



# Emerson ST55 Sensi Wi-Fi Programmable Thermostat Installation Guide

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**Emerson ST55 Sensi Wi-Fi Programmable Thermostat**



## Specifications

- Model: 1F86U-42WF, UP500W
- Version: October 2017
- Wi-Fi enabled thermostat
- Requires Sensi app for installation and configuration
- Operating System (OS) software compatibility is required for the Sensi app

## Product Usage Instructions

- Gather necessary information before starting installation.
- Download the Sensi app on your smart device.
- Create a Sensi account using a valid email address and password.
- Ensure the power to your HVAC system is turned off.
- Remove the cover of the old thermostat.
- Photograph the existing wiring for reference.
- Dispose of any jumper wires from the old unit.
- Select wire terminals with attached wires based on the old thermostat.
- Follow step-by-step instructions on the Sensi app for installation.
- Identify and connect wiring correctly.
- Connect the thermostat to Wi-Fi.

## You will need

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

- Sensi Password
- Wi-Fi Network Name/SSID
- Make sure this is a 2.4GHz network.

- Wi-Fi Network Password
- Screwdriver
- Hardware in Sensi Wi-Fi thermostat packaging

## Download the Sensi app

The Sensi Wi-Fi 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 4.2 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.



## 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, the Sensi app will prompt you to add a thermostat.

First, choose which thermostat you purchased. The Sensi Wi-Fi Programmable Thermostat option is for the following model numbers:

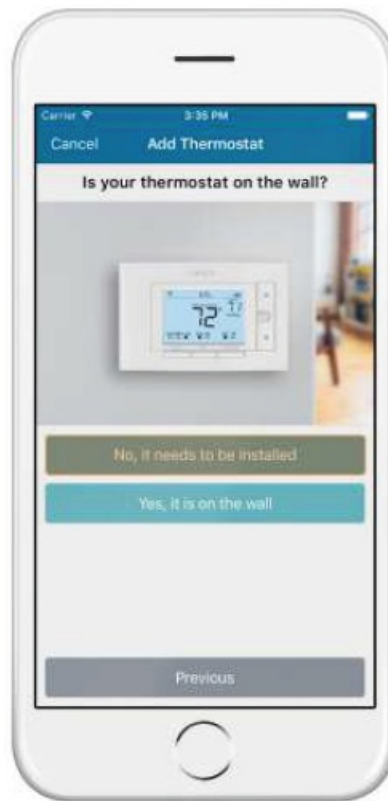
- 1F86U-42WF
- UP500W



**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 do 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.



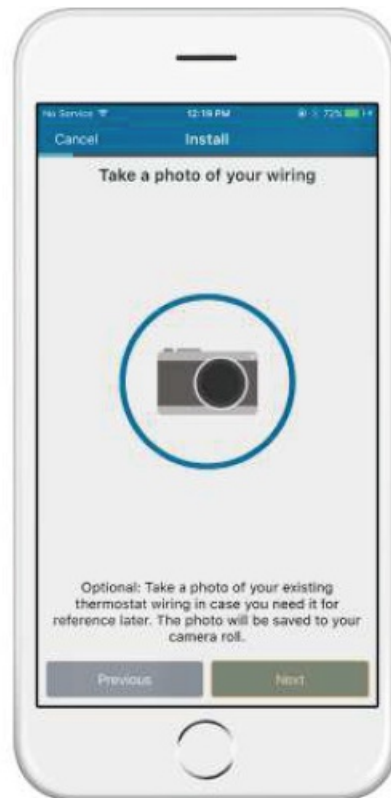
## Remove old thermostat cover

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.



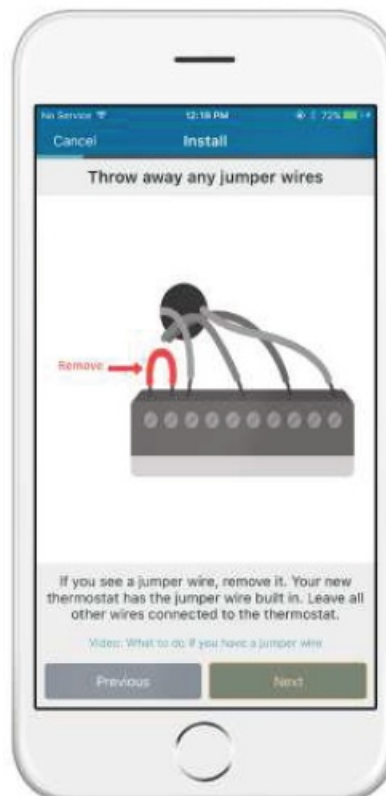
## Photograph your wiring

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

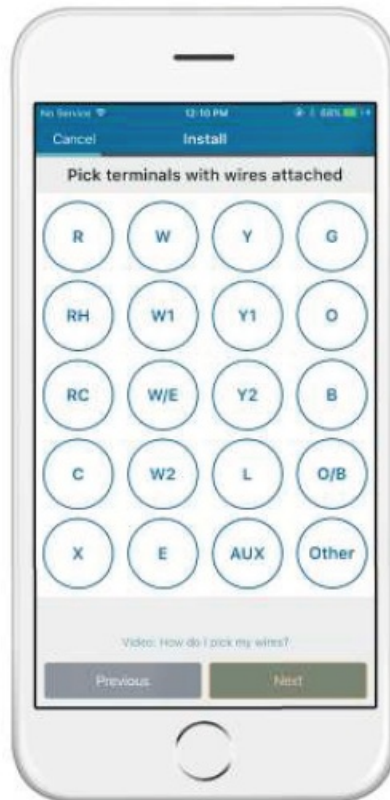
Sensi has a jumper wire built into it, and you will not need any jumper wires from your old unit.



### Choose wire terminals

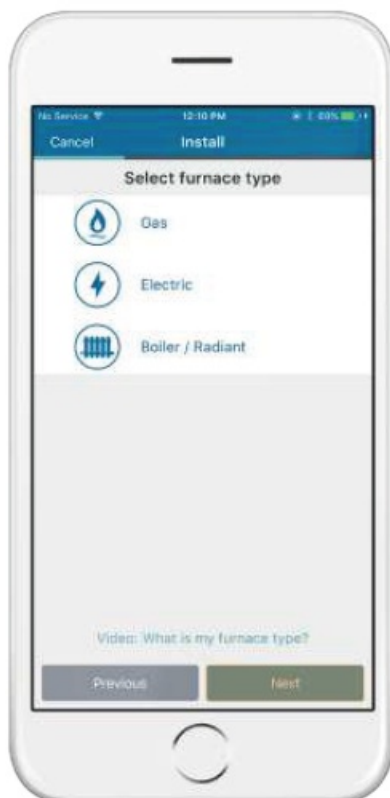


- Choose the terminal labels that have wires attached to them on your old thermostat here. The app will tell you if you have a valid configuration.
- If you are getting an invalid configuration message you can learn more about compatibility at [sensicomfort.com/compatibility](https://sensicomfort.com/compatibility).



## 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 the 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

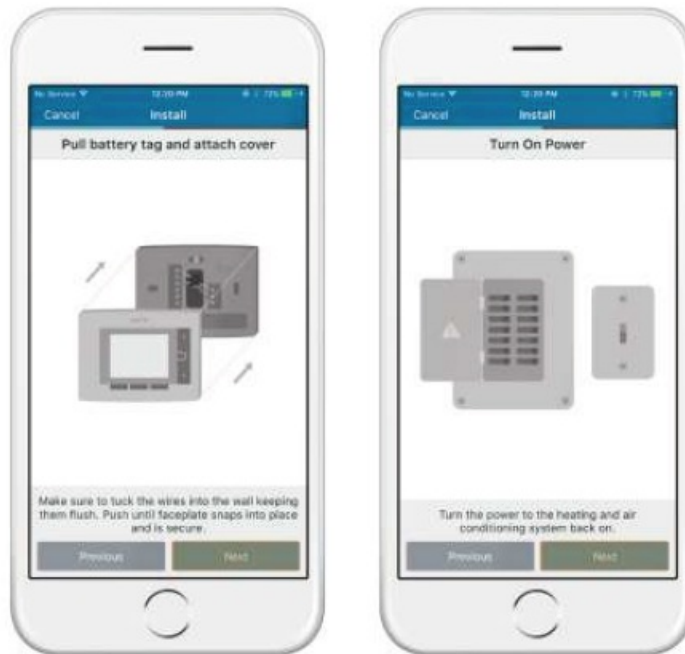
- Once the Sensi base is mounted and secured on the wall, insert the wires into the terminals. Simply push the wires into the terminal slots. Use a screwdriver to secure each wire in place

## Attach cover

- Push the front display onto the thermostat base.

## Turn on power

- Turn the power to your system back on.



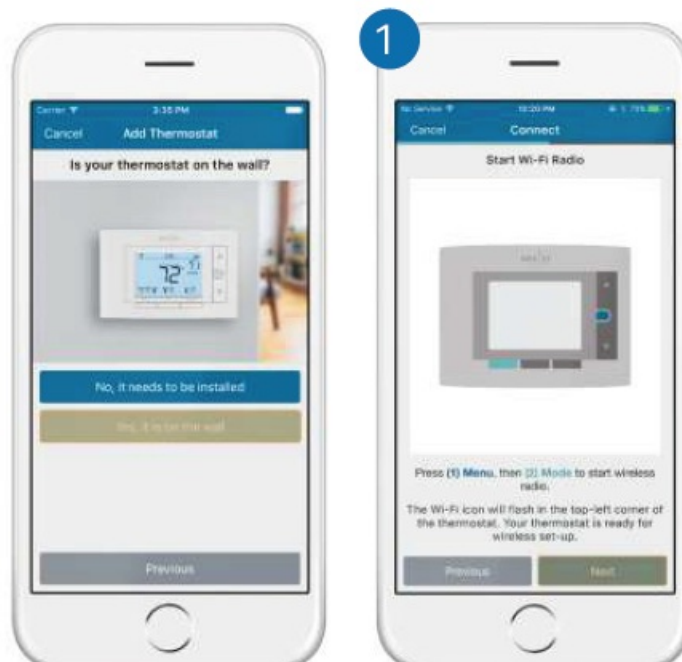
## Connecting to wi-fi

This portion of the installation guide covers how to connect your thermostat to Wi-Fi. If you choose 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 chose, “Yes, it is on the wall,” the app will jump right into connecting your thermostat to Wi-Fi.

### 1. PRESS THE MENU, THEN CONNECT

The Wi-Fi signal will flash in the upper left hand corner of the thermostat. In the app, press “Next” to continue.

\*Do not press “Next” on the thermostat.

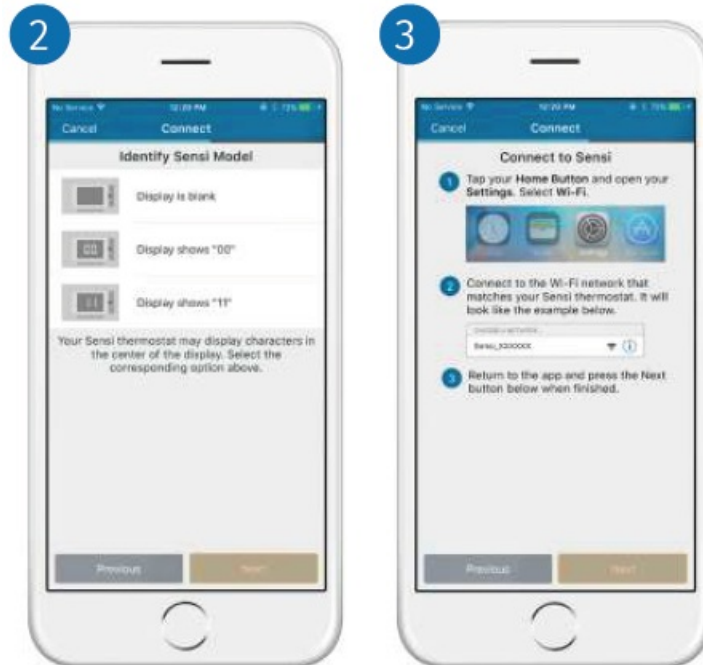


## 2. IDENTIFY SENSI THERMOSTAT

Select what option your thermostat displays. Once you see a checkbox next to your selection, press “Next” to continue.

## 3. CONNECT YOUR iOS DEVICE (10.0 OR LATER)

Go into your iPhone’s/iPad’s Wi-Fi Settings, and you’ll see a list of available networks. Select the Sensi network. Once you get the blue check mark next to the “Sensi” network return to the Sensi app. Press the “Next” button to continue.



Note: To connect to Wi-Fi using an Android device move to step 4.

### A. SENSI PASSWORD

Input the Sensi password that came in the packaging as the Sensi PIN. If you lost the card, this code can be found on the back of the thermostat face plate. Press “Next” to continue. Skip to step 4.



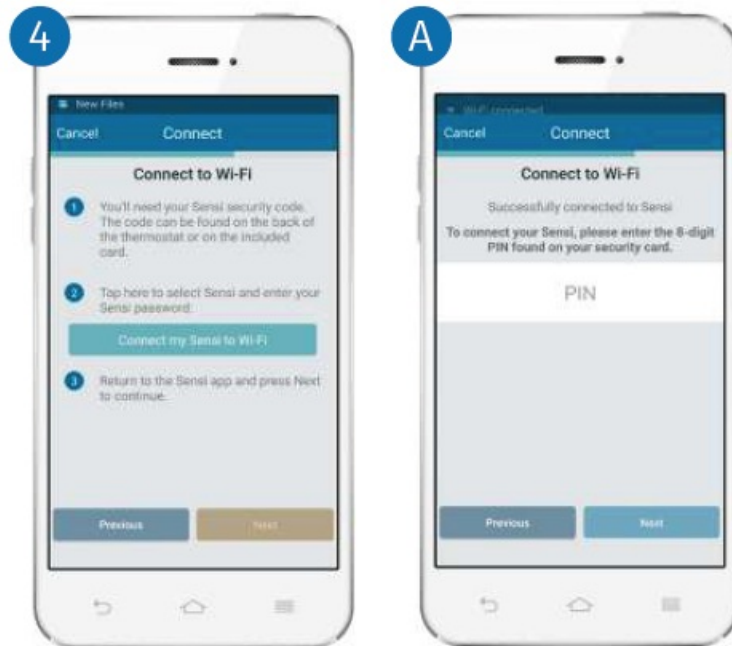
## 4. CONNECTING USING AN ANDROID DEVICE

Tap on the blue “Connect my Sensi to Wi-Fi” button in the app. This takes you to your phone’s Wi-Fi network list. You will see a Sensi network in the list of available networks. Tap the Sensi network, and connect to it. After you’ve successfully connected to the network, tap your phone’s back button to return to the Sensi app. Press

the “Next” button at the bottom of the app to continue.

#### A. SENSI PASSWORD

Input the Sensi password as the 8-digit PIN found on the back of the welcome guide or the back of the thermostat faceplate.

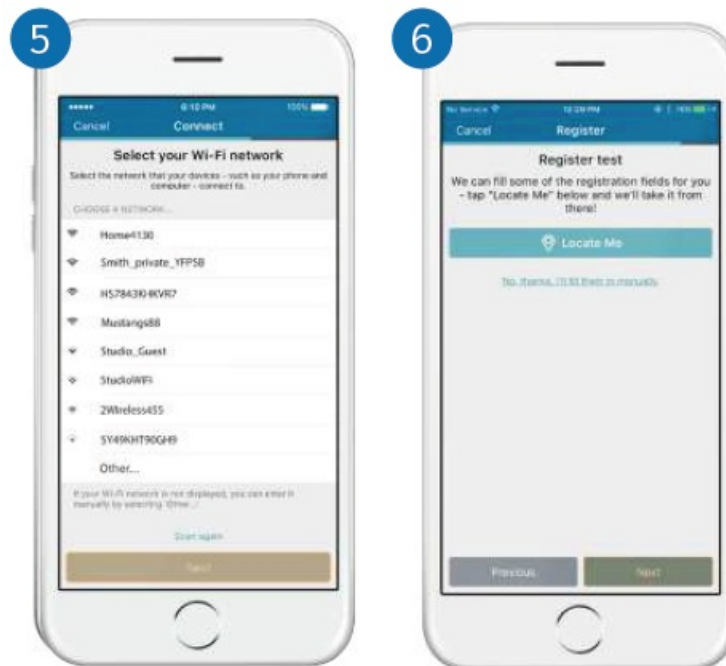


#### 5. SELECT YOUR WI-FI NETWORK

Select your home Wi-Fi network from a list of available networks. Note that this network must be 2.4GHz or Sensi thermostat will not be able to connect to it. If you have your network hidden, make it visible for installation purposes. Press “Next” to continue.

#### 6. ENTER YOUR NETWORK PASSWORD

Type in the password for your home Wi-Fi network. Press “Next” after you’ve input the password to continue.



#### 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 Thermostat” to open the main screen of the app.



## NOTES

### Accessing your sensi thermostat from other devices

- When you log into your Sensi account with your email address and password, the app or web page 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 or when you are logged into your thermostat via the Sensi website. 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 or select “Account” then “My Thermostat” option on the [www.sensicomfort.com](http://www.sensicomfort.com) website. 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, press the plus (+) sign to add another thermostat to your account.
- The (+) sign will be on the top left of the screen on an iOS device, and the top right of the screen on an Android device.
- **Note:** To reconnect an already registered thermostat to a new router, use the plus sign and choose the second option, “Yes, it is on the wall,” and run through the connection steps again.





### 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. (see picture)
- For Android: Tap the three dots in the upper right hand corner.



### HVAC configuration menu

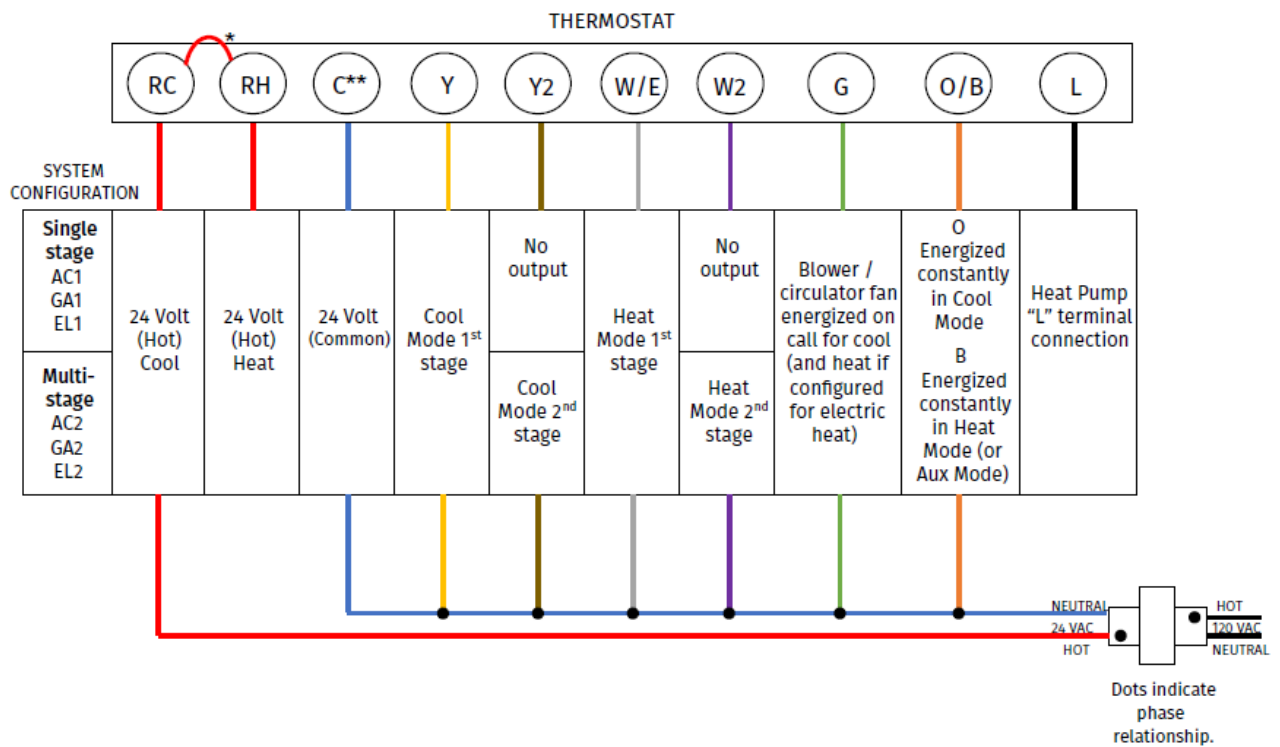
- If you chose the option “No, it needs to be installed” and walked through the installation process on the Sensi



app the app should have correctly configured your thermostat for system type. You can check your system configurations by accessing the “menu” on the physical thermostat. Here is a configuration menu that explains each setting.

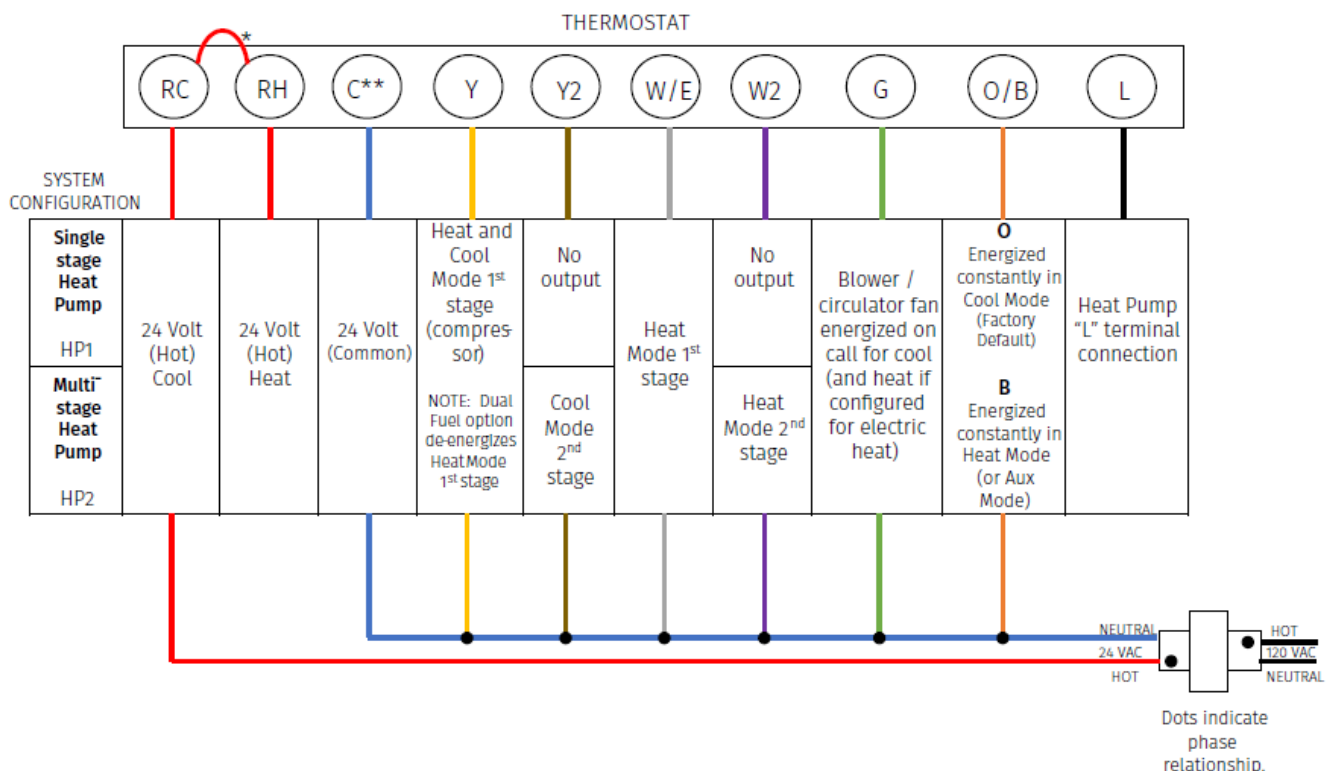
CONFIGURATION MENU ITEMS REFERENCE			
No.	Menu item	Default	Options
1	Wireless Setup Connects Thermostat to Wi-Fi network	—	Connect
2	Fahrenheit or Celsius	F	F C
3	Outdoor Equipment Configuration Cooling or heat pumps	AC2	AC1 – Conventional Cooling 1 (Single Stage) HP1 – Heat Pump 1 (Single Stage) AC2– Conventional Cooling 2 (Two-Stage) HP2– Heat Pump 2 (Two-Stage) ACO1– No Cooling
4	Indoor Equipment Configuration For Gas or Electric Heat	EL2	GA 1 (Single Stage) EL1– Electric 1 (Single Stage) GA2 (Two-Stage) EL2– Electric 2 (Two-Stage)
5	Reversing Valve Position Selects “O” or “B” Setting For Heat Pumps Only	O	O B
6	Wireless Radio Turns Wi-Fi Radio On/ Off	ON	On Off

Single stage or multi-stage conventional system with single transformer



- Internal jumper between RC and RH, located on back of thermostat above battery compartment.
- Common connection required for Heat only or Cool only systems.
- Thermostat wiring does not follow a standardized color code. Label thermostat wires before removing old thermostat from the wall.

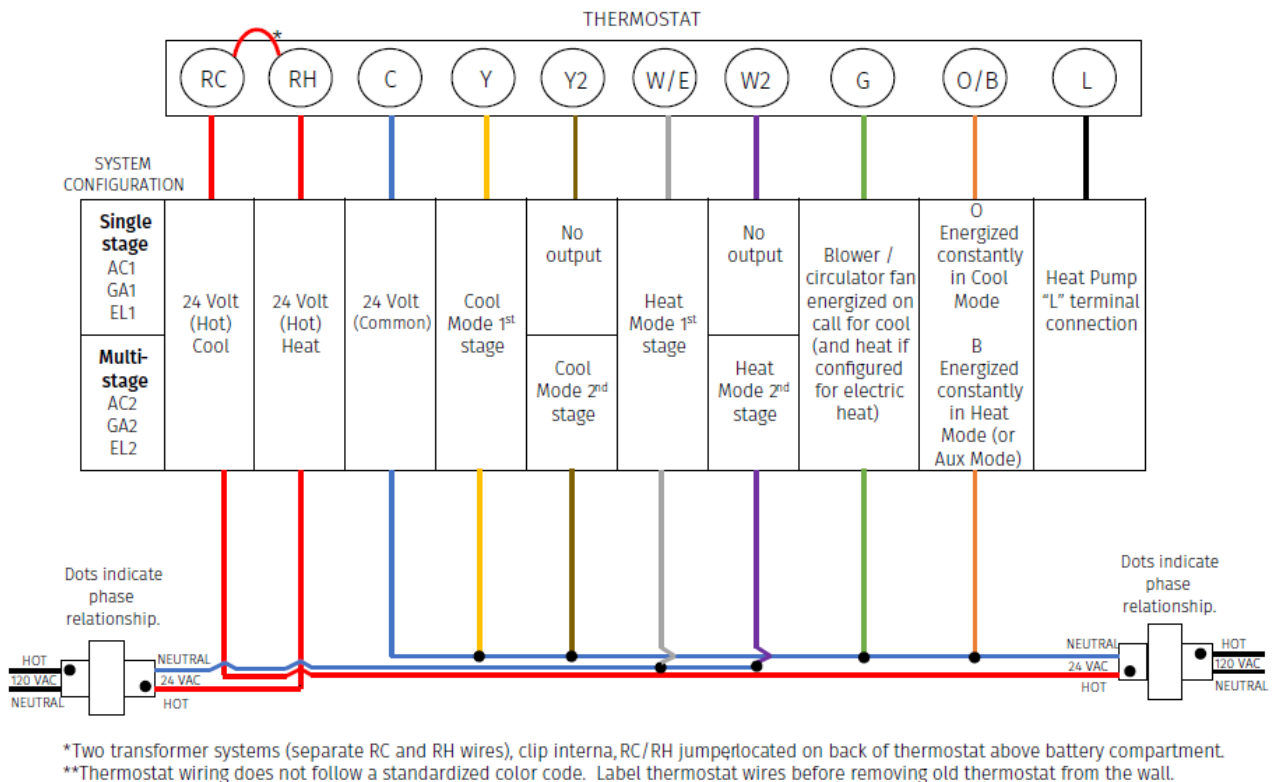
## Heat Pump Systems



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

- Thermostat wiring does not follow a standardized color code. Label thermostat wires before removing old thermostat from the wall.

### Single stage or multi-stage system (no heat pump) with two transformers



- Two transformer systems (separate RC and RH wires), clip internal RC/RH jumper located on back of thermostat above battery compartment. Thermostat wiring does not follow a standardized color code. Label thermostat wires before removing old thermostat from the wall.

## CONTACT

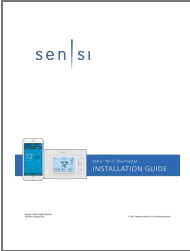
For problems connecting your Sensi thermostat, call or email the Sensi Technical Support team, and they will be happy to help you or your contractor walk through any steps needed to troubleshoot the Sensi thermostat.

- [www.sensicomfort.com/support](http://www.sensicomfort.com/support)
- (888) 605.7131
- [support@sensicomfort.com](mailto:support@sensicomfort.com)

## FAQ

- **Q:** Do I need to download the Sensi app for installation?
- **A:** Yes, the Sensi app is required to install and configure the Wi-Fi thermostat correctly.
- **Q:** What information is needed to create a Sensi account?
- **A:** You need a valid email address and a chosen password to create a Sensi account.

## Documents / Resources

	<p><a href="#">Emerson ST55 Sensi Wi-Fi Programmable Thermostat</a> [pdf] Installation Guide</p> <p>1F86U-42WF, UP500W, ST55 Sensi Wi-Fi Programmable Thermostat, ST55, Sensi Wi-Fi Programmable Thermostat, Wi-Fi Programmable Thermostat, Programmable Thermostat, Thermostat</p>
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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