

#27011 Reedy SC480X Brushed Crawler ESC  
#27034 Reedy SC480X Program Card

#### SPECIFICATIONS

Cells	2-3 LiPo, 5-9 NiMH	
Current (A)	80 cont./320 burst	
Resistance ( $\Omega$ )	0.0014 ohm	
Operation	For/Brake/Rev	
Motor Limit	2S LiPo/5-6 NiMH	540/550 12T 3-Slot; 8T 5-Slot
	3S LiPo/7-9 NiMH	540/550 15T 3-Slot; 10T 5-Slot
Low Voltage Cutoff	Yes	
Dimensions (mm)	32 x 37 x 18	
Weight (g)	43g	
BEC	7.4V/5A	
Power Wires	14-Gauge	
Connector	Battery/T-Plug, Motor/Bullet, Aux/FUT-J	

Congratulations on your purchase of Reedy's SC480X Brushed Crawler ESC. The latest electronics technology along with the design and engineering experience that is responsible for 30 World Championship titles has been incorporated into its design.

Trail tested and proven, Reedy's SC480X is a simple to use, economical, and powerful ESC for trail truck and crawler enthusiasts. Excellent forward/reverse/brake feel, a wide range of adjustability, and robust hardware make the SC480X suitable for both trail truck and crawler applications.

**Please read the following instructions before installing and operating your ESC.**

#### FEATURES

- Crawler/Trail Truck specific operation
- Dual auxiliary power leads
- Durable case with aluminum heat sink
- Water-resistant and dust proof
- Precision throttle, reverse, and brake control
- Fully adjustable brake and throttle functions\*
- LiPo low-voltage protection
- Heavy-duty silicone wires
- Low-resistance T-plug connector
- Bullet motor connectors

\*Requires program card #27034

#### 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, for the product to operate properly and to avoid damage or injury.

#### WARNINGS

- Never operate your ESC/motor under no load at high RPM.
- Never apply reverse voltage.
- Always unplug the battery from the ESC when not in use or while in storage.
- Never let children use this product without the strict supervision of an adult.
- Never leave the ESC unattended while powered ON.
- Always use caution when handling your ESC as it may become extremely hot during use.
- Always disconnect the battery and stop using the ESC if it begins to act abnormally.
- Always power ON your transmitter before the ESC and power OFF the ESC before the transmitter.

**Important! ESCs that display evidence of reverse voltage, or internal/external modifications to wiring are not covered under warranty.**

#### AUXILIARY POWER LEADS:

The auxiliary power leads provide 7.4V output which be used to power accessories such as LED lights, winches, and digs.

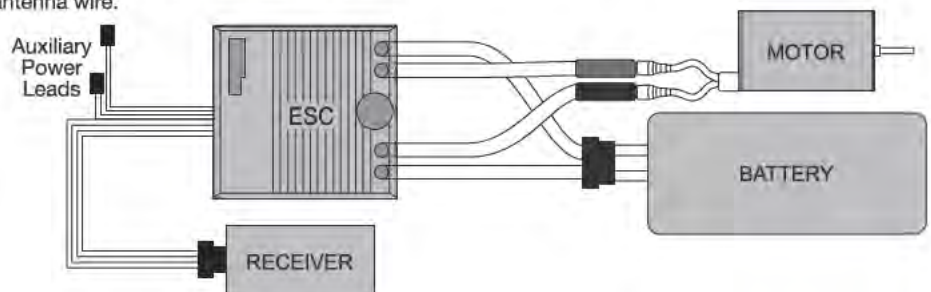
#### LIPO/NIMH MODE

Select the appropriate plug position depending on the type of battery used.

**WARNING: Failure to select the appropriate mode may result in permanent damage to your battery and or fire.**

#### INSTALLATION

- Mount your ESC securely using high-quality double-sided tape.
- Install your ESC in a position that allows easy access to all the connectors.
- Plug the ESC's receiver wire into the receiver (refer to the transmitter manual).
- To prevent radio interference, arrange the ESC wiring so that it is not near the receiver antenna wire.
- Connect the ESC motor leads to the leads exiting the motor observing correct polarity indicated by matching wire colors.
- Always power ON your transmitter before the ESC and power OFF the ESC before the transmitter.



## POWERING ON/OFF

The SC480X does not have an ON/OFF switch. It is powered ON simply by plugging in a charged battery. To power the ESC OFF, unplug the battery. The following procedures should be followed every time you power ON your ESC:

- Confirm that your transmitter's throttle/brake EPA/ATV and D/R (Dual Rate) settings are at 100% and your throttle trim is at neutral.
- Making sure that your throttle trigger is in the neutral position, turn on your transmitter and then plug the battery into the ESC. The ESC will execute a self-test and throttle calibration procedure which is indicated by a beep-beep tone and illuminated red LED
- When the red LED goes out, your vehicle is now ready to drive.

**WARNING: ALWAYS UNPLUG THE BATTERY AFTER YOU ARE FINISHED DRIVING YOUR VEHICLE! FAILURE TO DO SO MAY RESULT IN PERMANENT DAMAGE TO YOUR BATTERY AND OR FIRE.**

## ADJUSTABLE SETTINGS

The pre-programmed ESC settings work very well in most situations, but if you want access to additional settings for fine-tuning you can do so using optional Program Card (#27034).

**Initial Drive** – Throttle applied the moment the trigger is moved from the neutral position to the throttle range.

**Low-Voltage Cutoff** – The cell voltage at which the ESC will shut off to protect the battery.

**Drag Brake** – The brake force applied when the throttle trigger is returned to the neutral position.

**Max. Reverse Power** – The maximum reverse speed allowed relative to the forward speed.

**Punch Control** – The aggressiveness of the application of throttle.

## CHANGE SETTINGS

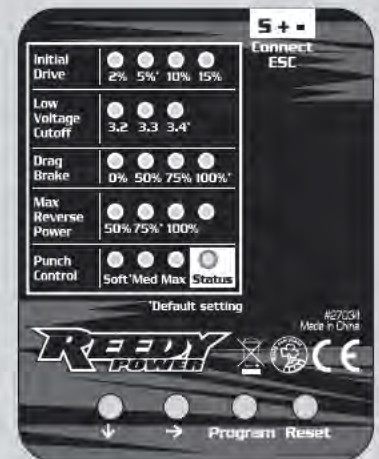
To adjust settings using the Program Card, follow these steps:

- Remove the receiver wire from the receiver and plug it into the Program Card.
- Power the ESC ON by plugging in a charged battery.
- A connection is confirmed when the blue LED blinks two times. Red LEDs will indicate the current ESC settings.
- Use the down arrow key to select the setting that you would like to change, then use the right arrow key to select the desired value. To restore the factory default settings, press the reset key.
- When all selections have been made, press the Program key to save the changes. The blue LED will illuminate for five seconds and shut off when the process is complete.
- Unplug the receiver plug from the Program Card and plug it back into the receiver. You are now ready to drive with the updated settings.

## SPECIFICATIONS


SETTING	VALUE
Initial Drive	2%, 5%*, 10% 15%
Low Voltage Cutoff (V/Cell)	3.2, 3.3, 3.4*
Drag Brake	0%, 50%, 75%, 100%*
Max Reverse Power	50%, 75%*, 100%
Punch Control	Soft*, Medium, Max


\*Default setting



## WARRANTY

Your Reedy SC480X is warranted to the original purchaser for 30 days from the date of purchase, verified by the sales receipt, against defects in material and workmanship. Product that has been mishandled, abused, used incorrectly, used for an application other than intended, or damaged by the user are not covered under warranty. Associated Electrics 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.

 Associated Electrics, Inc. declares that this product complies with the essential requirements and other relevant provisions of the European directive 2014/30/EU.

 The crossed-out wheeled bin means that within the European Union, this product must be taken to a separate waste collection facility at the product's end of life. Do not dispose of this product as unsorted municipal waste.

## TROUBLESHOOTING

Problem	Cause	Solution
After powering ON the ESC, the motor does not work, no sound is emitted	The connections between battery pack and ESC are incorrect.	Check the power connections
		Replace connectors
The motor runs in the opposite direction	The wire connections between the ESC and the motor need to be changed	Verify that the leads are plugged in correctly, + to + and - to -. Swap the wires if necessary.
The motor suddenly stops running while driving the vehicle	The throttle signal from the transmitter has been lost	Be sure the transmitter is working properly and that the batteries are charged Be sure that the ESC is plugged into the receiver correctly
	The ESC has entered Low Voltage Protection mode	Re-charge the battery/install a fully charged battery
	The ESC has entered Thermal Protection mode	Allow the ESC to cool down
Intermittent operation or random stopping/starting	Poor connections	Verify that the battery pack, receiver, and motor connections are correct
	Strong electromagnetic interference	Move to another area to operate the vehicle or wait until the interference has subsided

FCC Note:  
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or change to this equipment. Such modifications or change could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.15 Subpart B.