HOBBYWING®

LED Program Box
USER MANUAL

Thank you for purchasing this HOBBYWING product! For avoiding any possible troubles that you may have in use, please take time to read through this manual before the use. In addition, please note the use conditions and technical parameters of this product.
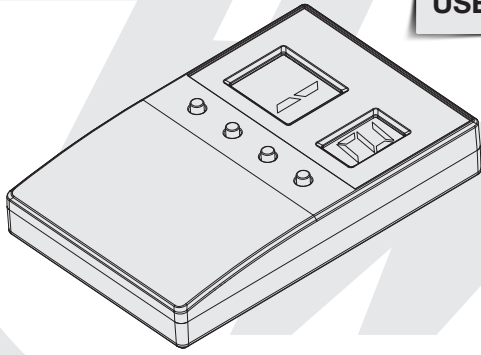
ATTENTION   CAUTIONS

01 Introduction

This LED Program Box is for programming HOBBYWING brushless ESCs. Its friendly interface makes the ESC programming easy and quick. It's compact and applicable for field use.

02 Specifications

- Working Voltage: 4.8-8.4V
- Size: 88 x 58 x 14mm
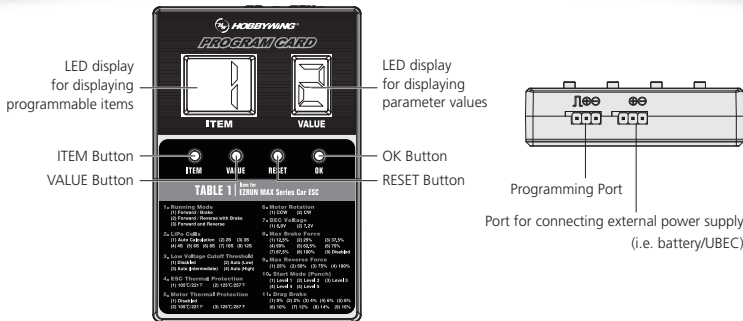- Weight: 40g

03 Applications

This LED Program Box works with the following products of HOBBYWING.
- PLATINUM V1/V2 series & FLYFUN V5 series of brushless aircraft ESCs.
- XERUN series, EZRUN series & QUICRUN series of brushless car ESCs.
- SEAKING series of brushless boat ESCs.

Note 1:
- This program box doesn't work with some XERUN ESCs (i.e. XR8 Plus). About if it's compatible with your ESC, please refer to the user manual (of your ESC)
- This program box doesn't work with some SEAKING ESCs (i.e. SEAKING Pro 160A) either. About if it's compatible with your ESC, please refer to the user manual (of your ESC).
- This program box only works with HOBBYWING brushless ESCs; it's not compatible with other ESCs.
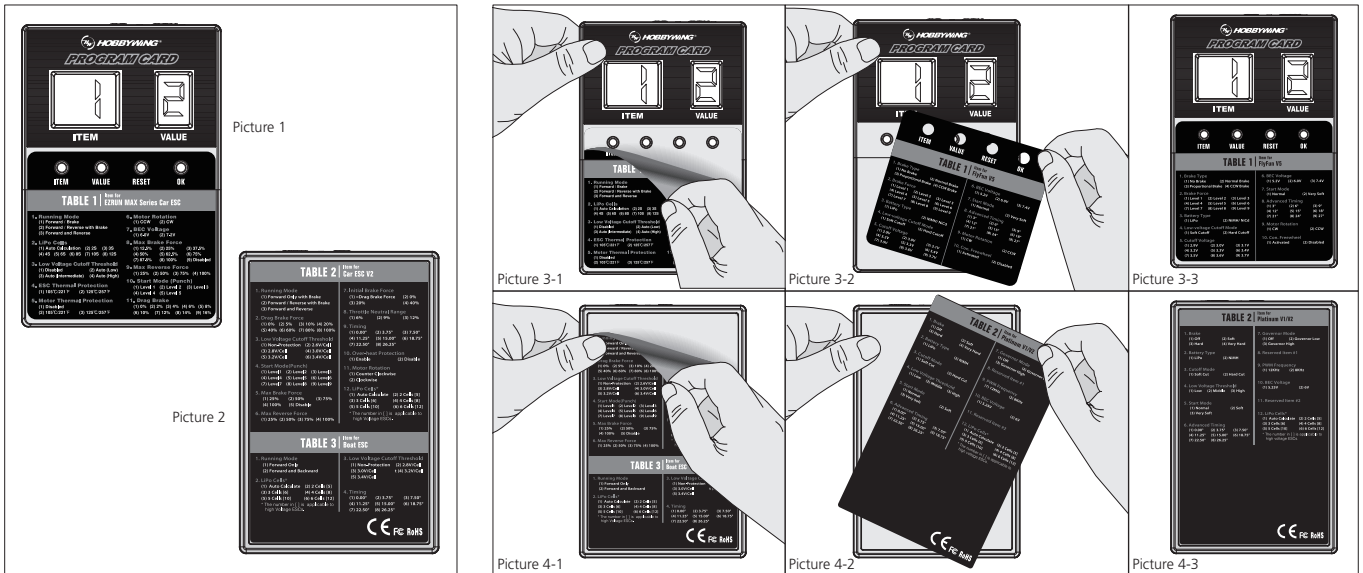
04 Functions & Explanations

LED display for displaying programmable items

LED display for displaying parameter values

ITEM Button

VALUE Button

OK Button

RESET Button

Programming Port

Port for connecting external power supply (i.e. battery/UBEC)

05 User Guide

1 How to Re-label your LED Program Box (optional)

- If your ESC is a car/boat ESC, then there is no need to re-label this program box. Because the corresponding label has already been stuck on the program box at factory.
  1) Front side/TABLE 1 (as shown in Picture 1) is applicable to EZRUN MAX series of car ESCs.
  2) Back side/TABLE 2 (as shown in Picture 2) is applicable to XERUN V2 series, EZRUN V2 series & QUICRUN series of car ESCs; TABLE 3 (as shown in Picture 2) is applicable to boat ESCs.
- If your ESC is an aircraft ESC, then you need to re-label this program box. That's to replace the label which has already been stuck on your program box with the stock label (for aircraft ESCs) included in your (program box) product box.
  1) Front side/TABLE 1(as shown in Picture 3) is applicable to FLYFUN V5 series of brushless aircraft ESCs.
  2) Back side/TABLE 2 (as shown in Picture 4) is applicable to PLATINUM V1/V2 series of brushless aircraft ESCs.

Picture 1

Picture 2

Picture 3-1   Picture 3-2   Picture 3-3

Picture 4-1   Picture 4-2   Picture 4-3

2 How to connect this LED Program Box to different ESCs

Warning! The battery must be disconnected from your ESC before connecting it to this program box. Otherwise, your ESC cannot be "connected" to the program box.

The way to connect LED program box to ESC may vary due to different ESC hardware design. The following are the ways to connect a LED program box to different ESCs, about which way you should take, please refer to the user manual of your ESC.

1) For ESC with the throttle cable and programming cable multiplexed
- For ESC with built-in BEC: plug the ESC throttle cable in the port marked with " ⊖⊕⏚ " on your program box.
- For ESC without built-in BEC (so-called OPTO version): plug the ESC throttle cable in the port marked with " ⊖⊕⏚" and an extra battery (with voltage of 4.8-8.4V) in the other port marked with " ⊖⊕" on your program box (for powering the program box).

2) For ESC that the fan port (on the ESC) is also the programming port
In this case, please unplug the fan wire (from the FAN/PRG port on your ESC) and then plug one end of the programming cable (included in the product box) in and the other end in the programming port marked with " ⊖⊕⏚" on your program box.

3) For ESC with a separate programming cable
- For ESC with the programming cable which has output voltage of 4.8-8.4V: plug the programming cable in the port marked with " ⊖⊕⏚ " on your program box.
- For ESC with the programming cable which has no output voltage: plug the programming cable in the port marked with " ⊖⊕⏚ " and an extra battery (with voltage of 4.8-8.4V) in the other port marked with " ⊖⊕ " on your program box.

4) For ESC with a separate programming port
In this case, please plug one end of the programming cable (included in the product box) in the programming port (on your ESC) and the other end in the port marked with " ⊖⊕⏚ " on your program box.

Note 2:
1) In general, the separate programming cable mentioned above is the "shorter" cable with a JR connector on your ESC.
2) The extra battery mentioned above can also be replaced by an UBEC.

3 How to make LED Program Box work

After all the connections, please connect a battery to your ESC and turn it on. A few seconds later, the LED Program Box will display current settings in your ESC. If the program box doesn't display anything, then please check if the programming cable and the wire (on UBEC/that extra battery) for powering LED Program Box have been reversely plugged in. After confirmed all the connections (are correct), disconnect the battery, 2 seconds later, re-connect it to your ESC to see if any information is displayed on the LED Program Box.
Attention! It often takes a few seconds before LED Program Box displays "digits/information".

4 How to program your ESC with a LED Program Box

- ITEM Button: press this "ITEM" button can select the programmable item(s) you want to adjust/check; the corresponding (item) number of each item will be displayed on the left LED display.
- VALUE Button: after selected one programmable item, the corresponding parameter stored in your ESC will be displayed on the right LED display; and press this "VALUE" button can adjust parameter values.
- OK Button: press this "OK" button after you adjust all the parameters (you want to adjust), a Red "——" will show up on the right LED display for about 1 or 2 second(s) to indicate it's transferring the new parameter values to your ESC. This Red "——" will disappear when the ESC saves all the parameter values.
- RESET Button: press this "RESET" button can factory reset your car ESC.