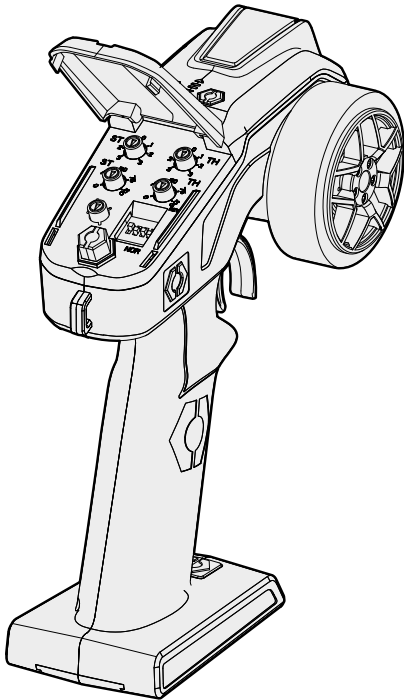




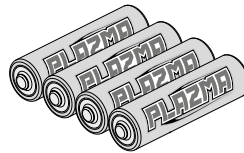
TF-805 2.4 GHZ DIGITAL SYSTEM Instruction Manual

Components

TF-805 Transmitter



Equipment Needed



101939
PLAZMA 1.5V Alkaline AA Battery

SRL-805 Receiver



161296
HPI SRL-805 4-in1 ESC/RX/LED/Gyro Controller

Operating Suggestions

Thank you for selecting this HPI RACING product!

Be sure to thoroughly read and understand these instructions before using this product. Pay particular attention to the items labeled Caution and Attention. Failure to follow these instructions may result in damage to your RC car and injury to yourself and other people.



Caution

If you make changes or adjustments not shown in the instruction manual, your vehicle may be damaged.

Safety Guidelines about Products

- Turn on the transmitter first then the receiver. Turn off the receiver first then the transmitter.
- Before running you must check the radio function.
- After running, the motor, ESC and wires may be hot. Do not touch as they can cause burns.
- This radio is made of precision electronics, do not expose to extreme heat, vibration, shock or water.
- Do not cut antenna wire.
- 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.
- Be careful to not short circuit any of the wires as this will cause damage to the unit.
- Do not disassemble and make any modifications to the transmitter and receiver/ESC.



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.

En: More Information
De: Weitere Informationen
Fr: Plus d'informations
Es: Más información
Fi: Lisätietoja
No: Mer informasjon

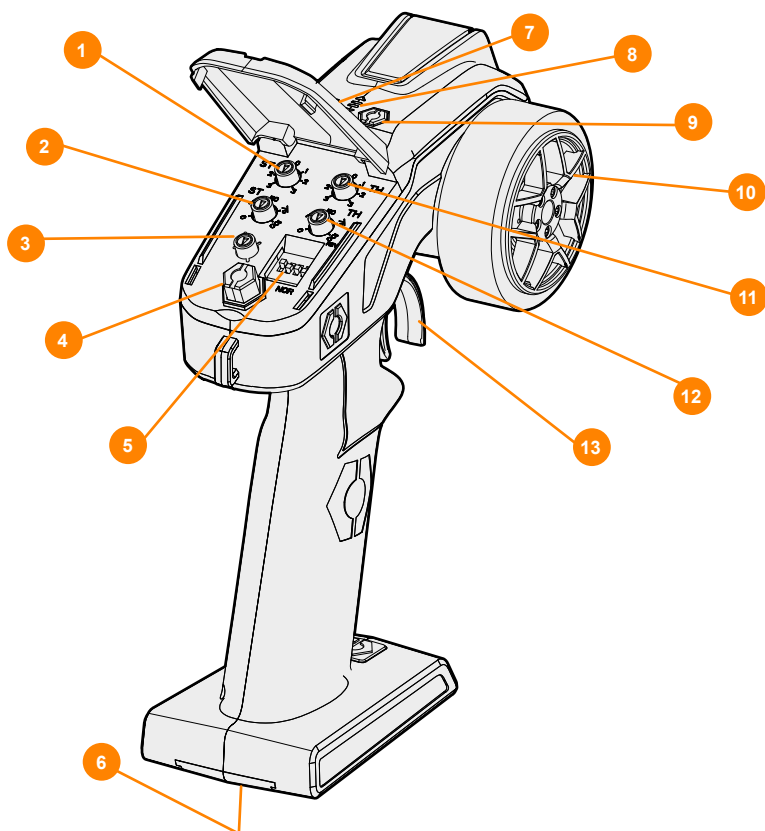
Da: Mere information
Sv: Mer information
Pt: Mais informações
It: Ulteriori informazioni
Tr: Daha fazla bilgi
Ro: Mai multe informații

Pl: Więcej informacji
Cs: Více informací
Zh: 更多信息
Ja: 詳細情報



1 Overview

1-1 Transmitter Controls



- | | | | |
|---|------------------------------|----|-----------------------------|
| 1 | Steering Trim | 8 | Car Battery Level Indicator |
| 2 | Steering Dual Rate (D/R) | 9 | Channel 4 Control |
| 3 | CH5 / Gyro Gain Adjustment | 10 | Steering Control |
| 4 | Power Switch/Status Lights | 11 | Throttle Trim |
| 5 | Channel Reverse DIP Switches | 12 | Throttle Dual Rate (D/R) |
| 6 | Battery Compartment | 13 | Throttle Trigger |
| 7 | Channel 3 Control | | |

1-2 Transmitter Operation

This transmitter is for use with the SRL-805 Receiver.

These functions only work as described when used with that product.

1-2-1 Steering Trim

To be used for centering the steering



4-4-3

1-2-2 Steering Dual Rate (D/R)

To be used to adjust steering servo throw.

1-2-3 CH5 / Gyro Gain Adjustment

Adjust the Gyro Gain on SRL-805 receiver.



3-6

1-2-4 Power Switch / Status Light

Hold down to power on the transmitter.

Status lights:

- Blue light is always on for general mode
- Light flashes for low voltage alarm in general use
- Light flashes when entering the menu setting mode

1-2-5 Channel Reverse DIP Switches

- 1 - Reverse for CH1
- 2 - Reverse for CH2
- 3 - Reverse for CH3
- 4 - Reverse for CH4

1-2-6 Channel 3 Control

CH3 Switch is used for the LED ON/OFF Functions.



3-4

1-2-7 Car Battery Level Indicator

3 green lights and 1 red light, indicating 100%, 75%, 50%, and 25% power respectively, only available on receivers support voltage return.

1-2-8 Channel 4

Auxiliary Channel for transponder or other accessories.

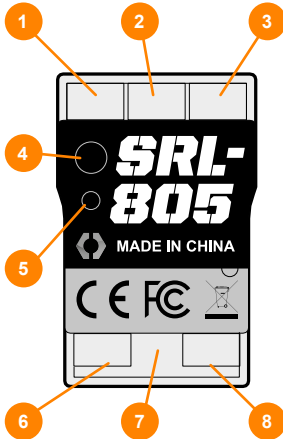
1-2-9 Throttle Trim

To be used for centering the throttle.

1-2-10 Throttle Dual Rate (D/R)

Used to adjust Throttle throw - can be used to reduce the top speed of the car.

1-3 SRL-805 ESC/RX/LED Controller Connections/Functions



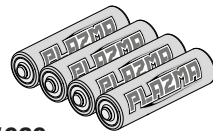
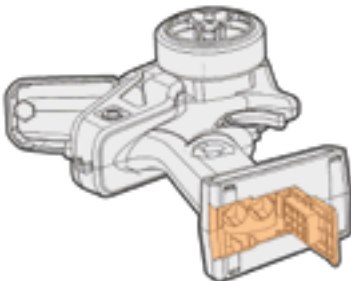
- 1 CH4: Aux Connection
- 2 CH1: Steering Connection
- 3 LED Light Interface Connection
- 4 Bind Button
- 5 LED
- 6 Motor Connection
- 7 Antenna
- 8 Battery Connection

2 Getting Started

2-1 Install Transmitter Batteries

1

Open battery cover at the bottom of transmitter and install batteries. The battery socket is equipped with an anti-reverse plug function, a positive and negative connection reverse will not burn the device



101939

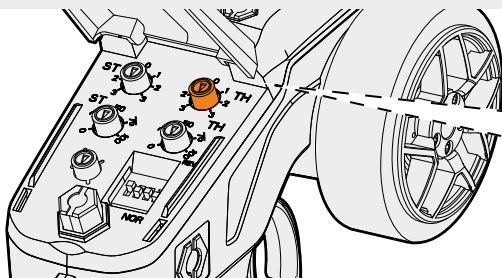
PLAZMA 1.5V Alkaline AA Battery
(Not Included)



Do not mix batteries of
different ages or types

2-2 Switching On

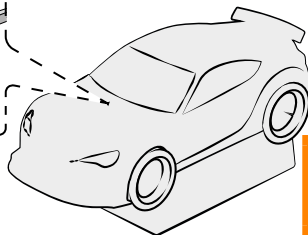
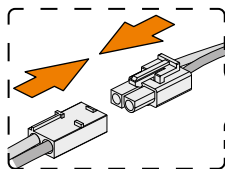
- 1** Check battery level and center throttle trim, then switch on the transmitter



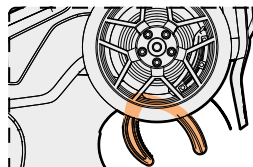
! Centre Throttle Trim



- 2** Place car on stand, connect battery, and switch on the transmitter. The car and transmitter should auto connect. if not see section 3-1



i 3-1

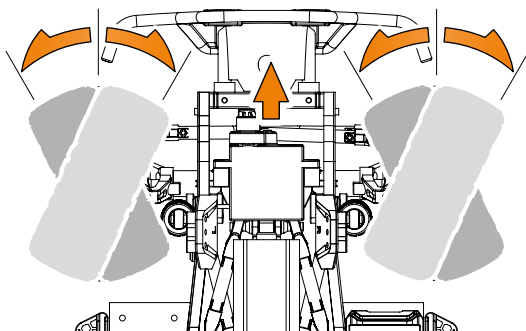
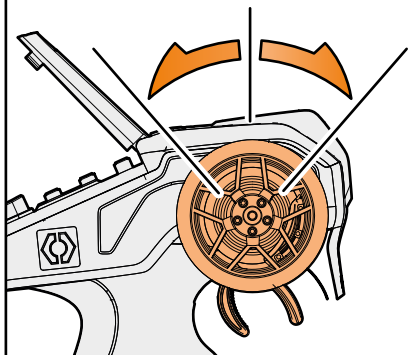


! Do not touch throttle

2-3 Basic Operation

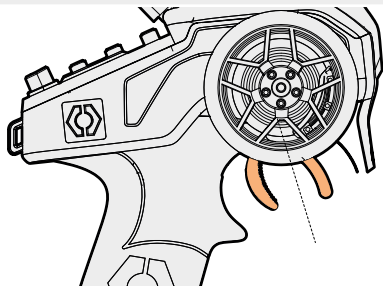
2-3-1 Steering

- 1** Steering is normally back = left, forward = right. This can be reversed using DIP Switch 1

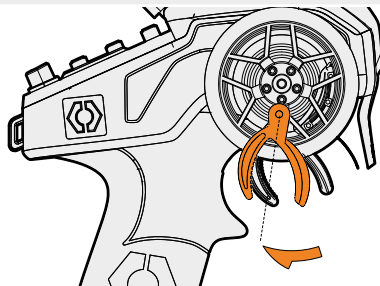


2-3-2 Acceleration

1 Throttle Trigger - neutral position



1^A Throttle Trigger - forwards

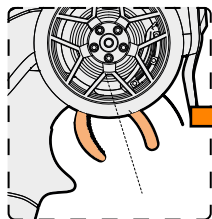


2-3-3 Reverse/Braking

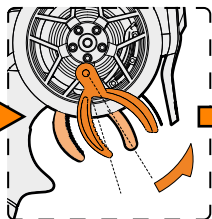
1 Throttle Trigger - Reverse/braking

Braking

1. Stop (Neutral)

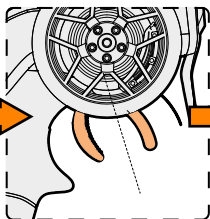


2. Brake

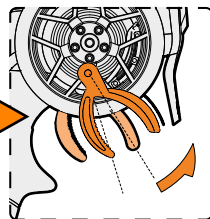


Reverse

3. Stop (Neutral)



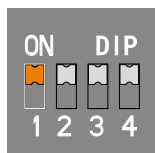
4. Reverse



2-4 Steering Adjustments

2-4-1 Steering Reverse

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



2-4-2 Steering Trim

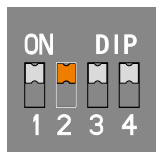
1 Adjust steering trim until wheels are in correct alignment so that car drives straight



2-5 Throttle Adjustments

2-5-1 Throttle Reverse

- 1** To change direction of throttle



2-5-2 Throttle Trim

- 1** If vehicle is moving without touching the trigger, adjust the Throttle Trigger Trim



3 Setup/Customization

3-1 Binding/Pairing

Programming a receiver to recognize the code of only one specific transmitter.

In most cases, the binding process will happen automatically when both the transmitter and the ESC/Receiver are switched ON and within range.



2-2

- 1** Long press the binding button for more than 3 second and then release, the LED will flash quickly, indicating that the binding is ongoing



- 2** When the LED stops flashing and is always on, binding is complete . If not successful, the LED will keep flashing slowly to notify, and repeat the above steps



Cautions

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



Cautions

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

3-2

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.

Situations when the fail safe will operate:

HPI SRL-805	When transmitter radio signal is cut off.
	When battery charge is low.

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



Cautions

The fail safe cannot completely protect your car.

3-2-1

Checking Fail Safe

To check the failsafe:

1. Set the car so that the wheels can turn, but it will not move, either by putting on a stand or turning upside down.
2. Turn on the transmitter, and then the car.
3. Move the throttle trigger to turn the car wheels (accelerate).
4. Whilst the car is running, turn off the transmitter.

If the failsafe is working, the car's wheels should stop turning.



Cautions

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

3-2-2

Fail Safe Setup

1

Short press the binding button and the indicator will blink quickly, indicating that you have entered the failsafe setting

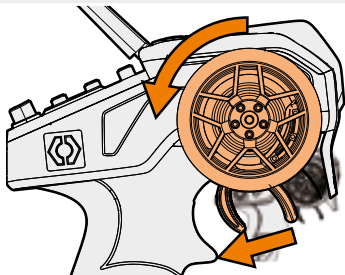
2

Set the channel that needs to set failsafe to the desired position, keep the state of the channel unchanged, press the binding button again, the indicator will be on, save the setting and exit

3-3 Transmitter Calibration

3-3-1 Enter Calibration Mode

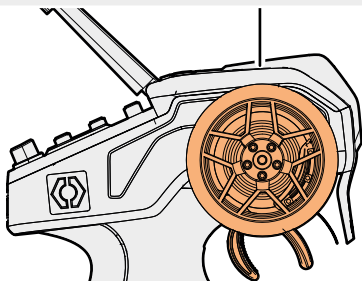
- 1** Hold the steering wheel fully to the left and pull the throttle trigger fully backwards



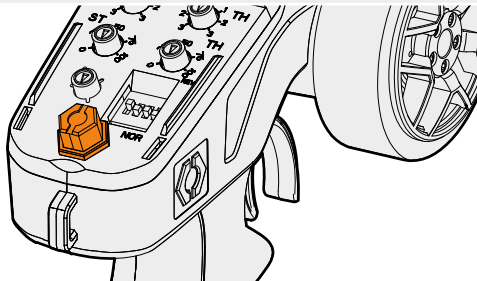
- 2** While holding both controls, press and hold the Power button on the transmitter for 2 seconds



- 3** When the startup tone sounds, release the steering wheel and trigger

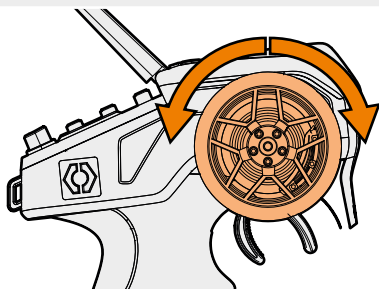


- 4** Within 5 seconds, press the Power button again. The blue status LED will flash, indicating that calibration mode is active.

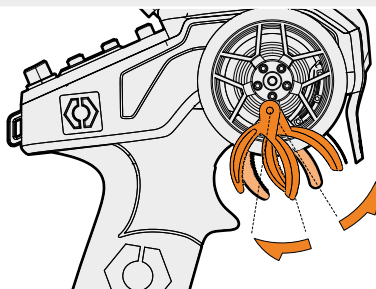


3-3-2 Calibrate CH1 (Steering) and CH2 (Throttle)

- 1** Turn the steering wheel (CH1) fully left and then fully right. Repeat 2-3 times



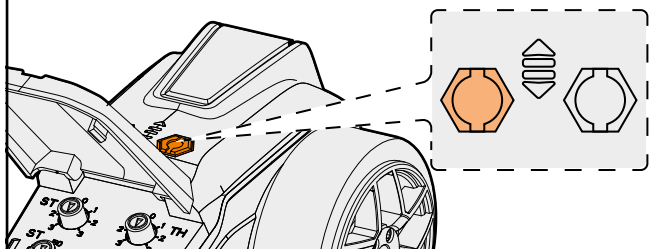
- 2** Pull the throttle trigger (CH2) fully forward and fully then fully backward. Repeat 2-3 times.
CH1 and CH2 calibration is now complete



3-3-3 Calibrate CH3 and CH4

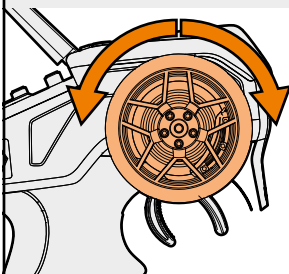
1

Press the CH3 button. The channel indicator light will turn on



2

Adjust the steering wheel (CH1) to the desired travel position for CH3



3

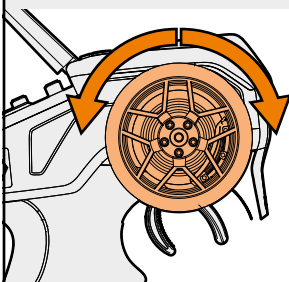
Press the CH4 button. The channel indicator light will turn on



4

Adjust the steering wheel (CH1) to the desired travel position for CH4.

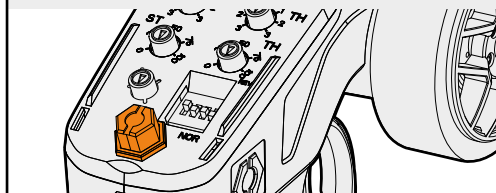
CH3 and CH4 calibration is now complete



3-3-4 Save Settings

1

Press the Power button to save the calibration settings and exit calibration mode



2

Verify that all channels operate correctly before use

3-4 LED Lighting Functions

3-4-1 Headlights and Taillights

The headlights and taillights are switched on and off using Channel 3 (CH3).

3-4-2 Turn Signals (if applicable)

The turn signals operate automatically with the steering:

- The left turn signal illuminates when steering left.
- The right turn signal illuminates when steering right.

3-4-3 Hazard Lights (if applicable)

To turn the hazard lights on:

1. From the center steering position, turn the steering wheel fully right three times.

To turn the hazard lights off:

2. Turn the steering wheel fully left three times again.

3-4-4 Light Direction / Reverse Function (if applicable)

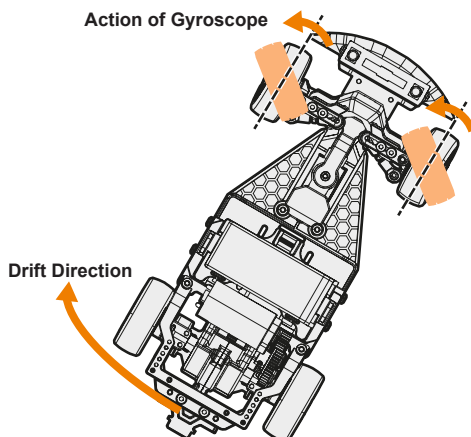
Channel 4 (CH4) switches the lighting direction between forward and reverse modes.

3-5 Gyroscope

An RC car gyroscope is an electronic stability aid that automatically applies counter-steering to reduce spinning and sliding while improving straight-line control—particularly at high speeds or in rear-wheel-drive drift setups.

Installed between the receiver and the steering servo, it detects unintended movement and makes real-time corrections to help the car handle more smoothly and predictably.

The gyro correction should operate in the opposite direction to the steering direction.



3-5-1 Gyroscope Direction (Reverse) Setting

Press the Bind button twice to reverse the gyroscope direction. The indicator LED will flash twice to confirm the change.

With the gyroscope enabled:

- **Rotating the vehicle counter-clockwise should cause the front wheels to turn right.**
- **Rotating the vehicle clockwise should cause the front wheels to turn left.**

If the wheels move in the wrong direction, press the Bind button twice again to reverse the gyroscope direction.



3-5-2 Gyroscope Enable / Disable

Press the Bind button three times to enable or disable the gyroscope.

- **Green LED – Gyroscope enabled**
- **Red LED – Gyroscope disabled**

The gyroscope can also be disabled by setting the gyro sensitivity (gain) to 0%.



3-6 Other Receiver Operations

3-6-1 Servo Mode Selection (Digital / Analog)

Press the Bind button 4 times to switch the receiver's servo output mode between Digital and Analog.

If the selected servo mode is incompatible with the servo, you may notice one or more of the following symptoms:

- Continuous buzzing noise
- Excessive vibration or jitter
- Servo overheating

If any of these symptoms occur, switch to the other servo mode and check operation again.



Attention

Using the incorrect servo mode for extended periods may cause excessive heat and reduce servo lifespan.

3-6-2 Steering End Point Adjustment (EPA)

If the steering travel is unequal from left to right, or the steering angle is insufficient, perform an EPA (End Point Adjustment) calibration.

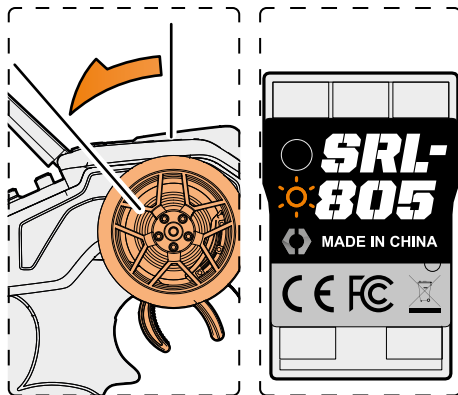
- 1** Press the Bind button 5 times to enter EPA setup mode.

The receiver LED will flash twice to confirm entry



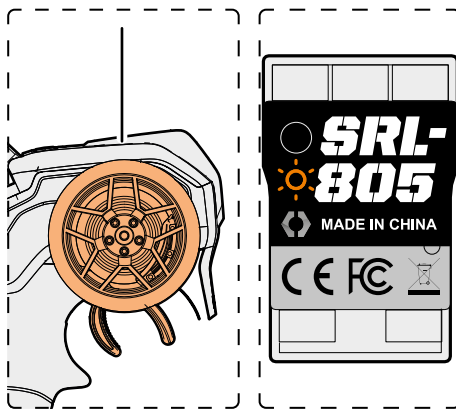
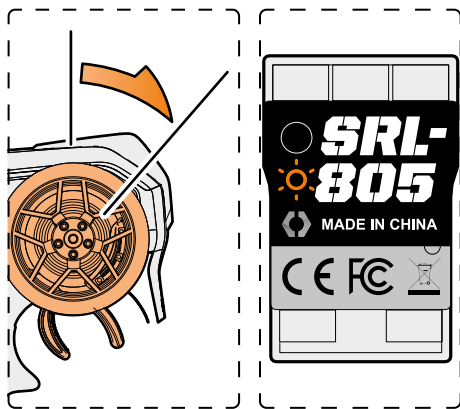
- 2** Turn and hold the steering wheel fully left.

The receiver LED will flash twice



- 4** Return the steering wheel to the center position.

The receiver LED will flash twice



The EPA calibration is now complete. The receiver will automatically save the settings and exit EPA setup mode.

4 Troubleshooting

If RC car does not move or you have no control, see below:

Problem	Cause	Remedy
Does Not Move.	Battery is not placed properly in the transmitter.	Place batteries in the transmitter properly.
	Weak or no battery in model.	Install charged battery.
	Damaged motor.	Replace with new motor.
	Frayed or broken wiring.	Splice and insulate wiring completely.
	ESC is shut down by heat protection circuit.	Stop driving immediately, do not drive the car until the Speed Controller cools down.
No Control.	Weak or no batteries in transmitter or model.	Install charged or fresh batteries.
	Neutral position or trim is incorrect.	Adjust the steering trim.
	Binding Setup is incorrect.	Make sure binding is setup properly.
Steering and Throttle Function Reversed.	Servo reverse switch is in the wrong position.	Set to correct position.
	Wires from ESC to motor are improperly connected.	Re-connect the motor.

FCC COMPLIANCE STATEMENT

This device transmits in the range 2.4 to 2.4835 GHz and has been tested to comply with the limits for a Part 15 Class B device of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Any change or modification to the device not expressly approved by the manufacturer may void the user's authority to operate the equipment. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Canada Compliance Statement:

This Class B digital apparatus complies with Canadian ICES-003. (Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.) This equipment complies with the FCC/IC radiation exposure limits set forth for FCC and Industry Canada portable transmitting devices operation in an uncontrolled environment. The equipment should only be used or installed at locations where there is normally at least a 20cm separation between the antenna and all persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

CE Compliance statement

- En** The radio equipment type in this product transmits in the frequency range 2.4 to 2.4835 GHz with a maximum power of 18dBm and is in compliance with EU Directive 2014/53/EU. The full text of the Declaration of Conformity is available at www.hpiracing.com/ce
- De** Die Fernsteuerung in diesem Produkt überträgt in dem Frequenzbereich 2.4 bis 2.4835 GHz mit einer maximalen Stärke von 20dBm und sie ist in Übereinstimmung mit der EU Richtlinie 2014/53/EU. Der volle Text und die Erklärungen zur Konformität finden Sie unter www.hpiracing.com/ce
- Fr** Cet appareil transmet dans la gamme de fréquence de 2,4 à 2,4835 GHz avec une puissance de 20dBm et est conforme à la Directive UE 2014/53 / UE. Le texte intégral de la Déclaration de conformité est disponible sur www.hpiracing.com/ce
- Es** El tipo de equipo de radio en este producto transmite en el rango de frecuencia de 2.4 a 2.4835 GHz con una potencia máxima de 20dBm y cumple con la Directiva de la UE 2014/53/UE. El texto completo de la Declaración de conformidad está disponible en www.hpiracing.com/ce
- FI** Tuotteen radiolähetin toimii taajuusalueella 2,4–2,4835 GHz ja suurimmalla teholla 20 dBm, ja se on EU-direktiivin 2014/53/EU mukainen. Vaatimustenmukaisuusilmoituksen koko teksti: www.hpiracing.com/ce
- No** Radioutstyrstypen i dette produktet sender på frekvensområdet 2,4 til 2,4835 GHz med en maksimal effekt på 20 dBm og er i samsvar med EU-direktiv 2014/53/EU. Den fullstendige teksten til samsvarserklæringen er tilgjengelig på www.hpiracing.com/ce
- Da** Radioudstyret i dette produkt sender på frekvensområdet 2,4 til 2,4835 GHz med en maksimal effekt på 20 dBm og er i overensstemmelse med EU-direktiv 2014/53/EU. Den fulde overensstemmelseserklæring findes på www.hpiracing.com/ce
- Sv** Radioutrustningen i denna produkt sänder i frekvensområdet 2,4 till 2,4835 GHz med en maximal effekt på 20 dBm och uppfyller EU-direktiv 2014/53/EU. Den fullständiga försäkringen om överensstämmelse finns på www.hpiracing.com/ce
- Pt** O tipo de equipamento de rádio neste produto transmite na faixa de frequência de 2.4 a 2.4835 GHz com uma potência máxima de 20dBm e está em conformidade com a Diretiva Europeia 2014/53/EU. O texto completo da Declaração de Conformidade está disponível em: www.hpiracing.com/ce
- It** Il tipo di equipaggiamento radio in questo prodotto trasmette nella gamma di frequenze 2.4 - 2.4835 GHz con una potenza massima di 20dBm e rispetta la Direttiva UE 2014/53/EU. Il testo completo della Dichiarazione di Conformità è disponibile su www.hpiracing.com/ce
- Tr** Bu üründe radyo ekipmanı türü, 2.4 - 2.4835 GHz frekans aralığında maksimum 20dBm güçte yayın yapar ve AB Direktifi 2014/53/EU ile uyumludur. Uygunluk Beyanının tam metnine şu adresten ulaşabilirsiniz: www.hpiracing.com/ce
- Ro** Tipul echipamentului radio din acest produs transmite în intervalul de frecvențe 2.4 - 2.4835 GHz cu o putere maximă de 20dBm și respectă Directiva UE 2014/53/EU. Textul complet al Declarației de Conformitate este disponibil pe www.hpiracing.com/ce
- Pl** Sprzęt radiowy w tym produkcie działa w paśmie częstotliwości 2,4 do 2,4835 GHz z maksymalną mocą 20 dBm i spełnia wymogi dyrektywy UE 2014/53/EU. Pełna treść Deklaracji Zgodności dostępna jest na stronie: www.hpiracing.com/ce
- Cs** Rádiové zařízení v tomto produktu vysílá v pásmu 2,4 až 2,4835 GHz s maximálním výkonem 20 dBm a je v souladu se směrnici EU 2014/53/EU. Plné znění Prohlášení o shodě je k dispozici na stránce: www.hpiracing.com/ce



hpi-racing

www.hpiracing.com

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