

01 Introduction

Congratulations and thank you for your trust in Hobbywing product. By purchasing the XERUN XD10 Pro, you have chosen a high performance sensorless brushless electronic speed controller!



02 Warnings

- To avoid short circuits, ensure that all wires and connections must be well insulated before connecting the ESC to related devices.
Ensure all devices are well connected to prevent poor connections and avoid damage to your electronic devices.

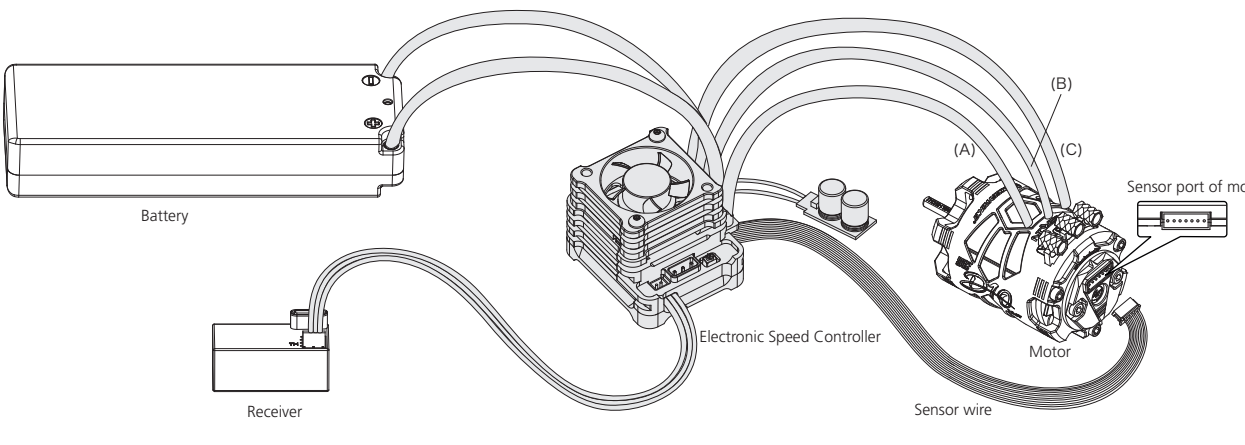
03 Features

- Built-in switch mode BEC with a maximum output of 10A and voltage adjustable from 5V to 7.4V (step: 0.1V) for usage with servos & other devices require different voltages.
Separate PRG/FAN port is able to power an external fan for maximize cooling performance or connect a LCD program box or WiFi module to the ESC.

04 Specifications

Table with specifications: Model (XERUN XD10 Pro), Cont./Peak Current (100A/800A), Motor Type (Sensored / Sensorless Brushless Motors), Applications (1/10* drift car), etc.

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 Wiring: The motor wiring is different between the sensed and the sensorless; please only follow the introductions below.
2. Receiver Wiring: 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 (F5) to "Output Off" or "Neutral Position".

Calibration steps 1-4 with diagrams showing throttle trigger movements and LED status checks.

2 Power On/Off

Attention! The temperature of its Aluminum housing may be very high when there is heavy load. For precaution, we recommend users to have a fan blown towards the ESC.

3 Programmable Items

Large table with columns: Section, Item, Programmable Items, and Parameter Values. Rows include General Setting, Throttle Control, Brake Control, and Timing.

Note: Item 4C (Boost Start RPM) & item 4D (Boost End RPM) are not programmable if item 4B (Timing Activation) is set to "Auto".

- 1A. Running Mode: Racing mode, Forward with Brake, Forward/ Reverse with Brake.
1B. Max. Reverse Force: The reverse force of the value will determine its speed.
1C. Reverse Delay: This parameter is used to adjust and set the delay time when the reverse output is being applied.

- 1G. BEC Voltage: BEC voltage can be adjusted between 6.0-7.4V. 6.0V is applicable to common servo.
1H. Remote Off: Users can simply push and hold the brake trigger for 6 seconds.
1I. Motor Rotation/Direction: With the motor shaft faces you (the rear end of the motor is away from you).

- 2F. Softening Value: It allows users to fine-tune the bottom end, change the driving feel, and maximize the driving efficiency at different track conditions.
3A. Drag Brake: It is the braking power produced when releasing from full speed to neutral position.

- 2C. Initial Brake Force: It is the force when pushing throttle trigger from neutral zone to the initial brake position.
3E. Boost Curve: This item is used for regulating the relation between the throttle range in brake zone and the brake force.
3F. Brake Frequency: The brake force will be larger if the frequency is low; you will get a smoother brake force when the value is higher.

Table for Option 2: Auto showing Actual Boost Timing vs RPM (Motor Speed).

- Option 2: 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 specifically set) is applied.

5 ESC Programming

- 1) Program your ESC with a multifunction LCD program box or via a multifunction LCD program box & a PC.
2) Program your ESC with an OTA Programmer: The XD10 Pro ESC can also be programmed via a WiFi module along with smart phone devices.
3) Data Checking: The ESC is able to record the maximum ESC temperature, maximum motor temperature, minimum battery voltage and maximum motor speed in operation.

6 Factory Reset

- Restore the default values with a multifunction LCD program box: After connecting the program box to the ESC, continue to press the "ITEM" button on the program box until you see the "RESTORE DEFAULT" item.

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 and the GREEN LED dies out when the throttle trigger is in the throttle neutral zone.

08 Trouble Shooting

Troubleshooting table with columns: Trouble(s), Possible Causes, and Solution(s).