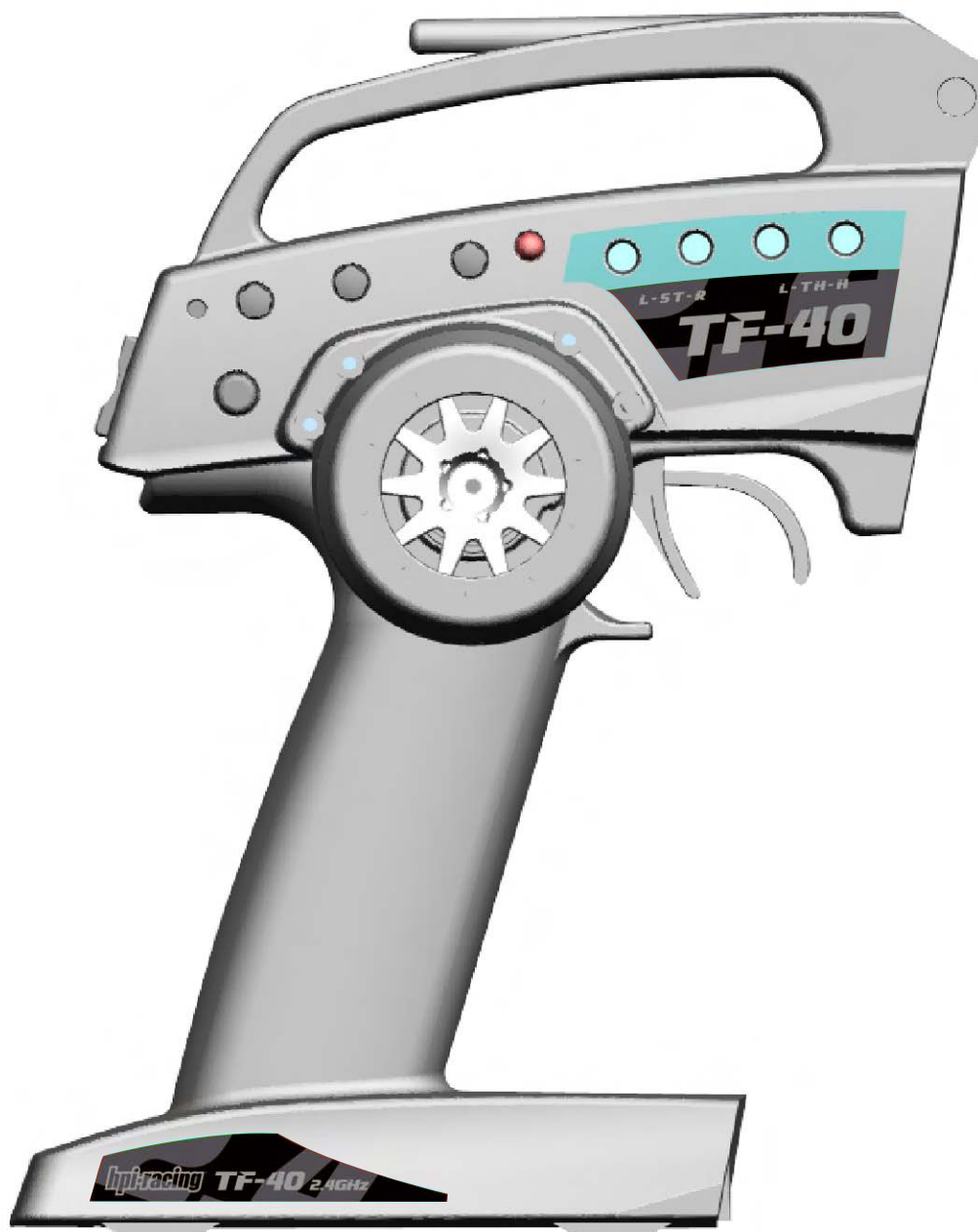




2.4GHz Pistol Radio Set

2.4GHz FHSS

radio system instruction manual



FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 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 operating instructions, may cause harmful interference to radio communications, however, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and in, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

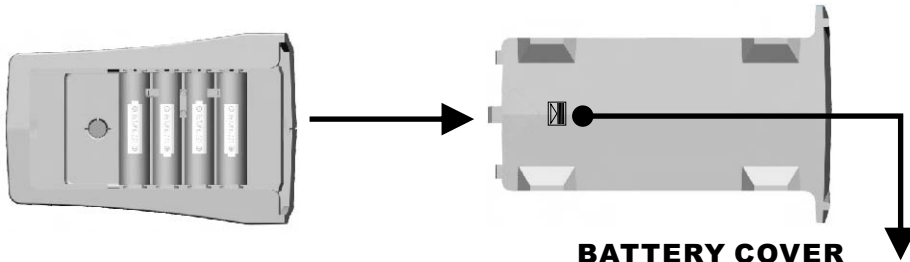
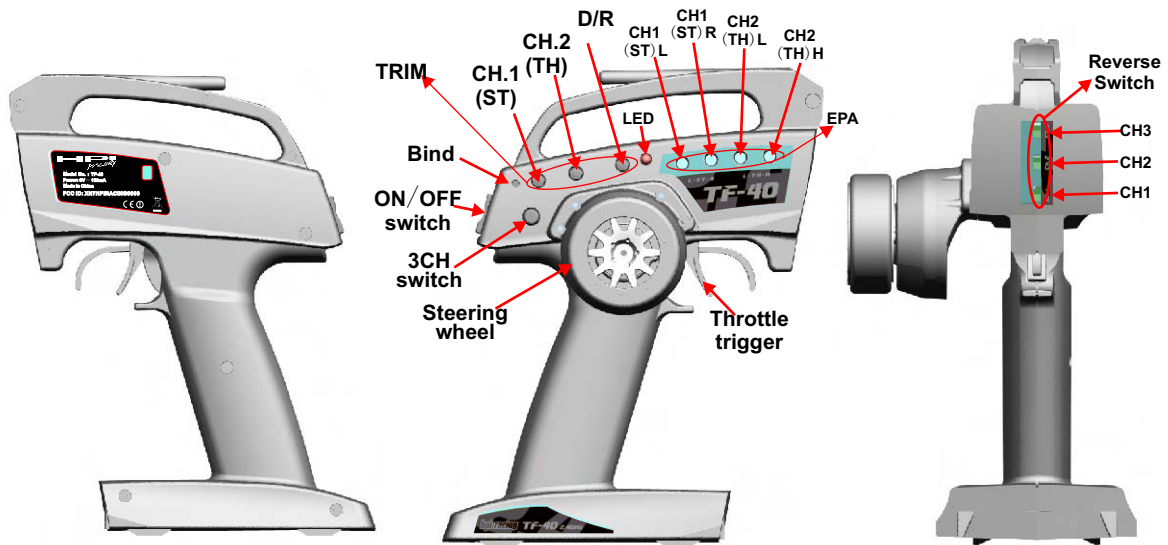
This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

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

WARNING: Changes or modifications made to this equipment not expressly approved by the party responsible for compliance may void the FCC authorization to operate this equipment.


NAME OF EACH PART

TRANSMITTER TF-40

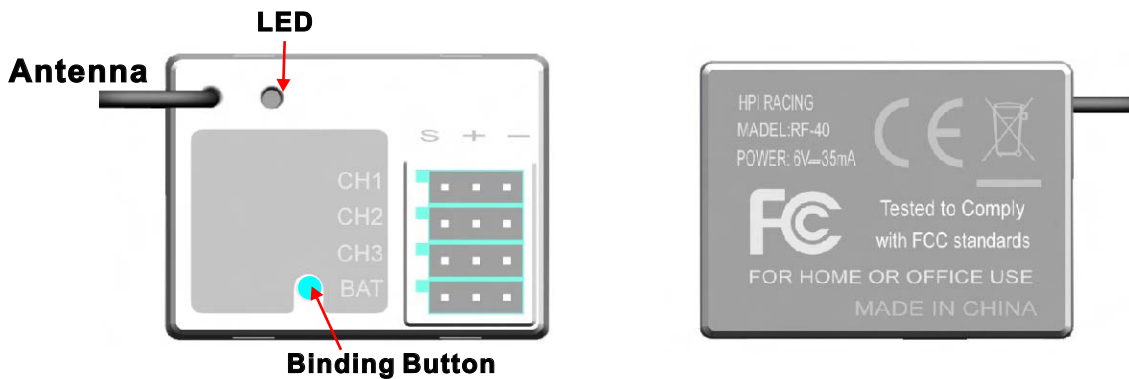


BATTERY COVER

* Please noted the transmitter does not have charging function, 4"AA" alkaline dry cells required.

When replacing the battery. Slide the cover downward while pressing the part marked "  ".

RECEIVER RF-40



END POINT ADJUSTMENT / EPA

Use this when performing left and right steering angle adjustments, throttle high side/brake side operation amount adjustment. - Corrects the maximum steering angle and left and right steering angles when there is a difference in the turning radius due to the characteristics, etc. of the vehicle.

Maximum steering angle adjustment

(The EPA function basically determines the maximum steering angle of each channel in each direction.)

Adjustment: Range: 50~150% of each direction.

Use the small plastic tool (-) to turn the two small knobs inside the control panel upper right as shown to make adjustments of the steering angle of each direction. (Caution: The servo reverse switches will effect to the directions)

Caution!

Decide the EPA value at the contact point of your vehicle steering system construction. When trim the EPA, be sure that the steering servo does not bind at the maximum steering angle.

Throttle (forward, brake side/reverse side) adjustment.

Adjustment: Range: 50~150% of each direction.

Use the small plastic tool (-) to turn the plastic tool small knobs inside the control panel lower side as shown to make adjustments of the control range of each direction. (Caution: The servo reverse switches will effect to the directions)



Caution!

If the throttle channel is connected to an ESC, read your ESC manual to decide the EPA value for your vehicle.

SPECIAL NOTE FOR 2.4GHZ FHSS RADIO SYSTEM SETUP

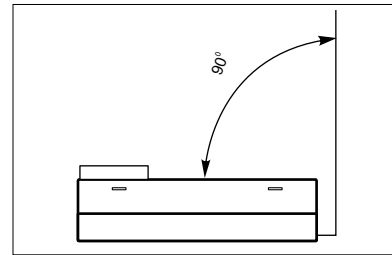
Since the 2.4GHz have different characteristics than that of the conventional frequencies, please read this section carefully to enjoy safe flight with the 2.4GHz system.

RECEIVER'S ANTENNA INSTALLATION

The wavelength of the 2.4GHz is much shorter than that of the conventional frequencies, it is very susceptible to loss of signal which results in a receiving error. In order to avoid this phenomenon, please must follow the receiver antenna installation shown as below.

1. The antenna must be kept as straight up as possible. Otherwise it will reduce the effective range.

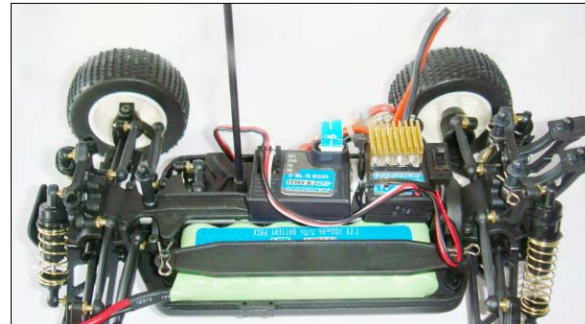
2. The antenna should be placed at 90 degrees to the receiver case.



3. The antenna must be kept away from conductive materials, such as metal and carbon by at least a half inch. The coaxial part of the antennas does not need to follow these guidelines, but do not bend it in a small radius.

4. Keep the antenna away from the motor, ESC, and other noise sources as much as possible.

*This photo demonstrates how the antenna should be placed. For actual installation the receiver must be wrapped with a sponge or placed with floating material to protect it from vibration .



The receiver contains precision electronic parts. It is the most delicate radio component on-board the model and should be protected from vibration, shock and temperature extremes. To protect the receiver, wrap it in R/C foam rubber or other vibration-absorbing material. If appropriate, waterproof the receiver by placing it in a plastic bag and closing the open end with a rubber band before wrapping it on chassis. If moisture enters the receiver, intermittent operation or a failure may result. Wrapping the receiver in a plastic bag also protects it from fuel and exhaust residue which, in some cars, can work its way into the body.

TRANSMITTER ANTENNA

1. The transmitter antenna is adjustable so please make sure the antenna is never pointed directly at the model when running it as this creates a weak signal for the receiver.

2. Keep the antenna vertical to the ground to create a better RF condition for the receiver. Of course this depends on how you hold the transmitter, but in most cases, adjusting the transmitter antenna so that it is vertical to the ground will give the best results.

3. Never grip the antenna when using this transmitter as this degrades RF quality.



BINING PROCEDURE

The transmitter has an individual randomize ID that is created in the factory, In order to start operation, the receiver must be linked with the ID code of the transmitter with which it is being paired. Once the link is made, the ID code is stored in the receiver and no further linking is necessary unless the receiver is to be used with another transmitter or when you purchase a new receiver for your recent transmitter, this procedure is necessary; otherwise the receiver will not work with the transmitter.

After installing the RF-40 Receiver, you are now ready to bind them together.

1. Place the Transmitter and the Receiver close to each other within 1 meter.
2. Turn the power switch to the ON position on the Transmitter. Transmitter LED will turn on.
3. Press and hold the RF-40 Receiver Binding button, then turn the power switch to the ON position on the RF-40 Receiver and continue holding the Binding button. The RF-40 receiver LED will flash quickly.
4. Release the Binding button on the RF-40 receiver after 1 second.
5. Press and hold the Binding button on the Transmitter for 1 second until the LED on the RF-40 receiver steady light.

NOTE: The fourth step must be done with 10 seconds after RF-40 receiver power on.

6. Binding is now complete. Both Transmitter and Receiver LED will now stay on.
7. Operate the controls to confirm.

FAIL SAFE

CH1~CH3 Fail safe is a feature that will move the CH1~CH3 servos to a preset position that you set. If no user preset is added, the Fail Safe will set it-self to the last operated position.

After binding of the Transmitter and Receiver, you can set the CH1~CH3 Fail Safe feature.

1. Turn the power switch to the ON position on the Transmitter. Confirm Transmitter LED is on.
2. Turn the power switch to the ON position on the Receiver. Confirm RF-40 Receiver LED is on.
3. Move controls to confirm connection between Transmitter and Receiver.
4. Press the Binding button on the RF-40 Receiver for 2 seconds then release, LED will flash slow.
5. Move CH1~CH3 lever to your desired Fail Safe position and hold.
6. Press the Binding button on the RF-40 Receiver again more than 1 second within 5 seconds, LED will flash quickly.
7. Release the CH1-CH3 lever after the receiver LED steady light, and discontinue pressing the Bind button on the Receiver.
8. Confirm that the CH1-CH3 Fail Safe is working properly by turning the transmitter power switch OFF. The servo should move to the preset fail safe position. Turn the transmitter power switch back on to confirm full control.

NOTE: ANY NEW BINDING OF TX &RX WILL CLEAR THE PRESET FAIL SAFE.

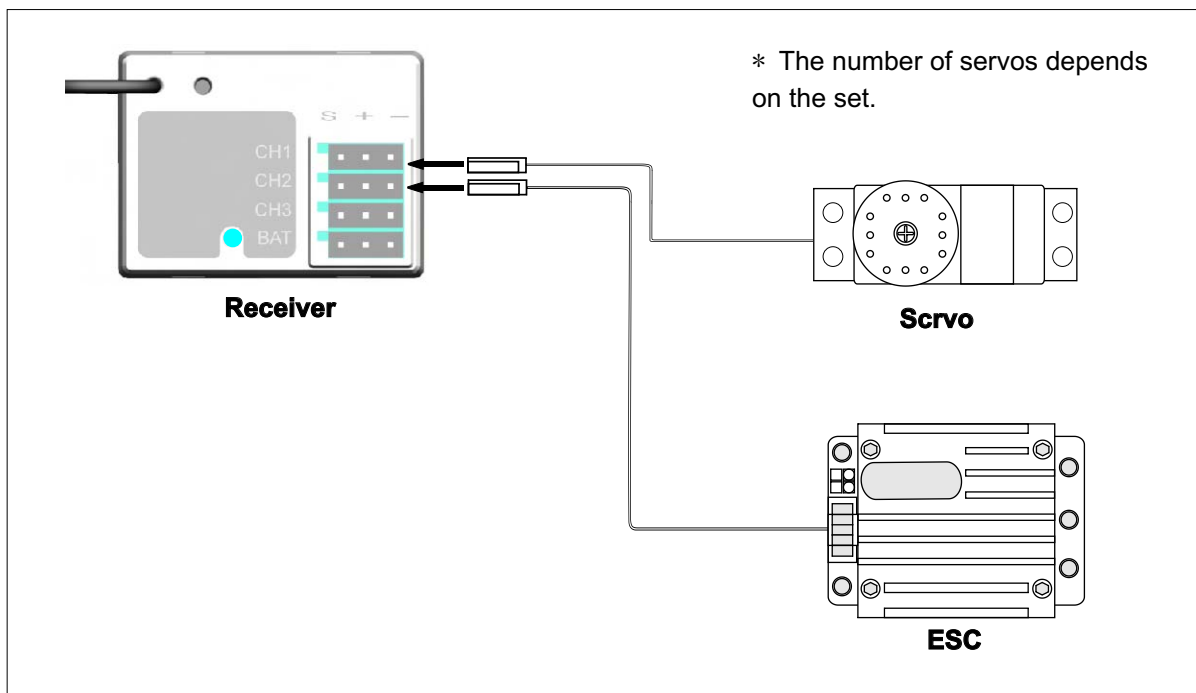
ADJUSTMENT AND INSTALLATION

This section describes the installation method and adjustment method after installation when installing the receiver, servo, ESC to the car.

CONNECTIONS

Connection example is shown below.

Connection Example





WARNING

Connector Connection

- ! Insert the receiver, servo, and battery connectors fully and firmly.

If vibration, etc. causes a connector to work loose during running, the car may crash.

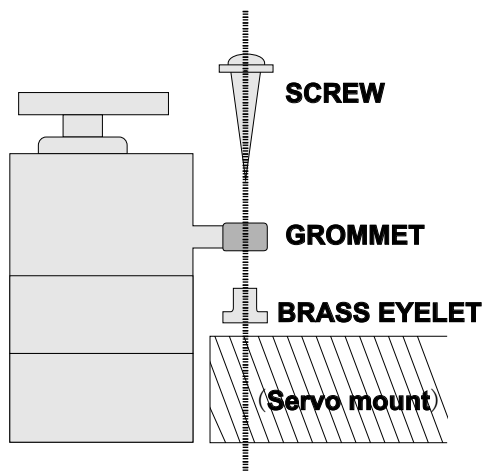
Servo Throw

- ! Operate the servo horn over its full stroke and adjust so that the pushrod does not bind or is not too loose.

Unreasonable force applied to the servo horn will adversely affect the servo and drain the battery quickly.

Servo Installation

- ! Install the servo to the servo mount, etc. through a rubber grommet. Also install the servo so that the servo case does not directly touch the servo mount or other parts of the chassis.



Receiver Vibration proofing / Waterproofing

- ! Vibrationproof the receiver by wrapping it in sponge rubber or some such material. If the receiver may get wet, waterproof it by placing it in a plastic bag.

If the receiver is subjected to strong vibration and shock, or gets wet, it may operate erroneously and cause a crash.

Receiver Antenna

- ⊘ Do not cut or bundle the receiver antenna. Also, do not bundle the antenna together with the servo lead wires.

Cutting or bundling the receiver antenna will lower the receiver sensitivity and shorten the flight range and cause a crash.

<Antenna installation>



Use a rubber grommet, etc. at the part at which the antenna comes out of the body through the antenna tube so that it will not break.

Adjustments

The operating direction, neutral position, and steering angel of servo are adjustable.

Adjustment Procedure

Before making any adjustments, set all the SERVO REVERSER switches on the side of the transmitter to the lower (NOR) position. (Switch the switches with a small screwdriver, etc.)

Turn on the transmitter and receiver power switch and make the following adjustments:

1. Check the direction of operation of the servo.

If a servo operates in the wrong direction, switch its SERVO REVERSER switch. (The direction of operation can be changed without changing the linkage.)

2. Check the engine throttle (speed adjustment) linkage.

Change the servo horn installation position and hole position so that the throttle is opened fully when the throttle stigger is set to HIGH (back ward) and is closed fully when release the throttle stigger

3. After all the linkages have been connected, recheck the operating direction, throw, etc.

Before running adjust the car in accordance with the kit and engine instruction manuals.

4. Run the car and trim the servo.