

## TrustFire TF-EB02

# TrustFire EB02 Battery Storage Case User Manual

Comprehensive guide for your TrustFire 8.4V Bicycle Mobile Power Box.



## PRODUCT OVERVIEW

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The TrustFire EB02 is a versatile battery storage case designed for 4 x 18650 Li-ion rechargeable batteries. It functions as a power source for 8.4V bicycle lights and as a power bank for mobile devices via its 5V USB output. Its robust, waterproof design makes it ideal for outdoor cycling and emergency power needs.



Image: The TrustFire EB02 battery storage case, showing its compact, rectangular design with a blue cap and integrated cables for USB and DC output.

## PACKAGE CONTENTS

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Upon opening your TrustFire EB02 package, please verify that all the following items are included:

- 1x EB02 4 x 18650 Battery Power Pack Case (*batteries not included*)
- 1x Strap for mounting
- 1x User Manual (this document)



Image: The TrustFire EB02 battery case, its retail packaging, and the included mounting strap.

## SETUP AND BATTERY INSTALLATION

Proper battery installation is crucial for the safe and effective operation of your EB02 power box. This device is designed exclusively for **4 x 18650 Li-ion rechargeable batteries with protected PCB**.

1. **Prepare Batteries:** Ensure you use four 18650 Li-ion batteries that have the *same voltage, inner resistance, and capacity*. Using mismatched batteries can lead to performance issues or damage.
2. **Open the Case:** Unscrew the blue cap on top of the EB02 case and carefully remove the top cover.
3. **Insert Batteries:** Observe the polarity markings (+ and -) inside the battery compartments. **Strictly follow the negative and positive directions** when inserting each 18650 battery. Incorrect insertion can cause damage to the storage box or even lead to a fire hazard.

4. **Secure the Cover:** Once all four batteries are correctly inserted, place the top cover back onto the case and screw the blue cap tightly to ensure a secure and waterproof seal.



Image: Diagram illustrating the correct polarity for 18650 battery insertion into the EB02 case, showing positive and negative terminals.





Image: A hand demonstrating the process of inserting 18650 batteries into the TrustFire EB02 case, showing the internal battery compartments.

## OPERATING INSTRUCTIONS

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The TrustFire EB02 offers dual output interfaces for various applications.

### Charging the EB02

To charge the batteries within the EB02 case, connect an 8.4V charger's output port to the battery box's DC 5.5mm port. The DC port serves as both an input for charging and an output for powering devices.

## Using the DC Output (8.4V)

The round DC 5.5mm port is primarily designed for connecting to 8.4V bicycle lights. Simply plug your compatible bike light into this port to power it.

## Using the USB Output (5V)

The 5V USB port is exclusively for output and can be used to charge mobile phones or other digital products. This feature allows the EB02 to function as an emergency power bank.



Image: The TrustFire EB02 showing its dimensions (49mm x 102mm x 46mm) and clearly labeling the 5V USB port and 8.4V DC port.

## EB02

### Use As Power Bank or Battery Storage Box for Bike Light



Image: The TrustFire EB02 battery case mounted on a bicycle frame using its strap, demonstrating its use as a power source for a bike light.

## MAINTENANCE

The TrustFire EB02 is designed for durability and outdoor use. To ensure its longevity and optimal performance, follow these maintenance guidelines:

- **Waterproof Rating:** The EB02 has an IP67 waterproof rating, meaning it is protected from dust and can withstand immersion in water up to 1 meter for 30 minutes. While highly resistant, avoid prolonged submersion or high-pressure water jets.
- **Cleaning:** Wipe the exterior of the case with a damp cloth to remove dirt or debris. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** When not in use for extended periods, store the EB02 in a cool, dry place. It is recommended to remove the batteries if storing for very long durations.
- **Port Care:** Keep the DC and USB ports free from dust and moisture. Ensure the blue cap is securely tightened when not in use to maintain waterproofing.





Image: The TrustFire EB02 battery case shown with water splashing, highlighting its IP67 waterproof capability.

## TROUBLESHOOTING

If you encounter issues with your TrustFire EB02, consider the following common solutions:

- **Device Not Powering On/Charging:**
  - Ensure batteries are correctly inserted with the proper polarity.
  - Verify that the 18650 batteries are fully charged and in good condition.
  - Check that the charger (for input) or device (for output) is properly connected to the correct port.
- **Overcharge/Over-discharge/Over-current Protection:** The EB02 is equipped with built-in protection functions. If the device stops working unexpectedly, it might be due to one of these protections being triggered.
  - **Overcharge:** Disconnect the charger.
  - **Over-discharge:** Recharge the batteries.



- **Over-current:** Disconnect the load causing the high current.

These protections help prevent damage to the batteries and the device.

- **Mismatched Batteries:** Using batteries with different voltages, internal resistances, or capacities can lead to improper function or damage. Always use four 18650 batteries that are identical in specifications.
- **Incorrect Battery Installation:** As noted in the setup section, incorrect polarity can cause severe damage. If you suspect this, immediately disconnect any power source and re-check battery orientation.

## SPECIFICATIONS

Detailed technical specifications for the TrustFire EB02 Battery Storage Case:

| Feature               | Specification  |
|-----------------------|--|
| Model                 | TF-EB02  |
| Battery Compatibility | 4 x 18650 Li-ion rechargeable batteries (with protected PCB) |
| Input Voltage         | 8.4V (via DC 5.5mm port)                                     |
| Input Current         | 2000mA   |
| Output 1 (DC Port)    | 8.4V (5.5mm DC port)   |
| Output 2 (USB Port)   | 5V Max 2100mA  |
| Standby Current       | 80uA   |
| Waterproof Grade      | IP67   |
| Protection Functions  | Overcharge, Over-discharge, Over-current                     |
| Product Dimensions    | 49mm x 102mm x 46mm (approx. 1.93 x 4.02 x 1.81 inches)      |
| Item Weight           | 159 g (approx. 5.6 oz)                                       |
| UPC/EAN               | <a href="#">6956990503073</a>                                |

## EB02

USB power supply max up to 2100mA,  
greatly shorten charging time



Image: The bottom view of the TrustFire EB02 case, displaying printed specifications including input/output voltages and current, and the UPC/EAN code.

## WARRANTY AND SUPPORT

Specific warranty details for the TrustFire EB02 are not provided in this manual. For information regarding warranty coverage, technical support, or service inquiries, please refer to the official TrustFire website or contact the retailer from whom you purchased the product.

You can visit the TrustFire Store on Amazon for more products and information: [TrustFire Store](#)