HT-BAT

Backup Power Controller User Manual

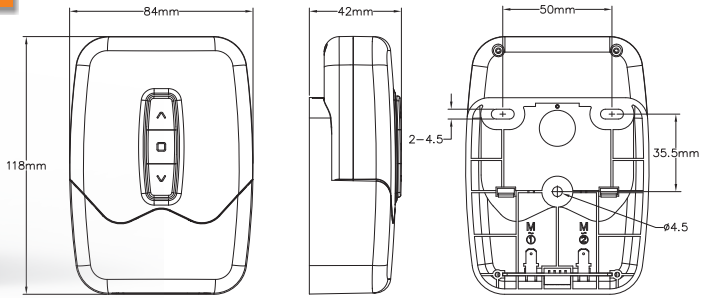
Version: V1. 2

1. 1 Product Description

- HT-BAT is a controller designed for DC12V tubular motors (mechanical limit switch version), integrating a 433.4MHz wireless receiver and a 2600mAh lithium battery module. It provides an easy and intelligent power control solution for various door and window applications.
- The HT-BAT controller adopts a split quick-plug design, enabling flexible separation of the main unit and the base via its plug-and-socket structure. The detached main unit (without the base) can be charged independently, providing users with versatile charging options for diverse scenarios.
- Externally pluggable automotive-grade fuse ensures zero power consumption during storage and transportation, safeguarding the controller's energy efficiency.
- Externally pluggable automotive-grade fuse , features with overload self-fusing to protect the electronic control system and battery pack from electrical hazards.

1.2 Product Overview

Finished Product



Product Dimensions

1.3 Technical Specifications

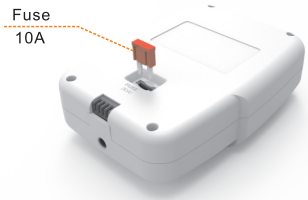
Model	Battery Capacity	Full Charge Voltage	Standby Power	Receiver Frequency	Output Current	Operating Temperature
HT-BAT	2600mAh	14.4V	≤200uA	433.92Mhz	8A (MAX)	-40℃～65℃

1.4 Precautions

- Strictly adhere to safety guidelines for lithium battery storage, transportation, and recycling;
- Use only a dedicated lithium battery charger (16. 8V/1A) for charging. Do not use other power sources;
- Do not charge continuously for more than 8 hours;
- Storage temperature: -40℃~45℃;
- If the device is not used for more than 3 months, recharge it fully and discharge it to 12V~13. 2V (optimal storage voltage) by connecting it to a motor. Avoid long-term storage without charging;
- Do not expose the device to fire, water,or dispose of it as household waste;
- Avoid prolonged exposure to high-temperature or high-humidity environments during use or storage;

2.1 Charging Preparation Before Use

Note: To ensure battery safety during transportation and storage and reduce standby power consumption, the main unit and battery are disconnected(without the fuse inserted)as the default factory setting.

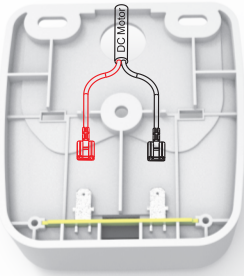


1. Insert the fuse into the slot on the back of the controller;

2.Connect the dedicated charger to the charging port of the controller until the green light stays on, indicating full charge. Then unplug the charger;

2.2 Connecting the Controller to the Motor

- Connect the two power wires of the DC motor to the terminal tabs on the back of the controller securely;
- Press the up/down buttons on the controller. If the motor moves in the opposite direction of the door/window operation, manually swap the motor wires on the controller terminals or follow Section 4.5 to reverse the controller's program direction;
- For DC motors with mechanical limit switch, refer to the DC motor manual for limit adjustments and precaution;

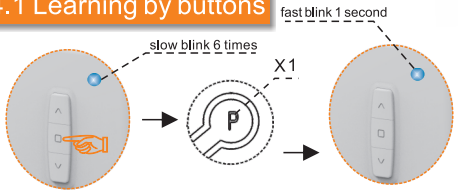


3 Smart LED Indicators

LED1		Red light on	Charging in progress
		Green light on	Fully charged
		Red light slow blink(4 times)	Low battery reminder (charge promptly)
		Red light fast blink(4 s)	Low battery protection (power output terminated)
LED2		Blue light blink (1 time)	Control command received

Note: If LED1 shows a slow red blink during motor operation, charge the controller immedi ately. When the red light blinks rapidly, the controller will cut off power to the motor, rendering the door/window unable to open or close until the controller is fully charged or the fault is resolved

4.1 Learning by buttons

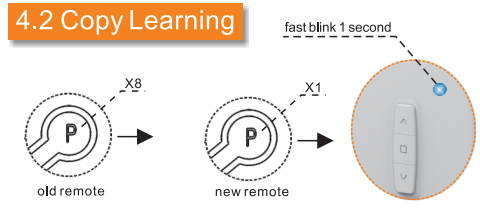


1.Press and hold the "Stop" button for 5 seconds until the blue light turns off completely.

2.Press the remote control's "P" button once.

3.The controller's blue light will blink rapidly for 1 second, indicating successful learning.

4.2 Copy Learning

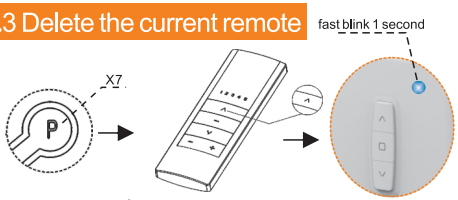


1.Press the "P" button on the old remote control 8 times. The controller's blue light will blink rapidly and then turn off.

2.Press the new remote control's "P" button once.

3.The controller's blue light will blink rapidly for 1 second, indicating successful pairing.

4.3 Delete the current remote

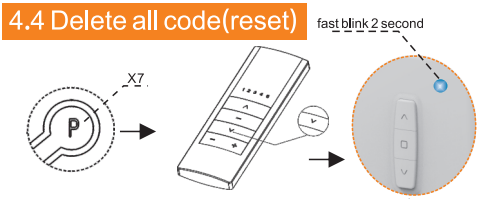


1.Press the remote control's "P" button 7 times while the controller's blue light blinks 7 times.

2.Press the remote control's "Up" button once.

3.The controller's blue light will blink rapidly for 1 second, indicating the current remote operating is deleted successfully.

4.4 Delete all code(reset)

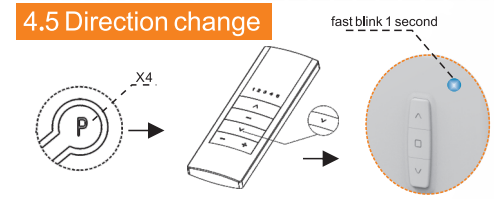


1.Press the remote control's "P" button 7 times while the controller's blue light blinks 7 times.

2.Press the remote control's "Down" button once.

3.The controller's blue light will blink rapidly for 2 seconds, indicating all remotes learned with the receiver are deleted successully.

4.5 Direction change

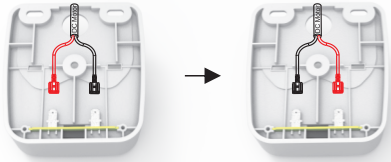


1.Press the remote control's "P" button 4 times while the controller's blue light blinks 4times.

2.Press the remote control's "Down" button once.

3.The controller's blue light will blink rapidly for 1 second, indicating successful direction change.

4.6 Wiring Direction Reversal



To reverse the motor direction, swap the connection of the power supply's quick-connect terminals with the controller's tab terminals.