

CRAWLMASTER V2

1/10th scale Rock Crawler Speed Controller for Sensorless Brushless Motors

1.0 Features

- AM32 programming compatible
- Advanced 32 bit MCU
- 3s to 4s LiPo input
- onboard 5v 2a switchmode BEC
- 38x27x4.6mm
- 7 grams (bare board)
- Brushless Sensorless only
- 40a continuous
- Computer programmable features
 - Voltage cutoff
 - Drag brake
 - Timing
 - Sine startup for lower speed operation
 - forward only mode
 - Instant reverse mode
 - Motor direction

2.0 Connection

- Tools and Parts required:
 - Wire cutters
 - Wire strippers
 - Soldering iron (70W)
 - Rosin core electrical solder
 - Battery connector
 - Wires (16ga or larger recommended)

2.1 Soldering your wires

The battery connector must be added to the power side of the controller. The positive is labeled + and negative -. The polarity MUST BE CORRECT or the controller will be damaged. Strip enough insulation off of the wires to solder on your battery connector and to the controller leads. After the connector is soldered and insulated check one more time to make sure the polarity is correct before plugging in a battery.

Solder your motor directly to the ESC or solder wires with bullets that match your motors needs. 4 mm is industry standard for 1/10th scale applications

2.2 Motor direction

After initiation - if the motor runs backwards while the ESC light is green, swap any two motor wires to reverse the direction of the motor. Alternatively, reverse motor direction in the AM32 programmer

2.3 Connecting to the receiver

Connect the receiver lead to the throttle channel on your receiver. Do not connect a battery or external BEC to the receiver unless the red wire is removed from the ESC's receiver lead. Be sure to insert plug with correct polarity.

3.0 Calibration

Turn on the system by plugging in your battery. The ESC should beep to indicate arming, beep the number of lipo cells to autodetect cutoff voltage, and then be silent and ready for action. Please view the video guide if you want to hear the tones. If your ESC beeps quickly and continuous, it indicates that the radio signal is not detected. Be sure your RX is on, bound, and the RX plug is correct into the RX.

4.0 Using your ESC

After arming, the ESC is ready to use. There is no on/off switch on this ESC, so the battery must be unplugged after use to avoid battery damage.

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Troubleshooting

- Drag brake or Throttle Damping doesn't work properly
 - Recalibrate ESC to radio
 - Ensure that neutral setting on radio is adjusted properly
 - Reprogram ESC
- No lights on ESC
 - Check that battery is plugged in, and polarized correctly
- No power to motor
 - Ensure motor is plugged into ESC properly
 - Ensure motor is in good condition and spins freely
 - Ensure Battery is plugged into ESC properly
 - Ensure ESC is arming and plugged into RX properly
 - Ensure Battery is fully charged
- ESC wont arm (all lights blinking)
 - Double check that radio is on, and that ESC is plugged into RX properly
 - Try adjusting neutral on your transmitter, or reversing your throttle channel

If you have further troubles, contact us at info@HolmesHobbies.com