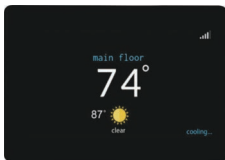


SYST0201CW
Ion™ Black System
Control



Owner's Manual



A240490

US Patents: U.S. Pat No. 7,243,004, U.S. Pat No. 7,775,452, pointSET™
U.S. Pat No. 7,415,102

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1. Introduction

CONGRATULATIONS! Your decision to choose the Ion™ Black System Control puts you in a select group of homeowners who understand the value of precise comfort control and appreciate the simplicity of an easy-to-use, intuitive, Control.

Your new Ion™ Black System Control offers high quality comfort technology. Please take a few moments to carefully read through this manual. Next set up a comfort profile and schedule that makes sense for your lifestyle; then relax and enjoy the new comfort of your home!

2. Home Screen

2.1. Information Displayed

NOTE: When you connect your system to the Internet and register on my.ioncomfort.com, you can access nearly all of the consumer features on the SmartHome mobile app. See the **WIRELESS** section for more information.

The information displayed on the Home Screen will appear when there has been no interaction with the Ion Black System Control for at least two minutes. The basic information displayed on the Home Screen consists of the current date and time, the room temperature (zone temperature if applicable), the outdoor temperature (if available, contact your installing dealer for details), and current weather condition. Connectivity status to the home Wi-Fi network and the Ion Server will also be displayed on the Home Screen. Note: You must have Wi-Fi enabled for the indicator to appear.

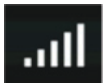
2.2. Wi-Fi® Connectivity Status



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Connectivity status to the home Wi-Fi network and Ion Server is displayed in the top right hand corner of the Home Screen.

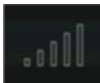
When the Ion Black System Control is connected to the home Wi-Fi network and the Ion Server, the signal strength bars will be displayed in white as depicted in the image below. Connection strength to the home Wi-Fi network will be indicated by the number of solid white bars displayed. A red “X” over the bars indicates no connection to the home Wi-Fi network.



Strong Connection



Limited Connection



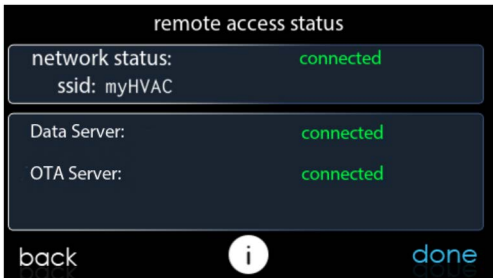
Poor Connection



No Connection

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- Pressing on the Connectivity Status bars from the Home Screen will allow you to view the Remote Access Status screen.



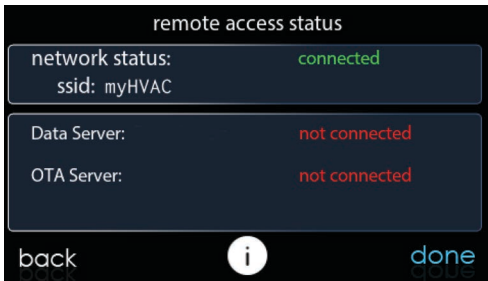
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NOTE: If the Ion Black System Control is not connected to the home network, a red “X” will appear over the strength bars. If the Ion Black System Control is connected to the home Wi-Fi network but loses connection to the Ion Server, a triangle will appear over the strength bars as depicted in the image below. Connection strength to the home Wi-Fi network will continue to be displayed by the number of solid bars. If this problem persists, please contact 1-877-591-8908 for assistance.



A170247

- Pressing on the Connectivity Status bars from the Home Screen will allow you to view the Remote Access Status screen.



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2.3. Information Buttons

On the bottom of some screens will be an information icon. By pressing the information icon, a text box will display to show what interactions are available on that particular screen. To close the text box, touch the text box.



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3. Main Screen

The Main Screen is where most interactions will take place. Touch anywhere on the Home Screen to arrive at the Main Screen. The most convenient way to interact with your control is using the SmartHome mobile app. See the **WIRELESS** section for more details on connecting your product to the Internet.

3.1. System Mode

Once in the Main Screen,

- To access your system mode touch the **MODE** label located in the upper right of the Control.
- The drop-down menu will allow you to choose between **AUTO**, **HEAT**, **COOL**, **FAN ONLY** and **OFF**, depending on the equipment installed in your system.
- If **OFF** is selected your system will not control temperatures, humidity, or fan.

- If **AUTO** is selected, the Ion Black System Control automatically switches between heating and cooling to maintain your comfort during transitional seasons.

NOTE: **AUTO** mode is intended to switch between heating and cooling modes based on temperature demand. A gradual auto transition is the energy-conscious default that will satisfy the majority of customers. For Ion Zoning systems, some customers might have significant and simultaneous heating and cooling demands in different zones. To address this need, a special simultaneous heating and cooling demand auto mode could be enabled by the Installer. When the feature is enabled and **AUTO** mode is selected, the simultaneous heating and cooling demand auto mode will alternate between heating and cooling, depending on demand, every half hour. This may result in higher energy usage but provide the benefit of greater comfort. Your installing contractor is able to enable this feature, if desired. (This feature is only available with zoned systems).

- If **HEAT** is selected then the Ion Black System Control operates only the heating system.
- If **COOL** is selected then the Ion Black System Control operates only the cooling system.
- If **FAN ONLY** is selected, then the Ion Black System Control operates the indoor fan but heating, cooling, humidification or dehumidification will not take place.

3.2. Set Day and Time

- To set the day and time for your home screen enter the Main Screen by touching anywhere on the Control.
- Touch the **DAY** and **TIME** label located at the top middle of the screen or access by going through the menu screen (see page 41).

- To set the **HOUR, MINUTE, MONTH, DAY, or YEAR** touch the feature you wish to change.
- Use the Up (Y) and Down (B) buttons to make the appropriate changes.
- When you have completed all of the settings, touch **SAVE**.
- If you make a mistake you may touch **CANCEL** and begin again.

3.3. Adjust Temperature (Temporary Hold)

The Ion Black System Control allows you to temporarily override your programmed schedule by adjusting the indoor temperature at any time to meet your needs.

NOTE: The Ion Black System may seem slow to react to set point, activity and system mode changes. This is normal, as the system will ramp up capacity and fan speeds slowly to achieve the proper level of home conditioning, while avoiding wasting energy, stressing home circuits and dimming lights with a "hard start."

3.4. Adjusting Comfort Activities (See Comfort Profiles on page 17)

- To adjust the comfort activity, enter the Main Screen by touching anywhere on the Control.
- Touch the activity/top button under the activity feature on the left side of the screen; then select the desired activity of **HOME, AWAY, SLEEP, or WAKE**.
- Use the Up (Y) and Down (B) buttons to change the time to temporarily hold the desired temperature in 15 minute increments.
- When the correct time interval is displayed, touch **DONE**.
- To return to the scheduled program, touch **HOLD UNTIL**, and then select **PER SCHEDULE**.

3.5. Adjusting Heating

NOTE: If **OFF** is selected, the Heat, Cool, Auto and Fan Only will not be available. When changing from the **OFF** mode to Heat, Cool, Auto, or Fan Only, it is normal for the system to run the blower for a minute or two. During this time, the system is using the filter check feature to determine the filter usage. This feature is part of the system design and cannot be turned off.

- To adjust the heating temperature, enter the Main Screen by touching anywhere on the Control.
- With the system in either **AUTO** or **HEAT** mode, use the Up (Y) and Down (B) buttons to set the desired temperature.
- On the left hand side of the screen, the comfort profile will switch to manual, and the system will be placed in a temporary hold.
- Use the Up (Y) and Down (B) buttons to change the time to temporarily hold the desired temperature in 15 minute increments.
- When the correct time interval is displayed, touch **DONE**.
- To return to the scheduled program, touch **HOLD UNTIL**, and then select **PER SCHEDULE**.

3.6. Adjusting Cooling

- To adjust the cooling temperature, enter the Main Screen by touching anywhere on the Control.
- With the system in either **AUTO** or **COOL** mode, use the Up (Y) and Down (B) buttons to set the desired temperature.
- On the left hand side of the screen, the comfort profile will switch to manual, and the system will be placed in a temporary hold.
- Use the Up (Y) and Down (B) buttons to change the time to temporarily hold the desired temperature in 15 minute increments.
- When the correct time interval is displayed, touch **DONE**.

- To return to the scheduled program, touch **HOLD UNTIL**, and then select **PER SCHEDULE**.

3.7. Adjust Temperature (Permanent Hold)

The Ion Black System Control allows you to permanently override your programmed schedule by adjusting the indoor temperature at any time to meet your needs.

3.8. Adjusting Comfort Activities (See Comfort Profiles on page 17)

- To adjust the comfort activity, enter the Main Screen by touching anywhere on the Control.
- Touch the activity under the activity feature on the left side of the screen; then select the desired activity of **HOME**, **AWAY**, **SLEEP**, or **WAKE**.
- Touch the **HOLD UNTIL** button, then touch **HOLD**.
- To return to the scheduled program touch **HOLD**, and then touch **PER SCHEDULE**.

3.9. Adjusting Heating

- To adjust the heating temperature, enter the Main Screen by touching anywhere on the Control.
- With the system in either **AUTO** or **HEAT** mode, use the Up (Y) and Down (B) buttons to set the desired temperature.
- On the left hand side of the screen, the comfort profile will switch to **MANUAL**.
- Touch the **HOLD UNTIL** button, then touch **HOLD**.
- To return to the scheduled program, touch **HOLD**, and then touch **PER SCHEDULE**.

3.10. Adjusting Cooling

- To adjust the cooling temperature, enter the Main Screen by touching anywhere on the Control.
- With the system in either **AUTO** or **COOL** mode, use the Up (Y) and Down (B) buttons to set the desired temperature.
- On the left hand side of the screen, the comfort profile will switch to **MANUAL**.
- Touch the **HOLD UNTIL** button, then touch **HOLD**.
- To return to the scheduled program, touch **HOLD**, and then touch **PER SCHEDULE**.

NOTE: For Multi-Zone Applications (Temporary and Permanent Hold options)

- For added convenience in a multi-zone application, the activity feature will also allow you select the desired activity of **HOME** or **AWAY** for **ALL ZONES**.



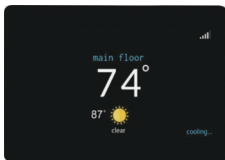
A14238I

- Once you have selected the desired activity for **ALL ZONES**, you will have the option to either permanently (**HOLD**) or temporarily (**HOLD UNTIL**) override your programmed schedule.



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- Selecting the **HOLD** option will permanently override your programmed schedule until you **CANCEL ALL ZONES**.
- Selecting the **HOLD UNTIL** option will allow you to temporarily override your programmed schedule.
- Once selected, use the Up (Y) and Down (B) buttons to change the time in 15 minute increments.
- When the correct time interval is displayed, touch **DONE**.



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4. Features

4.1. Adjust Fan Speed

The Features function of Ion Black System Control allows you to adjust the fan speed during continuous fan operation.

- To adjust the fan speed, enter the Main Screen by touching anywhere on the Control.
- Touch **FEATURES** on the top left of the screen.
- A drop down menu will appear. Touch **FAN** selection.
- Use the Up (Y) and Down (B) buttons to set the fan to **AUTO, LOW, MEDIUM** or **HIGH**, then touch **SAVE**. This will permanently change the fan setting in the active Comfort Profile. If the current activity is Manual, it will only change the current fan speed.
- For zoned systems, the selected fan speed and Comfort Profile changes will apply to the zone currently displayed in the Home and Main screens. To adjust the fan speed in another zone, touch the zone name on the Main screen, and select the desired zone.

4.2. View Current Humidity Level

The Features function of Ion Black System Control allows you to view the current humidity level within the conditioned space.

- Enter the Main Screen by touching anywhere on the Control.
- Touch **FEATURES** on the top left of the screen.
- In the drop down menu you will see your measured humidity levels within the conditioned space.

5. Menu Screen

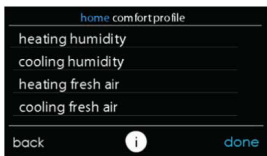
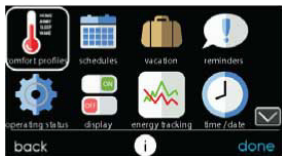
Your menu screen offers more features and control for your Ion Black System Control. Touch the **MENU** button at the bottom right of the Main Screen. The most convenient way to program your control is using the

SmartHome mobile app. See the **WIRELESS** section for more details on connecting your product to the Internet.

5.1. Comfort Profiles

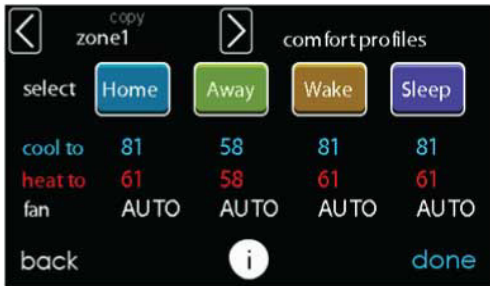
You will need to set the comfort profiles before you attempt to program your new Ion Black System Control.

- The **COMFORT PROFILES** button includes settings for Temperature and Fan Profiles, Humidity and Fresh Air Profiles, as well as Window Protection Setup.



A14240

- Set your desired heating and cooling temperatures and your fan setting using the **TEMPERATURE AND FAN PROFILES** for each activity. In zoned systems, the activity settings will apply to the selected zone only.



A14241

- For example to change your **HOME** comfort profile, touch the **HOME** icon.
- Use the Up (Y) and Down (B) buttons to change the fan settings, heating and cooling temperatures. When you are done, press the **DONE** button on the bottom right.
- Do the same thing to change the **WAKE** and **SLEEP** profiles.
- The **AWAY** profile provides an extra feature called **Smart Setback**. It allows the Ion System to dynamically determine the away temperature automatically to save the most amount of money, yet reach your comfort settings when you return home. Smart Setback may Control the temperature somewhere in between the Away temperature limits. This is normal and is intended to prevent excessive energy use.
- Use the Up (Y) and Down (B) buttons to change the fan settings and temperature settings. The temperature settings are the range in which you choose to keep your home conditioned while you are

away. The **Smart Setback** function will maintain your temperature within this range.

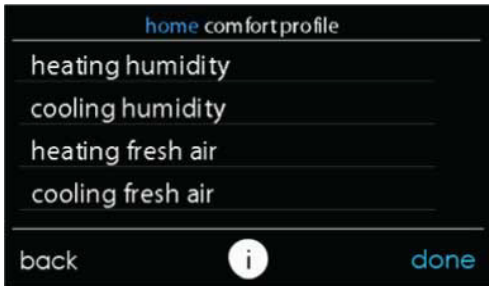
- Set your desired humidity and fresh air (if applicable) using the **HUMIDITY AND FRESH AIR PROFILES** for each activity.



A14242

5.2. Home Comfort Profile Humidity Control

- Touch **WHEN AT HOME** to set your humidity settings while the home is occupied to enjoy superior comfort.



A14243

- If you have a humidifier installed for your system, touch **HEATING HUMIDITY** to set the desired humidity level within the home.
 - You will have the option to turn ON or OFF your humidifier from this screen.



A14244

- Once your Humidifier is turned ON, use the Up (Y) and Down (B) buttons to set the desired humidity level between 5-45%.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.
- Next, select your desired humidity level during cooling by touching **COOLING HUMIDITY**.



A14245

- Use the Up (Y) and Down (B) buttons to set the desired dehumidification level between 46-58%.
- Touch **YES** or **NO** for the system to over-cool the conditioned space by up to 3°F to remove as much humidity out of the air as possible. The system will not over-cool past 70°F.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.

5.3. Home Comfort Profile Fresh Air Control

- If a ventilator is installed in your home, select the amount of fresh air to circulate during heating mode by touching **Heating Fresh Air**.

NOTE: This option may not be available with the ERVXXNVA ventilator due to its simplified control design.



A14246

- You will have the option of choosing among **AUTO**, **MANUAL**, or **OFF**.

NOTE: This option may not be available with the ERVXXNVA ventilator due to its simplified Control design.

- The **AUTO** setting will allow the user to choose the maximum fresh air that the ventilator will provide. Selections are **Low**, **Medium** or **High**. In Auto, the ventilator will run continuously, unless the outdoor temperature is near or below 0°F or is near or above 100°F. Beyond those temperatures, it will turn off.
- The **MANUAL** setting allows you to select the percentage of fresh air to supply your home. In the **MANUAL** mode, there are several selections available: Off, Low 25%, Low 50%, Low 75%, Low 100%, Medium, and High. The percent values are percent of an hour.
- Use the Up (Y) and Down (B) buttons to set the desired ventilation level.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.

- If applicable, next select the amount of fresh air to circulate during cooling mode by touching **COOLING FRESH AIR**. Again, you will have the option of choosing among **AUTO**, **MANUAL** and **OFF**.
 - Use the Up (Y) and Down (B) buttons to set the desired ventilator speed level.
 - Press **SAVE** when finished, or **CANCEL** to discard any changes.

5.4. Away Comfort Profile Humidity Control

You may wish to have different humidity settings when you're away. Press the Menu area on the Main Screen to access the additional menu selections. Select **Comfort Profiles**, then select **Humidity and Fresh Air Profiles** option.



A14247

- Touch **AWAY** to set your humidity settings while you are away from home to save the most amount of energy.
- If you have a humidifier installed for your system, touch **HEATING HUMIDITY** to set the desired humidity level when you are away from home.

- Use the Up (Y) and Down (B) buttons to set the minimum humidity level between 5%-45%.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.
- To set the desired humidity level during cooling, touch **COOLING HUMIDITY**.
 - Use the Up (Y) and Down (B) buttons to set the maximum dehumidification level at **NONE** or between 55-65%.
 - Touch **YES** or **NO** for the system to over-cool the conditioned space by up to 3°F to remove as much humidity out of the air as possible.
 - Press **SAVE** when finished, or **CANCEL** to discard any changes.

5.5. Away Comfort Profile Fresh Air Control

You may wish to have different Fresh Air profiles for when you're away. Press the menu area on the Main Screen to access the additional menu selections. Select **Comfort Profiles**, then select **Humidity and Fresh Air Profiles** option.

- Touch **AWAY** to set your fresh air settings while you are away from home.
 - You will have the option of choosing between **AUTO**, **MANUAL**, or **OFF**.
 - The **AUTO** setting will allow the system to choose the fresh air setting in a range of Low, Medium or High, as selected by you.
 - The **MANUAL** setting allows you to select the percentage of fresh air to supply to your home. In the **MANUAL** mode, there are several selections available: Off, Low 25%, Low 50%, Low 75%, Low 100%, Medium, and High. The percent values are percent of an hour.
 - Use the Up (Y) and Down (B) buttons to set the desired ventilation level.

- Press **SAVE** when finished, or **CANCEL** to discard any changes.
- If applicable, select the amount of fresh air to circulate during cooling mode by touching **COOLING FRESH AIR**. Again, you will have the option of choosing among **AUTO**, **MANUAL** and **OFF**.
 - Use the Up (Y) and Down (B) buttons to set the desired ventilation speed level.
 - Press **SAVE** when finished, or **CANCEL** to discard any changes.

5.6. Vacation Comfort Profile Humidity Control

You may wish to have different humidity settings when you're on Vacation. Press the Menu area on the Main Screen to access the additional menu selections. Select **Comfort Profiles**, then select **Humidity and Fresh Air Profiles** option.

- Touch **VACATION** to set your humidity settings while you are on vacation to save the most amount of energy.



A14248

- If you have a humidifier installed for your system, touch **HEATING HUMIDITY** to set the desired humidity level when you are away from home.

- Use the Up (Y) and Down (B) buttons to set the minimum humidity level between 5%-45%.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.
- To set the desired humidity level during cooling, touch **COOLING HUMIDITY**.
 - Use the Up (Y) and Down (B) buttons to set the maximum dehumidification level at **NONE** or between 55-65%.
 - Touch **YES** or **NO** for the system to over-cool the conditioned space by up to 3°F to remove as much humidity out of the air as possible.
 - Press **SAVE** when finished, or **CANCEL** to discard any changes.

5.7. Vacation Comfort Profile Fresh Air Control

- If a ventilator is installed in your home, select the amount of fresh air to circulate during heating mode by touching **HEATING FRESH AIR**.
- You will have the option of choosing between **AUTO**, **MANUAL**, or **OFF**.

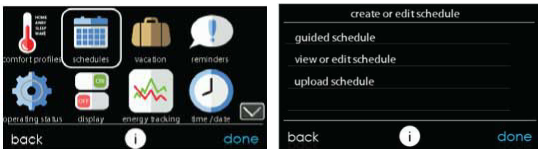
NOTE: This option may not be available with the ERVXXNVA ventilator due to its simplified Control design.

- The **AUTO** setting will allow the user to choose the maximum fresh air that the ventilator will provide. Selections are **Low**, **Medium** or **High**.
- The **MANUAL** setting allows you to select the percentage of fresh air to supply to your home.
- Use the Up (Y) and Down (B) buttons to set the desired ventilation level.
- Press **SAVE** when finished, or **CANCEL** to discard any changes.

- If applicable, select the amount of fresh air to circulate during cooling mode by touching **COOLING FRESH AIR**. Again, you will have the option of choosing among **AUTO**, **MANUAL** and **OFF**.
 - Use the Up (Y) and Down (B) buttons to set the desired ventilation level.
 - Press **SAVE** when finished, or **CANCEL** to discard any changes.

6. Schedules

Program your Ion Black System Control by selecting the **SCHEDULES** icon. You may select to use the guided scheduling feature, view or edit your schedule or upload your schedule from a USB C device. The most convenient way to program your control is using the SmartHome mobile app. See the **WIRELESS** section for more details on connecting your product to the Internet.



A14249

6.1. View or Edit Schedule

- To set a specific day use the Left (A) and Right (") buttons beside the day names.
 - If you wish to copy this schedule to other days, touch **COPY** above the day.
 - Select the days you wish to have the same schedule, then touch **COPY**.

- To select the time the activity starts, touch the **TIME** icons. Use the Up (Y) and Down (B) buttons to set the desired start time.
- If you want to delete a time period, touch the **TIME** icon, then touch **DELETE**.
- To change the desired activity touch the **ACTIVITY** icon then select the desired activity (**WAKE**, **HOME**, **AWAY** or **SLEEP** buttons). When finished touch **SAVE**.
- *For Zoned Systems*
 - To set a specific room, use the Left (A) and Right (") buttons beside the zone name.
 - If you wish to copy this schedule to a different zone, touch **COPY** above the zone name.
 - Select the zones you wish to have the same schedule, then press **COPY**.

6.2. Guided Scheduling

The Guided Scheduling feature will prompt you with simple questions to help set a schedule that meets your desired comfort level and lifestyle.

If you are satisfied with your comfort settings, proceed to the next screen.

If you are not, go through the process outlined under **Comfort Profiles** (page 17).

1. If you have a zoning system, the next question will prompt you to pick the zone you wish to schedule.
 - Select the desired zone to program, then touch **NEXT**.
 - **If you do not have a zoned system, the Control will skip this question.**
2. The next question will prompt you to select the days you wish to schedule.

- You may select individual days, all days or weekdays by touching their respective buttons.
 - After you have selected the desired days, touch **NEXT** to continue.
3. The next question will ask what time you wake up on the scheduled days.
- Use the Up (Y) and Down (B) buttons to set the time you wake up.
 - After you have selected the correct time, touch **NEXT** to continue.
4. The next question will ask if someone is home all day.
- Simply touch **YES** or **NO** to answer this question.
 - If you select **NO**, the next question will ask what time you leave the home.
 - Use the Up (Y) and Down (B) buttons to set the time you leave.
 - After you have selected the correct time, touch **NEXT** to continue.
 - You will then be asked what time you will return to your home.
 - Use the Up (Y) and Down (B) buttons to set the time you return home.
 - After you have selected the correct time, touch **NEXT** to continue.
5. If you select **YES** or have completed the previous steps, the next question will ask if you want different sleep settings.
- If you select **YES**, the next question will ask what time you go to sleep.
 - Use the Up (Y) and Down (B) buttons to set the time you go to sleep.
 - After you have selected the correct time, touch **NEXT** to continue.

6. If you select **NO** or have completed the previous steps, you will be shown a screen that the scheduling process is complete for the selected days and zones (if applicable).
 - If you have completed the schedule, touch **SAVE** continue.
 - If you touch **CANCEL**, it will prompt you back to [Fig. 5](#).
7. If you touched **SAVE** in [Fig. 6](#), you will be asked if you want to schedule more days.
 - Simply touch **YES** or **NO** to answer this question.
 - If you select **YES**, you will return to [Fig. 2](#) and follow the process.
8. If you select **NO**, the screen Control will show you the newly created schedule.
 - If you have a zoning system, you will be asked if you want to schedule another zone.
 - If you select **YES**, you will return to [Fig. 2](#) and follow the process.
 - If you select **NO**, you will see the newly created schedule.

6.3. Upload My Schedule

As noted earlier, programming the control with the SmartHome mobile app is the most convenient way. You can program a system that is not connected to the Internet using a PC or MAC computer using the process shown, below.

The **Upload My Schedule** feature with the desktop app will allow you to upload your schedules from a PC or MAC computer, load those schedules onto a USB C device, and upload the schedules into the Ion Black System Control.

NOTE: Use a 4GB to 32GB USB C device.

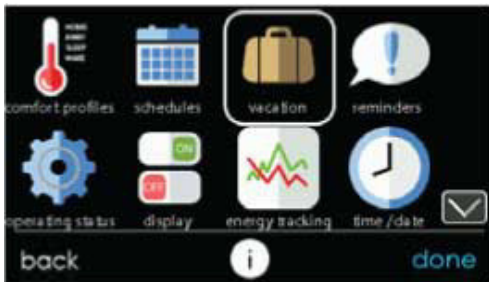
- To download the my.ioncomfort application for your computer, go to my.ioncomfort.com.

- Click on the Downloads tab.
- Download the my.ioncomfort Desktop application.
- The my.ioncomfort Desktop application provides you the ability to create your schedule for the Ion Black System Control.
- Once the schedules are complete, insert a USB C device into your computer. Add a new folder to the USB C device labeled **User**. Make sure that this folder is at the top of the folder chain in the USB C; this is also called the “root directory.”
 - Select the **Save Schedule to the USB C** option on the computeE Desktop application Schedules menu. Read the directions and then select **Export**.
 - Save the schedule file in the User folder on the USB C.
 - Once that is complete, safely remove the USB C from the computer.
- Install the USB C into the USB C slot on the right side of the Ion Black System Control.
- On the Ion Black System Control, select **Schedules** from the Menu screen, then select the **Upload Schedule** option.
- If the folder and file have been placed correctly on the USB C, you will be asked if you wish to upload the schedule.
 - Select **Yes**.
 - When successful, press **Next**.

7. Vacation

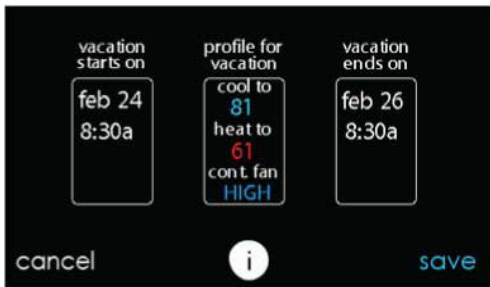
Forgot to enter your vacation schedule until you got to the airport? No Problem! The most convenient way to program your control is using the SmartHome mobile app. See the **WIRELESS** section for more details on connecting your product to the Internet.

Touch the **VACATION** icon in order to set a prolonged vacation schedule.



A12174

- Touch **PLAN VACATION** to begin your vacation schedule.
- The system automatically selects to start vacation at the current time.
- Use the Up (Y) and Down (B) buttons to set the time and date of when your vacation begins; then touch **NEXT**. The Control won't allow you to select a vacation start date/time earlier than the current date/time.
- Use the Up (Y) and Down (B) buttons set the fan speed and the temperature range you wish to keep your house; then touch **NEXT**.
- Use the Up (Y) and Down (B) buttons to set the time and date of when plan to return from your vacation; then touch **NEXT**. The system won't allow you to select a vacation end time that would result in a vacation duration of less than one day.
- Review your vacation schedule to make sure it is accurate. If it is correct, touch **SAVE** to complete your vacation schedule.

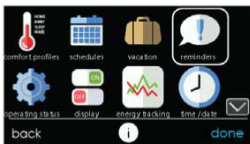


A12110

8. Reminders

NOTE: When you connect your system to the Internet and register on the my.ioncomfort.com website, you can receive alerts and reminders via email. See the **WIRELESS** section for more information.

With the Ion Black System Control, there are accessory messages to remind you when it is time for maintenance. Select the **REMINDERS** icon from the menu screen.



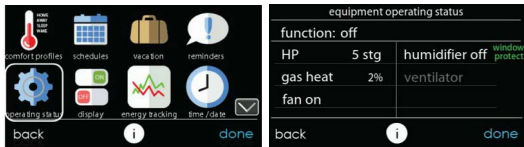
A12123

- You have the option of choosing a pop-up reminder for your air filter, humidifier, or UV lights.
- To enable a reminder, touch **YES**.

- After you have selected your desired reminders, touch **SAVE**.

9. Operating Status

The **OPERATING STATUS** menu gives a quick look at the status of your Ion Heating and Cooling System.



A12173I

9.1. Equipment Operating Status

Within the operating status, you can view which function your system is performing, and at which stage the heating or cooling equipment is operating. A message stating, “System Check in Progress” means that the system is performing its normal 1 p.m. Filter check. This also happens any time the system mode is changed from Off to Auto, Heat, Cool, or Fan Only. When you are finished looking at the operating status, press the **DONE** button to return to the previous menu.

When simultaneous heat/cool demand is enabled, this screen will display an information message at this location. This includes the following messages:

cooling not available

heating not available

waiting to cool

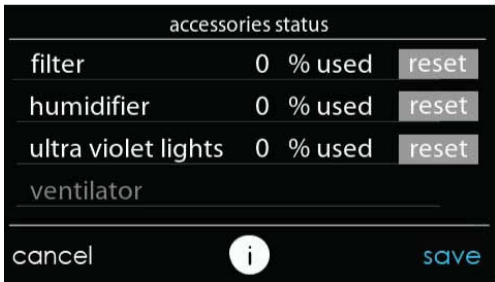
waiting to heat

A160190

9.2. Accessories Status

Within the accessory status, you can view how much of each accessory has been consumed, and reset the counter for each accessory.

- To reset the counter for your installed accessory, touch the **RESET** button, then press **SAVE**.
- To return to the previous menu, press **CANCEL**.



A12108I

9.3. Temperature Control Status

The Temperature Control Status allows you to take a quick look at the actual temperatures, and temperature set points for each zone in your system.

- When you are done looking at your zone status, press **DONE**.

The system will indicate which mode is running by showing flashing arrows towards either the heating or cooling set point. For a zoned system, the system shows flashing arrows for each zone currently being conditioned. If the system is preparing for the next program period, an indicator will be displayed to show that the system is moving the temperature toward the next programmed set point. In zoned systems with the simultaneous heat cool demand auto mode active, the system will show a single arrow towards either the heating or cooling set point for each zone pending conditioning in the other mode.

temperature control status			
ZONE NAME	HEAT TO	ACTUAL	COOL TO
zone1	59	74	81
zone2	58	73	58
zone3	63	65	83
zone4	64	84	84
zone5	65	70	85
zone6	58	74	58
zone7	67	65	87
zone8	68	87	88

back i done

A160187

10. Display

The following display preferences can be adjusted for Ion Black System Control, **Temperature Units** (°F or °C), **Backlight Levels**, **Sound Settings** and **Screen Saver Settings**.



A14256

10.1. Temperature Units

Select the desired temperature units, either °F for Fahrenheit, or °C for Celsius and touch **SAVE**. Temperatures will be displayed with half-degree resolution for Celsius, or full degree resolution for Fahrenheit.

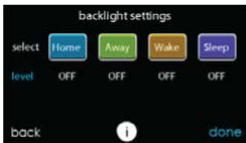


A14257

10.2. Set Backlight Levels

- Backlight levels are programmable for each Comfort Profile setting **HOME, AWAY, WAKE, or SLEEP**.
- Use the Up (Y) and Down (B) buttons to set/change the brightness of back lighting.
 - Brightness levels include **OFF** or 1-10.

NOTE: After 30 seconds of inactivity on the touch screen, the backlight level **will** be set back to the current selected level which may be **OFF**.



A14258

10.3. Sound Settings

The control can emit a "click" sound in response to each screen touch. Select **ENABLED** to turn this sound on; or **DISABLED** to turn it off.



A14259

10.4. Activate Screen Lock

- A message will pop up asking if you want to proceed with the screen lock. Selecting **Yes** will lock the screen and take you back to the home screen.



A13247

- To unlock the screen, press and hold **UNLOCK** in the bottom left hand corner for 10 seconds.



A13248I

- The screen will change and the Control will then be accessible. If the screen is to be locked again, return to the menu, select the screen lock and touch **YES**.

11. Energy Tracking

The Ion Black System Control has the ability to monitor and estimate the energy consumption of certain models of your Ion System. For systems where energy tracking is not available, the menu icon will be shown in gray color, and this section does not apply.

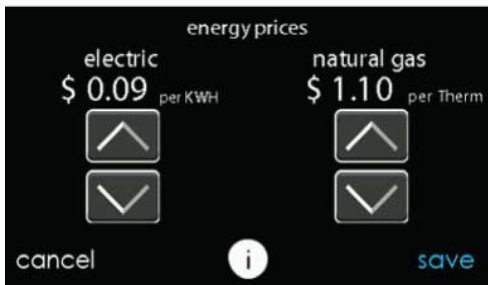


A1211I

- Touch **VIEW ENERGY USAGE** to view the estimated energy consumption in daily, monthly or annual time intervals. You can view

energy consumption in units (kWh for electric and selected unit for gas heat), or in dollars.

- If a gas furnace is installed, you can **SELECT FUEL TYPE** (natural gas or propane), and also **SELECT FUEL DISPLAY UNITS**.
- Touch **ENTER ENERGY PRICES** to enter the current electric and gas utility rates.
 - Use the Up (Y) and Down (B) buttons to set the costs per kWh and cost per Therm or your selected unit.
 - Once the correct pricing is entered, press **SAVE**.



A12113

12. Time / Date

The **TIME/DATE** icon allows you to set the time and date for the Ion Black System Control.



A14250

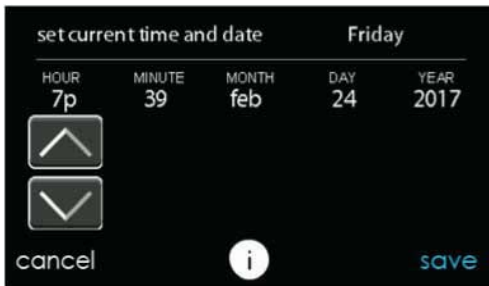
12.1. Set Time and Date

The time and date can either be set manually or can be synchronized with the web server (only for Wi-Fi connected units). From the Main Screen, touch **MENU**, on the bottom of the Control. The **TIME/DATE** icon will bring up the time and date menu.

12.2. Manually Adjust Time and Date

Select manually adjust time and date and follow these steps:

- To set the **HOUR**, **MINUTE**, **MONTH**, **DAY**, or **YEAR**, touch the feature you wish to change.



A14251

- Use the Up (Y) and Down (B) buttons to make the appropriate changes.
- When you have completed all of the settings touch **SAVE**.

12.3. Setup Daylight Savings Time

You can program your Ion Black System Control to automatically adjust for daylight saving time. From this screen, you can also choose to override the preprogrammed start and end dates for daylight saving.



A14252

12.4. Setup Time Zone

The time zone can be selected by selecting the setup time zone from the menu. Then select the time zone for the location. Time zones for both US and Canada are included.



A14217

12.5. Enable Time Synchronization

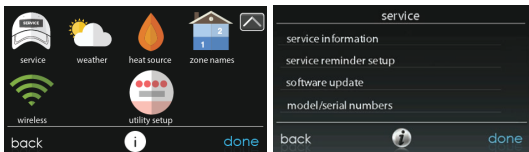
For systems with Wi-Fi® capability, after setting up the time zone, the time synchronization can then be done. Both must be done in order to enable time synchronization.



A14253

13. Service

Selecting the **SERVICE** icon from the menu screen will allow you to view service contact information, set-up or modify service reminders and update the software for your wall Control.

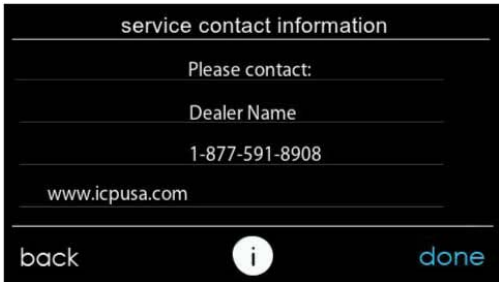


A1702371 Rev B

13.1. Service Information

Your dealer information is easily accessible and may already be pre-programmed in your Control by your dealer. Select the **SERVICE INFORMATION** option.

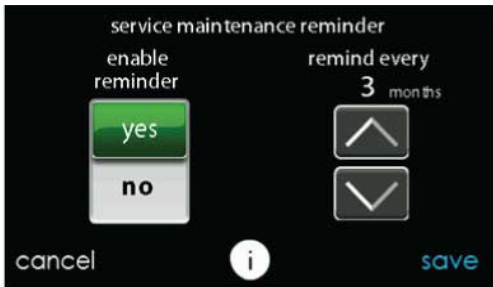
- Either your dealer's contact information or the dealer service number, 1-877-591-8908, will appear.
- This information will also appear if your system requires service.



A13250I

13.2. Service Reminder Update

Setup option will allow you to setup routine service reminders. Once the reminder option is enabled, you can select the frequency of these reminders (3 to 18 months).



A13251

13.3. Software Update

Periodically software updates for the Ion Black System Control will be made available. Updates will download automatically through your Wi-Fi connection, allowing you to install them at your convenience. Software updates will be made available on the my.ioncomfort.com website for download to a USB C.



A240317

13.4. Updating Software Using USB C

- When software updates are available, they will be posted on the downloads page of the [my.ioncomfort](http://my.ioncomfort.com) consumer portal. You may also visit <https://legacy.ioncomfort.com/ion/downloads>.

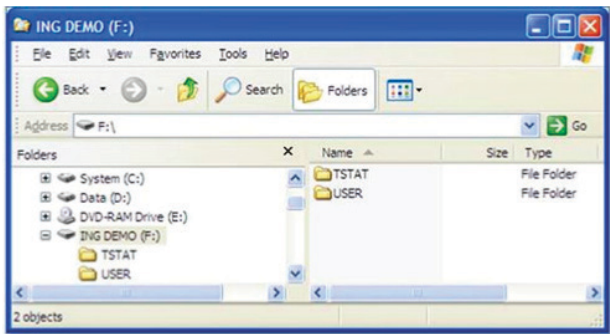
NOTE: You will obtain best results using a USB C that is 4 GB to 32 GB in size.

- From the downloads page on the [my.ioncomfort](http://my.ioncomfort.com) website, click on the link under the Download Latest Software
- Read the End User License Agreement (EULA).

- At the bottom of the EULA, choose “Yes” if you accept the agreement.

NOTE: If you do not wish to accept the agreement, you will not be able to download the software update.

- Use the Download link provided in the EULA document to download the software update package.



A13253

- Highlight the TSTAT folder in the WinZip window by clicking on the folder icon ONCE to highlight the proper folder to be downloaded to the USB C. You may also choose to extract the Documents folder as well to obtain any update information associated with the software update. Then click on **EXTRACT**.
- Choose the USB C device root directory as the location to extract the folder from the zip file. When the download is complete, the TSTAT folder will appear on the root directory of the USB C device. Verify

that the files, including the “.hex” file, have been extracted into the TSTAT folder of the USB C.

- Press Yes to continue with the software upgrade. The upload and installation will take several minutes.
- When the software upgrade is complete, a “successful” message will appear. Click **DONE**.
- The Ion Black System Control will perform a restart after the **DONE** button is pressed. Once the Ion Black System Control has successfully restarted, the USB C may be removed.
- This completes the software upgrade process.

13.5. Updating Software Using Wi-Fi®

When software updates are available, this reminder message will be displayed on the home screen.



A250003

Touch anywhere inside the software update reminder message to install the latest software or customize your reminder messages for software

updates. (Note: The version numbers shown below are examples. Actual version numbers will vary.)

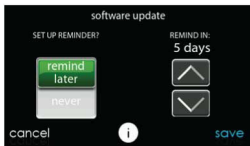


A150194

Selecting **YES** will initiate the software update process. Your Ion Black System Control will reboot in order to complete the software update process. All of your previously stored information and settings will be maintained.

NOTE: Select **DETAILS** to view the release notes associated with the software to be downloaded.

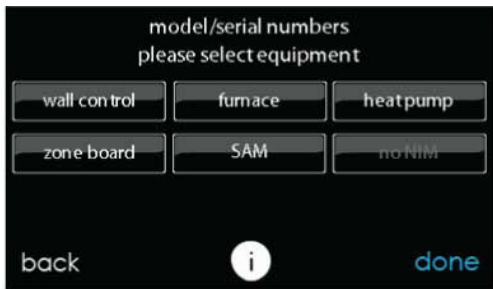
Selecting **NO** will allow to set-up a reminder for a later time or you can disable the reminder feature for this particular software update.



A150204

13.6. Model / Serial Numbers

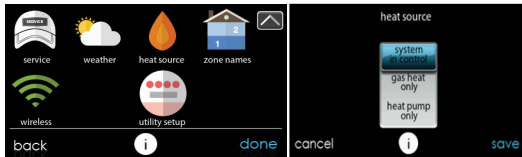
This screen will allow you to access the model numbers and serial numbers for the installed equipment.



A14255

14. Heat Source (If Applicable)

With the Ion Black System Control, you can select the desired heat source of your system, if your system is equipped as a Dual Fuel System. Select the **HEAT SOURCE** icon from the menu screen.



A170239I Rev B

NOTE: Options available on this screen will correspond to the equipment attached. Options may appear that are different than those shown, below.

- The default is for the system to Control the heat source.
- To have only the furnace Control, select **FURNACE ONLY**.
- To have only the heat pump, select **HEAT PUMP ONLY**.
- To have only electric select **ELECTRIC ONLY**.
- When you have made the appropriate selection, touch **SAVE**.

15. Zone Names (If Applicable)

With the Ion Black System Control, you have the ability to customize zone names. Select the **ZONE NAMES** icon from the menu screen.



A170240I

- Touch the zone in which you choose to change the name.
- Choose between selecting a **COMMON NAME** or **CREATE A CUSTOM NAME**.

- If you choose select a common name, touch the name you want for that particular zone.
- If you choose create a custom name, use the (≤ or clear) button to erase the existing zone name. Then, use the on-screen keyboard to type in the name you want for that particular zone.

15.1. Home Automation System Interface (If Applicable)

The Ion System can also be accessed via Amazon Alexa™ Home Skills. See the My Apps tab on the my.ioncomfort.com website for more information.

Your dealer can work with your home automation supplier to see if the systems are compatible, or to see if the home automation supplier can make them compatible.

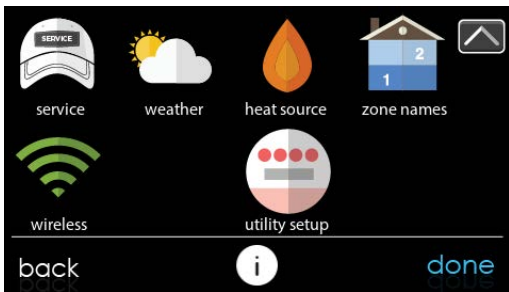
16. Wireless

The Ion Black System Control can connect to the in-home Wi-Fi® network to connect the Ion Black System Control to the Internet. The Ion Black System Control is intended to connect to an existing home Wi-Fi network, or to be added to an existing Ion System Wi-Fi network. If the in-home Wi-Fi is found to be incompatible, another 2.4 GHz band wireless router can be installed to establish Wi-Fi connectivity. The Ion Black System Control Wi-Fi radio operates only on the 2.4 GHz band. Please call 1-877-591-8908 for support with Wi-Fi set-up and connection to the Ion Server.

The ability to remotely access and adjust the settings of the Ion Black System Control with the SmartHome mobile application is dependent on the compatibility of the user's mobile device, the Ion Black System Control, and/or the Ion web server with, and the availability of, the user's

Internet service provider or mobile device carrier service. International Comfort Products makes no representations or warranties, express or implied, including, to the extent permitted by applicable law, any implied warranty of merchantability or fitness for a particular purpose or use, about the compatibility of the user's mobile device, with the Ion Black System Control, and/or the Ion web server, with, and the availability of, the user's Internet service provider or mobile device carrier service, or that the ability to remotely access and adjust the settings of the Ion Black System Control will not be negatively affected by the network-related modifications, upgrades, or similar activity of the user's Internet service provider or mobile device carrier service.

To establish Wi-Fi connectivity to the Ion Black System Control using the in-home router or wireless access point the wireless access point SSID and password/passkey must be known for set-up.



A170241I Rev B

- Select **WIRELESS** from the menu screen.
- Make sure the Wi-Fi connection is enabled, by touching **ENABLED**.

- Touch **SETUP A WI-FI CONNECTION** to begin the process.
- Next, touch **SCAN FOR AVAILABLE ACCESS POINTS**.



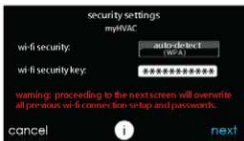
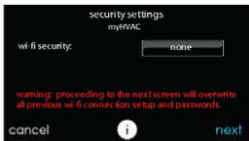
A13235

- On the next screen look for the SSID of the router/access point. After being selected, it will be outlined in faint blue and will be indicated by a checkmark. Then select **NEXT**.



A150175

- The selected network will show. Choose an appropriate Wi-Fi security. Usually auto-detect will correctly identify the type of security used. If the network has no security it will show as on the left, but a secured network will prompt for the Wi-Fi security key.



A150191

- If a Wi-Fi security key is shown as on the right hand picture above then select the white bar and enter the security key, then select **NEXT**.
- Touch in the security key area, and the keyboard will appear.
 - Use the on screen keyboard to enter the Wi-Fi security key, then touch **NEXT**.
- The Control will inform you if the connection is successful. If so, touch **DONE**.
 - If the connection is unsuccessful, verify that the proper information has been entered before you touch **RETRY**. The Control will go through the process again.



A13238

- After the control has connected to the network, go to my.ioncomfort.com, or use the SmartHome mobile app to register the unit. Registration requires the MAC address and serial number of the Ion Black System Control. On the wall control to find the serial number and MAC address of the Ion Black System Control, click on Menu, Down Arrow, Wireless and View my.ioncomfort Registration Info. When using the SmartHome mobile app you can take a picture of the QR code and these items will be filled in for you. This screen will provide the information needed on the my.ioncomfort.com website during registration.



A170285I_Rev. B

- When the connection to the Ion web server has been established, the status screen will show Connected for both Wi-Fi and the server.

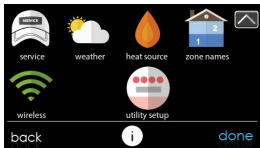


A13242I

17. Weather

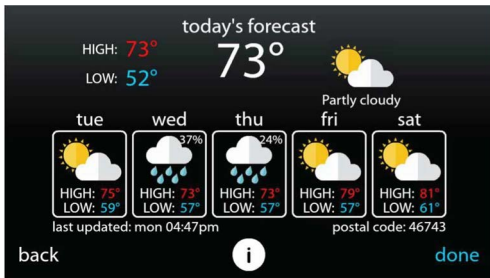
When the Ion Black System Control is connected to a Wi-Fi® network, use the **WEATHER** icon to retrieve the weather forecast based your postal code.

Weather forecasts are provided through the *Ion* server. Local outdoor air temperature is provided by a sensor installed by your dealer. Please contact your installing dealer for details.

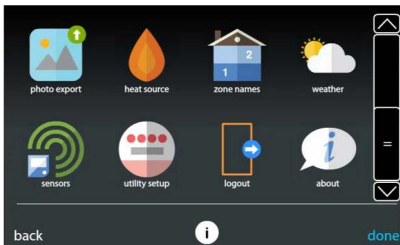


A170242I Rev B

- To enter your postal code, touch **CHANGE CURRENT LOCATION**.
- Next, select your country (United States or Canada).
- To enter your postal code, touch in the blank area; then enter your postal code using the on screen keyboard. Note that you may select a postal code other than where the system is located, if another postal code has a more relevant weather forecast for your area.
- After you have entered your postal code, touch **SAVE**.



A170250



A1702081

18. SmartSave Program (Available in Select Regions)

Your system control is pre-configured to support the SmartSave energy management program. SmartSave instructions vary based on your location and energy provider. Please refer to ICPUSA.com for further information.

19. Statement 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

19.1. FCC Interference Statement

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.

To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Pour se conformer aux limites d'exposition RF FCC et IC pour la population générale / l'exposition incontrôlée, l'antenne utilisée pour cet émetteur doit être installée pour assurer une distance de séparation d'au moins 20 cm de toutes les personnes et fonctionnant conjointement avec toute autre antenne ou émetteur.

This Device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada, exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: 1) ce dispositif ne peut pas causer d'interférences, et 2) ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

 **WARNING**

This product can expose you to chemicals including Lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

 **AVERTISSEMENT**

Ce produit peut vous exposer à des agents chimiques, y compris le plomb et les composés de plomb, identifiés par l'État de Californie comme pouvant causer le cancer et des malformations congénitales ou autres troubles de l'appareil reproducteur. Pour de plus amples informations, prière de consulter www.P65Warnings.ca.gov

 **ADVERTENCIA**

Este producto puede exponerlo a químicos que incluyen plomo y compuestos de plomo, los cuales son conocidos en el Estado de California como causantes de cáncer y defectos de nacimiento, u otros daños reproductivos. Para mayor información, visite www.P65Warnings.ca.gov



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Amazon Alexa is a trademark of Amazon, Inc. or its affiliates.

TP-LINK is a trademark of TP-Link Technologies Co., Ltd.

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