9imod WP 1060

9IMOD WP 1060 60A Brushed ESC Instruction Manual

Waterproof Electronic Speed Controller for 1/10 Scale RC Crawler Cars and Trucks

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your 9IMOD WP 1060 60A Brushed Electronic Speed Controller (ESC). This ESC is designed for 1/10 scale brushed RC vehicles, offering reliable performance and waterproof protection. Please read this manual thoroughly before use to ensure proper function and longevity of your product.

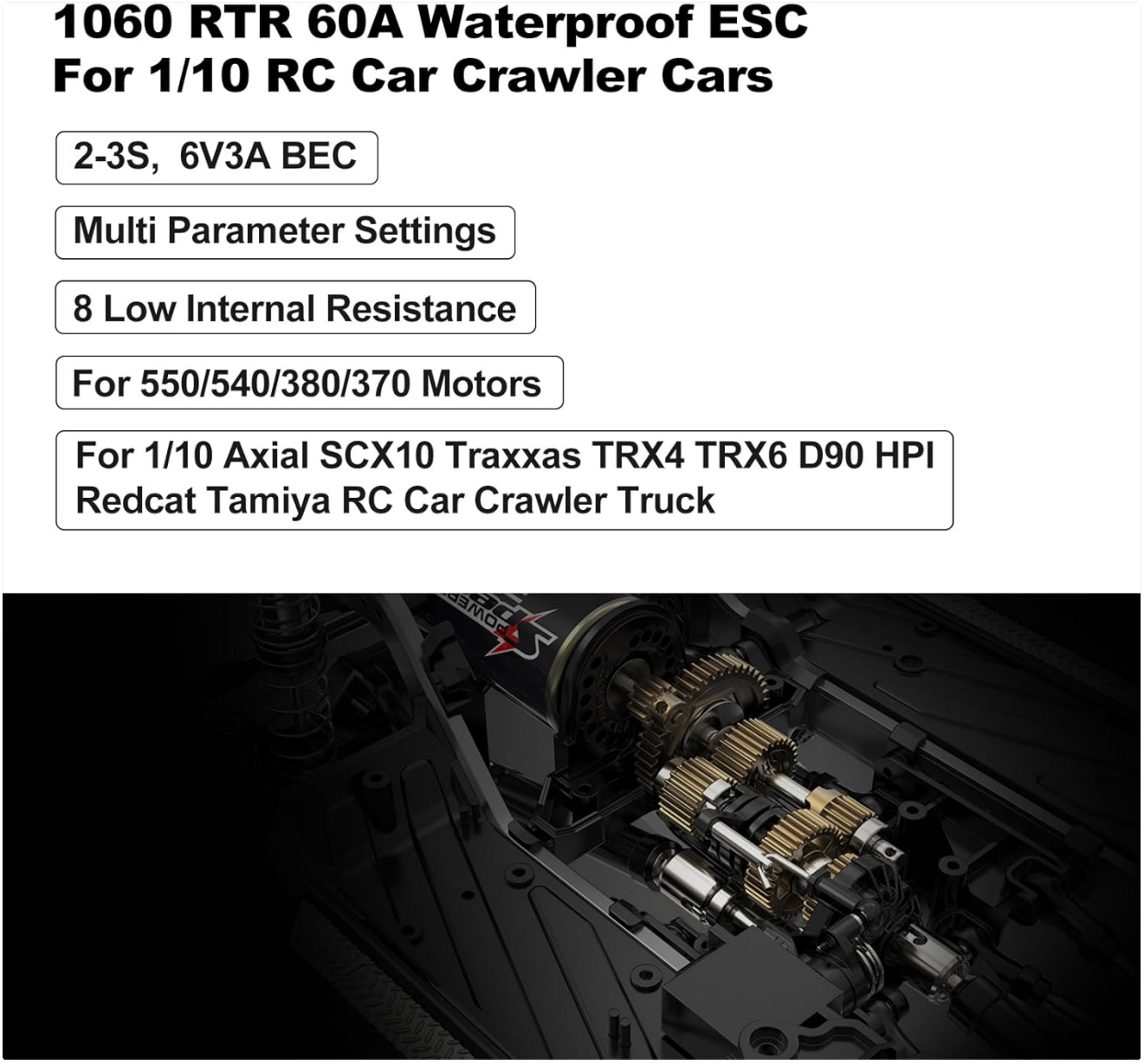


Image 1: The 9IMOD WP 1060 ESC shown with various 1/10 scale RC vehicles, highlighting its broad compatibility with models like Traxxas TRX-4, TRX-6, D90, and Axial SCX10.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the product and surrounding equipment:

- Ensure all connections are secure and correct before powering on the ESC. Incorrect wiring can cause damage.
- Do not operate the ESC in conditions exceeding its specified voltage or current limits.
- Keep the ESC away from extreme heat, direct sunlight, and corrosive materials.
- Although waterproof, avoid prolonged submersion or operation in highly corrosive liquids. Always dry the ESC thoroughly after exposure to water.
- Disconnect the battery from the ESC when not in use to prevent accidental activation or discharge.
- This product does not require batteries for its operation, but it connects to your RC vehicle's battery. Handle all batteries according to their manufacturer's safety guidelines.

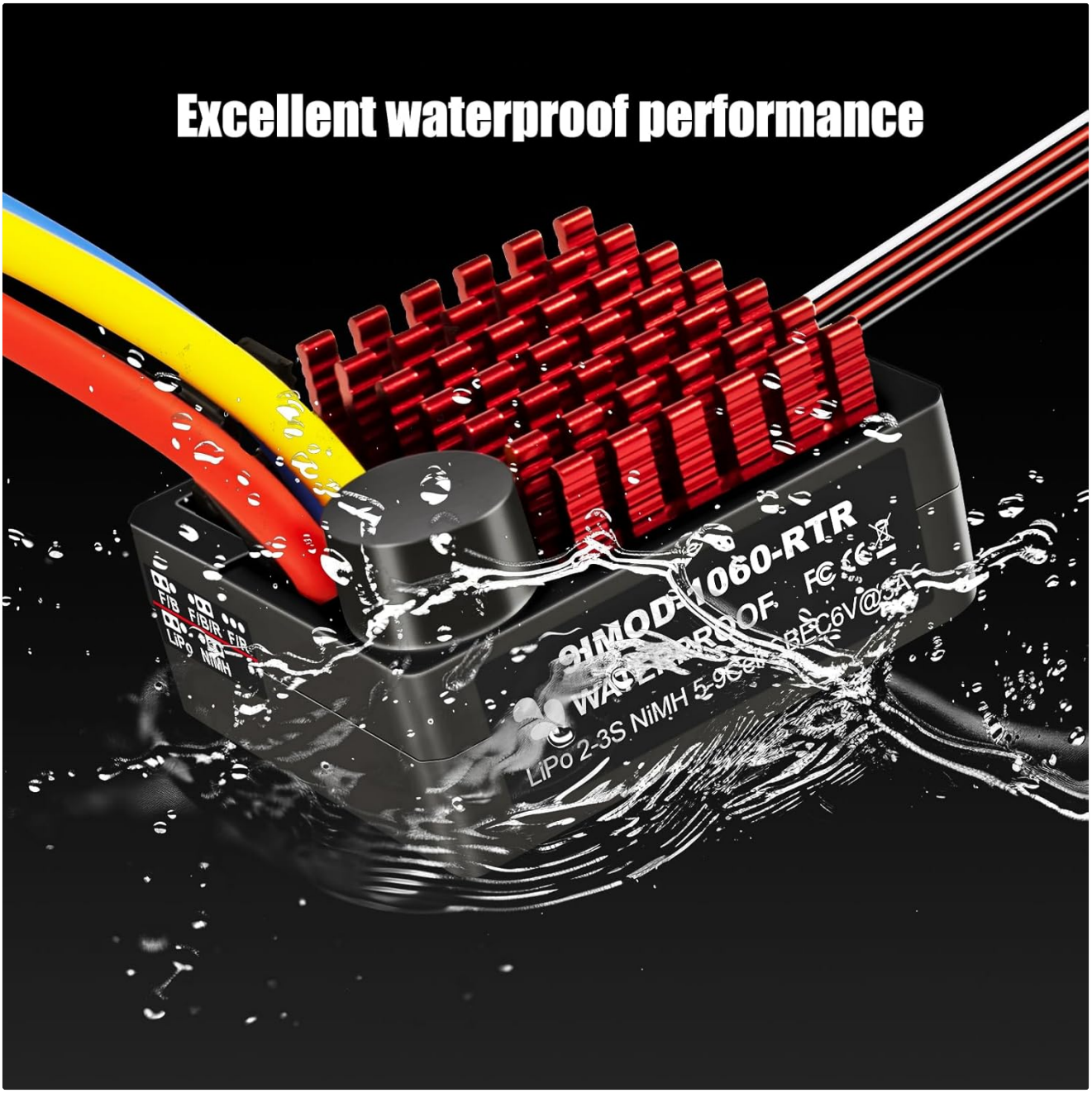


Image 2: The 9IMOD WP 1060 ESC submerged in water, illustrating its waterproof design for protection against outdoor elements.

3. Product Features

The 9IMOD WP 1060 ESC offers a range of features for enhanced RC vehicle control:

- **Compatibility:** Designed for 1/10 scale brushed RC crawlers and other vehicles.
- **Power Rating:** 60A continuous current capacity with 2S-3S LiPo or 5-9 cell NiMH battery compatibility.
- **Waterproof Design:** Constructed to protect internal components during outdoor operation and various weather conditions.
- **Connector Type:** Equipped with a Tamiya-Plug connection system for secure power transfer.
- **BEC Feature:** Includes a switch mode BEC (Battery Elimination Circuit) providing 6V/3A for stable power delivery to the receiver and servos.
- **Running Modes:** Supports multiple running modes including Forward/Brake, Forward/Reverse/Brake, and Forward/Reverse.

4. Package Contents

Upon opening the package, verify that all items are present:

- 1 x 9IMOD WP 1060 60A Brushed ESC with Tamiya-Plug

5. Specifications

Parameter	Value
Model	9imod-1060-RTR
Constant Current	60A
Burst Current	480A
BEC Output	6V / 3A (Switch Mode)
Power Supply	2-3S LiPo battery, 5-9 cell NiMH battery
Waterproof	Yes
Suitable for	1:10 RC Cars/Boats/Tanks
Plug Type	Tamiya Plug (also available in T Plug/XT60 Plug variants)
Running Modes	Forward/Brake, Forward/Reverse/Brake, Forward/Reverse
Motor Compatibility	For 550/540/380/370 Motors
Dimensions (L*W*H)	36 * 31 * 20mm
Item Weight	1.76 ounces



Item Name	Model
60A Brushed Waterproof ESC	9imod-1060-RTR
Constant Current	**Burst Current**
60A Brushed Waterproof ESC	480A
BEC	**Power Supply**
6V / 3A	2-3S LiPo battery, 5-9 cell NiMH battery
Suitable for	**Water proof**
1:10 RC Cars/Boats/Tanks	YES
Plug	**Item Size**
T Plug/XT60 Plug/Tamiya Plug	36 * 31 * 20mm
Running Modes:	**Motor**
Forward/Brake, Forward/Reverse/Brake, Forward/Reverse	For 550/540/380/370 Motors

Image 3: A detailed table outlining the technical specifications of the 9IMOD 1060-RTR ESC, including current ratings, BEC output, and physical dimensions.

6. Setup and Installation

Follow these steps to correctly install and connect your ESC to your RC vehicle:

1. **Mount the ESC:** Securely mount the ESC in your RC vehicle chassis using double-sided tape or screws, ensuring good airflow around the heatsink.
2. **Connect to Motor:** Connect the two motor wires from the ESC to your brushed motor. Polarity (positive/negative) typically does not matter for brushed motors, but consistent connection is recommended.
3. **Connect to Receiver:** Plug the small servo-style connector from the ESC into the throttle channel (usually CH2) of your RC receiver.
4. **Connect to Battery:** Connect the Tamiya plug from the ESC to your battery pack. Ensure the battery is fully charged and compatible with the ESC's voltage requirements (2S-3S LiPo or 5-9 cell NiMH).
5. **Power Switch:** Ensure the power switch on the ESC is accessible for easy on/off operation.

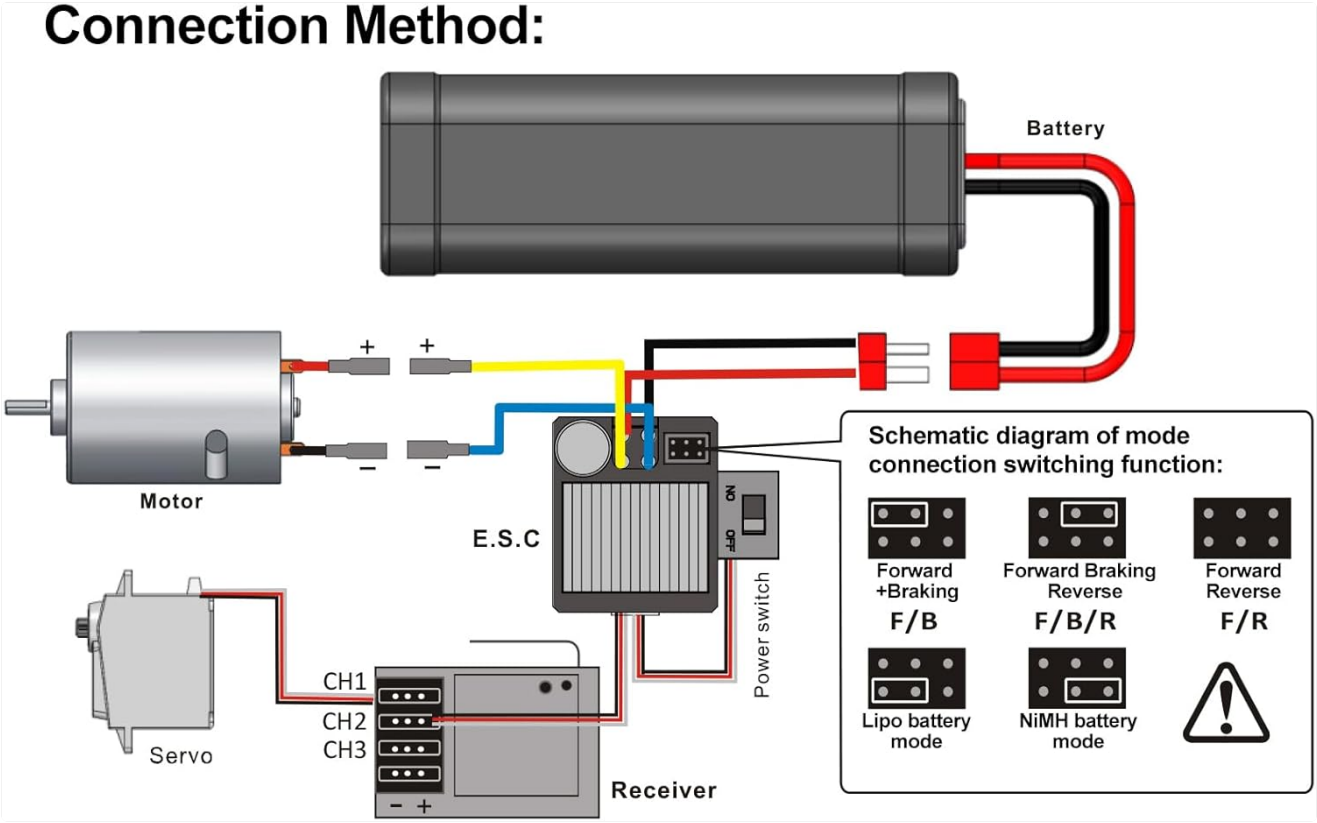


Image 4: A clear diagram illustrating the connection method for the ESC, motor, battery, and receiver, along with a schematic for the mode connection switching function.

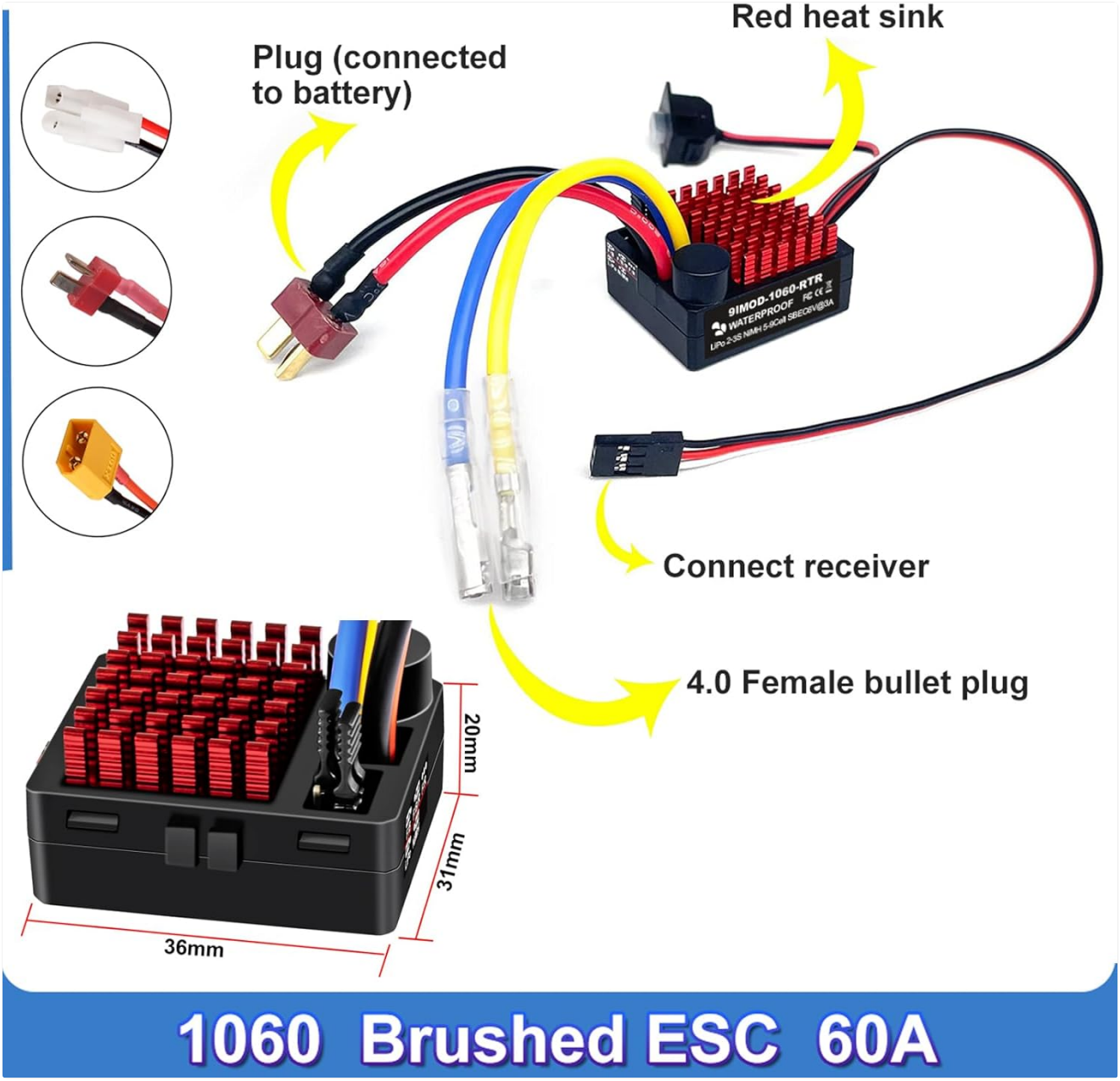


Image 5: An overhead view of the 9IMOD 1060 ESC, highlighting the Tamiya plug for battery connection, the receiver cable, 4.0mm female bullet plugs for motor connection, and the red heatsink.

7. Operation

Before operating your RC vehicle, perform the following steps for proper ESC calibration and mode selection:

7.1. ESC Calibration

1. Ensure the ESC is switched OFF first.
2. Center the throttle trigger on your transmitter and set the throttle trim to neutral. Turn up the D/R (Dual Rate) or EPA (End Point Adjustment) for the throttle channel to its maximum setting (100%).
3. Switch ON the ESC. Do not operate the throttle until the ESC has emitted a series of beeps, indicating successful calibration.

7.2. Running Mode Selection

The ESC supports three running modes, selectable via jumpers or switches on the unit:

- **Forward/Brake (F/B):** For racing, provides forward movement and braking.

- **Forward/Reverse/Brake (F/B/R):** For general use, allows forward, reverse, and braking.
- **Forward/Reverse (F/R):** For rock crawlers, provides forward and reverse without a brake function, allowing for immediate direction changes.

7.3. Battery Type Selection

Ensure the adjustable tabs or jumpers on the ESC are properly set according to your battery type (LiPo or NiMH) to prevent over-discharge or incorrect voltage cutoff.

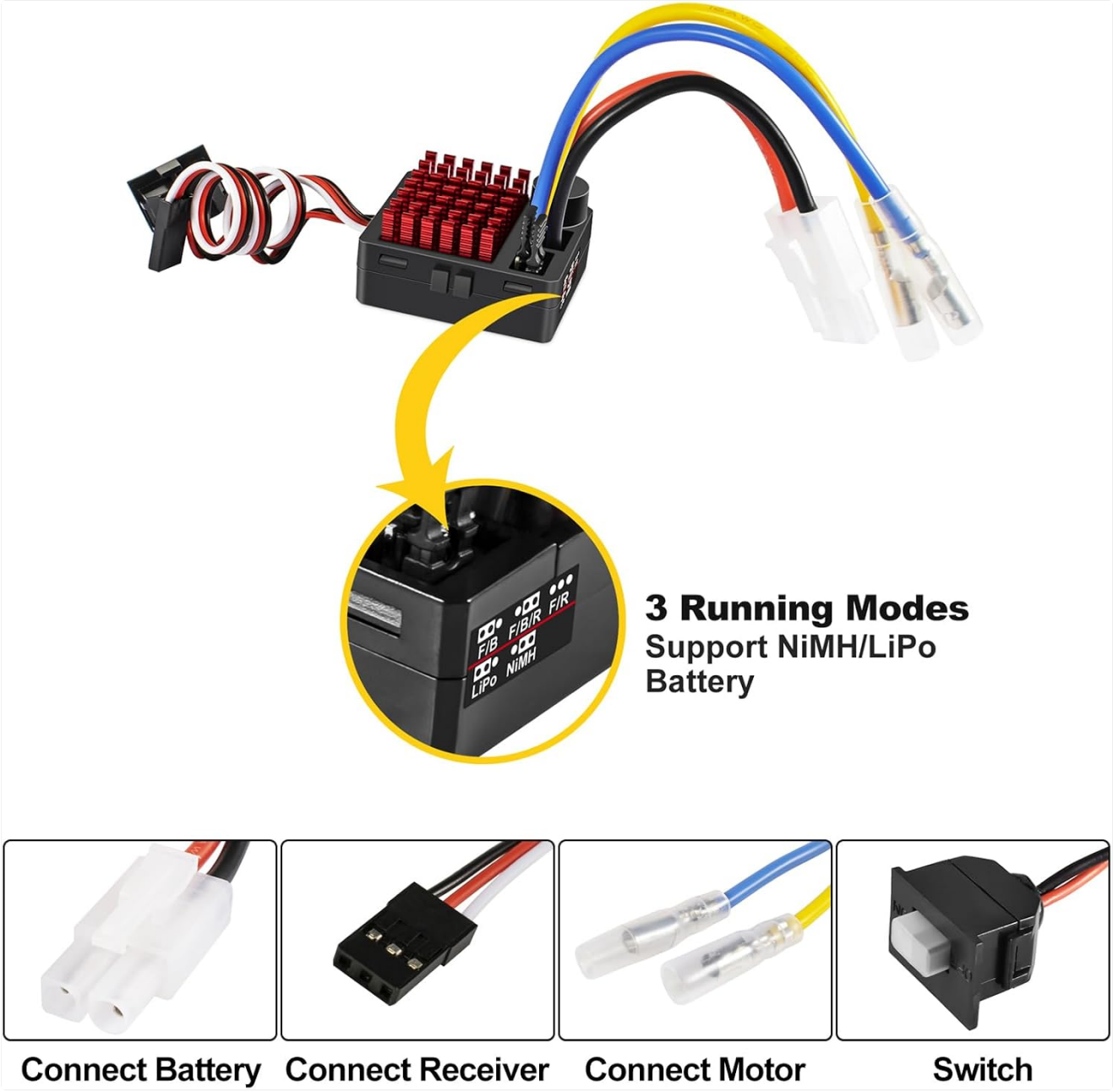


Image 6: A close-up of the 9IMOD 1060 ESC's control panel, indicating the switch for selecting between the three running modes and the battery type (NiMH/LiPo).

8. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your ESC:

- **Cleaning:** After each use, especially in dusty or wet conditions, clean the ESC with a soft brush or compressed air to remove dirt and debris. For wet conditions, ensure it is completely dry before storage or next use.
- **Inspection:** Periodically inspect all wires and connectors for signs of wear, fraying, or corrosion. Replace damaged components immediately.

- **Storage:** Store the ESC in a cool, dry place away from direct sunlight and extreme temperatures. Disconnect it from the battery during storage.
- **Firmware:** Check the manufacturer's website for any available firmware updates, though this model typically does not require user-updatable firmware.

9. Troubleshooting

If you encounter issues with your ESC, refer to the following common problems and solutions:

- **ESC Not Powering On:**
  - Check battery connection and ensure the battery is charged.
  - Verify the ESC's power switch is in the 'ON' position.
  - Inspect all wiring for breaks or loose connections.
- **Motor Not Responding or Erratic Behavior:**
  - Recalibrate the ESC with your transmitter (refer to Section 7.1).
  - Check motor wire connections.
  - Ensure the receiver is properly bound to the transmitter and receiving signal.
  - Verify the running mode is correctly selected for your application.
- **ESC Overheating:**
  - Ensure adequate airflow around the ESC.
  - Check if the motor is too large or geared too high for the application, causing excessive load.
  - Reduce continuous heavy load or allow the ESC to cool down between runs.
- **Water Damage (despite being waterproof):**
  - While waterproof, extreme conditions or prolonged submersion can still cause issues. Immediately disconnect power, dry thoroughly, and inspect for corrosion.

10. Warranty and Support

9imod products are manufactured to high-quality standards. For warranty information, technical support, or assistance with your 9IMOD WP 1060 ESC, please contact 9imod customer service through the retailer where the product was purchased or visit the official 9imod website for support resources.
Please retain your proof of purchase for warranty claims.