

HōM® Energy Manager

Web-Programmable Thermostat User's Manual



IT801

Look inside for a complete guide to the setup and operation of your new thermostat.

Installed by:	
Date:	
Number of Thermostats:	
Notes:	

Table of Contents

Your Duke Energy HōM® Energy Manager thermostat controls your central air conditioning and heating system. The types of compatible systems include:

Central Air Conditioners:

- Single-Stage
- Multi-Stage

Heat Pump*:

- Single-Stage
- Multi-Stage

Furnaces:

- Single-Stage Gas or Oil
- Multi-Stage Gas or Oil
- Single-Stage Electric
- Multi-Stage Electric
- Two-Wire Hydronic
- Millivolt Heat System

Aux Heat:

- Single-Stage Electric
- Multi-Stage Electric

IMPORTANT

All programming functions are available through the Duke Energy HōM Energy Manager Portal. The "7-Day/4-Interval" programming function cannot be done manually at the thermostat. It can only be done through the HōM Energy Manager Portal.

You may enter the HōM Energy Manager Portal from anywhere you have Web access, using your smartphone, tablet, or computer. You may manually use the thermostat to raise or lower the temperature at your location, and set all other HVAC features. For details on programming through the HōM Energy Manager Portal, please see your *Welcome to Duke Energy HōM Energy Manager* brochure or visit duke-energy.com/homenergymgr.

All compatible components are connected and configured by the HōM Energy Manager technician during installation.

*If you have a heat pump, make sure your settings are no more than 2 degrees between the warmest temperature (the one you set when you are present) and coolest temperature (the one you set when you are away). Large temperature differences may enable the auxiliary heating mode and potentially cause your electric bill to increase significantly in the fall and winter months.

Step 1: Getting Started

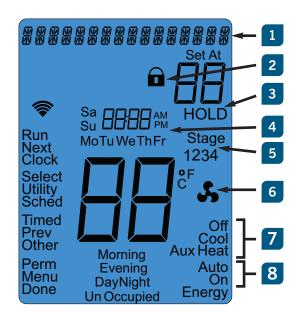
A. Thermostat Buttons and Indicators



1 Nightlight	Enables or disables illumination. Provides night light function. Can be used to activate the LCD back light.
2 FAN Button	Changes fan setting (Auto/On)
3 SYSTEM Button	Changes operating mode (Off , Cool , Off , Heat , Aux Heat [displayed on heat pump units only] and Off)
4 User Program Buttons	Facilitate various operations in different menus
5 Temperature Setpoint Buttons	Changes temperature up + or down -
6 LEDs	Indicates status of conservation periods
7 Module Slot	Houses the communications radio module

Step 1: Getting Started

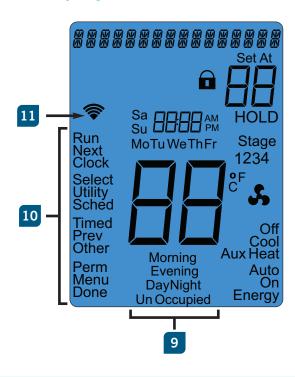
B. Thermostat Display



1 Messaging Display	Displays current date, HVAC system status, conservation period status, and Duke Energy-related messages. In the event of a power outage, the clock will maintain the correct time for 24 hours
2 Lock Icon	Confirms keypad lockout, preventing unwanted changes to thermostat settings
3 HOLD Indicator	Appears only when thermostat program is overridden
4 Time and Day Display	Indicates current time and day of the week
5 HEAT/COOL Stage Display	When ON, the indicated stage is active; when OFF, the state is inactive; when flashing, compressor delay is active
6 Fan Status	Appears only when fan is on
7 System Status	Displays current operation mode according to system configuration as set by installer • Off – system is OFF • Cool • Off • Heat • Aux Heat • Off
8 Fan Mode	AutoOn

Step 1: Getting Started

B. Thermostat Display (continued)



9 Time Of Day Program Interval	Displays current programming interval setting
User Buttons Display (Programming Buttons)	Actions to be performed when corresponding user button is pressed
11 Link Status	Indicates status of Wi-Fi® link

NOTE: Should a communications error (COMM ERROR) display in the thermostat messaging area, please call Duke Energy at 800.956.8825 immediately. The message indicates a communication problem between your thermostat and Duke Energy. In some instances, the utility will program the thermostat to also display whom to contact during a communications error.

Step 2: Main Menu and Thermostat Settings

The User Programming Menu table (next page) summarizes the configuration items that the homeowner can adjust, and provides a convenient space to keep track of your settings.

To enter the User Programming Menu:

- 1. Ensure the thermostat is at the home screen (see example at right).
- 2. Press the **Menu** button. The display will show the first level of the User Programming Menu.
- 3. While in the User Programming Menu:
 - The and buttons change settings
 - The Next and Previous buttons move from one item screen to another
 - The **Done** button exits the User Programming Menu



This menu displays the name of the wireless Internet access network to which the thermostat is connected. In this menu, you may reset your wireless Internet connection [RESET WI-FI®] or remain connected to the existing network [CLIENT]. The default setting is CLIENT.

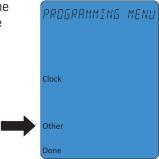
STEP 1: Return Thermostat to Wi-Fi® Configuration Mode

Sometimes it might be necessary to move the wireless Internet accessible thermostat to a different wireless Internet access network, change your network name or change your network password. To do this, you will need to disconnect your HōM® Energy Manager thermostat for your wireless Internet network as follows:

1. On the Main Menu screen, press the **Menu** button.



 Press the Other button. The thermostat will display the WI-FI® SETTINGS menu.



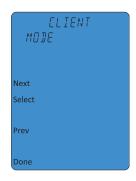
3. Press the **Select** button. The message area of the thermostat will display the wireless Internet access network name (SSID) to which you are currently connected.



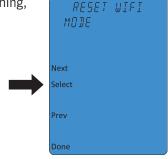
4. Press the **Next** button. The top line of the message area will flash **CLIENT**.



5. Press the + button to advance the display to RESET WI-FI®.



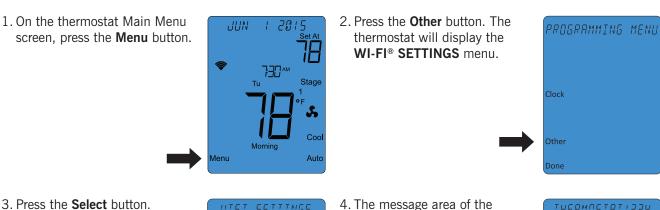
6. As **RESET WI-FI**® is flashing, press the **Select** button.

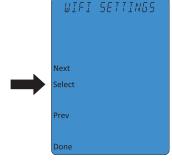


STEP 2: Connect to a Wireless Internet Network

In the configuration mode, the HōM® Energy Manager thermostat acts like a wireless Internet access point. This allows the homeowner to use any wireless Internet-enabled device to connect to the thermostat and configure it to use their Wi-Fi® settings with a standard Web browser.

NOTE: If any settings on your wireless Internet router are changed at any time during this step, you must cycle the power to your thermostat and restart this procedure.





thermostat will display **THERMOSTAT** followed by the last four digits of the thermostat's Wi-Fi® module serial number. This is the network name (SSID) you will use to connect to the thermostat



If you continue to have connectivity problems, please call the HōM Energy Manager customer service center at 800.956.8825.

5. Use a Wi-Fi®-enabled smartphone, tablet, or computer to connect to the thermostat. Open the Wi-Fi® settings menu on your device and select the **THERMOSTAT** name displayed in **step 4**.



 You may receive a notification that you are connected to a non-secure network. Select **OK** or **CONTINUE**.



- 7. Open the web browser on your device. If your browser is set to automatically open a Web page, the IntelliTEMP configuration page should automatically appear.
- 8. If the settings page does not appear after a few seconds, type "directlink/settings" in the address bar, then press **ENTER**. If the settings page still does not appear, on the thermostat Main Menu screen, press the button next to **Menu**. Then press the button next to **Other**. The thermostat will display the **WI-FI® SETTINGS** menu. Press the button next to **Select**. The message area of the thermostat will display the Wi-Fi® network name (SSID) to which you are currently connected. Press the button next to **Next**. The IP Address of your device will be displayed in the thermostat's message area. In the browser bar of your device, type "http://" followed by the IP address displayed on the thermostat. Press **ENTER**.



Use the pull-down on the settings page to select your user network name.



10. If your wireless
Internet router is set
to hide the network
name or your network
is not listed in the
pull-down, click on the
link below the pulldown to display the
manual settings page.



- 11. Enter the network password for your network.
- 12. Once all fields are filled in correctly, click on the **Save** button.



13. The settings page will now show an overview of the settings you entered. If all settings are correct, click on **Apply**. If you need to correct any settings, click on **Cancel**.



14. After clicking on **Apply**, the web page will now display the form shown on the right. The Wi-Fi® thermostat will close the wireless Internet connection to your device. It will then attempt to connect to your wireless Internet accessible router. If there was an error detected in one of the settings you will be prompted to return to the settings page and correct the error.



B. Filter Timer Settings Menu

The filter timer is an indicator to the homeowner to check and/or replace the HVAC air filter.

Filter Timer Menu allows you to set the number of days before the **CHANGE FILTER** alert appears in the thermostat display. It also allows you to disable the filter timer and the Reset Filter Timer. The default setting is 90 days, but filters should be checked every month. How often you change them can impact the quality of your indoor air and the efficiency of your HVAC system. To set/reset the filter timer:

1. Press the **Menu** button. The **Programming** menu screen title will appear in the messaging area.



WIFI SETTINGS

2. Press the **Other** button to advance the menu screen to the **WI-FI® SETTINGS** menu.



3. Press the **Next** button to advance to the **FILTER TIMER** screen.



4. Set the number of days until the **CHANGE FILTER** message will appear in the display window by pressing the + or - button. The day setting will advance or regress in 5-day increments.



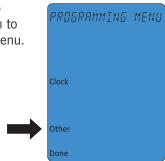


To disable the filter timer:

 Press the Menu button. The Programming menu screen title will appear in the messaging area.



2. Press the **Other** button to advance the menu screen to the **WI-FI® SETTINGS** menu.



3. Press the Next button to advance to the FILTER TIMER screen.

4. Press the + or - button to reach Off.

5. Press Done.

Next
Select
Prev
Done

C. Reset Filter Timer





Filter Timer Reset

The filter timer is an indicator to the homeowner to check and/or replace their HVAC air filter. The filter timer can be reset at any time—whether there is an active **CHECK FILTER** message display or not. The filter timer can be reset from within the **FILTER TIMER** user programming menu by pressing the **SELECT** button. The countdown timer (flashing value) will be reset to the user selected filter timer value displayed at the end of the top display line. When returning to the main operating screen, the **FILTER RESET** message will be displayed and **CHECK FILTER** message will no longer be displayed to confirm that the filter has been reset.

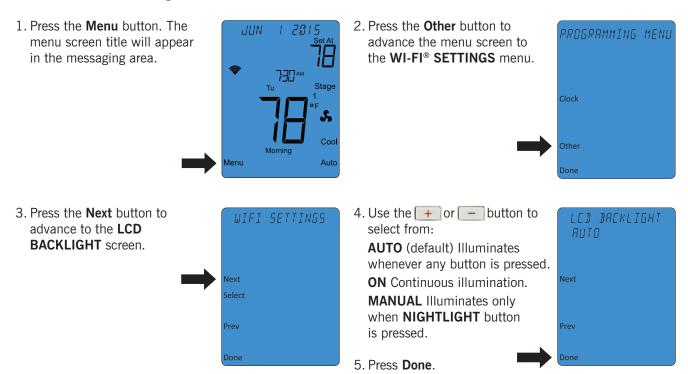
There is also an easy way for the user to reset the filter timer value to the default value from the main operating screen without the need to enter the programming menu. To reset the filter timer, press and hold the **FAN** button for 3 seconds until the message **FILTER RESET** is displayed. The filter timer will be reset to the user defined value and the **CHECK FILTER** message will no longer be displayed in the message display area.

NOTE: If the **FILTER TIMER** in the user settings menu is set to **OFF**, this filter timer reset is not being used.

D. LCD Backlight Settings Menu

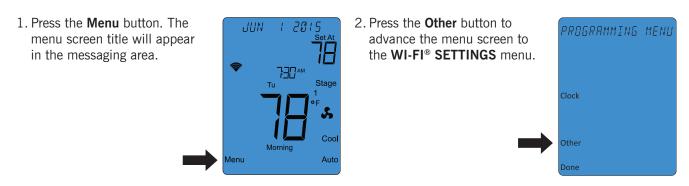
This menu allows you to choose when the LCD backlight illuminates.

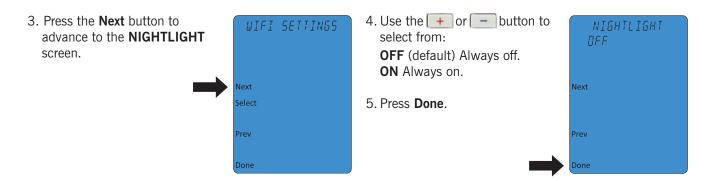
To choose when the backlight illuminates:



E. Nightlight Settings Menu

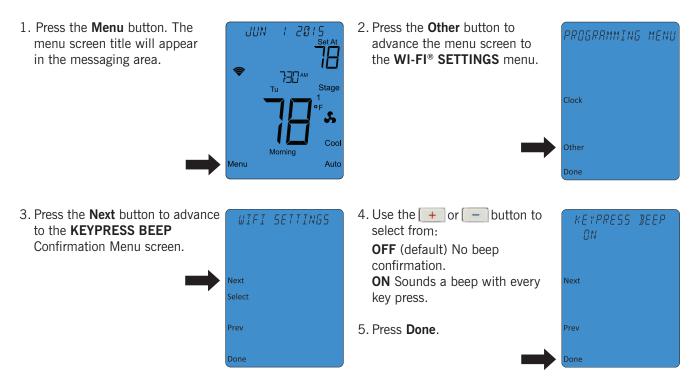
This menu allows you to choose when the nightlight illuminates.





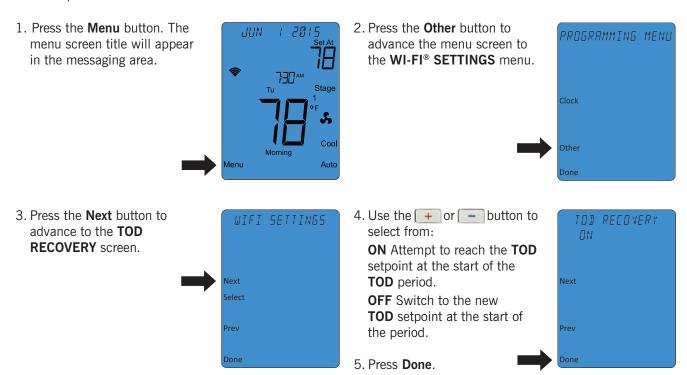
F. Keypress Beep Confirmation Menu

This menu allows you to enable or disable an audio beep confirmation of every key press.



G. Time-of-Day (TOD) Recovery

This feature turns your system on before the **TOD** programming time to attempt to reach the set point at the start of the **TOD** period.



Step 3: How to Set a Temperature "Hold"

You can override the thermostat's programmed temperature setpoint at anytime by choosing one of three types of hold operations, explained below. The type you choose determines when the hold will end and the thermostat returns to its programmed schedule.

When you set a hold, the word **HOLD** will be displayed beneath the temperature setpoint on the thermostat display screen. The word **RUN** will be displayed next to the top left button indicating an active hold. The type of hold (Temporary, Timed Temporary, Permanent) will be displayed in the messaging area at the top of the thermostat. This message will appear in rotation with other messages such as the current date and other active thermostat operations.

A. Temporary Hold

A temporary hold lasts until the start of the next time-of-day program schedule period, or until you manually end it.

To set a temporary hold:

1. Press the + or - button to adjust the setpoint to the desired temperature.



2. Wait 5 seconds for the thermostat to confirm your hold on the display.



B. Timed Temporary Hold

A timed temporary hold lasts until the time you have designated it to end, or until you manually end it. To set a timed temporary hold:

- 1. Press the + or button to adjust the setpoint to the desired temperature.
- The word **TIMED** will display for 5 seconds after you set the hold temperature. Press the button next to it.



Step 3: How to Set a Temperature "Hold" (continued)

3. The current time display in the center of the screen will begin flashing. Press the + button to set the time you want the temperature hold to end.

You may adjust the time in 15-minute increments and set a timed temporary hold for up to 24 hours. Press **Select** when the desired time is displayed. Once the hold time is set, the display returns to the current time.





C. Permanent Hold

A permanent hold lasts until you manually end it. To set a permanent hold:

Press the ___ or __ button to the desired temperature.

The word **PERM** will display for 5 seconds after you set the hold temperature. Press the button next to it.





D. Ending a Hold

To end a temporary or timed temporary hold before the end of its assigned duration, or to end a permanent hold, press the button next to the **RUN** display. This ends the active hold and returns the thermostat to its program schedule.

NOTE: When setting a temporary or timed temporary hold, failure to press the button next to the **TIMED** display within 5 seconds will cause a default to temporary hold. When setting a permanent hold, failure to press the button next to the **PERM** display will also cause a default to temporary hold.





Step 4: Using the Keypad Lock

The HōM® Energy Manager thermostat enables you to limit user access through its keypad lockout feature. This security prevents unwanted changes to the thermostat settings and programming. You may select your level of security from two types of lockouts:

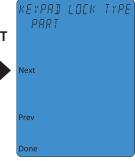
A. Partial (PART) Lockout

Prevents other users from changing any programming values while still allowing users access to operational changes such as setting a hold or changing the system operation mode. To set a partial lockout:

At the main operating screen, press and hold the + and buttons simultaneously for 3 seconds.



 The display will change to the KEYPAD LOCK TYPE screen with OFF flashing. Select PART by pressing the + or button. Press Next.



3. Enter a four-digit security code of your choosing. This code will be required to unlock the keypad in the future. To enter the code, press the + or - button to change the first digit, then press **Next**. Repeat the above process for the last 3 digits, then press the **Done** button.



4. Your security code is now saved and the keypad lock is now active. The thermostat will return to the main operating screen and display a temporary **KEYPAD LOCKED** message. The screen will now constantly display a lock icon indicating an active keypad lock.



Step 4: Using the Keypad Lock (continued)

B. Full (FULL) Lockout

Prevents any type of user activity through the keypad except for turning on the backlight (if it was previously enabled). The user cannot change program settings, mode of operation, fan mode of operation or set/end a hold. To set a full lockout:

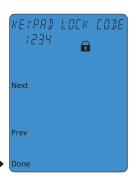
1. At the main operating screen, press and hold the + and buttons simultaneously for 3 seconds.



2. The display will change to the KEYPAD LOCK TYPE screen with OFF flashing. Select FULL by pressing the + or - button. Press Next.



3. Enter a 4-digit security code of your choosing. This code will be required to unlock the keypad in the future. To enter the code, press the + or - button to change the first digit, then press **Next**. Repeat the above process for the last 3 digits, then press the **Done** button.



4. Your security code is now saved and the keypad lock is now active. The thermostat will return to the main operating screen and display a temporary KEYPAD LOCKED message. The screen will now constantly display a lock icon indicating an active keypad lock.



NOTE: You will set your four-digit security code the first time you set a keypad lockout. The code will remain the same until you change it manually. There is no way to unlock the keypad lock if you forget your code, so choose a number that has meaning and notate it below in the space provided.

Code	Date

Step 4: Using the Keypad Lock (continued)

C. Unlocking the Keypad

1. At the main operating screen, press and hold the + and buttons simultaneously for 3 seconds.



2. The display will change to the **ENTER LOCK CODE** screen with "5555" flashing. Enter your 4-digit security code by pressing the + or - button to change the first digit, then press **Next**. Repeat the above process for the last 3 digits, then press the **Done** button.



3. If the correct code is entered, **KEYPAD UNLOCKED** will appear in the message area of the screen. The thermostat will return to the main operating screen and the lock icon will no longer be displayed.



4. If an incorrect code is entered, the thermostat will return to the main operating screen, display the temporary message UNLOCK FAILED, continue to display the lock icon and remain in the locked mode.



Step 5: Conservation Events

The HōM® Energy Manager automatic electricity conservation program may be activated for a few hours on up to 10 summer weekday afternoons when electricity use is at its highest. During these "conservation periods", your cooling system's compressor cycles each hour for the amount of time you chose when you enrolled.

Your HōM Energy Manager thermostat will keep you informed when a conservation period occurs. The message display and green LED indicator will signal when your compressor is resting and when it is active during an event. The message and indicator will change during the period coincident with your cycling level.

A. Conservation (Disabled) Phase Displays

- 1. The green LED indicator remains lit throughout the conservation phase.
- 2. The message **CONTROL ACTIVE** appears in the message display rotation.
- 3. A message showing the approximate time remaining in the conservation event also appears in the message display rotation.







B. Cooling (Enabled) Phase Displays

- 1. The green LED indicator flashes 1/2 second off, 1-1/2 seconds on when the thermostat is allowed to run normally during the conservation event.
- 2. The message **CONTROL EVENT** appears in the message display rotation.
- 3. A message showing the approximate time remaining in the conservation event also appears in the message display rotation.







Step 5: Conservation Events (continued)

IMPORTANT: During a conservation period, you may access the HōM® Energy Manager Portal to follow the status of the event and monitor your home's temperature. However, you are not able to manually or remotely change the temperature or make any changes to your programming schedule until the conservation period has ended. Your data charts and tips do remain accessible at anytime.

Troubleshooting

Power Loss

The HōM® Energy Manager thermostat is designed to withstand a power loss without the need of a battery backup. The thermostat responds to a power loss as follows:

- All Thermostat Settings and Schedule Programming are stored to permanent memory and retained throughout the power loss.
- The thermostat will return to the same System Mode (Off/Heat/Cool/Aux) it was in prior to the power loss.
- A **Permanent Hold** will be maintained after a power loss.
- A **Temporary Hold** will be maintained after a power loss ONLY if still within the same Program Schedule time period. Otherwise the thermostat will return to operating according to the Program Schedule.
- The thermostat is designed to maintain the clock for at least 24 hours without power. If power has been lost for more than 24 hours, the clock will return to a factory default time and will update with the next utility time sync.
- A Conservation Period will be maintained after a power loss if still within the same conservation period.

Common Problems: No Heat, No Cool, or No Fan

Possible Cause	Corrective Action
Blown fuse or tripped circuit breaker.	Replace fuse or reset breaker.
Furnace power switch set to OFF .	Turn switch to ON .
Furnace blower compartment door or panel is loose or not properly installed.	Replace door panel in proper position to engage safety interlock or door switch.

No Heat or No Cool

Possible Cause	Corrective Action
Thermostat may be in a HōM Energy Manager conservation period. "Event in Progress" will be displayed on top line of home screen.	Wait for the HōM Energy Manager conservation period to end.
System switch is set to OFF .	Press the thermostat's SYSTEM button one or more times to select HEAT or COOL (as appropriate).

Heat, Cool, or Fan Runs Constantly

	Possible Cause	Corrective Action
Fan set to ON .		Change Fan to AUTO .

Troubleshooting (continued)

No Heat

Possible Cause	Corrective Action
Pilot light not lit.	If it will not stay lit, call for service from your HVAC contractor.
System switch not set to HEAT .	Press the thermostat's SYSTEM button one or more times to select HEAT and press + to raise the temperature setpoint above room temperature.
Furnace Lock-Out Condition. Heat may also be intermittent.	Many furnaces have safety devices that shut down when a lock-out condition occurs. If the heat works intermittently, contact the furnace manufacturer or your HVAC contractor for assistance.
Heating system requires service or thermostat requires replacement.	To diagnose this condition: Press SYSTEM button to select HEAT and press + to raise the temperature setpoint above room temperature. Within a few seconds the thermostat should make a soft click sound. This sound usually indicates the thermostat is operating properly. If the thermostat does not click after being reset, contact HōM® Energy Manager for a replacement thermostat. If the thermostat does click, contact the furnace manufacturer or your HVAC contractor for a service visit to verify the heating is operating correctly.

Furnace or Air Conditioner Cycles Too Fast or Too Slow (Narrow or Wide Temperature Swing)

Possible Cause	Corrective Action
The location of the thermostat and/or the size of the heating system may be influencing the cycle rate.	Electronic thermostats, like this one, normally provide precise temperature control and may cycle faster than some older mechanical models. A faster cycle rate means the unit turns on and off more frequently to maintain the desired temperature, but runs for a shorter time so there is no increase in overall energy use.

Troubleshooting (continued)

No Cool

Possible Cause	Corrective Action
System switch not set to COOL.	Press SYSTEM button to select COOL and press to lower the temperature setpoint below room temperature.
Outdoor unit disconnect or breaker tripped.	Verify the outdoor unit disconnect or breaker has not been tripped.
Cooling system requires service or thermostat requires replacement.	To diagnose this condition: Press SYSTEM button to select COOL and press — to lower the temperature setpoint below room temperature. Within a few seconds the thermostat should make a soft click sound. This sound usually indicates the thermostat is operating properly. If the thermostat does not click after being reset, contact your installing contractor for a replacement thermostat. If the thermostat clicks, contact the furnace manufacturer or HVAC contractor for a service visit to verify the cooling is operating correctly.

Multi-stage Air Conditioner or Heat Pump: Second, Third, or Fourth Stage Won't Come On

Possible Cause	Corrective Action
Your thermostat is designed to determine the optimum time to activate the second stage. Simply raising the temperature in heating or lowering it in cooling will not always force the thermostat to bring the second stage on quickly. There is a time delay of 0 to 30 minutes depending on the performance of the first stage of the system.	Wait for the second, third, or fourth stage to come on.

Notes	

Notes		

FCC Statements:

Warning:

Changes or modifications to this device not expressly approved by Comverge, Inc. could void the user's authority to operate the equipment.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For Class B Devices:

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

OHDRD1503

