HYDRA X 8S
WATER-COOLED MARINE SPEED CONTROL

QUICK START GUIDE

OVERPOWERING RC SINCE 1997

castle

ABOUT THE HYDRA X 8S

Motors	Please note that while the Hydra X 8S 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 100° C (212° F). Excessive heat in the motor can damage the motor, the Hydra X 8S, and the batteries.
Prop Size	Always start with a smaller prop size. If you wish to change the prop, motor, or battery, check your temperatures often on the first run. If the electronics get too hot, decrease the prop pitch or diameter, or reduce the pack voltage.
Programming	Programming The Hydra X 8S 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 utilize product discount in lieu of free adapter). See the Drivers' Ed Guide for more instructions on transmitter programming and the Castle Link system ("Tuning with Castle Link" and "Transmitter Programming").
Data Logging	The Hydra X 8S 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 Castle Link. You will be able to inspect many parameters including battery voltage, motor RPM, ESC temperature and more. Additional information about using the data logging features can be found in the Driver's Ed Guide ("Data Logging").

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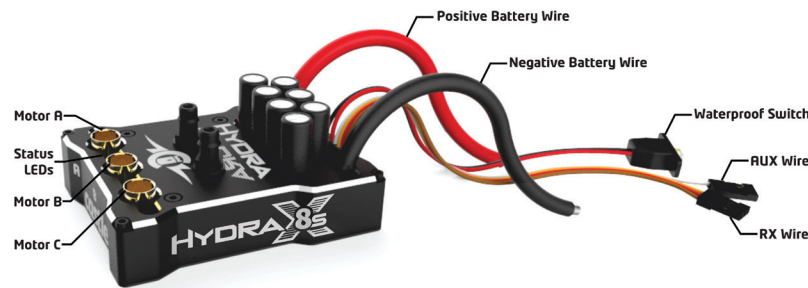540 North Rogers Road, Olathe, KS 66062
(913) 390-6939 (ext. #1 Support, #2 Service)

Product Support: castlecreations.com/contact-support
Service: castlecreations.com/contact-service
Website: castlecreations.com

HYDRA X 8S SPECIFICATIONS

Application Guidelines	Hobby boats up to 36"
Input Voltage Range	Min: 3S LiPo, Max: 8S LiPo, 33.6V
BEC Specs	Adjustable from 5V to 8.5V (8 A peak), default 5.5V
Sensors	Yes, with optional Sensor Harness (P/N 011-0108-00)
Product Use Statement	• Applying voltages higher than 33.6V will cause irreparable damage to your controller. • The Hydra X 8S 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 Hydra X 8S requires the use of connectors designed for 150+ amps continuous. Ex. Castle 6.5mm polarized or 8mm bullet (Driver's Ed Guide, "Connectors and Power Wiring"). • The Hydra X 8S 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 non-warranty 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. Plug in the RX wire into throttle (#2) and AUX wire into auxiliary (#3/#4).

5. Calibrate your ESC to your radio. (See *below*).

YOU ARE NOW READY TO GO!

- Positive Battery Wire
- Negative Battery Wire
- Waterproof Switch
- AUX Wire
- RX Wire
- Motor A
- Status LEDs
- Motor B
- Motor C

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

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://www.castlecreations.com/HydraX8sDEG

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

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.

TRANSMITTER PROGRAMMING REFERENCE

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

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

5. Motor Type
- Brushless*
- • Brushed Reversing

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

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

6. Motor Direction
- Normal*
- • Reverse

*Default Setting

AUDIBLE ALERT REFERENCE

• •	Start Fail
• —	Low Voltage Cutoff
— •	Over-Current
• • —	Radio Glitch
• — •	Over-Temperature
• — —	Excessive Load
— • •	AUX Wire Radio Glitch
— • —	BEC Over-Temperature
• • • •	Data Log Full Warning