

At this time we would like to thank you for purchasing the RF-901SM.

This product has adopted the current 2.4GHz z SS system that allows the use of multiple channels without the need to search for 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.

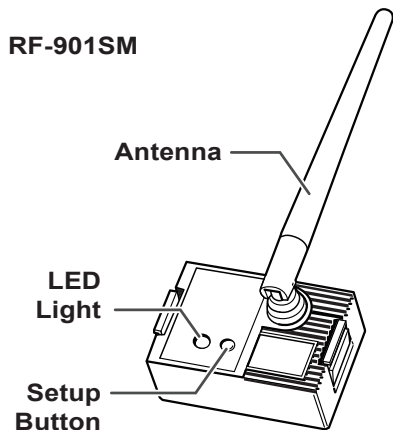
- This product is manufactured for surface use radio controls. \*Discontinue use for all other purposes.
- Discontinue use in the event of a thunder storm. \*There is danger of a lightning bolt striking the antenna of the transmitter.
- When rain and puddles are present, please discontinue use.
  - \*There are times when water enters into the equipment and control will be lost.
- Discontinue use when consuming alcohol or medication that may hinder concentration or judgement.
  - \*Unexpected accidents are caused with a judgment mistake.
- Please note that some parts are angular and pointed in the product.
  - Furthermore please keep this away from small children and avoid the use and storage in place where they can reach it.
- 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 this corporation's genuine products.
  - \*We are not responsible for the outcome or damage that may occur when genuine products are not used.
- Altering the transmission module is inhibited by law and is subjected to penal code violations.
  - Resolution remodeling 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.
- 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.

1. Note that excessive pressure is not applied on the module pins of the transmitter when inserting the RF-901SM 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.

**Antenna movable range**

**Configuring the Transmitter**

**Warning** The 2.4GHz system-transmitting mode greatly differs from the previous AM and AD modes.

When converting from AM and AD band to 2.4GHz, it is necessary to substantially modify each specification of the transmitter according to the chassis.

The Mini-Z 2.4GHz corresponds to all response modes.

**Pairing**

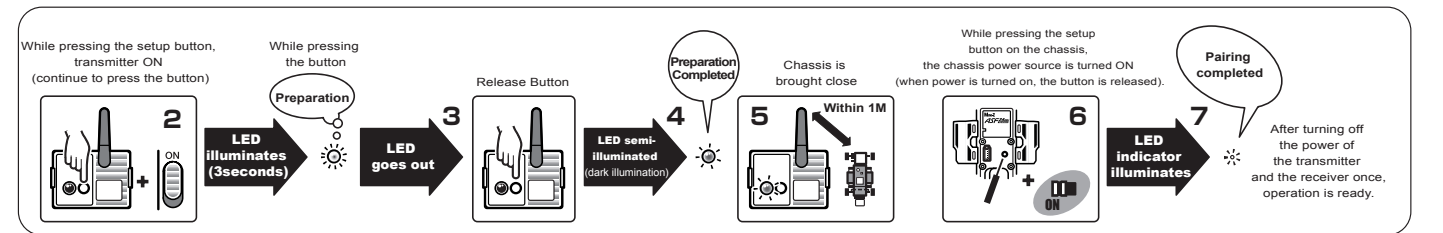
When using the receiver for the first time, the receiver must store the ID number of the module and "pairing" of the receiver and module is necessary. Pairing must be performed when the module that is used is modified. When multiple receivers are used, each receiver must go through the pairing process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

7. Release the pairing button when the LED indicator lights up and the pairing is completed. Please turn off the power of the transmitter and the receiver.
8. Continuing, you verify the operation. The illumination of the LED is verified by turning the power source of the transmitter 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.

1. Install the RF-901SM 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 chassis is brought close to the transmitter (within 1M). (As for a detailed procedure, please refer to the instruction manual of the chassis.)
6. While pressing the pairing button on the chassis, turn ON the power source.

**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-901SM module will scan for a free frequency while the receiver scans for its paired module. This is called "carrier sense".

**About Repairs**      **Technical Specifications**

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.

- **RF-901SM Module**
  - Transmission frequency : 2.4GHz
  - Modulation technique: Direct spread mode
  - Output: Approximately 1mW
  - High speed response correspondence (ULTRA、ADVANCED、SUPER、NORMAL)
  - Operational possible range: Radius approximately 40m
  - Antenna: Single type
  - Electric power consumption: Approximately 60mAh

