Comfort365

Installer and User Manual
Model C365T21

Ver4.06 Sep 2018

DESCRIPTION

The Comfort365 thermostat controls heating, cooling and airflow to the sleeping and living spaces. The thermostat is installed in the living space, a temperature sensor is installed in the bedroom space and two modulating dampers are installed to control the airflow to the living and sleeping space.

The C365 thermostat monitors the temperature at the sensor and the temperature at the thermostat every 2 minutes during heating and cooling calls. If the temperatures are different, the Comfort365 automatically adjusts the modulating dampers 2% so that more airflow is directed to the space that needs it for a uniformly comfortable home.

Pat. Pending

FEATURES

System Modes
Off, Heat, Cool and Auto

Fan Modes
Auto or Continuous (On)

Thermostat Modes
Hold, Schedule or Vacant mode.

Programs Per Day
Morning, Daytime, Evening and Night.

Program Format
Weekdays and weekend– 5/2.

Temperature Override
Temperature is held for 3 hours when adjusted in Schedule mode.

Airflow Control
Airflow control can be turned off using Option 17. The thermostat will operate as a typical thermostat.

Airflow Limits
Maximum airflow limits in heating and cooling can be set during installation.

Nighttime Operation
At night, the C365 thermostat uses the temperature sensor in the sleeping space to control heating and cooling calls and directs more airflow to the sleeping space and less airflow to the unoccupied living space. Energy savings is 30% at night. *If bedrooms are located downstairs, consider turning off the Nighttime Airflow Control option off.*

Manual Airflow Control
Manual airflow control enables the homeowner to direct more airflow to the living or sleeping space as they desire. This option is ideal for homeowners who have an unusual work schedule, home office or spend more time in one space than the other.

Compatible Equipment
Gas/electric equipment with 2-stage heating and 1-stage cooling or 1-stage heating and 2-stage cooling and heat pumps with 2-stage heating and 2-stage cooling.

Wired Sleeping Area Temperature Sensors
One TS510W sensor or two TS520W sensors can be used in the sleeping space and wire to the thermostat.

Modulating Dampers
Round or rectangular dampers using the A80MT wired actuator and up to 1 inch static pressure.

Power
Operates on 24VAC from the HVAC equipment using the R and C wires.

Easy Upgrade to WiFi
Easily upgrade to the WiFi version to remotely access your home's HVAC system from anywhere using a smart phone, tablet or PC. WiFi version plugs into the same subbase so there is no additional wiring. To purchase the WiFi thermostat, contact your installer or give us a call at 949-916-6701.

INSTALLER SECTION

This manual is separated into two different sections: one for the Homeowner and one for the Installer.

INSTALLATION

⚠ CAUTIONS

- Before installing the Comfort365 system, turn off all power to your HVAC system.
- Read and follow all instructions carefully.
- Read entire manual before installing products.
- Follow all local electrical codes during installation. All wiring must conform to local and national electrical codes.
- Use cautions when mounting components to surfaces that may have concealed wiring beneath the surface.
- When servicing Comfort365 system or accessing products, turn off all power to these items.

❗ ATTENTION INSTALLER

1) Install and wire components to the thermostat. (see Wiring section)
2) Place the thermostat on the subbase. Do not install batteries.
3) Turn power to the HVAC equipment On.
4) Check for Error Messages. (see Error Message section)
5) Set equipment options 1-5 if different than factory default settings. (see Installer Options section).
6) Test the installation by initiating a heating call, cooling call and fan call.
7) Display the sleeping space temperature by touching the area where Living and the living space temperature are displayed. If the temperature reads too low or too high, make sure the correct sensor(s) have been installed.

❗ ATTENTION INSTALLER (cont.)

8) Test the damper operation and airflow by initiating a cooling call and overriding automatic airflow. Touch the area where Airflow % is displayed. The set point temperature will disappear. Use the UP key to direct 150% airflow to the sleeping space. You should feel more airflow in the sleeping space compared to the living space. The LED on the sleeping space damper should be green (open) and the LED on the living space damper should be off (partially closed).

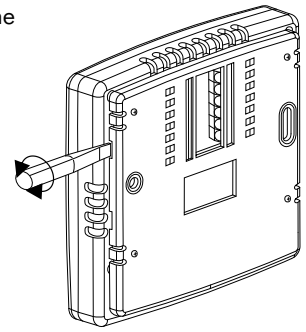
   Touch the Airflow % area again and use the DOWN key to direct 150% airflow to the living space. You should feel more airflow in the living space compared to the sleeping space. The LED on the living space damper should be green and the LED on the sleeping space damper should be off.

9) Install batteries and set the time and day (see Installing Batteries and Set Time and Day section)

- Airflow Control Off Option 17 turns off Airflow Control. The thermostat controls the system, dampers fully open, nighttime airflow control is disabled and airflow is no longer displayed on the thermostat.
- User Airflow Control can be enabled using the User Options.
- Nighttime Airflow Control is defaulted to ON. If bedrooms are located downstairs, consider turning this option Off using the User Options if bedrooms are not on the same trunk.

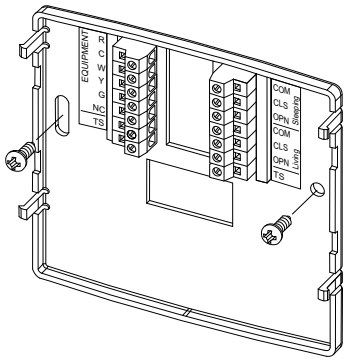
REMOVE SUBBASE

Place a slotted screwdriver in the slots as shown and rotate to remove subbase from the thermostat housing.



ATTACH SUBBASE TO WALL

Attach the subbase to an interior wall and about 5-feet above the floor as shown using the screws and wall anchors supplied. The wires to the wiring hub pass through the opening.



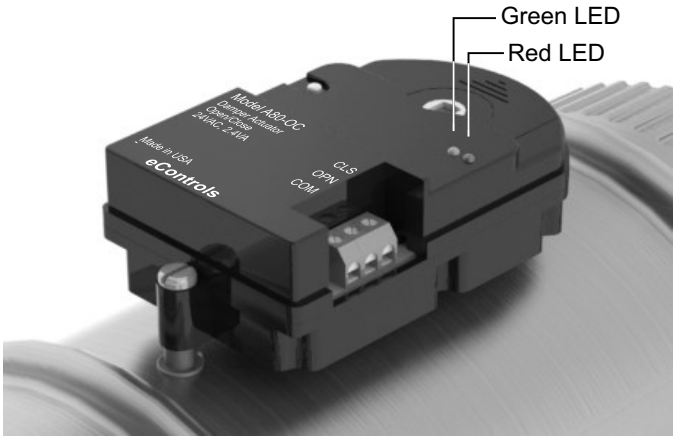
INSTALLER SECTION

INSTALL DAMPERS

Install an R80CT damper in the duct supplying air to the sleeping space and wire the terminals to the corresponding terminals on the C365T21. Install a second R80CT damper in the duct supplying air to the living space and wire it to the C365T21. Each damper uses 2.4VA of power.

Ensure that damper installation does not cause obstruction to the damper blade.

When two or more dampers are required to define the sleeping or living space, the damper may be wired in parallel. LEDs on the damper actuator indicate when the damper is fully open (green) or fully closed (red). When properly installed, the dampers will never fully close.



DAMPER WIRING

⚠ Warning!

Turn the power to the HVAC equipment off before wiring.

Use 3-conductor, 18 or 20 gage, thermostat cable to wire from the C365T21 Thermostat to the sleeping and living space dampers. There are separate terminals for the sleeping and living space dampers.

Ensure the damper for the sleeping space is wired to the terminals labeled SLEEPING and the damper for the living space is wired to the terminals labeled LIVING.

C365 Terminal	Wire Color	Damper Terminal	Function
COM	White	COM	Common
CLS	Red	CLS	Closes Damper
OPN	Green	OPN	Opens Damper

Multiple dampers can be used to construct the sleeping or living spaces. Daisy chain terminals– COM to COM, OPN to OPN and CLS to CLS.

WIRING

⚠ Warning!

Turn the power to the HVAC equipment off before wiring.

Gas/Electric, 2H/1C

Use 6-conductor, 18 or 20 gage, thermostat cable.

C365 Terminal	Wire Color	Equipment Terminal	Function
R	Red	R, Rc, Rh	24VAC Power
C	Blue	C	Common
W/OB	White	W, W1	Stg1 Heating
Y1	Yellow	Y, Y1	Cooling
G	Green	G	Fan
W2E/Y2	Brown	W2	Stg2 Heating

Gas/Electric, 1H/2C

Use 6-conductor, 18 or 20 gage, thermostat cable.

C365 Terminal	Wire Color	Equipment Terminal	Function
R	Red	R, Rc, Rh	24VAC Power
C	Blue	C	Common
W/OB	White	W, W1	Stg1 Heating
Y1	Yellow	Y, Y1	Stg1 Cooling
G	Green	G	Fan
W2E/Y2	Brown	Y2	Stg2 Cooling

Heat Pump, 1 Compressor

Use 6-conductor, 18 or 20 gage, thermostat cable.

C365 Terminal	Wire Color	Equipment Terminal	Function
R	Red	R, Rc, Rh	24VAC Power
C	Blue	C	Common
WOB	White	O or B	Rev Valve
Y1	Yellow	Y, Y1	Compressor
G	Green	G	Fan
W2E/Y2	Brown	W, W2 or E	Aux Heat

Heat Pump, 2-Compressor

Use 6-conductor, 18 or 20 gage, thermostat cable.

C365 Terminal	Wire Color	Equipment Terminal	Function
R	Red	R, Rc, Rh	24VAC Power
C	Blue	C	Common
WOB	White	O or B	Rev Valve
Y1	Yellow	Y, Y1	Stg1 Compressor
G	Green	G	Fan
W2E/Y2	Brown	Y2	Stg2 Compressor

INSTALLER SECTION

TEMPERATURE SENSOR WIRING

⚠ Warning!

Turn the power to the HVAC equipment off before wiring.

Use 2-conductor, 18 or 20 gage, thermostat cable to wire from the C365T21 Thermostat to the temperature sensor in the sleeping space.

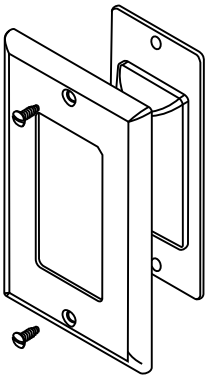
- Single Sensor Installation
  Use one (1) Model TS510W sensor.
- Dual Sensor Installation
  Use two (2) Model TS520W sensors.

C365 Terminal	Wire Color	Sensor Terminal	Function
TS	White	SNR	Thermistor
TS	Red	SNR	Thermistor

Printed circuit board

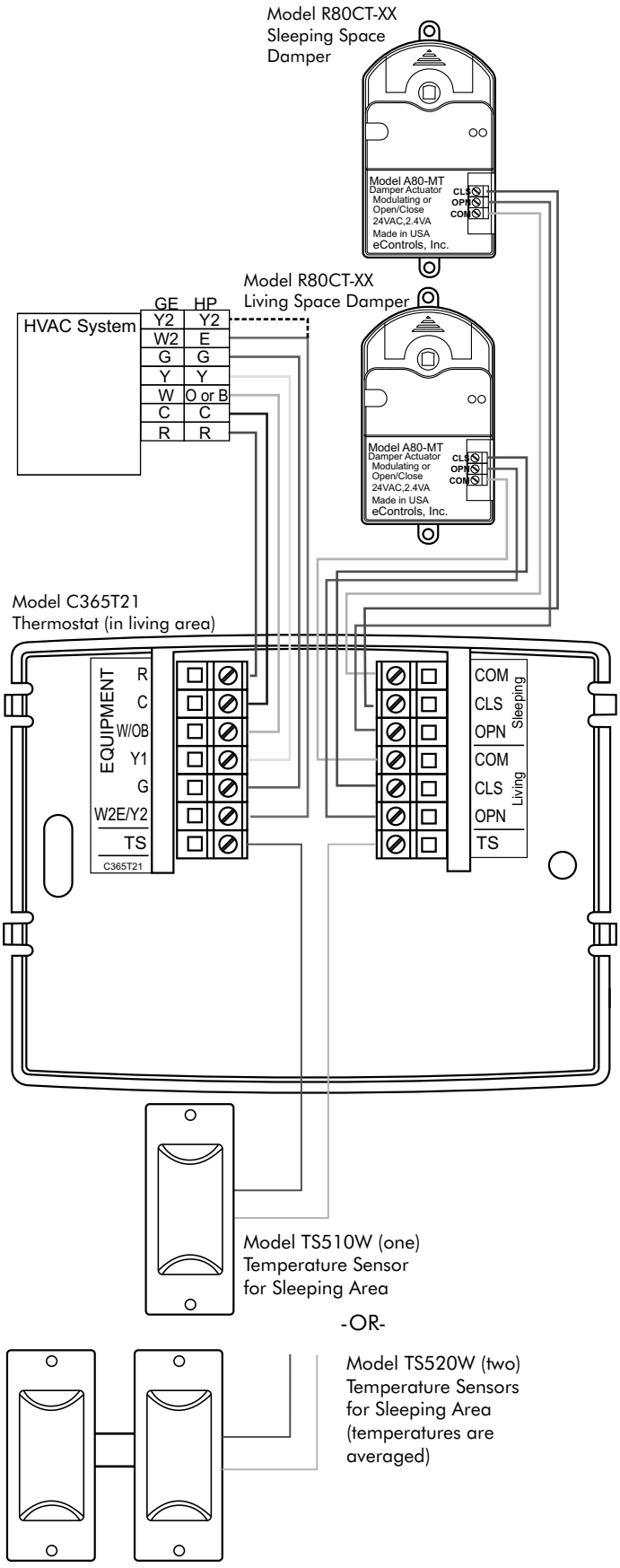
Brass washer

Place wire between brass washer and the printed circuit board and hand tighten screw.



The TS5 sensor can be installed in a single gang box or directly to the wall using the hardware provided.

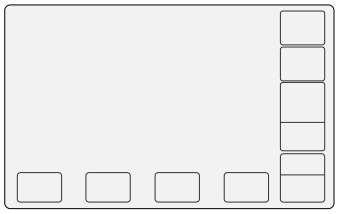
WIRING DIAGRAM



Error Messages:

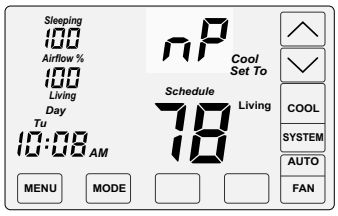
Blank LCD

When the equipment is powered up, a blank LCD indicates that there is no power to the thermostat. Check the wiring from the thermostat to the equipment for errors.



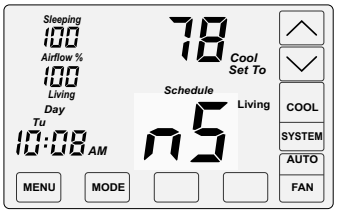
No Power Message

nP is displayed when there is no power to the system. If the message is displayed when the system is powered, check the wiring from the thermostat to the system for errors.



Sensor Error Message

nS is displayed when there is an error with the temperature sensor(s). Check for open wires or shortages.

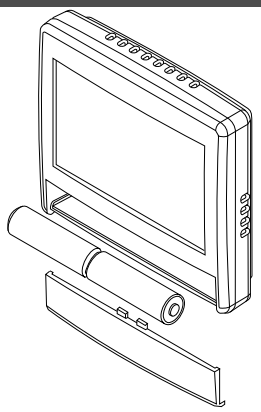


When the nS message is displayed, the thermostat will continue to control the system and automatically opens both dampers and disables airflow control until the sensor error is corrected.

Install batteries only after successfully testing the installation. See Attention Installer, p. 2.

INSTALL BATTERIES

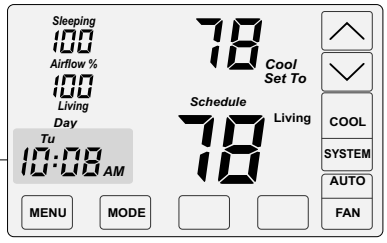
The batteries power the clock when 24VAC power is lost. Slide the battery cover downward and install the two AA batteries as shown.

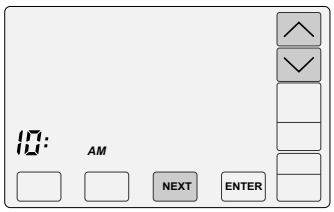


Press the touchscreen with your fingertip only, using a firm touch. Do not use a sharp object such as a pen or pencil. The touchscreen is a resistive touch and responds differently than touchscreens found in smart phones/devices.

Set Time and Day

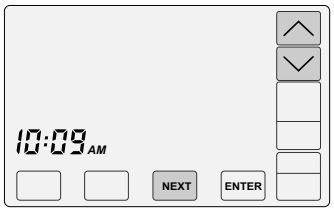
Touch here to change the time and day of the week.





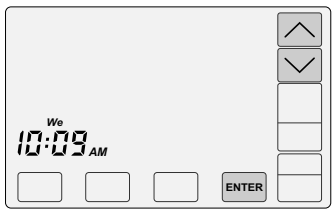
CHANGE THE HOUR

Touch the UP/DOWN keys to change the HOUR. Touch NEXT.



CHANGE THE MINUTE

Touch the UP/DOWN keys to change the MINUTE. Touch NEXT.



CHANGE THE DAY OF THE WEEK

Touch the UP/DOWN keys to change the DAY OF THE WEEK.

Touch ENTER to save and return to normal thermostat operation.

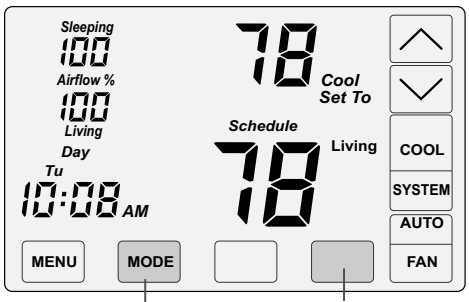
INSTALLER SECTION

INSTALLER OPTIONS

Option	Description	Display	Range	Default	Set To
01	Equipment Type		GE or HP	GE	
02	Reversing Valve *(Only displayed if HP selected)*	rEV	O or b	O	
03	Compressor Stages	CPr	0 or 1 (GE), 0, 1 or 2 (HP)	1(GE) 2(HP)	
04	Heating Stages	HtG	0, 1 or 2	1	
05	Fan Operation. *(Only displayed if GE selected)*	FAn	GA(Down) or EL(Up)	GA	
06	Compressor Minimum Off Time (minutes).	COt	0 to 9	2	
07	Gas Heating Minimum Off Time (minutes).	HOt	0 to 9	0	
08	Minimum Run Time (minutes).	r n t	0 to 9	2	
09	On-Off Temperature Differential 0 Cool On 1° above setpoint, Off at setpoint. Heat On1° below setpoint, Off at setpoint. 1 Cool On 1° above setpoint, Off .5° below setpoint. Heat On1° below setpoint, Off .5° above setpoint. 2 Cool On 1° above setpoint, Off 1° below setpoint. Heat On1° below setpoint, Off 1° above setpoint.	O O °	0, 1 or 2	1	
10	Smart Recovery.	S r	0n(Up) or Off(Down)	Off	
11	Vacant Heating Setpoint.	V A C +Heat	44 to 75F	65F	
12	Vacant Cooling Setpoint.	V A C +Cool	74 to 95F	80F	
13	Calibrate Living Area Sensor	C A L	+/- 5F	na	
14	Calibrate Sleeping Area Sensor.	C A L	+/- 5F	na	
15	Airflow Update Time	AFt	1 to 20 minutes	2	
16	Night Level LCD Backlight	BL + Night	On(Up) or Off(Down)	On	
17	Airflow Control	AFC	On(Up) or Off(Down)	On	
18	User (Manual) Airflow Control Enabled	UAC	On(Up) or Off(Down)	On	
19	Up Stage Time	USt	5 to 30 minutes	10	
20	Maximum Airflow in Heating to the Sleeping Space.	HAF + Heat	100 to 160%	160%	
21	Maximum Airflow in Cooling to the Sleeping Space.	CAF + Cool	100 to 160%	150%	
22	Maximum Airflow in Heating to the Living Space.	HAF + Heat	100 to 160%	160%	
23	Maximum Airflow in Cooling to the Living Space.	CAF + Cool	100 to 160%	150%	
24	Maximum Temperature Difference Between Sleeping and Living Spaces.	dIF	0 to 100	2	
25	Factory Restore	Fr	No or Yes	No	na

ACCESSING INSTALLER OPTIONS

To access the Installer Options, TOUCH and HOLD the hidden Enter key for 7 seconds until the first Option appears on the screen.



The hidden BACK key can be used to return to previous options.

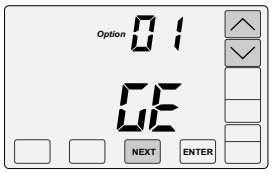
TOUCH and HOLD this key for 7 seconds to access the Installer Options.

- Press the touchscreen with your fingertip only, using a firm touch. Do not use a sharp object such as a pen or pencil.
- The NEXT key is used to display the next option.
- The ENTER key is used to save options and return to normal thermostat operation.
- The hidden BACK key is used to return to previous options and is located to the left of the NEXT key.

01 Selecting the Equipment Type

Factory Default: GE. Range: GE or HP

This option is used to select gas/electric or heat pump equipment.



Use the UP/DOWN keys to select gas/electric (GE) or heat pump (HP).

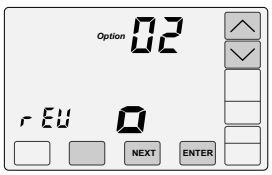
Touch NEXT or ENTER.

02 Reversing Valve

(Only displayed if Heat Pump equipment, HP is selected in Option 01)

Factory Default: O. Range: o or b

This option is used to select an O or B type reversing valve.



Use the UP/DOWN keys to select o for O-Type or b for B-Type.

Touch NEXT or ENTER.

INSTALLER SECTION

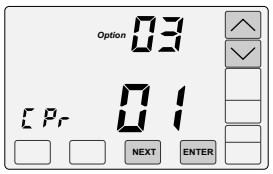
03 Setting Compressor Stages

Factory Default: 1 . Range: 0 or 1

This option is used to set the number of compressor stages.

Use the UP/DOWN keys to set 0 or 1 stage.

Touch NEXT or ENTER.

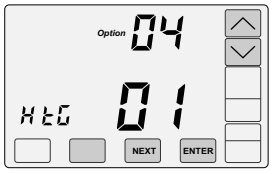


04 Setting the Heating Stages

Factory Default: 1 Stage. Range: 0, 1 or 2

Use the UP/DOWN keys to set 0, 1 or 2 stage.

Touch NEXT or ENTER.

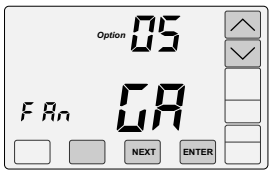


05 Setting the Fan Operation

(Only displayed if Gas/Electric equipment, GE, is selected in Option 01)

Factory Default: Gas. Range: GA or EL

Use the UP key to select "EL" for electric operation where the thermostat activates the indoor fan (G terminal) during heating calls or DOWN key to select GA for gas operation where the equipment plenum sensor activates the indoor fan in heating calls.

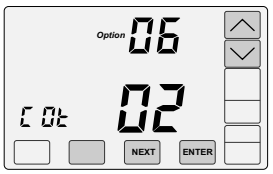


Touch NEXT or ENTER.

06 Compressor Minimum Off Time

Factory Default: 2 Min. Range: 0 to 9 Min.

Use the UP/DOWN keys to change the minimum off time (minutes) before restarting the compressor.

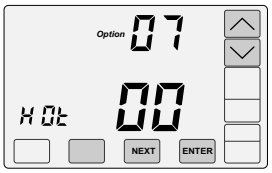


Touch NEXT or ENTER.

07 Heating Minimum Off Time

Factory Default: 0 Min. Range: 0 to 9 Min.

Use the UP/DOWN keys to change the minimum off time (minutes) before restarting a gas furnace or electric strip heater.

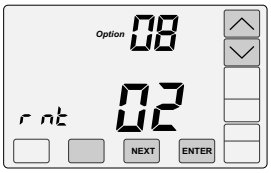


Touch NEXT or ENTER.

08 Minimum Run Time

Factory Default: 2 Min. Range: 0 to 9 Min.

Use the UP/DOWN keys to change the minimum run time (minutes) before turning a system off.



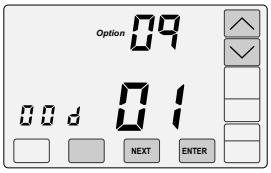
Touch NEXT or ENTER.

09 Setting On-Off Temperature Differential

Factory Default: #1. Range: 0, 1 or 2.

Use the UP/DOWN keys to select 0, 1, 2.

Touch NEXT or ENTER.



Differential Mode0 0.5º On/Off Span.

Differential Mode1 1.0º On/Off Span.

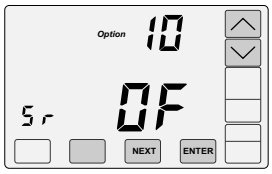
Differential Mode2 1.5º On/Off Span.

10 Smart Recovery

Factory Default: Off. Range: On or Off.

Smart recovery initiates a heating or cooling call so that the space is at temperature when the setback period ends.

Use the UP key to select ON to turn on smart recovery or the DOWN key to select OF to turn smart recovery off.

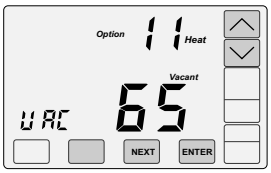


Touch NEXT or ENTER.

11 Vacant Heating Setpoint

Factory Default: 65ºF. Range: 44ºF to 75ºF

Use the UP/DOWN keys to select the heating temperature when the space is vacant.

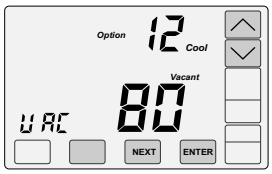


Touch NEXT or ENTER.

12 Vacant Cooling Setpoint

Factory Default: 80ºF. Range: 74ºF to 95ºF

Use the UP/DOWN keys to select the cooling temperature when the space is vacant.

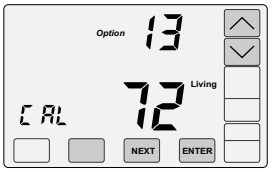


Touch NEXT or ENTER.

13 Calibrating Living Area Temperature Sensor

Factory Default: None. Range - +/-5º

Use the UP/DOWN keys to change the Living area temperature to the temperature that the user feels is correct.

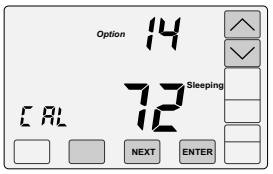


Touch NEXT or ENTER.

14 Calibrating Sleeping Area Temperature Sensor

Factory Default: None. Range - +/-5º

Use the UP/DOWN keys to change the Sleeping area temperature to the temperature that the user feels is correct.



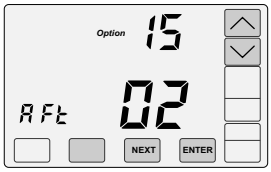
Touch NEXT or ENTER.

15 Airflow Update Time

Factory Default: 2 Min. Range: 1 to 20 Min.

This is the frequency, in minutes, that the damper position is updated.

Use the UP/DOWN keys to set the time in minutes to update the sleeping and living area airflow.

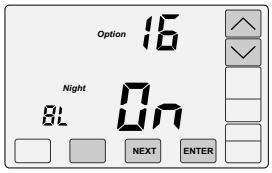


Touch NEXT or ENTER.

16 Night Level LCD Backlight

Factory Default: On. Range: On or Off.

The LCD has a low level backlight that can be used as a night light.



Use the UP key to turn the low level backlight ON or touch the DOWN key to turn OFF.

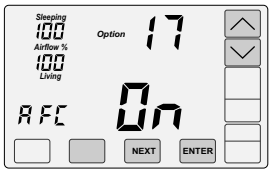
Touch NEXT or ENTER.

17 Airflow Control, On or Off

Factory Default: On. Range: On or Off.

This option turns the automatic airflow control on or off. If off, the dampers fully open, nighttime airflow options are disabled and airflow is no longer displayed on the thermostat.

Use the UP key to select ON for airflow control or touch the DOWN key to select OFF to disable airflow control.



Touch NEXT or ENTER.

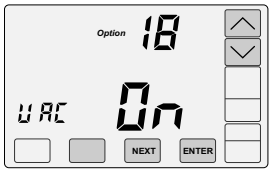
If Airflow Control was off and is now being turned on, the Nighttime Airflow option can be turned on using the User Options.

18 User (Manual) Airflow Control Enabled

Factory Default: On. Range: On or Off.

Manual airflow control enables the homeowner to direct more airflow to the living or sleeping space as they desire. This option is ideal for homeowners who have an unusual work schedule, home office or spend more time in one space than the other. The User Menu is used to turn off automatic airflow control. Nighttime Airflow option is still enabled but can be turned off using the User Options.

Use the DOWN key to select OFF only if disabling manual airflow control. (Not typical)

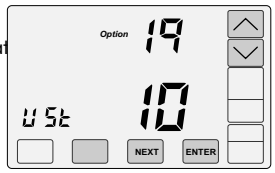


Touch NEXT or ENTER.

19 Upstaging Time

Factory Default: 10 min. Range: 5 to 30 min.

Use the UP/DOWN keys to set the time at which second stage heating or cooling is activated.



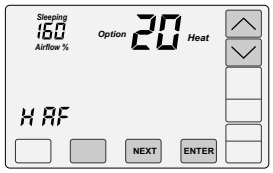
Touch NEXT or ENTER.

For options 20 - 23, use the installer test on the following page to determine the maximum allowable airflow.

20 Maximum Airflow in Heating to the Sleeping Area

Factory Default: 160%. Range: 100% to 160%.

Use the UP/DOWN keys to select the maximum allowable airflow in heating to the sleeping area.

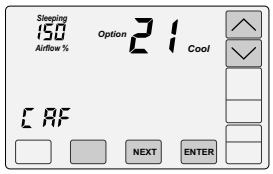


Touch NEXT or ENTER.

21 Maximum Airflow in Cooling to the Sleeping Area

Factory Default: 150%. Range: 100% to 160%.

Use the UP/DOWN keys to select the maximum allowable airflow in cooling to the sleeping area.

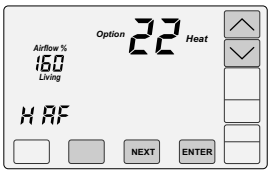


Touch NEXT or ENTER.

22 Maximum Airflow in Heating to the Living Area

Factory Default: 160%. Range: 100% to 160%.

Use the UP/DOWN keys to select the maximum allowable airflow in heating to the living area.

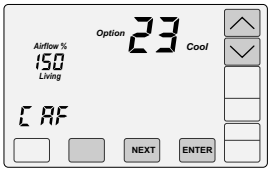


Touch NEXT or ENTER.

23 Maximum Airflow in Cooling to the Living Area

Factory Default: 150%. Range: 100% to 160%.

Use the UP/DOWN keys to select the maximum allowable airflow in cooling to the living area.



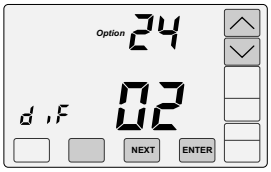
Touch NEXT or ENTER.

24 Maximum Temperature Differential

Factory Default: 2ºF. Range: 0º to 10º F

This is the maximum allowable temperature difference between the sleeping and living area temperatures. When the temperature difference is equal to or greater than the allowed differential, the airflow is adjusted.

Use the UP/DOWN keys to select the maximum allowable temperature difference between the sleeping and living area.

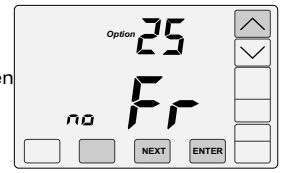


Touch NEXT or ENTER.

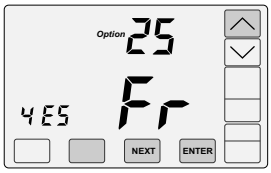
25 Factory Restore

WARNING! Factory Restore resets ALL settings.

To exit this option, touch NEXT or ENTER, or the hidden Back key.



To restore factory settings, touch the UP key to display YES then touch ENTER.



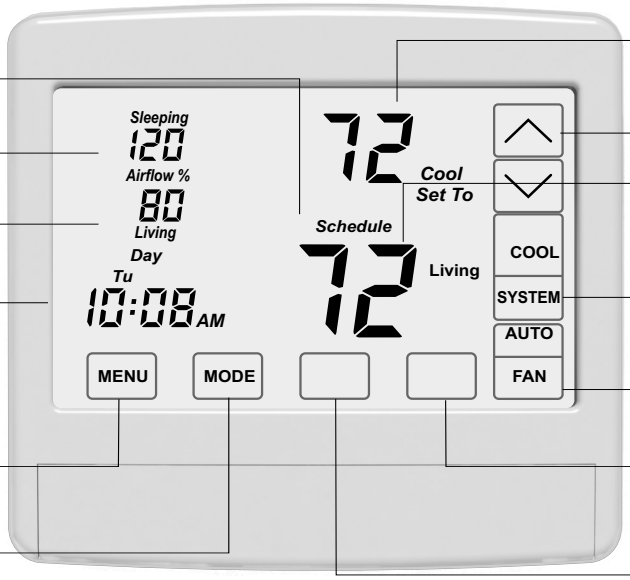
HOMEOWNER SECTION

THERMOSTAT OPERATION AND USER SETTINGS

- Thermostat Overview
- Thermostat Features
- Thermostat Operation
  - **1** Set Time and Day
  - **2** Set System Mode
  - **3** Set Fan Mode
  - **4** Set Thermostat Mode
  - **5** Changing Setpoint Temperatures
  - **6** Temperature Override
  - **7** Displaying Living and Sleeping space temperature
  - **8** Overriding Automatic Airflow
  - **9** Terminating Automatic Airflow
- User Options
  - **1** Set Schedule
  - **2** Turn Automatic Airflow Control On/Off
  - **3** Turn Nighttime Airflow Control On/Off
  - **4** Set Nighttime Airflow in Heating
  - **5** Set Nighttime Airflow in Cooling
  - **6** Clean the Touchscreen
- Changing Batteries

THERMOSTAT OVERVIEW

Press the touchscreen with your fingertip only, using a firm touch. Do not use a sharp object such as a pen or pencil. The touchscreen is a resistive touch and responds differently than touchscreens found in smart phones/devices.



Displays the Thermostat Mode HOLD, SCHEDULE or VACANT

Displays the sleeping area airflow

Displays the living area airflow

Displays the time, day and schedule. MORNING, DAYTIME, EVENING or NIGHT

MENU Key
Displays User options.

MODE Key
Selects Thermostat Mode HOLD, SCHEDULE or VACANT

Displays the heating or cooling setpoint temperature setpiont.

UP/DOWN Keys

Displays the living area and sleeping area temperatures.

SYSTEM MODE Key
OFF, HEAT, COOL, AUTO,

FAN MODE Key
AUTO or ON

ENTER Key
Used to save options and return to thermostat operation

NEXT Key
Used to advance through options

THERMOSTAT FEATURES

NIGHTTIME AIRFLOW CONTROL At night, the thermostat uses the temp sensor in the sleeping area to control heating and cooling calls and directs more airflow to the sleeping area and less airflow to the unoccupied living area. See User Options #3-5 for more information.

AIRFLOW OVERRIDE The airflow level to an area can be changed and held for 3 hours. See Thermostat Operation #8 for more information. To change and hold the airflow level for extended periods, see below.

AUTOMATIC OR MANUAL AIRFLOW CONTROL The thermostat automatically controls airflow. However, homeowners can turn automatic airflow control off and control airflow manually. This feature is enabled using the User Options. See User Option #2 for more information..

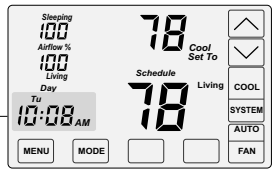
AIRFLOW CONTROL TURNED OFF In some installations, the thermostat has been installed to control the system only. The thermostat operates just like any other thermostat.

WiFi Easily upgrade to the Comfort365 WiFi thermostat to provide remote access to your home's heating and cooling from anywhere using a smart phone, tablet or PC. To purchase the Comfort365 WiFi thermostat, contact your installer or give us a call at 949-916-6701.

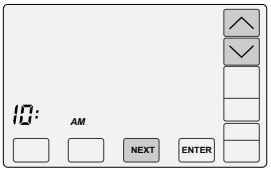
THERMOSTAT OPERATION

1 Set Time and Day

Touch here to change the time and day of the week.



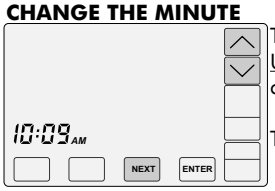
CHANGE THE HOUR



Touch the UP/DOWN keys to change the HOUR.

Touch NEXT.

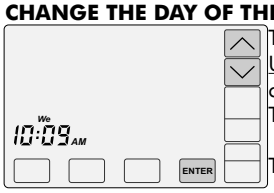
CHANGE THE MINUTE



Touch the UP/DOWN keys to change the MINUTE.

Touch NEXT.

CHANGE THE DAY OF THE WEEK



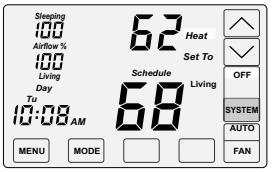
Touch the UP/DOWN keys to change the DAY OF THE WEEK.

Touch ENTER.

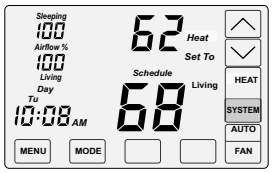
Depending on the mode, setting the time may reset the setpoint temperature to the factory default heating or cooling setpoint.

2 Set System Mode

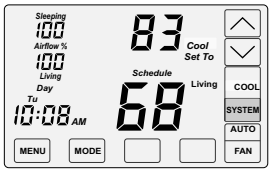
Touch the SYSTEM key to display the SYSTEM MODES: OFF, HEAT, COOL and AUTO. In AUTO or OFF, the setpoint for the last system call is displayed.



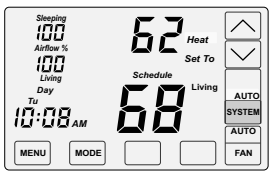
OFF
Heating and cooling systems are off.



HEAT
Only heating calls are enabled and heating setpoint is displayed. "HEAT" will blink in an active heating call.



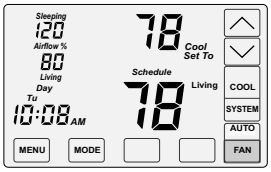
COOL
Only cooling calls are enabled and cooling setpoint is displayed. "COOL" will blink in an active cooling call.



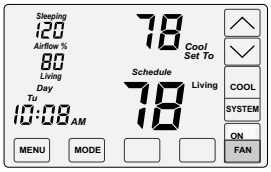
AUTO
Heating or Cooling calls are enabled. "HEAT" will blink in an active heating call or "COOL" will blink in an active cooling call.

3 Set Fan Mode

Touch the FAN key to change the FAN MODES - AUTO or ON.



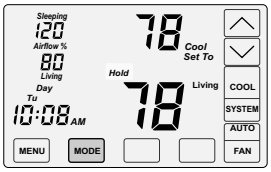
AUTO
Fan is activated only during heating or cooling calls. This is the most commonly used setting.



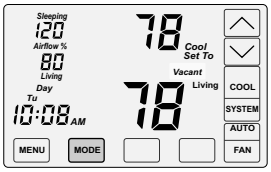
ON
Fan is continuously on.

4 Set Thermostat Mode

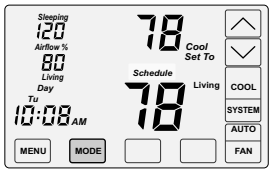
Touch the MODE key to display the THERMOSTAT MODES: HOLD, VACANT and SCHEDULE.



HOLD MODE
Setpoint temperatures are set by the user. No schedule is used.



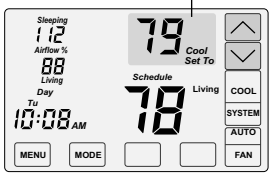
VACANT MODE
Setpoint temperatures are kept at the vacant temperatures set by the installer.



SCHEDULE MODE
Setpoint temperatures are changed at scheduled times defined by the user.

5 Changing the Setpoint Temperature

The UP/DOWN keys are used to change the setpoint temperature.



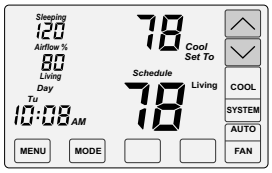
Touch here to display the Cooling setpoint, Heating setpoint

Touch the UP or DOWN key to raise or lower the Cooling setpoint or Heating setpoint.

The thermostat will return to displaying the active setpoint temperature after about 30 seconds.

6 Temperature Override

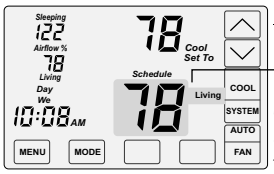
To override the Schedule setpoint temperature:



Touch the UP/DOWN keys to adjust the setpoint temperature. After 3 hours, the thermostat returns to the Schedule temperature.

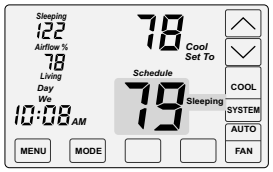
7 Displaying the Living and Sleeping Space Temperature

The thermostat displays the temperature in the downstairs living space and is indicated by Living. The thermostat also displays the Sleeping space temperature and is indicated by Sleeping.



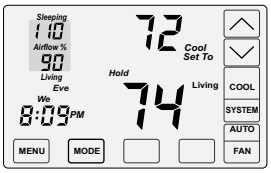
Living space temp is displayed.

Press this area to display the upstairs Sleeping space temperature.

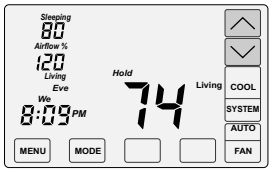


The Sleeping space temp is displayed. Press the area again to return to the Living space temp.

8 Overriding Automatic Airflow



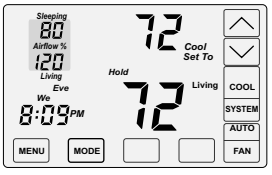
Touch the Airflow % area to override AUTOMATIC AIRFLOW to the living space or the upstairs sleeping space.



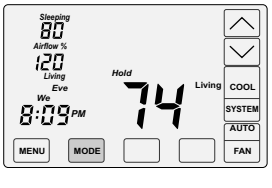
Touch the UP key to increase the airflow to the sleeping space or touch the DOWN key to increase airflow to the living space.

Airflow % will blink to indicate airflow override. After 3 hours, the thermostat returns to automatic operation.

9 Terminating Airflow Override



To terminate Airflow Override, touch the AIRFLOW% area.



Then touch the MODE key. The thermostat returns to automatic airflow control and the airflow % prior to the override.

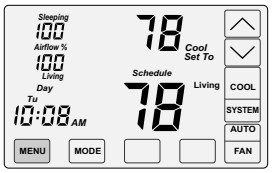
USER OPTIONS

Factory Set Schedule

The thermostat comes pre-set with the following energy-saving schedule for weekdays (Mon-Fri) and weekends (Sat-Sun). Using these settings can reduce your heating and cooling expenses.

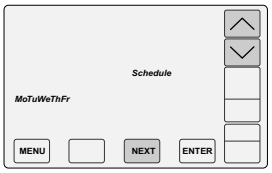
Monday - Friday	Time	Heat	Cool
Morn	6:00 AM	70	75
Day	8:00 AM	62	83
Even	6:00 PM	70	75
Nite	10:00 PM	62	78
Saturday & Sunday	**Time**	**Heat**	**Cool**
Morn	6:00 AM	70	75
Day	8:00 AM	62	83
Even	6:00 PM	70	75
Nite	10:00 PM	62	78

1 Change Factory Set Schedule



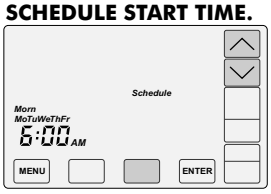
Touch the MENU key to display SCHEDULE. If no key is touched, the thermostat returns to normal operation after about 30 seconds.

SELECTING THE WEEKDAY OR WEEKEND SCHEDULE



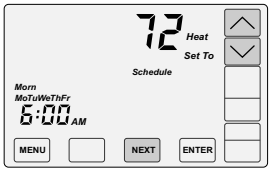
Touch the UP key to select the weekday schedule (MoTuWeThFr) or touch the DOWN key to select the weekend schedule (SaSu). Touch NEXT.

SETTING THE MORNING SCHEDULE START TIME.



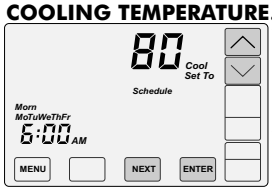
Touch the UP/DOWN keys to change the Morning Start Time. Touch NEXT.

SETTING THE MORNING HEATING TEMPERATURE.



Touch the UP/DOWN keys to change the Morning Heating Setpoint. Touch NEXT.

SETTING THE MORNING COOLING TEMPERATURE.



Touch the UP/DOWN keys to change Morning Cooling Setpoint. Touch NEXT.

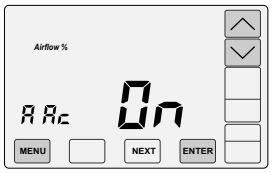
Continue setting the start times, heating setpoints, cooling setpoints for the Day, Evening and Night schedules.

Touch ENTER to save the schedule.

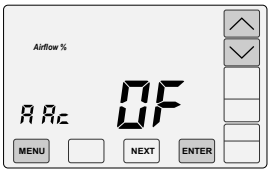
2 Automatic Airflow Control On or Off

- Homeowners with an unusual schedule, home office, etc. may want to use this option.
- With Automatic Airflow Control Off, the Nighttime Airflow Control option is still enabled. If desired, the homeowner can turn the Nighttime Airflow Control option off using User Options.
- This option is not displayed if the installer turned off Option 18 in the installer options.

Touch the MENU key until the following thermostat screen is displayed.



Thermostat defaults to Automatic Airflow Control On and automatically directs more airflow to where it's needed.



To turn Automatic Airflow Control OFF, touch the DOWN key. The user must set the airflow when airflow control is off.

Airflow % will blink indicating that Airflow is in manual control.

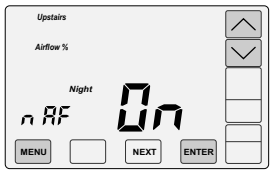
Touch the MENU key to save and go to next option or touch the ENTER key to save the options and return to normal thermostat operation.

- If Nighttime Airflow Control is On, at the morning start time when Nighttime Airflow Control ends, the airflow % will change to 100%. This prompts the homeowner to evaluate the airflow needs for that day.

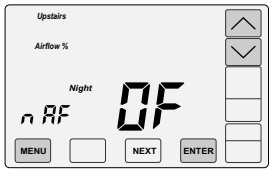
3 Nighttime Airflow Control On or Off

- This option is not displayed if Airflow Control has been turned off by the installer using the Installer Options.
- If bedrooms are located downstairs, consider turning the Nighttime Airflow Control OFF.

NIGHTTIME AIRFLOW CONTROL defaults to On and is used to save energy. The thermostat uses the temperature sensor in the sleeping area for controlling heating and cooling calls. The airflow is increased to 130% to the sleeping area and the airflow is reduced to 70% to the unused living area. The thermostat displays the sleeping area temperature.



Touch the MENU key to display NIGHTTIME AIRFLOW indicated by nAF On or Off.



Touch the UP key to turn the option ON. Touch the DOWN key to turn the option OFF.

3 Nighttime Airflow Control (Cont.)

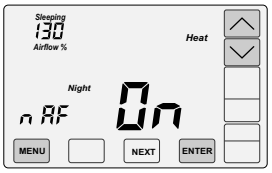
Touch the MENU key to save and go to next option or touch the ENTER key to save the options.

- Default start time for Nighttime Airflow is 10:00pm but can be changed using User Option 1 to change the Night Schedule Start Time.
- Default airflow level upstairs is 130%. If a different airflow level is desired, use User Option 4 to change the airflow level in heating and User Option 5 to change the airflow level in cooling.

4 Set the Nighttime Airflow in Heating

- This option is not displayed if Airflow Control has been turned off.

This option is used to change the default nighttime airflow in heating of 130% to a user desired airflow level, not to exceed installer limits.



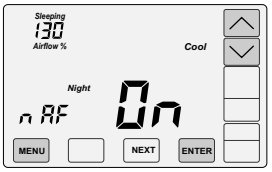
Touch the MENU key to display NIGHTTIME, UPSTAIRS AIRFLOW IN HEATING indicated by nAF Heat.

Use the UP/DOWN keys to adjust the airflow. Touch the MENU key to save and go to next option or touch the ENTER key to save the option.

5 Set the Nighttime Airflow in Cooling

- This option is not displayed if Airflow Control has been turned off.

This option is used to change the default nighttime airflow in cooling of 130% to a user desired airflow level, not to exceed installer limits.



Touch the MENU key to display NIGHTTIME, UPSTAIRS AIRFLOW IN COOLING indicated by nAF Cool.

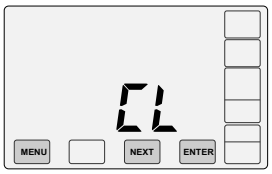
Use the UP/DOWN keys to adjust the airflow. Touch the MENU key to save and go to next option or touch the ENTER key to save the option.

HOMEOWNER SECTION

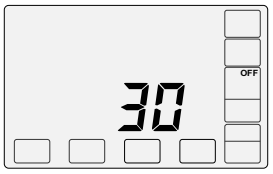
USER OPTIONS (Cont.)

7 Clean the Touch Screen

This option disables the touch screen for 30 seconds to enable the user to clean the touch screen by wiping down with a soft, damp cloth.



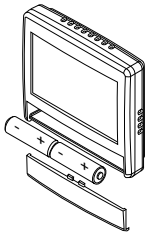
Touch the MENU key to display CLEAN DISPLAY option indicated by CL. To exit this option, press NEXT.



Press ENTER to start the 30 second count down. The touch screen is disabled during this time.

INSTALL / REPLACE AA BATTERIES

Two AA batteries power the clock when 24VAC power is lost. Slide the battery cover downward and install the two AA batteries, paying attention to the polarity.



HELPFUL HINTS FOR HOMEOWNERS

What are common settings for my thermostat?

Many homeowners run their thermostat in the HOLD mode. Set the HOLD mode by touching the MODE key until HOLD is displayed. Now select the SYSTEM mode and adjust your set point. In COOL the thermostat will turn on cooling when the room temperature is at or above the set point temperature. In HEAT the thermostat will turn on heating when the room temperature is at or below the set point temperature.

If your household follows a set schedule, the SCHEDULE mode can be selecting by touching the MODE key until SCHEDULE is displayed. The thermostat will now follow the default schedule or a custom schedule set by the homeowner.

HELPFUL HINTS FOR HOMEOWNERS

Does the Comfort365 have any energy saving features?

One of the biggest energy saving features is the Nighttime Airflow Control option which can save 30% in energy at night. This option is defaulted to On and is ideal when all of the bedrooms are located upstairs. This option uses the temperature sensors in the sleeping area to make heating and cooling calls. In addition, the thermostat automatically directs 130% more airflow to the sleeping space and 30% less airflow to the unoccupied living space.

How do I display the sleeping space temperature?

Touch the area where Living and the room temperature is displayed. The thermostat will now display the sleeping space temperature. Touch the area again to display the living space temperature.

If the sleeping space temperature is unusually low or high, contact your installer. The wrong type of sensors may have been installed or the sensors may have been wired incorrectly.

Note: If Nighttime Airflow Control option is On, the thermostat will automatically display the sleeping temperature at the Night start time.

My airflow doesn't seem to be working properly.

Test the airflow by overriding the airflow (See next section). Increase the airflow to the sleeping space to the maximum. You should feel more airflow coming from the registers in the sleeping space compared to the registers in the living space. Now increase the airflow to the living space to the maximum. You should feel more airflow coming from the registers in the living space compared to the registers in the sleeping space.

If you do not get these results, contact your installer.

How do I direct more airflow to the downstairs living space or upstairs sleeping space.

The thermostat automatically controls airflow to the living and sleeping space. However, the thermostat includes options to allow the homeowner to direct more airflow to either the living space or the sleeping space.

Override Airflow for 3 Hours
Touch the Airflow % area. The set point disappears. Use the UP key to increase airflow to the sleeping space or the DOWN key to increase airflow to the living space. To end airflow override, touch the Airflow % area, then touch the MODE key.

Override Airflow Permanently (Manual Control)
Touch the MENU key twice to display the AAC option. This option, Automatic Airflow Control, defaults to On. Turn OFF by touching the DOWN key. Manually change the airflow by touching the Airflow % area and using the UP or DOWN key to direct airflow to the living or sleeping space. The airflow % will remain until the homeowner makes an adjustment.

Note: If Nighttime Airflow Control is On, at the morning start time when Nighttime Airflow Control ends, the airflow % will change to 100%. This prompts the homeowner to evaluate the airflow needs for that day.

Learn more about your Comfort365 Thermostat by watching the Consumer How-To Video available at Comfort365USA.com

Warranty

This thermostat is warranted to be free of defects due to workmanship or materials under normal use and service for a period of 5 years from date of installation and not longer than 6 years from manufacturing date code.

eControls

eControls, Inc. 26072 Merit Circle #110 / Laguna Hills, CA 92653
949-916-0945 Fax 949-458-8502 www.eControlsUSA.com