RP-2S Repeater

Introduction

The RP-2S repeater is a device built in transceiver, and it is used to expand the coverage of radio signals. To avoid useless retransmission and to minimize the possibility of interference, RP-2S only relays the specific sensors/transmitters' signal, which have been enrolled during installation. Max. 10 sensors/transmitters can be enrolled in a RP-2S.

When the RP-2S is used, the proper location is somewhere between the base unit and sensors. Please refer to the diagram as below,
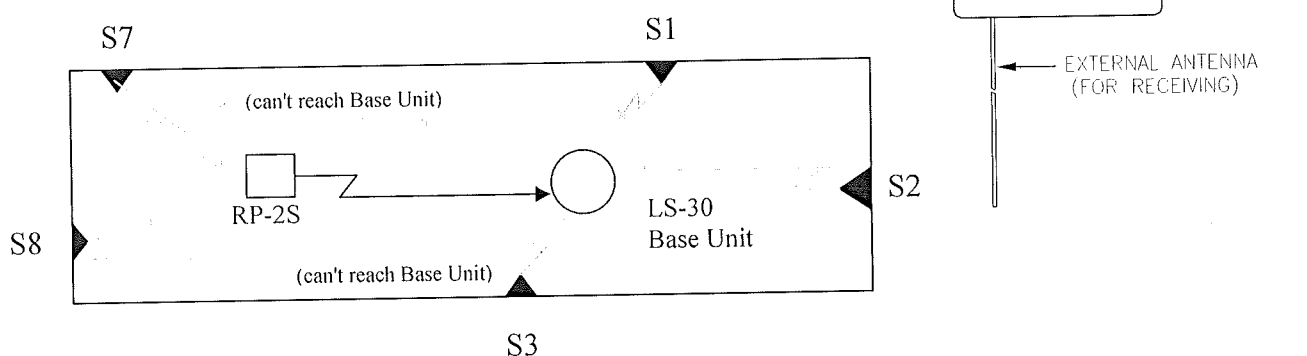

Fig. 1

Code enrolling and Installation

1. Stick the supplied antenna into the hole on the left top of the RP-2S carefully.
2. Plug the power adapter of RP-2S, and turn on the battery switch. You will hear a beep, then the red LED starts flashing once every 5 seconds.

    Note: In case the sensors have been mounted already, for the sake of convenience, you may merely turn on its battery switch (without connecting a power adapter, only if the internal battery can supply power for operation), and then bring the RP-2S close to the sensors to enroll the codes.

3. When the first time you press the Enrolling Button of RP-2S (with the tip of a paper clip or a ball pen) for 1 second, you will hear one beep, and the red LED keeps lighting up. Then you press the TEST button on the sensor, or activate Disarm function on wireless keypad which needs to be relayed, for 2 seconds then release. If RP-2S reads a valid RF signal within 25 seconds, you will hear two beeps, and the code enrolling terminates. Otherwise, you hear one beep when 25 seconds expire.

    Note:- Please keep the enrolling process as short as possible to prevent RP-2S from enrolling any unwanted sensor signal in the air.
    - Remote Controller can't be relayed by the repeater.

4. To make sure the correct code has been enrolled, press the test button on the sensor again, the LED on RP-2S should turn into green and flash.
5. You may repeat step3 to enroll more sensor/transmitter's code (up to 10). Each time a successful code enrolling increases one beep to prompt next code enrolling. For instance, if 3 sensors/transmitters have been enrolled in a RP-2S successfully, then when you press the Enrolling Button for the next enrolling, it will generate 4 beeps to indicate this sensor/transmitter will be saved in the 4th memory of the RP-2S.

    Remarks:
    1) To optimize the system's performance, the sensor's signal which can reach the base unit directly (ex. S1, S2, S3 in Fig. 1) is no need to be enrolled into the RP-2S. **For all sensors/transmitters needing to be relayed through the RP-2S (ex. S8, S9 in Fig. 1), you also have to enroll them into the base unit** .

2) During the process of code enrolling, if you hear 5 beeps with the red LED flashing after pressing the sensor/transmitter's button, it means this sensor/transmitter has been enrolled previously; the second code enrolling is ignored.

3) After 10 sensors/transmitters have been saved, the RP-2S will generate 5 beeps with the red LED flashing, if you press the Enrolling Button for enrolling next one. Under this condition, the RP-2S will not save sensor/transmitter any more.

Erase enrolled codes

Turn off the power of the RP-2S first (both power adapter and battery switch), press the Erolling Button first then turn on the power. You will hear 3 beeps, which indicates all the previous settings in the memory have been erased.

Installation Locations

Fig. 1 explains how to place the RP-2S in a proper location. Assume all sensors' radio signals can reach the base unit, except S7 and S8. First, you have to enroll the codes of S7 and S8 into RP-2S and Base Unit then put the RP-2S at somewhere between S7 & S8 and the base unit, usually closer to S7 & S8 side. A proper location must meet two conditions, the place where **A). The RP-2S can receive the radio signals from S7&S8 (you can check this by observing the LED status on the RP-2S) , B). The re-transmission signal from the RP-2S can reach the base unit.** It's recommended that you may do site test at several different locations before fixing the RP-2S. For the sake of convenience, you can turn on the battery switch of RP-2S, without connecting a power adapter during the test.

Remarks:

1. When the RP-2S receives the signal from a enrolled sensor, it will re-transmit this signal twice in a few seconds.

2. In some environments, a Base Unit sometimes probably receives both the sensor's original signal and the repeated signal from RP-2S successively, yet this wouldn't affect system's operation generally.

LED Indication

* **Red LED flashes once every 5** seconds: Standby state.

* **Red LED flashed with 5 beeps:** Duplicate code of enrolling sensor/transmitter or 10 sensors/transmitters have been saved, the memory is full.

* **Green LED flashes quickly:** Receiving a signal from enrolled sensor/transmitter.

* **Green LED lights up for one second:** Re-transmitting a signal.

Specifications

Power: 12V~15 DC
Current: about 96mA @stand-by, 137mA @transmission
Back-up time: about 8 hours @stand-by
Size: 85 x125 x 32 mm
Weight (w/o adapter): about 215g

WARRANTY

The Manufacturer warrants its products (hereinafter referred to as the Product) to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twelve months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period. At its option, to repair or replace the Product or and part thereof. To exercise the warranty the Product must be returned to the Manufacturer freight prepaid and insured.

This warranty does not apply in the following cases: improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the manufacturer.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential of incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall apply to the Product only. All Products, accessories or attachments of others used in conjunction with the Products, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to Products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function.

NOTE: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

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.

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