

Multistat Smart Thermostat Deployment Guide

Document Number:009-1959-00Document Date:July 2020Document Supports:CLI-W200x - da Vinci 8.8 and higher
CLI-W210x - da Vinci 8.8.2 and higher

This guide will assist the installer/integrator through the installation, wiring, and initial configuration of the Multistat Smart Thermostat.

Contents

To access links to the topics within this document, click the corresponding entry in the table of contents below.

1.	Before You Begin	4
2.	Deployment Steps	4
3.	Related Documentation	5
4.	Wiring Diagrams	6
5.	Add Thermostat to a Blueprint Configuration1	13
6.	Save Configuration, Generate Services, and Upload File1	4
7.	Wi-Fi Network	15
7.	Wi-Fi Network 1 7.1. Minimum Requirements 1	15 15
7.	Wi-Fi Network 1 7.1. Minimum Requirements 1 7.2. Provision To Wi-Fi using the On Screen Display 1	15 15
7.	Wi-Fi Network 1 7.1. Minimum Requirements 1 7.2. Provision To Wi-Fi using the On Screen Display 1 Basic Configuration Using the On-Screen Menus 1	15 15 15
7. 8. App	Wi-Fi Network 1 7.1. Minimum Requirements 1 7.2. Provision To Wi-Fi using the On Screen Display 1 Basic Configuration Using the On-Screen Menus 1 rendix A: HVAC Data Table Basics 1	15 15 16

Important Safety Information - Read First

Before installing, configuring, or operating any equipment and other, Savant recommends that each dealer, integrator, or installer, access and read all the relevant technical documentation. Savant technical documentation can be located by visiting the Savant Community. Vendor documentation is supplied with the equipment.

Read and understand all safety instructions, cautions, and warnings in this document and the labels on the equipment.

Safety Classifications In this Document

NOTE:	Provides specific information for installing, configuring, and operating the equipment.		
M IMPORTANT! Provides specific information that is critical to installing configuring, and operating the equipment.			
CAUTION!Provides specific information for avoiding situations may cause damage to equipment.			
WARNING!	Provides specific information for avoiding situations that may cause physical danger to the installer, end-user, etc.		

Electric Shock Prevention

- **ELECTRIC SHOCK!** The source power poses an electric shock hazard that has the potential to cause serious injury to installers and end users.
- **ELECTRICAL DISCONNECT**: The source power outlet and power supply input power sockets should be easily accessible to disconnect power in the event of an electrical hazard or malfunction.

Safety Statements

All safety instructions below should be read, understood, and applied under all relevant circumstances when working with this equipment.

- 1. Follow all input power ratings marked on product near power input!
- 2. If fuse replacement is required, replacement fuse should match fuse rating marked on the product.
- 3. Do not use equipment near water.
- 4. Clean only with dry cloth.
- 5. Do not block any ventilation openings or install near any heat sources such as heat registers, stoves, radiators, amplifiers, etc.
- 6. Refer all servicing to qualified service personnel. Servicing is required when any part of the apparatus has been damaged in any way, or fails to operate normally for any reason.
- 7. Use only attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/ accessories.
- 8. For applicable equipment, use the included power cord with the grounding prong intact to insure proper grounding of the device.
- 9. If the provided plug does not fit the desired outlet, contact a licensed electrician to replace the obsolete outlet.
- 10. Protect any power cord from being walked on, pinched, strained, or otherwise potentially damaged, especially at the outlet or device connections.
- 11. Disconnect any outlet powered apparatus from its power source during lightning storms or when unused for long periods of time.
- 12. To completely disconnect equipment from AC mains power, disconnect the power supply cord plug from the AC receptacle on the device.
- 13. For any hardwired or fixed in-wall apparatus, carefully follow all wiring diagrams and instructions. All electrical wiring and servicing should be performed by a properly licensed electrician.

Weight Injury Prevention

WEIGHT INJURY! Installing some of the Savant equipment requires two people to ensure safe handling during installation. Failure to use two installers may result in injury.

1. Before You Begin

Read through this document in its entirety and ensure that the following items are either available or installed before proceeding with deployment. The list below can be used to check off items as they are completed prior to installation.

Multistat Smart Thermostat and Hardware
Savant Control System running da Vinci 8.8 or higher
HVAC system installed and appropriate wires run to the thermostat's location(s)
OPTIONAL: Remote sensors and their associated wiring installed
Ethernet network meeting Savant requirements

See Appendix B: Network Requirements or refer to the Savant Device Networking Guidelines reference guide on the Savant Community.

2. Deployment Steps

To successfully deploy the thermostat and associated sensors, follow the steps below. Use this list to check off items as they are completed.

W	ire the Thermostat	
1.	Connect the HVAC Signaling Wires to thermostat. See Wiring Diagrams	

Blueprint Configuration

2.	Add thermostat to a Blueprint configuration. See Add thermostat to a Blueprint Configuration
3.	Upload Blueprint Configuration. See Save Configuration, Generate Services, and Upload File
4.	Add Thermostat to the Local Network. See Wi-Fi Network

Configure Thermostat for a standard HVAC System

5. Use the on-screen menus to configure thermostat. See Basic Configuration Using the On-Screen Menus

3. Related Documentation

This document outlines all basic deployment steps required to add a Savant Multistat Smart Thermostat to an existing Savant Pro system, including basic HVAC system wiring, Blueprint configuration, and on-screen menu items. This guide is not intended to encompass all possible aspects of use and customization available. To provide the best possible user experience, Savant recommends reviewing the related documents listed below in addition to this Deployment Guide:

- Multistat Smart Thermostat Quick Start Guide (009-1908-xx) Provides information on various technical specifications, regulatory information, feature descriptions, essential power connections, and remote sensor wiring. This Quick Start Guide also contains information needed to install the thermostat and add it to the local network. When complete, the thermostat will be ready to add to a Savant Pro System.
- Pro App HVAC Service User Guide (009-1542-xx) Once added to a Savant system, this guide contains the information needed to work in the HVAC Service in the Savant Pro App.
- Multistat Smart Thermostat Web Portal Programming Guide (009-1973-xx) The Web Portal for the CLI-W210/W200 contains all the necessary settings that are available to the user through the on-screen menus in the thermostat as well as advanced feature programming. This programming guide first describes each field in the portal and then gives examples of how to configure the more advanced aspects of the HVAC system.

4. Wiring Diagrams

Use the diagrams below when wiring the various types of HVAC systems.

<u>1 Stage Heat</u>



- Connect 24V AC to the RC and 24C terminals.
- Leave jumper shunt JP1 on the electronics board installed.
- Connect W1 from the thermostat to W1 (stage 1 heat) in the HVAC system.
- Connect G from the thermostat to the fan terminal in the HVAC system.
- Savant recommends using standard #18 AWG HVAC wiring.

1 Stage Heat, 1 Stage Cool



- Connect 24V AC to the RC and 24C terminals.
- Leave jumper shunt JP1 on the electronics board installed.
- Connect W1 from the thermostat to W1 (stage 1 heating) in the HVAC system.
- Connect Y1 from the thermostat to Y1 (stage 1 cooling) in the HVAC system.
- Connect G from the thermostat to the fan terminal in the HVAC system.
- Savant recommends using standard #18 AWG HVAC wiring.

1 Stage Heat, 1 Stage Cool, Separate Power Source



- Connect 24V AC from the cooling system to the RC and 24C terminals.
- Connect the power from the heating system to the RH terminal.
- Remove the shunt from jumper JP1 on the thermostat's circuit board.
- Connect the W1 terminal on the thermostat to W1 in the HVAC system.
- Connect the Y1 terminal on the thermostat to Y1 in the HVAC system.
- Connect the G terminal on the thermostat to the fan in the HVAC system.
- Savant recommends using standard #18 AWG HVAC wiring.

2 Stage Heat, 2 Stage Cool, Separate Power Source



- Connect 24V AC from the cooling system to the RC and 24C terminals.
- Connect the power from the heating system to the RH terminal.
- Remove the shunt from jumper JP1 on the thermostat's circuit board.
- Connect the W1 terminal on the thermostat to W1 in the HVAC system.
- Connect the W2 terminal on the thermostat to W2 in the HVAC system.
- Connect the Y1 terminal on the thermostat to Y1 in the HVAC system.
- Connect theY2 terminal on the thermostat to Y2 in the HVAC system.
- Connect the G terminal on the thermostat to the fan in the HVAC system.
- Savant recommends using standard #18 AWG HVAC wiring.

U HELPFUL! In both diagrams above, the power source from the cooling system is used to power the thermostat.

Heat Pump



- Connect 24V AC from the air handler to the RC and 24C terminals on the thermostat.
- Leave jumper shunt JP1 on the thermostat's circuit board installed.
- Connect the Y1 terminal on the thermostat to Y1 on the heat pump.
- Connect the G terminal on the thermostat to the fan on the air handler.
- Connect the O terminal on the thermostat to the changeover/ reversing valve on the heat pump.
- Savant recommends using standard #18 AWG HVAC wiring.

Heat Pump, Two Stage Heat, Two Stage Cool



- Connect 24V AC from the air handler to the RC and 24C terminals on the thermostat.
- Leave jumper shunt JP1 on the thermostat's circuit board installed.
- Connect the Y1 terminal on the thermostat to Y1 on the heat pump.
- Connect the Y2 terminal on the thermostat to Y2 on the heat pump.
- Connect the G on the thermostat to the fan on air handler.
- Connect the O terminal on the thermostat to the changeover/ reversing valve on the heat pump.
- Savant recommends using standard #18 AWG HVAC wiring.

<u>1 Stage Heat - Boiler System</u>



- Connect power from the heating system to the RC and 24C terminals.
- Leave jumper shunt JP1 on the electronics board installed.
- Connect the W1 terminal on the 1st thermostat to its respective zone valve.
- Connect the W1 terminal on the 2nd thermostat to its respective zone valve.
- Connect the common and one T connection from boiler to the zone valves.
- Connect the remaining T connection from the boiler to the zone valves.
- Savant recommends using standard #18 AWG HVAC wiring.

Radiant Heat



- Connect power from the heating system to the RC and 24C terminals.
- Leave jumper shunt JP1 on the electronics board installed.
- Connect terminal W1 on the thermostat to the zone valve in the radiant heat loop.
- Connect common and one T connection from boiler to the zone valve.
- Connect the remaining T connection from the boiler to the zone valve.

HELPFUL! Taco zone valves were used in the diagrams above. When wiring a different type of zone valve, refer to the documentation for that valve.

Humidifier or Dehumidifier Wiring - Auxiliary Relay



- The Aux Out and Aux In terminals connect to a normally open relay. These connections short when the relay is energized
- Refer to the Assign an Aux Relay to Control a Humidifier or Dehumidifier section in the Multistat Smart Thermostat Programming Guide available on the Savant Community.
- Savant recommends using standard #18 AWG HVAC wiring.

Humidifier or Dehumidifier Wiring - Any Relay



- The W1 and RH terminals connect to a normally open relay. These connections short when the relay is energized.
- A humidifier or dehumidifier is switched on or off using any available relay. When connecting one side of the transformer to the RH connection, use either W1, W2, or O to complete the circuit. When connecting the transformer to the RC connection, use either Y1, Y2, or G (see diagram above).
- Savant recommends using standard #18 AWG HVAC wiring.

1-Wire Smart Sensor



- Diagram shows where a 1-Wire type sensor is wired.
- Up to two 1-Wire sensors can be connected to the 1-wire terminals. Sensors are daisy-chained as shown in diagram.
- The CLI-THFM1 is the only 1-Wire sensor supported.
- Six hundred feet (182 m) cumulative is the maximum cable length supported for the 1-Wire sensor.
- The table below shows the recommended connections when using a Cat 5e/6/7 cable.

CLI-THFM1	Cat 5e/6/7 cable	Description
Black	White/Blue Stripe	Gnd
Blue	Blue	Data
Red	Orange	+5V DC

Remote RS1 / RS2 Sensor Wiring



- Any $10K\Omega$ type temperature sensor is supported.
- Diagram shows where to connect the 10 K Ω type sensor. Both the RS1 and RS2 terminals support this type of sensor.
- Five hundred feet (152 m) is the maximum distance supported. Savant recommends a #24 AWG or larger twisted pair.
- A typical installation sets the RS2 connection to be the outdoor sensor. See the **Configure an Outdoor Sensor** section in the Multistat Smart Thermostat Programming Guide (009-1973-00) on the Savant Community. However, users have the ability to configure any $10K\Omega$ type temperature sensor as the outdoor sensor.

Wire Designation Descriptions

There is no direct standard when designating wires for thermostats. A description of each of the designators stamped on the thermostat's mounting plate is shown below.

Designato	rs -	Power
	-	With one power source in the system, the hot wire from the transformer is wired to RC. See the Connect Power - One Transformer used to power the HVAC system section in the Multistat Smart Thermostat Quick Start Guide that is available on the Savant Community.
	-	When there are separate heating and cooling HVAC systems with a separate power source for each,
RH/RC		 Connect the hot wire of the transformer from the heating system to RH.
		 Connect the hot wire from the cooling system to RC.
		 Remove the jumper shunt from JP1 on the circuit board. Failing to remove the shunt will result in damaging the board. See the Connect Power - Two Transformers used to power the HVAC system section in the Multistat Smart Thermostat Quick Start Guide available on the Savant Community.
	-	With just one power source in the system, the common wire from the transformer is wired to the 24C terminal.
24C	-	When there are separate heating and cooling HVAC systems, connect the common wire from the transformer in the cooling system to 24C.

Designato	Designators - Signaling		
0	In a heat pump system, connect to the changeover/reversing valve connection (O).		
G	In a standard HVAC system, connect to the fan terminal.		
2/2	In a standard HVAC system, connect to the 2nd stage cooling terminal.		
Ϋ́∠	In a heat pump type system, connect to the 2nd stage cooling terminal on the compressor.		
\/1	In a standard HVAC system, connect to the 1st stage cooling terminal.		
Ϋ́Ι	In a heat pump type system, connect to the terminal on the compressor.		
W2	In a standard HVAC system, connect to the 2nd stage heating terminal.		
W1	In a standard HVAC system, connect to the 1st stage heating terminal.		
	In a heat pump system, connect to terminal on the heating strip.		

5. Add Thermostat to a Blueprint Configuration

The steps below describe how to add the thermostat's profile into Blueprint and then make the proper connections. There is both a single and dual set point profile available. Ensure that the correct profile is selected.

Add profile to Blueprint

- 1. Through the Savant Application Manager (SAM), open the current Blueprint configuration for the site.
- 2. Select the **Show Library** icon from the Blueprint toolbar and open the **Components** library.
- 3. Enter **CLI-W2** into the Search bar. Note that both a single and dual setpoint thermostat are listed (see image to the right).
- 4. Drag and drop the proper thermostat profile into the Shared Equipment Zone.
- 5. Enter a unique name into the dialog box that opens. The name entered should identify the thermostat (image not shown).
- 6. Select the **Create** button to finish adding the thermostat (image not shown).

Add UID to Inspector

- 7. Drag the thermostat from the component list and into the layout window.
- 8. Close the component library (Hide Library from the Blueprint toolbar).
- 9. Double click the thermostat and open its inspector.
- 10. Enter the 16-character UID into the Savant UID field (see image to the right).
 - The UID is printed on a sticker on the electronics board for thermostats that don't have a configuration loaded.
 - The UID is displayed on the ABOUT screen for thermostats with a configuration loaded.

Select HVAC MODE > (Swipe left to open ABOUT page)

11. Close the Inspector.

Make Blueprint Connections

- 12. Right-click on the Ethernet port on the thermostat and make the connection to a network switch.
- Generate Services for the configuration by selecting the generate services icon from the main option menu and confirm that a valid HVAC service is realized in the Services window that opens
- 14. For information on programming the HVAC Data table, refer to the Appendix A: HVAC Data table Basics section below. Make any modifications before proceeding to the next section.







6. Save Configuration, Generate Services, and Upload File

With the thermostat profile added to the Blueprint configuration complete, the file can now be uploaded to the Savant Host.

- Select the Generate Services icon from the Blueprint toolbar to update the realized services with the configuration changes. When using TrueControl II interfaces within a config, select Update All UI Screens to sync with services. The State Icon will change to Green, indicating that the new services added get updated.
- 2. Select **Upload to Master** icon ito upload the file to the Savant Host.

State	Generate Services	Update All UI Screens	Show Library	Show Inspector	Upload to Master	View SRS	Q View Services	Review Service Prefs	Review Triggers	Anage Logins	Manage Lighting
						S	elect t	he Uploa:	d to Ma	ster Icc	n

3. In the **Configuration must be saved** dialog box that opens, read the dialog and select **Save and Upload**.



4. The System Monitor application will open, as shown below. Verify the path to the Blueprint configuration file is correct. If not, select Browse and locate the file on the local drive (SDE/MacBook). Select **Upload** when satisfied, and the configuration will upload to the Host.

0 0 0	System Monitor - Scanner	11 ²
Connect Share Screen Mount Te	erminal View Logs Get Logs Get Config	? 🔲 🌭 🛧 🛃 Review Clear Upload Upgrade
Scanner	Network Range /Users/savant.user/documents/configs Browse Device Name Cancel Upload Smith Residen Pre-extract UIs Edit UIDs	Search Control of the operation of the o
	1 result	

7. Wi-Fi Network

Connecting CLI-W200/W210 thermostats to the local Wi-Fi network is not a requirement for basic HVAC controller functionality, although it is recommended since Wi-Fi access adds the following functions:

Access to a Savant system.

- On screen weather forecast
- Remote Access through a Savant System Over The Air (OTA) updates

7.1. Minimum Requirements

- Local Wi-Fi network configured and within range both 2.4 and 5.0 GHz (802.11 b/g/n) are supported.
- Local Wi-Fi network security WPA1[™], WPA2[™], WPA1[™] + WPA2[™]

7.2. Provision To Wi-Fi using the On Screen Display

The instructions below describe the process for provisioning CLI-W200/W210 devices to the local Wi-Fi network. These steps should be followed after initially powering the thermostat on, or after resetting the device to factory defaults (due to a change in the local network settings for example).

- 1. Apply power to the thermostat and wait for the Select Network To Connect screen to open.
- 2. Select the network to provision the thermostat to.
- 3. Enter the password for the network using the on-screen keyboard.
- 4. Select **DONE** when complete. The thermostat will then verify the network password credentials and connect to the network.
- 5. From the **Configure HVAC System** screen, select one of the options presented to configure HVAC system settings using the on-screen menus (for simple configurations) or via the web portal (for more advanced programming).



ADDITIONAL INFORMATION

- Static IP addresses are not supported. To configure a specific IP address, Savant recommends DHCP reservation.
- The Multistat Smart thermostat will not connect to a hidden network (networks not broadcasting an SSID).
- If the thermostat is reset to factory defaults, the IP information is lost and the thermostat will need to be reconnected to Wi-Fi.
- Once provisioned to a network with WAN access, the thermostat will query the Savant Cloud and initiate a firmware download when an updated version is available.

8. Basic Configuration Using the On-Screen Menus

This section details the on-screen menus that are available using the thermostat's touchscreen. Use the descriptions below when configuring HVAC control. Note that Savant recommends connecting the device to the local Wi-Fi network before proceeding. While connection to a network is not required, some features relying on Internet connectivity are unavailable for devices not provisioned to Wi-Fi.





TEMP UNITS - Select either Fahrenheit (F) or Celsius (C)

ENABLED HVAC MODES - Available for the Single Setpoint option only.

AUTO - The thermostat switches between heating and cooling based on the room temperature and the setpoint configured. HEAT/COOL - The thermostat will either only heat or cool the room based on the room temperature and setpoint configured.

OFF - The thermostat won't communicate with the HVAC system. This button is always highlighted.

HUMIDITY - Select ENABLED to display the humidity collected from either the internal humidity sensor or an external 1-wire smart sensor like the CLI-THFM1.

TEMP MAX/MIN - Sets the maximum or minimum temperature the setpoints can be adjusted to.



BACK

Select System Type

ELECTRIC

GAS

HEATPUMP

RADIANT

NEXT

BACK



DUAL - Dual setpoint thermostats incorporate both a heating and cooling trigger point. The lower setpoint triggers a call for heat while the upper setpoint triggers a call for cooling.

SINGLE - Single setpoint thermostats contain a single temperature trigger point, and depending on the temperature in the room, will trigger a call for heating or cooling.

The single setpoint option incorporates a range feature that tells the thermostat to keep the room within a range of temperatures set by the user. See the **Auto Range** section in the Savant Pro App HVAC Service User Guide (009-1542) available on the Savant Community.

Select the type of HVAC system the thermostat will be controlling.

ELECTRIC - Select to control an electric type furnace. This option dictates that the thermostat controls the fan and causes the fan relay to switch on just after a call for heat to ensure air is blowing once the heating element heats up.

GAS - Select to control a gas or oil fired type furnace. This option dictates that the HVAC system controls the fan when the fan relay is activated.

HEAT PUMP - Select to control a Heat Pump System.

RADIANT - Select to control under the floor radiant type heating system.

IMPORTANT! The CLI-W200/W210 thermostat can't control an electric type baseboard or similar device that requires switching either a 120 or 240V AC line voltage on and off.



HEAT/COOL STAGES - Select the number of heating and /or cooling stages the thermostat will control. Heat and cool stages are supported in Electric, Gas, and Heat Pump type systems.

Radiant type systems require a different set of values to configure. The Radiant type system is shown to the right

		-
FLOOR	HYSTERESIS	
\sim	5°	\wedge
MAX SLA	AB TEMPERAT	URE
\sim	80°	\wedge
SLAB TE	EMP SENSOR	
	None	
	RS1	
	RS2	
ВАС		IEXT

Radiant Floor Settings

FLOOR HYSTERESIS - The number of degrees the temperature of the floor must fall from the setting in the max slab temperature field before the heat can switch back on. Range = $0-10^{\circ}$ F ($0-6^{\circ}$ C).

MAX SLAB TEMPERATURE - The temperature set is the maximum temperature the floor can reach before the heating system is told to stop providing heat to avoid the floor from getting too hot. A slab type sensor must be mounted in the floor for this feature to function accurately. Ideally, the max slab temperature should never be reached. The Max Slab Temperature function is simply a safety feature.

SLAB TEMP SENSOR - Select which connection on the thermostat's backing plate will connect to the slab sensor. Select NONE when no sensor is installed.

What is Hysteresis? - In radiant systems, hysteresis keeps the HVAC system from switching on and off each time the temperature at the slab sensor reaches the thermostats max slab temperature setpoint, which puts less wear on the HVAC system.

Select Auxiliary Equipment
HUMIDIFIER
DEHUMIDIFIER
BACK

Select when either a humidifier or dehumidifier is controlled by the thermostat. Wiring diagrams are available in the Wiring Diagrams section above.

Int	ernal
F	RS1
F	RS2
fe-0021b	o10000a67
ВАСК) NEXT

Select Indoor Sensor

Select which sensor's temperature data to display on the thermostat's main screen. Since the temperature displayed is the indoor temperature, the sensor will typically be mounted indoors, near the thermostat.

Internal - Temperature sensor mounted inside the thermostat. Select Internal when no other sensors are installed.

RS1 or RS2 - Temperature sensor wired to either the RS1 or RS2 terminal in the thermostat's mounting plate. The sensor connected to these ports must be a 10K thermistor type sensor.

fe-0021b10000a67 - Select when a 1-Wire smart sensor like the CLI-THFM1 provides the indoor temperature. The label on the button is the UID of the sensor.



Select which sensor's temperature data to present as the outdoor temperature on the thermostat's main screen. Only RS1 or RS2 are supported when monitoring the outdoor temperature.

None - Select **None** when not monitoring the outdoor temperature.

RS1 - Select RS1 when monitoring the outdoor temperature using the sensor wired to the RS1 terminal on the thermostat's mounting plate.

RS2 - Select RS2 when monitoring the outdoor temperature using the sensor wired to the RS1 terminal on the thermostat's mounting plate.



NORMAL - By default, the thermostat's touchscreen is off. To activate, touch the LCD screen to view the temperature, humidity, etc. As long as the screen is touched, it will remain active. After not touching the screen for 30 seconds, it will go back to off.

ALWAYS ON - The touchscreen is always on. The light level in the room determines the brightness level on the screen.

- When the lighting level in the room is high, the brightness of the touch screen is bright.
- As the light level in the room dims, the brightness of the touchscreen also dims.

Example: Before going to bed, the lights in the room are on, and the touchscreen's level of brightness is high. Once in bed and the room is dark, the touchscreen brightness reduces until it is very dim so the person can sleep.



Weather information for any location around the world can be displayed on the thermostat's main screen (Wi-Fi connection required). To enable the feature, enter a location using the city, state, zip code. Use the information below to edit the Weather Settings screen.

WEATHER ENABLED

 \mathbf{ON} - The weather forecast function is enabled and displays the forecast for the week on the screen.

 $\ensuremath{\mathsf{OFF}}$ - The weather forecast function is disabled.

LOCATION

EDIT - Select EDIT to manually change the city, state, and zip code using the on-screen keyboard. After the thermostat resets, the forecast for that location will be displayed.

When connected to Wi-Fi, the location automatically populates and is loaded into the thermostat after a reboot. The loading of the location parameters can take several minutes to load after a restart.



SAVANT SCENES

ON - Global / Shared Scenes from the local Savant Host (Select Host below) are made accessible from the thermostat.

OFF - Scenes are not added to the thermostat.

SELECT HOST

Displays any Savant Host located on the network. Select a Host, and the Scenes from the Host chosen will populate to the thermostat's touchscreen.

Appendix A: HVAC Data Table Basics

The HVAC data table in Blueprint affects what functions and features are available in the Savant Pro and TrueControl II apps. Modifications made to the data table will affect what functions and features are available in these apps. An explanation of each field in this table is described below.

1. To access the data table, open Blueprint and select Tools > Settings > HVAC.

HVAC Settings													
Enabled	Controller	Location	Entity	ThermostatAddress [1]	ThermostatAddress [2] H	leat C	Cool Au	ito Humidity	Humidify	Dehumidify	midify External Temperature Sensor		State
	Kitchen Tstat	Kitchen	ZoneWithHumidityPoint	1			 						Kitchen Tstat.HVAC_cc
Show Advanced Columns Enable All Regenerate All Savant App Zone Map Disable All TrueControl Zone Map												Export	
+	-											Cance	

2. Use the descriptions in the table below when making updates to the data table.

Enabled	Checked - An HVAC service for the row was generated in Blueprint, and an HVAC service icon got added to either the Pro or TrueControl II app.						
	Unchecked - No service is generated.						
Controller	Select from the drop-down menu, the thermostat that got added to the configuration. When there is more than one thermostat in the configuration, all will be listed. When there is more than one thermostat, the Controller field associates the thermostat with a Location from the Location field.						
Location	Determines which zone to add the thermostat to in the User Interface (Pro App/TrueControl II).						
	The Entity column only affects the TrueControl II App. Set the field to ZoneWithSingleHumidityPoint.						
	- ZoneWithSingleHumidity - Displays the humidity info boxes in TrueControl II						
Entity	- Zone - Displays a screen without humidity.						
	Note: 3rd Party thermostats only support the zone selection.						
Thermostat [1]	Enter < 1 > for all Savant thermostats. For 3rd party thermostats, enter the address configured to the thermostat.						
Thermostat [2]	Not Applicable						
Heat/Cool/Auto/Humidity	Checked - Adds an entity for that function to the User Interface (Pro App / TrueControl II).						
Heat/Cool/Auto/Humidity	Unchecked - Do not populate or remove the function from the User Interface (Pro App / TrueControl II).						
Humidify	Not Supported						
Dehumidify	Not Supported						
External Tomporature Sonsor	Checked - Adds an external sensor entity to the User Interface (Pro App/TrueControl II).						
External temperature sensor	Unchecked - Do not populate or remove the external entity from the User Interface (Pro App / TrueControl II).						

3. After changes are made, save and upload configuration file to the Host.

Appendix B: Network Requirements

For a full overview of Savant's networking guidelines, see the Savant Device Networking Guidelines reference guide on the Savant Community.

Network Changes

Savant recommends performing the following to refresh the IP connection after connecting to a new network, changing routers, or if the IP address range is changed in the current router. This will reset any IP connection and ensure that the device is communicating with the network correctly.

From the On-Screen Display:

- 1. Select the Mode icon (Off, AUTO, HEAT, COOL) at the bottom of the main window of the LCD display.
- 2. Swipe left twice to navigate to the NETWORK window.
- 3. Select the **CHANGE** button and in the **Select Network To Connect** screen that opens, and select the new network and follow the prompts to enter the password and connect to the new network.

Important Notice

Disclaimer

Savant Systems, Inc. reserves the right to change product specifications without notice, therefore, the information presented herein shall not be construed as a commitment or warranty.

Savant Systems, Inc. shall not be liable for any technical or editorial errors or omissions contained herein or for incidental or consequential damages resulting from the performance, furnishing, reliance on, or use of this material.

Patents

Certain equipment and software described in this document is protected by issued and pending U.S. and foreign patents.

All products and services are trademarks or registered trademarks of their respective manufacturer.

Copyright

This document contains confidential and proprietary information protected by copyright. All rights reserved. Copying or other reproduction of all or parts of this document is prohibited without the permission of Savant Systems.

Trademarks

© 2020 Savant Systems, Inc. All rights reserved. Savant, Savant App, TrueImage, Savant Host, Now You Can, RacePoint Blueprint, Single App Home, TrueCommand, TrueControl, and the Savant logo are trademarks of Savant Systems, Inc.

AirPlay, Apple, AirPort Express, AirPort Extreme, Apple TV, Apple Remote Desktop, FireWire, iMac, iTunes, iPad, iPad mini, iPad Air, iPhone, MacBook, Mac and OS X are trademarks or trade names of Apple Inc. iOS is a trademark of Cisco[®]. Android, Google, Google Play, and other Google marks are trademarks of Google, Inc. Wi-Fi is a registered trademark of the Wi-Fi Alliance[®]. HDMI[®] is a trademark of HDMI Licensing, LLC. MOTU[®] is a registered trademark of Mark of the Unicorn, Inc. Luxul is a registered trademark of Luxul Wireless. NETGEAR[®], the NETGEAR Logo and ProSAFE are trademarks of NETGEAR, Inc. Extreme[™] is a trademark of Extreme Networks, Inc.

All other brand names, product names, and trademarks are the property of their respective owners.

Technical and Sales Support

Savant Systems, Inc is dedicated to providing prompt and effective support in a timely and efficient manner.

- To contact Savant Support, access the **Savant Customer Community** and enter a support Case ticket.
- To contact Savant Sales, visit Savant.com and select Contact Us to locate a local sales representative in your area.