

MERITRC

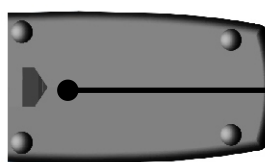
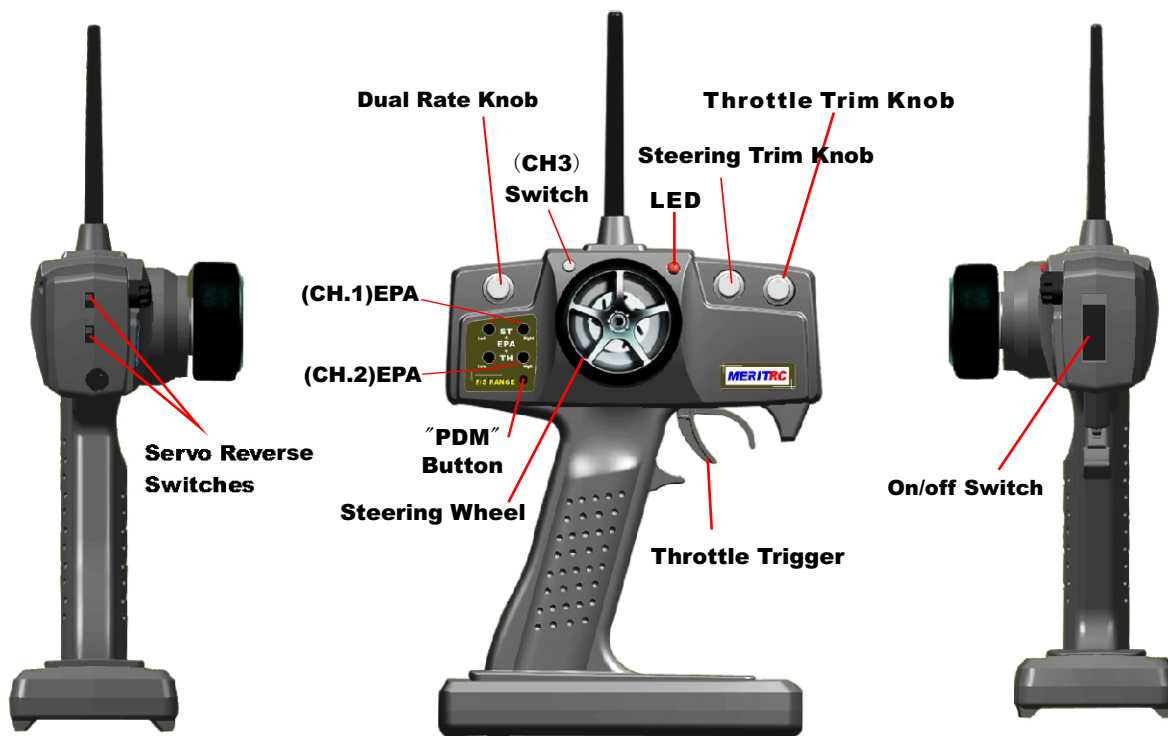
2.4GHz Pistol Radio Set

**2.4GHz FHSS
radio system
instruction manual**




NAME OF EACH PART

TRANSMITTER

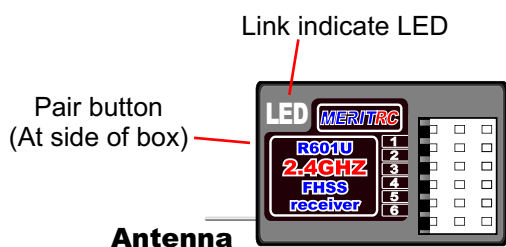


BATTERY COVER

* 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



CHANNEL OUTPUT

- "1": CH1
- "2": CH2
- "3": CH3
- "4": CH4
- "5": (Not used)(CH5)
- "6": (Not used)(CH6)

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: 75~125% of each direction.

Use the small Philip screwdriver (+) to turn the two small knobs inside the control panel upper side 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: 75~125% of each direction.

Use the small Philip screwdriver (+) to turn the two 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

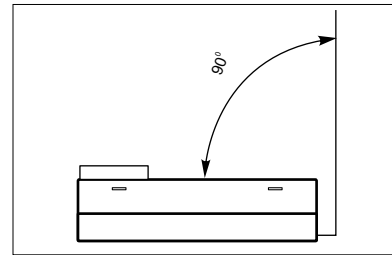
Since the 2.4GHz have different characteristics than that of the conventional frequencies, please read this section carefully to enjoy safe flight with the 2.4GHz system.

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.

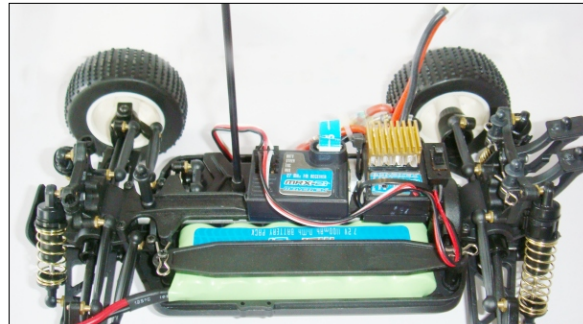
2. The antenna should be placed at 90 degrees to the receiver case.



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.



Pair 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.

1. Place the transmitter and the receiver close to each other within 1 meter.
2. Turn on the transmitter then the receiver. If they are not paired, the receiver red LED will blink per second or off, follow the next steps to link and pair the receiver and the transmitter.
3. Press down the receiver “pair button” switch for more than two seconds once the receiver LED start to blink quickly, it shows they are pairing, release the switch.
4. When the pairing is complete, the receiver LED will change to solid red and receiver will start to response to the transmitter after 2 seconds. Please refer to the table below for the LED status of the receiver's condition.

Receiving signals and ID is matched. : On
Receiving signals, but ID is not matched. : Off
No signal reception.: Off
Receiver ID memory is empty.: Blink per second

Chang the transmitter ID

The transmitter has an individual randomize ID that is created in the factory; even it is almost have no chance to meet the same ID transmitter in the same fly field, in case it does happen. The transmitter has an ID set up function.

By holding the “PDM” button to turn on the transmitter, the LED will blink. Press the “PDM” button to random change a new ID, the new ID will active when the transmitter turns on next time. Once you have set up a new ID for your transmitter, please must remember to re-pair your receiver with your transmitter before running.

You can go back to the original factory set ID by holding the “PDM” when turn on the transmitter, without press the “PDM” button, turn it off and on again to get back the original factory set up ID.

Range check the radio

A range check must be performed before the first run of a new car. It is not necessary to do a range check before every run (but is not a bad idea to perform a range check before the first run of each day). A range check is the final opportunity to reveal any radio malfunctions, and to be certain the system has adequate operational range.

1. There is "Power Down Mode" build in for doing a ground range check to activate the "Power Down Mode" by pressing the "PDM" button transmitter. The Green LED will turn off to indicate the PDM is working. During this mode, the RF power is reduced so the range test can be performed.
2. Walk away from the car while simultaneously operating the controls. Have an assistant stand by the model and signal what the controls are doing to confirm that they operate correctly. You should be able to walk 30-50 paces approximately from the model without losing control.
3. If everything operates correctly, return to the car. The "Power Down Mode" continues for 60 seconds and after that the power will go back to the normal level. To exit the "Power Down Mode" before the 60 seconds, press the "PDM" key again.
4. Never start flying when the "Power Down Mode" is active.

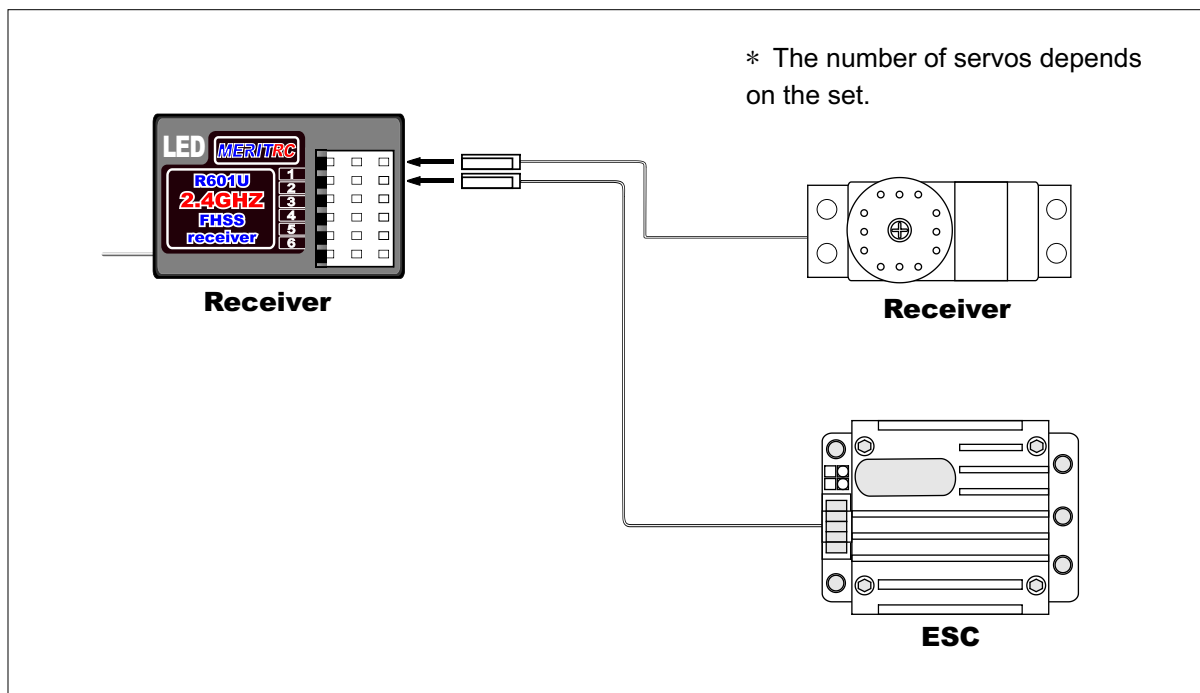
Adjustment And Installation

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.

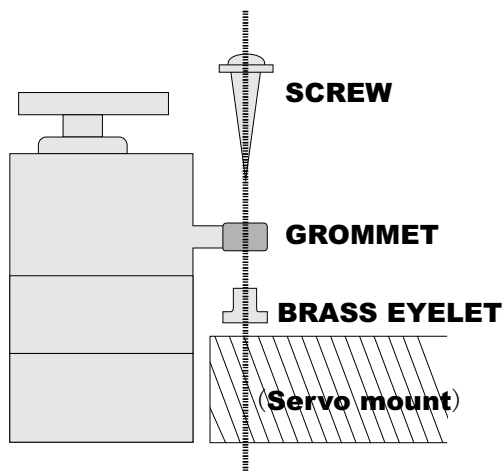
Servo Throw

- ! 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.

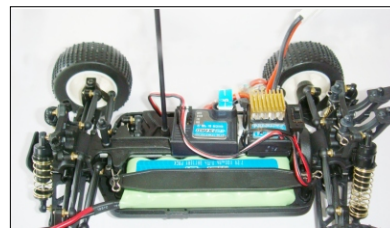
If the receiver is subjected to strong vibration and shock, or gets wet, it may operate erroneously and cause a crash.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules.

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.