



# uponor

RADIANT HEATING AND  
COOLING SYSTEMS

**CLIMATE CÖNTROL™  
ZONING SYSTEM**

**INSTALLATION GUIDE**

## Climate Cöntrol™ Zoning System Installation Guide

**Uponor Climate Control  
Zoning System Installation Guide**

Published by Uponor, Inc.  
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Apple Valley, MN 55124 USA  
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First Edition  
First Printing May 2008  
Printed in the United States of America

**Note:** 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 or more 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

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.



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## Section 1

# General Recommendations

### Safety Measures

- Read and follow the instructions in this guide.
- Installation must be performed by a qualified person according to local code.
- It is prohibited to make changes or modifications not specified in this guide.
- Power must be switched off when wiring.
- Uponor is not responsible for damages and breakdowns that may result from not following the instructions in this guide.

### Symbols Used in This Manual



**Warning:** Risk of bodily injuries. Nonobservance may harm health or cause damage to product components.



**Caution:** Important note on functionality



**Information:** Important operating advice and information



See another document.



See another page in the manual.



Extended function with the interface



Result of an action



Press button



LED off



LED on



LED blinks



LED flickers

### Power Supply

- The Uponor Climate Control™ Zoning System uses a 110VAC/60Hz power supply.
- In case of emergency, immediately disconnect the plug from the power.
- Do not use water to clean the Zoning System.
- Switch off power when wiring.
- Do not expose the Zoning System to flammable vapors or gases.

### Limitations for Radio Waves

The Zoning System uses radio waves. The frequency used is reserved for similar applications, and the chances of interference from other radio sources is very low. However, in some rare special cases, it may not be possible to establish a perfect communication. The transmission range is sufficient for most applications, but each building has different obstacles affecting communication and maximum transmission distance. If communication trouble exists, Uponor can support the system with accessories, such as repeaters, for solving the exceptional issues.

### Technical Constraints

- Keep installation and data cables away from power cables greater than 50VAC to avoid interference.
- The electrical circuits of the boiler and the pump must be protected by a maximum 10A circuit breaker.





## Section 2

# The Uponor Climate Control Zoning System Overview

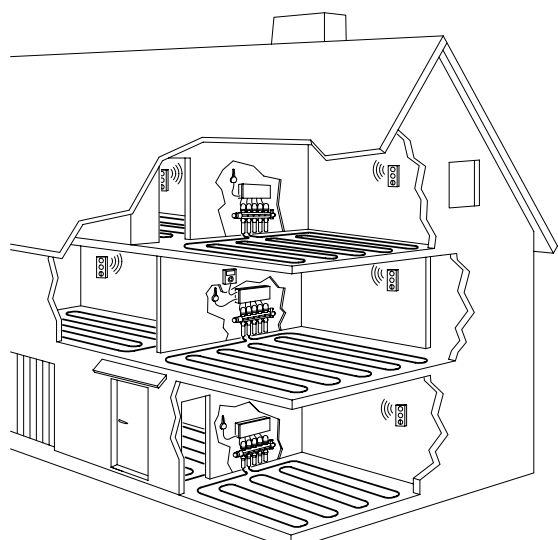


The Uponor Climate Control Zoning System is a wireless zoning control for radiant floor systems. Comfort, user-friendliness and temperature control for each room can be combined through the different components.

The control system consists of:

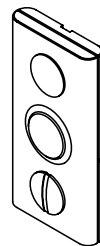
- Thermostat T-75
- Base Unit C-55 with antenna and actuators
- Interface I-75 (optional)

The Uponor Zoning System is controlled by wireless thermostats. The thermostats communicate with base units via radio waves.



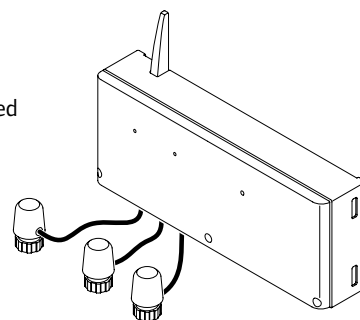
### Thermostat Display T-75

The thermostat displays the temperature on its screen. The thermostat is affected by the temperature of surrounding surfaces as well as the ambient air temperature. A thermostat calls for heat by sending a signal to the base unit. The base unit then activates the channels linked to that thermostat, powering the actuators mounted on the manifold.



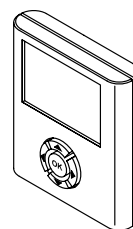
### Base Unit With Antenna and Actuators

The base unit controls the actuators based on the requirements from each zone thermostat. Each base unit is capable of controlling up to 12 thermostats and 14 actuators. The base unit is typically located near the manifolds.

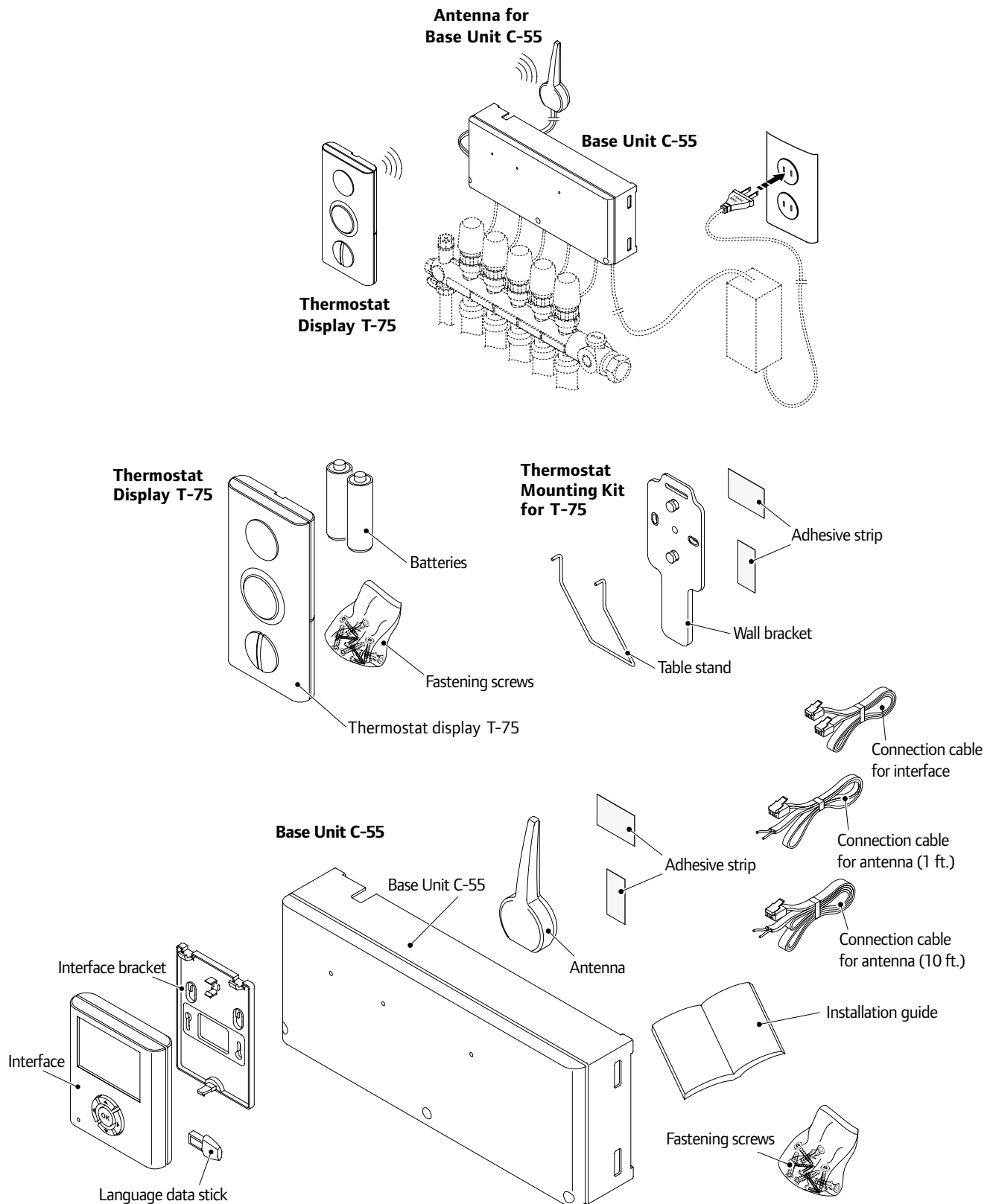


### Interface I-75

The interface allows viewing of important zone information and setting of vacation/setback schedules from a remote location. The interface also can display alarms such as low battery, no connection, etc.



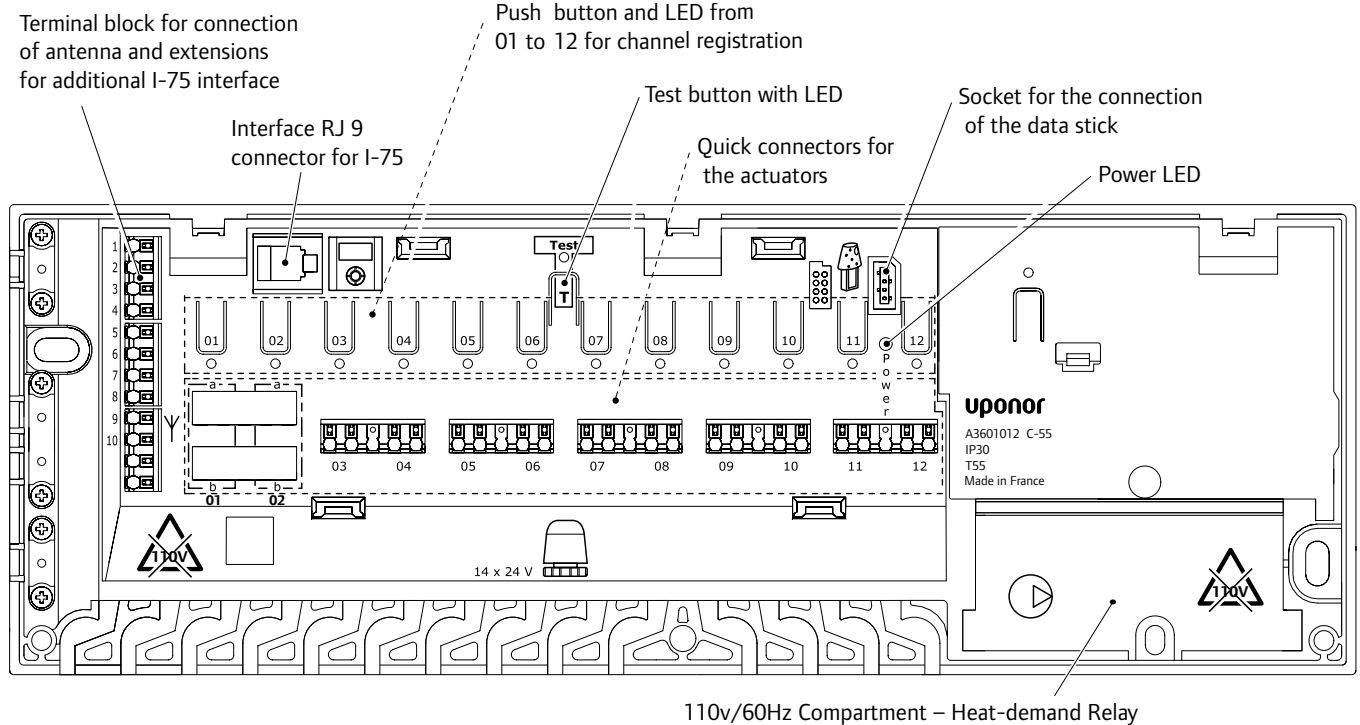
## Uponor Climate Control Zoning System Components



## Section 3

# Base Unit Installation

### Base Unit Diagram

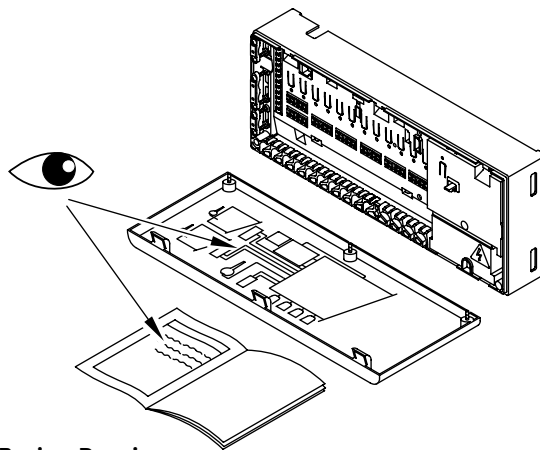
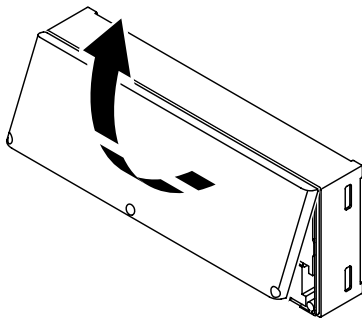


### Preparation Before Installation

Review the wiring diagram located inside the base unit cover.

#### Verify Contents

- Cordless electric drill
- 6mm (1¼") drill bit
- Small flathead screwdriver
- Phillips screwdriver



#### Review Drawings

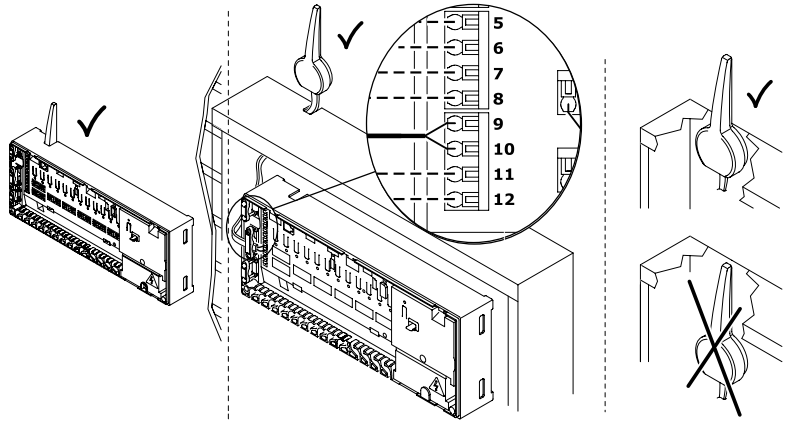
Review the drawings of the radiant floor heating system. If the locations of the base units and thermostats are not specified, determine the best positions.

- Install base unit with antenna close to each manifold.
- A 110VAC standard power receptacle is required for the connection of the base unit.
- Protect the mounting locations for the Zoning System from moisture.
- Use one thermostat for every zone with radiant floor heating.

## Components Installation

### Mounting the Base Unit Antenna

Decide if the antenna should be mounted on the back of the base unit or on the wall.

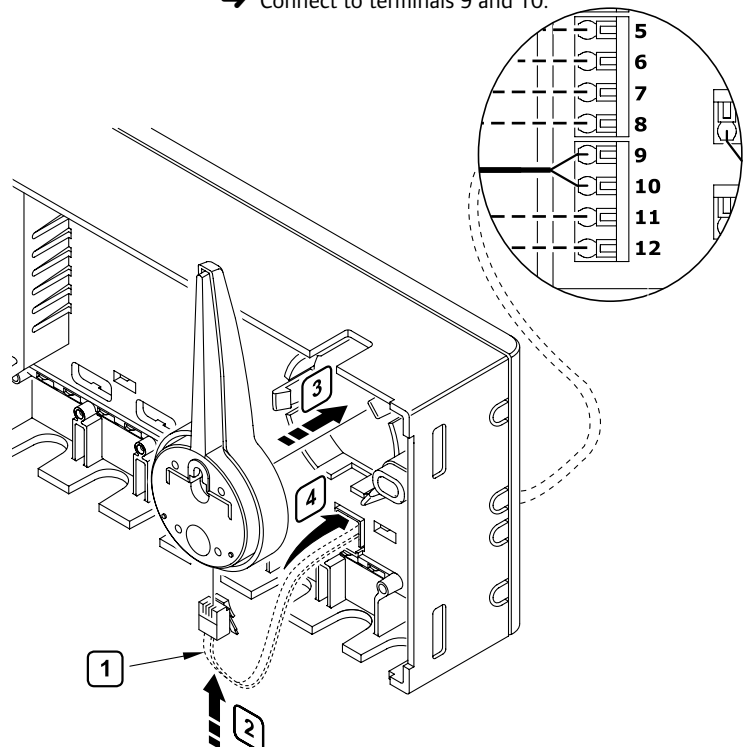


**Caution:** If the base unit is installed inside a metal manifold cabinet, place the end or the entire antenna outside the cabinet.

### Clip the Antenna Into the Back of the Base Unit

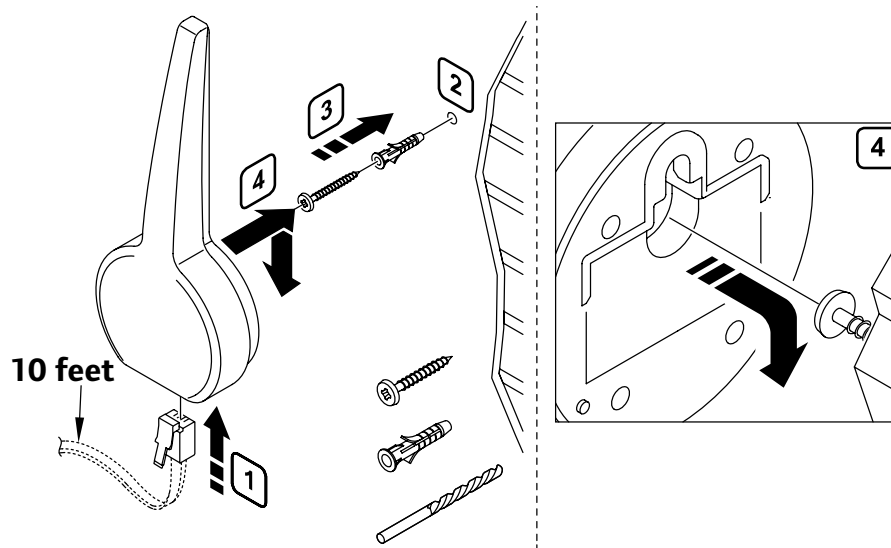
1. Use a one-foot antenna cable.
2. Connect the RJ 9 connector into the antenna.
3. Clip the antenna into the base unit.
4. Insert the cable of the antenna into the hole of the base unit.

→ Connect to terminals 9 and 10.



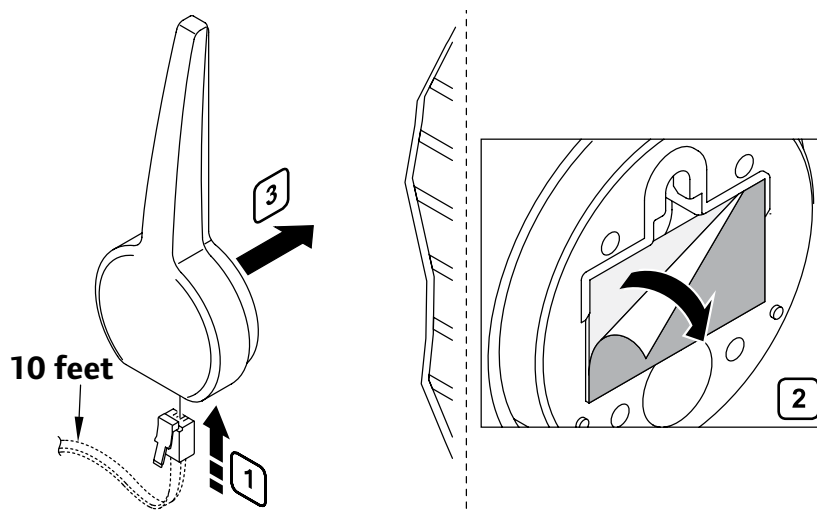
### Fastening the Antenna to the Wall with Screws

1. Connect the RJ 9 connector into the antenna.
2. Using a drill bit, drill the wall.
3. Fix anchor and screw to the wall. Let the screw protrude from the wall.
4. Fasten the antenna on the screw.



### Fastening the Antenna to the Wall with Adhesive

1. Connect the RJ 9 connector into the antenna.
2. Use the double-sided adhesive strip to attach the antenna to a smooth wall, such as glazed ceramic tiles.



### Mounting the Base Unit

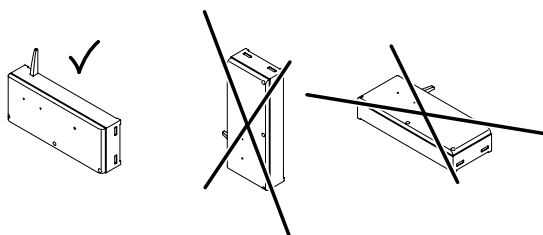
- Position the base unit just above the manifold. Ensure the power receptacle is within reach of the base unit's power supply cord.
- Check that the base unit's cover can be removed easily.
- Check that the connectors and switches are easily accessible.



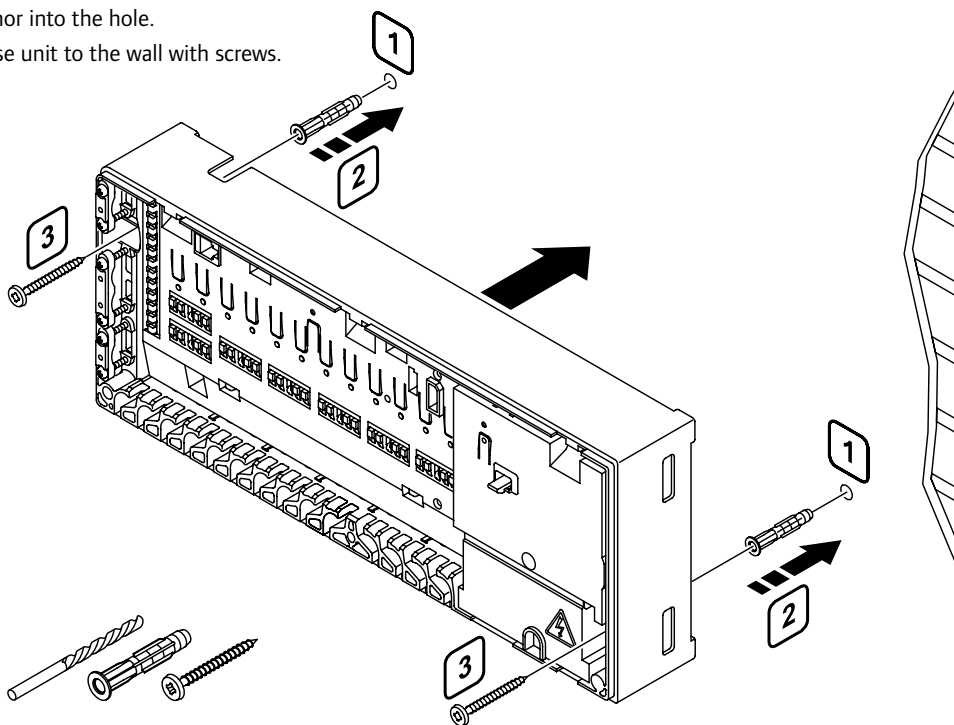
**Information:** Each thermostat can control any number of channels. Installation and maintenance are simplified if actuators controlled by the same thermostat are wired to channels in sequence.



**Caution:** Mount the base unit horizontally. There is a risk for overheating if the base unit is mounted vertically or on a flat surface.

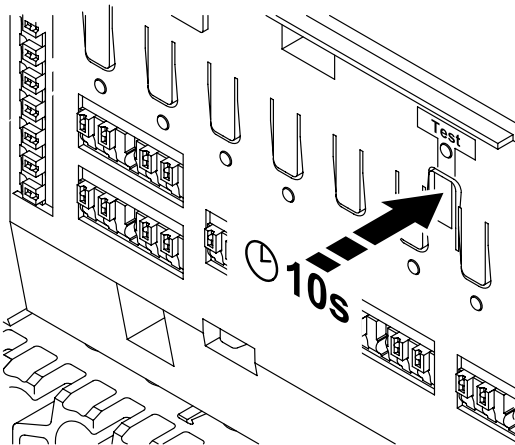


1. Hold base unit to wall; mark mounting hole locations on the wall with a pencil.
2. Drill the wall.
3. Press the anchor into the hole.
4. Attach the base unit to the wall with screws.



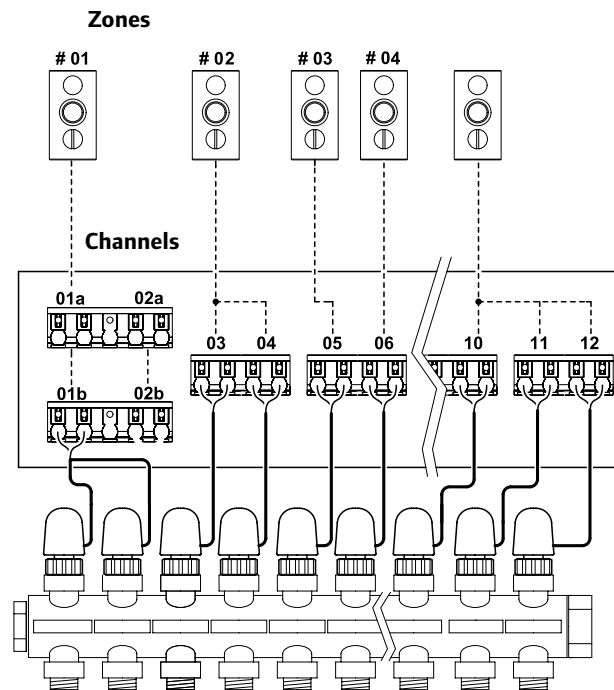
## Resetting the Base Unit

Resetting the base unit will cancel all channel registrations, allowing the user to change all the registrations.



1. Press the Test button for 10 seconds.
2. The Test LED flashes for at least two seconds, then all LEDs will turn off (except the power LED). All parameters are erased.
3. New installation and registration after reset is necessary.

## Installation Example



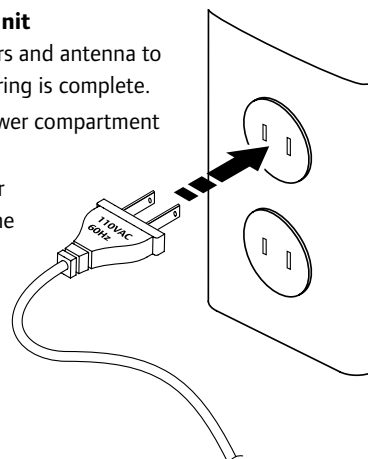
- Thermostat/Zone #01 controls two actuators connected to channels 1a and 1b.
- Channel 2a and 2b are not used in this diagram.
- Thermostat/Zone #02 controls two actuators connected to channels 3 and 4.
- Thermostat/Zone #03 controls one actuator connected to channel 5.
- Thermostat/Zone #04 controls one actuator connected to channel 6.
- Thermostat/Zone #10 controls three actuators connected to channels 10, 11 and 12.



**Warning:** Disconnect the power before installing or changing the device wiring.

## Powering the Base Unit

- Check the actuators and antenna to ensure that the wiring is complete.
- Check that the power compartment lid is closed.
- Connect the power supply plug into the electrical outlet.





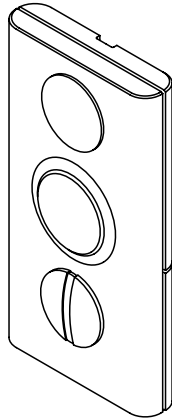


## Section 4

# Thermostat Installation

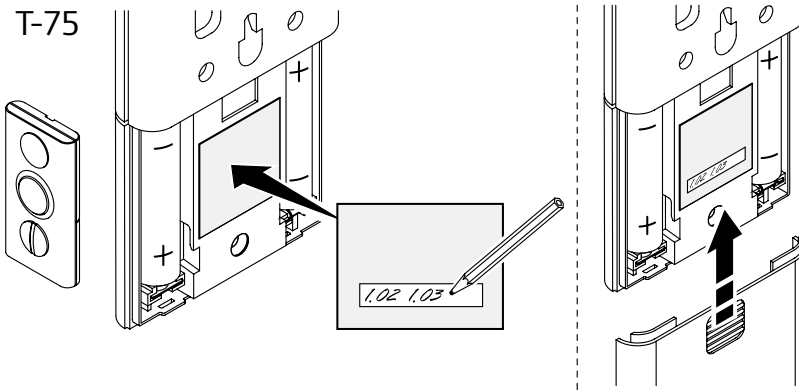
The Zoning System is controlled by the Thermostat Display T-75.

**Thermostat  
Display T-75**



## Label the Room Thermostats

- Install two alkaline AAA 1.5V batteries in each thermostat (see **page 26**).
- Label the thermostats with the channel numbers they are to control, e.g., 02, 03, etc. For a system with an interface and several base units, an identification for the base unit should be added, e.g., 1.02, 1.03, 2.02, 2.03, etc.



## Register Room Thermostats

An example of registering a thermostat: one thermostat controls two actuators that connect channels 02 and 03.

1. Push the Test button.

→ The Test button LED lights up ☀.

2. Push channel button 02.

3. Push channel button 03.

→ The LEDs of channels 02 and 03 will flash 🌙.

4. Using a small pointed tip, press the thermostat's registration button, located on the bottom of the thermostat, for at least five seconds.

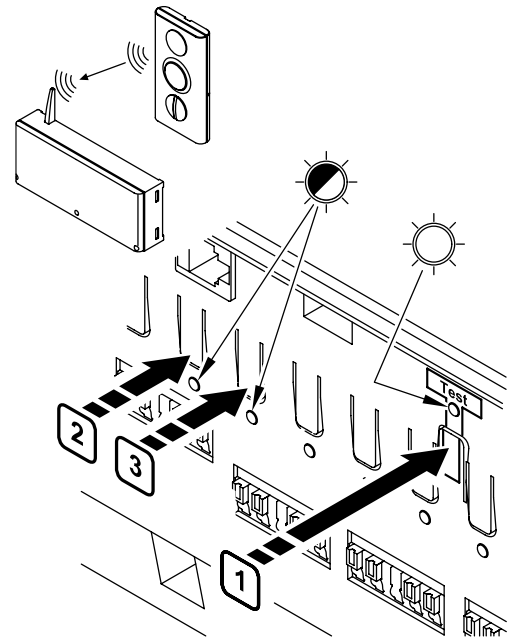
For Thermostat Display T-75:

- The thermostat displays two lines.
- Release the button when the temperature reappears.

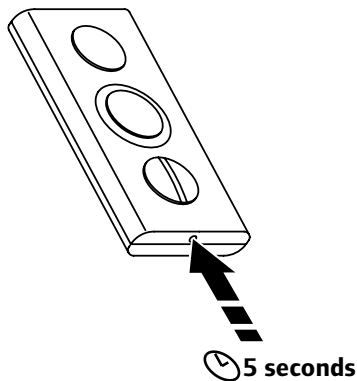
5. LED will flash and turn solid, indicating a successful link.

Repeat the same sequence for all thermostats.

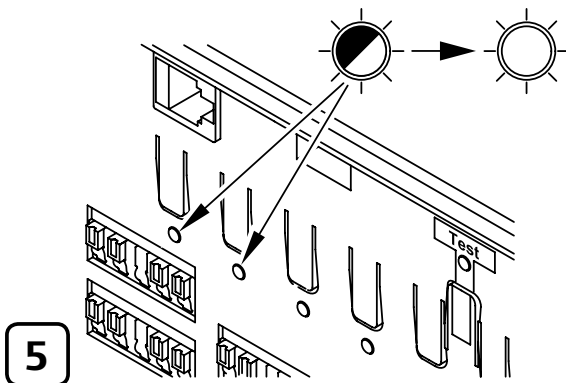
→ The Test LED switches off ●.



LED	LED Status
☀	LED on
🌙	LED flash
●	LED off



4



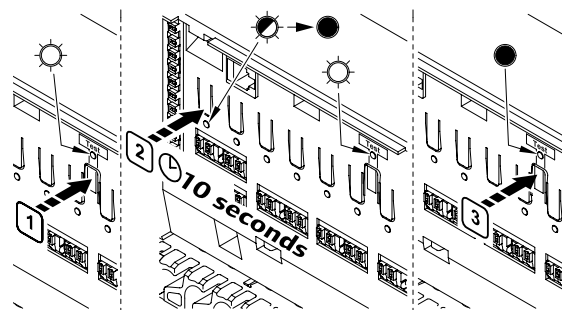
5

## Cancelling the Registration of a Channel

1. Press the Test button.

→ The Test and channel LEDs with registered thermostats light up ☀.

2. To cancel, press the channel button for 10 seconds.



→ The LED of the cancelled channel flashes 🌙 for two seconds, then switches off ●.

3. Press the Test button to exit registration mode.

→ The Test LED switches off ●.



**Caution:** To register a different thermostat to a channel, cancel the registration of the existing thermostat prior to linking to new thermostats. Then repeat the steps as outlined in the **Register Room Thermostats** section on this page.

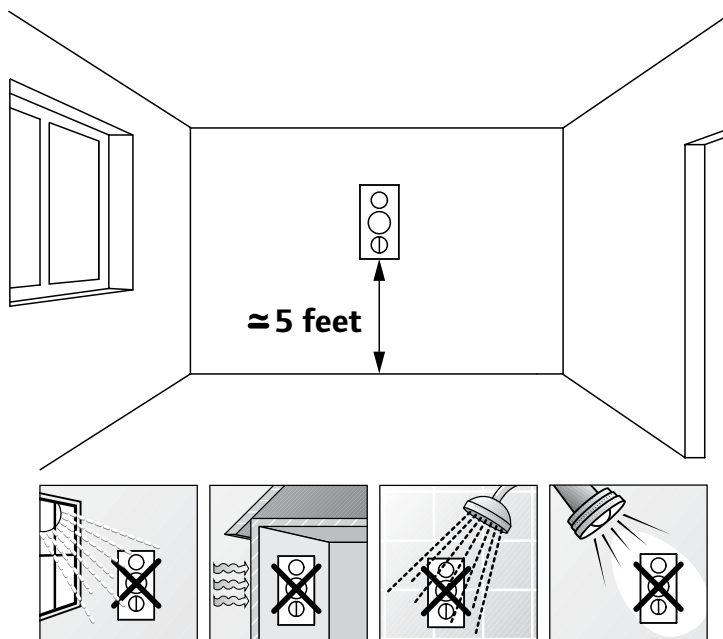
## Determining the Thermostat Location

- On an indoor wall
- 5' from the floor
- Away from any source of moisture
- Away from any source of heat
- Away from direct sunlight

## Mounting the Thermostat

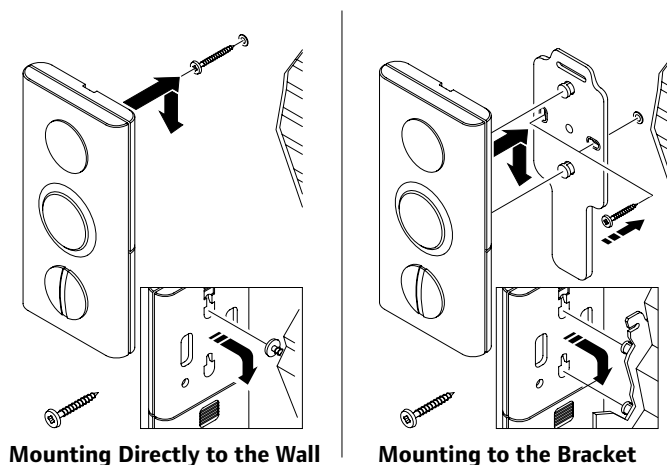
There are two ways to mount a thermostat:

- Direct mounting (using screws or adhesive strips)
- Thermostat mounting kit (includes table stand, wall bracket, adhesive strips, screws and batteries)



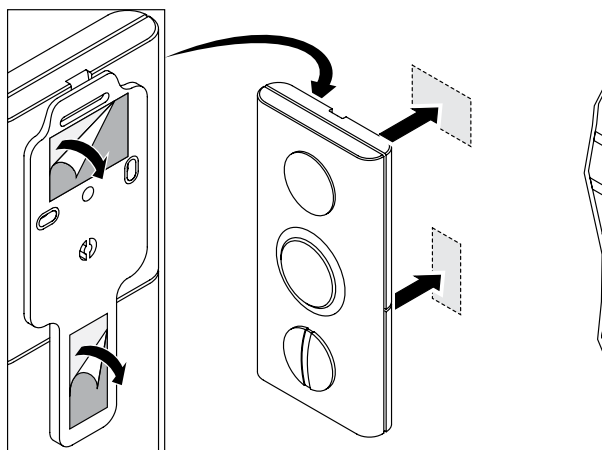
### Mounting Using Screws or Brackets

1. Screws should protrude from the wall.
2. Hang the thermostat on the screws.
3. When using the mounting kit bracket, mount bracket to the wall, then hang thermostat on bracket.



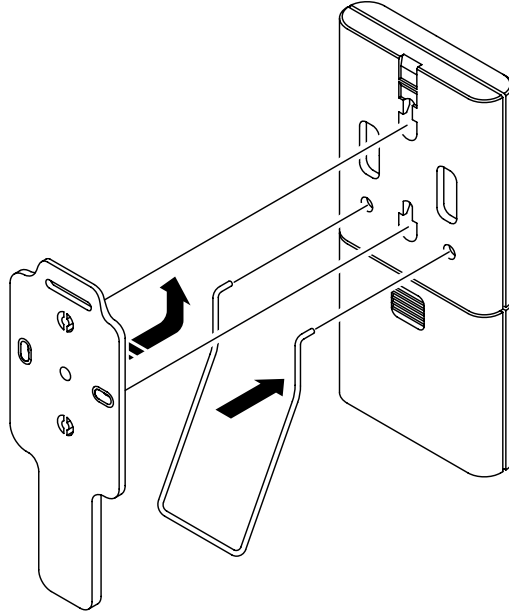
### Mounting Using Adhesive Strips

1. Use the double-sided adhesive strip to fix the thermostat on a smooth wall, such as glazed ceramic tiles.



### Mounting Using Table Stand

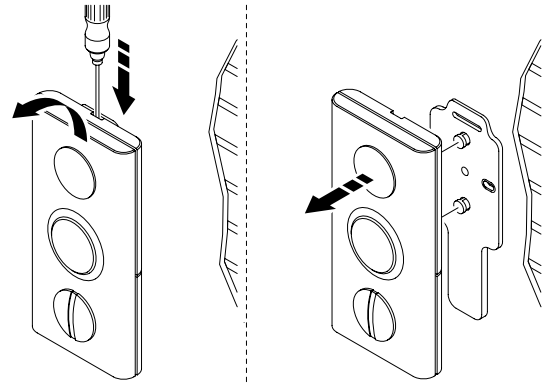
1. Attach stand to the back of the thermostat.



### Removing the Thermostat Display T-75 from the Bracket

To remove the thermostat from the bracket:

1. Insert flathead screwdriver as shown.
2. Thermostat will then release from bracket.



## Section 5

# Thermostat and Base Unit Testing

### Testing the Communication Between Thermostats and Base Unit

1. Press the Test button.

→ The Test and channel LEDs and registered channels light up ☀.

2. Using a sharp point, briefly press the thermostat registration button.

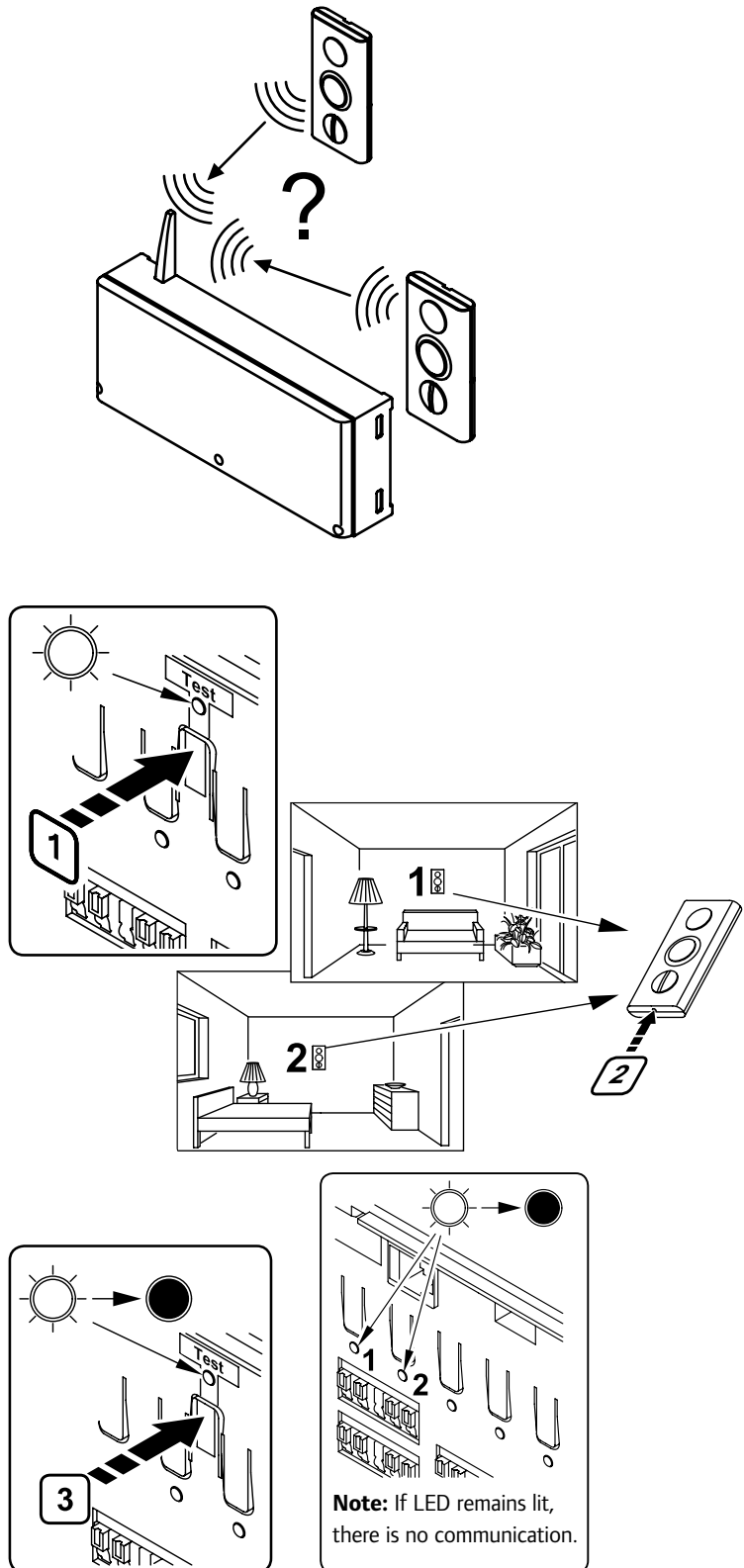
- 
- If communication is OK, the LEDs for the channels registered to the thermostat switch off.
  - If there is no communication, the LEDs for the channels registered to the thermostat stay on.

**Note:** See **Section 11: Troubleshooting** for guidance.

3. To exit the Test mode, press the Test button.



To verify functionality, increase setpoint of the thermostat to generate a call for heat. The LEDs will switch off for channels linked to this thermostat. The LEDs will not switch off if channels are not linked to this thermostat.



## Testing the Base Unit Actuator

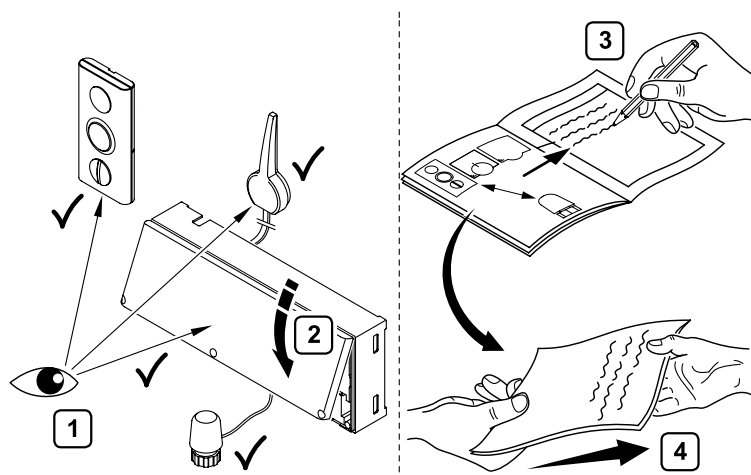
1. Press the button of the selected channel.

- • The LED lights up: the actuator is powered up (time for actuator opening is roughly 5 minutes).
- The LED does not light up.

**Note:** See **Section 11: Troubleshooting** for guidance.

2. Press the Test button twice to end the actuator test (or wait 10 minutes).

## Final Inspection



1. Verify that the antenna is correctly mounted.  
Check if the thermostats are powered.
2. Close the cover of the base unit. Close the thermostat covers where necessary.
3. Complete the installation report (**Section 12**).
4. Leave installation guide at jobsite for future reference.

## Section 6

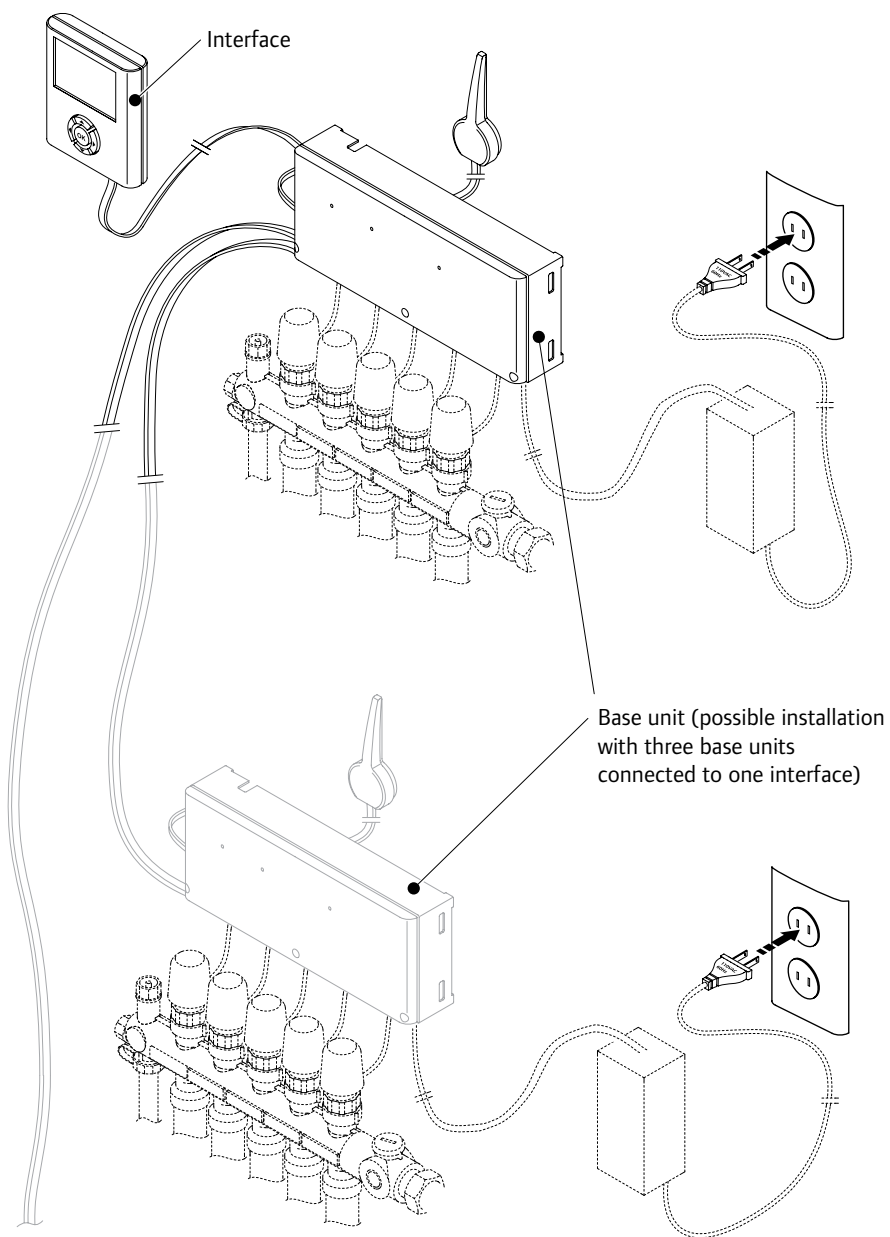
# Interface with Base Unit Installation



This section describes the installation of the Climate Control Zoning System Interface in control systems with up to three base units.

### Example of an Installation

A system may consist of up to three base units managed by a single interface.



## Interface Bracket Installation

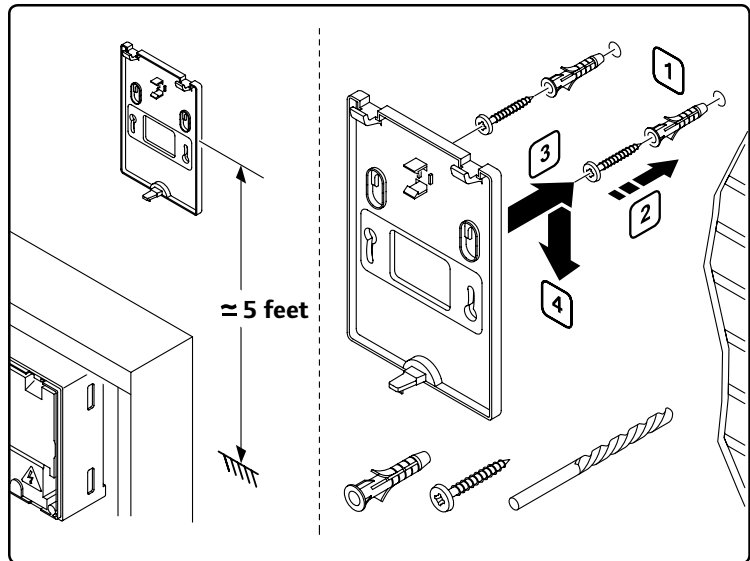
Before beginning the installation:

1. Select the mounting location of the interface.  
The interface on a wall or on the cover of the base unit.
2. Obtain installation report.
3. See wiring diagram in **Section 12**.
4. Disconnect the power to the base unit.
5. Open the base unit cover.

### Interface Bracket Wall Mounting

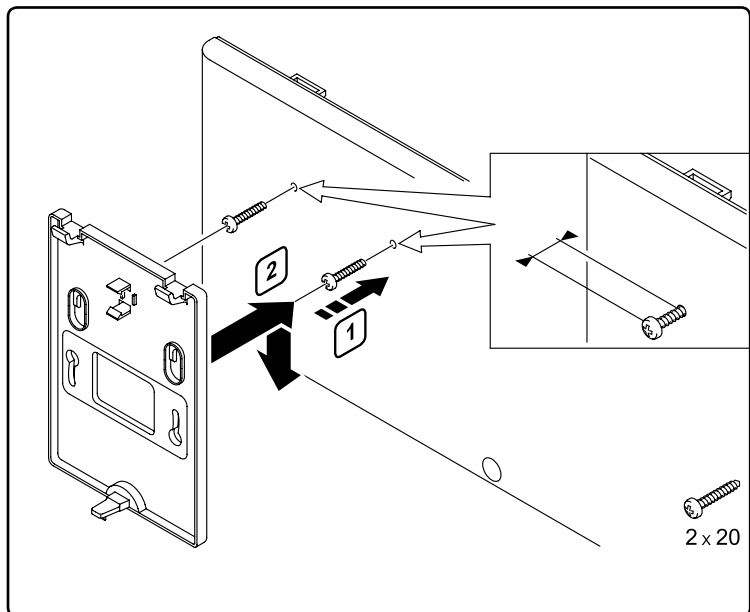
Mount the bracket at approximately eye level.

1. Hold bracket to wall; mark mounting-hole locations on the wall with a pencil.
2. Drill the wall.
3. Press the anchor into the hole.
4. Attach the interface brackets to the wall with screws.



### Interface Bracket Mounting on the Base Unit

1. Fix screws on the bracket cover.  
(Use cover marking as a guide.)
2. Let the screws protrude slightly from the base unit.
2. Hang the bracket on the screws.





## Wiring and Programming the Interface

Do not remove the yellow data stick from the interface before powering up and setting the language.

### Wiring the Interface

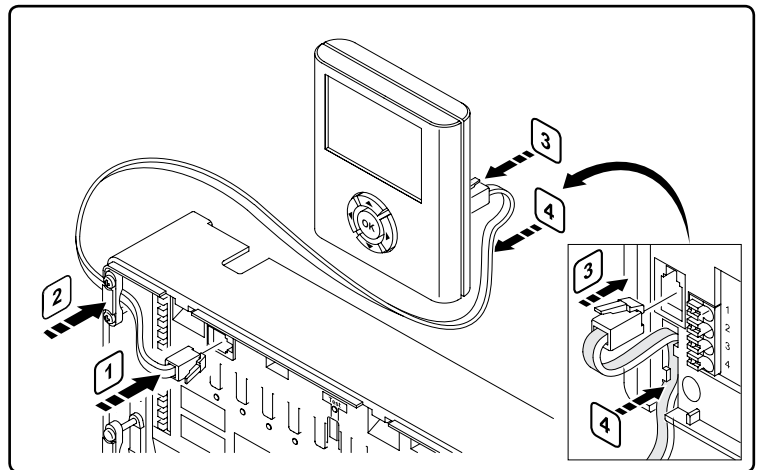
If the interface is located less than 6 feet from the controller, use the cable (interface to base unit) fitted with RJ 9 connectors at each end.

1. Connect the RJ 9 connector into the base unit #1.
2. Secure the cable in the clamp.
3. Connect the RJ 9 connector in the back of the interface.
4. Secure the cable in the cable guide.

If the interface is located more than 6 feet away from the controller, use the installation cable.



Wiring is polarized. Connect terminal 1 on the base unit to terminal 1 on the interface, etc.



### Base Unit

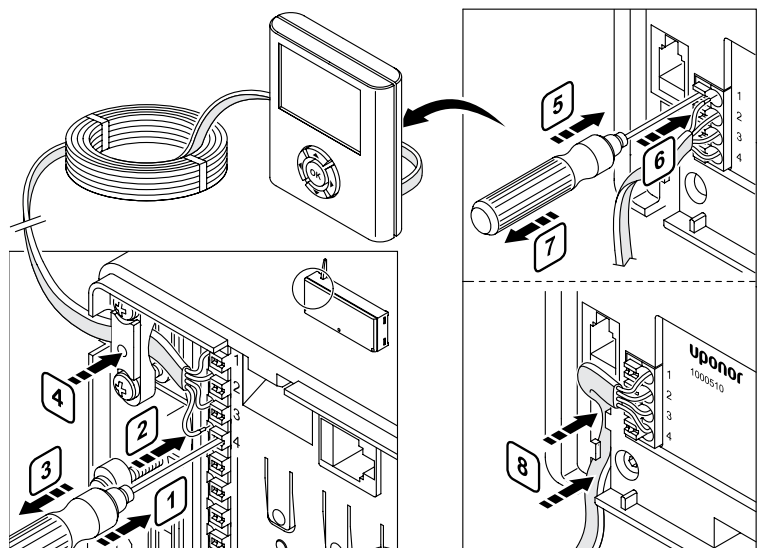
1. Without turning, press with a small screwdriver on the button of the terminal to insert or remove a wire.
2. Insert a wire in the quick connector.
3. Remove the screwdriver.
4. Secure the cable in the clamp.

### Interface I-75

5. Without turning, press with a small screwdriver on the button of the terminal to insert or remove a wire.
6. Insert in the quick connector on terminal.
7. Remove the screwdriver.  
Release quick connector button.
8. Secure the cable in the cable guide.



Maximum cable length: 60 feet



## Connections



**Warning:** Disconnect the power before installing or changing the device wiring.

### Additional Base Units

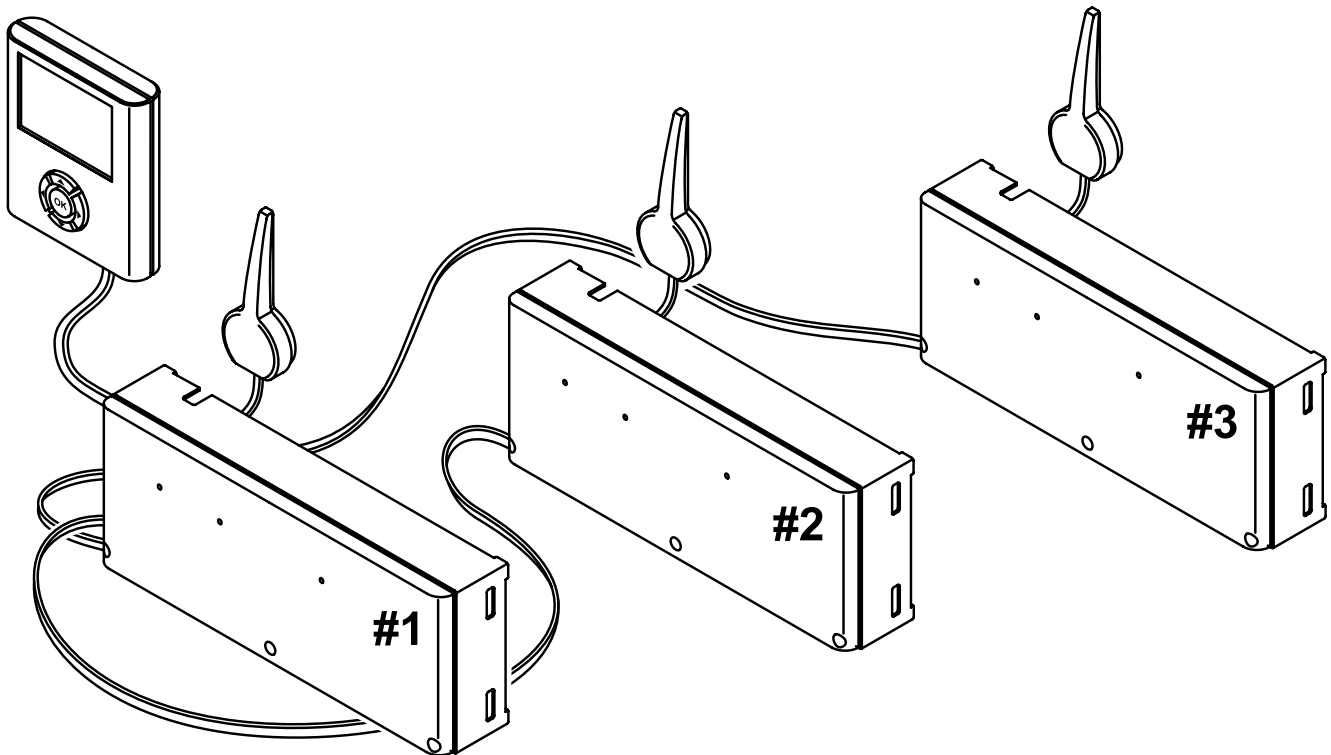
- For an installation with more than one manifold or more than 12 channels, install additional base units (up to three).
- A single interface drives all three base units.
- Each base unit must be fitted with an antenna.

### Connections Between Base Units



The connections between the base units are polarized.

- Base unit #1 is the controller connected to the interface.
- Connect terminal 5 and 6 of base unit #2 to terminal 5 and 6 of base unit #1.
- Connect terminal 7 and 8 of base unit #3 to terminal 7 and 8 of base unit #1 or base unit #2.



### Circulation Pump Relay

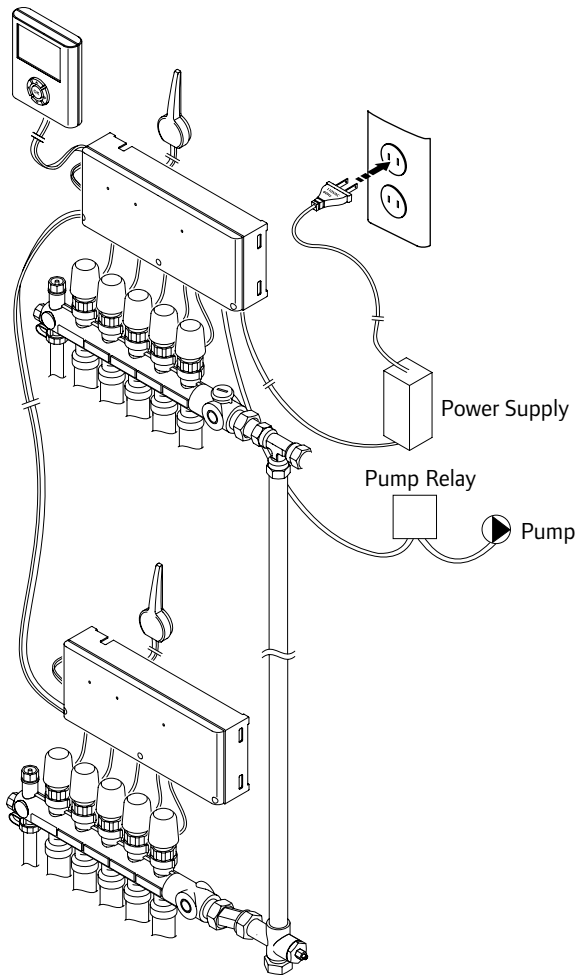
If separate pumps are used for each manifold, each pump relay can be connected to its own base unit.



See: **Section 3: Base Unit Installation.**

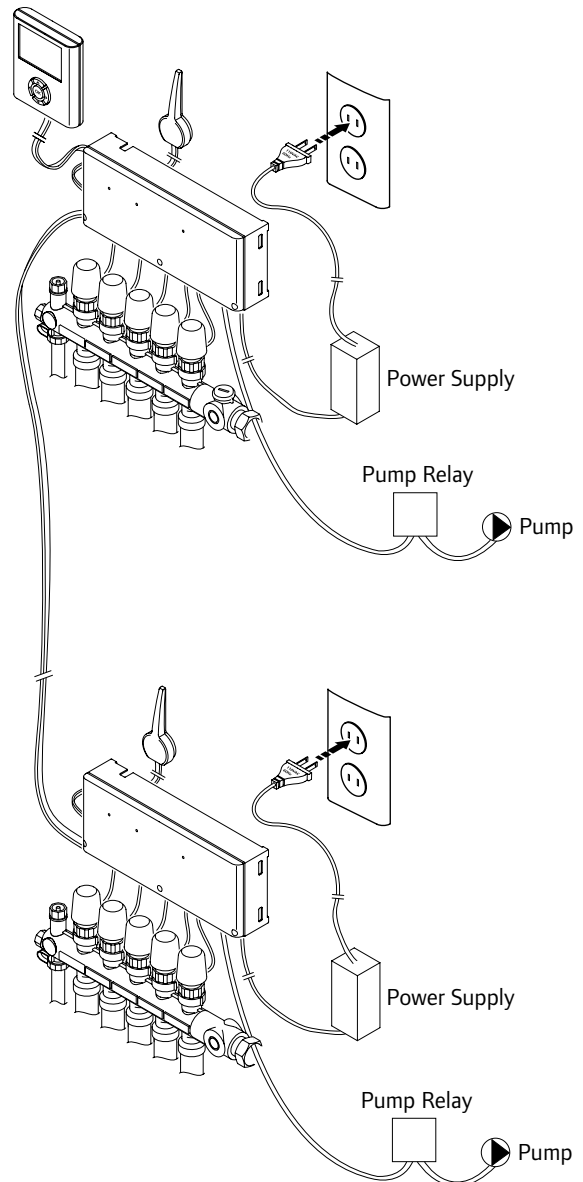
### For a System with Several Base Units

**Common Pump**

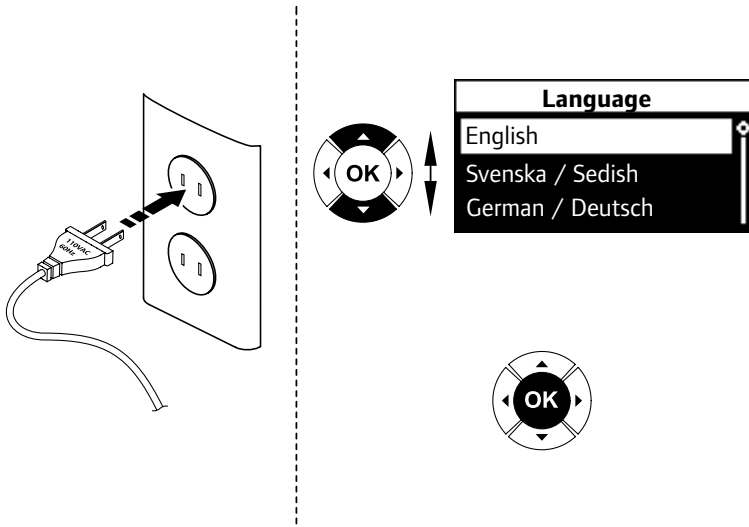


**Attention:** If a common pump supports multiple manifolds, a pump relay can be connected to the closest base unit. See the circulation pump supplier documentation before performing the connection.

**Individual Pumps**



## Connecting Base Unit Power Source and Selecting Programming Language



1. Check that the wiring is complete.
2. Ensure power compartment is closed.
3. Connect base units #2 and #3 to the power.
4. Check that the language data stick is connected at the back of the interface.
5. Ensure power compartment is closed. Connect base unit #1 to the power.
6. Select a language by pressing the ▲ or ▼ keys to select the language.
7. Press OK to confirm.



- If the language data stick is inserted, the language screen will automatically appear at first installation.
- The language setting is saved in case of power failure.
- The language can be changed after first installation by re-inserting the language stick.

## Time and Date Setup

This screen will open automatically when the language has been set.

**Set Date/Time**

00:00

01 Jan 2008

Select time and date with the keys.

**Set Date/Time**

00:00

01 Jan 2008

02  
01  
**00**  
23  
22

↑↓

OK

**Set Date/Time**

12:00

01 Jan 2008

14  
13  
**12**  
11  
10

↑↓

OK

**Set Date/Time**

12:00

01 Jan 2008

02  
01  
**00**  
59  
58

↑↓

OK

**Set Date/Time**

12:24

01 Jan 2008

26  
25  
**24**  
23  
22

↑↓

OK

**Set Date/Time**

12:24

01 Jan 2008

2010  
2009  
**2008**  
2007  
2006

↑↓

OK

**Set Date/Time**

12:24

01 Jan 2008

2010  
2009  
**2008**  
2007  
2006

↑↓

OK

**Set Date/Time**

12:24

01 Jan 2008

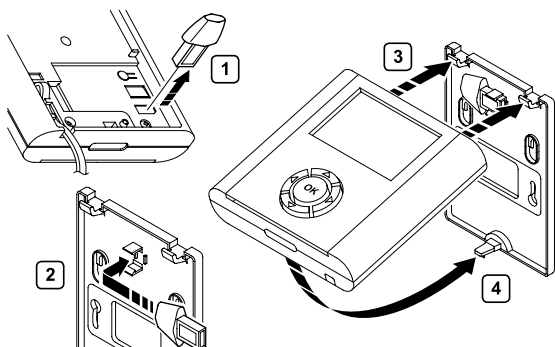
2010  
2009  
**2008**  
2007  
2006

↑↓

OK

1. Select hours.
2. Set the hour.
3. Select minutes.
4. Set the minutes and continue until the date is set.
5. Press OK to confirm.

## Attaching the Interface to Bracket



1. Remove the language data stick from the interface.
2. Attach the language data stick on the bracket.
- 3 and 4. Position the interface on the bracket.

## Interface Setup

### Interface Keys

	Displays the next menu	or	Goes to next field
	Displays the previous menu	or	Goes to previous field
	Press button longer than five seconds to return to display the Uponor screen	or	Goes to previous field
	Moves to line above	or	Increases the value
	Moves to line below	or	Decreases the value
	Displays the next screen	or	Confirms selection and displays the screen of the current menu

## Setting Installation Parameters for Multiple Base Units

If more than one base unit is used together, select heat demand management (i.e., one common pump relay or one pump relay per base unit). By default, the heat demand and valves are exercised once a week. Change this setting if needed.

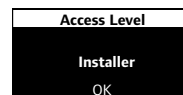
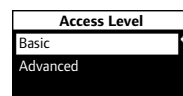
**Note:** If only installing one base unit, go to **Section 7: Thermostat Operation**.



To set these parameters, run the Installer Level as described in the next column.

## Access to the Installer Level

1. On the Uponor screen, simultaneously press ◀ and ▶ for 10 seconds to reach the Advanced Level. The Advanced display appears.
2. > Press OK.  
The Uponor screen is shown.
3. Go to the Advanced level via:  
Uponor screen > Main Menu > Settings > System Parameters > Access Level
4. Simultaneously press ◀ and ▶ for 10 seconds. Installer display appears.
5. > Press OK.  
The Uponor screen is shown.



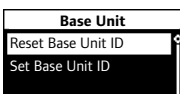
The system will automatically return to Advanced mode after 10 minutes.

## Setting Base Unit Identification

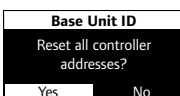


The default identification of the base unit is always #1. If more than one base unit is connected to the interface, all base units must be identified.

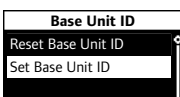
1. Uponor screen > Main Menu > Settings > System Parameters > Base Unit ID



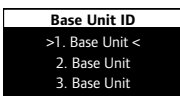
2. Reset Base Unit ID.  
> Press OK.



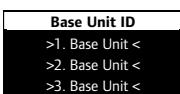
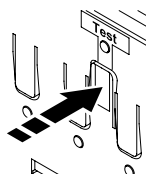
3. Select: Yes.  
> Press OK.



4. Press (down) key to move cursor to set controller ID. > Press OK.



5. The message >1. Base Unit < flashes: Press the Test button on base unit #1 (the one connected to the interface).

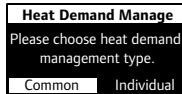


6. Repeat the operation for base units 2 and 3.

### Setting the Heat Demand Management

1. Uponor screen > Main Menu > Settings > System Parameters > Heat Demand Management

2. Choose Common or Individual.  
> Press OK.

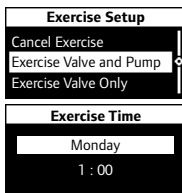


A common pump relay must not be connected to more than one base unit.

### Setting the Exercise Setup

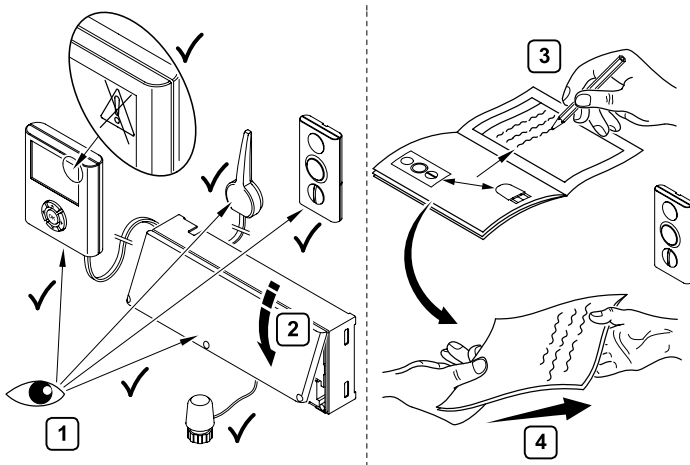
Schedule a weekly five-minute activation to maintain the functionality of the valves and pumps.

1. Uponor screen > Main Menu > Settings > System Parameters > Valve/Pump Exercise



2. Select the preferred parameter.  
> Press OK.
3. Set the day and time for the exercise.  
> Press OK.

### Installation Inspection



Completely check the installation.

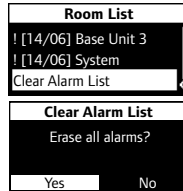
1. Review Base Unit Installation Section.
  - Confirm that the interface and thermostats are powered.
  - Check the interface for alarms.
2. Close the base unit cover.
3. Complete the installation report in **Section 12**.
4. Give this manual and all information about the system to the user.

### Alarms



To diagnose and resolve alarms, see **Section 11: Troubleshooting**.

1. Uponor screen > Main Menu > Information > Alarms > All Alarms



2. > Clear alarm list.
3. > Press OK.

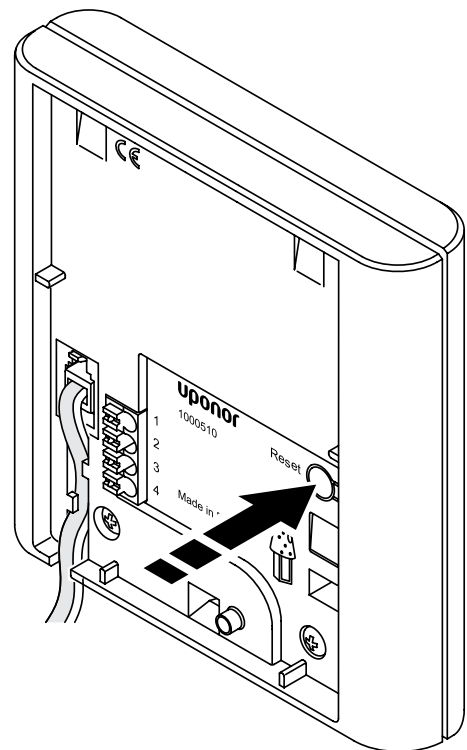


Make sure you have resolved all the alarms before clearing the list.

### Resetting the Interface

Should an error occur and the interface is not functioning normally, restart the system.

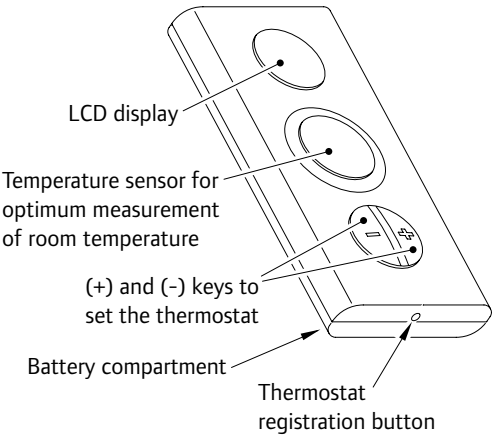
Briefly press the reset button. New installation and registration is not necessary, but the time and date must be reset.



Section 7

# Thermostat Operation

## Thermostat T-75 Display



**Default Display**  
(indication of room temperature)

LCD Display	Definition
88.8°F	Display of temperatures and menus
	Displayed when setting the room temperature
	Displayed during radio transmission
°C °F	Temperature format for the display
	Low-battery indication

## Changing the Temperature Format

1. Simultaneously press the (+) and (-) keys for 10 seconds.

→ The SEL (select) menu is displayed.



2. Press (+) or (-) to change the temperature format (°C or °F).

3. Wait 5 seconds.

→ The thermostat returns to the default display.



## Changing the Temperature Setpoint

1. Press the (+) or (-) key.

→ The setpoint icon and the room temperature setting display.



2. Press (+) or (-) to change the setpoint value.

3. Wait 5 seconds.

→ The radio transmission icon displays, confirming that the setpoint has been recorded and sent. The display returns to show measured room temperature.



To bring the temperature to default setpoint, briefly press the (+) and (-) keys simultaneously.

## Setting the Minimum and Maximum Temperatures



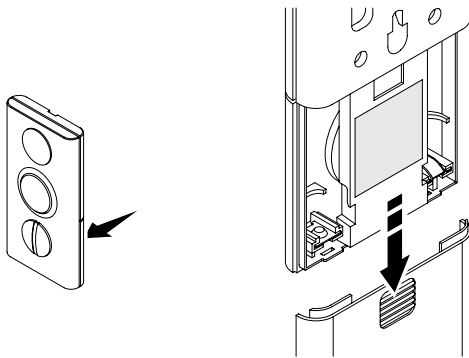
The minimum and maximum temperatures (41°F/5°C and 95°F/35°C) of the Thermostat Display T-75 are pre-set. It is, however, possible to tailor these temperatures to your system if it is equipped with an Interface I-75.

## Thermostat Battery Replacement

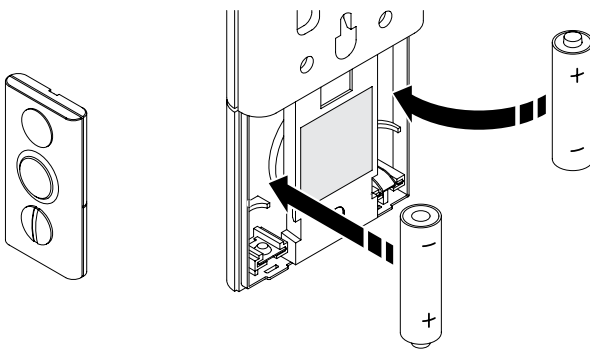


The thermostat uses two alkaline AAA 1.5V batteries. Note the polarity.

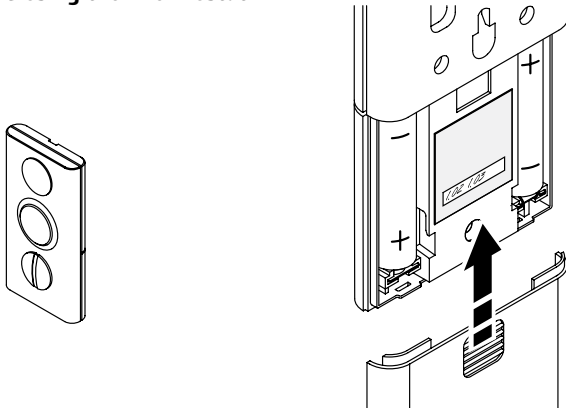
### Opening the Battery Cover



### Installing the Batteries



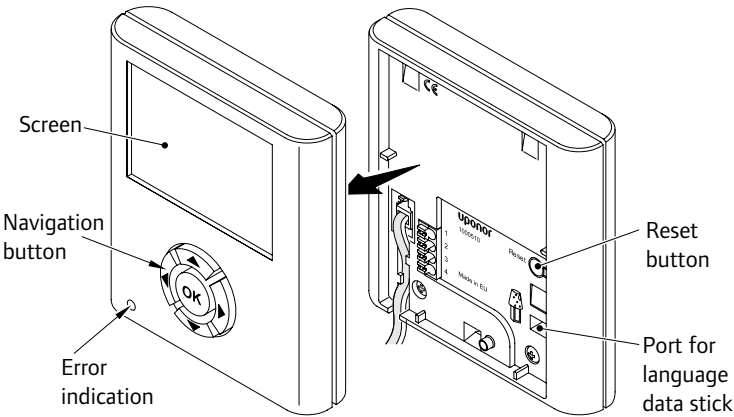
### Closing the Thermostat





Section 8

Interface Operation








The user-friendly interface features a digital screen, navigation, settings and validation keys.

The interface allows you to:

- centralize and optimize the system management.
- display and update the system operation settings.

The interface also displays the causes of any alarms.

Use of the Navigation Buttons			
	Displays the next menu	or	Goes to next field
	Displays the previous menu	or	Goes to previous field
	Goes to line above	or	Increases the value
	Goes to line below	or	Decreases the value
	Press OK Displays the next screen	or	Confirms selection and displays the screen of the current menu

## Interface Screens

### Uponor Screen



- Pressing any button activates backlighting.
- To go to the main menu, press OK.

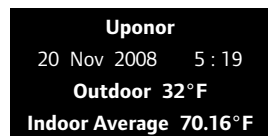
### Uponor Screen Icons

- Vacation mode is activated.
- An alarm/error message is present.

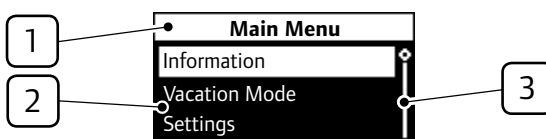
The outdoor temperature is displayed if the system is fitted with an outdoor temperature sensor.



The Interface menu displays indoor temperature; it will also display outdoor temperature if the system is fitted with an outdoor temperature sensor.

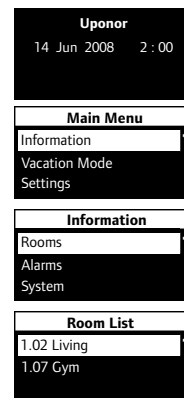


### Main Menu



1. Upper banner: Menu heading
2. Information zone: The selected line is highlighted.
3. Scroll bar

## How to Access and Navigate the Menu



1. > Press OK.
2. > Information > Press OK.
3. > Rooms > Press OK.
4. > Select the desired room.  
> Press OK.

- Display the desired information using the navigation keys. Use ◀ and ▶ to display the previous/next screen. Use ▲ and ▼ to display the previous/next thermostat.
- To go back to the room list, press OK.

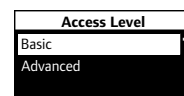
## Access Level

This parameter allows the user to set or select the access level. Two levels are available: basic or advanced.



The basic level allows the user to view some basic information, but not modify the settings. Recommended for use in a public location or a rented accommodation, such as a hotel room. The advanced level allows users to modify settings.

1. > Uponor screen > Main Menu > Settings > System Parameters > Access Level selection



2. > Basic or Advanced  
> Press OK.

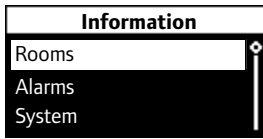


To switch from Basic to Advanced Level: On the Uponor screen, simultaneously press ◀ and ▶ for 10 seconds.

Screen Advanced and OK appears. Press OK to put the system is in Advanced mode.

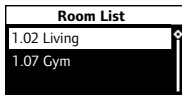
## Information Menu

The Information menu provides information about rooms, alarms/error messages and settings.



### Information Menu: Room Information

1. Uponor screen > Main Menu > Information > Rooms



2. > Select the desired room.  
> Press OK.



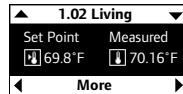
The number at the beginning of the room name on the display means: First digit: base unit. Second and third digits: number of the first channel controlled by this thermostat (01, 02, 03, etc.). If several terminals are controlled by the thermostat, only the lowest terminal number is displayed.

## Room Temperature

When room information is accessed, the screen displays room setpoint and measured temperature.



The temperature setpoint is 69.8°F. If the temperature set on the thermostat is outside the allowed temperature range for the room, the limitation temperature will be displayed as setpoint.



The measured temperature is 70.16°F.



3. >▶ to open the next screen.

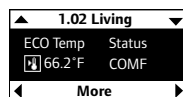
## ECO (Economy)



This screen displays the temperature setting for the room when it is in ECO mode. (Current setting is 66.2°F.)

### Status

Current status:  
COMF: Comfort mode.  
ECO: Economy mode



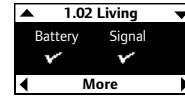
4. >▶ to open the next screen

## Battery and Communication Status

Battery and communication status are indicated with a ✓ or X.



- Battery: The batteries are sufficiently charged.
- Signal: Radio signal from the thermostat is good.



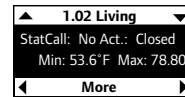
- Battery: The batteries are low.
- Signal: Radio signal from the thermostat and the antenna is faulty.

## Thermostat and Actuator Status

### Statcall

Yes: The thermostat is calling for heat.

No: The thermostat is reporting that the room temperature is satisfied.



### Act.

Open: The actuators are powered and open or opening.

Closed: There is no power to the actuators and they are closed or closing.

### Min

The minimum temperature setpoint of the room is set at 53.6°F.

### Max

The maximum temperature setpoint of the room is set at 78.8°F.

## Actuator Status

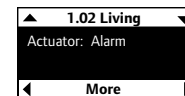


This screen is only displayed during installation.

### Actuator

OK: Normal operation

Alarm: A short circuit or similar problem is reported.



## Settings Menu

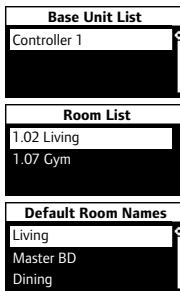
The settings menu allows the user to set the base unit for individual rooms.



The number at the beginning of the room name on the display means:  
First digit: base unit number (1, 2, 3); second and third digits: number of the first channel controlled by this thermostat (01, 02, 03, ...). (If several channels are controlled by the same thermostat, only the lowest terminal number is displayed.)

### Assigning or Changing a Room Name

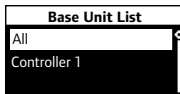
1. Uponor screen > Main Menu > Settings > Rooms > Room Names



2. Select the desired controller (only applies if more than one controller is installed) > Press OK.
3. Select the desired room or thermostat. > Press OK.
4. Select the room name from the predefined list. > Press OK.

### Setting the Min and Max Temperatures

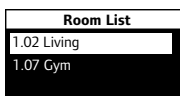
1. Uponor screen > Main Menu > Settings > Rooms > Min / Max Temperatures



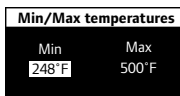
2. Select the desired base unit or All for all rooms on all base units > Press OK.



Selecting All sets the same min and max temperatures for all rooms.



3. Select the desired thermostat or room. > Press OK.



4. Set the temperatures  
Use ▲ and ▼ to increase and decrease the value.  
Use ◀ and ▶ to toggle between min. and max.  
> Press OK.



**Example:** If the temperature setpoint of the thermostat is set to 41 °F, the temperature will not fall below 53.6 °F because the minimum and maximum limitations for this room are set to 53.6 °F and 78.8 °F respectively.

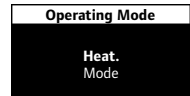
## Information Menu: System Information

### Heating Mode

Uponor screen > Main Menu > Information > System > Operating Mode

### Operating Mode

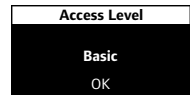
The system is always in heat mode.



### Access Level

Uponor screen > Main Menu > Information > System > Access level

Displays the current access level.



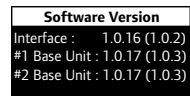
### Software Version

Uponor screen > Main Menu > Information > System > Software Version

X.X.X Software Version



(X.X.X.) Hardware Version



## ECO Mode



Reset profiles to the default values by re-editing. In heat mode, ECO mode reduces room temperatures at the set times. There are five different time and temperature profiles available, and all can be modified.

### Steps to Follow

1. Edit the ECO profiles.
2. Apply the ECO profiles.

### ECO Profile



This system provides five periods for temperature reduction settings, which indicate each setting, but are fully programmable. Set the timers first. Then define which thermostat each timer is to control.

## Heating

### ECO Off



### ECO All



## ECO Night and Day

For example:

ECO mode active:

From 10:30 p.m. to 5 a.m.

From 9:30 a.m. to 2:30 p.m.



## ECO Night

For example:

ECO mode active:

From 10:30 p.m. to 5 a.m.



## ECO Custom

For example:

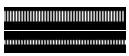
ECO mode active:

From 12:30 a.m. to 5:30 a.m.

From 12:00 a.m. to 5:30 p.m.



- Displaying the profiles:

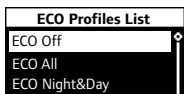


Comfort or ECO mode off.  
Economy or ECO mode on.

- All profiles can be modified.
- All customized settings remain saved in the event of a power failure.

## Editing the ECO Profiles

1. Uponor screen > Main Menu > Settings >  
> Edit ECO Profiles



2. Select the ECO profile to modify.  
> Press OK.



3. Modify the heating profile.  
> Press OK.

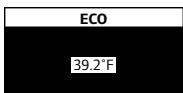
4. To modify the profile:

- Select the time using the ◀ and ▶ keys. The cursor moves by increments of 30 minutes. The set time is indicated above the time profile.
- Apply the Comfort mode by pressing the ▲ key.
- Apply the ECO mode by pressing the ▼ key.

5. To set a complete period within the same mode:

- Move the cursor to the start time of the period.
- Set the start time: Press briefly the ▲ or ▼ key.
- Move the cursor to the end time of the period.
- Press and hold the ▲ or ▼ key.

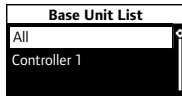
The profile applies for the whole period from start time to end time.



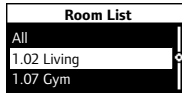
6. Modify the correction value of the temperature setpoint for the ECO mode.  
> Press OK.

## Apply ECO Profiles

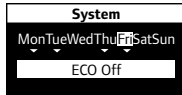
1. Uponor screen > Main Menu > Settings > Rooms >  
Apply ECO Profiles.



2. Select the desired base unit or all base unit (only applies if more than one base unit is installed).  
> Press OK.

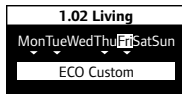


3. Select the desired room or All.  
> Press OK.



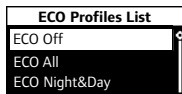
Select the day:

Go to the day by using the ◀ and ▶ keys and select the day by briefly pressing the ▼ key.



4. The present profile is displayed

5. Select the ECO Profiles mode:  
Press and hold ▼.



6. Select the desired ECO Profile.  
> Press OK.

7. Repeat for each day.



To check the setting for a certain day, go to the days by using ◀ and ▶. The current active profile status profile will display.



Different ECO profiles may be applied to the thermostat for any day of the week.



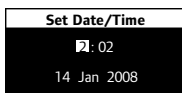
If one ECO profile is used in most rooms: Apply the profile to every room. In step 3, select the setting All. Then set individual rooms.

## Setting Time and Date

1. Uponor screen > Main Menu > Settings > System Parameters > Clock Settings > Set Date/Time



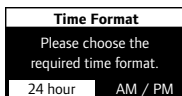
Toggle between the fields using the ◀ and ▶ keys. Change the values using the ▲ and ▼ keys.



2. Change the time and date.  
> Press OK.

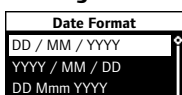
## Setting the Time Format

1. Uponor screen > Main Menu > Settings > System Parameters > Clock Settings > Time Format



2. 24 hour or AM/PM  
> Press OK.

## Setting the Date Format



1. Uponor screen > Main Menu > Settings > System Parameters > Clock Settings > Date Format

2. Select the format.  
> Press OK.

## Exercise Actuators and Pumps

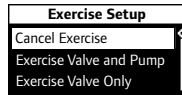


This exercise maintains the functionality of the actuators and pumps. A five-minute activation is scheduled every week.

### Cancel Exercise

1. Uponor screen > Main Menu > Settings > System Parameters > Valve/Pump Exercise > Cancel Exercise

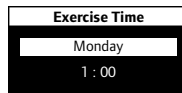
2. > Press OK.



### Exercise Valve and Pump

1. Uponor screen > Main Menu > Settings > System Parameters > Valve/Pump Exercise > Exercise Valve and Pump

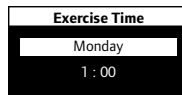
2. Set the time and date for the five-minute activation.  
> Press OK.



### Exercise Actuator Only

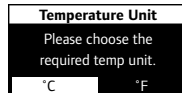
1. Uponor screen > Main Menu > Settings > System Parameters > Valve/Pump Exercise > Exercise Valve Only

2. Set the time and date for the five-minute activation.  
> Press OK.



## Temperature Unit

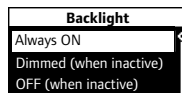
1. Uponor screen > Main Menu > Settings > System Parameters > Temperature Unit



2. > °C or °F  
> Press OK.

## Backlight

1. Uponor screen > Main Menu > Settings > System Parameters > Backlight



2. Select:  
Always ON  
Dimmed (when inactive): reduced screen brightness  
OFF (when inactive): backlighting off  
> Press OK.

## Installer Level




The device has another mode: the Installer level. Only the installer should set these settings.

The Installer access level provides additional access to:

- The information menu
- All advanced level parameters
- Pump management settings
- Base unit identification
- Language

## Vacation Mode

Vacation mode allows the user to easily set a temperature reduction common to all rooms. The thermostat settings are ignored during this period. The symbol  on the Uponor screen indicates that the system is in Vacation mode.

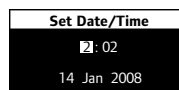
- The reduce vacation setpoint applies throughout the installation for all installed room thermostats. The setting range is 41°F to 95°F.



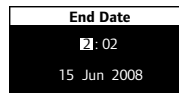
- The minimum and maximum limitations have priority over the Vacation mode reduction. For example if the minimum and maximum temperature range of a room is set to 68°F to 77°F, and the holiday temperature is set to 59°F for all rooms, the temperature for this room will not drop below 68°F.

### Applying the Vacation Mode

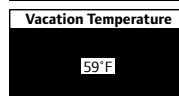
1. Uponor screen > Main Menu > Vacation Mode > Apply Vacation Mode



2. Enter time and date for the start of the vacation period  
> **Press OK.**



3. Enter time and date for the end of the vacation period  
> **Press OK.**

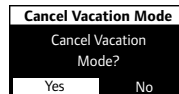


4. Enter the Vacation temperature setpoint > **Press OK.**

**Example:** Vacation Mode can be cancelled before the date is entered into the system.

### Cancelling the Vacation Mode

1. Uponor screen > Main Menu > Vacation Mode > Cancel Vacation Mode



2. Select Yes > **Press OK.**

## Section 9

# Technical Data

### General

- IP: IP30 (IP: degree of non-accessibility to the active parts of the product and degree of non-accessibility of water)
- Max. ambient relative humidity (RH): 95% max. at 68°F/20°C.
- Class II low-voltage device

### Thermostat T-75

- Certification
  - FCC Part 15 Subpart C
  - Industry Canada Category I device
- Approval and certification:
  - KNX: Konnex approval and certification
- Power supply: 2x Alkaline AAA 1.5V
- Voltage: 2.2V to 3.6V
- Operating temperature: 32°F/0°C to 113°F/45°C
- Storage temperature: 14°F/-10°C to 149°F/65°C
- Radio frequency: 902-928 MHz
- Transmitter duty cycle: 1%

### Interface I-75

- CE marking:
  - Low-voltage tests: EN 60730-1 and EN 60730-2-1
  - EMC tests: EN 60730-1
- Power supply: 11VDC  $\pm 10\%$  from controller
- Operating temperature: 32°F/0°C to 131°F/55°C
- Storage temperature: -4°F/-20°C to 158°F/70°C
- Consumption: 1W maximum

### Antenna T55

- Power supply: 11VDC  $\pm 10\%$  from controller
- Consumption:  $\ll 1W$
- Radio frequency: 902 to 928 MHz
- Transmitter duty cycle: 1%
- Receiver Class: 2

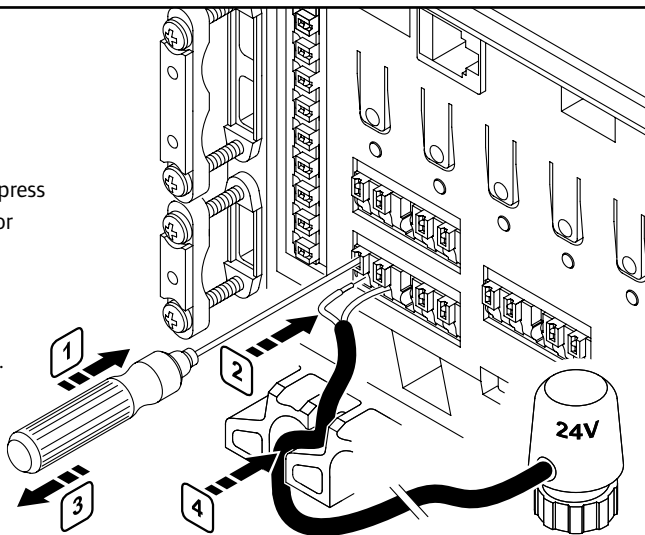
### Base Unit C-55

- Certification
  - FCC Part 15 Subpart C
  - Industry Canada Category I device
- Certification
  - ICES-003
- Power supply: 90-130VAC, 60Hz Class II switching power supply
- Operating temperature: 32°F/0°C to 131°F/55°C
- Storage temperature: -4°F/-20°C to 158°F/70°C
- Consumption: 70 W in full load max at 24VAC
- Demand contact: 24VAC at 2 Amps max (not fused)
- Valve outputs: 24VDC  $\pm 10\%$ , 436 mA max. per output 1 and 2 24VDC  $\pm 10\%$ , 218 mA max. per output 3 to 12
- Supply connection: terminal strip (push type) polarity sensitive

\*Do not substitute the external power supply. Damage to the controller and hazardous conditions may occur. Warranty will be voided.

#### Use of Quick Connectors:

1. Without turning, use a thin screwdriver to press the white button of the terminal to insert or remove a wire.
2. Insert a wire in the quick connector.
3. Release the white button.
4. Run the cable in the cable guides secure it.
5. Screw clamp to secure the cable of antenna or/and extension.



Terminal block for connection  
of antenna and extensions  
for additional I-75 interface

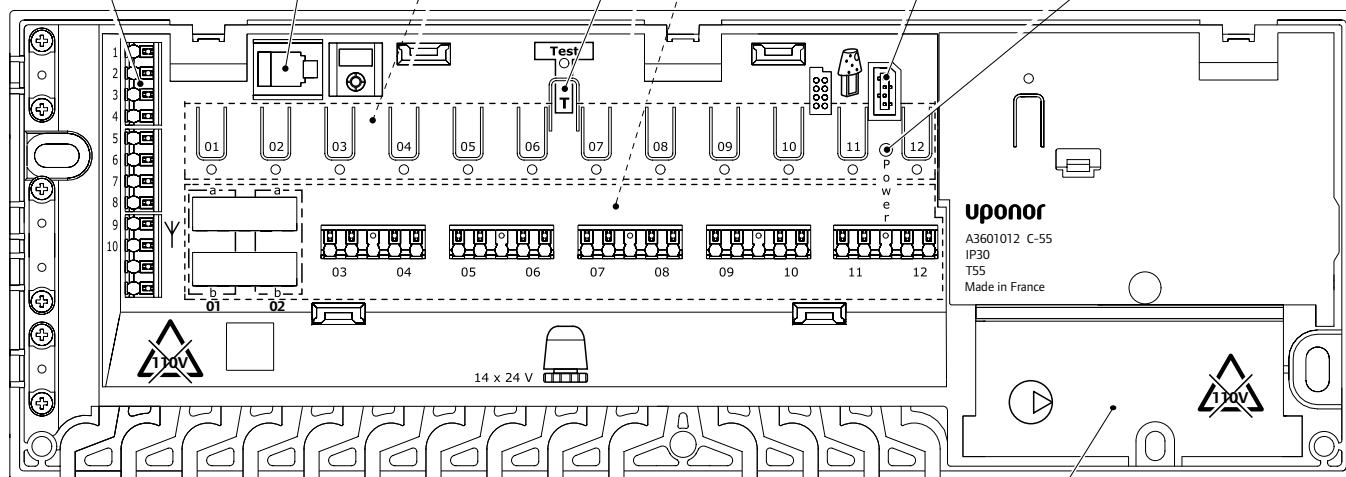
Push button and LED from  
01 to 12 for channel registration

Test button with LED

Quick connectors for the actuators

Socket for the connection  
of the data stick

- Power LED

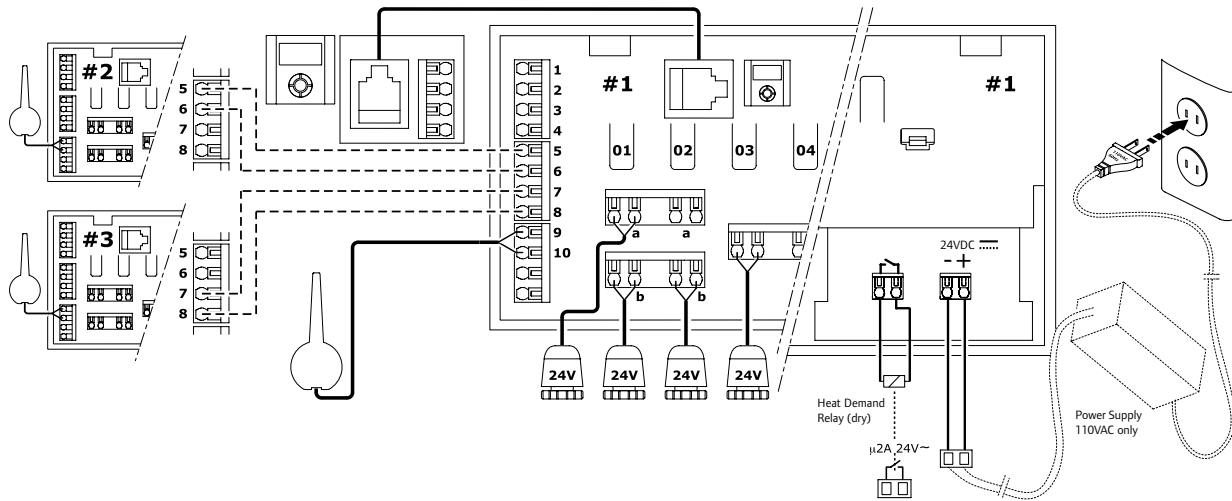


### 110v/60Hz Compartment – Heat-demand Relay



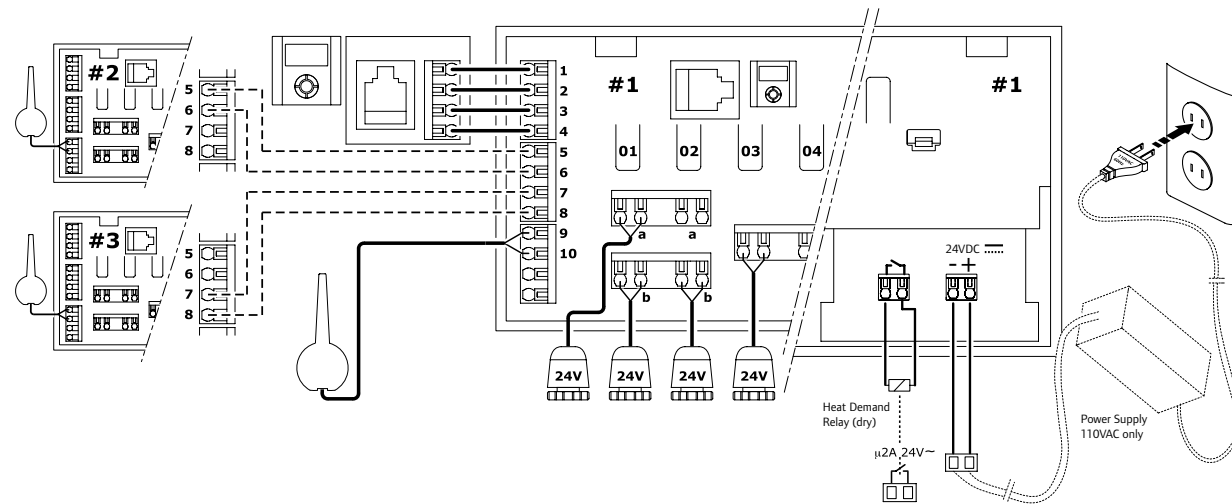
## Base Unit Connection Diagram

Connection of the interface with the cable fitted with RJ 9 connectors (6-foot cable)



## Base Unit Connection Diagram

Connection of the interface with the quick connectors (49-foot cable)





## Section 10

# Climate Control™ Zoning T-54 Installation Guide



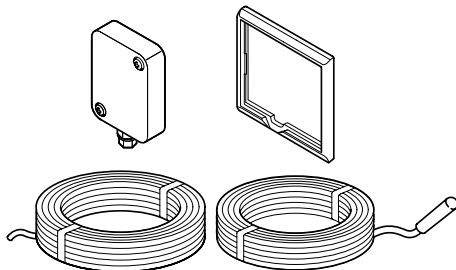
This quick-start guide provides instructions for installing T-54 Thermostats (A3600054) for use with the Uponor Climate Control™ Zoning System. Please refer to the Climate Control Zoning System Installation Guide (which comes with the base unit for A3601000 and A3601012) for other information not pertaining specifically to the T-54 Thermostat.

**Note:** The T-54 Thermostat Installation Guide is only available in the Zoning System base unit packaging.

The following accessories are available for use with the T-54 Thermostat:

- A3600010 Slab Sensor, 10K
- A3600254 Outdoor Sensor, 10K
- A3600154 Mounting Kit

**Important:** Do not use other 10K sensors with the T-54 Thermostat, as other types of sensors will provide inaccurate temperature information.

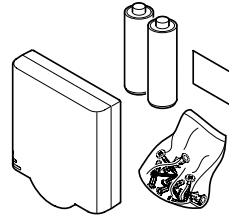


### Step 1: Package Contents

Confirm the contents of the package, which include:

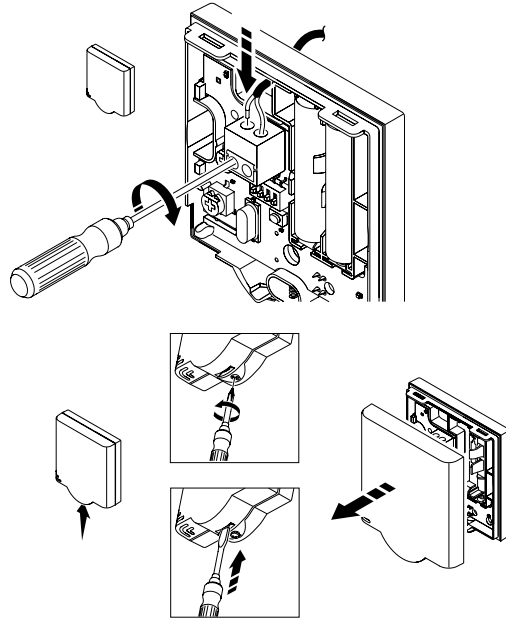
- T-54 Thermostat
- Two AAA batteries
- Hardware pack, anchors and label

**Note:** If any contents are missing, contact your Uponor representative for assistance.



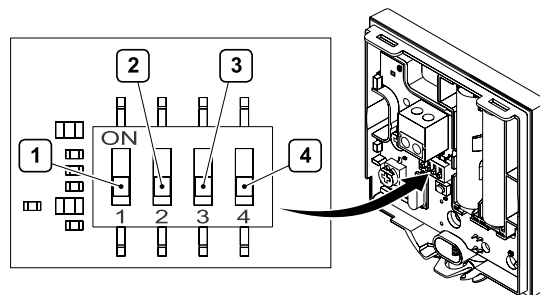
### Step 2: Battery Installation

Open the back of the T-54, insert the batteries and attach the appropriate sensor (if used).



### Step 3: Set the Dip Switches

Refer to the **Dip Switch Chart** on the next page to properly set the dip switches for the external sensor. To activate the feature, move the dip switch to the ON position.

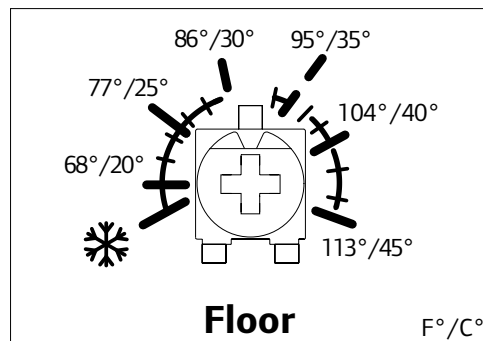
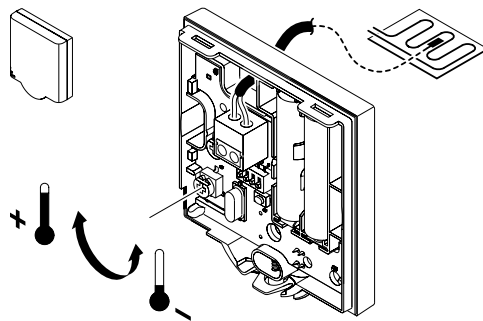


Function	Switch 1	Switch 2	Switch 3	Switch 4
As a standard room thermostat	Off	Off	Off	Off
With a floor sensor, maximum limitation	<b>On</b>	Off	Off	Off
With a floor sensor, minimum limitation	<b>On</b>	Off	Off	<b>On</b>
With an outdoor sensor	Off	<b>On</b>	Off	Off
Technical alarm	Off	Off	<b>On</b>	Off

**Table 1: Dip Switch Chart**

#### Step 4: Air and Sensor Settings

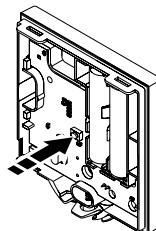
Adjust the settings for both the air and slab sensor temperatures (if used).



#### Step 5: Thermostat Connection

Register the thermostat to the base unit using the following procedure:

1. On the base unit, press and release the Test button.
2. Then press the "output" button for the actuator(s) or outputs that it will control. The output LED will flash.
3. Using a pointed instrument, gently press the registration button on the T-54 until the output LED on the base unit is on continuously.

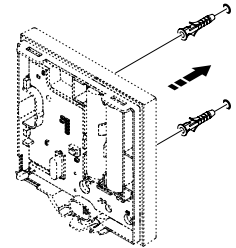


4. Repeat these steps to connect additional thermostats to the base unit.

5. Press and release the test button to end the registration process.

#### Step 6: Installation

Use screws or adhesive strips (included) to attach the thermostat to the wall. Uponor recommends labeling each thermostat with a location name along with the outputs or actuators it controls.



#### Battery Replacement

Replace the thermostat batteries when the red LED inside the thermostat flashes twice during a heating or cooling demand.


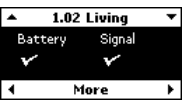

#### Temperature Information

1. On the Uponor screen, select **Main Menu > Information > Rooms**.
2. Select the desired room and press **OK**.

Icon	Description	Screen
	If thermostat temperature is outside the allowed temperature range for the room, limitation temperature is displayed as set point.	
	Measured temperature is 70.2°F.	
	Temperature setting for room when in ECO (Economy) mode. (Current setting 66°F). Options for current status: <b>COMF:</b> Comfort mode <b>ECO:</b> Economy mode	
	This screen displays if there is a floor sensor in the room. Floor temperature is 75°F. Max. and Min. — Minimum and maximum floor temperature set point.	

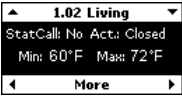
## Battery and Communication Status

1. On the Uponor screen, select **Main Menu > Information > Rooms.**
2. Select the desired room and press **OK.**
3. Press the right arrow 3 times.

Icon	Description	Screen
	<b>Battery:</b> Batteries are sufficiently charged. <b>Signal:</b> Radio signal from the thermostat and antenna is good.	
	<b>Battery:</b> Batteries are discharged. <b>Signal:</b> Radio signal from antenna or thermostat is poor or faulty.	

## Room Temperature and Actuator Status

1. On the Uponor screen, select **Main Menu > Information > Rooms.**
2. Select the desired room and press **OK.**
3. Press the right arrow 4 times.

Icon	Description	Screen
Stat Call	<b>Yes:</b> Thermostat is calling for heating (or cooling). <b>No:</b> Thermostat is reporting that room temperature is OK.	
Act.	<b>Open:</b> Actuators are powered and open, or on delay and will open soon. <b>Closed:</b> No power to the actuators, which are closed (or closing).	
Min.	Minimum set point of room is set at 60°F.	
Max.	Maximum set point of room is set at 72°F.	

## Minimum and Maximum Temperatures

1. On the Uponor screen, select **Main Menu > Settings > Rooms > Min./Max. Temperatures.**
2. Select the desired controller (base unit) or **All** for all rooms on all controllers and press **OK.**
3. Select a thermostat or room (if not using the All feature in the previous step) and press **OK.**
4. Set the temperatures. Use the up and down arrows to increase and decrease each setting. Use the forward and back arrows to toggle between the **Min.** and **Max.** settings.

**Note:** The room temperature will not fall below or rise above the minimum or maximum temperature settings regardless of the room temperature setpoint.

Controller List	Room List	Min/Max temperatures
All Controller 1	1.02 Living 1.07 Gym	Min: 60°F Max: 72°F

## Cover Alarm

A flashing power indicator on the display indicates an alarm or error. Specifically to the T-54, this alarm indicates that the cover of a thermostat is open. In the example below, this alarm shows that the cover to the living room is open. To view the room or rooms communicating the alarm:

1. From the Uponor screen, select **Main Menu > Settings > Rooms > Min./Max. Temperatures.**
2. Select the desired alarm and press **OK.**

Uponor	Alarm	Cover Alarm List
20 Dec 2009 13:35 Outdoor 15°F	1.02 Living Public therm. open!	[22/02] 1.02 Living
	26 Sept 2009 18:33	

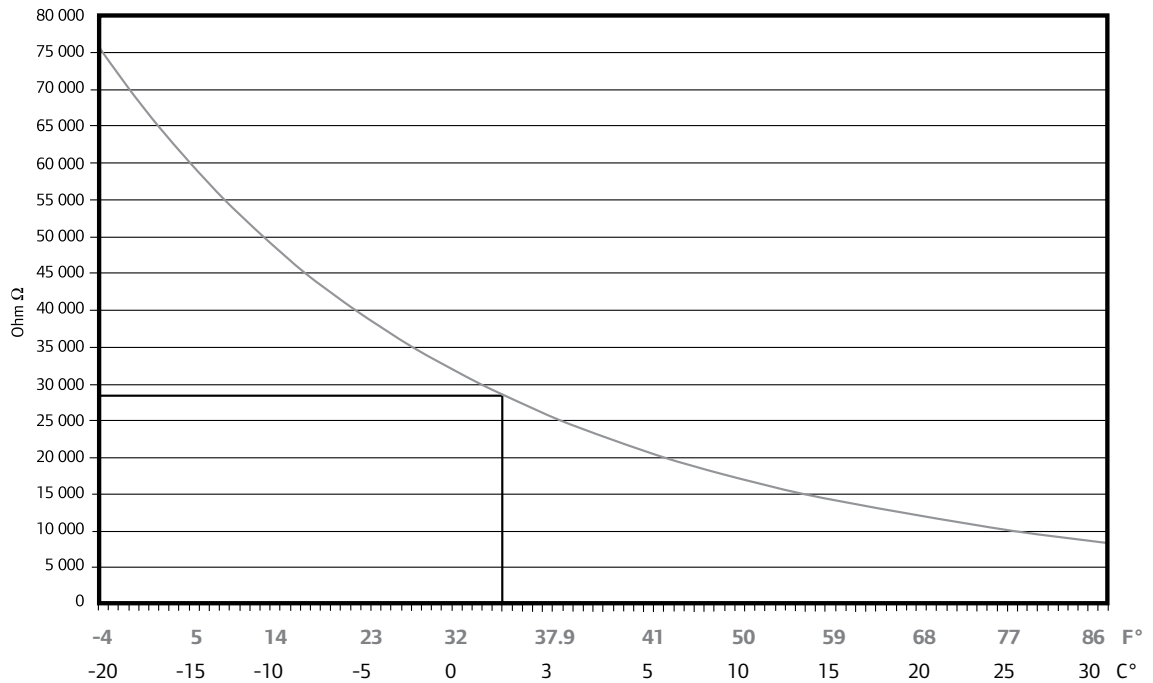
## Troubleshooting

The thermostat sends an alarm when more than 3 hours have elapsed since the controller received the last radio signal from the thermostat.

The table below shows problems that can occur in the thermostat.

Indication	Cause	Solution
Power LED and Channel LED flashes	Cover of thermostat is open.	Check thermostat settings and replace thermostat cover.
LED flashes twice	Thermostat battery power is running low.	Replace the batteries.

Table 2: Troubleshooting



**Table 3: Outdoor and Slab Sensor Resistance Value Table**

**Note:** 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 or more 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.

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.


For additional information about Climate Cöntrol™ Zoning not pertaining specifically to the T-54 Thermostat, refer to the Climate Cöntrol Zoning System Installation Guide.

## Section 11

# System Maintenance

Regular system component checks are recommended to optimize performance. This system requires no maintenance, but check system status regularly.

### Thermostat Batteries

The thermostats are powered by batteries. Replace the batteries of the thermostat when the symbol  appears.

### Base Unit

The Power LED of the Base Unit is always lit. When it blinks, this means that an alarm has been triggered. Open the controller cover. The LED of the channel from which the alarm originated is blinking rapidly. See **Section 11: Troubleshooting**.

### Automatic Exercise Function

The system is fitted with an automatic exercise function. Pump and actuators run every six days to prevent them from seizing.



If system is fitted with an interface, the exercise function may be activated at any time.

### Cleaning the Zoning System



Use a dry soft cloth to clean the Zoning System and its components.

### Interface Maintenance

- Check for alarms.
- Check the Information Menu every six months.
- Use a dry soft cloth to clean the Zoning System and all its components.

### Disposal of the Product

The Zoning System is made up of various recyclable components. Dispose of them properly.





## Section 12

# Troubleshooting

### Normal System Operating Conditions

#### Base Unit

The following indicates that the base unit is operating properly:

- The power LED of the base unit is lit.
- All channel LEDs are off if there is no demand for heat.
- LEDs light up when the corresponding actuators are activated.
- While waiting for the actuators to activate, the channel LEDs flash, indicating that they are opening.

#### Thermostat Display T-75




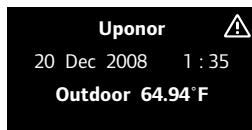
The thermostat is operating properly when the display shows the room temperature.

### Identifying and Resolving Alarms and Errors

#### Alarms

Each LED switches off as the corresponding problem is solved, and the power LED goes back to its normal state (i.e., always lit). A blinking LED indicator on the base unit and interface indicates an alarm or error message.

An alarm icon  appears in the upper right corner of the interface display to indicate an alarm. The icon disappears when the message is read, even if the issue remains.



**Note:** See **Table 10-1**, beginning on **page 41**, for possible alarms and solutions.



**Warning:** A qualified professional needs to install the wiring.

#### Base Unit Alarm

A blinking power LED indicates an alarm or error message. To resolve:

1. Remove the base unit cover to see power LED.\*
2. If LED is blinking, there is an error.
3. Verify which thermostat is creating the alarm



\*If an interface is fitted to the system, alarms display without the need to take the base unit apart. The interface displays clearly and accurately the causes of the various alarms.

**Note:** See **Table 10-1**, beginning on **page 41**, for possible alarms and solutions.

Each LED switches off as the corresponding issue is solved, and the power LED goes back to its normal state (i.e., always lit).

#### Information Menu: Alarms

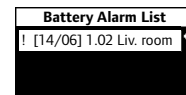
Alarm menu:

- Battery alarm
- All alarms

#### Battery Alarm

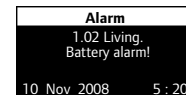
1. Uponor screen > Main Menu > Information > Alarms > Battery Alarm

2. Select the desired alarm.  
> Press OK.



Example: There is a battery alarm regarding the living room thermostat.

#### Alarm

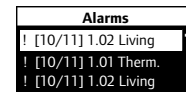


Change batteries in room thermostats.

#### Alarms List

1. Uponor screen > Main Menu > Information > Alarms > All Alarms

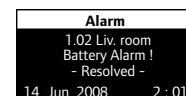
All the alarms are displayed. The first alarm is resolved, but resolution is still needed for the second and third alarms.



2. Select the desired alarm.  
> Press OK.

Example:  
The cause of the alarm in the living room thermostat has been resolved.

#### Resolved



**Short Circuit**

A short circuit is detected on the channel controlled by thermostat 1.01. (The terminals for the actuators are protected against short circuits, therefore there is an error in the actuator.)

Alarm		
1.01 Therm. Short-circuit!		
14 Jun 2008	4 : 01	

**Radio Signal Lost**

The radio signal of thermostat 1.02 is lost.

Alarm		
1.02 Living Radio signal lost!		
10 Nov 2008	4 : 20	

**Communication Error**

Base unit 3 has a communication error.

Alarm		
Base Unit Communication Error!		
19 Dec 2008	1 : 38	

**Unknown Error**

The system has an unknown error.

Alarm		
System Unknown Error!		
19 Dec 2008	6 : 38	


**Contacting an Installer**

Some alarms or errors may require an installer to solve the issue. See **Section 12** to find contact information. Prepare the following information before contacting the installer:

- Installation Report
- List of all alarms, including times and dates
- Drawings of the radiant floor heating system (if available)

**Contacting Uponor**

An installer may need to contact Uponor for more detailed information. Refer to the information in the interface software version window: Uponor screen > Main Menu > Information > Software Version.

Component	Alarms/Issues	Causes	Solutions	Notes
Base Unit	<ul style="list-style-type: none"> <li>• System does not start.</li> <li>• Power LED off</li> </ul>	No voltage	Ensure base unit powered correctly.	
Base Unit and Antenna	• Poor radio reception	<ul style="list-style-type: none"> <li>• Antenna mounted inside metal cabinet</li> <li>• Antenna out of position or wire disconnected</li> <li>• Interference</li> </ul>	Change the location of the antenna.	
	• Power LED and channel LED blink	<ul style="list-style-type: none"> <li>• Short circuit on a connected actuator</li> <li>• Short circuit on the actuator terminal/wiring error</li> </ul>	<ul style="list-style-type: none"> <li>• Use another channel (if an unused one is remaining).</li> <li>• For replacement of the base unit, see <b>Section 3</b>.</li> </ul>	See Installation Report to contact an installer.
Thermostat Display T-75	Battery icon displayed	• Thermostat batteries getting low	• Replace the batteries.	When the error is resolved, the thermostat screen displays the room temperature and the battery icon  disappears.
	Display is off	<ul style="list-style-type: none"> <li>• Batteries dead or wrong type.</li> <li>• Batteries installed incorrectly.</li> </ul>	• Replace the batteries.	
	Radio transmission icon is displayed, but the channel status (LED on/off) changes only if the thermostat is close to the antenna.	<ul style="list-style-type: none"> <li>• Transmitter working, but with reduced signal intensity</li> <li>• New installations in the house create interference.</li> </ul>	<ul style="list-style-type: none"> <li>• Contact an installer.</li> <li>• Find a new position for thermostat and/or antenna to prevent interference.</li> </ul>	





**Table 10-1: Troubleshooting Solutions**

Component	Alarms/Issues	Causes	Solutions	Notes
Thermostat or Actuator	Room too cold	Thermostat setting is too low (corresponding LEDs flashing).	Press + or – key to display and change the temperature setpoint on the thermometer.	Use minimum and maximum limitations to protect system from consequences of unreasonable temperature settings.
		Thermostat influenced by a heat source (temperature displayed drops when thermostat is moved)	Change the location of the thermostat.	
		Thermostats are mixed up.	Place each thermostat in the room supplied by the loops.	
		<ul style="list-style-type: none"> <li>• Actuator doesn't open.</li> <li>• The white indicator doesn't display in the indicator window.</li> </ul>	Replace the actuator.	See Installation Report to contact an installer.
		ECO in room information menu	<ul style="list-style-type: none"> <li>• Change ECO profile or assign another profile to the room.</li> <li>• End the ECO period by pressing a thermostat key.</li> </ul>	
		Temperature displayed in the room information menu is lower than the temperature on the thermostat.	Change minimum and maximum limitation.	
		Thermostats of single rooms are mixed up.	<ul style="list-style-type: none"> <li>• See Installation Report and the base unit/channel numbering under thermostat battery cover.</li> <li>• Force thermostat to transmit and check the corresponding LEDs are flashing.</li> <li>• Place the thermostat in the room supplied by the loops controlled by the thermostat.</li> </ul>	
Thermostat	Room temperature OK, but the floor is cold.	Supply system defect: no warm water in manifold.	Check boiler and circulation pump.	
	All rooms are cold.	Vacation mode still on	End vacation mode	
		ECO mode	<ul style="list-style-type: none"> <li>• Change ECO profile or assign another profile to the room.</li> <li>• End the ECO period by pressing all thermostat keys.</li> </ul>	

Table 10-1: Troubleshooting Solutions (cont.)

Component	Alarms/Issues	Causes	Solutions	Notes
Thermostat or Actuator	Room too warm	Actuator does not close.	<ul style="list-style-type: none"> <li>• Check that the actuator is correctly mounted.</li> <li>• Replace the actuator.</li> </ul>	See Installation Report to contact an installer.
		Thermostat setting is too high (corresponding LEDs flashing).	Press + or – key to display and change the temperature setpoint on the thermometer.	Place each thermostat in the room supplied by the loops.
		Thermostat influenced by a heat source (temperature displayed increases when thermostat is moved)	Change the location of the thermostat.	
		Thermostats are mixed up.	Place each thermostat in the room supplied by the loops.	
Interface	The interface is off.	Setting is off when inactive.	<ul style="list-style-type: none"> <li>• Change setting to dimmed when inactive.</li> <li>• Display returns when a key is pressed.</li> </ul>	
		Connection problem	<ul style="list-style-type: none"> <li>• Check the wiring and the interface connection with the controller.</li> <li>• Replace the interface.</li> </ul>	
	No response or frozen interface display	System is stalled or locked up.	Reset the interface: all parameters are saved, except for time and date.	
Base Unit with Interface	<ul style="list-style-type: none"> <li>• All connected base units are not found by the interface.</li> <li>• Base unit ID does not appear in the menu.</li> </ul>	Wiring problems	Correct the wiring.	

**Table 10-1: Troubleshooting Solutions (cont.)**

Component	Alarms/Issues	Causes	Solutions	Notes
Base Unit with Interface	<ul style="list-style-type: none"> <li>Signal <sup>1,2</sup> (from a single thermostat)</li> <li>Radio alarm in interface</li> <li>Radio icon  in room information on interface</li> <li>Power LED and thermostat LEDs in the base unit for connected channels flash</li> </ul>	Thermostat or antenna not in correct position.	<ul style="list-style-type: none"> <li>Reduce the distance between thermostat and base unit.</li> <li>Change the location of the thermostat within the room.</li> <li>Install antenna in correct position with wire converter correctly.</li> </ul>	<ul style="list-style-type: none"> <li>When the error is resolved, the thermostat screen displays the room temperature, and the battery icon  disappears.</li> </ul>
	No radio transmission icon displayed on thermostat screen when +/- keys pressed	Transmitter broken in thermostat	<ul style="list-style-type: none"> <li>Force the thermostat to transmit by changing the temperature setpoint.</li> <li>Replace the thermostat.</li> <li>To delete the assignment of the old thermostat and replace with the new one.</li> </ul>	Radio icon  replaced with 
	Radio transmission icon is displayed, but signals are received only if the thermostat close to the antenna.	Transmitter working, but with reduced signal intensity		
	New installations in the home create interference.	Interference	Find a new position for thermostat and/or antenna to prevent interference.	
Base Unit, Interface or Actuator	<ul style="list-style-type: none"> <li>Short circuit alarm on interface</li> <li>Power LED and concerned channel LED blink</li> </ul>	Short circuit on a connected actuator	Check wiring of the actuators, replace the actuator.	
		Short circuit on the actuator terminal	Replace base unit.	
Base Unit or Interface	<ul style="list-style-type: none"> <li>Communication error</li> <li>Software versions incompatible</li> </ul>	Wire disconnected or damaged	<ul style="list-style-type: none"> <li>Check wiring of interface and base unit.</li> <li>Replace base unit wire.</li> </ul>	See Installation Report to contact installer.
	<ul style="list-style-type: none"> <li>Communication error</li> <li>Base unit disappears from display list.</li> </ul>	Wrong wiring of several base units, wrong numbering of the base units or wire disconnected or damaged	<ul style="list-style-type: none"> <li>Check wiring of interface and base unit.</li> <li>Check base unit configuration.</li> <li>Replace wire.</li> </ul>	

**Table 10-1: Troubleshooting Solutions (cont.)**

<sup>1</sup>Alarm is triggered when more than three hours have elapsed since the base unit received the last radio signal from the thermostat.

<sup>2</sup>Power LED on the base unit and relevant channel LEDs blink.

Component	Alarms/Issues	Causes	Solutions	Notes
Interface	<ul style="list-style-type: none"> <li>• Display in interface locks up</li> <li>• No response when pressing keys</li> </ul>	<ul style="list-style-type: none"> <li>• General failure</li> </ul>	Reset the interface.	<ul style="list-style-type: none"> <li>• Time and date have to be set.</li> <li>• All other parameters are saved.</li> </ul>
Pump	Unfamiliar noise from the pump at the same time and day of the week	N/A	Change time for pump exercise.	

**Table 10-1: Troubleshooting Solutions (cont.)**

For additional issues, contact Uponor Technical Services at (888) 321-4739 (U.S.) or (888) 994-7726 (Canada)





## Section 13

# Installation Report

Installer should provide contact information and indicate assignments for base unit(s), channel numbers and rooms.

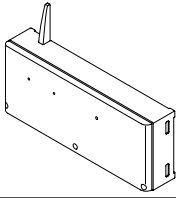

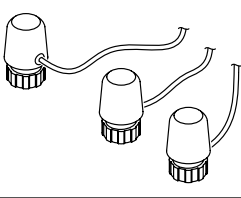
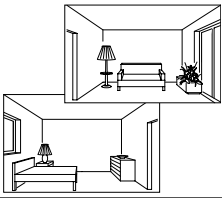
**Contact Information** \_\_\_\_\_

**Company Name** \_\_\_\_\_

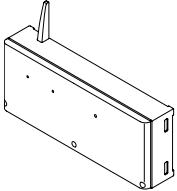

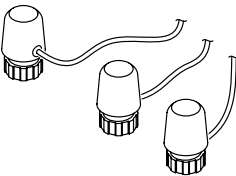
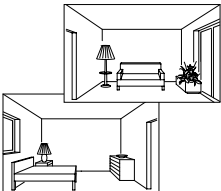
**Address** \_\_\_\_\_

\_\_\_\_\_

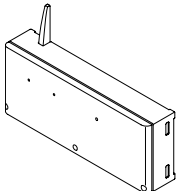
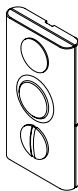
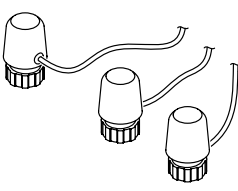
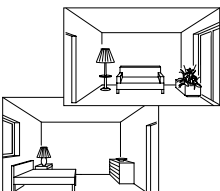
**Phone** \_\_\_\_\_ **Fax** \_\_\_\_\_ **e-mail** \_\_\_\_\_

			
<b>Base Unit Number</b>	<b>Channels</b>		<b>Rooms</b>
#1			
<b>Relay</b>	Yes <input type="checkbox"/>	24V <input type="checkbox"/>	
	No <input type="checkbox"/>	110V <input type="checkbox"/>	
<b>Pump</b>	Yes <input type="checkbox"/>		
	No <input type="checkbox"/>		

Option:

			
Base Unit Number	Channels		Rooms
#2			
	Pump	Yes <input type="checkbox"/>	
No <input type="checkbox"/>			

Option:

			
Base Unit Number	Channels		Rooms
#3			
Pump	Yes <input type="checkbox"/>		
	No <input type="checkbox"/>		



Notes:

Notes:



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