Thank you for purchasing this HOBBYWING product! Please read this declaration carefully before use, once you start to use, we will assume that you have read and agreed with all the content. Brushless power systems can be very dangerous, and any improper use may cause personal injury and damage to the product and related devices, so please strictly follow the instruction during installation and use. Because we have no control over the use, installation, or maintenance of this product, no liability may be assumed for any damages or losses resulting from the use of the product. We do not assume responsibility for any losses caused by unauthorized modifications to our product. Besides, we have the right to modify our product design, appearance, features and usage requirements without notification. We, HOBBYWING, are only responsible for our product cost and nothing else as result of using our product.

01 Features

- As an independent parameter adjustment device, directly use the built-in LCD screen to display, set, and share ESC parameters (import).
- Connect the ESC to a computer using a USB adapter. Use the USB Link application software on the computer to upgrade the ESC firmware and set parameters.
- The OTA Bluetooth module: Using the mobile APP to set ESC parameters, upgrade firmware, and read data.
- Detect the overall voltage of the lithium battery and the individual voltage of each cell.

02 Specifications

Exterior size：105.6mm（Length）*59mm（width）*24.4mm（Including wheel height）

Weight：85g

Input voltage：DC 5V~12.6V

03 Scope of application

- XERUN series car model brushless ESC (V2.0 and above)
- EZRUN series car model brushless ESC (V2.0 and above)
- PLATINUM series air model brushless ESC
- SEAKING Pro series ship model brushless ESC
- Some ESCs of QUICRUN series

Remarks: Whether the programmable box is supported depends on the specific ESC model. If necessary, you can check the ESC information introduction on the official website or consult the Hobbywing official. Hobbywing official website: https://www.hobbywing.com

04 Product icon and button/interface description

1. Wheel: Select the target menu by rotating the wheel up and down.

2. Save: Save button, to save parameter settings.

3. Back/Cancel: Return button is used to return to the previous menu. If you press and hold this button for about 2 seconds, you will be directed back to the home page.

4. ESC (S + -): This interface is used to connect to the programming interface of the ESC.

Remarks: Different types of ESCs may have different programming interfaces. For example, some ESCs have an independent programming port, some ESCs share the interface with the fan, and some ESCs have a throttle signal line. Please check the manual of the ESC and use the correct programming interface to connect with the setting box.

5. 5-12.6V (+ -): The power supply interface of the setting box. Please use an independent battery or UBEC supplies power to the setting box from this interface if the programming interface of the ESC has no voltage output (such as some old OPTO ESCs, please refer to the ESC manual). Please note that for most programming interfaces with voltage output ESCs, this interface does not need a separate power supply.

6. TYPE-C: Connect the setting box to a computer.

7. BATTERY CHECK: This interface is connected to the balance charging plug of the battery pack and is also used to detect the overall voltage of the battery pack and the individual voltage of each cell.

Remarks: Please pay attention to the wiring direction to avoid damage to the equipment; The pin pitch of this interface is 2.54mm, and is consistent with XH, EH, HP/PQ standards. The battery balance charging plug can be directly inserted into this interface. However, some battery balancing charging plugs may have a different pin pitch and cannot be directly connected. It is recommended to use the conversion cable shown in the figure above to connect.

05 User Guide

1: Set the parameters of the ESC as an independent device.

Step 1: Determine the programming interface of the ESC (check the ESC manual) and use the corresponding connection method.
a)The ESC has an independent programming interface: use a programming cable (JR/DuPont connectors at both ends) to connect the programming port of the ESC to the "ESC" interface on the setting box.

b)The programming interface of the ESC is shared with the fan interface: take off the fan plug of the ESC and use the programming cable (JR/DuPont connectors at both ends) to connect the fan interface of the ESC to the "ESC" interface on the setting box.

c)The programming port for the ESC is the throttle cable: pull out the ESC cable from the receiver and insert it into the "ESC" socket of the setting box.

Step 2: Determine whether the programming interface of the ESC has voltage output, and if the setting box needs a separate power supply (check the ESC manual). The majority of Hobbywing ESCs have voltage output equipped. This eliminates external power supply. However, there are also a few older ESCs whose programming interface does not have voltage output (such as Platinum-150A-OPTO V2). In that case, you would need to use an independent battery or UBEC on the "5-12.6V (+ -)" interface of the setting box to power the device. Fixed box power supply.

Step 3: Connect the battery to the ESC and turn on the ESC switch (if there is a switch).

The setting box will display the homepage interface. Select the corresponding function menu according to your needs.

2: As a USB converter, connect the ESC to a computer for parameter setting and firmware update.

Connect the setting box to the ESC according to the connection method introduced in the points above. Next, connect the setting box to the computer using a USB cable. Open the HOBBYWING USB LINK application software on the computer and connect the ESC to a battery. Finally, turn on the ESC switch (if any), and the HOBBYWING USB LINK software on the computer can establish a connection with the ESC. Establish parameter settings and firmware upgrades on the computer. (HOBBYWING USB LINK software can be downloaded from Hobbywing official website)

3: As an OTA Bluetooth module, set parameters, update firmware, and read data for ESCs.

1) Connect the ESC to the setting box according to the correct connection method (as described in the points above).

2) Download the official HW LINK V2 APP on the mobile phone. For iOS, search for Hobbywing directly in the App Store; for Android, search for Hobbywing in Google Play, or download it from the Hobbywing official website (https://www.hobbywing.com).

3) Power on the ESC, and open the APP. When you enter the APP for the first time, you will be prompted to choose Bluetooth connection or WiFi connection. Here, choose Bluetooth connection.

If you want to switch to Bluetooth connection after using WiFi connection, please click "Select Connection Method" in the "System Settings" to change the settings. Click the ESC logo on the upper right-hand corner of the APP. The Bluetooth devices that can be connected will pop up. Click the Bluetooth name inside the setting box to connect (Bluetooth factory default name: HW_BLE****, factory default password: 888888). After the connection is successful, you can perform parameter setting, firmware update, data reading and other operations on the connected ESC.

4: As a battery voltage detector (Monitor), measure and display the overall voltage of the battery pack and the voltage of the single cell.

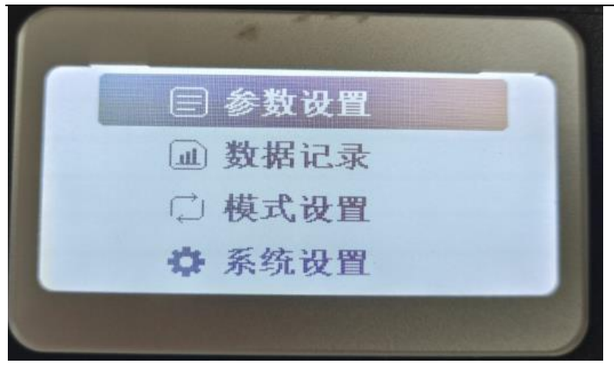
Measuring range：2-8S Li-Polymer/Li-Lon/Li-Fe

Measurement accuracy：±0.1V

How to use: Insert the battery balancing plug into the "BATTERY CHECK" port of the setting box separately (the negative pole of the battery balance port corresponds to the negative pole symbol on the shell of the setting box), as shown in the figure, after the battery is connected, the setting box will Automatically display the total battery voltage and the voltage of each cell.

Note: When detecting the lithium battery voltage, please do not connect the ESC and USB port at the same time, so as avoid damages to the device.

06 Introduction to menu functions



1. Parameter settings

Click to view and set the ESC parameters.

2. Data record

Click to view the recorded data such as "maximum temperature of ESC", "maximum temperature of motor", "minimum voltage of battery" and "maximum speed of motor" recorded by the ESC.

Remarks: The ESC needs to support the data recording function in order to be viewed.

3. Mode settings

1) Application mode switching: Refers to switching the application mode (proflie) of the ESC, suitable for ESCs with multiple application modes.

2) Import setting file: This is the sharing function for settings. Import the setting file of a certain ESC stored in the setting box to another ESC of the same model.

Use the scroll button to select and click a file to import, view, copy, delete, and rename. Press and hold the scroll button to delete all files with one click.

3) Add setting file: This is the function of saving the setting file. Store and name the setting table of the current ESC separately in a file.

4. System settings

1) Language setting: Chinese/English/Japanese and other languages is switchable.

2) Brightness setting: Set the brightness of the screen.

3) Sound switch: Turn on and off the beeping sound during operation.

4) Device information: View the version information of the ESC and the setting box.

5) Restore factory settings: "Restore default value only" is to restore the system settings of the setting box. "Restore all" is to restore the system settings and database of the setting box.

07 LCD program box firmware update

Due to the continuous update of the ESC function and the use of the LCD program box, it is recommended to upgrade to the latest firmware of the LCD program box if necessary. Methods are below:

Use a USB cable to connect the LCD program box to the computer. Run the HOBBYWING USB Link software. Select "LCD Setting Box" under the "Device" menu. On the "Firmware Update" page, select the latest version of the firmware program and click "Upgrade".

Remarks: The HOBBYWING USB Link software can be downloaded from the official website of Hobbywing Technology: https://www.hobbywing.com

08 FCC Information

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.