

DESCRIPTION

The Comfort365 thermostat controls heating, cooling and airflow to the sleeping and living areas. The thermostat is installed in the living area using the existing thermostat wiring and is wired to a wiring hub installed at the equipment. A wired or wireless temperature sensor is installed in the bedroom area and two modulating dampers are installed to control the airflow to the living and sleeping areas.

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 area that needs it for a uniformly comfortable home.

FEATURES

System Modes

Off, Heat, Cool, Auto and Emergency Heat (EHeat) when used with heat pumps. ECool mode available with WH42 and WH42H Wiring Hubs.

Fan Modes

Auto or Continuous

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

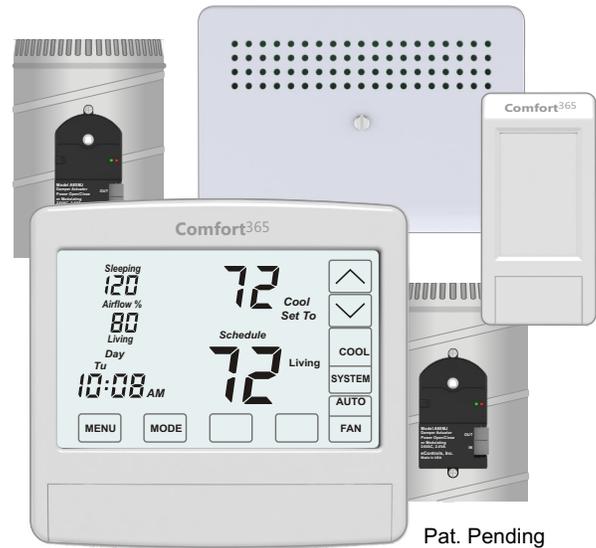
Airflow control can be turned off using Option 50. The thermostat will operate as a typical thermostat.

Nighttime Operation

At night, the C365 thermostat uses the temperature sensor to control heating and cooling calls and directs more airflow to the sleeping area. Energy savings is 30% at night.

Manual Airflow

The homeowner can enable manual airflow by turning off automatic airflow control using User Menu Option 2.



Compatible Equipment

WH11 Gas/electric equipment 1H/1C.
WH32, WH42 GE 2H/2C, HP 3H/2C.

Wired Sleeping Area Temperature Sensors

One TS510W sensor or two TS520W sensors can be used and wired to the Wiring Hub.

Wireless Sleeping Area Temperature Sensors

One or two TS5WL wireless sensors can be used. Requires ELR1 Radio Module installed in Wiring Hub.

Wired Outdoor Temperature Sensor

One TS3 sensor can be used and wired to the Wiring Hub.

Whole House Fan Control

WH42 Wiring Hub can control WHF using built-in Timer or temperature.

Economizer Control

WH42 Wiring Hub controls 1 or 3-damper economizer.

Fresh Air Control per ASHRAE 62.2

WH42 Wiring Hub controls fresh air using the equipment fan.

Modulating Dampers

Round or rectangular dampers using the A80MJ plug and play, modulating actuator. Plugs into the Wiring Hub.

Power

Operates on 24VAC from the HVAC equipment to the Wiring Hub R and C terminals.

INSTALLER SECTION

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

INSTALLATION

- ❗ Homes with plaster walls with steel lathe may experience wireless communication interference when using wireless sensors. Wired sensors are recommended.

⚠ 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.

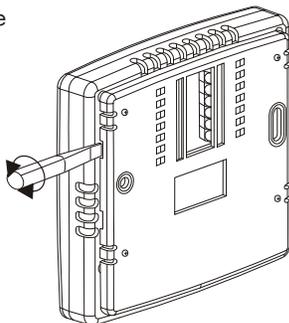
❗ ATTENTION INSTALLER

- 1) Install and wire components to the wiring hub. (See Wiring Hub manual for wiring detail)
- 2) If wireless sensors are used, install the ELR1 plug in radio module in the wiring hub and set the sensor number and home number as necessary. (see Wiring Hub manual).
- 3) Place the thermostat on the subbase. Do not install batteries.

- 4) Turn power to the HVAC equipment On.
 - 5) Check for Start Up Messages/Errors.
 - 6) Set equipment options 1-6 if different than factory default settings. (see Installer Options section).
 - 7) Test the installation by initiating a heating call, cooling call and fan call.
 - 8) Install batteries and set the time and day (see Installing Batteries and Set Time and Day section)
- Airflow Control Off Option 50 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 by the homeowner using User Menu Option 2 to turn off automatic airflow control.
 - 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.
 - Fresh Air Control is controlled by Options 20 through 25 and is only available when using a WH42 Wiring Hub.
 - Whole House Fan or Economizer Control, is controlled by Options 30 through 36 and is only available when using a WH42 Wiring Hub.
 - Airflow Control is defaulted to On and controlled by Options 50 thru 53.

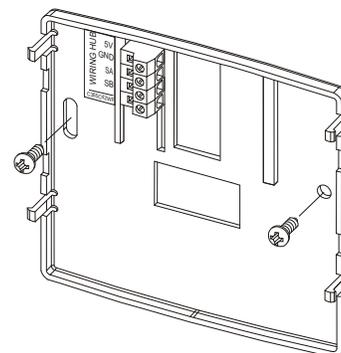
REMOVE SUBBASE

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

WIRING

The C365C42 thermostat is connected to the wiring hub using the existing thermostat cable in the home and eliminates having to install any new wires within the living area of the home when wireless sensors are used.

⚠ Warning!

Turn the power to the HVAC equipment off before wiring.

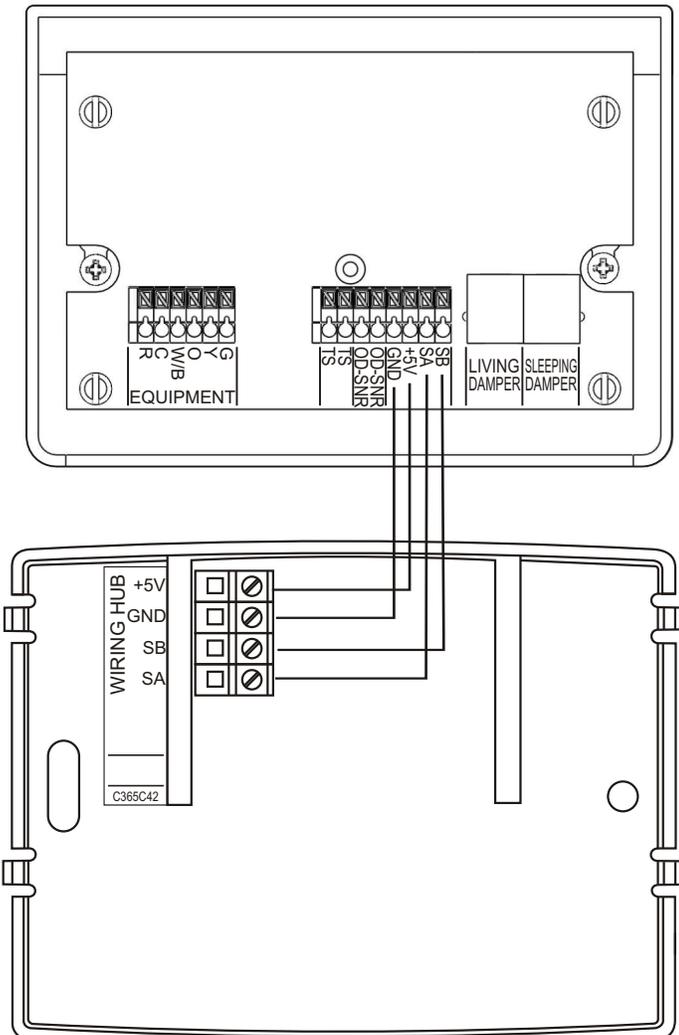
❗ See **Wiring Hub Installation Manual for detailed wiring instructions.**

Wiring Thermostat to Wiring Hub

Use 5-conductor(1 spare), 18 or 20 gage, thermostat cable.

C365 Terminal	Wire Color	Wiring Hub Terminal	Function
5V	Red	5V	24VAC Power
GND	White	GND	Common
SA	Blue	SA	Signal A
SB	Yellow	SB	Signal B

Wiring Hub Model WH11, WH32 or WH42



Thermostat Model C365C42 or C365C42WF

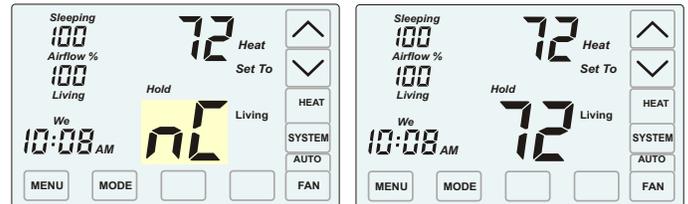
❗ After wiring all components, place the thermostat on the subbase. Do not install batteries. Turn power to the HVAC equipment On and check for startup messages. Set Installer Options and then test the installation by initiating a cooling call, heating call, fan call, and testing the airflow to the sleeping and living areas.

❗ Startup Messages:

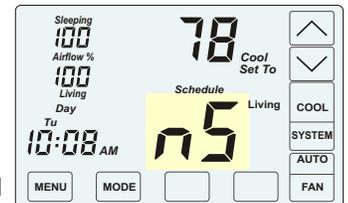
When the wiring hub and thermostat are powered, a blank LCD indicates that there is no power to the thermostat. Check the power indicator on the wiring hub. If the power indicator is on, turn off the power and check the wiring from the thermostat to the wiring hub for errors. If the power indicator is off, turn off the power and check the wiring from the wiring hub to the system for errors.



When the Wiring Hub and Thermostat are powered, nC will appear in the LCD display to indicate the thermostat has not established communication with the Hub. After several seconds the message disappears indicating the thermostat and wiring hub are now communicating.



When the wiring hub and thermostat are powered, nS is displayed when the thermostat has not detected a wired or wireless sensor. For wired sensors, turn off the power and check the wiring between the sensor and wiring hub and ensure the wires are secured in the correct terminals. For wireless sensors, ensure that batteries are installed in the wireless sensor and that the wireless sensor is set to the correct number. To check the wireless sensor communication, place your finger over the thermistor on the right side of the sensor to increase the temperature detected. The wireless sensor sends a signal to the thermostat when a temperature change has occurred or every 15 minutes. The thermostat will clear the nS message once the thermostat detects the sensor.

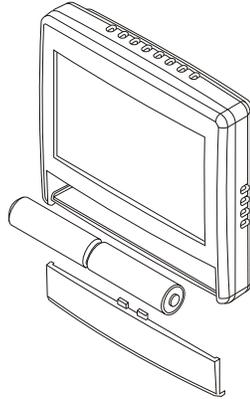


INSTALLER SECTION

❗ Install batteries only after successfully testing the installation by initiating a heating call, cooling call and fan call.

INSTALL BATTERIES

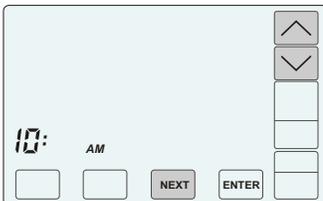
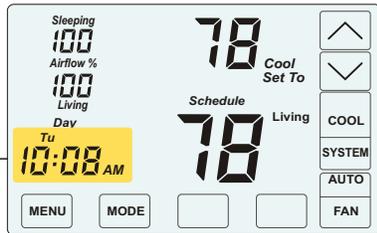
The batteries power the clock when 24VAC power is lost. Slide the battery cover downward and install the two AA batteries as shown.



❗ Press the touchscreen with your fingertip only, using a firm touch. Do not use a sharp object such as a pen or pencil.

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

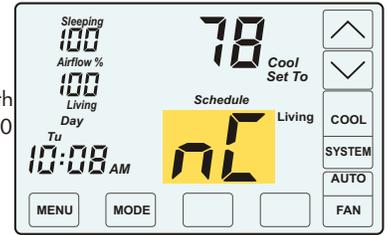
Touch the UP/DOWN keys to change the DAY OF THE WEEK.

Touch ENTER.

❗ Check for the following error messages:

Error Message No Communication

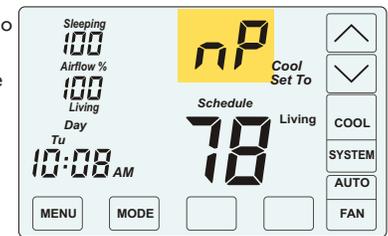
When the thermostat powers up, it will display the nC message indicating it has not established communication with the Wiring Hub. After about 10 seconds the thermostat will establish communication with the Wiring Hub and the nC message disappears.



The nC message will appear anytime communication with the Wiring Hub is lost or never established. Check the wiring between the thermostat and Wiring Hub and that the wires are secured in the correct terminals on the thermostat and Wiring Hub.

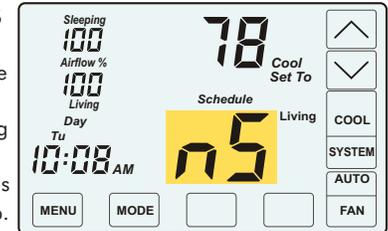
No Power Message

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 Wiring Hub and the Wiring Hub to the system for errors.



Sensor Error Message

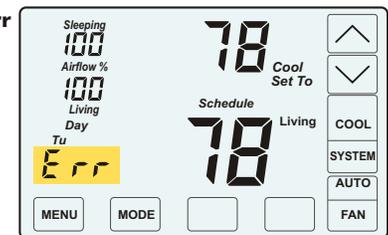
The thermostat displays the nS message indicating it has not detected a remote temperature sensor. Check the wiring between the sensor and Wiring Hub and that the wires are secured in the correct terminals on the Sensor and Wiring Hub. If a wireless temperature sensor is used, be sure the batteries are installed and the wireless sensor is set to the correct number.



When an nS error is detected, the thermostat fully opens the Upstairs and Downstairs dampers and turns airflow control off as long as the nS error persists. It still maintains control of heating and cooling calls.

Error Message Wireless Sensor Lost

The thermostat displays the **Err 01** or **Err 02** message indicating it has lost communication with a remote wireless temperature sensor. Check the batteries in the sensor and make sure the sensors are set to the correct sensor#. If the error message persists, turn the power off to the Wiring Hub. When power is restored, the Wiring Hub automatically detects which sensors are being used and clears the error messages.



Err 01 When an Err 01 error is detected, the thermostat alternately displays

Err 02 When an Err 02 error is detected, the thermostat alternately displays

INSTALLER SECTION

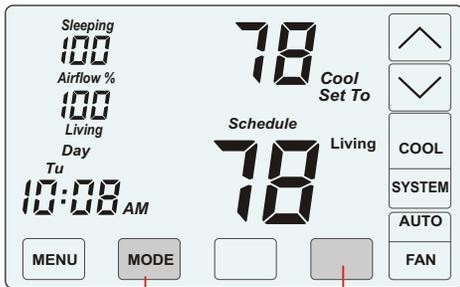
INSTALLER OPTIONS

Option	Description	Display	Range	Default	WH11	WH32	WH42
01	Equipment Type		GE or HP	GE		Yes	Yes
02	Heat Pump Type (HP Only)	HPt	Co(conv) or dF (dual fuel)	Co		Yes	Yes
03	OBP Outdoor Balance Point (Dual fuel HP Only)	OBP	35 to 55F	40F		Yes	Yes
04	Compressor Stages	CPr	0, 1 or 2	2	Yes	Yes	Yes
05	Heating Stages	HtG	0, 1 or 2	2	Yes	Yes	Yes
06	Fan Operation. (GE Only)	FAn	GA(Down) or EL(Up)	GA	Yes	Yes	Yes
07	Compressor Minimum Off Time (minutes).	COt	0 to 9	2	Yes	Yes	Yes
08	Gas Heating Minimum Off Time (minutes).	HOt	0 to 9	0	Yes	Yes	Yes
09	Minimum Run Time (minutes).	r n t	0 to 9	2	Yes	Yes	Yes
10	On-Off Temperature Differential 0 Cool On 1° above setpoint, Off at setpoint. Heat On 1° below setpoint, Off at setpoint. 1 Cool On 1° above setpoint, Off .5° below setpoint. Heat On 1° below setpoint, Off .5° above setpoint. 2 Cool On 1° above setpoint, Off 1° below setpoint. Heat On 1° below setpoint, Off 1° above setpoint.	O O d	0, 1 or 2	1	Yes	Yes	Yes
11	Smart Recovery.	S r	On(Up) or Off(Down)	Off	Yes	Yes	Yes
12	Upstaging Time	USt	5 to 30 minutes	10	Yes	Yes	Yes
13	Vacant Heating Setpoint.	V A C +Heat	44 to 75F	65F	Yes	Yes	Yes
14	Vacant Cooling Setpoint.	V A C +Cool	74 to 95F	80F	Yes	Yes	Yes
15	Calibrate Living Area Sensor	C A L	+/- 5F	na	Yes	Yes	Yes
16	Calibrate Sleeping Area Sensor.	C A L	+/- 5F	na	Yes	Yes	Yes
17	Night Level LCD Backlight	BL + Night	On(Up) or Off(Down)	On	Yes	Yes	Yes
20	Fresh Air Control per ASHRAE 62.2	FAC	On(Up) or Off(Down)	Off			Yes
21	Minutes of Fresh Air per Hour	FAt	0 to 60 minutes	30			Yes
22	Inhibit Fresh Air Using Temperature Limits	FAL	On(Up) or Off(Down)	Off			Yes
23	Fresh Air High Temperature Limit	FtH	65 to 100F	95F			Yes
24	Fresh Air Low Temperature Limit	FtL	0 to 65F	35F			Yes
25	HRV Operate during Cooling	HrC	On(Up) or Off(Down)	On			Yes
26	Enable Indoor Fan VENT Mode	FCt	On(Up) or Off(Down)	Off			Yes
30	Whole House Fan Control	HFn	On(Up) or Off(Down)	Off			Yes
31	Economizer using Dampers and Equipment Fan	ECO	On(Up) or Off(Down)	Off			Yes
32	Whole House Fan Motor Type	H Ft	PS(Dwn) or EC(Up)	PSC			Yes
33	Whole House Fan Motor Speeds	HFS	1, 2 for PSC 1,2,VA for ECM	1			Yes
34	Economizer/WHFan control	FEC	tr(Up) or tP(Down)	tP			Yes
35	WHF Motor speed staging	FUS	On(Up) or Off(Down)	Off			Yes
36	Economizer or WHFan OD Temp Differential	diF	0 to 10F	0F			Yes
50	Airflow Control	AFC	On(Up) or Off(Down)	On	Yes	Yes	Yes
51	Airflow Update Time	A Ft	1 to 20 minutes	2	Yes	Yes	Yes
52	User Airflow Control Enabled	UAC	On(Up) or Off(Down)	On	Yes	Yes	Yes
53	Maximum Temperature Difference Between Sleeping and Living area.	diF	0 to 10F	2F	Yes	Yes	Yes
54	Home Number for Wireless	Home	1 to 8	1	Yes	Yes	Yes
55	Thermostat Location	tLo	dS or uS	dS	Yes	Yes	Yes
60	Factory Restore	Fr	No or Yes	No	Yes	Yes	Yes

INSTALLER SECTION

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.



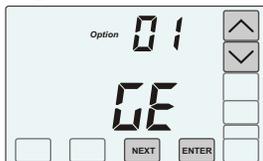
The hidden **BACK** key can be used to return to previous options. TOUCH and HOLD this key for 7 seconds to access the Installer Options.

- ❗ 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 Equipment Type

Factory Default: GE. Range: GE or HP

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



Touch **NEXT** or **ENTER**.

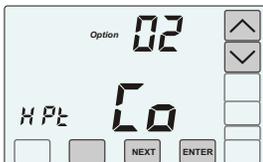
02 Heat Pump Type

(Only displayed if Heat Pump selected)

Factory Default: Co. Range: Co or dF

This option is used to select a conventional HP(Co) with electric auxiliary heating or a dual fuel HP (dF) with fossil fuel auxiliary heating.

Use the **UP/DOWN** keys to select Co for conventional HP or dF for dual fuel HP.



Touch **NEXT** or **ENTER**.

03 Outdoor Balance Point

(Only displayed if Heat Pump and Dual Fuel selected.)

Requires TS3 Outdoor Temperature Sensor to be installed. (see wiring hub installer manual)

Factory Default: 40F. Range: 35F to 55F

Use the **UP/DOWN** keys to select the outdoor temperature for switching to fossil fuel heating in a dual fuel heat pump.



Touch **NEXT** or **ENTER**.

04 Compressor Stages

Factory Default: 2 Stage. Range: 0 or 1 for WH11, 0-2 for WH32 and WH42

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



Touch **NEXT** or **ENTER**.

05 Heating Stages

Factory Default: 2 Stage. Range: 0-1 for WH11, 0-2 for WH32 and WH42

This option is used to set the number of heating stages in a GE system or auxiliary heating stages in a HP system.

Use the **UP/DOWN** keys to set 0, 1 or 2 stage for a GE system or 0 or 1 stage for HP auxiliary heating stages.



Touch **NEXT** or **ENTER**.

06 Fan Operation

(Only displayed if Gas/Electric selected.)

Factory Default: Ga. 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**.

07 Compressor Minimum Off Time

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

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

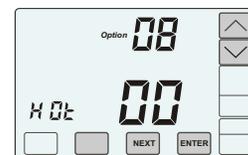


Touch **NEXT** or **ENTER**.

08 Gas Heating Minimum Off Time

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

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**.

09 Minimum Run Time

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

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

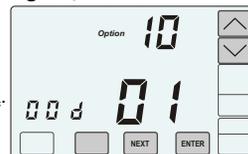


Touch **NEXT** or **ENTER**.

10 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**.

Mode0 .5° On/Off Span.

Mode1 1.0° On/Off Span.

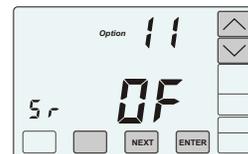
Mode2 1.5° On/Off Span.

11 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.

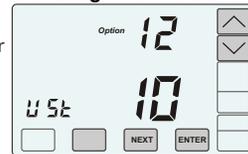


Touch **NEXT** or **ENTER**.

12 Upstaging Time

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

Use the **UP/DOWN** keys to set the number of minutes heating or cooling must call before upstaging.

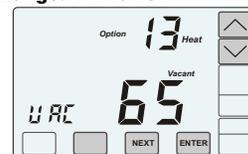


Touch **NEXT** or **ENTER**.

13 Vacant Heating Setpoint

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

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



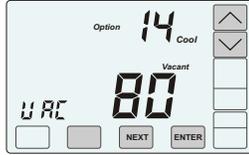
Touch **NEXT** or **ENTER**.

INSTALLER SECTION

14 Vacant Cooling Setpoint

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

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

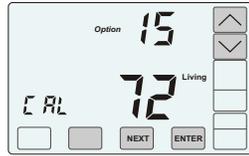


Touch NEXT or ENTER.

15 Calibrate Living Area Temperature Sensor

Factory Default: None. Range - +/-5°

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



Touch NEXT or ENTER.

16 Calibrate Sleeping Area Temperature Sensor

Factory Default: None. Range - +/-5°

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

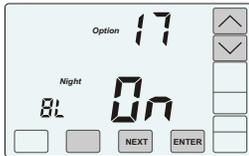


Touch NEXT or ENTER.

17 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.

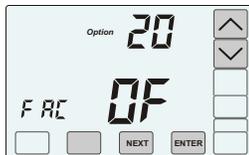
! Options 20 through 26 are only available when using the WH42 Wiring Hub. For wiring information see the WH42 Installer Manual.

20 Fresh Air Control per ASHRAE 62.2

Factory Default: OFF. Range: On or Off.

Fresh Air Control uses a Plug&Play damper and the equipment fan.

Use the UP key to turn Fresh Air Control ON or touch the DOWN key to turn Fresh Air Control OFF.



Touch NEXT or ENTER.

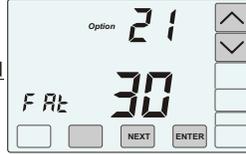
21 Minutes of Fresh Air per Hour

(Only displayed if Fresh Air Control is ON)

Factory Default: 30 minutes. Range: 0 to 60.

Select the number of minutes the fresh air damper should open each hour based on ASHRAE 62.2 calculations and damper size.

Use the UP key to increase the fresh air minutes or the DOWN key to decrease the minutes.



Touch NEXT or ENTER.

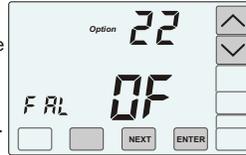
22 Inhibit Fresh Air in Severe Weather

(Only displayed if Fresh Air Control is ON)

Factory Default: OFF. Range: On or Off.

Select ON to inhibit fresh air control using outdoor temperature limits set in options 23 and 24.

Use the UP key to select ON or touch the DOWN key to select OFF.



Touch NEXT or ENTER.

23 High Temperature Limit

(Only displayed if Inhibit Fresh Air is ON)

Factory Default: 95F. Range: 65F to 100F.

Select the highest outdoor temperature for fresh air operation.

Use the UP key to increase the temperature limit or the DOWN key to decrease the temperature limit.



Touch NEXT or ENTER.

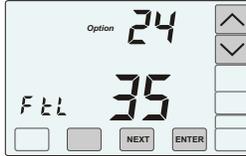
24 Low Temperature Limit

(Only displayed if Inhibit Fresh Air is ON)

Factory Default: 35F. Range: 0F to 65F.

Select the lowest outdoor temperature for fresh air operation.

Use the UP key to increase the temperature limit or the DOWN key to decrease the temperature limit.



Touch NEXT or ENTER.

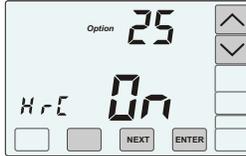
25 ERV/HRV Operation During Fresh Air

(Only displayed if Option 20, Fresh Air Control, is ON)

Factory Default: On. Range: On or Off

Selects if the ERV or HRV unit is turned on during fresh air operation when cooling is calling. The ERV/HRV is always turned ON during fresh air operation in heating calls.

Use the UP key to select ON or the DOWN key to select OFF.



Touch NEXT or ENTER.

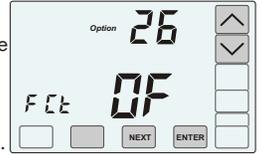
26 Enable Fan VENT Mode

(Not displayed if Fresh Air, Whole House Fan or Economizer Control is ON)

Factory Default: OFF. Range: On or Off.

Vent mode turns the indoor fan on for 15 minutes if no heating or cooling calls have occurred in the last 3 hours.

Use the UP key to select ON or touch the DOWN key to select OFF.



Touch NEXT or ENTER.

! Options 30 through 36 are only available and displayed when using the WH42 Wiring Hub. For wiring information, see the WH42 Wiring Hub Installer Manual.

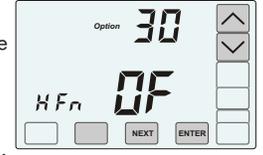
30 Whole House Fan Control

(When Option 31 is ON, this option is not displayed.)

Factory Default: OFF. Range: On or Off.

Select ON for Whole House Fan control.

Use the UP key to select ON or touch the DOWN key to select OFF.



Touch NEXT or ENTER.

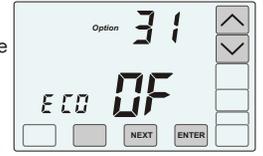
31 Economizer Control

(When Option 30 is ON, this option is not displayed.)

Factory Default: OFF. Range: On or Off.

Select ON for Economizer Control using a 1 or 3-damper economizer and the equipment fan.

Use the UP key to select ON or touch the DOWN key to select OFF.



Touch NEXT or ENTER.

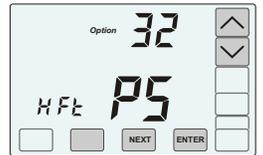
32 Whole House Fan Motor Type

(Only displayed if Option 30, Whole House Fan Control, is ON. When Option 31 is ON, this option is not displayed.)

Factory Default: PS. Range: PS or EC.

Selects if Whole House Fan uses PSC (PS) or ECM (EC) motor.

Use the UP key to select EC for ECM fan motor or touch the DOWN key to select PS for PSC fan motor.



Touch NEXT or ENTER.

INSTALLER SECTION

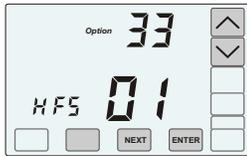
33 Whole House Fan Speeds

(Only displayed if Option 30, Whole House Fan Control, is ON. When Option 31 is ON, this option is not displayed).

Factory Default: 1. Range: 1, 2 or UA (Variable)
Selects if the Whole House Fan is 1 or 2-speed PSC or ECM motor. If the fan motor type is ECM, variable speed operation using PWM control can be selected.

Use the UP/DOWN keys to select 1, 2 or UA for variable speed.

Touch NEXT or ENTER.



34 WHF or Economizer Control by Temperature or Timer

(Only displayed if Option 30, Whole House Fan Control, or Option 31, Economizer Control is ON.)

Factory Default: tr. Range: tr or tP

Selects if the Whole House Fan or Economizer is controlled by temperature or the built-in 1 to 8-hour timer. If timer is selected, the number of hours can be adjusted using the User Menu.

Use the UP key to select **tr** for control by temperature or the DOWN key to select **tP** for control by timer.

Touch NEXT or ENTER.



35 Whole Fan Control Speed Staging

(Only displayed if Option 30, Whole House Fan Control, is ON.)

Factory Default: Off. Range: Off or On

Selects if the Whole House Fan speed is staged based on the difference between space temperature and cooling setpoint temperature.

Use the UP key to select ON or the DOWN key to select OFF.

Touch NEXT or ENTER.



36 Minimum Outdoor Temperature Differential

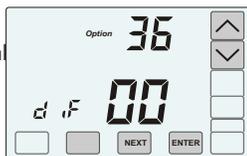
(Only displayed if Option 34 is set to tr, control by temperature.)

Factory Default: 0. Range: 0-10 degrees.

When using temperature control, selects the minimum differential between outdoor temperature and space temperature for Whole House Fan or Economizer operation. When set to 00, the WHF or Economizer operates at any outdoor temperature.

Use the UP key to increase the differential or the DOWN key to decrease the differential.

Touch NEXT or ENTER.



Options 50 through 55 set airflow options.

50 Airflow Control

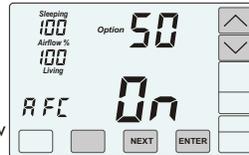
Factory Default: On. Range: On or Off.

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 needs to be turned on using the User Options.



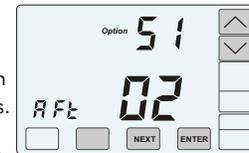
51 Airflow Update Time

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

Sets the number of minutes between updating the damper positions during heating or cooling calls.

Use the UP/DOWN keys to set time(minutes) between updating the dampers.

Touch NEXT or ENTER.



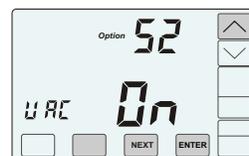
52 USER Airflow Control Enabled

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 UP key to select ON to enable the user to turn off automatic airflow control in the user options.

Touch NEXT or ENTER.



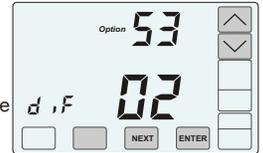
53 Maximum Temperature Differential

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

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.



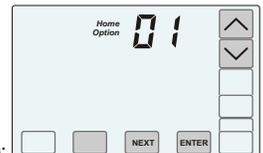
54 Wireless Home Number

Factory Default: 1. Range: 1 to 8.

The Home number is used in wireless communications with the wireless sensors and used to distinguish homes when they are within 300 feet of one another. If the homes are within 300 feet and both are using wireless temperature sensors, one of the homes needs to be changed to a different Home number. The wireless sensor home number also has to be changed and is described in the Wiring Hub Installation manual.

Use the UP/DOWN keys to select a new Home number.

Touch NEXT or ENTER.



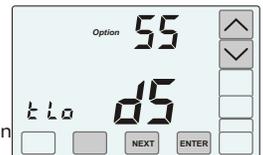
55 Thermostat Location

Factory Default: dS. Range: dS or uS

The thermostat is normally located downstairs in the living area. If the thermostat is located upstairs in the sleeping area, this option can be used to change the location to upstairs.

Use the Up key to select uS, upstairs in the sleeping area or use the Down key to select dS, downstairs in the living area.

Touch NEXT or ENTER.

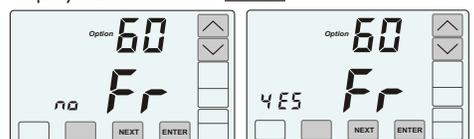


60 Factory Restore

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.



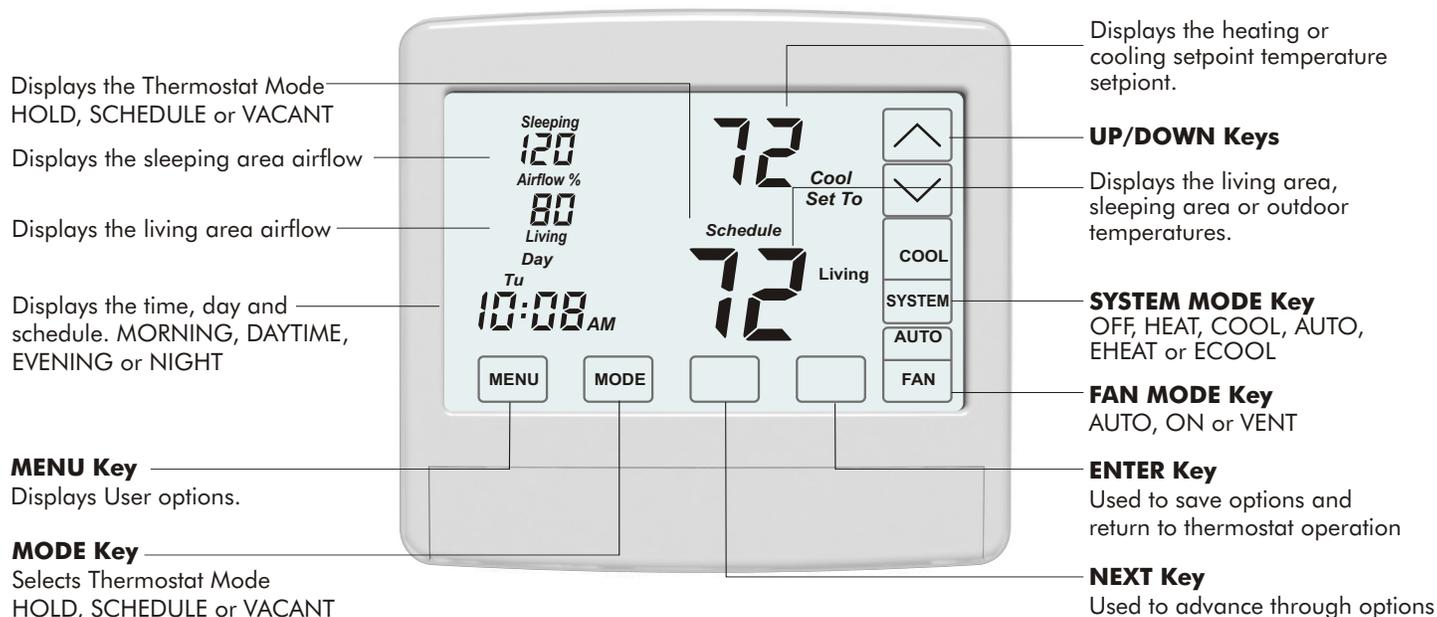
HOMEOWNER SECTION

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 area temperature, and Outdoor 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 Set eCool Timer
 - 7 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.



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 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 User Option #2.

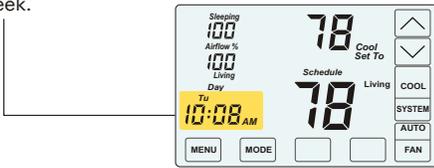
AIRFLOW CONTROL TURNED OFF In some installations, the thermostat has been installed to control the system only. The thermostat operates just like any other thermostat.

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.

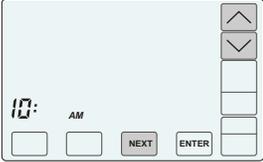
THERMOSTAT OPERATION

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.

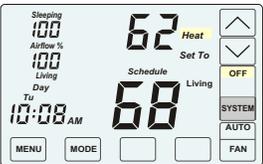
Touch **ENTER**.

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

Depending on your installation, some System Modes may not be displayed.

2 Set System Mode

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



OFF
Heating and cooling systems are off.

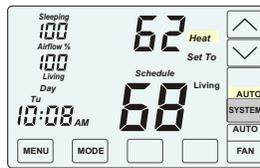


HEAT
Only heating calls are enabled and heating setpoint is displayed. "HEAT" will blink in an active heating call.



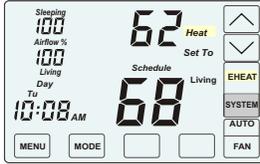
COOL
Only cooling calls are enabled and cooling setpoint is displayed. "COOL" will blink in an active cooling call.

2 Set System Mode (Cont)



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

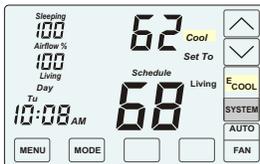
EHEAT will only be displayed if heat pump equipment.



EHEAT
Emergency Heating for heat pumps. "EHEAT" will blink in an active heating call.

ECOOL will only be displayed if a whole house fan or economizer has been installed.

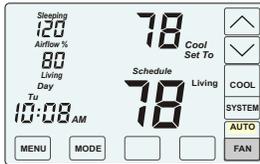
Some installations require a window to be open before operating in the ECOOL mode. Check with your installer.



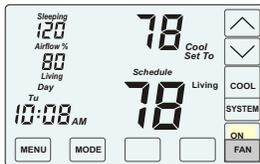
ECOOL
Econo Cooling brings in cooler outdoor air when a whole house fan or economizer is installed. "ECOOL" will blink in an active call.

3 Set Fan Mode

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

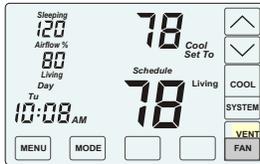


AUTO
Fan is activated only during heating or cooling calls. This is the most commonly used setting.



ON
Fan is continuously on.

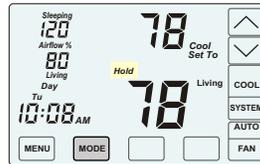
VENT mode will only be displayed when a WH42 Wiring Hub has been installed and the option enabled by the installer.



VENT
The fan will be activated for 15 minutes if no cooling or heating calls have occurred in the last 120 minutes.

4 Set Thermostat Mode

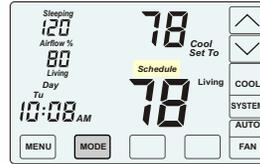
Touch the **MODE** key to display the THERMOSTAT MODES: HOLD, VACANT and SCHEDULE.



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



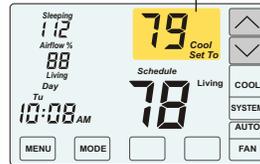
VACANT MODE
Setpoint temperatures are kept at the vacant temperatures set by the installer.



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

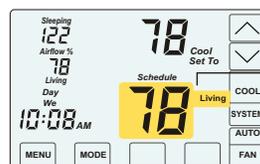
To override the Schedule setpoint temperature:



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

7 Displaying the Living, Sleeping or Outdoor Temperature

The thermostat displays the temperature in the downstairs living area and is indicated by Living. The thermostat also displays the Sleeping area temperature and the Outdoor temperature, if sensor is installed.

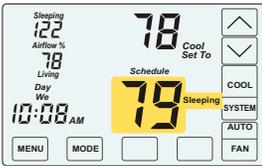


Living area temp is displayed.
Press this area to display the upstairs Sleeping area temperature.

HOMEOWNER SECTION

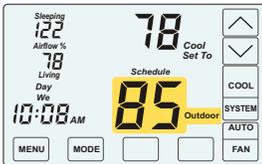
THERMOSTAT OPERATION (Cont.) USER OPTIONS

7 Displaying the Living, Sleeping or Outdoor Temperature (Continued)



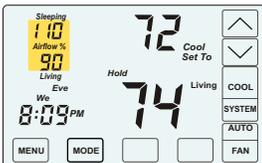
The Sleeping area temp is displayed. Press the area again to display the Outdoor temp.

❗ The outdoor temp will only be displayed if an outdoor temperature sensor is installed.

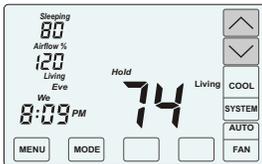


The Outdoor temp is displayed. Press the area again to display the Living area temperature.

8 Overriding Automatic Airflow



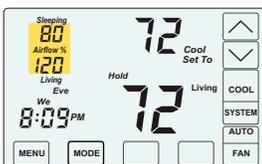
Touch the Airflow % area to override AUTOMATIC AIRFLOW to the living area or the upstairs sleeping area.



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

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. The AIRFLOW % returns to the airflow prior to the override.

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.

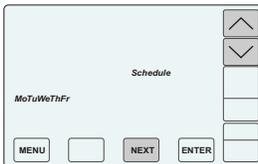
Monday - Friday	Time	Heat	Cool
Morn	6:00 AM	70	75
Day	8:00 AM	62	83
Even	6:00 PM	70	75
Nite	10:00 PM	62	78
Saturday & Sunday	Time	Heat	Cool
Morn	6:00 AM	70	75
Day	8:00 AM	62	83
Even	6:00 PM	70	75
Nite	10:00 PM	62	78

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.

USER OPTIONS (Continued)

Factory Set Schedule (Continued)

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

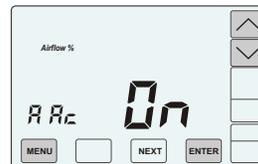
Touch ENTER to save the schedule.

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.

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 automatic 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.

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.

USER OPTIONS (Continued)

3 Nighttime Airflow Control On or Off (Continued)

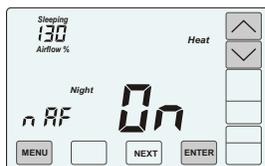
Touch the MENU key to save and go to next option or touch the ENTER key to save the options.

- 1 Default start time for Nighttime Airflow is 10:00pm but can be changed using User Option 1 to change the Night Schedule Start Time.
- 1 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

- 1 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

- 1 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.

6 Set eCool Timer

- 1 This option is only displayed if a whole house fan or economizer is installed and controlled using the timer in the thermostat.

Use this option to set the number of hours (1 -8) you would like eCool to run before turning Off.

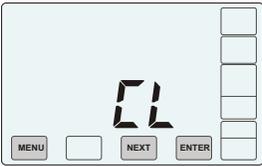


Touch the MENU key to display eCOOL TIMER option indicated by Etc. Touch the UP/DOWN keys to set the hours.

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

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.



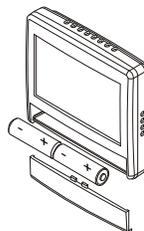
Touch the MENU key to display CLEAN DISPLAY option indicated by CL. To exit this option, press NEXT.



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.



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

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 selected 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.

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.

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.