ABOUT THE COPPERHEAD 10

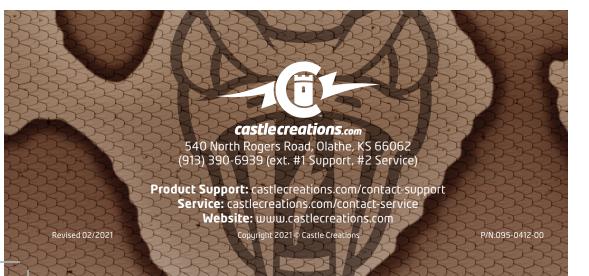
Motors

Please note that while the Copperhead 10 is capable of handling significant 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 100° C (212° F). Excessive heat in the motor can damage the motor, the Copperhead 10, and the batteries.

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

The Copperhead 10 is programmable via transmitter (see *Driver's Ed Guide*) or settings may be programmed via computer with a Castle Link USB adapter (coupon for free adapter included in package). Program with a mobile device using a Castle B•Link Bluetooth® Adapter (sold separately) or using a Castle Field Link Portable Programmer (sold separately). See the Drivers' Ed Guide for more instructions on transmitter programming and the Castle Link system (*"Tuning with Castle Link" and "Transmitter Programming"*).

The Copperhead 10 features *Data Log Lite*. 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 Castle Link. You will be able to inspect many parameters including battery voltage, motor RPM, ESC temperature and more. *Data Log Lite* maximizes use of memory space by providing access to the most important data available. Additional information about using the data logging features can be found in the Driver's Ed Guide ("Data Logging").





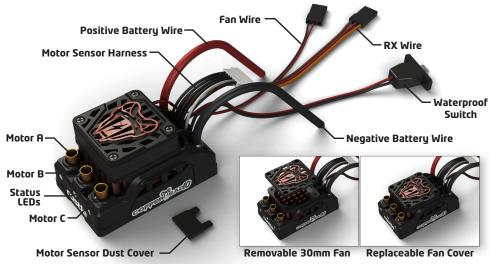
COPPERHEAD 10 SPECIFICATIONS

Application Guidelines	1/10 th scale RC Hobby vehicles weighing up to 7.5lbs.	
Input Voltage Range	Min: 2S LiPo, Max: 4S LiPo, 16.8V (Do not use 4S LiHV)	
BEC Specifications	Selectable, 5.5V or 7.5V (6A peak), default 5.5V.	
Sensors	Yes, with pre-installed Motor Sensor Harness (dust cover included in package).	
Product Use Statement	 Applying voltages higher than 16.8V will cause irreparable damage to your controller. The Copperhead 10 is a high-performance controller; you must use high-discharge cells in your high-performance application to ensure vehicle performance (see Driver's Ed Guide, "A Word About Batteries"). The Copperhead 10 requires the use of connectors designed for 50+ amps continuous. Ex. Castle 4.0mm Polarized Connectors (Driver's Ed Guide, "Connectors and Power Wiring"). The Copperhead 10 is not intended for human or animal propulsion. Failure to adhere to the Product Use Statement constitutes a violation of the warranty agreement, and will result in nonwarranty service fees to repair or replace damaged products. 	

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. Install the sensor dust cover or connect the motor sensor harness and wire (necessary to retain the RX wire).
- 5. Plug in the RX wire into throttle (#2) and fan wire into auxiliary (#3/#4).
- 6. Calibrate your ESC to your radio. (See below).

YOU ARE NOW READY TO GO!



THROTTLE CALIBRATION

- 1. Radio on, battery plugged in, ESC off.
- 2. Hold full throttle, turn ESC on (green LED).
- 3. When red LED flashes, go to full reverse.
- 4. When yellow LED flashes, go to neutral.
- 5. Armed and ready!



DRIVER'S ED GUIDE

www.castlecreations.com/CH10DEG

For more detailed information regarding Getting Started, Throttle Calibration, using Castle Link, or Transmitter Programming, please read the Driver's Ed Guide by visiting:



Or scan this QR code with your smart device to open the link.

TRANSMITTER PROGRAMMING REFERENCE			
 Brake/Reverse Typ 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* Reversing 	
	AUDIBLE ALERT REFE	RENCE	
• •	Start Fail		
• -	Low Voltage Cutoff		

• •	Start Fail
• _	Low Voltage Cutoff
• • •	Sensors Lost
• • -	Radio Glitch
• - •	Over-Temperature
- • -	BEC Over-Temperature
• • •	Data Log Full Warning
•	Motor Over-Temperature

NOTE: 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. Fan is not water resistant. Remove the fan from the ESC before exposure to liquids.