

Brushless ESC

Thank you for purchasing the Dromida brushless ESC.

Read this manual completely before use. Damage resulting from misuse or modification will void your warranty.

The Dromida brushless ESC was designed for the Dromida brushless motor. Use with any other motor other than the Dromida brushless motor is prohibited and will void your warranty.



IMPORTANT PRECAUTIONS

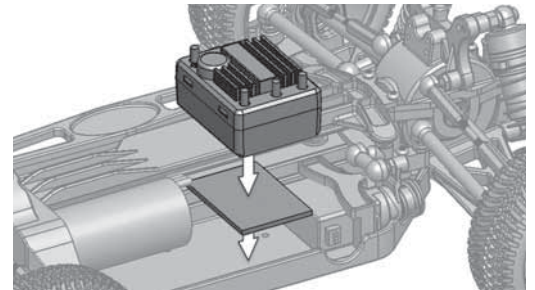
- Always monitor ESC, motor and battery temperatures during running.
- Disconnect the battery from the ESC immediately if the ESC or battery becomes hot. Allow the ESC or battery to cool completely before reconnecting.
- Never use more than a 2S LiPo or 7-cell NiMH battery.
- Always mount the ESC in a location where air can flow freely across it during operation.
- Always disconnect the battery from the ESC when not in use.
- Make sure the battery is fully charged before connecting to the ESC.
- Do not attempt to use the brushless ESC with a brushed motor.
- Use heat shrink tubing to insulate any bare wires between the motor battery and ESC to prevent any short circuiting.
- The ESC may become hot during running. Allow the ESC to cool before touching.
- Never turn on the ESC before plugging it into the receiver and switching on the transmitter.
- Dromida is not responsible for incidental damage or personal injury as a result of misuse of this product.

INSTALLATION

Use a quality double-sided tape to install the ESC and on/off switch to the chassis. It is recommended that you locate the ESC between the servo and the brushless motor on the chassis for best results. Make sure when locating the switch that it does not interfere with any moving parts or the vehicle's body.

Once the ESC is installed onto the chassis, connect the three motor wires from the ESC to the motor wires on the brushless motor. If the motor runs in reverse, swap any two of the motor wires.

Insert the receiver wire from the ESC into channel 2 of the receiver. Make sure to install the wires per the receiver manufacturer's specifications.



THROTTLE CALIBRATION

Before the ESC can be used, throttle calibration must be performed to ensure the throttle is set up properly. Be sure that your throttle trim is set to ZERO before performing calibration and that throttle end points and dual rates are set to maximum.

NOTE: We recommend that you prop the vehicle up off the ground to prevent it from driving off the surface in case the calibration is not performed properly.

1. With the ESC turned off, turn on the transmitter.
2. Press and hold the "SET" button on the on/off switch. Then, switch on the ESC. When the red LED begins to flash, release the button immediately.
3. With the transmitter throttle at neutral, press and release the ESC "SET" button. The green LED should flash one time.
4. With the transmitter throttle at full throttle, press and release the ESC "SET" button. The green LED should flash two times.
5. With the transmitter throttle at full reverse, press and release the ESC "SET" button. The green LED should flash three times.
6. After the calibration is completed, wait at least three seconds before giving any transmitter input.

NOTE: If you do not release the "SET" button once the red LED begins to flash, the ESC will enter the program mode. If this happens turn the ESC off and start over.

LED STATUS IN NORMAL RUNNING

- When the throttle is at neutral, all LEDs should be off.
- When running forward, the red LED will illuminate.
- At full throttle, the Red and Green LEDs will illuminate.
- During braking, the red LED will flash quickly.

ALERT TONES

When you turn on the ESC it checks the battery's voltage. If the battery is out of the normal voltage range it will alert you with a "beep-beep....beep-beep....beep-beep."

If the throttle signal is abnormal it will alert with a "beep.....beep.....beep."

VOLTAGE PROTECTION

The Dromida brushless ESC is equipped with a "LVC" (Low Voltage Cut-off) to protect LiPo batteries from being drained too low. If the LiPo battery is lower than the designated cut-off for more than 2 seconds the ESC will cut off the output power. The ESC cannot be restarted if the voltage of each LiPo cell is lower than 3.5V.

OVERHEAT PROTECTION

If the temperature of the ESC is over the factory preset temperature for 5 seconds, the ESC will cut off the output power. If this happens, check for binding or broken parts on the vehicle.

THROTTLE SIGNAL LOSS PROTECTION

The ESC will cut off the output power if the throttle signal from the transmitter is lost for 0.2 seconds.

PROGRAMMING

Running Mode: This function adjusts the running mode between forward/brake and forward/brake/reverse.

Drag Brake Force: This function adjusts the amount of drag brake applied at neutral throttle to simulate a slight braking effect of a neutral brushed motor while coasting.

Low Voltage Cut-Off (LVC): This program is used to prevent the LiPo battery from over-discharging. The ESC monitors the battery's voltage. At any time, if the battery's voltage is lower than the designated value, the output power will be reduced to 50%. After 10 seconds the ESC will completely cut the output power off.

Start Mode (Punch): This function adjusts the amount of initial power when the trigger is applied.

Maximum Brake Force: This program adjusts the amount of overall brake force applied when at full brake.

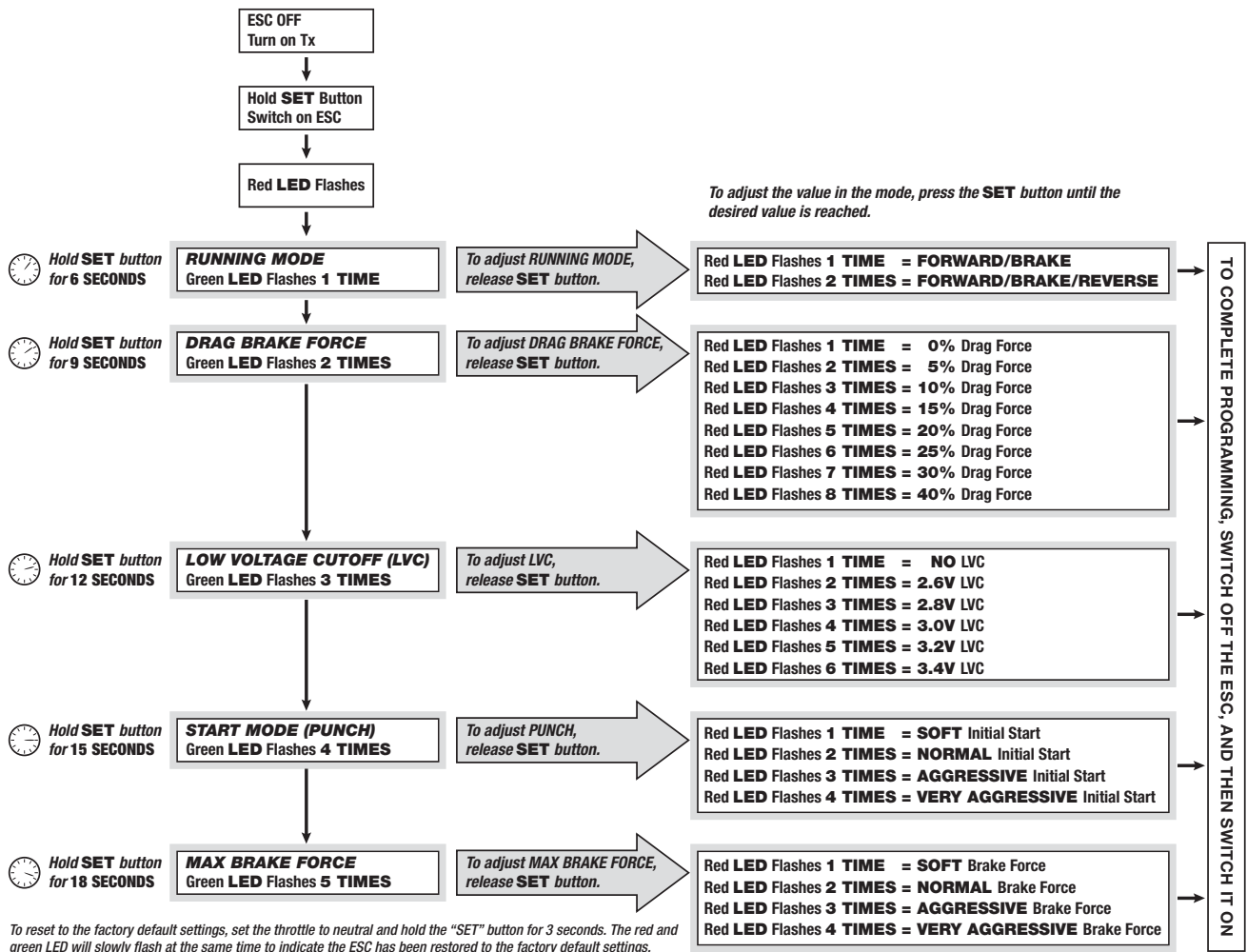
During programming the ESC the motor will emit a "beep" tone at the same time the LED flashes. A long time flash and long "beep" represents "5" so it is easy to identify items with large numbers.

For example:

A long time flash (motor sounds "beeeep") equals a value of 5.

A long time flash + 1 short flash (motor sounds "beeeep-beep") equals a value of 6.

A long time flash + 2 short flashes (motor sounds "beeeep-beep-beep") equals a value of 7.



90 DAY LIMITED WARRANTY

PLEASE DO NOT RETURN YOUR PRODUCT TO THE STORE! Dromida will repair or replace factory defects for 90 days from the date of purchase. This warranty specifically does not cover crash damage, misuse or abuse. To make a warranty claim, please contact our product support team at 1-217-398-8970 or e-mail us at productsupport@hobbico.com.

If requested by Product Support, please send defective product to: Hobby Services, 3002 N Apollo Dr., Suite #1, Champaign, IL 61822.

This warranty applies only if the product is operated in compliance with the instructions and warnings provided with each model. Dromida assumes no liability except for the exclusive remedy or repair of parts as specified above. Dromida shall not be liable for consequential or incidental damages. Some states do not allow the exclusion of consequential or incidental damages so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.