Honeywell Home

T4 Pro

Programmable Thermostat

Product Data

M37844

Package Includes:

- T4 Pro Thermostat
- UWP™ Mounting System
- Decorative Cover Plate
- Screws and Anchors
- 2 AA Batteries
- Thermostat Literature

TH4110U2005,
TH4210U2002

Optional Cover Plate installation

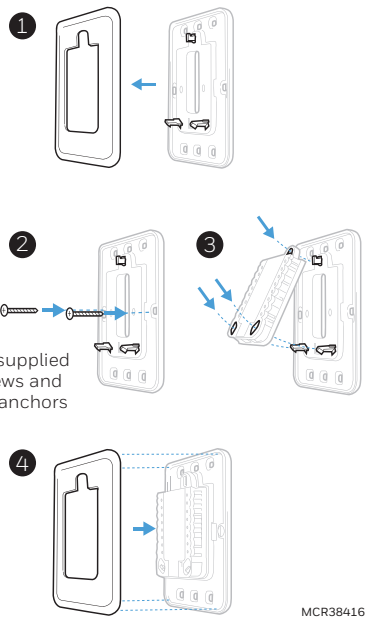
NOTE: If Optional Cover Plate is not required, see "UWP Mounting System installation" on next page.

Use the **Optional Cover Plate** when you need to cover paint gap from old thermostat.

There are different cover plates depending on when the thermostat was manufactured.

For the square cover plate:

1. Separate the Cover Plate from Mounting Plate.
2. Mount the Mounting Plate on to the wall using any of the 8 screw holes. Insert and tighten mounting screws supplied with Cover Plate Kit. Do not overtighten. See Figure 2. Make sure the Mounting Plate is level.
3. Attach the UWP by hanging it on the top hook of the Mounting Plate and then snapping the bottom of the UWP in place. See Figure 3.
4. Snap the Cover Plate onto the Mounting Plate. See Figure 4.



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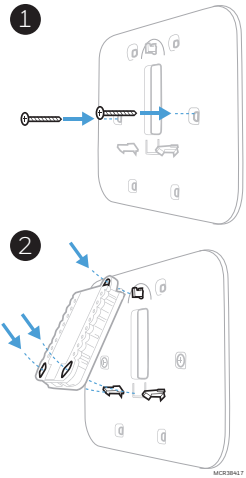
For the rectangular cover plate:

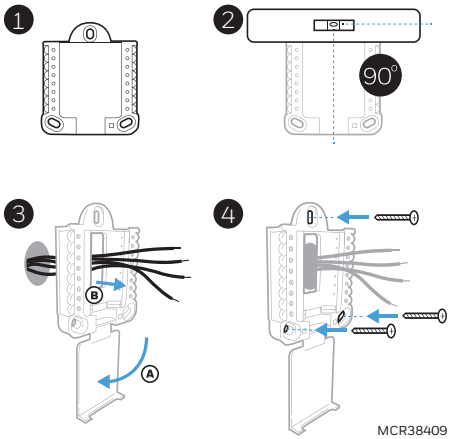
1. Mount the Cover Plate on the wall using any of the 6 screw holes. Insert and tighten the mounting screws supplied with the Cover Plate. Do not overtighten. See Figure 1. Make sure the Cover Plate is level. Attach the UWP by hanging it on the top hook of the Cover Plate and then snapping the bottom of the UWP in place. See Figure 2.
2. If there are no existing wall anchors:
   a. Position the Cover Plate on wall. Level and mark hole positions. See Figure 1.
   b. Drill holes at marked positions, and then lightly tap supplied wall anchors into the wall using a hammer.
      - If your box contains red anchors, drill 7/32" (5.6 mm) holes.
      - If your box contains yellow anchors, drill 3/16" (4.8 mm) holes.
      - Use 2x supplied screws (#8 1-1/2" (38 mm) for red anchors and #6 1-1/2" (38 mm) for yellow anchors).



UWP Mounting System installation

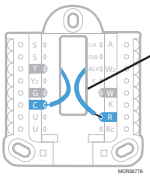
1. Before starting, turn the power off at the breaker box or switch. Open package to find the UWP. See Figure 1.
2. Position the UWP on wall. Level and mark hole positions. See Figure 2.

   Drill holes at marked positions, and then lightly tap supplied wall anchors into the wall using a hammer.
   - If your box contains red anchors, drill 7/32" holes.
   - If your box contains yellow anchors, drill 3/16" holes.
3. Pull the door open and insert the wires through wiring hole of the UWP. See Figure 3.
4. Place the UWP over the wall anchors. Insert and tighten mounting screws supplied with the UWP. Do not overtighten. Tighten until the UWP no longer moves. Close the door. See Figure 4.

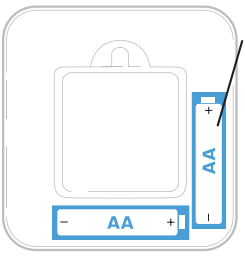


Use 3x supplied screws (#8 1-1/2 for red anchors and #6 1-1/2 for yellow anchors)

Power options



Insert **R** and **C** wires into designated terminals for primary AC power (C terminal is optional if batteries are installed, but it is recommended). Remove wires by depressing the terminal tabs.



Insert AA batteries for primary or backup power.

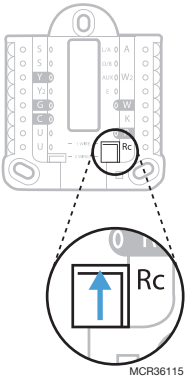
Setting Slider Tabs

Set R Slider Tab.

- Use built-in jumper **(R Slider Tab)** to differentiate between one or two transformer systems.
- If there is only one R wire, and it is connected to the **R**, **Rc**, or **RH** terminal, set the slider to the up position **(1 wire)**.
- If there is one wire connected to the **R** terminal and one wire connected to the **Rc** terminal, set the slider to the down position **(2 wires)**.

NOTE: Slider Tabs for U terminals should be left in place for T4 Pro models.

UWP Mounting System

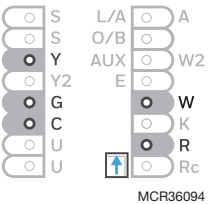


R/Rc Slider Tab (built-in jumper)

UWP Wiring terminal designations

S	Not used for T4 thermostat.
S	
Y	Compressor contactor (stage 1)
Y2	Not used for T4 thermostat.
G	Fan
C	24VAC common. For 2 transformer systems, use common wire from cooling transformer.
U	Not used for T4 thermostat.
U	

L/A - A	Not used for T4 thermostat.
O/B	Changeover valve
AUX - W2	Auxiliary heat (TH4210U only)
E	Emergency heat (TH4210U only)
W	Heat (stage 1)
K	Connect to K on C-wire adaptor**
R	24VAC power from heating transformer*
Rc	24VAC power from cooling transformer*



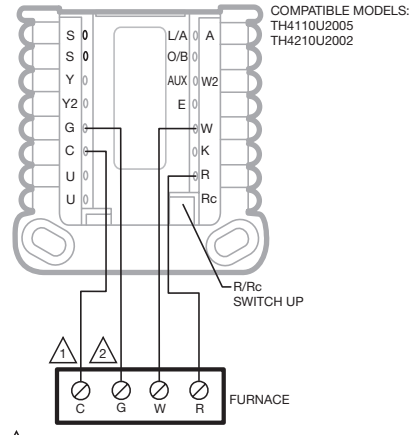
Note: Not all terminals may be used, depending on the system type that is being wired. The most commonly used terminals are shaded.

* Terminal can be jumped using Slider Tab. See “Setting Slider Tabs” above.

** The THP9045A C-wire adaptor is used on heat/cool systems when you only have four wires at the thermostat, and you need a fifth wire for a common wire. Use the K terminal in place of the Y and G terminals on conventional or heat pump systems to provide control of the fan and the compressor through a single wire—the unused wire then becomes your common wire. See THP9045 instructions for more information.

Wiring diagrams

1 Stage Heat Only: Gas or Oil Furnace



1 COMMON OPTIONAL.

2 G USED FOR INDEPENDENT FAN CONTROL ONLY. MOST HEAT ONLY, GAS OR OIL FORCED AIR SYSTEMS DO NOT USE A FAN (G) WIRE.

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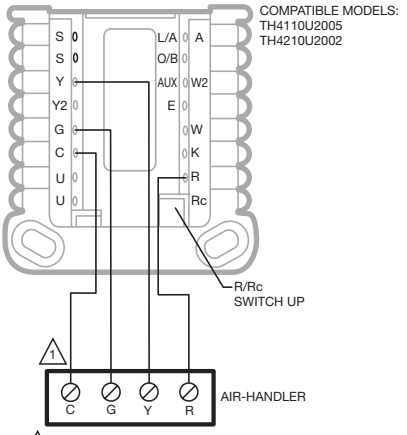
1 Stage Cool Only



1 COMMON OPTIONAL.

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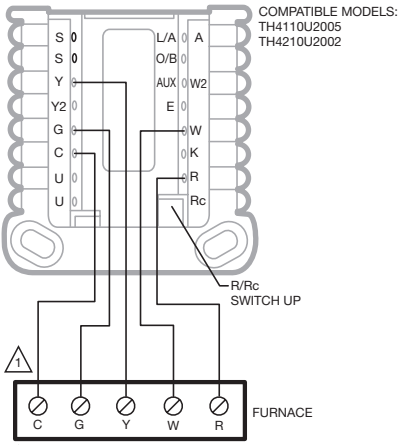
1H/1C: Gas Furnace + Air-Conditioning



1 COMMON OPTIONAL.

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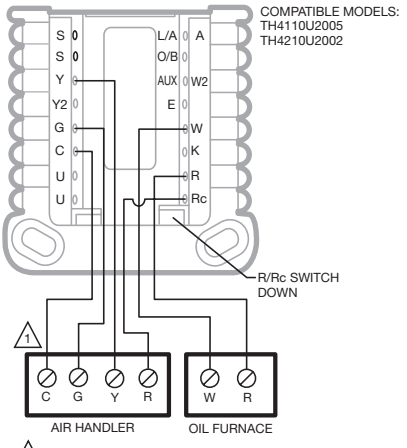
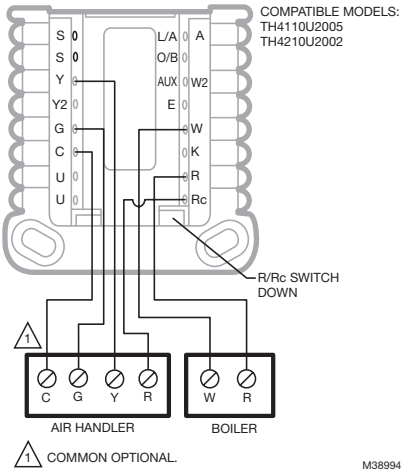
2 Transformer System, 1H/1C: Oil Furnace + Air-Conditioning



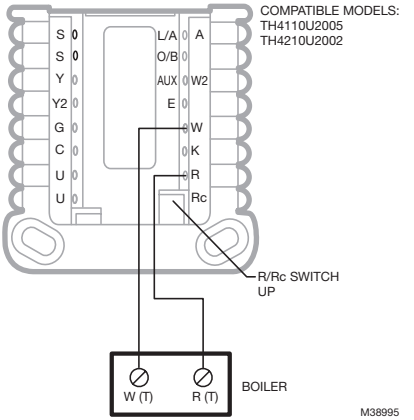
1 COMMON OPTIONAL.

M38993

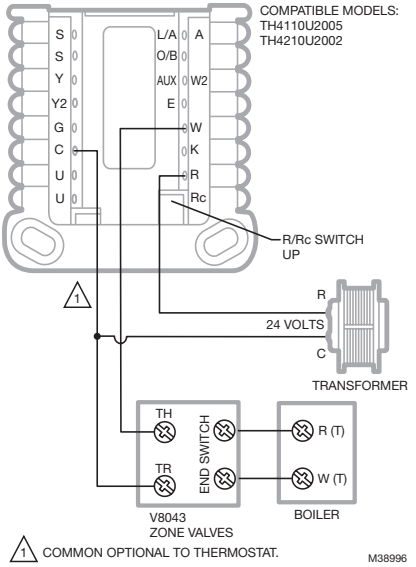
2 Transformer System, Hot Water Heat with Air-Conditioning (or Hot Water Coil)



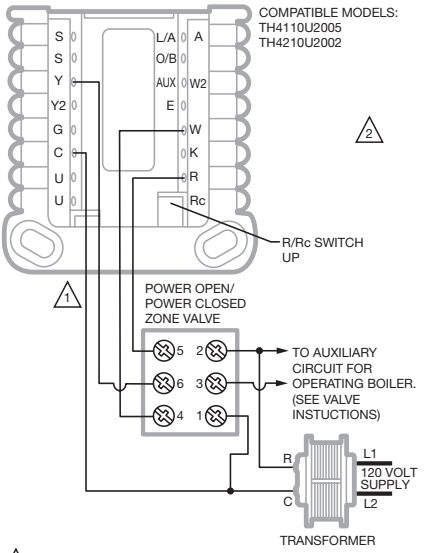
Hot Water Boiler, Heat Only



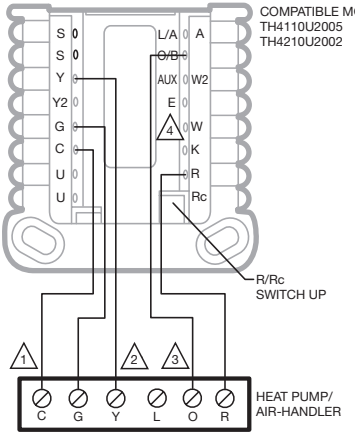
Hot Water Heat with Power Open Zone Valve



Hot Water Heat with Power Open/ Power Closed, Series 20 Zone Valve



1H/1C: Heat Pump without Aux Heat



1. COMMON OPTIONAL.
2. L CONNECTION (HEAT PUMP FAULT) NOT AVAILABLE ON T1 AND T4 MODELS. THE TH6210U2001 CAN BE USED IF FAULT INDICATION ON THERMOSTAT IS NEEDED.
3. SOME HEAT PUMPS USE B RATHER THAN O FOR REVERSING VALVE.
4. **DO NOT CONNECT ANY WIRE TO W FOR HEAT PUMP APPLICATIONS! THIS CAN CAUSE HEAT TO RUN CONTINUOUSLY.**

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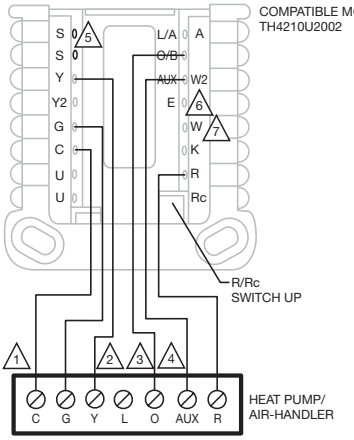
2H/1C: Heat Pump with Electric Aux Heat

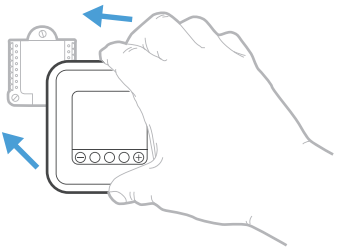


1. COMMON OPTIONAL.
2. L CONNECTION (HEATPUMP FAULT) NOT AVAILABLE ON TH4210U2002 MODEL. THE TH6210U2001 CAN BE USED IF FAULT INDICATION ON THERMOSTAT IS NEEDED.
3. SOME HEAT PUMPS USE B RATHER THAN O FOR REVERSING VALVE.
4. DIFFERENT HEAT PUMP MODELS LABEL THE AUXILIARY HEAT TERMINAL DIFFERENTLY THAN SHOWN. CONSULT HEAT PUMP WIRING GUIDE.
5. IF AUX HEAT LOCKOUT ON HIGH OUTDOOR TEMPERATURE IS REQUIRED, USE TH6220U2000 THERMOSTAT AND C7089U1006 OUTDOOR SENSOR. THE TH4210U2002 CANNOT DO THIS.
6. MOST HEAT PUMPS SHARE THE SAME SET OF HEAT STRIPS FOR AUX AND EM HEAT. IN THOSE CASES E ISN'T USED. IF YOU HAVE SEPARATE HEAT SOURCES FOR THE AUX AND EM HEAT, THE TH4210U2002 CANNOT BE SET TO DO THIS. THE TH6320U2008 MODEL CAN BE CONFIGURED FOR SEPARATE AUX AND E. IF THIS IS DONE, WIRE ONE SET OF STRIPS TO E TO BE ENERGIZED IN EM HEAT AND A DIFFERENT SET OF STRIPS TO AUX TO BE ENERGIZED IN AUX HEAT.
7. **DO NOT CONNECT ANY WIRE TO W FOR HEAT PUMP APPLICATIONS! THIS CAN CAUSE HEAT TO RUN CONTINUOUSLY.**

M39002

Thermostat mounting

1. Push excess wire back into the wall opening.
2. Close the UWP door. It should remain closed without bulging.
3. Align the UWP with the thermostat, and push gently until the thermostat snaps in place.
4. Turn the power on at the breaker box or switch.



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System operation settings

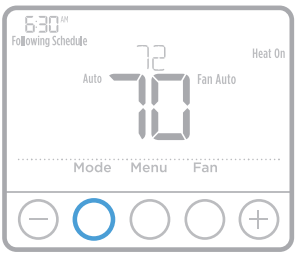
1 Press the **Mode** button to cycle to the next available System mode.

2 Cycle through the modes until the required System mode is displayed and leave it to activate.

NOTE: Available System modes vary by model and system settings.

System modes:

- **Auto:** Thermostat selects heating or cooling as needed.
- **Heat:** Thermostat controls only the heating system.
- **Cool:** Thermostat controls only the cooling system.
- **Em Heat** (TH4210U only) (only for heat pumps with auxiliary heat)**:** Thermostat controls Auxiliary Heat. Compressor is not used.
- **Off:** Heating and cooling system is off. Fan will still operate if fan is set to On.



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Fan operation settings

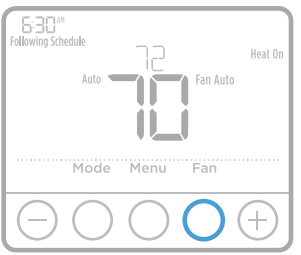
1 Press the **Fan** button to cycle to the next available Fan mode.

2 Cycle through the modes until the required Fan mode is displayed and leave it to activate.

NOTE: Available Fan modes vary with system settings.

Fan modes:

- **Auto:** Fan runs only when the heating or cooling system is on.
- **On:** Fan is always on.



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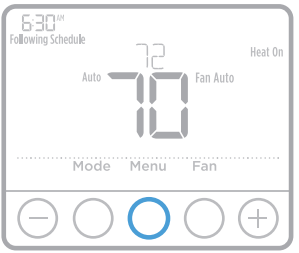
Set the time and date

Time

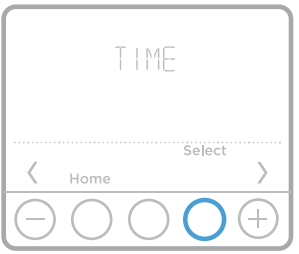
1 Press **Menu**, and then press ⊕ to go to **TIME**. Press **Select.**
2 Press ⊕ or ⊖ to choose between 12 or 24 hour. Press **Select**.
3 Use ⊕ or ⊖ to adjust the hour. Press **Select**.
4 Use ⊕ or ⊖ to adjust the minutes. Press **Select** to exit Time menu.



MCR36519A

Date

1 If previously setting time, continue to Step 2. If at the Home screen, press **Menu** on your thermostat.
2 Press ⊕ or ⊖ to go to **DATE**. Press **Select.**
3 Use ⊕ or ⊖ to adjust year. Press **Select**.
4 Use the ⊕ or ⊖ to adjust month. Press **Select**.
5 Use the ⊕ or ⊖ to adjust Date. Press **Select** to save and exit Date menu.



MCR36523

Program Schedule

You can program four time periods each day, with different settings for weekdays and weekends. We recommend the pre-sets (shown in the table below), since they can reduce your heating/cooling expenses.

Wake - Set to the time you wake up and the temperature you want during the morning, until you leave for the day.

Away - Set to the time you leave home and the temperature you want while you are away (usually an energy-saving level).

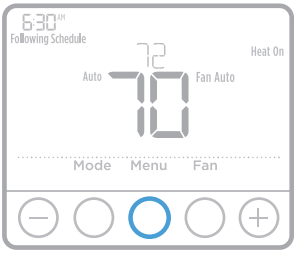
Home - Set to the time you return home and the temperature you want during the evening, until bedtime.

Sleep - Set to the time you go to bed and the temperature you want overnight (usually an energy-saving level).

	Heat	Cool
Wake (6:00 am)	70°	78°
Away (8:00 am)	62°	85°
Home (6:00 pm)	70°	78°
Sleep (10:00 pm)	62°	82°

NOTE: To temporarily or permanently override any of the above program schedules, see page 4.

To adjust program schedules



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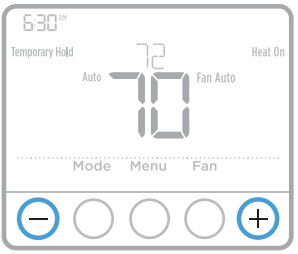
1 Press **Menu** on your thermostat.
2 **PROG** is displayed. Press **Select**. Then **ON** is displayed. (If you do not want to use a schedule, press ⊕ or ⊖ to display **OFF**. Press **Select**.) Press **Select**.
3 Press ⊕ or ⊖ to select day or set of days to edit. Press **Select**.
4 Press ⊕ or ⊖ to select a schedule period to edit (Wake, Away, Home, and Sleep). Press **Select**.
5 **ON** is displayed. Press **Select** to keep the schedule period on. Or press ⊕ and then **Select** to turn off the schedule period.
6 Time starts blinking. Press ⊕ or ⊖ to adjust the schedule period start time. Press **Select**.
7 Temperature starts blinking. Press ⊕ or ⊖ to adjust the "Heat" setpoint temperature. Press **Select**. Press ⊕ or ⊖ to adjust the "Cool" temperature setpoint. Press **Select**.
8 Repeat steps 4 through 7 for the remaining schedule periods.
9 Press **Home** when you're finished to save and return to the home screen.
10 Schedule can be adjusted and turned **ON** or **OFF** by returning to **Menu** and following the steps provided above.

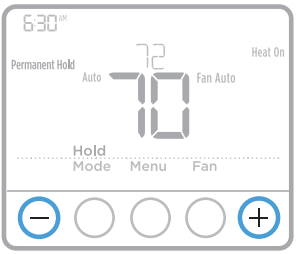
Program schedule override (temporary)



MCR36524A

1 Press ⊕ or ⊖ to adjust the temperature.
2 Once at the desired setpoint temperature, no further action is needed. The new setpoint temperature will be held until the next scheduled time period begins. For more information on schedule time periods, see "Program Schedule" on page 3.
3 To cancel the Temporary Hold, Press ⊕ or ⊖ and then press **Cancel**.

Program schedule override (permanent)



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1 Press ⊕ or ⊖ to adjust the temperature.
2 **TEMPORARY HOLD** is displayed and the setpoint temperature flashes. While it's flashing, press **Hold** (Mode) button to change to Permanent Hold.
3 To cancel the Permanent Hold, press ⊕ or ⊖ and then press **Cancel**.

Adjusting keypad lockout

1 Press **Menu** on the thermostat.

2 Press ⊕ or ⊖ to go to **LOCK**. Press **Select**.

3 Press ⊕ or ⊖ to go to **OFF, PART,** or **ON**, and then press **Select**.
OFF: Unlocked, and full access allowed.
PART: Partial lockout, allowing only the temperature to be changed.
ON: No access allowed.

4 To unlock the keypad, press the **CENTER** button and then enter the password "1234". To enter the password, press ⊕ or ⊖ to change the first digit of the number. Then press **Select**. Repeat this process to enter the second through fourth digits of the number. Once all four numbers have been entered, press **Select** again.

5 This will unlock the keypad.

6 If the code is incorrect, the screen will flash the lines "--".

7 Press **Back** to go back a step to enter the correct number and press **Select**.

NOTE: On some models keypad lockout is not available under menu if the installer did not enable the lockout during the installer setup.

Adjusting idle backlight display brightness

1 Press **Menu** on the thermostat.

2 Press ⊕ or ⊖ to go to **LITE**. Press **Select**.

3 Current brightness setting is displayed (1-5).

4 Press ⊕ or ⊖ to adjust backlight brightness.

5 Press **Select** to save and exit **LITE** menu.

NOTE: Backlight is only displayed if the C (common) wire is connected.

Adaptive Intelligent Recovery

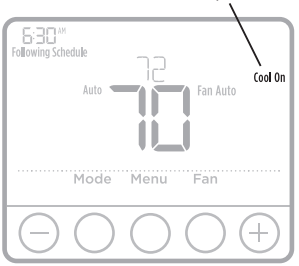
Over time, the T4 Pro Thermostat "learns" how long it takes your system to reach the temperature you want. It turns on the heating or cooling system earlier to make sure you're comfortable at the time you expect.

Built-in compressor protection

Damage can occur if the compressor is restarted too soon after shutdown. This feature forces the compressor to wait for a few minutes before restarting.

During the wait time, the display will flash the message Cool On (or Heat On if you have a heat pump). When the safe wait time has elapsed, the message stops flashing and the compressor turns on.

Message flashes until safe restart time has elapsed.



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Battery replacement

Batteries are optional (to provide backup power) if your thermostat was wired to run on AC power when installed. If your thermostat was not wired to run on AC power, then batteries are required.

Install fresh batteries immediately when the low battery icon appears. The icon appears about two months before the batteries are depleted.

Even if the low battery icon does not appear, you should replace batteries once a year, or before leaving home for more than a month.

If batteries are inserted within two minutes, the time and day will not have to be reset. All other settings are permanently stored in memory, and do not require battery power.

NOTE: When replacing batteries, alkaline batteries are recommended.

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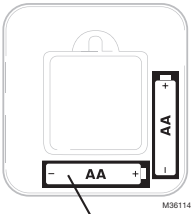
When the low battery warning appears, press gently to loosen the thermostat and then carefully pull it from the wall mount.



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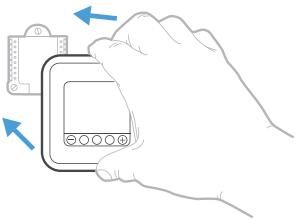
Insert fresh alkaline AA batteries and reinstall thermostat.



MCR36116

Alerts

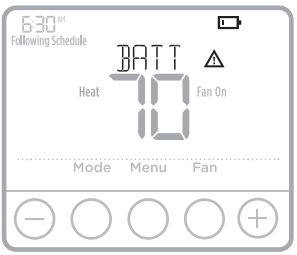
If there is an alert or reminder, the alert icon ⚠ appears on the Home screen.

Low Battery Warning

1 The batteries need to be replaced when **BATT**, the alert icon ⚠, and the battery icon are displayed on the Home screen.

2 When the battery power is very low, the thermostat's backlight is disabled to save battery power.

3 When battery power is critically low, only **BATT**, the alert icon ⚠, and the battery icon are displayed.



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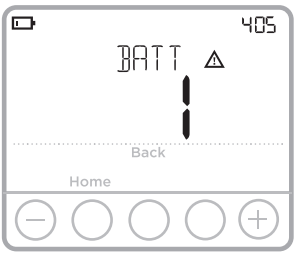

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Air Filter Reminder

1 The alert icon ⚠ appears on the Home screen.

2 Press **Menu**, and then press ⊕ until display shows **ALRT**.

3 Press **Select** to display which alert(s) are present.

4 The message **REPL** (REPLACE AIR FILTER) appears.

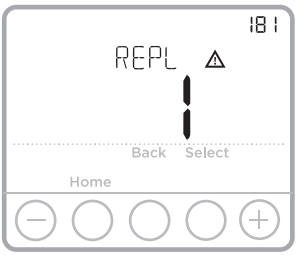
5 The reminder can be snoozed or cleared. Resideo recommends changing the air filter before clearing the reminder.

6 To snooze, press **Select**. The word **SNZE** (SNOOZE) appears.

7 Press **Select** again to snooze the reminder for 7 days.

8 To clear, press **Select,** and then press ⊕ to go to **CLER** (Clear).

9 Press **Select** to clear the air filter reminder.



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Snoozing and Clearing Alerts or Reminders*

1 Press **Menu**, and then press ⊕ until display shows **ALRT**.

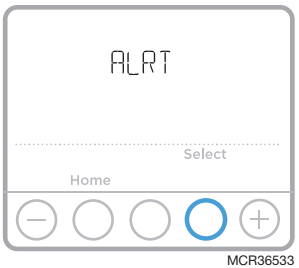
2 Press **Select** to display which alert(s) are present.

3 The word **SNZE** (SNOOZE) appears.

4 Press **Select** again to snooze the reminder for 7 days.

5 To clear the alert, press **Select,** and then press ⊕ to go to **CLER** (Clear).

6 Press **Select** to clear the reminder.



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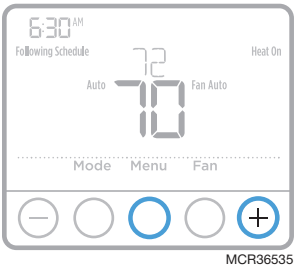
* Some alerts cannot be snoozed or cleared. Please call your local heating and cooling professional if this occurs. The heating and cooling system may require service.

Installer setup (ISU)

1 Press and hold **CENTER** and ⊕ buttons for approximately 3 seconds to enter advanced menu.
2 Press **Select** to enter **ISU**.
3 Press **Select** to cycle through menu setup options.
4 Press ⊕ or ⊖ to change values or select from available options.
5 Press **Select** and confirm your settings or press **Back** to ignore changes and return to ISU menu screen to continue editing another setup option.
6 To finish setup process and save your setting, press **Home** and return to Home screen.

NOTE: A complete list of all setup (ISU) parameters and options starts below and continues through page 16.



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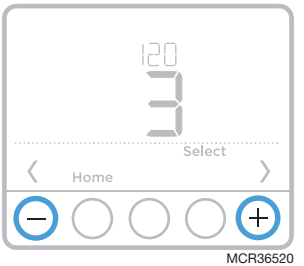

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Advanced setup options (ISU)

NOTE: Depending on system settings, not all options may be available.

# ISU	ISU Name	ISU Options (factory default in bold)
120	Scheduling Options	0 = Non-Programmable 2 = 5-2 Programmable **3 = 5-1-1 Programmable** 4 = 7-Day Programmable *Note: You can change default MO-FR, SA-SU schedule here. To edit periods during days, temperature setpoints, or to turn Schedule On/Off, touch MENU and go to SCHEDULE.*
125	Temperature Indication Scale	**0 = Fahrenheit** 1 = Celsius
200	Heating System Type	**1 = Conventional Forced Air Heat** 2 = Heat Pump 3 = Radiant Heat 5 = None (Cool Only) *Note: This option selects the basic system type your thermostat will control.*

Advanced setup options (ISU) (continued)

# ISU	ISU Name	ISU Options (factory default in bold)
205	Heating Equipment Type	*Conventional Forced Air Heat:* 1 = Standard Efficiency Gas Forced Air **2 = High Efficiency Gas Forced Air** 3 = Oil Forced Air 4 = Electric Forced Air 5 = Hot Water Fan Coil *Heat Pump:* **7 = Air to Air Heat Pump** 8 = Geothermal Heat Pump *Radiant Heat:* **9 = Hot Water Radiant Heat** 12 = Steam *Note: This option selects the equipment type your thermostat will control. Note: This feature is NOT displayed if feature 200 is set to Cool Only.*
218	Reversing Valve O/B	**0 = O (O/B in Cool)** 1 = B (O/B in Heat) *Note: This option is only displayed if the Heat Pump configured. Select whether reversing valve O/B should energize in cool or in heat.*
220	Cool Stages / Compressor Stages 200=Conv / 200=HP	0, **1** *Note: Select how many Cool or Compressor stages of your equipment the thermostat will control. Set value to 0 if you do not have Cool Stage/Compressor Stage.*
221	Heat Stages / Backup Heat Stages	Heat Stages: **1** Backup Heat Stages: 0, **1** *Note: Select how many Heat or Aux/E stages of your equipment the thermostat will control.*
230	Fan Control in Heat	1 = Equipment Controls Fan **2 = Thermostat Controls Fan** *Note: This ISU is only displayed if ISU 205 is set to Electric Forced Air or Fan Coil.*
300	System Changeover	**0 = Manual** 1 = Automatic *Note: Thermostat can automatically control both heating and cooling to maintain the desired indoor temperature. To be able to select "automatic" system mode on thermostat home screen, turn this feature ON. Turn OFF if you want to control heating or cooling manually.*
303	Auto Changeover Differential	**0 °F** to 5 °F **0.0 °C** to 2.5 °C *Note: Differential is NOT deadband. Differential means how far past the setpoint before switching to the mode selected. Deadband setup is not an option. An advanced algorithm fixes the deadband at 0 °F. This is more advanced than previous thermostats.*
340	Backup Heat Droop (TH4210U only)	**0 = Comfort** 2 = 2 °F 3 = 3 °F 4 = 4 °F 5 = 5 °F 6 = 6 °F 7 = 7 °F 8 = 8 °F 9 = 9 °F 10 = 10 °F 11 = 11 °F 12 = 12 °F 13 = 13 °F 14 = 14 °F 15 = 15 °F

Advanced setup options (ISU) (continued)

# ISU	ISU Name	ISU Options (factory default in bold)
350	Upstage Timer for Backup Heat (TH4210U only)	**0 = Off** 1 = 30 minutes 2 = 45 minutes 3 = 60 minutes 4 = 75 minutes 5 = 90 minutes 6 = 2 hours 7 = 3 hours 8 = 4 hours 10 = 5 hours
365	Compressor Cycle Rate (Stage 1)	1 - 6 Note: This ISU is only displayed when Cool /Compressor Stage is set to 1 stage. Cycle rate limits the maximum number of times the system can cycle in a 1 hour period measured at a 50% load. For example, when set to 3 CPH, at a 50% load, the most the system will cycle is 3 times per hour (10 minutes on, 10 minutes off). The system cycles less often when load conditions are less than or greater than a 50% load.
370	Heating Cycle Rate (Stage 1)	1 - 12 *Note: This ISU is only displayed when Heat Stage is set to 1 stage. Cycle rate limits the maximum number of times the system can cycle in a 1 hour period measured at a 50% load. For example, when set to 3 CPH, at a 50% load, the most the system will cycle is 3 times per hour (10 minutes on, 10 minutes off). The system cycles less often when load conditions are less than or greater than a 50% load. The recommended (default) cycle rate settings are below for each heating equipment type: Standard Efficiency Gas Forced Air = 5 CPH; High Efficiency Gas Forced Air = 3 CPH; Oil Forced Air = 5 CPH; Electric Forced Air = 9 CPH; Fan Coil = 3 CPH; Hot Water Radiant Heat = 3 CPH; Steam = 1 CPH.*
375	Heating Cycle Rate Auxiliary Heat (TH4210U only)	1 - 12
387	Compressor Protection	0 = Off 1 - **5** minutes *Note: The thermostat has a built in compressor protection (minimum off timer) that prevents the compressor from restarting too early after a shutdown. The minimum-off timer is activated after the compressor turns off. If there is a call during the minimum-off timer, the thermostat shows "Wait" in the display. This ISU is displayed if ISU 220 is set to at least 1 stage.*
425	Adaptive Intelligent Recovery	0 = No **1 = Yes** *Note: Adaptive Intelligent Recovery (AIR) is a comfort setting. Heating or cooling equipment will turn on earlier, ensuring the indoor temperature will match the setpoint at the scheduled time.*
430	Minimum Cool Setpoint	50 °F to 99 °F **(50 °F)** 10.0 °C to 37.0 °C **(10.0 °C)** *Note: The cool temperature cannot be set below this level.*
431	Maximum Heat Setpoint	40 °F to 90 °F **(90 °F)** 4.5 °C to 32.0 °C **(32 °C)** *Note: The heat temperature cannot be set above this level.*
435	Keypad Lockout	*Setting on original T4 models:* **0 = None** 1 = Partial 2 = Full *Setting on current T4 models:* **0 = Disabled** 1 = Enabled *Note: Due to customer feedback this feature was changed. On the original software you can lockout the thermostat from the ISU the same as you can from menu lockout. For later versions, this setting allows the contractor to enable or disable the lockout feature. When disabled, there is no lockout option under menu. Lockout code is 1234.*

Advanced setup options (ISU) (continued)

# ISU	ISU Name	ISU Options (factory default in bold)
702	Number of Air Filters	**0** - 2 *Note: This ISU refers to the number of air filters in the system.*
711	Air Filter 1 Replacement Reminder	**0 = Off** 1 = 10 Run Time Days 2 = 20 Run Time Days 3 = 30 Run Time Days 4 = 45 Run Time Days 5 = 60 Run Time Days 6 = 90 Run Time Days 7 = 120 Run Time Days 8 = 150 Run Time Days 9 = 30 Calendar Days 10 = 45 Calendar Days 11 = 60 Calendar Days 12 = 75 Calendar Days 13 = 3 Calendar Months 14 = 4 Calendar Months 15 = 5 Calendar Months 16 = 6 Calendar Months 17 = 9 Calendar Months 18 = 12 Calendar Months 19 = 15 Calendar Months *Note: Set a reminder for when to change your air filter. Choose either calendar or equipment run time-based reminder.*
712	Air Filter 2 Replacement Reminder	**0 = Off** 1 = 10 Run Time Days 2 = 20 Run Time Days 3 = 30 Run Time Days 4 = 45 Run Time Days 5 = 60 Run Time Days 6 = 90 Run Time Days 7 = 120 Run Time Days 8 = 150 Run Time Days 9 = 30 Calendar Days 10 = 45 Calendar Days 11 = 60 Calendar Days 12 = 75 Calendar Days 13 = 3 Calendar Months 14 = 4 Calendar Months 15 = 5 Calendar Months 16 = 6 Calendar Months 17 = 9 Calendar Months 18 = 12 Calendar Months 19 = 15 Calendar Months *Note: Set a reminder for when to change your air filter. Choose either calendar or equipment run time-based reminder.*
1400	Backlighting	**0 = On Demand** 1 = Continuous *Note: Common wire needed for continuous.*
1401	Backlight brightness	1 - **5** *Note: Only displayed if continuous backlight selected.*
1410	Clock Format	**12** / 24
1415	Daylight Saving Time	0 = Off **1 = On** *Note: Set to Off in areas that do not follow Daylight Saving Time.*
1420	Temperature Display Offset	-3 to 3F **(0)** -1.5 to 1.5C **(0)** *Note: 0 °F - No difference in displayed temperature and the actual room temperature. The thermostat can display up to 3 °F (1.5 C) lower or higher than the actual measured temperature.*

Installer system test

To perform a System Test:

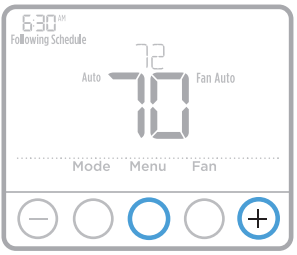
1 Press and hold **CENTER** and ⊕ buttons for approximately 3 seconds to enter advanced menu.

2 Use ⊕ to go to **TEST**. Press **Select** to enter System Test.

3 Use ⊕ to change between Heat, Cool, Fan, Em. Heat (TH4210U only), or Ver (thermostat version information). Press **Select**.

4 Press ⊕ to turn heat, cool, or fan on. Press ⊖ to turn them off.

5 Use the **Home** button to exit the System Test.



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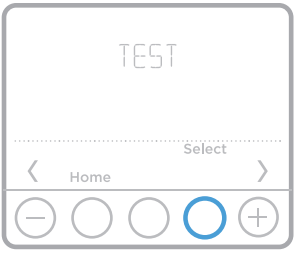

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System test		System status
Heat	0	Heat Off
	1	Heat On
	2	Heat On (TH4210U only)
Cool	0	Cool Off
	1	Cool On
Fan	0	Fan Off
	1	Fan On
Em. Heat (TH4210U only)	0	Em. Heat Off
	1	Em. Heat On

Specifications

Temperature Ranges
Heat: 40 °F to 90 °F (4.5 °C to 32.0 °C)
Cool: 50 °F to 99 °F (10.0 °C to 37.0 °C)

Operating Ambient Temperature
37 °F to 102 °F (2.8 °C to 38.9 °C)

Shipping Temperature
-20 °F to 120 °F (-28.9 °C to 48.9 °C)

Operating Relative Humidity
5% to 90% (non-condensing)

Physical Dimensions in inches (mm) (H x W x D)
4-1/16" H x 4-1/16" W x 1-5/32" D
103.5 mm H x 103.5 mm W x 29 mm D

Electrical Ratings

Terminal	Voltage (50/60Hz)	Running Current
W Heating	20-30 Vac	0.02-1.0 A
W2 (Aux) Heating (TH4210U only)	20-30 Vac	0.02-1.0 A
E Emergency Heat (TH4210U only)	20-30 Vac	0.02-0.5 A
Y Compressor Stage 1	20-30 Vac	0.02-1.0 A
G Fan	20-30 Vac	0.02-0.5 A
O/B Changeover	20-30 Vac	0.02-0.5 A

Troubleshooting

If you have difficulty with your thermostat, please try the following suggestions. Most problems can be corrected quickly and easily.

Display is blank	• Check circuit breaker and reset if necessary. • Make sure power switch for heating & cooling system is on. • Make sure furnace door is closed securely. • Make sure fresh AA alkaline batteries are correctly installed (see page 3).
Heating or cooling system does not respond	• Press **Mode** button to set system Heat (see page 7). Make sure the desired temperature is set higher than the inside temperature. • Press **Mode** button to set system Cool (see page 7). Make sure the desired temperature is set lower than the inside temperature. • Check circuit breaker and reset if necessary. • Make sure power switch for heating & cooling system is on. • Make sure furnace door is closed securely. • Wait 5 minutes for the system to respond.
Temperature settings do not change	Make sure heating and cooling temperatures are set to acceptable ranges: • Heat: 40 °F to 90 °F (4.5 °C to 32.0 °C) • Cool: 50 °F to 99 °F (10.0 °C to 37.0 °C)
“Cool On” or “Heat On” is flashing	• Compressor protection feature is engaged. Wait 5 minutes for the system to restart safely, without damage to the compressor.
Aux heat runs in cooling	• For heat pump systems, verify there is not a wire attached to W on UWP systems. See “Wiring heat pump systems” on page 4.
Cool runs with a call for heat	• For heat pump systems, verify there is not a wire attached to W on UWP systems. See “Wiring heat pump systems” on page 4.

CAUTION: ELECTRICAL HAZARD
Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

CAUTION: EQUIPMENT DAMAGE HAZARD
Compressor protection is bypassed during testing. To prevent equipment damage, avoid cycling the compressor quickly.

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

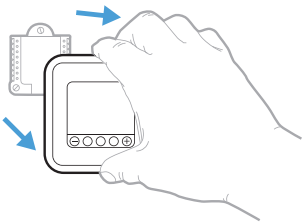
CAUTION: ELECTRONIC WASTE NOTICE
The product and batteries should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent negative consequences for the environment and human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

FCC statement available at https://customer.resideo.com/en-US/support/residential/codes-and-standards/FCC15105/Pages/default.aspx

Customer assistance

For assistance with this product, please visit **customer.resideo.com**.

Or call Customer Care toll-free at **1-800-468-1502.**



Pull to remove the thermostat from the UWP.

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