RZ251W

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Hours of Operation: M-F 9AM - 6PM Eastern

Table of Contents

This manual covers the following models:

- **RZ251W** (For use with T955WH remote sensing thermostat and the Z955W zoning system).

Congratulations on purchasing our Wireless System.
This remote sensor was designed to the highest reliability and ease of use standards. Thank you for choosing our quality products.

A trained, experienced technician must install this product.

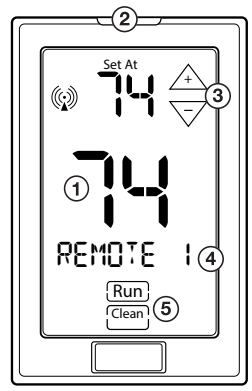
Carefully read these instructions. You could damage this product or cause a hazardous condition if you fail to follow these instructions.

Caution: Equipment Damage Hazard

Do not operate the cooling system if the outdoor temperature is below 50˚F (10˚ C) to prevent possible compressor damage.

Una version en espanol de este manual se puede descargar en la pagina web de la compania.

Getting to know your indoor remote sensor or zone control



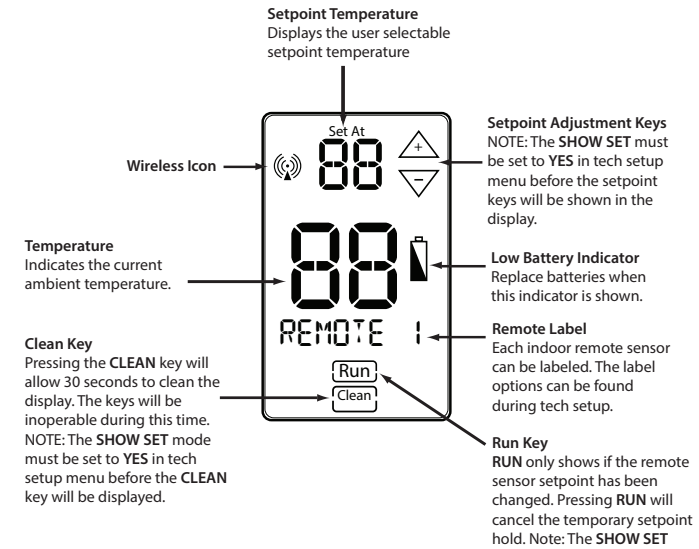
1. **LCD**
2. **Glow in the Dark Light Button***
3. **Temperature Setpoint Keys****
4. **Remote Name**
5. **Run and Clean Keys****

Wireless Range

Range between the remote and the master thermostat is approximately 100 feet with no obstructions and approximately 50 feet in standard residential metal, brick, and concrete construction.

***NOTE ABOUT THE LIGHT BUTTON:**
This button is used to light up the display. DO NOT hold the light button down for longer than 3 seconds or you will enter the technician setup screens. If inadvertently enter the tech setup press and release the light button a second time to exit the tech screens.

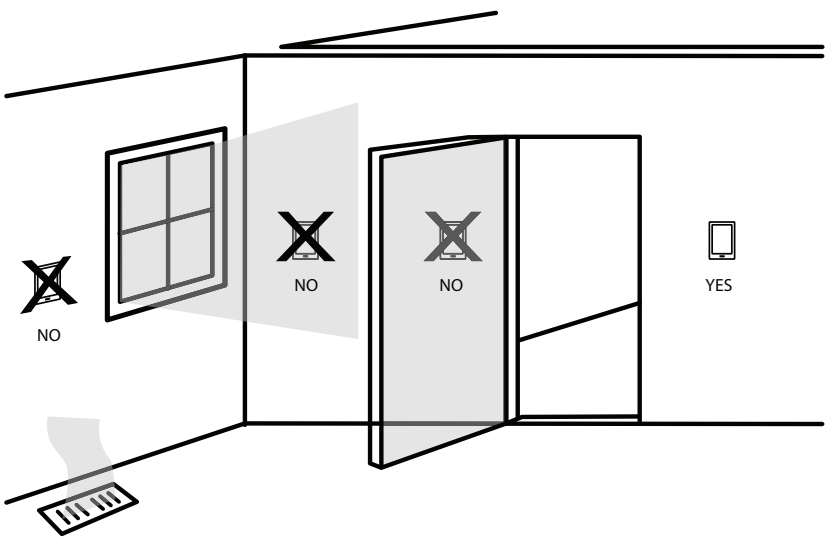
****NOTE ABOUT SETPOINT, RUN, AND CLEAN KEYS:**
These keys will only be shown if they have been turned on in Technician Setup menu.



Rev. 1820

Recommended Wall Mounting Locations

The remote sensor should be mounted or placed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.

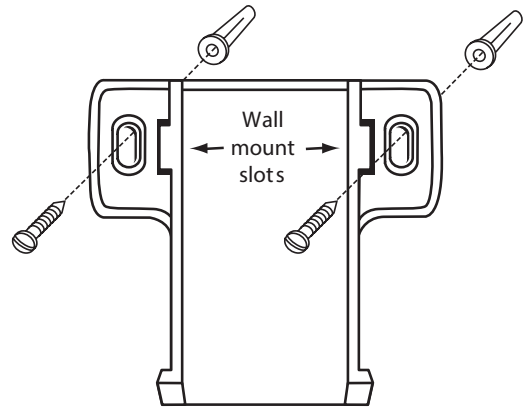


Do not mount or place Remote Sensors in locations:

- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
- Where appliances could radiate heat
- Do not set it next to or on hot appliances
- Do not put it in your pocket or hold in your hands for a long period of time.
- Body heat will distort the temperature reading.

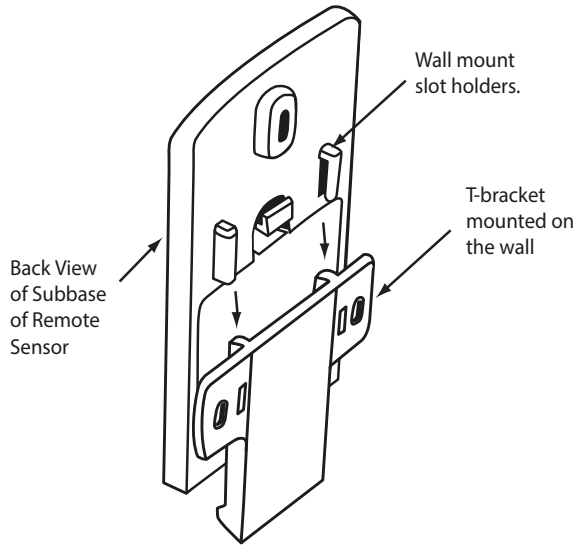
Wall Mount - Removable

1. **Mount T-bracket on the wall.**



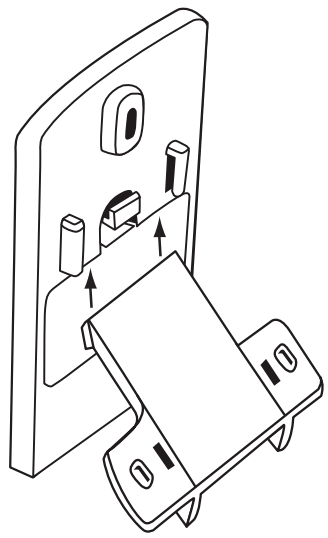
T-bracket

2. **Slide the Remote Sensor over the mounted T-bracket.**

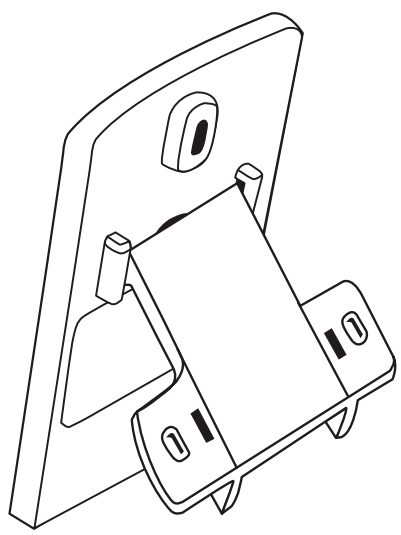


Desk or Counter Option

1. **Slide the T-bracket up into the slot holders.**

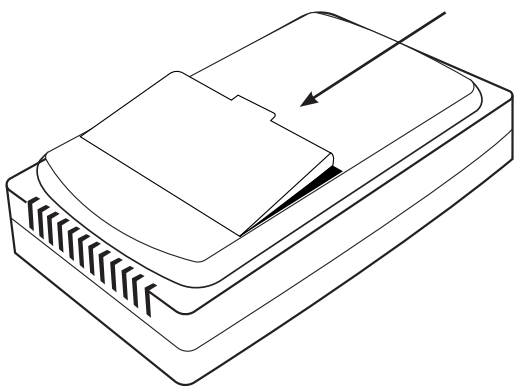


2. **T-bracket will stop on the top of the slot holders.**

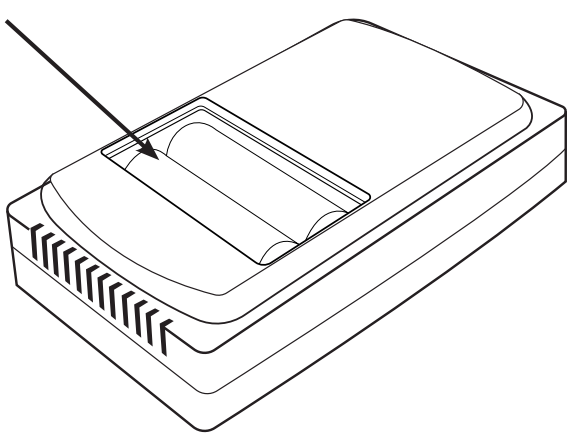


Temporary Wall Mount or Table Placement

1. **Use the finger tab on the back of the remote to remove the battery door.**

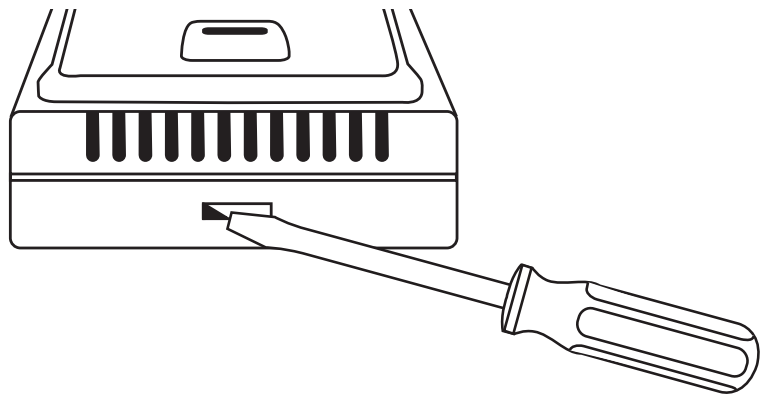


2. **Once you have removed the door from the back of the remote, insert 2 AA Alkaline batteries and replace the battery door.**

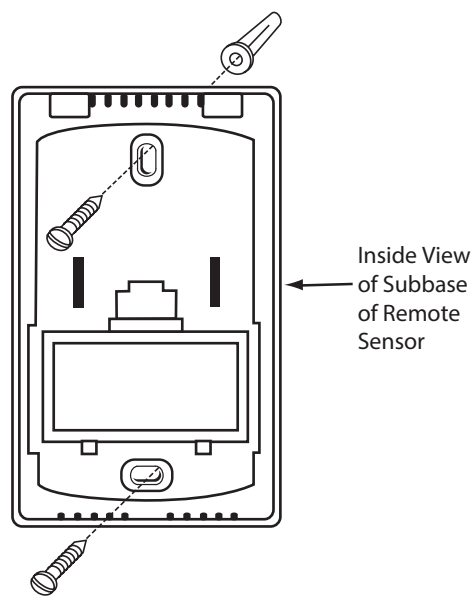


Wall Mount - Permanent

1. **Remove the remote from the subbase.**

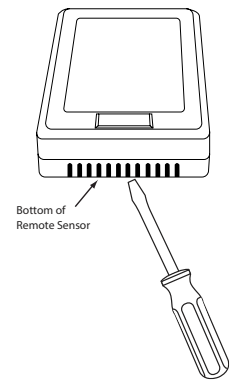


2. **Mount subbase to the wall**

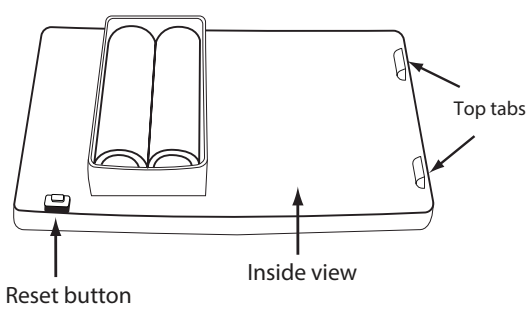


Inserting Batteries for Permanent Wall Mount

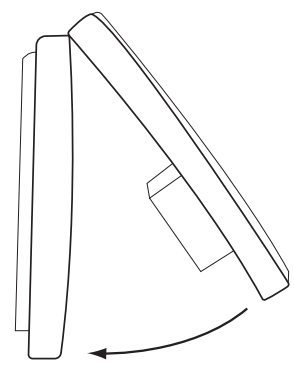
1. **Remove the remote from the subbase. It is held on the subbase by a plastic tab on the bottom of the remote sensor. Push in with a small flat head screwdriver to remove it from the subbase.**



2. **Once you have removed the remote from the subbase, insert 2 AA Alkaline batteries.**



3. **Attach the remote to the subbase by aligning the two top tabs and then close as shown.**



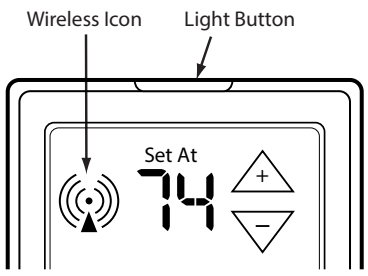
Remote Sensing Communication

Connecting to the Master Thermostat

Easy communication link set up.
(The remote sends temperature information every 5 minutes.)

1. The Thermostat Tech setting for the **Remote Sensor** must be set to **YES.** See the thermostat manual for instructions.
2. Navigate the Thermostat to the FINDING SENSORS technician setup step and then select the zone you wish to connect tot hat remote.
3. On the Remote Sensor hold the LIGHT button for 3 seconds to enter the tech setup screens.
4. In the 2nd tech setup step, choose the zone number selected on the Master Thermostat
5. While in the ZONE tech setup step on the remote, hold the light button down until the wireless icon flashes, approximately 3 seconds.

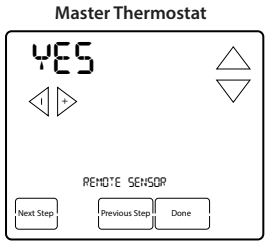
Remote Sensor



NOTE: you can only connect one **REMOTE** to each zone.

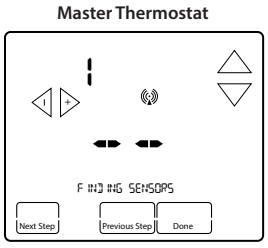
EXAMPLE:
if you would like to connect two **REMOTES** to the **Thermostats**. Then connect the first one to **Zone 1** and the second one to **Zone 2**.

Example Step 3 and 5.



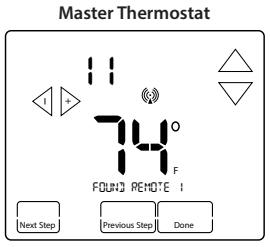
Example Step 1.

Master Thermostat Remote Sensor set to **YES**. Then press **NEXT STEP**.



Example Step 2.

The **Thermostat Finding Sensor** zone numbers must match the zone number on the **REMOTE**



Example Step 6.

The **Thermostat** now displays the name and the ambient temperature of the **REMOTE**.

Remote Sensing Technician Setup Menu

Tech Setup Steps		LCD Will Show	Adjustment Options	Default
Room Temperature Calibration	This feature allows the installer to change the calibration of the room temperature display. Fore example, if the thermostat reads 70 and you would like it to read 72.	0 CALIBRATE	You can adjust the room tem-paerature display to read + or - 4 degrees from the factory calibrated settings.	0
F°or C°	This feature sets the display tem-perature to read either Fahrenheit or Celsius.	F FAHRENHIT	**F** for Fahrenheit **C** for Celsius	F
Low Temperature Setpoint	This feature allows you to set a minimum cool setpoint value. The setpoint temperature cannot be lowered below this value.	44 LOW LIMIT	Use the key to select the minimum cool setpoint.	44°F
High Temperature Setpoint Limit	This feature allows you to set a maximum heat setpoint value. The setpoint temperature cannot be raised above this value.	90 HIGH LIMIT	Use the key to select the maximum heat setpoint.	90°F

NOTE: Got to page 9 of this manual to see the instructions on how to connect this **REMOTE** to the **Thermostat.**

NOTE: Tech setup cannot be entered if the **REMOTE** is in temporary hold mode. Press the **RUN** key to exit temporary hold.

Technician Setup Menu

This remote sensor has a technician setup menu for easy installer configuration. To set up the remote for your particular application:

1. Press and hold the LIGHT button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.
2. Configure the installer options as desired using the table below.
3. Use the key to move to the next tech setup screen. Use the key to make adjustments to the settings.

NOTE: Press and release the light button when you want to exit the tech setup screens.

Tech Setup Steps		LCD Will Show	Adjustment Options	Default
System Select	This step configures the remote device to connet to a wireless THERMOSTAT, or a wireless ZONING system master thermostat. Leave setting on 'THERMSTAT' for this application.	THERMSTAT	**THERMSTAT:** The remote is configured to a wireless ther-mostat. **ZONING:** The remote is configured to connect to wireless zoning system Master Thermostat.	THERMOSTAT
Zone Selction	Selcts which zone is connected to the thermostat. Only 1 remote can be used for each zone for a total of 4 remotes.	ZONE 1	Zone 1, Zone 2, Zone 3, Zone 4 The Zone number on the remote and the Thermostat must match in order to establish a connection See previous page to connect.	ZONE 1
Remote Name	Selcts a name for the remote. This name will appear on the thermostat when the thermostat is displaying the remote's temperature	REMOTE 1	Remote 1, Remote 2, Remote 3, Remote 4, Bedroom 1, Bedroom 2, Bedroom 3, Bedroom 4, Kitchen, Living Room, Hall, Family Room, Dining Room, Office, Study, Den, Loft, Upstairs	REMOTE 1
Show Set	Enabling this feature will allow the remote to temporarily over-ride the thermostat set point.	SHOW SET	**N:** The remote is used as a sensor only and cannot change the current set point. **Y:** Enables the temperature adjustment keys allowing the user to temporarily override the thermostat set point with the remote.	OFF

Remote Sensor Configuration

Sensor Only Mode

(**SHOW SET** tech screen set to **N**)

In sensor only mode (set to **N**) the remote will not allow you to change the set point. The current ambient temperature will be displayed and transmitted to the **Thermostat** every five minutes. The ambient temperature will be used for controlling when system average is selected and whenever it is given priority by the program in the **Thermostat.**

Adjustable Remote Mode

(**SHOW SET** tech screen set to **Y**)

In show set mode it will show the temperature setpoint arrows and the **CLEAN** key.

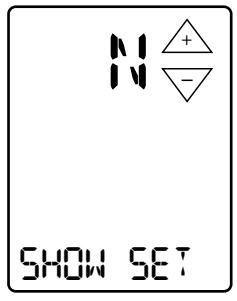
In this mode the **Remote** can be used to override the **Thermostats** current settings for 4 hours in addition to being used as temperature sensor.

OVERRIDE PROCEDURE:
Press the up or down arrows on the **Remote.** The current ambient temperature will be displayed. Adjust the temperature reading to the desired set point.

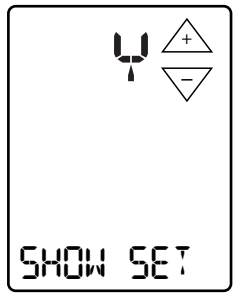
The **Thermostat** will display the zone that currently has control and the Temperature at the remote. The word **REMOTE** will be displayed on the **Thermostat** to show the remote has overriden the program. Allow up to 1 minute for the **Thermostat** to acknowledge an override from a **Remote.**

Pressing **Run Schedule** on the **Thermostat** will return the system to the programmed schedule.

The **Remote** will also show a **Run** key that can be pressed to return the **Thermostat** to the current programmed temperature, which cancels the hold.



Remote SHOW SET Tech Setup Screen



Remote SHOW SET Tech Setup Screen

NOTE: The **Remote** will show the Run key for 4 hours even if the Thermostat is put back in to normal operation or overridden by a 2nd remote. However, the last device changed will have priority.

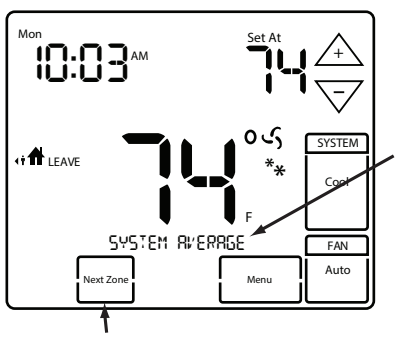
NOTE: The last remote or master changed will have priority

NOTE: There is no permanent hold option for the remote but you can select a permanent hold from the **Thermostat**.

Example of programming a priority for the SLEEP time period:
In this example system we have 1 Thermostat on the main floor and 1 remote in the Master Bedroom on the 2nd floor. During the setup process the remote was named Bedroom 1. During WAKE, LEAVE and RETURN, the program should remain on system average. When on the SLEEP time period during programming, press NEXT ZONE until Bedroom 1 shows. During the SLEEP time period the other remotes in the house will be ignored and the system will be controlled only by the ambient temperature of the remote in the master bedroom. The WAKE, LEAVE and RETURN temperature will be controlled by the system average.

New Features on the Thermostat After a remote is Connected

NEXT ZONE KEY



NEXT ZONE key cycles through ambient temperatures for connected zones.

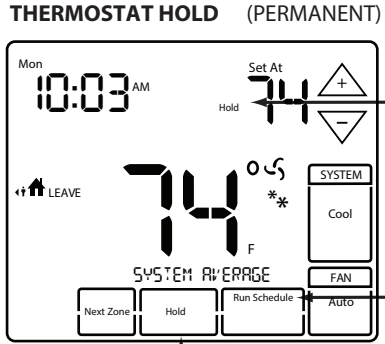
In this example, the name of the zone currently having priority is **SYSTEM AVERAGE**.

System average is the average of all connected sensors.

Local is the ambient temperature of the **Thermostat**.

The name of the **REMOTE** can be displayed. This shows it has priority.

THERMOSTAT HOLD (PERMANENT)

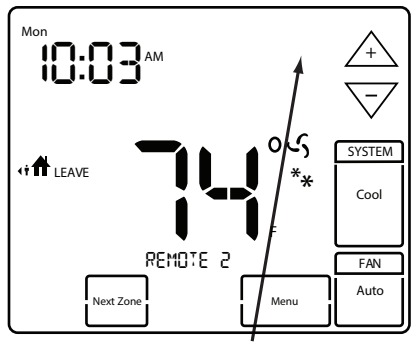


To put the thermostat into hold select system average or the zone you want to hold. Then use the arrows to adjust the setpoint. Then press the **HOLD** key.

HOLD: Indicates the Thermostat is in permanent **HOLD**. A permanent **HOLD** can be active for system average, local, or any **REMOTE**.

Run Schedule: Will cancel any holds and return the system to the program.

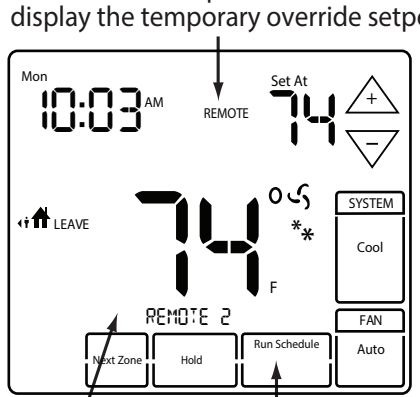
SETPOINT NOT DISPLAYED



Setpoint will only be displayed for the zone currently being used by the program or in hold. Press the + or − to show the setpoint for adjustment.

TEMPORARY HOLD (4 HOURS)

REMOTE: Indicates the **Master Thermostat** is in hold. The setpoint will now display the temporary override setpoint.



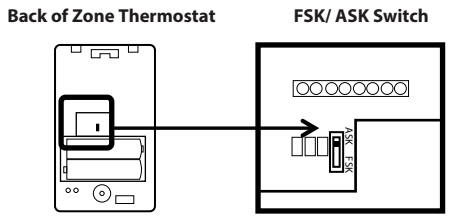
The name of the remote sensor will be displayed. In this example, it is **REMOTE 2**.

Run Schedule: Will cancel any holds and return the system to the program.

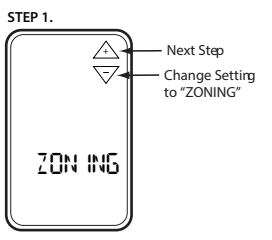
Specifications

The display range of temperature	32˚F to 99˚F (0˚C to 37˚C)
The control range of temperature	44˚F to 90˚F (7˚C to 32˚C)
Display Accuracy	± 1˚F
Power source	Battery power from 2 AA Alkaline batteries
Operating ambient	32˚F to +105˚F (0˚C to +41˚C)
Operating humidity	90% non-condensing maximum
Dimensions of thermostat	2.75″W x 4.5″H x 1.375″D
Frequency	916 MHz
Sending Data	Every 5 minutes
Reading Temperature	Every 60 seconds

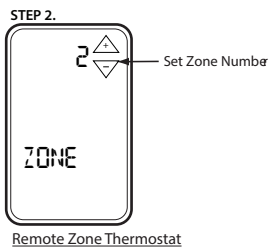
Our Wireless Zoning System contains selectable wireless communication. Each component has a jumper switch labeled FSK and ASK. Default Setting: FSK. All components must be set to the same position for wireless communication. This selectable communication option is available to you in case you have a device you are pairing with that only has the ASK option.



Connecting to the Master Thermostat



Remote Zone Thermostat



Remote Zone Thermostat

Easy communication link set up:

1. The Remote Zone Thermostat must be configured to "ZONING" in the first Tech Setup Step. See next page.

2. In the next Tech Setup Step, you select the Zone Number that the Remote Zone Thermostat will be used to measure/ control. (See page 7 for steps to enter Tech Setup.) This will be zones 2-5. (The Master Thermostat is always Zone 1.)

3. Then set the Master Thermostat Zone number to match the Remote Zone Thermostat. See Installation Manual, Tech Setup Step "Zone Remote Thermostat".

4. With both Remote Zone Thermostat and set to the same zonein their setup steps, press and hold the light button on the zone thermostat until the Wirelss Icon flashes, approximately 3 seconds.

5. The Master Thermostat should now show the temperature of the Remote Zone Thermostat, the Zone number it's configured for (Example 2) and it's name. If it hasn't been named yet, it will show

Master Thermostat

Remote Zone Thermostat

Master Thermostat

Technician Setup Menu

This zone thermostat has a technician setup menu for easy installer configuration. To set up the remote for your particular application:

1. Press and hold the LIGHT button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.

2. Configure the installer options as desired using the table below.

3. Use the ▲ key to move to the next tech setup screen. Use the ▼ key to make adjustments to the settings.

NOTE: Press and release the light button when you want to exit the tech setup screens.

Tech Setup Steps		LCD Will Show	Adjustment Options	Default
System Select	This step configures this device to connet to a wireless THERMOSTAT, or a wireless ZONING system master thermostat. Change setting to zoning for this application.	THERMSTAT	**THERMSTAT:** The remote is configured to a wireless thermostat. **ZONING:** The remote is configured to connect to wireless zoning system Master Thermostat.	THERMOSTAT
Zone Selction	This step links the device to the Master Thermostat, for the Zone # you wish to control. Select the same zone # on this ZONE THERMOSTAT that you select on the Master thermostat.	ZONE 1	**THERMOSTAT.** Zone 1,2,3,4 **ZONING** ZONE 2,3,4,5 The Master Thermostat is always ZONE 1.	ZONE 1
Remote Name	This step selects a name for the zone thermostat. This name will also appear on the Master Thermostat when it is displaying the zone's status.	REMOTE 1	Remote 1, Remote 2, Remote 3, Remote 4, Bedroom 1, Bedroom 2, Bedroom 3, Bedroom 4, Kitchen, Living Room, Hall, Family Room, Dining Room, Office, Study, Den, Loft, Upstairs	REMOTE 1
Show Set	**ZONING:** Enabling this feature will allow the zone remote to control the SYSTEM mode, FAN mode, and setpoint temperature of the zone. Disabling it will turn all control of that zone over to the master thermostat.	SHOW SET	**N:** Disables. In this mode the Remote is used as a sensor only and can not adjust the setpoint or system modes. The zone is conrolled by the MAster Thermostat. **Y:** Enables the temperature	OFF

Tech Setup Steps		LCD Will Show	Adjustment Options	Default
Room Temperature Calibration	This feature allows the installer to change the calibration of the room temperature display. Fore example, if the thermostat reads 70 and you would like it to read 72.	CAL IBRATE	You can adjust the room tempaerature display to read + or - 4 degrees from the factory calibrated settings.	0
F°or C°	This feature sets the display temperature to read either Fahrenheit or Celsius.	FAHRENH IT	**F** for Fahrenheit **C** for Celsius	F
Low Temperature Setpoint	This feature allows you to set a minimum cool setpoint value. The setpoint temperature cannot be lowered below this value.	LOW L IMIT	Use the ▼ key to select the minimum cool setpoint.	44°F
High Temperature Setpoint Limit	This feature allows you to set a maximum heat setpoint value. The setpoint temperature cannot be raised above this value.	HIGH L IMIT	Use the ▲ key to select the maximum heat setpoint.	90°F

Specifications

The display range of temperature ..... 32˚F to 99˚F (0˚C to 37˚C)
The control range of temperature..... 44˚F to 90˚F (7˚C to 32˚C)
Display Accuracy..... ± 1˚F
Power source .....Battery power from 2 AA Alkaline batteries
Operating ambient ..... 32˚F to +105˚F (0˚C to +41˚C)
Operating humidity ..... 90% non-condensing maximum
Dimensions of thermostat .....2.75"W x 4.5"H x 1.375"D
Frequency.....916 MHz
Reading Temperature.....Every 60 seconds