

Aftermarket Motor Controller for KTM E2 Installation & User Guide

Introduction

Congratulations on your purchase of the **Aftermarket Motor Controller for KTM E2**! This high-performance controller enhances your bike's power delivery, efficiency, and customization options. Follow this guide for proper installation, setup, and usage to ensure optimal performance and safety.

Safety Precautions

Before installation, please read the following safety guidelines carefully:

- **Disconnect Power:** Always turn off the bike and disconnect the battery before installation.
- **Wear Protective Gear:** Use insulated gloves and safety glasses when working with electrical components.
- Avoid Short Circuits: Do not allow tools or wires to touch battery terminals simultaneously.
- Double-Check Connections: Incorrect wiring can damage the controller and other components.

Tools & Materials Required

- T30 Torx wrench
- T40 Torx wrench
- 8mm wrench
- Wire strippers
- Zip ties
- Soldering iron

Installation Instructions

Step 1: Remove the Stock Controller

- 1. Place the bike on a stable stand and turn off all power and remove battery.
- 2. Remove the bike's seat and plastic covers. You will need a T30 torx to do this.



3. remove the front fender. you will need a T30 torx and an 8mm wrench for this step.



4. unplug all of the connections in front of the handlebars.



5. remove the BMS which is under the "ready to race cover". While you're at it remove the tip over sensor.



6. remove the battery shield from the bottom of the bike this will require a T40 Torx.



- 7. Locate the stock controller and carefully disconnect all wiring harnesses.
- 8. you will notice 4 wires going to the battery enclosure. carefully cut these one at a time.
- 9. Unscrew the mounting bolts and remove the stock controller.

Step 2: Install the Aftermarket Controller

1. Solder the provided XT60F to the large red and black wire coming from the battery enclosure. Don't forget to use the skirt. The XT60F has engravings on it for + and -. The black wire gets connected to the - and the red wire to the +.



2. Secure the new controller simply by pressing and latching it to the battery shield.





- 3. Connect the wiring harnesses. there should only be one place you can plug everything in.
- 4. Ensure all connections are tight and insulated with electrical tape or heat shrink tubing.
- 5. Use zip ties to secure loose wires and prevent interference with moving parts.
- 6. re-assemble the bike following step 1 in reverse order.

Step 3: Battery & Power Connection

- 1. Insert the battery
- To turn on you press and hold the power button for 1 second. On first power up the only way to know it's on is by connecting to it with Bluetooth. The factory lights will no longer work.

Controller Setup & Tuning

Basic Settings

bootup time is approximately 8 second from push of power button to "on" before throttle will work

- Once powered on, use the <u>Vesc tool</u> app to configure settings. please follow along with the video <u>here</u>.
- Adjust throttle response and power output, according to your preferences.

Troubleshooting

Cannot connect to bike with app

- Ensure the battery is properly connected.
- Inspect wiring connections for loose or incorrect installation.
- Verify Bluetooth is enabled on your phone.
- Uninstall and reinstall Vesc tool.

Motor Not Responding

- Verify that the throttle and motor wires are securely connected.
- Check controller settings in the mobile app.

Maintenance & Care

- Regularly inspect wiring connections for wear or corrosion.
- Keep the controller clean and free of dirt or moisture.
- Store the bike in a dry environment to prevent electrical damage.

Warranty & Support

Please join our community here to ask questions share ideas and give feedback

For warranty information and technical support, please contact **Indy Speed Control** at **support@indyspeedcontrol.com**.

Enjoy your upgraded KTM E2 and ride safely!