

# **Honeywell Home T1 Pro Non-Programmable Thermostat Installation Guide**

Home » Honeywell Home T1 Pro Non-Programmable Thermostat Installation Guide 🖺



# Honeywell Home T1 Pro Non-Programmable Thermostat Installation Guide



#### **Contents**

- 1 Package Includes
- **2 Optional Cover Plate installation**
- 3 UWP Mounting System installation
- **4 Power options**
- **5 Setting Slider Tabs**
- 6 UWP Wiring terminal designations
- 7 Wiring conventional systems: forced air and hydronics
- 8 Wiring heat pump systems
- 9 Thermostat mounting
- 10 System operation settings
- 11 Fan operation settings
- 12 Installer setup (ISU)
- 13 Installer setup options (ISU)
- 14 Specifications
- 15 Customer assistance
- 16 Documents / Resources
  - 16.1 References
- 17 Related Posts

### **Package Includes**

- T1 Pro Thermostat
- UWP Mounting System
- Decorative Cover Plate
- · Screws and Anchors
- 2 AA Batteries
- Thermostat Literature

### **Optional Cover Plate installation**

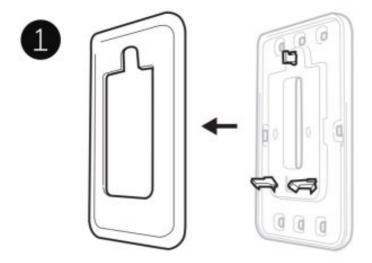
NOTE: If Optional Cover Plate is not required, see "UWP Mounting System installation".

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:

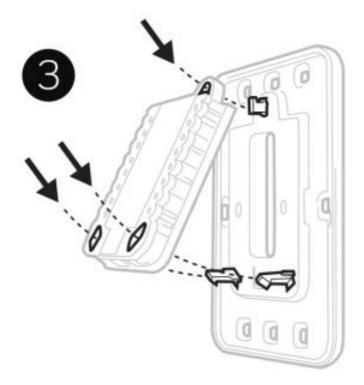
1. Separate the Cover Plate from Mounting Plate.



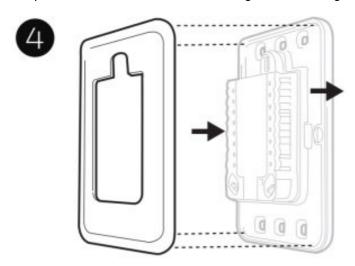
2. Mount the Mounting Plate on to the wall using any of the 8 screw holes. Insert and tighten mounting screws supplied with Cover Plate Kit. Do not overtighten. See Figure 2. Make sure the Mounting Plate is level.



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.

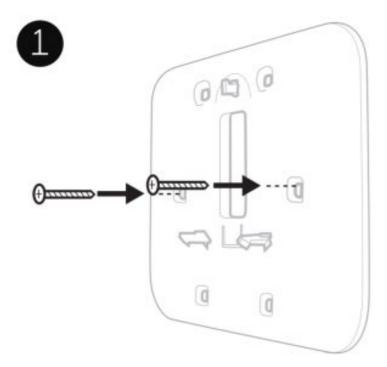


4. Snap the Cover Plate onto the Mounting Plate. See Figure 4.



# 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



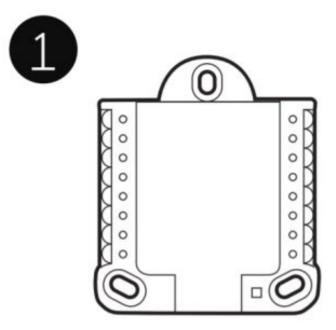
Make sure the Cover Plate is level. Attach the UWP by hanging it on the top hook of the Cover Plate and then snapping the bottom of the UWP in place. See Figure 2.



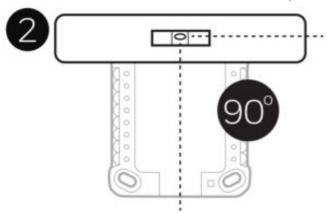
- 2. If there are no existing wall anchors:
  - 1. Position the Cover Plate on wall. Level and mark hole positions.
  - 2. Drill holes at marked positions, and then lightly tap supplied wall anchors into the wall using a hammer.
    - If your box contains red anchors, drill 7/32" (5.6 mm) holes.
    - 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.

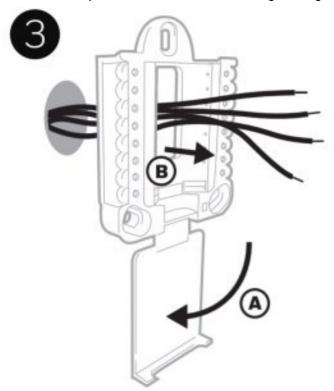


2. Position the UWP on wall. Level and mark hole positions. See Figure 2.

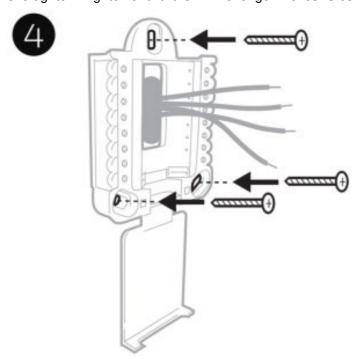


Drill holes at marked positions, and then lightly tap supplied wall anchors into the wall using a hammer.

- 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.

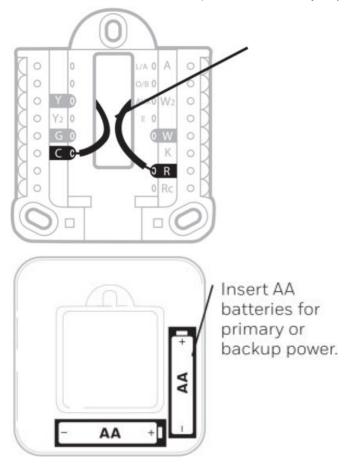


4. Place the UWP over the wall anchors. Insert and tighten mounting screws supplied with the UWP. Do not overtighten. Tighten until the UWP no longer moves. Close the door. See Figure 4.



### **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.



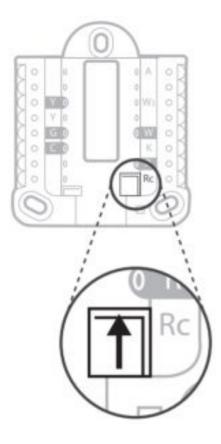
# **Setting Slider Tabs**

#### 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 T1 Pro models.

# **UWP Mounting System**

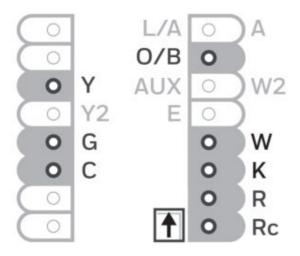


R/Rc Slider Tab (built-in jumper)

### **UWP Wiring terminal designations**

- Y Compressor contactor (stage 1)
- Y2 Not used for T1 thermostat.
- G Fan Relay
- C 24VAC common. For 2 transformer systems, use common wire from cooling transformer.
- L/A A Not used for T1 thermostat
- O/B Changeover Valve (TH1110D only)
- AUX -W2 Not used for T1 thermostat.
- E Not used for T1 thermostat.
- W Heat relay (stage 1)
- K Not used for T1 thermostat.

- R 24VAC power from heating transformer\*
- Rc 24VAC power from cooling transformer\*
- \* Terminal can be jumped using Slider Tab. See "Setting Slider Tabs" above.



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

### Wiring conventional systems: forced air and hydronics

Shaded areas below apply only to TH1110D.

### 1H/1C System (1 transformer)

- R Power [1]
- Rc [R+Rc joined by Slider Tab] [2]
- Y Compressor contactor
- C 24VAC common [3]
- W Heat relay
- G Fan relay

### 1H/1C System (2 transformers)

- **R** Power (heating transformer) [1]
- Rc Power (cooling transformer) [1]
- Y Compressor contactor
- C 24VAC common [3, 4]
- W Heat relay
- G Fan relay

### **Heat-only System**

- R Power [1]
- Rc [R+Rc joined by Slider Tab] [2]

- C 24VAC common [3]
- W Heat relay

### **Heat-only System with Fan**

- **R** Power [1]
- Rc [R+Rc joined by Slider Tab] [2]
- C 24VAC common [3]
- W Heat relay
- G Fan relay

### Heat-only System (Series 20) [5]

- R Series 20 valve terminal "R" [1]
- Rc [R+Rc joined by Slider Tab] [2]
- Y Series 20 valve terminal "W"
- C 24VAC common [3]
- W Series 20 valve terminal "B"

### **Cool-only System**

- **R** Power [1]
- Rc [R+Rc joined by Slider Tab] [2]
- Y Compressor contactor
- C 24VAC common [3]
- G Fan relay

### Heat-only System (power open zone valve) [5]

- R Power [1]
- Rc [R+Rc joined by Slider Tab] [2]
- W Valve
- C 24VAC common [3]

### Wiring heat pump systems

### 1H/1C Heat Pump System

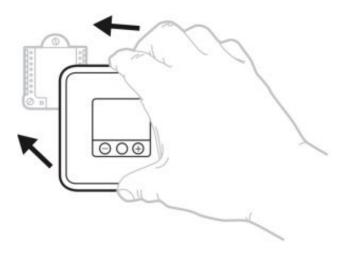
- **R** Power [1]
- Rc [R+Rc joined by Slider Tab] [2]
- Y Compressor contactor
- C 24VAC common [3]
- O/B Changeover valve [7]
- G Fan relay

#### **NOTES**

Wire specifications: Use 18- to 22-gauge thermostat wire. Shielded cable is not required.

- 1. Power supply. Provide disconnect means and overload protection as required.
- 2. Move R-Slider Tab on UWP to the R setting. For more information, see "Setting Slider Tabs" on page 3
- 3. Optional 24VAC common connection.
- 4. Common connection must come from cooling transformer.
- 5. In ISU set Heat system type to Radiant Heat. Set number of cool stages to 0.
- 6. In Installer Setup, set changeover valve to O (for cool changeover) or B (for heat changeover).

### 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.

### System operation settings



- 1. Press the Menu to cause the Mode and Fan menus to appear.
- 2. Press **Mode** ( ) to cycle through the available modes.

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

- Heat: Thermostat controls only the heating system.
- Cool: Thermostat controls only the cooling system.
- Off: Heating and cooling system is off. Fan will still operate if fan is set to On.

# Fan operation settings



- 1. Press Menu to cause the Mode and Fan menus to appear.
- 2. Press Fan ( + ) to cycle through Fan modes.

**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.

# Installer setup (ISU)

- 1. Press and hold Menu (center) for approximately 3 seconds to enter menu.
- 2. Press Edit ( ) to change values within a setup option.
- 3. Press Next ( + ) to advance to the next setup option.
- 4. Press Done to Save and return to the main menu screen.

**NOTE:** To keep the factory default settings, press to advance through the setup options. Once you pass the last option, the thermostat will automatically save and return you to the main menu.

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

# Installer setup options (ISU)

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

# ISU	ISU Name	ISU Options (factory default in bold)
125	Temperature Indication Scale	0 = Fahrenheit 1 = Celsius
200	Heating System Type	1 = Conventional Forced Air Heat 2 = Heat Pump (TH1110D only) 3 = Radiant Heat 5 = None (Cool Only)  Note: This option selects the basic system type your thermostat will control.

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 c ontrol.  Note: This feature is NOT displayed if feature 200 is set to Cool O nly.
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. Se lect whether reversing valve O/B should energize in cool or in heat.
220	Cool Stages / Compressor Stag es 200=Conv / 200=HP	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. This ISU will not be shown on TH1010D m odel.

221	Heat Stages	0, 1  Note: Select how many Heat stages of your equipment the thermo stat will control. This ISU will not be shown on TH1010D model.
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.
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. This IS U will not be shown on TH1010D model unless ISU 200 is set to 5 (cool only).
431	Maximum Heat Setpoint	32 °F to 90 °F (90 °F) 0 °C to 32.0 °C (32 °C)  Note: The heat temperature cannot be set above this level. This IS U will not be shown on TH1010D model unless ISU 200 is not set t o 5 (cool only).
1400	Backlighting	<ul> <li>0 = On Demand</li> <li>1 = Continuous</li> <li>Note: Common wire needed for continuous. This ISU will not be sh own if the device is powered only by battery.</li> </ul>

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) lo wer or higher than the actual measured temperature.
		room temperature. The thermostat can display up to 3 °F (1.5 C) lo wer or higher than the actual measured temperature.

# **Specifications**

• Temperature Ranges

**Heat:** 32 °F to 90 °F (0 °C to 32.0 °C) **Cool:** 50 °F to 99 °F (10.0 °C to 37.0 °C)

• Operating Ambient Temperature

32 °F to 102 °F (0 °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
<b>W</b> Heating	20-30 Vac	0.02-1.0 A
(Powerpile)	750 mV DC	100 mA DC
Y Compressor Stage 1	20-30 Vac	0.02-1.0 A
<b>G</b> Fan	20-30 Vac	0.02-0.5 A
O/B Changeover (TH1110D only)	20-30 Vac	0.02-0.5 A

#### **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**

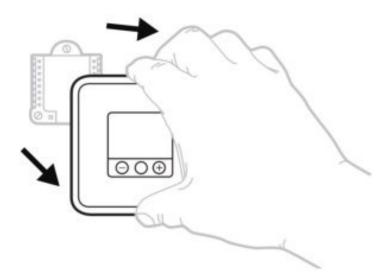
The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

#### FCC statement 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 <a href="https://honeywellhome.com/support">honeywellhome.com/support</a>



Pull to remove the thermostat from the UWP.



#### www.resideo.com

Resideo Technologies, Inc.
1985 Douglas Drive North, Golden Valley, MN 55422
<a href="https://www.honeywellhome.com/support">https://www.honeywellhome.com/support</a>
33-00189EFS—09 M.S. Rev. 09-20 | Printed in United States

© 2020 Resideo Technologies, Inc. All rights reserved.

The Honeywell Home trademark is used under license from Honeywell International, Inc. This product is manufactured by Resideo Technologies, Inc. and its affiliates.

### **Documents / Resources**



Honeywell Home T1 Pro Non-Programmable Thermostat [pdf] Installation Guide T1 Pro, Non-Programmable Thermostat, TH1110D2009, TH1010D2000

#### References

- H Product Support and Resources | Honeywell Home
- Smart Home Products and Systems | Resideo
- FCC Rules Part 15: Residential Codes & Standards | Resideo

Manuals+,