

8. Operations

8.1 Unit Overview

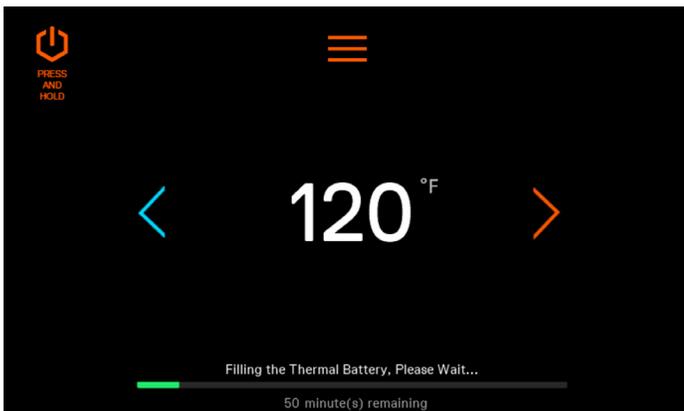
1. The display screen shows the user operating information of the **iE1 Electric Water Heater**.



2. The display screens given below are shown with an image as an example of the display screen and its applicable description and user operations wherever required.

8.1.1 Start Page – Temperature Setting

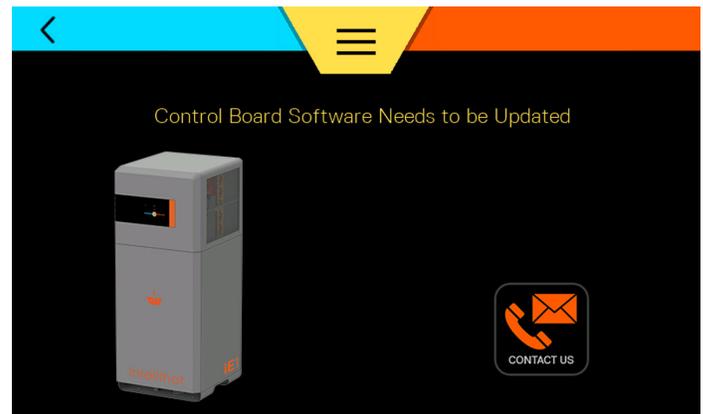
1. After the water heater is turned ON, the main screen will appear with the temperature setting option.
2. To increase the temperature as required, press the right arrow icon > shown in the image given below.
3. To decrease the temperature as required, press the left arrow icon < as shown in the image given below.
4. A loading bar will progress in the bottom the display screen as shown in the image given below.



5. The loading bar will disappear after the progress is fully completed.
6. To turn OFF the display screen, press the power icon on the left corner of the display screen.

8.1.2 Error Page

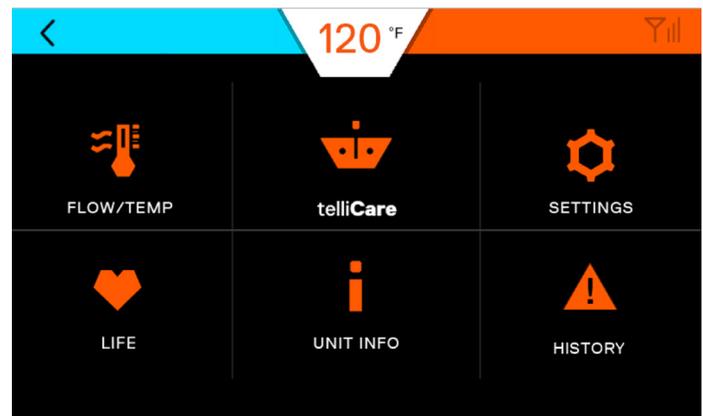
1. If the loading bar does not complete the progress, an error screen will appear as shown in the image given below.



2. If any other error code appears, please refer to Section "11.3 Troubleshooting Guide" on page 46.
3. Press the CONTACT US icon on the error page to access the contact information for any technical support on your iE1 Electric Water Heater product as shown in the image below.
4. Press the back icon < to go back to the previous menu.

8.1.3 Main Page – Menu Options

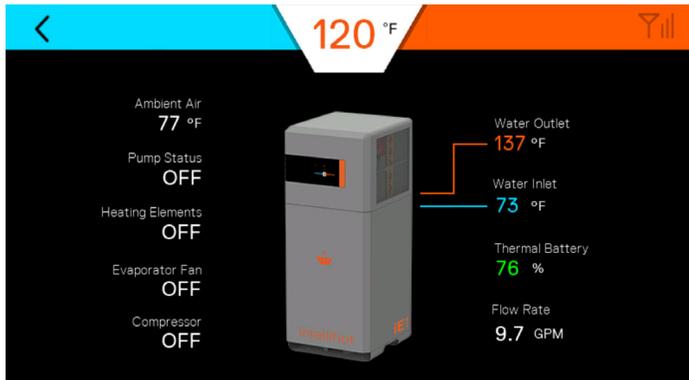
Press the menu icon as shown in "8.1.1 Start Page – Temperature Setting" to view the main page with the menu options as shown in the image given below.



Press the back icon < to go back to the previous menu.

8.1.4 FLOW/TEMP

1. Press the FLOW/TEMP icon as shown in Section “8.1.3 Main Page – Menu Options” to access the FLOW/TEMP options as shown in the image given below.



Nomenclature	Description
Water Inlet	Temperature of the Inlet Water
Water Outlet	Temperature of the Outlet Water
Thermal Battery	Percentage of Thermal Battery Charge
Flow Rate	Rate of water in Gallons Per Minute
Ambient Air temperature	Temperature of the atmospheric air.
Pump Status	ON/OFF status of the Pump
Heating Elements	ON/OFF status of the Heating Elements
Evaporator Fan	ON/OFF status of the Evaporator Fan
Compressor	ON/OFF status of the Compressor

2. Press the back icon < to go back to the previous menu.

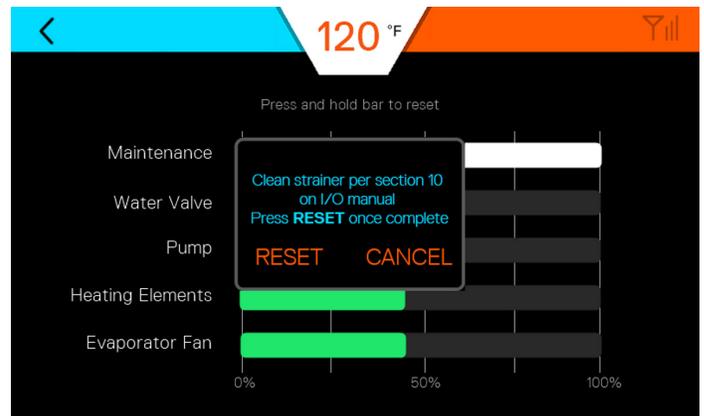
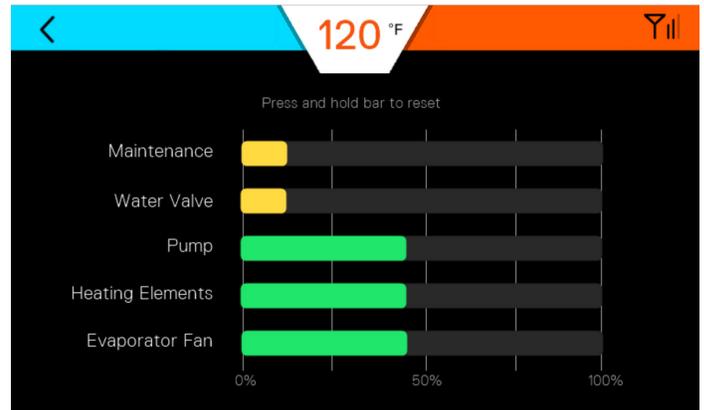
8.1.5 telliCare

1. Press the telliCare icon to access your subscription status of the telliCare service as shown in Section 8.2.1 Main Page – Menu Options.



8.1.6 Life

1. Press the LIFE icon to access the status of the life time of the components as shown in Section 8.2.1 Main Page – Menu Options.



- When a part is changed, the life of that parts should be reset to maximum. Press and hold bar to reset the life-status of the components.
- Enter the correct replacement code to re-set the life-status of the above components as shown in the above image.
- Press the back icon < to go back to the previous menu.

NOTE: Maintenance does not require a code to reset.

Part	Life Reset Code
Water Vave	1129
Pump	0517
Heating Elements	0106
Evaporator Fan	0205

8.1.7 UNIT INFO – Contact Information

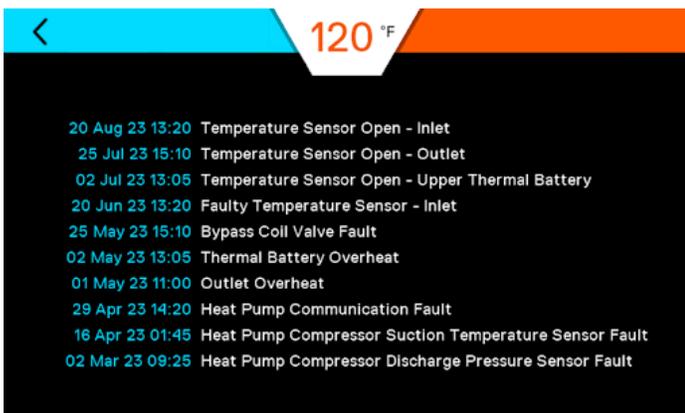
1. Press the UNIT INFO icon as shown in Section “8.1.3 Main Page – Menu Options” to access the contact information for any technical support on your iE1 Electric Water Heater product
2. The Unit Info pages displays your unit’s serial number, model number, and software version as shown in the below image.



3. Press the back icon < to go back to the previous menu.

8.1.8 HISTORY

1. Press the HISTORY icon as shown in “8.1.3 Main Page – Menu Options” to access the history of the recent errors/fault in the water heater.
2. Only a maximum of last 10 errors/fault with their respective time and date will be given as shown in the below image.



8.1.9 SETTINGS

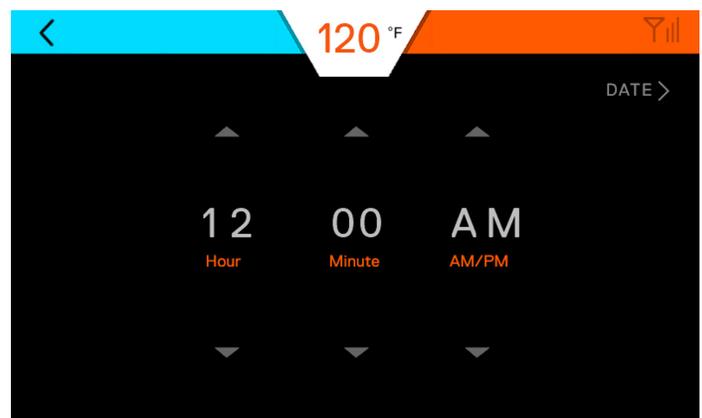
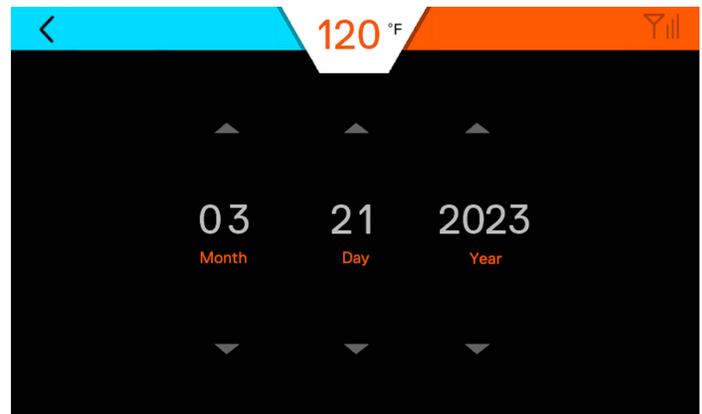
Press the SETTINGS icon as shown in Section 8.2.1 Main Page – Menu Options to access the setting options as shown in the image below.



Press the back icon < to go back to the previous menu.

8.1.10 TIME/DATE

Press the TIME/DATE icon as shown in Section 8.2.7 Settings to access the TIME/DATE options as shown in the image below.

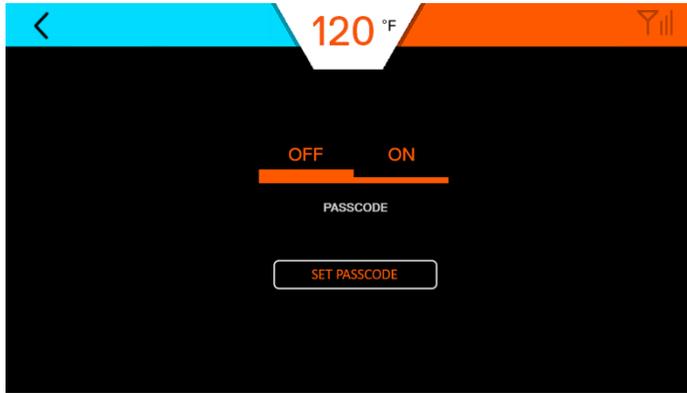


Press the up or down arrow from the above options in your display screen to set the correct date and time.

Press the back icon < to go back to the previous menu.

8.1.11 SECURITY

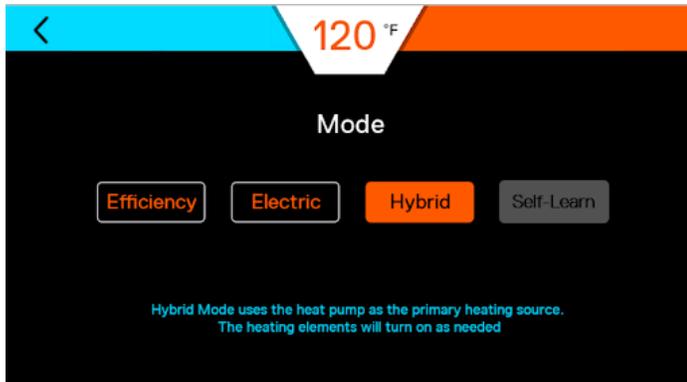
1. Press the SECURITY icon as shown in Section
2. 8.2.7 Settings to access the SECURITY options as shown in the image below.
3. Press the ON options to choose and confirm a 4 digit pass-code for your water heater.



4. Press the SET PASSCODE button to reset your 4-digit passcode.
5. In case of PASSCODE Error, please refer to Section 8.2.5 Unit Info – Contact Information.
6. Press the back icon < to go back to the previous menu.

8.1.12 MODE

1. Press the MODE icon as shown in Section 8.2.7 Settings to access the MODE options as shown in the image below.

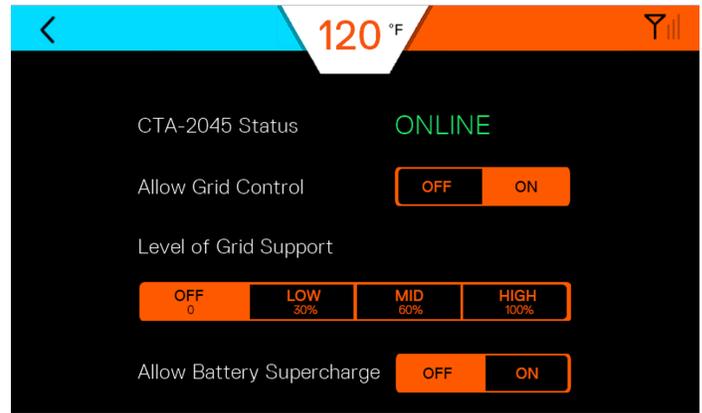


2. Operate the water heater from the options as shown in the below image and table.

Nomenclature	Description
Efficiency	Efficiency Mode uses the heat pump to heat water.
Electric	Electric Mode uses heating elements to heat water
Hybrid	Hybrid Mode uses heat pump as the primary heating source, the heating elements will heat water if demand exceeds. It combines high energy efficiency with reduced recovery time
Self-Learn	Unit automatically determines the source of heat and manages the thermal battery based on the usage pattern, it is the most efficient mode (recommended)

8.1.13 CTA-2045

1. Press the CTA-2045 icon as shown in Section 8.2.7 Settings to access the CTA-2045 status as shown in the image and table below.



Nomenclature	Description
CTA-2045 STATUS	Allows you to choose ONLINE or OFFLINE options.
Allow Grid Control	Allows you to ON or OFF the Allow Grid Control options.
Level of Grid Support	Allows you to choose from OFF – 0%, LOW –30%, MID – 50%, HIGH – 100%
100% options.	Unit automatically determines the source of heat and manages the thermal battery based on the usage pattern
Allow Battery Supercharge	Allows you to choose ON or OFF the Allow Battery Supercharge option. With Supercharge, the thermal battery can charge up to 190 °F

8.1.14 CASCADING

1. Press the CASCADING icon as shown in Section 8.2.7 Settings to access the CASCADING options as shown in the image below.



2. If there is more than one unit installed in the same location (within 50 meters), please refer to Section 9. Multi-Unit Overview.

8.1.15 BMS – Building Management Software

3. Press the BMS icon as shown in Section 8.2.7 Settings to access the BMS options as shown in the image given below.



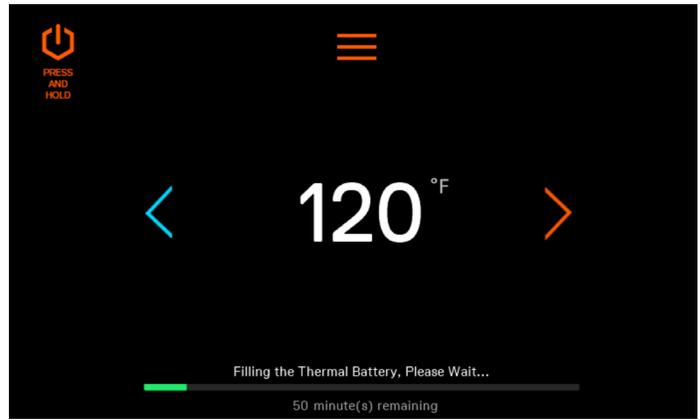
8.2 Turning Water Heater ON and OFF

When power is applied to the water heater or the electrical switch is turned ON, the following initialization screen appears.



WARNING

Turning the unit OFF does not disconnect it from the power source. Whenever working around electrical components within the water heater, turn off the power at the ON/OFF breaker switch. Touching live electrical components can cause serious injury or death.



Main menu screen automatically appears.

To turn the water heater OFF, press and hold the power button in the top left side of the screen.

8.3 Adjusting the Water Temperature

NOTICE

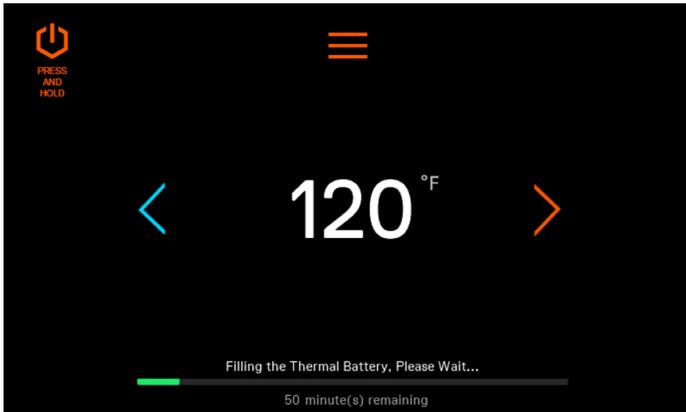
The outlet water temperature is factory preset to 120°F, however these commercial water heaters can heat water to 170°F.

DANGER



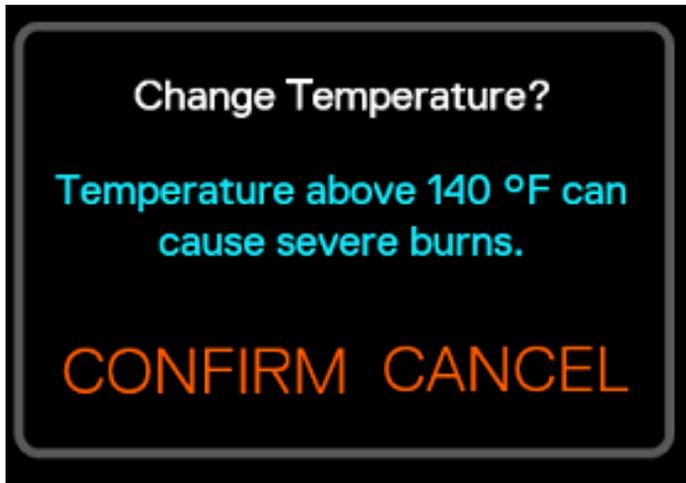
Hot water temperature over 125°F (52°C) can cause severe burns instantly or death from scalding. Children, the disabled, and the elderly are at the highest risk of being scalded. Do not leave children or the infirm unsupervised. Check temperature of hot water before taking a shower or bath. To control water temperature to a particular faucet, temperature limiting valves can be installed by your service professional.

If temperature is changed while someone taking shower could cause scalding. Due to this it is recommended that all water faucets and showers must be closed before changing the temperature setting.



Firmly press the (>) and (<) to increase or decrease temperature. Firmly hold the icon until the display reaches the desired temperature.

If temperature set to 140 or higher, a scalding warning message will be displayed.



9. Multi-unit Setup

9.1 General Information

Multiple units can be connected together to supply a large demand for hot water.

The water heaters communicate through standard Bluetooth connection (Wi-Fi 2.4 GHz Frequency) between each water heater. The benefits of connecting the units are

- When demand for hot water is low, fewer units operate.
- If one unit has an error code, the others continue to operate.
- Changing the settings (temperature, time, etc.) on one-unit changes settings on all the units.
- It allows shutdown of one unit for maintenance while the others continue to operate.

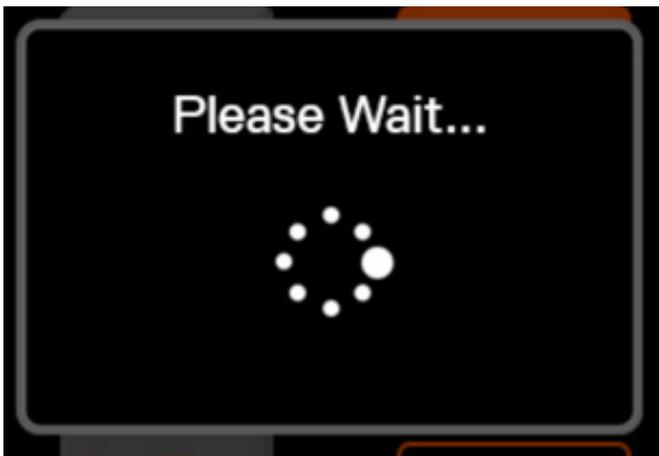
9.2 Installation Procedure

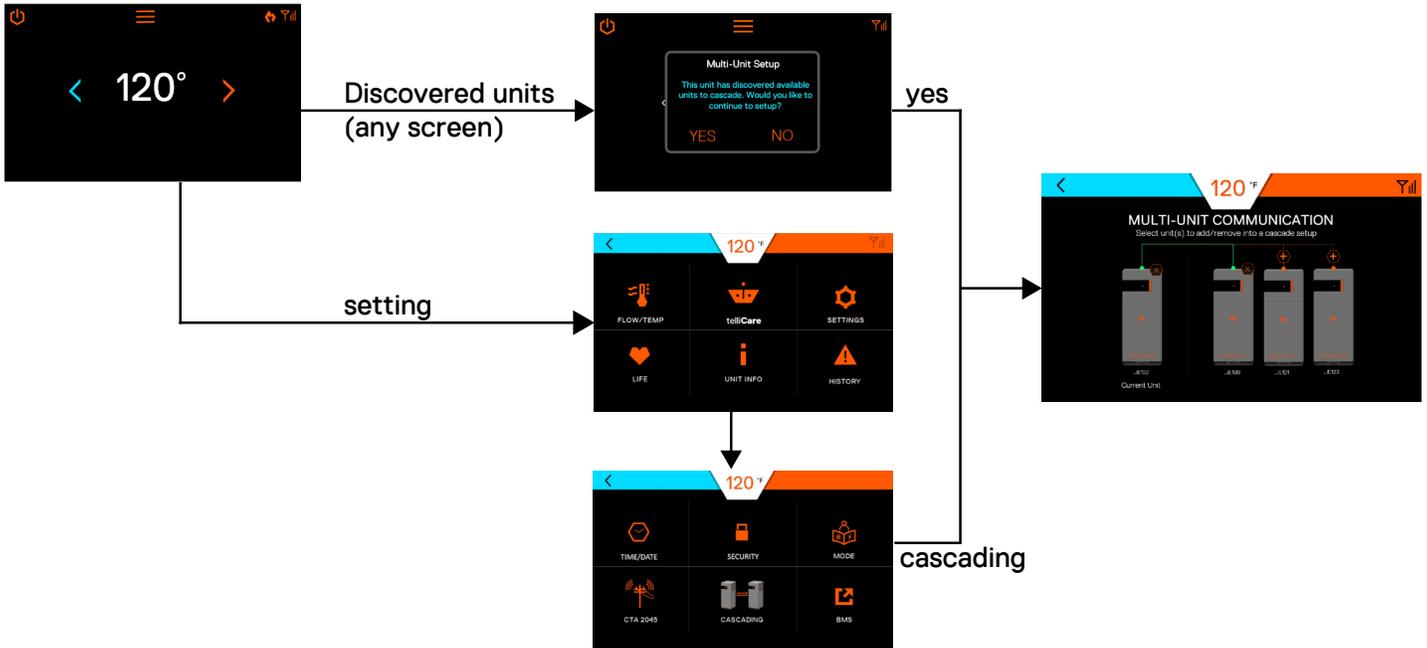
1. Make sure the water heaters are installed in the same room. Maximum distance separation allowed is 50 ft. Any concrete walls or separator between the units would e communication loss and the units will not see each other.
2. Connect all the units to the power supply. Refer to “section 7 electrical power” for additional information.
3. Install and connect the hot water lines. Make sure the water pipe is properly sized in accordance with the number of units being operated.
4. Install and connect the cold-water lines. Make sure the water line is properly sized in accordance with the number of units being operated.
5. Connect and route the condensate drain lines to a suitable discharge location.
6. Power ON each unit one by one and wait until each unit finishes the initialization screen. Make sure all units are in thermal battery charging stage before continuing.
7. Each unit will have a cellular/bluetooth module used for both cloud connection and cascade.

9.3 How Will It Work?

On First Discovery

- If units are nearby and able to cascade, a popup will show on the display letting customer know that other units have been discovered.
- Separation distance is limited to 50 ft.



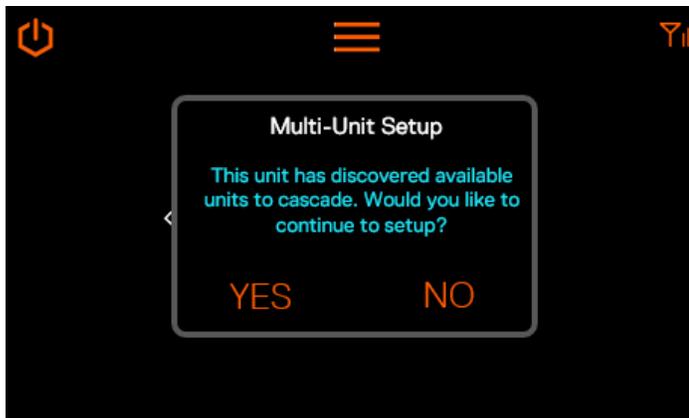


9.4 Auto Discovery Notification

Popups will show on any screen of the display on first time discovery of other units. Once interacted, popup will never show again.

Popup will not show if unit has been added into a cascade setup.

- Yes -> Navigate to Multi-Unit settings.
- No -> Skips setup and stays on
- Current page (Normal Option).



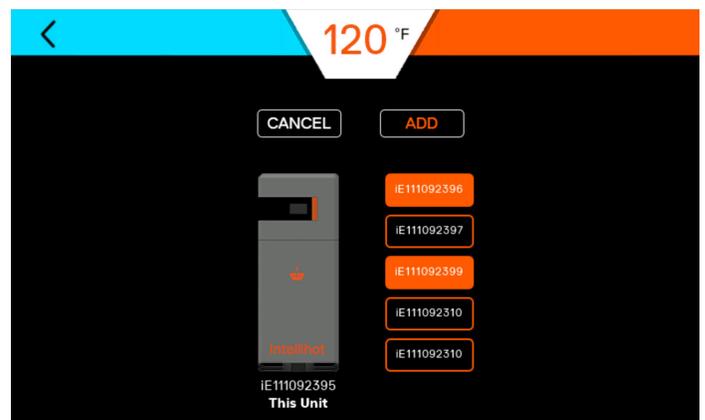
9.5 Cascading Process

Units should be within 50 feet to enable cascading.

- No unit cascaded.
- No unit available for cascade.



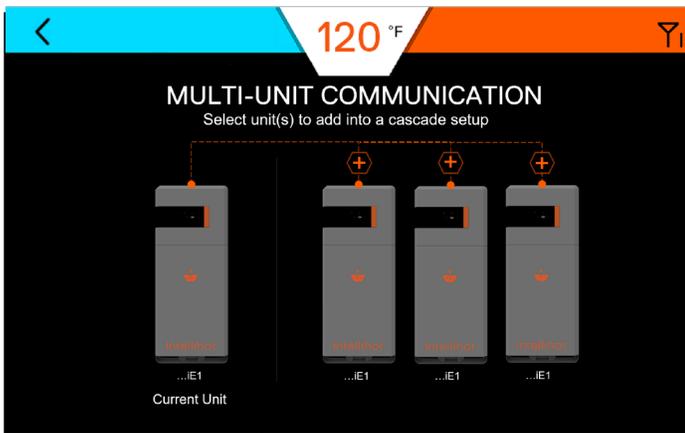
For a cascade setup, click icon above the unit on the screen to add current unit with one available unit.



To remove from cascade setup, click icon above the unit on the screen.



For a cascade setup, click icon above the unit on the screen to add current unit with another available units.



9.6 Offline Cascading

Cascading of units that are not currently ON is not recommended and it can cause operational problems.

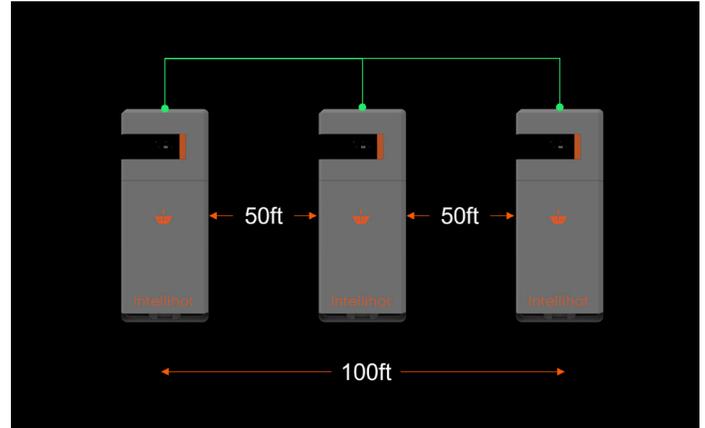


This icon indicates that the concerned unit is offline from the current unit bank.

The offline unit can be removed by holding the icon on the screen.

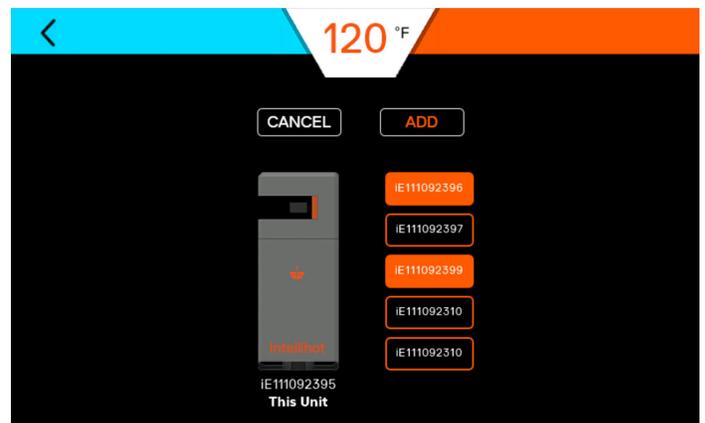
9.6.1 Cascading - Spacing

Make sure the water heaters are installed in the same room. Maximum distance separation allowed is 50 ft. Any concrete walls or separator between the units would cause communication loss and the units will not see each other.



9.7 Adding/Removing Units

For a cascade setup, click icon above the unit on the screen to add current unit with one available unit.

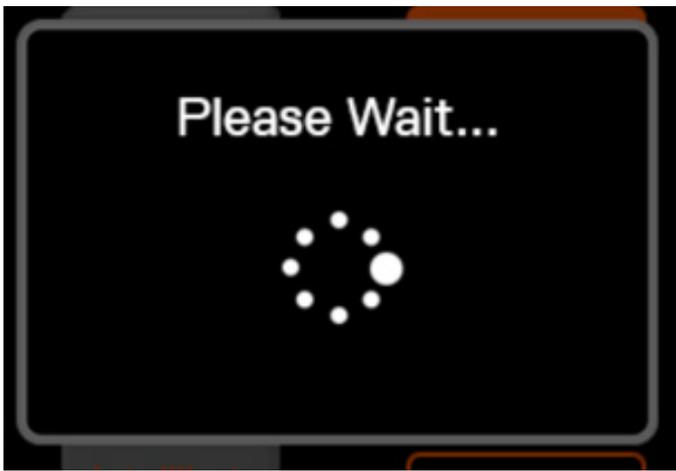
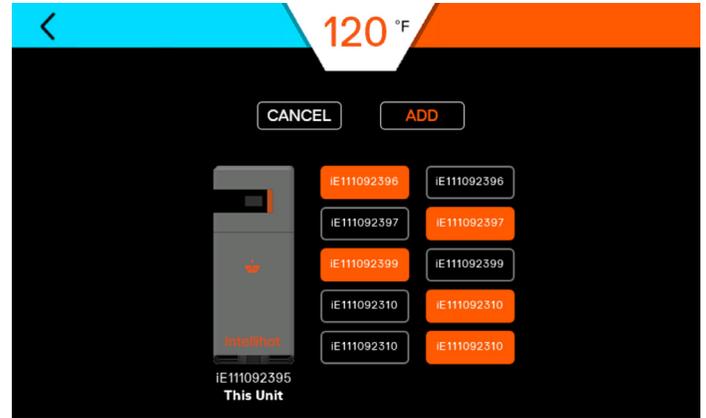


By the click of the icon, 'SAVE' option will appear on the screen.



After clicking the 'SAVE' option, second screen will appear with 'Multi-Unit Setup in progress'

The maximum number of units that can be connected is **six (6)**.



9.8 Cascade – Unable to setup

