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## 

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or service agency.

## ▲ CAUTION

To ensure proper system performance and reliability, Lennox does not recommend operation of VRF systems during any phase of construction. Construction debris, low temperatures, harmful vapors, and operation of the unit with misplaced filters can damage the units. Failure to follow these guidelines will result in the warranty being voided.

# IMPORTANT

Frequent changes to operating mode may cause system malfunction. Allow at least one minute between mode changes to allow the system to stabilize.

This manual must be left with the owner for future reference.

# INSTALLATION/ OPERATION INSTRUCTIONS

## V0STAT51P-3 Touch Screen Programmable Local Controller

CONTROLS 507900-01 03/2019

#### General

The V0STAT51P-3 is a wired touch screen programmable local controller for VRF Heat Recovery and Heat Pump indoor units with convenient timed schedules for daily operation. These instructions are intended as a general guide and do not supersede local codes in any way. Consult authorities having jurisdiction before installation.

#### Requirements

Be sure that power supply has been turned off before beginning installation. This controller should be used only as described in this manual.

#### **Shipping and Packing List**

#### Package 1 of 1 contains;

- 1 Wired Controller
- 1 CR2032 Lithium battery
- 2 Phillips screws
- 2 Plastic spacers
- 2 1/8" polymer toggle anchors
- 1 Installation and operation manual

#### **Tools Needed**

#2 Phillips screwdriver Slotted precision screwdriver Level 1/8" wall anchor tools

#### **Controller Placement**

Avoid installing local controller in high load or heat loss areas such as exterior walls or walls that are against unconditioned spaces, near entry doors and windows, or where direct sunlight may be present.

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#### Installation

# **A**WARNING

Be sure that power supply has been turned off before beginning installation. Do not operate controller with wet hands.

## 

Do not install controller in areas where harmful gases containing sulfur or other damaging agents may exist or the controller may be damaged.

Clean controller using a clean, damp cloth. Do not spray cleanser on or around controller.

# IMPORTANT

Electrostatic discharge can affect electronic components. Take precautions to neutralize electrostatic charge by touching your hand and tools to metal prior to handling the control.

# IMPORTANT

Read all of the information in this manual before using this controller. All wiring must conform to local and national building and electrical codes and ordinances. This is a 12 VDC controller. Do not install on voltages higher than 12 VDC.

- This manual provides the installation instructions for this controller. Refer to the included wiring diagrams to connect the controller to the indoor unit.
- The controller uses low voltage. Keep a minimum distance of 12" (305 mm) between low voltage control wire and high voltage power wires.

# Power wiring between controller and first indoor unit:

- Minimum 18 AWG stranded, shielded cable up to 164 feet (50 m).
- Ensure there are no gaps between the controller back cover and the mounting surface.
- Fill any holes in the wall behind the controller to avoid false readings from infiltration.
- · Ground the shielded control wiring.
- Do not use a megger to test insulation.

# Communication wiring between indoor units:

• Minimum 18 AWG stranded, shielded cable.

#### Connecting to One Indoor Unit

Connect the controller to one indoor unit main control board using 4-conductor shielded 18 GA cable. Connect to terminals 12V,COM,HA,HB. See Figure 1.

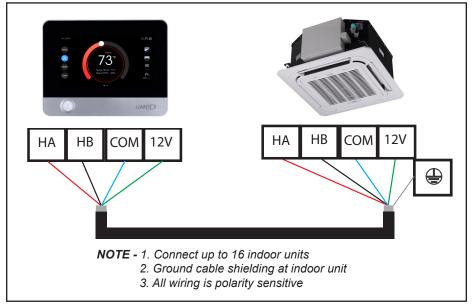


Figure 1. Connect Controller to Single Indoor Unit Wiring Connections

#### **Connecting to Multiple Indoor Units**

Connect the controller to multiple indoor units, up to 16. Use 4-conductor shielded cable to connect to the first indoor unit, then daisy chain control wiring to each indoor unit using the HA/HB terminals in the electrical control box of the indoor unit. Do not daisy chain 12V power cable. See Figure 2. **NOTE** – All of the indoor units connected to the controller must be on the same refrigerant circuit, connected to the same outdoor unit.

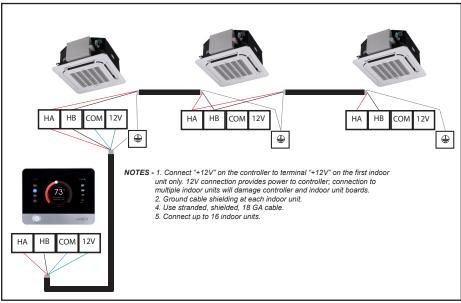


Figure 2. Connect Controller to Multiple Indoor Units Wiring Connections

## **A** CAUTION

Connect "12V" on the controller to terminal "12V" on the first indoor unit only. 12V connection provides power to controller; connection to multiple indoor units will damage controller and indoor unit boards.

#### Mounting the Controller

1. Remove the back cover from the controller. See Figure 3.

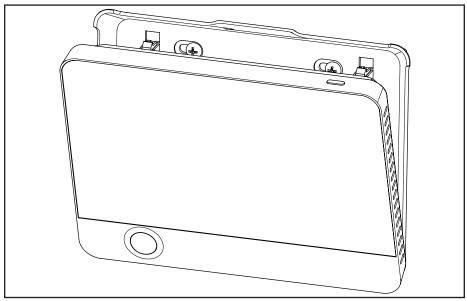


Figure 3. Remove Back Cover from Controller

2. Attach the back cover to the wall using screws. See Figure 4.

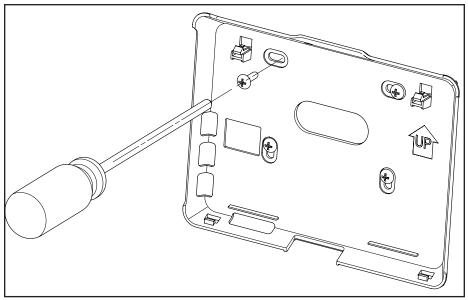


Figure 4. Attach Back Cover to Wall

3. Connect the controller to one indoor unit main control board using 4-conductor shielded 18 GA cable. Connect to terminals 12V,COM,HA,HB on the back of the controller.

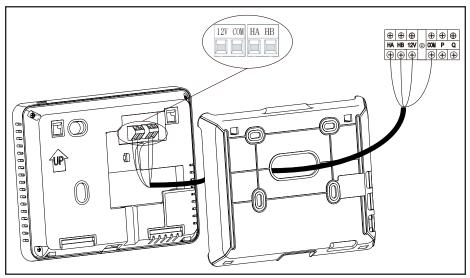


Figure 5. Connect Cabling

4. Insert the controller into the bottom snap joints of the back cover at an angle. See Figure 6.

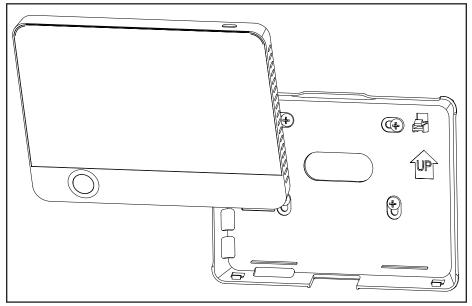


Figure 6. Insert Controller into Back Cover

5. Push the controller back toward the wall until it "snaps" into place. See Figure 7.

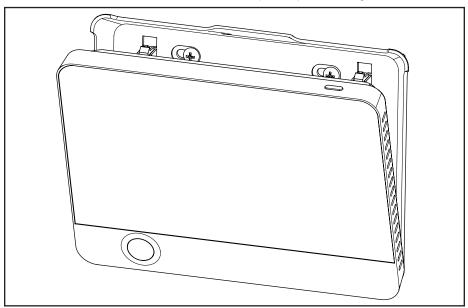


Figure 7. Snap Controller Into Place

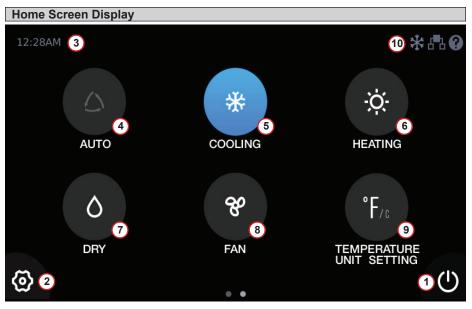


Figure 8. Home Screen Display 1

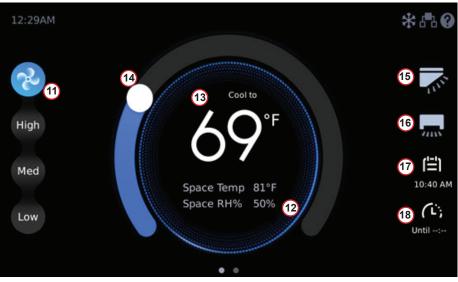


Figure 9. Home Screen Display 2

Number	Display Item	Description
1	ON/OFF button	Tap to turn the indoor unit on or off.
2	Settings button	Tap to access the menu screen.
3	Time Display	Displays the current system time.
4	Auto Mode Settings	Select Auto mode when the indoor unit is ON, and then the indoor unit will run in Auto mode (the icon illuminates after selection).
5	Cooling Mode Settings	Select Cooling mode when the indoor unit is ON, and then the indoor unit will run in Cooling mode (the icon illuminates after selection).
6	Heating Mode Settings	Select Heating mode when the indoor unit is ON, and then the indoor unit will run in Heating mode (the icon illuminates after selection).
7	Dry Mode Settings	Select Dry mode when the indoor unit is ON, and then the indoor unit will run in Dry mode (the icon illuminates after selection).
8	Fan Mode Settings	Select Fan mode when the indoor unit is ON, and then the indoor unit will run in Fan mode (the icon illuminates after selection).
9	Temperature Unit Set- tings	Switch the temperature unit: display in Fahrenheit/Celsius temperature.
10	Operation Mode	Displays the mode of operation of the indoor unit.
11	Fan Speed Control Button	Select fan speed, and tap "Auto", "High", "Med", or "Low" to confirm the selection.
12	Indoor Temperature and Humidity Display	Display the temperature and humidity of the room in which the indoor unit is located.
13	Setpoint	Displays the setpoint.
14	Setpoint Adjustment Slider	Adjust the setpoint by pressing and sliding.
15	Vertical Swing Angle Display	Displays the vertical swing angle of the indoor unit; tap to access the vertical swing angle settings.
16	Horizontal Swing Posi- tion Display	Display the horizontal swing angle of the indoor unit; tap to enter the horizontal swing angle settings.
17	Weekly Schedule Display	Display the setting status of the weekly schedule status, and tap to access the weekly.
18	Override Status Display	Display the Override status and tap here to set the Override settings.

### Table 1. Home Screen Display

No.	lcon	Name	Description
1	<i>&amp;</i>	Fan	Displays when the indoor unit is in Fan mode.
2	*	Cool	Displays when the indoor unit is in Cooling mode.
3	-Ò	Heat	Displays when the indoor unit is in Heating mode.
4	$\Diamond$	Dry	Displays when the indoor unit is in Dry mode.
5		Cooling operation in Auto mode	Displays when the indoor unit is in Auto mode providing cooling operation.
6	-ČA	Heating operation in Auto mode	Displays when the indoor unit is in Auto mode providing heating operation.
7		Centralized controller lock	Displays when some functionality is locked by a centralized controller.
8	品	Group control	Displays when more than one indoor unit is connected to the controller.
9	•••)	Occupancy sensor	Displays when an occupancy sensor is active.
10	?	Help	Tap to see the Help screens.
11	0	Mode conflict prompt	Displays when the indoor unit is in mode conflict with the outdoor unit (heat pump systems)
12	Â	Auto Dry function	Displays when auto dry function is ON.
13		Master controller	Displays if the controller is a master.
14	ſĿŊ	Master controller	Displays if the controller is a sub.
15	$\rho_{\approx}$	Outside air ducted indoor unit	Displays if the connected indoor unit is providing outside air.
16	<b>d</b> -	ON/OFF lock	Displays when some functionality is locked by settings on this controller.
17		Mode lock	Displays when Mode is locked.

Table 2. Special Status Symbol Displays

No.	lcon	Name	Description
18	<b>d</b> -)	Setpoint lock	Displays when Setpoint is locked.
19		Schedule lock	Displays when Schedule is locked.
20	<b>≈</b> **	Defrosting or oil return	Displays when the outdoor unit is in defrost or oil return operation.
20	ရို	Cold air prevention	Displays during period of time before the coil warms to the determined cold air prevention temperature. The fan will not run during this time period.

#### Operation

**NOTE -** Indoor units connected to a local controller may also be controlled by a centralized controller. Indoor units respond to the last command sent. It is recommended that indoor units be controlled from a single source of control, either local controller or centralized controller but not both, to avoid conflicts in commands.

#### ON/OFF

Tap the On/Off button to turn the indoor unit on or off.

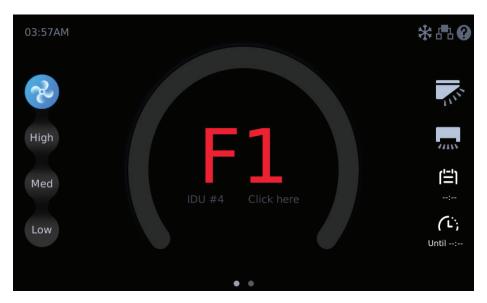


#### Figure 10. ON/OFF Operation

#### Error Code Display

When the connected indoor units or outdoor unit has an error, the original set temperature interface will display the error code.

Tap the error display area and to open the error code description interface.



Home <help <error="" coc<="" th=""><th>le</th><th></th></help>	le	
Swing	Indoo	r Unit Error Code
	FE	No address
Schedule	EO	Mode conflict
Daylight Savings Time	E1	Communication error between indoor and main outdoor unit
Room Temperature&RH%	E2	T1 (Room temperature sensor) malfunction
	E3	T2 (Middle of evaporator sensor) malfunction
Advanced Information	E4	T2B (Outlet of evaporator sensor)
		malfunction
Contractor Information	E5	T2A (Inlet of evaporator sensor) malfunction
	E6	DC fan motor error
Help	E7	EEPROM failure
Conviso Monu	Eb	EEV malfunction
Service Menu	Ed	ODU Fault

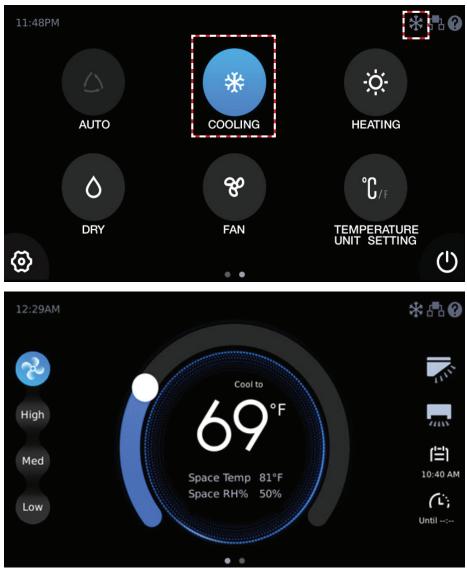
#### Figure 11. Error Code Display

#### **Mode Settings**

#### **Cooling Mode Operation**

When the indoor unit is powered on, tap COOLING in the operating mode selection interface. The selected icon will illuminate when the indoor unit runs in Cooling mode. The Cooling icon is displayed in the upper right corner of the home page.

To adjust the setpoint, tap the setpoint slider and drag the slider to the new setpoint temperature. The default setpoint range is  $62^{\circ}F$  to  $86^{\circ}F$  ( $17^{\circ}C$  to  $30^{\circ}C$ ).



#### Figure 12. Cooling Mode Operation

#### Heating Mode Operation

When the indoor unit is powered on, tap HEATING in the operating mode selection interface. The selected icon will illuminate when the indoor unit runs in Heating mode. The Heating icon is displayed in the upper right corner of the home page.

To adjust the setpoint, tap the setpoint slider and drag the slider to the new setpoint temperature. The default setpoint range is 62°F to 86°F (17°C to 30°C).

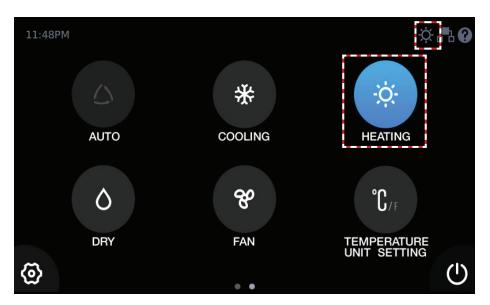




Figure 13. Heating Mode Operation

#### Auto Mode Operation

When the indoor unit is powered on, tap AUTO in the operating mode selection interface. The selected icon will illuminate when the indoor unit runs in Auto mode. The Auto icon or the Cooling icon is displayed in the upper right corner of the home page.

**NOTE -** During Auto mode, both operation mode (cooling or heating) setpoints display on the Home screen. **The current operation mode setpoint displays larger than the non-current operation mode.** 

In Auto mode the Cooling setpoint range is 68°F to 86°F (20°C to 30°C), the Heating setpoint range is 62°F to 81°F (17°C to 27°C).

To adjust the setpoint of either cooling or heating while in Auto mode, tap the appropriate setpoint, either cooling or heating. That setpoint will display as the larger number. Drag the temperature slider to the new setpoint temperature. If the setpoint you adjusted is not the current operation mode, after 10 seconds, the current operation mode setpoint will display as the larger number.

**NOTE** - The setpoint deadband between cooling and heating setpoints is setup in the Settings menu.

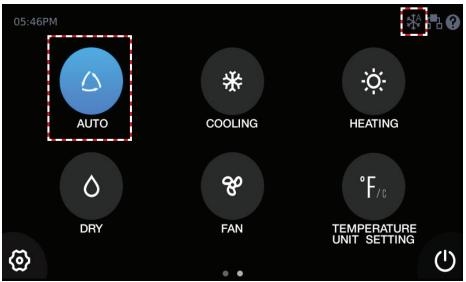


Figure 14. Auto Mode Operation



Figure 15. Auto Mode Setpoints

#### **Dry Mode Operation**

When the indoor unit is powered on, tap DRY in the operating mode selection interface. The selected icon will illuminate when the indoor unit runs in Dry mode. The Dry icon is displayed in the upper right corner of the home page.

Fan speed cannot be adjusted during Dry mode.

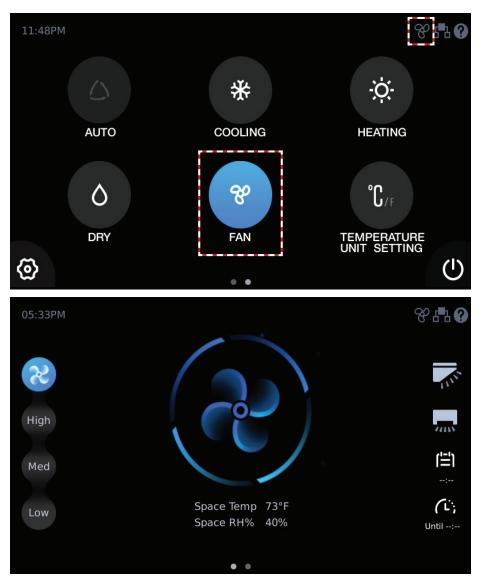


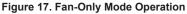
Figure 16. Dry Mode Operation

#### **Fan-Only Operation**

When the indoor unit is powered on, tap FAN in the operating mode selection interface. The selected icon will illuminate when the indoor unit runs in Fan mode. The Fan icon is displayed in the upper right corner of the home page.

The indoor unit fan operates without heating or cooling.





#### Temperature Setpoint

To adjust the setpoint, tap the setpoint slider and drag the slider to the new setpoint temperature. The default setpoint range is 62°F to 86°F (17°C to 30°C). The setpoint range can be adjusted using the Setpoint Limit screen in the Service menu.



Figure 18. Temperature Setpoint

#### Space Temperature and Space Humidity Display

On the main screen of the controller, you can view the current setpoint, space temperature and space humidity.

When the master wired controller chooses the Follow function, the Space Temp will display the temperature and corrected value detected by the temperature sensor of the master wired controller itself.

When the master and Sub wired controllers do not choose the Follow function, their Space Temp will display the temperature detected by their own temperature sensors (without a corrected value).

The temperature sampling range is  $-16^{\circ}F$  to  $156^{\circ}F$  ( $-9^{\circ}C$  to  $70^{\circ}C$ ). The humidity sampling range is 0% to 100%.



Figure 19. Setpoint, Space Temperature & Space Humidity Display

#### Temperature Unit Switching (°F/°C)

Tap TEMPERATURE UNIT SETTING at the lower right corner to switch the temperature display unit between Fahrenheit and Celsius.

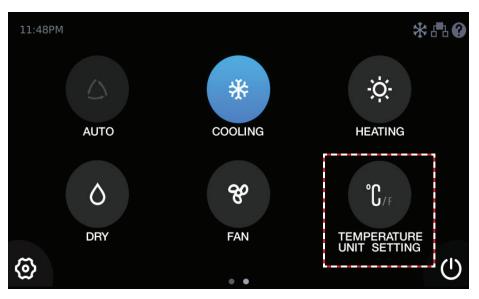


Figure 20. Fahrenheit or Celsius Temperature Display

#### Fan Speed

Tap Auto, High, Med, or Low to change the fan speed. The corresponding icon illuminates after selection.



Figure 21. Fan Speed Operation

#### Swing

Tap the Vertical Swing Angle Settings icon and the Horizontal Swing Angle Settings icon to enter the swing angle settings interface.

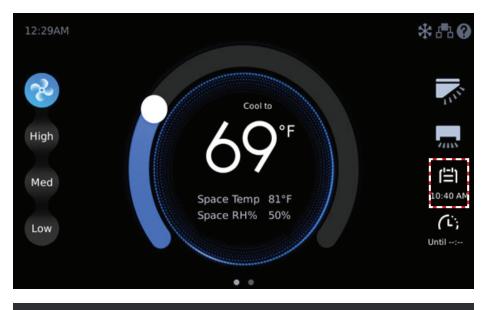


Home < Swing	
General	Vertical
Swing	swing pos1 pos2 pos3 <b>pos4</b> pos5
Schedule	Horizontal Swing Stop
Daylight Savings Time	
Room Temperature&RH%	
Advanced Information	
Contractor Information	
Help	



#### Weekly Schedule Settings Quick Access

Tap the Weekly Schedule Settings icon to enter the weekly schedule settings interface.



Home <schedule< th=""><th></th><th></th></schedule<>		
General	Override Options	 Until:
Swing	Schedule Templates	>
Schedule		ŕ
Daylight Savings Time	Schedule Setup	>
Room Temperature&RH%	Holiday and Special Day Schedule	>
Advanced Information		
Contractor Information		
Help		

Figure 23. Quick Access to Weekly Schedule Settings

#### **Override Settings**

Tap the Override icon and the Override delay time selection box displays.



Figure 24. Override Settings

#### Schedule Management

**NOTE** – If schedules are used and a centralized controller is installed on the system, controller functions should not be locked from the centralized controller.

Tap the Schedule button to access the schedule management settings interface. Set by week, and run different set statuses at different times of the day.

Before setting Schedule Templates, Schedule Setup, and Holiday and Special Day Schedule, you must first complete the date and time settings.

Home < Schedule		
General	Override Options	 Until:
Swing Schedule	Schedule Templates	>
Daylight Savings Time	Schedule Setup	>
Room Temperature&RH%	Holiday and Special Day Schedule	>
Advanced Information		
Contractor Information		
Help		

Figure 25. Tap Schedule Button to access Schedule Settings

If the system time is detected to be earlier than 01:00 AM Dec 30, 2017 (the factory default time is 2017-12-30), the setting date and time box will display.

Tap "YES" to open to the date and time settings screen, or tap "NO" to return to the previous page.

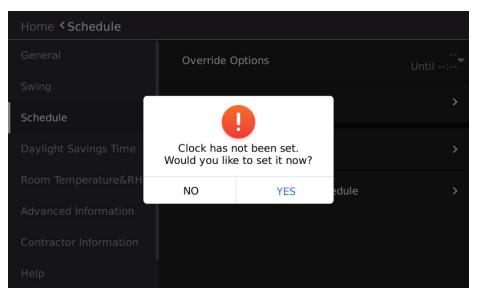
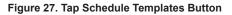


Figure 26. Set System Date & time

#### Setup Schedule Templates

Create a scheduled day's events. Tap the Schedule Templates button to access the daily schedule template settings interface.

Home < Schedule		
General	Override Options	 Until:
Swing	Schedule Templates	>
Schedule	Schedule lemplates	,
Daylight Savings Time	Schedule Setup	>
Room Temperature&RH%	Holiday and Special Day Schedule	>
Advanced Information		
Contractor Information		
Help		



Tap the Add button to add a daily schedule template. Up to 10 templates.

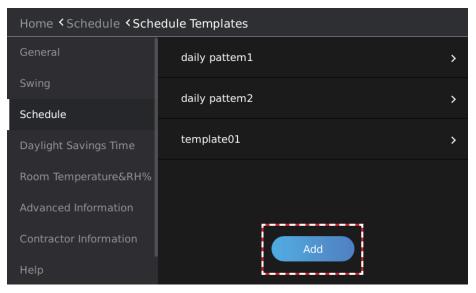


Figure 28. Add Daily Template

#### Copy and Paste a Schedule Template

Use the Copy and Paste buttons to copy a template and use it to create a new daily template. Copy a Schedule

Press and hold the schedule template you want to copy. The Copy and Paste buttons will display. Tap the Copy button.

Home < Schedule < Schedule Templates		
General	daily pattem1	· >
Swing	daily pattem2	Copy Paste
Schedule		
Daylight Savings Time		
Room Temperature&RH%		
Advanced Information		
Contractor Information	Add	
Help		

Figure 29. Copy a Schedule Template

#### Paste a Schedule

After copying a scheduled template, tap the Paste button.

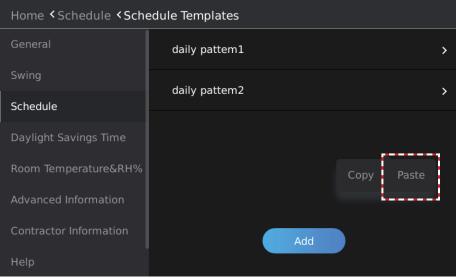


Figure 30. Paste to Create a New Schedule Template

The new schedule template will display. Rename the template as needed.

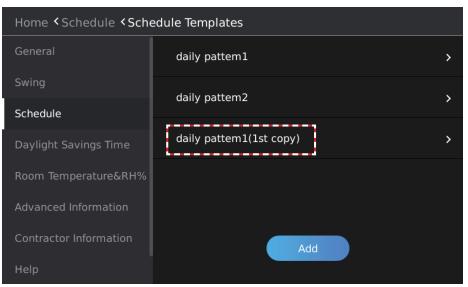


Figure 31. New Schedule Template

#### Rename a Schedule Template

Slide the daily schedule template to be deleted from the right to left, and "Rename" and "Delete" boxes will display. Tap Rename and enter the new name in the Edit box. Tap Yes to confirm. Tap Cancel to return to the previous screen.

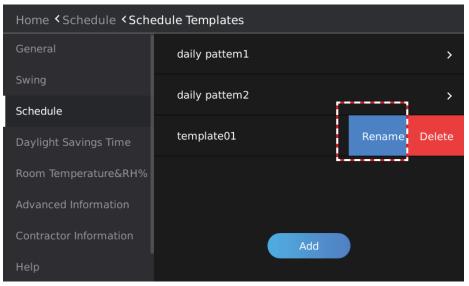


Figure 32. Rename a Schedule Template

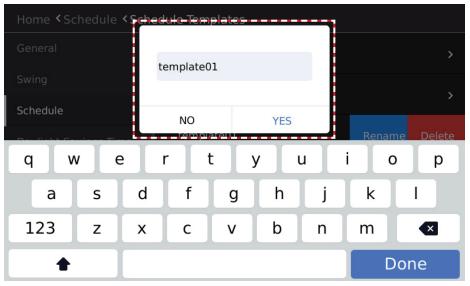


Figure 33. Enter Schedule Template Name

#### Delete a Schedule Template

Slide the daily schedule template to be deleted from the right to left, and "Rename" and "Delete" boxes will display. Tap Delete and Tap Yes when prompted. Tap Cancel to return to the previous screen.

Home <schedule <schedule="" templates<="" th=""></schedule>		
General	daily pattem1	>
Swing	daily pattem2	
Schedule		
Daylight Savings Time	template01	Rename Delete
Room Temperature&RH%		
Advanced Information		
Contractor Information	A	dd
Help		

Figure 34. Delete a Schedule Template

#### Add a Daily Schedule Action

Tap the template to add the action to. Maximum of 8 actions per daily schedule template. The Action setup screen will display. Select the Action's Start Time, ON/OFF status, Operation Mode, Cooling Setpoint, Heating Setpoint and Fan speed. Each action will end at the Start time of the next action.

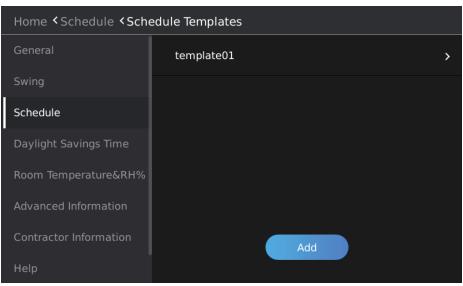


Figure 35. Add a Daily Schedule Action

<	template01				
1. action1 ♪	Off	Cool	<b>79°F</b>	<b>73°F</b>	Auto
05:05 AM <del>~</del>	On-Off	Mode	<sub>Cool</sub>	Heat	<sub>Fan</sub>
2. action2	Off	Cool	79°F	73°F	Auto
	On-Off	<sup>Mode</sup>	<sub>Cool</sub>	<sub>Heat</sub>	<sub>Fan</sub>
<ol> <li>action3 </li> <li>05:07 AM </li> </ol>	Off	Cool	79°F	73°F	Auto
	On-Off	<sup>Mode</sup>	<sub>Cool</sub>	Heat	<sub>Fan</sub>
		Ado			

Figure 36. Setup Daily Schedule Action

#### Delete a Daily Schedule Action

Slide the daily schedule action that needs to be deleted from right to left, and the Delete box will display.

Tap Delete to delete the daily schedule action.

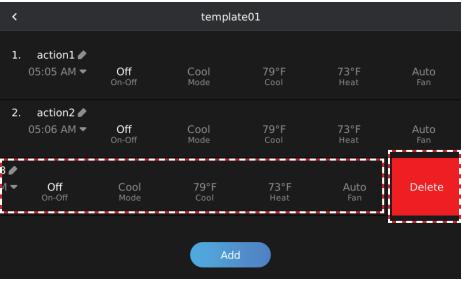


Figure 37. Delete Daily Schedule Action

## Rename a Daily Schedule Action

Tap the Edit button on the right of the action to rename the event.

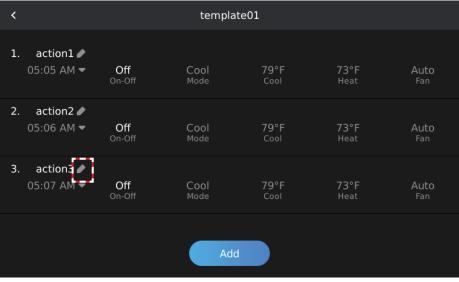


Figure 38. Rename a Daily Schedule Action

<			t	template	e01			
1. action1 05:05 AM		Off <sup>in-Off</sup> a	ction3					
2. action2 05:06 AM		Off	Cancel		Okay		73°F	Auto
q w	/ 6	e I	•	t	у	u	i	o p
а	s	d	f	g	h	j	k	I
123	z	x	с	v	b	n	m	
+								Done

Figure 39. Rename a Daily Schedule Action Edit Box

## Edit a Daily Schedule Action

Tap the daily schedule action content (e.g., time) that needs to be modified, and enter the daily schedule action content editing mode.

Slide up/down to increase/decrease the value and modify the daily schedule action content. The highlighted value in the middle is the currently set parameter.

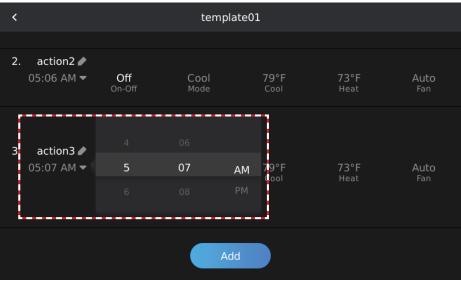


Figure 40. Modify a Daily Schedule Action

#### Setup a Weekly Schedule

Create a Weekly Schedule. Tap the Schedule button to access the schedule management settings interface.

Home < Schedule		
General	Override Options	  Until:
Swing Schedule	Schedule Templates	>
Daylight Savings Time	Schedule Setup	>
Room Temperature&RH%	Holiday and Special Day Schedule	>
Advanced Information		
Contractor Information		
Help		

## Figure 41. Tap Schedule Button to Access Schedule Settings

Tap the Schedule Setup button. The Schedule Setup screen will display.

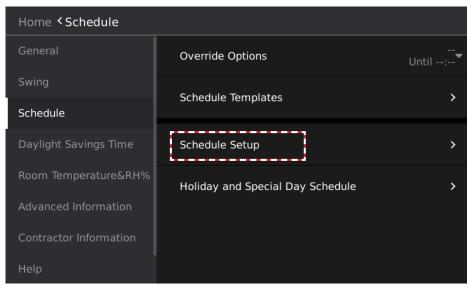


Figure 42. Tap Schedule Setup Button

# Tap the Add button.

Home < Schedule < Schedule Setup					
General	summer		~		
Swing	winter				
Schedule	Winter				
Daylight Savings Time	spring		•		
Room Temperature&RH%					
Advanced Information					
Contractor Information		Add			
Help					

Figure43. Add a New Weekly Schedule

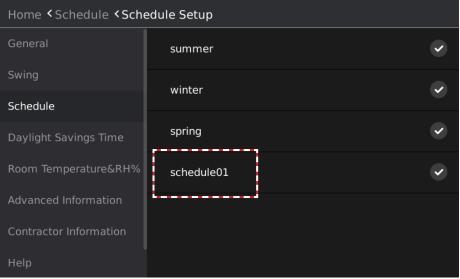


Figure 44. New Weekly Schedule

#### Rename a Weekly Schedule

Slide the weekly schedule to be deleted from the right to left, and "Rename" and "Delete" boxes will display. Tap Rename and enter the new name in the Edit box. Tap Yes to confirm. Tap Cancel to return to the previous screen.

Home < Schedule < Schedule Setup					
General	summer	۲			
Swing	winter	~			
Schedule					
Daylight Savings Time	spring	<ul><li>✓</li></ul>			
Room Temperature&RH%	schedule01	Rename Delete			
Advanced Information					
Contractor Information					
Help					

#### Figure 45. Rename a Weekly Schedule



Figure 46. Enter Weekly Schedule Name

#### Delete a Weekly Schedule

Slide the weekly schedule to be deleted from the right to left, and "Rename" and "Delete" boxes will display. Tap Delete and Tap Yes when prompted. Tap Cancel to return to the previous screen.

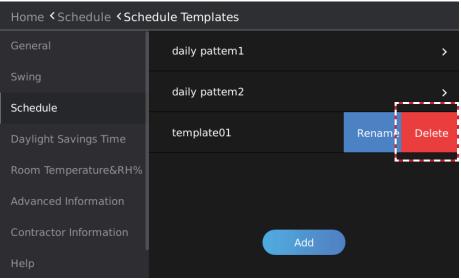


Figure 47. Delete a Schedule Template

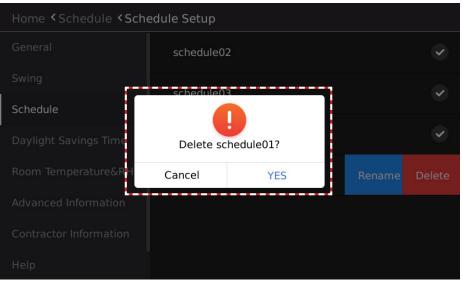


Figure 47. Confirm Deletion

## Modify a Weekly Schedule

Enter the weekly schedule template content editing interface.

Tap the drop-down button on the right of "Everyday" and select the weekly schedule combination mode.

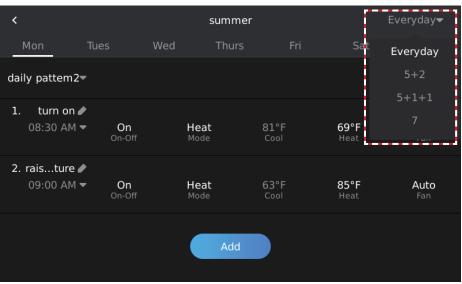


Figure 49. Modify a Weekly Schedule

Schedule	Description
Everyday	Set the schedule independently for each day of the week.
5+1+1	Set the schedule uniformly for Monday through Friday and independently for Satur- day and Sunday.
5+2	Set the schedule uniformly for Monday through Friday and uniformly for Saturday and Sunday.
7	Set the schedule uniformly for each day of the week.

Tap the "daily pattern2" drop-down button to import the desired daily schedule template.

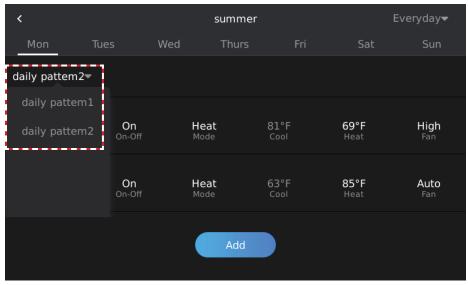


Figure 50. Select Daily Schedule Templates to Include in the Weekly Schedule

## Select the Weekly Schedule to Use

Tap the button on the right of the weekly schedule template you want to select to complete the weekly schedule selection. The selected icon is highlighted after selection.

Home < Schedule < Schedule Setup				
General	summer	$\bigcirc$		
Swing	winter			
Schedule				
Daylight Savings Time	spring	~		
Room Temperature&RH%				
Advanced Information				
Contractor Information	Add			
Help				

## Setup Holiday and Special Day Schedules

Create a special schedule for holidays. Tap the Schedule button to access the schedule management settings interface.

Home < Schedule		
General	Override Options	 Until:
Swing Schedule	Schedule Templates	>
Daylight Savings Time	Schedule Setup	>
Room Temperature&RH% Advanced Information	Holiday and Special Day Schedule	>
Contractor Information		
Help		

Figure 51. Tap Schedule Button to Access Schedule Settings

Tap the Holiday and Special Day Schedule button. The Holiday and Special Day Schedule screen will display.

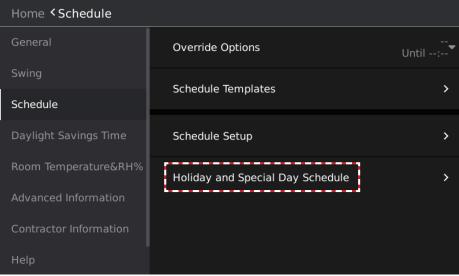


Figure 52. Tap Schedule Setup Button

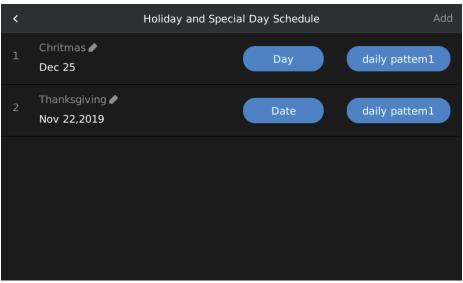


Figure 53. Holiday & Special Day Schedule Screen

## Add a Holiday and Special Day Schedule

Tap the Add button to create a new holiday schedule. The new schedule displays at the end of the list.

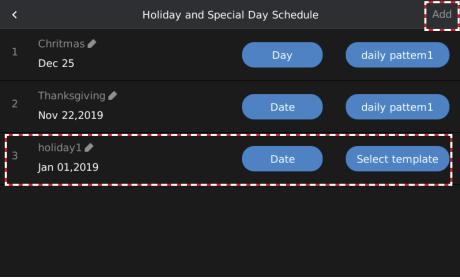


Figure 54. New Holiday & Special Day Schedule

## Rename a Holiday and Special Day Schedules

Tap the name of the holiday schedule that you want to modify, enter the rename edit interface, and type the name of the holiday.

Tap YES to finish naming and modifying the holiday schedule, or tap NO to return to the previous page.

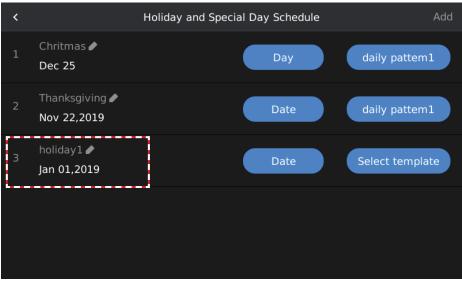


Figure 55. New Holiday & Special Day Schedule



Figure 56. Rename Holiday & Special Day Schedule

#### Modify a Holiday and Special Day Schedules

Tap the Day button of the holiday schedule that needs to be edited, select the type of holiday schedule date setting and set the date.

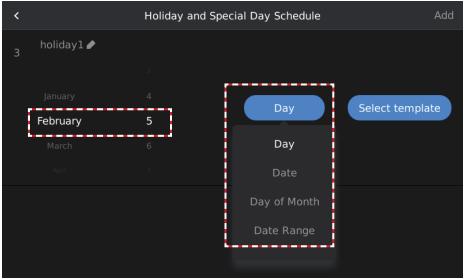


Figure 57 Select the Type of Holiday & Special Day Schedule

Tap the Select template button for the holiday schedule to be edited and select the daily schedule template for the holiday.

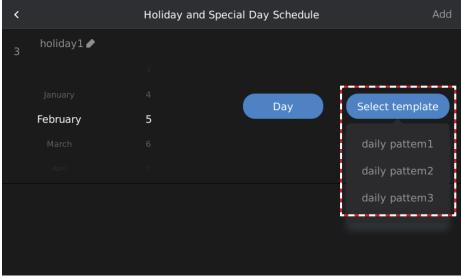


Figure 58. Select the Daily Schedule Template for the Holiday Schedule

### Delete a Holiday and Special Day Schedules

Slide the holiday schedule (e.g., holiday1) that needs to be deleted from right to left, and then a Delete box will display.

Tap the Delete button to delete the selected holiday schedule.

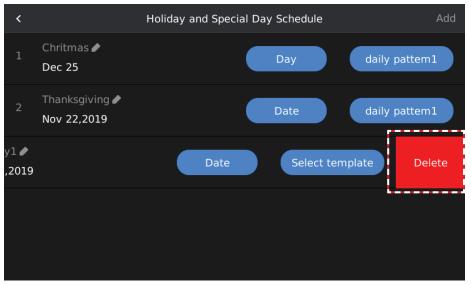


Figure 59. Delete Holiday & Special Day Schedule

## **Override Scheduled Settings**

Set the system to operate according to the current settings rather than the weekly schedule settings for a period of time.

Tap the drop-down button on the right of Override Options to set the Override delay time. The Override time can be set to 30, 60, 90, or 120 minutes.

Clear will clear the set time.

After setting, the currently selected delay time is displayed to the right of Override Options.

Home <b>&lt; Schedule</b>			
General	Override Options	6	60min Jntil 12:28
Swing	Schedule Templates	30min	60min
Schedule	Schedule lemplates		
Daylight Savings Time	Schedule Setup	90min	120min
		cle	ar
Room Temperature&RH%	Holiday and Special Day Schedu		·····
Advanced Information			
Contractor Information			
Help			

Figure 60. Override Scheduled Settings

The Override function is only active when the weekly schedule function is enabled. If the weekly schedule is inactive and the Override time is selected, the prompt box "Please activate schedule first" will display.

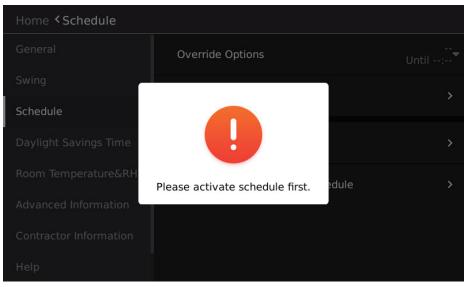


Figure 61. Activate Schedule Before Overriding Scheduled Settings

# **General Settings Configuration**

Tap the Settings icon on the main interface to enter the Settings interface.

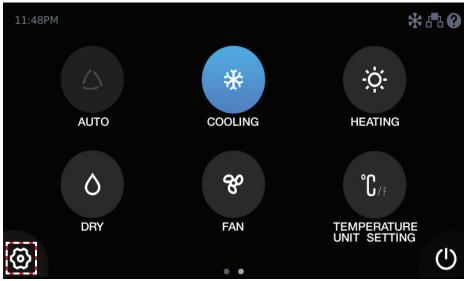


Figure 62. Access the Settings Interface

Tap the General button to enter the wired controller settings interface.

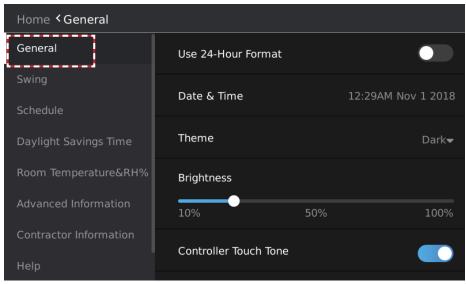


Figure 63. General Settings Screen

## Time Format Settings

Slide or tap the button on the right of Use-24-Hour Format to switch between 12 hour and 24 hour clock display.

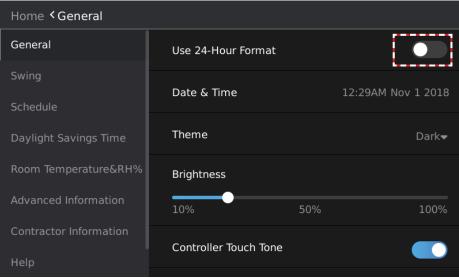


Figure 64. Time Format Settings

#### Time Settings

Tap the area to the right of Data & Time, and the time settings box will display. Slide up/down in the corresponding position to increase/decrease the value and change the time. The highlighted value in the middle is the currently set parameter.

Home <b>&lt; General</b>							
General		Use 24-H	our Forma	ıt			
Swing		Date & Ti	me		11-	39PM	Nov 1 2018
Schedule						5511011	100 1 2010
Daylight Savings Time							2016
		10	38	AM	Oct		2017
Room Temperature&RH%		11	39	PM	Nov	1	2018
Advanced Information		12	40		Dec	2	2019
Contractor Information							2020
Help							

## Figure 65. Time Settings

## Theme Settings

Tap the drop-down symbol on the right of Theme and select a theme from the selection box that displays.

There are three themes: Dark, Colorful and Simple.

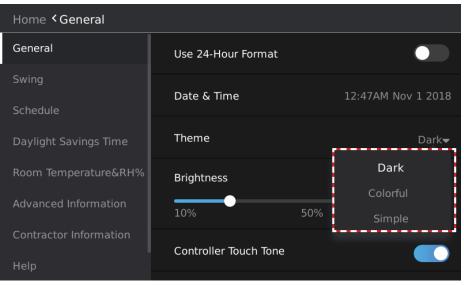


Figure 66. Theme Settings

## **Brightness Settings**

Slide the button below Brightness to complete the brightness modification. The brightness range is 10%-100%.

Home <b>&lt; General</b>				
General	Use 24-Hour Format			
Swing Schedule	Date & Time	12:29AM Nov 1 2018		
Daylight Savings Time	Theme	Dark <del>√</del>		
Room Temperature&RH%	Brightness			
Advanced Information	10% 50%	% 100%		
Contractor Information	Controller Touch Tone			
Help				

## Figure 67. Brightness Settings

### Controller Touch Tone (Sound) Settings

Slide or tap the button on the right of Controller Touch Tone to select whether the controller touch tone is active.

When the touch tone is inactive, neither the controller nor the indoor unit will beep when a command is sent to the indoor unit.

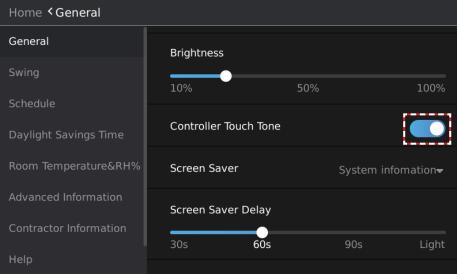


Figure 68. Touch Tone (Sound) Settings

#### Standby Interface (Screen Saver) Settings

Tap the drop-down symbol on the right of Screen Saver and select a standby screen in the selection box that appears.

The standby screen can be set to Blank, System Information, or Custom Image.

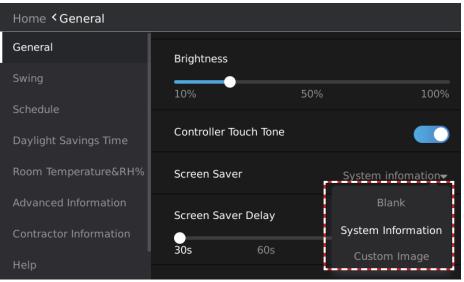
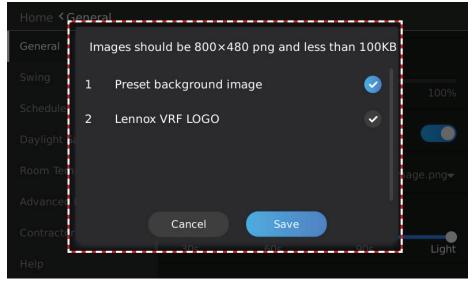


Figure 69. Standby Interface (Screen Saver) Settings

When you select the Custom Image theme, the box for selection of pictures on the USB will display. You can then select the custom picture to use.

Tap Save to save the theme settings, or tap Cancel to return to the previous interface.





**NOTE -** Custom image resolution is 800\*480, in .png format, and the size must not exceed 100 KB.

# Standby (Screen Saver) Duration Settings

Slide the button below Screen Saver Delay and select a time period after which the system enters the standby interface when no operation is made.

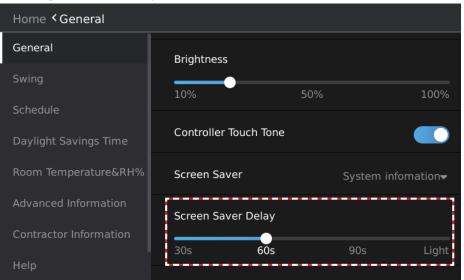


Figure 71. Standby (Screen Saver) Duration

# Swing Angle Settings

Tap the Swing button to enter the swing angle settings interface. Slide the Vertical button and select the angle of vertical swing. Click the Horizontal button to select whether to enable horizontal swing.

Home < Swing		
General	Vertical	
Swing	swing pos1 pos2	pos3 <b>pos4</b> pos5
Schedule	Horizontal	Swing Stop
Daylight Savings Time		• • • • • • • • • • • • • • • • • • • •
Room Temperature&RH%		
Advanced Information		
Contractor Information		
Help		

#### Figure 72. Swing Settings

# Daylight Savings Time Settings

Tap the Daylight Savings Time button to enter the daylight savings time setting interface.

Home < Daylight Savings Time				
General	Daylight Saving Time			
Swing Schedule	Start	02:00AM 2nd Sunday, Mar		
Daylight Savings Time	End	02:00AM 1st Sunday, Nov		
Room Temperature&RH%	*Start-The clock i *End-The clock is	s set forward 1 hour. set back 1 hour.		
Advanced Information				
Contractor Information				
Help				

## Figure 73. Daylight Savings Time Settings

Slide or tap the button on the right of Daylight Savings Time and select ON or OFF for daylight savings time.

Tap the time zone on the right of Start and select the starting time of the daylight savings time.

Home < Daylight Savings Time				
General	Daylight Saving Time			
Swing Schedule	Start	02:00AM 2nd Sunday, Mar		
Daylight Savings Time	End	02:00AM 1st Sunday, Nov		
Room Temperature&RH%	*Start-The clock is set for *End-The clock is set bac			
Advanced Information				
Contractor Information				
Help				

Figure 74. Select Start Date and Time

Slide the date that needs to be modified up or down. The highlighted value in the middle is the currently set parameter.

Home < Daylight Savings Time								
General	ſ	Daylight	t Sav	ing Tin	ne			
Swing	2	Start			C	)2:00AM	2nd Sund	ay, Mar
Schedule	-1							_
Daylight Savings Time								Jan
		1				1st		Feb
Room Temperature&RH%		2		00	AM	2nd	Sunday	Mar
Advanced Information	1	3		01	РМ	3rd		Apr
Contractor Information								Мау
Help								

Figure 75. Select Start Date and Time

Tap the time zone on the right of End and select the ending time of the daylight savings time.

Home < Daylight Savings Time				
General	Daylight Saving T	īme 🚺		
Swing	Start	02:00AM 2nd Sunday, Mar		
Schedule				
Daylight Savings Time	End	02:00AM 1st Sunday, Nov		
Room Temperature&RH%	*Start-The clock is se *End-The clock is set			
Advanced Information				
Contractor Information				
Help				



Slide the date that needs to be modified up or down. The highlighted value in the middle is the currently set parameter.

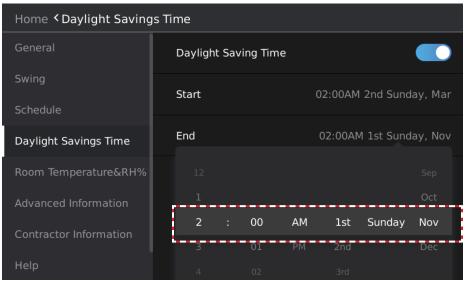


Figure 77. Select Daylight Savings Time End Date and Time

#### **Room Temperature and Humidity Display Settings**

Tap the Room Temperature&RH% button to enter the temperature and humidity display settings interface.

Home < Room Temperature&RH%				
General	Temperature Unit	°C °F		
Swing Schedule	Display Space Temperature On Homepage			
Daylight Savings Time	Dispaly RH% On Homepage			
Room Temperature&RH% Advanced Information				
Contractor Information				
Help				

Figure 78. Room Temperature & Relative Humidity (RH) % Settings

Tap the  ${}^{\circ}C/{}^{\circ}F$  button on the right of Temperature Unit to switch the temperature units. Tap or slide the button on the right of Display Space Temperature On Homepage to choose whether the main interface displays the temperature value.

Tap or slide the button on the right of Display RH% On Homepage to select whether the home page displays the humidity value.

Home < Room Temperatu	re&RH%
General	Temperature Unit
Swing Schedule	Display Space Temperature On Homepage
Daylight Savings Time	Dispaly RH% On Homepage
Room Temperature&RH%	
Advanced Information	
Contractor Information	
Help	

Figure 79. Room Temperature & Relative Humidity (RH) % Settings

# **Contractor Information Input**

Tap the Contractor Information button to enter the contractor information input interface.

Home < Contractor Information		
General	Name:	
Swing Schedule	Company Name:	
Daylight Savings Time	Address:	
Room Temperature&RH%	Phone Number:	
Advanced Information Contractor Information	Email Address:	
Help	Web Site:	

#### Figure 80. Contractor Information

Type the information you want to display using the input information interface. Tap YES to finish information input, or tap NO to return to the previous page.

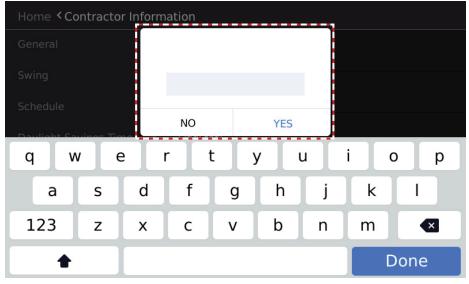


Figure 81. Enter Contractor Information

# Service Menu

#### Access Service Menu

- Tap the Service Menu button to enter the password entry interface.
- Tap the corresponding number buttons to enter the correct service password.
- During password entry, tap the backspace key "-" to delete information.
- Tap X to clear all input information.
- The user password can be changed on the Lock screen within the Service Configuration Options. The default password is 0000.

Home < Service Menu				
Swing				
Schedule		Enter Pa	ssword	Change
Daylight Savings Time				
Room Temperature&RH%	1	2	3	<del>~</del>
Advanced Information	4	5	6	0
Contractor Information	7	8	9	×
Help				
Service Menu				

Figure 82. Access Service Menu

### Change Password

- 1. Tap the Change button to enter the password modification interface. Tap the corresponding number buttons and enter the old password once, and the new password twice.
- 2. Tap YES to confirm the password modification, or tap Cancel to exit the password modification interface.

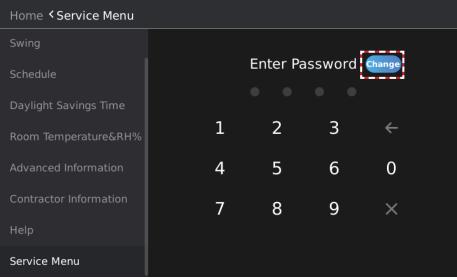
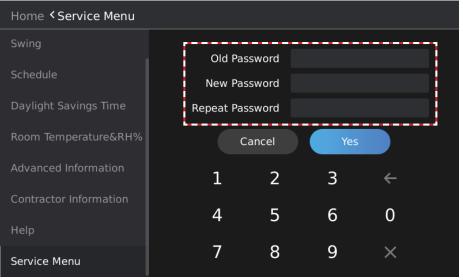


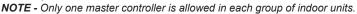
Figure 83. Change Password





# Master / Sub Wired Controller Settings

- 1. Tap the Master/Sub button to enter the Master / Sub wired controller setting screen.
- 2. Tap the Master or Sub button to identify the wired controller as a master/Sub controller.
- 3. Tap the Change button, and then the Restart the system to implement the change box will display. Tap "ok". The settings will be applied and the wired controller will restart automatically.



Home < Service Menu <	Master/Sub	
Master/Sub	Master	
Indoor Unit Addressing	Sub	
Indoor Unit Display Board		
Room Temperature Sensor		
Auto Mode		
Draft Prevention		
Indoor Fan Settings	Change	
Static Pressure	· · · · · · · · · · · · · · · · · · ·	
Home <b>&lt;</b> Service Menu <b>&lt;</b>	Master/Sub	
Master/Sub	Master	
Master/Sub Indoor Unit Addressing	Master	
	Master	
Indoor Unit Addressing	Master Restart the system to implement the change.	
Indoor Unit Addressing	Restart the system to	
Indoor Unit Addressing Indoor Unit Display Boar Room Temperature Sens	Restart the system to implement the change.	
Indoor Unit Addressing Indoor Unit Display Boar Room Temperature Sen Auto Mode	Restart the system to implement the change.	

Figure 85. Identify Controller as Master or Sub

# Master / Sub Wired Controller Operation

Up to two controllers can be connected to an indoor unit or group of indoor units. When two controllers are connected, one controller is the master controller and one is the sub controller for that indoor unit or group of indoor units.

Both the master and sub controller can change the indoor unit's operation. Other functionality is limited to the master controller.

Function	Master Controller Available	Sub Controller Available	Synchronize Controller Display
ON/OFF	Yes	Yes	Yes
Mode(Auto/Cooling/ Heating/Dry/Fan	Yes	Yes	Yes
Fan Speed	Yes	Yes	Yes
Setpoint	Yes	Yes	Yes
Swing	Yes	Yes	Yes
Schedule (including holidays)	Yes	No	No
Override	Yes	No	No
Temperature Unit Dis- play Setting (°F/°C)	Yes	No	No
Setpoint Limit	Yes	No	No

Table 4. Master/Sub Controller Operation of Indoor Unit

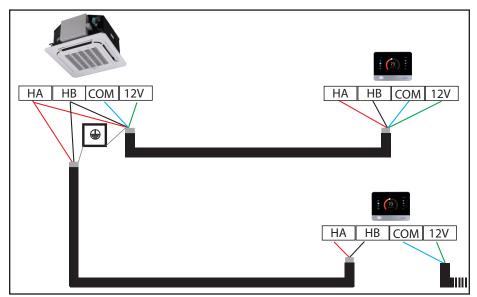


Figure 86. Master/Sub Configuration: V0STAT51 Master & V0STAT51 Sub

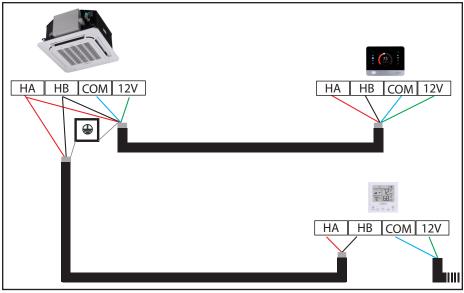


Figure 87. Master/Sub Configuration: V0STAT51 Master & V0STAT54 Sub

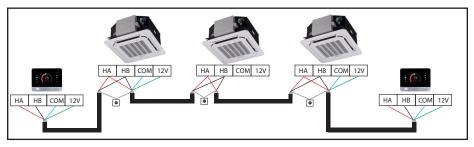


Figure 88. Master/Sub Configuration: Multiple Indoor Units Connected V0STAT51 Master & V0STAT54 Sub

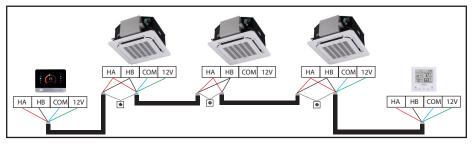


Figure 89. Master/Sub Configuration: Multiple Indoor Units Connected V0STAT51 Master & V0STAT54 Sub

# Indoor Unit Address Settings

- 1. Tap the Indoor Unit Addressing button on the screen to enter the Indoor unit address settings screen.
- 2. Slide the number left and right, and select the address value that you want to assign to the connected indoor unit.
- 3. Tap the Set button, and then the Need reboot to effective dialog will display.

4. Tap Ok. The settings will take effect and the wired controller will restart automatically.

NOTE - Requires a one-to-one connection to the indoor unit.

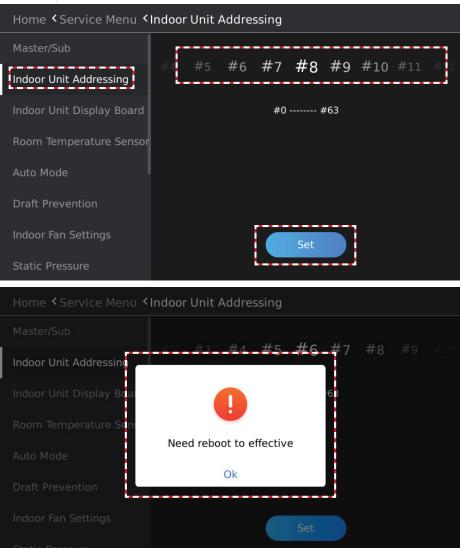


Figure 90. Assign Indoor Unit Address

# Indoor Unit Display Board & Buzzer (Sound) Settings

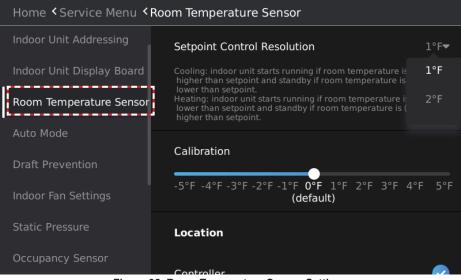
- 1. Tap the Indoor Unit Display Board button to access the Indoor unit display board and buzzer settings screen.
- 2. Slide or tap the button on the right of Display Board to select whether to enable the display function of the indoor unit display board.
- 3. Slide or tap the button on the right of Buzzer to select whether to enable the buzzer (sound) function of the indoor unit display board.

Home < Service Menu < Indoor Unit Display Board			
Master/Sub	Display Board		
Indoor Unit Addressing	When this is enabled, the digital display on the indo <b>xent of a set</b> unit will show the setpoint temperature. If disabled, the digital display on indoor unit will turn off.		
Indoor Unit Display Board	Buzzer		
Room Temperature Sensor	When this is enabled, the indoor unit will produce an audible beep when settings change. To turn off the beep, disable this function.		
Auto Mode			
Draft Prevention			
Indoor Fan Settings			
Static Pressure			

Figure 91. Indoor Unit Display & Buzzer (Sound) Settings

#### **Room Temperature Sensor Settings**

1. Tap the Room Temperature Sensor button to access the room temperature sensor settings screen.





- 2. Tap the drop-down button on the right of Setpoint Control Resolution and select the return difference temperature.
- 3. Slide the Calibration button and select the room temperature calibration value.

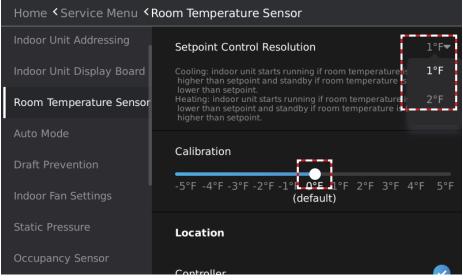


Figure 93. Room Temperature Control Resolution & Calibration

Tap the button below Location and select the Return Air (T1) temperature sensor location. **Controller.** Use the controller's T1 (return air) sensor for all connected indoor units. **Individual Indoor Unit.** All connected indoor units will use their own T1 (return air) sensor. **Select One Of The Indoor Units.** All connected indoor units will use the T1 (return air) sensor of the selected indoor unit. Tap the drop-down button on the right and select the address of indoor unit.

Home < Service Menu < Room Temperature Sensor		
Master/Sub	Location	
Indoor Unit Addressing	Controller	
Indoor Unit Display Board		
Room Temperature Sensor	Individual Indoor Unit 🛛 🗸 🗸	
Auto Mode	Select One Of The Indoor Units <del></del>	
Draft Prevention		
Indoor Fan Settings		
Static Pressure		

Home < Service Menu < Room Temperature Sensor						
Master/Sub	Location					
Indoor Unit Addressing	Controller					
Indoor Unit Display Board						
Room Temperature Sensor	Individual Indoor Unit	~				
Auto Mode	Select One Of The Indoor Units	6-				
Draft Prevention		6				
Indoor Fan Settings						
Static Pressure						
Eiguno	A Salaat Baturn Air Sanaar Lagatia					

Figure 94. Select Return Air Sensor Location

# Auto Mode Settings

• Tap the Auto Mode button to access the room auto mode settings screen.

Home < Service Menu < Auto Mode							
Auto Mode	Auto Mode Changeover Time						
Draft Prevention	15min (default)	30min	e	50min	90min		
Indoor Fan Settings	Setpoint D	eadband		Mi	nimum <del>▼</del>		
Static Pressure	3°F	4°F	5°F	6°F	7°F		
Occupancy Sensor	(default)						
Humidity Sensor	Auto Mode Changeover Time: The current mode will not change if its operation time is shorter than the value set above						
Aux/AH. Heat Contact	Setpoint Deadband: 1. Minimum: the setpoint deadband between cooling and heating setpoint for auto mode will be not smaller than the value set above. 2. Fixed: the setpoint deadband between cooling and heating setpoint for auto mode will be the fixed value set above.						

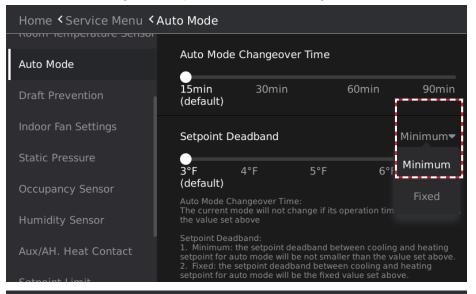
Figure 95. Auto Mode Settings

 Slide the button below Auto Mode Changeover Time and select the auto mode changeover time.

Home < Service Menu < Auto Mode							
Auto Mode	Auto Mode Changeover Time						
Draft Prevention	15min (default)	30min	6	50min	90min		
Indoor Fan Settings	Setpoint De	eadband		М	inimum <del>▼</del>		
Static Pressure	 3°F	4°F	5°F	6°F	7°F		
Occupancy Sensor	(default)						
Humidity Sensor	Auto Mode Changeover Time: The current mode will not change if its operation time is shorter than the value set above						
Aux/AH. Heat Contact	Setpoint Deadband: 1. Minimum: the setpoint deadband between cooling and heating setpoint for auto mode will be not smaller than the value set above. 2. Fixed: the setpoint deadband between cooling and heating setpoint for auto mode will be the fixed value set above.						

Figure 96. Auto Mode Changeover Time

- Tap the drop-down button on the right of Setpoint Deadband and select the method for setting the temperature difference between the cooling setpoint and heating setpoint in Auto mode.
- When the Setpoint Deadband in Auto mode is set to Minimum, the temperature difference between the cooling setpoint and the heating setpoint is set to a minimum value.
- When the Setpoint Deadband in Auto mode is set to Fixed, the temperature difference between the cooling setpoint and the heating setpoint is set to a fixed value.
- Slide the button below Setpoint Deadband and select the difference between the setpoint for auto mode in cooling and the setpoint for auto mode in heating.



## Home < Service Menu < Auto Mode

Room lemperature sensor					
Auto Mode	Auto Mode	Changeove	er Time		
Draft Prevention	15min (default)	30min		60min	90min
Indoor Fan Settings	Setpoint De	eadband		Mi	inimum <del>▼</del>
Static Pressure	3°F	4°F	5°F	6°F	7°F
Occupancy Sensor	Auto Mode Ch				
Humidity Sensor	The current m the value set a		hange if its o <sub>l</sub>	peration time is	shorter than
Aux/AH. Heat Contact	setpoint for au 2. Fixed: the s	he setpoint de ito mode will l etpoint deadt	oe not smalle oand betweer	ween cooling and r than the value n cooling and he value set above.	set above.

Figure 97. Auto Mode Setpoint Deadband

## **Draft (Cold Blow) Prevention Settings**

Set the temperature the coil must reach before the fan engages to prevent cold air from being distributed from the indoor unit.

- 1. Tap the Draft Prevention button to enter the cold air prevention temperature settings page.
- 2. Slide the temperature selection button and select the cold air prevention temperature set value.

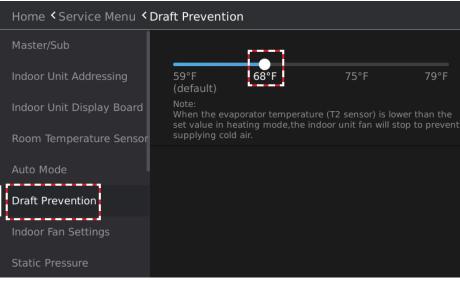


Figure 98. Draft (Cold Blow) Prevention

### **Stand-by Fan Speed Settings**

Set the indoor unit fan operation when the indoor unit setpoint is satisfied.

- 1. Tap the Indoor Fan Settings button to enter the stand-by fan speed settings interface.
- 2. Slide the button below Cooling and select the fan status setting when the cooling setpoint is satisfied.
- 3. Slide the button below Heating and select the fan status setting when the heating setpoint is satisfied.

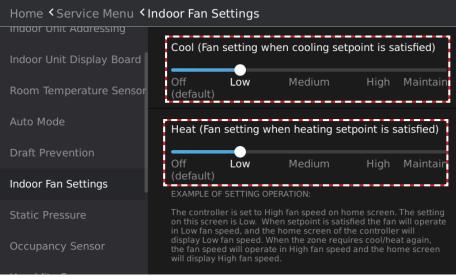


Figure 99. Indoor Fan Settings

## Indoor Unit Static Pressure Settings

Set the indoor unit static pressure. Ducted units only.

- 1. Tap the Static Pressure button to enter the static pressure settings screen.
- 2. Slide the static pressure selection button and select the static pressure setting.

**NOTE -** Requires a one-to-one connection to the indoor unit.

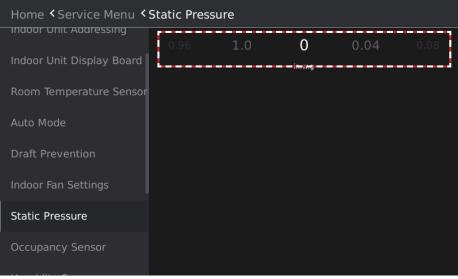
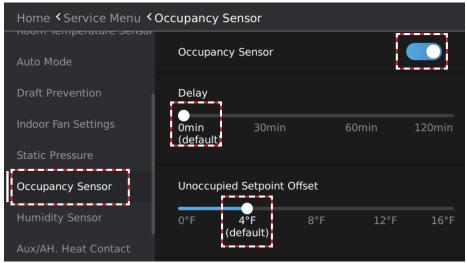


Figure 100. Static Pressure Settings

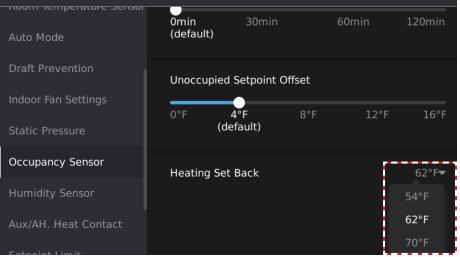
### **Occupancy Sensor Function Settings**

Setup the controller's occupancy sensor.

- 1. Tap the Occupancy Sensor button to access the occupancy sensor function settings screen.
- Slide the button on the right of Occupancy Sensor to select whether to enable the occupancy sensor function.
- 3. Slide the button below Delay to select the duration of the detection of the unoccupied status.
- 4. Slide the button below Unoccupied Setpoint Offset and select the temperature change value when unoccupied status is detected.
- 5. Tap the drop-down button on the right of Heating Set Back and select the temperature limit to enter the set back operation period.



# Home < Service Menu < Occupancy Sensor



### Figure 101. Occupancy Sensor Function Settings

## Dry Mode Settings

Setup humidity sensing from the controller.

- 1. Tap the Humidity Sensor button to enter the auto dry mode settings screen.
- 2. Slide the button on the right of Auto Dry and choose whether to enable the Auto Dry function.
- 3. Slide the slider on the right of Dehumidifier Contact and select whether to install the dehumidifier in the indoor unit.
- 4. Slide the value below Target RH% to set the indoor target humidity. The highlighted value in the middle is the current set parameter.
- 5. Slide the number below Cutoff to set the limit when the Cutoff dehumidification operation temperature is lower than the set temperature. The highlighted value in the middle is the currently set parameter.

Home < Service Menu < Humidity Sensor				
Auto Mode Draft Prevention	Auto Dry			
Indoor Fan Settings	Dehumidifier Contact			
Static Pressure	Target RH%			
Occupancy Sensor	70% 40% 45% 50% 55% 60%			
Humidity Sensor	(default)			
Aux/AH. Heat Contact	Cutoff			
Setpoint Limit	3°F <b>4°F</b> 5°F (default)			

Figure 102. Occupancy Sensor Function Settings

## Auxiliary / Alternate Heat Settings

Setup auxiliary and alternate heat source activation from the controller.

- 1. Tap the Aux/AH. Heat Contact button to access the auxiliary heat source function settings page.
- Select the button on the right of No Auxiliary/Alternative Heat Installed, Aux/Alt Heat Installed at IDU or in Duct or Other Aux/Alt Heat Installation and confirm the installation method of the auxiliary heat source.

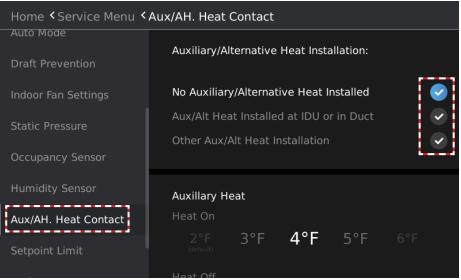


Figure 103. Auxiliary / Alternate Heat Settings

- Slide the Heat On temperature value below Auxiliary heat. The highlighted value in the middle is the currently selected parameter. This means that when the indoor ambient temperature is Δt1 lower than the set temperature, the external heat source is turned on.
- 4. Slide the Heat Off temperature value below Auxiliary heat. The highlighted value in the middle is the currently selected parameter. This means that when when the indoor ambient temperature is Δt2 higher than the set temperature, the auxiliary heat source is turned off.

Home < Service Menu < Aux/AH. Heat Contact				
Auto Mode				
Draft Prevention	Auxillary Heat Heat On			
Indoor Fan Settings	2°F 3°F 4°F 5°F 6°F			
Static Pressure	Heat Off			
Occupancy Sensor	0°F <b>1°F 2°F 3°F</b> 4°F			
Humidity Sensor	When indoor unit is in heating mode: 1.Tsh-T1≥"Heater ON"setting value,contact will close.			
Aux/AH. Heat Contact	2.Tsh-T1<"Heater OFF"setting value, contact will open. Tsh:Heating setpoint;T1:Room temperature.			
Setpoint Limit				

Figure 104. Auxiliary / Alternate Heat ON and OFF Settings

### Setpoint Limit Settings

Setup auxiliary and alternate heat source activation from the controller.

- 1. Tap the Setpoint Limit button to enter the setpoint limit screen.
- 2. Slide the temperature value below Minimum Cooling Setpoint and select the minimum cooling setpoint. The highlighted value in the middle is the currently selected parameter. After setting the minimum cooling setpoint, the user will be unable to set a value lower than this set value when adjusting the setpoint in Cooling mode and Dry mode, or the cooling setpoint in Auto mode.
- 3. Slide the temperature value below Maximum Heating Setpoint and select the maximum of the heating setpoint. The highlighted value in the middle is the currently selected parameter. After setting the maximum heating setpoint, the user will be unable to set a value higher than this set value when adjusting the setpoint in Heating mode, or the heating setpoint in Auto mode.

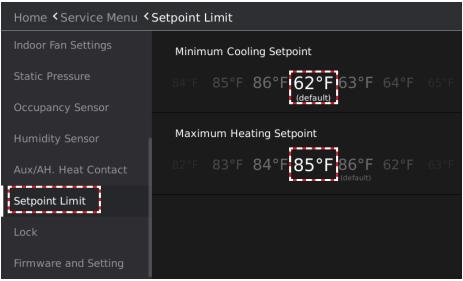


Figure 105. Setpoint Limit Settings

# Locking Function Settings

Lock the button operation of the controller to prevent the user from adjusting the controller.

- 1. Tap the Lock button to access the locking function settings screen.
- 2. Slide the button on the right of ON/OFF, Mode, Temperature Setpoint, Schedule, Horizontal Louver or Vertical Louver to select whether to lock the parameter.

**NOTE -** When functionality is locked, the Lock icon will display on the Home screen.

Home <b>&lt;</b> Service Menu <b><lock< b=""></lock<></b>				
Indoor Fan Settings	ON/OFF			
Static Pressure Occupancy Sensor	Mode			
Humidity Sensor	Temperature Setpoint	•		
Aux/AH. Heat Contact	Schedule	$\bullet$		
Setpoint Limit Lock	Horizontal Louver			
Firmware and Setting	Vertical Louver			

Figure 106. Locking Function Settings

Locking Type	Description
ON/OFF	Lock the ON/OFF button operation of the wired controller.
Mode	Lock the operation mode button operation of the wired controller.
Temperature Setpoint	Lock the set temperature adjustment button operation of the wired control- ler.
Schedule	Lock the weekly schedule operation parameter.
Horizontal Louver	Lock the vertical swing button operation of the wired controller.
Vertical Louver	Lock the horizontal swing button operation of the wired controller.

# **Advanced Information**

Tap the Advanced Information button to access the indoor unit information query interface.

Home < Advanced Information		
General	Operation Data	>
Swing Schedule	Error Code	>
Daylight Savings Time	HHE Interface	>
Room Temperature&RH%	Controller	>
Advanced Information		
Contractor Information		
Help		



## Device Operation Information Query

Tap the Operation Data button on the screen to enter the system operation information query interface.

Home < Advanced Information		
General	Operation Data	>
Swing	Error Code	>
Schedule		
Daylight Savings Time	HHE Interface	>
Room Temperature&RH%	Controller	>
Advanced Information		
Contractor Information		
Help		

Home < Advanced Information < Operation Data			
Swing		ODU Priority	
Schedule		ODU Mode	Cool
Daylight Savings Time		Master IDU	None
Room Temperature&RH%		Number of Indoor Units Connected	1
Advanced Information		Indoor Unit Address	1
		Series	VHI
Contractor Information		Capacity	18k
Help		Mode	Cool
Service Menu		Cooling Setpoint	83°F



Table 6. System Operation Information Querie
--

Item	Description
ODU Priority	Auto/Cool/Heat/VIP/Heat Only/Cool Only
ODU Mode	Cool/Heat/Fan/Force Cool/OFF
Master IDU	Show VIP indoor unit address; "None" is displayed when there is no VIP Indoor unit.
Indoor quantity	Show the number of connected Indoor Units
Address	Indoor unit address (can be selected if there are multiple indoor unit)
Series	Indoor unit type
Capacity	Indoor unit capacity
Mode	Indoor unit (operation) mode
Cooling setpoint	The cooling setpoint
Heating setpoint	The heating setpoint
T1-In Use	Indoor temperature used by the system
T1-IDU	Temperature value collected by the Indoor Unit's own sensor
T2	Evaporator middle temperature
T2A	Evaporator inlet temperature
T2B	Evaporator outlet temperature
EEV	EXV opening
Fan speed	Fan (operating fan speed) speed
Software version	Indoor Unit software version number.

## Table 7. Indoor Unit Types

Indoor Unit Type	Model Number
360° Cassette	V33
Wall-Mounted	VWM
Medium Static Concealed Ducted	VMD
Vertical Air Handler	VVC
High Static Concealed Ducted	VHI
Compact 360° Cassette	V22
Ceiling Floor Convertible	VCF

## Device Operation Error History Query

Check the error information of the system to which the wired controller is connected. Tap the Error Code button to enter the system error information query interface.

Home < Advanced Information					
General	Operation Data >				
Swing	Error Code >				
Schedule					
Daylight Savings Time	HHE Interface >				
Room Temperature&RH%	Controller >				
Advanced Information					
Contractor Information					
Help					

Home < Advanced Information < Error Code						
General	No.	IDU#	Error	Туре		Date and Time
Swing	1		F0	CTRL	error	11/05/2019/ 23:10
Schedule	2		FO	CTRL	error	01/05/2019/ 04:02
Daylight Savings Time	3	#4	F1	IDU	error	01/05/2019/ 03:56
Room Temperature&RH%	4		FO	CTRL	error	01/04/2019/ 22:46
Advanced Information	5		F0	CTRL	error	01/04/2019/ 22:21
	6		F0	CTRL	error	01/03/2019/ 11:16
Contractor Information	СІ	ear His	story	) (	Error	Code Description
Help						



Indoor Unit Type	Model Number
No.	Serial number.
IDU#	Address of the faulty indoor unit. If the error is related to the outdoor unit, MS box or controller "" is displayed.
Error	Error code number. Use this number to look up the error in the VRF app.
Туре	IDU - Indoor unit, ODU - Outdoor unit, CTRL - Controller. Identifies what equipment type is faulty.
Time	Date and time of the error.

Table 8. Error Code Information

Tap the Error Code Description button to enter the error code details screen. Detailed error code analysis and fault finding information is available in the Lennox VRF app.

Home < Advanced Information < Error Code						
General	No.	IDU#	Error	Туре		Date and Time
Swing			F0	CTRL	error	11/05/2019/ 23:10
Schedule			FO	CTRL	error	01/05/2019/ 04:02
Daylight Savings Time		#4	F1	IDU	error	01/05/2019/ 03:56
Room Temperature&RH%			FO	CTRL	error	01/04/2019/ 22:46
Advanced Information			FO	CTRL	error	01/04/2019/ 22:21
			F0	CTRL	error	01/03/2019/ 11:16
Contractor Information	С	lear Hi	story	)	Error	Code Description
Help				L L		

Home < Help < Error Cod	le	
General	Indoor	Unit Error Code
General	FE	No address
Swing	E0	Mode conflict
	E1	Communication error between indoor and
Schedule		main outdoor unit
	E2	T1 (Room temperature sensor) malfunction
Daylight Savings Time	E3	T2 (Middle of evaporator sensor) malfunction
	E4	T2B (Outlet of evaporator sensor)
Room Temperature&RH%		malfunction
Advanced Information	E5	T2A (Inlet of evaporator sensor) malfunction
Advanced information	E6	DC fan motor error
Contractor Information	E7	EEPROM failure
oond deed information	Eb	EEV malfunction
Help	Ed	ODU Fault
	<b>CC</b>	High Water Alarm



### Tap the Clear History button to delete the error code history from the controller.

Home < Advanced Information < Error Code						
General	No.	IDU#	Error	Туре		Date and Time
Swing	1		F0	CTRL	error	11/05/2019/ 23:10
Schedule	2		FO	CTRL	error	01/05/2019/ 04:02
Daylight Savings Time	3	#4	F1	IDU	error	01/05/2019/ 03:56
Room Temperature&RH%	4		F0	CTRL	error	01/04/2019/ 22:46
Advanced Information	5		F0	CTRL	error	01/04/2019/ 22:21
	6		F0	CTRL	error	01/03/2019/ 11:16
Contractor Information Help	C	lear His	story		Error	Code Description

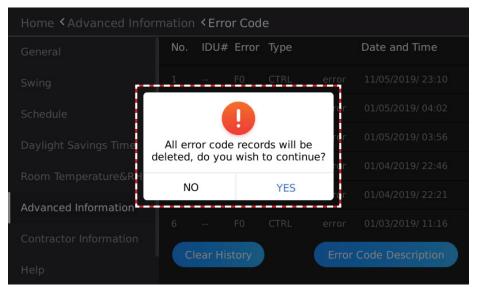


Figure 111. Clear Error Code History

# HHE Dry Contact Relay Interface Status Query

Tap the HHE Interface button to access the HHE relay query interface.

Home < Advanced Information				
General	Operation Data	>		
Swing Schedule	Error Code	>		
Daylight Savings Time	HHE Interface	>		
Room Temperature&RH%	Controller	>		
Advanced Information				
Contractor Information				
Help				

Figure ##. Access HHE Dry Contact Relay Interface

Tap the drop-down button on the right of the Indoor Unit Address, and select an indoor unit address to query the status of dry contacts.

Home < Advanced Information < HHE Interface				
General	Number of Indoor Units Connected	1		
Swing Schedule	Indoor Unit Address	6 <del>~</del>		
	541	ing at the		
Daylight Savings Time	FAN	inactive		
Room Temperature&RH%	СТОМ	inactive		
Advanced Information	HTON	inactive		
Contractor Information				
Help	AUXH	inactive		

Figure 112. View HHE Dry Contact Relay Information

# Controller Information

Tap the Controller button to access the controller information interface.

Home < Advanced Information				
General	Operation Data	>		
Swing Schedule	Error Code	>		
Daylight Savings Time	HHE Interface	>		
Room Temperature&RH%	Controller	>		
Advanced Information				
Contractor Information				
Help				

Home < Advanced Information < Controller				
General	Controller Model Number	V0STAT51P-3		
Swing Schedule	Controller Software Version	18.11.28.01		
Daylight Savings Time	Group No.			
Room Temperature&RH%	Space Temp			
Advanced Information	Space RH%			
Help				

Figure	113.	Controller	Information
riguio		00110101101	mormation

### **Firmware and Setting Information**

Tap the Firmware and Setting button to access the Software Update and Firmware screen.

Home < Service Menu < Firmware and Setting				
Indoor Fan Settings	Firmware Update	>		
Static Pressure Occupancy Sensor	Backup Settings	>		
Humidity Sensor	Import Settings	>		
Aux/AH. Heat Contact	Reset Settings	>		
Setpoint Limit				
Lock				
Firmware and Setting				

Figure 114. Access Firmware and Settings

# **A** CAUTION

DO NOT turn off power to the indoor unit or the controller during the software update process. Damage to indoor unit and controller boards may occur.

# **A** IMPORTANT

After initial setup, make a back up copy of the controller settings by following the instructions on page 97. Store the copy on a large capacity flash drive for permanent storage. This ensures the controller can be reset to initial settings if needed.

### Software Version

Tap the Firmware and Setting button to access the software update screen.

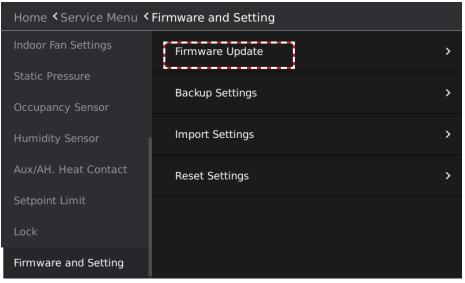


Figure 115. Access Software Update & Version Information

The software update screen displays the current version of the wired controller software.

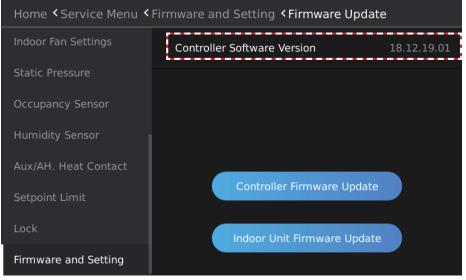


Figure 116. Software Version

### Controller Software Update

- 1. Insert the USB containing the software update files into the USB port on the bottom of the controller.
- 2. Tap the Controller Firmware Update button, and a list of software installed in the USB device will display.

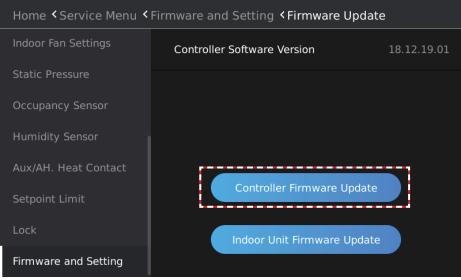


Figure 117. Controller Software Update

3. Select the controller software version number to upgrade.

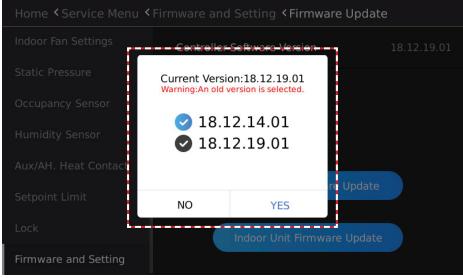


Figure 118. Available Controller Software Update Files

4. Tap YES to upgrade the controller software. Wait for about 10 seconds. Then the Update success pop-up window will display. Or, tap NO to return to the previous screen.

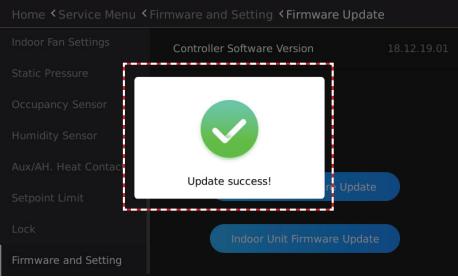


Figure 119. Controller Software Update Success!

5. After the controller software upgrade, the Reboot the system to finish the update prompt box will display. Tap YES to restart the system, or tap NO to return to the previous interface.

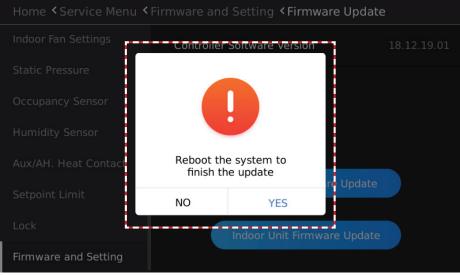


Figure 120. Reboot After Controller Software Update

### Indoor Unit Software Update

Update the connected indoor unit software; requires one-to-one connection between indoor unit and controller.

1. Insert the USB containing the software update files into the USB port on the bottom of the controller.

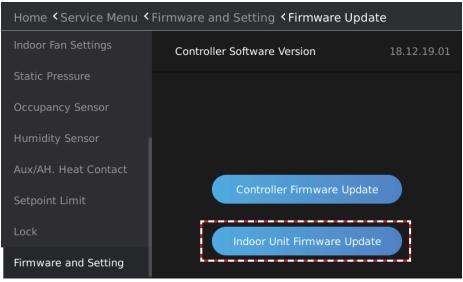


Figure 121. Indoor Unit Software Update

- 2. Tap the Indoor Unit Firmware Update button, and a list of software installed in the USB device will display.
- 3. Select the indoor unit software version number to upgrade.

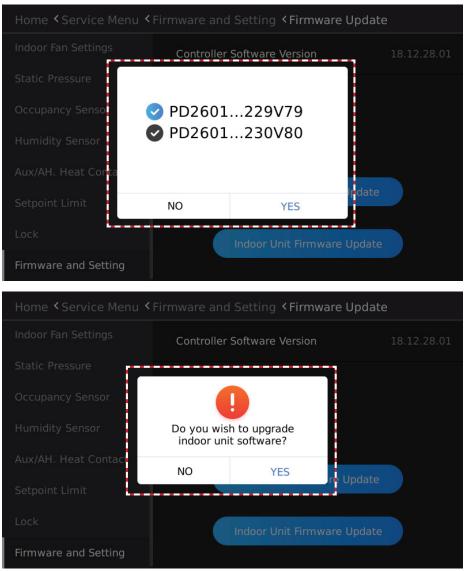


Figure 122. Indoor Unit Software Update File Selection

- 4. Tap YES, and then the Do you wish to upgrade indoor unit software? pop-up window will display. Or, tap NO to return to the previous screen.
- 5. The Upgrading software notification will display until the update is complete.

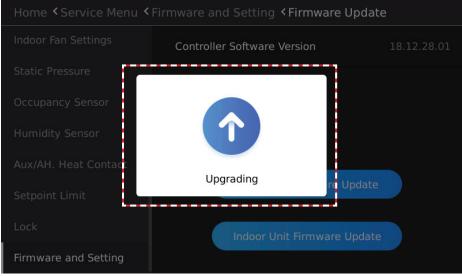


Figure 123. Indoor Unit Software Update In Progress

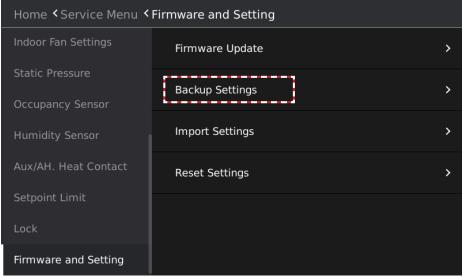
If the software upgrade is unsuccessful, the notification Indoor unit software upgrade failed. will display.



Figure 124. Indoor Unit Software Update Failure

### Setting Parameters Backup

Tap the Backup Settings button to export parameters for the general function settings and advanced settings of the wired controller to the connected USB device.



### Figure 125. Backup Controller Settings

The Backup Complete pop-up window displays after the setting parameters have been exported.

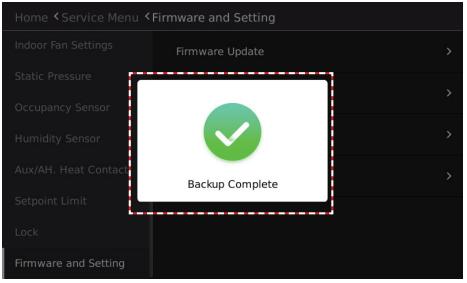
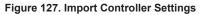


Figure 126. Backup Complete Notification

### Setting Parameters Import

Tap the Import Settings button to import parameters for the general function settings and advanced settings of the wired controller from the connected USB device.

Home < Service Menu < Firmware and Setting			
Indoor Fan Settings	Firmware Update	>	
Static Pressure Occupancy Sensor	Backup Settings	>	
Humidity Sensor	Import Settings	>	
Aux/AH. Heat Contact	Reset Settings	>	
Setpoint Limit			
Lock			
Firmware and Setting			



The Settings imported successfully pop-up window displays after the setting parameters have been exported.

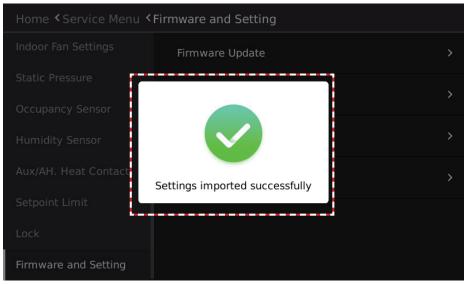
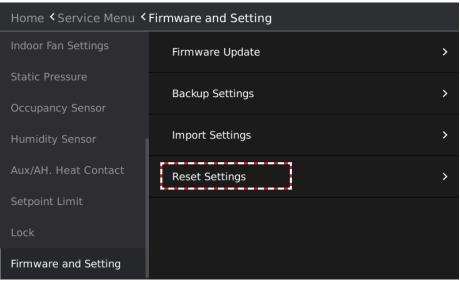


Figure 128. Import Successful Notification

### Reset Settings

Tap the Reset Settings button to reset the settings of the wired controller to factory default.



### Figure 129. Reset Controller to Factory Settings

A prompt reading "All settings will be reset. Do you wish to continue?" will display. Tap YES to restore all settings of the wired controller to factory settings, or tap NO to return to the previous screen.

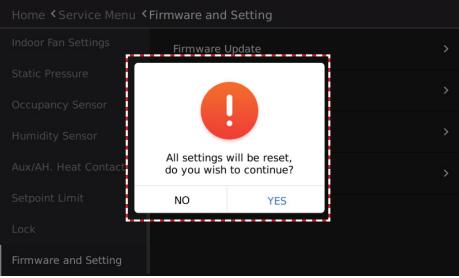


Figure 130. Reset to Factory Settings Confirmation

## Help

### Get On-screen Help

- Tap the Help button to access the help screens.
- Tap the Home Page Instruction button to access the icon description screen.
- Tap the Error Code button to access the error code description screen.

Home < Help		
Swing	Home Page Instruction	>
Schedule	Error Code	>
Daylight Savings Time		
Room Temperature&RH%		
Advanced Information		
Contractor Information		
Help		
Service Menu		

Figure 131. On-Screen Help



#### Warning:

Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Statement of digital devices:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/ TV technician for help.

### Lennox Information:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Lennox Industries Inc.

Address: 2140 Lake Park Blvd, Richardson, TX 75080, USA Phone: 1-844-438-8731

### **Technical Support**

1-844-GET-VRF1 (1-844-438-8731) vrftechsupport@lennoxind.com www.LennoxVRF.com

Download the app from the Apple App Store or the Google Play store.

