ABOUT COBRA 10

Motors

Please note that while the Cobra 10 is capable of handling incredible amounts of power, your motor must also be up for the task. Always run your motor within the manufacturer's specs. Monitor motor, battery, and controller temps carefully and never let the motor get above 180°F. Excessive heat in the motor can damage the motor, the Cobra 10, and your batteries.

Gearing

Always start with stock gearing. If you wish to change the gearing, motor, or battery, you must check your motor temperature frequently on the first run. If the motor gets too hot, reduce the pinion size, increase the spur size, or reduce the pack voltage.

Programming

The Cobra 10 features a fully programmable Castle feature set using the included FREE Castle Link V4 USB adapter and freely downloadable NEW Castle Link Windows™ software. (Windows 10+ required). It also offers convenient transmitter programming for six common adjustable settings including cutoff voltage and drag brake.
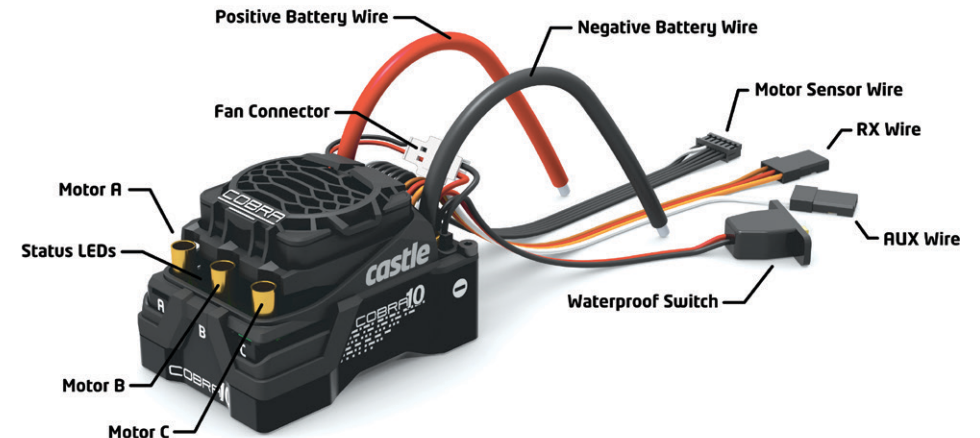
Data Logging

The Cobra 10 features data logging. You will be able to measure and record important power system information during your race, turn by turn. After your run, you can download and analyze this log using the Castle Link USB adapter. You will be able to inspect many parameters including battery voltage, motor RPM, ESC temperature, and more. Additional information about using data logging features can be found in the Driver's Ed Guide ("Data-Logging").

castlecreations.com

COBRA 10
32-BIT 1:10 SCALE WATERPROOF ELECTONIC SPEED CONTROL

QUICK START GUIDE

OVERPOWERING RC SINCE 1997   castle

GETTING STARTED

1. Solder a high quality battery connector to the ESC (see *Driver's Ed Guide "Connectors and Power Wiring"*).

2. Mount the ESC and motor into the vehicle.

3. Connect motor to the ESC (see *Driver's Ed Guide, "Motor Wiring"*).

4. Plug the RX wire and AUX wire in. (See RECEIVER CONNECTION section on the opposite side)

5. Calibrate your ESC to your radio. (See *Driver's Ed Guide, "How to Calibrate the ESC"*).

YOU ARE NOW READY TO GO!

Positive Battery Wire — Negative Battery Wire — Motor Sensor Wire — RX Wire — Fan Connector — Motor A — Status LEDs — AUX Wire — Waterproof Switch — Motor B — Motor C

COBRA 10 SPECIFICATIONS

Application Guidelines	Cobra 10 is designed for use in 1:10 scale vehicles weighing up to 7lbs. and 1:8 scale buggies geared for off road racing weighing up to 9lbs.
Input Voltage Range	Min: 2S LiPo, Max: 6S LiPo (Note: while the ESC is capable of up to 25.2V, the motor of your choice may only be capable of lesser voltage. Always use the lesser of the two values.)
BEC Specifications	5.0V - 8.0V adjustable in 0.1V increments (8A Peak); default 5.5V
Waterproof*	Yes
Sensors	Yes, with pre-installed Direct Connect Sensor Wire.
Product Use Statement**	• Applying voltages higher than 25.2V will cause irreparable damage to your controller, voiding the warranty. • Recommended battery capacity for 1:10 and 1:8 scale vehicles is 5000mAh. We recommend using 30C continuous discharge or higher LiPo batteries (or high quality 25C batteries such as Traxxas® Power Cell). • The Cobra 10 uses 4.0mm motor bullet connectors directly on the ESC and the battery input wires are bare. You must add the connector of your choice to the battery leads. We recommend a high current connector rated for 70+ amps.

RECEIVER CONNECTION

RX Wire	Plug the RX wire into the throttle (#2) channel on your receiver.
AUX Wire	The AUX wire allows you to adjust a setting "on-the-fly" using an auxiliary channel on your receiver. The AUX wire function is disabled by default and is programmable via Castle Link. Plug this wire into the auxiliary (#3/#4) channel on your receiver.

*Not intended for operation while submerged in liquid. If unit is operated in wet conditions, rinse with fresh water to remove dirt or corrosives, then fully dry unit. The cooling fan must be removed prior to driving in wet conditions. It is not waterproof.

**Failure to adhere to the Product Use Statement constitutes a violation of the warranty agreement and will result in non-warranty service fees to repair or replace damaged products.

For more detailed information regarding Getting Started, Throttle Calibration, using Castle Link, or Transmitter Programming, please read the Driver's Ed Guide by visiting https://home.castlecreations.com/cobra10. You can also use your smart device's camera and this QR code to open the link.

TRANSMITTER PROGRAMMING REFERENCE

1.Brake/Reverse Type
- • With Reverse*
- • • Without Reverse
- • • • Crawler Reverse

2.Voltage Cutoff
- • Auto-Lipo*
- • • None

3. Brake Amount
- • 25%
- • • 50%*
- • • • 75%
- • • • • 100%

4. Drag Brake
- • Disabled*
- • • 10%
- • • • 20%
- • • • • 30%
- • • • • • Crawler Full On

5. Motor Type
- • Brushless*
- • • Brushed Reversing

6. Motor Direction
- • Normal*
- • • *Reverse*

Default Setting

AUDIBLE ALERT REFERENCE

• •	Start Fail
• —	Low Voltage Cutoff
— •	Over-Current
• • •	Sensors Lost
• • —	Radio Glitch
• — •	Over-Temperature
• — —	Excessive Load
— • •	AUX Wire Radio Glitch
— • —	BEC Over-Temperature
— — •	Motor Over-Temperature

COBRA10

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