

sen | si™ Connect
to Comfort



SENSI™ TOUCH SMART THERMOSTAT Installation guide

Table of Contents

Downloading the app and creating an account	3
Installing the Sensi thermostat	4
Connecting the Sensi thermostat	7
Troubleshooting	8
Notes	10

You Will Need

Gather this information before you begin installation for a smoother walk through.

- Wi-Fi Network Name/SSID
 - Make sure this is a 2.4GHz network.
- Wi-Fi Network Password
- Screwdriver
- Hardware in Sensi Touch Smart Thermostat packaging

Download the Sensi app

The Sensi Touch Smart Thermostat is a Wi-Fi enabled device. To install and configure your thermostat correctly, you must use the Sensi app. To start the installation process, download the Sensi app to your smart phone or tablet. It is a free download. The Sensi app requires the following Operating System (OS) software to download:

Android (Google Play) version 5.0 or later

iOS (Apple) version 10.0 or later

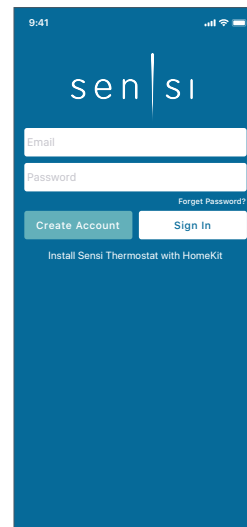
**Note that in the iOS store, the Sensi App will ONLY appear on an “iPhone only” search. On an iPad, change the search criteria in the App Store.*



Create an account

When you download the Sensi app, you will be prompted to create an account. This is required to access your thermostat remotely and use all the features Sensi offers. Use a valid email address and a password of your choosing to create an account. Remember this email address and password. Your Sensi thermostat will be linked to this email address once it is registered.

**Note that the “Install a device” option is only for installing to HomeKit only. You will lose available features without creating an account.*



Installation

Once you have downloaded the Sensi app, and have created an account, you are ready to install the thermostat to your wall and connect it to Wi-Fi. If no thermostats are registered yet, tap the plus (+) sign to add a thermostat.

First, choose which thermostat you purchased. The Sensi Touch Smart Thermostat option is for the following model numbers:

- 1F95U-42WF series
- ST75 series
- NH-AWIFI, OH-AWIFI

Note: You can check your model number on the back of the thermostat faceplate.

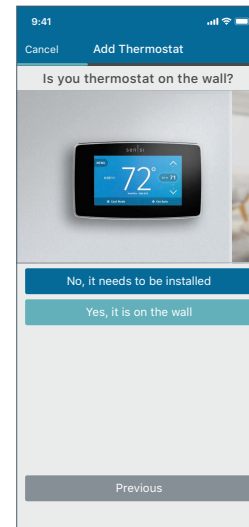


Install Path

After creating an account, signing in and choosing your model, the app will ask you whether or not the thermostat is already on the wall. You will either choose “No, it needs to be installed,” or “Yes, it is on the wall.”

The first option will walk through the entire installation process. If you did not have this thermostat professionally installed, choose this option.

The second option is for connecting your thermostat to Wi-Fi only. If you have had a professional install your thermostat, and you just need to connect the Sensi thermostat to your home Wi-Fi network, choose this option.



No, it needs to be installed.

This option will walk you through the entire installation process, including identifying and connecting your wiring, as well as connecting to Wi-Fi. The Sensi app will walk through a step-by-step process for installation.

Gather Tools and Package Contents

Gather all the necessary tools for installation.



Turn Off Power

Turn off the power to your heating and air conditioning system before handling your thermostat wires.

Remove Old Thermostat Cover

Remove the cover using a screwdriver or by pushing the pressure latch. Some covers pull off while others need to be released using a screwdriver.

Photograph Your Wiring

THIS IS IMPORTANT. The Sensi app will prompt you to take a picture of your existing thermostat and old wiring in case you need it later.

This can be helpful for troubleshooting with our technical support team if necessary. The picture you take will be saved to your camera roll or photo gallery.

Throw Away Any Jumper Wires

Sensi has a jumper wire built into it, and you will not need any jumper wires from your old unit.

Choose Wire Terminals

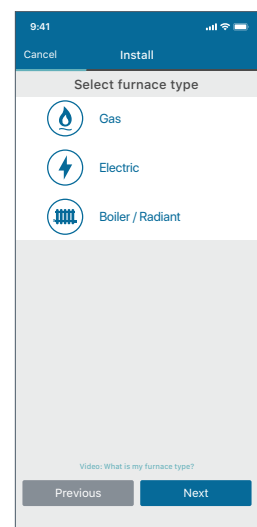
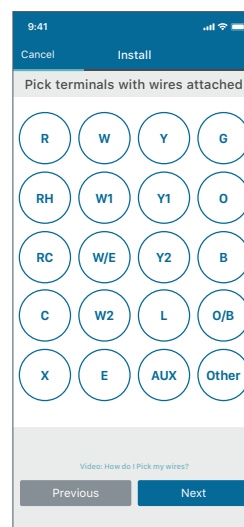
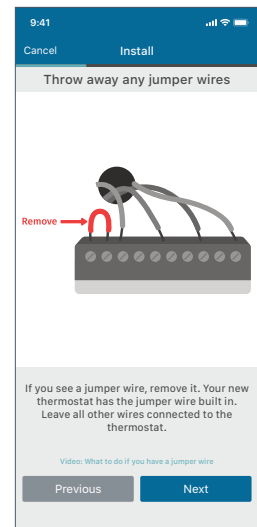
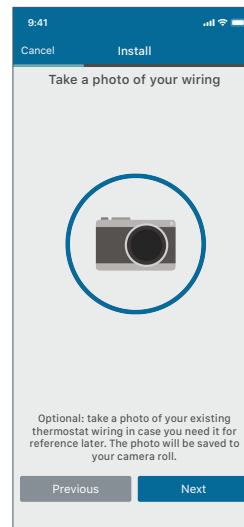
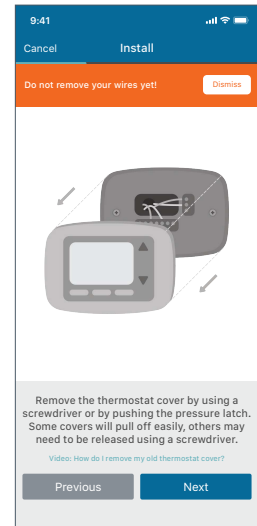
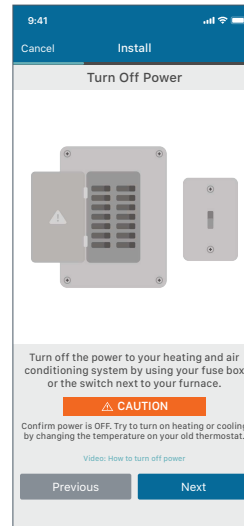
Choose the terminal labels that have wires attached to them on your old thermostat here. The app will tell you if you have a valid configuration.

If you are getting an invalid configuration message you can learn more about compatibility at sensi.emerson.com/en-us/compatibility.

Sensi Touch requires a c-wire.

System Type

Select what type of system you have.



Label Your Wires

Using the provided wire label stickers, label your wires by removing one wire at a time.

Disconnect Wires and Remove Base

After all of your wires are labeled, remove the old thermostat base from the wall.

Install Sensi Base

Use the provided mounting screws and secure the Sensi base to the wall.

Connect the Wires

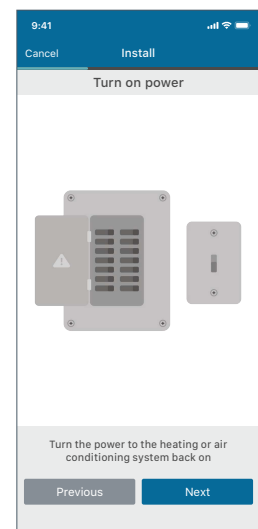
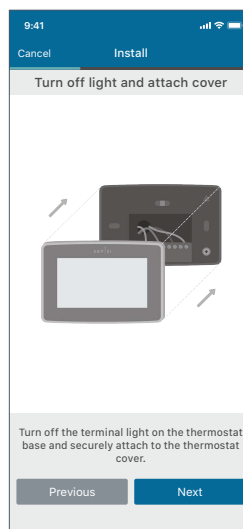
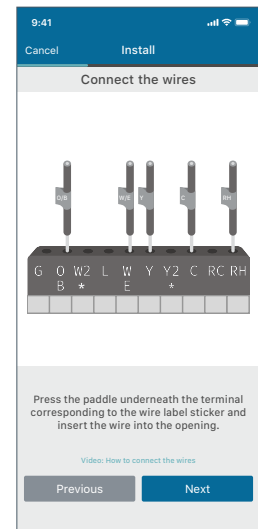
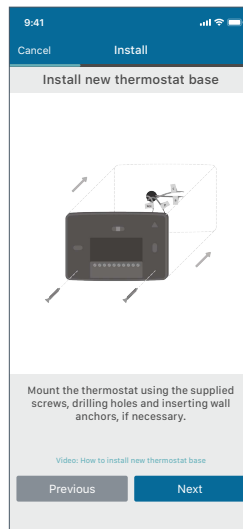
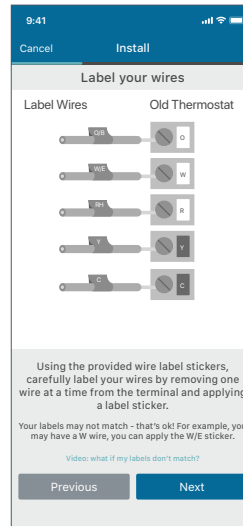
Once the Sensi base is mounted and secured on the wall, insert the wires into the terminals. Simply push the wires into the terminal slots. Use a screwdriver to secure each wire in place

Attach Cover

Push the front display onto the thermostat base. If you used the "Backlight" feature, please make sure the switch is turned "Off" so you can control it from the display.

Turn On Power

Turn the power to your system back on.



Connecting to Wi-Fi

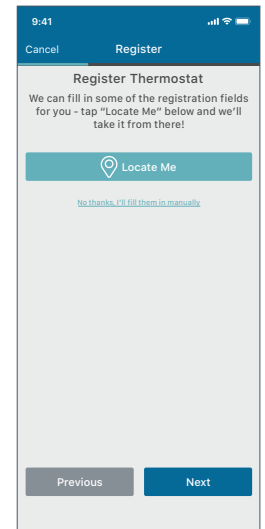
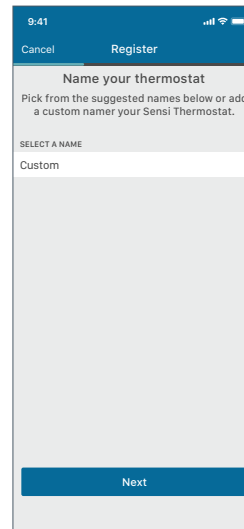
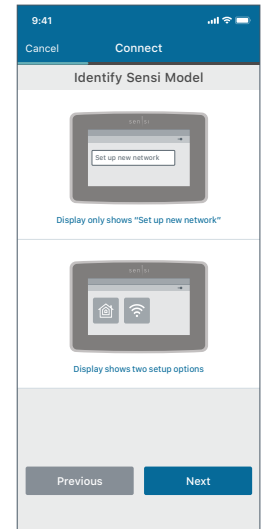
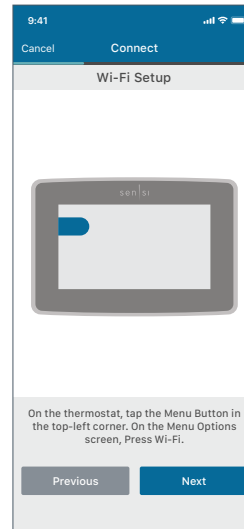
This portion of the installation guide covers how to connect your thermostat to Wi-Fi. If you chose the first option, “No, it needs to be installed,” the app will provide instructions for installing and wiring your thermostat before you connect to Wi-Fi. If you had your Sensi thermostat installed by a professional or if you have already installed and wired your Sensi thermostat yourself, but have not yet connected to Wi-Fi, choose “Yes, it is on the wall.” The app will jump right into connecting your thermostat to Wi-Fi.

BROADCAST SENSI NETWORK

On the thermostat, press Menu, and then Wi-Fi. Depending the Sensi version you may see “Set up new network” or you may see two icons. If you see two icons, you’ll have the option to bypass HomeKit setup.

CONNECT YOUR SENSI THERMOSTAT TO YOUR WI-FI NETWORK WITH THE SENSI APP

Follow the step-by-step instructions in the Sensi app. The Wi-Fi connection process will be slightly different based on your device’s operating system (iOS/Android), Sensi app version, and the version of Sensi thermostat that you have.



Name Thermostat

You can select a name or choose a custom name for your thermostat. Press “Next” to continue.

Register thermostat

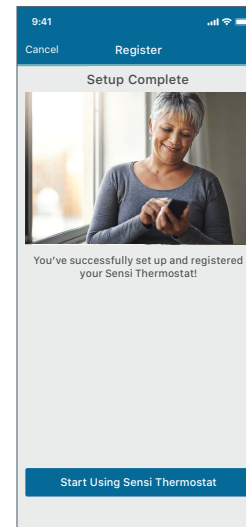
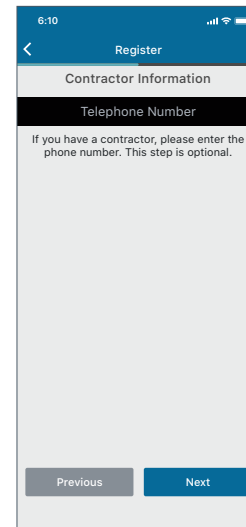
After successfully connecting Sensi, the app will prompt you to register the thermostat. You can either choose the “Locate Me” option or fill in your street address, city, state, zip code, country and time zone manually. Press “Next” to continue.

Contractor Information

If a contractor professionally installed your thermostat, and registered as a Sensi partner, they have the option to input their phone number here. If there is not a registered number available, simply hit “Next” to continue.

Start Using Sensi

Congratulations on successfully installing Sensi. Press “Start Using Sensi” to open the main screen of the app.



Connecting to Wi-Fi Troubleshooting

If you're having trouble connecting to Wi-Fi, here are some tips to try:

- Make sure the Sensi app is up-to-date and running the latest version available in your app store.
- Reboot your smart phone.
- Reboot your router by unplugging it from the wall for a few minutes and then plugging it back in.
- If you're on an iPhone, make sure Keychain is On, and Home Data is allowed for the Sensi app.
- If you're on an Android, go into your phone's Advanced Wi-Fi Settings and turn off the "Switch to mobile data" feature. (Depending on your Android, it may be called "Smart Network Switch" or "Avoid poor connections.")
 - It may be easier to just turn "Mobile Data" off completely for setup. You can find this in your Connection settings.
- Try another smart phone or tablet. Simply download the Sensi app and sign into the app using the email address and password you used when you created your account.

Reconnecting to Wi-Fi

If you replaced your router or changed your Wi-Fi network password, you will need to reconnect your thermostat to Wi-Fi. This is different depending on what smart device you are using. Please see our support article for more information on how to reconnect.

sensi.emerson.com/en-us/support/reconnecting-sensi-thermostat-to-wifi

Blank or flashing display

If you installed a Sensi Touch Smart Thermostat, but the touchscreen is still blank or only flashes after completing all the steps in the Sensi app, then most likely the thermostat is not receiving enough power from your system to turn on or stay on continuously.

Sensi Touch requires a “C” wire to power the thermostat. Sensi does have a battery powered light in the sub-base for installation, but that light will only last for about an hour, and is not an indicator that there is power to the thermostat.

I DON'T HAVE A WIRE IN THE “C” TERMINAL.

Sensi requires a “C” wire. If you don't have a wire in the “C” terminal, check out our “C” wire videos for DIY installation at sensi.emerson.com/en-us/c-wire.

If you are installing Sensi to a heat only system, you may be able to install an external transformer. Learn more about that option by searching “external transformer” on our support site at sensi.emerson.com/en-us/support.

I HAVE A WIRE IN THE “C” TERMINAL.

1. Did you DIY this “C” wire connection? If so, make sure that this wire is connected to “C” terminal at the thermostat and at your system.
 1. Go down to your air handler, reveal your system's control board, and trace the “C” wire at the thermostat to ensure that it is securely connected to the “C” terminal at the system control board. If you haven't already, it may help to watch one of the “C” wire videos to see how to access the control board.
 2. Gently tug the “C” wire at the system control board to ensure that it is screwed into the terminal securely.
 3. Gently tug all the wires at the thermostat to ensure that they are secure in the terminal block on the sub-base.
2. Do you have a voltmeter? Set your voltmeter to AC and measure the voltage between RH (or RC) and C at the thermostat to ensure that you have between 20-30VAC at the thermostat. If you have less than 20VAC, the thermostat will not turn on.
3. Are your breakers on? You turned your power off for installation. Make sure the power is turned on. You may want to try resetting them if they're turned on already.

HVAC configuration menu

If you chose the option “No, it needs to be installed” and walked through the installation process on the Sensi app, the app should have correctly configured your thermostat for your system type. However, if you are experiencing an issue or you want to check your system configurations, you can manually configure your thermostat as well. Learn more about how to properly configure your thermostat by searching “configure” on our support site at sensi.emerson.com/en-us/support.

Accessing your Sensi thermostat from other devices

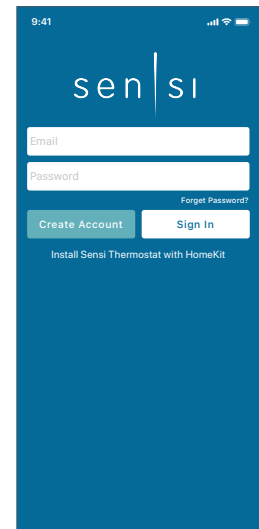
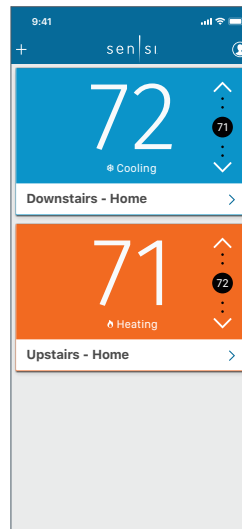
When you log into your Sensi account with your email address and password, the app will be able to control all the thermostats registered to your Sensi account.

If you give someone else your email address and password to your Sensi account, they will be able to log in and control any thermostats registered to that account. You can change your email address and password from inside the app. Be aware of this when giving out your information. There is no limit to the number of devices that can access the thermostat.

Forgot password

If you forgot the password to your Sensi account, click on “Forgot Password” on the login screen of the Sensi app. A temporary password will be sent to the email address that you use to login.

CONFIGURATION MENU ITEMS REFERENCE			
Display Code	Menu item	Default	Options
	Wireless Setup Connects Thermostat to Wi-Fi network	—	Connect
	Fahrenheit or Celsius	F	F C
	Outdoor Equipment Configuration Cooling or heat pumps	AC2	AC1 – Conventional Cooling 1 (Single Stage) AC2 – Conventional Cooling 2 (Two-Stage) HP1 – Heat Pump 1 (Single Stage) HP2 – Heat Pump 2 (Two-Stage) AC0 – No Cooling
	Indoor Equipment Configuration For Gas or Electric Heat	EL2	EL1 – Electric 1 (Single Stage) EL2 – Electric 2 (Two-Stage) FAN GA1 – Gas 1 (Single Stage) GA2 – Gas 2 (Two-Stage)
	Reversing Valve Position Selects “O” or “B” Setting For Heat Pumps Only	O	O B 2
Fn	Circulating Fan	OFF	Off/10% – 100% (5% increments)
H AA	Humidification Add Accessory	OFF	Off/On
H SP	Humidification Set Point	OFF	Off/5% – 50% (5% increments)
dH AA	Dehumidification Add Accessory	Od	Od/Oc Od – Optimal dehumidification (Overcool to dehumidify) Oc – Optimal comfort (Wired dehumidification)
dH SP	Dehumidification Set Point	OFF	Off/40% – 95% (5% increments)
	Wireless Radio Turns Wi-Fi Radio On/Off	ON	Off/On



Installing multiple thermostats

If you are installing more than one thermostat, follow the same installation process in the Sensi app. Once you have one thermostat installed, open the Sensi app on your phone. At the main screen, press the + sign to add another thermostat to your account.

Accessing account information

You can use the Account area to access your email preferences, change your account information and email address associated with your Sensi.

For iOS: Tap the person icon in the upper right hand corner.

For Android: Tap the three dots in the upper right hand corner.

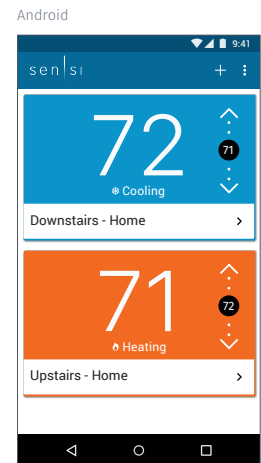
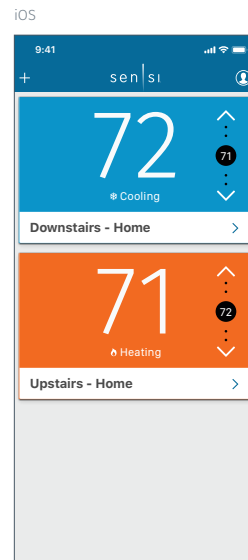
Technical support

For problems connecting your Sensi thermostat, call or email the Sensi Technical Support team, and they will be happy to help you or your contractor walk through any steps needed to troubleshoot the Sensi thermostat.

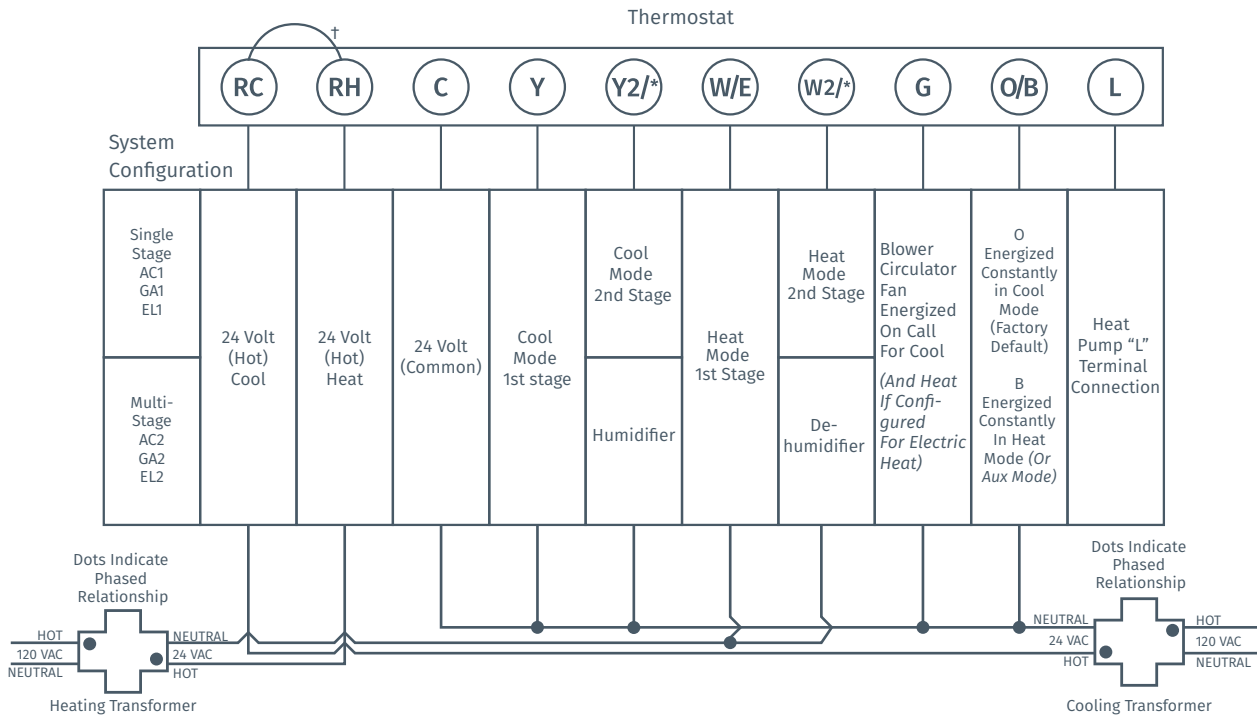
sensi.emerson.com/en-us/support

(888) 605.7131

support@sensicomfort.com

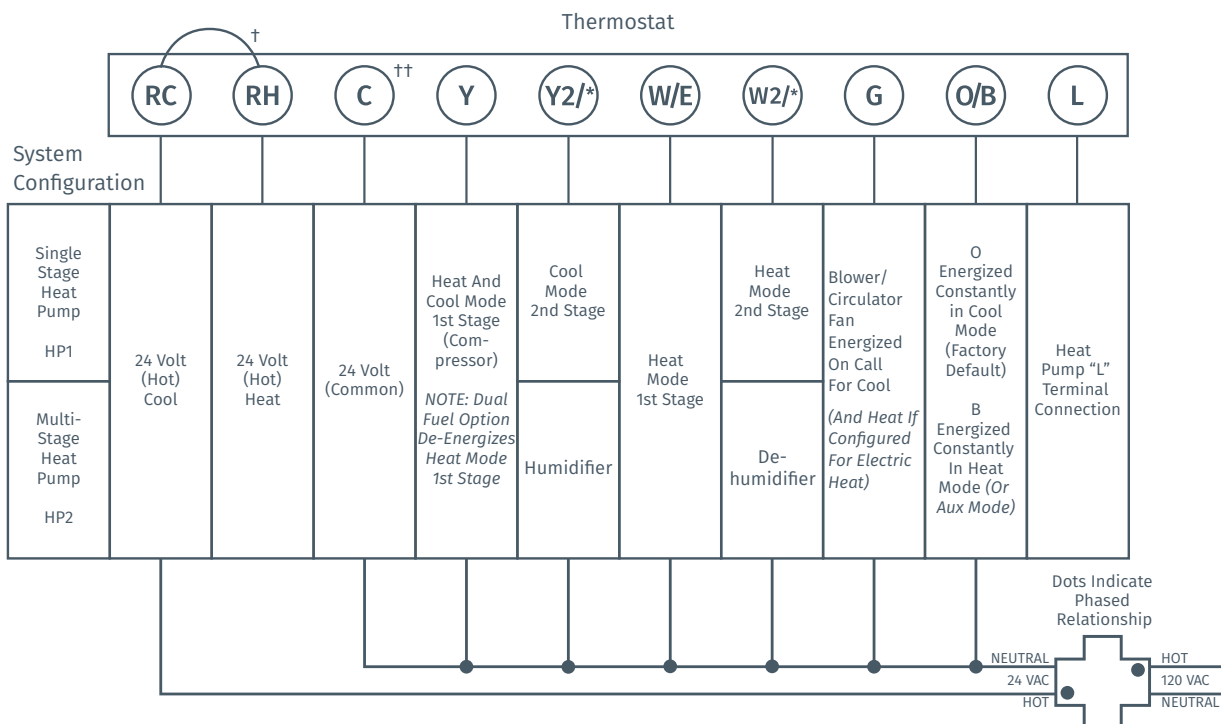


SINGLE STAGE OR MULTI-STAGE SYSTEM (NO HEAT PUMP) WITH TWO TRANSFORMERS



*Two transformers systems (separate RC and RH wires), clip internal RC/RH jumper, located on back of thermostat.

HEAT PUMP SYSTEMS



†Internal jumper between RC and RH, located on back of thermostat.