

At this time we would like to thank you for purchasing the RF-901S and KR-408S. This product has adopted the current 2.4GHz z SS system which allows the use of multiple channels without the need to search an available open channel like the bands of a crystal system. This product corresponds to the transmitters that are sold by our company, listed below. Please read this instruction manual before using this product. Also please read the instruction manual of the transmitter being used.

**Corresponding Transmitters** **EX-I Mars / EX-I MarsR / EX-10 Helios / EX-I UR / EspritIII Universe**

**For your safety, please note the handling and use of this product.**

**Attention** The contents of this display show a possibility of death or where a serious injury may occur or a highly substantial damaging accident may occur.

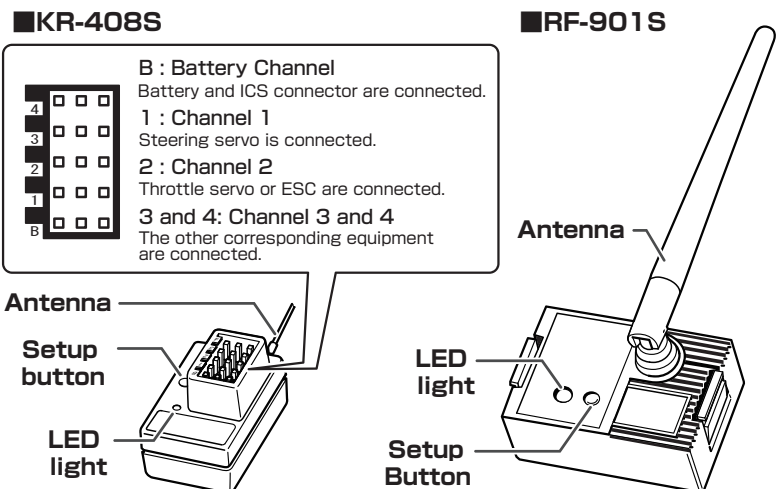
- This product is manufactured for surface use radio controls. \*Discontinue use for all other purposes. Discontinue use in the event of a thunder storm. \*There is danger of a lightning bolt striking the antenna of the transmitter.
  - Discontinue use when consuming alcohol or medication that may hinder concentration or judgement. \* Unexpected accidents are caused with a judgement mistake.
  - Discontinue use when consuming alcohol or medication that may hinder concentration or judgement. \* Unexpected accidents are caused with a judgement mistake.
  - Only use the batteries specified in the instruction manual of the transmitter.
  - To turn the system on, start by turning on the transmitter then the receiver. To turn off the system, turn off the receiver first, then the transmitter in this sequence.
  - Please be sure to use only our products for the transmitter and servos.
- \* Concerning the damage and the like, which is generated when combining products that are not our company's genuine products we do not owe responsibility.
- Altering the transmission module is inhibited by law and is subjected to penal code violations. Resolution remodelling of all products may result in the cause of a short and other accidents. In addition, if this product is altered we will refuse repair service.
  - Please do not use this product inside an airplane, hospital, near any automatic control equipment, medical electrical machinery and apparatus such as fire alarms. In addition with respect to the law, if this product effects other radio equipment and electronic equipment, use must be discontinued at once.

**Warning** This displays shows the possibility or a substantially damaging accident which can cause injury.

- Please avoid storage in a place of high temperatures and high humidity because it may cause the breakdown, damage and deformation of the product.
- Please note when using with an engine model, place where exhaust and the waste oil will not come into contact with the product. \*In case of submerging in oil or water, please send it out for repair.
- This product's performance is designed for use in the shown specified usage which is based on this instruction manual and the instruction manual of the transmitter which is used. When the instructions are not understood, please contact our service department for advise.
- After verifying the safety of use, think of all the accidents possible and please enjoy with responsibility.

**Our company cannot owe responsibility from the nature of the radio control models and the customer assumes all responsibilities that result from this product being used.**

**Name of Parts**



**Installation of Module**

When removing and installing of the module please make sure that the power switch of the transmitter is turned to OFF.

**Antenna movable range**

1. Note that excessive pressure is not applied on the module pins of the transmitter when inserting the RF-901S module.
2. When in use please adjust and try to have the antenna as much as possible vertically positioned.

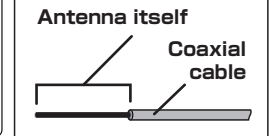
**Warning** Please do not touch the antenna while in use. Radio wave output becomes extremely weak. This will alter the module antenna range.

**Installation of Antenna**

When using an antenna tube made from resin, be sure to use an antenna mount. Absolutely do not use an antenna mount made of metal because it will pass noise through and will cause troubles. The exposed 3cm is part of the antenna as shown in the figure below. Place this as high as possible when installing the receiver. In order to protect the antenna itself, insert into the antenna tube and please do not have the antenna exposed from the tube. In addition, do not bend or kink the antenna. This may cause the wire to break and the specified performance will be lost.

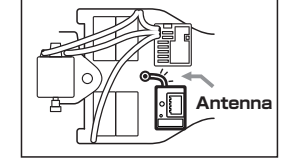
**Warning** Please, absolutely do not cut the antenna wire. The reception becomes impossible.

Please set the receiver away from noise sources such as the battery, ESC, motor and silicon wires. The antenna wire and the silicon wires should be paid special attention to.



**Antenna Installation Location** For electric powered models.

Please keep distance to the receiver site, due to noise sources of the battery, motor, ESC, etc. if possible. Also keep away power condensers and shotki diodes that generate noise from the receiver antenna if possible.



**Pairing**

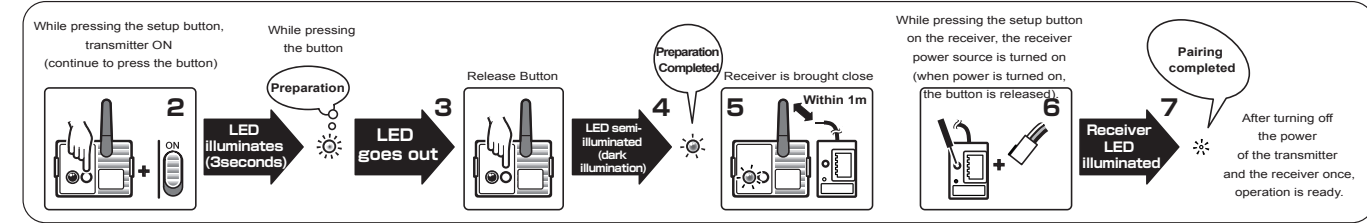
When using the receiver for the first time, the receiver must store the ID number of the module and "pairing" of the receiver and module is necessary. Pairing must be performed when the module that is used is modified. When multiple receivers are used, each receiver must go through the pairing process at least once.

1. Install the RF-901S module in the transmitter and raises the antenna.
2. While the set button of module is pushed, power of the transmitter is turned on. At this time the LED light of module lights up.
3. After approximately 3 seconds, the LED light will go out. When LED goes out is verified, please release the set button.
4. When the LED light goes to a darker illumination (semi- illuminated), preparation of the transmitter is set.
5. The antenna of the receiver is brought close to within 1m.
6. While pushing the set button on the receiver, turn the power source ON. (Please push the setup button of the receiver easily with a cylindrical shape such as toothpick.)

7. Release the set button when the LED lamp of the receiver lights up, and the pairing will be completed. Please turn off the power of the receiver and transmitter.
8. Continuing, you verify the operation. The illumination of LED is verified turning the power source of the transmitter to ON. (Operation should as normal.)
9. Turn the power source of the receiver to ON and if there is no semi-illumination and a change to the illumination of the LED the pairing has succeeded.

**Warning** If the pairing fails it may be due to a wireless LAN, microwave oven or someone else trying to pair at the same time. Please move to another location where you can try the pairing again.

**Warning** After pairing is completed, turn on the transmitter and then the receiver and your system will be ready to use.



**Note in regard to use and carrier sense**

**Attention** In order to be able to do "carrier sense" appropriately, the location where power of the transmitter is turned on should be as close as possible to where the model will be operated.

When turning on the transmitter, the RF-901S module will scan for a free frequency while the receiver scans for its paired module. This is called "carrier sense".

**Configuration of fail-safe function**

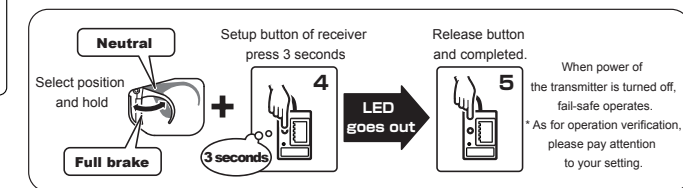
Fail-safe is when the receiver loses the radio signal of the transmitter, and the function keeps channel 2 (throttle) in an optional position. The configuration is usually full brake or neutral.

**Attention** Please be sure to configure fail-safe for safety.

**Warning** When the fail-safe actuated position is modified, please perform the configuration once again.

- If the brake linkage in a gas car was corrected, we recommend that you configure it a second time.
1. Power of the transmitter is turned ON.
  2. Power of the receiver is turned ON and the operation of servo is verified.
  3. The throttle trigger should be set to the brake, or neutral position.

4. Continue to press the set button of the receiver for 3 seconds. When the LED light of the receiver goes out, the button is released.
5. You can verify fail-safe operation once the power source of the transmitter is turned OFF. This configuration will be stored in the receiver until the setting is changed again.



**About Repairs**

When breakdown repair it is requested, please report the breakdown status in as much detail as possible.

By noting the problem, repairs are performed quicker.

**When you believe you have a breakdown.**

- Please refer to your manual once more and please inspect.
- When you do not understand something, please inquire our service department.

When inquiring to our service department about a breakdown, please include in as much detail as possible of the contents mentioned below about your problem.

- Name of products (battery, car, transmitter & motor) used.
- When breaking down, usage condition and description of breakdown condition.
- Your address, name and telephone number.

• When a repair is being requested, please be sure to send the memo which includes the above-mentioned contents in as much detail as possible.

**Technical Specifications**

● RF-901S Module  
 Transmission frequency: 2.4GHz  
 Modulation technique: Direct spread mode (DS-SS)  
 Output: Approximately 10mW  
 High speed response correspondence (ULTRA, ADVANCED, SUPER, NORMAL)  
 Operational possible range: Radius approximately 80m  
 Antenna: Single type  
 Electric power consumption: Approximately 60mAh

● KR-408S Reciver (Receiver)  
 High speed response correspondence  
 ICS and fail-safe function  
 Antenna: Coaxial feeder cable  
 Number of channels: 4 CH: 4CH  
 Power source: 4.8v~7.4v  
 Size: 28x18.3x18.5  
 Weight: 7.5g