#### USER'S INFORMATION MANUAL

Hx3 TOUCH SCREEN THERMOSTAT MODELS: S1-THXU430W



#### **TABLE OF CONTENTS**

PRODUCT DESCRIPTION	2	Locations Screen	30
Content	2	App Home and Secondary	
Features	4	Home Screens	34
THERMOSTAT CONTROLS	5	MANAGING DEALER ACCESS	35
Home Screen	7	Using the Tips Screen	36
Secondary Home Screen	8	Granting Dealer Access	37
Modes of Operation	9	Revoking Dealer Access	38
SETTINGS	11	APP SETTINGS	38
Away Mode	12	Programmable	39
Humidity Settings	13	Schedule Management	39
Fan Settings	14	Location, Room, and Dealer	41
Lockout Settings	15	Away Mode	41
Banner Information	16	Notifications	43
ADVANCED SETTINGS	17	AMAZON ALEXA SETUP	44
Schedule	18	Using Alexa in Celsius	44
Wi-Fi Network Status	24	Alexa Skill Voice Commands	44
Hx THERMOSTAT APP	25	APPLE WATCH SETUP	46
Registration and Login	25	Warranty	47
Mi Fi Connectivity	27		

Read all sections of this manual and keep the manual for future reference.

## **M** WARNING

Cancer and Reproductive Harm – www.P65Warnings.ca.gov

#### PRODUCT DESCRIPTION

#### Content

The following figure shows the items in the  $\mbox{Hx}\mbox{3}^{\mbox{\tiny TM}}$  Touch Screen Thermostat box:

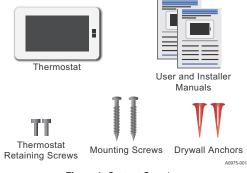


Figure 1: Content Overview

#### 5407935-UUM-D-1119

Figure 2 shows the tools required for installing the Hx3 Touch Screen Thermostat. It is best practice that a qualified technician performs the installation.



Figure 2: Tools for Installation

#### Features

The following table describes the main features of the Hx3 Touch Screen Thermostat.

Feature	Description
Control of heating and cooling outputs	Uses RS485 modbus
Indoor temperature sensing	> 0.5°F accuracy from 60°F to 90°F
Remote sensor	Connects to a standard 10k NTC thermistor (P/N: S1-02542683000)
Humidity sensing and display	Operates cool-to-dehumidify functionality and dehumidification/humidification functionality in communicating systems
Presence detection	Activates backlight when the thermostat sensor detects user presence
Near Field Communication (NFC) functionality	Used for passive/active limited data transfer
Wi-Fi connectivity	Supports 802.11 a/b/g/n standards and utilizes a Broadcom chipset
Cloud connectivity	Apple iOS and Android app available for user smartphone or tablet control
Optimized installation	Spring-loaded connectors that accept 16–24 AWG wire. A screwdriver is not required for wire insertion and removal.
Optimized boot time	3-second boot time before temperature is dis- played and the thermostat is fully operational
4.3 in. TFT 320x240 QVGA color display	Enhanced 80° viewing angle in all directions
RS-485 communications bus	For modbus communication protocols
Over the Air (OTA) functionality	Can reprogram the board functionality Wi-Fi

#### THERMOSTAT CONTROLS

**IMPORTANT:** Never use sharp instruments, such as a pencil or pen, to tap touch screen controls or keys. To prevent damage to the thermostat, always tap keys with your fingertip.

To familiarize yourself with the thermostat controls, see Figures 3 and 4.

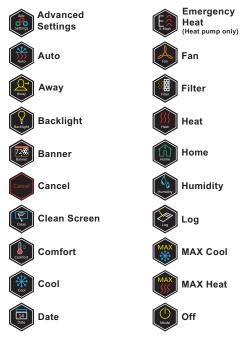
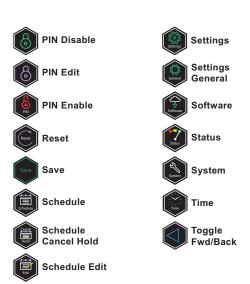


Figure 3: Thermostat Controls

A1189-001



Schedule Settings

Service

Figure 4: Thermostat Controls

#### NOTICE

Do not spray any liquid directly on the thermostat. Spray liquids onto a cloth, and use the damp cloth to clean the screen. Use water or household glass cleaner. Do not use abrasive cleansers.

A1190-001

#### Home Screen

For a quick reference guide to the Home screen, see Figure 5.

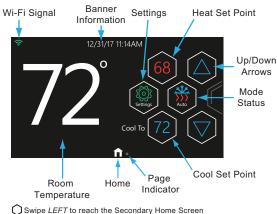


Figure 5: Home Screen

The Home and Secondary Home screens may differ slightly, depending on your heating and/or cooling system and the display settings of the thermostat.

A1191-001

#### Secondary Home Screen

On the Home screen, swipe left to reach the Secondary Home screen. The Secondary Home screen allows you to do the following:

- · Access the Settings screen.
- · Activate Max Heat mode or Max Cool mode.
- · View and edit Humidity settings if enabled.
- · Choose Home mode or Away mode.

For a quick reference guide to the Secondary Home screen, see Figure 6.

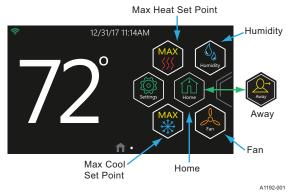


Figure 6: Secondary Home Screen

To return to the Home screen, swipe right or tap Home.

#### Modes of Operation

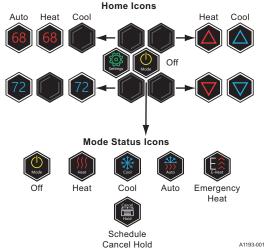


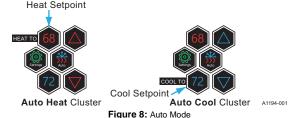
Figure 7: Home and Mode Status Icons

On the Home screen, different modes of operation are available:

- Off mode: In this mode, no heating or cooling operation occurs.
- · Heat mode: Use this mode for heating.
- · Cool mode: Use this mode for cooling.
- Auto mode: Use this mode for automatic heating and cooling.

#### **Activating Auto Mode**

You can activate Auto mode on the Home screen. See Figure 5. For automatic heating, on the Home screen, tap the **Heat setpoint** (red) and use the Up/Down arrows to select the required setpoint. For automatic cooling, on the Home screen, tap the **Cool setpoint** (blue) and use the Up/Down arrows to select the required setpoint. See Figure 8.



### Activating Max Heat Mode and Max Cool Mode

On the Secondary Home screen (see Figure 6), you can tap the **Max Heat** icon or the **Max Cool** icon to run equipment at maximum capacity for 10 minutes or until the temperature increases or decreases by 10°F respectively.



Figure 9: Max Heat Mode and Max Cool Mode

#### **SETTINGS**

Use the Settings screen to configure the thermostat settings. For an overview of the settings icons, see Figure 10.



Figure 10: Settings Icons

Tap the **Comfort**, **General**, or **System** icons to access the secondary settings screens (see below for the options available on each screen).

Comfort	<u>General</u>	<u>System</u>
Humidity (if enabled)	Advanced Settings	Status
Fan	Clean Screen	Log
	PIN	Filter
	Time/Date	Software
	Back light	
	Banner	

To configure a thermostat setting:

- On the Home Screen or the Secondary Home screen, tap the Settings icon.
- Tap the relevant icons to view or edit settings. For example, tap the General icon and then tap the Time icon to change the time the thermostat displays.
- 3. To return to the Settings screen, swipe left or right.

#### Away Mode



Figure 11: Away Mode

Use Away mode to select setpoints outside the schedule. This is useful if you want to adjust heating and cooling for periods when you are not at home.

#### To enable Away mode:

- On the Settings screen, tap the Away icon. Tap the heat or cool Up/ Down arrows to select the required setpoint or tap Reset, tap Save, and return to settings.
- On the thermostat Secondary Home screen, tap the Home icon. See Figure 6. The setpoints change to the Away setpoints on the thermostat and the app. The Away and Cancel Hold icons are visible on the Home screen of the thermostat and the app.
- To disable, tap the Away icon on the thermostat or app. Alternatively, tap any setpoint, the Cancel Hold icon, or an Up/Down arrow. The setpoints change to the Home setpoints on the thermostat and the app, that is, the scheduled heating and cooling setpoints.

#### **Humidity Settings**

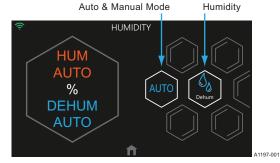


Figure 12: Humidity Settings

To move between automatic and manual mode, tap  ${\bf Auto}$  or  ${\bf Man.}$  See Figure 12.



- In manual mode, you can change setpoints by tapping the Up/Down arrows.
- To choose the Humidify or Dehumidify setting, tap the Humidity icon.
- Auto mode automatically sets the Humidity setpoint based on indoor and outdoor temperatures.

#### NOTICE

Auto mode requires an outdoor sensor. If condensation appears on your windows, lower the Humidity setpoint or switch to Auto mode.

#### Fan Settings

To view or change the fan settings:

- 1. On the Secondary Home screen, tap the Fan icon.
- 2. Tap the Up/Down arrows to view or select fan settings as shown in Figure 13. For the different fan options, see Figure 14.



Figure 13: Fan Screen



Figure 14: Fan Options

# CFM Percentage - Applies to Communicating Systems Only

The blue Up/Down arrows and CFM percentage only appear if the following apply:

- The fan operation is NOT in Auto mode.
- You are using communicating indoor equipment.



#### Lockout Settings

You can lock your thermostat by setting a PIN. You can do this to prevent someone from tampering with your thermostat, for example.

To activate the Lockout setting and set a PIN:

- 1. On the Home screen, tap the Settings icon.
- On the Settings screen, tap the General icon, then tap the PIN Enable icon.
- 3. On the Lockout screen, tap the **Enable** icon. See Figure 15.
- On the Set Pin screen, select a 3-digit PIN. Your PIN selection appears in the banner area. See Figure 17.
- 5. Tap Save. Your thermostat is now set to locked.
- To edit or disable the PIN, on the Lockout screen, tap the Edit PIN icon or the Disable icon. See Figure 16.



Figure 15: Lockout Disabled

Figure 16: Lockout Enabled

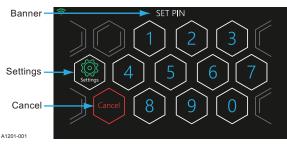


Figure 17: Set Pin Screen

#### Banner Information

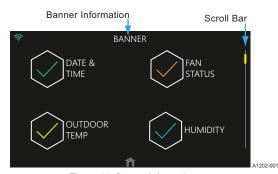


Figure 18: Banner Information



Figure 19: Banner Information

To specify the information shown in the banner of the thermostat:

- On the Settings screen, tap the General icon, then tap the Banner icon.
- On the Banner screen, use the yellow scroll bar to view all of the available options.
- Tap the buttons to enable or disable banner information. When a setting is enabled, a check mark is displayed.

#### ADVANCED SETTINGS

To configure the thermostat, go to the Advanced Settings screen. See Figure 20. When you select an entry from the list of advanced settings, a selection screen similar to the one shown in Figure 21 displays.



Figure 20: Advanced Settings

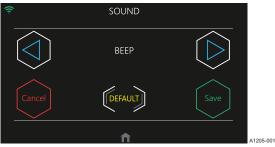


Figure 21: Advanced Settings - Sound

The following advanced settings are available:

- Synch Time to Server: If the thermostat is connected to a Wi-Fi
  router, both the date and time are synced with the server based on
  the timezone of the smart device used to connect the thermostat to
  the router
- Screen Timeout: Allows you to specify how long the backlight of the thermostat remains on after you stop interacting with it. The options are 5, 10, 15, 20, 25, or 30 seconds.
- Proximity: Allows you to enable or disable presence detection. If you enable the proximity feature, the backlight of the thermostat activates when the thermostat sensor detects user presence.
- Prox Sensitivity: Allows you to adjust the sensitivity of the proximity feature. The default setting is medium and you can change this to high or low. High sensitivity increases the detection range of the thermostat sensor.
- Daylight Savings: Allows you to enable or disable Daylight Savings. The default setting is enabled.
- Wireless: Allows you to enable or disable the Wi-Fi functionality of the thermostat. The default setting is enabled.
- Sound: Allows you to adjust the thermostat sound. The options are OFF, CLICK, or BEEP. The default option is CLICK. See Figure 21.

#### Schedule

To access the Schedule functionality, go to the Settings screen, and tap the **Schedule** icon. You have the option to select one of the following:

Schedule Settings



Edit Schedule



#### **Understanding Schedule Settings**

On the Schedule Settings screen, tap the buttons to enable the required schedule settings. When a setting is enabled, a check mark is displayed. Use the scroll bar to view all options.

As shown in Figure 22, you can choose one of the following modes:

- Programmable: This mode allows you to set up heating and cooling setpoints for four periods in each day of the week. These periods are referred to as day parts in this document. When you select Programmable mode, the default schedule is displayed on the Schedule screen. You can edit the default schedule as required using the Edit Schedule screen.
- Non-Programmable: This means that the thermostat runs in a simplified mode that satisfies the selected heating or cooling setpoints. In this mode, the Edit Schedule icon does not appear because the scheduling functionality is disabled.

You can change the mode you have selected if required. To do so, go to the Schedule Settings screen and tap the button for the required mode.



Figure 22: Schedule Settings Screen

Override settings are also available on the Schedule Settings screen. See Figures 23 and 24. These are only applicable in Programmable mode. If you want to suspend the set schedule, you can choose one of the following options:

- Until Cancelled: Overrides the schedule until you tap the Cancel Hold icon
- Next Event: Overrides the schedule until the next event occurs, that is, the next day part
- Hours (1–12): Overrides the schedule for the number of hours specified

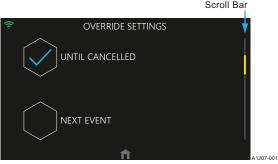


Figure 23: Schedule Settings Screen

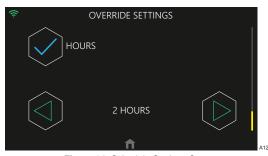


Figure 24: Schedule Settings Screen

When you select an override setting, if you tap the Up/Down arrows on the Home screen, the schedule **Cancel Hold** icon appears. Tap the **Cancel Hold** icon to revert the system to the set schedule. The **Cancel Hold** icon disappears.



#### **Editing the Schedule**



Figure 25: Schedule Screen - Default Schedule



Figure 26: Edit Schedule Screen

#### To edit the schedule:

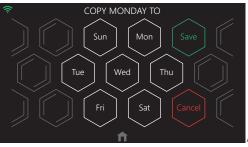
- On the Schedule screen, swipe left or right to navigate to the day of the week that you want to edit, for example, Monday.
- Tap the day part you want to edit, for example, Monday Awake. See the example outlined in green in Figure 25. The Edit Schedule screen appears.
- Tap the setpoint, time (hour and minute), period (AM/PM), or fan for editing. See Figure 26.
- 4. Repeat steps 1–3 to edit the day parts in each day as required.

On the Edit Schedule screen, the Up/Down arrows change color based on the selected option:

- Red for heat
- Blue for cool
- · Green for time

The following options are available on the Schedule screen:

- Copy: Allows you to copy the scheduled day to any other day of the week. See Figure 27.
- Events: Allows you to choose whether the schedule contains 4 day parts or 2 day parts. The default is 4 day parts. See Figures 28 and 29.
- Default: Allows you to reset the schedule to the default schedule.
   See Figure 25.



A1211-001

Figure 27: Copy Screen



Figure 28: Events Screen



Figure 29: Schedule Screen - 2 Day Part

#### Wi-Fi Network Status



Figure 30: Wireless Status Screen

To connect the Hx3 Touch Screen Thermostat to a Wi-Fi network, you must perform wireless setup using the Wireless Status screen and the  $Hx^{TM}$  Thermostat app. Follow the instructions provided in the Wi-Fi Connectivity section.

To access the Wireless Status screen, tap the **Wi-Fi Signal Strength** icon in the banner area. On the Wireless Status screen, you can check Wi-Fi connectivity information. You can also disconnect from a Wi-Fi network if required. To do so, tap **Disconnect**.

#### NOTICE

Your HVAC system and thermostat will operate if the Wi-Fi connection is lost. Only Hx Thermostat app usage and software updates are affected when offline.

#### Hx THERMOSTAT APP

The Hx Thermostat app is available for Apple iOS at the App Store or Android devices at Google Play. Search for Hx Thermostat.

#### Registration and Login



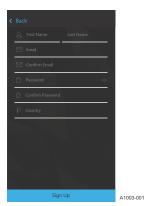


Figure 31: Login/Signup Screen

Figure 32: Registration

#### Part 1: Register for a Hx Thermostat App Account

A1002-001

- 1. Tap Sign up. See Figure 31.
- Follow the prompts to register your email address and choose a password. See Figure 32. The password must contain a minimum of 8 characters, including a lowercase letter, an uppercase letter, and a number or special character.
- 3. In the email verification dialog box, tap OK.
- Check your smart device email inbox for the confirmation email. See Figure 33.
- 5. Review and follow the link. Tap **OK** to confirm your email.

### NOTICE

iOS users cannot use the Gmail native app. iOS users can receive Gmail by setting up a Gmail account through the iOS email app.

#### NOTICE

Only one email account can be registered to a Hx3 Touch Screen Thermostat. If more than one user needs to access the thermostat with a smart device, download the app and log in with the registered email address and the password created during registration. DO NOT create another user account. If you register and pair a different email account to the thermostat, the original email account is no longer paired to the thermostat for remote access.



Figure 33: Verification Link Email

#### NOTICE

You will **NOT** be able to confirm your Hx Thermostat app account if you open the confirmation email link from your **PC**. **laptop**, or **Mac**.

#### Part 2: Log In

- 1. Tap Log In.
- 2. Enter your registered email address and the password you chose during the registration process (see Part 1: Register for a Hx Thermostat App Account). The Locations screen displays on your smart device. See Figures 34 and 35.





Figure 35: Locations

If your Wi-Fi router is a dual band router, confirm that your smart device is connected to the 2.4 GHz frequency. DO NOT connect your smart device to the 5 GHz frequency.

#### Wi-Fi Connectivity

You must complete wireless setup to connect the thermostat to a Wi-Fi network.

### Part 1: Prepare for Wireless Setup

- 1. Ensure that your smart device is connected to Wi-Fi.
- 2. Ensure that the Locations screen is visible on your smart device. See Figure 35.

#### Part 2: Complete QR Code Setup



Figure 36: Wireless Status Screen

- On the Locations screen, tap Plus (+) and follow the steps in the app or steps 2–4 below.
- On the thermostat Home screen, tap the red Wi-Fi icon.
- 3. On the Wireless Status screen, tap Setup. See Figure 36.
- Wait for the QR code to appear on the thermostat, and use your smart device to scan the displayed QR code.

#### NOTICE

If your smart device does not scan the QR code or the QR code is not visible, follow the instructions in the Manual Setup Without a QR Code section

#### Manual Setup Without a QR Code

- 1. Tap Or Enter Code Manually at the bottom of the app.
- Enter the 12-digit alphanumeric SSID displayed on the thermostat Wireless Status screen. The SSID is case-sensitive. See the SSID example highlighted in Figure 37.



Thermostat SSID Location



Figure 37: SSID Example

A1216-001

### NOTICE

You MUST connect the thermostat to the 2.4 GHz frequency on dual band routers.

Part 3: Complete Wireless Setup



A1217-00

Figure 38: Wireless Setup Completion

- 1. Select the network Wi-Fi. See Figure 38.
- 2. Enter the password.
- Enter the location name, for example, Home. The location name is a name for the thermostat. The name that you choose is displayed on the Locations screen.
- 4. Enter the room name, for example, Living room. The room name that you choose is displayed in the banner area of the app Home and Secondary Home screens. Wireless setup is now complete. You can navigate through the tutorial provided, or tap the three-bar menu icon to return to the Locations screen.

**IMPORTANT:** If the smart device fails to connect, on the thermostat Wireless Status screen, tap the **Wi-Fi** icon, tap **Disconnect**, and repeat steps 1–4.

#### NOTICE

The smart device might be connected to the RIPL network. In this case, go to the smart device settings and, under Wi-Fi, choose the option to forget the RIPL network.

#### Locations Screen





Figure 39: Locations

Figure 40: Menu

The Locations screen allows you to do the following:

- Access the menu
- Access the app Home Screen for your Hx3 Touch Screen Thermostat
- · Add and manage multiple Hx3 Touch Screen Thermostats

#### Viewing the Menu

To view the menu, tap the three-bar menu icon in the upper left corner of the screen. See Figure 39. As shown in Figure 40, the following menu options are available:

- · Locations: Brings you to the Locations screen
- Tutorial: Provides information about app icons, the Home and Secondary Home screens, settings, and the display of faults

- Manage Dealer Access: Brings you to the Manage Dealer Access screen. See the Managing Dealer Access section.
- About: Provides information about the app software revision and a link to the privacy policy
- Logout: Logs you out of the app. When you log out, the Login screen displays.

#### Accessing the App Home Screen

When you add a thermostat to the Locations screen, the location name of the thermostat is displayed. To access the app Home screen for a thermostat, tap the relevant location name. In the example in Figure 39, one thermostat with the location name Home is available. To access the app Home screen for the thermostat, you would tap **Home**. For details about the app Home screen, see the App Home and Secondary Home Screens section.

#### **Adding Multiple Locations**

You can add multiple Hx3 Touch Screen Thermostats to the Locations screen. For example, if you have a thermostat in your main residence, and you also have one in a guest house or vacation home, you can use the Locations screen to manage both thermostats.

If you have multiple thermostats, you can display all of them on the Locations screen. However, you can also opt to add a thermostat to an existing location. This is useful, for example, if you have multiple thermostats within the same residence and you want to group them together. When you add a thermostat to an existing location, a Secondary Locations screen that displays the location name of the thermostat is enabled. In the example in Figure 41, a thermostat with the location name Office has been added to the existing location Home.

To add another thermostat:

- 1. On the Locations screen, tap Plus (+).
- Follow the steps in the Wi-Fi Connectivity section to connect the thermostat to a Wi-Fi network.
- 3. On the Enter Location Name Below screen:
  - a. Enter a location name. The location name is displayed on the Locations screen.

#### Or

b. Select an existing location and enter the location name. A Secondary Locations screen that displays the location name is enabled.

Enter a distinct location name to distinguish between thermostats.

#### Using the Secondary Locations Screen



Figure 41: Secondary Locations Screen

If you add a thermostat to an existing location, this enables a Secondary Locations screen. See Figure 41. When you tap the location name on the Locations screen, the Secondary Locations screen displays before the app Home Screen for the thermostat.

You can use the Secondary Locations screen to do the following:

- Add more thermostats to the Secondary Locations screen. To do so, tap Plus (+) and follow the steps in the Wi-Fi Connectivity section to connect the thermostat to a Wi-Fi network.
- Access the app Home screens for the thermostats displayed. To do so, tap the location name of a thermostat.
- · Edit the location name
- · Delete the location

#### 5407935-UUM-D-1119

To edit the location name:

- 1. On the Locations screen, tap the location name, for example, **Home**.
- 2. On the Secondary Locations screen, tap the gear icon in the upper left corner. See Figure 41.
- 3. Tap Edit Location Name. A keyboard is activated.
- 4. Edit the location name as required. The edited name is displayed on the Locations screen.

To delete the location:

- On the Locations screen, tap the location name, for example, Home.
- 2. On the Secondary Locations screen, tap the gear icon in the upper left corner. See Figure 41.
- 3. Tap Delete Location.
- 4. Tap **Yes, Delete this Location** to confirm you want to delete the location. The location is removed from the Locations screen.

**Note:** When you delete a location from the Locations screen, any locations grouped under the location are also deleted.

#### App Home and Secondary Home Screens

The app Home and Secondary Home screens behave in the same manner as the thermostat Home and Secondary Home screens. The app updates with any changes you make to the thermostat, and the thermostat updates with any changes you make to the app.



COOLING 72°

MAX

Living Room

08/24/18 11:14AM

COOLING 72°

MAX

Living Room

08/24/18 11:14AM

Figure 42: Home Screen

Figure 43: Secondary Home Screen

A1220-001

To navigate between the Home and Secondary Home screens in the app, swipe left or right. To refresh the screen, swipe down in the area indicated by the arrow shown in Figure 42 until the spinning refresh icon appears.

Tap the **Settings** icon to access and manage the app settings. Some of these settings are specific to the app and differ from the thermostat settings, for example, the Geo-Fencing setting. Other settings such as Away mode work in a similar way in the app and the thermostat. See the App Settings section for more information.

#### MANAGING DEALER ACCESS

You can allow dealers to access your system, for example, to enable them to view the system and diagnose issues. You do this through the Grant Dealer Access screen, which is accessible if you receive an email from the dealer requesting access. See the Granting Dealer Access section for more information. The Tips screen provides an overview of the different permission levels. You can use the Manage Dealer Access screen to view and revoke dealer access as needed.

If you have not given a dealer access to your system, the Manage Dealer Access screen displays the text **No Shared Thermostats**. See Figure 44. If you have granted a dealer access to your system, the Manage Dealer Access screen is populated with this information. See Figure 45.

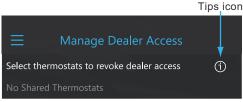


Figure 44: Manage Dealer Access



Figure 45: Revoke Dealer Access

A1018-001

A1017-001

#### Using the Tips Screen

On the Manage Dealer Access screen, tap the **Tips** icon to access the Tips screen. See Figure 44. The Tips screen helps you to understand:

- · Installer, Diagnostic, and Status role permissions
- Access duration (permanent and temporary)
- The icons relating to specific roles and access durations

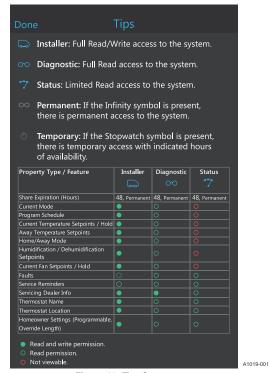


Figure 46: Tips Screen

# **Granting Dealer Access**

If a dealer wants to access your system, you receive an email request. This email contains a link that is specific to your smart device. You must use your smart device to open this link. You can not review the dealer access options if you open the link using your PC, laptop, or Mac. When you select the link, the Grant Dealer Access screen appears. On this screen, you can change the role type, duration, and locations as needed, and grant access to the dealer.

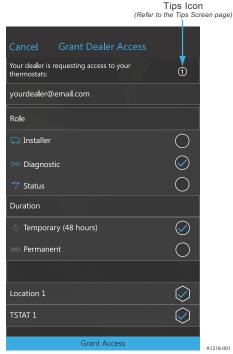


Figure 47: Grant Dealer Access

## Revoking Dealer Access

You can revoke dealer access at any time. To do so, go to the Manage Dealer Access screen and tap the button beside the relevant thermostat. See Figure 45.

# APP SETTINGS



Figure 48: App Settings

To access the app settings, tap the **Settings** icon on the app Home screen or Secondary Home screen. The settings are explained below.

# Programmable

Use the toggle button to select the **On** or **Off** option. When you select Programmable mode, the **Schedule Hold Length** functionality is enabled.

# Schedule Management



Figure 49: Schedule Screen

Figure 50: Edit Schedule Screen dule Hold Length settings to man-

You can use the Schedule and Schedule Hold Length settings to manage the thermostat schedule. To adjust the schedule:

- On the app Home screen, tap the **Settings** icon, then tap **Schedule**.
   On the Schedule screen, swipe left or right to navigate to the day of
- On the Schedule screen, swipe left or right to navigate to the day of the week you want to edit, for example, Tuesday. See Figure 49.
- 3. Tap the day part you want to edit, for example, Tuesday Awake. See Figure 49. The Edit Schedule screen appears.
- Tap the setpoint, time (hour and minute), period (AM/PM), or fan for editing. See Figure 50.
- 5. Repeat steps 2-4 to edit the day parts in each day as required.

On the Edit Schedule screen, the Up/Down arrows change color based on the selected option:

- · Red for heat
- Blue for cool
- · Green for time

To access the Fan screen, tap the **Fan** icon.

The following options are available on the Schedule screen:

- Default: Allows you to reset the schedule to the default schedule.
   See Figure 49.
- Events: Allows you to choose whether the schedule contains 4 day parts or 2 day parts. The default is 4 day parts. See Figure 51.
- Copy: Allows you to copy the scheduled day to any other day of the week. See Figure 52.



Figure 51: 4 Day Part Option



Figure 52: Copy Option

## Schedule Hold Length

Tap Schedule Hold Length to select one of the schedule override options: Until Cancelled, Next Event, or Hours (1–12).

# Location, Room, and Dealer

Tap Location or Room name to rename locations and rooms in the thermostat if required. To add or edit dealer information, tap **Dealer Information**.

# Away Mode

Use Away mode to select setpoints outside the schedule. This is done in a similar way in the Hx3 Touch Screen Thermostat.

To enable Away mode:

- Tap Setpoints. Tap the heat or cool Up/Down arrows to select the required setpoint or tap Reset, tap Save, and return to settings.
- On the app Secondary Home screen, tap the Home icon. See Figure 54. The setpoints change to the Away setpoints on the app and the thermostat. The Away and Cancel Hold icons are visible on the Home screens of the app and thermostat. See Figures 55 and 56.
- To disable, tap the Away icon on the app or thermostat. Alternatively, tap any setpoint, the Cancel Hold icon, or an Up/Down arrow. The setpoints change to the Home setpoints on the app and the thermostat, that is, the scheduled heating and cooling setpoints.



Figure 53: Setpoints



Figure 54: Home Icon



Figure 55: Away Icon



Figure 56: Cancel Hold

## Geo-Fencing

Use the toggle button to enable or disable the Geo-Fencing feature. Move the slider to specify a region within 1–25 miles from your home. When enabled, the Geo-Fencing feature triggers specific actions when your smart device enters or exits the specified region. When your smart device exits the region, you receive a notification to remind you to set Away mode. When your smart device enters the region, Home mode is automatically enabled and the setpoints change to the Home setpoints.

# NOTICE

You must enable Locations and Notifications on your smart device for the Geo-Fencing feature to function. The Geo-Fencing screen may vary between smart devices.

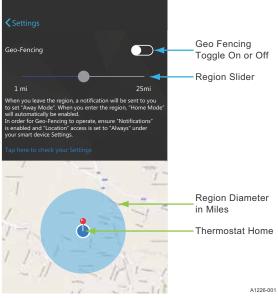


Figure 57: Geo-Fencing

## Notifications

Use the Notifications settings to help mange your system effectively.

Tap **Service Reminders** to set up an email reminder to contact your dealer for a routine system service in Spring and/or Fall. See Figure 58.

Tap Faults/System Log to enable fault alerts, view the system log, or email your dealer as needed. See Figure 59.





Figure 58: Service Reminders

Figure 59: Faults/System Log

Use the **Temperature Threshold** and **Humidity Threshold** toggle buttons to enable or disable the temperature and humidity thresholds. See Figure 60. Tap the **Min setpoint** or **Max setpoint** that you want to adjust, use the Up/Down arrows to select the required setpoint, and tap **Save**. Alternatively, you can tap **Reset**. A push notification is sent to alert you if the indoor temperature or humidity goes above or below the range you have specified.



Temp Threshold

Humidity Threshold

Figure 60: Min and Max Setpoints

## AMAZON ALEXA SETUP

You can use Alexa with the Hx3 Touch Screen Thermostat. Ensure that Alexa is installed, enabled, and connected to your home Wi-Fi network, and that the Alexa app is installed on a smart device.

## Follow these steps:

- From the smart device, select the Alexa app.
- In the Skills section or Smart Home Skills section, search for Hx Thermostat and enable the skill.
- Log in with your Hx Thermostat app account details (your registered email and password). Your Hx Thermostat app account is now linked with Alexa.
- Add the thermostat in one of the following ways:
  - Say "Alexa, discover my devices". OR
  - In the Smart Home section, in the Alexa app, tap Discover Devices.

# Using Alexa in Celsius

If required, you can use degrees Celsius rather than degrees Fahrenheit as the unit of temperature in Alexa. To do so:

- 1. From the smart device, in the Alexa app, tap Settings.
- 2. Locate and select Celsius as the unit of temperature.

# Alexa Skill Voice Commands

The following table provides examples of Alexa skill voice commands.

Command	Utterances
Set device temperature	"Alexa, set {Room Name} to {number} degrees"
	"Alexa, set {Room Name} to {number}"
	"Alexa, set the {Room Name} temperature to {number} degrees"
	"Alexa, change the {Room Name} to {number} degrees"
	"Alexa, turn {Room Name} temperature to {number} degrees"

Command	Utterances
Increase device temperature	"Alexa, increase the {Room Name} temperature to {number} degrees"
	"Alexa, increase the temperature to {number} in the {Room name}"
	"Alexa, increase the temperature to {number} degrees in the {Room Name}"
	"Alexa, raise the {Room Name} by {number} degrees"
	"Alexa, make {Room Name} warmer by {number} degrees"
	"Alexa, increase the {room Name} temperature by {number} degrees"
Decrease device temperature	"Alexa, decrease the {Room Name} temperature by {number} degrees"
	"Alexa, lower the {Room Name} temperature by {number} degrees"
	"Alexa, cool down {Room Name} by {number} degrees"
	"Alexa, decrease the {Room Name} temperature to {number} degrees"
	"Alexa, decrease the temperature to {number} in the {Room Name}"
	"Alexa, decrease the temperature to {number} degrees in the {Room Name}"
Turn device fan off	"Alexa, turn off {Room Name fan}"
Turn device fan on	"Alexa, turn on {room Name fan}"
Change mode	"Alexa, turn {Room Name} to Cool"
	"Alexa, turn {Room Name} to Heat"
	"Alexa, turn {Room Name} to Auto"
	"Alexa, turn {Room Name} Off"

## APPLE WATCH SETUP

To use the Hx Thermostat app on the Apple Watch:

- Pair the Apple Watch to an iPhone.
- 2. Download the Hx Thermostat app to the iPhone.
- 3. Log in to the Hx Thermostat app. Note that the interface on the Apple Watch is similar to the interface on the iPhone.
- 4. Follow Apple requirements for Apple Watch connectivity to iPhones.



A1050-001

Figure 61: Heat Setpoints on the Apple Watch

Using the Hx Thermostat app on the Apple Watch is similar to using it on your smart device. Swipe left or right to view all screens. Note these tips:

- Modes: Tap to view the Heat, Cool, and Auto modes, for example.
  - Setpoints: To increase and decrease the temperature, tap the required setpoint and turn the Digital Crown on the Apple Watch.
  - Multiple Locations: In the app, tap and hold the face of the watch.
     A Devices screen appears. Tap the Devices screen and the list of thermostats appears for editing.

**Third-Party Trademarks Notice:** For information about third-party trademarks, refer to the relevant company websites.

# Limited Warranty

#### Residential Thermostats

WARRANTY TERMS: Johnson Controls Unitary Products (hereinafter "Company") warrants this product to be free from defects in factory workmanship and material under normal use and service and will, at its option, repair or replace any parts, without charge, subject to the exclusions below, that prove to have such defects according to the terms outlined in this warranty. Company reserves the right, at its sole discretion, to provide a replacement unit in the place of repair parts, in which case the warranty period for the replacement unit is limited to the remainder of the original warranty period. Alternatively, Company may, at its option, extend a replacement allowance to be applied toward the purchase of a new unit marketed by Company. The exact amount of the allowance will be determined at the discretion of Company, based upon current market conditions, but in no case shall this allowance exceed thirty (30) percent of the original consumer purchase price of the unit excluding such items as ductwork, wring, piping, and installation costs. The warranty period for repair or replacement parts or unit provided hereunder shall not extend beyond the warranty period deted below. Company shall have no responsibility hereunder for installation, shipping, handling, or other charges except as specifically provided herein.

This warranty covers only the equipment described by the Product Model Number and Unit Serial Number on the equipment or listed on the Warranty Registration Card, and applies only to products installed in the United States, Canada, or Puerto Rico. Tampering, altering, defacing, or removing the product serial number will serve to void this warranty. This warranty extends only to the original consumer purchaser and is nontransferable. For this warranty to apply, the product must be installed according to Company recommendations and specifications, and in accordance with all local, state, and national codes; and the product or residence must not be removed from its place of original installation. This warranty does not apply to any unit sold over the Internet, by telephone or other electronic means unless the dealer that buys or sells a unit over the Internet, by telephone or other electronic means also installs the unit. In the absence of a recorded Warranty Registration Card, the warranty period will begin upon product shipment from Company. If you are unaware of the date the warranty became effective, contact Company at (877) 874-7378 or visit

FOR PRODUCT REGISTRATION: For your benefit and protection, register your product with Company promptly after installation. This will initiate the warranty period and allow us to contact you, should it become necessary. You can register your product online at <a href="https://www.upgproductregistration.com">www.upgproductregistration.com</a> or by returning the Warranty Registration Card on the back page of this packet.

Product Model Number:	Installation Date:
Unit Serial Number:	Installing Dealer:

FOR WARRANTY SERVICE OR REPAIR: Notify your Installing Dealer or a Participating Dealer, preferably in writing, as soon as possible after discovery of the problem. Be sure to include the Product Model Number, Unit Serial Number, Installation Date, and a description of the problem. You may find the Installing Dealer's name on this page or on the equipment, and you can locate Participating Dealers online.

If a Dealer response is not received within a reasonable amount of time, notify Company at: Johnson Controls Unitary Products, Consumer Relations, 5005 York Drive, Norman, OK 73069 or by telephone at (877) 874-7378. All warranty service or repair will be performed during regular business hours, Monday through Friday 9:00 AM - 5:00 PM. Service requests sent to Company without prior Dealer contact will be referred back to a Participating Dealer. Because this process takes time, it is in the best interest of the Consumer to contact a Participating Dealer directly.

WARRANTY PERIOD: The warranty period in years, depending on the part, is as shown in the chart below (see next page).

MODEL	DESCRIPTION	PARTS
S1-THXU280*, S1-THXU430W	Hx <sup>™</sup> TOUCH SCREEN THERMOSTAT	5 Years

MAINTENANCE: Company strongly recommends regular periodic preventive maintenance on this equipment. The person most familiar with the equipment in your HVAC system is a Participating Dealer. The Participating Dealer can ensure that your maintenance program meets the "Company Warranty" conditions, maximize the equipment efficiency, and service your unit within the mandated quidelines with regard to unlawful discharge of refrigerants into the atmosphere.

#### EXCLUSIONS: This warranty does not cover any:

- Shipping, labor, or material charges or damages resulting from transportation, installation, or servicing.
- Damage or repairs required as a consequence of mishandling, faulty installation, misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
- Damages or failure to start resulting from improper voltage conditions, blown fuses, open circuit breakers, or other inadequacy or interruption of electrical service or fuel supply.
   Fuses, either internal or external to the product.
- Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts.
- Products removed from their original location for re-installation purposes.
- Damages resulting from accident, abuse, fire, flood, alteration, or acts of God.
- Damages resulting from use of the product in a corrosive atmosphere.
- Normal maintenance, or damages resulting from failure to perform normal maintenance, as outlined in the installation and servicing instructions or owner's manual.
- 10. Cleaning or replacement of filters, nozzles, or orifices.
- Damages resulting from operation with inadequate supply of air or water; Damages resulting from failure to properly and regularly clean air and/or water side of condenser and evaporator.
- Damages resulting from: (I) freezing of condenser water or condensate; (II) inadequate or interrupted water supply; (III) use of corrosive water; (IV) fouling or restriction of the water circuit by foreign material or like causes.
   Damages caused by improper parts, components or accessories not suitable for use in or with
- the unit. For a list of parts that are known to be compatible please reference the equipment renewal parts list, contact a Participating Dealer for assistance, or call 1-877-874-7378.
- Electricity or fuel costs, or increases in fuel or electric costs, for any reason including additional
  or unusual use of supplemental electric heat.

This warranty is in lieu of all other express warranties. All implied warranties, including the implied warranty of merchantability and fitness for a particular purpose are limited in duration to the actual warranty period applicable to the part. Some states do not allow the disclaimer of implied warranties, so the above disclaimer may not apply to you. In addition, some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. In no event, whether as a result of breach of warranty or contract, tort (including negligence), strict liability, or otherwise, shall Company be liable for special, incidental, or consequential damages or expenses, including but not limited to loss of use of the equipment or associated equipment, lost revenues or profits, cost of substitute equipment, or cost of fuel or electricity.

The above limitations shall inure to the benefit of Company's suppliers and subcontractors. The above limitation on consequential damages shall not apply to injuries to persons in the case of consumer goods. Company does not assume, or authorize any other person to assume for Company, any other liability for the sale of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Subject to change without notice. Published in U.S.A. Copyright © 2019 by Johnson Controls. All rights reserved.

5407935-UUM-D-1119 Supersedes: 5407935-UUM-C-0819