SG

ステージ
STAGE D10

Startup Guide



STOP AT NOTHING.

WWW.HPIRACING.COM

hpi·racing

En 161002-006-SG

Thank you

Thank you for selecting this HPI RACING product!

This kit is designed to be fun to drive and uses top quality parts for durability and performance. The instruction manual you are reading was designed to be easy to follow yet thorough in its explanations. HPI Racing wants you to enjoy driving your new R/C kit. If you come across any problems or need some help getting through a step, you can contact us on the internet at www.hpiracing.com.

This is a high performance R/C kit, and it requires regular maintenance for best performance. If you don't do regular maintenance the performance will suffer. HPI has all the necessary parts and accessories available to keep your car performing at its best.

The caution or attention symbols will warn you about steps that can be very dangerous.

Please read and understand the instructions carefully before proceeding.



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

Before Running	**Please read manual (with parent, guardian or a responsible adult if necessary).**
While Operating	**Please do not run on a public street, this could cause serious accidents, personal injuries and/or property damage.**
	Please do not run near pedestrians or small children.
Before Operating	**Make sure that all screws and nuts are properly tightened.**
	Always use fresh batteries for your transmitter and receiver to avoid losing control of the model.
	Please confirm the neutral throttle trigger position.
After Running	**Turn OFF receiver first, then turn OFF transmitter. This will prevent the car from losing control.**
	After running a HPI RACING product, it is necessary to perform routine maintenance. Failure to do this can result in increased wear and damage to the engine and chassis.
Battery safety	**Please be careful when handling the battery. It will be hot after running. If the wire is frayed, a short circuit can cause a fire.**

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Additional Information

QS *Quick Start Guide* + www

TG *Technical Guide* + www

BM *Body Installation* + www

SG *This Guide* www

RM *Transmitter Manual* www

EM *ESC Manual* www

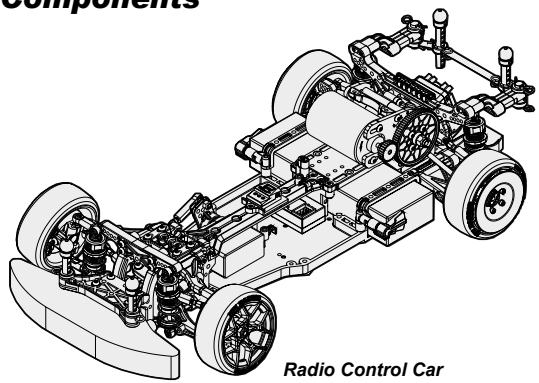
UG *User Guide* www

i **EM-1-1**

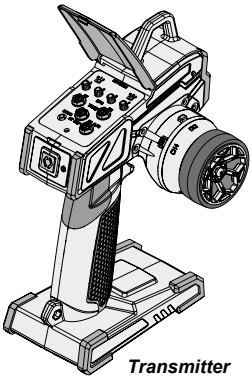
NOTE - This refers to the relevant guide (as above) and the relevant section. In this example, Section 1-1 of the ESC Manual.

Kit Contents

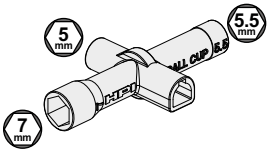
Components



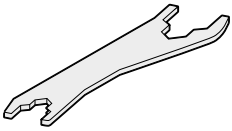
Radio Control Car



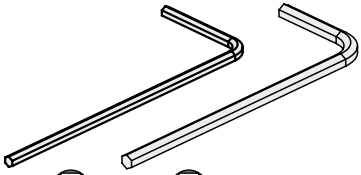
Transmitter



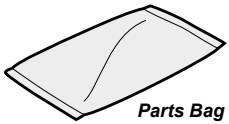
160362
Cross Wrench Small (Plastic)



160364
Turnbuckle Wrench



Z901 ***Z904***
Allen Wrench



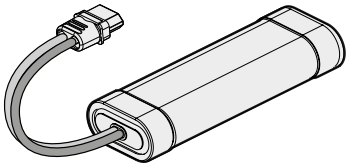
Parts Bag

Tip

Refer to the User Guide for information on the use of spare parts.

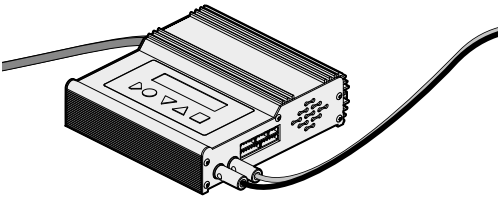
i UG

Equipment Needed

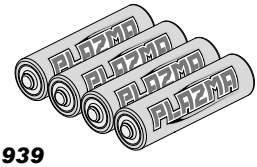


BATTERY PACK
PLAZMA 7.2V 2000mAh/7.4V 2S LiPo

! Use 2S LiPo for Flux models.



Suitable Battery Charger

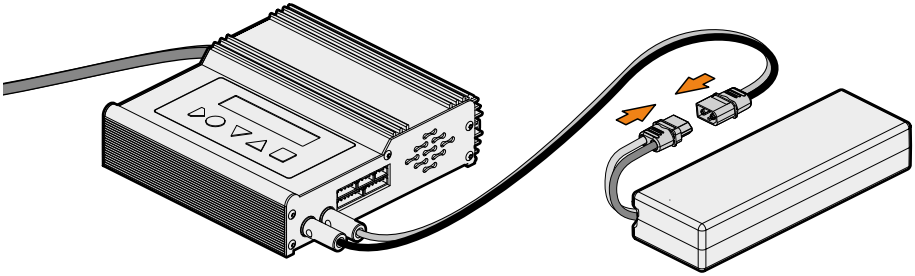


101939
PLAZMA 1.5V Alkaline AA Battery

1-1 Charging Car Battery

Charge the car battery.

Refer to your charger owner's manual for details on proper setup.



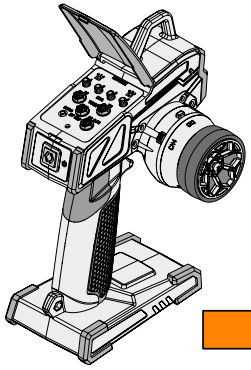
Caution

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.

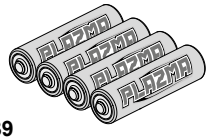
1-2 Setting Up Transmitter

1-2-1 Transmitter Battery Installation

1 *Open battery cover at the bottom of transmitter and install batteries*

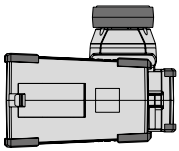


Do not mix batteries of different ages or types.

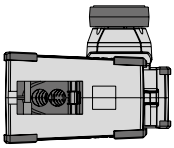


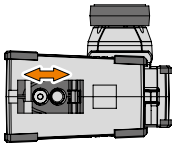
101939
PLAZMA 1.5V Alkaline AA Battery
(Not Included)

Battery Cover



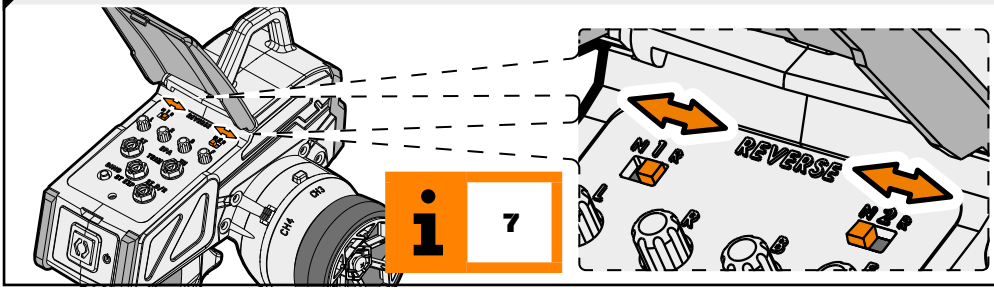
Note Direction.





1-2-2 Transmitter Preparation

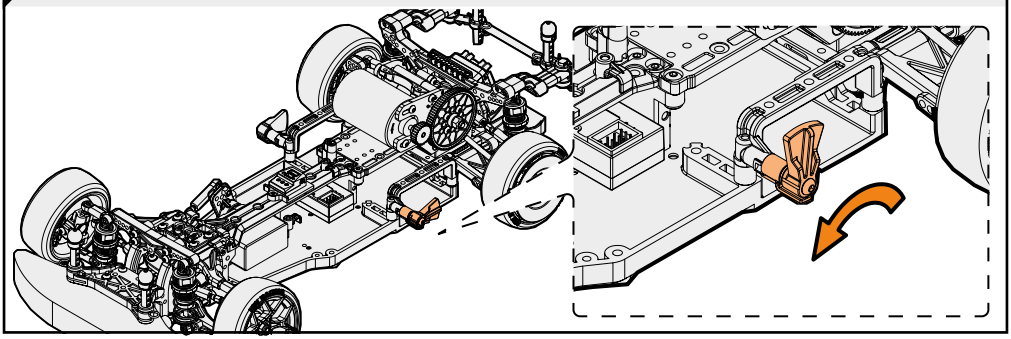
1 *Check direction of reverse switches*



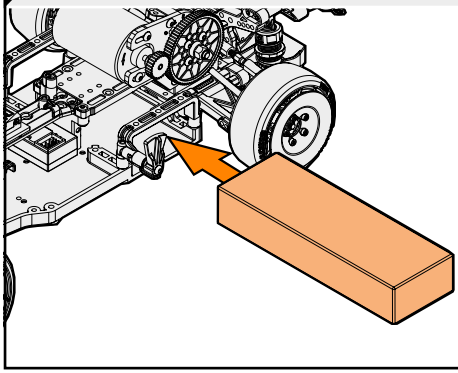
1-3 *Preparing the Chassis*

1-3-2 Battery installation

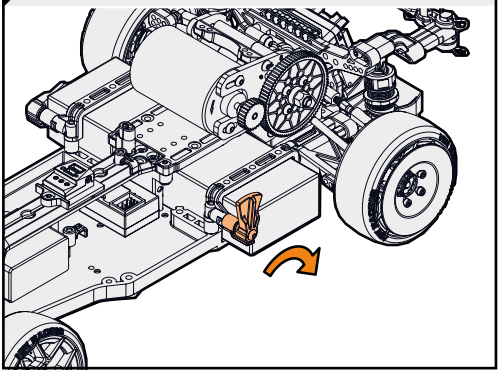
1 *Rotate the Battery Clip*



2 *Slide in fully charged battery*



3 *Rotate the Battery Clip to retain battery*



2-1 ESC Setup

The installed ESC is set up for use straight out of the box, but you will need to adjust the settings to suit the battery pack you are using.

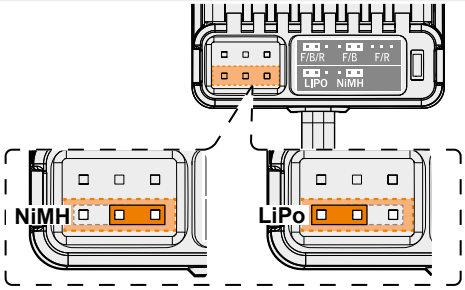
2-1-1 Brushed Models

The ESC is programmed using jumpers to select the required setting. It is important to select the correct setting for your battery to ensure that the built-in low-voltage protection functions correctly.

Low-voltage protection is an electronic safety feature that protects the battery by reducing or cutting the ESC output when the battery voltage drops below a preset threshold.

If the battery pack voltage remains below the threshold for more than 2 seconds, the ESC will enter protection mode. When the car stops, the red LED on the ESC will blink to indicate that the low-voltage cut-off protection has been activated.

1 ***Position jumpers as shown to select setting. (We recommended using tweezers to plug in the jumpers)***



Beep Sound	Behaviour
1 short Beep	The battery is NiMH/NiCd
2 short Beeps	The battery is 2S LiPo
3 short Beeps	The battery is 3S LiPo
1 long Beep	Self-test and throttle calibration is okay. The ESC is ready to run.

2-1-2 Brushless (FLUX) Models

For FLUX models we only recommend a 2S LiPo Battery Pack, but you will need to select the suitable cell voltage for the low voltage protection of your battery pack.

The FLUX ESC offers 6 options:

Auto LiPo Cut Off	Option 1	Option 2	Option 3	Option 4 (Default)	Option 5	Option 6
	Disable	Auto 2.6V/Cell	Auto 2.8V/Cell	Auto 3.0V/Cell	Auto 3.2V/Cell	Auto 3.4V/Cell

Tip **See separate ESC Manual for more detailed information** EM 3-2

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.

If the voltage of the battery pack is lower than the threshold for 2 second, the ESC will enter the protection mode.

When the car stops, the red LED blanks on the ESC to indicate that the low voltage cut-off protection has been activated.

2-2 *Binding/Pairing*

Programming a receiver to recognize the code of only one specific transmitter. Binding and fail-safe is pre-set from the factory.

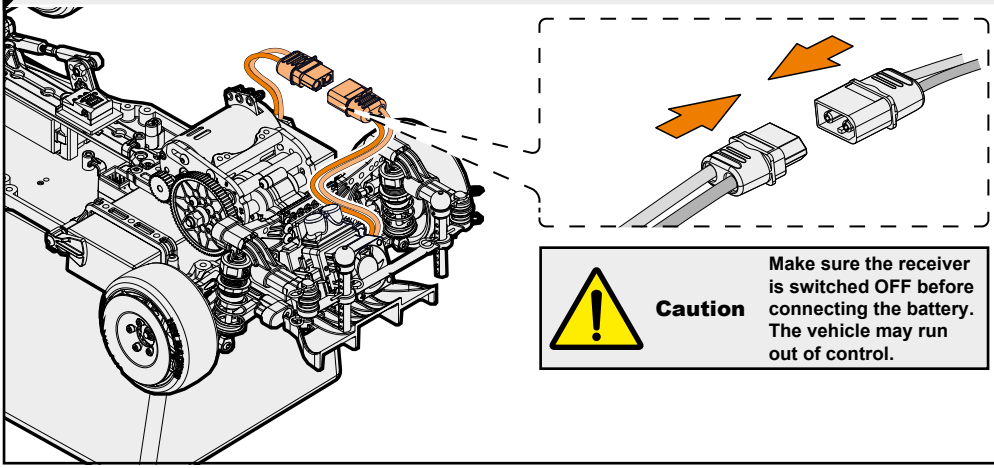
Car and transmitter should auto connect when both powered on. See **Section 3** for the switching on procedure.

Caution **If you change transmitters or add a receiver, you must re-bind before operating your vehicle.**

If the car and transmitter do not bind after switching on, or you change the transmitter or receiver, do the following:

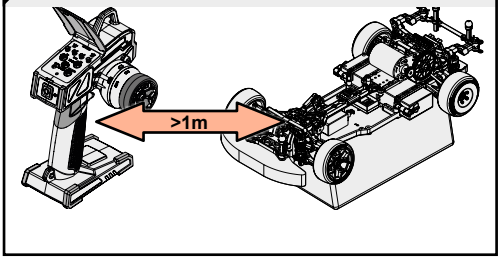
2-2-1 Manual Binding

1 ***Connect Battery - ensure you have completed the ESC setup for battery type first***

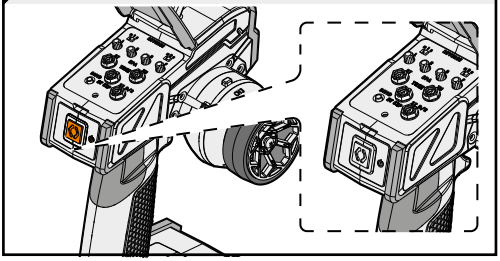


Caution **Make sure the receiver is switched OFF before connecting the battery. The vehicle may run out of control.**

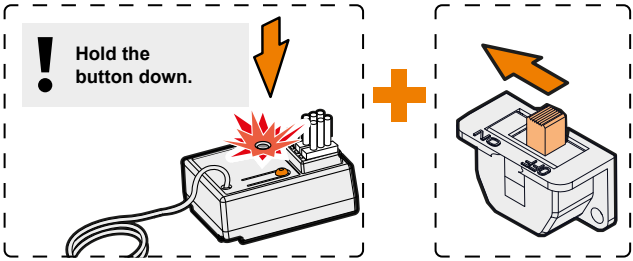
2 ***Place the transmitter and the receiver close to each other (within one meter).***



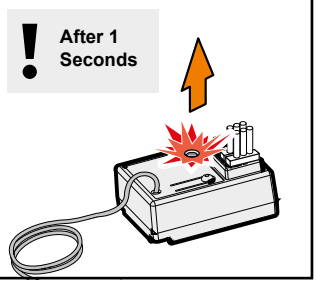
3 ***Turn the power switch on the transmitter to the ON position.***



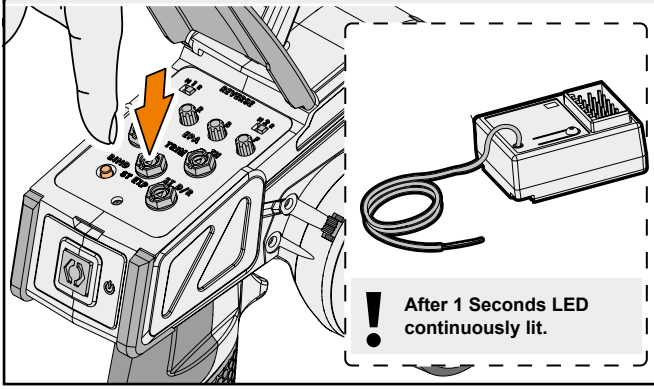
4 *Press and hold the receiver setup button, then turn the power switch to the ON position. The LED will then flash quickly.*



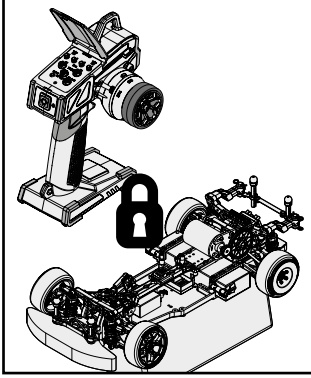
5 *Release the setup button after 1 second*



6 *Press and hold the BIND button on the transmitter for 1 second until the LED on the receiver is continuously lit.*



7 *Binding Complete.*



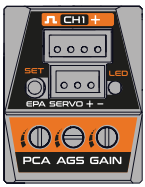
2-3 *Gyroscope*

The gyroscope must be set up before first use. Refer to the separate setup guide included in the box for instructions.

161068-006



161068
D-Box3 Lite Drift Gyro



161069
D-Box3 Pro Drift Gyro

2-4 *Body Installation*

Tip

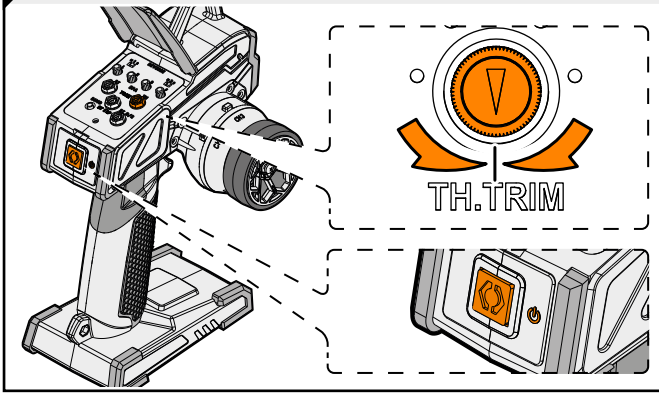
Refer to the separate instruction sheet included in the box.

BM

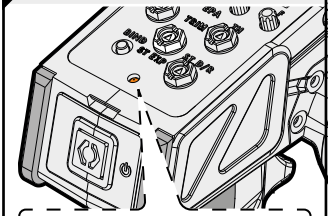
3 Switching On

STAGE D10

1 *Center Throttle Trim, the power on transmitter*



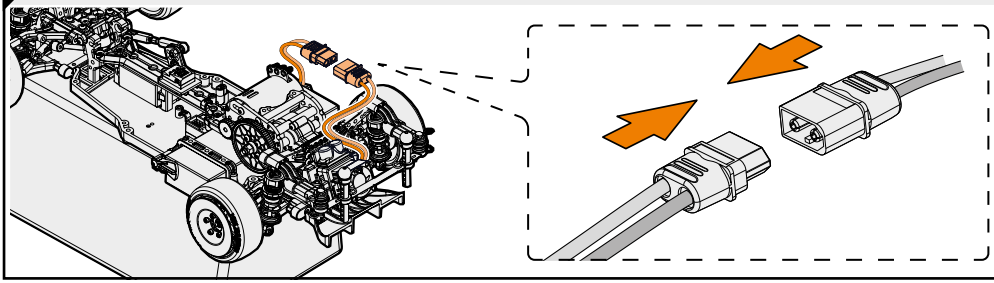
2 *Check Batteries*



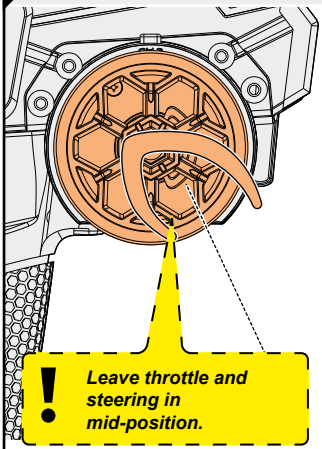
Good Batteries

Low Batteries (Light Blinks)

3 *Put the car on a stand, and connect battery*

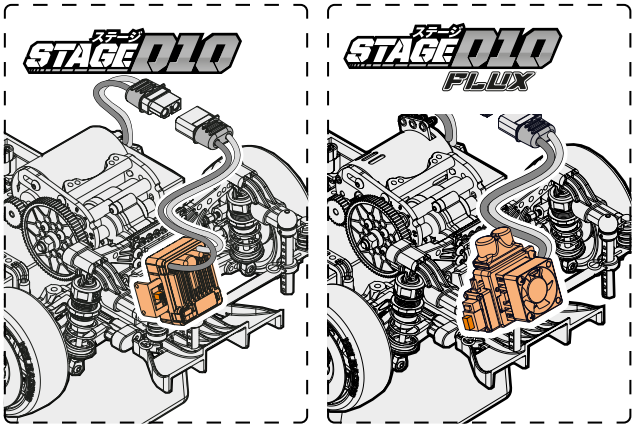


4 *Do not touch throttle or steering*



! *Leave throttle and steering in mid-position.*

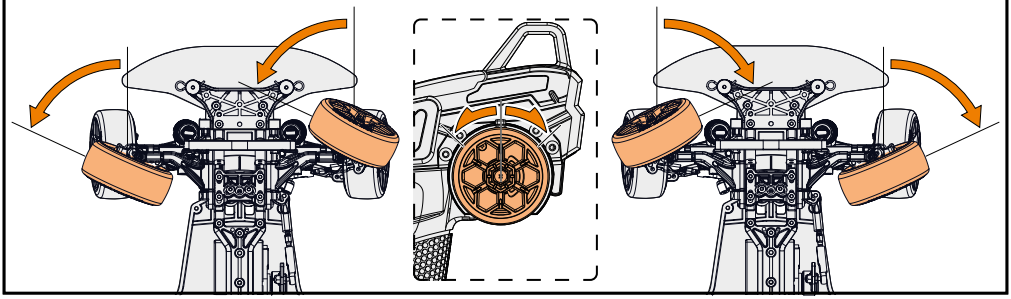
5 *Turn on car*



4 Using the Transmitter

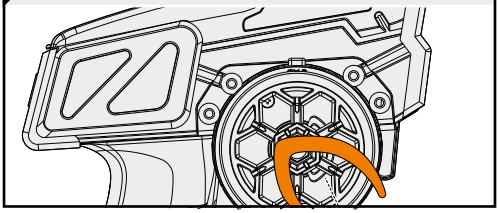
4-1 *Steering*

1 *Steering is normally back = left, forward = right. This is adjustable - see transmitter manual for further information.*

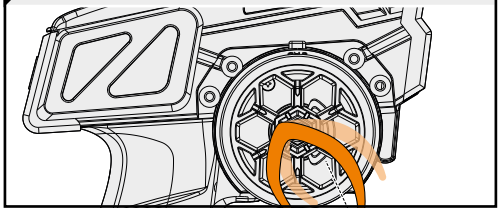


4-2 *Acceleration*

1 *Throttle Trigger - neutral position*

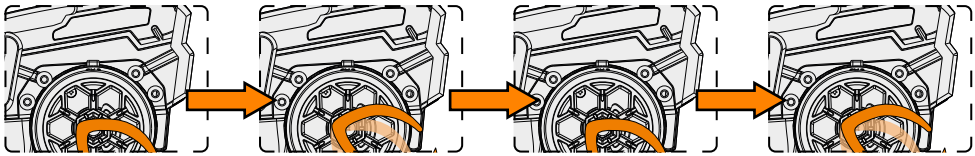


2 *Throttle Trigger - forwards*



4-3 *Reverse/braking*

Braking		Reverse	
1. Stop (Neutral)	2. Brake	3. Stop (Neutral)	4. Reverse



Tip

See separate Transmitter Manual for more detailed information

RM

4-4 Auxiliary Channels

4-4-1 CH3: LED Lights

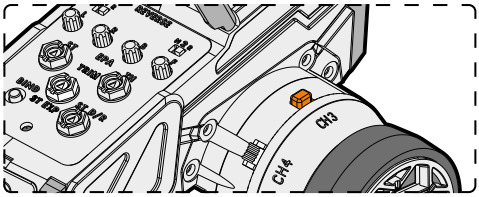
The TF-51 Channel 3 is used to control the LED light function. The CH3 button cycles through 3 modes:

1. Off

2. On

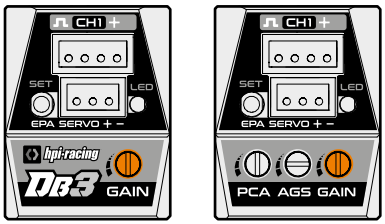
3. Daytime running mode

(Headlights Off, Tail lights On)



4-4-2 CH4: Gyro GAIN (Sensitivity Adjustment)

Gyro gain can be adjusted using either the gyro's GAIN dial or a transmitter channel (e.g. CH4).



With Gyro GAIN dial:

- Turn anticlockwise to increase gain.
- Turn clockwise to decrease gain.

With Transmitter:

Note: When gyro gain is controlled from the transmitter, the GAIN dial on the gyro is disabled.

CH4 is a bi-directional digital switch,and comprises of 100 stepped increments.

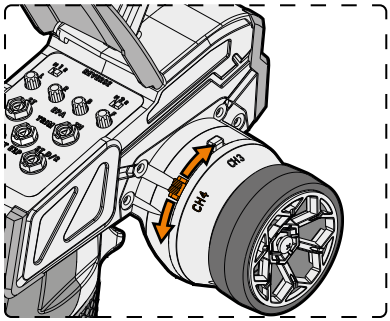
A short press in either direction moves in single stepped increments.

A long press moves in increments of 10 steps.

A short single beep sounds when you make changes to the CH4 position.

The center positions (eg. 50%) is denoted by a double beep.

Move the CH4 switch backwards to reduce the Gain, and forwards to increase the Gain.



NOTES

If steering oscillation or glitching occurs at higher gain settings:

- Adjust the AGS setting (D-Box3 Pro)
- If the issue remains, reduce the gain.
- For initial setup, start with the gain at approximately 50% (dial centered) and adjust as required.

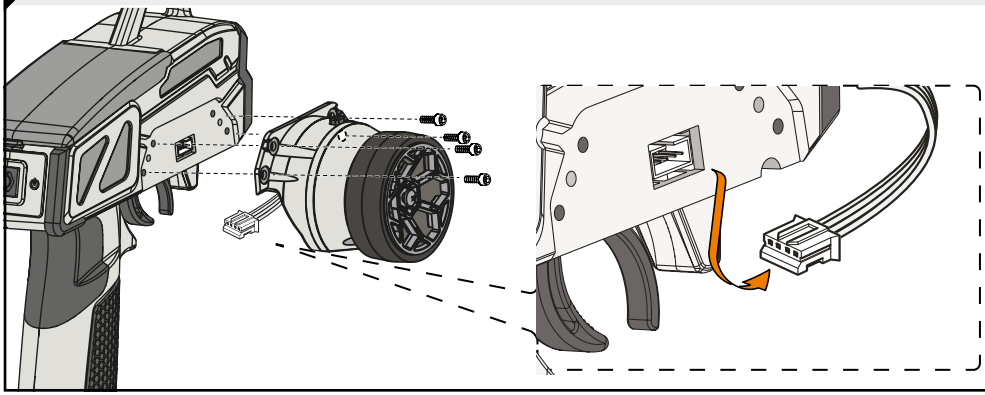
Tip **See separate Gyro Startup Guide for more detailed information** **161068-006**

Tip **See separate Transmitter Manual for more detailed information** **RM**

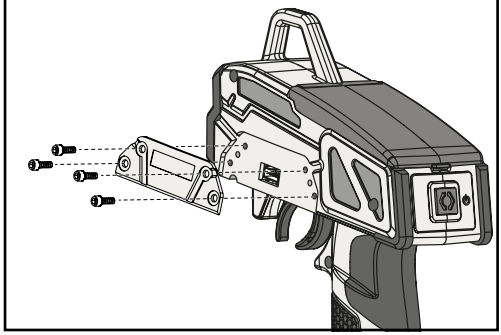
4-5 *Steering Wheel Adjustment*

The steering module on the TF-51 can be swapped from one side of the Transmitter body to the other. This allows for Left as well as Right handed use.

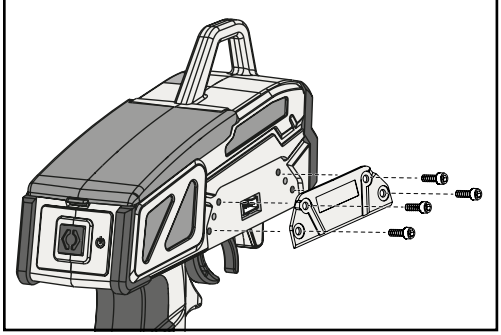
1 *Remove screws holding steering wheel and disconnect wiring loom*



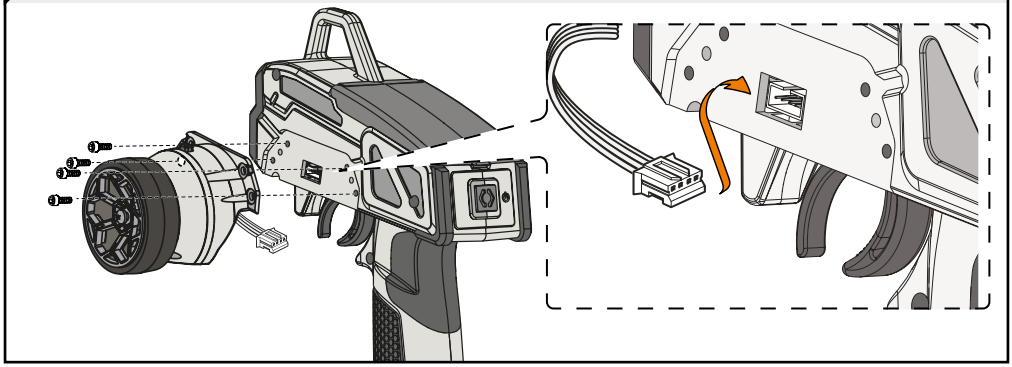
2 *Remove blanking plate on opposite side*



3 *Re-fit blanking plate in place of steering wheel*



4 *Re-fit steering wheel and re-connect wiring loom*



4-6 *Practice Turning*

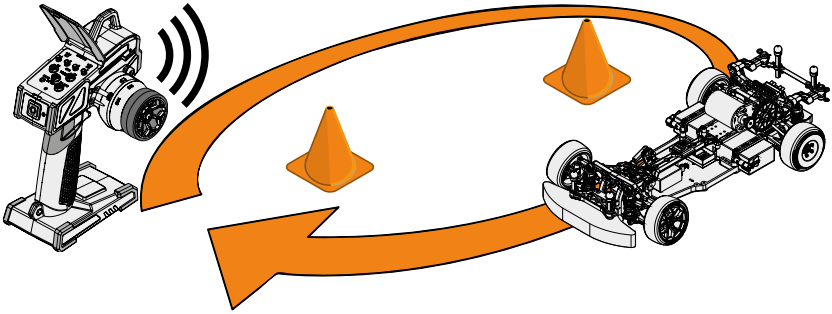
Install body and enjoy!



Allow the car to cool down for 15 minutes between each run.

When the car is running toward the driver, the directions of the steering wheel are reversed.

Once you become comfortable driving your RC car, practice driving on a track with cones.



Caution	**Do not run in water or sand** **Do not run on public streets or highways. This could cause serious accidents, personal injuries, and/or property damage.**

5 Fail Safe System

This car has a built-in fail safe system that will stop the car if the radio glitches, either because of interference or if the car goes out of range.

The fail safe system has been setup at the factory, but you should become familiar with the function of the fail safe and check the operation before running.

Caution	**Any new binding of transmitter & receiver will clear the preset fail safe.**

Situations when the fail safe will operate.

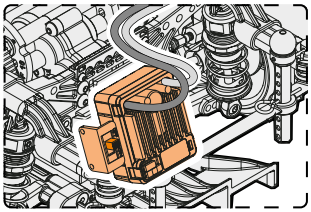
HPI RF-51	***When transmitter radio signal is cut off.***

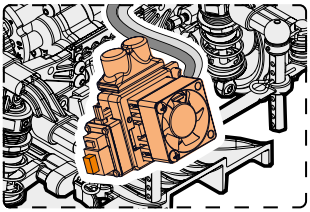
When fail safe is operating, the red LED will continuously flash.

Caution	**The fail safe cannot completely protect your car.**

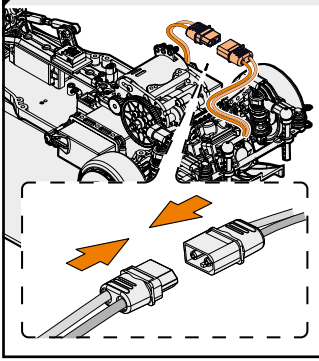
5-1 Checking Fail Safe

1 *Place car on a stand and turn OFF*

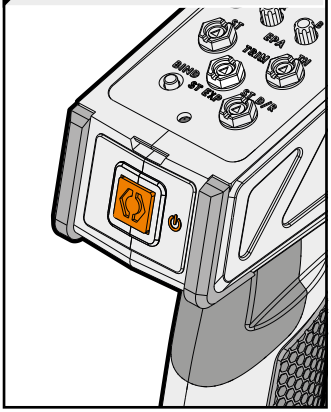




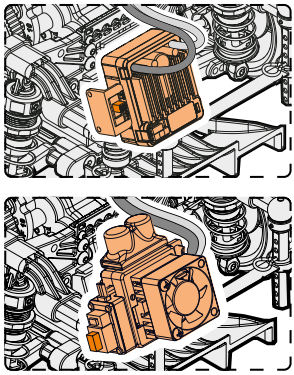
2 *Connect Battery*



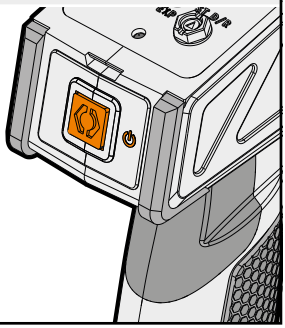
3 *Turn on transmitter*



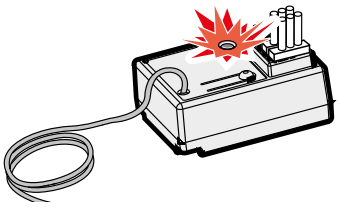
4 *Turn on car*



5 *Apply throttle so wheels turn. Without releasing the throttle trigger, switch OFF the transmitter.*



6 *LED light will flash and vehicle will not move. This means that the fail safe is working properly*



To confirm that fail safe is working properly, the ESC will go in to the neutral position and the vehicle will not move when you shut off the transmitter.

! When fail safe is operating, LED light will turn off.

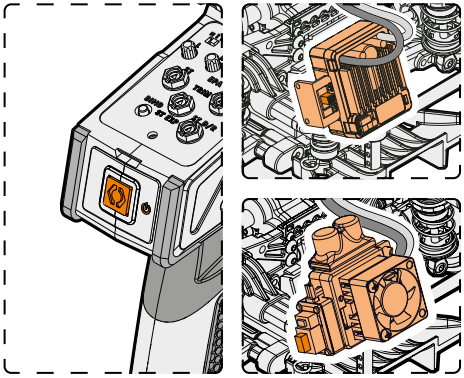
Caution

If the LED is flashing, the car should be in neutral. The ESC should not be applying throttle, brake or reverse. If car is not in neutral, please perform the fail-safe setup procedure.

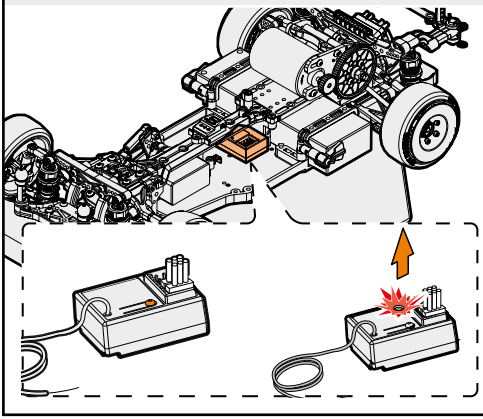
5-2 Fail Safe Setup

The fail safe is setup from the factory, but if it is not functioning as expected, it can be setup using the following steps.

1 *Turn on transmitter and Car*



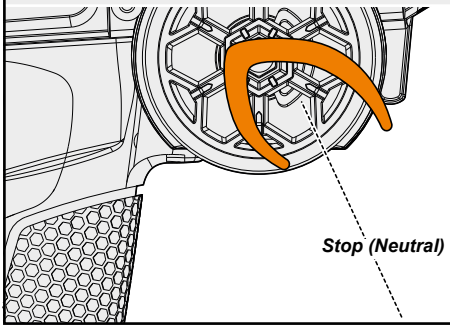
2 *Press the BIND button on the receiver then release. LED will flash.*



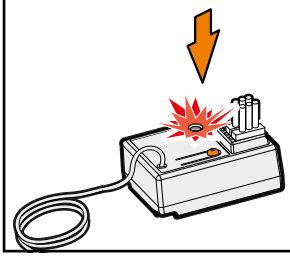
3 *NOTE: Start step 4 within five seconds.*

! **After five seconds fail safe setup will reset, the LED will be continuously lit and you will have to start over at step one above.**

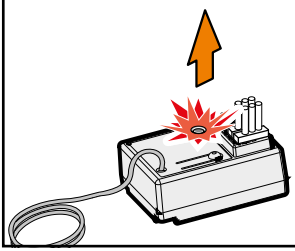
4 *Leave throttle trigger in neutral position.*



5 *Press the BIND button and hold it down. The LED will flash quickly.*



6 *Once the receiver LED remains lit, then release the BIND button on the receiver.*

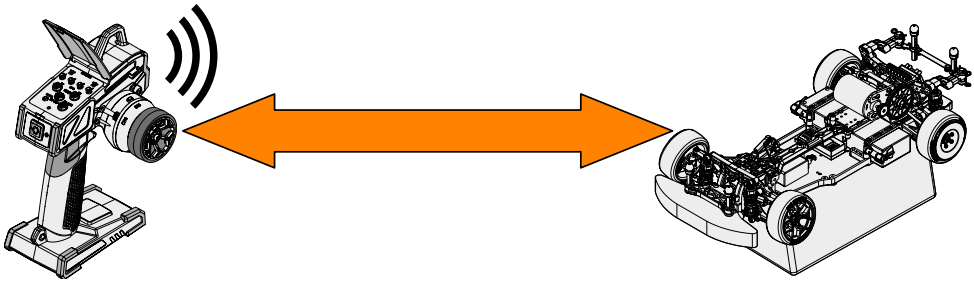


7 *To confirm fail safe is working refer to step 7, section 5-1*

i **5-1**

6 Checking Radio Range

To properly check the range, have a friend hold the truck and walk to the farthest distance that you plan to operate your model. Operate the controls to make sure the model responds correctly. Do not operate the model if there is any problem with the radio system. If you switch on the R/C car first before the transmitter, you may lose control of the R/C car.



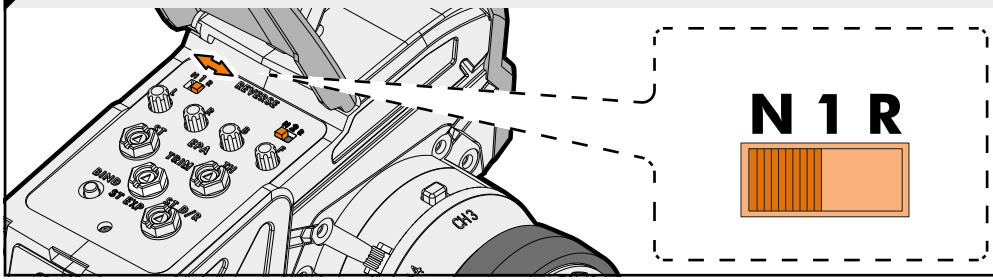
Caution

2.4GHz radio frequency only functions by line of sight, if you drive behind a solid object or around a corner and lose sight of the vehicle you may lose control of the RC car.

7-1 Steering Adjustments

7-1-1 Steering Reverse

1 *To change direction of steering - e.g. for left handed use.*



7-1-2 Steering Dual Rate

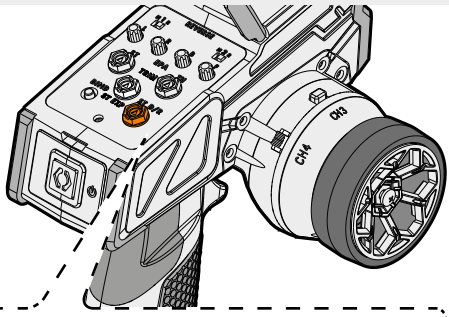
1 *The Steering Dual Rate adjustment controls the maximum steering travel in both directions with a single adjustment.*

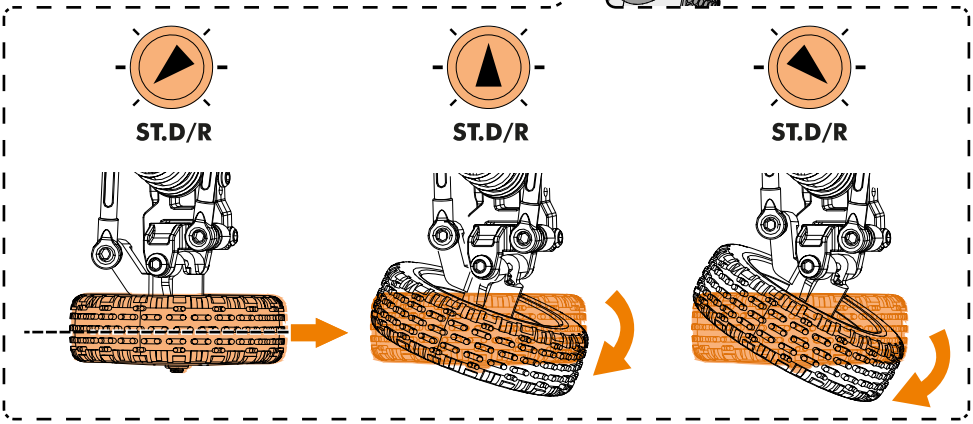
Use this setting to adjust how far the front wheels can turn to suit the track and driving conditions.

Clockwise = More steering travel

Anticlockwise = Less steering travel

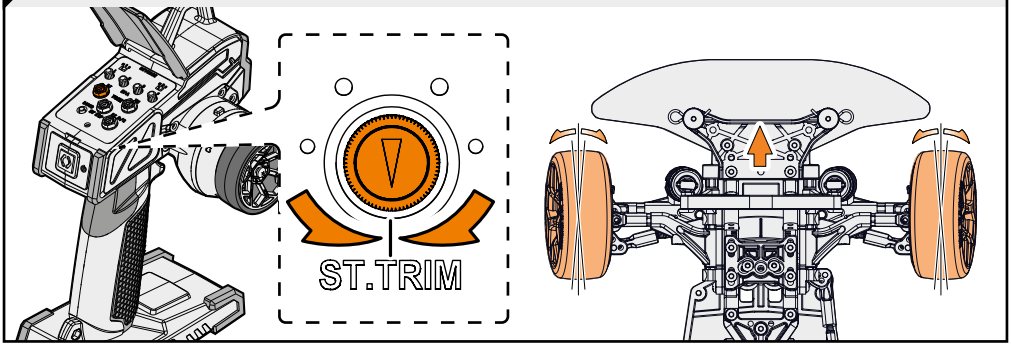
Note: After adjustment, check that the wheels and steering components move freely without binding or contacting the chassis or body.





7-1-3 Steering Trim

1 *Adjust steering trim until wheels are in correct alignment so that car drives straight*



7-1-4 Steering Exponential

ST EXP (Steering Exponential) controls the response curve of the steering servo (CH1).

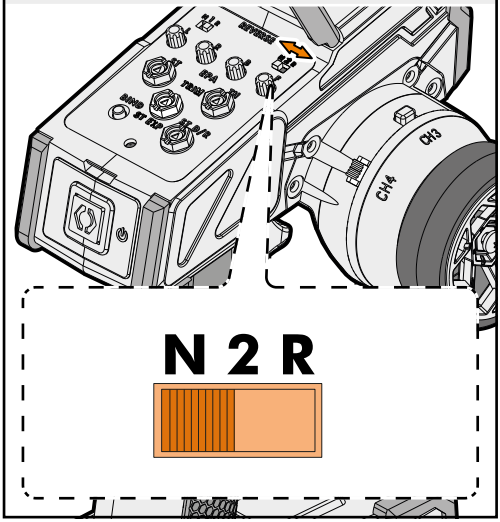
Refer to the Transmitter Manual for more information.

i RM 3-5

7-2 *Throttle Adjustments*

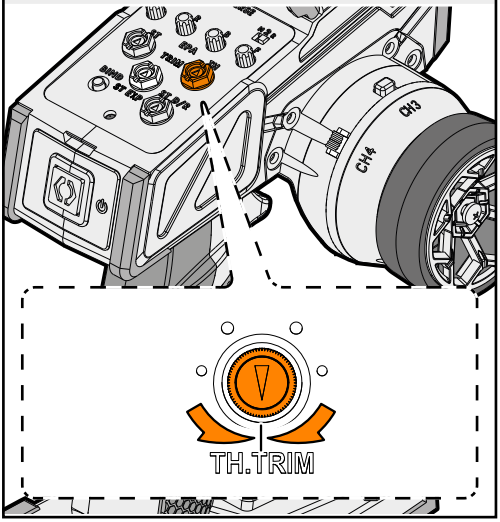
7-2-1 Throttle Reverse

1 *To Reverse the Throttle Direction*



7-2-2 Throttle Trim

1 *If the vehicle moves without any throttle input, adjust the Throttle Trim until the vehicle remains stationary.*

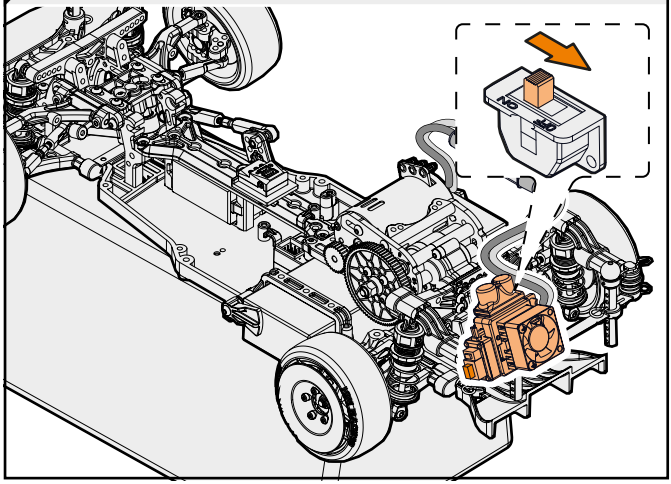


Attention

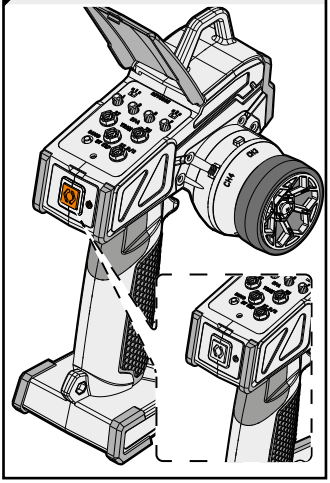
Turn off receiver first, then turn off transmitter

If you switch off the transmitter first before the R/C car, you may lose control of the R/C car.

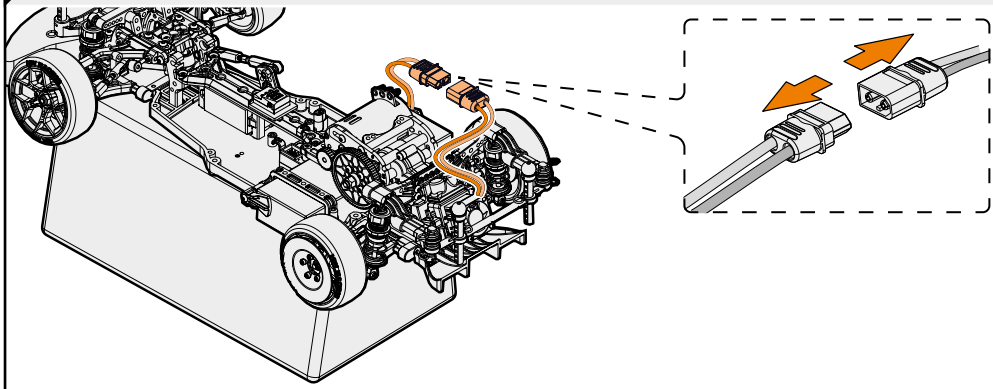
1 *Place car on a stand and turn off*



2 *Switch off transmitter*



3 *Disconnect Battery*



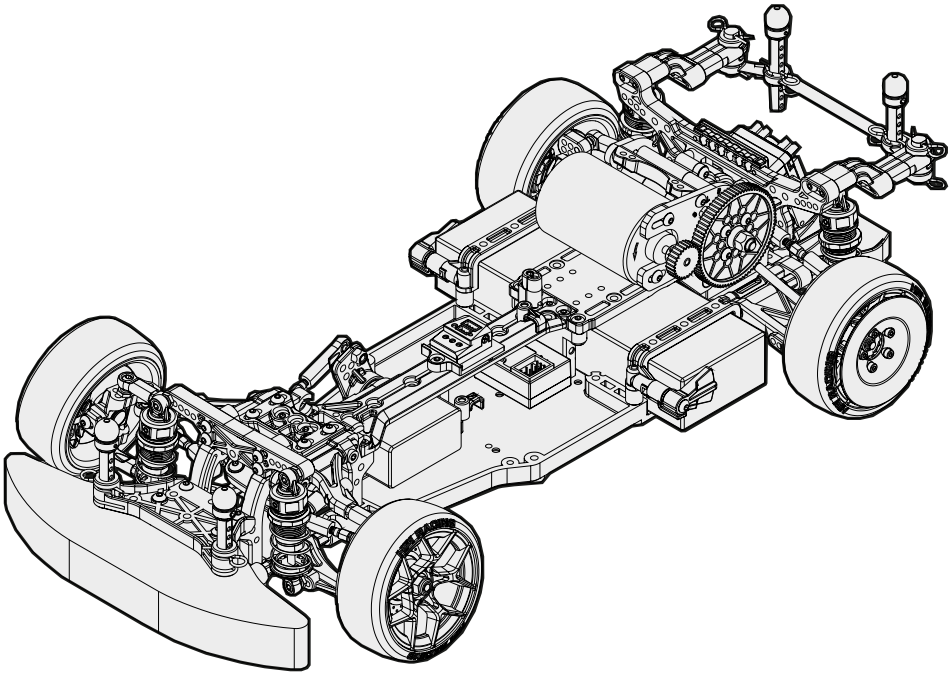
Caution

Disconnect the battery when you are not running the vehicle.

The vehicle may run out of control or the battery can overheat and cause a fire.

Driving in Wet Conditions

Caution **This HPI vehicle is NOT designed to be driven in wet conditions. Driving in wet conditions will require additional vehicle preparation and maintenance.**



Notes:

Never drive the vehicle in stormy conditions where lightning could be present.

The electronic components are not waterproof; always keep them protected from rain and water. Remove all water/mud and dry the vehicle completely after driving. Check the vehicle for trapped water in the tires, transmission, etc. Some metal parts like bearings and hinge pins will need lubrication after driving in wet conditions.

The electric motor is not designed to be submerged in water. If water gets inside, it can reduce the life of the motor.

Most LiPo battery packs are not designed to operate in wet conditions. Consult the instruction manual or manufacturer for limitations. Inspect the inside of the waterproof radio enclosure after driving in wet conditions.

Adjust wiring and seals as needed to prevent water damage. After running in water, dry off any water from ESC and connectors.