



Sensi Smart Thermostat Installation Guide

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SENSI™ SMART THERMOSTAT Installation guide



Models: 1F87U-42WF, ST55
Version: January 2020

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DOWNLOADING THE APP AND CREATING AN ACCOUNT

You Will Need

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

- Sensi Password
 - Found on the back of the Welcome Guide, or back of the thermostat faceplate labeled “Sensi Security Code”)
- Wi-Fi Network Name/SSID
 - Make sure this is a 2.4GHz network.
- Wi-Fi Network Password
- Screwdriver
- Hardware in Sensi Smart thermostat packaging

Download the Sensi app

The Sensi 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 smartphone 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

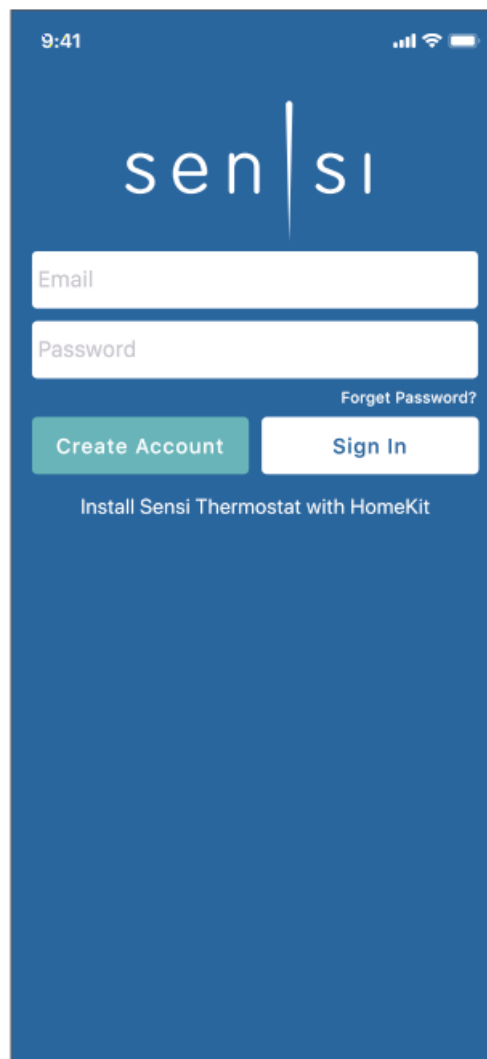
iOS (Apple) version 10.0 or later

*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.



INSTALLING THE SENSI THERMOSTAT

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 “+” sign to add a thermostat. Then, choose which thermostat you purchased.

- 1F87U-42WF series
- ST55 series



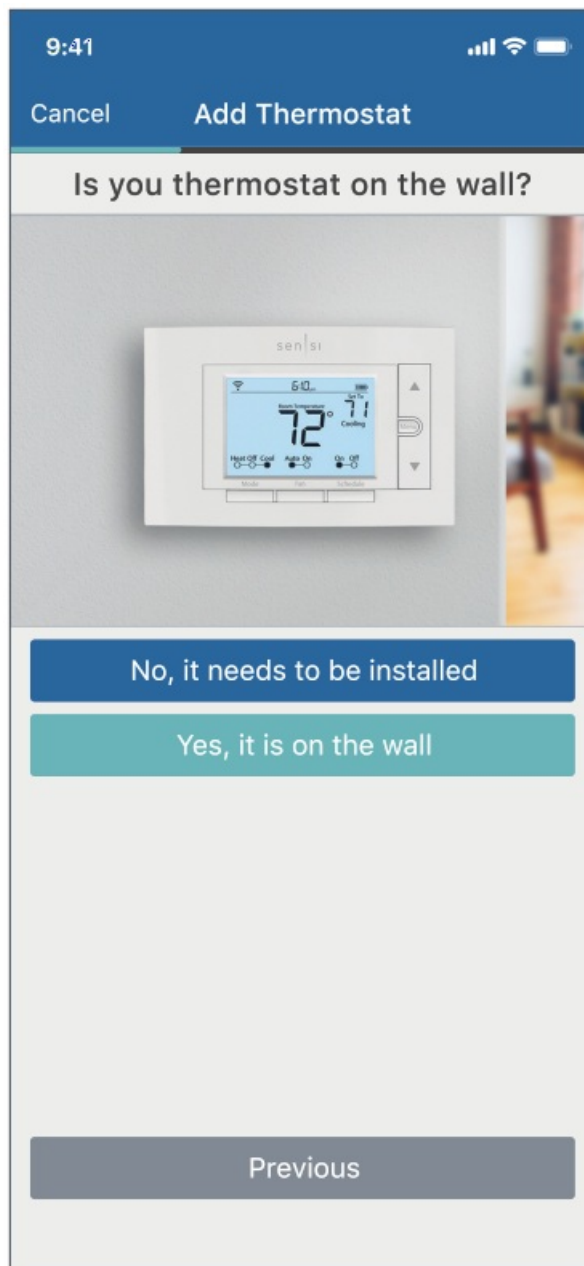
Note: You can check your model number on the back of the thermostat faceplate.

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.”

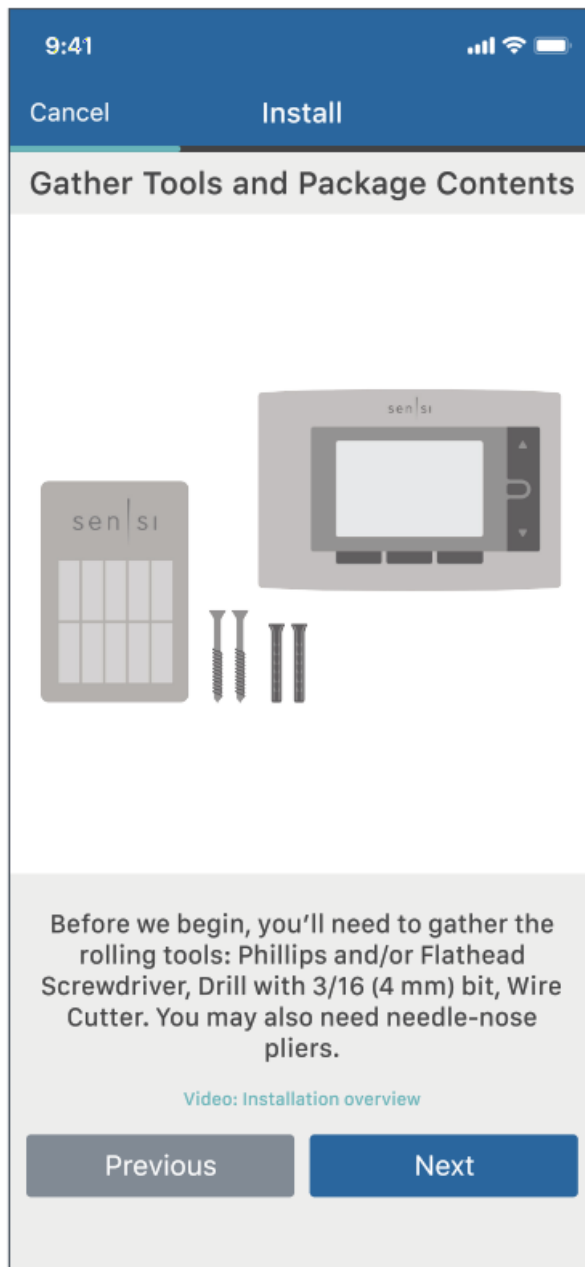
The first option will walk through the entire installation process. If you did not have this thermostat professionally installed, choose this option.

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

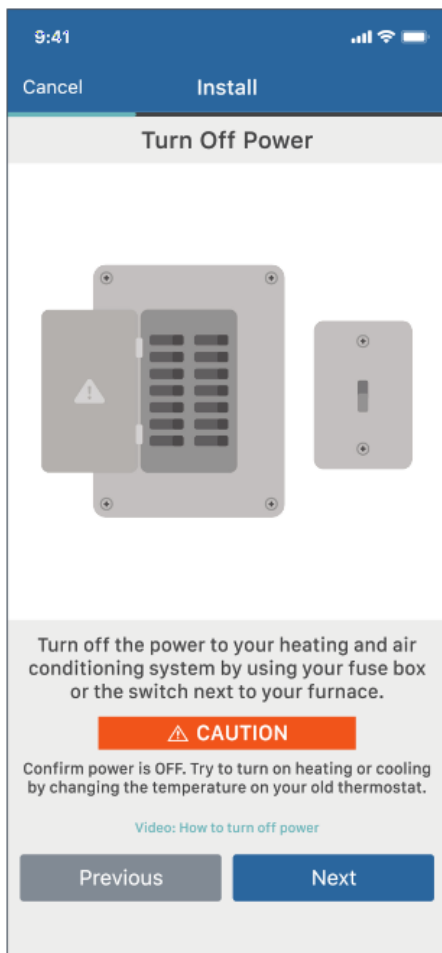
Gather all the necessary tools for installation.

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.

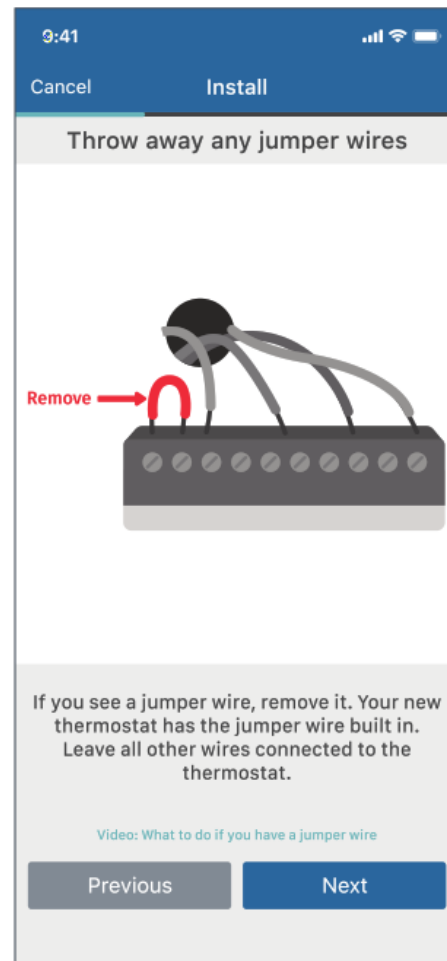
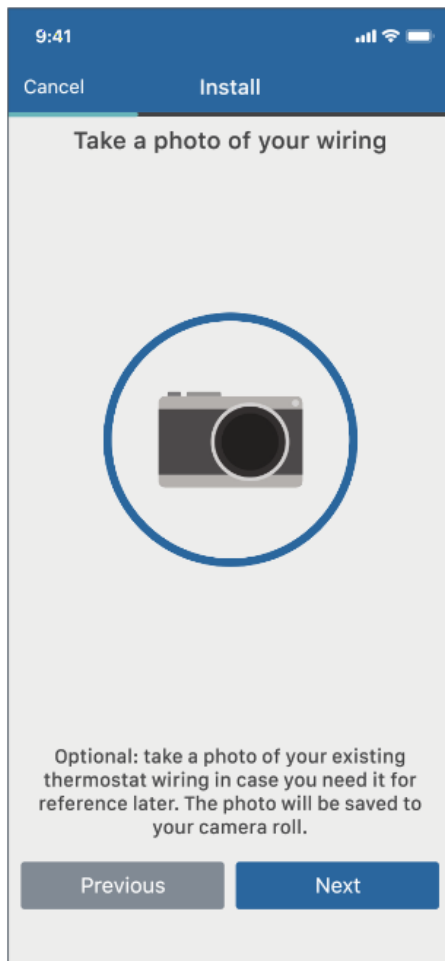


Photograph Your Wiring

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-ua/compatibility.

A c-wire, or “common wire”, is required for heat only, cool only & heat pump applications. You can learn more about installing a c-wire at sensi.emerson.com/en-us/c-wire.

System Type

Select what type of system you have.

9:41

Cancel Install

Pick terminals with wires attached

R	W	Y	G
RH	W1	Y1	O
RC	W/E	Y2	B
C	W2	L	O/B
X	E	AUX	Other


Video: How do I Pick my wires?


Previous Next


9:41

Cancel Install

Select furnace type

 Gas

 Electric

 Boiler / Radiant

Video: What is my furnace type?

Previous Next











Label Your Wires

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

9:41

Cancel Install

Label your wires

Label Wires	Old Thermostat
	
	
	
	
	

Using the provided wire label stickers, carefully label your wires by removing one wire at a time from the terminal and applying a label sticker.

Your labels may not match - that's ok! For example, you may have a W wire, you can apply the W/E sticker.

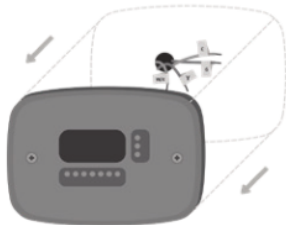
Video: what if my labels don't match?

Previous Next

9:41

Cancel Install

Disconnect wires and remove base



Secure by wrapping the wires around a pencil to keep them from falling into the wall.

Video: How to remove old thermostat base

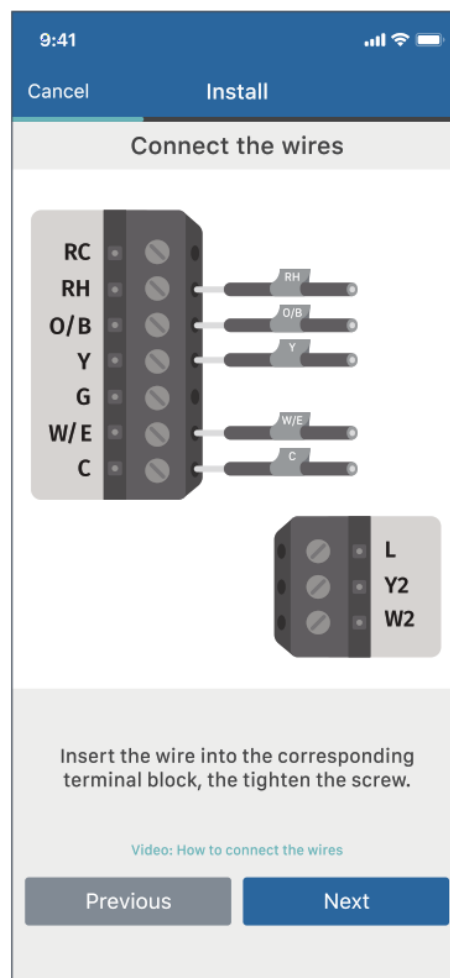
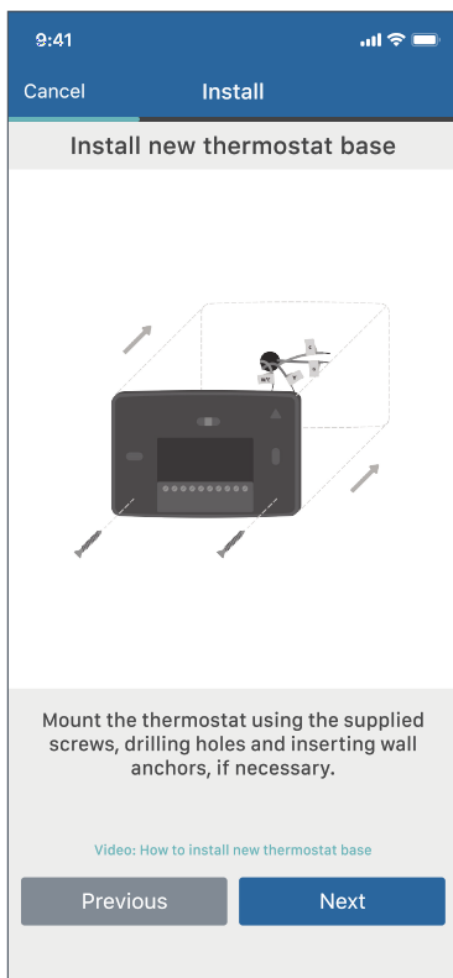
Previous Next

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.

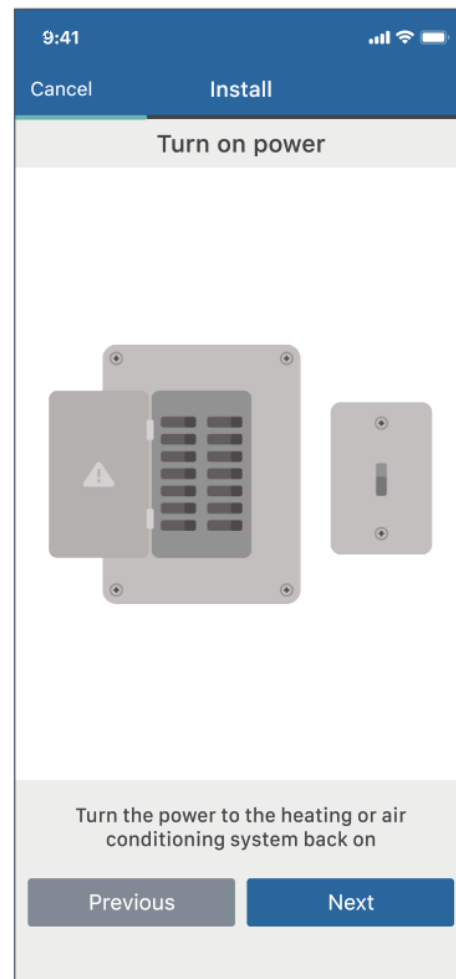
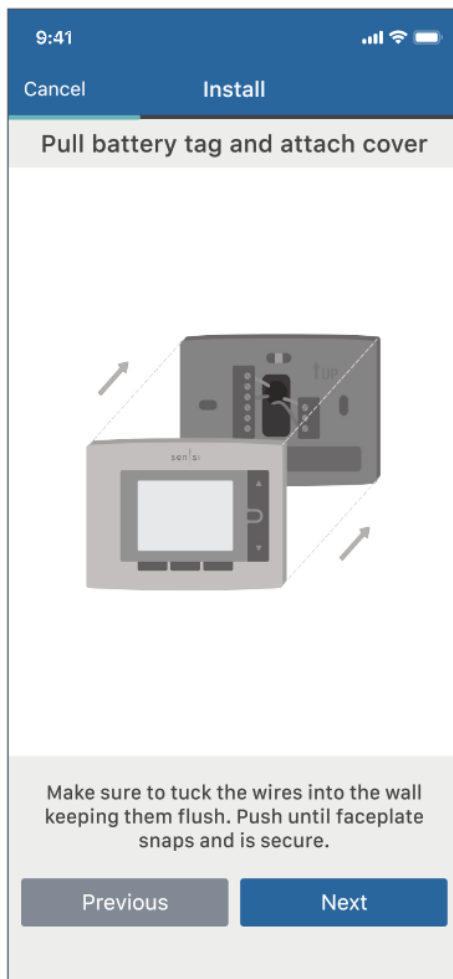


Connect the Wires

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.

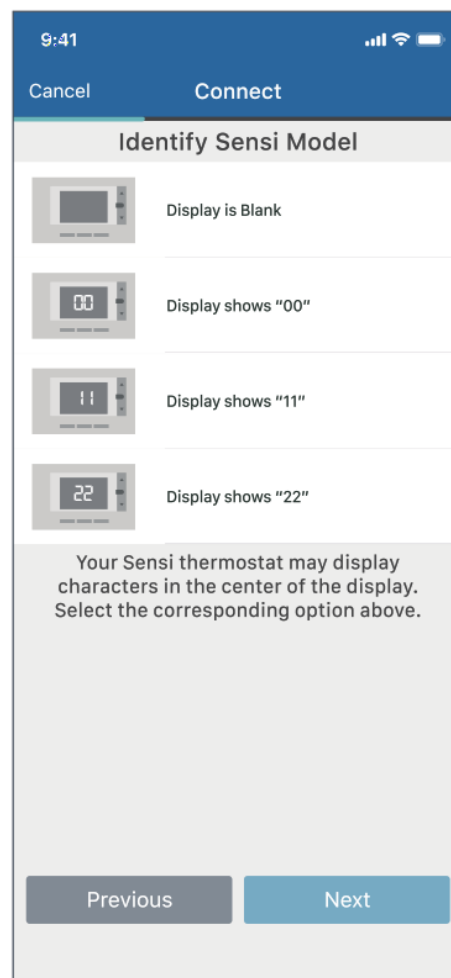
Attach Cover

Push the front display onto the thermostat base.



Connecting to Wi-Fi

This portion of the installation guide covers how to connect your thermostat to Wi-Fi. If you chose “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.



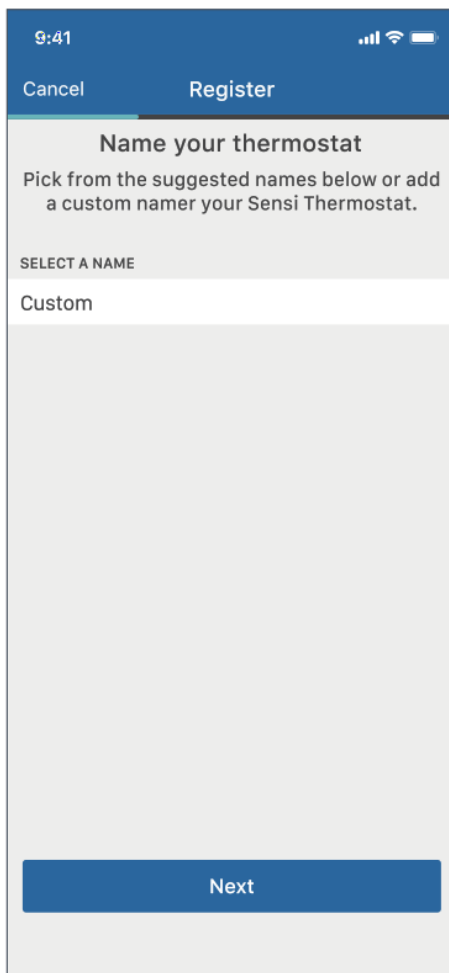
BROADCAST SENSI NETWORK

On the thermostat, press Menu, and then Mode. The WiFi icon in the upper left-hand corner will flash, and 00, 11, or 22 will be displayed in the middle of the thermostat. This determines what Sensi version you have.

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

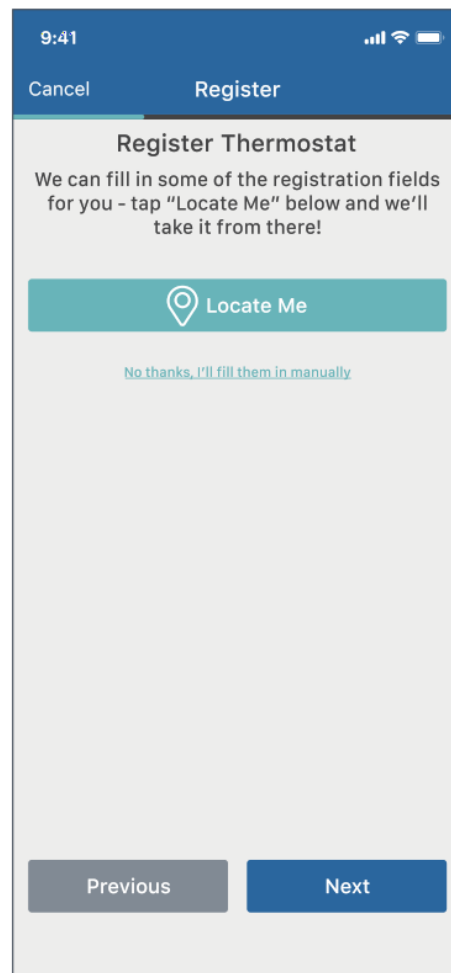
Follow the step-by-step instructions in the Sensi app. The Wi-Fi connection process will be slightly different based on your device's operating system (iOS/Android), Sensi app version, and the version of Sensi thermostat that you have. If you are connecting with an iPhone/iPad, and you see 11 or 22 displayed on your screen, you'll have the option to connect your thermostat with Apple HomeKit.

After connecting to the Sensi network, you'll enter the Sensi password, printed on the Welcome Guide (or found on the back of the thermostat face plate as "Sensi Security Code"). Then you'll connect to your Wi-Fi network.



Name Thermostat

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

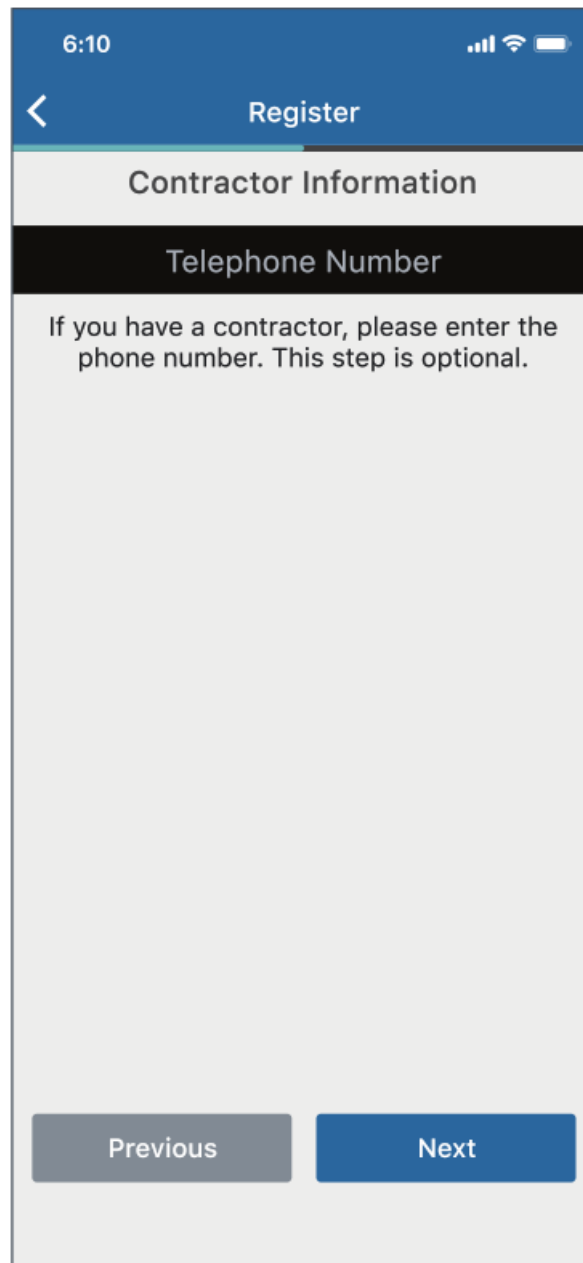


Register thermostat

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.



The image shows a mobile application registration screen. At the top, a blue header bar contains a back arrow on the left and the word "Register" in the center. Above the header, the status bar shows the time "6:10" and icons for cellular signal, Wi-Fi, and battery. Below the header, a light gray section is titled "Contractor Information". Underneath this is a dark gray section titled "Telephone Number". The main content area is light gray and contains the text: "If you have a contractor, please enter the phone number. This step is optional." At the bottom of the screen are two buttons: a gray "Previous" button on the left and a blue "Next" button on the right.

6:10

< Register

Contractor Information

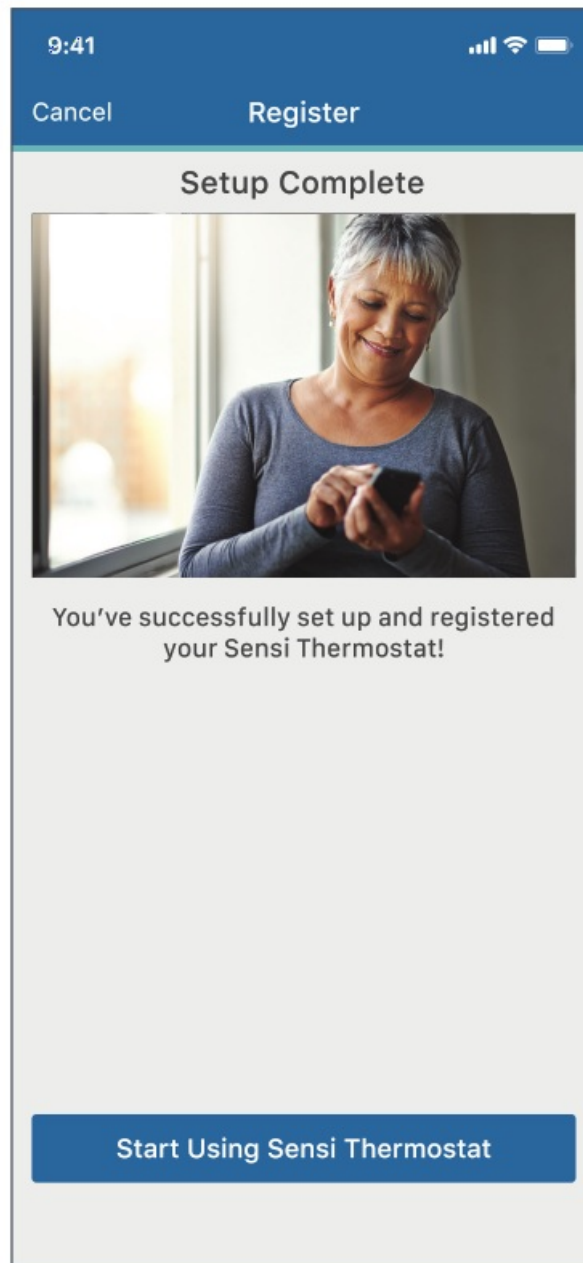
Telephone Number

If you have a contractor, please enter the phone number. This step is optional.

Previous Next

Start Using Sensi

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



TROUBLESHOOTING

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 smartphone.
- Reboot your router by unplugging it from the wall for a few minutes and then plugging it back in.
- After your router reboots, and your Wi-Fi network has internet access again, make sure that your phone is connected to your 2.4GHz Wi-Fi network.
- 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 smartphone 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

NOTES

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.

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)

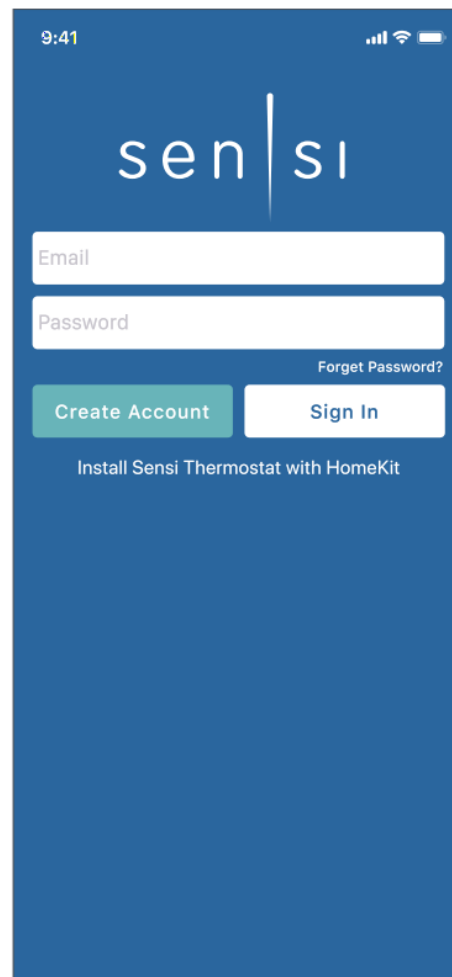
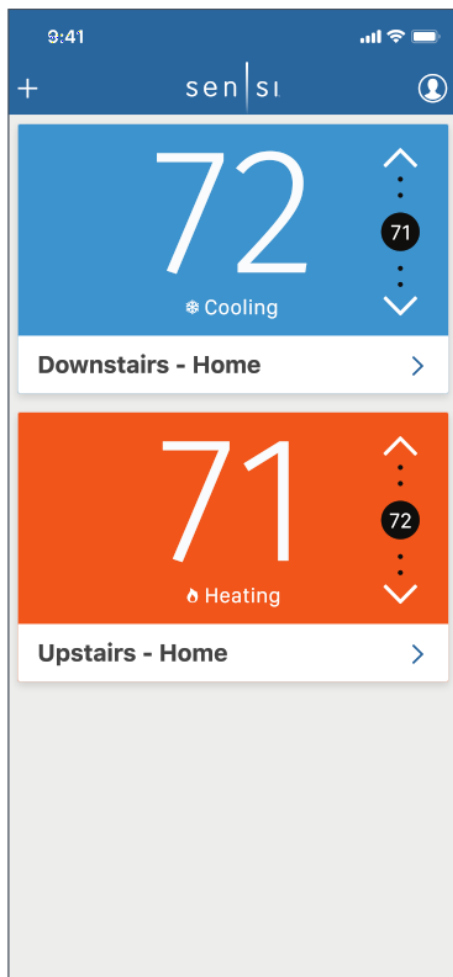
	Reversing Valve Position Selects "O" or "B" Setting For Heat Pumps Only	O	O B 2
Fn	Circulating Fan	OFF	Off/10% – 100% (5% increments)
H AA	Humidification Add Accessory	OFF	Off/On
H SP	Humidification Set Point	OFF	Off/5% – 50% (5% increments)
dH AA	Dehumidification Add Accessory	Od	Od/Oc Od – Optimal 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

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

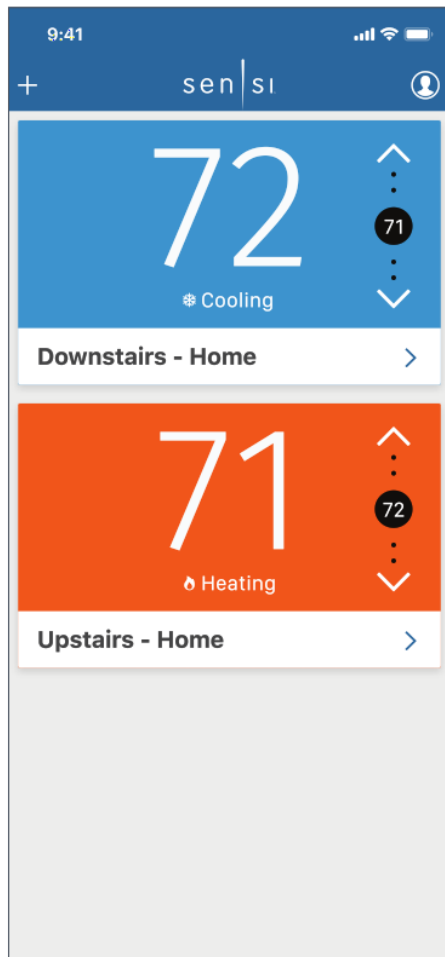
If you forgot the password to your Sensi account, click on "Forgot Password" on the login screen of the Sensi app. A temporary password will be sent to the email address that you use to login.



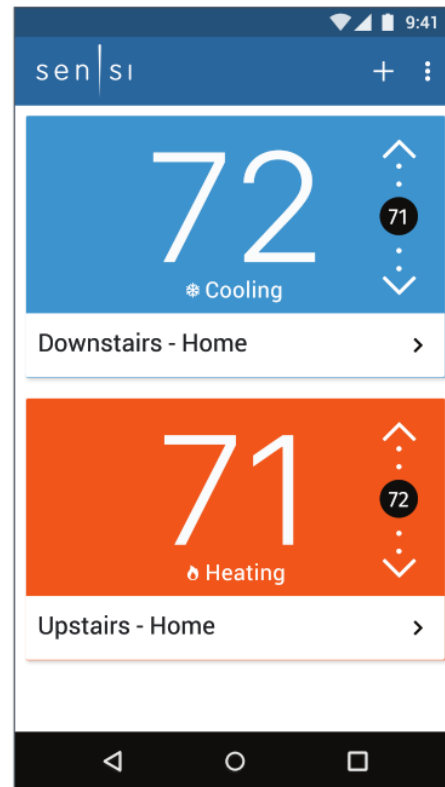
Installing multiple thermostats

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, tap the + sign to add another thermostat to your account.

iOS



Android



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.

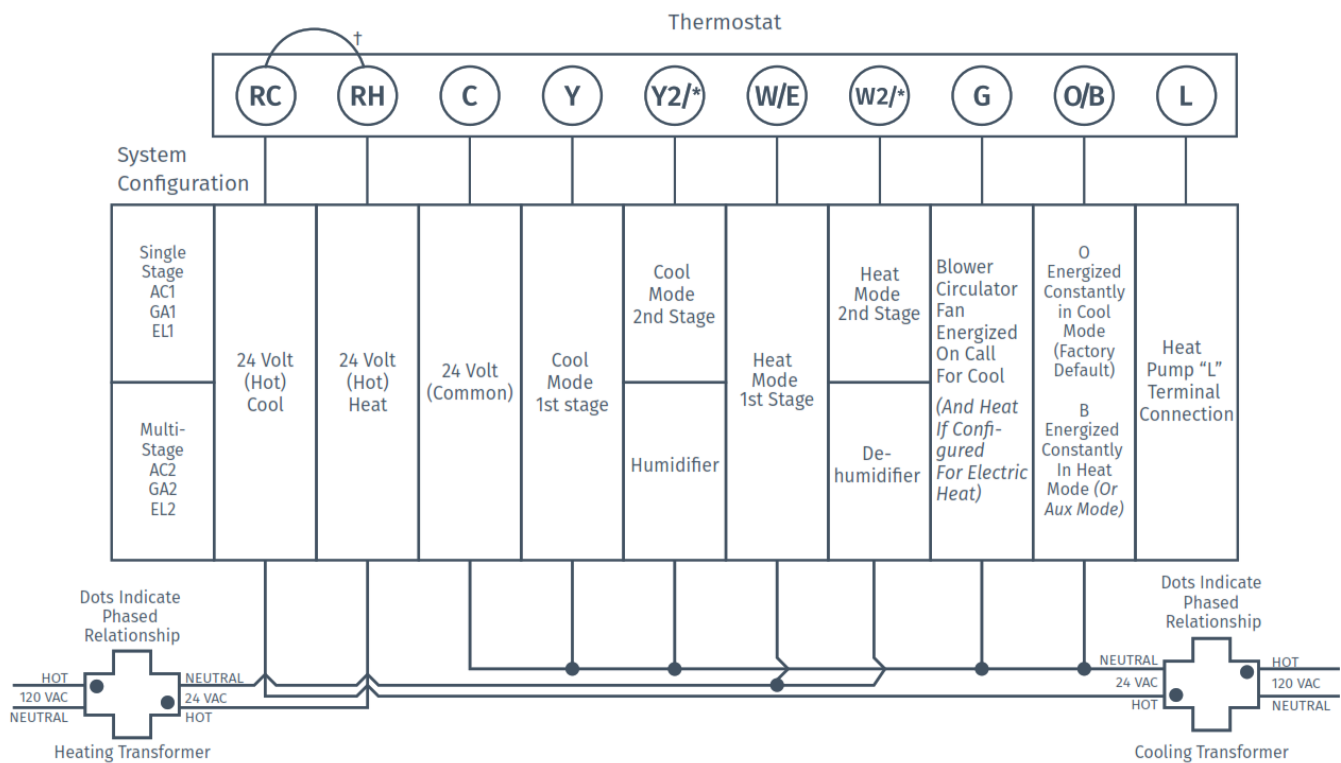
sensi.emerson.com/en-us/support

(888) 605.7131

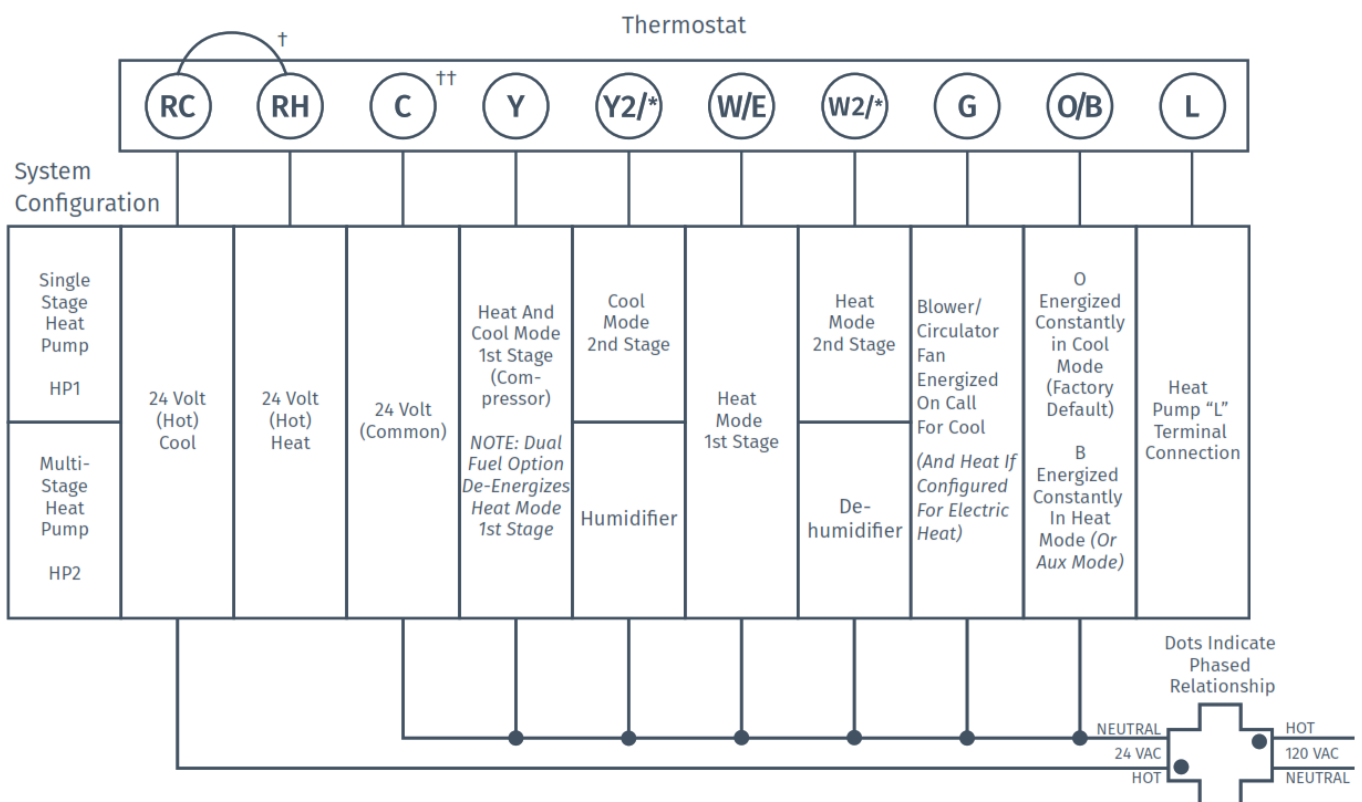
support@sensicomfort.com

NOTES

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.



† Internal jumper between RC and RH, located on the back of the thermostat.
Common connection required on Heat-only, Cool-only, or Heat Pump systems.

Documents / Resources

	<p>Sensi Sensi Smart Thermostat [pdf] Installation Guide 1F87U-42WF, ST55, Sensi, Smart Thermostat</p>
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References

- [S Thermostat C-Wire Installation | Sensi US](#)
- [S Sensi Support | Sensi US](#)
- [S Sensi Support | Sensi US](#)