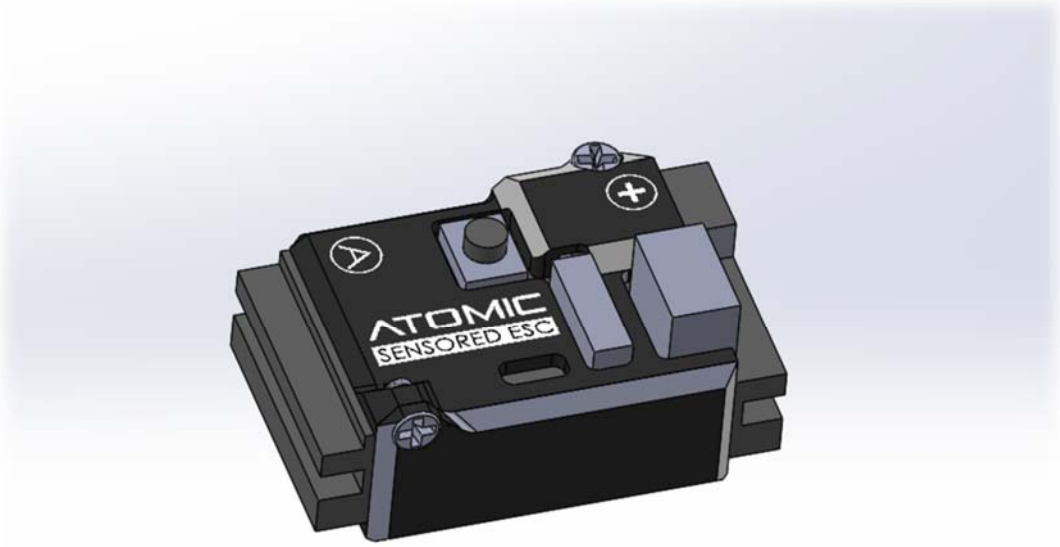
ATOMIC
SENSORED ESC



Thank you for purchasing the ATOMIC SENSORED ESC (electronic speed controller).
We strongly recommend reading through this user manual before use. We do not assume responsibility for any losses caused by unauthorized modifications to our product. We are only responsible for our product cost and nothing else as result of using our product.

Warnings:

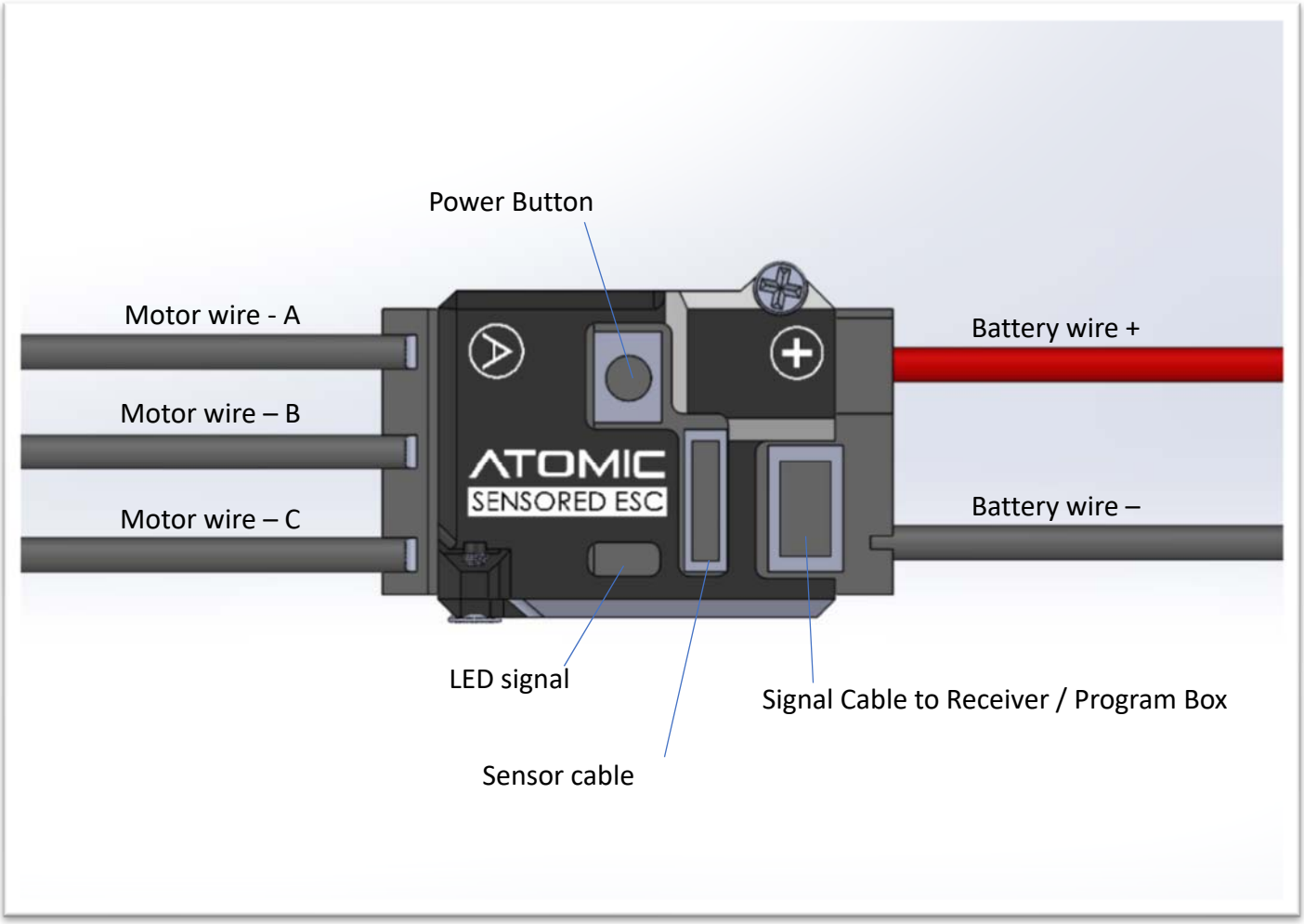
- Ensure all devices or wires are well connected, in order to prevent poor connections that may cause your vehicle to lose control or other unpredictable issues like damage to the device.
- Always disconnect and remove batteries after use, as the ESC will continue to consume current if it's still connected to batteries (even if the system is turned off). Long-time contact will cause batteries to completely discharge and result in damage to batteries or ESC or both.

Features:

- Ultra mini size, easy to put on 1:28 scale RC cars
- Compatible with both sensored or sensorless brushless motors on the market.
- Aluminum casing with excellent heat dissipation.
- Various protections control: motor locked up protection, low-voltage cutoff protection, thermal protection and fail safe.
- Advanced programming via portable LCD program box (sold separately).

Specifications	
Current Rating	24A Continues, 40A Peak
BEC Output	6V – 1.5A, 7.4V -- 1A
Battery Input	2 cell lipo (7.4V), 4 cell NiMh (4.8V)
Dimension:	20*14*7mm
Motor Compatibility	Both Sensored or Sensorless motors (15 or 16mm diameter), 12000Kv or below
Applications	1:28 or 1:24 RC cars

Connections of cables:



1. Motor wire -A to the motor A solder-tabs
2. Motor wire -B to the motor B solder-tabs
3. Motor wire -C to the motor C solder-tabs
4. Connect the sensor cable to the motor (if you using sensored motor)
5. Connect battery wire ”+” to battery “positive” wire
6. Connect battery wire “-“ to battery “negative” wire.
7. Connect the Signal cable to the receiver.

Setup and Calibration of Throttle Range.

Settings in Transmitter (you may need to refer to your transmitter manual):

1- **Set "Throttle" High Point** (or EPA, or ATV) **to 100%.**
2- **Set "Brake" High Point** (or EPA, or ATV) **to 100%.**
3- **Set "Throttle Curve" or Throttle Exponential** (EXP or EXPO) **to 0.**
4- **Set Throttle Trim to Center (Neutral).**
5- **Set Throttle Sub-trim to Center (Neutral).**
6- **Set Throttle Channel to "Normal"**
   *** **(for Futaba transmitter, Throttle channel may require to set to "Reverse")**

Calibration the Neutral, Forward and Backward endpoint to the Electronic Speed Control (ESC):

For safety precaution, remove the motor pinion before calibration. Or put the car on the car stand, to make sure the wheels are elevated from surface.

1- Switch on transmitter and throttle stick at neutral position.
2- Connect the battery to ESC
3- Press and hold the ESC power button, until a BLUE Led light up.
4- When the BLUE Led light up, ESC is in Throttle Calibration mode and the neutral position is saved in the ESC.
5- Move the throttle to the full throttle position, then the BLUE Led will be flashing until a solid BLUE Led will be light up. Light up BLUE Led represent the full throttle position has been set.
6- Move the throttle stick to the full brake position, then the RED Led will be flashing until a solid RED Led will be light up. Light up RED Led represent the full brake position has been set.
7- Move the throttle stick back the neutral position again, then the flashing RED & BLUE (purple color) Led will be light up that means throttle range setting has been completed.
8- Reboot: Power off the ESC and Power on it. After reboot the ESC now is ready for run.

LED Signals	
Throttle Neutral	Blue
Full Throttle	Blue + Red
Full Backward	Red