



TS2501 Wi-Fi Smart Thermostat

# User Manual





## Table of Contents

<b>1</b>	<b>Welcome!</b>	<b><a href="#">2</a></b>
<b>2</b>	<b>Overview</b>	<b><a href="#">4</a></b>
<b>3</b>	<b>Basic Functions Using the Thermostat</b>	<b><a href="#">11</a></b>
	- HVAC Configuration	<a href="#">12</a>
	- System	<a href="#">17</a>
	- Fan Mode	<a href="#">18</a>
	- Mode	<a href="#">19</a>
	- Adjusting the Set Temperature	<a href="#">20</a>
<b>4</b>	<b>Advanced Functions Using the Thermostat via Portal/App</b>	<b><a href="#">21</a></b>
	- Schedule Settings and Schedule Hold	<a href="#">22</a>
	- Input Lock	<a href="#">25</a>
	- HVAC Fan Controls	<a href="#">26</a>
	- Taking Ownership of a Smart Thermostat Registered to a Different user	<a href="#">42</a>
	- Thermostat Advanced Settings	<a href="#">48</a>
<b>5</b>	<b>Using the App</b>	<b><a href="#">60</a></b>
	- Adding a New Device	<a href="#">61</a>
	- Controlling the Device	<a href="#">77</a>
	- Scheduling the Device	<a href="#">78</a>
	- Checking the Device Info	<a href="#">79</a>
	- Configuring Geofence Settings	<a href="#">80</a>
	- Miscellaneous Tabs in the Menu	<a href="#">84</a>
<b>6</b>	<b>Using the Portal</b>	<b><a href="#">85</a></b>
	- Understanding the Icons	<a href="#">86</a>
	- Using the Icons on the Left Column	<a href="#">87</a>
	- On the Dashboard Page (Home Page)	<a href="#">88</a>
	- On the Devices Page	<a href="#">89</a>
	- On the Vacation Page	<a href="#">91</a>
	- On the Geofence Page	<a href="#">92</a>
	- On the 3 <sup>rd</sup> Party Integration Page	<a href="#">93</a>
<b>7</b>	<b>Maintenance</b>	<b><a href="#">94</a></b>
<b>8</b>	<b>Feature List</b>	<b><a href="#">106</a></b>



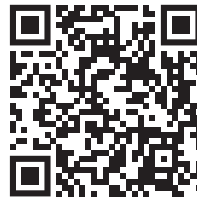
## Welcome!

Thank you for choosing the TrickleStar® TS2501 Wi-Fi Smart Thermostat™. We are your smart partner in optimizing comfort and maximizing savings for your Heating, Ventilation, and Air Conditioning (HVAC) systems. You can now remotely control and monitor the heating and cooling systems in your home and business from anywhere. If you have any inquiries about TrickleStar products or need technical support, visit our website for tutorials, videos and Frequently Asked Questions (FAQ). You can also contact us by email or phone.

Website: [www.tricklestar.com](http://www.tricklestar.com)  
Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)  
Toll Free: 1-888-700-1098

## Instruction Videos

If you want to see the Installation Instructions as videos, visit our YouTube channel:  
<https://www.youtube.com/user/TrickleStarUS/>





## Overview

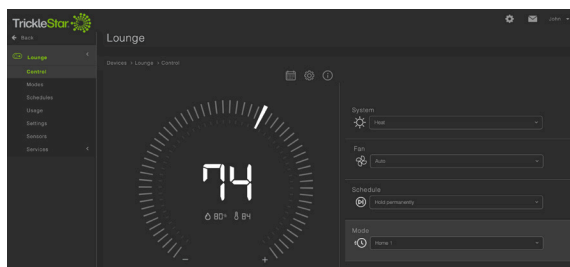
### What's in the System?

Congratulations on the purchase of your new TrickleStar Wi-Fi Smart Thermostat. This Thermostat offers a wide range of options to monitor and control your HVAC system, via:

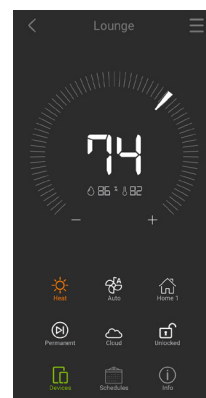
- the Thermostat
- the TrickleStar Portal (Portal), which is also mobile browser friendly
- the TrickleStar App (App) on your smartphone



Thermostat



Portal / Portal Mobile



App

This User Manual will guide you through the Thermostat features using the Thermostat, Portal and App. You can check the list of features and the location from which to perform the features by referring to “Feature List” from pages [106](#) to [112](#).

*Note: If you have not installed your Thermostat, refer to the [Installation Guide](#).*



## Thermostat User Interfaces

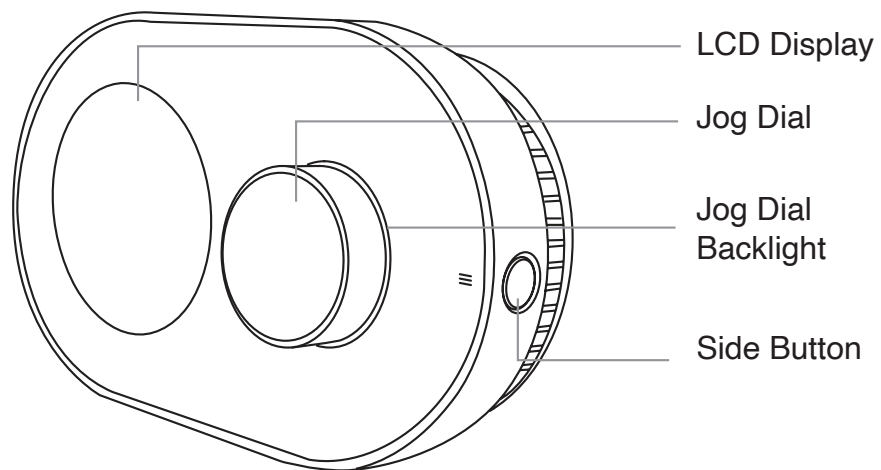


Fig 5-A

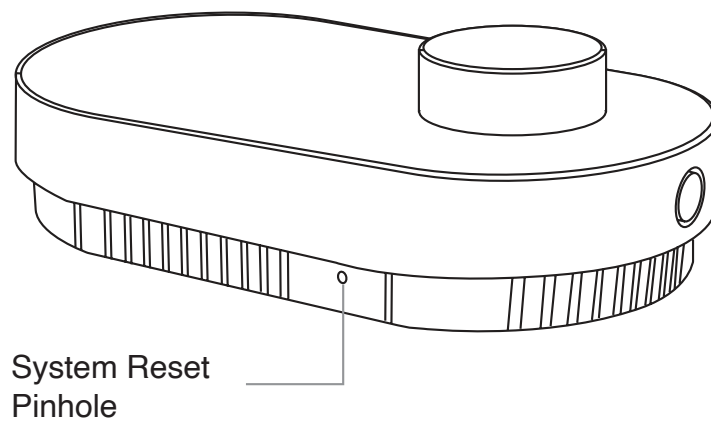


Fig 5-B

LCD Display

The Thermostat has a bright LCD display, which makes it easy to read and adjust the settings for the Thermostat.

System

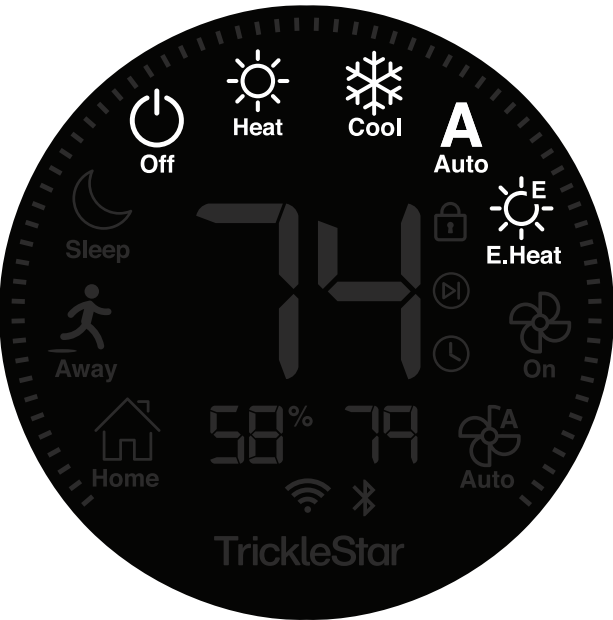







Fig 6-A

System	
	<b>Off Indicator</b> System: Off
	<b>Heat Indicator</b> System: Heat
	<b>Cool Indicator</b> System: Cool
	<b>Auto Indicator</b> System: Auto
	<b>E.Heat Indicator</b> System: Emergency Heating

Fan



Fig 7-A

Fan Mode



**Fan On Indicator**  
Fan: On or Run Once Mode



**Fan Auto Indicator**  
Fan: Auto or Circulation Mode

Mode



Fig 7-B

Mode



**Home Indicator**  
Mode: Home



**Away Indicator**  
Mode: Away



**Sleep Indicator**  
Mode: Sleep

## Wireless Connections

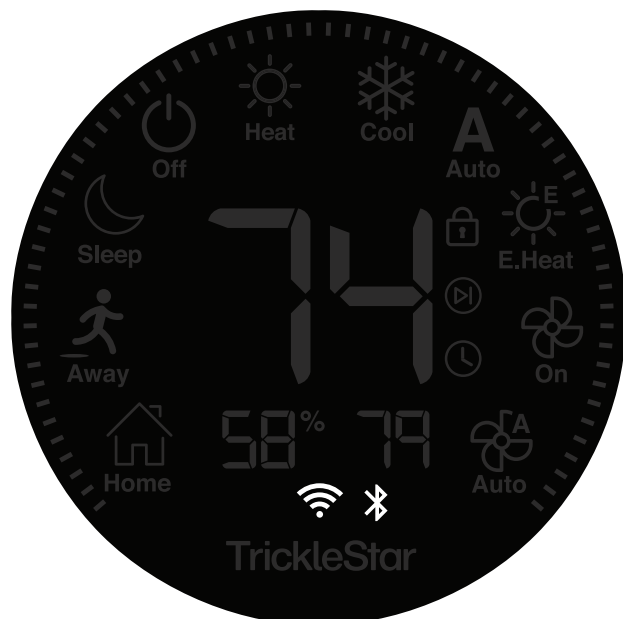


Fig 8-A

### Wireless Connections



#### Wi-Fi Indicator

Indicates Wi-Fi connection and signal strength.  
Flashes rapidly: Wi-Fi is disconnected.  
Flashes slowly: Connection to Portal is lost.



#### Bluetooth Indicator

When connected to one or more occupancy sensors.  
Flashes: Thermostat is scanning for occupancy sensor.

## Other Indicators

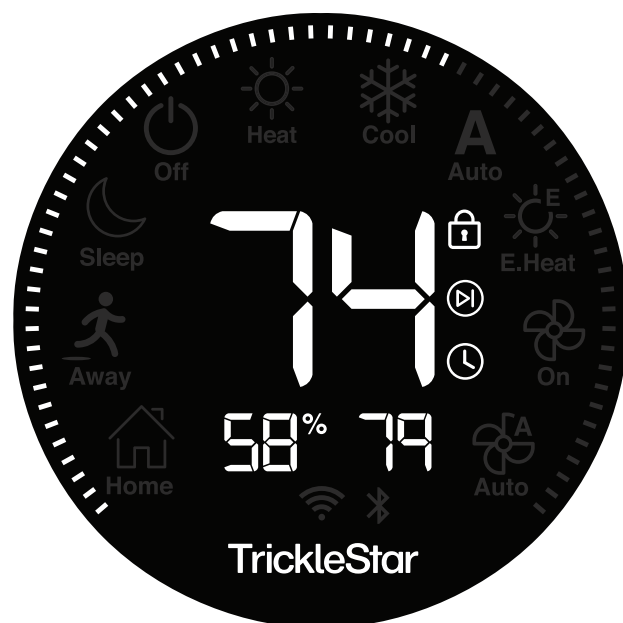


Fig 8-B

### Other Indicators

58%

#### Humidity Indicator

Display the room humidity in percentage.

74

#### Room Temperature Indicator

Display the room temperature.

74

#### Setpoint Temperature Indicator

Display the setpoint temperature.



Fig 9-A



## **Speedometer**

Speedometer for Setpoint Temperature.



## **Key-Lock Indicator**

Indicates the input is locked. Flashes: Reminds users that the Thermostat input is locked when new input is detected.



## **Hold Indicator**

Indicates Permanent Hold / Vacation Hold. Flashes: Temporary Hold.



## **Schedule Indicator**

Indicates a schedule is in progress.

TrickleStar

## **TrickleStar Logo**

Brand (Always on).

## Jog Dial Backlight

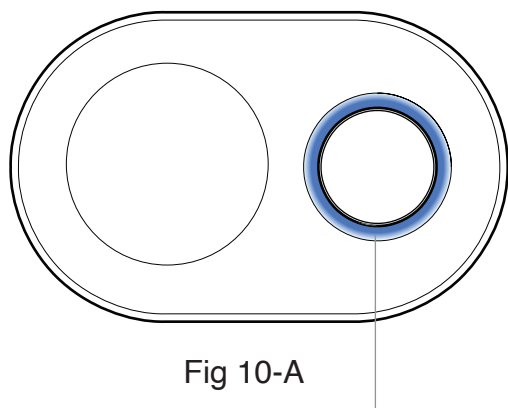







Fig 10-A

Jog Dial Backlight

### Jog Dial Backlight

-  **White**  
In configuration mode or setting mode
-  **Green**  
When there is demand response activity
-  **Red**  
When Emergency Heating is turned on (heat pump only)
-  **Blue**  
When Cooling is turned on
-  **Orange**  
When Heating is turned on
- Off**  
When Emergency Heating, Heating, and Cooling are turned off



## Basic Functions Using the Thermostat

If you have never connected your TrickleStar Thermostat to the Portal/App, your Thermostat will work as a simple non-programmable thermostat. You can manually set the basic functions such as System, Fan, Mode and Setpoint Temperature on the Thermostat using the Jog dial and Side button. You can check the list of features which the Thermostat can perform by referring to “Feature List” from pages [106](#) to [112](#).

*Note:*

*To enjoy all functions on your Smart Thermostat, it is recommended for you to create a Portal account and add the Smart Thermostat to your account.*

*Please refer to “Adding a New Device” at page [61](#) for instructions to add the Smart Thermostat to your account via the TrickleStar App.*



## HVAC Configuration

On first time powering up, the Thermostat will automatically prompt you to set your HVAC configurations. The Thermostat will control your HVAC system based on these settings.

After you have completed the Start-Up Configuration, you can still change the configuration for your system. The Thermostat will automatically upload any changes to your Portal account if your Thermostat is already connected to Wi-Fi and the Portal.

### Enter Configuration Mode

To change the HVAC Configuration, press and hold the Side button for 10 seconds to enter the Configuration Mode.

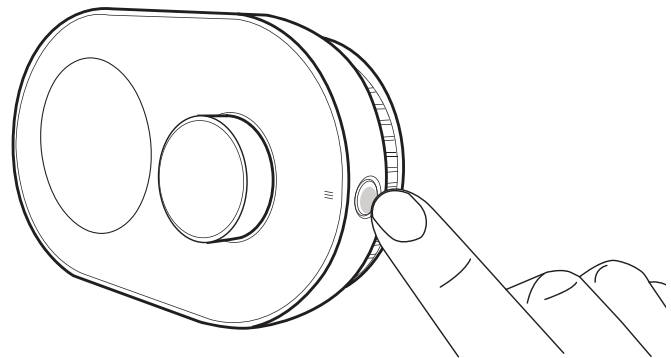


Fig 12-A



## Step 01 - Wi-Fi Provisioning

This display will be shown if:

- 1) Your Thermostat has never been connected to the Portal. You can connect your Thermostat to the Portal, or press the Jog dial or Side button to skip this step.
- 2) Your Thermostat has been connected to the Portal but has lost connection with the Portal after System Reset. Check your router and reconnect to the Portal.
- 3) Your Thermostat has been reset to factory default settings or Wi-Fi setting has been reset.



Fig 13-A

*Note: To reconnect your Thermostat to the Portal, select "Devices", then click on your "Device Name". Select "Settings", then click "Info and Time Zone". At "Connected Network (SSID)", click "Configure". Follow the steps to reconnect your Thermostat to the Portal.*

## Step 02 - Select Your HVAC System

1. Rotate the Jog dial to select:
  - "HC" for conventional system.
  - "HP" for heat pump system.
2. Press the Jog dial or the Side button to confirm your selection.



Fig 13-B

## Step 03 - Select Fan Control Option

1. Rotate the Jog dial to select:
  - “HG” for gas heating.
  - “HE” for electric heating.
2. Press the Jog dial or Side button to confirm your selection.



Fig 14-A

## Step 04 - Select Heat Pump Reversing Valve Option

If you have selected “HP” for heat pump system in Step 02, this option will be displayed.

1. Rotate the Jog dial to select:
  - “o” for a system in which the reversing valve is energized in cooling.
  - “b” for a system in which the reversing valve is energized in heating.
2. Press the Jog dial or the Side button to confirm your selection.



Fig 14-B

## Step 05 - Test the Connection of Each Output

This step helps you to check if the output terminals were connected correctly and securely. During the connection test, check if your HVAC equipment connected to the respective output terminal is turned on.

1. Rotate the Jog dial clockwise to turn on the output as follows:

- **--** : All outputs off
- **Y1** : Only Y1 is on, all others off
- **Y2** : Only Y2 is on, all others off
- **W1** : Only W1 is on, all others off
- **W2** : Only W2 is on, all others off
- **G** : Only G is on, all others off
- **OB** : Only O/B is on, all others off
- **ACC** : Only ACC is on, all others off

After you rotate the Jog dial, there may be a few seconds delay before the HVAC equipment turns on. This is not a malfunction.



Fig 15-A



2. Press the Jog dial or Side button to end the connection test. All the outputs will be turned off.

When you have completed the configuration, the Thermostat will enter Normal Operation and you will see this display on the Thermostat.



Fig 16-A

**Note:**

- To stop and exit the Start-Up Configuration, press and hold the Side button for approximately 5 seconds.
- The output terminals are tested in a predefined sequence to ensure the safety of your HVAC equipment. As such, after you have tested a specific output and proceeded to the next, you are not allowed to test the previous output again. If you need to retest the previous output, reenter the Start-Up Configuration as follows: Press and hold the Side button for approximately 10 seconds. It will restart from Step 01 (or Step 02 if the Thermostat is already connected to Wi-Fi).
- If there is no input for more than one minute in each of the steps from Step 02 to Step 05, the Thermostat will exit the Start-Up Configuration and return to Normal Operation.

## System

Press the Side button for System configuration. Then rotate the Jog dial to select the desired System. Press the Jog dial or the Side button to confirm your selection. Note that some System may not be selectable depending on your HVAC configuration.

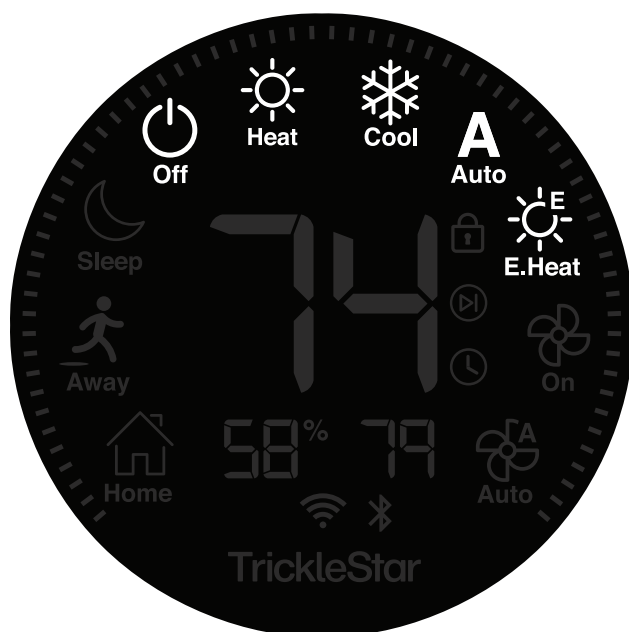


Fig 17-A

<b>Off</b>	The system is turned off and the Thermostat will only display the room temperature and room humidity.
<b>Heat</b>	The system will turn on the heating system when the room temperature drops below the "Set Temperature (Heat)".
<b>Cool</b>	The system will turn on the cooling system when the room temperature rises above the "Set Temperature (Cool)".
<b>Auto</b>	The system will activate the heating or cooling systems based on the room temperature to keep your home within the desired range of your "Set Temperature (Heat)" and "Set Temperature (Cool)".
<b>Emergency Heating</b>	Also known as "Auxiliary Heat". It is the second stage of heating that your Thermostat runs on when the temperature is too cold for your heat pump to extract heat from the outside. This option is only available if you have selected "HP" for heat pump system in Start-Up Configuration.

## Fan

After you have confirmed your selection for the System, the Thermostat will prompt you to select the Fan configuration.

Rotate the Jog dial to select the desired Fan setting. Press the Jog dial or the Side button to confirm your selection. The Thermostat will then return to Normal Operation.

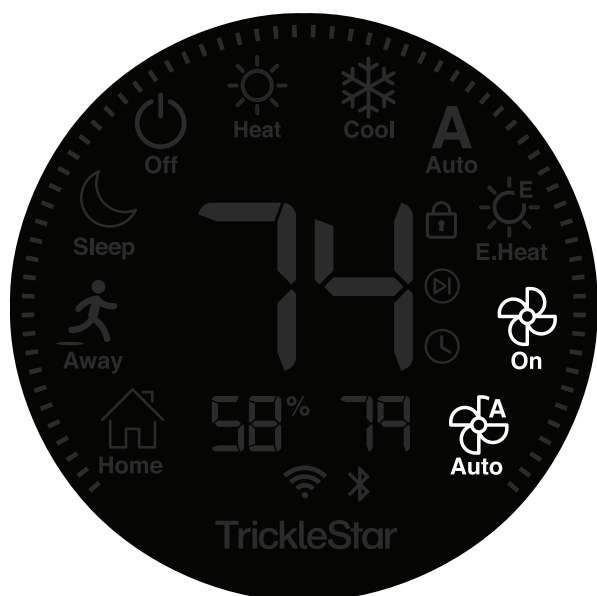


Fig 18-A

### On

The fan is turned on all the time.

### Auto

The fan will automatically turn on or off based on the HVAC system turning on or off.

## Mode

Press the Jog dial, then rotate the Jog dial to select the desired occupancy Mode. Press the Jog dial or the Side button to confirm your selection. The Thermostat will return to Normal Operation.



Fig 19-A

<b>Home</b>	Select this setting when you are at home and active/awake.
<b>Away</b>	Select this setting when you are not at home.
<b>Sleep</b>	Select this setting when you are at home but inactive/asleep.

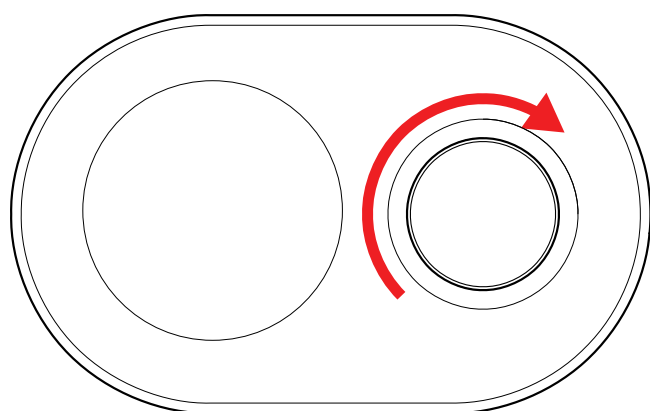
### Note:

- If your Thermostat is not connected to the Portal, the Fan and Mode that you have selected are used until you manually change their settings again.
- If your Thermostat is connected to the Portal and you have set a daily schedule, the Fan and Mode that you have selected are used until they are automatically changed by your next scheduled event.

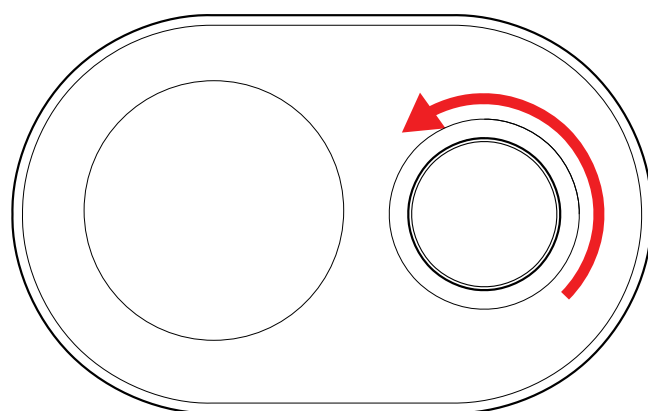


## Adjusting the Setpoint Temperature

Before you adjust the Temperature, select the System. Rotate the Jog dial clockwise to increase the temperature and counterclockwise to reduce the temperature. Once you have selected the Temperature the indicator will flash in the display. The Thermostat will automatically save the setting after 5 seconds, or you can press the Jog dial or Side button to save your setting immediately.



Increase Temperature



Reduce Temperature

Fig 20-A

### Note:

- If your Thermostat is not connected to the Portal, the Setpoint Temperature that you have selected is used until you manually change the setting again.
- If your Thermostat is connected to the Portal and you have set a daily schedule, the Setpoint Temperature that you have selected is used until it is automatically changed by your next scheduled event.





## Advanced Functions Using the Thermostat via Portal/App

To maximize value for your Thermostat, you need to add the Thermostat to your Portal account. The Portal will maintain communications with the Thermostat to update any changes made from the Portal or the Thermostat. The App will also synchronize all settings and information with the Portal. To add a new device to your Portal account via the TrickleStar App, please refer to “Adding a New Device” at page [61](#).

The Portal/App allows you to remotely control your Thermostat anytime, anywhere. It also allows you to configure and monitor Schedule for every day in the week, use the multi-user geofencing feature, monitor Demand Response events and configure advanced settings.

You can check the list of features which the Thermostat can perform in Portal or App by referring to “Feature list” from pages [106](#) to [112](#).



## Schedule Settings and Schedule Hold

### Set a schedule (Schedule Setting)

If your Thermostat is connected to the TrickleStar Portal, you can create a daily/weekly schedule by changing the Mode profiles.

Refer to “Scheduling the Device” on page [78](#) for details on configuring the Schedule via the TrickleStar App.

Your Thermostat will automatically follow the Setpoint Temperature and Set Fan for both Heat and Cool as per the Mode profiles in the schedule you have created.

### Override a schedule (Schedule Hold)

You can override a Schedule Setting if necessary. The schedule will then be put on Hold.

There are three types of Hold:

- **Temporary Hold:** The setting will be used until the next schedule starts, or when you cancel the Temporary Hold. It is activated when you change the Fan, Mode or Setpoint Temperature manually.
- **Permanent Hold:** The setting is permanent until you cancel the Permanent Hold. You have to manually enable the Permanent Hold via Portal/App after changing the Fan, Mode or Setpoint Temperature.
- **Vacation Hold:** The setting is used until the preset end date and time is satisfied, or when you cancel the Vacation Hold.

#### *Note:*

- *To cancel the Temporary Hold, Permanent Hold or Vacation Hold, press and hold the Jog dial for 3 seconds. The Thermostat will return to current Schedule.*
- *You can also cancel the Temporary Hold, Permanent Hold or Vacation Hold in the Portal or the App.*
- *You can only activate the Permanent Hold and Vacation Hold via the Portal or the App.*

You can see the Hold indicator and Schedule indicator on the LCD display as follows:

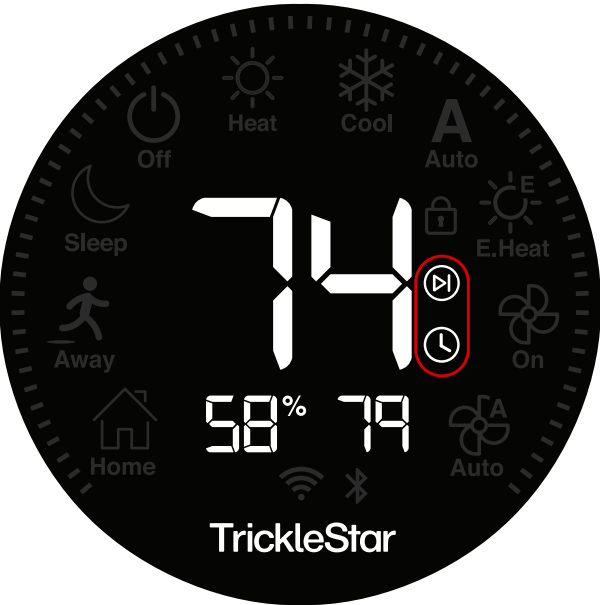




Fig 23-A

Types of Hold	Hold Indicator 	Schedule Indicator 
No hold (Schedule is active)	Off	On
Temporary Hold	Flashes	Off
Permanent Hold	On	Off
Vacation Hold	On	Off

## Input Lock

You can lock the Thermostat to avoid unintentional changes to your settings. Activate the Input Lock mode via the Portal or App as follows:

- Portal: Select “Devices”. Click on your “Device Name”. Select “Settings”. Click on “Display and Other Settings”. At Input Lock, click to select “On”.
- App: Select “Devices”. Tap on “Unlocked”. “Locked” will then be shown to indicate that the Thermostat has been locked.

The Key-Lock indicator will be shown on the LCD display and the Thermostat will be in Input Lock mode. The Jog dial and Side button will not respond to any input. When you press the Jog dial or Side button, the Key-Lock indicator flashes to remind you that the Thermostat is in Input Lock mode.

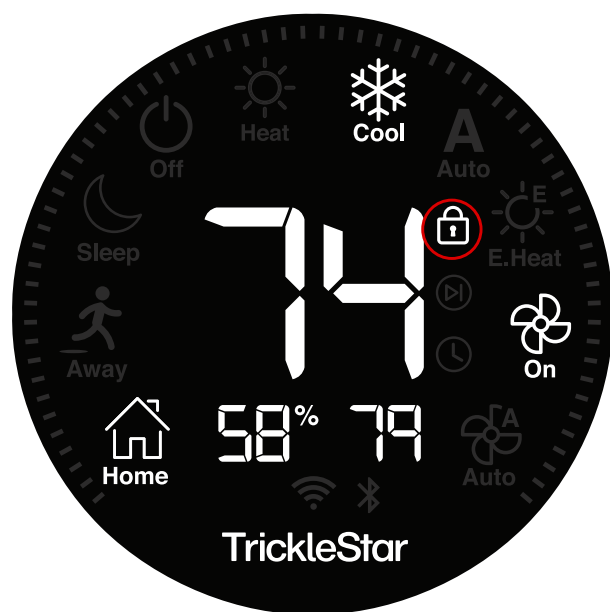
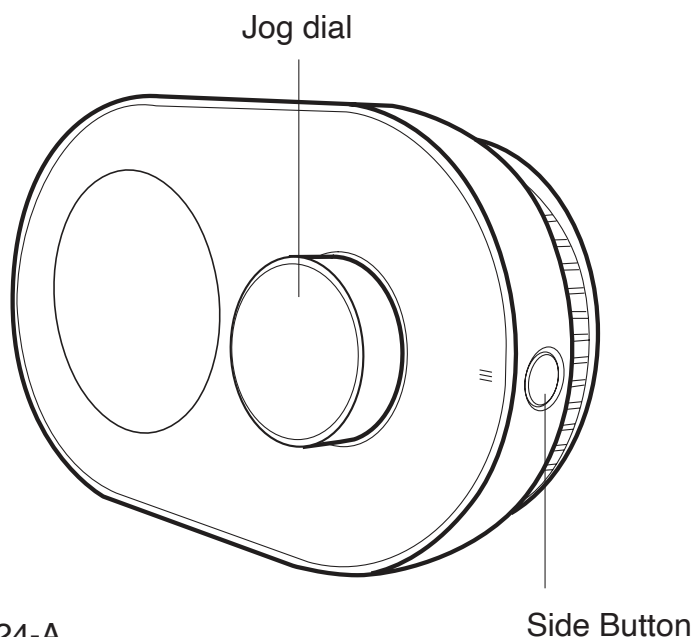


Fig 24-A



To turn off Input Lock, press and hold the Jog dial or Side button for three seconds to unlock the Thermostat. The Key-Lock indicator disappears from the LCD display and the Thermostat is no longer in Input Lock mode. You can now use the Jog dial and Side button to change your settings.



## HVAC Fan Controls

The TrickleStar Smart Thermostat provides additional capabilities to control your HVAC fan/blower for ventilation on-demand.

There are four types of fan controls available at your fingertip:

### Fan On:

In this configuration, the HVAC fan/blower will be turned on indefinitely until you change the Fan setting.

You can configure this setting via the Smart Thermostat itself, the Portal, or the App.

#### Smart Thermostat:

- 1. Press the Side Button. Select the HVAC System.
- 2. Rotate the Jog Dial to select Fan as “On”. Press the Jog Dial to save.

#### Portal:

- 1. From the Portal Dashboard, go to Devices tab. Select your device name.

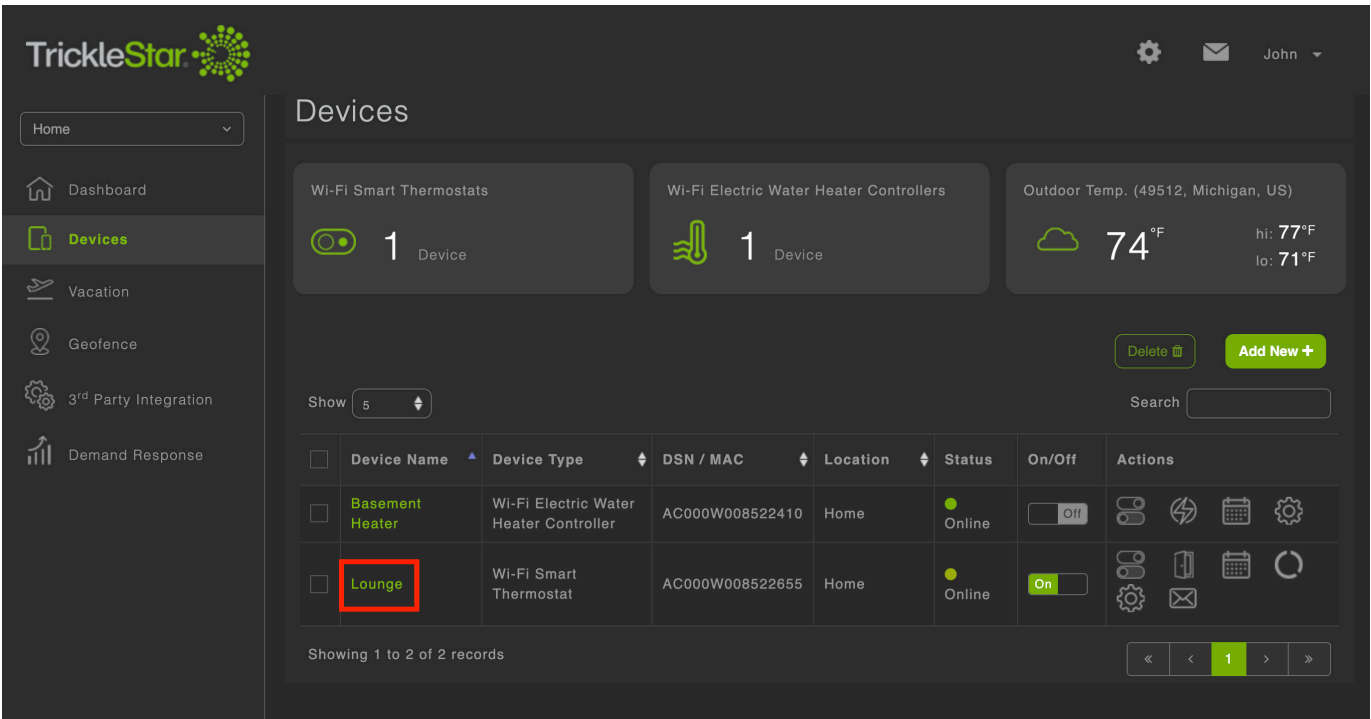


Fig 25-A

2. Under the Fan setting, select “On”.

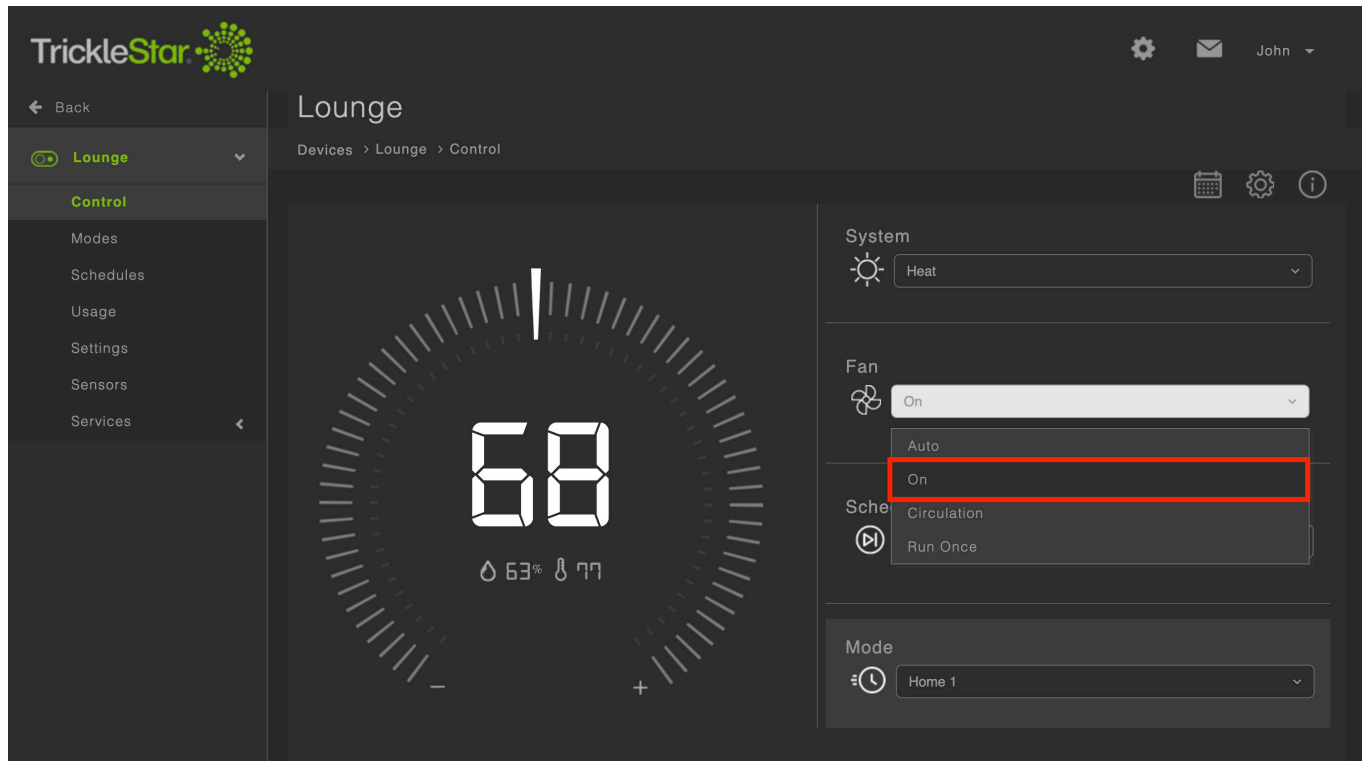


Fig 26-A

App:

1. At the App Devices tab, tap on the Fan setting and select “On”.

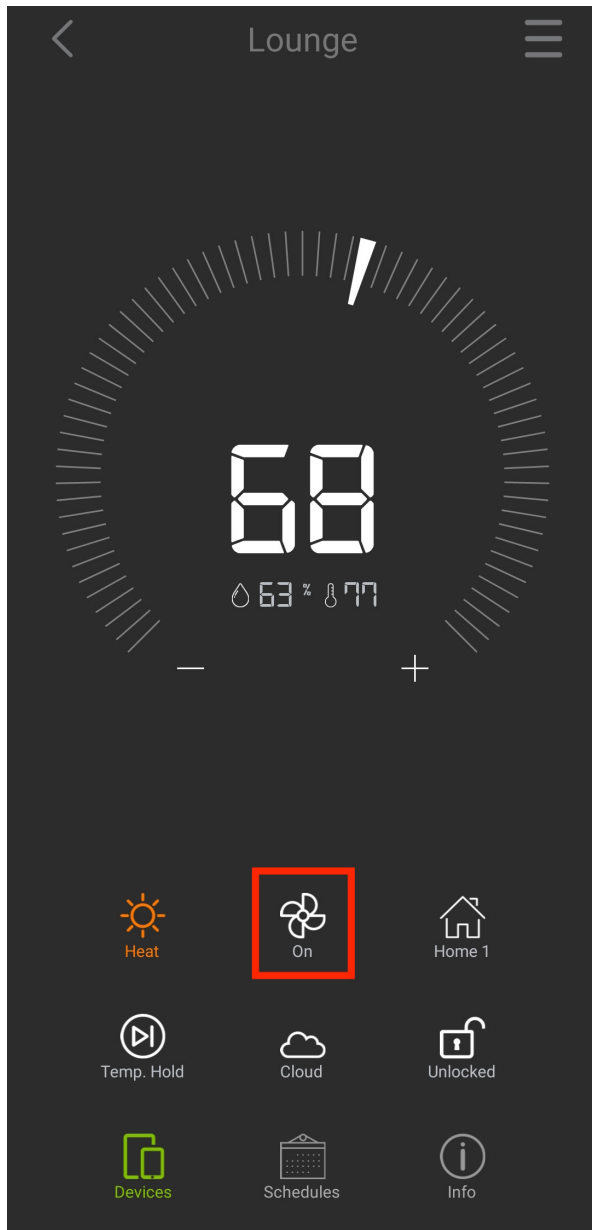


Fig 27-A



Fan Auto:

In this configuration, the HVAC fan/blower will run whenever the HVAC system (Cooling, Heating, or Emergency Heating) is running. You can configure this setting via the Smart Thermostat itself, the Portal, or the App.

Smart Thermostat:

- 1. Press the Side Button. Select the HVAC System.
- 2. Rotate the Jog Dial to select Fan as “Auto”. Press the Jog Dial to save.

Portal:

- 1. From the Portal Dashboard, go to Devices tab. Select your device name.

TrickleStar

Home

Dashboard

Devices

Vacation

Geofence

3rd Party Integration

Demand Response

Devices

Wi-Fi Smart Thermostats

1 Device

Wi-Fi Electric Water Heater Controllers

1 Device

Outdoor Temp. (49512, Michigan, US)

74°F

hi: 77°F

lo: 71°F

Delete

Add New

Show 5

Search

	Device Name	Device Type	DSN / MAC	Location	Status	On/Off	Actions
<input type="checkbox"/>	Basement Heater	Wi-Fi Electric Water Heater Controller	AC000W008522410	Home	Online	Off	<div><div></div><div></div><div></div><div></div></div>
<input type="checkbox"/>	Lounge	Wi-Fi Smart Thermostat	AC000W008522655	Home	Online	On	<div><div></div><div></div><div></div><div></div></div>

Showing 1 to 2 of 2 records

<<

<

1

>

>>

Fig 28-A



2. Under the Fan setting, select as “Auto”.

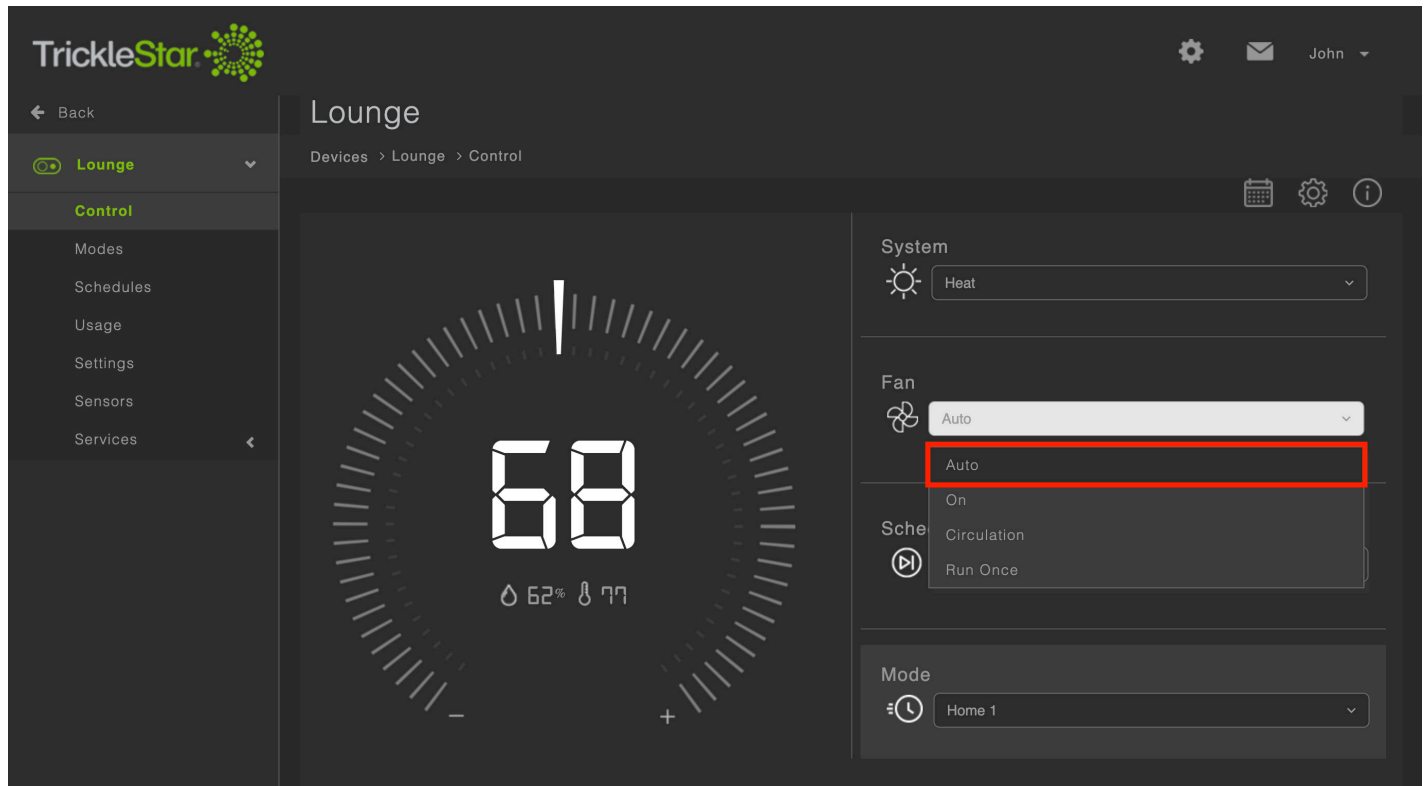


Fig 29-A

App:

1. At the App Devices tab, tap on the Fan setting and select “Auto”.

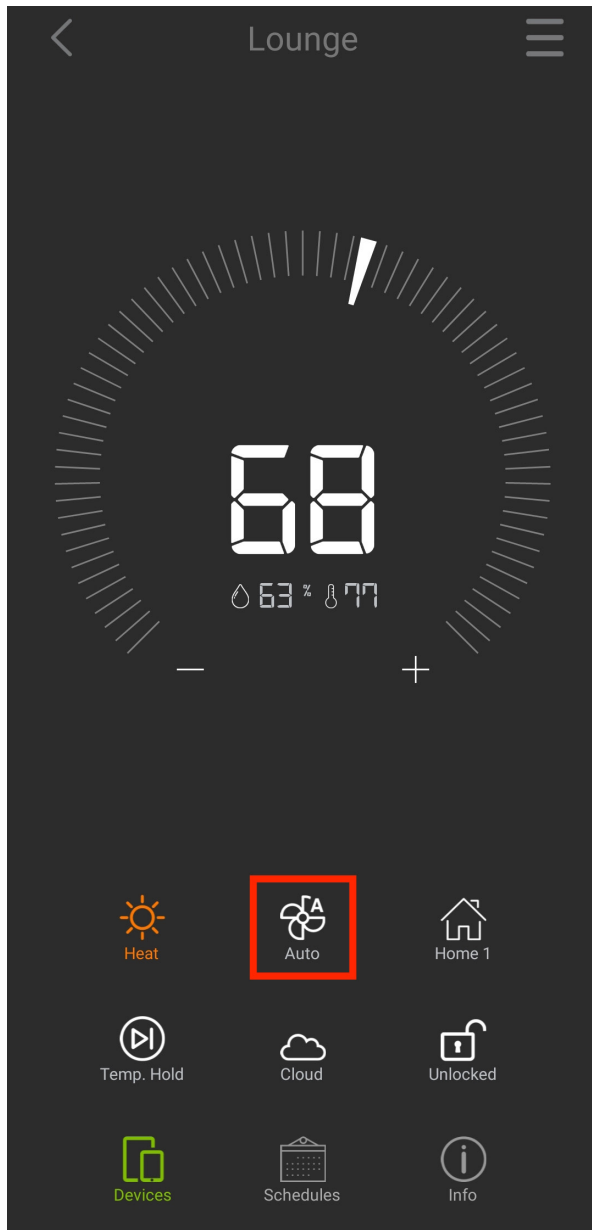


Fig 30-A

## Fan Run Once:

In this configuration, you can turn on the HVAC fan/blower for one cycle. The Portal/App will ask you for the duration to turn on the HVAC fan/blower. This setting will not affect the Thermostat's Hold state. If you manually changed the Fan setting anywhere, the Fan Run Once mode will be cancelled. Once the timer duration lapses, the Fan setting will return to your previous setting.

You can configure this setting in the Portal, or the App.

### Portal:

1. From the Portal Dashboard, go to Devices tab. Select your device name.
2. Under the Fan setting, select as "Run Once".

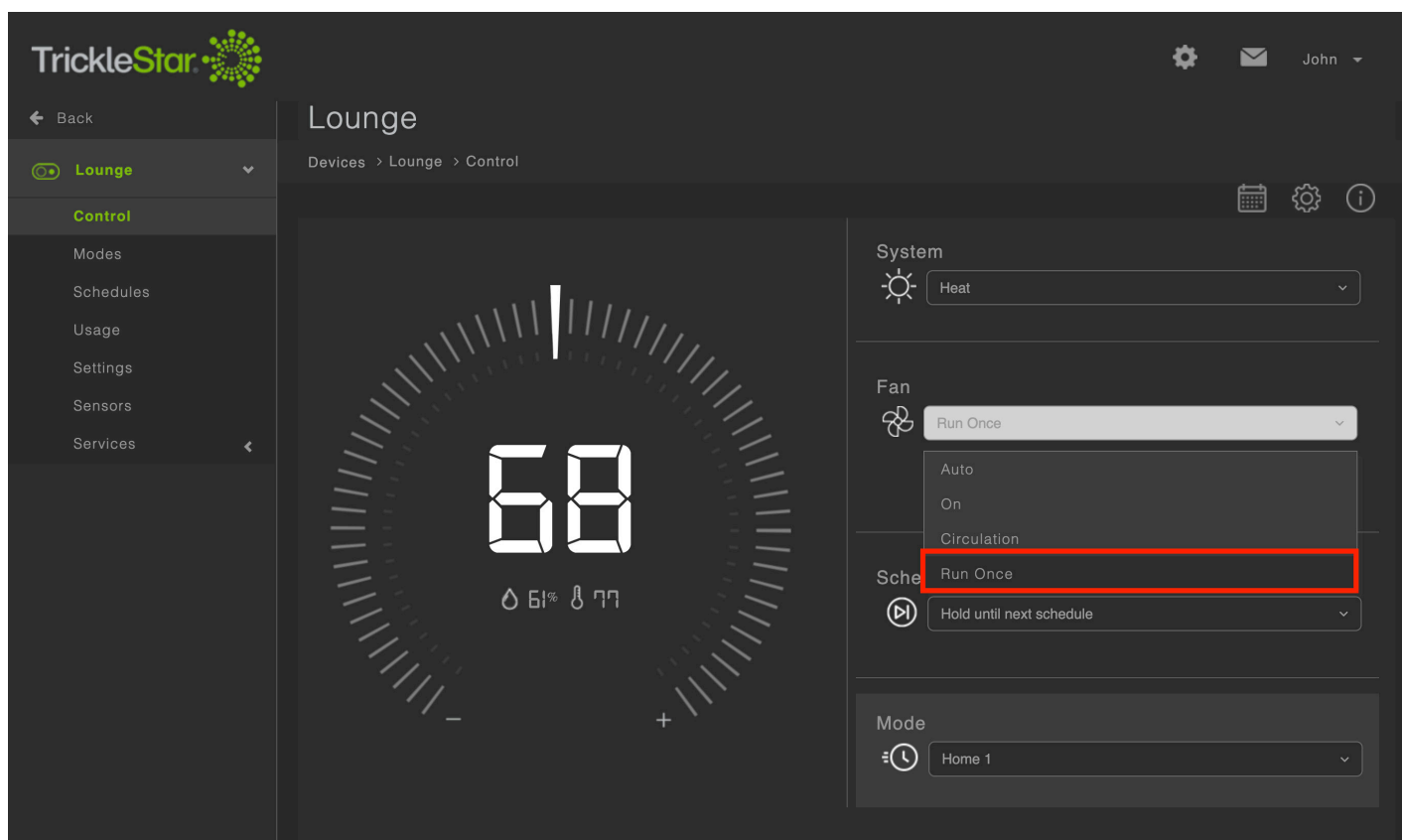


Fig 31-A

- The Portal will then ask you how long to turn on the HVAC fan/blower for the one-time run cycle (options: 10, 20, 30, 40, 50, 60, 90 or 120 mins).

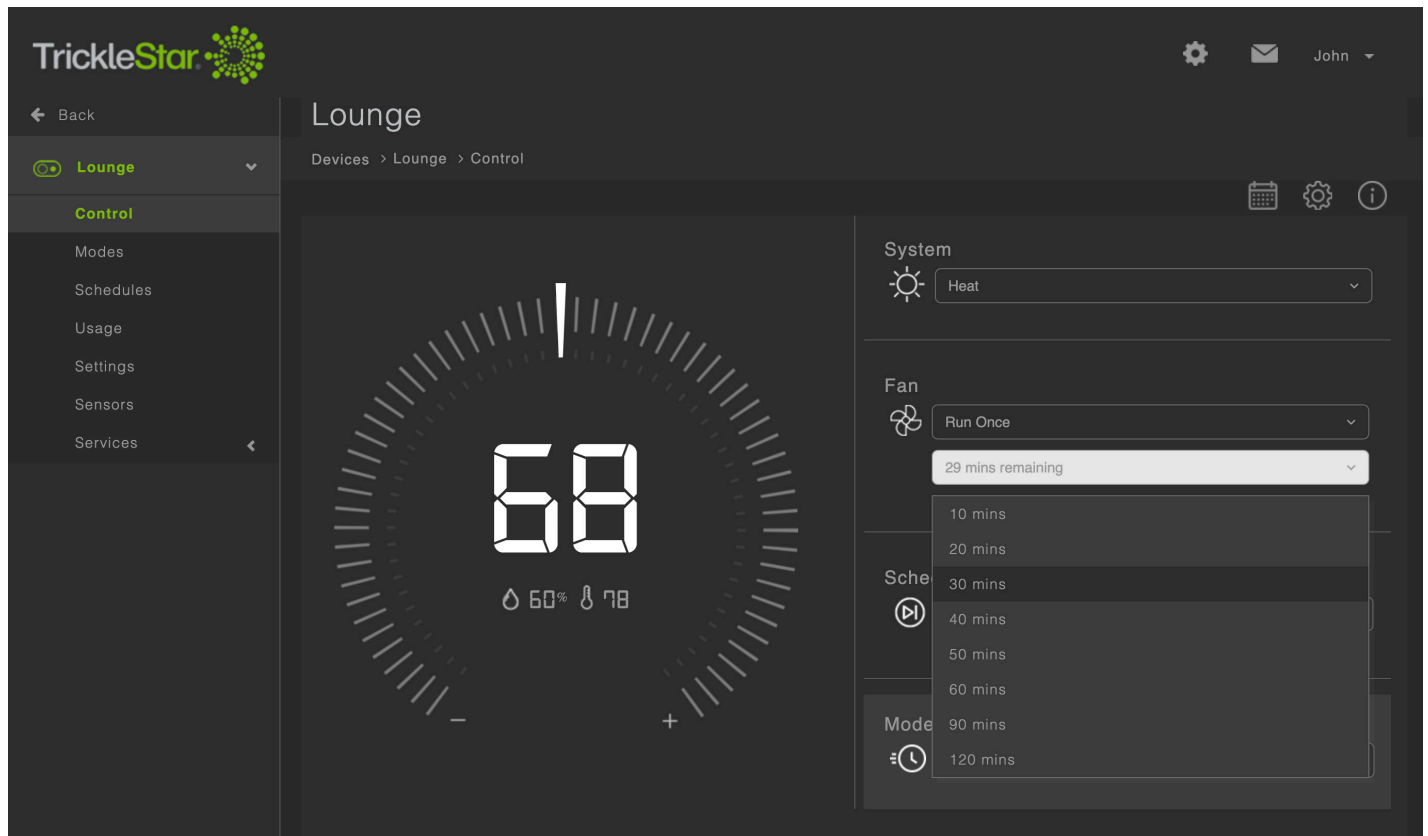




Fig 32-A

4. The duration field will be updated to reflect the length of the remaining fan run time.

Fan

 Run Once 


30 mins remaining 

Fig 33-A

5. The Thermostat LCD will show the “Fan On” icon when the Fan Run Once duration is active.

App:

1. From the App Devices tab, tap on the Fan setting and select “Run Once”.
2. The App will then ask you how long to turn on the HVAC fan/blower for the one-time run cycle (options: 10, 20, 30, 40, 50, 60, 90 or 120 mins).

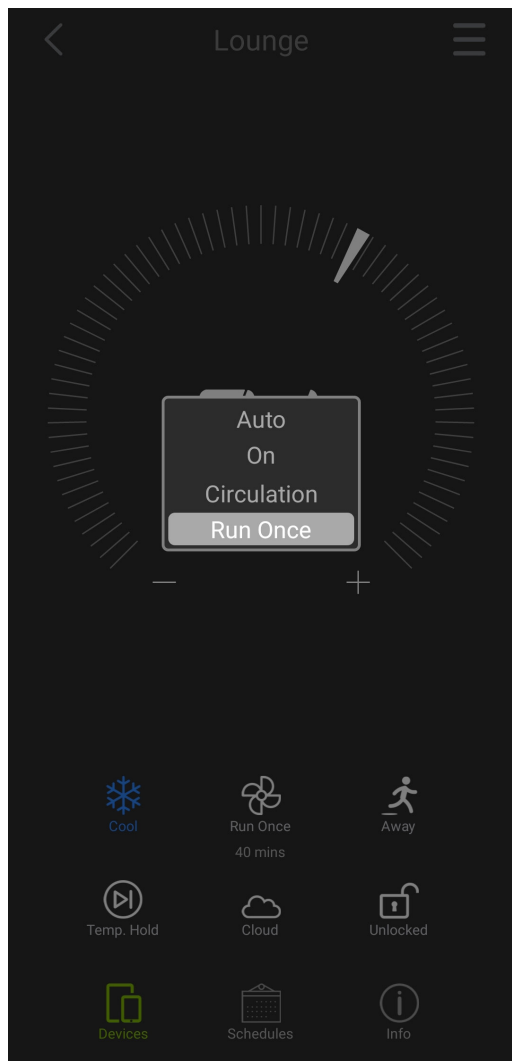


Fig 34-A

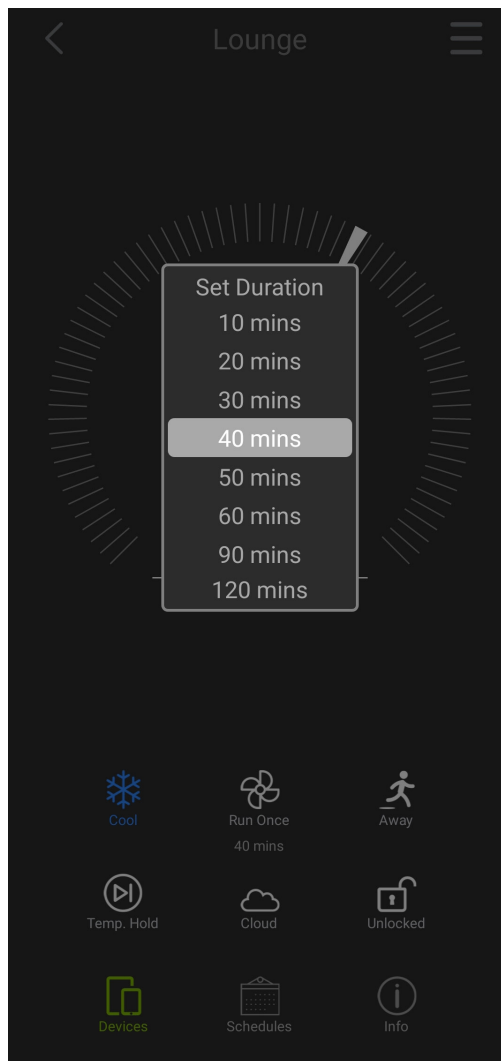


Fig 34-B

3. The Thermostat LCD will show the “Fan On” icon when the Fan Run Once duration is active.



Fan Circulation (Hourly):

In this configuration, you can set the HVAC fan/blower to turn on every hourly.  
Note, the fan will also turn on when HVAC system is running (similar to Fan Auto mode). This duration (of fan running when HVAC is running) counts towards fulfilling the Fan Circulation duration in every cycle.

For example, if you select the Fan Circulation as “40 mins/hr”, and your HVAC and fan system ran for 26 minutes in the hourly cycle, the Thermostat will signal the fan to run the remainder 14 minutes before the end of the hourly cycle.

- There are two ways Fan Circulation can be configured, both achieving different purposes:
- **Modes:** this Fan Circulation setting will be used together with the Modes setting in the Schedule. When Thermostat is running the Schedule, it will automatically follow the configured set temperature and fan according to the Modes lined up in the Schedule.

You can configure this setting in the Portal, or the App.

Portal:

1. From the Portal Dashboard, go to Devices tab. Select your device name.
2. Click on Modes tab on the left menu panel.
3. Under Set Fan (Heat) and Set Fan (Cool) fields for each Mode, select your desired Circulation duration (options: 10, 20, 30, 40 or 50 mins/hr).

Thermostat - Modes

Devices > Lounge > Modes

#	Name	Set Temperature (Heat)	Set Temperature (Cool)	Set Fan (Heat)	Set Fan (Cool)	Used In
1	Home 1	68°F	78°F	Circulation (30 mins/hr)	Circulation (30 mins/hr)	Default Schedule
2	Home 2	70°F	75°F	Auto (default)	Auto (default)	Default Schedule
3	Away	64°F	Off	Auto (default)	Circulation (10 mins/hr)	Default Schedule
4	Sleep	64°F	80°F	Auto (default)	Circulation (30 mins/hr)	Default Schedule
5	Vacation	50°F	Off	Auto (default)	Circulation (40 mins/hr)	Vacation Schedule

Reset Modes

Fig 35-A

4. When your Thermostat is running the Schedule, the “Fan” field in Portal Control page will be updated to reflect your Circulation settings preset in the Modes page.

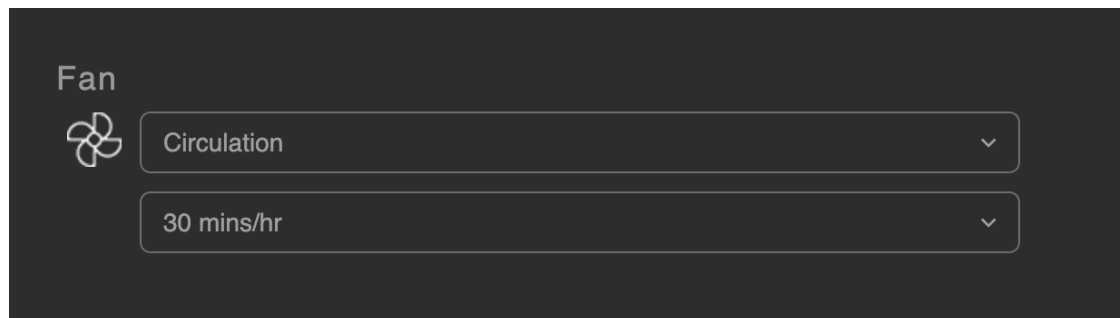


Fig 36-A



## App:

1. From the App Devices tab, tap on the “Info” tab.

2. Tap on “Mode”.

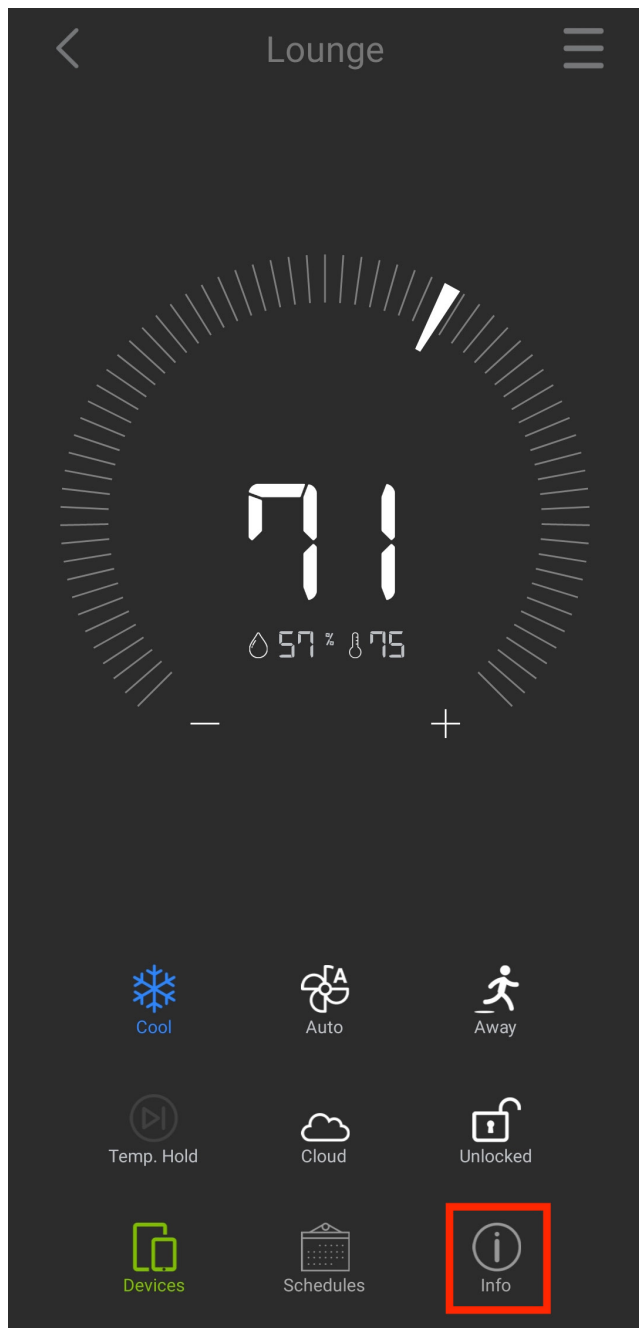


Fig 37-A

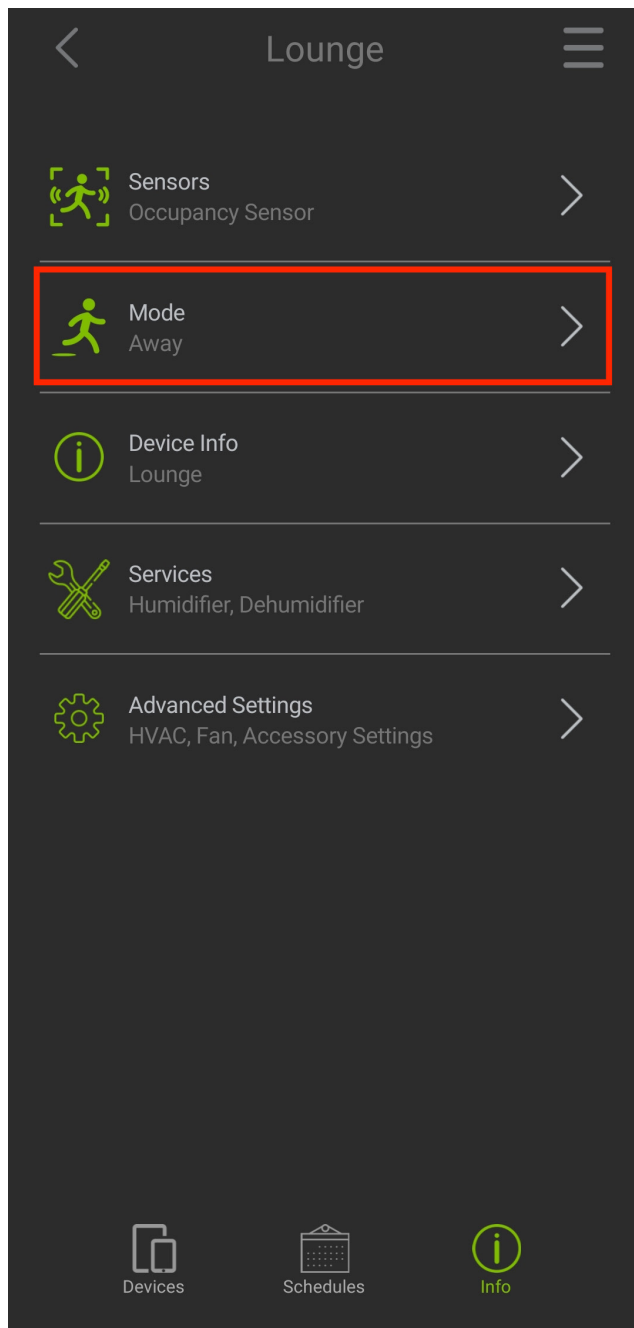


Fig 37-B

3. Tap on Edit Modes.
4. The Thermostat – Modes page will be shown. Under Set Fan (Heat) and Set Fan (Cool) fields for each Mode, select your desired Circulation duration (options: 10, 20, 30, 40 or 50 mins/hr).

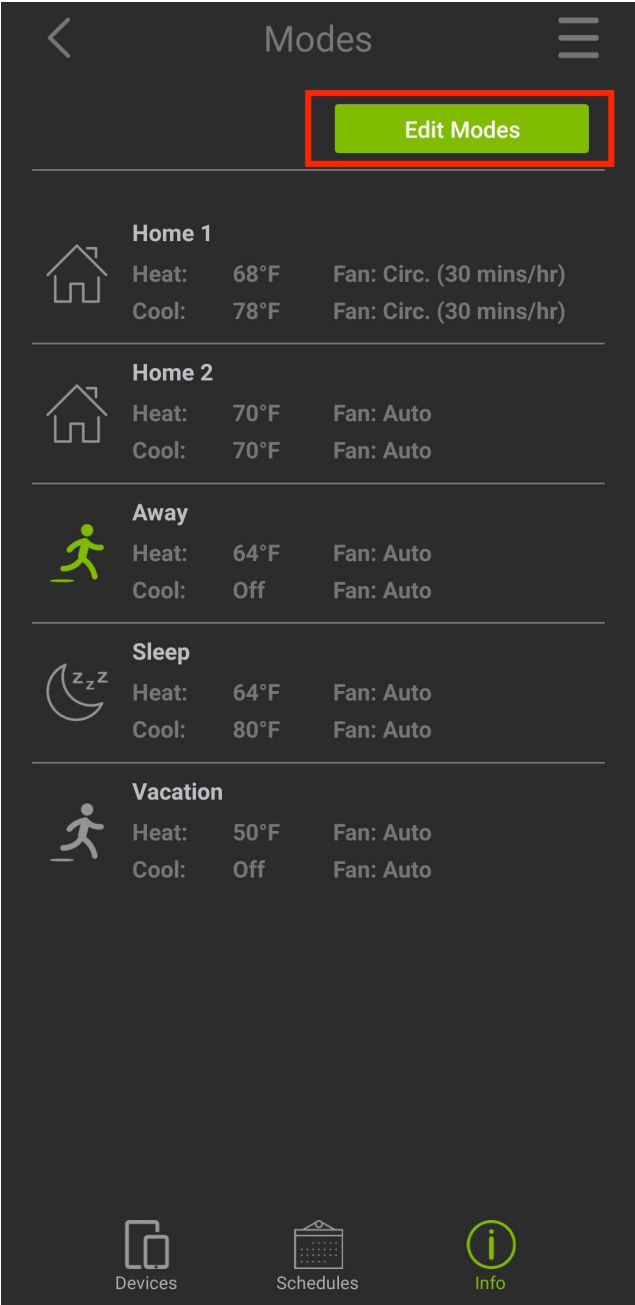


Fig 38-A

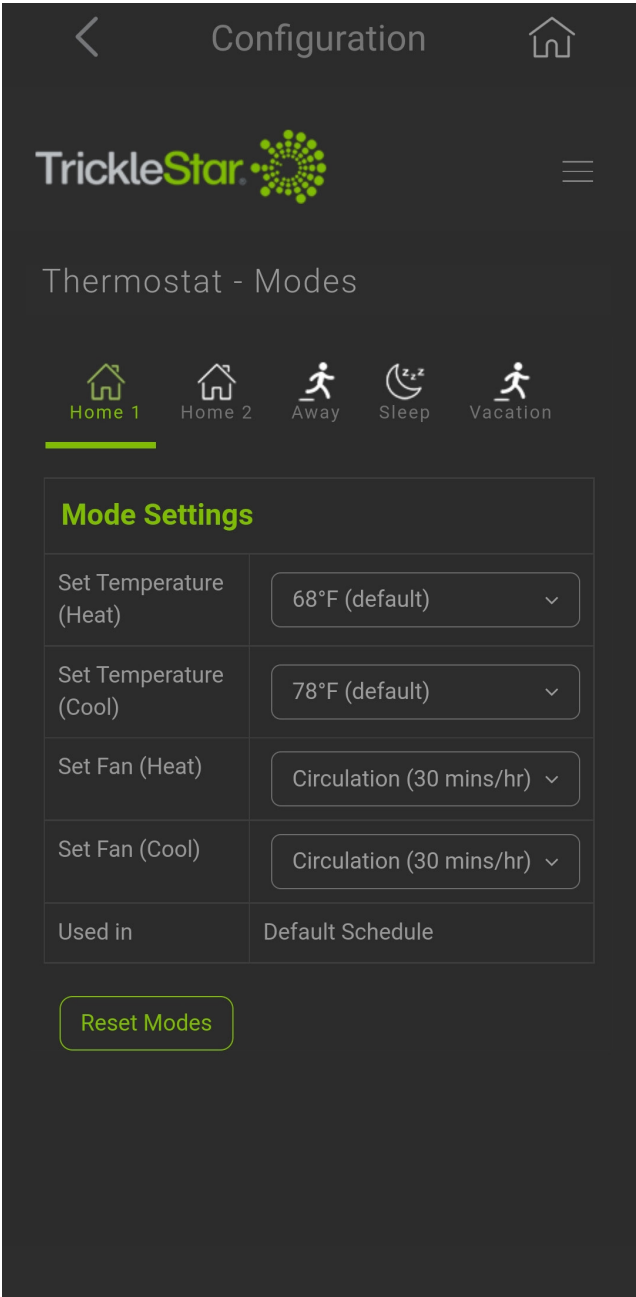


Fig 38-B



- **Control page:** this Fan Circulation setting can be used when the System is set to Off or to manually override the current fan settings. Configuring the Fan Circulation setting via the Control page will put the Thermostat to Temporary Hold state.

You can configure this setting in the Portal, or the App.

Portal:

1. From the Portal Dashboard, go to Devices tab. Select your device name.
2. Under the Fan setting, select “Circulation”.

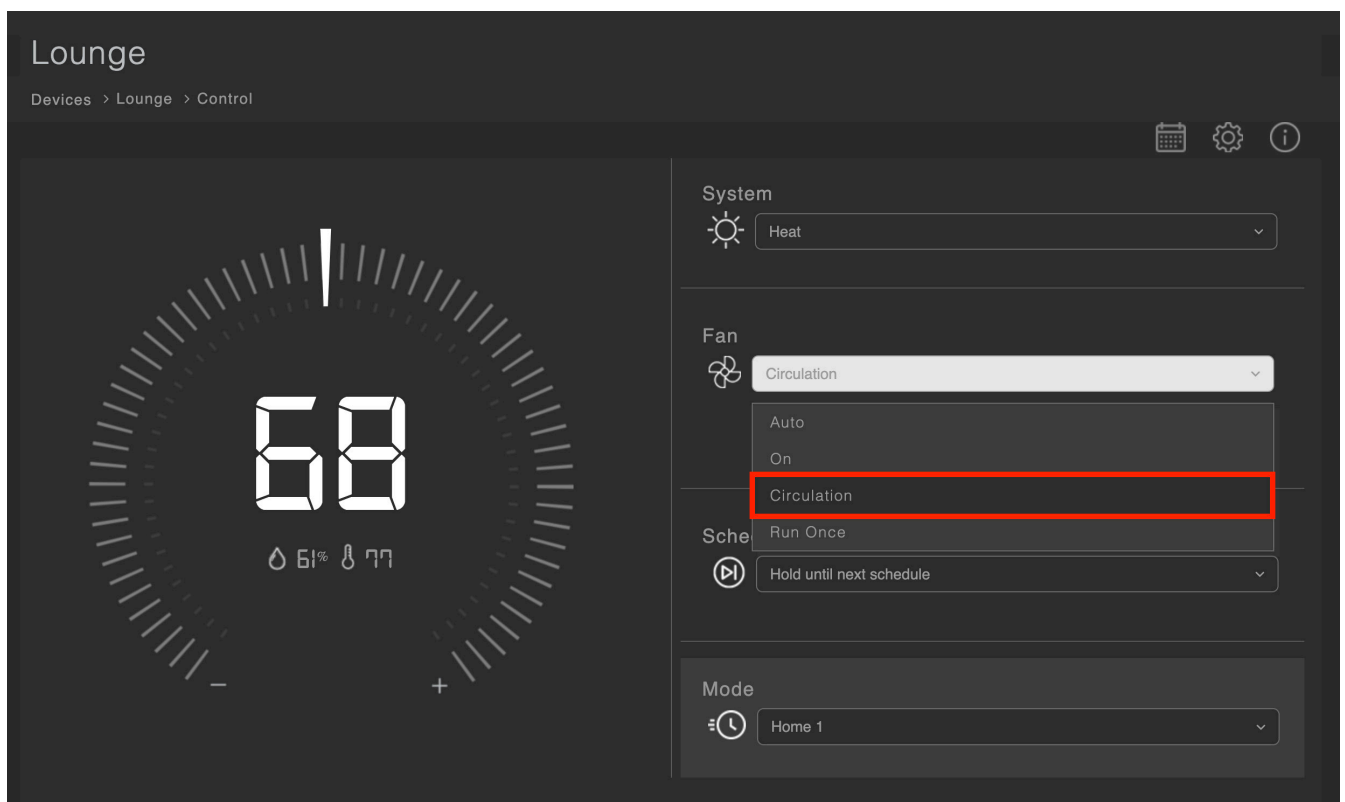


Fig 39-A

3. The Portal will then ask you how long to turn on the HVAC fan/blower every hour (options: 10, 20, 30, 40 or 50 mins/hr).

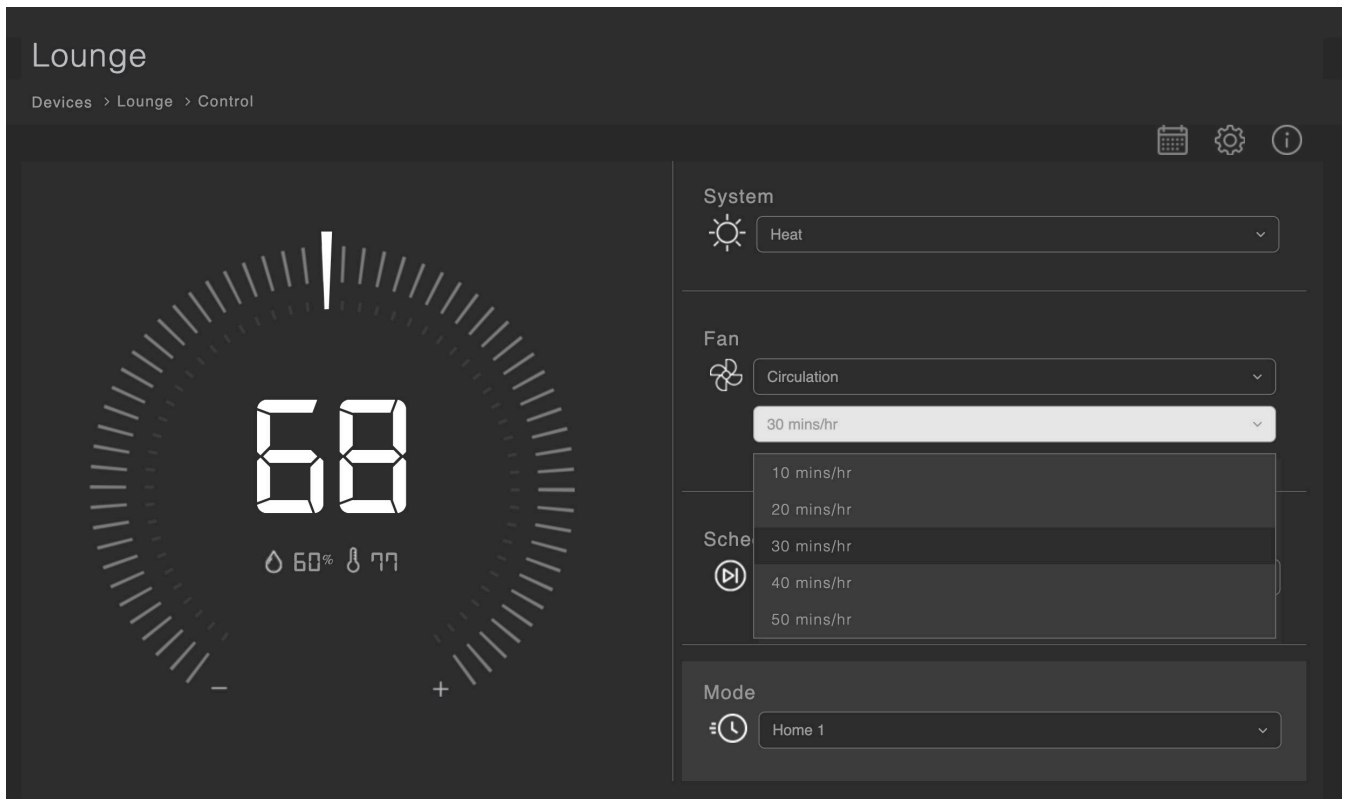


Fig 40-A

## App:

1. From the App Devices tab, press the Fan setting and select “Circulation”.
2. The App will then ask you how long to turn on the HVAC fan/blower every hour (options: 10, 20, 30, 40 or 50 mins/hr).

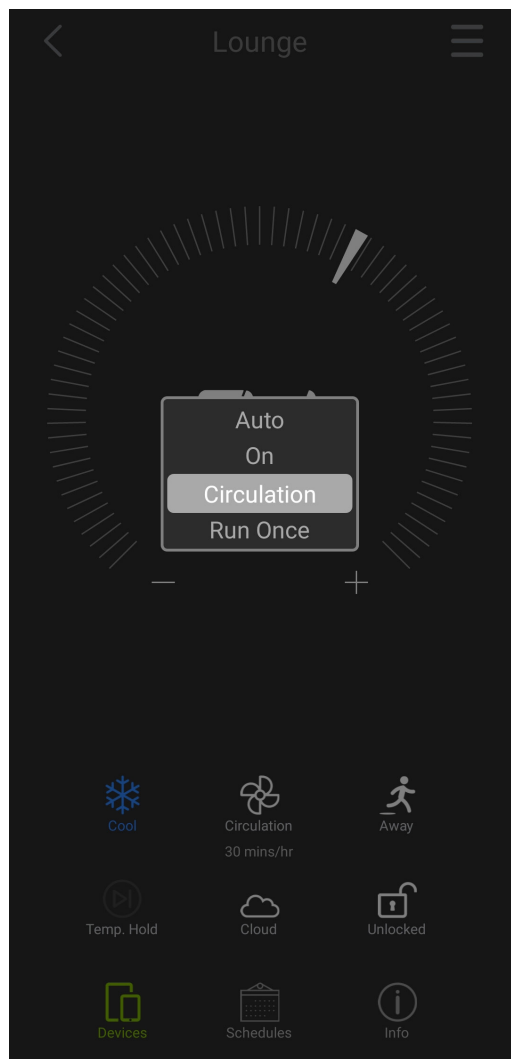


Fig 41-A

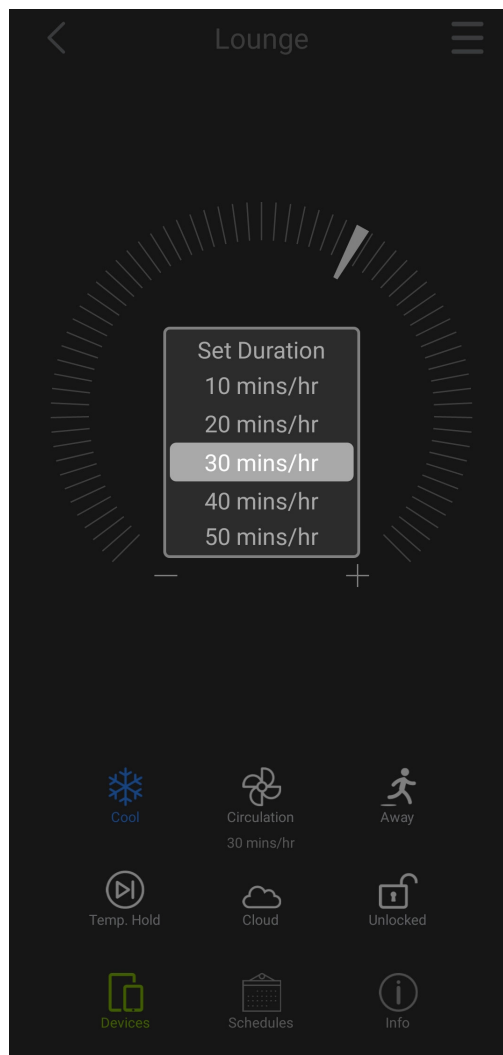


Fig 41-B

### Expected behavior for Fan in Circulation mode:

- The HVAC fan/blower will actually be turned on twice within the hour, once every half-hourly to provide effective ventilation.
- All duration as explained above will be split to half for each half-hour cycle.
- When Fan Circulation is enabled, the fan icon in the Thermostat LCD display will be shown as “Auto” mode.

## Taking Ownership of a Thermostat Registered to a Different User

TrickleStar Portal identifies different Thermostat devices using its DSN number, unique to each Thermostat. When a device with a particular DSN number is already registered to a user, you will not be able to register the same device with the same DSN number in TrickleStar Portal/App.

If you have a Thermostat registered to a different user, or you have no information about its previous owner, these steps will be applicable to you.

TrickleStar Portal offers steps to claim an already registered Thermostat as your own, provided you can complete the manual identification process to confirm that you have control over the Thermostat.

1. Ensure that you have access to TrickleStar Portal ([portal.tricklestar.com](http://portal.tricklestar.com)), and had already created a Portal account.
2. To begin the process, click “Devices” and then click on “Add New +” in the TrickleStar Portal.
3. Select “Wi-Fi Smart Thermostat” to add a new Thermostat unit. If you need to install the Thermostat, follow the Thermostat Setup Wizard from “Step 1: Install TrickleStar Thermostat”.
4. Once the Thermostat installation is completed, click “Step 2: Connect TrickleStar Thermostat to Wi-Fi” and enter the Site Name as well as a name for the Thermostat. For example, the Site Name could be “Home” while the Thermostat could be named “Living Room TSTAT”.
5. The “Ready to Connect” page will then be shown:

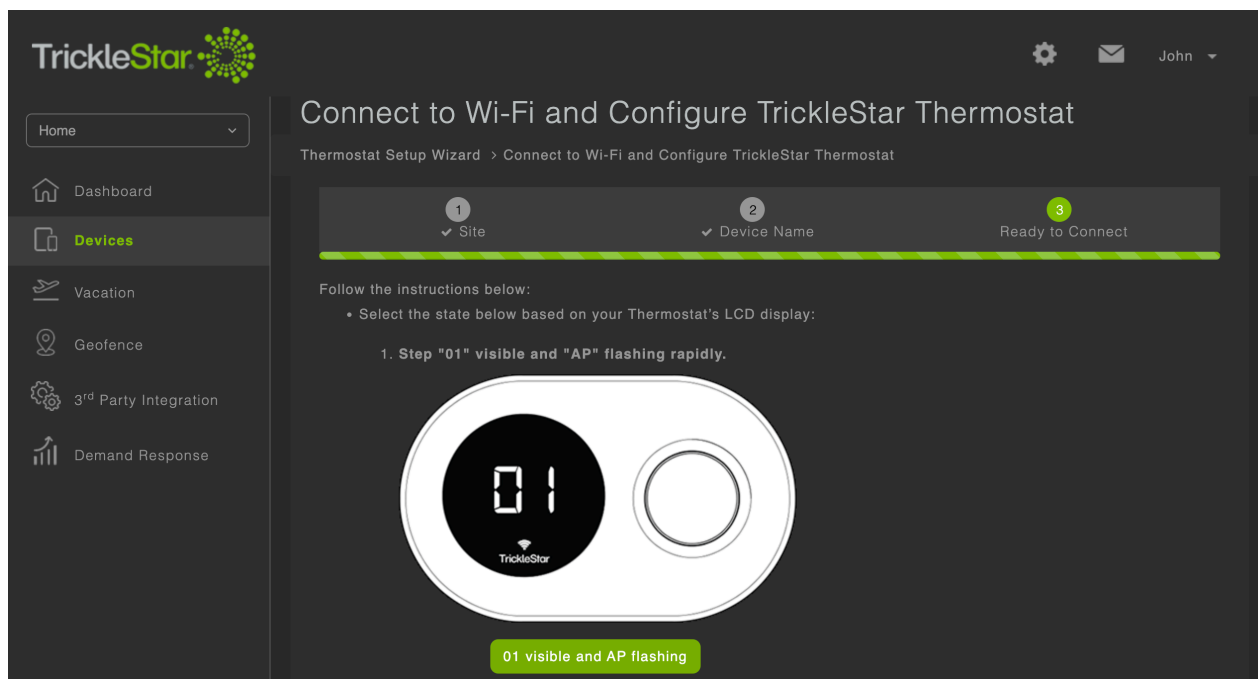


Fig 42-A



6. Power on your Thermostat, wait for it to boot up and click the button on Portal that corresponds to the state of the Thermostat's LCD display.
7. Next, the Portal will prompt users to enter the DSN number (case-sensitive) into the text box provided. It can be found on a sticker label at the bottom of the Thermostat. Please call our Customer Service if you are unable to locate the DSN number.
8. If your Thermostat is in states 1, 2, or 3, follow the instructions to connect the Thermostat to your Wi-Fi network. If your Thermostat is in states 4 or 5, the Thermostat is already connected to your Wi-Fi network so the Portal will skip to the next step.
9. The following window will be prompted when the Portal detected that you are attempting to take ownership of an already registered device. Press "Yes" to confirm and take ownership of the Thermostat unit.

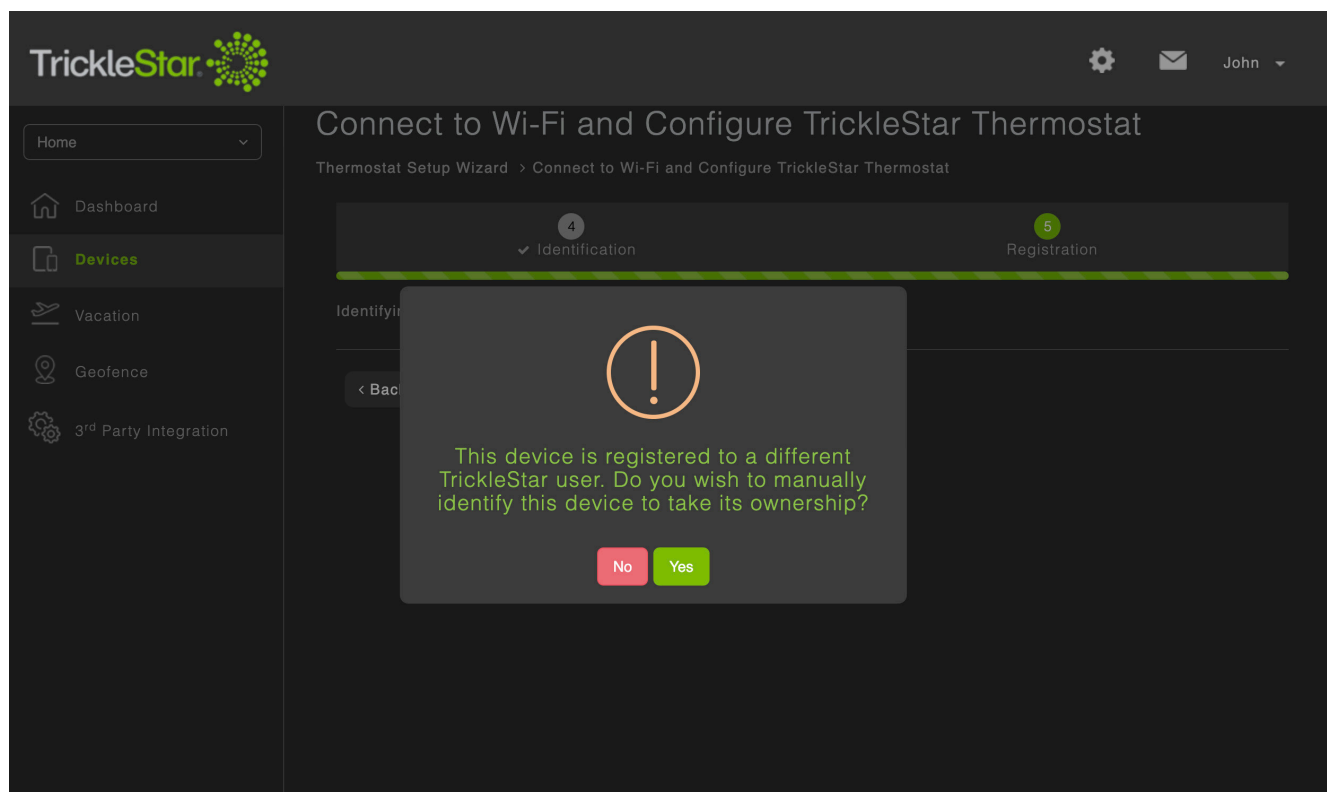
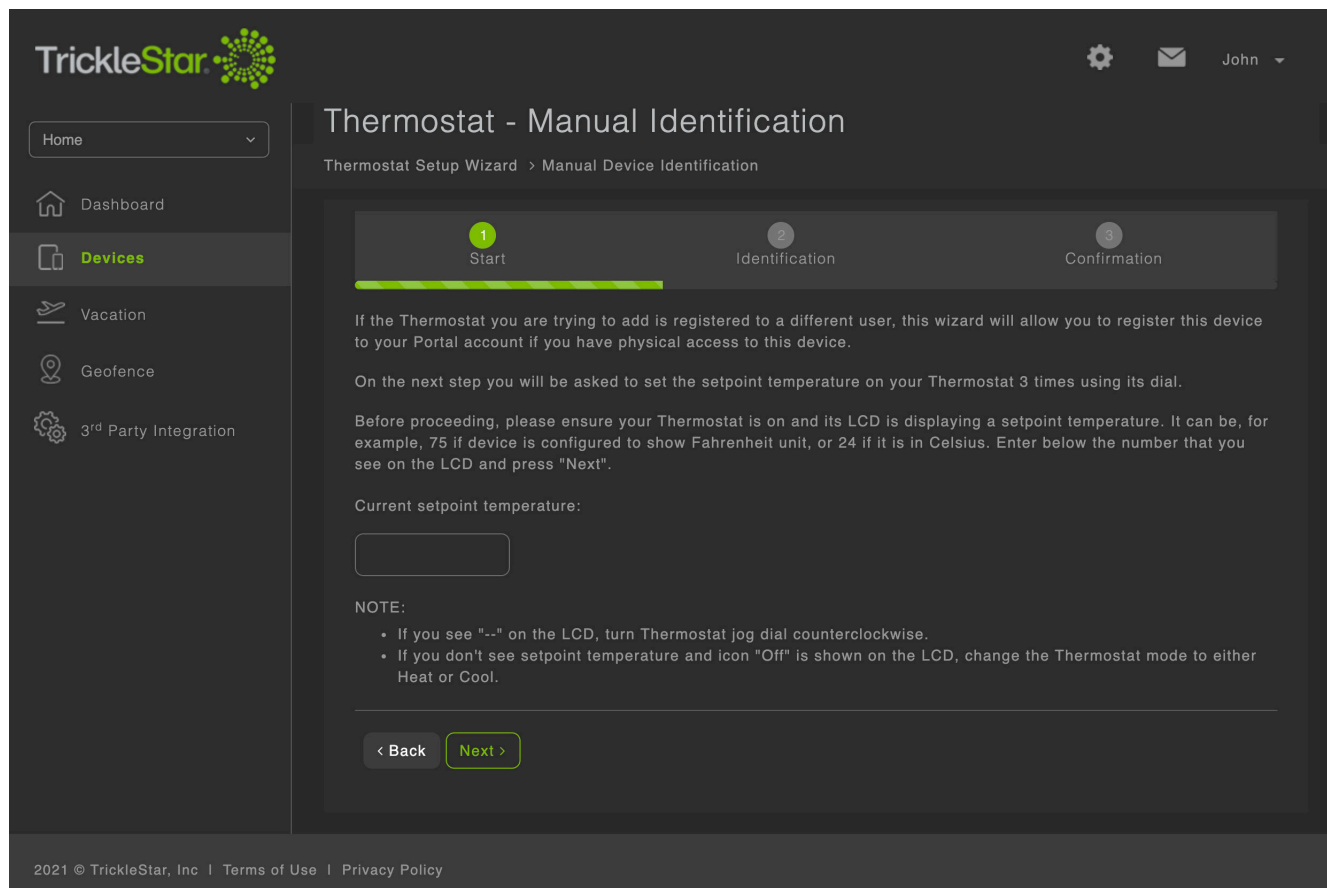


Fig 43-A

10. The Portal will then show the following page to begin the manual identification process. Enter the current setpoint temperature as shown by the Thermostat LCD display and click “Next”.



The screenshot shows the TrickleStar web portal interface. On the left is a sidebar with navigation links: Home, Dashboard, Devices (highlighted), Vacation, Geofence, and 3rd Party Integration. The main content area is titled "Thermostat - Manual Identification" and includes a breadcrumb trail "Thermostat Setup Wizard > Manual Device Identification". A progress bar at the top indicates three steps: 1 Start (active), 2 Identification, and 3 Confirmation. The main text explains that the wizard allows registering a device to a different user and instructs the user to set the setpoint temperature three times. It includes a text input field for the "Current setpoint temperature:" and a "NOTE" section with two bullet points about LCD display issues. At the bottom are "< Back" and "Next >" buttons.

Fig 44-A

11. During the manual identification process, the Portal will prompt three different temperature setpoints, one at a time. Change the setpoint at the Thermostat and click “Continue” at the Portal after each setpoint change to verify that you have control over the physical Thermostat unit.



12. Occasionally, the Portal may prompt the following message requesting you to restart the identification process. Click “OK” to close the window.

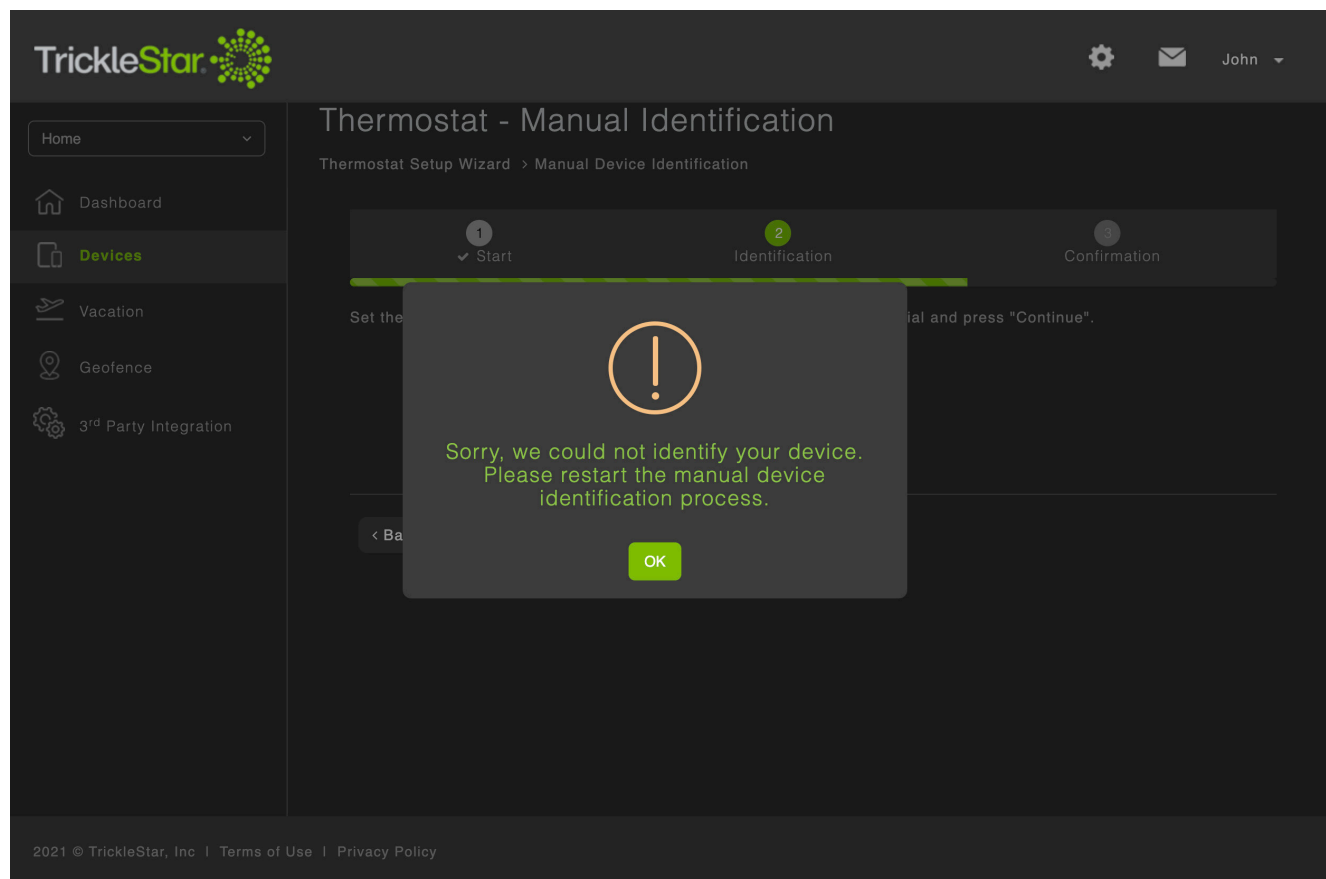


Fig 45-A

13. Click “Restart” to restart the manual identification process.

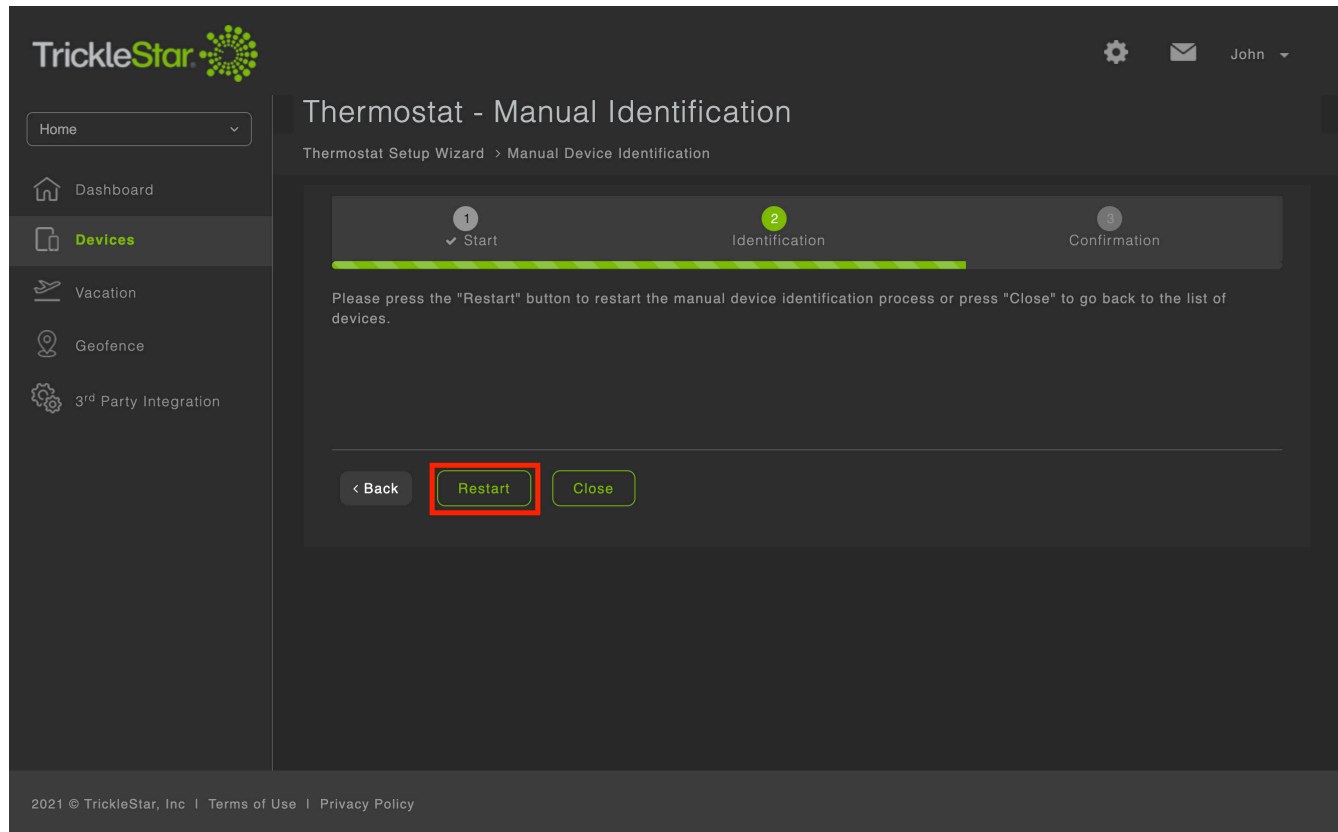


Fig 46-A

14. Repeat the process. Once it is completed, the following page will be shown. You have now successfully claimed ownership of the Thermostat unit to your account in the TrickleStar Portal.

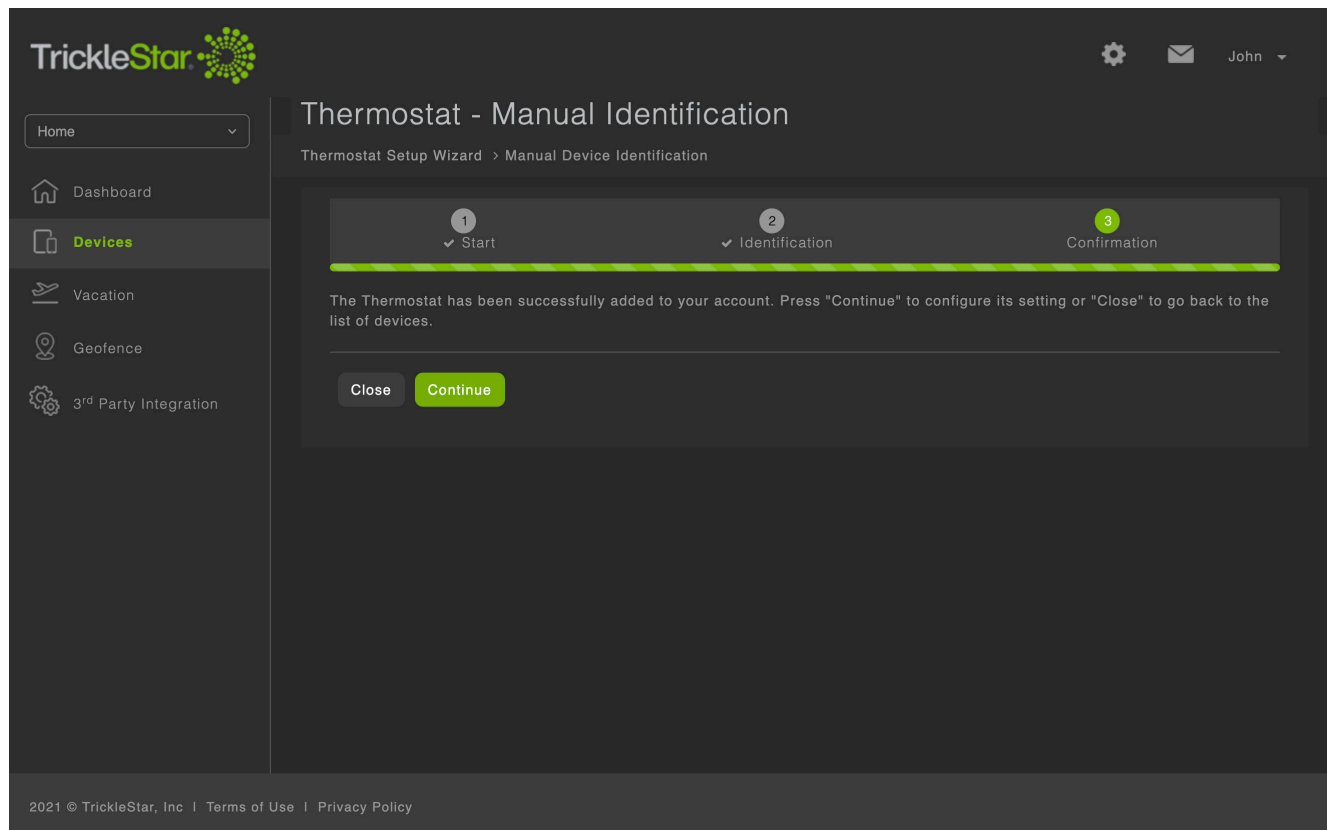


Fig 47-A

15. It is recommended that you click “Continue” and follow the Portal’s instructions to configure your HVAC settings before using the Thermostat.



## Thermostat Advanced Settings

Select	To	When is it shown?
<b>HVAC Settings</b>		
<b>HVAC Configuration Items</b>		
HVAC System	Show your configured HVAC system. Options include: Conventional (HC), or Heat Pump (HP).	When the Thermostat is Online.
Fan Control Option	Show your configured Fan Control Option. Options include: Gas Heating (HG), or Electric Heating (HE).	When the Thermostat is Online.
Heat Pump Reversing Valve Option	Show your configured Heat Pump Reversing Valve Option. Options include: Energized in Cooling (O), or Energized in Heating (B).	When the Thermostat is Online.
Configure and Test	Instruct the Thermostat to enter Configuration mode to allow users to reconfigure the HVAC settings and test the output terminals.	When the Thermostat is Online.
<b>HVAC Settings</b>		
HVAC Type	Change the HVAC type that is connected to the Thermostat. Options include: Heating and Cooling, Heating Only, or Cooling Only.	When the Thermostat is Online.
Number of Heating (W) and Cooling (Y) Stages	Change the number of Conventional (CONV) Heating or Auxiliary (AUX) Heating W stages, and the number of Compressor Y stages.	When the Thermostat is Online.

HVAC Settings		
Supplemental Heating	If your HVAC system is a Heat Pump (HP), select whether your Heat Pump has supplemental electric resistance and/or emergency heating. Available for Single Stage Heating only.	When the Thermostat is Online and if your HVAC system is a Heat Pump (HP) with Single Stage Heating.
Compressor Lock Out in AUX Heating	Enable/disable the automatic shut off for compressor stages when the Auxiliary Heating is activated.	When the Thermostat is Online.
Auto Season Changeover	Enable/disable the Auto system mode. The Auto Season Changeover feature will automatically change the System from Heating to Cooling or from Cooling to Heating depending on the room temperature. The thermostat will keep the current system (both heating and cooling will be turned off) when the room temperature falls between Set Temperature (Cool) and Set Temperature (Heat) in the Modes settings.	When the Thermostat is Online.
Auto Season Changeover Delay	Select the minimum delay duration between changing System Modes (Heating to Cooling, or vice versa) while in Auto system mode.	When the Thermostat is Online.
Auto Season Changeover Tolerance Range	Select the temperature deadband to trigger the Auto Season Changeover feature. The system will automatically change to Cooling/Heating mode if the room temperature is higher/lower than Setpoint Temperature by the value of this setting.	When the Thermostat is Online.

HVAC Settings		
Compressor Minimum Turn Off Time	Select the minimum duration when the compressor is turned off, before the compressor can be turned on again.	When the Thermostat is Online.
Compressor Minimum Turn On Time	Select the minimum duration when the compressor is turned on, before the compressor can be turned off again.	When the Thermostat is Online.
CONV/AUX Heating Minimum Turn Off Time	Select the minimum duration when the CONV/AUX Heating is turned off, before the CONV/AUX Heating can be turned on again.	When the Thermostat is Online.
CONV/AUX Heating Minimum Turn On Time	Select the minimum duration when the CONV/AUX Heating is turned on, before the CONV/AUX Heating can be turned off again.	When the Thermostat is Online.
Upstage Timer 2	Select the duration for the System to automatically turn on the second stage of heating or cooling once the first stage heating or cooling has run for longer than this setting.	When the Thermostat is Online.

HVAC Settings		
Upstage Timer AUX1	Select the duration for the System to automatically upstage the Heating to AUX1. If the current stage (stage 1 or 2) of CONV Heating has been running for longer than this setting, the system will automatically upstage the Heating to AUX1.	When the Thermostat is Online.
Upstage Timer AUX2	Select the duration for the System to automatically upstage the Heating to AUX2. If the current stage (AUX1) of the Heating has been running for longer than this setting, the system will automatically upstage the Heating to AUX2.	When the Thermostat is Online.
Span 1	Select the hysteresis factor for stage 1 CONV Heating control. If the room temperature is lower than the Set Temperature by this setting, the Stage 1 CONV Heating will be turned on. This setting is also applicable for Cooling control, where the Stage 1 Cooling will be turned on if the room temperature is higher than the Set Temperature by this setting.	When the Thermostat is Online.
Span 2	Select the hysteresis factor for stage 2 CONV Heating control. If the room temperature is lower than the Set Temperature by this setting plus the Span 1 setting, the Stage 2 CONV Heating will be turned on. This setting is also applicable for Cooling control, where the Stage 2 Cooling will be turned on if the room temperature is higher than the Set Temperature by this setting plus the Span 1 setting.	When the Thermostat is Online.

HVAC Settings		
Span AUX1	Select the hysteresis factor for stage 1 AUX Heating control. If the room temperature is lower than the Set Temperature by this setting, the Stage 1 AUX Heating will be turned on.	When the Thermostat is Online.
Span AUX2	Select the hysteresis factor for stage 2 AUX Heating control. If the room temperature is lower than the Set Temperature by this setting plus the Span AUX1 setting, the Stage 2 AUX Heating will be turned on.	When the Thermostat is Online.
High Balance Point	Select the temperature setpoint where the AUX heating will be locked out once the outdoor temperature is higher than or equals to this setting. The AUX heating will not be turned on when it is locked out.	When the Thermostat is Online.
Low Balance Point	Select the temperature setpoint where the Compressor heating will be locked out once the outdoor temperature is lower than or equals to this setting. The Compressor heating will not be turned on when it is locked out.	When the Thermostat is Online.
Anti-Freeze	Select the temperature setpoint where the Heating system will turn on automatically if the room temperature is lower than this setting.	When the Thermostat is Online.
A/C Overcool	Select the temperature factor where Cooling will be allowed to continue past the Set Temperature (Cool) by this setting to dehumidify the room.	When the Thermostat is Online.



Fan, Accessory and Free Cooling		
<b>Fan Settings</b>		
Residual Cooling Fan Delay	Select the duration where the fan will continue running after the Cooling cycle has finished.	When the Thermostat is Online.
Residual Heating Fan Delay	Select the duration where the fan will continue running after the Heating cycle has finished.	When the Thermostat is Online.
<b>Accessory Settings</b>		
Accessory Type	Select the Accessory that is connected to the Thermostat. Only one accessory can be connected at any one time (Humidifier/ Dehumidifier/Ventilator).	When the Thermostat is Online.
Accessory Control Polarity	Select “Normal” if your accessory is turned on using a closed-circuit configuration. Select “Reverse” if your accessory is turned on using an open-circuit configuration.	When the Thermostat is Online and an Accessory is connected to the Thermostat.
Humidifier Runs with Equipment	Enable/disable the configuration where the Humidifier can only turn on if the HVAC (Heating or Cooling) is turned on.	When the Thermostat is Online and a Humidifier is connected to the Thermostat.
Humidifier Runs in System	Select the mode of operation (Heating and/or Cooling) where the Humidifier will be turned on.	When the Thermostat is Online and a Humidifier is connected to the Thermostat.
Humidifier Calls for Fan	Enable/disable the configuration where the fan will turn on together when the Humidifier is turned on.	When the Thermostat is Online and a Humidifier is connected to the Thermostat.

Accessory Settings		
Dehumidifier Runs with Equipment	Enable/disable the configuration where the Dehumidifier can only turn on if the HVAC (Heating or Cooling) is turned on.	When the Thermostat is Online and a Dehumidifier is connected to the Thermostat.
Dehumidifier Runs in System	Select the mode of operation (Heating and/or Cooling) where the Dehumidifier will be turned on.	When the Thermostat is Online and a Dehumidifier is connected to the Thermostat.
Dehumidifier Calls for Fan	Enable/disable the configuration where the fan will turn on together when the Dehumidifier is turned on.	When the Thermostat is Online and a Dehumidifier is connected to the Thermostat.
Humidity Setpoint	Select the relative humidity setpoint for your accessory.	When the Thermostat is Online and a Humidifier/Dehumidifier is connected to the Thermostat.
Hysteresis for Humidity Control	Select the humidity control hysteresis factor. If the room humidity is lower than the humidity setpoint by this setting, the Humidifier will be turned on. Likewise, if the room humidity is higher than the humidity setpoint by this setting, the Dehumidifier will be turned on.	When the Thermostat is Online and a Humidifier/Dehumidifier is connected to the Thermostat.

Free-Cooling		
Enabled	Enable/disable free-cooling. If the outdoor temperature is lower than the room temperature, Free Cooling will be turned on to cool down the house by drawing in cool, outdoor air instead of running the Cooling system.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Free Cooling Run Time – Off	Select the run time of Free Cooling if System Mode is turned off.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Free Cooling Run Time – Home	Select the run time of Free Cooling if Occupancy Mode is set to Home.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Free Cooling Run Time – Sleep	Select the run time of Free Cooling if Occupancy Mode is set to Sleep.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Free Cooling Run Time – Away	Select the run time of Free Cooling if Occupancy Mode is set to Away.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Free Cooling Manual Override Enabled	Enable/disable manual override to manually turn on / off Free Cooling.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.

<b>Free-Cooling</b>		
Free Cooling Manual Override Duration	Select duration for which Free Cooling will be turned on when activating it manually (through the Portal).	When the Thermostat is Online, a Free Cooling Ventilator is connected to the Thermostat, and the Free Cooling Manual Override Enabled is selected as Yes.
Pre-Occupancy Purge Period	Select the duration for which Free Cooling will turn on automatically, when the occupancy mode is changed from Away to Home by any scheduled event. This is done to purge the stale air out of the house.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Maximum Outdoor Temperature	Select the maximum outdoor temperature for Free-Cooling to be activated. If the outdoor temperature is higher than this setting, then Free-Cooling will not be activated.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Maximum Outdoor Humidity	Select the maximum outdoor humidity for Free-Cooling to be activated. If the outdoor humidity is higher than this setting, then Free-Cooling will not be activated.	When the Thermostat is Online and a Free Cooling Ventilator is connected to the Thermostat.
Minimum Set Temperature / Outdoor Temperature Difference	Select the minimum temperature difference between setpoint temperature and outdoor temperature for Free-Cooling to be activated. If the difference is lower than this setting, then Free-Cooling will not be activated.	When the Thermostat is Online.
Maximum Temperature Change Time	Free Cooling will be deactivated if the room temperature is not dropped by 1°F within this setting's duration.	When the Thermostat is Online.

Display and Other Settings		
Display Settings		
Temperature Unit on LCD	Select the temperature unit shown on the Thermostat LCD display. When the checkbox of “Use General Settings” is checked, the temperature unit on the LCD will follow the temperature unit selection on the General Settings page.	When the Thermostat is Online.
Input Lock	Enable/disable Input Lock on the Thermostat. This will lock any input from the Jog dial or the side button from changing the Thermostat settings.	When the Thermostat is Online.
LCD Active Time	Change the LCD Active Time on the Thermostat. If user input is received, the Thermostat LCD will temporarily show 100% brightness. This setting sets the duration for which the LCD will maintain 100% brightness, before returning to the original brightness level according to the corresponding occupancy mode.	When the Thermostat is Online.
LCD Brightness – Home	Select the LCD brightness on the Thermostat in Home mode.	When the Thermostat is Online.
LCD Brightness – Sleep	Select the LCD brightness on the Thermostat in Sleep mode.	When the Thermostat is Online.
LCD Brightness – Away	Select the LCD brightness on the Thermostat in Away mode.	When the Thermostat is Online.
Icon Hints	Enable/disable the Hints from being shown below the icons in the Thermostat LCD display.	When the Thermostat is Online.

Other Settings		
Auto-Recovery	Enable/disable Auto-Recovery. When enabled, before a change in scheduled event, the Thermostat will gradually change the setpoint temperature some time in advance in order to prepare the room towards the next schedule depending on the difference between current room temperature and Set Temperature (Heat/Cool) of the next scheduled event.	When the Thermostat is Online.
Maximum Heat Set-Temperature	Change the maximum allowable setpoint temperature in Heat mode. Note: Changing this setting may affect the Set Temperature (Heat) in the Modes settings.	When the Thermostat is Online.
Minimum Cool Set-Temperature	Change the minimum allowable setpoint temperature in Cool mode. Note: Changing this setting may affect the Set Temperature (Cool) in the Modes settings.	When the Thermostat is Online.
Room Temperature Offset	If your Thermostat is measuring room temperature either higher or lower than expected, you may use this setting to offset or calibrate the displayed room temperature closer to your expected room temperature.	When the Thermostat is Online.

Info and Time Zone		
Device Info		
MAC Address	Shows the MAC address of the Thermostat.	Always shown.
Serial Number	Shows the Serial Number of the Thermostat.	Always shown.
Device Name	Use a short name that is easy to pronounce to control this device using Google or Alexa voice commands. Ask Alexa or Google Home to re-discover your device after you changed the name of your Thermostat.	Always shown.
Firmware Version	Shows the Firmware Version of the Thermostat.	Always shown.
Type of Connection	Shows the Type of Connection to the Thermostat.	Always shown.
Connected Network (SSID)	Shows the Wi-Fi network that the Thermostat is connected to. Click on the Configure link to connect this Thermostat to your Wi-Fi network after a reset, or if you simply need to connect to a different Wi-Fi network or reconnect to the same network after its password has been changed.	Always shown.
LAN IP Address	Shows the LAN IP Address of the Thermostat.	Always shown.
Registration Date	Shows the date of registration for the Thermostat.	Always shown.
Device Location	Shows the location where you have registered the Thermostat for use.	Always shown.
Time Zone	Select the Time Zone for your Thermostat. When the checkbox of "Use General Settings" is checked, the Time Zone on this Thermostat will follow the Time Zone selection on the General Settings page.	Always shown.
Reset Settings		
Reset Thermostat Settings	Reset all settings on the Thermostat Settings page to Factory Default values (does not affect Schedules, Modes, Sensors, Vacation and Geofence settings).	When the Thermostat is Online.



## Using the App

The TrickleStar App is a one-stop App platform allowing contractors and homeowners to easily register, configure and control the Connected Products (**Smart Thermostat** and **Wi-Fi Electric Water Heater Controller**).

This section explains the process of registering and controlling your Thermostat using the TrickleStar App.

Download the TrickleStar App to your mobile device from the Apple App Store or Google Play Store. You can also scan the following QR codes:

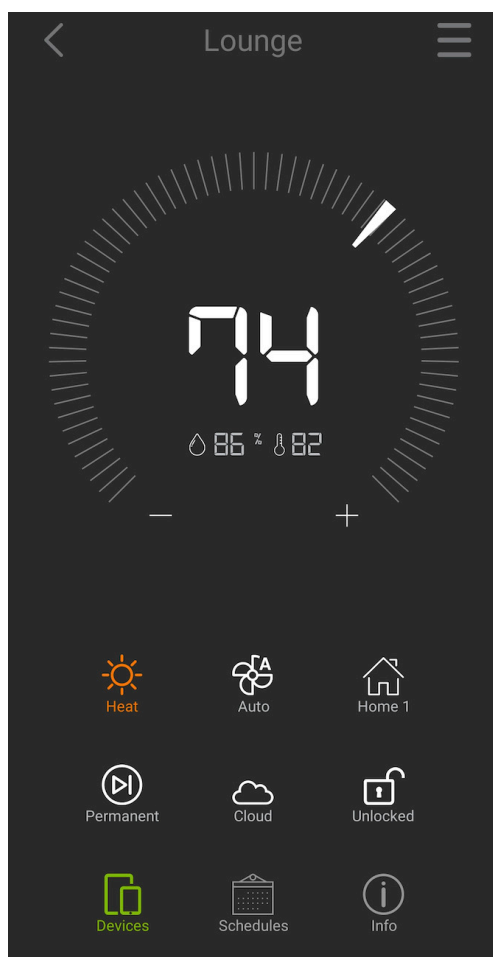



Fig 60-A

*Note: To use the App, you need to have a Portal account. If you have not created a Portal account, create one at: [portal.tricklestar.com](https://portal.tricklestar.com)*



## Adding a New Device

To add a new device in the TrickleStar App, please follow the steps below:

1. Launch the TrickleStar App, you should see the below screen if you do not have any devices added to your TrickleStar account.
2. Tap on the Menu icon  and tap on “Add New” to add a new device.

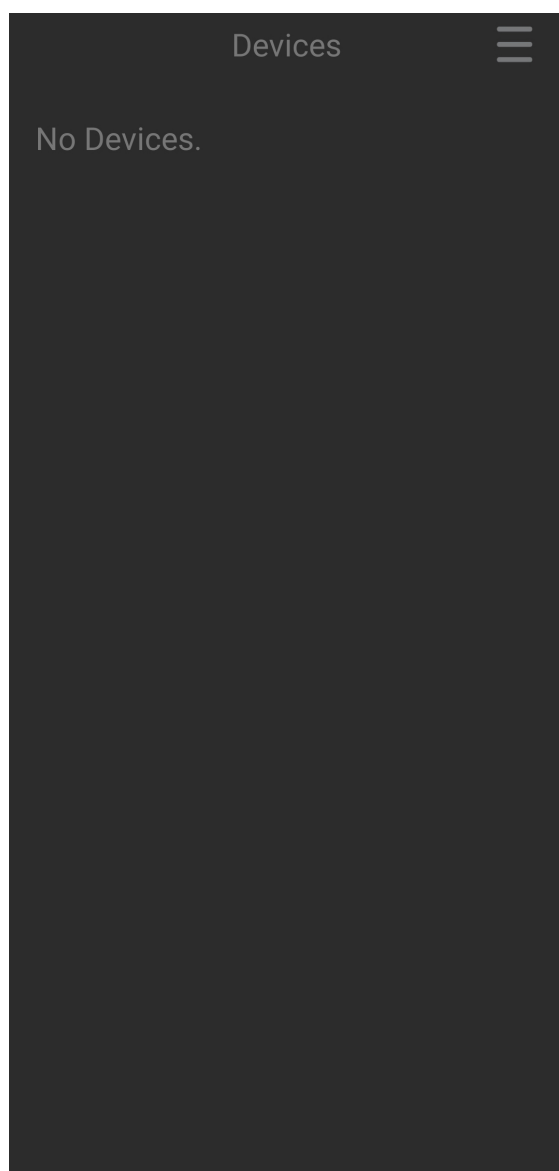


Fig 61-A

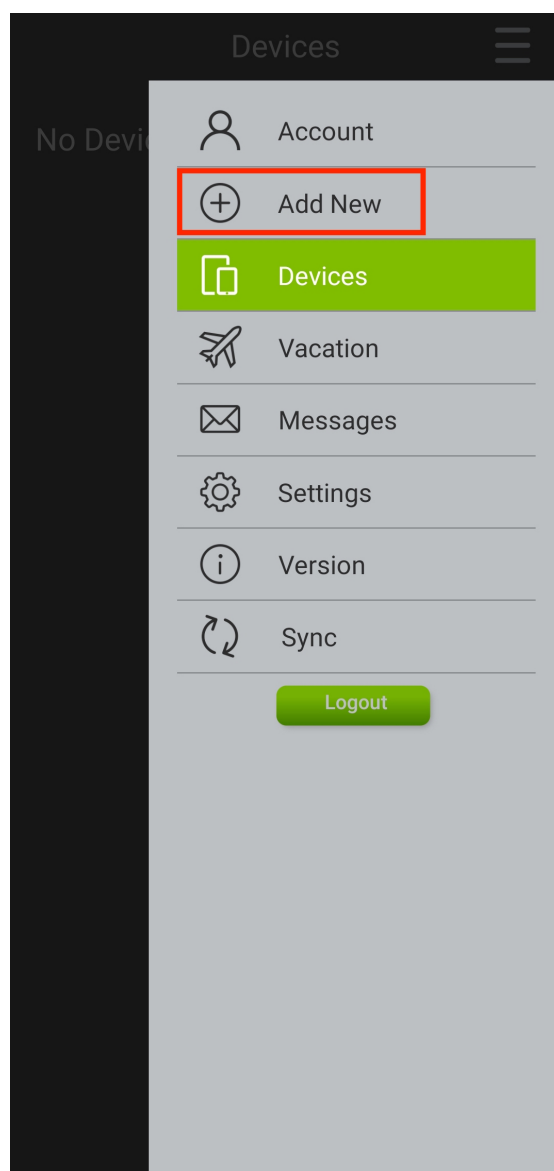


Fig 61-B

3. Select “Wi-Fi Smart Thermostat”.

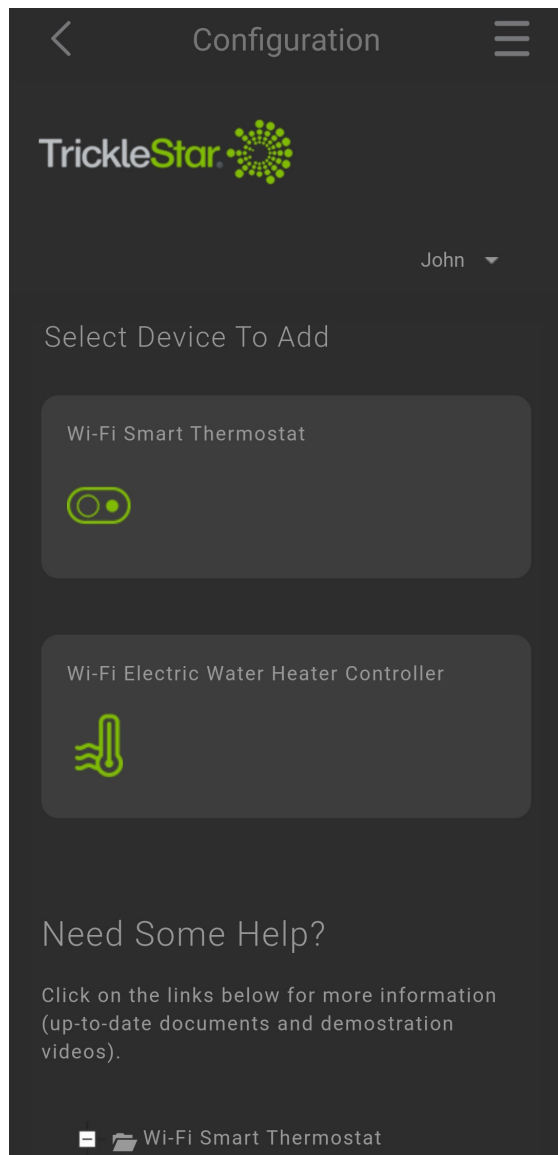


Fig 62-A

4. The Installation Workflow will then be shown.

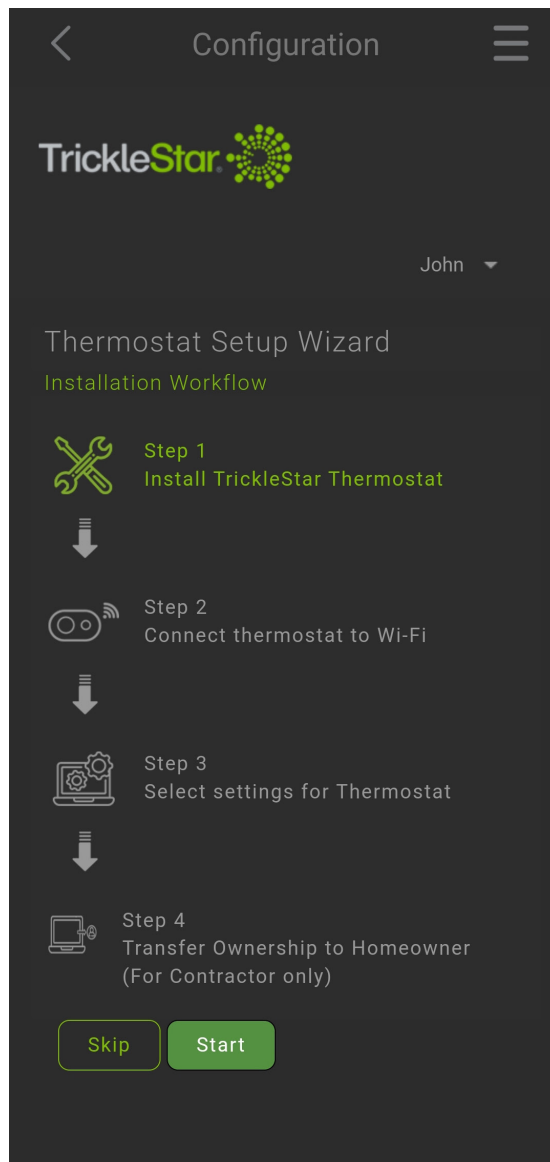


Fig 62-B

*Note: If you need instructions to install the Thermostat, tap on “Step 1: Install TrickleStar Thermostat” and tap “Start”. The wizard will walk you through the installation via a step-by-step guide.*



5. Once you have completed the installation, tap on “Step 2: Connect Thermostat to Wi-Fi” and tap “Start”:
- a. Create a new site for the device.  
For example, you can name your site as “Home” or “Office” accordingly.
  - b. Create a Device Name.  
For example, you can name your device as “Living” or “Lounge”.

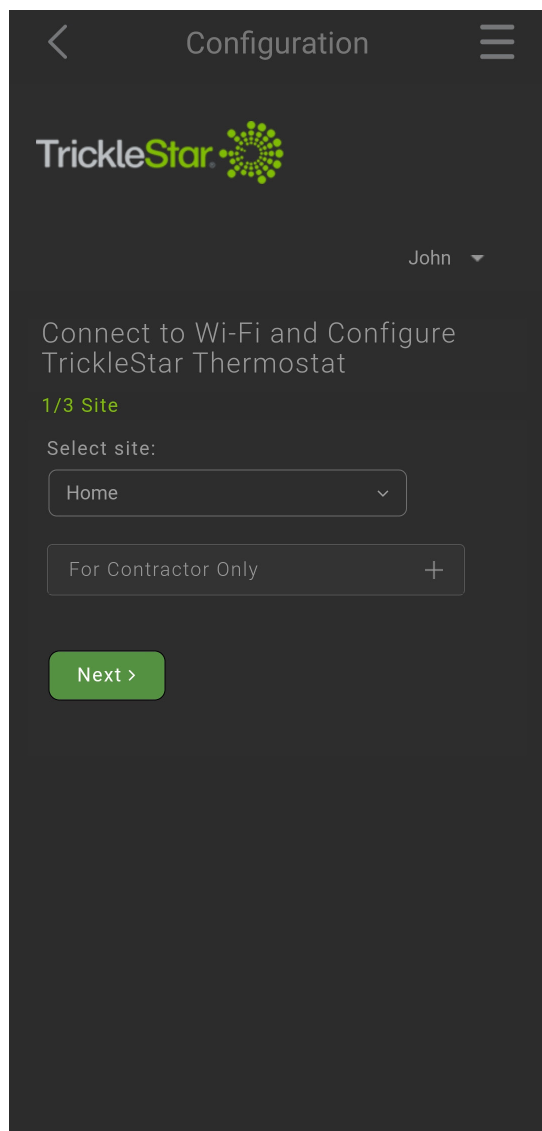


Fig 63-A

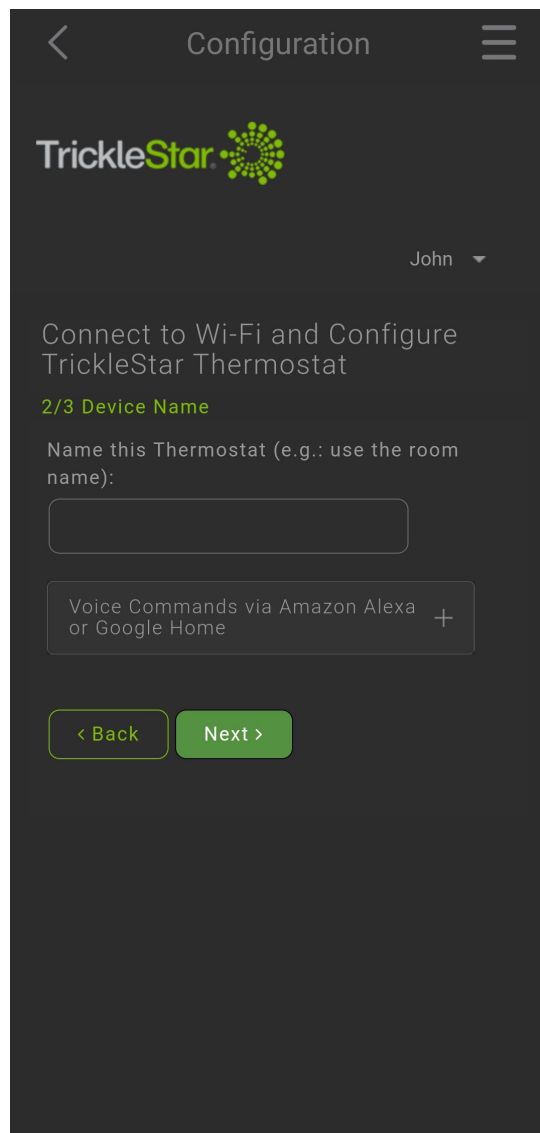


Fig 63-B

- c. Tap on the button that corresponds to the state of your Thermostat LCD display.  
For a fresh, out of the box installation, it will typically be the first state of “01 visible and AP flashing”.

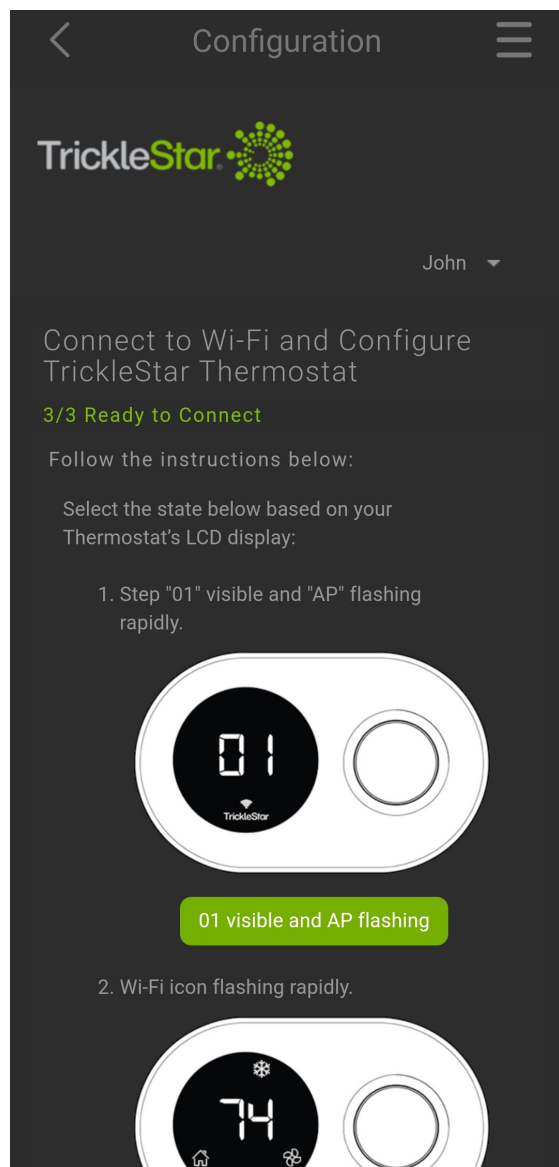
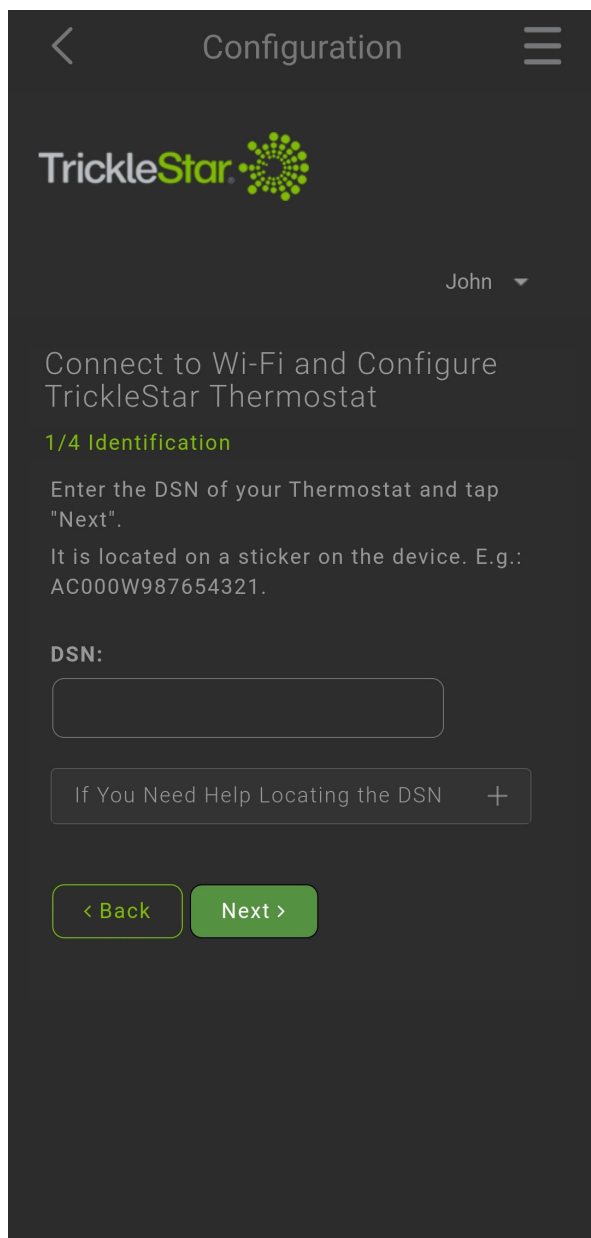


Fig 64-B

*Note: There are 5 different LCD states to choose from. See the animated LCD displays in the App and cross-reference with the actual Thermostat LCD display to choose the correct state.*

- i. Enter the device DSN into the text field.



The screenshot shows the 'Configuration' screen of the TrickleStar app. At the top, there is a back arrow, the title 'Configuration', and a menu icon. Below this is the TrickleStar logo and a user profile 'John' with a dropdown arrow. The main heading is 'Connect to Wi-Fi and Configure TrickleStar Thermostat'. Below this is a progress indicator '1/4 Identification'. The instructions state: 'Enter the DSN of your Thermostat and tap "Next". It is located on a sticker on the device. E.g.: AC000W987654321.' There is a text input field for the DSN, followed by a button that says 'If You Need Help Locating the DSN' with a plus icon. At the bottom, there are two buttons: '< Back' and 'Next >'.

Fig 65-A

*Note: If the App detected the DSN of the device was already registered previously, the App will prompt verification steps to take ownership of the device. Please refer to page [42](#) for more information on taking ownership of a device. These steps are identical in the App.*

- ii. Ensure the Thermostat LCD display is still showing step “01” and “AP” flashing. Tap on “Next” to continue.

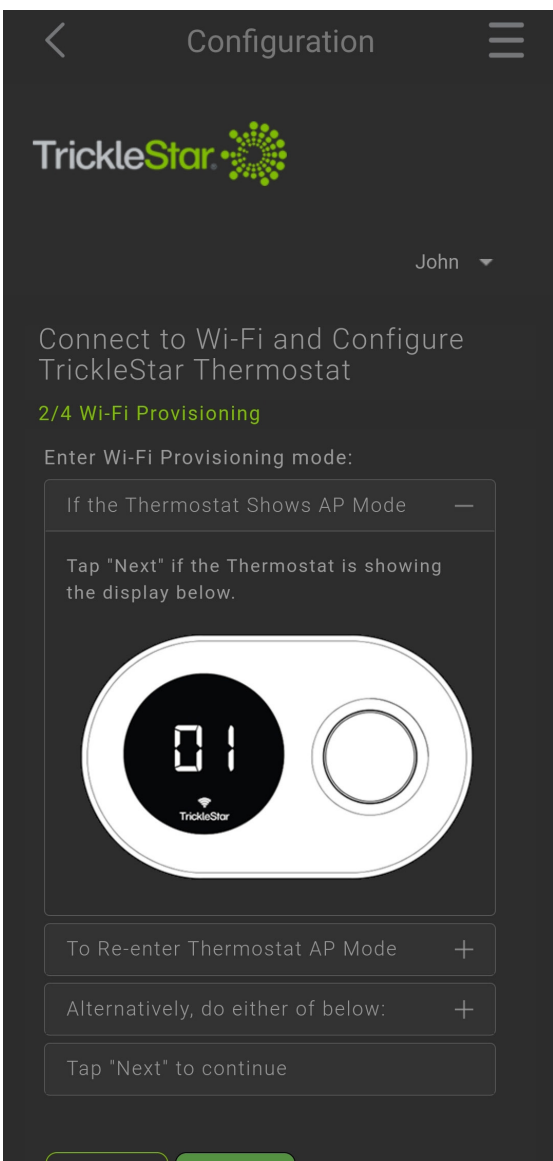


Fig 66-A

*Note: If your thermostat LCD display is no longer showing step “01” and “AP” flashing, follow the instructions in the App.*

- iii. Go to the Wi-Fi settings in your mobile device and connect to the Thermostat’s Wi-Fi broadcast.

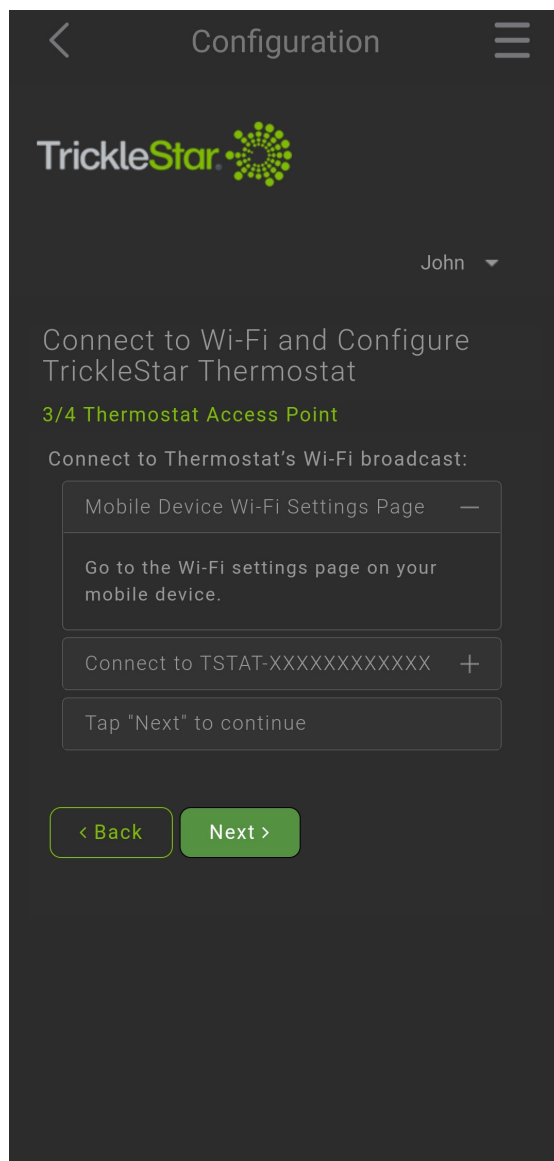


Fig 66-B

*Note: The Thermostat Wi-Fi broadcast should look like this: TSTAT-XXXXXXXXXXXX, where the 12 alphanumeric represents the MAC address of the device.*



- iv. Ensure that your mobile device is now connected to the Thermostat's Wi-Fi broadcast. At the TrickleStar App, tap on "Tap here" to open the Access Point interface. Connect the Thermostat to your Wi-Fi network. Next, you must connect your mobile device to the same Wi-Fi network. Tap on "Done" afterwards.

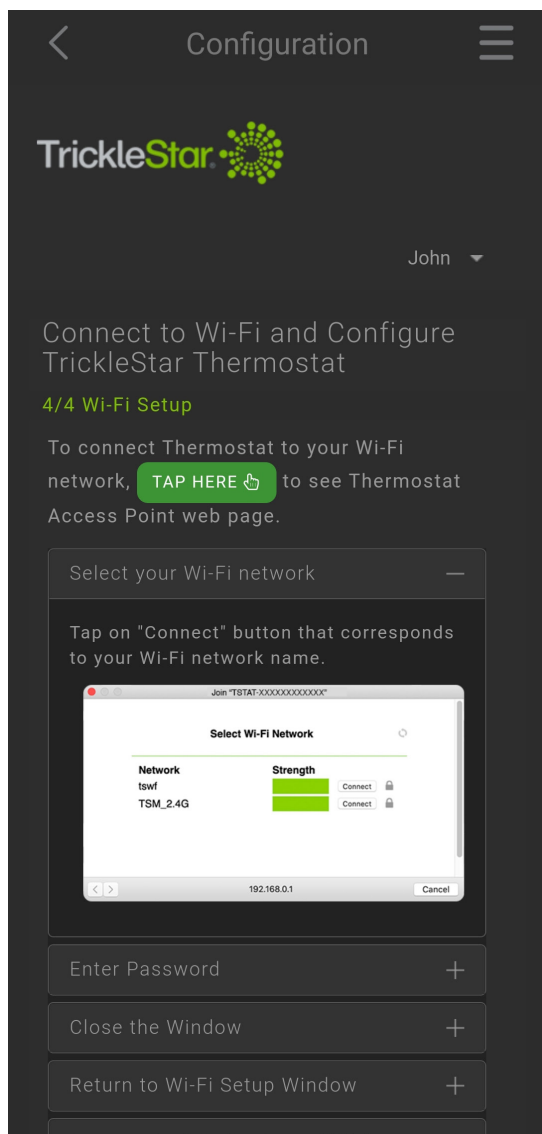


Fig 67-A

*Note: The Wi-Fi network credentials will be saved in the Thermostat's memory. These credentials will not be lost even in the event the Thermostat loses power.*



- v. The App may take several minutes to register the device to your account. Once connected to Wi-Fi, the Thermostat will then show the progress of connection to Portal via speedometer.

*Note: If the Thermostat keeps restarting the speedometer progress, you may proceed with the configuration in the Portal. The Thermostat LCD display will be updated once the connection to Portal is established successfully.*





6. The Portal will then prompt you to setup the HVAC system:
  - a. Configure your HVAC system.  
Options: “Conventional System (HC)” or “Heat Pump System (HP)”.

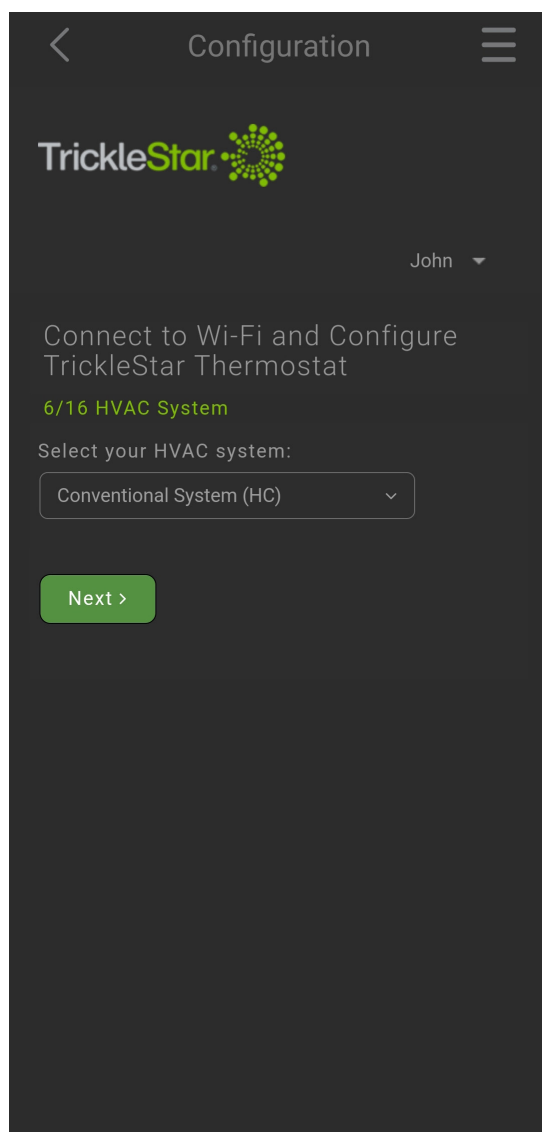


Fig 69-A

*Note: It is normal if the Thermostat LCD display is still stuck at any of the configuration stages. All settings configured in the App will be downloaded to the Thermostat once connection to Portal is established.*



- b. Configure your fan control option.  
Options: “Gas Heating (HG)” or “Electric Heating (HC)”.

This screenshot shows the 'Configuration' screen for a TrickleStar thermostat. At the top, there is a back arrow, the title 'Configuration', and a menu icon. Below this is the TrickleStar logo and a user name 'John' with a dropdown arrow. The main heading is 'Connect to Wi-Fi and Configure TrickleStar Thermostat'. Below that, the section '7/16 Fan Control Option' is highlighted in green. The prompt 'Select fan control option:' is followed by a dropdown menu currently showing 'Gas Heating (HG)'. At the bottom, there are two buttons: '< Back' and 'Next >'.

Configuration

TrickleStar

John

Connect to Wi-Fi and Configure TrickleStar Thermostat

7/16 Fan Control Option

Select fan control option:

Gas Heating (HG)

< Back Next >

Fig 70-A

- c. Configure your heat pump reversing valve option. Options: “Energized in Cooling (o)” or “Energized in Heating (b)”.

This screenshot shows the 'Configuration' screen for a TrickleStar thermostat, specifically for the heat pump reversing valve. It has the same header as Fig 70-A. The section '8/16 Heat Pump Reversing Valve' is highlighted in green. The prompt 'Select heat pump reversing valve option:' is followed by a dropdown menu currently showing 'Energized in Cooling (o)'. Below this, there is a paragraph of text: 'Click "Next" to save your selection and start the output terminal testing. When you click "Next", you will not be able to return to this step.' At the bottom, there are two buttons: '< Back' and 'Next >'.

Configuration

TrickleStar

John

Connect to Wi-Fi and Configure TrickleStar Thermostat

8/16 Heat Pump Reversing Valve

Select heat pump reversing valve option:

Energized in Cooling (o)

Click "Next" to save your selection and start the output terminal testing.  
When you click "Next", you will not be able to return to this step.

< Back Next >

Fig 70-B

*Note: This configuration is only enabled if you have selected your HVAC System as “Heat Pump System (HP)”.*



7. Next, the App will prompt the output tests. Complete the 8 output tests and ensure the corresponding HVAC component is turned on/off accordingly.
8. The App will then prompt additional Thermostat Settings for configuration. Tap on “Continue” to begin the configuration.

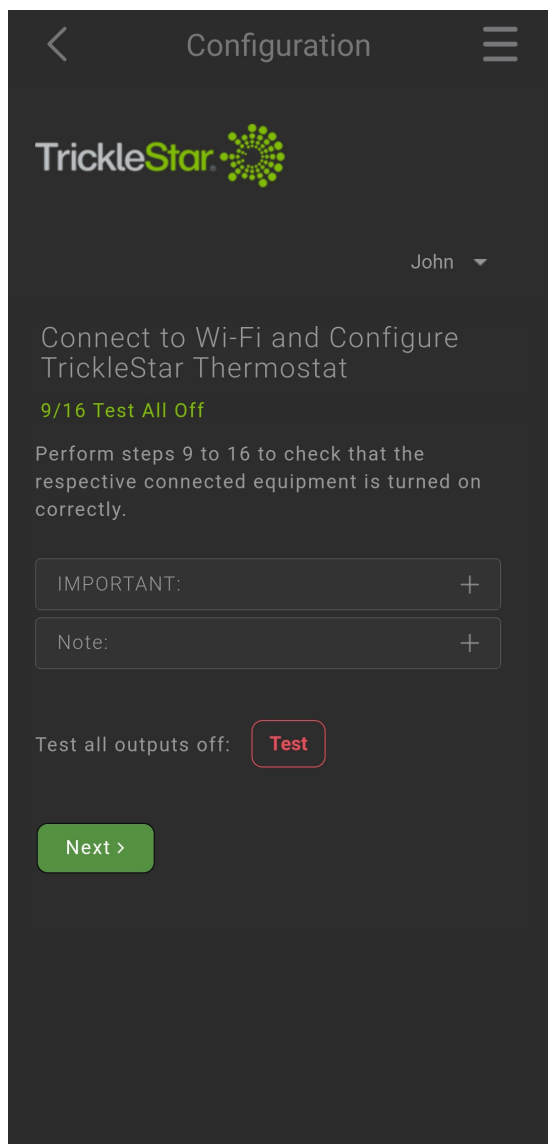


Fig 71-A

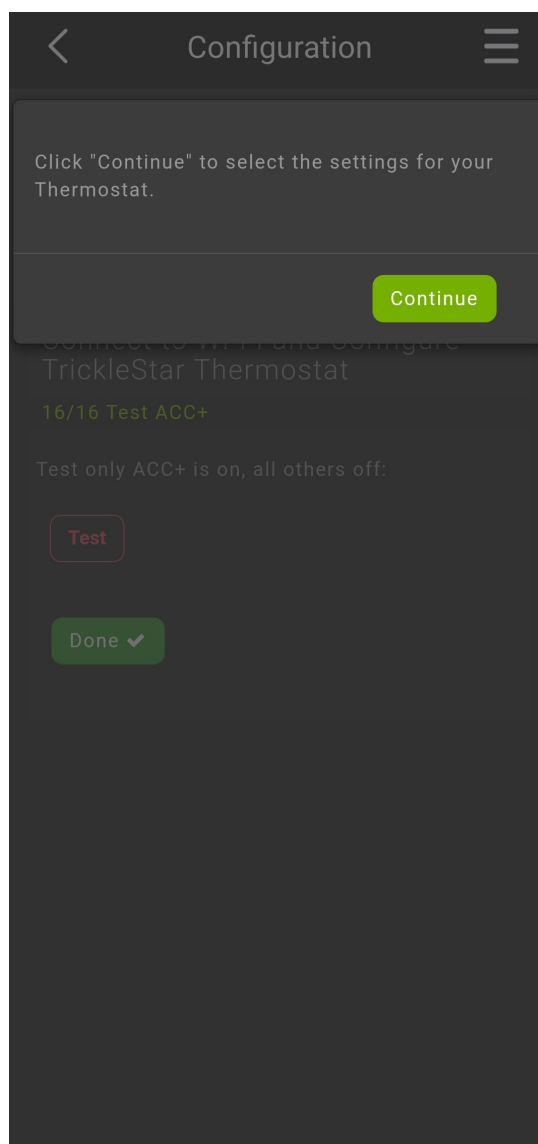


Fig 71-B

*Note: For detailed information on the output tests, please refer to page [15](#).*



- a. The first setting is the HVAC Type, the number of heating and cooling stages, and whether your Heat Pump has any supplemental heating.

This is a screenshot of the 'Configuration' screen in the TrickleStar app. At the top, there is a back arrow, the title 'Configuration', and a menu icon. Below the TrickleStar logo, the user's name 'John' is displayed with a dropdown arrow. The section is titled 'Thermostat Settings' with a sub-header '2/4 HVAC Type'. The 'HVAC Type:' label is above a dropdown menu currently set to 'Heating and Cooling'. Below this, the text 'Number of W (Heating) and Y (Cooling) Stages:' is followed by an information icon and a dropdown menu set to 'Dual Stage Heating, Dual Stage Coolir'. A note states: 'Refer to the photo of the labeled wiring to choose the number of W & Y Stages.' Below the note is a 'Tips:' section with a plus icon. At the bottom, a question asks 'Does your Heat Pump system have a supplemental heating source?' with a 'Yes' button selected. A green 'Next >' button is at the very bottom.

Fig 72-A

- b. Configure the temperature unit that will be shown by the Thermostat's LCD display.

This is a screenshot of the 'Configuration' screen in the TrickleStar app, showing the next step. It has the same header and user information as Fig 72-A. The sub-header is '3/4 Temperature Unit'. The text 'Select temperature unit:' is above a dropdown menu set to 'Fahrenheit'. Below the dropdown are two green buttons: '< Back' and 'Next >'. There is no 'Next >' button at the bottom of the screen.

Fig 72-B

*Note: The temperature unit can be changed any time via the TrickleStar Portal/App settings.*



- c. Configure your Modes settings, which include the Set Temperature for Heat and Cool, as well as the Set Fan for Heat and Cool.

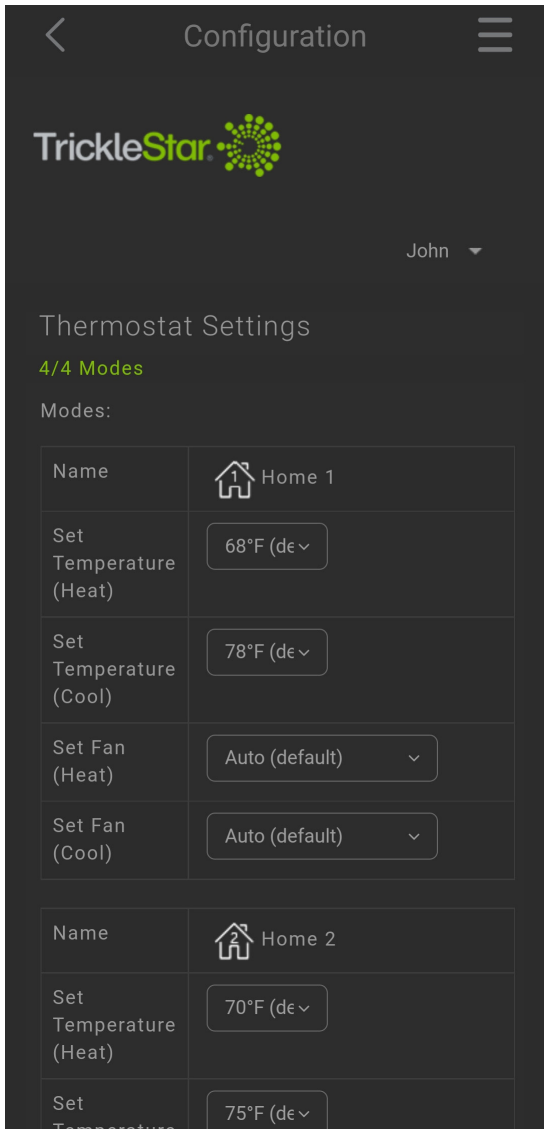


Fig 73-A

*Note: These 4 Modes settings will be used in the Schedule. The Thermostat will automatically set the temperature and fan mode according to these settings at the corresponding time and day of the week.*



9. Tap on “Save” to save all the configuration and settings.
10. If you are a homeowner, tap on “Don’t need to transfer ownership? Go to Devices List” to return to Devices page. The configuration ends here.

If you are a Contractor, proceed to “Step 4: Transfer Ownership to Homeowner (For Contractor only)”. Press “Start” to begin the process.

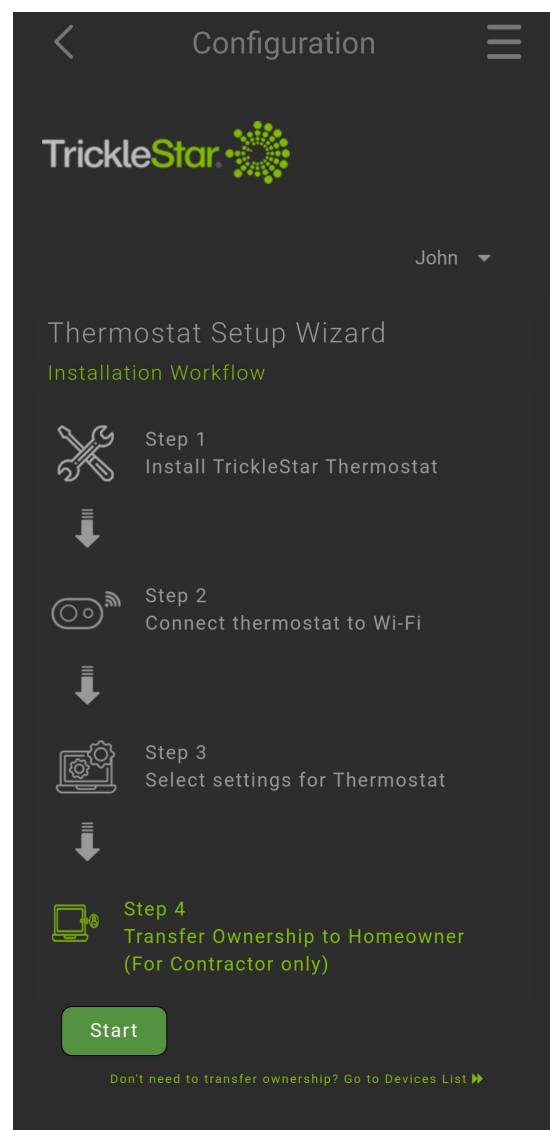


Fig 74-A



11. Ensure the homeowner has already created a Portal account. Enter the homeowner's email address to the Email field and select the Site to transfer. Tap on "Add".

This is a mobile app configuration screen titled "Configuration". It features the TrickleStar logo at the top left and a user profile "John" with a dropdown arrow at the top right. The main heading is "Ownership Transfer". Below it, the section "Ownership Transfer details" contains a red note: "Note: When you transfer ownership and the receiver with the specified email address below accepts it:" followed by two bullet points: "• The receiver will take over the selected site(s), including all TrickleStar devices and accessories on the site." and "• You will no longer have access to the selected site(s). All delegations you may have created for the selected site(s) will be removed." Below the note is an "Email:" label and an empty text input field. The "Sites" section has the text "Select a site to transfer." and a dropdown menu currently showing "Nothing selected". At the bottom are two buttons: a grey "Cancel" button and a green "Add" button with a white checkmark.

Fig 75-A

12. TrickleStar Portal will send an email to the listed email address. The homeowner will have to log into the TrickleStar App and accept the ownership transfer request at the same Ownership tab.

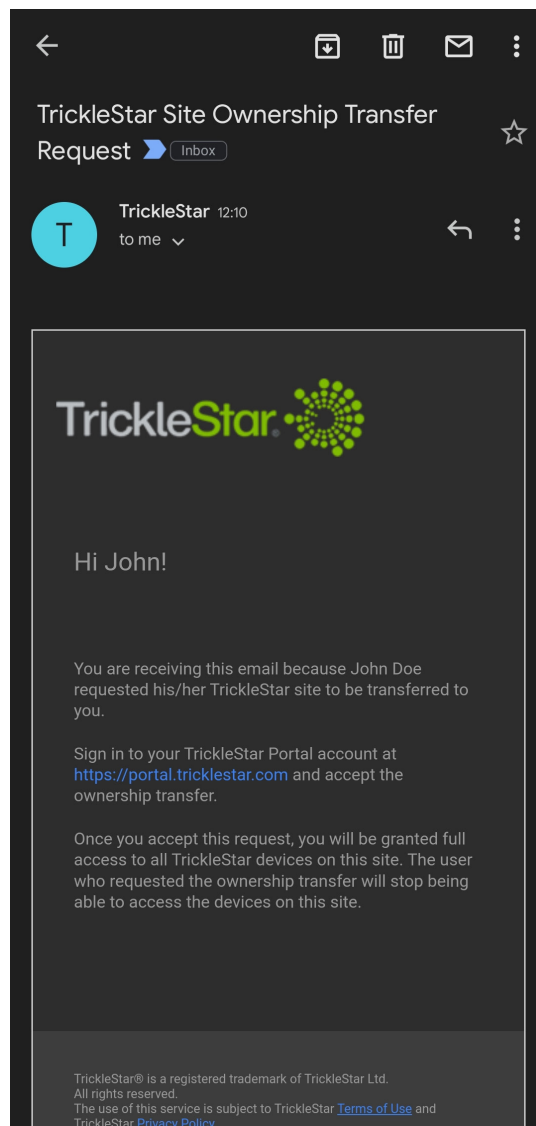


Fig 75-B



13. Once the ownership transfer request has been accepted by the homeowner, the contractor will lose all control over the device permanently.



Controlling the Device

To control the device, click on the Menu icon and select “Devices”.  
The following are the controls accessible via the TrickleStar App in the Devices page:

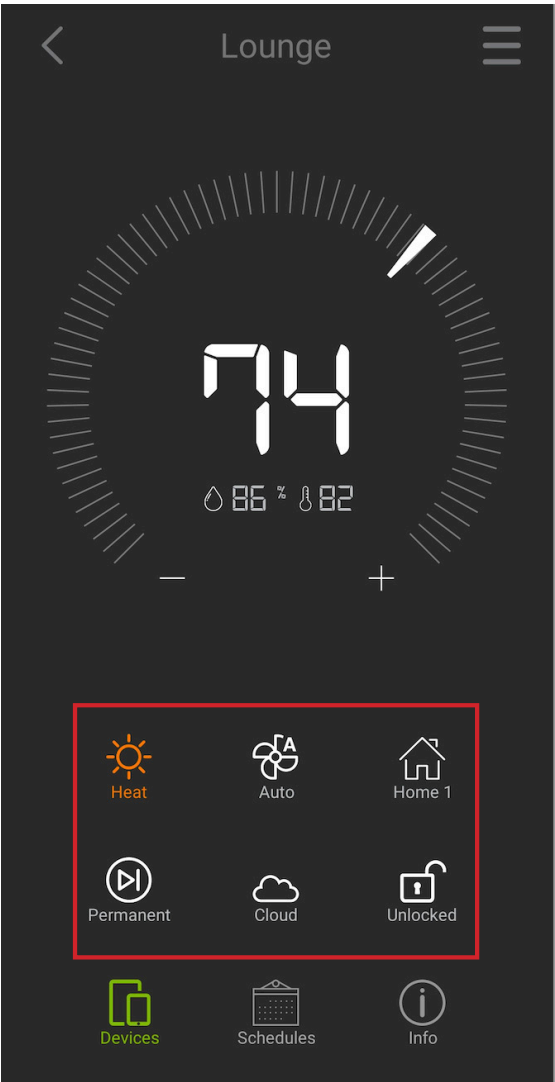








Fig 77-A

Tap on the icon	To
	Change the System, whether Heat, Cool, Auto, EM Heat, or Off.
	Change the Fan, whether On, Auto, Run Once, or Circulate.
	Change the Mode, whether Home1, Home2, Away, or Sleep.
	Change the Hold Type, whether No Hold, Temporary or Permanent Hold.
	Indicate if the App is communicating at a different network (Cloud) or same network (LAN) with the Thermostat.
	Lock or unlock the Thermostat (Input Lock).

Note:

- If you have registered more than one device in your Site, you may tap on the device that you wish to control at the Home page to access the Devices page.
- If you have more than one Site in your TrickleStar account, you need to first select the desired Site, and then tap on the device to access the Devices page.

## Scheduling the Device

Tap on the “Schedules” icon to access the Schedules page. To edit the Schedule, click “Edit Schedules”. The Thermostat will automatically change the Mode according to the different times of the day, for all 7 days in a week. Tap on the “Add Schedule” icon to add a new schedule event, or tap on existing schedules to edit or delete them.

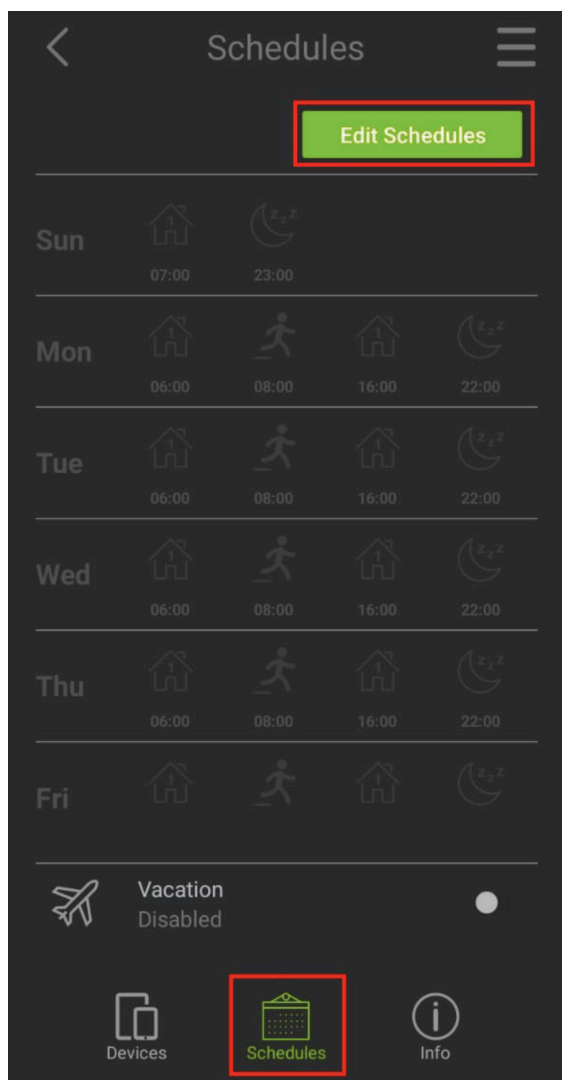


Fig 78-A

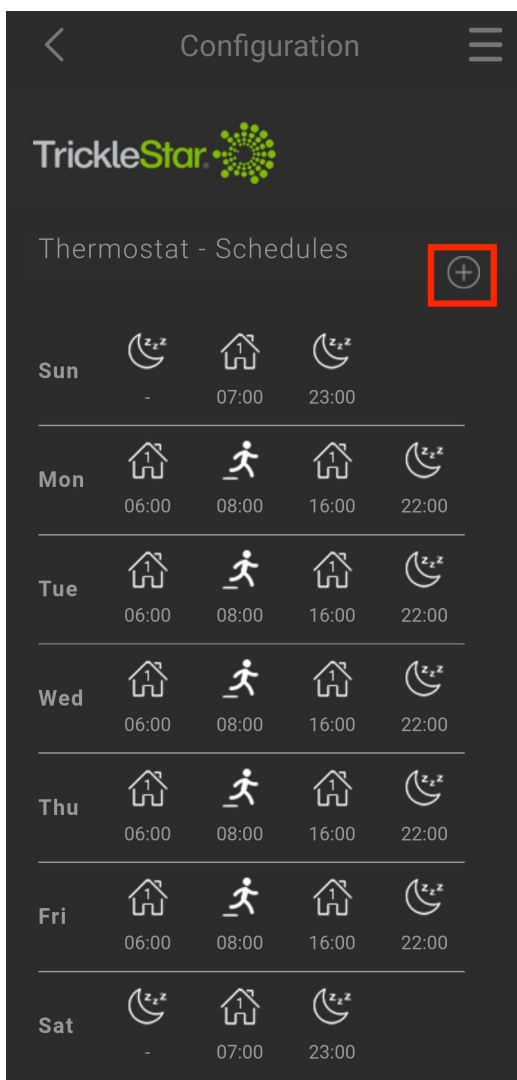


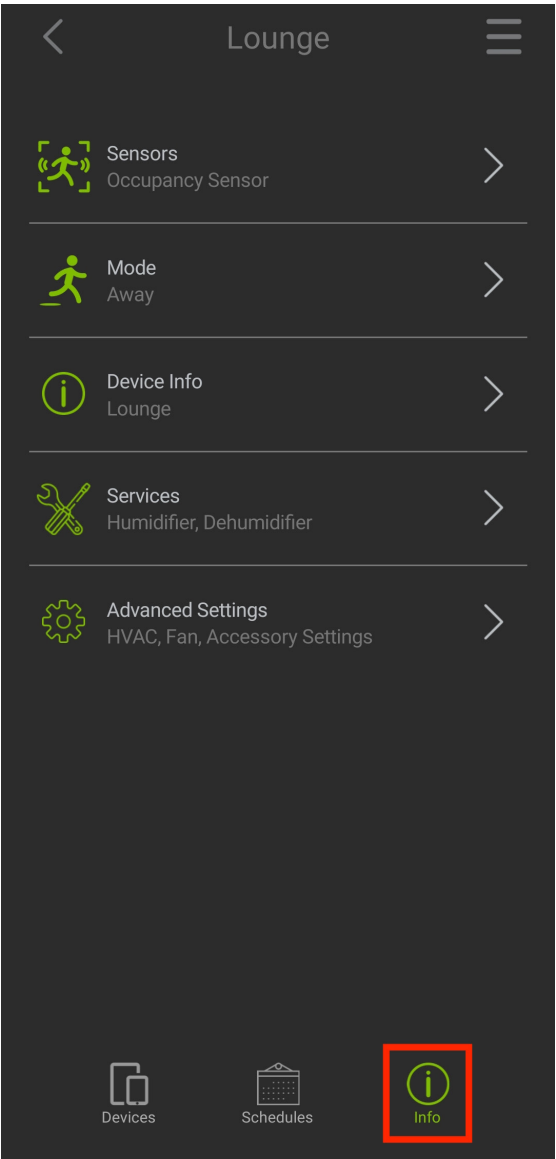
Fig 78-B

### Note:

- You only need to configure the start time of each event, and it will remain in effect until the next Scheduled Mode event.
- You can schedule up to 6 events in a day.

Checking the Device Info

Tap on the “Info” icon to access the information of the Thermostat operations and the connected Occupancy Sensors.









Tap on the icon	To
	Show the status of the Occupancy Sensors, enable/disable each sensor operation, and to add a new sensor to Thermostat.
	Show and edit the settings for each Mode and Vacation, such as the Set Temperature (for Heat and Cool) and Set Fan (also for Heat and Cool).
	Show the general information of your device.
	Show the settings for Alerts and Reminders.
	Change the Advanced Settings for the Thermostat.

Fig 79-A

## Configuring Geofence Settings

Follow the steps below to configure the multi-user geofencing feature.

1. Tap on the menu icon  and you will see more options. Select “Settings”.
2. At the Settings page, tap on “Geofencing”.

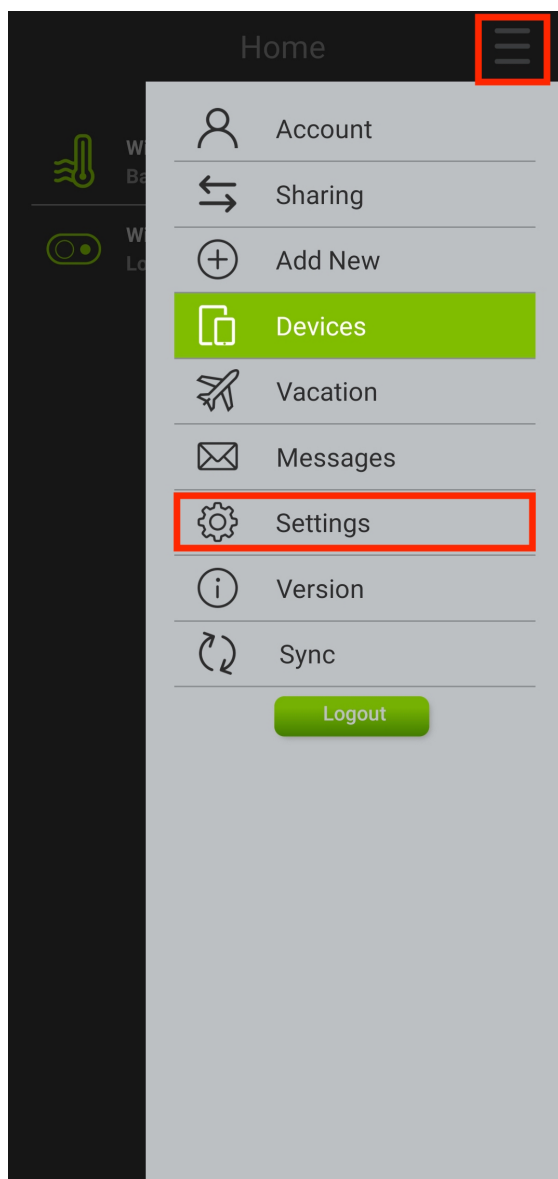


Fig 80-A

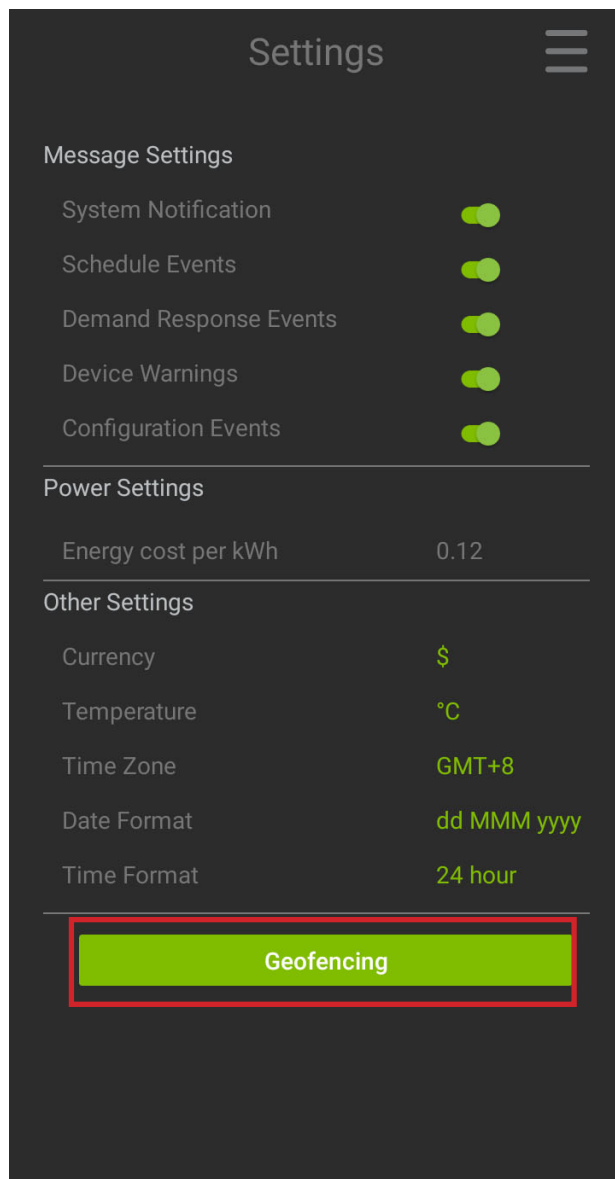


Fig 80-B

3. If your mobile device prompts the following screen asking for the location permission for the TrickleStar App, please select “Allow all the time”.
4. The Geofencing page will be shown, indicating that the Geofencing has not been enabled for the Thermostat. To enable the Geofencing feature, tap on “Edit”.

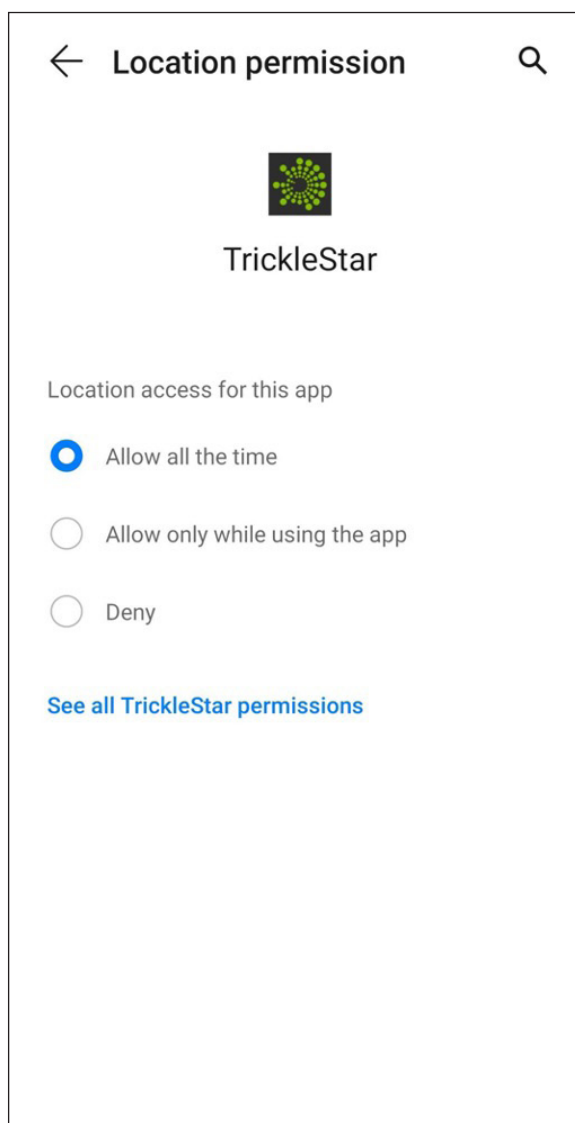


Fig 81-A

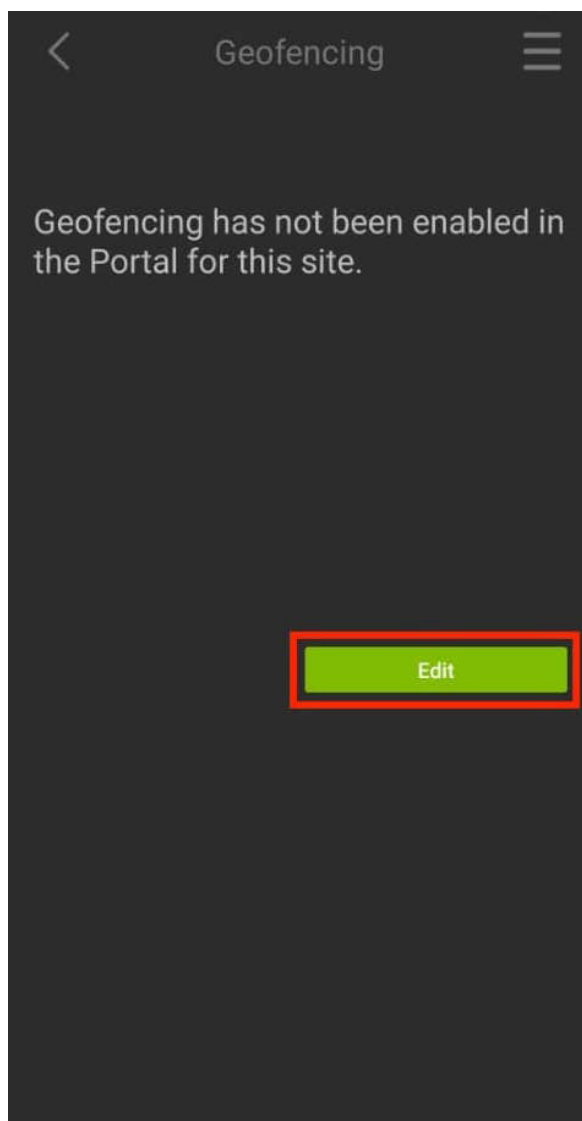


Fig 81-B

*Note: Selecting any other options for the location permission would affect the performance of the Geofencing feature.*

5. The Geofence and Site Settings page will then be shown. Enable the Geofencing feature, and select the radius to form the geofence boundary. Tap on “Save Changes” to save your settings.

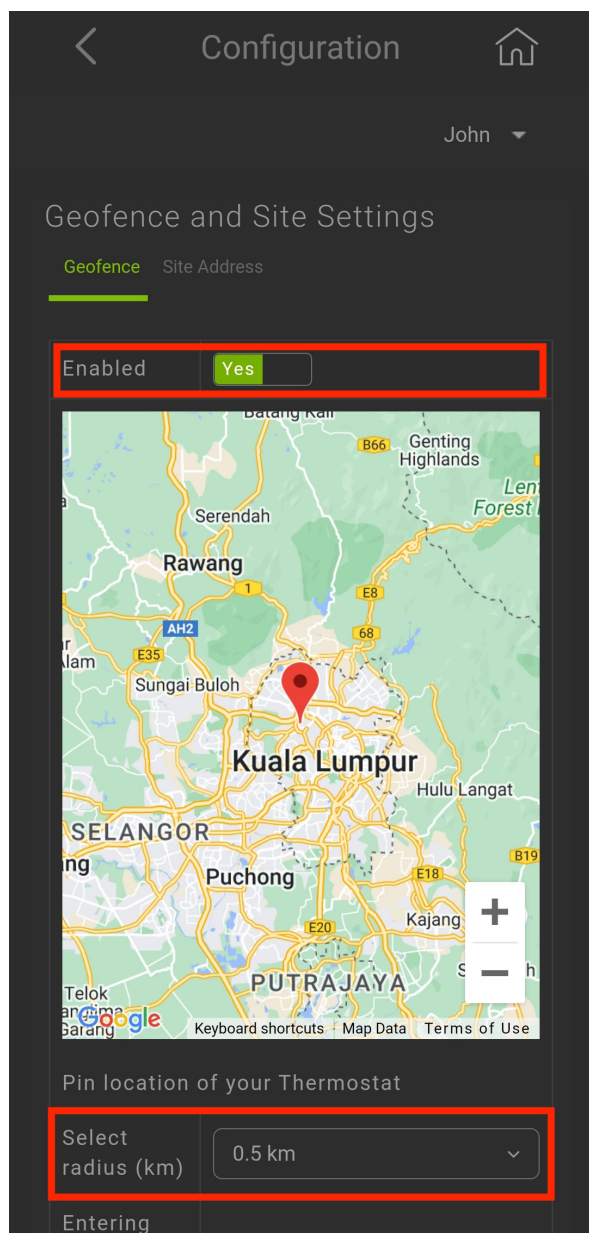


Fig 82-A

6. Enable the Geofencing feature for your mobile device. You may then check your mobile device's GPS status whether you are "Inside Geofence" or "Outside Geofence" from here.

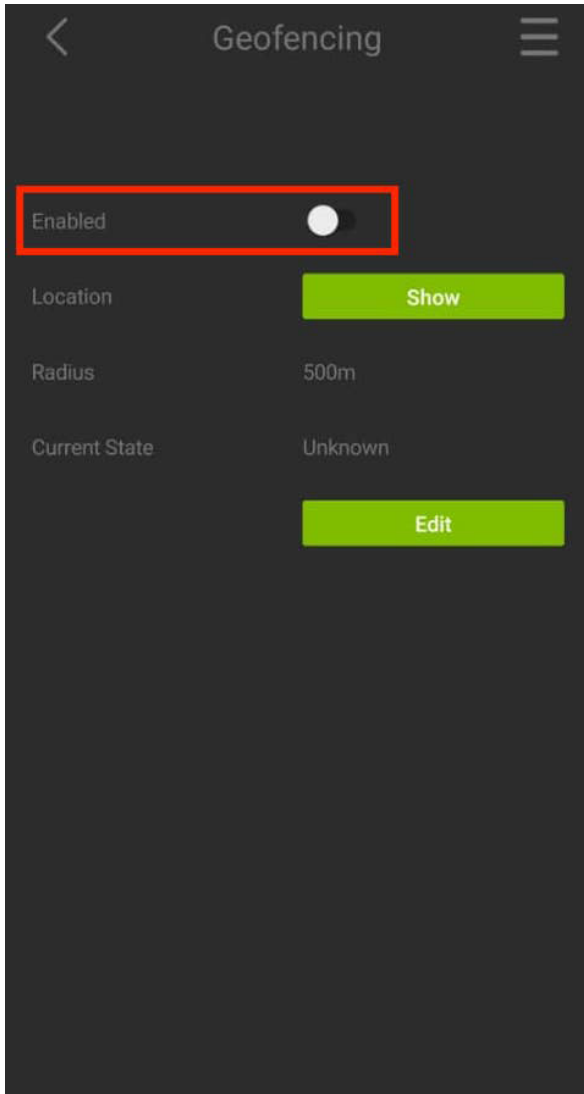


Fig 83-A

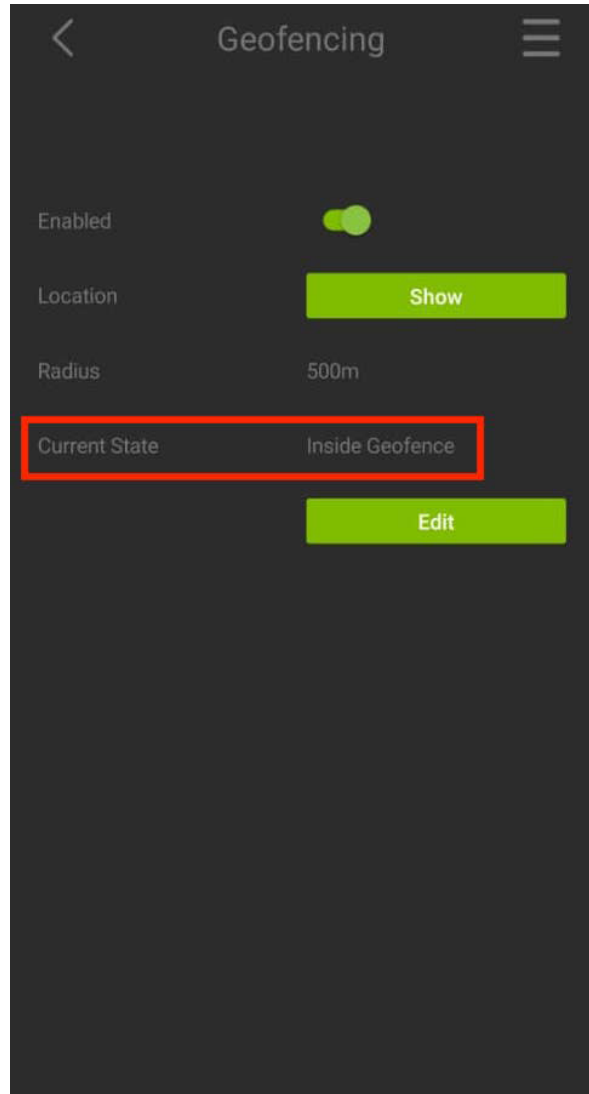



Fig 83-B

**Note:**

- You must enable the Geofencing feature (in Step 6) for every mobile device which will be using this feature.
- To ensure optimum Geofencing performance, ensure that you run the TrickleStar App in the background for your mobile device. Do not 'kill' the TrickleStar App.

### Miscellaneous Tabs in the Menu

The Menu icon  provides additional tabs for miscellaneous configuration and settings:

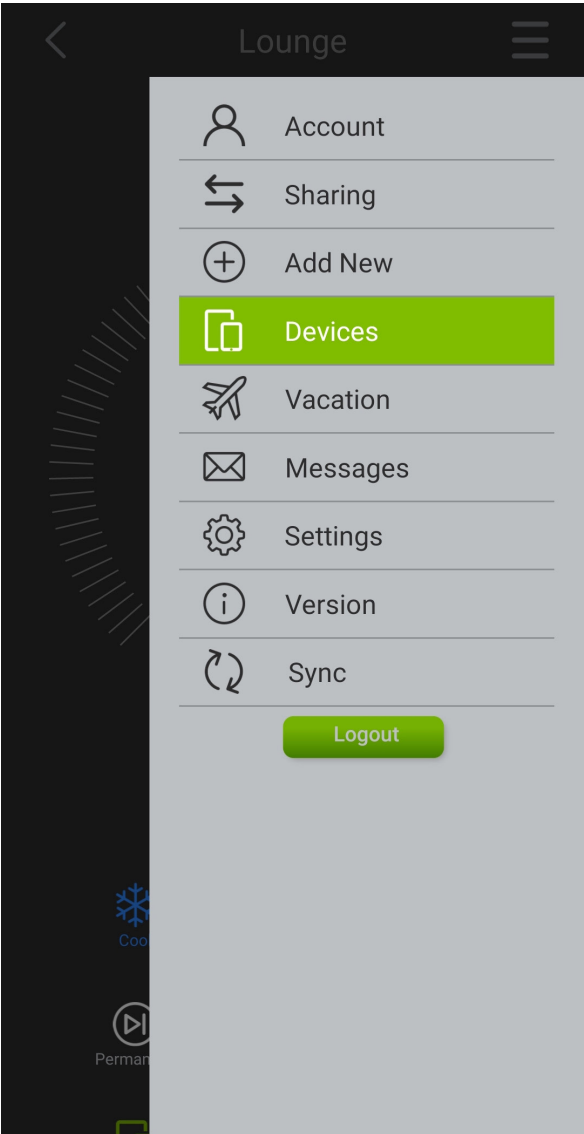









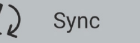


Fig 84-A

Select	To
 Account	Change your account information.
 Sharing	Change the Site Management and Sharing settings.
 Add New	Add a new device to your TrickleStar account.
 Devices	View and select the connected devices. If you have multiple sites, it will show all Site names. Tap on your desired Site, it will show all connected devices in that Site.
 Vacation	Update your vacation settings and enable/disable the vacation schedule.
 Messages	Check and delete your messages.
 Settings	View or change the General Settings, including Geofence settings, for the Thermostat.
 Version	Check the App's version and to access the TrickleStar Website, Privacy Policy, and Terms and Conditions.
 Sync	Sync the information from the Portal.
 Logout	Log out from the App.





## Using the Portal

TrickleStar Portal provides an alternative access to control your devices via your PC browser. The site is also made to be mobile-friendly, so you may also access the Portal via your mobile device's browser.

The Portal is the platform which houses all control and setting elements, shared with the TrickleStar App. Therefore, any controls and settings that you can see and configure in the TrickleStar App can also be performed via the Portal.

You can check the list of features which the Portal can perform by referring to “Feature List” from pages [106](#) to [112](#).

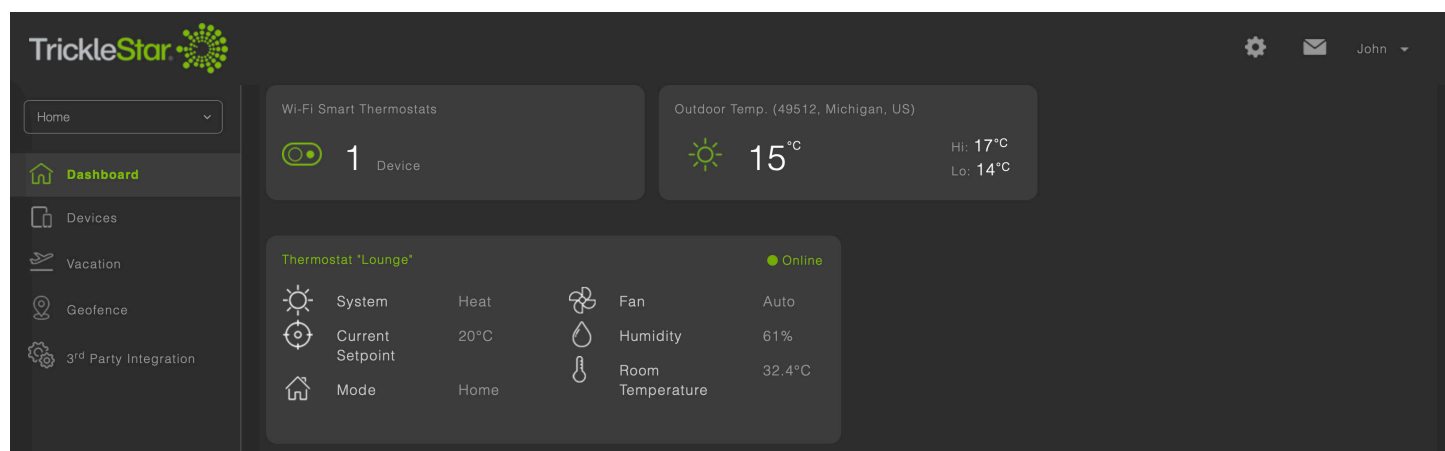


Fig 85-A

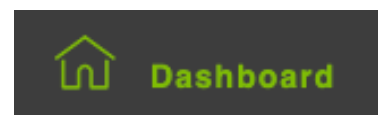
**Note:**

- If you have not created a Portal account, create one at: [portal.tricklestar.com](https://portal.tricklestar.com)

## Understanding the Icons

The TrickleStar Portal is designed to be intuitive and easy-to-use. Most of the icons, buttons and interfaces have their descriptions clearly labelled near itself.

For example: The Dashboard icon is labelled as such.



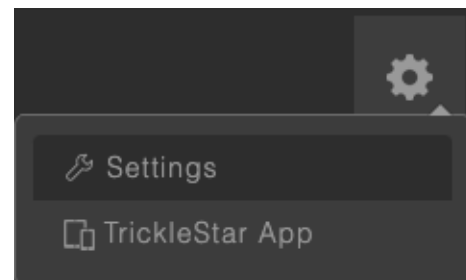
Where the icons are not labelled from the get-go, you may mouse over those icons, and the description will be shown automatically.

For example: Mouse over the Control icon, the description will be shown.



Some icons act as a dropdown menu when clicked. As such, they do not have their descriptions shown from the get-go or when moused over.

For example: Click on the Settings icon to see the dropdown menu.



The Messages icon stores all messages prompted by the Portal, the App, or utilities (for DR and ToU integrations).

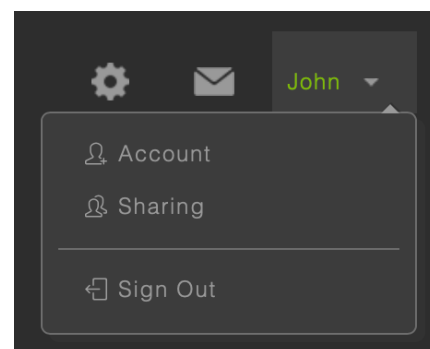
For example: Click on the Messages icon to see all messages.



Your Portal account name is shown at the top right corner of the Portal. Clicking on the name will reveal a dropdown menu showing the "Account", "Sharing" and "Sign Out" icons.

For example: You can change your Account Settings in the "Account" icon. Clicking on the "Sharing" icon takes you to the Site Management and Sharing page, where you can manage your sites as well as your delegation and ownership transfer requests.

Click on the "Sign Out" icon if you want to sign out from your Portal account.



### Note:

- Some advanced settings may have a tooltip explaining the settings in more detail. Simply mouse over the tooltip icon ⓘ to read the settings explanation.
- Please allow some time for the tooltip explanation to be shown when mousing over the tooltip icon.

## Using the Icons on the Left Column

You can select the icons on the left column to perform specific tasks as follows:

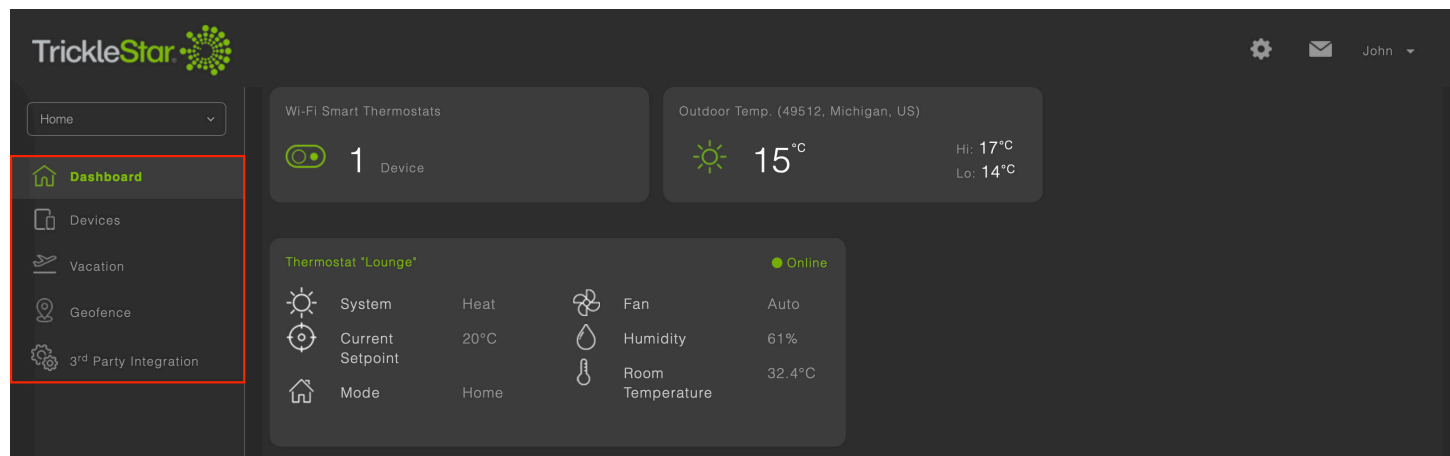







Fig 87-A

Select this Icon	To
 Dashboard	Show the basic settings for your connected devices and to change the settings.
 Devices	Show your connected devices so that you can select and change the settings for each device.
 Vacation	Update your vacation details and to enable/disable the vacation schedule for your connected devices.
 Geofence	Define the boundary of your geofence. Once the smartphone GPS enters/leaves the geofence boundary, the Smart Thermostat will automatically change the Mode (Home/Away).
 3 <sup>rd</sup> Party Integration	Integrate with Amazon Alexa or Google Home.

## On the Dashboard Page (Home Page)

1. Select “Dashboard” to show the basic settings for your connected devices.
2. Click on the device to access the Device control page where the settings can be changed.

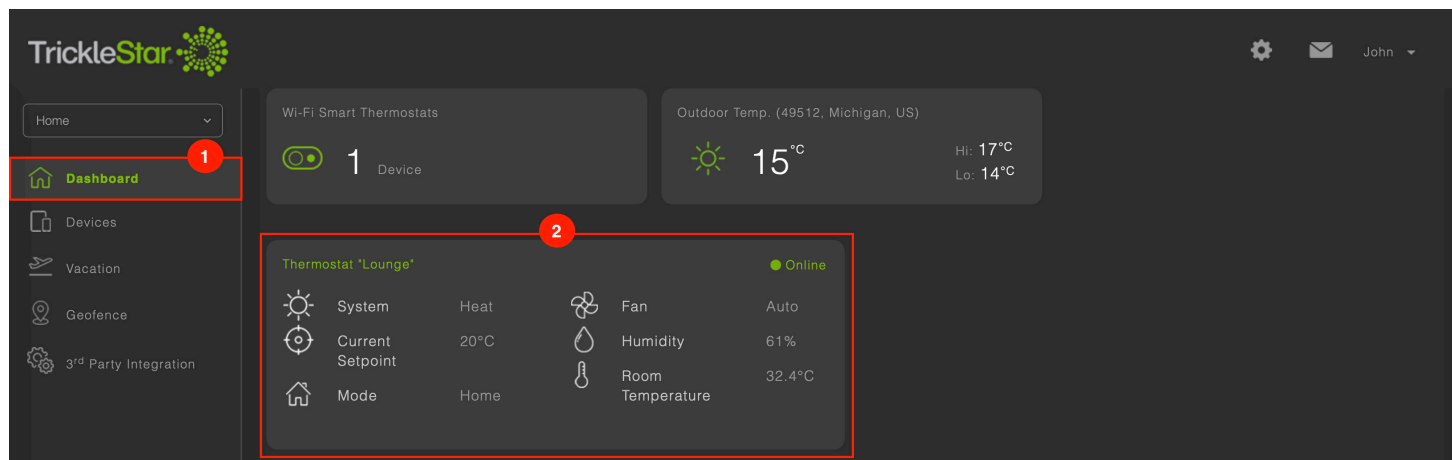


Fig 88-A

## On the Devices Page

1. Select “Devices” to show your connected devices.
2. Click on the device name to access the Device control page where it’s settings can be changed.

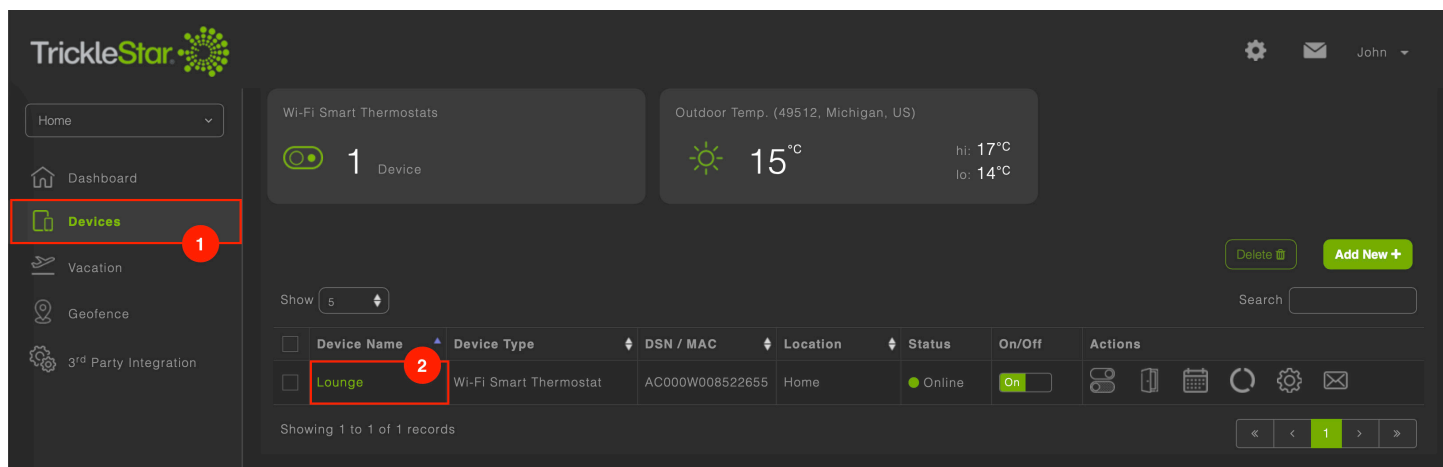


Fig 89-A

3. At the Device control page, select the settings category as explained in the table that follows.
4. Click on the selection fields to change the respective settings.

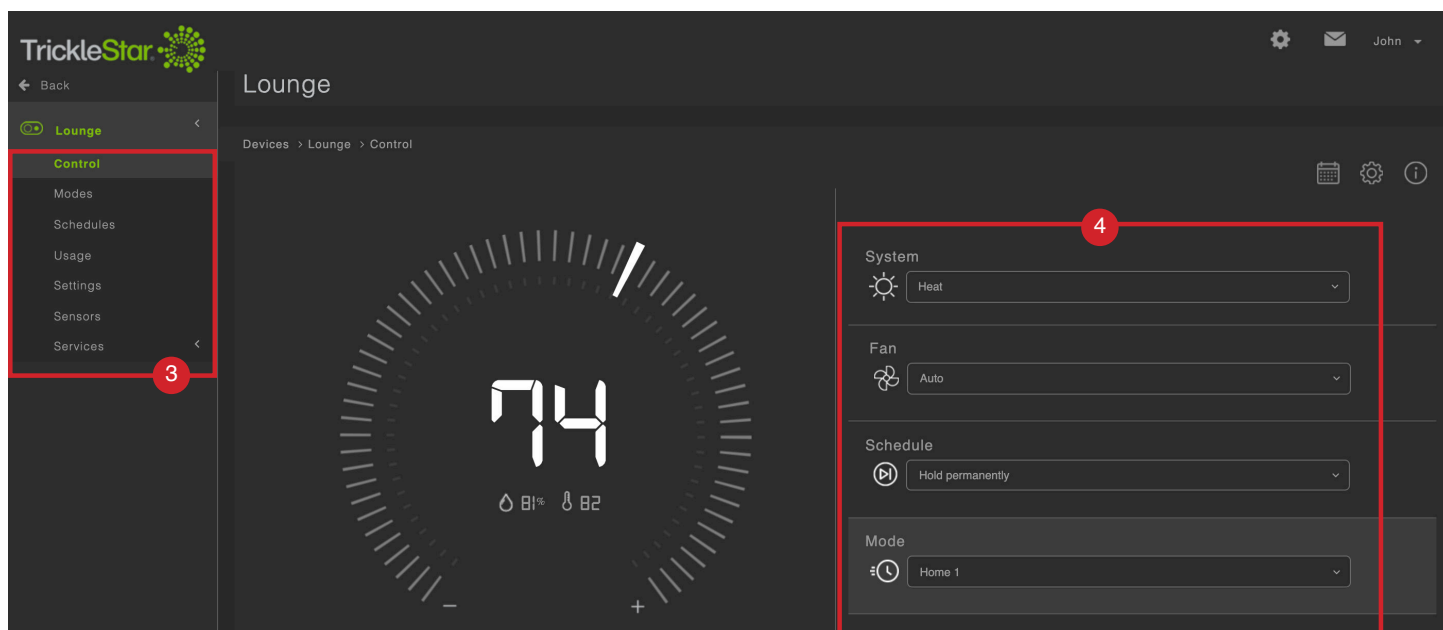


Fig 89-B

Select	To
Control	Change the basic settings such as Setpoint Temperature, System, Fan, Schedule, and Mode.
Modes	Change the settings for each Mode and for Vacation such as Setpoint Temperature (Heat and Cool) and Set Fan (Heat and Cool).
Schedules	Show your daily/weekly schedule and to add/edit/delete a scheduled event.
Usage	Show the average HVAC system Run Time and Usage History for your device by weekly/monthly/yearly.
Settings	Change the settings for your (1) HVAC Settings, (2) Fan, Accessory and Free Cooling, (3) Display and Other Settings, (4) Info and Time Zone.
Sensors	Change the settings for Occupancy Sensor, add new sensor, refresh existing sensor data, enable/disable sensor, and to unpair any unused sensor.
Services	Change the settings for Alerts and Reminders.

## On the Vacation Page

1. Select “Vacation” to update your vacation schedule for your connected devices.
2. Update your vacation details and enable/disable the vacation schedule.

TrickleStar®

Home

Dashboard

Devices

**Vacation**

Geofence

3rd Party Integration

### Vacation Settings

Dashboard > Vacation Settings

#### Vacation Dates

Depart 07 Aug 2021 08:00 Return 19 Aug 2021 14:00

Once dates and times are provided and Vacation is enabled, all TrickleStar devices on site "Home" will be programmed to activate the Vacation schedule between these dates/times.

#### Devices

The list of devices on site "Home":

- Lounge

Note:

- Vacation schedule will be enabled for all devices of the currently selected site "Home".
- If you wish to enable Vacation schedule for another site, please select that site and repeat the Enable Vacation Schedule process.

#### Status

[Enable Vacation Schedule](#)

Vacation schedule is currently **Disabled**.

Fig 91-A

## On the Geofence Page

1. Select “Geofence” to define your Geofence boundary for the location where the Thermostat is installed.
2. Enable the Geofence feature. Ensure the map is showing the designated location where the Thermostat is installed and define the radius of the Geofence boundary.
3. When the mobile device enters the Geofence boundary, the Thermostat’s occupancy mode will be set to the closest Home mode configured in the Portal Schedule. Note there are 2 Home modes: Home 1 or Home 2. Likewise, when the mobile device leaves the Geofence boundary, the occupancy mode will be set to Away.

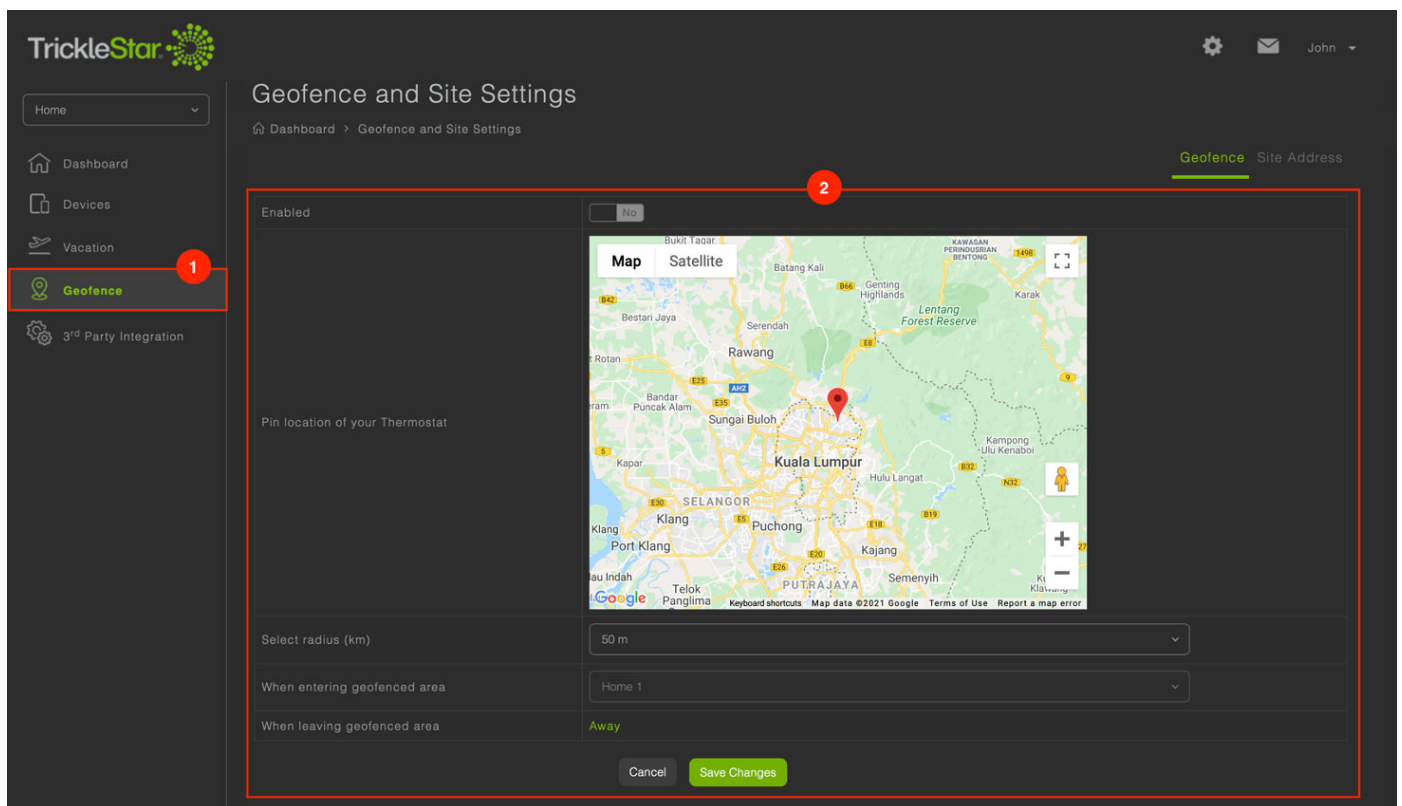


Fig 92-A

**Note:**

The Geofence feature will not conflict with any installed Occupancy Sensor in your home. For example, if the App detects the user entering the Geofence boundary, the App notifies the Thermostat to change to Home 1 mode. When user enters the house and detected by the Occupancy Sensor, the mode will remain, since it is already in Home 1 mode.

If the user enters the house before the App detected the user entering the Geofence boundary, the Occupancy Sensor will signal the Thermostat to change to Home 1 mode. When the App eventually detected the user in the boundary, the mode will also remain, since it is already in Home 1 mode.



On the 3rd Party Integration Page

- 1. Select “3rd Party Integration” to integrate with Amazon Alexa, or Google Home.
- 2. Click “Configure” accordingly to integrate with your preferred 3rd party system.

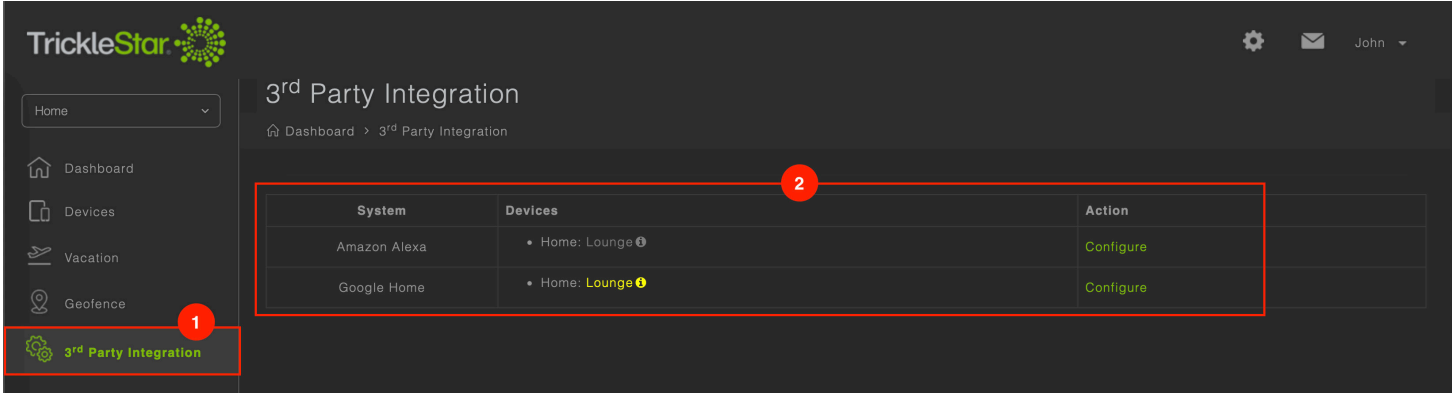


Fig 93-A

## Maintenance

### System Reset

After a circuit breaker tripping or main switch tripping, the Thermostat will automatically reset its system. System reset will not change the configuration, the Wi-Fi setup and settings on the Thermostat and your Portal account. The Thermostat will automatically reconnect to your Portal account, if you have one.

If your Thermostat is not working according to your expectation, or you need to perform a system reset for your Thermostat, use a paper clip to press the System Reset Pinhole at the bottom of your Thermostat.

During system reset, the Thermostat will perform a System Check and try to recover the connection to the Cloud based on previous Wi-Fi settings. If connection to Cloud is successful, the LCD display will return to Home Screen for Normal Operation.

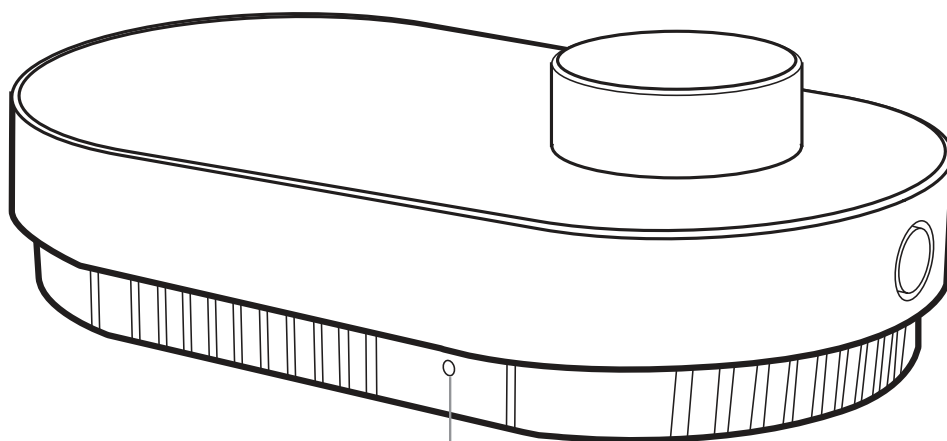


Fig 94-A

System Reset  
Pinhole

System Check Display

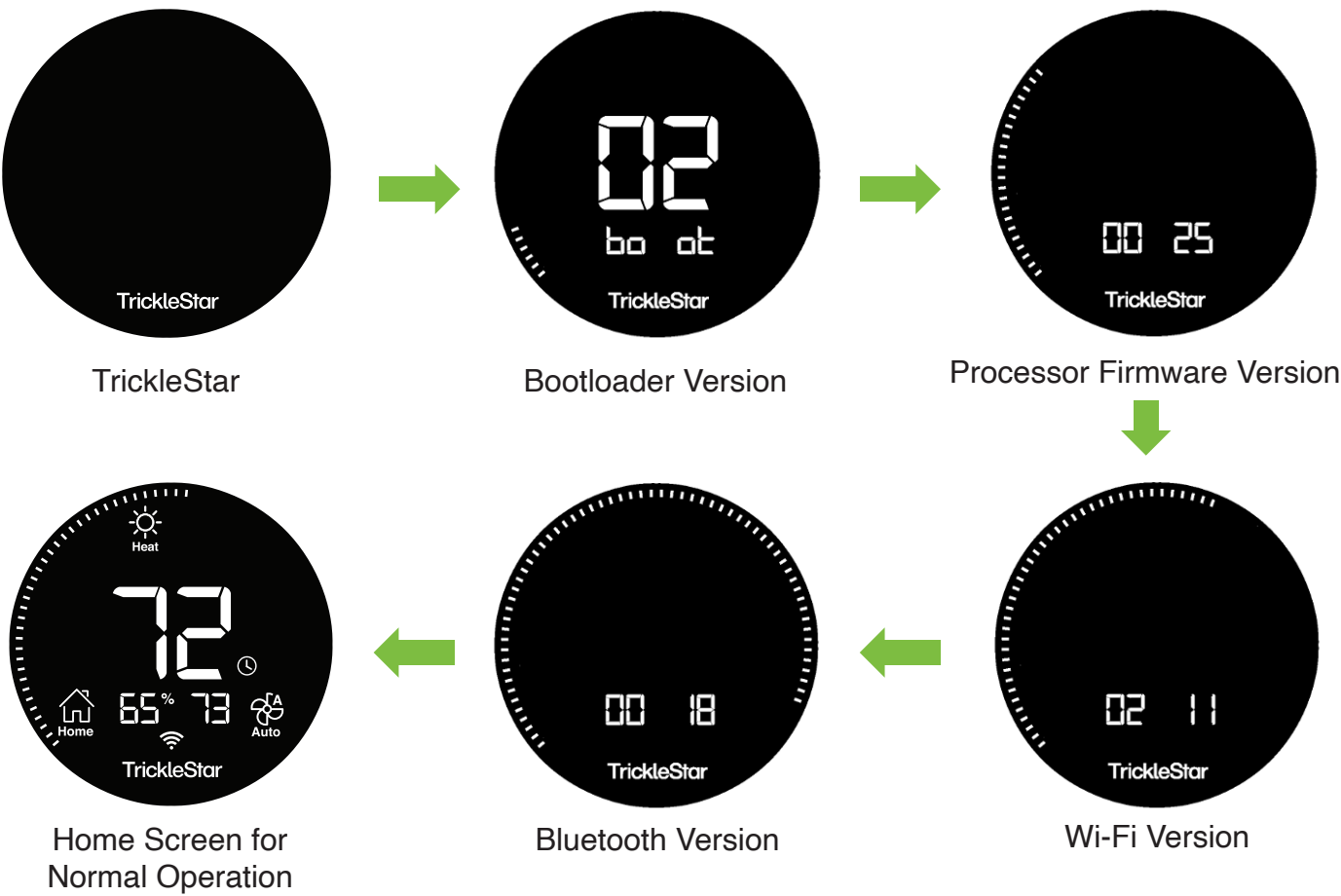


Fig 95-A

## Factory Reset

If you need to reset your Thermostat to factory default settings, press and hold the Jog dial and Side button simultaneously for 15 seconds until “01” is shown and “AP” flashes on the LCD display. During factory reset, the thermostat will take about 45 seconds to start up and speedometer will show the progress. All users or device settings will be deleted and the Thermostat will reset to factory default settings.

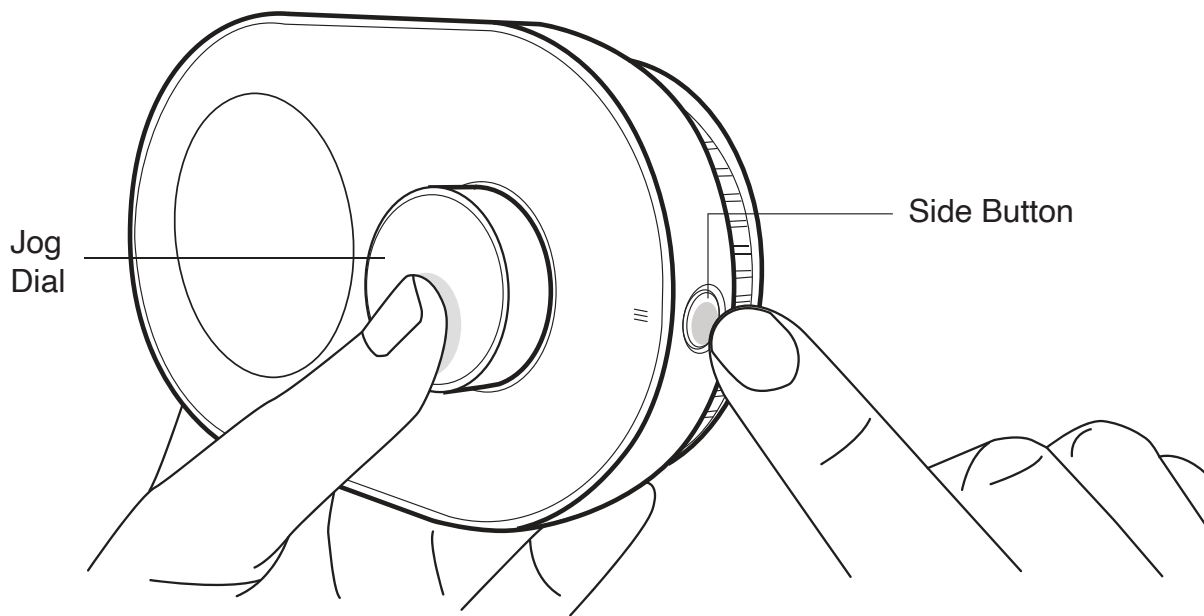


Fig 96-A



When the factory reset is completed, the Thermostat will perform a System Check. Then, the LCD display will show the Start-Up Configuration.

### System Check Display

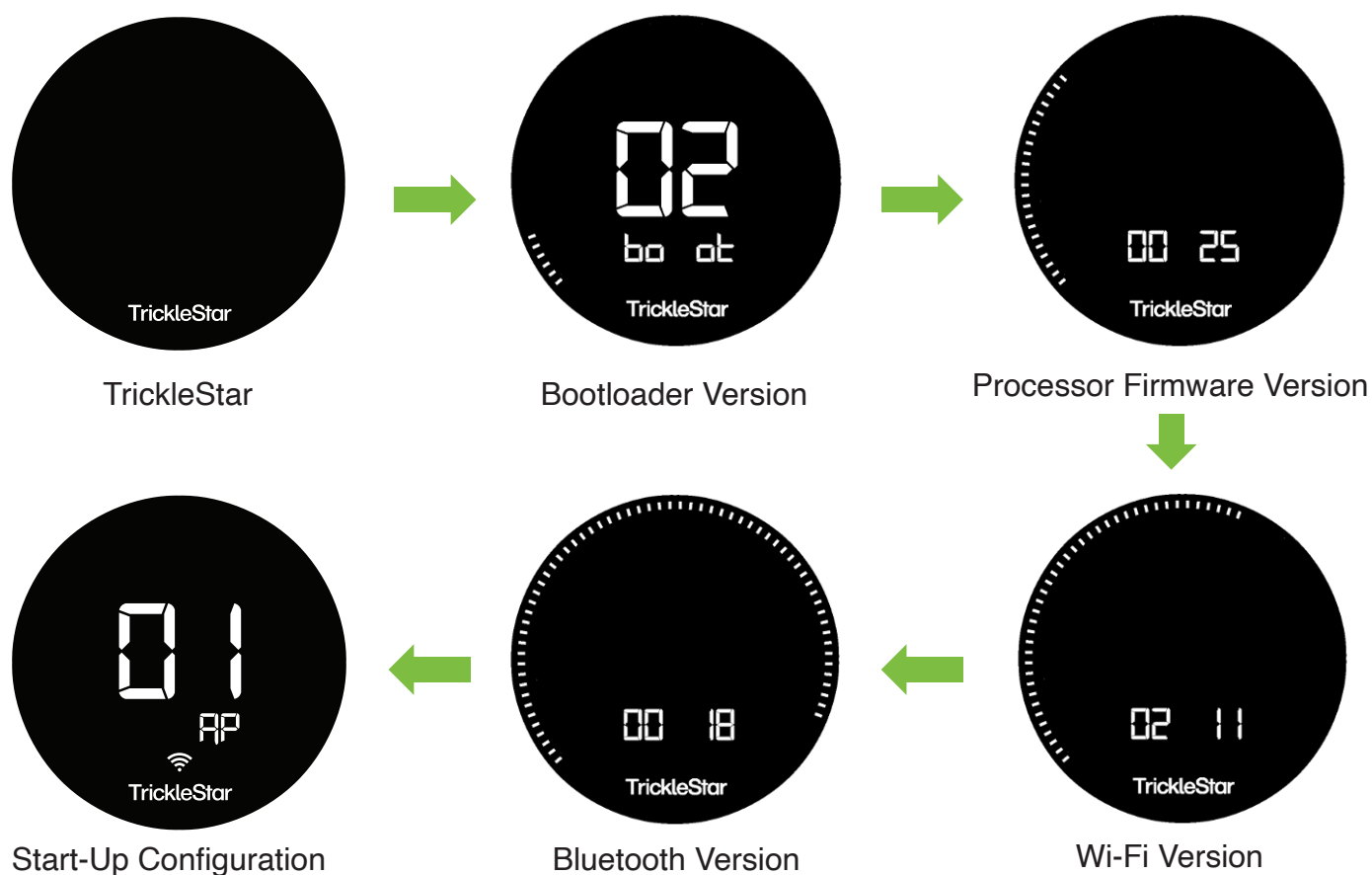


Fig 97-A

Next, you need to manually delete your device in the Portal.

At the Portal, select “Devices”, tick on the checkbox beside the Device Name, then click “Delete”. Click “Add New +” to add your Thermostat. Then, follow the steps in the Thermostat Setup Wizard.

Refer “Configuration - Step 01 to Step 05” from pages [13](#) to [16](#) to complete the Start-Up Configuration.



## Configuration and Reset

You can perform configuration and resets on your Thermostat as follows:

Type of Reset	Method	Page
1) HVAC System Configuration To reconfigure the Thermostat for the connected HVAC system or change the selection for Start-Up Configuration.	<ul style="list-style-type: none"><li>• Press and hold the Side button for 10 seconds.</li></ul> OR <ul style="list-style-type: none"><li>• At the Portal, select: Devices -&gt; Device Name -&gt; Settings -&gt; HVAC Configuration Items -&gt; Configure and Test</li></ul>	<a href="#">12</a>
2) System Reset To reset your Thermostat but maintain the configuration, Wi-Fi setup and Thermostat settings as well as your Portal account.	<ul style="list-style-type: none"><li>• Use a paper clip to press the System Reset Pinhole at the bottom of your Thermostat.</li></ul>	<a href="#">94</a>
3) Factory Reset To reset your Thermostat to factory default settings, where all user and device settings will be deleted and reset to factory default settings.	<ul style="list-style-type: none"><li>• Press and hold the Jog dial and Side button simultaneously for 15 seconds until "01" is shown and "AP" flashes on the LCD display.</li><li>• At the Portal, select "Devices", tick on the check box beside the Device Name, then click "Delete". Click "Add New +" to add your Thermostat.</li></ul>	<a href="#">96</a>

## Configuration and Reset

Type of Reset	Method	Page
<p>4) Wi-Fi Network Reset</p> <p>To reset your Wi-Fi network for the Thermostat when you have changed to or added a new network, where all previous Wi-Fi connection data will be cleared.</p>	<ul style="list-style-type: none"> <li>• Use a paper clip to press the System Reset Pinhole at the bottom of your Thermostat. Then, press and hold the jog dial throughout the start-up screens displaying firmware versions until “01” is shown and “AP” flashes on the LCD display.</li> <li>• At the Portal, select: Devices -&gt; Device Name -&gt; Settings -&gt; Info and Time Zone -&gt; Connected Network (SSID) -&gt; Configure</li> </ul>	N/A

## Firmware Update

The Portal will occasionally transfer a firmware update to your Thermostat. During the firmware update transfer, the Thermostat will change to Disconnected Mode and the Wi-Fi indicator on the LCD display will be “rolling” continuously to indicate the download process.

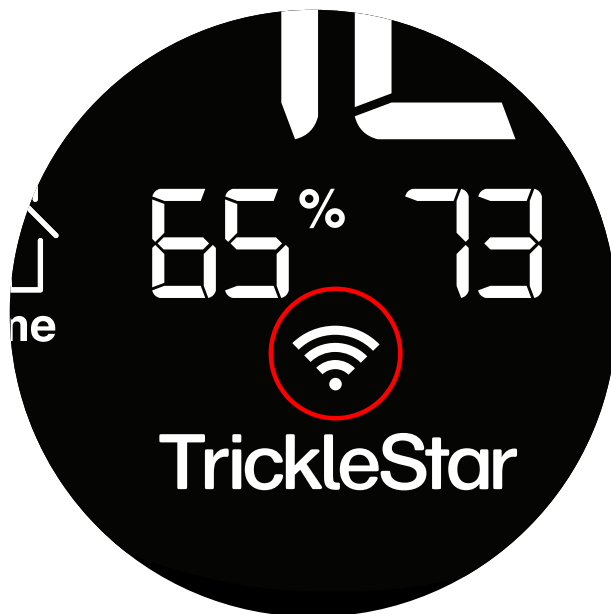


Fig 100-A



Fig 100-B





When the firmware download is completed, the Thermostat will install the update automatically. The installation progress will be shown on the LCD display from 00 to 99 percent.

When the installation is in progress, all other Thermostat functions will be stopped including Heating/Cooling, Schedule and Sensor operations. The Thermostat, Portal and App will not respond to your input.

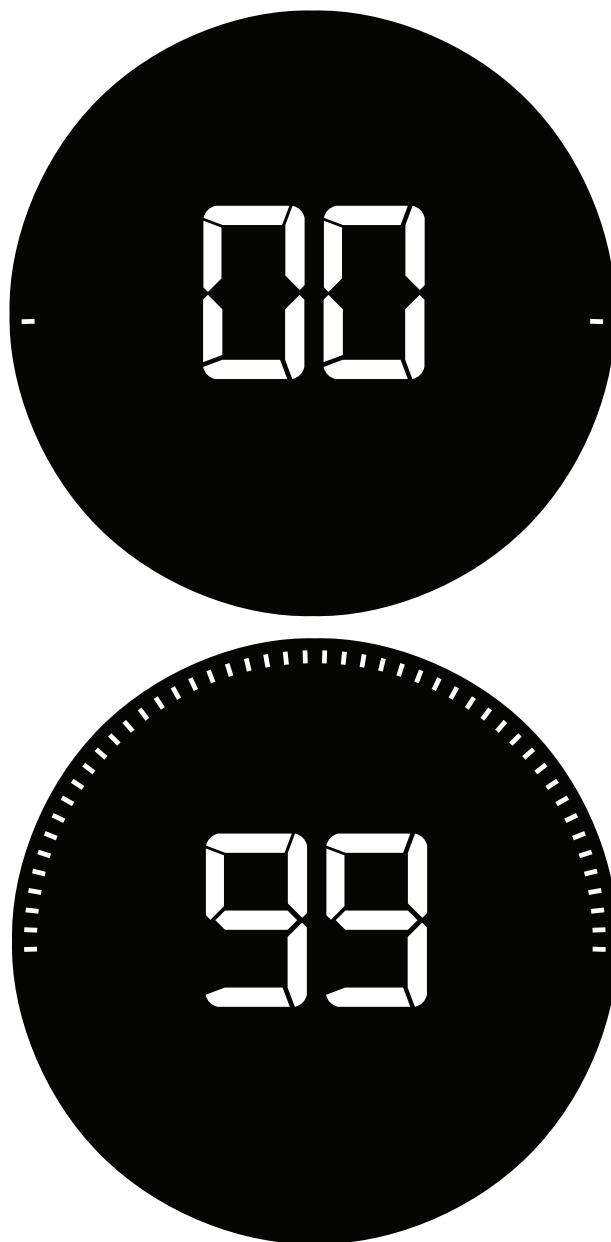


Fig 101-A



When the installation is completed, the Thermostat will perform System Reset or resume Normal Operation and automatically reconnect to your Portal.



Fig 102-A

*Note: The firmware update cannot be initiated on the Thermostat, and it cannot be canceled or postponed.*



## Cleaning the Thermostat

Clean your Thermostat with a microfiber cloth, dampened with clean water. Wipe the housing surface as well as the screen.

*Note:*

- *Do not spray any water or liquid directly onto your Thermostat.*
- *Do not use soap or any type of cleaning chemicals on your Thermostat.*

## Troubleshooting

Problem	Solution
<p>I changed the settings on the Thermostat but the Portal or App does not reflect the changes.</p>	<ul style="list-style-type: none"> <li>• Depending on the internet connectivity, it may take a few minutes to reflect the changes on the Portal or App. This is not a malfunction.</li> <li>• Refresh the Portal or App as follows: <ul style="list-style-type: none"> <li>- For Portal: Refresh the browser.</li> <li>- For App: Select "Sync" from the menu.</li> </ul> </li> </ul>
<p>I do not know which reset to perform when my Thermostat is not working as expected.</p>	<ul style="list-style-type: none"> <li>• If you want to reset your Thermostat but maintain the configuration, Wi-Fi setup and Thermostat settings as well as your Portal account, perform System Reset: Use a paper clip to press the System Reset Pinhole at the bottom of your Thermostat. For details, refer pages <a href="#">94</a> to <a href="#">95</a>.</li> <li>• If you want to reset your Thermostat to factory default settings, perform Factory Reset: Press and hold the jog dial and Side button simultaneously for 15 seconds until "01" is shown and "AP" flashes on the LCD display. All settings will be deleted and the Thermostat will reset to factory default settings. Then, you need to manually delete your device in the Portal and re-add it to the Portal. For details, refer pages <a href="#">96</a> to <a href="#">97</a>.</li> <li>• If you have changed to or added a new network, and you want to reset your Wi-Fi network for the Thermostat, perform Wi-Fi Network Reset:  Use a paper clip to press the System Reset Pinhole at the bottom of your Thermostat. Then, press and hold the jog dial throughout the start-up screens displaying firmware versions until "01" is shown and "AP" flashes on the LCD display.  At the Portal, select: Devices -&gt; Device Name -&gt; Settings -&gt; Info and Time Zone -&gt; Connected Network (SSID) -&gt; Configure. All previous Wi-Fi connection data will be cleared.</li> </ul>

Problem	Solution
The Thermostat cannot be registered via the TrickleStar Portal.	<p>If the TrickleStar Portal request for the DSN number, refer to your photo of the label at the bottom of the Thermostat. You will find the DSN number on the label.</p> <p>The DSN number can also be found on the Thermostat packaging.</p>

If the problem persists, you can refer to the Frequently Asked Questions (FAQ) section on our website, or email or call our technical support:

Website: [www.tricklestar.com](http://www.tricklestar.com)

Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)

Toll Free: 1-888-700-1098

## Feature List

This Feature List shows the location where you can perform the listed features. The Portal supports the entire set of features, whereas the App and the Thermostat unit only support a limited set of features. This Feature List is created based on the Portal structure so that you can find the features you want easily.

● Available — Not available

Features	Thermostat	Portal	Apps
<b>Basic Features</b>			
Start-Up Configuration	●	●	●
System	●	●	●
Fan Mode	●	●	●
Mode	●	●	●
Setpoint Temperature	●	●	●
System Reset	●	-	-
Factory Reset	●	-	-
<b>Advanced Features</b>			
<b>Dashboard</b>			
<b>General Settings</b>		<a href="#">86</a>	<a href="#">84</a>
Message Setting			
• Receive System Notifications	-	●	●
• Receive Schedule Events	-	●	●
• Receive DR Events	-	●	●
• Receive Device Errors and Warnings	-	●	●
• Receive Configuration Events	-	●	●
Power Setting			
• Cost Per kWh	-	●	●
Other Setting			
• Currency	-	●	●
• Temperature Unit	-	●	●
• Time Zone	-	●	●

Features	Thermostat	Portal	Apps
• Date Format	-	●	●
• Time Format	-	●	●
<b>Messages</b>	-	●	●
<b>Account</b>		<a href="#">86</a>	<a href="#">84</a>
• Account Settings	-	●	●
• Change Password	-	●	-
• Delete Account	-	●	-
<b>Sharing</b>		<a href="#">86</a>	
• Site Management	-	●	●
• Delegation	-	●	●
• Ownership Transfer	-	●	●
<b>Wi-Fi Smart Thermostats</b>		<a href="#">88</a>	
• No. of Device	-	●	-
<b>Outdoor Temp. (Location)</b>		<a href="#">88</a>	
• Current Temperature	-	●	-
• hi temperature	-	●	-
• lo temperature	-	●	-
<b>Thermostat "Device Name"</b>		<a href="#">88</a>	
• Online / Offline	-	●	●
• System	-	●	●
• Current Setpoint	-	●	●
• Mode	-	●	●
• Fan	-	●	●
• Humidity	-	●	●
• Room Temperature	-	●	●
<b>Devices</b>		<a href="#">89</a>	
Delete	-	●	●
Add New	-	●	●
Show	-	●	-
Search	-	●	-
<b>Control</b>		<a href="#">89</a>	<a href="#">77</a>
• System	●	●	●
• Fan	●	●	●
• Schedule	●	●	●
• Mode	●	●	●
• Setpoint Temperature	●	●	●

Features	Thermostat	Portal	Apps
<b>Modes</b>		<a href="#">89</a>	<a href="#">79</a>
• Set Temperature (Heat)	●	●	●
• Set Temperature (Cool)	●	●	●
• Set Fan (Heat)	●	●	●
• Set Fan (Cool)	●	●	●
<b>Schedules</b>		<a href="#">89</a>	<a href="#">78</a>
• Schedule Overview	-	●	●
• Add Schedule Event	-	●	●
• Edit Schedule Event	-	●	●
• Delete Schedule Event	-	●	●
<b>Usage</b>		<a href="#">89</a>	
• Run Time	-	●	-
• Usage History	-	●	-
<b>Settings</b>		<a href="#">89</a>	
• HVAC Configuration Items			
- HVAC System	●	●	●
- Fan Control Option	●	●	●
- Heat Pump Reversing Valve Option	●	●	●
- Configure and Test	●	●	●
• HVAC Settings			
- HVAC Type	-	●	●
- Number of Heating (W) and Cooling (Y) Stages	-	●	●
- Compressor Lock Out in AUX Heating	-	●	●
- Auto Season Changeover	-	●	●
- Auto Season Changeover Delay	-	●	●
- Auto Season Changeover Tolerance Range	-	●	●
- Compressor Minimum Turn Off Time	-	●	●
- Compressor Minimum Turn On Time	-	●	●
- CONV/AUX Heating Minimum Turn Off Time	-	●	●
- CONV/AUX Heating Minimum Turn On Time	-	●	●
- Upstage timer 2	-	●	●
- Upstage timer AUX1	-	●	●
- Upstage timer AUX2	-	●	●
- Span 1	-	●	●
- Span 2	-	●	●



Features	Thermostat	Portal	Apps
- Span AUX1	-	●	●
- Span AUX2	-	●	●
- High Balance Point	-	●	●
- Low Balance Point	-	●	●
- Anti-Freeze	-	●	●
- A/C Overcool	-	●	●
Fan, Accessory and Free Cooling			
• Fan Settings			
- Residual Cooling Fan Delay	-	●	●
- Residual Heating Fan Delay	-	●	●
• Accessory Configuration			
- Accessory Type	-	●	●
- Accessory Control Polarity	-	●	●
- Humidifier Runs with Equipment	-	●	●
- Humidifier Runs in System	-	●	●
- Humidifier Calls for Fan	-	●	●
- Dehumidifier Runs with Equipment	-	●	●
- Dehumidifier Runs in System	-	●	●
- Dehumidifier Calls for Fan	-	●	●
- Humidity Setpoint	-	●	●
- Hysteresis for Humidity Control	-	●	●
• Free-Cooling			
- Enabled	-	●	●
- Free Cooling Run Time - Off	-	●	●
- Free Cooling Run Time - Home	-	●	●
- Free Cooling Run Time - Sleep	-	●	●
- Free Cooling Run Time - Away	-	●	●
- Free Cooling Manual Override Enabled	-	●	●
- Free Cooling Manual Override Duration	-	●	●
- Pre-Occupancy Purge Period	-	●	●
- Maximum Outdoor Temperature	-	●	●
- Maximum Outdoor Humidity	-	●	●
- Minimum Set-temp / Outdoor Temperature Difference	-	●	●
- Maximum Temperature Change Time	-	●	●

Features	Thermostat	Portal	Apps
Display and Other Settings			
• Display Settings			
- Temperature Display on LCD	-	●	●
- Input Lock	-	●	●
- LCD Active Time	-	●	●
- LCD Brightness - Home	-	●	●
- LCD Brightness - Sleep	-	●	●
- LCD Brightness - Away	-	●	●
- Icon Hints	-	●	●
• Other Settings and Features			
- Auto-Recovery	-	●	●
- Maximum Heat Set-Temperature	-	●	●
- Minimum Cool Set-Temperature	-	●	●
- Room Temperature Offset	-	●	●
Info and Time Zone			
• Device Info			<a href="#">78</a>
- MAC Address	-	●	●
- Serial Number	-	●	●
- Device Name	-	●	●
- Firmware Version	-	●	●
- Type of Connection	-	●	●
- Connected Network (SSID)	-	●	●
- LAN IP Address	-	●	●
- Registration Date	-	●	●
- Device Location	-	●	●
- Time Zone	-	●	●
• Reset Settings			
- Reset Thermostat Settings	-	●	●
<b>Sensors</b>		<a href="#">89</a>	<a href="#">78</a>
Refresh Sensor Data	-	●	●
Add New Sensor	-	●	●
Unpair Sensor(s)	-	●	●

Features	Thermostat	Portal	Apps
Sensor Settings			
• Thermostat Temperature Sensor			
- Weighting	-	●	-
• Occupancy Sensor General Settings			
- Occupancy Detection	-	●	-
- Absence Detection Sensitivity	-	●	-
- Occupancy Detection Sensitivity	-	●	-
- Occupancy Detection Restart Time	-	●	-
• Occupancy Sensor 1			
- Name	-	●	●
- MAC Address	-	●	-
- Serial Number	-	●	-
- Weighting	-	●	-
- Occupancy Detection	-	●	-
- Status	-	●	●
- Temperature	-	●	●
- Occupancy	-	●	●
- Battery Voltage	-	●	●
<b>Services</b>		<a href="#">89</a>	<a href="#">78</a>
Alerts			
• Low Temperature Alert			
- Temperature Setpoint	-	●	●
• High Temperature Alert			
- Temperature Setpoint	-	●	●
• Low Humidity Alert			
- Humidity Setpoint	-	●	●
• High Humidity Alert			
- Humidity Setpoint	-	●	●
Reminders			
• HVAC Maintenance			
- Receive service reminder	-	●	●
• Furnace Filter			
- Receive filter change reminder	-	●	●
• Humidifier / Dehumidifier / Ventilation Filter			
- Receive filter change reminder	-	●	●
• UV Lamp Maintenance			
- Receive change reminder	-	●	●

Features	Thermostat	Portal	Apps
<b>Vacation</b>		<a href="#">91</a>	<a href="#">59</a>
• Vacation dates	-	●	●
• Devices	-	●	●
• Status	-	●	●
<b>3rd Party Integration</b>		<a href="#">93</a>	
• Amazon Alexa	-	●	-
• Google Home	-	●	-



For technical support, go to:  
Website: [www.tricklestar.com](http://www.tricklestar.com)  
Email: [customer.service@tricklestar.com](mailto:customer.service@tricklestar.com)  
Toll Free: 1-888-700-1098

Patent No. Des. D957,965

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