



System Installation Guide

RedLINK™ Wireless System

With TrueZONE™ Panel & Wireless Adapter

Français : voir la page 17 • Español: vea la página 32

Provides wireless control of HZ322 or HZ432 RedLINK TrueZONE Panels.
(See zone panel information for heat/cool stage capacity.)

Installation guide for:

- FocusPRO® wireless thermostats
- Wireless remote control
- Wireless outdoor air sensor



DISCONNECT POWER BEFORE BEGINNING INSTALLATION. Can cause electrical shock or equipment damage.



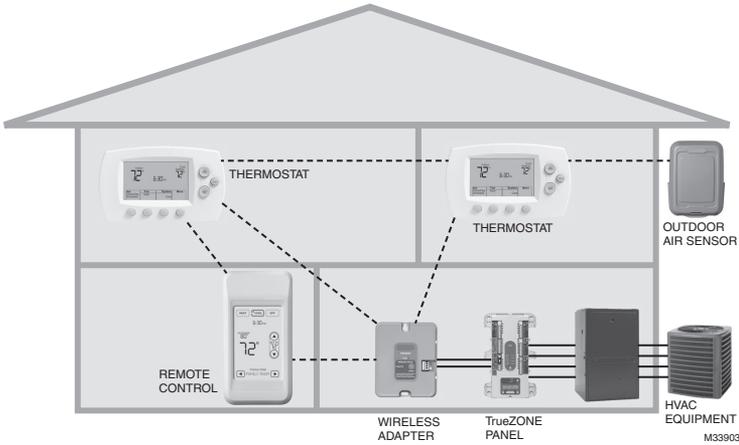
MERCURY NOTICE: If this product is replacing a control that contains mercury in a sealed tube, do not place the old control in the trash. Contact your local waste management authority for instructions regarding recycling and proper disposal.



Must be installed by a trained, experienced technician. Read these instructions carefully. Failure to follow these instructions can damage the product or cause a hazardous condition.



System installation at a glance



Installation procedure

This document covers linking and installation procedures for FocusPRO wireless thermostats and RedLINK accessories in TrueZONE applications.

Before you begin, **you must mount, wire & configure the TrueZONE panel and wireless adapter** (see TrueZONE Installation Guide), then follow steps below.

- 1** You must configure the TrueZONE panel before you begin
- 1** Install batteries in wireless devicesPage 3
- 2** Link all devices to wireless networkPages 3-5
- 3** Exit wireless setupPage 6
- 4** Customize thermostat (installer setup)Pages 6-10
- 5** Mount thermostat and outdoor sensorPage 11

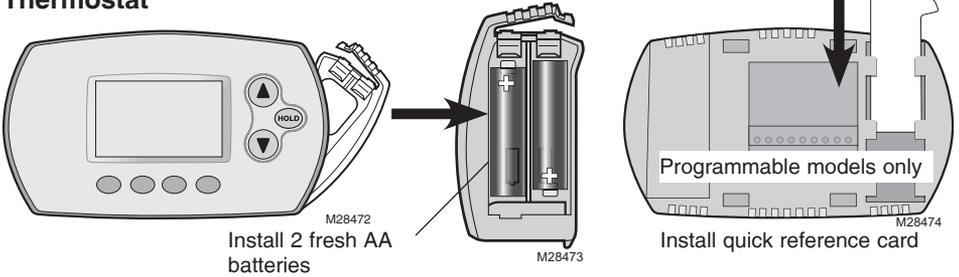
To replace system components if needed, see page 13

1 **If you have more than one TrueZONE Panel:** Thermostats are linked to specific zone panels. Optional accessories must be linked to each zone panel separately.

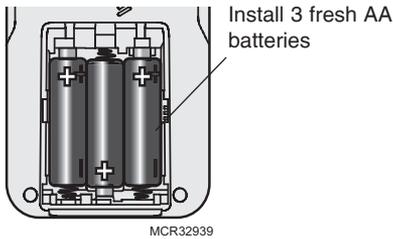
1 Install batteries in wireless devices

When system wiring is complete and TrueZONE panel is configured for RF, install batteries in all devices. Make sure batteries are inserted properly (see illustrations below).

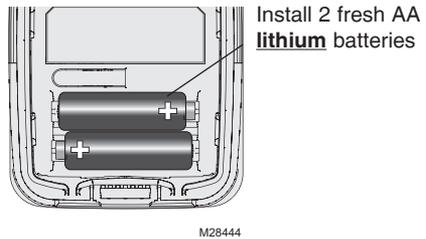
Thermostat



Remote control (optional)

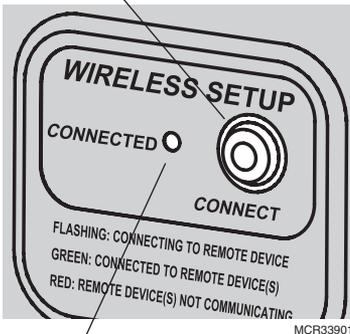


Outdoor air sensor (optional)



2 Link all devices to wireless network

Press **CONNECT**



Flashing status light times out after 15 minutes of inactivity. Press **CONNECT** again if necessary.

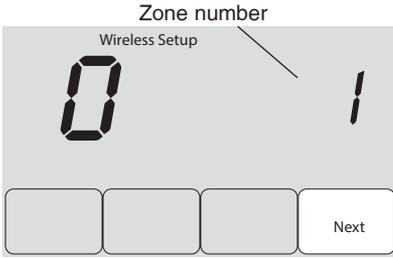
Make sure the Connected light on the wireless adapter is flashing green.

If the light stops flashing before you have linked all devices, press **CONNECT** again.

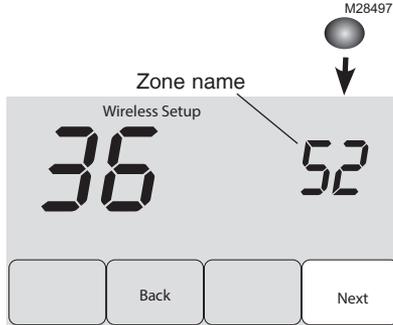
i If light does not flash, another EIM/wireless adapter may be in wireless setup mode. Exit wireless setup at the other EIM/wireless adapter.

Continued on next page >>

Link thermostats to wireless network



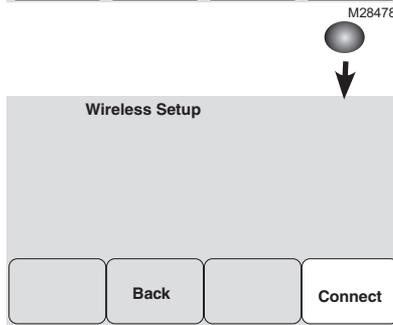
Press ▲ or ▼ to set a zone number for this thermostat (1 to 4), then press **NEXT**.



Press ▲ or ▼ to change the name or location of this zone, then press **NEXT**.

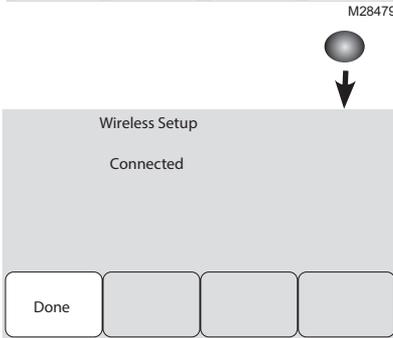
Example: 31 = Living room

 See complete zone list on page 8



Press **CONNECT** to establish a link to the wireless network.

 If E1 appears, see error codes on page 12.



After a brief pause, the confirmation screen at left should be displayed, to verify that the wireless connection has been established.

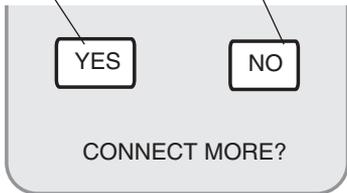
Press **DONE** to display the home screen.

Link remote control to wireless network (optional)



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Press to link another zone panel Press to save and exit



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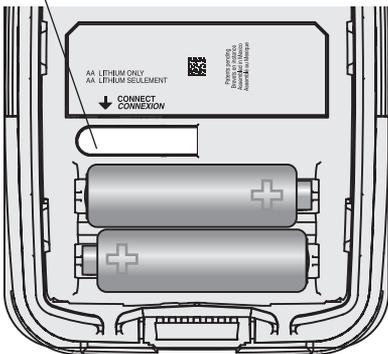
- 1 Make sure the Connected light on the wireless adapter is flashing.
- 2 Press **CONNECT** at the remote. There will be a short delay as the remote seeks a signal from the wireless network.
- 3 When the screen displays “Connected,” press **DONE**.
- 4 Press **NO** at the next screen to save and exit. (Or press **YES** and repeat steps 1-4 to link another zone panel.)

-  If E1 appears, see error codes on page 12.
-  The linking procedure may time out if there is no keypress within 30 minutes. To begin again, press and hold the blank space (or arrow if present) in the lower right corner of the screen until the display changes (about 3 seconds)



Link outdoor sensor to wireless network (optional)

Press and release



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- 1 Make sure the Connected light on the wireless adapter is flashing.
- 2 Press the **CONNECT** button on the back of the sensor.
- 3 Check thermostat to verify that the outdoor sensor is working. After about 15 seconds, the thermostat should display outdoor temperature and humidity.

(If you are installing more than one zone panel, repeat steps 1-3 for each.)

3 Exit wireless setup

Press **CONNECT** at the wireless adapter to exit wireless setup (light should stop flashing).

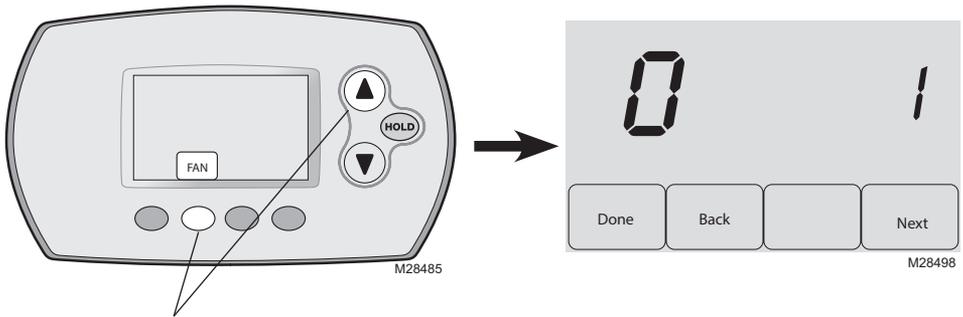
Note: The wireless adapter will automatically exit wireless setup after 15 minutes of inactivity.

Note: If installing more than one zone panel, you must exit wireless setup before installing an additional zone panel.

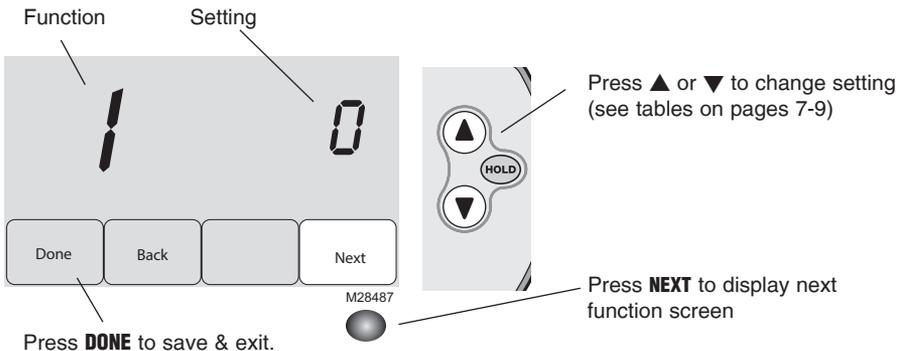
4 Customize thermostat (installer setup)

Follow the steps below to begin installer setup. At each function screen, press **▲** or **▼** to change the setting as desired, then press **NEXT** to advance to the next function screen.

See tables on pages 7-9 for a description of options for each function.



To begin, press and hold the **FAN** and **▲** buttons until the display changes (about 3 seconds).



Installer setup tables

Setup functions	Settings & Options (factory default in bold)
0 Zone number	0 No zoning (single thermostat used with THM5320R EIM) [Options: select zone 1, 2, 3 or 4]
1 System type	0 1 heat/1 cool conventional 1 1 heat/1 cool heat pump (no aux. heat) 2 Heat only (includes Series 20) 3 Heat only with fan 4 Cool only 5 2 heat/1 cool heat pump 6 2 heat/2 cool conventional 7 2 heat/1 cool conventional 8 1 heat/2 cool conventional 9 2 heat/2 cool heat pump 10 3 heat/2 cool heat pump
2 Changeover valve (O/B terminal)	0 O/B terminal controls valve in cooling 1 O/B terminal controls valve in heating
3 Fan control (conventional heat)	0 Gas/Oil heat (equipment controls fan) 1 Electric furnace (thermostat controls fan)
5 Stage 1 heat cycle rate (CPH= cycles per hour)	5 Gas or oil furnaces (less than 90% efficiency) 1 Steam or gravity systems 3 Hot water systems & furnaces of over 90% efficiency 9 Electric furnaces [Cycle rate options: 1 to 12 CPH]
6 Stage 2 heat cycle rate (CPH)	5 Gas or oil furnaces (less than 90% efficiency) 1 Steam or gravity systems 3 Hot water systems & furnaces of over 90% efficiency 9 Electric furnaces [Cycle rate options: 1 to 12 CPH]
7 Stage 3 heat cycle rate (CPH)	5 Gas or oil furnaces (less than 90% efficiency) 1 Steam or gravity systems 3 Hot water systems & furnaces of over 90% efficiency 9 Electric furnaces [Cycle rate options: 1 to 12 CPH]
8 Emergency heat cycle rate (CPH)	9 Electric furnace [Cycle rate options: 1 to 12 CPH]
9 Stage 1 compressor cycle rate	3 Recommended cycle rate [Cycle rate options: 1 to 6 CPH]
10 Stage 2 compressor cycle rate	3 Recommended cycle rate [Cycle rate options: 1 to 6 CPH]
12 Manual/Auto changeover	0 Manual (User options: Heat/Cool/Off) 1 Automatic (User options: Heat/Cool/Auto/Off)
13 Adaptive Intelligent Recovery	<u>Applies only to Model TH6320</u> 0 Off ** 1 On
14 Temperature display	0 Fahrenheit 1 Celsius

** See page 9

Installer setup tables

Setup functions	Settings & Options (factory default in bold)
15 Compressor off time (minimum)	5 5 minute compressor off time ** [Options: 0 to 4 minutes]
16 Schedule format	<u>Applies only to Model TH6320</u> 0 Weekday/weekend program schedule 1 Weekday/Saturday/Sunday program schedule
26 Auxiliary heat control	<u>Applies only to Model TH5320</u> 0 Comfort ** 1 Economy
27 Maximum heat setpoint	90 Max. heat temperature setting is 90°F (32°C) [Options: 40 to 90°F (4.5 to 32°C)]
28 Minimum cool setpoint	50 Min. cool temperature setting is 50°F (10°C) [Options: 50 to 99°F (10 to 37°C)]
32 Temp. display offset (indoor)	0 Thermostat displays actual temperature [Options: -3 to +3°F offset (-1.5 to +1.5°C)]
33 Temp. display offset (outdoor)	0 Thermostat displays actual temperature [Options: -5 to +5°F offset (-2.5 to +2.5°C)]
35 Humidity display offset (outdoor)	3 Thermostat displays actual humidity [Other options: 0 = -15%, 1 = -10%, 2 = -5%, 4 = 5%, 5 = 10%, 6 = 15% offset]
36 Zone name	52 Thermostat 1 Basement 20 Game Room 39 Office 1 2 Bathroom 21 Garage 40 Office 2 3 Bathroom 1 22 Great Room 41 Pantry 4 Bathroom 2 23 Guest Room 42 Play Room 5 Bathroom 3 24 Gym 43 Pool Room 6 Bedroom 25 Kid's Room 44 Porch 7 Bedroom 1 26 Kitchen 45 Rec Room 8 Bedroom 2 27 Kitchen 1 46 Sewing Room 9 Bedroom 3 28 Kitchen 2 47 Spa 10 Bedroom 4 29 Laundry Room 48 Storage Room 11 Boat House 30 Library 49 Studio 12 Bonus Room 31 Living Room 50 Sun Room 13 Computer Room 32 Lower Level 51 Theater 14 Den 33 Master Bath 52 Thermostat 15 Dining Room 34 Master Bed 53 Upper Level 16 Exercise Room 35 Media Room 54 Utility Room 17 Family Room 36 Music Room 55 Walk In Closet 18 Fireplace 37 Nursery 56 Wine Cellar 19 Foyer 38 Office 57 Workshop
39 Wireless setup	0 Disconnect thermostat from wireless system 1 Thermostat is connected to wireless system
90 RESET	0 No reset 1 Reset installer options & program schedule to factory default settings

** See page 9

Special functions

Adaptive Intelligent Recovery (Setup Function 13): Allows the thermostat to “learn” how long the furnace and air conditioner take to reach programmed temperature settings, so the temperature is reached at the scheduled time.

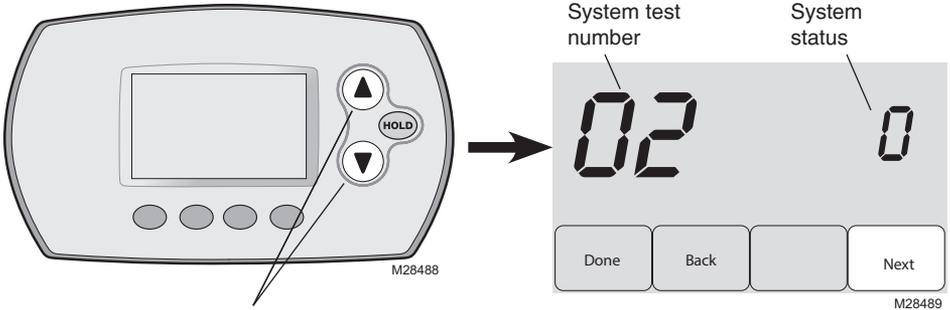
Compressor Protection (Setup Function 15): Forces the compressor to wait a few minutes before restarting, to prevent damage. During this time, “Heat On/Cool On” flashes on the display.

Comfort/Economy (Setup Function 26):

If you choose Comfort, auxiliary heat will respond quickly to meet the temperature setpoint. If you choose Economy, the system will wait longer. Auxiliary heat will be activated only if the setpoint is not reached within a reasonable time.

System test

Follow the procedure below to test for proper operation.



To begin, press and hold the ▲ and ▼ buttons until the display changes (about 3 seconds)

Press ▲ or ▼ to check system status
 Press **NEXT** to advance to next test
 Press **DONE** to terminate system test

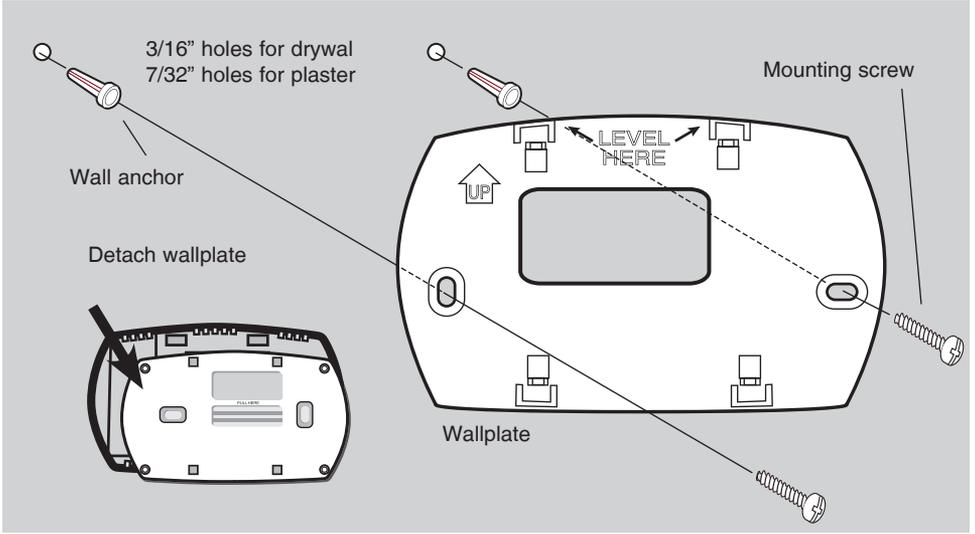
System Test

System Status

02 Wireless test	0 Off 1 Test radio signal (after a brief pause, screen displays 1-10 to show signal strength; 5 or higher recommended)
10 Heating system	0 Heat and fan turn off 1 Heat turns on 2 Stage 2 heat turns on 3 Stage 3 heat turns on
20 Emergency heating system	0 Heat and fan turn off 1 Heat and fan turn on
30 Cooling system	0 Compressor and fan turn off 1 Compressor and fan turn on 2 Stage 2 compressor turns on
40 Fan system	0 Fan turns off 1 Fan turns on
70 Thermostat information (for reference only)	71 Software revision number (major revisions) 72 Software revision number (minor revisions) 73 Configuration identification code (major) 74 Configuration identification code (minor) 75 Production configuration date code (week) 76 Production configuration date code (year)

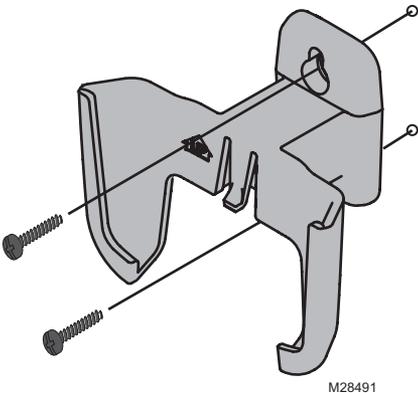
⚠ CAUTION: EQUIPMENT DAMAGE HAZARD. Compressor protection (minimum off time) is bypassed during testing. To prevent equipment damage, avoid cycling the compressor quickly.

5 Mount thermostat & outdoor sensor



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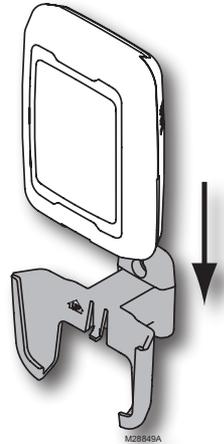
Outdoor sensor (optional)



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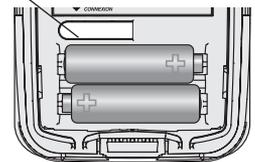
Mount the sensor on a vertical exterior wall, at least 6 inches below any overhang. Choose a location protected from direct sunlight.

Place sensor securely in bracket, facing away from wall



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Press and release

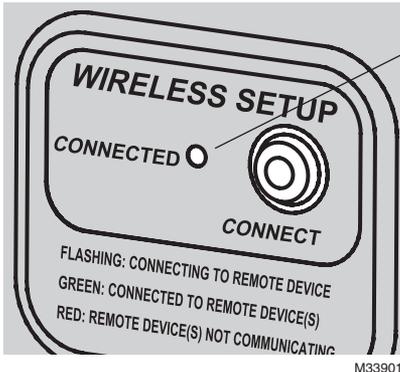


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To check location before mounting: Restore thermostat Home screen, then hold the sensor where you intend to install it and press the **CONNECT** button. If sensor is working properly, thermostat will switch to display outdoor temperature and humidity.

Verify proper setup

When wireless setup is complete, make sure the Connected light on the wireless adapter is solid green (see below), then follow the steps in the Checkout section of the TrueZONE installation guide to verify proper operation.



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Wireless status light

- **Solid green:** wireless adapter is working properly and communicating with wireless devices.
- **Flashing green:** Linking to wireless devices (light flashes for 15 minutes after you press **CONNECT**).
- **Solid red:** Communication problem. Check wireless adapter and other wireless devices.

Error codes (thermostat & remote control)

If **E1** appears during setup, check error code number (right side of screen):

- 29** Attempting to connect incompatible wireless devices.
- 30** Verify that thermostat zone number matches number assigned at zone panel.
- 31** Verify that this zone number is configured at the zone panel as an RF thermostat.
- 34** Low signal strength. Move wireless device to a different location and try again.
- 38** Make sure Connected light on wireless adapter is flashing and you are 2+ feet away from wireless adapter.

Replacing system components

Thermostat

To replace a thermostat, install batteries and follow the procedure on page 4 to link it to the wireless network. If necessary, modify settings as needed (see tables on pages 7-9).

Remote control & outdoor sensor

To replace a remote control or outdoor air sensor, install batteries and follow the procedure on page 5 to link it to the wireless network.

TrueZONE panel & wireless adapter

After installing a new zone panel or wireless adapter, you must re-set the thermostat and remote control to communicate with the new equipment, as described below.

At the thermostat:

- 1 Press and hold the **FAN** and **▲** buttons for 3 seconds.
- 2 Press **BACK** twice to display Function 39 (wireless setup).
- 3 Press **▼** to change Function 39 setting to 0 (disconnect from old equipment).
- 4 Follow the procedure on page 4 to link to new equipment.

At the remote control:

- 1 Press and hold the blank space (or arrow if present) in the lower right corner of the screen until the display changes (about 3 seconds).
- 2 Press **REMOVE** , then **YES** to disconnect from old equipment.
- 3 Follow the procedure on page 5 to link to new equipment.

Press and hold for about 3 seconds



Specifications & replacement parts

Operating Ambient Temperature

Thermostat: 32 to 120° F (0 to 48.9° C)

Remote control: 32 to 120° F (0 to 48.9° C)

Wireless Adapter: -40 to 165° F (-40 to 73.9° C)

Outdoor air sensor: -40 to 140° F (-40 to 60° C)

Operating Relative Humidity

Thermostat: 5% to 90% (non-condensing)

Remote control: 5% to 90% (non-condensing)

Wireless Adapter: 5% to 95% (non-condensing)

Outdoor air sensor: 0% to 100% (condensing)

Physical Dimensions (height, width, depth)

Thermostat: 3-9/16 x 5-13/16 x 1-1/2 inches (91 x 147 x 38 mm)

Wireless Adapter: 5-9/16 x 4-3/8 x 1-1/4 inches (141 x 112 x 32 mm)

Outdoor air sensor: 5 x 3-1/2 x 1-11/16 inches (127 x 89 x 43 mm)

Accessories & Replacement Parts

Item	Part Number
Wireless adapter	THM4000R1000
FocusPRO® wireless thermostat (programmable)	TH6320R1004
FocusPRO® wireless thermostat (non-programmable)	TH5320R1002
Remote control	REM5000R1001
Outdoor air sensor	C7089R1013
Battery holder	50007072-001
Cover plate (covers marks left by old thermostats)	50002883-001

Regulatory information

FCC Compliance Statement (Part 15.19) (USA only)

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.

FCC Warning (Part 15.21) (USA only)

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

FCC Interference Statement (Part 15.105 (b)) (USA only)

This equipment has been tested and found to comply 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Wireless adapter, thermostats and outdoor sensor

To comply with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure, the antenna(s) used for these transmitters must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Remote control

This portable transmitter with its antenna complies with FCC and Industry Canada RF exposure limits for general population/uncontrolled exposure.

Section 7.1.5 of RSS-GEN

Operation is subject to the following two conditions:

- 1 this device may not cause interference, and
- 2 this device must accept any interference, including interference that may cause undesired operation of the device.

CAUTION: ELECTRONIC WASTE NOTICE

The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent negative consequences for the environment and human health.