



Follow the <u>Installation Instructions</u> before proceeding. Set the thermostat mode to "OFF" prior to changing settings in setup or restoring Factory Defaults.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This color touchscreen has the ability to receive updates to its firmware. Periodically firmware updates are released by the manufacturer to add features and/or performance enhancements. This manual was produced reflecting the most current firmware/ feature set at the time of publication, firmware rev. 3.04. Firmware releases after rev. 3.04 may not be adequately depicted in this manual. Please refer to the appropriate website or contact your place of purchase to learn about changes to the thermostat after firmware release 3.04.





#### **Glossary of Terms**

**Auto-Changeover:** A mode in which the thermostat will turn on the heating or cooling based on room temperature demand.

**Cool Setpoint:** The warmest temperature that the space should rise to before cooling is turned on (without regard to deadband).

**Deadband:** The number of degrees the thermostat will wait, once a setpoint has been reached, before energizing heating or cooling.

**Differential:** The forced temperature difference between the *heat* setpoint and the cool setpoint.

**Heat Setpoint**: The coolest temperature that the space should drop to before heating is turned on (without regard to deadband).

**Icon**: The word or symbol that appears on the thermostat display.

**Mode:** The current operating condition of the thermostat (i.e. Off, Heat, Cool, Auto, Program On).

**Non-Programmable Thermostat:** A thermostat that does not have the capability of running *Time Period Programming*.

**Programmable Thermostat:** A thermostat that has the capability of running *Time Period Programming.* 

**Temperature Swing**: Same as Deadband.

**Time Period Programming:** A program that allows the thermostat to automatically adjust the *heat setpoint* and/or the *cool setpoint* based on the time of the day. *Same as Schedule.* 

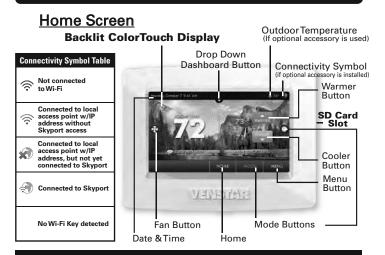
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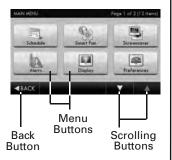
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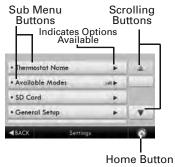
#### **Get To Know Your Thermostat**



#### Main Menu Screen



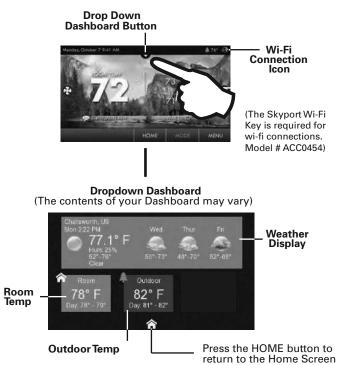
#### Sub Menu Screen



#### **Get To Know Your Thermostat**

#### **Dropdown Dashboard**

The Dropdown Dashboard displays temperature, humidity, and other readings. It will also show the high and low readings of the day.



#### **Get To Know Your Thermostat**

Care and Use of Your Thermostat
Pencils, pens and other sharp objects should never be used on your thermostat; these may damage your touchscreen. Only use your finger tip to press the touchscreen buttons.



Use a soft, damp cloth to clean the screen.

DO NOT USE ABRASIVE CLEANERS OR CLEANERS THAT CONTAIN SOLVENTS. DO NOT SPRAY ANYTHING DIRECTLY ONTO THE THERMOSTAT.

## Quick Start - Temperature, Modes & Fan

## Selecting Your Desired Temperature and Mode

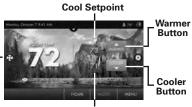




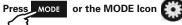
Press warmer or to adjust temperature

The Heat or Cool Setpoint is the temperature the room has to reach before heating or cooling will turn off.

(Without regard to deadband)



**Heat Setpoint** 





**HEAT** will allow only heat operation.

COOL will allow only cool operation.

AUTO will allow both Heat and Cool operation.

OFF - heating and cooling systems are turned off.



COOLER buttons in Auto mode will adjust both the heat and cool setpoints simultaneously. To adjust heat and cool setpoints individually, choose HEAT mode to adjust the heat setpoint and COOL mode to adjust the cool setpoint, then return to AUTO mode.

HEAT OR COOL MODE - Pressing the WARMER or COOLER buttons in Heat or Cool mode will adjust only the heat or cool setpoints.

#### Using the Fan Button

Press the FAN Icon

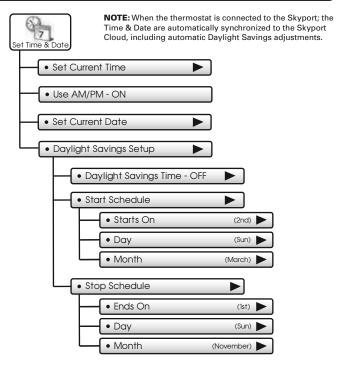


FAN ON fan runs constantly even in OFF Mode.

FAN AUTO fan only runs with a heating or cooling demand.

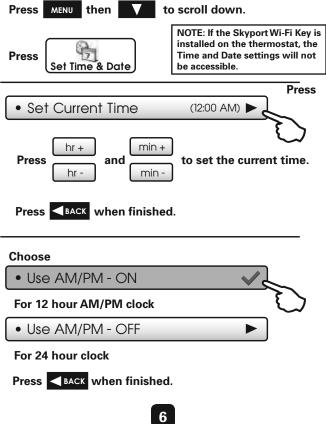


## Quick Start - Set Time & Date



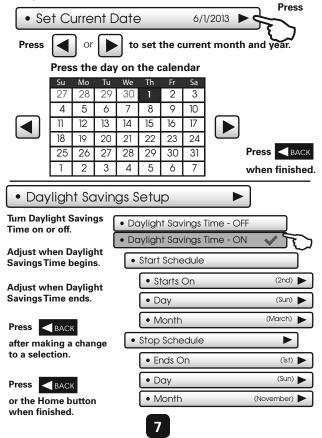
#### Quick Start - Set Time & Date

## Setting the Time

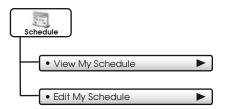


#### Quick Start - Set Time & Date

## Setting the Date



## Main Menu Buttons - Schedule



## Main Menu Buttons - Schedule



This thermostat features up to four programmable time periods per 24 hour day: Morning, Day, Evening, and Night. The start time for each time period is adjustable. The stop time for each time period is the start time for the next period.

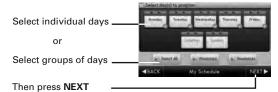
#### View My Schedule

Press a day of the week to view its settings. This may be repeated for each day.



## • Edit My Schedule

Press and select days to program



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#### Main Menu Buttons - Schedule

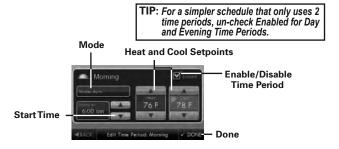


(Continued)

Press and select a Time Period (Morning, Day, Evening, or Night) to edit.



Adjust Mode, StartTime, and Heat and Cool Setpoints to desired settings. The Time Period may also be Enabled or Disabled. Un-check the Enabled box for Time Periods you don't want to use. Press **DONE** when finished.



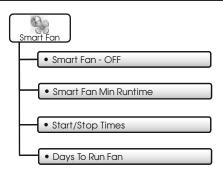
When you are finished editing the four time periods press

Review your program.

Press **SAVE** to keep your program. Press **EDIT** to make further changes.



# Main Menu Buttons - Smart Fan



#### Main Menu Buttons - Smart Fan



The fan may be programmed to turn on automatically for a specified period during the day.

Press to turn fan schedule on or off

- Smart Fan OFF
- Smart Fan ON



Set the minimum number of minutes the fan will run from the top of each hour. Set runtime to 60 minutes to be on continuously from StartTime to StopTime. (5 - 60 mins.)

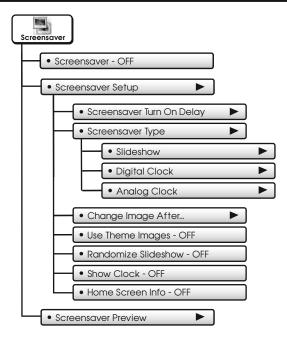
• Start/Stop Times (7:00AM - 9:00PM) ►

Set when the Smart Fan schedule will start and stop. For example, you may not want Smart Fan to run during sleeping hours.

Days To Run Fan

Choose which days of the week Smart Fan will run.

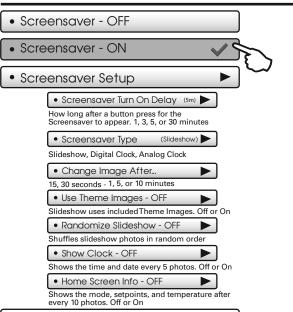
## Main Menu Buttons - Screensaver



#### Main Menu Buttons - Screensaver



The Screensaver allows you to create custom slideshows.

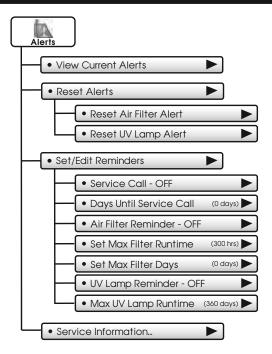


Press this button to preview your screensaver operation before returning to the Home Screen.

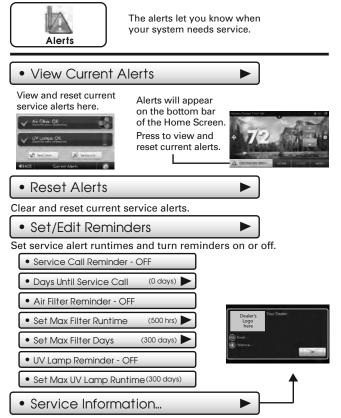
After the preview, press anywhere on the screen to return to the sub menu.

• Screensaver Preview

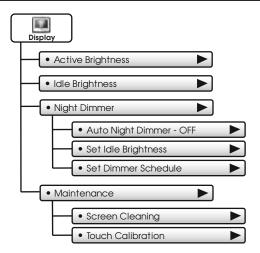
## Main Menu Buttons - Alerts



#### Main Menu Buttons - Alerts



# Main Menu Buttons - Display



#### Main Menu Buttons - Display



The display brightness options may be adjusted in this menu.

• Active Brightness (80%) ▶

You may select how bright the backlight is while the thermostat is active. The display is active for 3 minutes after last touch, it then goes idle.

• Idle Brightness (30%) ▶

You may select how bright the backlight is while the thermostat is idle.

Night Dimmer

You may dim the brightness of the screen at night.

Auto Night Dimmer - OFF

The screen can be set to dim automatically at night.
Dimming the display can prolong the life of the backlight.

• Set Idle Brightness (20%)

Set the screen brightness for the Night Dimmer. When Night Dimmer is On, the display will go idle 8 seconds after last touch.

Set Dimmer Schedule

Set the schedule for the Night Dimmer.

## Main Menu Buttons - Display



Maintenance allows you to clean and calibrate the touch screen.



Screen Cleaning Mode disables the touch feature for 15 seconds so the screen may be cleaned without altering any settings.

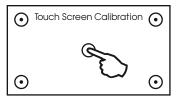


Use a soft cloth without solvents or abrasive cleaners

#### Touch Calibration

Under normal circumstances, the touch screen should not need to be calibrated.

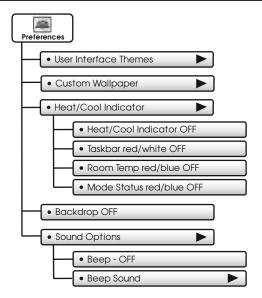
Touch the center of the targets as they appear on the screen.



Press | FINISH | when done.

When calibration is complete, the thermostat will automatically restart and return to the Home Screen.

#### Main Menu Buttons - Preferences



#### Main Menu Buttons - Preferences



You may set the type of background that appears on the thermostat Home Screen.

#### • User Interface Themes (ocean)

This thermostat has several high quality background themes to choose from. NOTE: At 7 PM, the background will change to an evening scene and the moon will replace the sun. At 7 AM it will return to a daytime scene.

#### Custom Wallpaper

You may choose your own background image by selecting a photo that you have uploaded from an SD memory card.

#### Heat/Cool Indicator

You may choose an enhanced indicator of the current status of the HVAC equipment.

- Heat/Cool Indicator ON/OFF • Taskbar Red/White - ON/OFF
- RoomTemp Red/Blue ON/OFF
- Mode Status Red/Blue ON/OFF

#### Backdrop - OFF

#### • Backdrop-ON

The Backdrop makes numbers and words easier to read, and may be needed on certain background images.



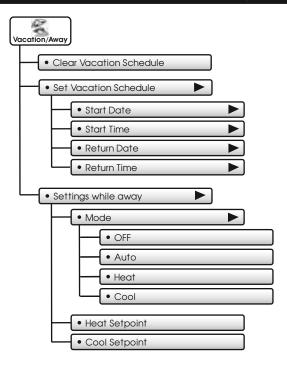


Turn the beep sound on or off.



Choose from different beep sounds.

## Main Menu Buttons - Vacation/Away



# Main Menu Buttons - Vacation/Away



Vacation or pressing the AWAY button will use temporary, energy saving settings without changing the regular schedule. Pressing the HOME button will return the thermostat to normal comfort settings.

#### • Clear Vacation Schedule

Removes the stored vacation schedule.



Set your Vacation Schedule.



Select the time Vacation Mode will start.

Then press ◀ BACK



Continued >



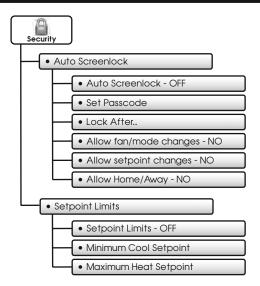
(50°) **>** 

(85°) **>** 

• Heat Setpoint

• Cool Setpoint

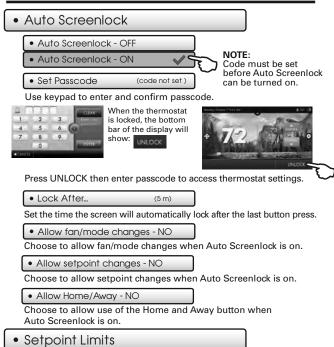
## Main Menu Buttons - Security



#### Main Menu Buttons - Security

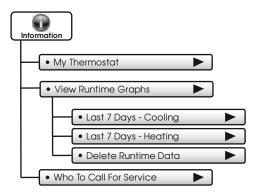


Security settings may be set to limit or prevent changes to your thermostat.



Limits how high or low heating and cooling may be adjusted.

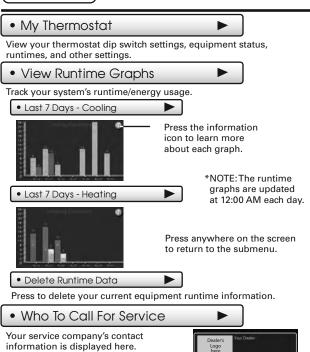
## Main Menu Buttons - Information



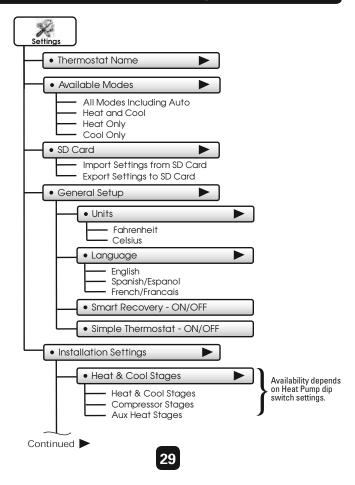
#### Main Menu Buttons - Information

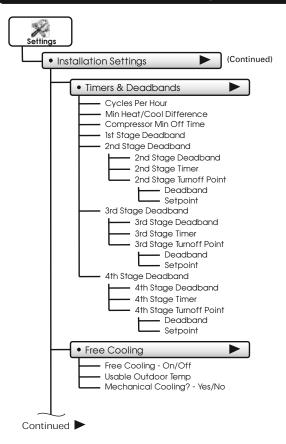


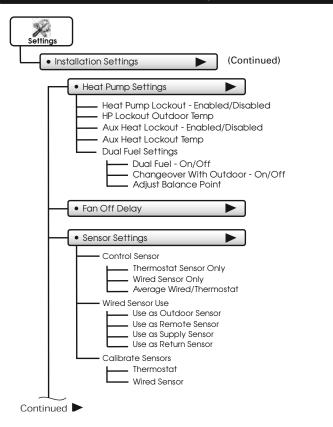
This button contains valuable service and system runtime information.

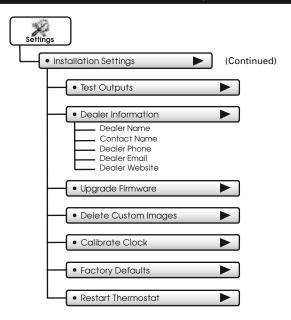


## Main Menu Buttons - Settings











Thermostat heating and cooling options are found in this menu

### • Thermostat Name

Use keypad to name your thermostat. The name is displayed on the Home Screen.

(Up to 14 characters)



(all) ▶

#### Name appears here



Choose the desired modes the thermostat will use: Heat, Cool, Heat & Cool, or Auto (All). For example, if you only have a heater, choose Heat, and only Heat & Off modes will be available. This will simplify the operation for the user.

# • SD Card

Import and export files to and from the thermostat. See the ColorTouch Assistant instructions for further details.

#### • Import Settings from SD Card

Upload files from ColorTouch Assistant or

#### • Export Settings to SD Card

Export files from one thermostat and import

\*NOTE: A 2GB SD card is recommended. To import and export files, the SD card must contain the same version of the firmware as the thermostat.

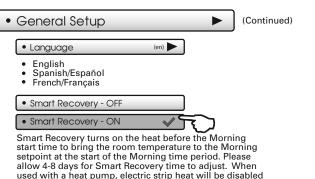
#### General Setup

• Units

- Fahrenheit (F) Celsius (C)

(F)

Simple Thermostat - ON

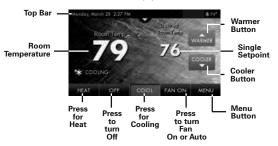


used with a heat pump, electric strip heat will be disabled while Smart Recovery is active.

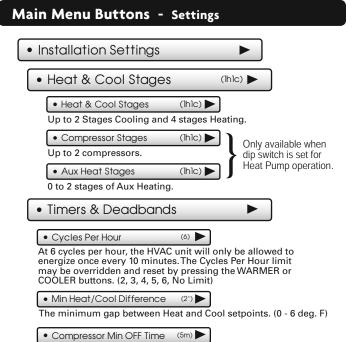
• Simple Thermostat - OFF

#### Turn on Simple Thermostat for the most basic user interface.

When SimpleThermostat is on, alerts will appear in the top bar of the main screen. Press on the top yellow alert bar to view alerts.



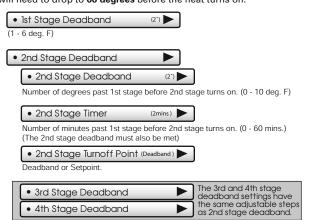
**Note:** When using the SimpleThermostat Home Screen; the program schedule along with the **HOME** and **AWAY** features are unavailable.



None, 1 minute, or 5 minutes.

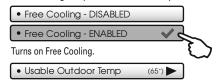


1st Stage Deadband Specifies the minimum temperature difference between the room temperature and the desired setpoint before the first stage of heating or cooling is allowed to turn on. For example, if the heat setpoint is 68° and the 1st Stage deadband is set to 2 degrees, the room temperature will need to drop to 66 degrees before the heat turns on.

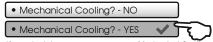




Free Cooling is an energy saving way to boost the efficiency of your air conditioning system by bringing in cool air from the outside. The installation of a Free Cooling damper(s) and outdoor temperature sensor is required.

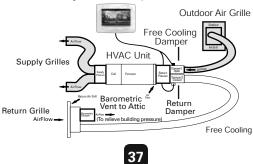


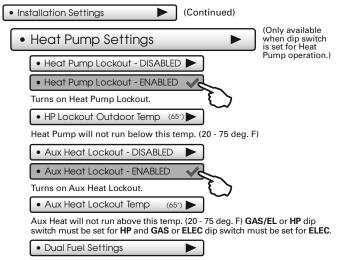
Free Cooling shuts off above this outdoor temperature. (40 - 80 degrees F)



If you don't have a compressor, set Mechanical Cooling to "NO", Y1 will then be used to control the Free Cooling Damper(s) and Y2 will be disabled. If set to "YES", mechanical (compressor) cooling will be controlled by the Y2 terminal. (See page 53 for wiring diagram)

Mechanical air conditioning is turned on with a 2nd stage demand for cooling and the Free Cooling, outdoor air damper is closed.





This feature is for heat pump applications only.

This will only appear if the GAS/EL or HP dip switch is set for HP and the GAS or ELEC dip switch is set for Gas.

When Dual Fuel is ON, an outdoor temperature or, if Change With Outdoor is set to OFF a demand for third stage heat will be used to stop running the heat pump and switch to a fossil fuel source of heat. NOTE: Once the change to fossil fuel is made, the heat demand must finish with fossil fuel. Additional heat demands within 10 minutes will also use fossil fuel, regardless of outdoor temperature or stage demand.

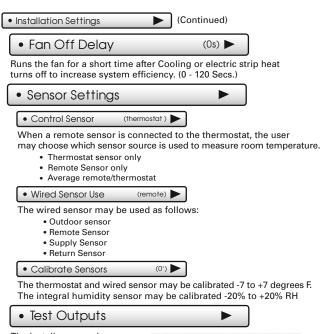
- Dual Fuel ON/OFF
- Changeover With Outdoor ON/OFF

ON: Uses an outdoor sensor for changeover.

OFF: Uses a third stage heat demand for changeover.

• Adjust Balance Point

Choose the temperature for changeover to fossil fuel. (5 - 60 deg. F)



technician can use this feature to test the functions without any time delays of the thermostat.



With a 1st stage cooling call, Y1 and G are active -

#### Dealer Information

A Dealer may enter their company contact information for the customer to use when they need service. This will appear when the "WhoTo Call For Service" button is pressed in the Information Menu.

Use the keyboard to enter your information.

Dealer Name
 Contact Name
 Dealer Phone
 Dealer Email
 Dealer Website
 Please use
 ColorTouch
 Assistant to add
 Dealer's logo.
 (See Page 44)



#### • Upgrade Firmware

Press to upgrade the thermostat firmware. The SD Card must be in the thermostat SD Card reader and contain the valid firmware. If an error message appears, confirm with ColorTouch Assistant that firmware is up to date or simply try reinserting the SD card.

If you are connected to Skyport Wi-Fi and you receive an Alert that new firmware is available, simply press the Upgrade Firmware button to upgrade wirelessly.

**Note:** Occasionally an update that requires a large amount of data is not possible to do wirelessly. In this case an update using an SD card will be required.

# • Delete Custom Images

Press to delete the custom photos you uploaded to the thermostat.

# • Calibrate Clock (0 mins) ▶

If needed, the clock may be calibrated up to -10 to +10 minutes per month.

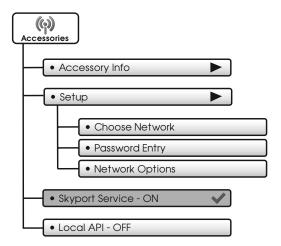
# • Factory Defaults

Press to reset the thermostat back to the factory settings.

# • Restart Thermostat

If needed, press here to restart the thermostat.

# Main Menu Buttons - Accessories



# Main Menu Buttons - Accessories

## • Accessory Info

It is here that you will find helpful information regarding the connectivity status of your thermostat, including the thermostat's ID.



#### Setup

Upon pressing setup, the thermostat will search for available local networks with which to connect.

After identifying local access points, you will be prompted to choose a network, enter a password and other network options.



## Skyport Service - ON

Enable the thermostat to connect to the Skyport Cloud for remote monitoring and control features.

#### Local API - OFF

Enabling the local API allows 3rd party software to interface with your thermostat, such as a home automation system.

# Main Menu Buttons - Emergency Heat



The Emergency Heat function is only available if your thermostat is set to control a Heat Pump.

To initiate the Emergency Heat feature, press the Emergency Heat button. During Emergency Heat operation, the thermostat will turn on the fan and auxiliary stages of heat when there is a demand for heat. The 1st stage of heating and all stages of cooling will be unavailable. To exit Emergency Heat, press the Emergency Heat button.



# The ColorTouch Assistant

ColorTouch Assistant may be downloaded at no charge at: www.venstar.com/thermostats/colortouch/assistant



Every time the user runs the ColorTouch Assistant software, it automatically connects to Venstar ColorTouch website in the background and updates the software and firmware (the operating system for ColorTouch) at no cost.

The ColorTouch Assistant allows you to use your computer to:

- Upload photos for background and slideshow images
- Configure installation settings
- Program a time period schedule
- Upload dealer and service contact information and company logo
- Update thermostat firmware

# The ColorTouch Assistant

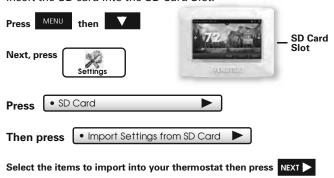
### **Uploading Photos and Settings to your thermostat**

When you are finished adding and editing photos and settings, click on Save to SD. When prompted, remove the SD card from the SD card reader on your computer.



### At the thermostat:

Insert the SD card into the SD Card Slot.



Your thermostat will automatically save your new photos and settings.

## Remove and Replace the old thermostat

To install the thermostat properly, please follow these step by step instructions. If you are unsure about any of these steps, call a qualified technician for assistance.

- Assemble tools: Flat blade screwdriver, wire cutters and wire strippers.
- Make sure your Heater/Air Conditioner is working properly before beginning installation of the thermostat.
- Carefully unpack the thermostat. Save the screws, any brackets, and instructions.
- Turn off the power to the Heating/Air Conditioning system at the main fuse panel. Most residential systems have a separate breaker for disconnecting power to the furnace.
- Remove the cover of the old thermostat. If it does not come off easily, check for screws.
- Loosen the screws holding the thermostat base or subbase to the wall and lift away.
- Disconnect the wires from the old thermostat. Tape the ends of the wires as you disconnect them, and mark them with the letter of the terminal for easy reconnection to the new thermostat.
- Keep the old thermostat for reference purposes, until your new thermostat is functioning properly.

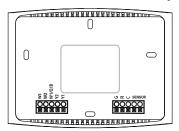
# Wire Connections

If the terminal designations on your old thermostat do not match those on the new thermostat, **refer to the chart below or the wiring diagrams that follow.** 

Wire from the old thermostat terminal marked	Function	Install on the new thermostat connector marked
G or F	Fan	G
Y1,Y or C	Cooling	Y1
W1, W or H	Heating	W1/0/B
Rh, R, M, Vr, A	Power	R
С	Common	С
O/B	Rev. Valve	W1/O/B*
W2	2nd Stage Heat	W2
Y2	2nd Stage Cooling	Y2
W3	3rd Stage Heat	W3
OUT -	Outdoor Sensor	SENSOR
OUT +	Outdoor Sensor	SENSOR

<sup>\*</sup> O/B is used if your system is a Heat Pump.

### The T5800 Thermostat Backplate



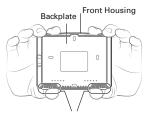
#### NOTE:

The backplate does not fully cover a full size vertical junction box. The ACC-WPLWH ColorTouch Wallplate or a single-gang, horizontally mounted junction box would be needed for that type of installation

#### To remove the thermostat backplate: Using the Finger Pull Areas, pull the front housing away from the backplate.



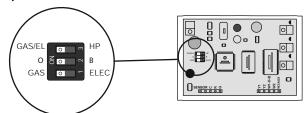
Look for these tabs to locate the pull areas



Pull out with thumbs in these areas

W3	3rd stage heat circuit	
W2	2nd stage heat circuit	
W1/O/B	1st stage heat circuit	
Y2	2nd stage compressor relay	
Y1	1st stage compressor relay	
G	fan relay	
R	24 VAC return	
С	24 VAC common	
SENSOR	remote/outdoor/supply/return sensor connections	

#### Dip switches are located on the back of the thermostat



GAS/EL HP GAS/EL HP



This dip switch configures the thermostat to control a conventional gas/electric system or a heat pump. If your system is anything other than a heat pump, leave this switch set for GAS/EL.\*

\*For some commercial heat pumps, this switch may need to be set for GAS/EL. Consult the commercial heat pump literature.



When the GAS/EL or HP dip switch is configured for HP, this dip switch (O or B) must be set to control the appropriate reversing valve. If O is chosen, the W1/O/B terminal will energize in cooling. If B is chosen, the W1/O/B terminal will energize in heating.

#### 1. When GAS/EL or HP is set for GAS/EL: This switch (GAS or ELEC) controls how the thermostat



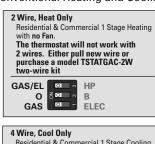
This switch (GAS or ELEC) controls how the thermostat will control the Fan (G) terminal in heating mode. When GAS is chosen, the thermostat will not energize the Fan (G) terminal in heating. When ELEC is chosen the thermostat will energize the fan in heating.

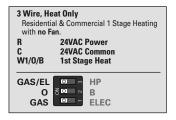
#### 2. When GAS/EL or HP is set for HP:

This switch (GAS or ELEC) defines the Aux Heat type. When <u>GAS</u> is chosen, the auxiliary heat will not be allowed to run during heat pump operation. When using a Dual Fuel system, set this switch for <u>GAS</u>. When <u>ELEC</u> is chosen, up to two stages of auxiliary strip heat will be allowed to run.

## Sample Wiring Diagrams with Dip Switch Positions

Conventional Heating and Cooling Systems





5 Wire, 1 Stage Cooling, 1 Stage Heat Residential & Commercial 1 Stage Cooling,

24VAC Power

24VAC Common

1st Stage Heat 1st Stage Cool

HP

В

with 1 stage Gas Heat.

Fan

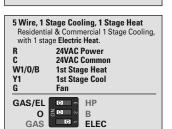
0 m

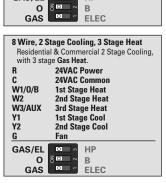
C W1/0/B Y1

GAS/EL

G

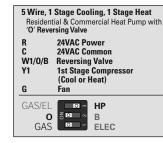


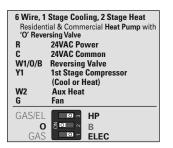


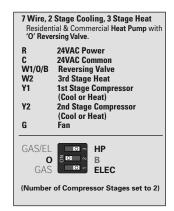


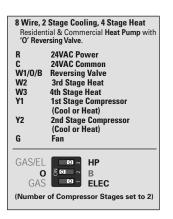
# Sample Wiring Diagrams with Dip Switch Positions

Heat Pump Systems



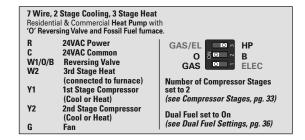


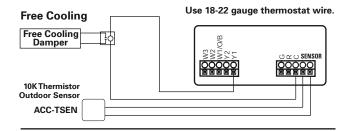




# Sample Wiring Diagrams with Dip Switch Positions

Heat Pump Systems with Dual Fuel





Free Cooling utilizes the Y1 terminal for the operation of 1st stage cooling. If mechanical (compressor) cooling is also present, the mechanical cooling is connected to the Y2 terminal in this instance.

Free Cooling may be used with a Gas/Electric or Heat Pump system.

**Temperature Sensor: ACC-TSEN Temperature Sensor** 10K ohm sensor at 77F/25C. Negative Temperature Coefficient.

### **Troubleshooting**

SYMPTOM: The thermostat touchscreen buttons are not responsive.
 CAUSE: The touchscreen is out of calibration.
 REMEDY: Remove the thermostat from the backplate. Push the

**REMEDY:** Remove the thermostat from the backplate. Push the thermostat back onto the backplate, while keeping your finger pressed firmly against the center of the touchscreen, until the Calibration screen appears. Re-calibrate the Touchscreen.

• SYMPTOM: The display is blank.

CAUSE: Lack of proper power.

**REMEDY:** Make sure the power is on to the HVAC and that you have 24vac between  $\bf R \ \& \ C$ .

• SYMPTOM: The air conditioning does not attempt to turn on.

CAUSE: The cooling setpoint is set too high.

**REMEDY:** Lower the cooling setpoint or lower the cooling set-point limit. *See Setpoint Limits (page 28).* 

• SYMPTOM: The heating does not attempt to turn on.

**CAUSE**: The heating setpoint is set too low.

**REMEDY:** Raise the heating setpoint or raise the heating set-point limit. See Setpoint Limits (page 28).

• SYMPTOM: When controlling a residential heat pump, and asking for cooling, the heat comes on.

**CAUSE**: The thermostat reversing valve dip switch is set for "B". **REMEDY**: Set the reversing valve jumper for "O".

SYMPTOM: When calling for cooling, both the heat and cool come on.
 CAUSE: The thermostat equipment dip switch is configured for "HP" and the HVAC unit is a Gas/Electric.

REMEDY: Set the equipment dip switch for "Gas".

• **SYMPTOM**: Air handler control board fuse blows when thermostat is attached to backplate with power on, but does not blow until the thermostat is placed onto the backplate.

**CAUSE**: The Outdoor sensor and/or sensor wiring is shorted. **REMEDY**: Check/replace Outdoor sensor and/or sensor wiring.



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### **Warranty**

One-Year Warranty - This Product is warranted to be free from defects in material and workmanship. If it appears within one year from the date of original installation, whether or not actual use begins on that date, that the product does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option to replace any defective part, will be provided without charge for the part itself provided the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. Such costs may be covered by a separate warranty provided by the installer.

THIS WARRANTY APPLIES ONLYTO PRODUCTS INTHEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

LIMITATIONS OF WARRANTIES – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICHTHE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SOTHE ABOVE MAY NOT APPLYTO YOU. THE EXPRESSED WARRANTIES MADE INTHIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.

ALL WORK UNDERTHETERMS OFTHIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME ASTHEIR WARRANTY PERIOD ONLYTHE REMAININGTIME PERIOD OFTHIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

- Normal maintenance as outlined in the installation and servicing instructions or owner's manual, including filter cleaning and/or replacement and lubrication.
- 2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
- Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
- Damage as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
- 5. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
- 6. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
- Electricity or fuel costs or increases in electricity or fuel costs for any reason whatsoever including additional or unusual use of supplemental electric heat.
- 8. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above may not apply to you.

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

Patent Pending

