INTRODUCTION

The repeater i4H-RP-2SN is used to extend the RF distance of i4Home system. To avoid useless retransmission and minimize the possibility of radio interference, the repeater only relays the sensors/transmitters' signal which have been enrolled in the repeater. Maximum 10 sensors/transmitters can be enrolled in a repeater.
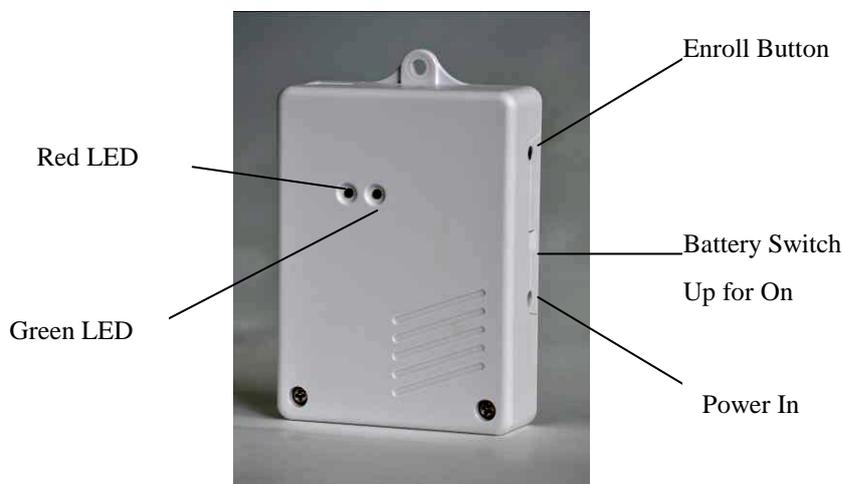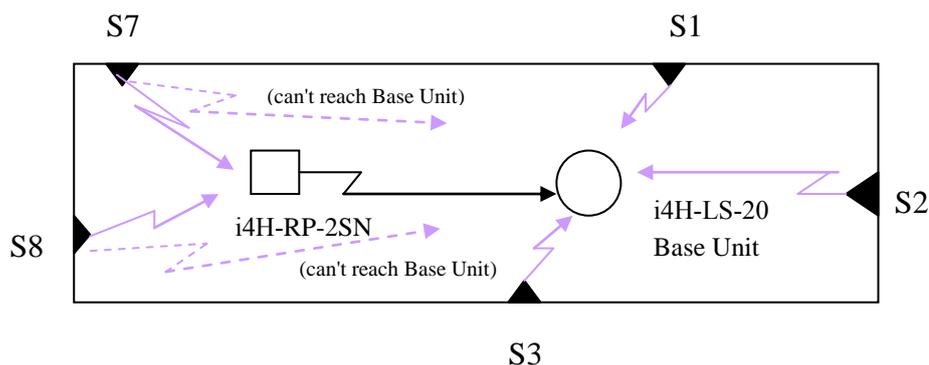
Fig. 1

Fig. 2

ENROLL THE REPEATER IN THE BASE UNIT

1. Turn off the power and battery switch of the repeater.
2. Keep pressing the Clear/Enroll Button on i4H-LS-20 for over 3 seconds and then release it, the i4H-LS-20 would keep beeping and the all LEDs blink. This means the system is ready for enrolling device.
3. Within 30 seconds, plug the power adapter of the repeater, the repeater would generate a beep, in the mean time the Green LED turns on for one second and the repeater sends its ID to the Base Unit for enrolling. If you hear 3 short beeps from the i4H-LS-20 soon later then enrolling successes, otherwise you will hear one long beep after 30 seconds that means enrolling fails, you have to repeat enrolling action.
4. Turn on the battery switch for battery charging.

ENROLL THE SENSORS IN THE REPEATER

1. For the first time you press the Enroll Button of the repeater (with the tip of a paper clip or a ball pen) for 1 second, it would generate one beep, and the red LED turns on. Then you press the TEST button on the sensor/transmitter (or activate its RF transmission) which needs to enroll. If the repeater receives a valid RF signal within 30 seconds, it would generate two beeps, and the enrolling terminates. Otherwise, it would generate one beep after 30 seconds.

   Note: 1) Please keep the enrolling process as short as possible to prevent the repeater from enrolling any unwanted sensor's signal in the air.

   2). In case the sensors have been mounted already, for the sake of convenience, you may simply turn on repeater's battery switch without connecting a power adapter, and then bring the repeater closely to the sensors to enroll the codes.

2. To verify if the sensor/transmitter has been enrolled correctly, you can press the test button on the sensor/transmitter again to check if the Green LED on the repeater flashes.

3. Just repeat step1 to enroll more sensors/transmitters (Maximum 10). Each time a successful enrolling increases one beep to prompt next enrolling. For instance, if 3 sensors/transmitters have been enrolled in the repeater successfully, then when you press the Enrolling Button for the next enrolling, it will generate 4 beeps to indicate this sensor/transmitter will be stored in the 4th memory of the repeater.

Remarks:

1) To optimize the system's performance, the sensors of which RF signals can reach the Base Unit directly (ex. S1, S2, S3 in Fig. 2) are no need to be enrolled in the repeater.

2) For all sensors/transmitters that are enrolled in the repeater (ex. S7, S8 in Fig. 2), they have to be enrolled in the Base Unit too. Please refer to LS-xx manual respectively.

3) 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 already; the new enrolling would be ignored.

4) After 10 sensors/transmitters have been enrolled, if you try to press the Enrolling Button to enroll next sensors/transmitter, the repeater would generate 5 beeps with the red LED flashing. Under this condition, no more sensor/transmitter can be enrolled.

ERASING ALL ENROLLED SENSORS

Turn off the power of the repeater (both power adapter and battery switch), press the Enroll Button first and then turn on the power. The repeater would generate 3 beeps to indicate all previous enrolls have been erased.

LOCATION FOR THE REPEATER

Fig. 2 explains how to place the repeater in a proper location. Assume all sensors' radio signal can reach the Base Unit except S7 and S8, then you should put the repeater at somewhere between S7 & S8 and the Base Unit but a little closer to S7 & S8.

A proper location must meet two conditions, the place where

A) The repeater can receive the radio signals from S7&S8. This can be checked by observing the LED status on the repeater.

B) The re-transmission signal from the repeater can reach the Base Unit.

It's recommended to do site test at several different locations before fixing the repeater. For the sake of convenience, you can turn on the battery switch of i4H-RP-2SN without the power adapter during the test.

Remarks:

1. After the repeater receives the signal from an 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 the repeater, yet this wouldn't affect system's operation generally.

POWER AND BATTERY

1. In case the input power fails, the green LED would light for 1 second and the repeater would send "AC-Loss" warning signal to the Base Unit, after that the repeater starts to beep in every 30 seconds.

2. The internal battery can support the repeater for over 48 hours. And the repeater would send "Battery Low" warning signal in every 24 hours to the base unit when the battery voltage goes down too low. In the meantime it starts to beep in every 5 seconds.

3. Once the input power recovers, the repeater would send "AC Restore" signal to the Base Unit.

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 enrolled, no more can be enrolled.
- **Green LED flashes quickly:** Receiving a signal from enrolled sensor/transmitter.
- **Green LED lights up for one second:** Re-transmitting a signal.

SPECIFICATIONS

Input Power: 7V/850mA power adapter
Battery: 4.8V/800mAH Ni-MH
Power consumption: 26mA @ standby, 35mA@transmission, with battery switch ON
RF Transceiver: 433MHz, 868MHz or 915MHz as requested
Maximum Capacity: 10 sensors or transmitters
Dimensions: 77 (W) x115 (H) x27 (D) mm
Weight: About 128g, excluding power adapter

i4HOME™
SMART HOME