

## Connected Comfort

 Skyport™ is the bridge to your environment



### Easy to use

Simple and intuitive.  
Information and control  
at your fingertips

### Convenient

Remotely adjust your  
settings from the couch  
to across town

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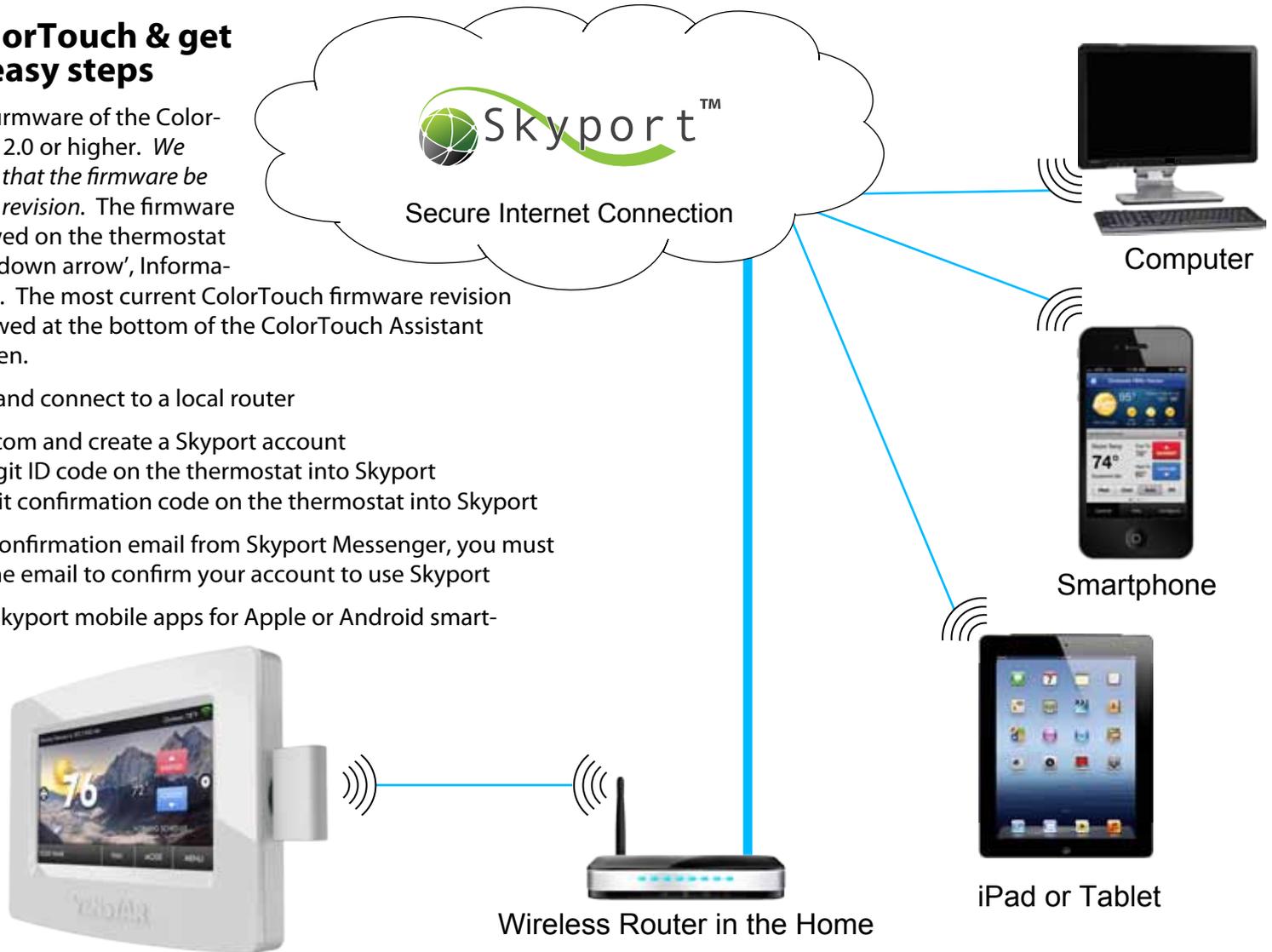
## **TROUBLE-SHOOTING**

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# Skyport Communications Overview

## Add Wi-Fi to ColorTouch & get connected in 5 easy steps

- 1** Make sure that the firmware of the ColorTouch thermostat is 2.0 or higher. *We strongly recommend that the firmware be updated to the latest revision.* The firmware version may be viewed on the thermostat by pressing: Menu, 'down arrow', Information, My Thermostat. The most current ColorTouch firmware revision number may be viewed at the bottom of the ColorTouch Assistant Software home screen.
- 2** Install the Wi-Fi Key and connect to a local router
- 3** Go to [www.venstar.com](http://www.venstar.com) and create a Skyport account
  - a. Enter the 16 digit ID code on the thermostat into Skyport
  - b. Enter the 6 digit confirmation code on the thermostat into Skyport
- 4** After receiving the confirmation email from Skyport Messenger, you must click on the link in the email to confirm your account to use Skyport
- 5** Download the free Skyport mobile apps for Apple or Android smartphones and tablets.

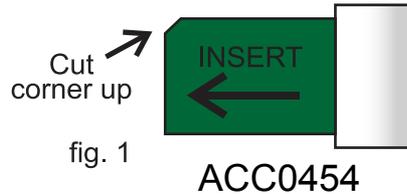


# ACC0454 Wi-Fi Installation



# ACC0454 Wi-Fi Installation

1



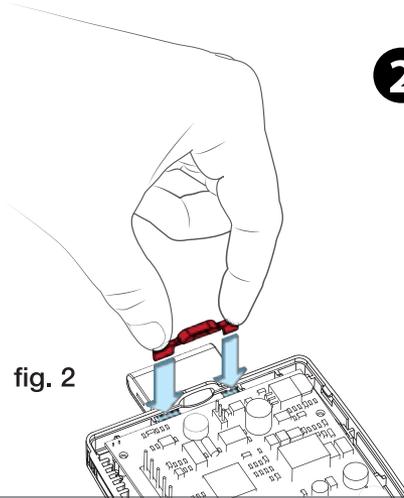
Insert the Skyport Wi-Fi Key all the way into the SD slot of the ColorTouch thermostat. The “cut corner” of the Key’s circuit board faces up as shown in figure 1.

**Important - Do not install upside down and force in slot or it may damage the thermostat. Wi-Fi key when installed correctly will easily slide in slot.**

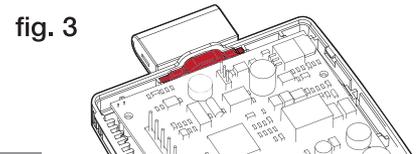
## Installation of the included locking clip is strongly recommended

1 With the thermostat removed from the backplate, insert the Skyport Key.

Install the locking clip as shown in figure 2.



2 The Locking Clip is seated all the way down next to the circuit board as shown in figure 3. Reinstall the thermostat on the backplate.



2



When the Wi-Fi Key is successfully detected this screen will appear.

Pressing **NO** will return the thermostat to the home screen.

Pressing **YES** will proceed to step 3.

If Wi-Fi setup screen does not appear go to the Troubleshooting section page vi.

3



The thermostat will scan for all available networks. Select the appropriate network from the list on the display.

*Scans for up to 90 seconds*

4

# ACC0454 Wi-Fi Installation

4



If the network requires security, press **PASSWORD** and enter the password on the keyboard, then press **DONE**. If no security is required, **PASSWORD** will not appear. Press **NEXT** to continue.

5

Select Automatic & Press Next



6



You are now at the Accessory Info screen\* in the Menu. The status of the thermostat will show that it is “Connected” to the Wi-Fi LAN.

The ID on this screen will be needed to create an account to establish a successful connection to Skyport Cloud Services.

*\*If the Accessory Info screen does not appear then press “Menu”, the “down arrow”, “Accessories”, and “Accessories Info”.  
If this procedure is not successful see page vii.*

# ACC0454 Wi-Fi Installation



Take a picture of this screen or write down the ID code for easy entry into your Skyport account later.

The information displayed on the Wi-Fi status screen includes:

- ID: the thermostat and wi-fi key custom ID code
- Network: the name of the local router
- Signal: the signal strength of the local router
- IP: the local IP address
- Wi-Fi: how long you have been connected to the local router
- Skyport: how long you have been connected to the Skyport Cloud Services
- Website: <http://venstar.skyport.cloud.com>

# Setting up a Skyport Account



# Setting up a Skyport Account



Logon to [www.venstar.com](http://www.venstar.com) and click the  button.

This will transfer you to the [venstar.skyportcloud.com](http://venstar.skyportcloud.com) website. Click the  button

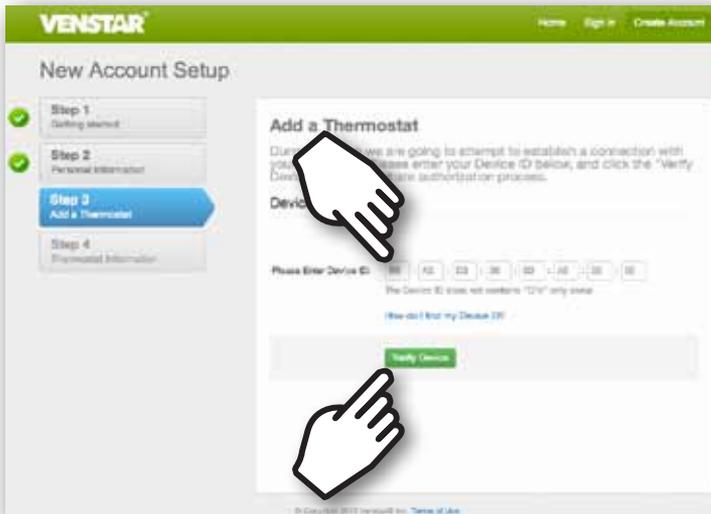
# Setting up a Skyport Account



Read the Getting Started instructions and press CONTINUE



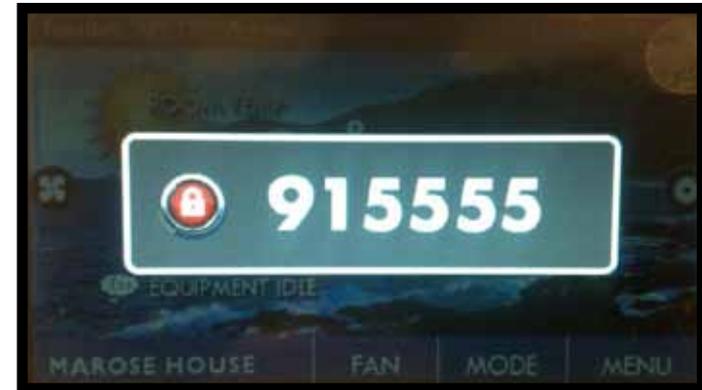
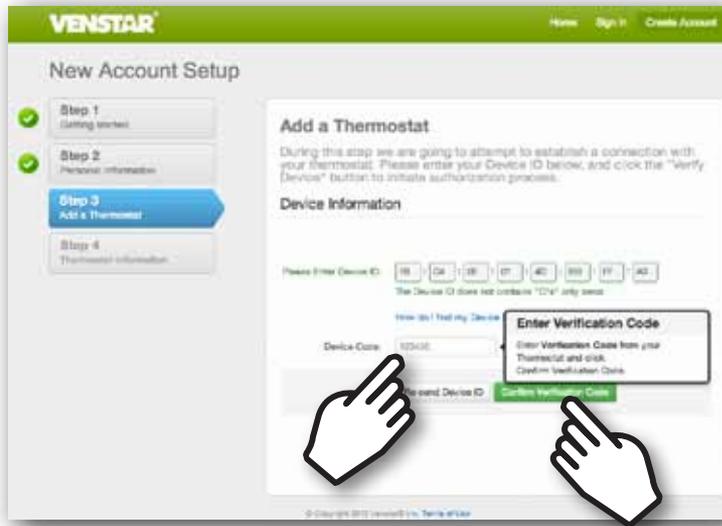
Enter your User Details and press CONTINUE



Enter your Device ID from the Wi-Fi Status screen on the ColorTouch and then press the "Verify Device" button

If you need to get back to this screen click: Menu-->Down Arrow-->Accessories-->Accessories Info

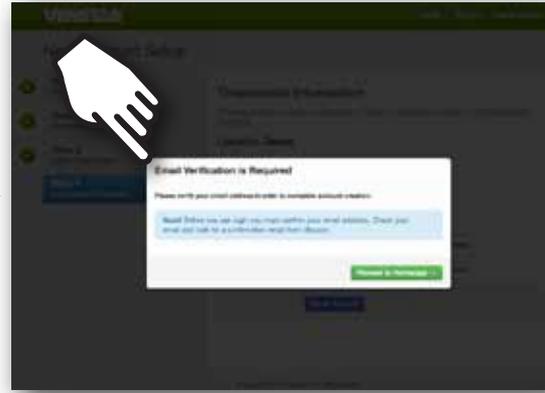
# Setting up a Skyport Account



Your unique Verification Code will appear on the ColorTouch thermostat after you enter your Device ID.

After entering the Device ID, a unique 6-digit Verification Code will appear on your thermostat. Your unique Verification Code must be entered into the Skyport New Account Setup page, then press the Confirm Verification Code Button.

# Setting up a Skyport Account



Click the “Create Account” button to finalize your account information.

After creating a Skyport account, the Skyport Messenger will send an email validation to the email listed on the account. The user must click on the link contained in the email to validate the account.

# Installing the Skyport App



## iPhone & iPad Instructions

- Go to the App Store on your iPhone or iPad
- Press the Search button
- Input "Venstar"
- Select Venstar Skyport
- Click "FREE" to install
- Enter your ID and Password from the Skyport website.



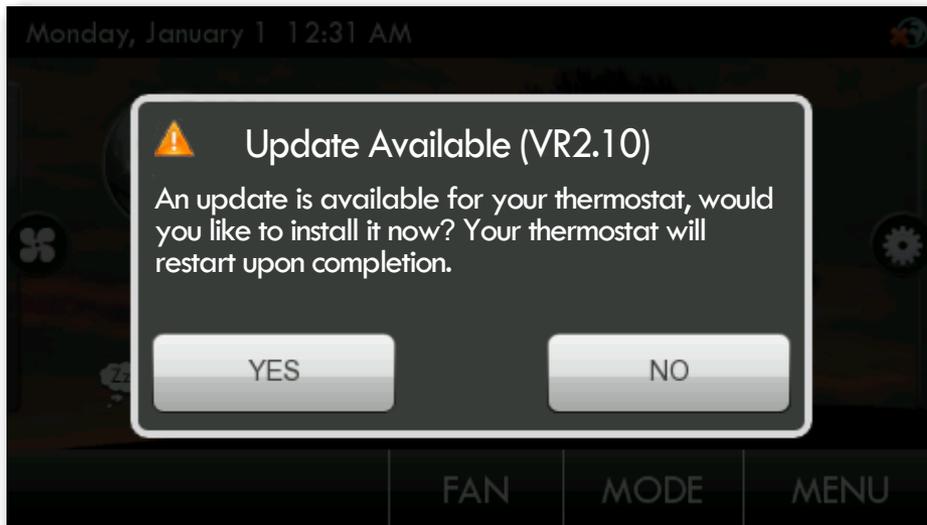
## Android Instructions

- Go to the Google Play Store on your device
- Type "Venstar" in the Search Bar
- Select Venstar Skyport
- Click "Install"
- Enter your ID and Password from the Skyport website.



# Wi-Fi Firmware Update

Most, but not all firmware updates may be “through the air” utilizing the local router and Wi-Fi. On occasion a firmware update with a large amount of data will require the use of an SD memory card and our ColorTouch Assistant Software.



## Update Instructions\*

- Push the MENU button
- Push the SETTINGS button
- Push the INSTALLATION SETTINGS button
- Push the UPDATE FIRMWARE button
- Select YES to update the ColorTouch

\* Must have VR 2.06 or later

# Programming

## Setting the Schedule Remotely

**Editing Monday**

**Occupied 1**

Start: 7:00 AM  
Stop: 6:00 PM  
Mode: Auto  
Cool: 74°  
Heat: 72°

Click to Edit

Reset

**Editing Monday**

**Morning**

Start: 6:00 AM  
Mode: Auto  
Cool: 78°  
Heat: 70°

Click to Edit

**Day**

Start: 8:00 AM  
Mode: Auto  
Cool: 85°  
Heat: 62°

Click to Edit

**Evening**

Start: 6:00 PM  
Mode: Auto  
Cool: 78°  
Heat: 70°

Click to Edit

**Night**

Start: 8:30 PM  
Mode: Auto  
Cool: 82°  
Heat: 62°

Click to Edit

Reset Next →

Reset Next →

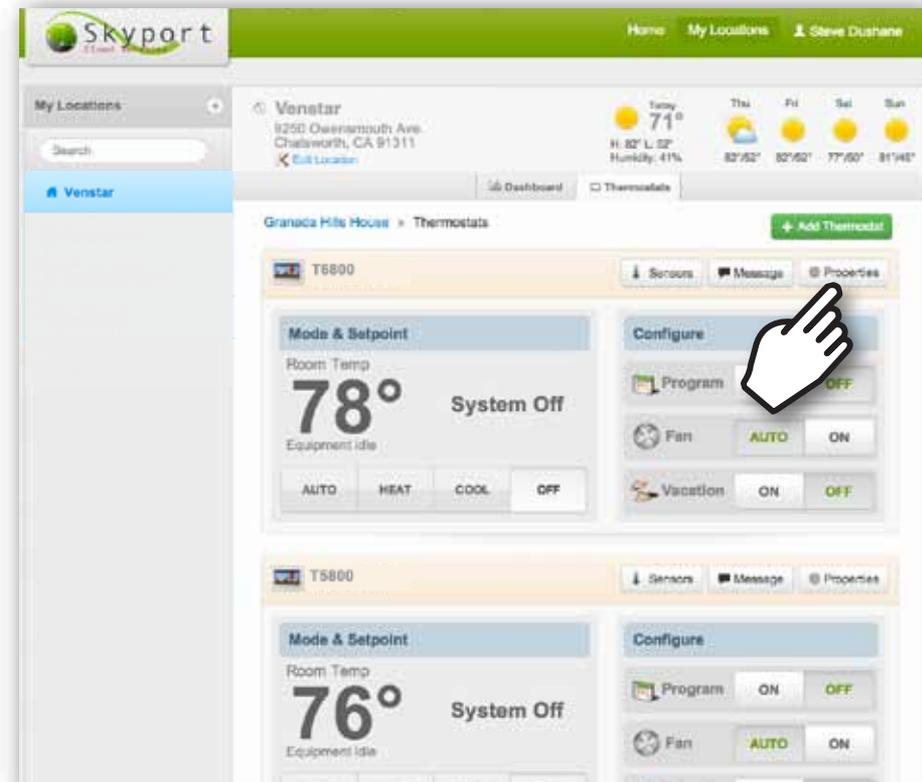
Period	Start	Mode	Cool	Heat
Morning	6:00 AM	Auto	78°	70°
Day	8:00 AM	Auto	85°	62°
Evening	6:00 PM	Auto	78°	70°
Night	8:30 PM	Auto	82°	62°

# Programming

## Setting the Schedule Remotely

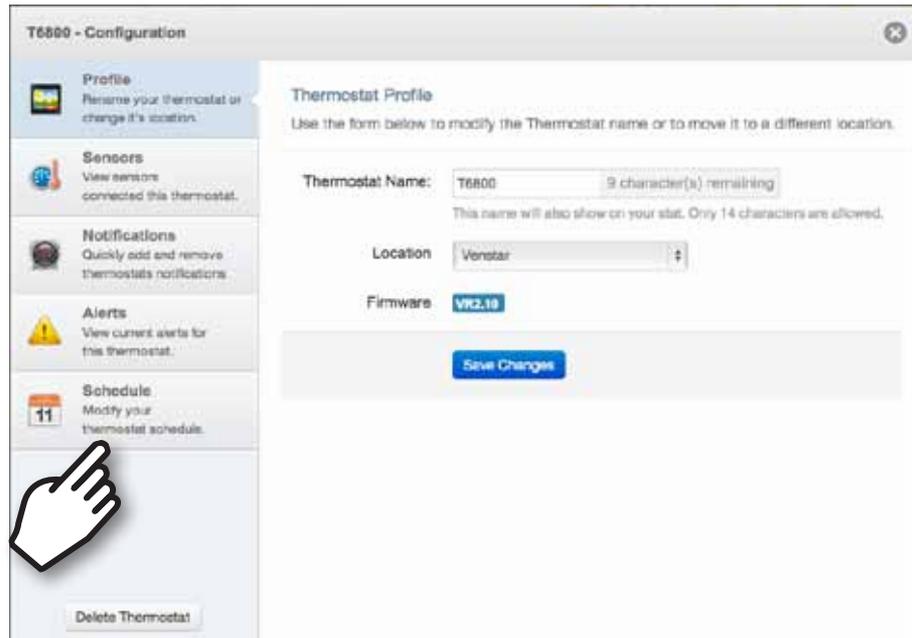


Skyport allows you to view and modify schedules and temperatures remotely. First, open your account and then click "Thermostats"



Next, scroll to the thermostat you want to change, then select "Properties"

### T6800 Commercial ColorTouch Thermostat Programming

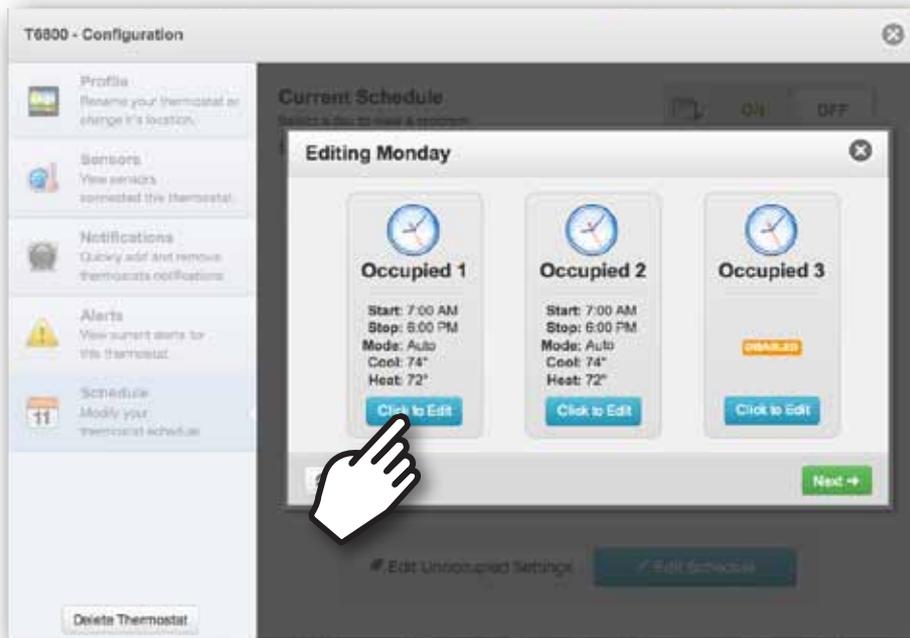


In the Properties screen press the Schedule button to view the time period settings

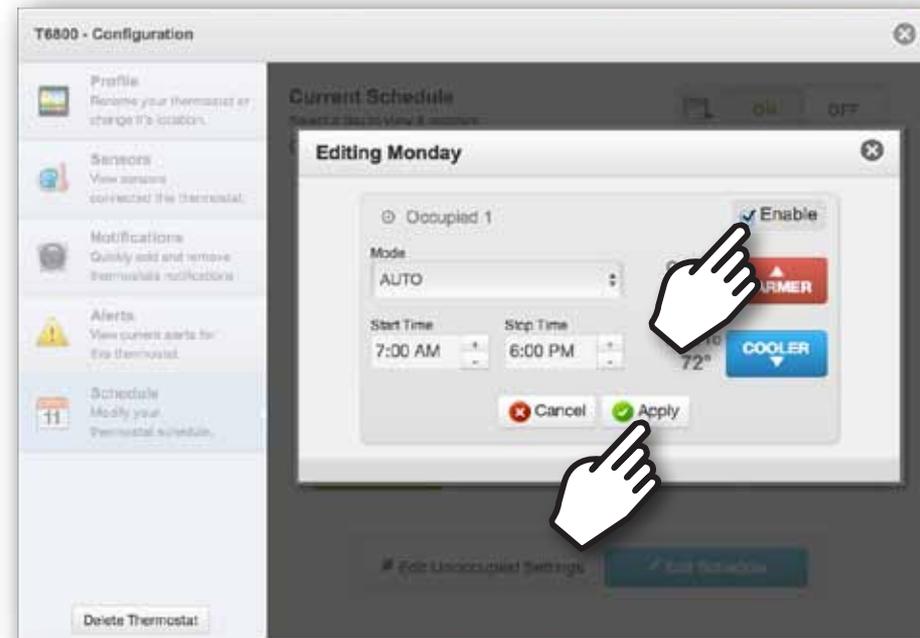


Make sure the schedule is turned "ON" at the top of the page and then click "Edit Schedule"

### T6800 Commercial ColorTouch Thermostat Programming

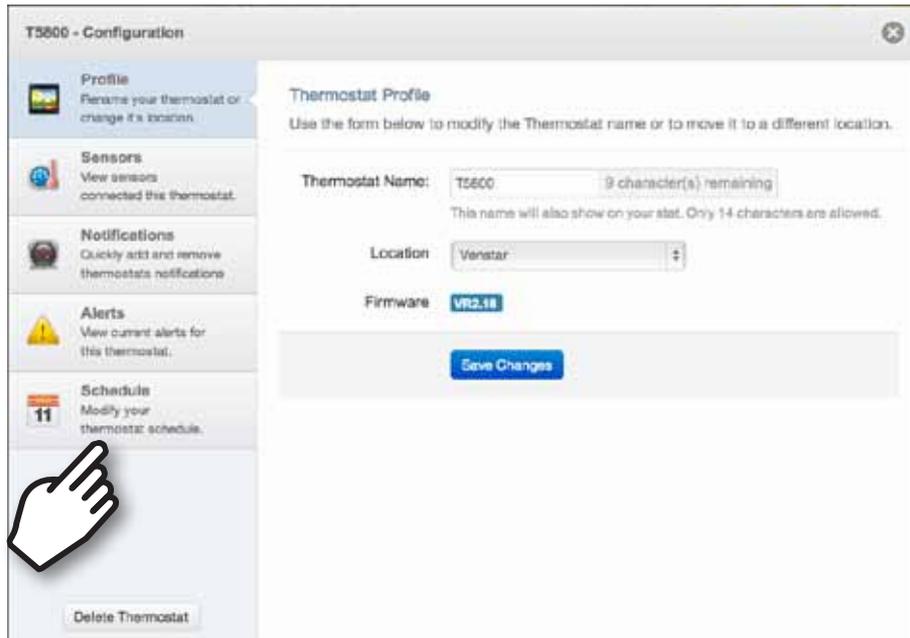


Choose the Occupied period you would like to change by selecting "Click to Edit"

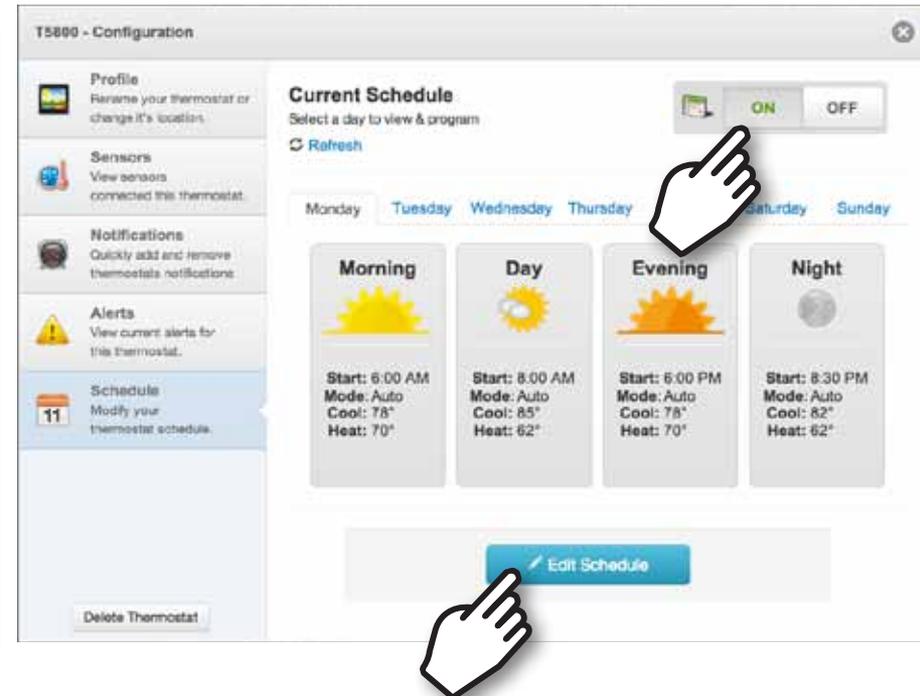


Set the mode, temperatures and start/stop times for your thermostat. Then click "Enable" program and then "Apply"

### T5800 Residential ColorTouch Thermostat Programming



In the Properties screen press the Schedule button to view the time period settings

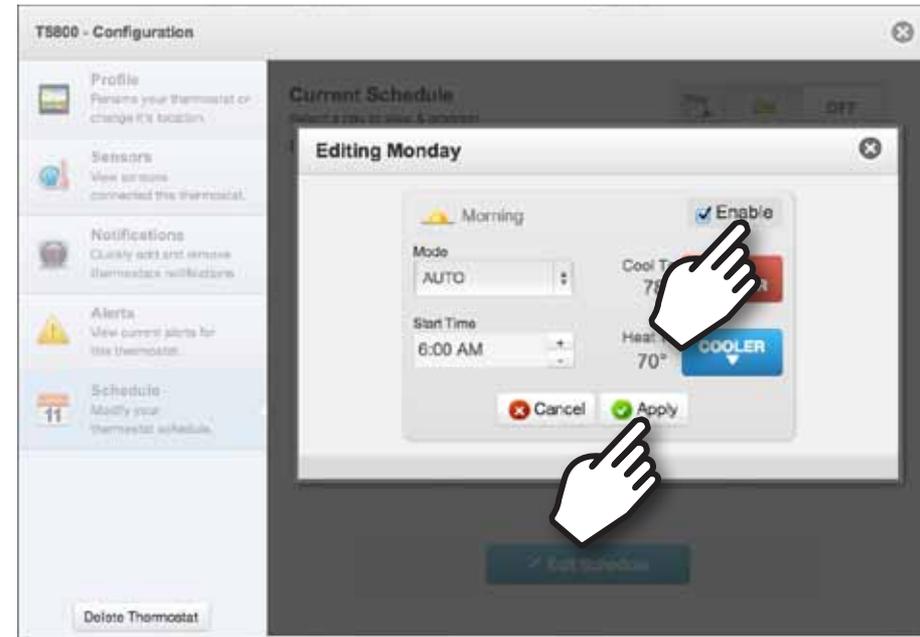


Make sure the schedule is turned "ON" at the top of the page and then click "Edit Schedule"

### T5800 Residential ColorTouch Thermostat Programming



Choose the Occupied period you would like to change by selecting "Click to Edit"



Set the mode, temperatures and start/stop times for your thermostat. Then click "Enable" program and then "Apply"

# Remote Sensors

## Installing and Monitoring a Remote Sensor

**T6800 - Configuration** ✕



**Profile**  
Rename your thermostat or change it's location.



**Sensors**  
View sensors connected this thermostat.



**Notifications**  
Quickly add and remove thermostats notifications



**Alerts**  
View current alerts for

### Sensors

The list below display all the sensors currently connected with this thermostat.

 Thermostat	<b>78°</b>	Hi 80°	Lo 71°
 Supply	<b>76°</b>	Hi --	Lo 76°
 Outdoor	<b>73°</b>	Hi 81°	Lo 50°

Showing 3 Sensor(s)



**Alerts**  
View current alerts for



**Notifications**  
Quickly add and remove thermostats notifications



**Sensors**  
View sensors connected this thermostat.

Showing 3 Sensor(s)

 Outdoor	<b>73°</b>	Hi 81°	Lo 50°
 Supply	<b>76°</b>	Hi --	Lo 76°
 Thermostat	<b>78°</b>	Hi 80°	Lo 71°

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Skyport™

# Remote Sensors

## Installing and Monitoring a Remote Sensor

ColorTouch thermostats allow you to select *how* a wired remote temperature sensor is used:



- Press the "Menu" button
- Press the "Settings" button,
- Press the "Installation Setting" button
- Press the "Sensors" button
- Then select "how" you want to use your wired remote sensor

**ACC-TSEN**  
Indoor/Outdoor remote sensor  
(4½" x 2¾")



**ACC-TSENWB**  
Indoor remote sensor  
(2¼" x 1¾")



**ACC-DSEN**  
ColorTouch Duct Sensor  
(⅛" x ⅜" x 20ft.)



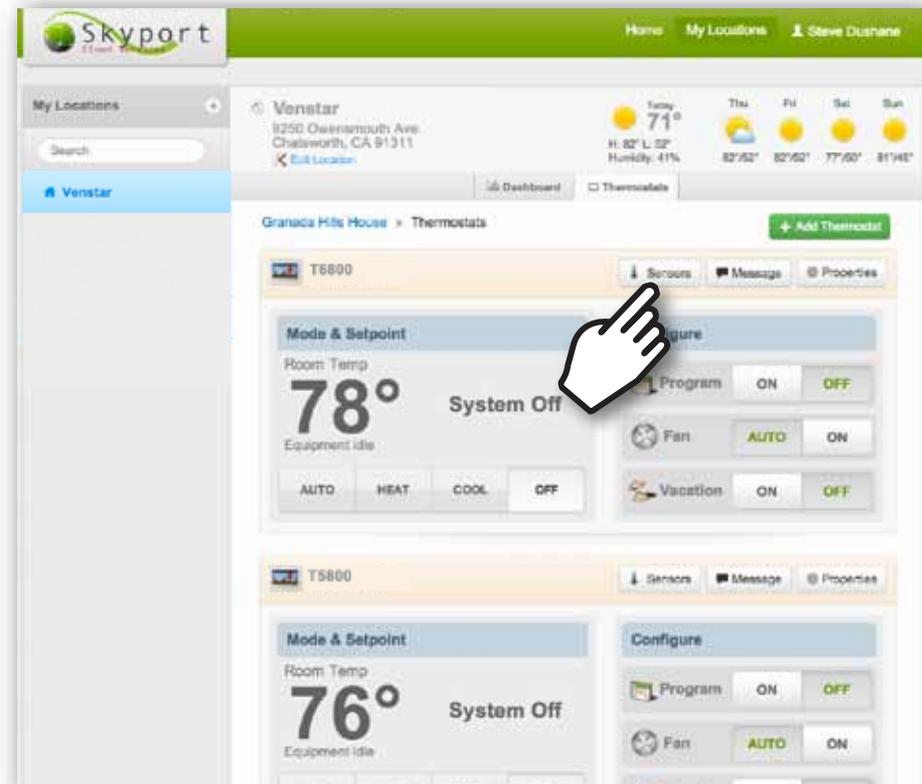
Sensors can be mounted up to 200ft away on 18 ~ 22 gauge unshielded thermostat wire. Sensors have a temperature range of -40F to 131F

# Remote Sensors

## Installing and Monitoring a Remote Sensor



Skyport allows you to monitor room air temperature, supply air temperature and troubleshoot HVAC units remotely. First, highlight the Location and then click "Thermostats"

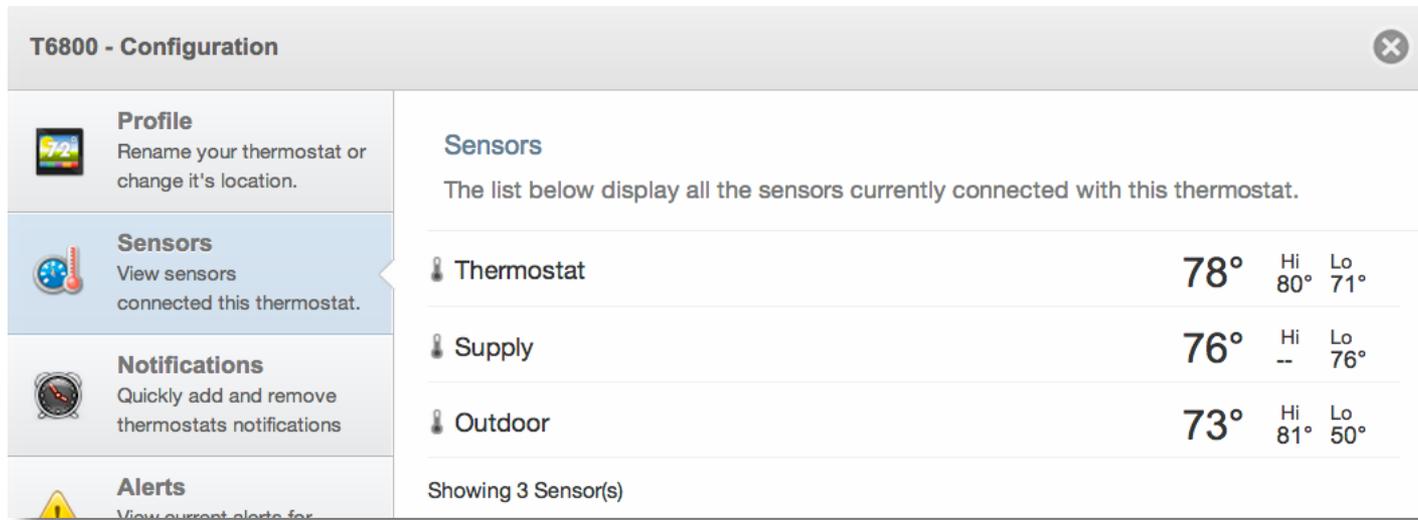


Next, scroll to the thermostat you want to monitor and click "Sensors"

# Remote Sensors

## Installing and Monitoring a Remote Sensor

You can troubleshoot a home or building from anywhere with a ColorTouch thermostat, a Wi-Fi Key and a Supply air duct sensor.



The screenshot shows the 'T6800 - Configuration' window with a sidebar on the left and a main content area. The sidebar has four items: 'Profile' (Rename your thermostat or change its location), 'Sensors' (View sensors connected this thermostat), 'Notifications' (Quickly add and remove thermostats notifications), and 'Alerts' (View current alerts for). The 'Sensors' section is selected. The main content area is titled 'Sensors' and contains the text 'The list below display all the sensors currently connected with this thermostat.' Below this is a table with three rows of sensor data.

Sensor Type	Current Temperature	Hi	Lo
Thermostat	78°	80°	71°
Supply	76°	--	76°
Outdoor	73°	81°	50°

Showing 3 Sensor(s)

### With the ACC-DSEN installed in the supply duct you can:

1. Compare supply duct temperature to thermostats current heat/cool demand
2. Compare supply duct temperature to actual room temperature on thermostat
3. Compare supply duct temperature to outdoor air temperature
4. See the high & low supply duct temperature history (resets automatically at midnight)

# User Accounts

## Adding Additional Users to Skyport

The screenshot shows the Skyport web interface. At the top left is the Skyport logo with the tagline 'Clear the Air'. To the right are navigation links for 'Home', 'My Locations', and 'John Peil'. Below the logo is the 'Your Account' section with a sidebar menu containing 'Account', 'Password', and 'Users' (which is highlighted). The main content area is titled 'All Users' and features a table with three columns: Name, E-mail, and Role. The table lists three users: Terry Zimmerman (User), John Peil (Owner), and My Contractor (User). Each user entry has links for 'Edit', 'Access', and 'Delete'. A green 'Add User' button is located in the top right corner of the table area. Below the table are two large buttons: a blue 'Add Existing User' button and a grey 'Add New User' button. The 'Add Existing User' button includes an icon of two people and text explaining that it allows adding a user already in Skyport Cloud Services using their email address, such as a contractor. The 'Add New User' button includes an icon of a person with a plus sign and text explaining that it allows adding a new user not in Skyport Cloud Services to the account. Below these buttons are two more buttons that are partially obscured and appear to be inverted or mirrored versions of the ones above.

Name	E-mail	Role
Terry Zimmerman <a href="#">Edit</a>   <a href="#">Access</a>   <a href="#">Delete</a>	---@---.com	User
John Peil <a href="#">Edit</a>   <a href="#">Access</a>   <a href="#">Delete</a>	---@---.com	Owner
My Contractor <a href="#">Edit</a>   <a href="#">Access</a>   <a href="#">Delete</a>	---@---.com	User

**Add Existing User**  
Add a user that is already in Skyport Cloud Services using his/her email address, such as your contractor.

**Add New User**  
Add a new user that is not in Skyport Cloud Services to your account.

# User Accounts

## *Adding Additional Users to Skyport*

With Skyport the contractor can be added to their customer's account and given "View Only" access for monitoring, or "View and Modify" access to monitor and control the customer's thermostats. When a contractor has each of his/her customers add them to their accounts they will be able to monitor and/or control ALL of their customer's thermostats from one screen. A powerful Search function is also available to easily find and access specific thermostats from all of your linked accounts.

Using Skyport to manage multiple accounts allows a contractor to:

- 1) Monitor and Control an entire building's thermostats
- 2) Provide individual tenants the ability to "View Only" or "View and Modify" the thermostats for their individual areas
- 3) Choose who receives e-mails when the system is not operating correctly, so the owner and/or contractor do not have to constantly monitor the thermostats to see if the units are running correctly

A Homeowner with an individual Skyport Account can:

- 1) Give his/her contractor the ability to access their thermostats
- 2) Give other members of the family access to "View Only" or "View and Modify" the thermostats in the house
- 3) Choose who receives e-mails when the system is not operating correctly, so the owner and/or contractor do not have to constantly monitor the thermostats to see if the units are running correctly

# User Accounts

## Adding Additional Users to Skyport



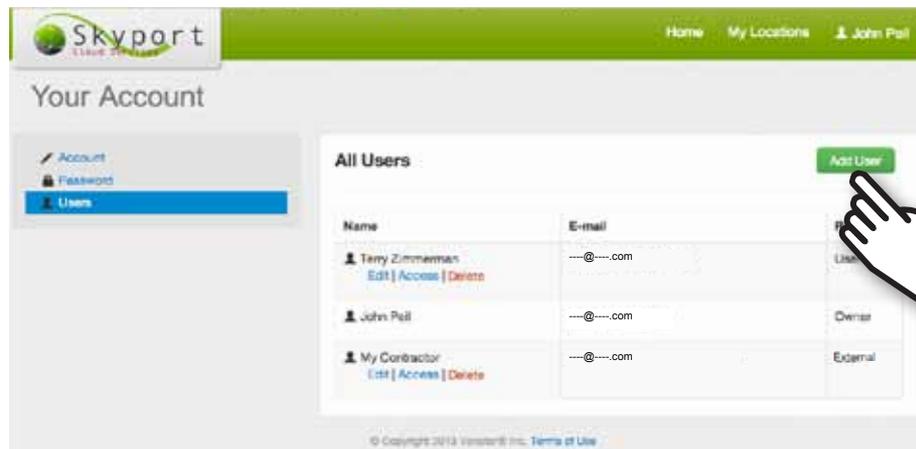
The screenshot shows the 'Your Account' page. The left sidebar contains a menu with 'Account' (selected), 'Password', and 'Users'. The main content area is titled 'Account Information' and contains several input fields: 'First Name', 'Last Name', and 'E-mail'. Below these are radio buttons for 'Units' (Fahrenheit selected, Celsius unselected) and 'Allow to be added to another account' (Yes selected, No unselected).

In the Your Account screen click on the "Users" option

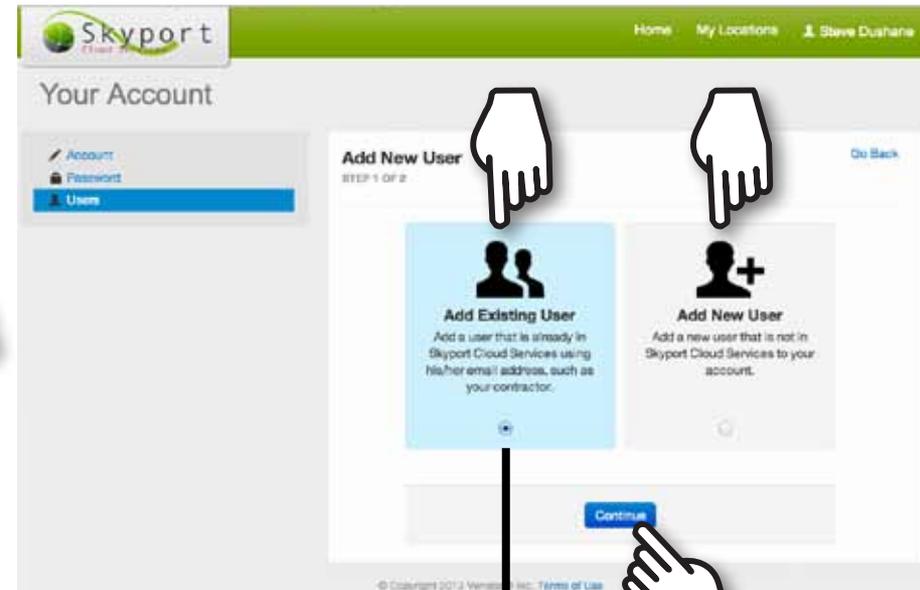
Click on your Username and select "Your Account"

# User Accounts

## Adding Additional Users to Skyport

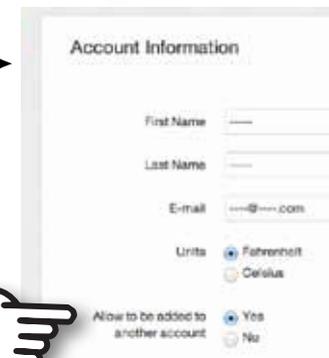


Now click on the “Add User” button



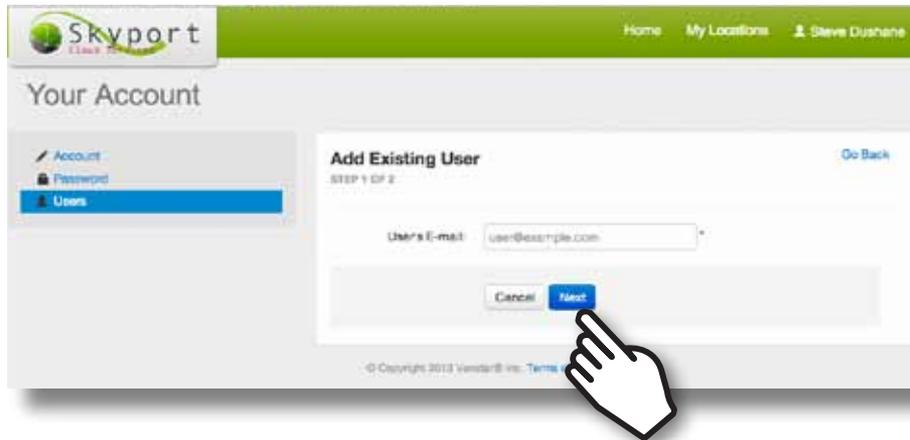
Choose “Add New User” or “Add Existing User”

If an existing user is selected, then **that user** must have the “Allow to be added to another account” option set to “Yes” in **their** Account Information.

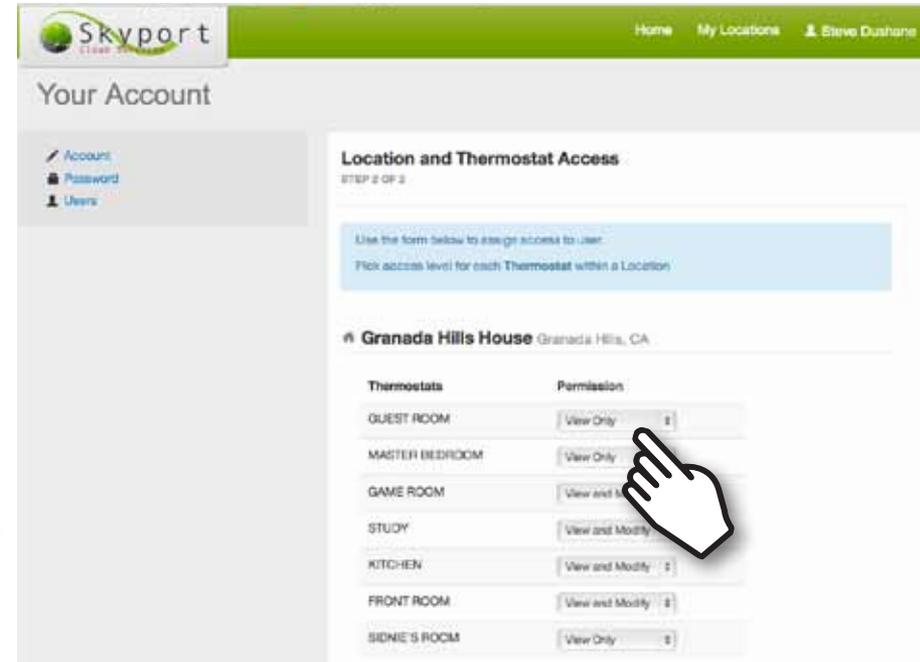


# User Accounts

## Adding Additional Users to Skyport



Enter the Existing User email address and click the Next button



Select "View Only" or "View and Modify" access for each thermostat for this user account

# Troubleshooting



# Troubleshooting

## *Adding another Wire: Option #1*



# Troubleshooting

## Adding another Wire: Option #1

This is a common problem when replacing a mechanical thermostat or a thermostat powered by batteries. Older thermostats require four wires, but newer more sophisticated thermostats require a fifth wire. This wire is known as the “Common” wire and powers the digital display.

*Note: Before starting, it is recommended that you take a picture of the original wiring to the old thermostat as reference to help remember what terminal each thermostat wire was connected to.*

Option #1: The easiest and least expensive option is to sacrifice independent control of your indoor fan (*wiring diagram on next page*)

- 1 First, disconnect power from your heating and/or cooling system.

*Caution: If your heating and cooling system is powered during the thermostat installation process and you accidentally touch the R (red) power wire to the C (blue or brown) common wire, you will permanently damage either the equipment fuse or the transformer in the equipment.*

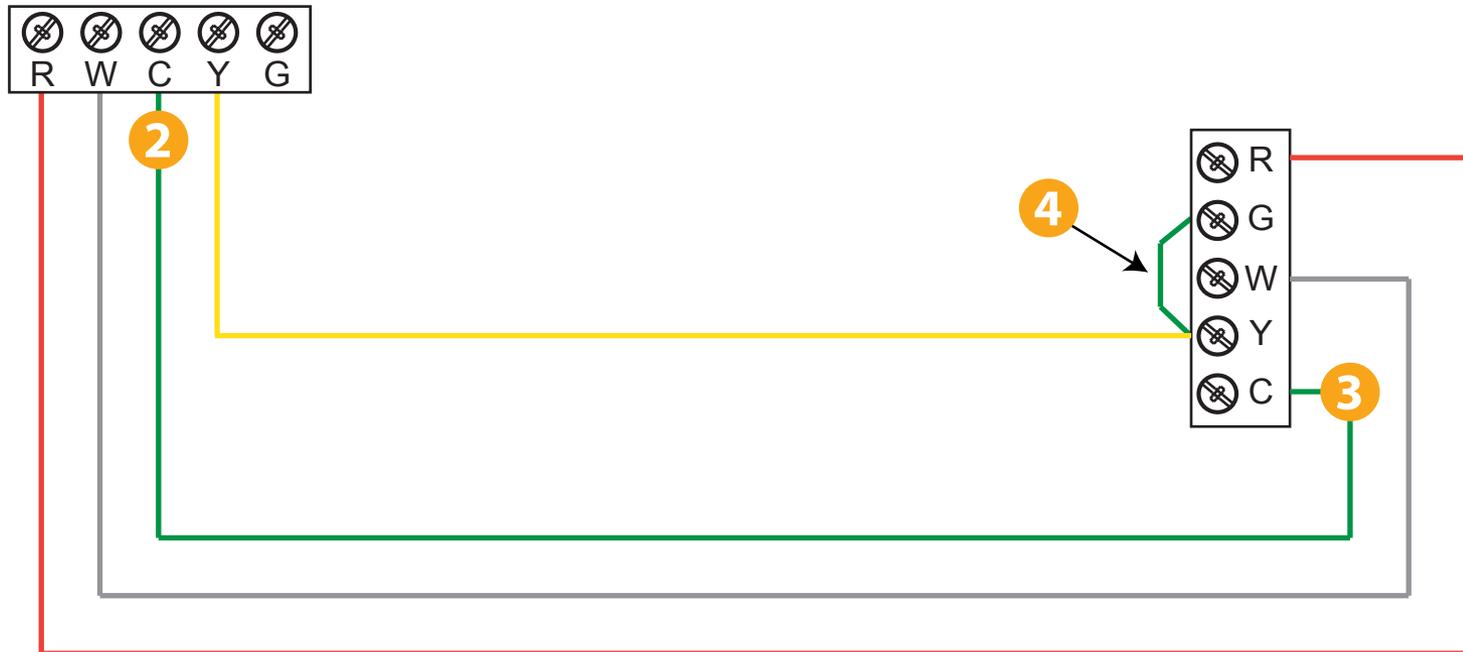
- 2 After disconnecting power from your heating and/or cooling system, move the wire connected to the G terminal (typically green) that controls your indoor fan to the C terminal (common) on the thermostat.
- 3 At your heating and cooling equipment repeat the same step and move the G terminal wire to the C terminal.
- 4 At your heating and cooling equipment place a jumper wire from the Y equipment terminal to the G equipment terminal. This will allow the fan to turn on when the thermostat is calling for cooling or heating but it will not give you independent fan control from the thermostat.

# Troubleshooting

## Adding another Wire: Option #1



- 1 First, disconnect power from your heating and/or cooling system.



**Note:** This solution will work for most heating furnaces or heat pumps (about 90% of all equipment) however it may not work for some electric resistance heating units that require the thermostat to energize the G terminal during a call for heating.

# Troubleshooting

## Adding another Wire: Option #2

Option #2: Purchase Venstar's ACC0410 Add-A-Wire accessory. Add-A-Wire enables one thermostat wire to control two thermostat signals. Installation is simple and very inexpensive allowing you to make a 4 wire system into a 5 wire system. Also, multiple Add-A-Wires may be used to turn a 4 wire system into a 6 wire system. Steps 1 and 2 from page ii are identical (*wiring diagram on next page*):

- 1 First, disconnect power from your heating and/or cooling system.

*Caution: If your heating and cooling system is powered during the thermostat installation process and you accidentally touch the R (red) power wire to the C (blue or brown) common wire, you will permanently damage either the equipment fuse or the transformer in the equipment.*

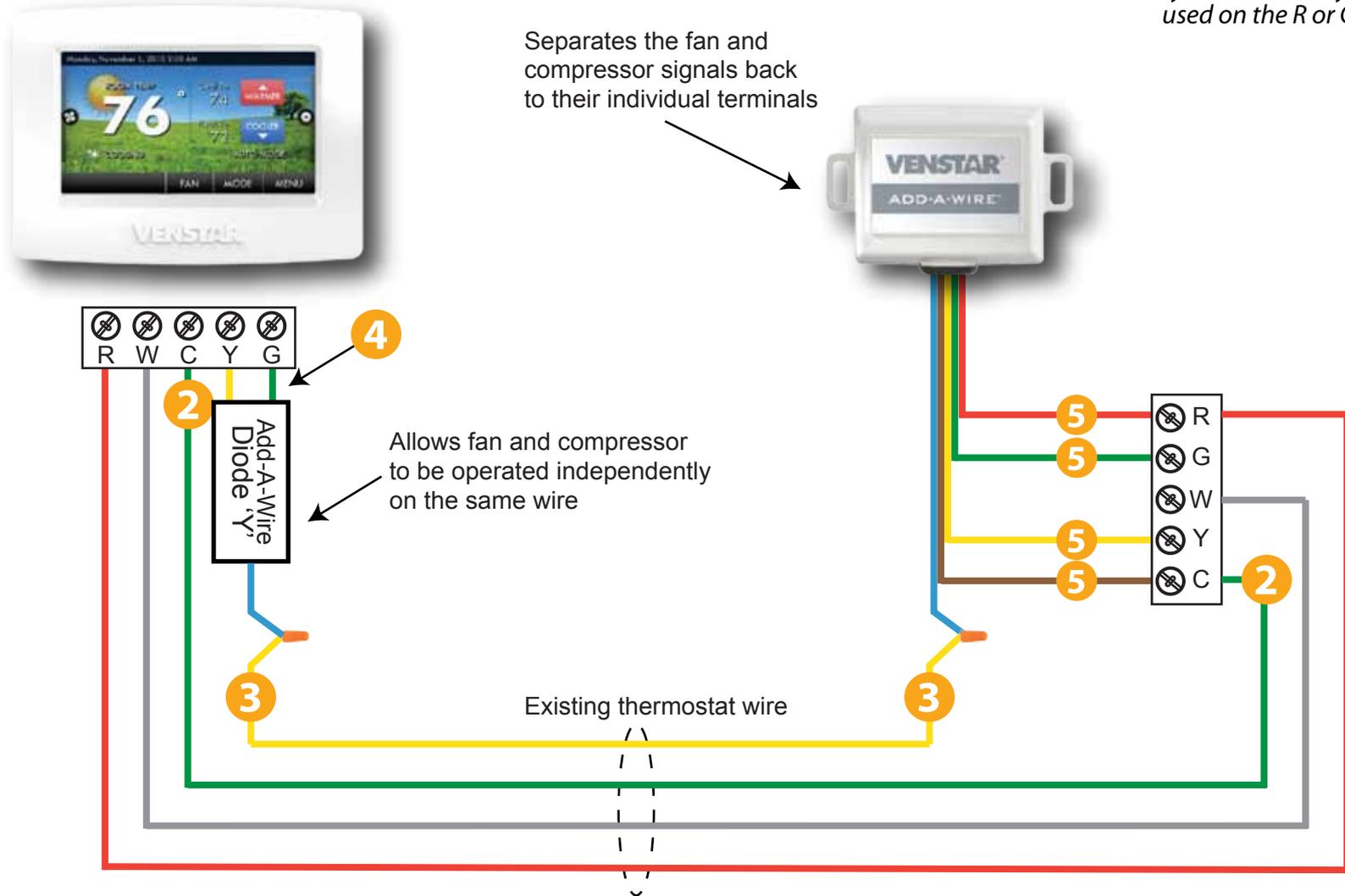
- 2 After disconnecting power from your heating and/or cooling system, move the wire connected to the G terminal (typically green) that controls your indoor fan to the C terminal (common) on the thermostat and the C terminal heating and cooling equipment.
- 3 As shown in the wiring diagram, use the wire connected to the Y terminal (typically yellow) to connect the Diode "Y" wire at the thermostat (blue) to the Add-A-Wire Accessory wire at the equipment (also blue).
- 4 At the thermostat connect the Diode "Y" Green wire to the G terminal and the Diode "Y" Yellow wire to the Y terminal on the thermostat.
- 5 At the equipment connect the Accessory Green wire to the G terminal, the Accessory Yellow wire to the Y terminal, the Accessory Brown wire to the C terminal, and the Accessory Red wire to the R terminal on the equipment.

# Troubleshooting

## Adding another Wire: Option #2

- 1 First, disconnect power from your heating and/or cooling system.

**Note:** The Add-A-Wire is not compatible with 2-Wire systems and may not be used on the R or C wires.



# Troubleshooting

## Wi-Fi Key is not Recognized

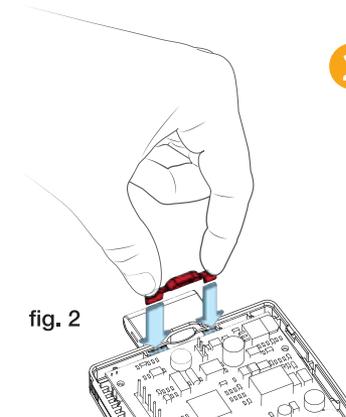
When the Wi-Fi Key is inserted into the thermostat nothing happens.

If Wi-Fi setup screen does not appear the Key may be inserted incorrectly or the thermostat may have outdated Firmware. To check the Firmware Version:

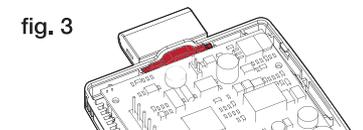
- 1 Press the MENU button on the Home Screen
- 2 When the icons come up, press the DOWN arrow button
- 3 Press the INFORMATION button
- 4 Press the MY THERMOSTAT button
- 5 In the lower left of the screen is the Firmware version
- 6 If the software is not 2.03 or higher please visit <http://venstar.com/Support/> and click on the "Helpful Tips" tab to read through the following tutorials:
  - 1 ***"How to install the ColorTouch Assistant software on your computer"***
  - 2 ***"How to update the Firmware on your T5800 Residential ColorTouch Thermostat"***

- 7 If the firmware is 2.03 or higher and still does not show the Wi-Fi setup screen, try taking the Skyport Wi-Fi Key out and reinserting it
- 8 If the Wi-Fi still does not come up, reset your thermostat (see the "Factory Default" section in your thermostat manual) then reinsert and hold the Wi-Fi key in the thermostat
- 9 The Wi-Fi setup should be displayed. If required, lock the Wi-Fi key into the thermostat (see below).

- 1 With the thermostat removed from the backplate, insert the Skyport Key.  
  
Install the Locking Clip as shown in figure 2.



- 2 The Locking Clip is seated all the way down next to the circuit board as shown in figure 3. Reinstall the thermostat on the backplate.



# Troubleshooting

## Network Connection Errors or Frozen Display

***After the network is selected, the thermostat scans for 90 seconds and the screen displays “Error unable to connect to network”.***

This usually happens because the wrong password was entered. Try using a smart phone, tablet, or computer to connect to the Wi-Fi network. It is recommended that you try one of these at the same location as the thermostat. If connection with one of these devices is possible, then the thermostat should also connect.

You should also look at the Wi-Fi signal strength by pressing MENU on the home screen of the thermostat, then the DOWN arrow to ACCESSORIES and finally ACCESSORY INFO.

If the signal strength is less than 10% you should either move the Wi-Fi wireless router closer the thermostat or put in a Wi-Fi repeater.

Another suggestion would be to purchase a newer more powerful router. They typically cost around \$60.00.

***New software does not load, display freezes, or Wi-Fi Key not recognized.***

There are some instances where your thermostat may need to be rebooted like a computer or Smartphone. This can be done by turning the power to the thermostat off and back on.

- 1 Grasp the faceplate with both hands
- 2 Place thumbs under plastic ridge on bottom of thermostat, and slowly pull the bottom of the faceplate upwards, without pulling the top.
- 3 The thermostat will hinge upwards, disconnecting the baseplate from the faceplate causing the screen to go blank, and powering off the thermostat.
- 4 Now push the faceplate back onto the baseplate, securing it once more.
- 5 The thermostat will load a white screen with a logo on it, and then begin starting up.
- 6 Once the thermostat finishes starting you have successfully “Power Cycled” the device.

# Troubleshooting

## *Adobe Air is not Installed*

When installing Color Touch Assistant you get an error that says "ADOBE AIR IS NOT INSTALLED".

- 1 First try installing Adobe Air by clicking the blue "Install Now" button.
- 2 If that fails, reboot your computer, and try the "Install Now" button again.
- 3 After trying to reboot and install still fails, download Adobe AIR directly from Adobe's website.  
<http://get.adobe.com/air/>
- 4 If problems continue to persist, follow the detailed help offered directly from Adobe at  
<http://helpx.adobe.com/air/kb/troubleshoot-airinstallation-windows>

# Troubleshooting

## Contractor Tips

- 1** When your salesman or service technician is in the home have him or her ask the homeowner if they would like to be able to change the temperature in the house from their smartphone. If they say yes, have the installer ask the homeowner if they can check out the Wi-Fi in the house to see if it will support the ACC0454 Skyport Wi-Fi Key. Then take the smartphone to the vicinity of the thermostat and try to connect to the homeowner's Wi-Fi network. The installer may have to ask for the Wi-Fi password. Next, by going to the settings icon on the iPhone, click on Wi-Fi, choose the network, and enter the password. At this point the installer can see if the Wi-Fi thermostat is going to hook up without any problems. If they can connect with the iPhone, iPad, etc., then the thermostat will also connect. Have the installer save the network name and password for the customer.
- 2** You can set up a Wi-Fi thermostat at your office for a customer's home or office. All you will need is an e-mail address (you can get one free from Google) or you can use the customer's e-mail address and password if they choose to provide it. Set the thermostat up using your office Wi-Fi and password for your router. When the installer goes out to install the thermostat all he or she will need to do is go to MENU on the home screen. Press the DOWN arrow and then the ACCESSORIES button. Finally press the SETUP button. The thermostat will then scan for all the networks in the house. Click on the correct network and enter the password to complete the process.
- 3** It is imperative that you have a supply air temperature sensor to troubleshoot and monitor their HVAC system. In most cases you can use the thermostat wire that goes from the thermostat to the rooftop unit, furnace, etc. Since the thermostat wire ends at the control panel of the unit, it is a short, easy run to put the temperature sensor in the supply air. If you only have five wires then you can use one or two Add-A-Wires (ACC0410) to free up wires for the sensor. If you have a long run from thermostat wire you may not be able to use the thermostat wire. A separate wire must be run or use shielded wire. There is no way of telling if a problem exists until you try using the thermostat wire. If the temperature fluctuates two or three degrees when nothing is running, you will need to use shielded wire.