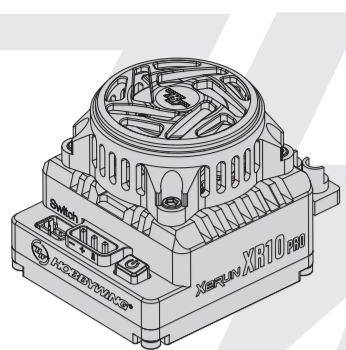


01 Introduction



XERUN USER MANUAL

Brushless Electronic Speed Controller
XERUN XR10 Pro G3
XERUN XR10 Pro G3-X



Thank you for purchasing this HOBBYWING product! Please read this instruction manual carefully before use, once you use the product,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.

20241008

HW-SMPS4-04L01

02 Warnings

- To avoid short circuits, ensure that all wires and connections are well insulated before connecting the ESC to related devices.
Ensure all devices in the system are connected correctly to prevent any damage to the system.
Read the manuals of all the items being used in the build to ensure correct and overall install is correct and reasonable.

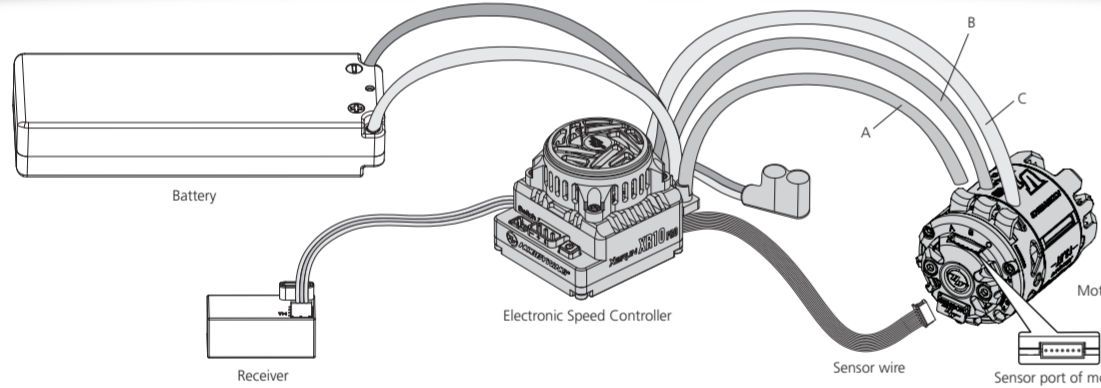
03 Features

- 3 select-to-use profiles applicable to all 1/10th RC car racing, and the external switch port for connecting an external switch (not included in the packaging box, purchase separately) is applicable to different installations.
Separate programming port is able to power an external fan or connect a LCD Program Box Pro or OTA Programmer to the ESC.

04 Specifications

Table with 3 columns: Model, XERUN XR10 Pro G3, XERUN XR10 Pro G3-X. Rows include Cont./Peak Current, Motor Type, Applications, Motor Limit, LiPo/NMH Cells, BEC Output, Cooling Fan, Size, Weight, Programming Port, and Reverse Polarity Protection.

05 Connections



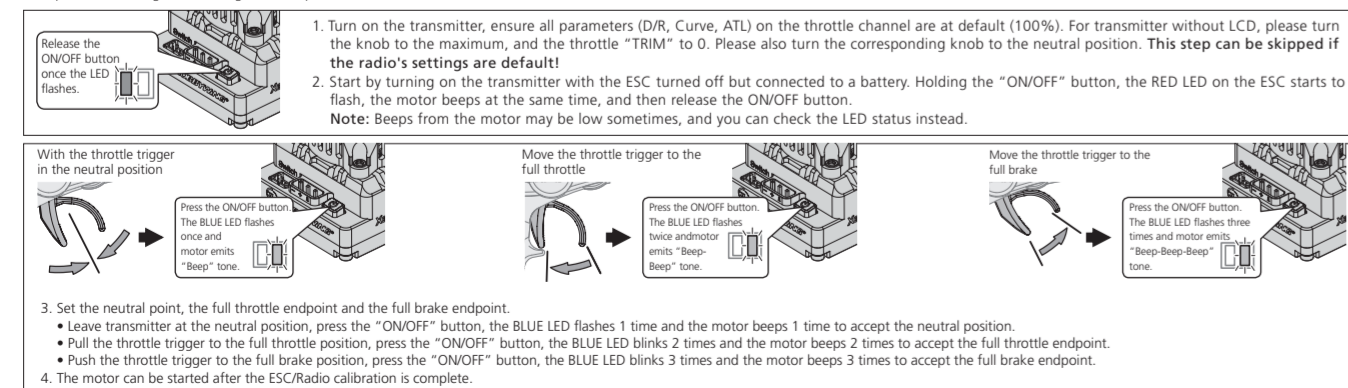
This is an extremely powerful brushless motor system. For your safety and the safety of those around you, we strongly recommend removing the pinion gear attached to the motor before performing calibration and programming functions with this system.

- 1. Motor Connection: Sensored motor connection MUST connect A from the ESC, to A on the motor, B to B, and C to C with the sensor wire connected any variation of the motor to ESC connections may cause damage.
2. Receiver Connection: The throttle control cable on the ESC has to be plugged into the throttle (TH) channel on the receiver.

06 ESC Setup

1 ESC/Radio Calibration

Begin using your ESC by calibrating with your transmitter. We strongly recommend Hobbywing users to use the "Fail Safe" function on the radio system and set (FS) to "Output OFF" or "Neutral Position".



2 Power On/Off

- Attention: In the off state, short press the switch button to turn on the esc; Long press the power button to turn off the esc.
1. To prevent accidental shutdown, clicking the switch button cannot shut down the esc while it is running, it can only be turned off when the motor stops running.

3 Programmable Items

Table with columns: Section, Item, Programmable Items, Parameter Values. Rows are categorized by General Setting, Throttle Control, Brake Control, and Timing.

Note: The PWM Drive Frequency, Brake Frequency, Brake Control, Boost Timing, Turbo Timing and relevant items will be invalid (that's item 2F, 3F, and items from 4A to 5D) when Sensor Mode (item 1J) is set to "Sensorless/Sensorless Hybrid".

- 1A. Settings Mode: In Basic mode, only some basic and commonly parameter items are displayed, see the items marked with an asterisk (\*) in the parameter table.
1B. Running Mode: Option 1: Forward with Brake. Option 2: Forward/Reverse with Brake.
1C. Max. Reverse Force: The reverse force of the value will determine its speed.

07 Explanation for LED Status

- 1. During the Start-up Process: The RED LED turns on solid indicating the ESC doesn't detect any throttle signal or the throttle trigger is at the neutral position.
2. In Operation: The RED LED turns on solid when the throttle trigger is in the throttle neutral zone. The RED LED will blink slowly to stable for zero-timing/blinky racing rules.

- 3C. Drag Brake Frequency: The drag brake force will be larger if the frequency is low, and you will get a smoother brake force when the value is higher.
3D. Max. Brake Force: This ESC provides proportional braking function; the braking effect is decided by the position of the throttle trigger.
3E. Brake Rate Control: This parameter is used to control the response of the brake.

- 4A. Boost Timing: It is effective when the whole throttle range, it directly affects the car speed on straightaway and winding course.
4B. Boost Timing Activation: Option 1: Auto. In Auto mode, the ESC adjusts the Boost Timing dynamically as per the throttle amount.
4C. Boost Start RPM: This item defines the RPM at which Boost Timing is activated.
4D. Boost End RPM: This item defines the RPM at which Boost Timing (you specify) set is applied.

4 Preset Modes

In order to make one firmware applicable to all different racing conditions, there are three "easy-to-select" preset modes (as shown below). Users are able to change the settings of the modes provided (and rename those mode) as per the control feel, track, and etc.

Table with 2 columns: Mode #, Modes/Profiles, Applications. Rows include Zero Timing, 1/10 On-Road, and 1/10 Off-Road.

5 ESC Programming

- 1. Program your ESC with a multifunction LCD program box pro: Connect the interface marked with "+ + +" on the esc to the interface marked with "ESC" on the program box using a separate programming cable.
2. Using the OTA Programmer for parameter settings: Insert the programming cable of the OTA Programmer into the programming interface of the esc, and use your phone to install the HW Link APP to set the esc.

6 Factory Reset

- Restore the default values with a multifunction LCD program box pro: After connecting the program box to the ESC, Click on "Parameter Settings" and select the "Reset Parameters" to restore the factory settings.
Restore the default values with a OTA Programmer (& HW Link App): After connecting the OTA Programmer to the ESC, open the HOBBYWING HW Link App on your smart phone, select "Parameters" followed by "Factory Reset" to reset the ESC.

08 Trouble Shooting

Table with 3 columns: Trouble, Possible Causes, Solutions. Rows include issues like 'ESC unable to start', 'After power on, the RED LED flashes', 'The vehicle is going in the reversed direction', 'The motor suddenly stopped', 'The motor stuttered but couldn't start', 'The vehicle could run forward (and brake), but could not reverse', 'The motor got stuck or stopped when increasing the throttle during the starting-up process', and 'The RED & BLUE LEDs on the ESC flashing rapidly at the same time when the throttle trigger was at the neutral position.'