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 Cŏntrol™ Zoning not pertaining specifically to the T-54 Thermostat, refer to the Climate Cŏntrol Zoning System Installation Guide.

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RADIANT HEATING SYSTEMS

CLIMATE CŎNTROL™ ZONING SYSTEM T-54 THERMOSTAT

INSTALLATION GUIDE

Climate Cŏntrol™ Zoning T-54 Installation Guide

This quick-start guide provides instructions for installing T-54 Thermostats (A3600054) for use with the Uponor Climate Cŏntrol™ Zoning System. Please refer to the Climate Cŏntrol 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.
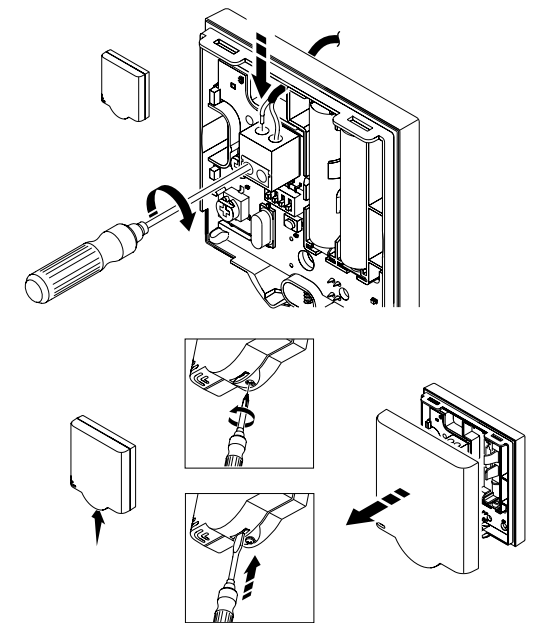
Step 1: Package Contents
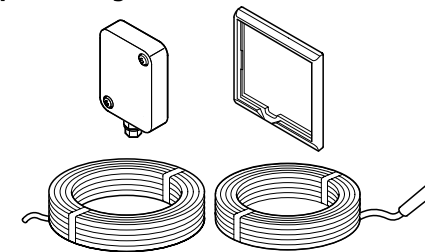
Confirm the contents of the package, which include:

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

Note: If any contents are missing, contact your Uponor representative for assistance.
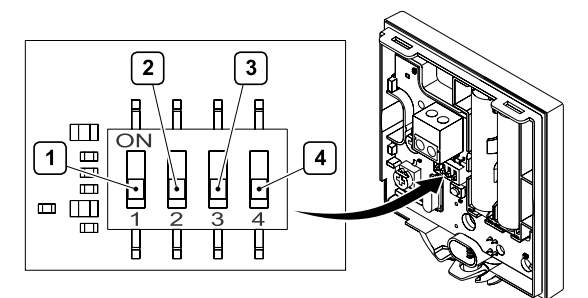
Step 2: Battery Installation
Open the back of the T-54, insert the batteries and attach the appropriate sensor (if used).

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	**On**	Off	Off	Off
With a floor sensor, minimum limitation	**On**	Off	Off	**On**
With an outdoor sensor	Off	**On**	Off	Off
Technical alarm	Off	Off	**On**	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).

86°/30°   95°/35°
77°/25°   104°/40°
68°/20°   113°/45°

Floor   F°/C°
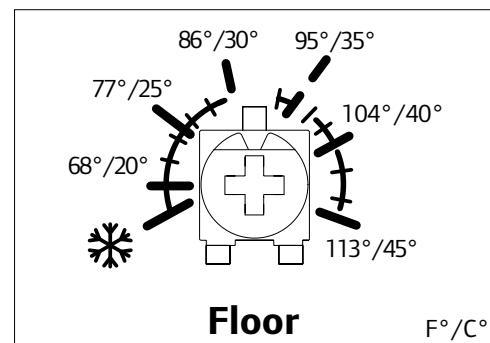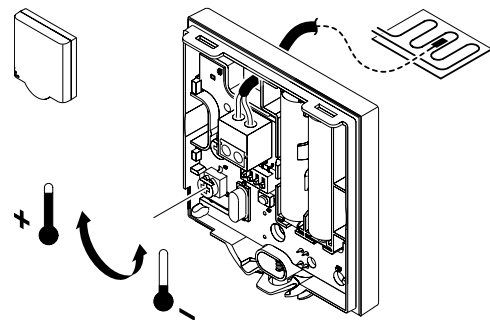
Step 5: Thermostat Connection

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.
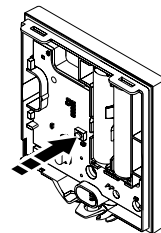
4. Repeat these steps to connect additional thermostats to the base unit.
5. Press and release the test button to end the registration process.

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.
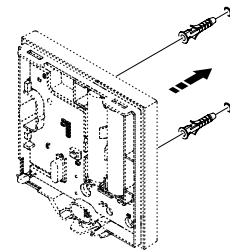
Battery Replacement

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.	1.02 Living / Set Point 70°F / Measured 70.2°F / More
	Measured temperature is 70.2°F.	
	Temperature setting for room when in ECO (Economy) mode. (Current setting 66°F). Options for current status: **COMF:** Comfort mode **ECO:** Economy mode	1.02 Living / ECO Temp Status 66°F COMF / More
	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.	1.02 Living / Floor 75°F Max: 85°F Min: 70°F / More

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
✔	**Battery**: Batteries are sufficiently charged. **Signal**: Radio signal from the thermostat and antenna is good.	1.02 Living / Battery ✔ Signal ✔ / More
✕	**Battery**: Batteries are discharged. **Signal**: 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	**Yes**: Thermostat is calling for heating (or cooling). **No**: Thermostat is reporting that room temperature is OK.	1.02 Living / StatCall: No Act: Closed Min: 60°F Max: 72°F / More
Act.	**Open**: Actuators are powered and open, or on delay and will open soon. **Closed**: 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! / 26 Sept 2009 18:33	! [22/02] 1.02 Living

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

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