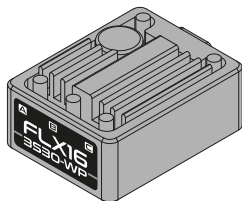


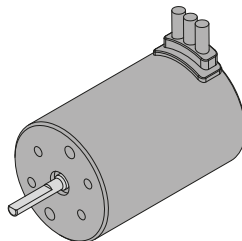


FLX18-3S30-WP FLUX ESC Instruction Manual



160898

FLX18-3S30-WP Flux ESC with XT-30



160899

FLX16-2435-450KV Brushless Motor



Cautions

Failure to follow these instructions can damage your kit, and cause serious bodily injury or death.



Attention

Failure to follow these instructions can cause injury to yourself or others.
You might also cause property damage or damage your kit.



Cautions

This is an extremely powerful brushless motor system. We strongly recommend removing your tires for your own safety and the safety of those around you before performing calibration and programming functions with this system. Please keep your hands, hair, and loose clothing clear from the gear train and wheels of an armed high performance system.

Rubber tires will “expand” to extreme size on a high speed vehicle. DO NOT hold the vehicle in the air and run it up to full throttle. Tire failures at that speed can cause serious injury! Make sure your tires are securely glued to the rims and check them often!

Always disconnect the battery from the ESC when you are finished using your vehicle. The switch on the ESC controls the power that is delivered to the receiver and servos. The controller will always draw current when it is connected to the battery and will completely discharge batteries if they are connected for long durations. This may cause failure of your batteries.

En: Scan Me
De: Scanne mich
Fr: Scanne-moi
Es: Escanéame
Fi: Skannaa minut
No: Skann meg

Da: Scan mig
Sv: Skanna mig
Pt: Escaneie-me
It: Scansionami
Tr: Beni Tara
Ro: Scanează-mă

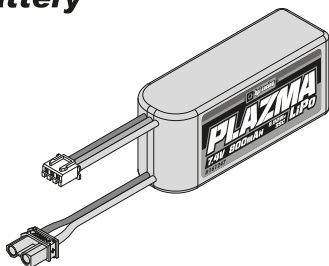
Pl: Przeskanuj mnie
Cs: Naskenuj mě
Zh: 扫描二维码
Ja: スキャンして



Equipment Needed

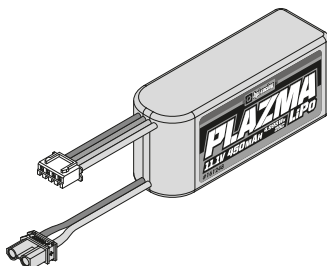
**FLX18-3S30-WP
FLUX ESC**

Battery



2 cell LiPo 7.4V battery pack

OR



3 cell LiPo 11.1V battery pack



Attention

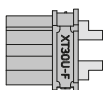
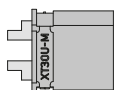
Do not use NiCd/NiMH battery chargers for LiPo batteries. If you do not use a special charger for LiPo batteries, they will be damaged.



Cautions

If you are using a LiPo battery pack, you must enable the Auto-LiPo setting. If you do not setup your speed control correctly, your battery may explode, swell, smoke, or become useless. Please refer to page 6 for Auto-LiPo setting.

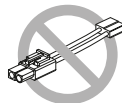
Battery Connector



Poor quality battery connectors can be a roadblock to performance. Avoid the common “white plastic” connectors commonly seen on many battery packs.

A fast brushless setup will draw many times the power that these connectors can safely handle.

For this reason your HPI Brushless ESC is equipped with an XT-30 plug



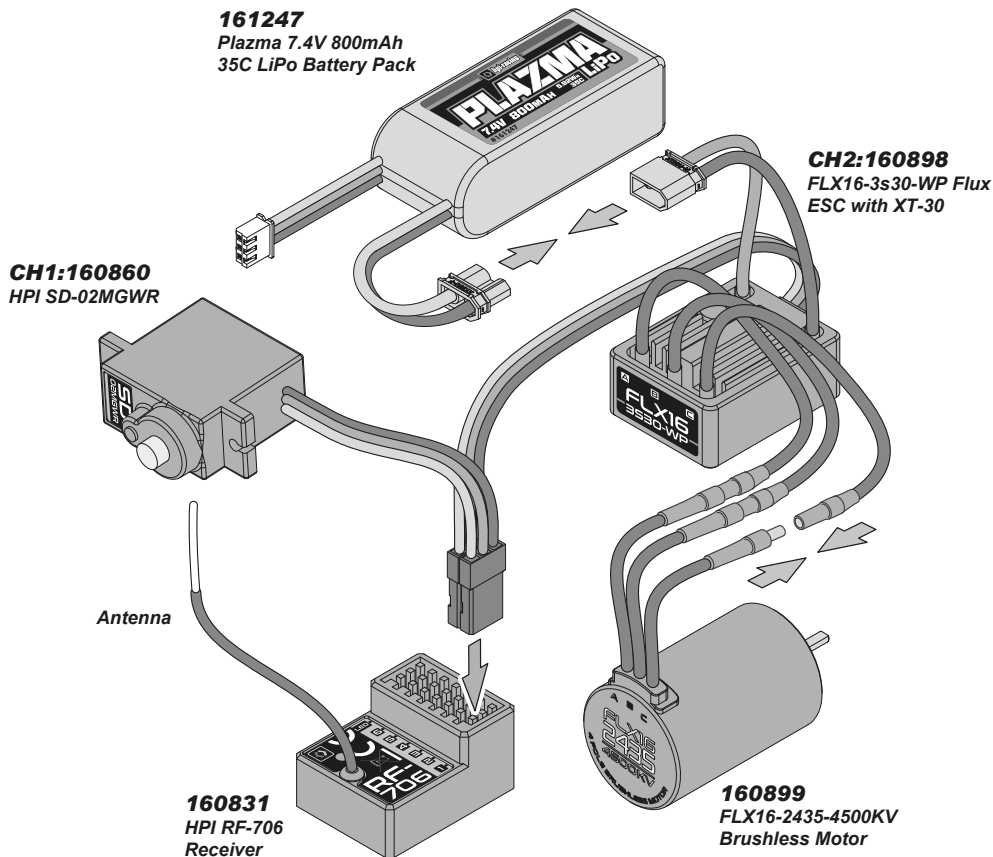
Cautions

As with any extremely high powered electric power system, the primary limitations to ultimate vehicle performance are the batteries and connectors. Use the best batteries and connectors that you can find. The better the batteries, the more performance you will have! We do not recommend the use of low quality batteries referred to as “stick packs” use of “stick packs” may result in personal injury or fire. Your ESC and Motor will safely operate on 2-3 cell LiPo (7.4v-11.1V) battery packs. Exceeding these voltages may result in damage to your brushless system.

1 Receiver Connections

**FLX18-3S30-WP
FLUX ESC**

1-1 Receiver Connections



1-1-1 Failsafe Function

If the temperature of the ESC is too high, the Thermal Protection Function will activate. Once the ESC has cooled down to normal temperature, it will work as normal.



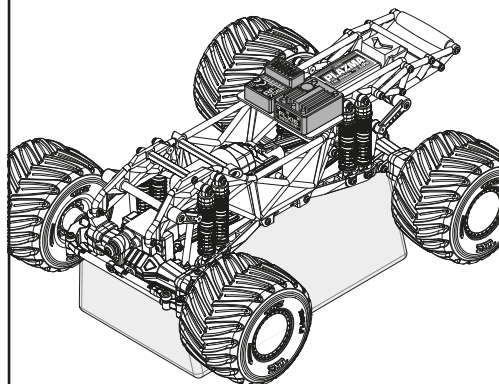
Cautions

Always disconnect the battery from the ESC when you are finished using your vehicle. The switch on the ESC controls the power that is delivered to the receiver and servos. The controller will always draw current when it is connected to the battery and will completely discharge batteries if they are connected for long durations. This may cause failure of your batteries.

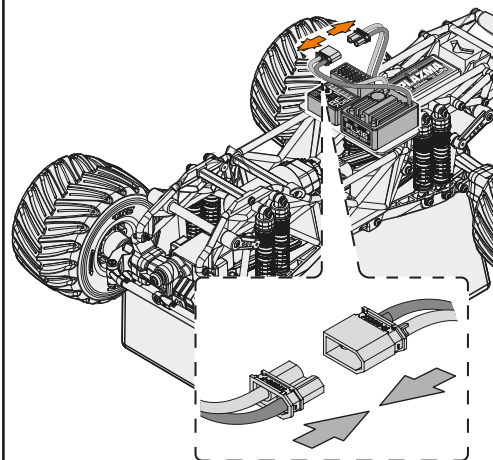
2-1 ESC Setup

You must setup the ESC before running the first time. After the initial setup, it is not required before every run. Please read through the instructions and get familiar with the procedure before starting setup. The setup process moves quickly, and it will help you to be ready for each step.

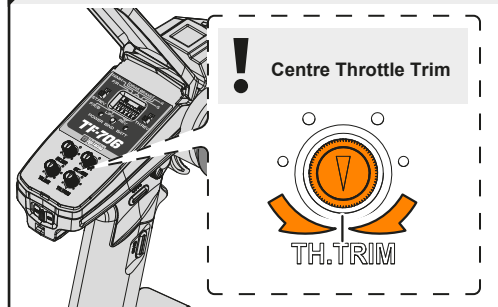
1 Put the car on a stand



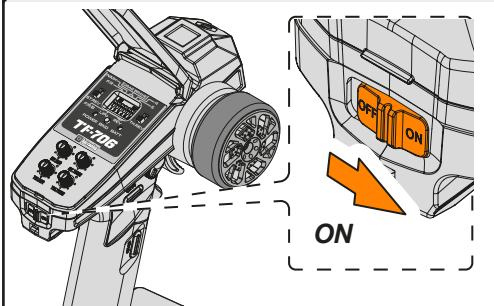
2 Connect Battery



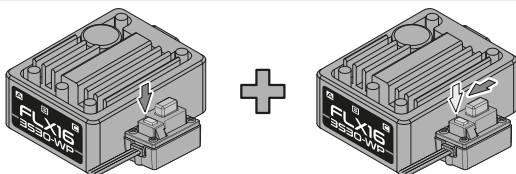
3 Centre throttle trim



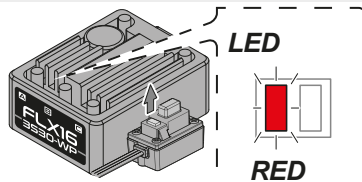
4 Switch on transmitter



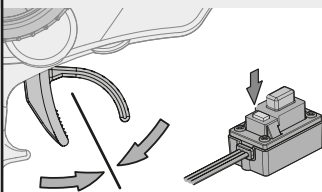
- 5** To enter calibration mode: Hold down the setup button while turning on the ESC.



- 6** Release the Setup button once the LED flashes



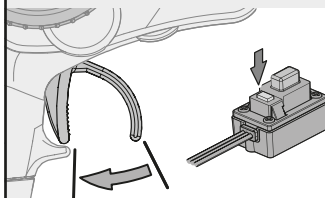
- 7** Leave the trigger in the neutral position. Press the setup button



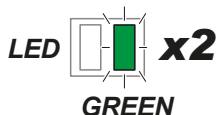
- 8** Green Led Flashes And A Beep Sound From The Motor



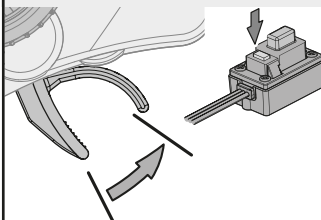
- 9** Move trigger to full throttle and press the setup button



- 10** Green Led Flashes Twice Beeps Twice From The Motor



- 11** Move the trigger to full brake and press the setup button.



- 12** Green Led Flashes Three Times, Beeps Three Times From The Motor



2-2 LED Status

1. During the Start-up Process

- The GREEN LED flashes "X" number of times indicating the number of LiPo cells you have connected to the ESC.
- The GREEN LED turns on solid indicating the throttle trigger is at the neutral position.
- The RED LED flashes a short, single flash and repeats (☆, ☆, ☆), along with a beep from the motor if the ESC doesn't detect any throttle signal.

2. During Operation • The GREEN LED turns on solid indicating the throttle trigger is at the neutral position. • The RED LED turns on solid when your vehicle runs forward. The GREEN LED comes on when pulling the throttle trigger to the full (100%) throttle endpoint. • The RED LED turns on solid when you reverse, the GREEN LED will also come on when pushing the throttle trigger to the full reverse endpoint and setting the "maximum brake force" to 100%.

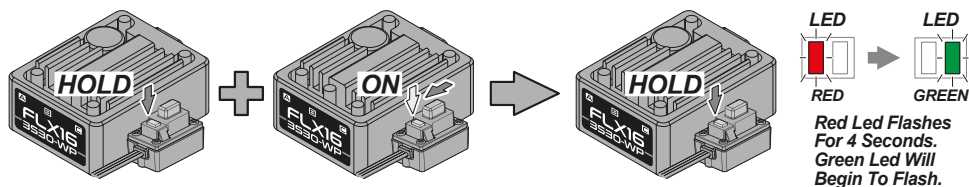
3. ESC Protection is Activated • The RED LED flashes a short, single flash and repeats (☆, ☆, ☆) indicating the low voltage cut-off protection is activated. • The GREEN LED flashes a short, single flash and repeats (☆, ☆, ☆) indicating the ESC thermal protection is activated.

3-1 ESC Programming

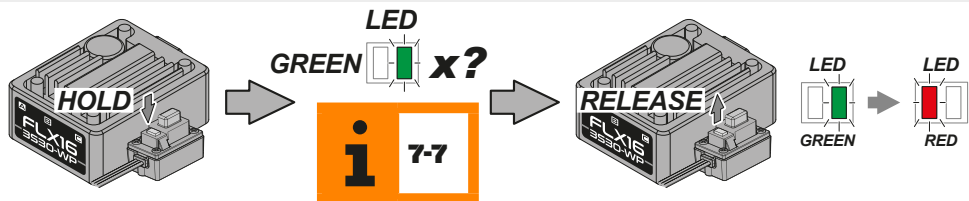
- Note:**
1) During the programming process, the motor will emit a "Beep" tone whilst the LED is flashing.
2) The ESC will use a long flash and "Beep" tone to represent number "5" to easily identify higher value settings.

E.g. Short Flash X4 (☆,☆,☆,☆) = Program Value No. 4
 Long Flash (☆—) = Program Value No. 5
 Long Flash + Short Flash (☆—,☆) = Program Value No. 6

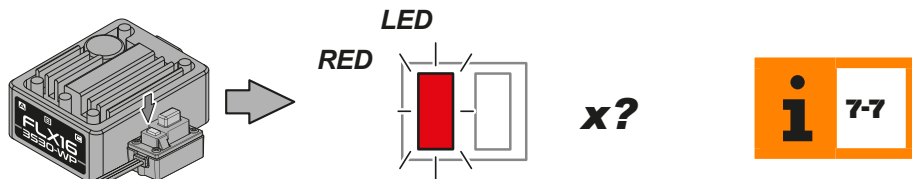
- 1** While switching on ESC hold down the setup button. Continue to hold the setup button while the LED's flash. Continue to hold the setup button until the green LED's flash.



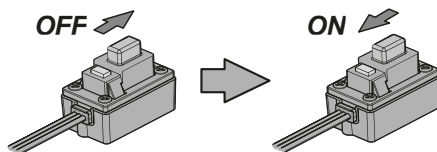
- 2** Each flash represents the programmable mode number. Release the setup button when you reach the desired mode. You are now in the program mode setting.



- 3** Press the setup button to change the mode value. Each mode value will have different amounts of red LED flashes.



- 4** In order to save the changes and the settings you must switch off the ESC. When you next switch it back on it will have saved your new settings. To make further alterations you need to re-enter the mode values again.



3-2 Optional HOBBYWING PROGRAM BOX

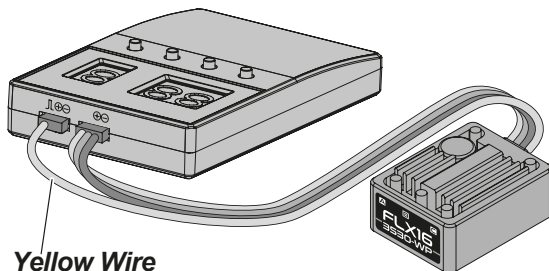
Your HPI Flux ESC is fully compatible with the HOBBYWING LED Program Box which allows you to quickly change settings easily with the LED screen. Available separately.



- 1 Connect the Program Box using a separate programming cable as shown in the diagram.

Then connect the ESC to the battery and turn it on.

Use the "ITEM" and "VALUE" buttons on the program card to select and change the values. Press "OK" to save the parameters.



Yellow Wire

3-3 Program Modes

Parameter mode Eingestellter Wert Mode paramètre モード内容		1	2	3	4	5	6	7	8	9
PPR r r o o g g m m e e a a g g m m s s a a l l b b e e s s M a r r o o d d e e M o d d e e S e t t i i n n g g e e	1	Running Mode Fahrmodus Mode Allumage ランニングモード	Fwd/Brake Vorw./Brems Avt/Frein 前進/ブレーキ	Fwd/REV/Brake Vorw./Rückw./Brems Avt/Arri/Frein 前進/後進/ブレーキ						
	2	Drag Brake Force Roll-Bremse des Motors Freinage de Ralentissement ドラッグブレーキ	0%	5%	10%	15%	20%	25%	30%	40%
	3	Auto-Lipo Cut off Auto-Lipo Abschaltung Coupure Auto-Lipo オートLIPカットオフ	Disable Deaktiviert Inactif プロテクトOFF	Auto 2.6V/Cell	Auto 2.8V/Cell	Auto 3.0V/Cell	Auto 3.2V/Cell	Auto 3.4V/Cell		
	4	Punch Punch Punch パンチ	Level 1	Level 2	Level 3	Level 4				
	5	Max.Brake Force Max. Bremskraft Force frein. max 最大制動力	25%	50%	75%	100%				

Standard Position
Standard Einstellung
Position standard
基本設定位置

3-3 Program Modes

3-3-1 Running Mode

FWD/Brake - This mode offers Forward and Brake functions only. This mode is commonly required at race events.

FWD/REV/Brake - This mode offers Forward, Brake and Reverse. Note, The Reverse function uses a soft start "Double click" function which will only allow reverse to be activated once the motor has stopped moving forward.

3-3-2 Drag brake force

This mode allows the setting of an automatic drag brake when the throttle stick is returned to neutral, simulating the slight braking effect of a brushed motor while coasting.

3-3-3 Auto LiPo Cut Off

The Auto-LiPo cut off value is changed depending on the type of battery you will be using in your RC car. When using a Lithium based pack please select the suitable cell voltage for the low voltage protection of your battery pack. WARNING: Never use the value " No Protection" if you are using a Lithium battery! The Flux ESC will monitor the battery output voltage. If the voltage drops lower than the preset threshold for more than 2 seconds, the output power will be reduced by 50%. This will allow enough time to bring the car back to you. After 10 seconds the Flux ESC will cut output power completely.

3-3-4 Punch

Punch can be used to control overall motor response in relation to the throttle input. The higher the set value, the faster the acceleration. Lower punch settings are advised for softer starts, lower traction, or to help with motor hesitations or stuttering when throttle is applied rapidly.

3-3-5 Max. Brake Force

The ESC provides a proportional brake function. This mode sets the brakes force applied when the throttle is at full brake. A very large brake force may slow the car quickly but be aware it can also do damage to the cars drivetrain.

3-4 Factory Reset

Restore the ESC to the factory settings using the Setup Button.

Turn on the transmitter, then turn on the esc. Press and hold the SET button of the esc switch for over 3 seconds. RED & GREEN LEDs flash simultaneously indicating you have successfully restored the default values. To save the changes you must switch off the ESC. When you next switch it back on your settings will be back in the default mode.

Restore the ESC to the factory settings using the LED program card.

Once the LED program card is connected to the ESC, press the "RESET" key and then press "OK" to save to restore the factory settings.



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