Honeywell Home



9000 Series Smart Colour Touchscreen Thermostat

Installation Guide





- HOME: Touch to display Home screen.
- FAN: Select fan mode.

SYSTEM: Select system mode (heat/cool).

MENU: Touch to display options. Start here to set a program schedule.

CURRENT SCHEDULE: Change temperature setting and select temporary or permanent hold.

INDOOR CONDITIONS: Shows indoor temperature and humidity.

- CURRENT DATE AND TIME.
- **CURRENT STATUS:** Shows system mode (heat/cool).

OUTDOOR CONDITIONS: Shows outdoor temperature and humidity (post registration).

Wallplate Installation

- 1. Separate wallplate from thermostat.
- 2. Mount wallplate as shown below.



Drill 3/16" holes for drywall. Drill 7/32" holes for plaster.



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



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.

Wiring



Terminal Designations

С	Common wire from secondary side of cooling transformer (in case of two transformers)	
К	Optional C-wire adapter.	
Rc	Cooling power. Connect to secondary side of cooling system transformer.	
R	Heating power. Connect to secondary side of heating system transformer.	
W-0/B	1st stage heat relay. Or changeover valve for heat pumps.	
Y	1st stage compressor contactor.	
G	Fan relay.	
W2-Aux/E	2nd stage heat relay. Or heat pump auxiliary/Emergency heat relay.	
Y2	2nd stage compressor contactor.	
L	Heat pump system monitor.	
	Jumper Loop - a plug with a wire loop used to connect the R to the RC terminals, Leave jumper loop in place in single transformer systems. Remove (unplug) jumper loop in the two transformer systems.	

Wiring

Wiring Guide - Conventional Systems

Wiring Instructions

- 1. This thermostat requires a 24VAC common wire to power-up. The K terminal is available for C-wire adapter (THP9045A1098).
- 2. Straighten the wire. Using a pen's tip, hold down the terminal and gently slide the wire into the terminal hole.

Note: Terminal hole will only accept one wire.

1H/1C System	
(1 transformer)	



Rc Power [1]

R	[R+Rc joined by jumper loop]
Υ	Compressor contactor
С	24VAC common
W	Heat relay
G	Fan relay

Heat-only System



Rc	Power [1]
R	[R+Rc joined by jumper loop]
С	24VAC common
W	Heat relay

1H/1C System (2transformers)



Rc	Power (cooling transformer) [1, 2]	
R	Power (heating transformer) [1, 2]	
Y	Compressor contactor	
С	24VAC common [3]	
W	Heat relay	
G	Fan relay	
	,	
Heat	Heat-only System	

with Fan



Rc Power [1]

R	[R+Rc joined by jumper loop]
С	24VAC common

- W Heat relay
- G Fan relay





- Rc Power [1]
- [R+Rc joined by jumper loop] R
- γ Compressor contactor
- С 24VAC common
- G Fan relay

2H/2C System





Rc	Power [1]
R	[R+Rc joined by jumper loop]
Υ	Compressor contactor (stage 1)
С	24VAC common
W	Heat relay (stage 1)
G	Fan relay
W2	Heat relay (stage 2)
Y2	Compressor contactor (stage 2)

2H/2C System (2 transformers)



Rc Power (cooling transformer) [1, 2] Power (heating transformer) [1, 2] R γ Compressor contactor (stage 1) С 24VAC common [3] W Heat relay (stage 1) G Fan relay W2 Heat relay (stage 2) Y2 Compressor contactor (stage 2)

See [notes] below



Jumper Loop

NOTES

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

- [1] For power supply, provide a means of disconnection and overload protection.
- [2] Remove jumper loop for 2-transformer systems.
- [3] Common connection must come from cooling transformer.

Wiring

Wiring Guide - Heat Pump Systems

Wiring Instructions

- 1. This thermostat requires a 24VAC common wire to power-up. The K terminal is available for C-wire adapter (THP9045A1098).
- 2. Straighten the wire. Using a pen's tip, hold down the terminal and gently slide the wire into the terminal hole.

Note: Terminal hole will only accept one wire.

1H/1C Heat Pump System



Rc	Power [1]
R	[R+Rc joined by jumper loop]
γ	Compressor contactor
С	24VAC common
0/B	Changeover valve [7]
G	Fan relay

2H/1C Heat Pump System



Rc	Power [1]
R	[R+Rc joined by jumper loop]
Υ	Compressor contactor
С	24VAC common
0/B	Changeover valve [2]
G	Fan relay
Aux/E	Auxiliary/Emergency heat relay
L	Heat pump system monitor

3H/2C Heat Pump System	
Rc	Power [1]
R	[R+Rc joined by jumper loop]
Y	Compressor contactor (stage 1)
С	24VAC common
0/B	Changeover valve [2]
G	Fan relay
Aux/E	Auxiliary/Emergency heat relay
Y2	Compressor contactor (stage 2)
L	Heat pump system monitor

See [notes] below



Jumper Loop

NOTES

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

- [1] For power supply, provide a means of disconnection and overload protection.
- [2] In Setup, set changeover valve to O or B.

Initial Setup

Upon initial power up, or after being reset to factory defaults, the initial thermostat options (language, location, and system type) must be set to define the heating/cooling system. Other options can be customised later.

Follow prompts on the screen to select appropriate options.



1. Select the language of your choice, then touch **Next**.



2. Select Home or Business installation, then touch **Next**.

Your thermostat locat	ion
Location Name (press t	o edit)
THERMOSTAT	
Back Help	Next

Touch **Next**, or name the thermostat location - touch **THERMOSTAT** and follow the instructions.





3. Select what the thermostat will control and touch **Next**.

Note: Touch the orange Help button on the screen for more information.

- Select the system type and touch Next. (The system type determines other selections for completing the initial setup.)
- 5. Touch **Next** after making selections on each screen.
- Touch Done on the last screen. The thermostat displays an option to connect to the Wi-Fi network.

System Setup

On the home screen, touch **Menu** > **System Setup** to modify the initial system setup.



System Setup Options (MENU > System Setup)

Screen Title	Settings and Options
Language	English/Français/Español.
Thermostat installed in	Home/Business (Thermostat is used in a residential (default) or commercial setting).
Your thermostat location	Touch THERMOSTAT button to display the screen where you can enter a custom name using a keypad. If you have only one thermostat, you can leave the name as THERMOSTAT . For business installations you can check a box to display the thermostat name on the home screen.
Your thermostat controls	Select Heating or Cooling or both (default).
Your system type	Select Forced Air (default), Heat Pump, or Hot Water or Steam. Each option offers different choices on the following screens.
Your forced air heating system type	Select how your forced air system is powered: Gas/Oil (default) or Electric.
Efficiency of your heating system	Select Standard Efficiency Forced Air (default) or High Efficiency Forced Air.
Your heating system type	If you selected Hot Water or Steam on "Your system type," select the specific heating system here.
Number of cooling stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires are connected: 'Y' wire only (1 stage) or 'Y' and 'Y2'.
Number of heating stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires are connected: 'W' wire only (1 stage) or 'W' and 'W2'.
Your fan control	Select whether your thermostat (default) or heating system controls the fan.
Type of changeover valve	If you selected 'Heat Pump' on "Your system type," select whether it uses a cooling changeover valve (default) or heating changeover valve.
Number of heat pump compressor stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires are connected: 'Y' wire only (1 stage) or 'Y' and 'Y2'.
Your backup heat	No or Yes (default)

Connecting to the Wi-Fi Network

After the initial setup, walk the homeowner through connecting to a Wi-Fi network. Or, refer the homeowner to the User's Guide, so that the homeowner can connect the thermostat to the Wi-Fi network later.

1. Connect the Wi-Fi network.

Touch **Yes** to connect the thermostat to the Wi-Fi network. The screen displays the message "Searching for wireless networks. Please wait..." after which it displays a list of all Wi-Fi networks it can find.

Note: If you cannot complete this step now, touch I'll do it later. The thermostat will display the home screen. Complete this process by selecting MENU > Wi-Fi Setup. Continue with Step 2.

- 2. Select the network.
 - 2a Touch the name of the homeowner's network. The thermostat displays a password page.

Note: If the home network is not shown on the list, touch **Rescan**.

- 2b Using the keyboard enter the password for the home network.
- 2c Touch **Done**. The thermostat displays "Connecting to your network. Please wait..." then shows a "Connection Successful" screen.
- 2d Touch **Next** to display the registration information screen.
- 2e Have the homeowner register the thermostat by going to http://www. mytotalconnectcomfort.com Note the Thermostat's MAC and CRC; they'll be needed during registration. Or, refer the homeowner to the User's Guide.

Note: The Register Online screen remains active until you complete registration and/or touch **Done**.

 For remote access, the homeowner or end-user must register at mytotalconnectcomfort.com



Setting Advanced Preferences

- 1. Touch **MENU**. The thermostat displays a list of options.
- 2. Select **Preferences** > **Advanced Preferences**. The thermostat displays the first screen of options that you can change.
- 3. On each screen, make changes as needed, then touch **Next** to display new options. Repeat this step until you have made all changes.
- 4. After making all necessary changes, touch **Done** to save and exit.



Screen Title	Settings and Options	
Scheduling Options	Select Non-programmable or Programmable. Programmable uses default or customised programming to automatically raise and lower temperature settings for different times of the day.	
Temperature Indication Scale	Select Fahrenheit or Celsius.	
Heating and Cooling System Changeover	Select Manual or Automatic.	
Number of Schedule Periods	Select 2 Periods Per Day or 4 Periods Per Day.	
Pre-occupancy Purge Duration *	Select how long the fan will run before each occupied period: Off, 1, 2, or 3 hours.	
Type of Override *	Select Standard to maintain the programmed periods or Initiate Occupancy to use energy-saving settings until a user presses Start Occupancy.	
Override Duration *	Select how long to maintain temperature during an override: 1-10 hours or No Limit.	
Early Recovery for Heating *	Select No to begin recovery on schedule or Yes to ramp up temperature early.	
Early Recovery for Cooling *	Select No to begin recovery on schedule or Yes to ramp down temperature early.	
Temperature Limits	Select the Minimum Cool and Maximum Heat Limit.	
Keypad Lockout	Select Unlocked/Partially Locked/Locked.	
Clock Format	Select 12 Hour or 24 Hours.	
Daylight Saving Time	Select Off or On. If set to On, the system will automatically change time/date to account for daylight saving.	
Indoor Display Offsets	Select the number of degrees to offset indoor temperature or percentage to offset indoor humidity.	

*Available when thermostat is installed in Business mode.

Troubleshooting

If you are facing difficulties with your thermostat, please try the following suggestions. Most problems can be corrected easily through these.

Display is blank Cannot change system setting to	 Check circuit breaker and reset if necessary. Make sure power switch at heating and cooling system is on. Make sure furnace door is closed securely. Make sure C wire is connected. Check at the System Setup screen "Your thermostat controls" or "Your system type" is set to 	
Cool Fan does not turn on when heat is	match your heating and cooling equipment.Check that System Setup screen "Your fan control" is set to match your heating equipment.	
required "Wait" appears on the screen	 Compressor protection feature is engaged. Wait for 5 minutes for the system to restart safely, without causing damage to the compressor. 	
Heat pump issues cool air in heat mode, or warm air in cool mode	 Check your setting for System Setup screen "Type of changeover valve" to make sure it is properly configured for your system (see page 7). 	
Heating or cooling system does not respond	 Touch SYSTEM to set system to Heat. Make sure the temperature is set higher than the room temperature. Touch SYSTEM to set system to Cool. Make sure the temperature is set lower than the Inside temperature. Check circuit breaker and reset if necessary. Make sure power switch at heating and cooling system is on. Make sure furnace door is closed securely. If "Wait" is displayed, the compressor protection timer is on. Wait for 5 minutes for the system to restart safely, without damaging the compressor. 	
Heating system is running in cool mode	• Check that on the System Setup screen "Your thermostat controls" or "Your system type" is set to match your heating and cooling equipment .	

Accessories & Replacement Parts

Please contact your distributor to order replacement parts.

Cover plate assembly Part Number THP2400A1027W

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

4-1/2" W x 3-1/2" H x 7/8" D
 115 mm W x 88 mm H x 22 mm D

Electrical Ratings

Terminal	Voltage	Max. Current
	(50/60Hz)	Rating
W-O/B	20-30 Vac	1.0 A
W2 (Aux/E)	20-30 Vac	1.0 A
Y Cooling	20-30 Vac	1.0 A
Y2 Cooling	20-30 Vac	1.0 A
G Fan	20-30 Vac	0.5 A



DISCONNECT POWER BEFORE INSTALLATION. Can cause electrical shock or equipment damage.



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 the Thermostat Recycling Corporation at www.thermostat-recycle.org for information on how and where to properly and safely dispose off your old thermostat.

Need Help?

For assistance with this product please visit **http://honeywellhome.com** or call Customer Care toll-free at **1800 049 687**

For more information http://customer.resideo.com Customer Call Center Tel.: 1800 049 687





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