Manuals+ — User Manuals Simplified.

HEAT-TIMER 059049-00 Wireless Space Sensor User Manual

Contents

HEAT-TIMER®

HEAT-TIMER 059049-00 Wireless Space Sensor

CAUTION

This equipment complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These

limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be etermined, by turning this equipment OFF and ON, the user may correct the interference by: (1) Reorienting or relocating the receiving antenna, (2) Increasing separation between the equipment and wireless components, (3) Connecting the equipment to a different outlet circuit from that of the wireless components, or (4)Consulting an experienced radio/TV technician for assistance. The antenna supplied by Heat-Timer Corporation must be used (gain <= 6dB). It is recommended not to operate the device (transceiver) with persons closer than 20cm to the antenna. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
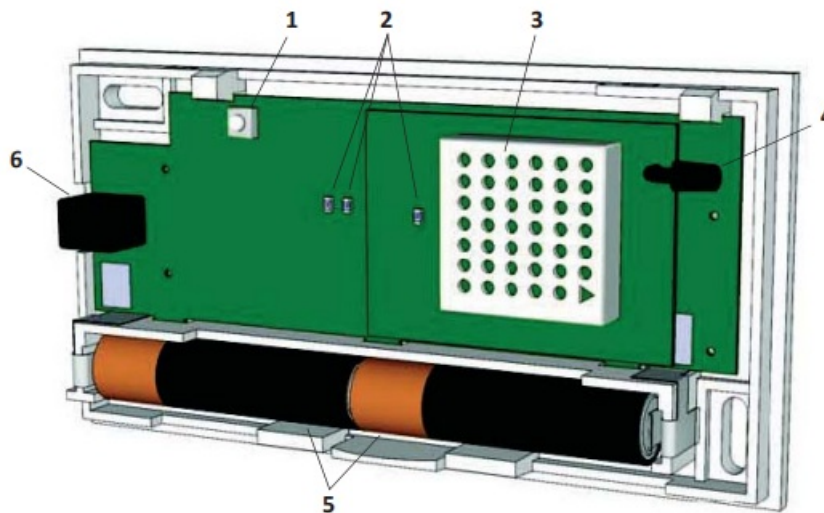
Controls, Indicators, and Connections

Figure1: Wireless Space Sensor Controls, Indicators, and Connections

Item	Description
1	Mode Button Use to set the Wireless SNR mode (Normal, Install, or One Packet).
2	Status Indicators (LEDs) • Red "main" LED blinks when in Install mode. • Green "main" LED blinks when data reception by a destination device has been acknowledged. • Red "RF" LED (nearest the RF Module) blinks when transmitting data in Install mode or if One Packet mode has been initiated. If all three LEDs are blinking, no System ID has been configured.
3	RF Module Transmit/receive radio signals to/from other devices.

Item	Description
4	Internal Antenna
5	Batteries Provide power for the Wireless SNR (2) AA 1.5V alkaline batteries.
6	RS485 Connector Programming interface for the Wireless Programmer or MSI Hub.

Specifications

- Dimensions (W x H xD):

  5″ x2 58x 78″ (127mm x 66.68mm x 22.23mm)
- Mounting Locations:

  .Wall Mount
- Temperature Range:

  40°F to 150°F (4.5°C to 66°C)
- Power Input:

  AA Alkaline (1.Sv) Batteries (2)
- Transmission/Reception:

  Internal Antenna
- frequency

  Rr SUOZ ris
- Signal Strength:

  25mW to 100mW
- Programming Interface

  RS485
- User Interface

  Status Indicators (2 Main LEDs, 1 RF Module LED)

  Mode Button (1)

Installation Instructions

The Wireless SNR installation process consists of the following basic steps:

1. Programming the Wireless SNR System ID.
2. Selecting appropriate locations and mounting the device(s).
3. Performing final iCMS configuration.

Required Materials (Not Supplied)
The following materials/tools are required for installation, but are not supplied:

- General tool kit (screwdrivers, power drill, etc.)

Programming the System ID

For the SNRS to function in a wireless system, each must communicate with a nearby Transceiver (TRV) or MSI Hub. Each wireless network snould nave a unique systerm iD that enabies all wireless components with that iD to communicate with eacn other.
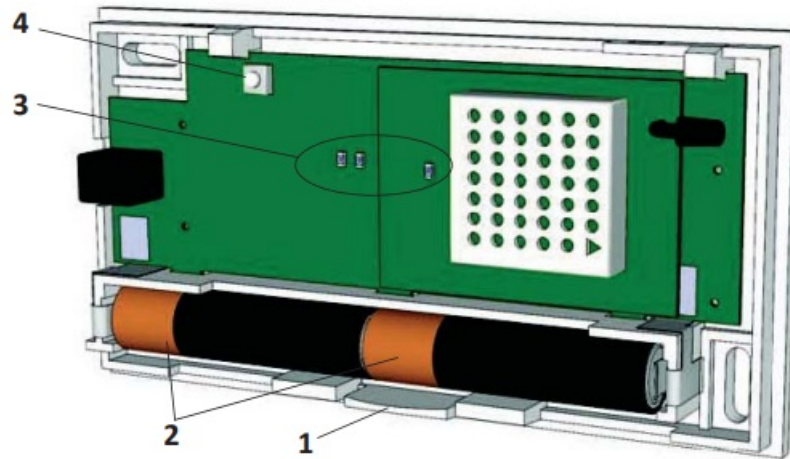
1. Open the Wireless SNR by gently pressing on the base locking tab (1) and removing the cover, and then insert two AA alkaline 1.5V batteries (2) (Heat-Timer p/n 020008-00).

   NOTE

   ure to install the batteries in the proper direction,

2. Observe the Wireless SNR status indicators (3). If the LEDs are blinking every second after installing the batteries, the System ID is not set (by detault, the factory setting is that the system ID is not set).

   NOTE: If the LEDS are not blinking, verify the batteries are good and are installed correctly. If the batteries are good and the LEDS are not blinking, the System ID has already been set. If the system ID is known, continue with "Mounting the Wireless SNR on page 7. If the system ID is not known, the System ID must be cleared using the following8 steps:

   1. Remove the batteries from the Wireless SNR.
   2. Press and hold the Mode button (4) while re-installing the batteries. Continue holding the Mode button until the Wireless SNR status indicators (3) start blinking once per second.
   3. Continue with Step 3.

      6 Wireless SNR Installation and Operation Manual

3. Remove the batteries from the Wireless SNR, and then program the Wireless SNR System ID using one of the following three methods:

   Program the System ID Wirelessly using a Transceiver or MSI Hub

   NOTE: Transceiver software must be version 13 or above.
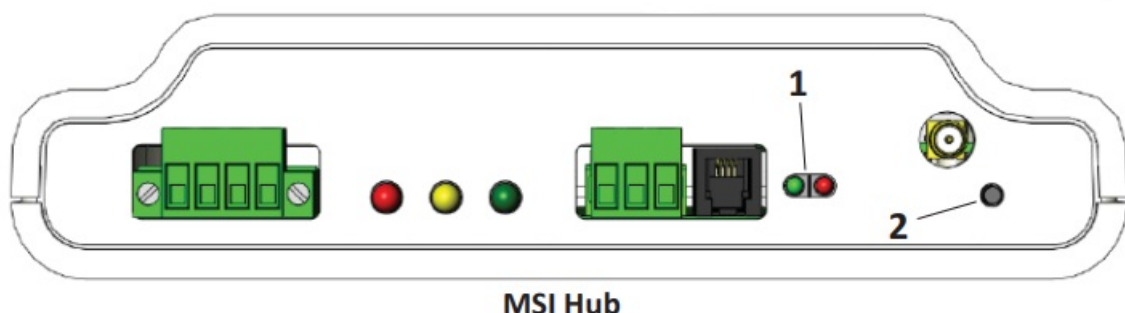
MSI Hub

   1. Ensure the Transceiver or MSI Hub has been LED powered-on and has already been programmed with the System ID. Observe Espeen pocnne. tiE EDSeDlnkinilelyionEEDe secOne).dSsenDSnoDeen poclnue
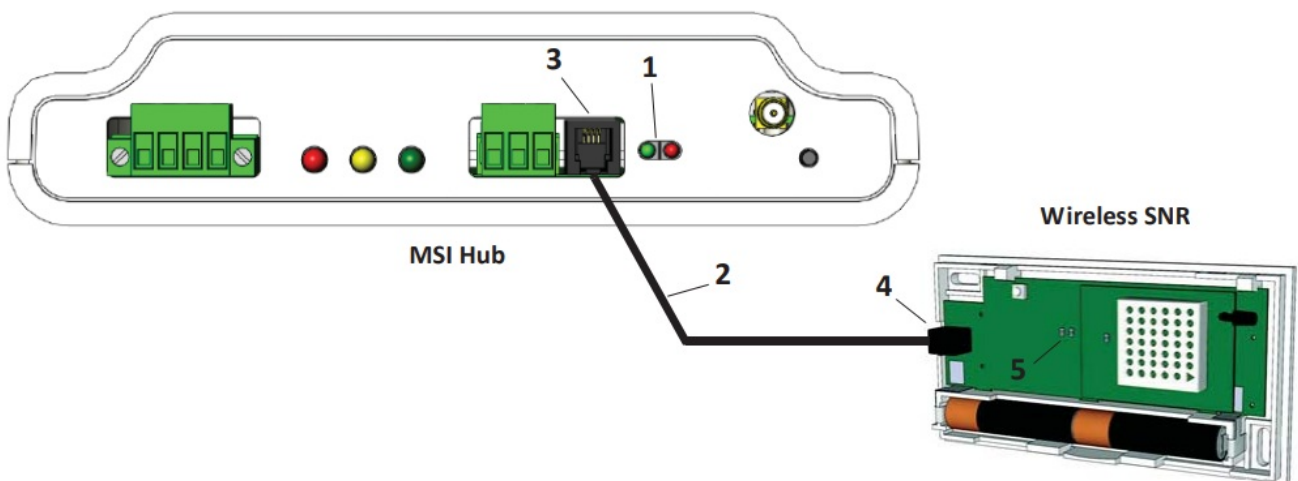
MSI Hub

2. Press and hold the System ID Set/Reset button on the MSI Hub (2) or Transceiver for 5 seconds or until the red LED starts blinking.

NOTE: The System ID Set/Reset button is located on the board for the Transceiver.

3. Insert the batteries into the Wireless SNR and observe the sensor's red and green status LEDS. When the LEDS Sstop Dlinking, thne sensor is programmed and ready to be mounted.

4. After the System ID has been programmed, press the System ID Set/Reset button on the MSI Hub or Transceiver to return the device to normal operation.

5. Continue with "Mounting the Wireless SNR" on page 7.

Program the System ID by Connecting Wireless SNR to the MSI Hub

1. Ensure the MSI Hub has been powered-on and has already been programmed with the System ID. Observe the MSI Hub status LEDS (1). If the status LEDS are not blinking, or are blinking only once every 15 seconds, a system iD has been programmed. If the LEDS are blinking rapidly (once per second), a system ID has not been programmed.

2. Connect the provided black MSI RJ11 communications cable (2) to the programming connection on the MSI Hub (3) and Wireless SNR (4).

CAUTION

The black I to the Wireless NR. USing any other cable may result in damage to the MSI Hub and/or the Wireless Sensor/ iranscever. to the Wirelece RU11 communications e cable (provided) MUST be used when connecting the MSI Hub

3. Insert the batteries into the Wireless SNR and observe the sensor's red and green status LEDS (5). When the LEDs stop blinking, the sensor is programmed and ready to instal.

4. Disconnect the Wireless SNR from the MSI Hub, and then continue with "Mounting the Wireless SNR" on page 7.

**Program the System ID using the Hand-Held Wireless Programmer**

1. Set the desired System ID in the Hand-Held Wireless Programmer. Refer to the Hand-Held Wireless Programmer manual Or nstructions.

2. After the System ID is set, press the [Mode] button to return to the main menu, select Config Devices, and then press Enter/

3. Select System ID, and then press [Enter /eI The System ID currently programmed into the Wireless Programmer is displayed.
4. When ACK is displayed on the Wireless Programmer screen, this is confirmation that the Wireless SNR has accepted the
5. System ID. Verity that the sensor's red and green status LEDS have stopped blinking.
6. Disconnect the Wireless SNR from the Wireless Programmer, and then continue with "Mounting the Wireless SNR on page 7.

Mounting the Wireless SNR

NOTE: The System ID must be programmed prior to mounting the Wireless SNR. Ensure the steps provided in "Programming the System ID" on page 5 have been completed before continuing. The Wireless SNR cover should already be removed and the batteries installed.

1. Select an appropriate location to mount the Wireless SNR. The location must meet the tollowing minimum requirements:
    1. The location should be on a wall that will represent the current living space temperature (tor example: in the living room, 5 feet (1.5 meters) high on an interior wall.
    2. The mounting surface should be flat and strong enough to hold the weight of the device.
    3. DO NOT mount the device in a location where it will be exposed to heating, cooling, or humidity sources (such as near radiators, heating/cooling vents, windows, doors, or in a kitchen or bathroom.
2. Mark the mounting location through the two mounting holes (1) in the Wireless SNR base, and then secure the Wireless SNR in place using the supplied screws and wall anchors.
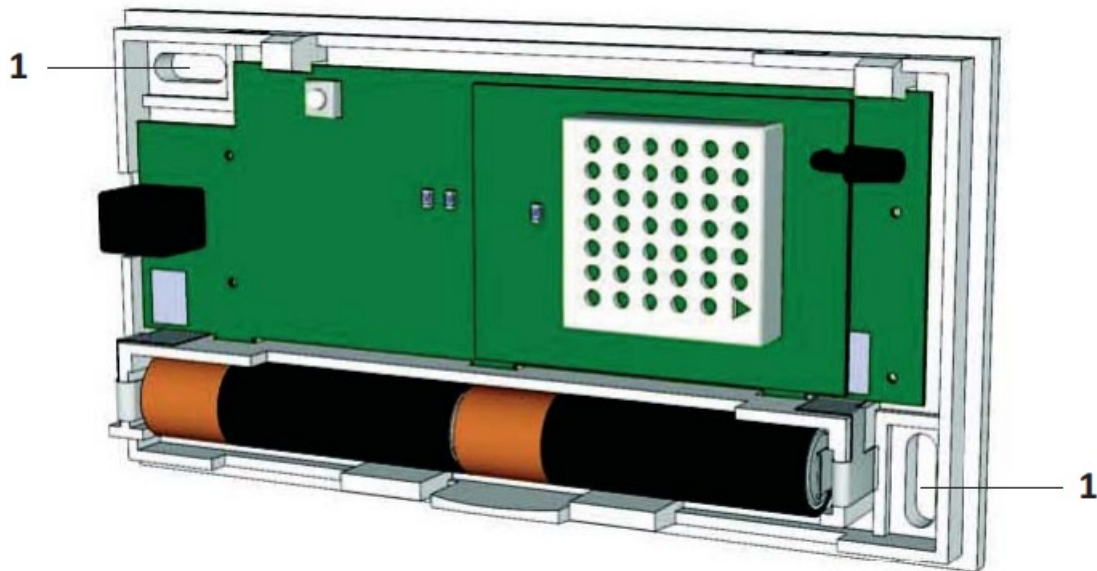
3. Snap the cover back onto the Wireless SNR.
4. Continue to "Performing the ICMS Contiguration" on page 7 when all devices have been mounted.

Performing the ICMS Configuration

After the Wireless SNR has been configured and installed, it must be contigured in ICMS.

1. Write the location of the Wireless SNR on the ID card provided with the device (for example, Apt. 5A).
2. Access www.HTControls.com and log in.

3. Configure ICMS with the applicable Wireless SNR installation data (device ID, name, type, and location).

4. After the ICMS configuration is complete, log out of ICMS.

Heat-Timer Corp.

Detailed Operation

Control Theory

The Heat-Timer Wireless Network Sensor System is designed to be used in a variety of large buildings, garden apartments, and in retrofit applications. This gives both the accuracy and flexibility required to monitor those buildings' temperatures (giving the control retrofit applications. This g e snace temperatures at nortabie levels). The system eases the installation face in buildings were it would be difficult or cost prohibitive utilizing other means, and gives Heat-Timer Platinum controls access to the he wireless sensor data, which it logs and uses for monitoring and fine-tuning its operation. The primary integral components of the system are: the Ms Hub, Transceivers (TRV), Wireless sensors (SNR), and Wireless Temperature Modules (WTM). The SNRS communicate their intormation to a nearby TRV or directly to an MSI Hub. Data received by a
TRV IS transmitted either to another TRV Or to the MSI Hub. All data received by the MSI Hub is communicated to the Platinum control.

Troubleshooting

Symptom	Possible Cause	Recommended Action
Both red status LEDs (or all three LEDs) are continuously blinking.	System ID has not been configured.	Configure the System ID. If the LEDs are still blinking after the System ID has been configured, contact Customer Support.
Status LEDs are not blinking after the batteries are installed.	Batteries not installed correctly, or are weak or drained.	Verify the batteries are good and are installed correctly (check the polarity diagram on the base).
	System ID is already configured.	If the System ID has been previously configured and is known, no action is required. If the System ID is not known, reconfigure the System ID.
Data is not being transmitted or received by the Wireless SNR.	Batteries weak or drained.	Replace both AA alkaline batteries (Heat-Timer p/n 020008-00).

WARRANTY
WARRANTIES AND LIMITATIONS OF LIABILITTY AND DAMAGE:
Heat- Timer Corporation warrants that it will replace, or at its option, repair any Heat-Timer Corporation manufactured product or part thereof which is found to be defective in material workmanship within one year from the date of instalation only if the warranty registration has been properly filled out and retumed within 30 days or the date or installation. Damages to the product or part thereot due to misuse, abuse,
an improper installation by others or caused by power railure, power surges, Tire, filood or lightning are not covered by this warranty. Any service, repairs, modifications or alterations to the product not expressly authorized by Heat-Timer The corporation will invalidate the warranty. Batteries are not included in this warranty. This warranty applies only to the original user and is not assignable or transferable. Heat-Timer Corporation shall not be responsible for any maladjustments of any control installed by Heat-Timer Corporation. It is the user's responsibility to adjust the settings of the control to provide the proper amount or heat or cooling required in the premises and tor proper operation of the heating or cooling system. Heat- Timer Corporation shall not be required to make any changes to any building systems, including but not limited to thee heating system, boilers or electrical power system, that is required for proper operation of any controls or other equipment nstalled by Heat-limer Corporation or any contractor. Ihird Party products and services are not covered by this Heat Timer Corporation warranty and Heat-Timer Corporation makes no representations or warranties on behalf of such third parties. Any warranty on such products or services is from the supplier, manufacturer, or licensor of the product or service. See separate Terms and Conditions of Internet Control Management System ("ICMS") services, including warranties and limitations of liability and damages, for ICMS services.
THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND HEAT-TIMER CORPORATION SPECIFICALLY DISCLAIMS ANY AND ALL WARRANTIES OF MERCHANTABILITY FOR A

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Documents / Resources

HEAT-TIMER 059049-00 Wireless Space Sensor [pdf] User Manual
RFMODULE02, QPI-RFMODULE02, QPIRFMODULE02, Wireless 1HWZRUN6HQVRU6 VWH
P, 059049-00, Wireless Space Sensor, 059049-00 Wireless Space Sensor

References

- ▦ **Commercial Heating Controls | Energy Management Systems - Heat-Timer® Corporation**
- ☏ **BuildingNet LLC. | Internet Control Management System | Login**