

Comfort™ Non-Programmable Owner's Manual



Carrier

turn to the experts™

YOU WILL LOVE THIS THERMOSTAT.

This Comfort™ non-programmable thermostat is an easy to use model that provides the most sought-after features for keeping your home comfortable. And with a slim profile, it is designed to be as smart – and smart-looking – as any of the other electronics in your home. Let this manual show you how easy it is to enjoy the newest experience in home comfort.



Designed and Assembled in the U.S.A.

NOTE: Read the entire instruction manual before starting the installation.

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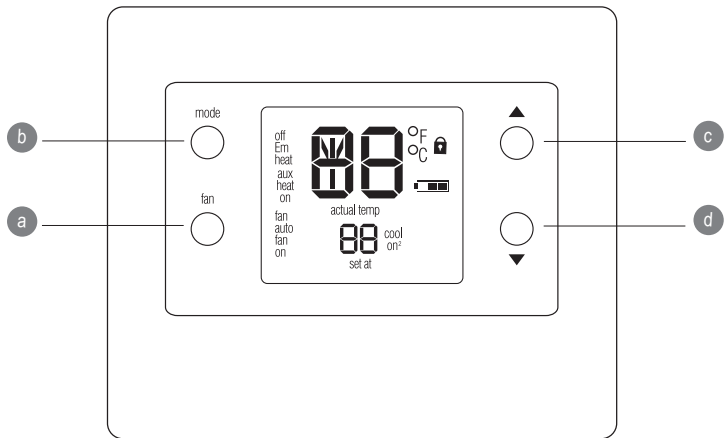
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BUTTON IDENTIFICATION



BUTTON IDENTIFICATION

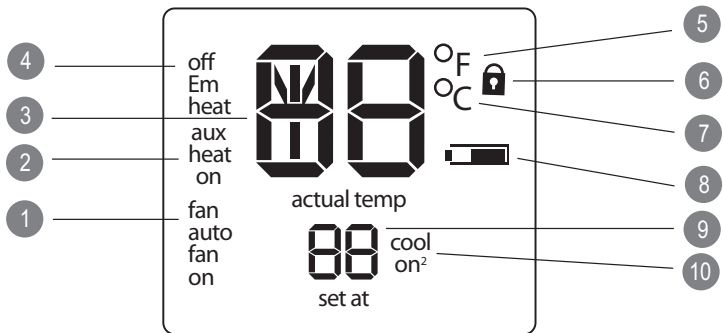
- a. FAN** Selects whether the fan operates continuously (on) or only when needed for heating or cooling (auto)

- b. MODE** Selects whether thermostat is set for heating, cooling, emergency heat (heat pump system only), auto (heat and cool as needed), or off

- c. UP** Increases the temperature or adjusts the screen selection up when setting advanced features

- d. DOWN** Decreases the temperature or adjusts the screen selection down when setting advanced features

ON-SCREEN INDICATORS



ON-SCREEN INDICATORS

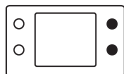
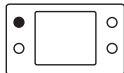
1. Fan mode – on or auto
2. System is in auxiliary (supplemental) mode
3. Current temperature
4. Thermostat mode is either off or using emergency heat
5. Fahrenheit
6. Keypad is locked (no padlock means unlocked)
7. Celsius
8. Battery strength indicator
9. Selected cooling set point; “on” indicates system is in cooling mode
10. Second stage of cooling is active

OPERATING THE THERMOSTAT

Setting the temperatures for heating and cooling

Your thermostat is installed with the heating set at 68° F and the cooling set at 72° F. You can use these or change them so your home is as warm or as cool as you would like it to be. These steps will hold the temperature where you set it.

1. To change the heating temperature, press the **mode** button on the left until the screen says *heat*.
2. Press the **up** or **down** button located on the right side of the display until you reach the desired temperature.
3. To change the cooling temperature, press the **mode** button on the left until the screen says *cool*.
4. Press the **up** or **down** button located on the right side of the display until you reach the desired temperature.



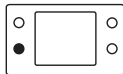
OPERATING THE THERMOSTAT

Using the fan

When the fan is on, it helps distribute air throughout your home for a more even temperature in all spaces. You can set the thermostat so that the fan runs only during your heating and cooling cycles (auto mode) or to run continuously.

The thermostat is set at the factory to run automatically as needed. Here's how to change the setting so it runs continuously.

1. Press the **fan** button on the left. The display message will change from *auto fan* to *fan on*.
2. To return the fan to auto mode, press the **fan** button again. You will see *fan auto* on the display.



OPERATING THE THERMOSTAT

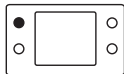
Using emergency heat (heat pump systems only)

Emergency heat is useful when the automatic auxiliary heat system can't keep up with demand. (Systems with heat pumps use "auxiliary heat" when it's too cold outside for the heat pump to heat the house without help. The display indicator for this is *aux heat on*.)

If the heat pump compressor that works with auxiliary heat fails, or if the heat pump isn't working at all, you can turn on the emergency heat for that extra help. (You'll know there's a problem if the house can't seem to get warm when it's very cold outside.) You want to avoid using emergency heat, though, because it's the most expensive option. And, of course, if you suspect a problem with your heat pump, call your heating and cooling dealer immediately.

Here's how to set your thermostat to use emergency heat.

1. Press the **mode** button repeatedly until you see *Em heat* in the upper left of the display.
2. To turn off emergency heat, press the **mode** button again to select *heat*, *cool* or *auto*.



OPERATING THE THERMOSTAT

Installing or replacing the batteries

You can install batteries in your thermostat so that if the power goes out, the display will still show the indoor temperature.

In some situations, batteries are also the power source. Then, two AA batteries should last about one year. When the batteries have lost about one-third of their power, a battery icon appears on the display. Two-thirds of it will be black. As the batteries get weaker, the icon goes down to one black bar and then none. When the icon is empty, you will begin to lose thermostat functions when it is battery powered. When the batteries are completely dead, you won't be able to use the thermostat.

When using batteries for power, we recommend that you replace the batteries at the one bar level with two AA alkaline batteries. They're in the back of the thermostat, so you'll have to remove it from the wall.

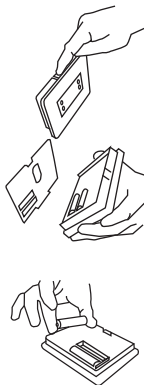
Here's how to both install and replace batteries.

1. Locate the **latch** at the top of the thermostat. It's at the center of the top rim.



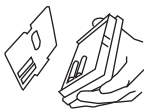
OPERATING THE THERMOSTAT

2. Press it down. This will disconnect the thermostat from the top of the wall plate.
3. Remove the thermostat from the **wall bracket** completely by bringing it slightly toward you and lifting it up and off the **lip** on the lower edge of the **wall bracket**.
4. Set the thermostat face down on a flat surface. You will see the batteries in the lower right corner.
5. Remove and discard the old batteries.
6. Install new batteries by matching the “plus” and “minus” ends of the batteries with the “plus” and “minus” indicators you’ll see outside the two white battery shapes in the space where the batteries sit.
7. Snap the batteries into place.
8. Put the thermostat back on the **wall bracket** by lining up the **slot** on the bottom edge of the back of the thermostat with the **lip** on the **wall bracket**. You will feel the **slot** fit over the lip.



OPERATING THE THERMOSTAT

9. With the bottom of the thermostat attached to the bottom of the **wall bracket**, bring the thermostat back to the wall. Line up the **latch** at the top of the thermostat with the corresponding **lip** on the wall bracket.
10. Lightly push the thermostat toward the wall. When the **latch** and **lip** are lined up properly, you will hear the thermostat snap into place.
11. Close the door.



OPERATING THE THERMOSTAT

Using the thermostat to turn the heating and cooling system off

To use the thermostat to turn the heating and cooling system off, press the **mode** button on the left repeatedly until the display shows *off* in the upper left.




Auto changeover

The thermostat uses one of five modes: heat, cool, Em heat (heat pump version only), auto, and off. When the mode selection is auto, the thermostat is in auto changeover mode. This allows the system to switch from heating to cooling – or from cooling to heating – to maintain the temperatures you’ve set. It does this automatically.

ADVANCED OPTIONS

Advanced options display codes chart

You can customize a few features of your thermostat. This chart shows which features you can change and the codes associated with them. The codes will be shown on the display when you follow the instructions.

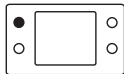
Feature	Configuration Code	Change Indication
Fahrenheit to Celsius	U1	F or C
backlighting	U2	On or Of
keypad lockout	U3	Of, On, padlock 

ADVANCED OPTIONS

Changing from Fahrenheit to Celsius

Your thermostat is preset to display the temperature in degrees Fahrenheit. You can change this to Celsius.

1. Press and hold the **mode** button for about three seconds. The display will show *U1* and the letter *F* in the center.
2. Press the **up** or **down** button on the right to change it from *F* (Fahrenheit) to *C* (Celsius).
3. Press the **fan** button on the left to exit this screen.

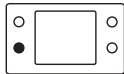


Turning on the continuous backlighting

The thermostat display lights up for a few seconds after you press any button. This is backlighting. It will go dark after a few seconds.

If the thermostat is powered by electricity, it is possible to have a constant low level amount of backlighting until you press any button, which increases the lighting temporarily. Here's how to turn on the constant backlight when your thermostat is powered by electricity.

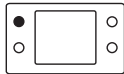
1. Press and hold the **mode** button for about three seconds. The display will show *U1* and the letter *F* in the center.
2. Press the **mode** button twice. The display will show *U2* and *Off*.
3. Press the **up** or **down** button on the right to change it from *Off* to *On*.
4. Press the **fan** button on the left to exit this screen.



Keypad lockout

The keypad lockout feature lets you “lock” the thermostat so nobody can change the temperature – or make any other changes – by pressing buttons. Keypad lockout is not activated when the thermostat is installed. Here’s how to activate it.

1. Press and hold the **mode** button for about three seconds. The display will show *U1* and the letter *F* in the center.
2. Press the **mode** button until the display shows *U3* and *Of*.
3. Press the **up** or **down** button on the right to change it from *Of* to *On*. You will also see a padlock, which indicates the keypad is locked.
4. Press the **fan** button on the left to exit this screen.



Unlocking the keypad

Here's how to temporarily unlock the keypad.

1. Press and hold the **up** and **down** buttons on the right simultaneously for about five seconds.
2. The *padlock icon* will disappear. This means the keypad is unlocked and can be used. The keypad will revert back to the locked state after you've stopped pushing buttons for two minutes.



The battery icon is displayed

The battery icon appears on the display only when the battery starts to lose power. Replace it when one-third of the icon is black. If your thermostat is battery powered and you wait until the icon is just a silhouette with no black bars, you will slowly lose thermostat functions until it doesn't work at all.

“Aux heat on” is displayed (heat pump systems only)

Aux heat on is auxiliary heat. It applies only to the heat pump version. If it is on, you will see *aux heat on*. When it is displayed, it means the system has determined that it's too cold outside for your heat pump to heat the house without help, so it's getting help from the electric heaters. This happens automatically.

“Em heat” is displayed (heat pump systems only)

Em heat is the display term for emergency heat and applies only to the heat pump version. You have to turn on emergency heat manually – it doesn't happen automatically – so if you see Em heat on the display, it means somebody has turned it on.

WHAT IF . . .

There is a power outage

If you lose electricity and have batteries installed, the thermostat will continue to display the indoor temperature because it has a battery backup power source. This means that even though your heating and cooling system doesn't work, you will still be able to monitor your home's temperature.

You get a system error message

Here are the possible system error messages and what they mean:

- The room air sensor reports that the room air temperature is above 150° or below -50°.
- E4 The memory has failed and the thermostat will return to the default factory settings. Call your heating and cooling dealer.

COMMON TERMS AND WHERE TO FIND THEM

Auto changeover **page 14**

This feature automatically switches your system from heating to cooling – or from cooling to heating – whenever necessary.

Auxiliary heat (heat pump systems only) **page 10**

Most heat pump systems can't heat a home sufficiently when it gets very cold outside so they use a supplemental heating source called auxiliary heat. The system knows when to use this help and does so automatically. If it's using auxiliary heat, the display will show *aux heat on*. You have no control over the auxiliary heat function.

Backlighting **page 17**

Backlighting illuminates your display when you push a button.

Emergency heat (heat pump systems only) **page 10**

You can manually set the thermostat to use emergency heat but it is the most expensive option. If it's using emergency heat, the display will show *Em heat*.

Mode **page 14**

This term refers to the type of operation your system is performing. The options are heat, cool, emergency heat, auto, and off.

THERMOSTAT LIMITED WARRANTY



CARRIER CORPORATION

Limited Warranty for Thermostats

FOR WARRANTY SERVICE OR REPAIR:

Contact the installer or a Carrier dealer. You may find the installer's name on the equipment or in your Owner's Packet. You can also find a Carrier dealer online at www.carrier.com

For help, contact: Carrier Corporation, Consumer Relations, P.O. Box 4808, Syracuse, New York 13221, Phone 1-800-227-7437

PRODUCT REGISTRATION: You can register your product online at www.carrier.com.

Model Number _____ Serial Number _____

Date of Installation _____ Installed by _____

Name of Owner _____ Address of Installation _____

Carrier Corporation (hereinafter "Company") warrants this product against failure due to defect in materials or workmanship under normal use and maintenance as follows. All warranty periods begin on the date of original installation. If a part fails due to defect during the applicable warranty period Company will provide a new or remanufactured part, at Company's option, to replace the failed defective part at no charge for the part. Alternatively, and at its option, the Company will allow a credit in the amount of the then factory selling price for a new equivalent part toward the retail purchase price of a new Company product. Except as otherwise stated herein, those are Company's exclusive obligations under this warranty for a product failure. This limited warranty is subject to all provisions, conditions, limitations and exclusions listed below and on the reverse (if any) of this document.

THERMOSTAT LIMITED WARRANTY

OWNER–OCCUPIED, RESIDENTIAL APPLICATIONS

This warranty is to the original purchasing owner and is transferable only to the extent and as stated in the Warranty Conditions and below. The warranty period in years, depending on the part and the claimant, is as shown in the chart below.

Product	Limited Warranty (Years)	
	Original Owner	Subsequent Owner
TP, TC, TB Thermostats***	10* (or 5)	10** (or 5)

- * If properly registered within 90 days, otherwise 5 years (except in California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration, registration is not required to obtain longer warranty periods). See Warranty Conditions below.
- ** If properly transferred within 90 days, otherwise 5 years. See Warranty Conditions below. In California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration, registration is not required for a transfer and all warranty periods for subsequent owners are five years from original installation.
- *** Applies only to Thermostats. Active electronic finished good accessories, such as the optional ExP module, have different warranty terms. See product for details.

OTHER RESIDENTIAL APPLICATIONS (Apartments, Rental Properties, etc.)

The warranty period is five (5) years and is not transferable.

OTHER APPLICATIONS

This warranty is non–transferable. The warranty period is one (1) year on all such applications.

LEGAL REMEDIES: The owner **must** notify the Company in writing, by certified or registered letter to Carrier Corporation, Warranty Claims, P.O. Box 4808, Syracuse, New York 13221, of any defect or complaint with the product, stating the defect or complaint and a specific request for repair, replacement, or other correction of the product under warranty, mailed at least thirty (30) days before pursuing any legal rights or remedies.

THERMOSTAT LIMITED WARRANTY

WARRANTY CONDITIONS:

1. To obtain the longer warranty periods as shown in the table under original owner, for the original purchaser, the product must be properly registered at www.carrier.com within ninety (90) days of original installation. In jurisdictions where warranty terms conditioned on registration are prohibited by law, registration is not required and the longer warranty period shown will be apply.
2. Where a product is installed in a newly constructed home, the date of installation is the date the homeowner purchased the home from the builder.
3. If the date of original installation cannot be verified, then the warranty period begins ninety (90) days from the date of product manufacture (as indicated by the model and serial number). Proof of purchase may be required at time of service.
4. The remainder of the first five years of warranty is freely transferable without registration. To obtain a transfer of the longer warranty periods as shown in the table under subsequent owner, a subsequent owner must register the transfer at www.carrier.com within 90 days of the change in ownership and payment of a transfer fee. Not applicable in all jurisdictions. See website for details.
5. Product must be installed properly and by a licensed HVAC technician.
6. The warranty applies only to products remaining in their original installation location.
7. Installation, use, care, and maintenance must be normal and in accordance with instructions contained in the Installation Instructions, Owner's Manual and Company's service information.
8. Defective parts must be returned to the distributor through a registered servicing dealer for credit.

LIMITATIONS OF WARRANTIES: ALL IMPLIED WARRANTIES AND/OR CONDITIONS (INCLUDING IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE) ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. SOME STATES OR

THERMOSTAT LIMITED WARRANTY

PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY OR CONDITION LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESS WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON, WHATSOEVER

THIS WARRANTY DOES NOT COVER:

1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts, or replacement parts, or new units.
2. Any product purchased over the Internet.
3. Normal maintenance as outlined in the installation and servicing instructions or Owner's Manual, including filter cleaning and/or replacement and lubrication.
4. Failure, damage or repairs due to faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
5. Failure to start due to voltage conditions, blown fuses, open circuit breakers, or damages due to the inadequacy or interruption of electrical service.
6. Failure or damage due to floods, winds, fires, lightning, accidents, corrosive environments (rust, etc) or other conditions beyond the control of Company.
7. Parts not supplied or designated by Company, or damages resulting from their use.
8. Products installed outside the U.S.A. or its territories and Canada.
9. Electricity or fuel costs, or increases in electricity or fuel costs from any reason whatsoever, including additional or unusual use of supplemental electric heat.
10. Any cost to replace, refill or dispose of refrigerant, including the cost of refrigerant.
11. **ANY SPECIAL, INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER.** Some states or provinces do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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and without obligations.