



Degrii Smart Thermostat Self Help Doc

For more information, visit Degrii.com

Specification

| TOPIC | SPEC |
|---------------------------|--|
| Color | Black |
| Material | Plastic |
| Dimensions | 145 x 83 x22 mm or 5.7 x 3.2 x 0.86 inches |
| Weight | 155g |
| Display | LED arrays |
| Power Source | 24VAC~60Hz |
| Power consumption | Less than 2.4VA |
| Sensors | Temperature & Humidity |
| Communication Method | Bluetooth; 2.4 GHz WiFi |
| System Compatibility | in the Quick Start Guide |
| Phone Compatibility | Android 9.0+; iOS 14.0+ |
| Weather Resistance | Indoor use only |
| Operating Temperature | 32~130°F (0~55°C) |
| Storage Temperature | -22~140°F (-30~60°C) |
| Certifications | FCC, IC |
| Environmental Information | ROHS compliant; Recyclable packaging; Mercury free; Arsenic free; PVC free |
| Languages | English |
| Warranty | 1-Year |

Thermostat Compatibility

Remove the cover from your old thermostat. Using the Degrii OS app or the website compatibility checker [<https://degrii.com/pages/thermostat-compatibility-checker>], select the wires of your old thermostat to determine if your system is compatible with the Degrii thermostat.

■ What types of HVAC are compatible with Degrii thermostat?

Below is a summary of the types of HVAC systems Degrii thermostats are compatible with. Always use our **compatibility checker** to confirm if your system is compatible with the thermostat.

- Compatible with 24-volt systems.
- Natural Gas, Oil, or Electric fuel types.
- Conventional (Furnace and Air Conditioning) with up to 2 stages of heat and 2 stages of cool.
- Conventional (Furnace and Air Conditioning) with a single accessory, such as a humidifier, dehumidifier, ventilator.
- Conventional (Furnace and Air Conditioning) single-speed fan control.
- Heat pumps with up to 4 stages of heat (2 stage heat pump, 2 stage auxiliary heat) and two stages of cool.
- Heat pumps with single-speed fan control.
- Boilers up to 2 stages of heat.
- Dual Transformer (Boiler and Air Conditioning) with up to two stages of heat and two stages of cool.
- Dual Transformer (Boiler and Air Conditioning) single accessory, such as a humidifier, dehumidifier, ventilator.

About the C wire

The common (C) wire doesn't control heating or cooling. Instead, C wires help deliver power from the system to the thermostat. Not all systems have a C wire installed and so require you to install a C wire.

But if you find that you need a C wire with a Degrii thermostat, you can install the Degrii **C-Wire** or **24V power adapter** depending on your system requirement. Use the Degrii App compatibility checker to find out which one you need.

Incompatible systems

- Proprietary systems with non-standard labels (for instance 1 2 3 or A B C).
- High voltage electric baseboard systems (110-240V).
- Millivolt systems (use much less electricity than low voltage systems and can't deliver the right amount of power).
- Not compatible with **communicating and modulating equipment** (Redlink, Comfortmaker, ClimateTalk).
- Systems that use coal, wood chips, pellets, anthracite, or other biomass materials are typically incompatible with Degrii thermostat.

■ What do my thermostat's wire labels mean

Here are some letters you may see on your thermostat's terminals and wire labels and what they mean.

| Common terminals | Degrii Wire terminals | Meaning |
|--|---------------------------------|---|
| G | G | This wire controls the blower fan, which is responsible for pushing the warm or cool air through all the vents in your house. |
| C | C | This stands for the "common" wire in an HVAC system, and it provides power to the thermostat. |
| Y, Y1 | Y1 | The Y wire is used to send a signal to your HVAC system telling it to fire up the air conditioner. For cooling. |
| Y2 | Y2 | Second stage cooling. |
| W, W1 | W1 | Just like the Y wire, the W wire(s) control the heating aspect of your system. |
| E | * | This works nearly identically to auxiliary heat, but for emergency purposes only. It has to be turned on manually, whereas auxiliary heat can turn on automatically if need be. |
| O, O/B | O/B | These wires are responsible for switching the changeover valve in a heat pump system. The O wire reverses the valve from heating to cooling, and the B wire switches the valve from cooling to heating. |
| W2, Aux, X2 | W2 (or W1 if no existing W1) | Second stage heating, usually auxiliary (electric) heating. |
| T (label found on HVAC, not thermostat label) | C | For Lenox G14 series HVACs which do not have C label on the control board terminals, the T stands for the "common", and it provides power to the thermostat. |
| X, X1 | C | This stands for the "common" wire in an HVAC system, and it provides power to the thermostat. |

| Common terminals | Degrii Wire terminals | Meaning |
|---|-----------------------|---|
| B | C or O/B | Depending on the HVAC type, B can either be the common wire (C) or O/B wire for heat pumps. Verify if you have a Heat pump. If you have a heat pump and have an O or O/B wire in addition to the B wire without C wire, then B is the C wire. If you have no heat pump, then B is your common wire. |
| ACC, H, Hum, Hum1, H2, Hum2 | * | Some thermostats have this terminal to connect equipment like a whole-house humidifier. |
| D, DH, Dhum, Dehum, D2, DH2, Dhoom2, Dehum2, BK | * | Some thermostats have this terminal to connect equipment like a whole-house humidifier. |
| L | Not needed | The L wire is a system monitor and used to light a light on the thermostat. |
| S, S1, S2, T | Not needed | These wires run directly outside and provide outdoor temperature information to the thermostat. |



Customer Service

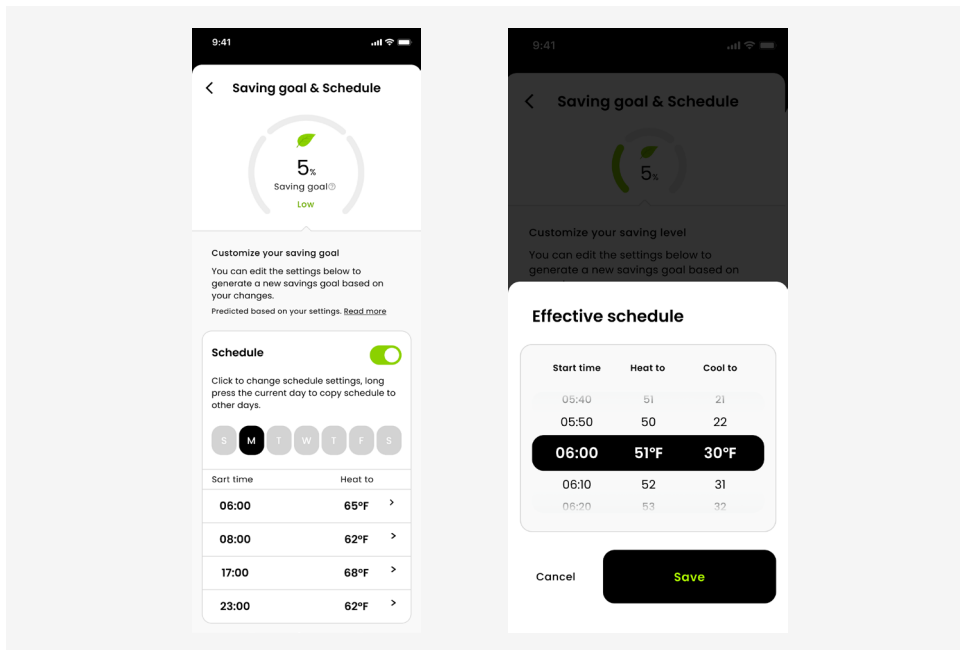
Telephone: +1 (888) 533-4744

Email: happycustomer@degrii.com

Join the community: <https://degrii.com/pages/join-the-degrii-community>

■ How do I program my schedule on my Degrii thermostat

Go to the schedule tab from the main settings menu: **SETTINGS > SAVING GOAL > SCHEDULE**. You will see your schedule for the day. Tap on any of the already existing schedules to view or edit your schedule for that specific day.



After setting the time, click on the "**Heat to**" and the "**Cool to**" to set the heating and cooling temperatures, respectively.

Tap **Save** in the bottom right corner to save your new schedule.

■ How to rename your Degrii thermostat

Go to MAIN MENU > SETTINGS > NAME. You can choose from a list of suggested names, or enter the name you wish to use for the device with the option to enter your own name above the suggestions.

■ Degrii thermostat features

After setting up your Home app, you can continue customizing your thermostat.

1. Add a home address for the Degrii app. This will be used to determine your outdoor temperature for your heat pump heating and also for geofencing. To set the home address:
 - a. Open the Degrii app
 - b. Click on the map at the top area to set your home location.
2. You can create some settings to save energy by scheduling temperatures for each part of your day.
 - Create a schedule to be activated in your home.
 - Smart fencing could be turned on to use geofencing when the Away routine starts and return to your scheduled temperatures when the Home routine starts.

You will get heating and cooling system alerts if there are system issues and receive seasonal reminders for checkups (eg: Safety temperature alert).

■ App Features

Alexa Commands

How to setup Alexa link:

https://degrii.com/pages/support-alexa_integration

- "Alexa, what's the <thermostat name> set to?"
- "Alexa, what's the <thermostat name> temperature?"
- "Alexa, Set the temperature to <number> degrees"
- "Alexa, Set the <thermostat name> to <number> degrees"
- "Alexa, Set the <thermostat> between <number> and <number> degrees" (Auto mode)
- "Alexa, decrease the <thermostat> by <number> degrees"
- "Alexa, increase the <thermostat> by <number> degrees"
- "Alexa, set the the <thermostat> to <mode>" (modes: heat, cool, auto, off)

Google Assistant commands

How to setup Google assistant link:

https://degrii.com/pages/support-google_assistant_integration

Once your Degrii account is connected to Google Assistant, you can use the following voice commands to control your thermostat.

- "Ok Google, what's the <thermostat name> set to?"
- "Ok Google, what's the <thermostat name> temperature?"

- "Ok Google, Set the temperature to <number> degrees"
- "Ok Google, Set the <thermostat name> to <number> degrees"
- "Ok Google, decrease the <thermostat> by <number> degrees"
- "Ok Google, increase the <thermostat> by <number> degrees"
- "Ok Google, set the the <thermostat> to <mode>" (modes: heat, cool, auto, off)

Note: At this time, the Google Assistant integration does not support setting both heating and cooling temperature in Auto mode. We look to enable this capability as soon as possible. Stay tuned.

Thermostat Lock

Now you can stop your kids but not your spouse from accessing the thermostat. The locking feature is available from both the App and on the device itself. No passcode needed.

How to Lock the Thermostat

- To turn on or off the **Lock Thermostat feature in the app**;
 1. Go to settings in the upper right corner of the app.
 2. Scroll down to the Lock Thermostat feature and toggle it on/off.
- To turn on or off the **Lock Thermostat feature on the thermostat**;
 1. Tap the thermostat Menu button twice and then click the right button to go settings.
 2. Tap the Menu button again to enter into settings.
 3. Tap the Menu button one more time to lock the thermostat.

Fan Control

The Degrii Thermostat has 2 fan control modes as shown below:

- **Auto** - This mode has a **default fan cycle of 0 min/hr**. The fan will only run during the heating or cooling stage and turns off immediately the heat turns off (without Coast to Cool activated).
The fan cycle can be configurable by clicking on Auto to access the fan cycle menu. Fan cycle is configurable from 0min/hr to 30min/hr.
NOTE: This is the minimum amount of time the fan will run each hour.
- **On** - The fan will run continuously.

Fan Activation Delay

For gas furnaces, the Degrii thermostat is automatically configured to have the fan run according to the furnace control logic (By Furnace).

However, users can change the Fan Activation Delay from By Furnace to any time of their choice in Settings -> Advanced -> Fan Activation Delay. The time selected determines when the blower fan will turn on during heating. The fan only turns on after the set time to allow enough time for the furnace to heat up.

Saving Goal and Schedule

Now you can stop your kids but not your spouse from accessing the thermostat. The locking feature is available from both the App and on the device itself. No passcode needed.

Coast to Cool

Degrii thermostat sends signal to turn off your compressor or furnace earlier before the end of a cooling cycle or heating cycle, and keeps the fan on for 30 seconds to blow the remaining cool air or warm air into your home. This feature could help save energy during summer or winter time.

Customizable Schedule

Time-Based scheduling – Program your thermostat for one week; each day (each day is a different schedule); Or any group of days, like Mon-Fri, Sat, Sun; or Mon-Fri, Sat-Sun. You could further customize the temperature of a specific time period without changing the rest of the time slots.

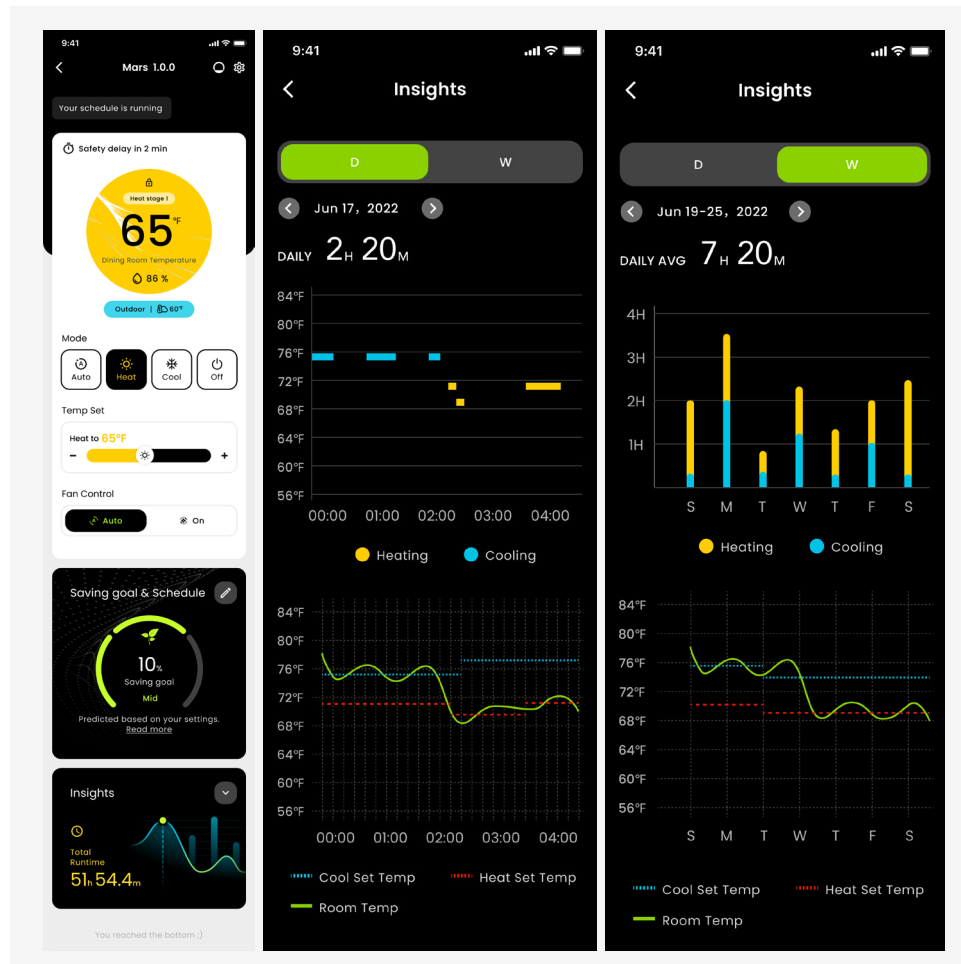
The schedule can be turned on or off depending on your needs.

Differential Temp

You can set the value of the minimum difference between the current temperature and set temperature before the system calls for heat or cool. A smaller difference means shorter cycle times, whereas a larger difference results in longer cycle times. By default the differential temp is 1°F which means if you the heat is set to 65°F we will turn the HVAC on when the temperature falls to 64°F. A higher Differential Temp will help prevent unnecessary short cycles from wearing your heating/cooling system and reduce starting cost. The temperature range is adjustable from 0.5 to 3 °F (0.5 to 3 °C) by going to Settings > Saving goal & Schedule.

Insights

Degrii Insights is the ultimate platform for understanding your thermostat's historical data in the Degrii app. With advanced analytics tools and user-friendly visualizations, you can explore temperature patterns, track energy consumption, and make informed decisions for cost savings and comfort.



To access the thermostat insights:

1. Open the Degrii app.
 2. Click on your degrii thermostat.
 3. Scroll to the bottom of the page. You see the entrance to the thermostat history data.
 4. Click on the down arrow beside Insights to open the page.
- **Total runtime:** Total runtime for thermostat insights data refers to the cumulative duration that the degrii thermostat has been actively running or operating during a specified period. It represents the combined time that the thermostat has been actively heating, cooling, or maintaining the temperature in a building or space.
 - **Daily history data:** This includes information on cooling and heating duration, average home temperature, and heat and cool setpoints. It gives insights into how long the thermostat operated for cooling or heating, the typical temperature in the home, and the desired temperature ranges. Analyzing this data helps optimize energy usage and improve comfort levels.
 - **Weekly history data:** Typically, weekly history data includes details such as the total duration of cooling and heating periods during the week, average home temperature for each day, and the average heat and cool setpoints programmed into the thermostat.

Smart Fencing

Once the Smart fencing feature is enabled. We will use the location of your phone to switch between Home and Away status. Your thermostat will switch from Home to Away when your phone is 3 miles away from home, or switch from Away to Home when your phone is within 3 miles from home.

Once the motion sensor detects movement in front of the thermostat while the status is Away and your phone is still 3 miles from home, it will switch your schedule back on.

The Smart fencing function can be toggled on/off at settings in the app.

Humidity Preferences

If the * terminal has been connected with an integrated humidifier or dehumidifier, the thermostat can turn the accessory device on to moderate the humidity level.

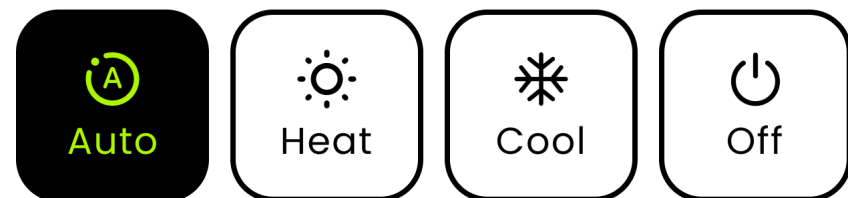
Once you have setup the thermostat with humidifier or dehumidifier, you will find the humidity setting for controlling your humidifier/dehumidifier in the app settings.

Click on the humidity settings in the app to set your Minimum and Maximum humidity preference for your home. The thermostat will ensure that the humidity of the room stays within the selected range.

Safety Temps

Safety Temps can help protect your home from extremely cold or hot weather by turning on your heating or cooling system when your set limits are reached, even if your thermostat is set to Off, or no heating is scheduled. You will receive notifications when the safety temperature is reached. For example, the weather becomes lower than the frost point when you are away from home, Degrii thermostat can heat the room up to prevent low temperature from damaging your water pipe. Another good use of this feature is when you have to leave plants or pets at home, you may set the Safety Temp higher in the winter and lower in the summer to keep them comfortable during extreme temperature. Did I mention this feature can still work without Wi-Fi? Your heating Safety Temps is set to 40° F/4° C by default and cooling is off, but both can be adjusted by going to Setting > Advanced > Safety Temperature.

Modes



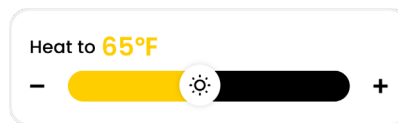
Auto: Auto mode allows you to set both heat and cool temperatures for you comfort. In this mode, you heat will turn on when the room temperature falls below the heat setpoint, while the AC will turn on when the room temperature goes above the cool setpoint. The default deadband for heat and cool is 5F (2.5C) and can be changed in advanced settings in the app from 3F to 10F.

Heat: In this mode, only the heat of your system can be controlled. Users can set the desired heat temp for the room.

Cool: In this mode, only the AC of your system can be controlled. Users can set the desired cool temp for the room.

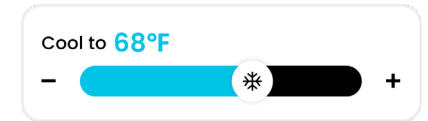
Off: Turn off the thermostat if you do not want the thermostat to heat or cool your home using your schedule or set temp. The thermostat will stay off until you change the mode from off to either Auto, Heat, or Cool.

Heat Set Temp



The lowest heat setting on the Degrii thermostat is 40 degrees Fahrenheit (4.5 degrees Celsius), while the highest heat setting can go up to 90 degrees Fahrenheit (32 degrees Celsius). Increase the heat setpoint by scrolling the heat bar to the right or tap the + button. To decrease the heat setpoint, scroll the heat bar to the left or tap the - button.

Cool Set Temp



The lowest cool setting on the Degrii thermostat is 40 degrees Fahrenheit (4.5 degrees Celsius), while the highest Cool setting can go up to 90 degrees Fahrenheit (32 degrees Celsius). Increase the cool setpoint by scrolling the cool bar to the right or tap the + button. To decrease the cool setpoint, scroll the cool bar to the left or tap the - button.

Deadband (Minimum Comfort Zone)

The minimum difference between the heat mode set temperature and the cool mode set temperature when the system mode is in auto mode. The default value is 5 °F (2.8 °C). You can change this on the app in Settings > Advanced > Deadband.

Screen Timeout

Tailor the visibility of your thermostat screen with the Screen Timeout feature. Choose between keeping the screen always on or allowing it to turn off during periods of inactivity. By default, the Auto setting conserves energy by turning off the screen after 30 seconds of idleness. You can adjust this setting in the app under Settings > Advanced > Screen Timeout.

Temperature & Humidity Correction

Degrii Thermostat has built in temperature and humidity sensors that are already well calibrated at the factory. If the sensors seem to be consistently reading slightly above or below the actual temperature or humidity you can adjust it with your reference thermometer. For example, if the thermostat reading is higher than your reference temperature, apply "-1" or "-2" in this setting. You can locate these features at Settings > Advanced > Temperature Correction or Settings > Advanced > Humidity Correction.

Minimum Runtime/Safety Delay (Short Cycling Protection-alternative name)

If the compressor is restarted too soon after a shutdown, system damage can occur. This feature allows the compressor to wait a few minutes before restarting, helping to prevent damage to the heating or cooling system. During the brief wait period, the thermostat will show Cool on (or Heat on if you have a heat pump) until the wait period is over, at which point the compressor will turn back on. The time is 2 min by default.

Units

You can switch between using Celsius and Fahrenheit by going to Settings > Advanced > Temperature Units.

Note: this setting will be applied on both Degrii Thermostat and the App when adjusting and displaying the temperature. The unit for system setting will always be in Fahrenheit.

Accessories (* Terminal)

Degrii thermostat offers an accessory terminal that is capable of connecting 1 of the 4 following devices:

1. Dehumidifier - Configuration of the dehumidifier:
 - a. Cooling - Dehumidifier will only run when the cooling stage is active and the humidity is outside the desired range.
 - b. Fan - Run the fan when the dehumidifier is active.
 - c. Energize (Active on or Active off).
2. Humidifier - Configuration of the humidifier will ask:
 - a. Heat - Humidifier will only run when the heating stage is active and the humidity is outside the desired range.
 - b. Fan - Run the fan when the humidifier is active.
3. Ventilator.
4. Emergency Heat - The emergency can be activated from the settings of the App and on the thermostat.

Note: The emergency heat option is only available when Emergency heat is chosen as the * terminal during the setup process.

Share Device

You can share access to the thermostat control with your families, roommates and even Airbnb guests.

Restrictions on shared devices:

The shared account user has some restrictions to the use of the app such as:

1. Cannot create room;
2. Cannot share device with others;
3. Cannot execute OTA;
4. Cannot change home location
5. Clicking on the delete device button only removes the device from the shared user's wyze app device list, but does not delete the device from the main user's list.

Special attention!

Shared devices can use AutoSwitch. That means anyone who leaves home activates AutoSwitch, which changes state to Away.

Filter reminder

Degrii thermostat has a built-in filter management system that can store filter information like sizing factors. User will be notified when the filter is about to be depleted.

Thermostat troubleshooting

Common Stages

| Conventional 1 Stage Heating | |
|------------------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Conventional 2 Stage Heating | |
|------------------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Conventional 1 Stage Heating 1 Stage Cooling | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Conventional 2 Stage Heating 2 Stage Cooling | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Conventional 2 Stage Heating 1 Stage Cooling | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/ Humidifier/Dehumidifier/Ventilator |

| Conventional 1 Stage Heating 2 Stage Cooling | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay (Stage 1)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 1 Stage Heat Pump | |
|-------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 1 Stage Heat Pump with Aux Heat and Emergency Heat | |
|--|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 1 Stage Heat Pump with Aux Heat | |
|---------------------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 2 Stage Heat Pump | |
|-------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 2 Stage Heat Pump with Aux Heat | |
|---------------------------------|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-1 Stage Heat Pump, 1 Stage Heat | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| 2 Stage Heat Pump with Aux Heat and Emergency Heat | |
|--|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-2 Stage Heat Pump, 1 Stage Heat | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay (Stage 3)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-1 Stage Heat Pump, 2 Stage Heat | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay (Stage 3)/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-1 Stage Heat Pump with Aux Heat, 1 Stage Heat | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat |
| W1 | Heating relay (Stage 2)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-2 Stage Heat Pump, 2 Stage Heat | |
|---|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay (Stage 3)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay (Stage 4)/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

| Dual Fuel-2 Stage Heat Pump with Aux Heat, Emergency Heat and 1 Stage Heat | |
|--|---|
| Wire Label | Function Description |
| Rc | 24 V AC power (Cooling) |
| Rh | 24 V AC power (Heating) |
| C | 24 V AC common |
| O/B | Heat pump control valve |
| Y1 | Compressor Cool/Heat (Stage 1) |
| Y2 | Compressor Cool/Heat (Stage 2) |
| W1 | Heating relay (Stage 3)/Auxiliary Heat Relay (electric) |
| W2 | Heating relay/Auxiliary Heat Relay (electric) |
| G | Fan relay |
| * | Emergency heat/Humidifier/Dehumidifier/Ventilator |

■ Heat Pump

Heat Pump Type

Air-to-Air: It extracts heat from the outside air and transfers it indoors. Its efficiency is affected by the outside air temperature. It might require a supplementary heating source in very cold climates.

Geothermal: It utilizes the relatively constant temperature of the ground to extract or dissipate heat.

Emergency Heat (E)

This feature is commonly found in heat pump systems. When the outdoor temperatures drop significantly, heat pumps may become less efficient in extracting heat from the outside air. In such cases, the emergency heat setting allows the user to turn on the backup heating system to maintain a comfortable indoor temperature. Users can manually select the Emergency Heat mode on the thermostat if they know that the heat pump alone won't be sufficient to maintain the desired indoor temperature.

Note that **Emergency heat is not the same as Aux/backup heat**. The emergency heat requires the user to manually turn it on and is only available if the user has a dedicated wire labeled E connected to the degrii thermostat * **terminal. Aux/backup heat**, on the other hand, is automatically controlled by the thermostat to supplement the heat pump in extreme cold conditions.

Swap Heat and Cool

This feature, when turned on, will reverse the cool and heat functions. If you realize that your heat pump is heating when you turn on the AC and vice versa, turn on the swap heat and cool toggle to correct the operation.

■ How to determine if your B wire is a common or O/B wire

Most thermostat manufacturers use C to designate the connector for the common wire. However, there are some Trane, American Standard, and York thermostats that use B for the common wire. To address this, check:

1. If you're installing a Degrii thermostat to control a heat pump system and the current thermostat has both a B and a C, connect the B to the Degrii O/B terminal and connect the C to the Degrii C terminal.
2. If you're installing the Degrii thermostat to control a heat pump system and the current thermostat has both an O and a B, connect the O to the Degrii O/B terminal and connect the B to Degrii C terminal.
3. If you're installing a Degrii thermostat to control a heat pump system and the current thermostat only has a B wire, connect the B to the Degrii O/B terminal and install a CWA.
4. If you're installing a Degrii thermostat to control a conventional system (non heat pump) and you see a B wire connected to the current thermostat, that B is a common wire and should be connected to the C terminal on the Degrii thermostat.

Note: If you have a B wire that is actually a common wire, not following the rules above can lead to blowing a fuse on your HVAC controller board and, most likely, damaging the Degrii Thermostat.

■ When X, W1 or W2 is an AUX wire

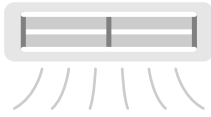

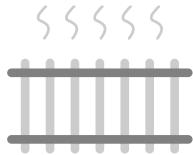
In a heat pump system W1, W2, X, X1 or X2 are used to turn on auxiliary heat and one of them should be attached to the W1 or W2 terminal in the Degrii thermostat. You should, however, **verify that the X wire** on the old thermostat is not a common wire. Once you're sure, you can assume that the X is the auxiliary heat and should be inserted into the W1 or W2 terminal on the Degrii thermostat depending on the available terminal after connecting the other wires.

1. If you're installing a Degrii thermostat to control a heat pump system and the current thermostat has both an X and a C connect the X to the Degrii W1 or W2 terminal and connect the C to the Degrii C terminal.
2. If you're installing a Degrii thermostat to control a heat pump system and the current thermostat has an **X and both O and B (where B is C)**, connect the X to the Degrii W1 or W2 terminal and connect the B to the Degrii C terminal.
3. If you're installing a Degrii thermostat to control a heat pump system and you see an X wire connected to the current thermostat without a C wire, that X is a common wire and should be connected to the C terminal on the Degrii thermostat.

■ How to tell the kind of heating system you have

During setup, your thermostat will ask what type of system you have and the type of fuel it uses. It's important that you enter the correct system information during thermostat setup.

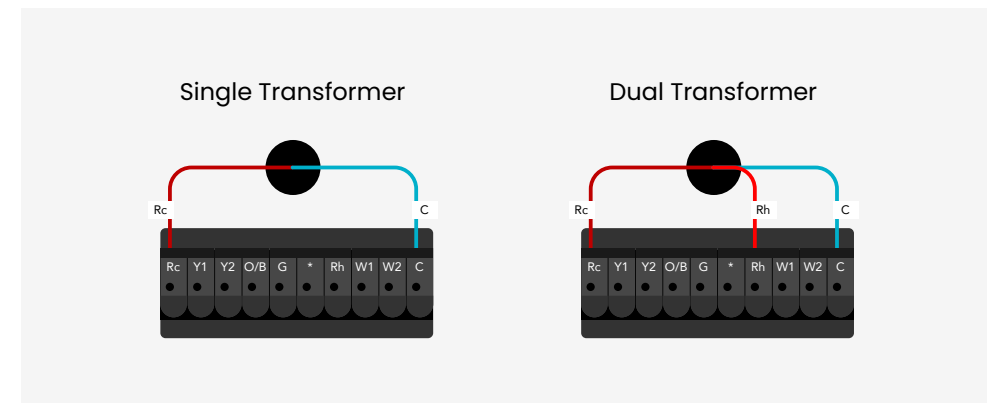
The Degrii thermostat needs to know the type of heating system you have so it can correctly control it. To help you choose the system you have, here's a breakdown of how each system works.

| | | |
|--------------------------------|---|--|
| <p>Forced Air</p> | <p>With this kind of heating system, warm air comes out of vents throughout your home.</p> |  <p>Furnace/Forced Air</p> |
| <p>In-Floor Radiant</p> | <p>This utilizes electric coils or hot water pipes under the floor of your home to provide heating.</p> |  <p>Infloor Radiant</p> |
| <p>Radiators</p> | <p>Radiators are sealed metal containers filled with hot water, steam or electric coils. They're similar to in-floor systems, since they don't use vents or fans, but radiators aren't installed under the floor.</p> |  <p>Radiator</p> |

■ Thermostat isn't turning on after installing (No Power)

You must have a wire in both the Rc and C terminal. Follow the below guide, before attempting to adjust any wiring ensure the power is shut off at the circuit breaker.

Regardless of with or without CWA, the wiring on the Degrii Thermostat must have Rc and C wires similar to one of the two images below to power on the thermostat.



1. Before checking/adjusting any wiring, ensure that power to heating/cool system is turned off. Turn the power on again after checking/adjusting any wires.
2. Check wiring - Please note the Degrii Thermostat power configurations only support the two images shown below.
 - a. ATTENTION: Rh cannot be used independently, the Rh will have to be changed to Rc. Note the above image.
 - b. Change Rh to Rc, if you do not have Rc connect on the degrii thermostat.
 - i. Power off.

- ii. Disconnect from Rh.
 - iii. Connect to Rc.
 - iv. Power on.
3. Check C-wire.
- a. Turn Power off.
 - b. Note the thermostat must have a C-wire. If you install a CWA, the old G-wire will become the C-wire. Don't worry, you won't lose independent fan control.
 - c. Ensure C-wire and Rc-wire are properly installed at the thermostat.
 - d. Sometimes the C-wire in your old thermostat is unused, even it is plugged into the C-terminal of your old thermostat. If you have R(or Rc), G, W, Y (or Y1) and unused C (or no power running through), you are likely fall into this case. To make it work, you can complete in one of two ways:
 - i. Remove the C-wire from the thermostat restart the installation process without selecting C-terminal and follow the app to install the C-wire adapter. or
 - ii. Identify the C-wire coming from the thermostat at the control board and wire it to the control board C-terminal. Identifying the wire can be challenging . We recommend the assistance of an HVAC professional. Ensure the power is off at the circuit breaker, before starting.
 - e. Power on.
4. If you have installed C-Wire Adapter (CWA)
- a. Turn Power off.
 - b. Ensure C-Wire Adapter is properly installed.
 - i. Review your photo of the old control board wiring and ensure the **labels were applied correctly**. Do you have an extra wire in one of the control board terminals (R-G-W-C) ?
 - ii. Ensure the correct wires were connected to the CWA (R, W, G, Y)
 - iii. Double check and ensure the correct CWA wires (R, Y, W, G, C) were connected to the control board terminals.
 - iv. Check all connections are secure and screws are firmly tightened.
 - c. Check the equipment cover has been reinstalled (some have kill switches there).
 - d. At the thermostat: The G-wire is used as the C-wire now. Ensure old G wire is labeled as C and connected to the degrii thermostat C terminal.

FAQ

Q. Is Degrii compatible with zone boards?

A: The Degrii thermostat is not compatible with a wide range of zone systems. Simply follow the guided setup in the degrii app to install the thermostat seamlessly.

For zoned systems with multiple thermostats, it might be necessary to install the Degrii C wire adapter at the zone controller in case there is no C wire available. To determine if you require a CWA (C wire adapter), use the Degrii compatibility checker within the Degrii app.

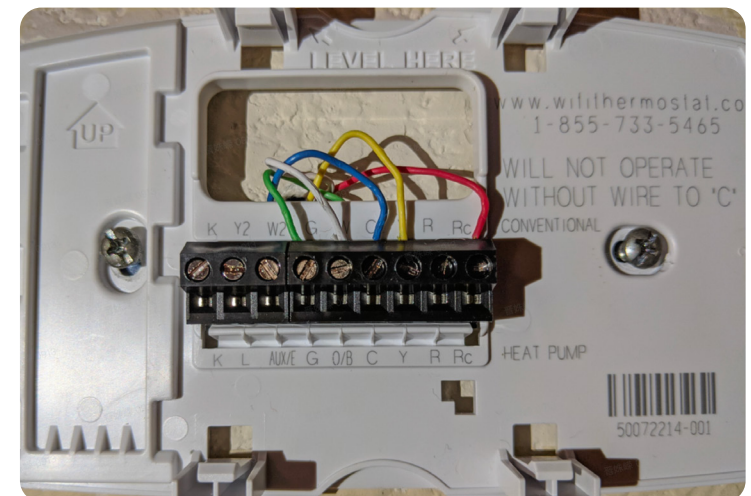
Enjoy the convenience and control of the Degrii thermostat!

Q: Is the Degrii Thermostat compatible with a 2-wire system?

A: Yes. By using the 24v power adapter, the Degrii Thermostat will be able to work with a 2-wire system.

Q: I have two lines of terminal labels. Which do I use for Degrii Thermostat?

Some thermostats have both “Conventional” and “Heat Pump” modes, causing them to have two lines of terminal labels. Your system is only using one of these two modes. All you have to do is figure out which mode is currently in use and then use that set of labels for the compatibility checker.



If you don't know what system that you have off-hand, no worries! Here are a few dead giveaways:

1. Try turning on the heat, then check if your outside condenser/air conditioning unit starts running. If it does, you have a heat pump system.
2. If turning on the heat doesn't make your outside unit run, you'll probably hear sounds coming from your basement, closet, or the ceiling when your heat is on. This would mean you have a conventional system.
3. Check out the labels on your condenser or indoor air handler for a model number or name. You can likely search this up to figure out what type of system you have.
4. Check your HVAC control board for the wire labels. The control board will most likely have only one set of labels which corresponds to either a heat pump or conventional unit.

Q: How do I identify my thermostat wires?

A: You will need to remove the front cover of your old thermostat, then remove the jumper wire if any. Follow the wire from the wall to the terminals of the control board where the wire is connected. Finally, label the wires based on the letter on its terminal accordingly. In this example, you would select Rh, G, Y, and C.

Q: Will the system reconnect after a power outage?

A: Yes, the Degrii Thermostat will reconnect with your Wi-Fi once it powers back on, and it will resume its mode and schedule.

Q: What do I do if Heat and Cool are Swapped?

A: When a Heat Pump system is setup, the heat and cool stage can be configured in reverse. If you have Heat Pump system and your heating/cooling are reversed, swap them into the correct configuration in Settings -> Advanced -> Heat Pump -> Swap Heat and Cool.

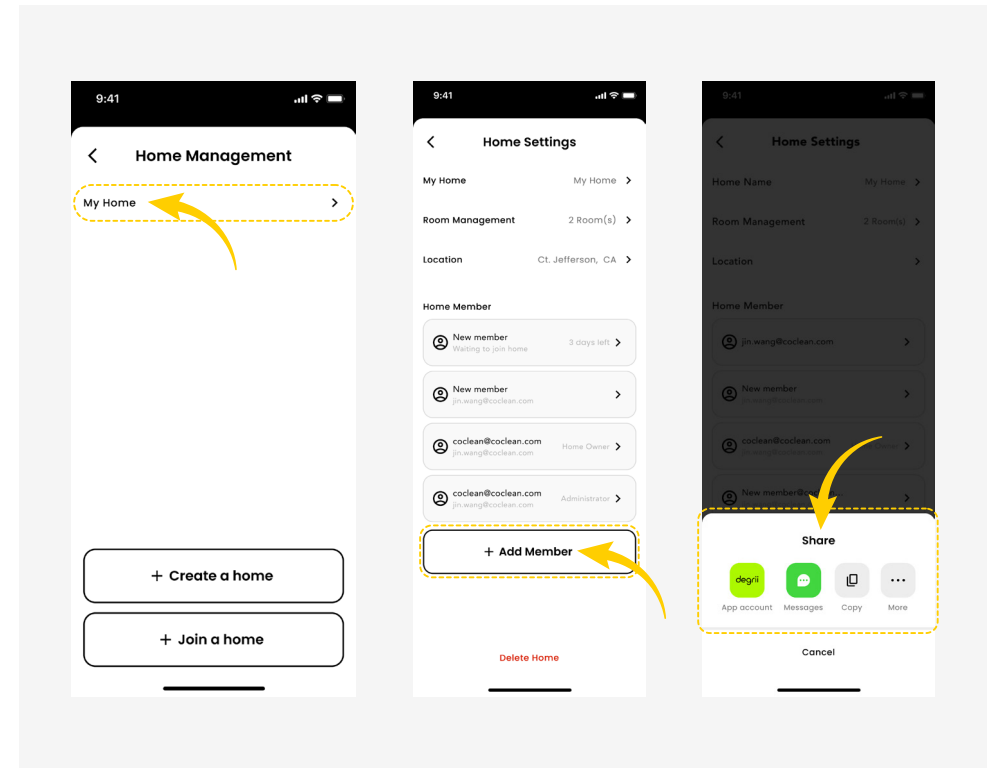
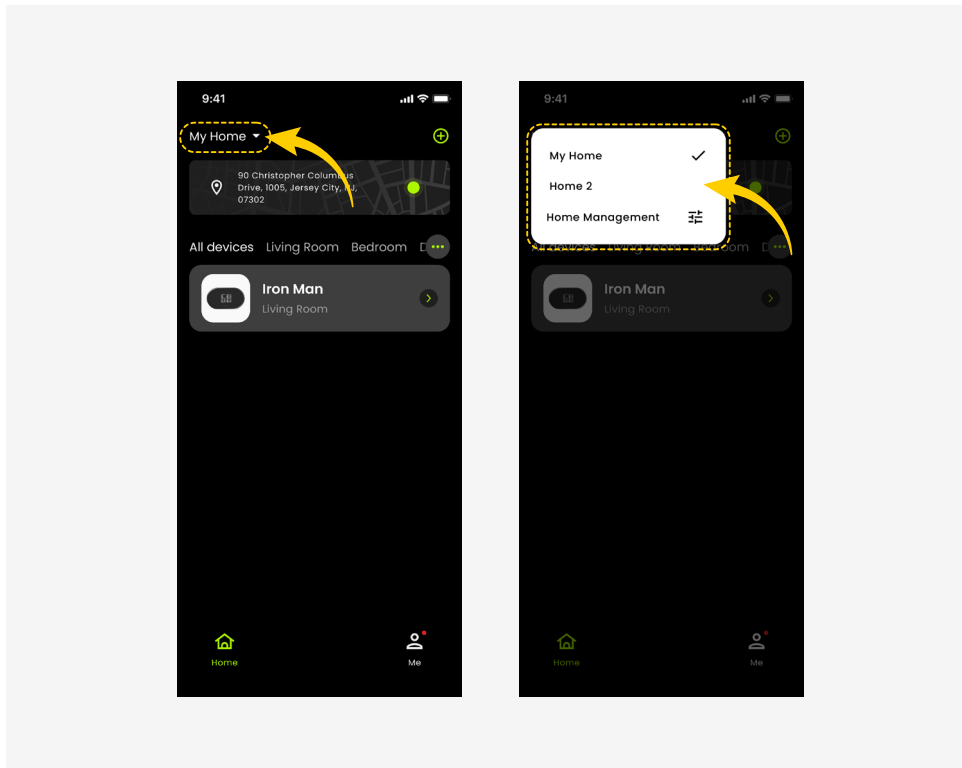
Note: "Swap Heat and Cool" is not available for a conventional system (no O/B wire).

Q: Can I share my thermostat with others? e.g., family, guest, airbnb user.

A: Yes, you can share the thermostat in your home with family members and friends by:

1. In Degrii app home page, go to Home management in the upper left corner.

2. Select the Home in which the devices you want to share are located, click Add Member and select the method of invitation.



Q: Does it work with millivolt system? e.g., fireplace

A: No, the Degrii thermostat doesn't work with millivolt systems.

Q: Can I control the fan independently?

A: Yes, if you have a G-wire, then you can control the fan even if you have CWA installed. Check out fan options here.

Q: How precise is the temperature reading and set points?

A: In Fahrenheit it 0 decimal places e.g.,(70°F), and 1 decimal place in Celsius e.g.,(23.5°C)

Q: Can I set up the Thermostat temporarily without WiFi at home?

A: Yes. You can use your mobile internet hotspot to set up the thermostat if you do not have a working Wi-Fi.

Q: How do I reset the device?

A: If you want to reset the thermostat,

1. Press and hold the Menu button on the thermostat for 5s.
 2. Select "yes" by clicking the right button.
 3. Click the Menu button to reset the thermostat.
-

Q: How do I set the Heat and Cool temperature in Auto mode?

A. The minimum allowable temperature difference between heating and cooling is 5 degrees Fahrenheit (2.5 degrees Celsius). To set the Auto mode temperature:

1. Tap either the left button or right button on the thermostat main page to display the "Heat to" or "Cool to" setpoint temperatures respectively.
2. Tap the right or left to increase or decrease the temperature.

Q: What do I do if the thermostat shows Degrii logo on the screen?

A: Usually, the thermostat screen shows "Degrii" during first time installation. Also, when the thermostat is Factory Reset, the screen shows the Degrii logo. This is perfectly normal. All you need to do is open the Degrii app and set up the thermostat all over again (Add thermostat).

Q: When does the next stage turn on for furnace?

A: The heat and cool stages change based on two factors; the temp difference (set Temp - current temp), and default run time. After the default run time of 30 mins, if the current temperature has not reached the set temperature, the system will move to the next stage.

Stage 1: 1 - 4 degrees from the set temp

Stage 2: 4 - 8 degrees from the set temp

Stage 3: 8 - 12 degrees from the set temp

Q: When does the next stage turn on for heat pumps?

A: The heat and cool stages change based on two factors; the temp difference (set Temp - current temp), and default run time. After the default run time of 1 hr, if the current temperature has not reached the set temperature, the system will move to the next stage.

Stage 1: 1 - 6 degrees from the set temp

Stage 2: 6 - 10 degrees from the set temp

Stage 3: 10 - 13 degrees from the set temp

Stage 4: >13 degrees from the set temp

Q: Can I set my desired Cool or Heat stage?

A: No. You can not manually set the heating or cooling stage to be used by the system.

Q: How to submit a log?

A: You can submit a log through the Degrii app platform home page.

- Go to Me
 - Click on Settings
 - Click Degrii Support, Select Submit Log and write details of the issue
 - Submit the Log and write down the Ticket ID to give to our customer support agents
-

Q: Will the Degrii Thermostat still work if Wi-Fi connection is lost?

A: Yes, it will keep operating based on the last working schedule; you can control your temperature or change status from the thermostat device as well.

Q: A change was made on the Degrii app but it has not shown up on the thermostat?

A: Check the right side of the thermostat to see if it still has wifi connection. If the thermostat wifi is disconnected, the Wi-Fi light will be off. If the thermostat is connected to the Wi-Fi, there may still be a delay in the connectivity between the app and thermostat.

Q: Can the Degrii thermostat work without the App?

A: Yes. You can use the Degrii thermostat without the app.

Q: How do I change WiFi?

A: To reset the thermostat Wi-Fi:

- Press the right and left buttons on the thermostat for 5 secs to display Wi-Fi reset
- Click the right button to select "y"
- Click the middle button to reset the Wi-Fi

To add new Wi-Fi:

- Open the Degrii app
- Click the + sign on the upper right corner of the app main page to add device
- Select the product category (Smart Thermostat)
- Click Change Wi-Fi/Reconfigure and follow the app instructions to add the Wi-Fi

Q: How do I turn on Emergency Heat?

The emergency Heat can only be turned on manually by going to Settings -> Advanced -> Heat Pump -> Emergency Heat. This option is only available if the User selects Emergency heat during the setup process. It has a max runtime of 30 mins.

Note: Emergency Heat is not the same as Aux Heat.

Q: How do I turn off my Degrii thermostat without the Safety Temperature turning it back on?

A. Go to settings --> Advanced --> Safety Temperature and then select None for both Min and Max safety temperatures. Save the change and go to the thermostat main page, and select off under MODE to turn off the thermostat.