

# INJORA<sup>®</sup>

## MICRO BRUSHLESS ESC

### INSTRUCTION MANUAL



- Electrical Connection**  
Before connecting the ESC to related components, ensure proper insulation of all wires and connectors. Short circuits can damage the ESC.
- Power Compatibility**  
Prior to using this ESC, carefully review the specifications of your power system and chassis. Ensure a rational power combination to avoid motor overload, preventing damage to the ESC.
- Welding Considerations**  
If welding is required for the ESC's input/output wires or connectors, use a welding device with a minimum power of 60W to ensure reliable connections.
- Safety Testing**  
For your safety and that of others, perform wiring tests with the vehicle suspended to avoid accidents.
- Temperature Limits**  
Avoid exceeding an external temperature of 90°C/194°F for the ESC. High temperatures can damage the ESC and potentially harm the motor.
- Disconnecting Power**  
After use, remember to disconnect the battery from the ESC. Failure to do so may result in energy consumption, leading to battery or ESC failure. We are not responsible for any damage caused by this.

## 01 Features

- The INJORA MBL32, based on the AM32 firmware, is meticulously tailored for Micro crawlers and is programmable.
- Smooth and linear at low speeds, powerful and aggressive at high speeds.
- Runs more quietly than brushed systems, producing virtually no noise.
- MBL32 features a built-in BEC with adjustable output: 6V/7.4V
- The MBL32 ESC is preset for the INJORA 1621 Purple Viper Motor. For the 2204 Fat Viper Motor or others, adjust settings using our website tutorials.

## 02 Begin to Use the New ESC

### ESC Specifications

Part Number: MBL32	BEC: Max 3A
Max.Current: 30A	BEC Output: 6.0v/7.4V(adjustable by DIP switch) <sup>①</sup>
LiPo Cells: 2-3S	Motor Connectors: PH 2.0
Compatible Motors: INJORA 1621/2204	Dimensions(L*w*h): 30*22*11mm
Applications: 1/18 1/24 RC Crawler car	Weight: 16g

## 03 Connecting the Motor to the ESC

### Quick Start Guide

1. Connecting the ESC, Motor, Receiver, and Battery  
Follow the wiring diagram included with this manual to connect the ESC, motor, receiver, and battery (transmitter, receiver, and 2-3S LiPo battery need to be provided by the user). Ensure the battery is fully charged.

2. Turning On the ESC  
To Turn On the ESC: Press and hold the power switch button until the ESC powers on. The power switch indicator light will remain on, indicating that the ESC is successfully powered on.

3. Connecting the Transmitter  
After turning on the ESC, turn on the power switch of the transmitter. The ESC indicator light will change from red to green, indicating a successful connection.

4. Indicator Light Instructions  
ESC Power Switch Indicator Light:  
Green light on continuously: ESC is powered on.  
Light off: ESC is powered off.

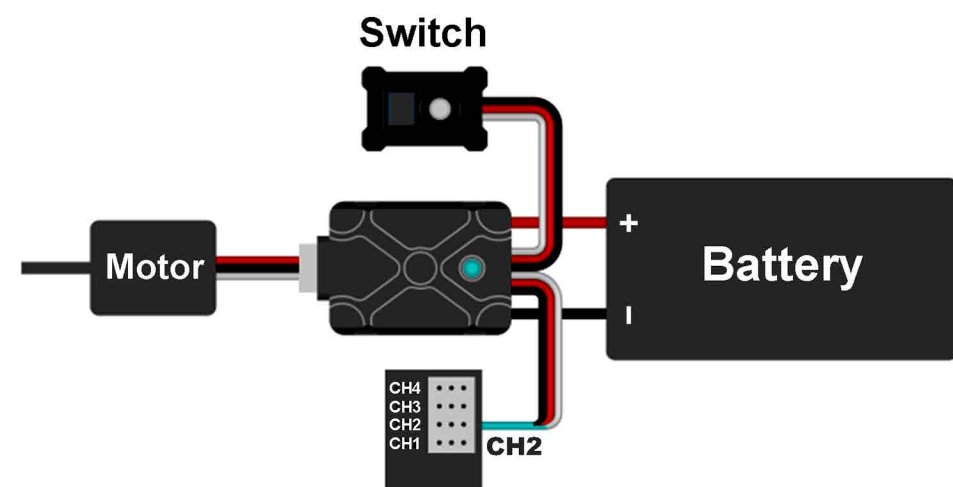
ESC Status Indicator Light:  
Red light: Connection not yet successful.  
Green light on continuously: Connection successful.

NOTICE:

① Always disconnect the battery from the system when you have finished operating your vehicle. The system's switch only controls power to the receiver and servos. The system will continue to draw current when connected to the battery, resulting in possible damage to the battery through over-discharge.

② The INJORA brushless ESC only supports INJORA brushless motors. We cannot guarantee compatibility with products from other brands. Please do not pair INJORA ESC with motors from other brands, or vice versa. Any damage resulting from such use is not covered under our warranty.

### Connections



①	1	2	DIP SWITCH	BEC OUTPUT
	OFF	OFF		6.0V
	ON	OFF		7.4V

## 04 Parameter Settings

### Operating Parameters

Battery Type	Li-po
Forward Force	100%
Reverse Force	100%
Brake Force	100%
Drag Brake Force	100%

The parameters have been pre-configured at the factory. If you wish to customize the settings using the firmware, please visit our website to download the relevant drivers and firmware tools, as well as the accompanying tutorials.

## 05 Troubleshooting

PROBLEM	SOLUTION
The ESC power switch light does not illuminate when pressed and held.	<ul style="list-style-type: none"> <li>Ensure all connections are secure.</li> <li>Charge the battery or replace it with a fully charged one.</li> <li>Repair or replace the ESC power switch.</li> </ul>
Steering direction is incorrect.	Adjust the reverse direction setting on the transmitter.
ESC power switch light is solid green, but the ESC indicator light is red.	<ul style="list-style-type: none"> <li>Ensure all connections are secure.</li> <li>Make sure the ESC plug is connected to CH2 on the receiver.</li> <li>Ensure the transmitter is powered on.</li> <li>Ensure good reception between transmitter and receiver</li> </ul>
Operation is not smooth, experiencing stuttering.	<ul style="list-style-type: none"> <li>Ensure good reception between the transmitter and receiver.</li> <li>Verify that the ESC is correctly programmed with the appropriate parameters for the motor and battery.</li> <li>Adjust or replace the gear.</li> </ul>
Steering servo operates but the system doesn't run	<ul style="list-style-type: none"> <li>Ensure all system programming matches your installed systems requirements for safety</li> <li>Ensure all receiver connections are correct and secure</li> <li>Test the system apart from the vehicle system and replace system as needed</li> <li>Recharge or replace batteries</li> <li>Ensure all system connections are secure</li> <li>Adjust throttle travel or other throttle settings on the transmitter and the system</li> </ul>
System slows but will not stop	<ul style="list-style-type: none"> <li>Adjust transmitter settings, such as trim, throttle travel, etc.</li> <li>Ensure system settings are correct for system</li> <li>Calibrate throttle control to system</li> </ul>

If you encounter any issues during use, please contact us through our official website. We are committed to resolving your concerns and ensuring a smooth experience with our products.



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