



Honeywell PRO3000 Series Non-Programmable Digital Thermostat Instruction Manual

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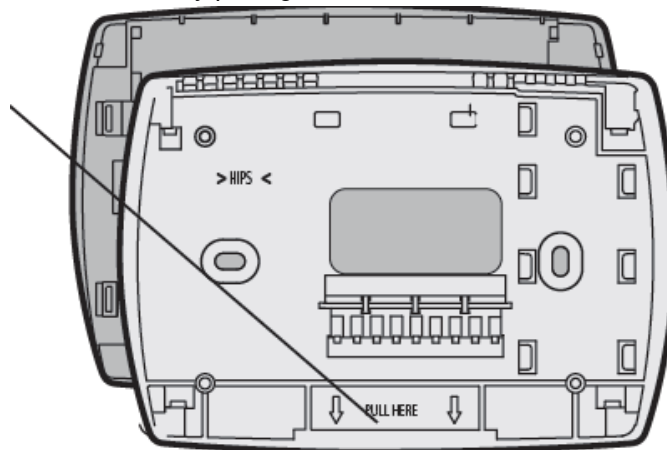
Honeywell

Honeywell PRO3000 Series Non-Programmable Digital Thermostat

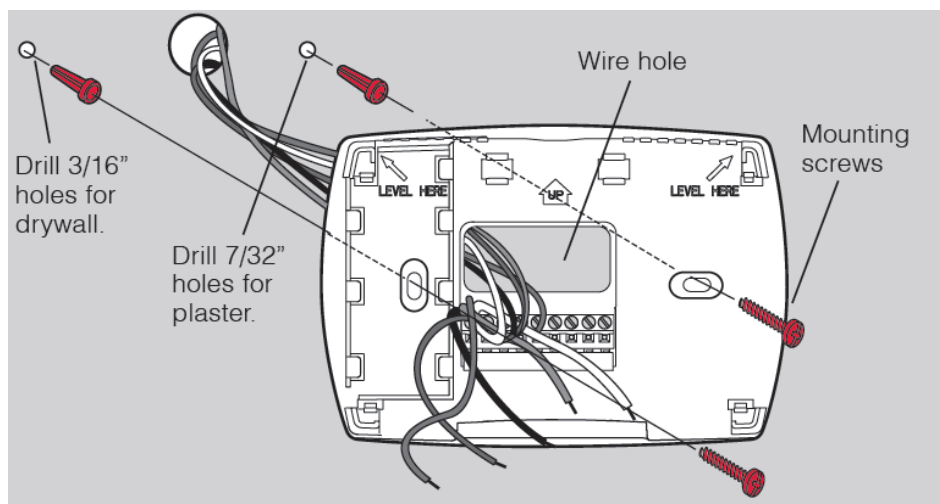


Wallplate installation

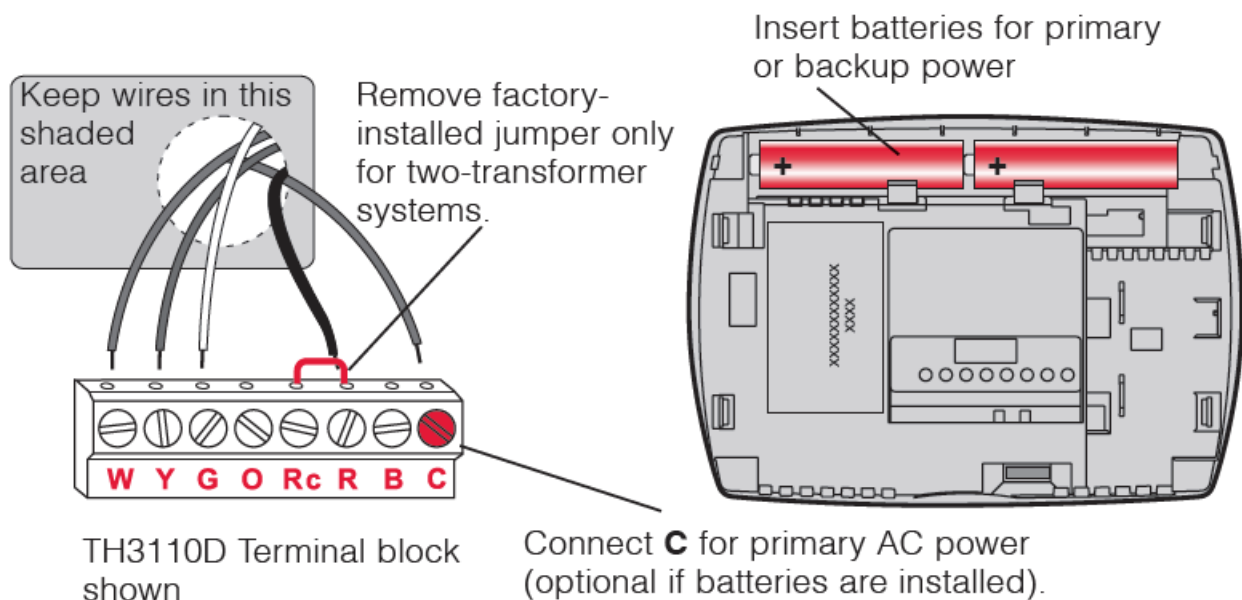
Remove the wall plate from the thermostat by pulling from the bottom, then follow directions below for mounting.



1. Pull wires through wire hole.
2. Position wall plate on wall, level and mark hole positions with pencil.
3. Drill holes at marked positions as shown below, then tap in supplied wall anchors.
4. Place wall plate over anchors, insert and tighten mounting screws.



Power options



Wiring terminal designations

TH3110D

- C 24 Vac common. For 2 transformer systems, use common wire from cooling transformer.
- B Changeover valve energized in heating
- R 24 Vac power from heating transformer
- Rc 24 Vac power from cooling transformer
- O Changeover valve energized in cooling
- G Fan relay
- Y Compressor contactor
- W Heat relay



TH3210D

- C 24 Vac common
- B Changeover valve energized in heating
- R 24 Vac power
- L Sends output when set to Em.
- O Heat Changeover valve energized in cooling
- G Fan relay
- Y Compressor contactor
- Aux Auxiliary heat relay
- E Emergency heat relay



2H/1C Heat Pump System TH3210D

- C 24 Vac common [3]
- B Changeover valve energized in heating [5]
- R Power [1]
- L Sends output when set to Em. Heat [8]
- O Changeover valve energized in cooling [5]
- G Fan relay
- Y Compressor contactor
- Aux Auxiliary heat relay
- E Emergency heat relay



1H/1C System TH3110D (1 transformer)

- C 24 Vac common [3]
- R [R+Rc joined by jumper]
- Rc Power [1]
- G Fan relay
- Y Compressor contactor
- W Heat relay



1H/1C System TH3110D (2 transformers)

- C 24 Vac common [3, 4]
- R Power (heating transformer) [1, 2]
- Rc Power (cooling transformer) [1, 2]
- G Fan relay
- Y Compressor contactor
- W Heat relay



1H/1C Heat Pump System TH3110D [7]

- C 24 Vac common [3]
- B Changeover valve energized in heating [5]
- R [R+Rc joined by jumper]
- Rc Power [1]

- O Changeover valve energized in cooling [5]
- G Fan relay
- Y Compressor contactor [6]
- W [W+Y joined by jumper]



Heat Only System TH3110D

- C 24 Vac common [3]
- R [R+Rc joined by jumper]
- Rc Power [1]
- W Heat relay



Heat Only System with Fan TH3110D

- C 24 Vac common [3]
- R [R+Rc joined by jumper]
- Rc Power [1]
- G Fan relay
- W Heat relay



Cool Only System TH3110D

- C 24 Vac common [3]
- R [R+Rc joined by jumper]
- Rc Power [1]
- G Fan relay
- Y Compressor contactor



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. Remove jumper for 2-transformer systems.

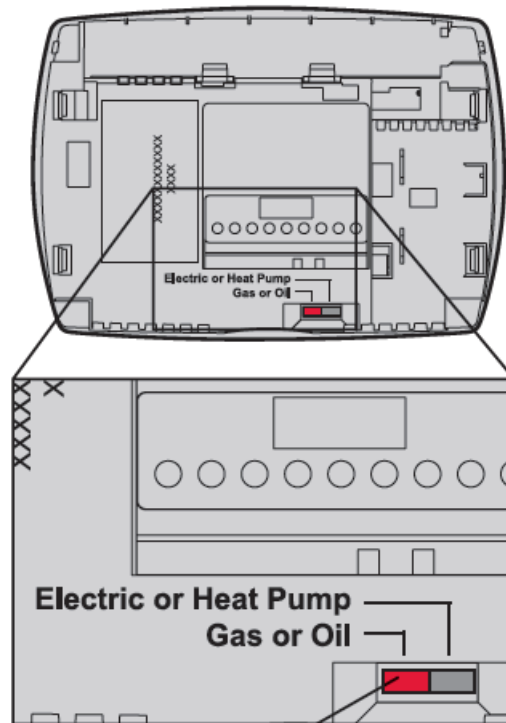
3. Optional 24 Vac common connection.
4. Common connection must come from cooling transformer.
5. Use either O or B terminals for changeover valve.
6. Use a small piece of wire (not supplied) to connect W and Y terminals.
7. Set fan operation switch to Heat Pump (see page 5) and configure system type for heat pump (see page 6).
8. L terminal sends a continuous output when thermostat is set to Em. Heat. Connect to Honeywell zoning panels to switch the panel to Emergency Heat.
9. Install field jumper between Aux and E if there is no emergency heat relay.

Fan operation settings

(TH3110D only)

Gas or Oil: For gas or oil heating systems, leave the fan operation switch in this factory-set position. (This setting is for systems that control the fan in a call for heat.)

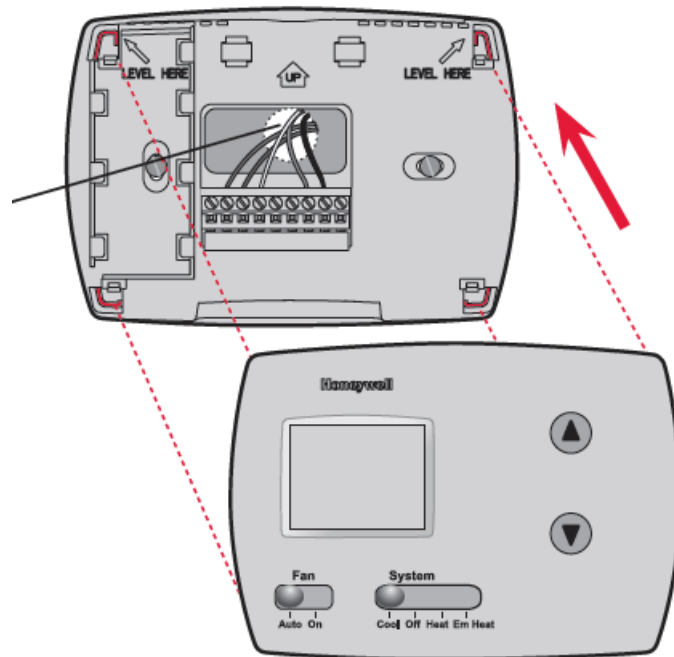
Electric or Heat Pump: Change the switch to this setting for heat pump or electric heat systems. (This setting is for systems that allow the thermostat to control the fan in a call for heat, if a fan wire is connected to the G terminal.)



Set fan operation switch.

Thermostat mounting

1. Align the 4 tabs on the wall plate with corresponding slots on the back of the thermostat.
2. Push gently until the thermostat snaps in place.
3. Push excess wire back into the wall opening.
4. Plug wall opening with non-flammable insulation.

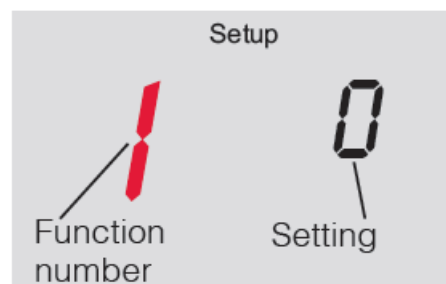
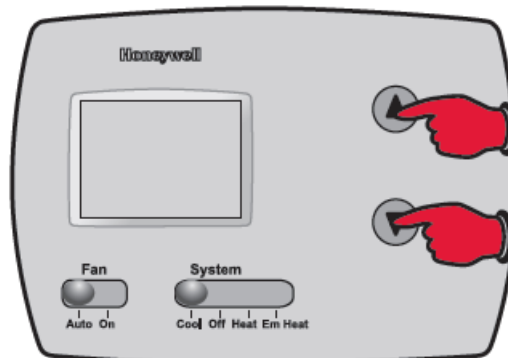


Installer Setup

Follow the procedure below to configure the thermostat to match the installed heating/cooling system, and customize feature operation as desired.

To begin, press and hold the s and t buttons until the display changes.

1. Press t to change settings.
2. Press s to advance to next function.
3. Press and hold ts to exit and save settings.



Setup function

1 System type
TH3110D only

5 Heating cycle rate
(CPH: cycles/hour)
TH3110D only

6 Auxiliary heat cycle rate (CPH)
TH3210D only

8 Emergency heat cycle rate (CPH)
TH3210D only

9 Compressor cycle rate (CPH)

14 Temperature display

15 Compressor protection

Settings & options (factory settings in bold)

0 Gas, oil or electric heat with air conditioning

1 Heat pump (5 minute compressor off time in heating and cooling)

5 For gas or oil furnaces of less than 90% efficiency

1 For steam or gravity systems

3 For hot water systems & furnaces of over 90% efficiency

9 For electric furnaces

[Other cycle rate options: 2, 4, 6, 7, 8, 10, 11 or 12 CPH]

5 For gas or oil furnaces of less than 90% efficiency

1 For steam or gravity systems

3 For hot water systems & furnaces of over 90% efficiency

9 For electric furnaces

[Other cycle rate options: 2, 4, 6, 7, 8, 10, 11 or 12 CPH]

9 For electric emergency heat

1 For steam or gravity systems

3 For hot water systems & furnaces of over 90% efficiency

5 For gas or oil furnaces of less than 90% efficiency

[Other cycle rate options: 2, 4, 6, 7, 8, 10, 11 or 12 CPH]

3 Recommended for most compressors

[Other cycle rate options: 1, 2, 4, 5, or 6 CPH]

0 Fahrenheit

1 Celsius

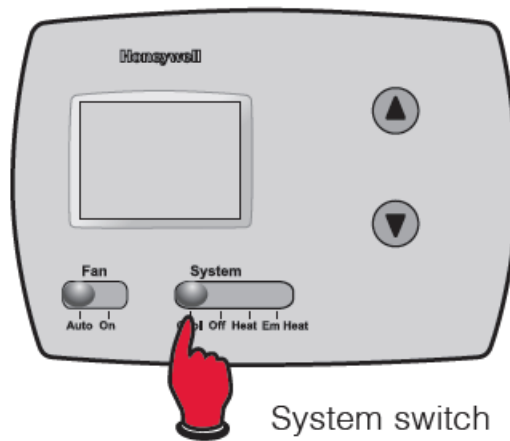
5 Five-minute compressor off time

[Other options: 0, 1, 2, 3 or 4-minute off time]

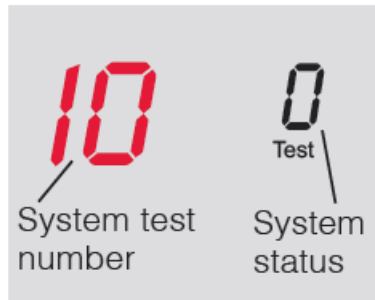
Compressor Protection (Setup Function 15): Forces the compressor to wait a few minutes before restarting, to prevent damage. During the wait time, the message Cool On or Heat On (heat pumps only) will flash on the display.

Installer system test

1. Set SYSTEM switch to Heat.
2. Press t to turn on and check systems (see table, below).
3. Press t until systems turn off.
4. Set SYSTEM switch to Em Heat and repeat steps 2-3 above (TH3210D only).
5. Set SYSTEM switch to Cool and repeat steps 2-3 above.
6. Press and hold ts to terminate test at any time.



System switch



System test

- 10 Heating system**
- 20 Emergency heat**
- 30 Cooling system**
- 70 Thermostat information**
(for reference only)

System status

- 0 Heat and fan turn off.
- 1 Heat turns on.
- 2 Auxiliary heat turns on (TH3210D only).
- 0 Heat and fan turn off.
- 1 Heat and fan turn on.
- 2 Auxiliary heat turns on. } (TH3210D only)
- 0 Compressor and fan turn off.
- 1 Compressor and fan turn on.
- 71 Software revision number (major revisions)
- 72 Software revision number (minor revisions)
- 73 Configuration identification code (major)
- 74 Configuration identification code (minor)
- 75 Production configuration date code (week)
- 76 Production configuration date code (year)

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 at heating & cooling system is on.
- Make sure furnace door is closed securely.
- Make sure fresh AA alkaline batteries are correctly installed (see page 2).

Heating or cooling system does not respond

- Set system switch to Heat. Make sure the temperature is set higher than the Inside temperature.
- Set system switch to Cool. Make sure the temperature is set lower than the Inside temperature.
- 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° to 90°F (4.5° to 32°C).
 - Cool: 50° to 99°F (10° to 37°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.

“Heat On” is not displayed

- Set the System switch to Heat, and set the temperature level above the current room temperature.

“Cool On” is not displayed

- Set the System switch to Cool, and set the temperature level below the current room temperature.

Specifications

- **Temperature Ranges**
 - Heat: 40° to 90°F (4.5° to 32°C)
 - Cool: 50° to 99°F (10° to 37°C)
- **Operating Ambient Temperature**
 - 32° to 120°F (0° to 48.9°C)
- **Shipping Temperature**
 - -20° to 120°F (-28.9° to 48.9°C)
- **Operating Relative Humidity**
 - 5% to 90% (non-condensing)
- **Physical Dimensions**
 - 3-13/16” H x 5-3/8” W x 1-1/4” D
 - 97 mm H x 137 mm W x 32 mm D

Electrical Ratings

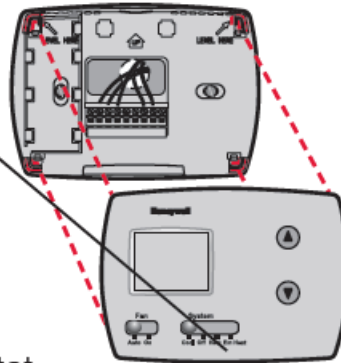
System	Voltage (50/60Hz)	Running Current
• Heat (1st stage)	20-30 Vac	0.02-1.0 A
• (Power pile)	750 mV DC	100 mA DC
• Emergency heat	20-30 Vac	0.02-1.0 A

- Auxiliary heat 20-30 Vac 0.02-1.0 A
- Cooling 20-30 Vac 0.02-1.0 A

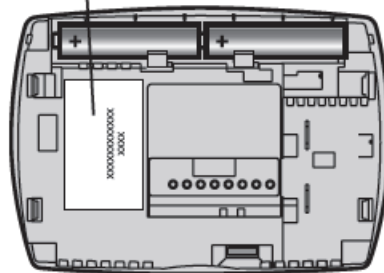
Need Help?

For assistance with this product, please visit customer.honeywell.com.
Or call Honeywell Customer Care toll-free at 1-800-468-1502.

Pull at bottom
to remove
thermostat
from
wallplate.



Turn thermostat
over to find model
number and date
code.



CAUTION:

EQUIPMENT DAMAGE HAZARD

Compressor protection is bypassed during testing. To prevent equipment damage, avoid cycling the compressor quickly.

CAUTION:

ELECTRICAL HAZARD

Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

CAUTION:

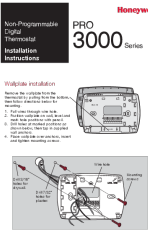
MERCURY NOTICE

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.

Automation and Control Solutions

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Documents / Resources

 <p>Non-Programmable Digital Thermostat Installation Instructions</p> <p>PRO 3000 Series</p> <p>Wiring Installation</p> <p>Remove the cap from the thermostat and locate the terminals. The terminals are labeled as follows:</p> <ol style="list-style-type: none"> 1. Common (C) 2. Heating (H) 3. Cooling (C) 4. Fan (F) 5. Alarm (A) 6. Relay (R) 7. Transformer (T) 8. Ground (G) <p>Connect the wires to the terminals as follows:</p> <ol style="list-style-type: none"> 1. Connect the Common (C) wire to the Common (C) terminal. 2. Connect the Heating (H) wire to the Heating (H) terminal. 3. Connect the Cooling (C) wire to the Cooling (C) terminal. 4. Connect the Fan (F) wire to the Fan (F) terminal. 5. Connect the Alarm (A) wire to the Alarm (A) terminal. 6. Connect the Relay (R) wire to the Relay (R) terminal. 7. Connect the Transformer (T) wire to the Transformer (T) terminal. 8. Connect the Ground (G) wire to the Ground (G) terminal. <p>After wiring, replace the cap and test the thermostat.</p> <p>firealarmresources.com</p>	<p>Honeywell PRO3000 Series Non-Programmable Digital Thermostat [pdf] Instruction Manual PRO3000 Series Non-Programmable Digital Thermostat, PRO3000 Series, Non-Programmable Digital Thermostat, Digital Thermostat, Thermostat</p>
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References

- [!\[\]\(13b6bdd0ca077c333d50231f1443cb1d_img.jpg\) Fire Alarm Resources | Download fire alarm documents](#)
- [!\[\]\(5dbedd4e1e8871e3a0e67053ad2f9701_img.jpg\) Honeywell - The Future Is What We Make It](#)