

**ComfortNet CTK03 Thermostat Instructions
Millbrook Apartments #4 Application**



These residential units are furnished with new high efficiency HVAC units. These are designed to help the University reduce its carbon footprint. With this goal in mind, we ask for your assistance in operating each space as efficiently as possible. Setting a schedule and maintaining reasonable temperature set points have a significant effect on the amount of energy required to condition your space.

The facilities team has implemented a schedule as shown below. If this schedule does not meet your needs, the attached instructions describe how to change the times to better align with your schedule.

- Monday - Friday
 - 6:00AM Wake 70° Heat, 74°Cool
 - 10:00AM Leave 68° Heat, 78°Cool
 - 3:00PM Return 70° Heat, 74°Cool
 - 11:59PM Sleep 68° Heat, 78°Cool
- Saturday – Sunday
 - 6:00AM Wake 70° Heat, 74°Cool
 - 10:00AM Leave 70° Heat, 74°Cool
 - 3:00PM Return 70° Heat, 74°Cool
 - 11:59PM Sleep 68° Heat, 78°Cool
- Fan is always on AUTO
- Anytime you will be away for more than 48 hours, please use the vacation scheduler.

If you have any questions on the operation of your HVAC unit or thermostat, please call Customer Service during normal business hours at 314.935.5544.



Operating Manual

ComfortNet™ CTK03 Communicating Thermostat

Touch-screen Thermostat



69-2687EFS-01
HID-350

ComfortNet™ Communicating Thermostat

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CAUTION: EQUIPMENT DAMAGE HAZARD. To prevent possible compressor damage, do not operate cooling system when outdoor temperature is below 50°F (10°C).

This thermostat contains a Lithium battery which may contain Perchlorate material. Special handling may be required. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

About your new thermostat

Your new thermostat is pre-programmed and ready to go. Just check the settings below and change if needed:

1. Set date and time See page 4
2. Select fan setting See page 5
3. Select system setting See page 6
4. Program schedules: Preset for maximum cost savings..... See pages 7-10
5. Set humidification, dehumidification and ventilation See pages 16-19

i ONE-TOUCH TEMP CONTROL: You can override the program schedule at any time, and manually adjust the temperature (see pages 9-10).

Need Help?

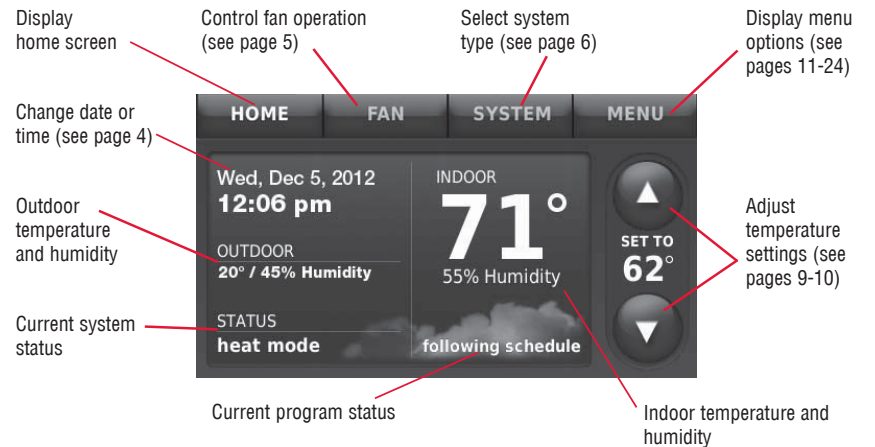
For assistance please call toll-free: **(888) 593-9988**

Read and save these instructions.

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Operating Manual

Quick reference: residential use



i Outdoor temperature and humidity are displayed only if an optional outdoor air sensor is installed.

Quick reference: commercial use

Display home screen

Control fan operation (see page 5)

Select system type (see page 6)

Display menu options (see pages 11-24)

Change date or time (see page 4)

Outdoor temperature and humidity

Current system status

Press to override program temporarily

Thermostat location and current program status

Adjust temperature settings (see pages 9-10)

Indoor temperature and humidity

i Outdoor temperature and humidity are displayed only if an optional outdoor air sensor is installed.

Date/time settings

Press date/time display

Press to select date or time

Press arrow buttons to change

To set the date or time, press the date/time display, then select **SET TIME** or **SET DATE**.

Press the ▲ or ▼ buttons until the proper time/date is displayed, then press **DONE** to save and exit (or press **CANCEL** to exit without changing the time).

i The thermostat will switch to and from Daylight Saving Time automatically.

Fan settings

Press **FAN**

Press any displayed option

- **On:** Fan is always on.
- **Auto:** Fan runs only when heating or cooling system is on.
- **Circulate:** Fan runs randomly, about 35% of the time (residential models only).
- **Follow Schedule:** Fan controlled by program (see pages 7-8).

i The fan speed can be adjusted from Low to High when the fan is set to **ON** or **CIRCULATE**.

i In commercial use, press **AUTO** or **ON** to temporarily override the programmed fan schedule.

i In commercial use, the **CIRCULATE** option is not available.

System settings

Press **SYSTEM**

Press any displayed option

Press **SYSTEM**, then select any option (press ▲ or ▼ to scroll menu):

- **Heat:** Thermostat controls only the heating system.
- **Cool:** Thermostat controls only the cooling system.
- **Automatic:** Thermostat selects heating or cooling as needed.
- **Off:** Heating and cooling system is off. Fan will still operate if fan is set to On or Circulate.
- **Emergency Heat** (only for heat pumps with auxiliary heat): Thermostat controls Auxiliary Heat. Compressor is not used.

i Press **HELP** for more information about these options.

Energy Saver settings for maximum cost savings

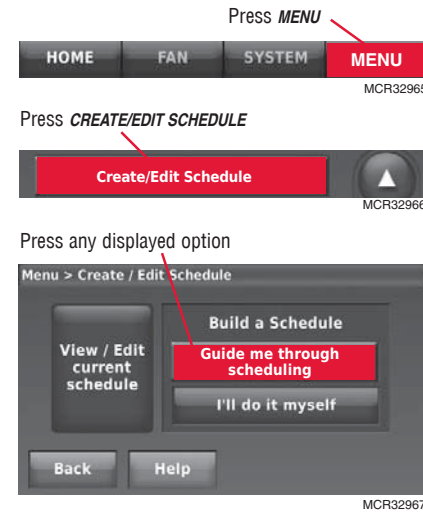
These default Energy Saver settings can reduce expenses by as much as 33%. (See next page to customize each time period.)

Residential Use	Period	Start time	Heat (Mon-Fri)	Cool (Mon-Fri)	Heat (Sat-Sun)	Cool (Sat-Sun)
	Wake	6:00 am	70°	78°	70°	78°
Leave	8:00 am	62°	85°	62°	85°	
Return	6:00 pm	70°	78°	70°	78°	
Sleep	10:00 pm	62°	82°	62°	82°	

Commercial Use	Period	Start time	Heat	Cool	Fan
	Occupied 1	8:00 am	70°	75°	On
Unoccupied 1	10:00 pm	55°	85°	Auto	
Occupied 2*	12:00 am	70°	75°	On	
Unoccupied 2*	12:00 am	55°	85°	Auto	

* Period 2 is cancelled by default. If you activate it, the values shown above are default settings.

To adjust program schedules



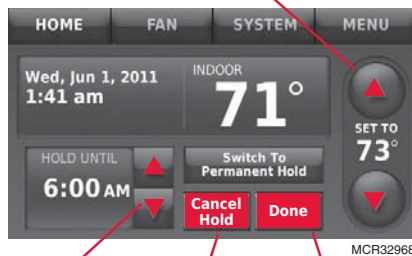
Press **MENU**, then **CREATE/EDIT SCHEDULE** to display options:

- **Guide me:** This option creates a schedule for you, by asking simple questions.
- **I'll do it myself:** This is a faster way to create a schedule manually.
- **View/Edit:** This displays the full schedule, so you can make quick adjustments.

- **i** To reduce costs, you should use the pre-set Energy Saver settings (see page 7).
- **i** Press **HELP** at any menu screen for more information about schedule options.

Program schedule override: residential use

Press to change temperature



- Press to set "hold" time
- Press to cancel "hold"
- Press to begin "hold"

Press **▲** or **▼** to change the temperature. It will be maintained until the "hold" time you set.

Press the **PERMANENT HOLD** button to keep the same temperature until you manually change it or resume the program schedule.

To cancel these settings at any time, press **CANCEL HOLD**.

Program schedule override: commercial use

Press to activate "occupied" mode



Press to change temperature



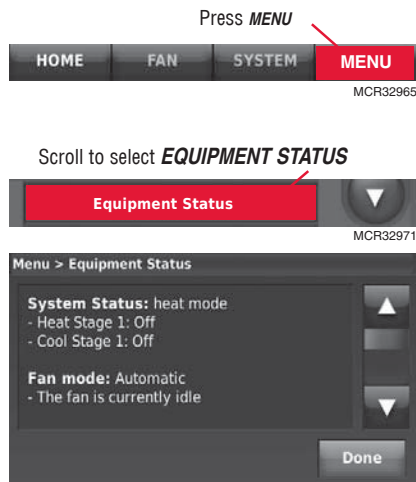
- Press to set "hold" time
- Press to cancel "hold"
- Press to begin "hold"

Press **▲** or **▼** to change the temperature. It will be maintained until the "hold" time you set.

Press **OVERRIDE** to use a pre-set "occupied" temperature if a person is present during an unoccupied period. The new temperature will be maintained for at least 1 hour, and can be adjusted up to the maximum time set by the installer. To change the time, press the **HOLD UNTIL** arrow buttons.

The programmed schedule will resume when the override timer expires. To cancel the override at any time, press **CANCEL HOLD**.

System status information

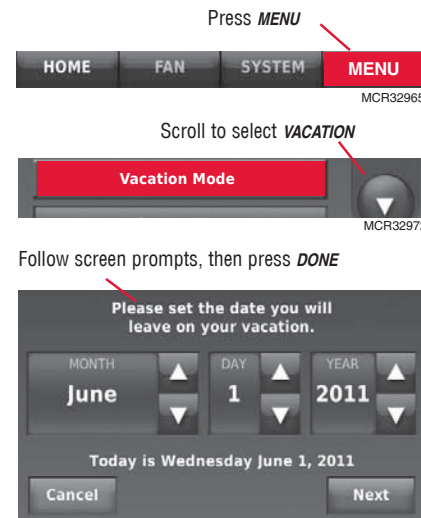


Press **MENU**, then select **EQUIPMENT STATUS**.

Depending on how your thermostat was installed, the Equipment Status screen can report data about the following systems:

- Heating and cooling
- Fan
- Humidification
- Dehumidification
- Ventilation
- Maintenance reminders
- Thermostat information

Menu: Vacation scheduling (residential use)

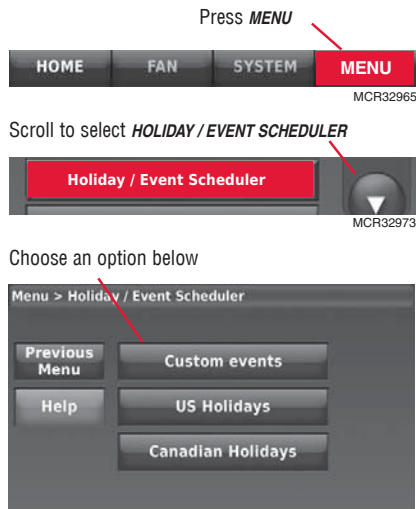


This feature lets you conserve energy while away, and restores a comfortable temperature just before you return to your home.

Press **▲** or **▼** at each screen to enter temperatures, dates and times as prompted, then press **DONE**.

The temperature you set will be maintained until you return, then the program schedule will resume.

Menu: Holiday/event scheduling (commercial use)

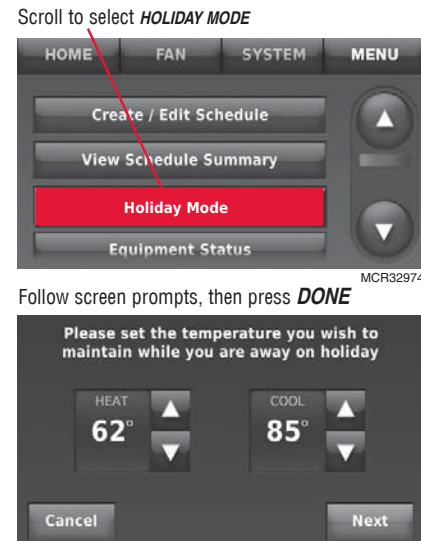


This feature lets you conserve energy when the workplace is unoccupied for special events or on holidays.

The **US** (United States) and **CANADIAN** options allow you to select from a list of holidays commonly observed in each country. You can set the system to “unoccupied” or “occupied” mode for the days you select.

The **CUSTOM EVENTS** button gives you more options to customize temperatures for specific dates and times in the future.

Menu: Holiday override (commercial use)



Press **HOLIDAY MODE** to set temperatures that will be maintained from now until the date you expect to return.

The thermostat will resume the normal schedule on the date you set. You can press **CANCEL** at any time to resume the normal schedule.

i The cool temperature setting can only be set higher than the unoccupied program setting and the heat temperature setting can only be set lower than the unoccupied program setting.

Initiate Occupancy mode (commercial use)



Press to maintain comfortable temperature while room is occupied

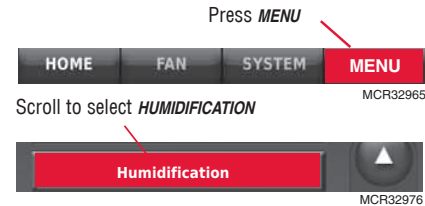
This feature keeps temperature at an energy-saving level until the **PRESS TO START OCCUPANCY** button is pressed. When you arrive, press the button to maintain a comfortable temperature while the room is occupied.

Press the ▲ or ▼ buttons to set the temperature or “Hold Until” time. The temperature is maintained until the time you set. Temperature returns to an energy-saving level after the timer expires, or the “Occupied” period ends.

The thermostat keeps temperature at an energy saving level until **OVERRIDE** or **PRESS TO START OCCUPANCY** button is pressed.

i This feature is available only if it is programmed by the installer.

Menu: Humidification



Window Protection limits the amount of humidity to prevent frost or condensation on windows

Move the slider bar to the humidity level you prefer, then press **DONE**.

Press **MORE SETTINGS** if frost or condensation appears on windows. A lower number adjusts humidity to help prevent these problems. Use a higher number if indoor air is too dry.

i The Window Protection option is only available if an optional outdoor sensor is installed.

Menu: Dehumidification (residential use)



This feature can control your air conditioner to reduce humidity. Move the slider bar to the humidity level you prefer, then press **DONE**.

i If your air conditioner is used to control humidity, temperature may drop as much as 3° F below the level you set until humidity reaches the desired level.

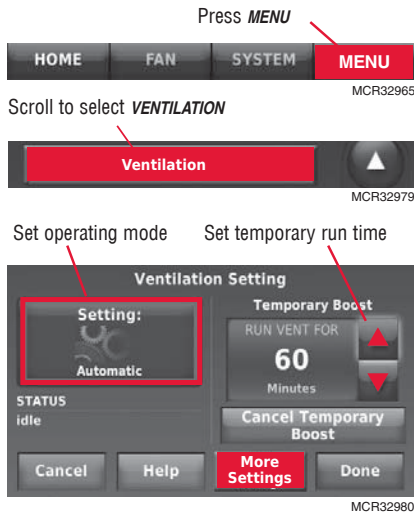
Menu: Dehumidification (commercial use)



Move the slider bar to the humidity level you prefer, then press **DONE**. If your air conditioner is used to control humidity, the thermostat may use the following methods to maintain your desired humidity:

- Cool from 1° to 5° F lower than your temperature setting.
- Run cooling for the minimum “on” time to reduce humidity.

Menu: Ventilation



Press **SETTING** to set operating mode:

Auto: Ventilation (fan) runs as programmed by the installer.

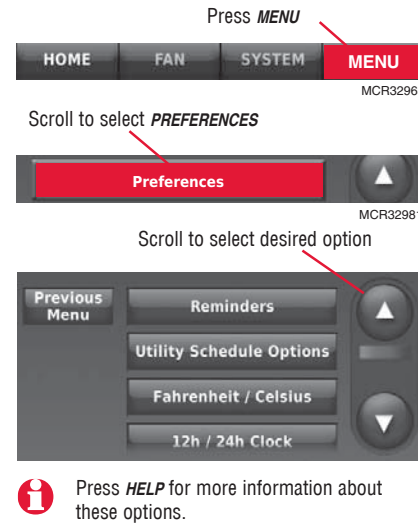
Off: Ventilation (fan) remains off unless turned on using the timer.

On: Ventilation (fan) is always on.

Press **▲** or **▼** to run ventilation (fan) temporarily. To turn it off, set to zero.

Press **MORE SETTINGS** to change maintenance reminders.

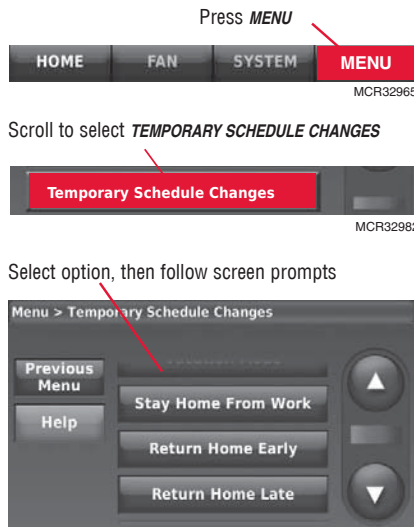
Menu: Preferences



At this screen you can view or change the following options:

- Reminders to change filters
- Utility Schedule options
- Fahrenheit/Celsius display
- 12/24-hour clock display
- Display Options:
 - Adjust screen color
 - Adjust screen brightness
- Language choice
- Scheduling options:
 - Non-programmable
 - Programmable
- Adaptive Intelligent Recovery (see page 25)
- Restore default schedule
- Daylight Saving Time options

Menu: Temporary schedule changes



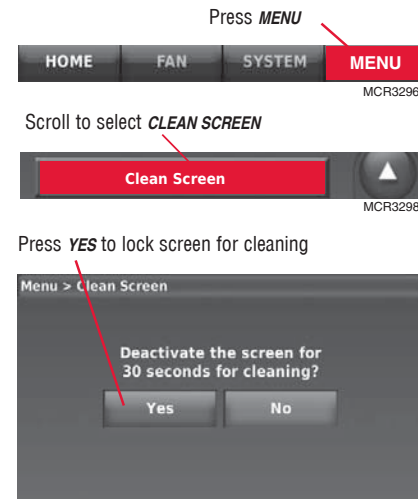
This feature is useful if your daily schedule sometimes changes.

Select an option, then follow screen prompts to conserve energy while you're away and maintain a comfortable climate after you return.

After the times you set, the normal program schedule will resume.

- i** Press **HELP** for more information about these options.
- i** See also Program Schedule Overrides (pages 9-10).

Menu: Clean screen



Use this feature to lock the screen so you can clean it without changing any settings. A countdown timer will show elapsed time until the screen is reactivated.

- i** Do NOT spray any liquid directly on the thermostat. Spray liquids onto a cloth, then use the damp cloth to clean the screen. Use water or household glass cleaner. Avoid abrasive cleansers.

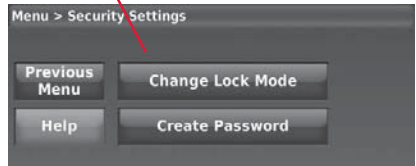
Menu: Security settings



Scroll to select **SECURITY SETTINGS**



Select option, then follow screen prompts



Press **HELP** for more information about these options.

Security options can be used to prevent unauthorized changes to system settings.

Lock options:

- **Unlocked:** Full access allowed.
- **Partially locked:** Only temperature can be changed.
- **Fully locked:** No access allowed.

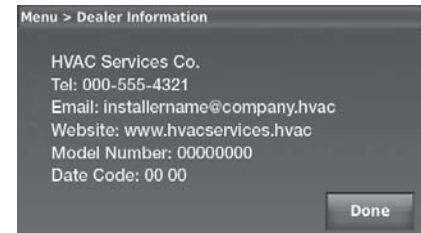
If you choose to use a password for additional security, write it here for reference:

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Menu: Dealer Information



Scroll to select **DEALER INFORMATION**



Check this screen if you need to contact the person who installed your system, for maintenance, repairs or upgrades.

Advanced features

Adaptive Intelligent Recovery (residential use only)

Over time, the ComfortNet™ CTK03 communicating thermostat “learns” how long it takes your system to provide the temperature you want. It turns on the heating or cooling system earlier to make sure you’re comfortable at the time you expect.

Dehumidification Away Mode

Your system can be set to control indoor climate while your home is vacant during the humid season. Before you leave, press **MENU**, then select **DEHUMIDIFICATION AWAY MODE**. Temperature and humidity will be kept at levels adequate to protect your home and possessions while you are away. When you return, press **CANCEL** to resume normal operation.

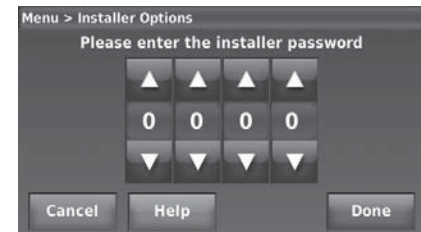
Compressor Protection

This feature protects your air-conditioning system by forcing the compressor to pause before restarting, to prevent damage. During this brief pause, the message “Waiting for Equipment” is displayed on screen.

Pre-occupancy Purge (commercial use only)

This feature turns on the fan 1 to 3 hours before each “occupied” time period, to provide a comfortable work environment when you arrive.

Menu: Installer options

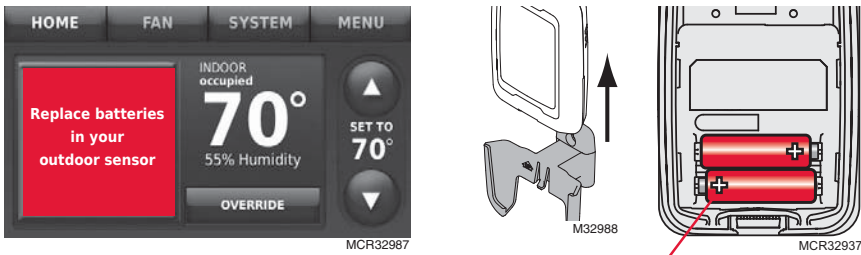


These options should be changed only by professionally qualified technicians. To avoid disabling or damaging your equipment, **do not change these options yourself.**

The USB port on the bottom of the thermostat is for use by professional installers only. Do not attempt to use this port yourself.

Press **HELP** at any screen for more information about these options.

Battery replacement: Wireless outdoor sensor

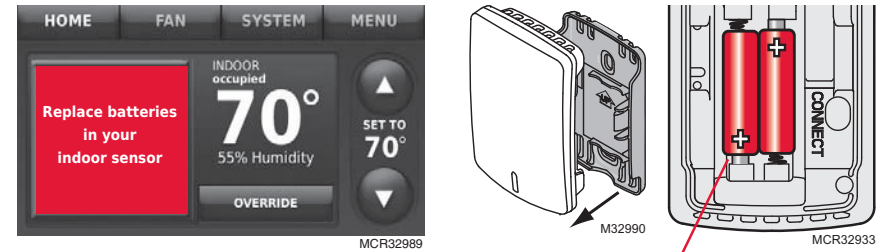


Remove sensor from bracket, detach cover and install 2 fresh AA **lithium** batteries

Replace batteries in your outdoor sensor when a warning appears on the thermostat screen, about two months before batteries are depleted.

After new batteries are installed, the outdoor sensor will restore communication with the wireless network within a few seconds.

Battery replacement: Wireless indoor sensor



Install 2 fresh AAA alkaline batteries. Status light will briefly flash green. If it flashes red, batteries are not good.

Replace batteries in your indoor sensor when a warning appears on the thermostat screen, about two months before batteries are depleted. When the sensor status light begins flashing red, battery power is critically low and will be depleted within 2-3 weeks. During normal operation, the status light remains off.

i After installing batteries, the status light may glow amber for 20 seconds. Please wait while the indoor sensor restores communication with the wireless network.

Humidity display



Humidity reading depends on sensor location

In some circumstances, the humidity displayed on the Home screen may not match humidity near the thermostat.

Some systems are set up to use two sensors, one to control humidification, the other for dehumidification. These sensors are often installed in different locations.

Depending on how it was configured when installed, the thermostat will only display humidity readings from one sensor on the Home screen.

Optional accessories



Portable Comfort Control

If you have only one thermostat, you move this remote control from room to room (like a portable thermostat), to make sure the temperature is comfortable in the room you're using. If you have multiple thermostats, you can view and adjust the temperature in each room from your armchair.



Wireless Outdoor Sensor

With a wireless outdoor sensor, your ComfortNet™ CTK03 communicating thermostat can display outside temperature and humidity. This information can also be displayed on your handheld Portable Comfort Control.



Wireless Indoor Sensor

If an indoor sensor is installed, your ComfortNet™ CTK03 communicating thermostat can monitor the temperature and humidity at that location and adjust the system to maintain comfort there. With multiple sensors, the thermostat can average temperature readings from each, to optimize comfort throughout your home.

Optional accessories



RedLINK™ Internet Gateway

The Honeywell RedLINK Internet Gateway gives you remote access to your ComfortNet™ CTK03 communicating thermostat via the Internet or from your smart phone. You can use a Web browser to review or adjust indoor temperature, system mode and other settings. The Gateway can also send alerts to as many as 6 email addresses to notify you if a problem occurs.



Wireless Entry/Exit Remote

This handy device mounts beside your door for convenient one-touch control. Press **AWAY** when you leave, and **HOME** when you return, to keep your home comfortable while occupied and save energy when you're away. To change pre-set temperatures, go to **Menu > Entry / Exit Remote Settings**.

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Optional accessories



Wireless Vent and Filter Boost Remote

This handy device mounts anywhere in your home (typically bathroom or kitchen) for convenient on demand ventilation. Select 20, 40 or 60 minutes as desired for increased ventilation.

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In case of difficulty

If you have difficulty with your thermostat, please try the suggestions below. Most problems can be corrected quickly and easily.

Screen is blank

- Check circuit breaker and reset if necessary.
- Make sure power switch at heating & cooling system is on.
- Make sure furnace door is closed securely.

Screen is difficult to read

- To change the screen brightness or color, see backlight options in the Preferences menu (see page 20).
- At 2 am each day, ComfortNet™ CTK03 communicating thermostats change screen colors for an hour, to prevent burn-in. Touch the screen at any time to restore pre-set screen colors.

Heating or cooling system does not respond

- Press **SYSTEM** to set system to Heat. Make sure the temperature is set higher than the Inside temperature.
- Press **SYSTEM** to set system to Cool. Make sure the temperature is set lower than the Inside temperature.
- Check circuit breaker and reset if necessary.
- Make sure power switch at heating & cooling system is on.
- Make sure furnace door is closed securely.
- If "Waiting For Equipment" is displayed, the compressor protection timer is on. Wait 5 minutes for the system to restart safely, without damaging the compressor.

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Limited Warranty

This thermostat ("control") is warranted by Goodman Manufacturing Company, L.P. ("Goodman") to be free from defects in materials and workmanship under normal use and maintenance, as described below:

To the original equipment registered owner and his or her spouse ("owner") this control is warranted for a period of TEN YEARS, except as provided below. This warranty applies only if:

- 1) The control is installed in an owner-occupied, single family residence; and
- 2) The control is installed in conjunction with a new furnace or air handler containing a communicating system that is compatible with the control (a "Compatible Unit"); and
- 3) If the Compatible Unit is a Goodman® or Amana® brand furnace or air handler, the owner has properly registered the furnace or air handler with Goodman [at www.goodmanmfg.com] or Amana [at amana-hac.com]; but failure by California and Quebec residents to register a Goodman® or Amana® brand Compatible Unit does not diminish their warranty rights. If the above warranty does not apply, then the control is warranted for a period of 5 YEARS. No warranty continues after the control is removed from the location where it was originally installed. No warranty applies to, and no warranty is offered by Goodman on, any control ordered over the Internet, by telephone or other electronic means unless the dealer selling the unit over the Internet, by telephone or other electronic means is also the installing contractor for the unit.

The warranty period begins on the date of the original installation. Where the product is installed in a newly constructed home; the date of the installation is the date the homeowner purchased the home from the builder. If that date cannot be verified, the warranty period begins three months from the month of manufacture (as indicated by the four digit date code (yyww) where "yy" indicates the year and "ww" indicates the week of manufacture located on the base plate). As its only responsibility, and your only remedy, Goodman will, without charge, replace any control found to be defective due to workmanship or materials under normal use and maintenance. For warranty credit, the defective control must be returned to a Goodman heating and air conditioning products distributor by a state certified or licensed contractor. This warranty does not apply to labor, freight, or any other cost associated with the service, repair or operation of the unit. This warranty is in lieu of all other express warranties. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WARRANTY. Some states and provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. GOODMAN SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO EXTRA UTILITY EXPENSES OR DAMAGES TO PROPERTY. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

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Regulatory information

FCC Compliance Statement (Part 15.19) (USA only)

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.

FCC Warning (Part 15.21) (USA only)

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

FCC Interference Statement (Part 15.105 (b)) (USA only)

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 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.

Equipment interface module, thermostats and outdoor sensor

To comply with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure, the antenna(s) used for these transmitters must be installed to provide a separation distance of at least 20 cm from all persons and must

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Regulatory information

not be co-located or operating in conjunction with any other antenna or transmitter.

Portable Comfort Control

This portable transmitter with its antenna complies with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Section 7.1.2 of RSS-GEN

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Section 7.1.3 of RSS-GEN

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.

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Need Help?

For assistance please call toll-free: **(888) 593-9988**