GEN UC



NETWORK ALL YOUR HVAC EQUIPMENT

MONITOR, UPDATE AND CONTROL SYSTEM INFORMATION FROM THE MOBILE APP

Internet Access to system information and TOTAL building control

RIGHT IN THE PALM OF YOUR HAND



Remotely control multiple stand alone RTU's or splits, with our App and your wireless device...**from ANYWHERE**

1 to 400 RTU or Split Systems

Zonex SYSTEMS

comfort you control

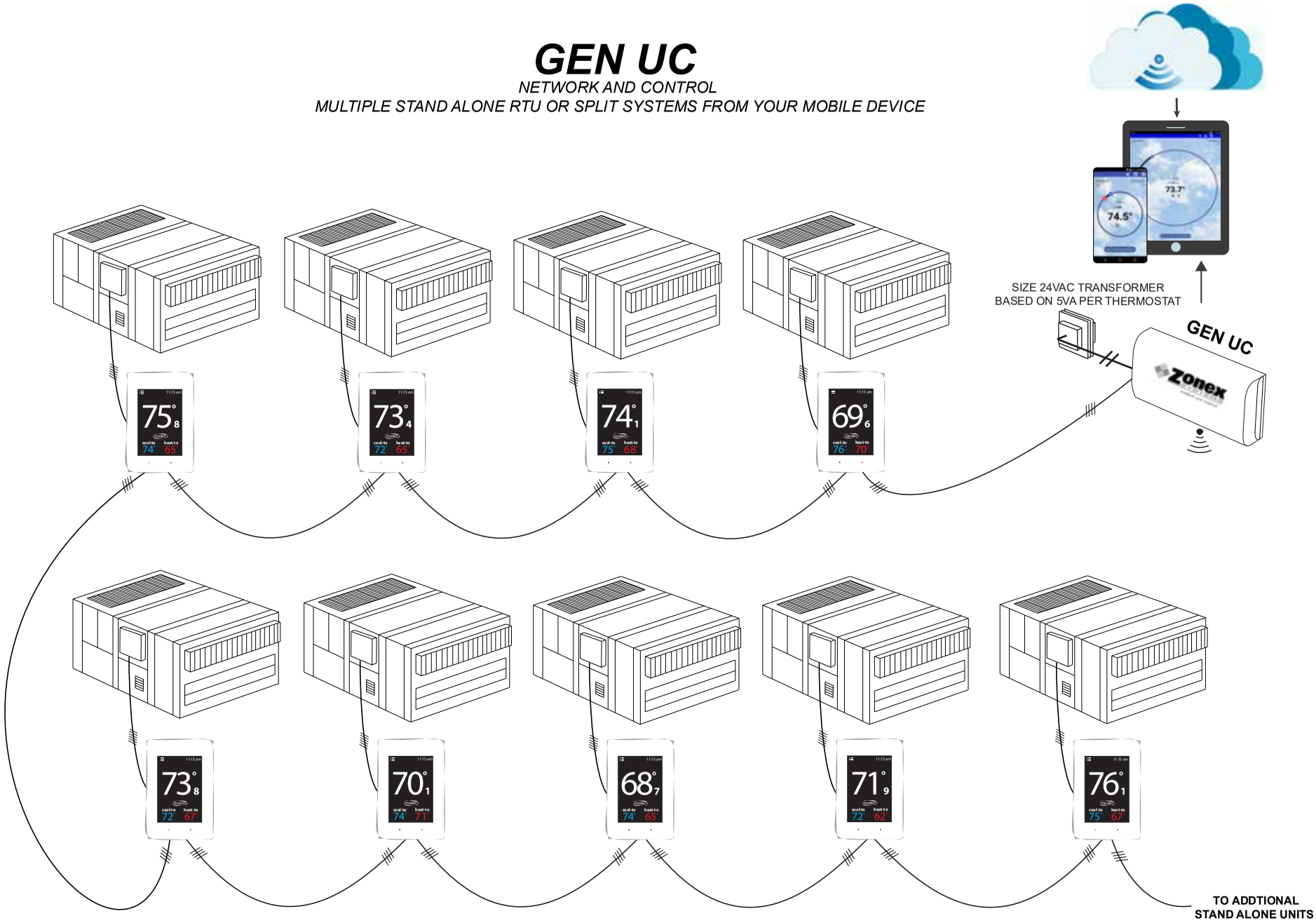
INSTALLATION AND APPLICATIONS MANUAL

PART # GENUCMAN
Sept 2022

GEN UC

NETWORK AND CONTROL

MULTIPLE STAND ALONE RTU OR SPLIT SYSTEMS FROM YOUR MOBILE DEVICE



GEN UC

The GEN UC is a microprocessor based, digital communcating controller designed to communicate and control stand alone Gas / Electric or Heat Pump units, either RTU's or Split type systems, remotely over the internet. The GEN UC will communicate and control up to 20 SATouchX's. The communication hub is App based and accessed via mobile phone, tablet or PC device over a local area network (LAN) or the internet.

The GEN UC RM controllers are available and used to expand your system to control multiple stand alone units remotely. GEN UC can support up to 20 RM expansion controllers providing control of up to 400 RTU's or split systems.

The GEN UC mobile App allows for a wide range of system control and changeover strategies, allowing the contractor to tailor the GEN UC system to a specific application. An integrated clock allows for setup, night setback, vacation scheduling, globally or individually for each thermostat, selectable 2 to 8 hour override, and a feature to remotely lock each thermostat independently in the system. A unique system tool provides the installing contractor with a simple startup diagnostic to quickly alert and identify any system wiring errors, all from the palm of your hand using the GEN UC mobile App.

The GEN UC communicates to SATouchX thermostats that are universal multi-stage stand alone communicating thermostats for direct control of Gas / Electric and Heat Pump systems. The SATouchX is hard wired to the unit and communicates back to the GEN UC via the RS-485 communiacation link. Each SATouchX is equipped with RA/SA sensors which report system operations to the mobile App, along with Humidity status.

GEN UC is recognized as the industry's easiest commercial control system to install and wire. The GEN UC system operates over a plenum rated three wire data link, along with two 24vac power wires all daisy chained from SATouchX to SATouchX with no home run wiring required.

TABLE OF CONTENTS

1 QUICK START AND OVERVIEW 5
- Quick Start and Commissioning 5-6
- Mobile App Overview 7-8
- System Schematic Overview 9

2 SYSTEM COMPONENTS 10
- GEN UC Controller 10
- GEN UC RM Controller 11
- RLYX Generic Load Controller 12
- SATouchX Thermostat 13-14

3 INSTALLATION INSTRUCTIONS 15
- GEN UC Controller 15
- SATouchX Installation 16
- GEN UC ADR installation 17
- GEN UC RM Controller 18-19
- RLYX Generic Load Controller 20

4 COMMISSIONING AND START UP 21
- ID'ing and Configuring Thermostats 21-22
- Downloading the Mobile App and Connecting to the GEN X 23
- Commissioning and Start up of the GEN UC 24-26
- Commissioning and Syncing of the GEN UC RM 27

5 SATOUCHX THERMOSTAT CONFIGURATION 28
- Thermostat Configuration Menu 28-33
- Thermostat Advanced Menu 34-36

6 GEN X NETWORK CONNECTION AND ACCOUNT SET UP 37
- Android Wireless Connection Configuration 37
- Apple Wireless Connection Configuration 38
- Account Set up for Internet Connection 39

7 GEN UC MOBILE APP OVERVIEW AND OPERATION 40
- System Configuration Menu 40
- Schedule / Vacation 41
- Lock, Thermostat Lock Mode, Turn Thermostat ON/OFF 42
- System Diagnostic, Override Hours 43
- Enable Morning Warm Up, Temperature Format 44
- Set Stat Zone Names, Change GEN UC / RM Unit Names 45
- Configure Number of Thermostats 46
- Configure Number of RM's Attached to System, Assign RM ID 46-47
- See Zone Overview / Change ADR Settings 47-48
- Extended Menu Options 49

8 GEN X WEB-PORTAL INSTRUCTIONS 50
- Web-Portal Login 50
- Zone Overview and Changing Thermostat Setpoints 51-52
- Diagnostics Screen and Schedule / Vacation Set up Changing 53-55
- Temperature Format and Zone Names 56

9 SYSTEM SET UP DIRECTORY 57

Wiring and Installation

1. Install GEN UC controller inside the conditioned space, in a area that is easily accessible.

2. Install an Independent 24V/100VA transformer, wire the secondary 24v output to the TR1 and TR2 (IN) lower terminal on the GEN UC controller. **Do not ground out the transformer.**

3. Wire TR1 and TR2 (OUT) upper terminal from the GEN UC controller to the first SATouchX TR1 and TR2 using 18/2 thermostat wire. (See page 14.) Continue daisy chaining TR1 and TR2 from the SATouchX to the next SATouchX until you terminate at the last SATouchX in the system. **Make sure TR1 (Hot) and TR2 (Common) polarity is consistent throughout the system.**

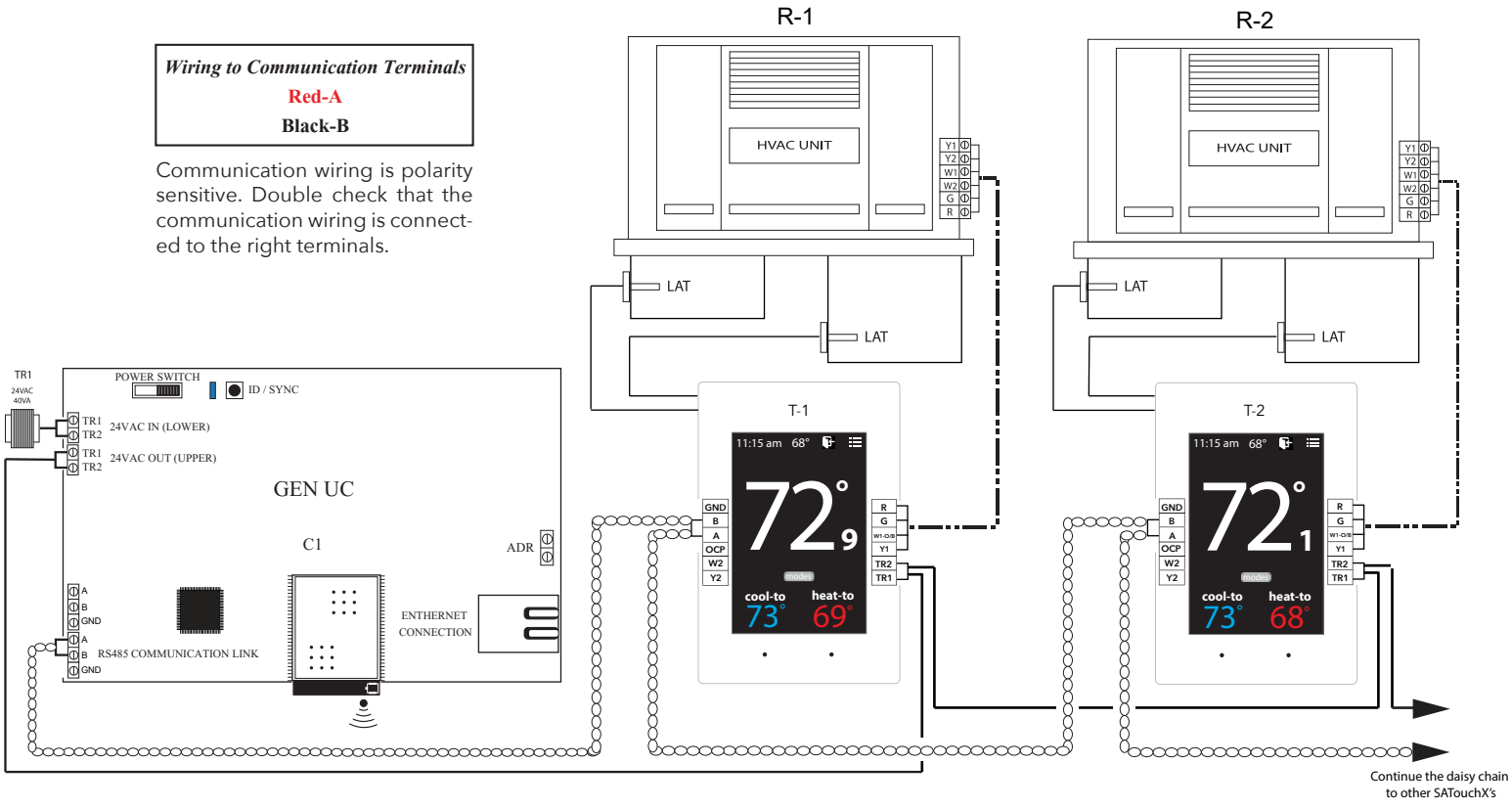
4. Wire communication link A and B from the GEN UC controller using Zonex 2 wire Plenum rated twisted pair wire (Part #STPR) to the first SATouchX. (See page 14.) Continue daisy chaining from A and B on the SATouchX to the next SATouchX until you terminate at the last SATouchX in the system. **Make sure A and B polarity is consistent throughout the system.**

5. Install the Supply (AT1) and Return Air (AT2) sensors 18" to 24" downstream of the unit. **Wire in the Supply sensor to its pigtail and Return Air sensor to its pigtail on the back of thermostat using 18/4 thermostat wiring.**

6. Using 18/6 thermostat wire, wire from the thermostat R, Y1, Y2, W1 / O/B, W2, G to the unit terminals R, Y1, Y2, W1 / O/B, W2, G.

7. Install the thermostats on an interior wall, away from drafts, supply air currents and direct sunlight or any heat generating source

8. Turn ON the GEN UC controller; confirm that the GEN UC and SATouchX's are powered. If you don't have a blue power light or the SATouchX's are not powered, confirm power at the transformer and check TR1 and TR2 wiring.



ID'ing and ConfiguringThermostats

9. Every thermostat in the system needs a unique ID ranging from 1-20. They must be in numerical order the way the communication wire is daisy chained. Confirm no duplicate addresses.

   To set the stat's ID access the Advanced Configuration menu by tapping on the degree symbol next to the room temp O. The degree symbol will change from white to green and then tap ☰

   Once in the Thermostat Advanced Menu, Select **SET ID**

   Use the ∧ and ∨ arrows and set the new ID ranging from 1-20

   Tap 💾 to save changes, to return to the home screen tap ⌂

   (Repeat the steps above, All stats are ID'ed as 001 to 020, maximum of 20 zones on each GEN UC / GEN UC RM system.)

10. While still in the Advanced Configuration Menu,
    Select **Set Unit Type**, choose the unit type the thermostat will be controlling: Gas, Electric or Heat Pump.
11. If GEN UC RM's are being installed to support additional HVAC units, see page 17. If not, skip this step.

Connecting to the GEN UC controller via the Mobile App

12. Download the GEN X mobile App from the Google Play or Apple App store and install it on your mobile device.
13. Connect the GEN X to the building's Local Area Network (LAN)(Router or Switch) with an Ethernet cable.
    If a wired network connection is not available, **please go to page 37** for direct wireless connection to the GEN X using your mobile device.
14. Connect your mobile device via Wi-Fi to the same network the GEN X is connected. You may need to get the SSID/network name and password from the network administrator or IT personel.
15. Open the GEN X mobile App and Tap **Scan LAN for GEN X**. Once the scan is complete, **Tap Select Local GEN X** at the top of the screen. A drop down menu will appear allowing you to select a GEN X controller. If more than one is displayed, Tap the system you want to connect too.

System Configuration

16. Tap ⚙ for System Configuration Menu; scroll down to **Configure # of Thermostats** and indicate how many SATouchX's are wired to the GEN UC controller.(See page 21.)
17. Tap **System Diagnostic**, confirm under Thermostat Status that all SATouchX's are Active.
18. See System Configuration Menu on page 40 to further configure the GEN UC controller.
19. Scroll to Thermostat Overview and tap. All zones should be showing room temperatures. Tap any zone to change set point for Cooling. See page 7 on how to use the App. Adjust your cool set point and Tap ☰ at the top of the App. This will take you back to the zone overview screen. The thermostat room temperature should show in blue and the SATouchX should be energized for cooling. Satisfy the thermostat calling for cooling and repeat the steps above for a heat call.

    For Advanced Feature Configuration or additional operating information, review the attached GEN UC Manual.

MOBILE APP OVERVIEW

This App gives you direct access and control to every thermostat connected to the GEN UC system.

These Menu shortcuts at the top of the screen allow you to quickly navigate the GEN UC App.

- Overview Screen
- Schedule/Calendar
- System Configuration Menu
- Extended Menu Options

The Overview Screen provides a quick look at all temperatures in your system, current calls for heat or cool, along with listing the occupied and unoccupied set points.



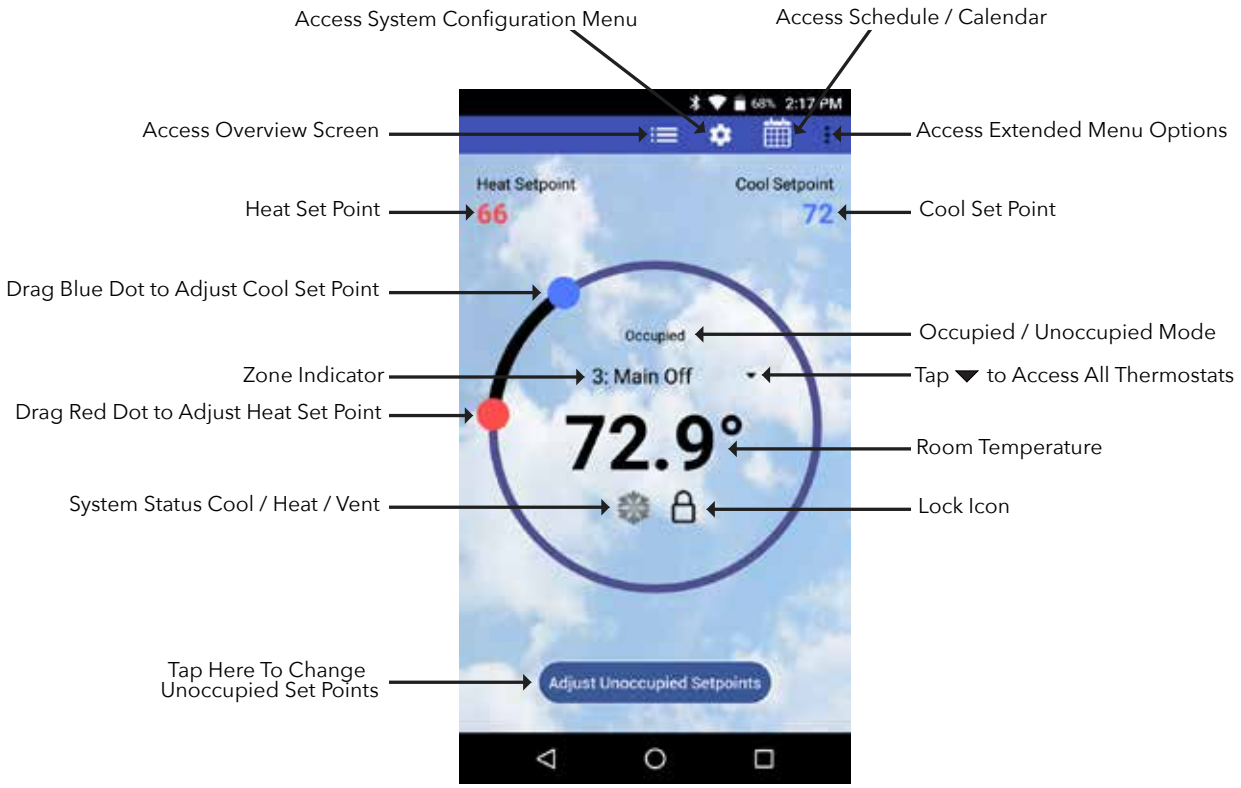
Tap the icon to access the Overview screen which displays the following:

1. Thermostat ID
2. Thermostat Name (Tap stat name to drill down thermostat)
3. Current room temperature of each thermostat

   Note: *Room temperatures are displayed in Blue if the zone is calling for cooling or Red if the zone is calling for heat. A flashing room temperature indicates a call that has not yet been addressed. Room temperatures in black are zones that have been satisfied.*
4. Occupied Heat / Cool set points.
5. Unoccupied Heat / Cool set points.

Tap any thermostat to make an individual or global temperature set point change.

Familiarize yourself with the thermostat features and simple operation:



System Diagnostic screen provides an overview of the system's current conditions. Tap the ⚙ icon and then locate and tap **System Diagnostic** to view the following information or Click ⋮ and select System Diagnostic.

REVIEW:

1. The number of thermostats in the system
2. Supply and Return Air temperatures of the unit as well as the Humidity in the room.
3. Thermostat status: indicates if each thermostat is active (wired and communicating properly with the system), and reports any wiring errors in the system.

This app is a great tool to diagnose and / or avoid potential problems with your system.



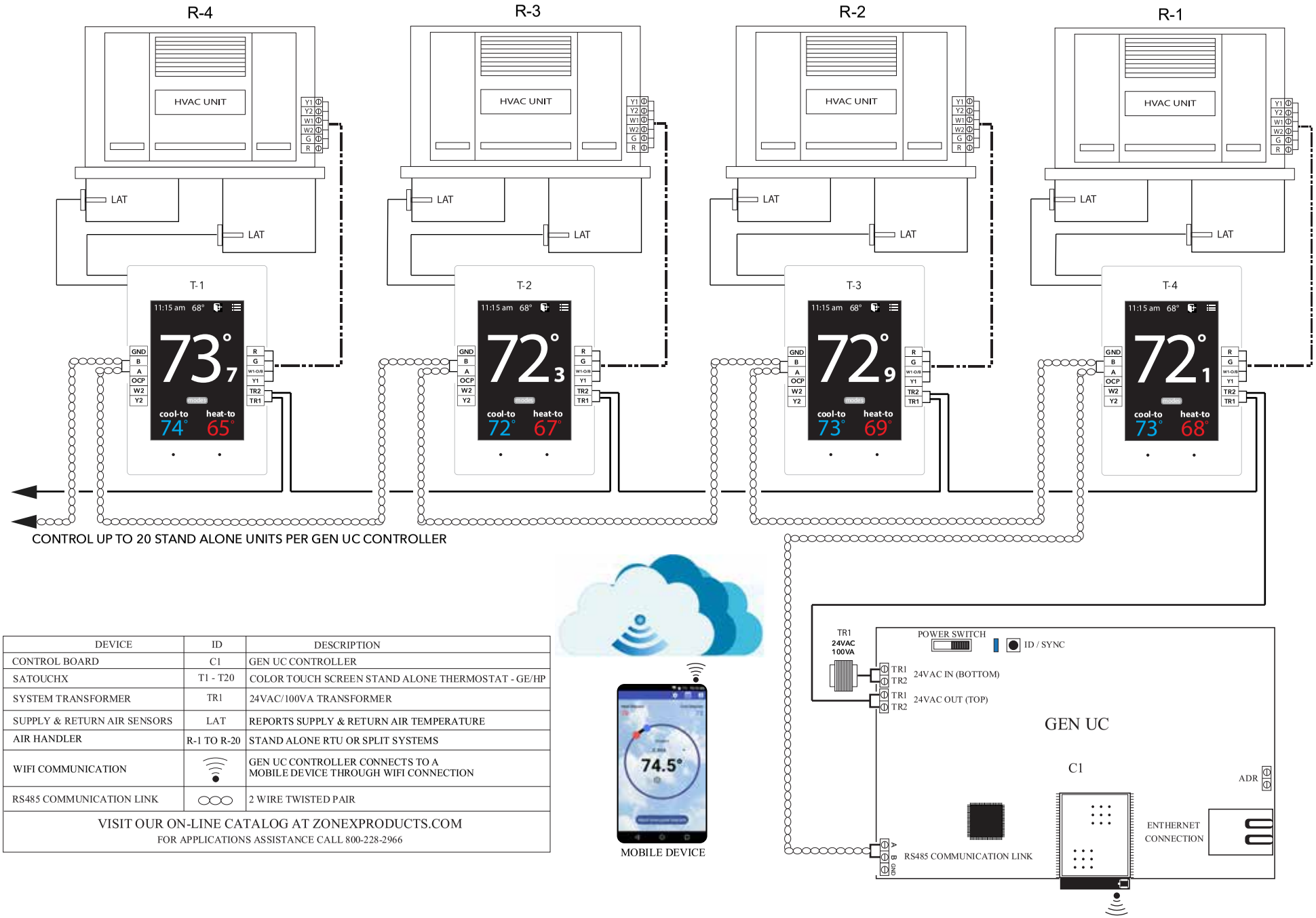
Schedule/Calendar is used to schedule occupied or unoccupied periods individually or globally for each thermostat and vacation days.
Tap the 📅 icon to configure the following:

1. Select 5-1-1 (Mon – Fri, Sat – Sun), 7 day operation or 24/7 operation
2. Set Daily schedule
2. Set 2nd Daily schedule (optional)
3. Set vacation schedules
4. Enable vacation schedules

The **Extended Menu** provides shortcut access to the following, by tapping on the ⋮ icon:

1. System diagnostics
2. Log out of Account
3. Change RM/GEN X (same system)
4. Change RM/GEN X (separate system)
5. View contractor info page
6. Exit the App

This App provides direct system access, either on-site or remotely, putting control right in the palm of your hand. For more detailed information and operating instructions explore this GEN UC manual.



DEVICE	ID	DESCRIPTION
CONTROL BOARD	C1	GEN UC CONTROLLER
SATOUCHX	T1 - T20	COLOR TOUCH SCREEN STAND ALONE THERMOSTAT - GE/HP
SYSTEM TRANSFORMER	TR1	24VAC/100VA TRANSFORMER
SUPPLY & RETURN AIR SENSORS	LAT	REPORTS SUPPLY & RETURN AIR TEMPERATURE
AIR HANDLER	R-1 TO R-20	STAND ALONE RTU OR SPLIT SYSTEMS
WIFI COMMUNICATION		GEN UC CONTROLLER CONNECTS TO A MOBILE DEVICE THROUGH WIFI CONNECTION
RS485 COMMUNICATION LINK		2 WIRE TWISTED PAIR

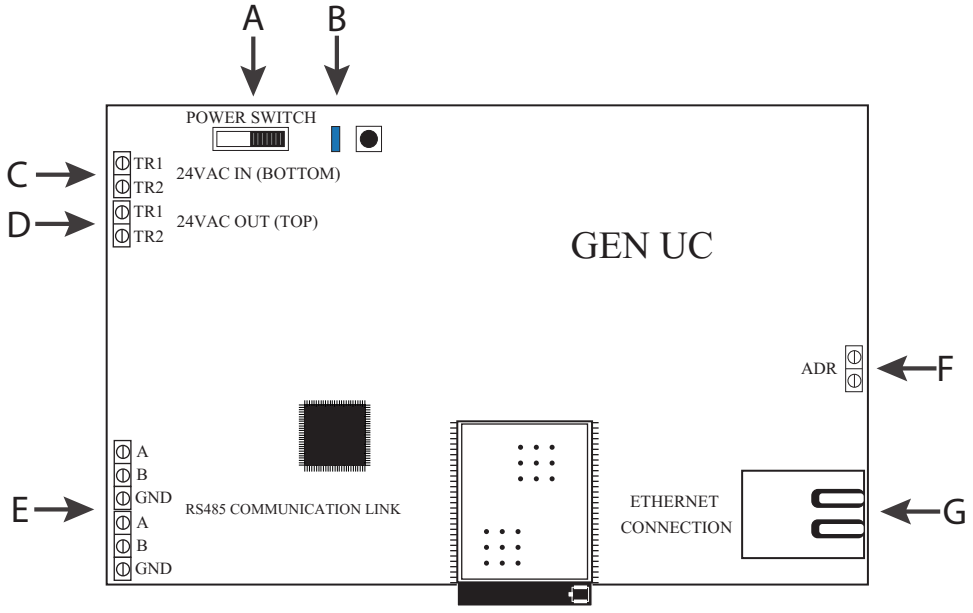
VISIT OUR ON-LINE CATALOG AT ZONEXPRODUCTS.COM
FOR APPLICATIONS ASSISTANCE CALL 800-228-2966



The GEN UC (Part# GENUC) is a microprocessor based, digital communicating controller designed to communicate and control stand alone G/E or HP units, either RTU or split type systems, remotely over the internet. The GEN UC will communicate and control up to 20 SATouchX's. The GEN UC is expandable using up to 20 add-on GEN UC RM controllers that are daisy chained together via the RS-485 communications link, providing system expansion up to 400 units.

Communications hub is App based and accessed via mobile phone or device over local area network or the internet. The GEN UC gathers information every 60 seconds from each SATouchX while communicating with the system over a Zonex 2-wire plenum rated twisted pair data link.

The GEN UC is powered with one 24V/100VA transformer, which also powers all thermostats in the system. Power from the controller, along with a 2-wire communications link, is daisy chained SATouchX to SATouchX to streamline installation and system communications. Additional control strategies are established with your mobile device using the GEN UC mobile App, which initiates control decisions remotely or on-site with the GEN UC system controller. **Review controller terminal connections below:**



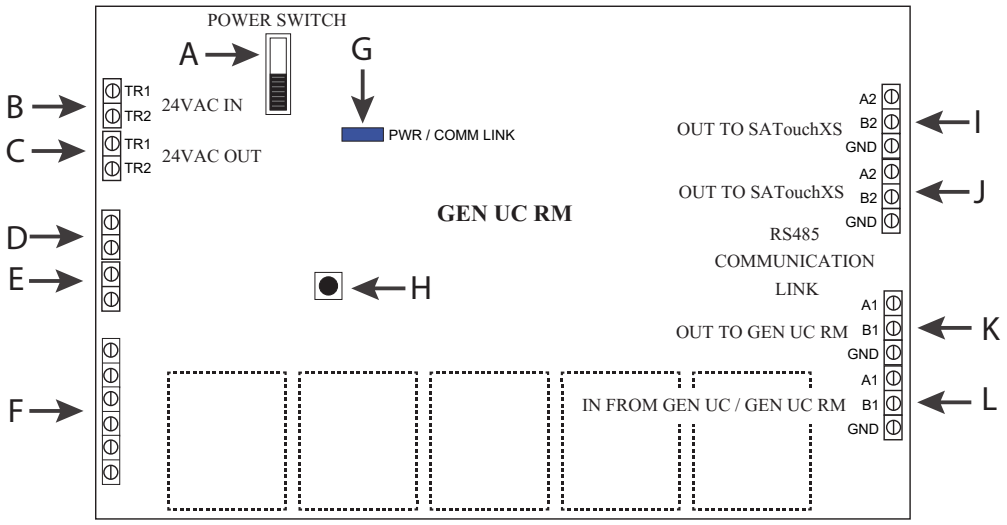
A. On /Off Power Switch
B. Communication link LED
C. 24vac IN (Lower Terminal) to power the GEN UC board
(Independent 24V/100VA Transformer)
D. 24vac OUT (Upper Terminal) daisy chained out to SATouchX's
E. A/B/GND 3 wire communication link, daisy chained OUT to SATouchX's and GEN UC RM (if utilized)
F. Automated Demand Response (ADR)
G. Network Connection



The GEN UC RM is a micro-controller based, auto changeover Universal Gas/Electric or Heat Pump system controller (Part# ***GEN UC RM***), designed to work with the GEN UC controller to provide expansion capability to support additional stand alone units. The ***GEN UC RM*** supports up to 20 SATouchX's. The ***GEN UC RM*** gathers information every 60 seconds from each thermostat while communicating with the system over a 2-wire data link.

The ***GEN UC RM*** is powered with one 24V/100VA transformer, which also powers all thermostats in that system. Power from the controller, along with Zonex plenum rated 2-wire twisted pair communications link, is daisy chained thermostat to thermostat to streamline installation and system communications.

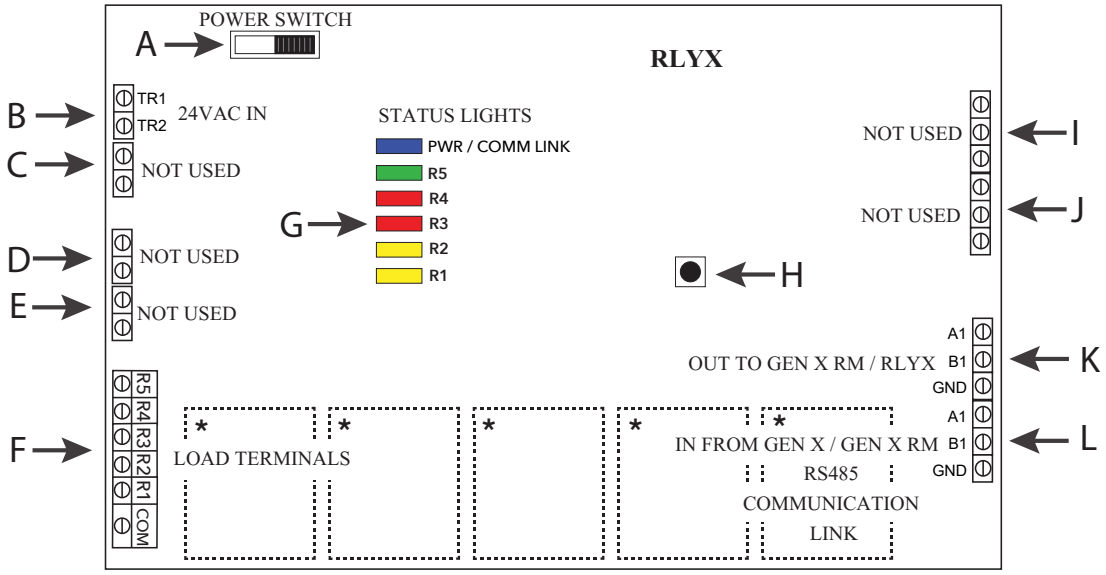
Additional control strategies are established with your mobile device using the GEN UC mobile app, which initiates control decisions with the ***GEN UC RM*** controller. Review controller terminal connections below:



A On /Off Switch
B 24vac IN to power the GEN UC board (Independent 24V/100VA Transformer)
C 24vac OUT daisy chained out to the Thermostats
D Not Used
E Not Used
F Not Used
G Communication link LED
H Sync Button
I A / B / GND 3- wire communication link, daisy chained OUT to the SATouchX's
J A / B / GND 3- wire communication link, daisy chained OUT to SATouchX's
K A / B / GND 3- wire communication link, daisy chained OUT from GEN UC RM to additional GEN UC RM for system expansion
L A /B / GND 3- wire communication link, daisy chained IN from GEN UC to GEN UC RM



The RLYX is a communicating device equipped with 5 SPST relay terminals switched between a single Common terminal (NOT as dry contacts independent from each other). The RLYX can be used to control loads such as fans, pumps, blowers, lighting, or any load that can be operated using low voltage signals of 24VAC or less. When a relay is energized a circuit is completed between Common and the corresponding relay terminal (i.e. Common and R1, Common and R2 and so on). Status of the relays are displayed as either ON or OFF under the Zone Overview or System Diagnostics screens of the GEN X App and LED indicators on the RLYX board. Relays will energize in the Occupied mode and de-energize in the Unoccupied mode. One Occupied and one Unoccupied event can be scheduled per day for each relay/load on either a daily basis or on 5-1-1 basis (Mon-Fri, Sat-Sun). Each relay terminal on the RLYX can be configured with its own independent schedule tailored to the needs of each load. The RLYX can also be configured with Vacation Schedules for holidays or other special events when the building will be Unoccupied during the regular schedule. If more than five loads are to be controlled then additional RLYX's will be required. The GEN X can support up to twenty RLYX and/or GEN X RM controllers, if the application requires more than twenty RLYX and/or GEN X RM controllers then additional GEN X's will be required.



A. On /Off Switch
B. 24VAC IN to power the RLYX board (Independent 24VAC /40VA Transformer)
C. Not Used
D. Not Used
E. Not Used
F. Load Terminals
G. Communication link LED / Relay Status Lights
H. Sync Button
I. Not Used
J. Not Used
K. A1/B1/GND 3 wire communication link, daisy chained OUT from RLYX to GEN X RM or RLYX
L. A1/B1/GND 3 wire communication link, daisy chained IN from GEN X or GEN X RM

**Board Relays are Pilot Duty*

DESCRIPTION



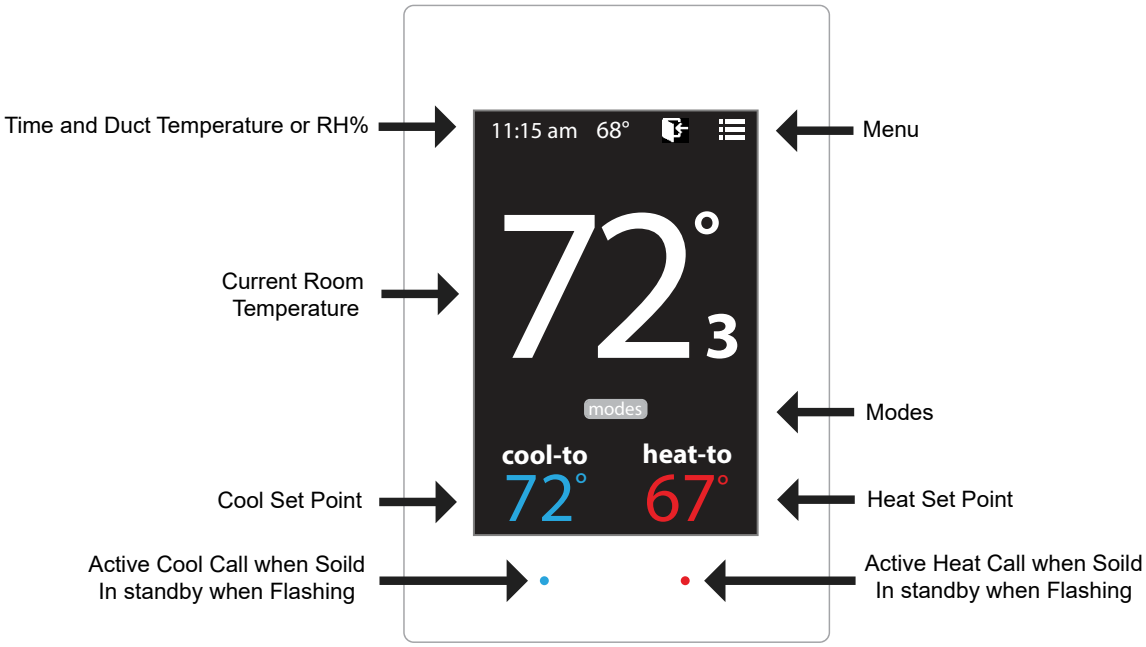
The SATouchX is a universal programmable G/E or H/P thermostat, microprocessor based, auto changeover, stand alone thermostat used to control stand alone units in the GEN UC system. The SATouchX is configured for Gas/Electric (2H, 2C) or Heat Pump (3H, 2C) with selectable fan operation. The SATouchX reports the room humidity, supply and return air temperatures and has a large, easy to read LCD display.

The SATouchX is very easy to configure through the mobile App or by manually adjusting settings at the thermostat.

The SATouchX features an on board thermistor for precise temperature measurement. In the event of power loss, the Heat and Cool set points are stored in non-volatile memory, without the need for battery backup.

Space ambient temperature is continually displayed with large, easy-to-read numbers. The SATouchX temperature display range is 47° - 95°F. Heat and Cool set points and operation modes are all indicated on the display.

Programmed set points can be manually adjusted at the thermostat or electronically locked through the mobile app to provide limited manual set point adjustment. During unoccupied hours, temporary operation can be overridden with a touch of a button.





Sequence of operation

COOL - The thermostat will make a Y1 cool call when the space temperature rises 1° above set point. Y2 will energize when the space temperature rises 2° above the cool set point (2nd stage can be adjusted 2°- 8° for desired staging). When the room temperature reaches set point, Y1 and Y2 will de-energize. O or B energize for the reversing valve circuit, depending on configuration. The G circuit is energized for fan.

HEAT - Gas / Electric - The thermostat will make a W1 heat call when the space temperature is 1° below the heat set point. W2 will energize when the space temperature is 2° below the heat set point (2nd stage can be adjusted 2°- 8° for desired staging). When the room temperature reaches set point W1 and W2 will de-energize.

Note: When the thermostat is configured for GAS operation the fan circuit is not energized in heat mode. When the thermostat is configured for ELECTRIC operation the fan circuit is energized in heat mode.

HEAT - Heat Pump - The thermostat will make a Y1 heat call when the space temperature is 1° below the heat set point. Y2 will energize when the space temperature is 2° below the heat set point (2nd stage can be adjusted 2°- 8° for desired staging). W2 (Aux Heat) will energize when the space temperature is 1° below what the 2nd stage temperature is set for. When the room temperature reaches set point Y1,Y2 and W2 will de-energize.

EMERGENCY HEAT - When Emergency Heat is selected in the configuration menu on the thermostat on a call for heat, there is an output signal on “W2” for backup heat and “G” for the fan. The compressor circuits Y1 and Y2 are locked out during heat calls until the emergency heat function has been turned off in the configuration menu. (When selected for Emergency Heat, cool calls are not seen by the SATouchX untill the Emergency Heat is disabled.)

FAN MODE - Is factory set for “AUTO”. To configure the thermostat to run the fan constant “ON” you will need to go into the thermostat configuration menu and select Fan Mode and change it from “AUTO” to “ON”.

SATouchX Installation

Install the thermostat on an interior wall, away from drafts, supply air currents and direct sunlight or any heat generating source.

Installing the Supply and Return Air Sensors

Install the Supply (AT1) and Return Air (AT2) sensors 18" to 24" downstream of the unit. **Wire in the Supply sensor to its pigtail and Return Air sensor to its pigtail on the back of thermostat using 18/4 thermostat wiring.**

Installing RTU / Split System Unit Wiring

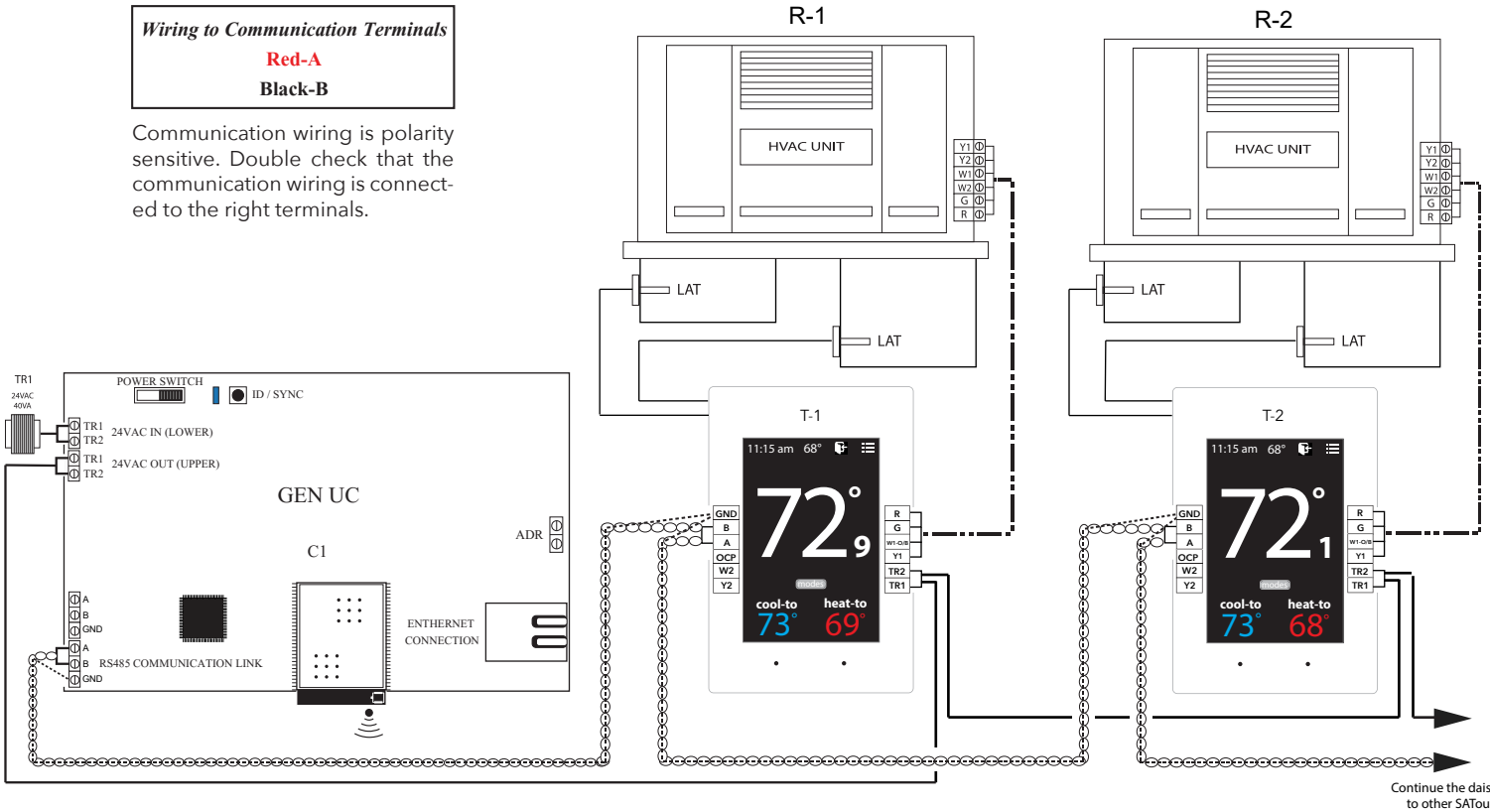
Using 18/6 thermostat wiring, wire from the thermostat R, Y1, Y2, W1 / O/B, W2, G to the unit terminals R, Y1, Y2, W1 / O/B, W2, G.

Installing 24 volt power wiring

Once GEN UC controller and SATouchX's are installed, install one 24V/100VA transformer, and wire secondary 24 volts to the TR1 / TR2 (IN) lower terminals on GEN UC controller. Using 18 ga. thermostat wire, wire TR1 / TR2 (OUT) upper terminals and daisy chain power wires to the first thermostat. Continue daisy chain wiring from first thermostat to second, third, etc., until all thermostats are wired with power. **Note: Maintain TR1(Hot) and TR2(Common) wiring polarity throughout the system to improve communications.**

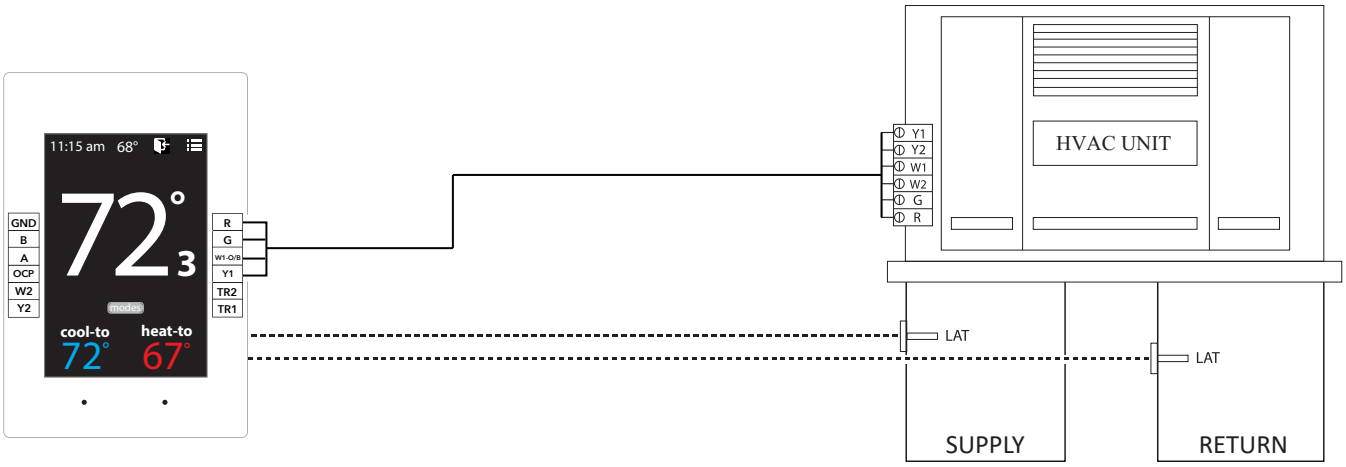
Installing Communication Wire RS485

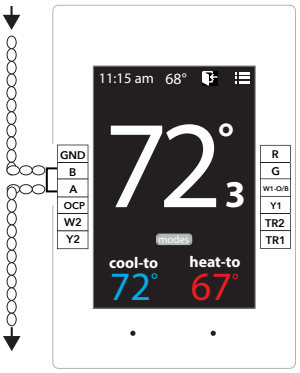
Once power wiring is daisy chained to all thermostats in the system, use Zonex 2 - wire plenum rated twisted pair communications wire to install communications link. Install communications wire using the A and B terminals on GEN UC controller and daisy chain to the first thermostat in the system and wire to A and B terminals on the thermostat. Continue daisy chain to the next thermostat using A and B terminals on the thermostat to the A and B of the next thermostat, repeating this process until all thermostats are wired into the communications link. Communications wiring is polarity specific: if RED communications wire is on A at the GEN UC controller, then RED wire is connected to A throughout the system.



WIRING THE UNIT, SUPPLY AND RETURN AIR SENSORS TO THE SATouchX

Use 18/6 thermostat wire, wire from SATouchX to the RTU/split system. Make sure to match up the unit terminals to the SATouchX terminals R, Y1, Y2, W1/O/B, W2, G. Wire in the Supply and Return air sensors using 18/4 thermostat wire. Install the Supply (AT1) and Return Air (AT2) LAT sensors 18 to 24" downsteam of the unit.

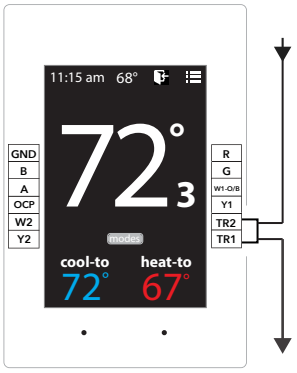




DAISY CHAIN THE COMMUNICATION WIRE

Using Zonex STPR communication wire. Wire **IN** and **OUT** of A and B to and from SATouchX's in a daisy chain configuration.

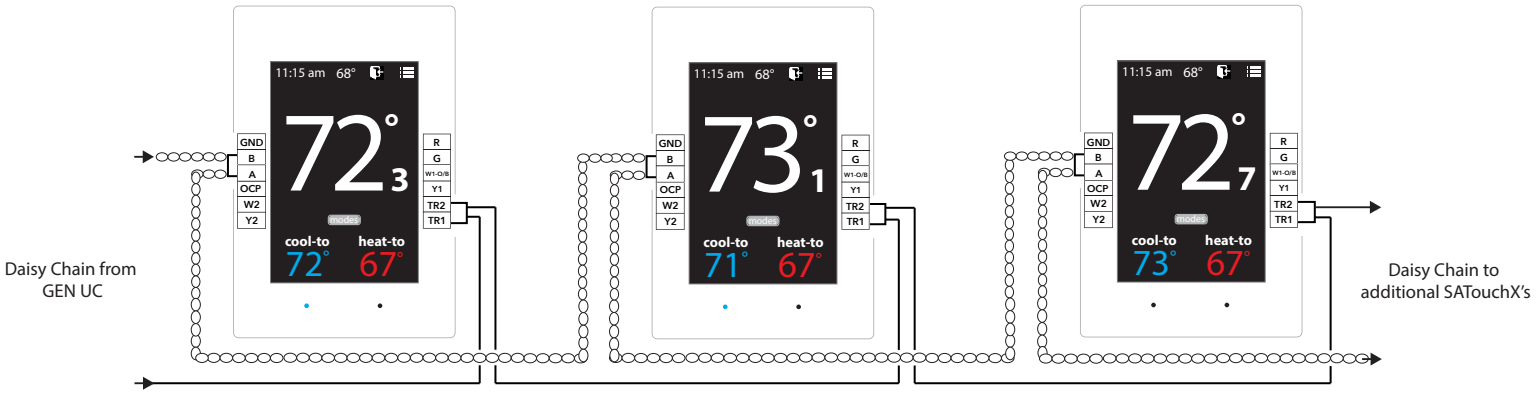
Wiring to Communication Terminals
Red-A
Black-B



DAISY CHAIN 24V POWER FROM GEN UC or GEN UC RM

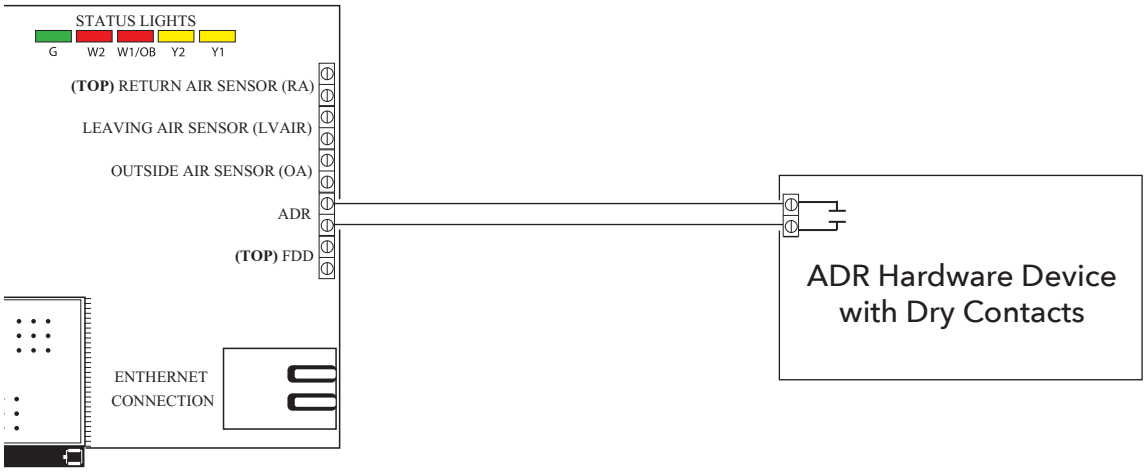
SATouchX is powered by the independent transformer connected to the GEN UC. Using 18/2 wire for the 24vac power, daisy chain from TR1, TR2 **IN** and **OUT** to and from the SATouchX's.

Daisy Chain Multiple SATouchX's



Wiring in the Automated Demand Response (ADR) to GEN UC controller

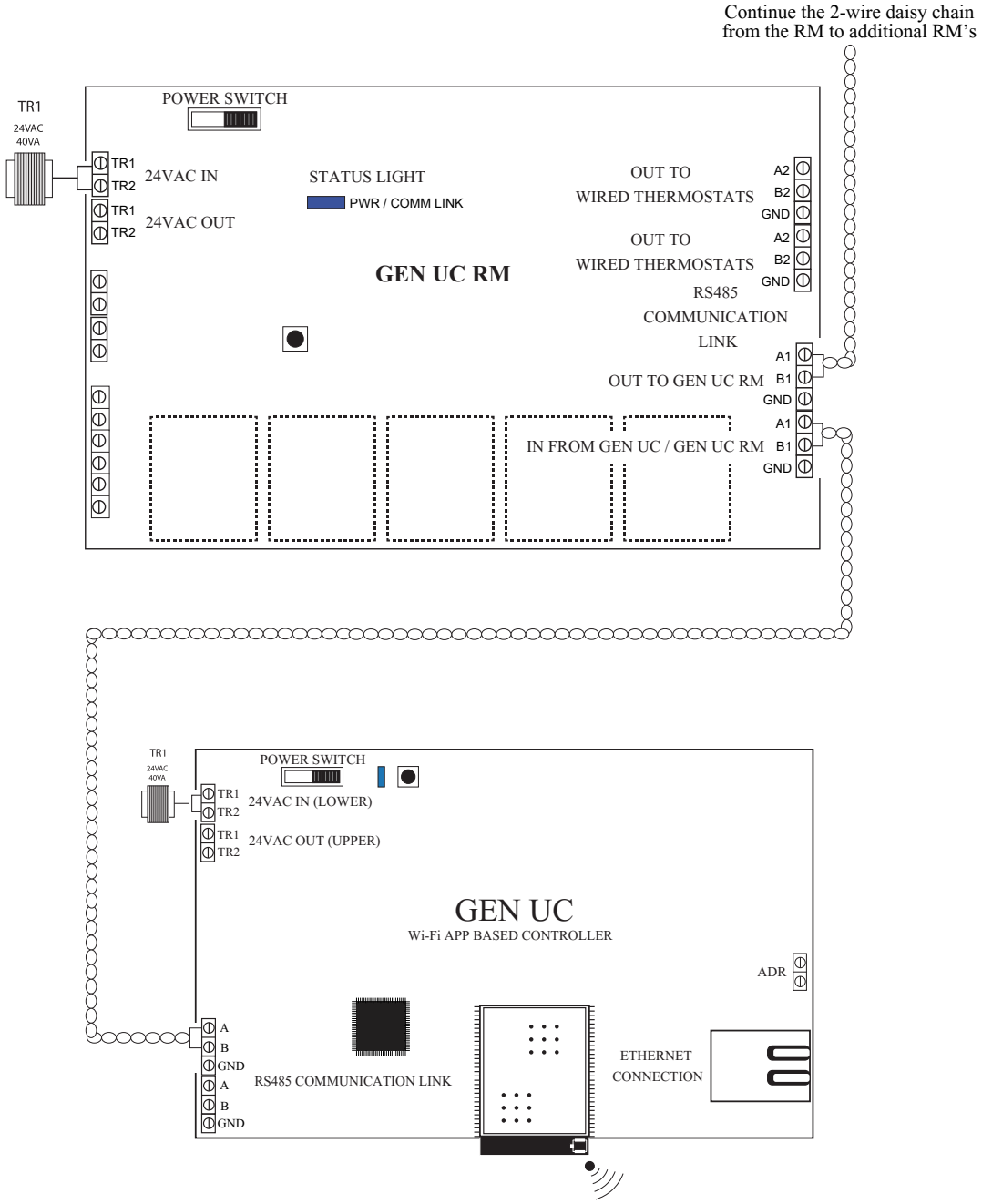
ADR (Automated Demand Response) is a load shedding strategy implemented by local utilities to curb electricity usage during high demand periods. The local utility provider sends out a signal from a VTN or DRAS (Virtual Top Node or Demand Response Automated Server) from their facility and is received by a VEN (Virtual End Node) located at the customer's location. The purpose of the signal is it to setback thermostat set points 4° for both the heating and cooling modes of the facility's HVAC equipment. **The GEN UC does not directly accept signals from the local utility provider.** For the GEN UC to setback thermostat set points it must be used in conjunction with a VEN hardware device that supports Open ADR **(contact the local utility provider for the most current protocol requirements for your area)** and must be equipped with a set of dry normally open contacts that close during an ADR event. The contacts of the VEN are wired to the ADR terminal of the GEN UC (see diagram below). When the VEN receives an ADR signal from the VTN or DRAS its contacts close, the GEN UC & RM's set back their thermostats 4° for both the heating & cooling modes and lock the thermostat set points so they cannot be adjusted at the thermostat during the ADR event. Once the ADR event has concluded the thermostats unlock and return to their original set points. For a list of Open ADR products please visit **http://products.openadr.org** or contact your local utility provider. This feature can be enabled/disabled on a thermostat by thermostat basis. Go to Settings ->Change ADR settings -> Check the boxes to enable ADR for that thermostat on the GEN X app.



Wiring the GEN UC to the GEN UC RM Expansion Controller

With the GEN UC controller installed, if you have more than 20 RTU's or Split systems, install the RM expansion controller using the 2-wire twisted pair communication wire. Wire from the GEN UC A and B out to the RM A and B (IN) on the RM controller as shown below. If there are multiple RM's in the system, continue the 2-wire twisted pair in a daisy chain fashion from the RM to the next RM.

Note: Up to 20 RM's may be daisy chained to the GEN UC controller.



SATouchX Installation

Install the thermostat on an interior wall, away from drafts, supply air currents and direct sunlight or any heat generating source.

Installing the Supply and Return Air Sensors

Install the Supply (AT1) and Return Air (AT2) sensors 18" to 24" downstream of the unit. **Wire in the Supply sensor to its pigtail and Return Air sensor to its pigtail on the back of thermostat using 18/4 thermostat wiring.**

Installing RTU / Split System Unit Wiring

Using 18/6 thermostat wiring, wire from the thermostat R, Y1, Y2, W1 / O/B, W2, G to the unit terminals R, Y1, Y2, W1 / O/B, W2, G.

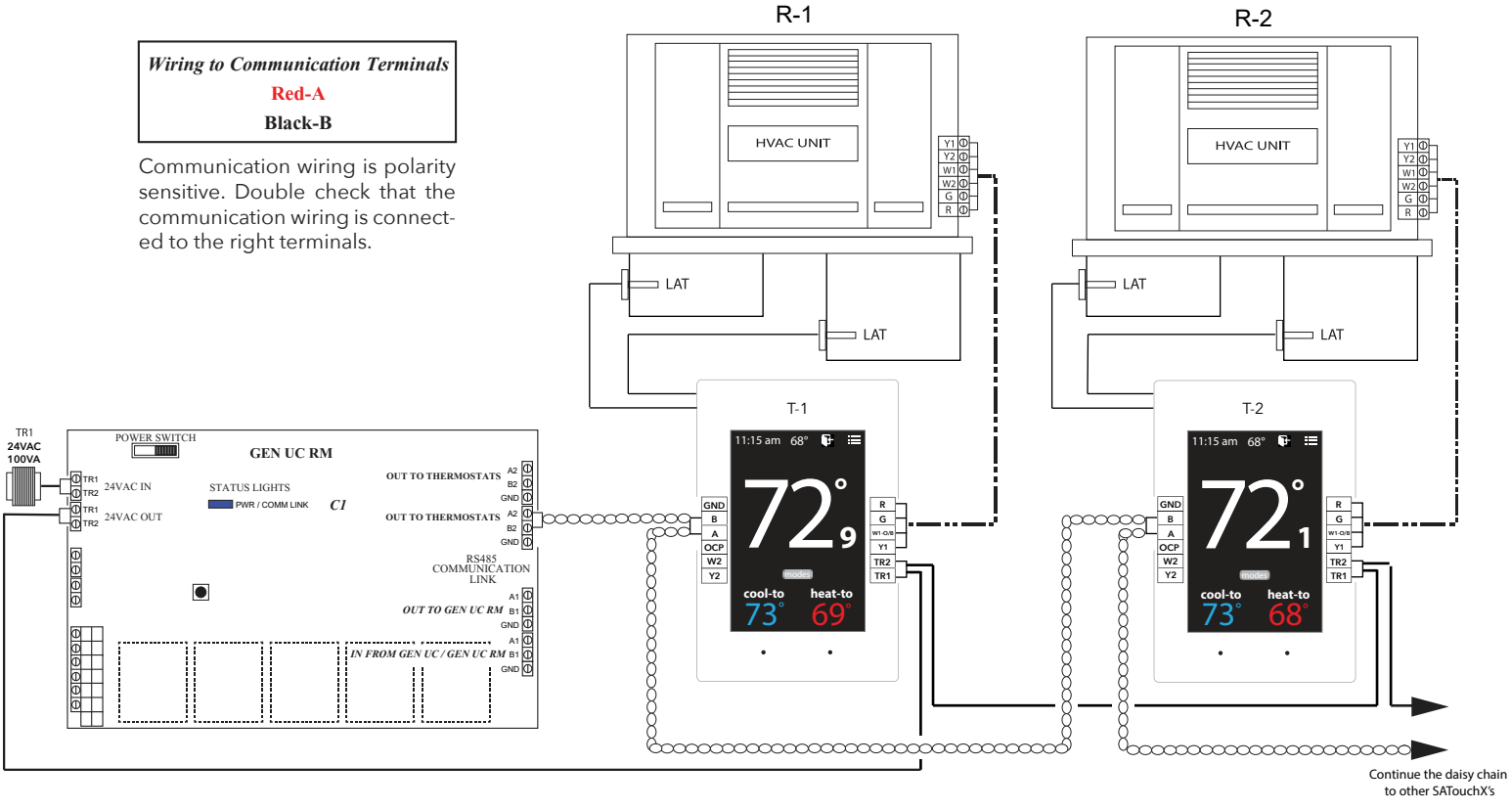
Installing 24 volt power wiring

Once GEN UC RM controller and SATouchX's are installed, install one 24V/100VA transformer, and wire secondary 24 volts to the TR1 / TR2 (IN) on GEN UC RM controller. Using 18 ga. thermostat wire, wire TR1 / TR2 (OUT) and daisy chain power wires to the first thermostat. Continue daisy chain wiring from first thermostat to second, third, etc., until all thermostats are wired with power.

Note: Maintain TR1(Hot) and TR2(Common) wiring polarity throughout the system to improve communications.

Installing Communication Wire RS485

Once power wiring is daisy chained to all thermostats in the system, use Zonex 2- wire plenum rated twisted pair communications wire to install communications link. Install communications wire using the A2 and B2 terminals on GEN UC RM controller and daisy chain to the first thermostat in the system and wire to A and B terminals on the thermostat. Continue daisy chain to the next thermostat using A and B terminals on the thermostat to the A and B of the next thermostat, repeating this process until all thermostats are wired into the communications link. Communications wiring is polarity specific: if RED communications wire is on A at the GEN UC RM controller, then RED wire is connected to A throughout the system.



Installing 24VAC wiring

Once the RLYX controller is installed, install one 24VAC 40VA transformer and wire secondary 24 volts to the TR1 / TR2 (IN) terminals on RLYX controller. Using 18 ga. thermostat wire.

Note: Maintain TR1 and TR2 wiring polarity throughout the system to ensure effective communications.

DO NOT ground out the transformer.

Installing Communication Wire RS485

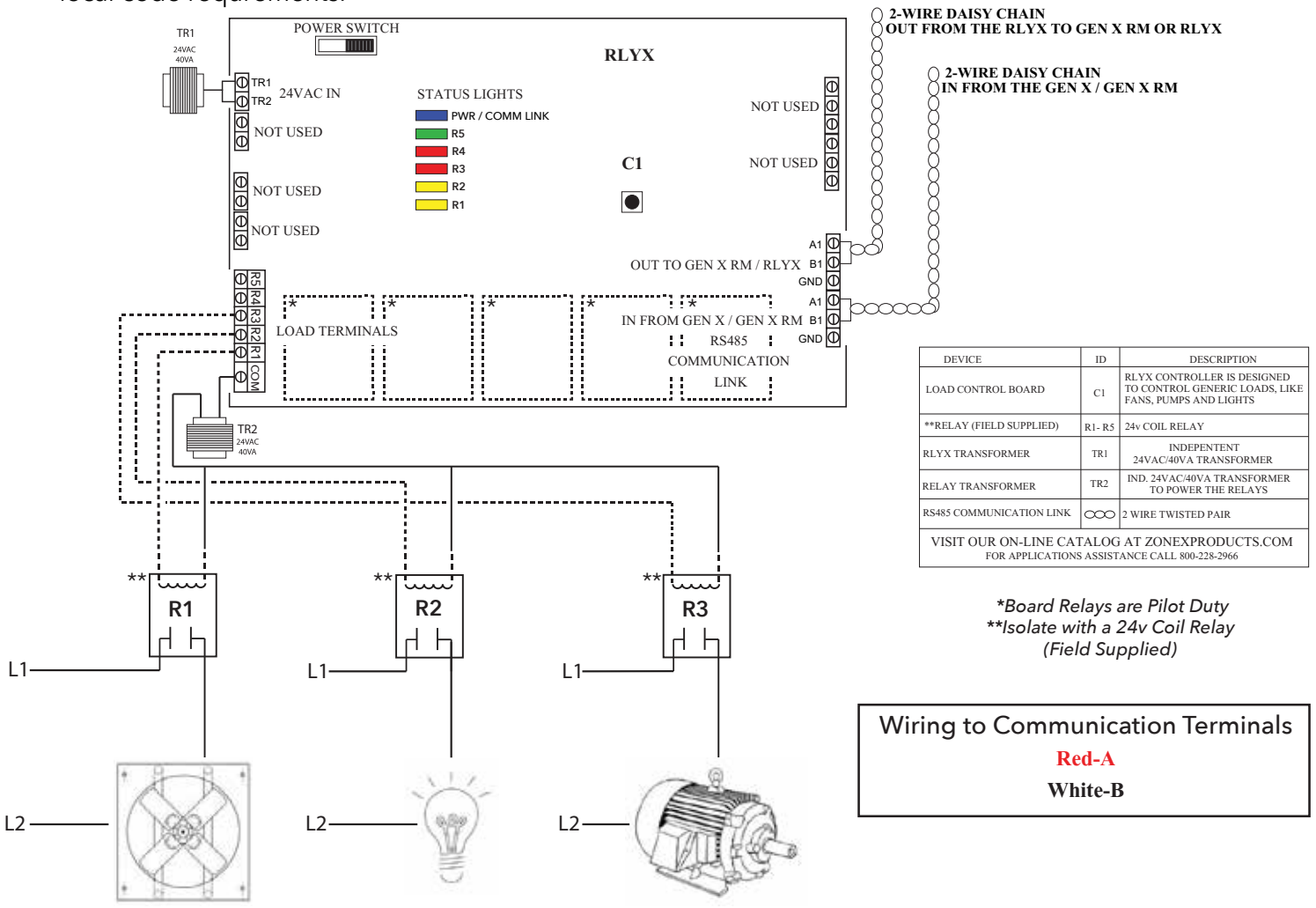
Using Zonex STPR twisted pair communications wire to install communications loop. Install communications wire using the A and B IN from GEN X / GEN X RM terminals on RLYX controller. Continue daisy chain from the OUT to GEN X RM / RYLX terminals using A and B to the A and B IN on the next GEN X RM / RYLX controller, repeating this process until controllers are wired into the communications loop. Communications wiring is polarity specific, if RED communications wire is on A at the RYLX controller, then RED wire is connected to A throughout controls communications loop.

Wiring in the 24VAC Coil Relay's and Relay Transformer

Install a second independent 24VAC 40VA transformer, using 18 ga wire run one side of the 24VAC to **"COM"** on the RYLX load terminals. Install a field supplied 24VAC coil relay and wire in the other leg of the 24VAC transformer to one side of the 24VAC coil on the relay or relay's.

Now wire from "R1" off the RYLX load terminal strip using 18 ga wire to the other side of the 24VAC coil relay, this should complete the circit for the "R1" load. Repeat the steps above for any additional relay's using load terminals "R2, R3, R4 or R5".

Wire in the generic load power so that the relay breaks the loads power. Wire in all generic loads to meet local code requirements.



DEVICE	ID	DESCRIPTION
LOAD CONTROL BOARD	C1	RLYX CONTROLLER IS DESIGNED TO CONTROL GENERIC LOADS, LIKE FANS, PUMPS AND LIGHTS
**RELAY (FIELD SUPPLIED)	R1- R5	24v COIL RELAY
RLYX TRANSFORMER	TR1	INDEPENTENT 24VAC/40VA TRANSFORMER
RELAY TRANSFORMER	TR2	IND. 24VAC/40VA TRANSFORMER TO POWER THE RELAYS
RS485 COMMUNICATION LINK	○○○	2 WIRE TWISTED PAIR
VISIT OUR ON-LINE CATALOG AT ZONEXPRODUCTS.COM FOR APPLICATIONS ASSISTANCE CALL 800-228-2966		

**Board Relays are Pilot Duty*
***Isolate with a 24v Coil Relay (Field Supplied)*

Wiring to Communication Terminals

Red-A

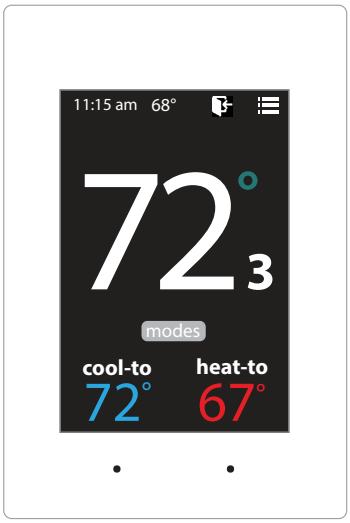
White-B

Setting ID on the SATouchX Thermostat

Each thermostat must be ID'd. Beginning with the first thermostat in the daisy chain closest to the GEN UC controller. Locate associated thermostat and confirm display appears on stat. If not, turn ON the GEN UC and GEN UC RM controllers at the ON/OFF switch located on the left hand corner of the controllers. If no display is seen, check that you have 24VAC between TR1 and TR2 on the GEN UC or GEN UC RM controller and then at the thermostat.

To access the Thermostat Advanced Menu: Tap on the degree symbol next to the room temp.

The degree symbol will change color from white to green and then tap .



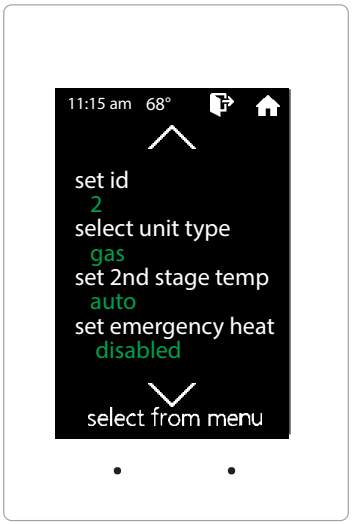
Setting STAT ID for the Thermostat

While in the Thermostat Advanced Menu, Select **SET ID**

Use the ^ and v arrows to set the new ID ranging from 1-20

Tap to save changes, to return to the home screen tap

Note: (All thermostats recieve a unique ID 001 to 020, maximum of 20 thermostats per GEN UC and GEN UC RM controllers.)





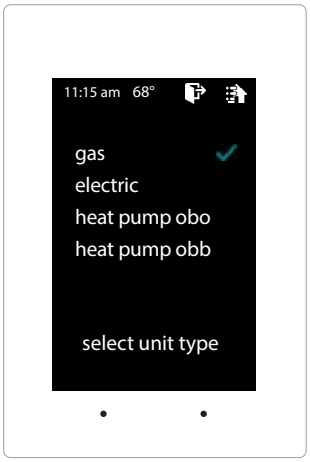
Select Unit Type

The SATouchX is designed as a universal GAS/ELECTRIC/HEAT PUMP thermostat. Factory default is set for GAS operations.

While in the Thermostat Advanced Menu, Select **Unit Type**

Select the the desired unit type operation

Tap  to save changes, to return to the home screen tap 



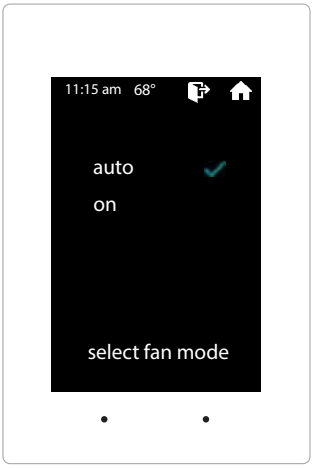
Select Fan Mode

Fan operation is configured for either Fan ON or AUTO. When system is configured for ON operation, the Fan will run during Occupied schedule and will revert to Auto operations during Unoccupied schedule. When thermostat is configured for Auto operation, Fan will only run when there is a call for heating or cooling

While in the Thermostat Advanced Menu, Select **Fan Mode**

Select the the desired fan operation “Auto” or “On”.

Tap  to save changes, to return to the home screen tap 



Downloading the Mobile App and Connecting to the GEN UC

The GEN X mobile App provides local or remote access to your system, providing direct access to zoned systems or stand alone units.

Download and install the GEN X App on your mobile device from Google Play or Apple App Store.

Connect an Ethernet cable from the customer's network into the GEN UC's Ethernet connection (this should be provided by the customer). (Skip the step below if you were able to connect to the customer's network.)

If a network connection is not available please go to pg 35 for direct wireless setup instructions.

Ensure that your mobile device is connected to the same network as the GEN UC via a Wi-Fi connection. If you are connecting to the customer's network then you must obtain the network name /SSID and password (you may need to contact your customer's IT personnel).

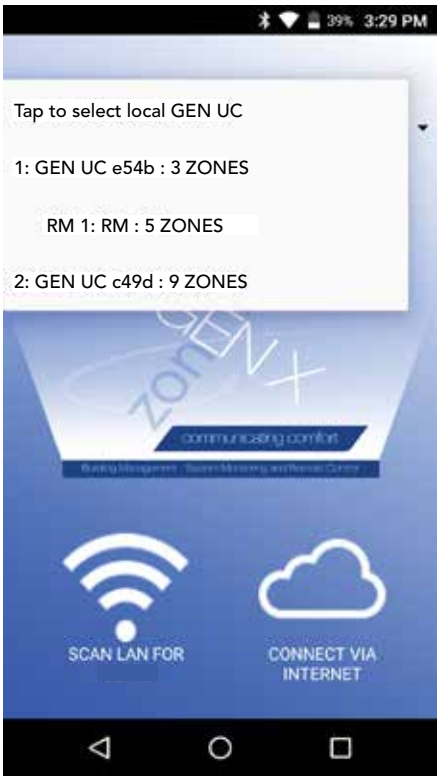
Open the Zonex App and press the "SCAN LAN FOR GEN X" icon at the bottom of the screen.

Allow the App time to scan the network for the GEN X control board (this could take up to 60 seconds).

You will then see the message "Tap to select your local GEN X system" at the top of the App. Tap the down arrow on the right, and a drop down menu will appear indicating the GEN UC is connected to the network. If no GEN UC is listed, power off the GEN UC for a few moments, power it back on and reopen the Zonex App so the scan process can be restarted.

Select the GEN UC you wish to access by tapping on it.

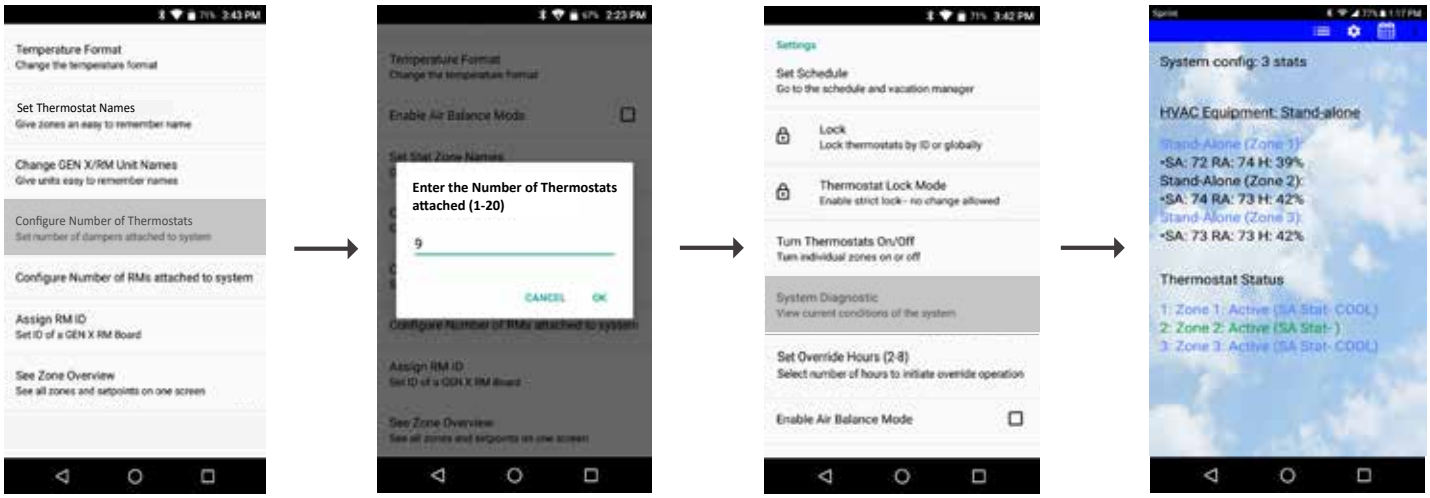




Once GEN UC controller is mounted, turn on the GEN UC controller and confirm all SATouchX's are powered. Address the SATouchX's. The system is now ready to be commissioned and started up. If SATouchX's are blank, check power wires.

Confirm Thermostat Communications

Open the GEN X app, tap the ⚙ for System Configuration Menu and choose Configure Number of Thermostats. Enter the number of thermostats that are in the system. While still in the Configuration menu select System Diagnostic and confirm that all the thermostats are showing Active under the thermostat status. If it shows RF error, check power at the SATouchX and confirm. If it shows Err: Check wiring / Stat ID, confirm wiring is correct and check Stat ID.



Confirm Cool Call

Open the Gen X app and go to the Zone overview screen ☰, select Zone 1 by tapping on that zone. The Ring of Comfort screen should appear. Tap on ▼ in the middle of the ring and choose All Zones. Slide or Drag the Blue dot counterclockwise to lower the temperature below the current room temperature. Tap back on the phone to return to overview screen. All thermostats should have a current room temperature that is blinking Blue, indicating a Cool call. Within 2 minutes a call for Cooling will be made from the SATouchX and confirm the RTU / Split system is energized for Cooling. Go to each SATouchX and confirm that the RTU / Split system is energized for Cooling. Once all SATouchX's are confirmed operational, satisfy Cooling calls at each thermostat. At each thermostat, raise cool set point by using the UP button to raise the set point. Confirm "ON" disappears and the unit de-enerigzes. Continue to satisfy all Cool calls one at a time until all calls are satisfied.

OVERVIEW SCREEN



RING OF COMFORT

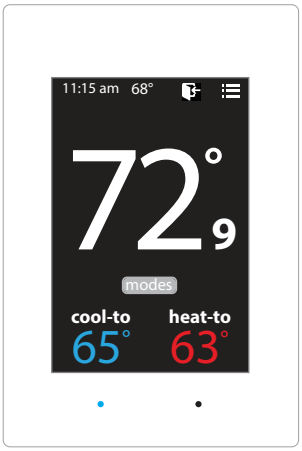


▼ ACCESS ALL THERMOSTATS









Confirm Heat Call

Open the GEN X app and go to the Zone overview screen ☰ , select Zone 1 by tapping on that zone. The Ring of Comfort screen should appear. Tap on ▼ in the middle of the ring and choose All Zones. Slide or Drag the Red dot clockwise to raise the temperature above the current room temperature. Tap back on the phone to return to zone overview screen. All thermostats should have a current room temperature that is blinking Red indicating a heat call. Within 2 minutes a call for heating will be made from the SATouchX and confirm the RTU / Split system is energized for heating. Go to each SATouchX and confirm that the RTU / Split system is energized for heating. Once all SATouchX's are confirmed operational, satisfy heating calls at each thermostat. At each thermostat, lower heat set point by using the DOWN button to lower the set point. Confirm "ON" disappears and the unit de-enerigzes. Continue to satisfy all heat calls one at a time until all calls are satisfied.

OVERVIEW SCREEN

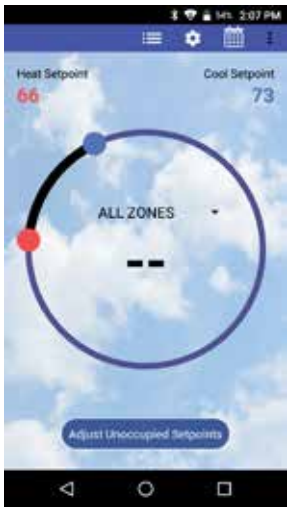


RING OF COMFORT

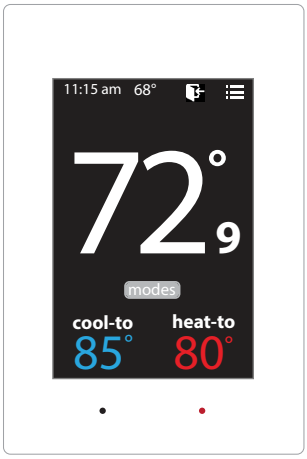


▼ ACCESS ALL THERMOSTATS









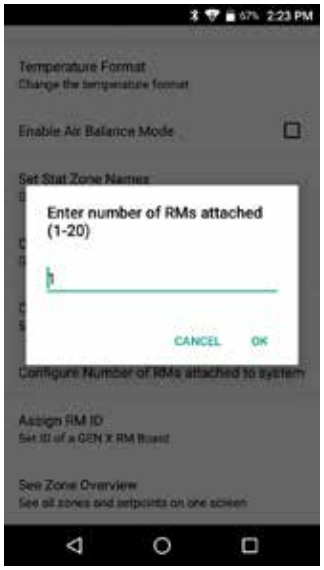
Syncing the GEN UC RM to the GEN UC Controller

Each RM controller communicates to the GEN UC over an RS485 communications buss. GEN UC is the communications hub for the system providing time clock functions along with interpreting any calls or system updates at the RM level and communicates that information to the cloud. Each RM controller must be synced with the GEN UC controller to communicate and transmit information to and from the mobile App.

Connect to the GEN UC via the mobile app. Go into the "System Configuration Menu" and select "Configure Number of RM's Attached to System". Enter the number of GEN UC RM's wired to the GEN UC controller.

While still in the "System Configuration Menu", select "Assign RM ID". Enter 1 for the first GEN UC RM in the system and press "OK". When the Blue light starts flashing on the GEN UC RM controller, press and hold the sync button on the GEN UC RM board for 15 seconds. When the light stops flashing the sync has been completed.

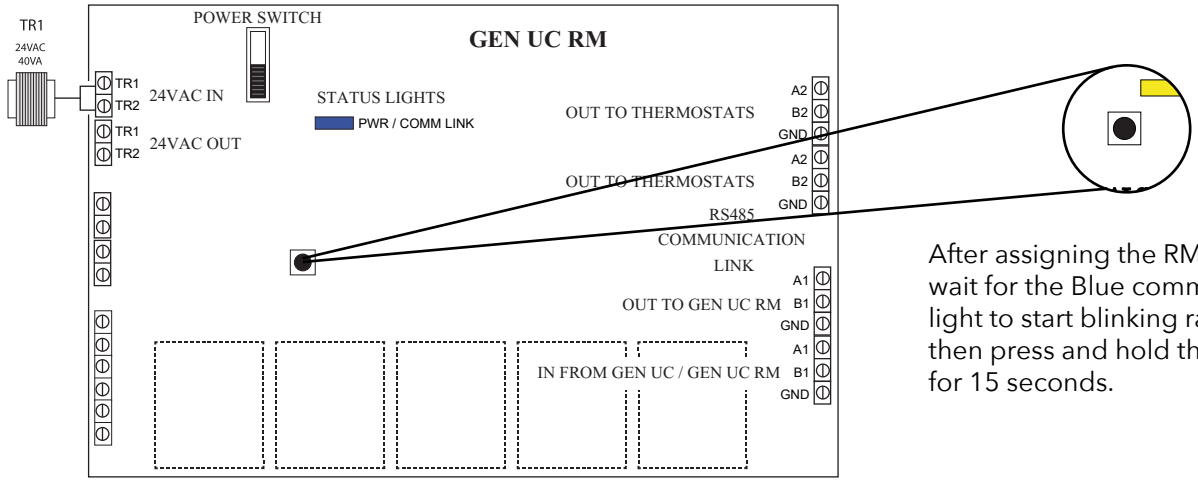
Repeat the "Assign RM ID" for each additional GEN UC RM in the system, making sure to increase the RM ID for each GEN UC RM. For example, if you have 7 GEN UC RM's in the system, they will be ID'd 1-7 in the order of how the communication wire is daisy chained.



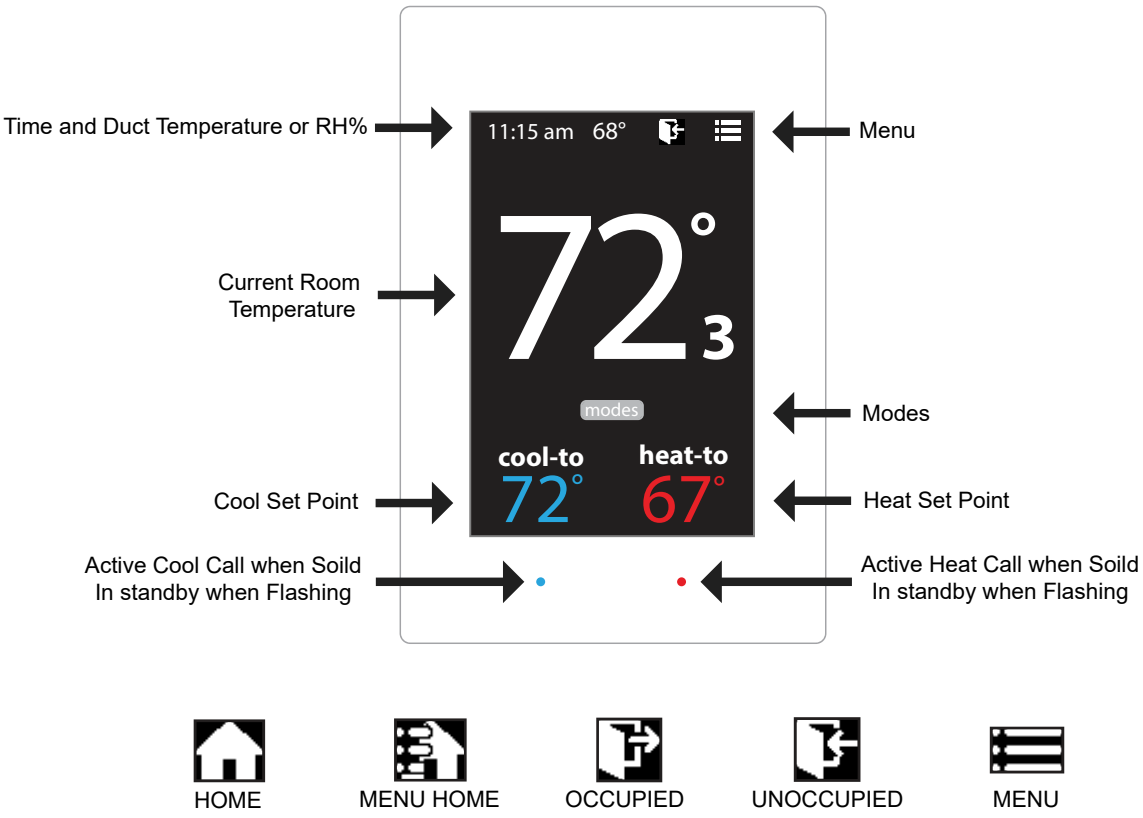
Enter number of RMs attached to the system (1-20)



Each RM needs to be assigned its own ID



After assigning the RM with its ID, wait for the Blue communication light to start blinking rapidly and then press and hold the sync button for 15 seconds.



Addressing Thermostats

Every thermostat in the system needs a unique ID ranging from 1-20. They must be in numerical order the way the communication wire is daisy chained. Confirm no duplicate addresses.

To set the stat's ID access the Advanced Configuration menu by tapping on the degree symbol next to the room temp O . The degree symbol will change from white to green and then tap

Once in the Thermostat Advanced Menu, Select **SET ID**

Use the ^ and v arrows and set the new ID ranging from 1-20

Tap to save changes, to return to the home screen tap

Select Unit Type

The SATouchX is designed as a universal GAS/ELECTRIC/HEAT PUMP thermostat. Factory default is set for GAS operations.

While in the Thermostat Advanced Menu, Select Unit Type

Select the the desired unit type operation

Tap to save changes, to return to the home screen tap

Display Temperature Calibration

Thermostats are calibrated at the factory and should require no further adjustment. However, the display space temperature may be field calibrated by the following procedure:

To access the Thermostat Configuration Menu: Tap 

While in Thermostat Configuration Menu, Select **Calibrate Display**

Use the  and  arrows to calibrate the thermostat display to a external temperature probe temperature reading.

Tap  to save changes, to return to the home screen tap 

Adjusting Set Points

The Heat or Cool set points are displayed at the bottom of the screen. To adjust the set points, tap on the heat-to or cool-to temperatures; the set points will be displayed on the screen.

Use the  and  arrows over the flame/snowflake icons to set the desired heat and cool set points.

Tap  to save changes

Changing Mode

The thermostats are auto changeover, but specific modes may be selected. Heat/Cool mode is the default.

System Heat/Cool - Tap on modes , select “Heat/Cool”. Tap  to save changes

System Heat Only - Tap on modes , select “Heat Only”. Tap  to save changes

System Cool Only - Tap on modes , select “Cool Only”. Tap  to save changes

System Off - Tap on modes , select “Off”. Tap  to save changes

Override Operation

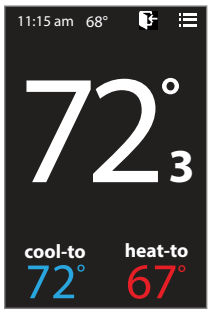
When the thermostat displays the unoccupied icon  a 2-hour temporary override may be initiated by tapping the  “Override” will appear. When additional override time is required, tap the unoccupied icon again.

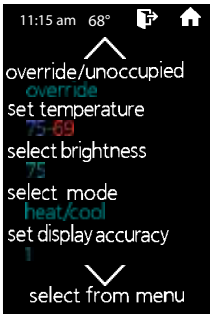
THERMOSTAT CONFIGURATION MENU

To access the Thermostat Configuration Menu: Tap 

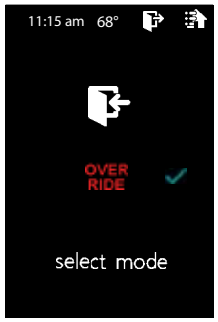
The **THERMOSTAT CONFIGURATION MENU** allows you to:

Override/Unoccupied	Select Unoccupied Light	Current Schedule	Calibrate Display
Set Temperature	Mode	Time & Date	
Select Occupied Light	Set Display Accuracy	Temperature F/C	





OVERRIDE/UNOCCUPIED



When a thermostat displays "unoccupied mode ", a 2-hour temporary override maybe initiated.

While in the Thermostat Configuration Menu, Select **Override/Unoccupied**

Tap "**override**" to place the thermostat into a override mode.

Tap  to save changes, to return to the home screen tap 

Shortcut note: Tap on  to place the thermostat into 2 hour override mode

SET TEMPERATURE



When in the "Set Temperature" screen you can adjust the heat/cool set points to their desired temperature settings.

While in the Thermostat Configuration Menu, Select **Set Temperature**

Use the  and  arrows over the flame/snowflake icons to set the desired heat and cool set points.

Tap  to save changes, to return to the home screen tap 

Shortcut note: Tap on **cool to/heat to** to adjust setpoints.

SELECT OCCUPIED LIGHT



The brightness of the thermostat during occupied mode is adjustable from 100% down to off .

While in Thermostat Configuration Menu, Select **Occupied Light**

Use the ^ and v arrows to select the desired brightness.

Tap  to save changes, to return to the home screen tap 

Note: If "off" is selected, just touch stat to wake it up.

SELECT UNOCCUPIED LIGHT



The brightness of the thermostat during unoccupied mode is adjustable from 100% down to off .

While in Thermostat Configuration Menu, Select **Unoccupied Light**

Use the ^ and v arrows to select the desired brightness.

Tap  to save changes, to return to the home screen tap 

Note: If "off" is selected, just touch stat to wake it up.

MODE



Thermostat mode allows the thermostat to be set to heat/cool, cool only, heat only of off operation.

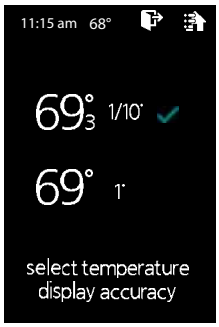
While in the Thermostat Configuration Menu, Select **Mode**

Select the the desired operation mode

Tap  to save changes, to return to the home screen tap 

Shortcut note: Tap modes on the home screen to access the mode selection screen

SET DISPLAY ACCURACY



Display accuracy allows the thermostat to display the room temperature in 1/10° or 1°.

While in the Thermostat Configuration Menu, Select **Set Display Accuracy**

Select the the desired display accuracy

Tap to save changes, to return to the home screen tap

CURRENT SCHEDULE



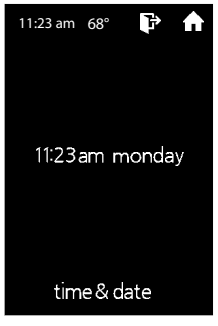
View the current thermostat schedule, given by the Gen UC system

While in the Thermostat Configuration Menu, Select **Current Schedule**

This allows you to view the schedule for that zone. Changes to the schedule are done through the Gen X app.

Tap to go back to the menu, to return to the home screen tap

TIME & DATE



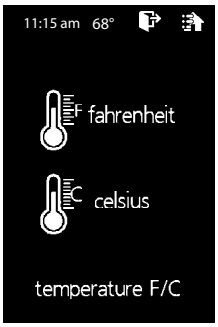
View the current time and day, given by the Gen UC system

While in the Thermostat Configuration Menu, Select **Time & Date**

View the current time and date on the Gen X system

Tap to go back to the menu, to return to the home screen tap

TEMPERATURE F/C



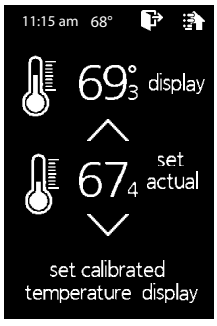
The SATouchX can be configured for F° or C° operation through the Gen X app

While in the Thermostat Configuration Menu, Select **Temperature F/C**

View the current temperature operation

Tap to go back to the menu, to return to the home screen tap

CALIBRATE DISPLAY



Thermostat is equipped with an accurate temperature sensor. If you require field calibration, follow the steps below.

While in Thermostat Configuration Menu, Select **Calibrate Display**

Use the and arrows to calibrate the thermostat display to a external temperature probe temperature reading.

Tap to save changes, to return to the home screen tap

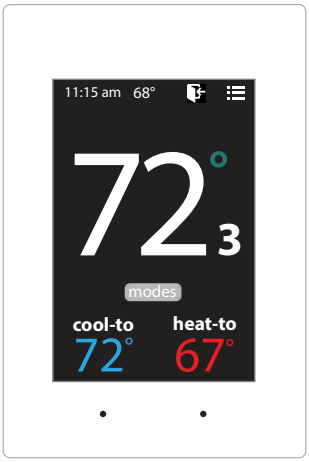
THERMOSTAT ADVANCED MENU

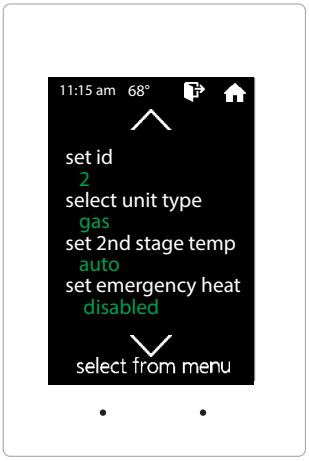
To access the Thermostat Advanced Menu: Tap on the degree symbol next to the room temp

The degree symbol will change color from white to green and then tap

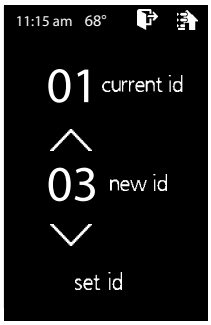
The **THERMOSTAT ADVANCED MENU** allows you to:

Set ID	Select Fan Mode	Set Emergancy Heat	Temp Source
Select Unit Type	Set 2nd Stage Temp	Diagnostic	Menu Type





STAT ID



Every thermostat in the system needs a unique ID. They must be ID'ed in numerical order the way the communication wire is daisy chained. No duplicate addresses.

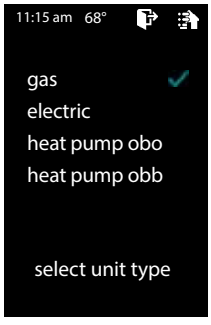
While in the Thermostat Advanced Menu, Select **SET ID**

Use the ^ and v arrows to set the new ID ranging from 1-20

Tap to save changes, to return to the home screen tap

Note: (All thermostats recieve a unique ID 001 to 020, maximum of 20 thermostats per GEN UC and GEN UC RM controllers.)

SELECT UNIT TYPE



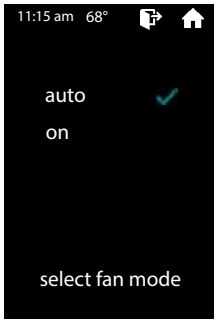
The SATouchX is designed as a universal GAS/ELECTRIC/HEAT PUMP thermostat. Factory default is set for GAS operations.

While in the Thermostat Advanced Menu, Select **Unit Type**

Select the the desired unit type operation

Tap to save changes, to return to the home screen tap

SELECT FAN MODE



Fan operation is configured for either Fan ON or AUTO. When system is configured for ON operation, the Fan will run during Occupied schedule and will revert to Auto operations during Unoccupied schedule. When thermostat is configured for Auto operation, Fan will only run when there is a call for heating or cooling.

While in the Thermostat Advanced Menu, Select **Fan Mode**

Select the the desired fan operation “Auto” or “On”.

Tap to save chnages, to return to the home screen tap

SET 2ND STAGE TEMP



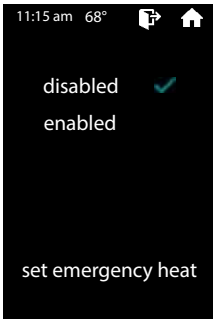
The SATouchX’s 2nd stage operation is based on room temperature. Staging is adjustable from 2°- 8° from thermostat room temperature.

While in the Thermostat Advanced Menu, Select **Set 2nd Stage Temp**

Use the and arrows to set the 2nd stage temp range from 2°-8°

Tap to save chnages, to return to the home screen tap

SET EMERGANCY HEAT



The SATouchX has an emergency heat function that will lock out the compressor, and energize the Aux heat in the unit.

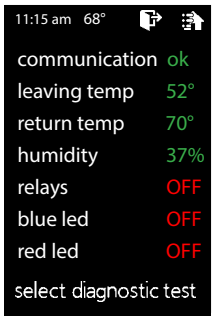
While in the Thermostat Advanced Menu, Select **Set Emergancy Heat**

Select “Enabled” for emergancy heat operation.

Tap to save changes, to return to the home screen tap

Note: Only emergancy heat calls will be seen when enabled.

DIAGNOSTIC



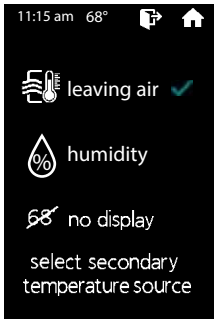
The SATouchX Diagnostic screen will allow you to confirm communication with the GEN UC controller and allow you to confirm the relays operation, LED operation and report the leaving/return temperatures as well as the relative humidity.

While in the Thermostat Advanced Menu, Select **Diagnostic**

Tap **relays** to confirm they energize and de-energize
Tap **blue led** to confirm the blue led illuminates
Tap **red led** to confirm the red led illuminates

Tap to exit diagnostic screen, to return to the home screen tap

TEMP SOURCE



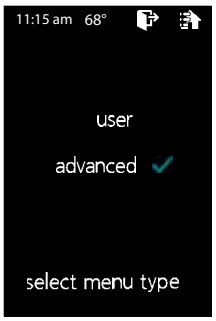
Temp source allows the thermostat to display the leaving air temperature or the relative humidity at the top on the home screen. A LAT sensor needs to be installed to report this reading. It will read 00 if no sensor is installed.

While in the Thermostat Advanced Menu, Select **Temp Source**

Select leaving air, humidity or no display to diplay or not display the temperature

Tap to save changes, to return to the home screen tap

MENU TYPE



Menu type will allow you to see the advanced menu options under the user menu when advanced is selected.

While in the Thermostat Advanced Menu, Select **Menu Type**

Select **user** to hide the advanced options
Select **advanced** to show the advanced options under the user menu

Tap to save changes, to return to the home screen tap

The GEN UC can be configured to connect directly wirelessly between a mobile device for the purpose of communication and configuration. A connection between mobile devices is done with a static IP address. The following steps below outline this procedure.

Wireless connection for **Android** devices

1. Ensure that an Ethernet cable is NOT plugged into the GEN UC (when a cable is plugged in the WiFi capability is automatically disabled).

2. Download the GEN X App from the Google Play store and install it on your mobile device.

3. On your mobile device open your Wi-Fi settings and scan for networks.

4. If the GEN UC is powered ON and within range **"GENX"** should appear in the list of the networks available to connect to.



5. Tap on **"GENX"** in the list of networks, your mobile device will attempt to connect to the GEN X and a popup list should appear. On the pop-up list select **"Show advanced options"**. If the popup list does not appear press and hold **"GENX"** until a popup list does appear, then tap **"Modify network"** and then select **"Show advanced options".**



6. Under **"IP settings"** change **"DHCP"** to **"Static"**, under the **IP address** field type in 10.10.10.10, under the **Gateway** field type in 10.10.10.1 under the Subnet field (if present) type in 255.255.255.0 and then save the settings or tap **"Connect".**

7. The word **"Connected"** should appear under **"GENX"** in the network list of your mobile device.

8. Open the GEN X mobile app, tap **"Yes"** for local access, tap **"SCAN LAN FOR GEN X"** and once the scan is complete select the GEN XV from the drop down list at the top of the app.

9. Your mobile device is now connected to the GEN UC via wireless connection. Configuration changes can now be made to the GEN UC. If the GEN UC is to be connected to an existing wireless network please call Zonex tech support to help with this set up. **Please note that the GEN UC Wi-Fi range is approx 50 feet.**

Wireless connection for **Apple** devices

1. Ensure that an Ethernet cable is NOT plugged into the GEN UC (when a cable is plugged in the WiFi capability is automatically disabled).

2. Download the GEN X App from the Apple App Store and install it on your mobile device.

3. On your mobile device tap on **Settings** and then tap on **Wi-Fi**. Ensure **Wi-Fi** is turned on.

4. If the GEN UC is powered ON and within range **"GENX"** should appear under **CHOOSE A NETWORK**. Tap on **GENX** once, **GENX** will then be automatically moved under **Wi-Fi**, tap **GENX** one more time.





5. Under **IPV4 ADDRESS** tap **Configure IP**. On the next menu tap **Manual**. A menu will appear just below labeled **MANUAL IP**.

6. In the **IP address** field type in 10.10.10.10, in the **Subnet Mask** field type in 255.255.255.0 and in the **Router** field type in 10.10.10.1, and then tap **Save**.

7. Once connected the mobile device should have a check mark next to **GEN X** indicating a connection.

8. Open the GEN X mobile app for local access, tap **"SKIP ACCOUNT LOGIN -- LOCAL CONNECTION ONLY"** and once the scan is complete select the GEN XV from the drop down list at the top of the app.

9. Your mobile device is now connected to the GEN UC via wireless connection. Configuration changes can now be made to the GEN UC. If the GEN UC is to be connected to an existing wireless network please call Zonex tech support to help with this set up. **Please note that the GEN UC Wi-Fi range is approx 50 feet.**



An account needs to be created to access the GEN UC system over the internet. Follow the steps below on how to create an account.

Open the Zonex mobile app and go to the log in screen.

Select - **CREATE NEW ACCOUNT**



Enter your information to sign up

USERNAME (case senstive)

PASSWORD (case senstive)

GIVEN NAME

EMAIL ADDRESS

PHONE NUMBER



A confirmation code will be emailed to confirm the new account creation

ENTER THE CONFIRMATION CODE AND CONFIRM

NOTE: If you do not receive the confirmation code email, check the spam folder.

Once this step is completed you will need to contact Zonex tech support at 800-228-2966 to confirm and complete the account set up.

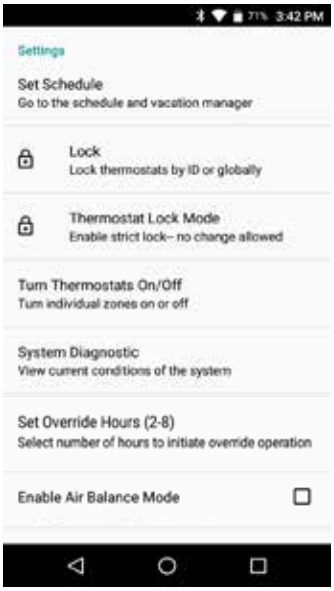
GEN UC MOBILE APP

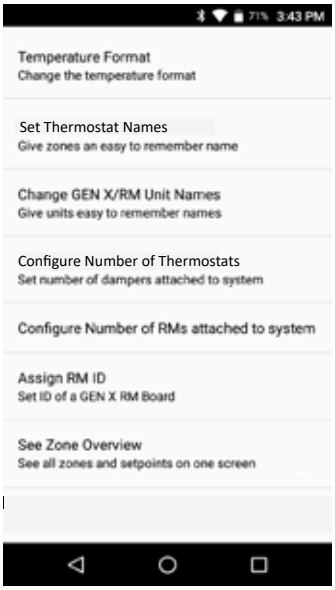
The mobile app interacts with the GEN UC controller via the Wi-Fi network and initiates control decisions for the system. Through the GEN UC mobile app you can coordinate global or individual schedules for the system, lock thermostats individually and provide a user interface to make adjustments and establish master temperature settings individually or globally for the system. This user interface provides diagnostic functions to streamline system troubleshooting along with password protection and many additional functions.

You will find outlined below the 14 unique functions that the GEN UC offers:

System Configuration Menus

System feature changes are configured through the GEN UC Mobile App for all thermostats and the GEN UC System controller. **Note: Not all menu items apply to the GEN UC**





MENU FEATURES:

01 SET SCHEDULE / VACATION SCHEDULE
02 LOCK
03 TURN THERMOSTATS ON/OFF
04 SYSTEM DIAGNOSTIC
05 SET OVERRIDE HOURS
06 ENABLE WARM UP MODE
07 TEMPERATURE FORMAT F° / C°
08 SET THERMOSTAT NAMES
09 CHANGE GEN UC / RM UNIT NAME
10 CONFIGURE NUMBER OF THERMOSTATS
11 CONFIGURE NUMBER OF RM'S ATTACHED TO SYSTEM
12 ASSIGN RM ID
13 SEE ZONE OVERVIEW
14 CHANGE ADR SETTING

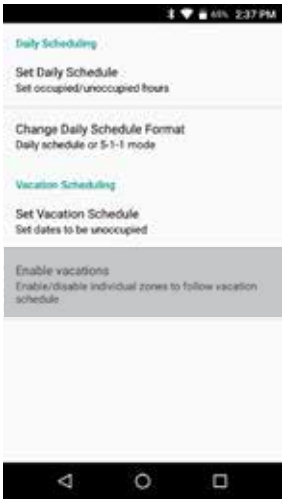
01 SCHEDULE / VACATION













Tap **Set Schedule or Tap on** 
Tap **Change Daily Schedule format**
Choose **your format 5-1-1, 24/7 or Daily Schedule**
Tap **Set Daily Schedule**
Tap **M-F ALL**
Choose **Set Occupied Time or Set Unoccupied**
Set **Occupied Start Time, Press Ok**
Set **Occupied End Time, Press Ok**

Tap **Sat or Sun ALL**
Choose **Set Occupied Time or Set Unoccupied**
Set **Occupied Start Time, Press Ok**
Set **Occupied End Time, Press Ok**

SETTING 2ND DAILY SCHEDULE:
Tap **Set 2nd Daily Schedule**
Tap **M-F ALL**
Choose **Set Occupied Time or Set Unoccupied**
Set **Occupied Start Time, Press Ok**
Set **Occupied End Time, Press Ok**

Tap **Sat or Sun ALL**
Choose **Set Occupied Time or Set Unoccupied**
Set **Occupied Start Time, Press Ok**
Set **Occupied End Time, Press Ok**

VACATION SCHEDULE
Tap **Set Schedule**
Choose **Set Vacation Schedule**
Press Add Vacation
Tap **a Date on the Calendar to Start Vacation and another to End Vacation, Press Ok**
Tap **Enable Vacations**
Choose **Individual zones or All Zones to follow vacation schedule**

TO NAME A VACATION SCHEDULE
Tap **the Vacation schedule that you want to name**
Tap **Change name and enter the new name, Press Ok**

TO DELETE OR EDIT A VACATION SCHEDULE
Tap **the current Vacation Schedule you want to Delete or Edit**
Tap **Delete or Edit**

02 LOCK THERMOSTATS



Thermostats can be locked independently or globally through your Mobile device, when a thermostat is locked the end user will have limited operation (+/- 2°) or no variance (0°) of the theromstat from heating or cooling set points.

Tap **Lock Thermostats**
Select a **Stat** or **All Zones** and choose **+/- 2°** or **0°** lock.

◉ Confirms thermostat is locked.

03 TURN THERMOSTAT ON / OFF



The thermostat On and Off function will allow you to turn individual thermostats On and Off.

Press **Turn Thermostat On/Off**
Select **the thermostat or thermostats you want to turn Off or On**

☑ To turn OFF the thermostat uncheck the box

Note: Off is displayed on the thermostat.

04 SYSTEM DIAGNOSTIC



Allows the user to review the current conditions for the GEN UC system: Number of active thermostats in the system, how many thermostats are communicating, what thermostats are turned Off, Unit Status, Leaving Air Temperature, Return Air Temperature and Humidity all from your Mobile Device.

Tap **System Diagnostic or access from ⋮ Extended feature menu.**

Scroll **Down to view Active Thermostats and unit conditions**

By tapping on a thermostat, under **Thermostat Status** it will take you to that thermostat's set points and current room temperature.

Troubleshooting Note: System Diagnostic is a great tool to use to confirm communications with thermostats and detect communication errors or wiring errors in the system.

05 OVERRIDE HOURS



Select the number of hours to initiate override operation. Select 2-8 hours in the setback mode. Tap once on the thermostat to initiate override operation. The "override" can be tapped again to terminate override operation.

Select **Set Override Hours**

Enter **2-8 hours for override operation, Press OK**

This is a global function. All thermostats on this unit will operate with the override time selected.

06 ENABLE WARM UP MODE



In cold climates a MORNING WARM UP sequence will assist in preheating the building prior to occupancy. The GEN UC system provides a strategy for morning warm up based on a sophisticated algorithm built into the system controller. When enabled, the system will switch from Unoccupied to Occupied two hours prior to system start time and run heating for 20 minutes to evaluate time needed to raise building temperature. After 20 minutes system will return to Unoccupied mode. Using the information gathered from the 20 minute warm up evaluation, thermostats will reset individual occupied start times to provide morning warm up for each unit in the building.

☑ **Enable Warm up Mode (Enabled when box is checked)**

07 TEMPERATURE FORMAT

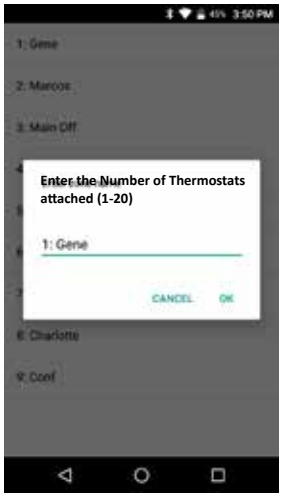


The GEN UC may be configured for F° or C° operations.

Press **Temperature Format**
Select **F° or C°**

08 SET THERMOSTAT NAMES

This allows you to give each thermostat a specific name.



Select **Set Thermostat Names**
Select **Thermostat that you want to name**
Enter name of thermostat, Press OK
Repeat for all additional thermostats that need to be named

09 CHANGE GEN UC / RM UNIT NAMES

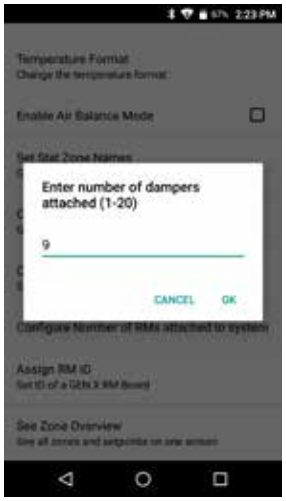
This allows you to give the GEN UC / GEN UC RM's a specific name.



Select **Change GEN UC / RM Unit Names**
Select **Unit you want to name**
Enter name for that unit, Press OK
Repeat for all additional units that need to be named.

10 CONFIGURE NUMBER OF THERMOSTATS

Installer should set the number of thermostats in the system. This reduces the need for the GEN UC controller to poll and review each thermostat. Installer can set the number of thermostats from 1-20.



Select **Number of Thermostats**
Indicate how many units in this system 1-20, Press OK

11 CONFIGURE NUMBER OF RM'S ATTACHED TO SYSTEM

Configuring the number of RM's attached to system allows the GEN UC to know how many RM's it will be working with. It also needs to know how many RM's there are to be able sync properly.



Select **Configure Number of RM's Attached to System.**
Indicate how many RM's are in the building.
Note: Each RM can support up to 20 thermostats.

12 ASSIGN RM ID

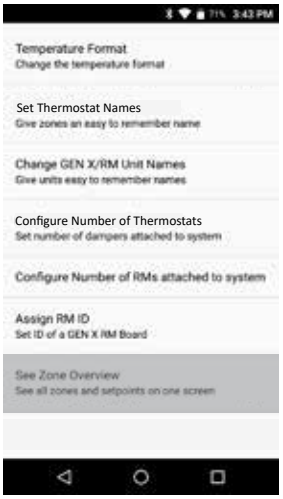


Each GEN UC RM receives an ID number ranging from 1-20. This allows the GEN UC mobile app the ability to communicate to the RM's through the GEN UC controller. The RM's need to be ID'd and synced in the order of the daisy chain.

Select **Assign RM ID**
Enter the ID of the first RM in the system, press OK

When the RM blue light starts flashing rapidly, hold the sync button on the RM controller that you wish to sync. When the light stops flashing, sync is complete.

13 SEE ZONE OVERVIEW





Zone overview will let you review all the thermostats, current room temperatures, active cooling calls in Blue, active heating calls in Red along with Occupied and Unoccupied set points.

Select **Zone Overview to see all thermostat set points and current room temperatures**

14 CHANGE ADR SETTINGS



When the 3rd party device receives an ADR signal from the utility service provider its contacts close, the GEN X & RM's set back their thermostats 4° for both the heating & cooling modes and lock the thermostat set points so they cannot be adjusted at the thermostat during the ADR event. Once the ADR event has concluded the thermostats unlock and return to their original set points.

Tap **Change ADR Settings**
Select the zone or zones you want to enable

☑ To enable the thermostat for ADR

The Extended Menu Options ⋮ will allow access to additional control systems tied to the GEN UC controller or account, check the system diagnostic, view contractors information and log out or exit the app.

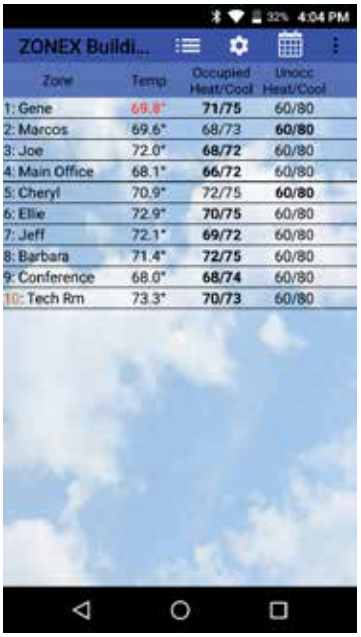
System Diagnostic - Gives an overview of the system you are currently connected to including number of Thermostats the system is configured for, Leaving, Return & Outside air temps, System Status (Heat, Cool or Vent operation), number of Heat and Cool calls and Thermostat Status.

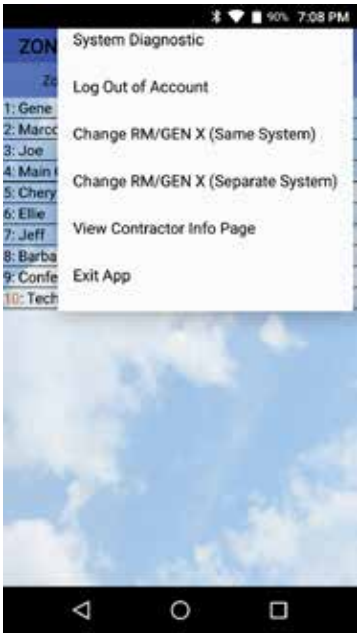
Log Out of Account – Will log you out of your account and takes you back to the option screen for logging in to the system over the internet or accessing a system on the same local network that your mobile device is also connected too.

Change RM/GEN X (Same System) – Allows you to switch between a GEN UC and RM's on the same system you are currently connected to. This option can be used for over the internet or local network connections.

Change RM/GEN X (Separate System) – Allows you to connect to any of the GEN UC systems that are associated with your user account. This option is used for over the internet connections only.

Exit App – Closes the GEN X app.





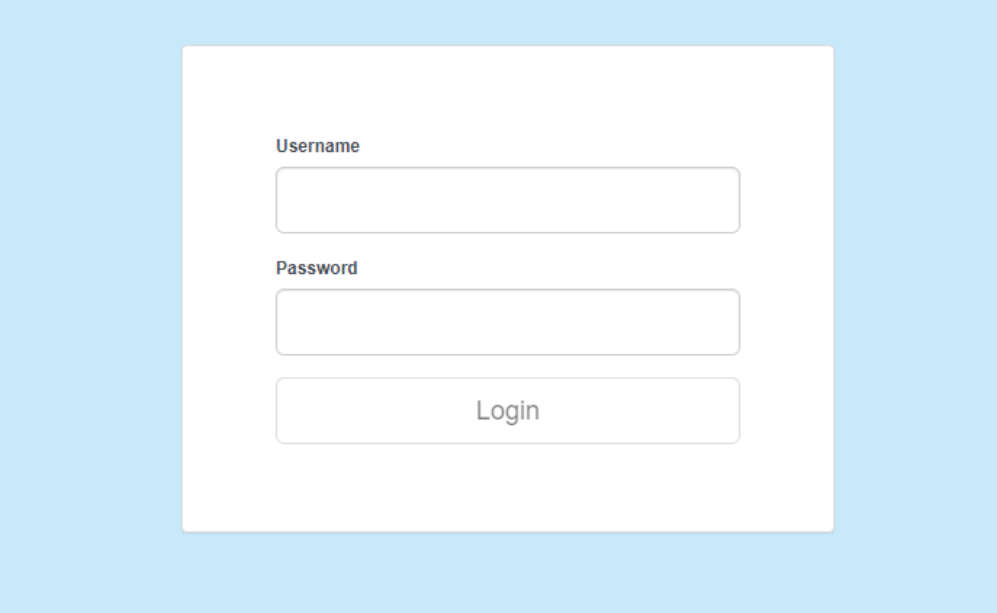
GEN X WEB-PORTAL LOGIN - END USER INTERFACE

The GEN UC controller can be accessed from any web browser. Accesing the GEN UC over the internet requires a user name and password that is set up through the Zonex moblie app and confirmed by Zonex tech support.

If you need help setting up an account call Zonex tech support at 800-228-2966.

To access the GEN UC go to: www.genxcontrol.com

Enter the user name and password: Click Login



END USER INTERFACE OVERVIEW

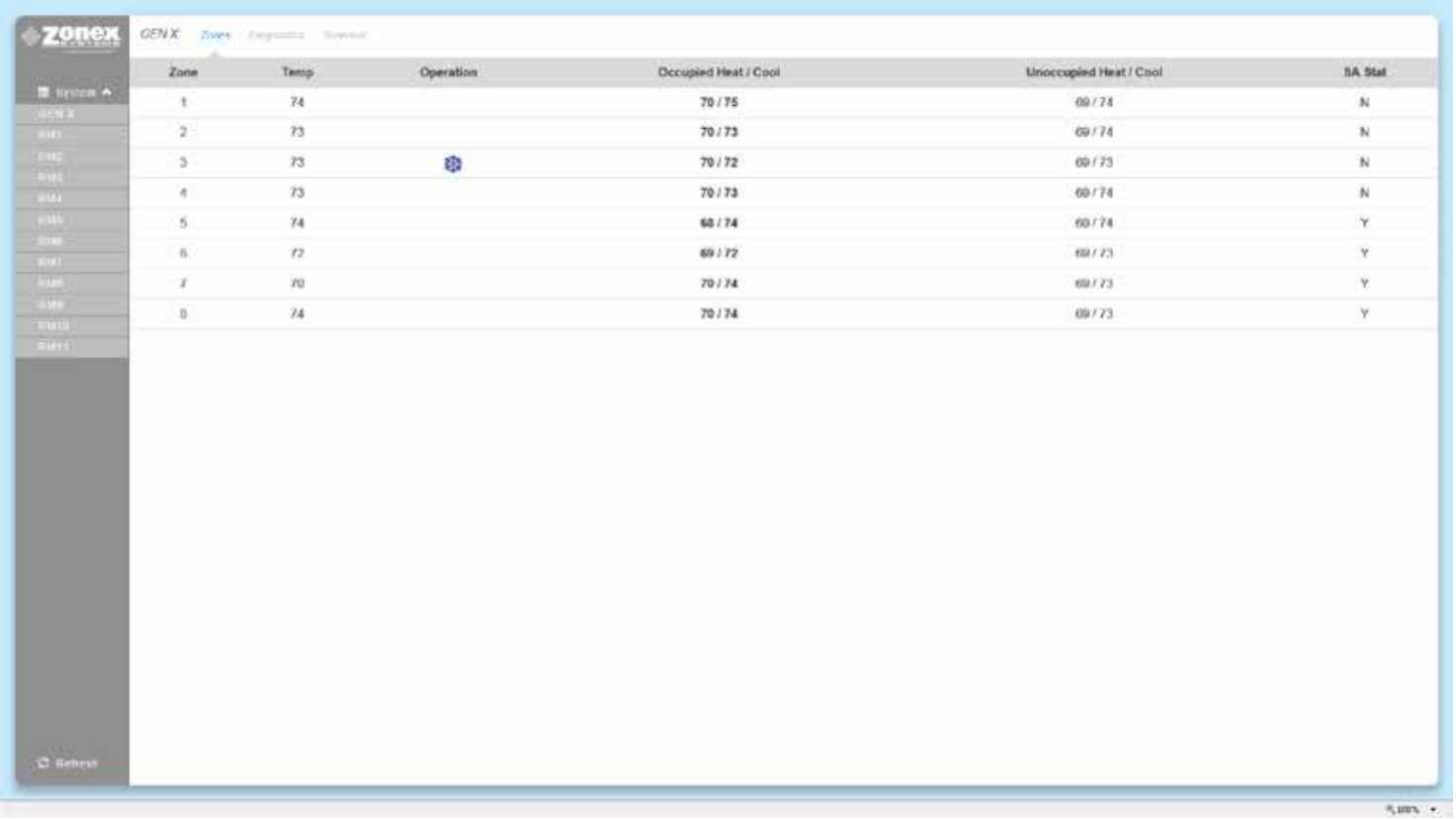
You can review and perform the following:

-Review all zones on a system by system basis
-Change occupied and unoccupied thermostat setpoints
-Lock/unlock thermostats
-Review the system status, leaving and return air temperatures
-Review and change zone schedules and vacation days
-Review and change zone names
-Set temperature format

ZONE OVERVIEW

Once you have logged into the end user interface you will see all the thermostats associated with the GEN UC controller.

To see other zoned roof top units or split systems. Click in the left hand column, a drop down will appear. Click on the RM controller that you wish to view.



Note: If the web-portal doesn't seem to load right, delete the cash and cookies in the web browser and reload the web-portal.

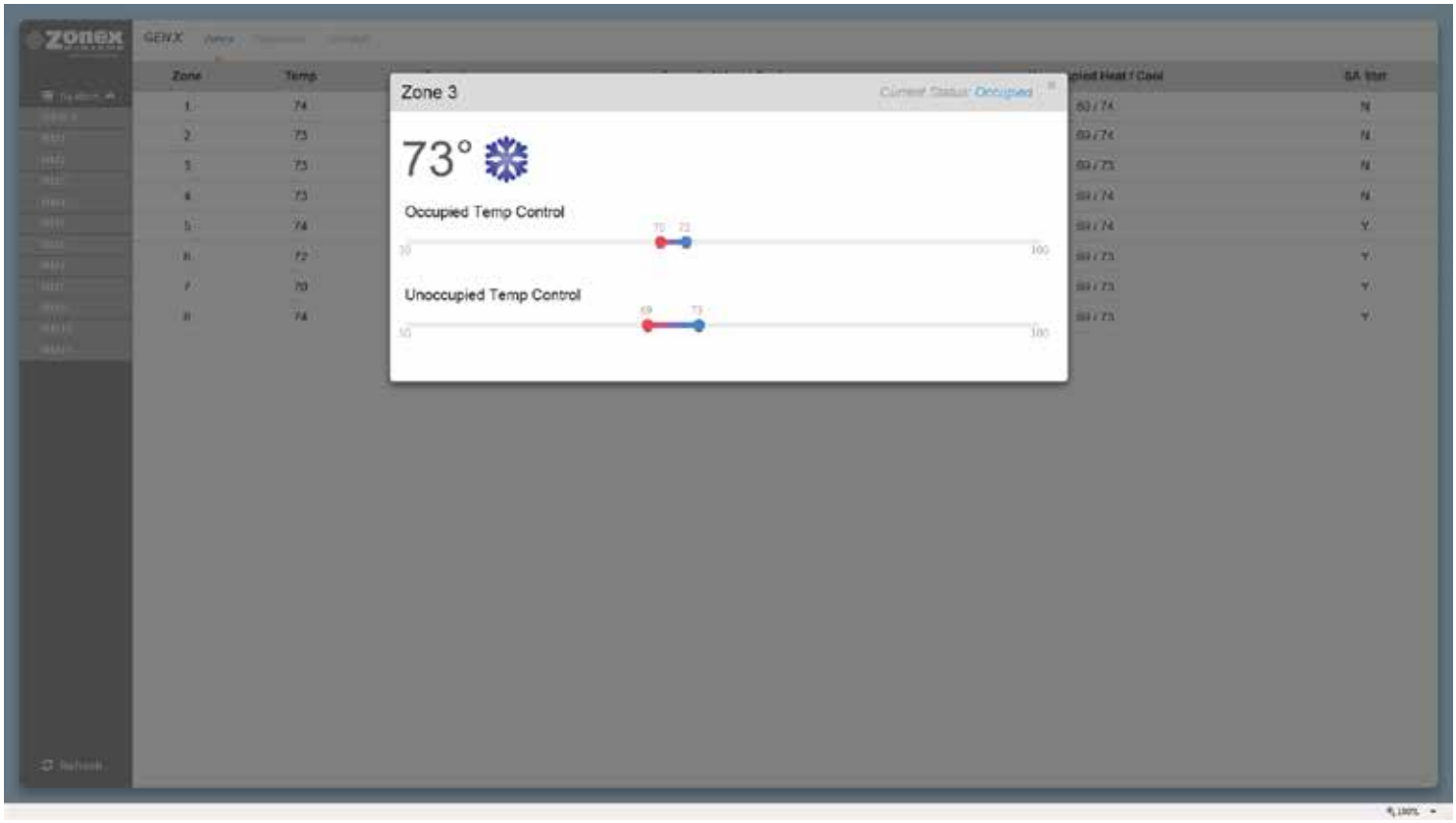
CHANGING THERMOSTAT SETPOINTS

To change temperatures on a thermostat. Click the zone you wish to change the temperature on.

To change either the Cool set point (Blue Dot) or Heat set point (Red Dot) slide the corresponding dot to the left to lower the temperature and to the right to raise the temperature. After making temperature changes click on the X in the upper right corner of the pop up box to exit this screen. Changes will be transmitted to thermostats remotely.

Both Occupied and Unoccupied set points can be changed at this screen.

Note: The system is designed to maintain a 2° dead band between the heating and cooling set points.



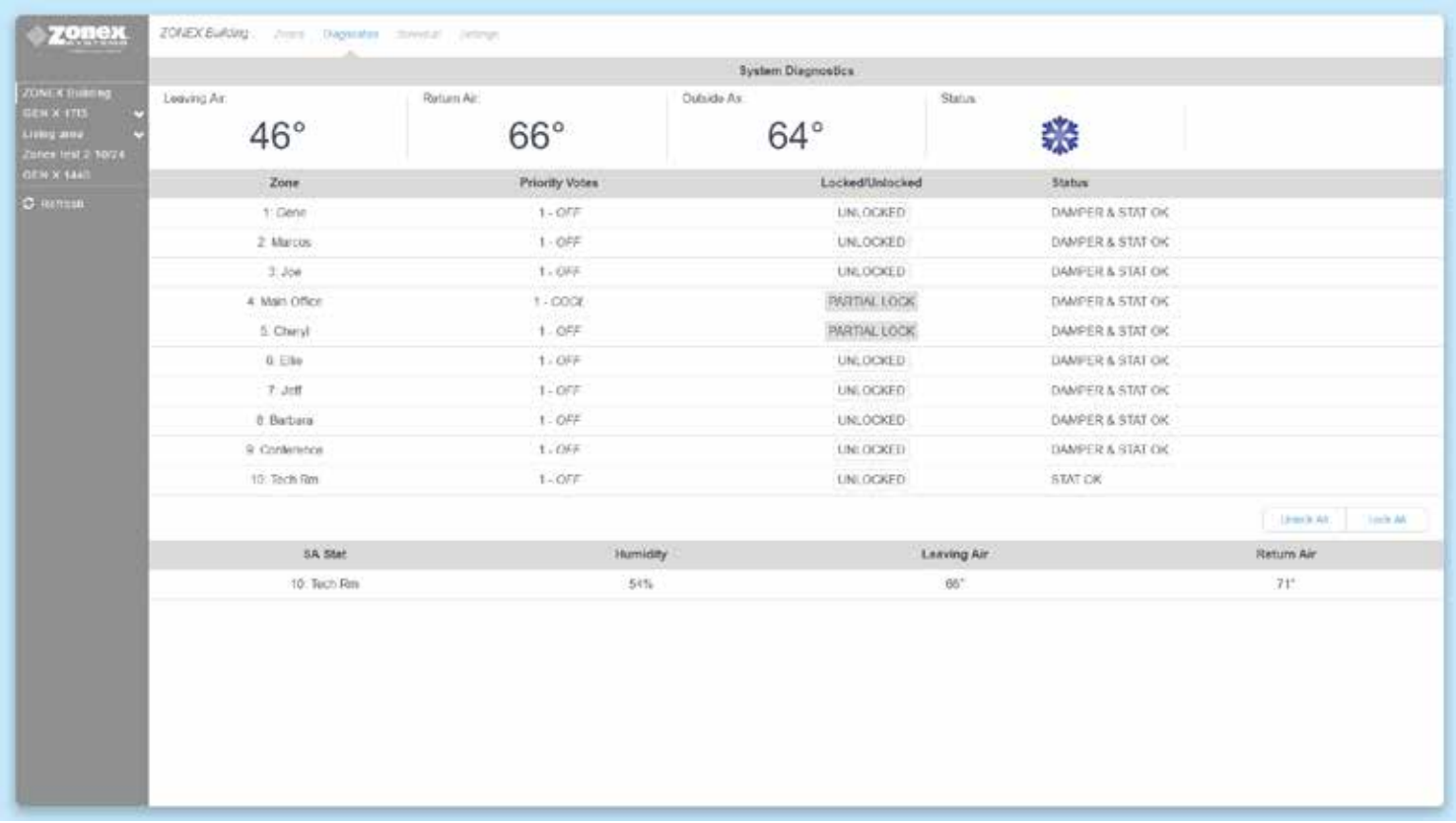
DIAGNOSTICS SCREEN

The diagnostic screen allows you to view the leaving, return, and outside air temperatures and the current status of the system as well as the mode of operation the thermostat is calling for (Cool, Heat, or Off/No Call).

The buttons under the Locked/Unlocked column are used to change thermostats so they can be LOCKED with 0° variance, PARTIAL LOCK +/- 2° or UNLOCKED. If you wish to lock or unlock all zone thermostats click on Unlock All / Lock All in the bottom right corner below the last zone status.

The Status column indicates the current status of communication between the thermostat and GEN UC controller.

If you have standalone thermostats (SATouchX) connected to the GEN UC/ GEN UC RM controllers, the humidity, leaving and return air temperatures are displayed at the bottom of the diagnostic screen.



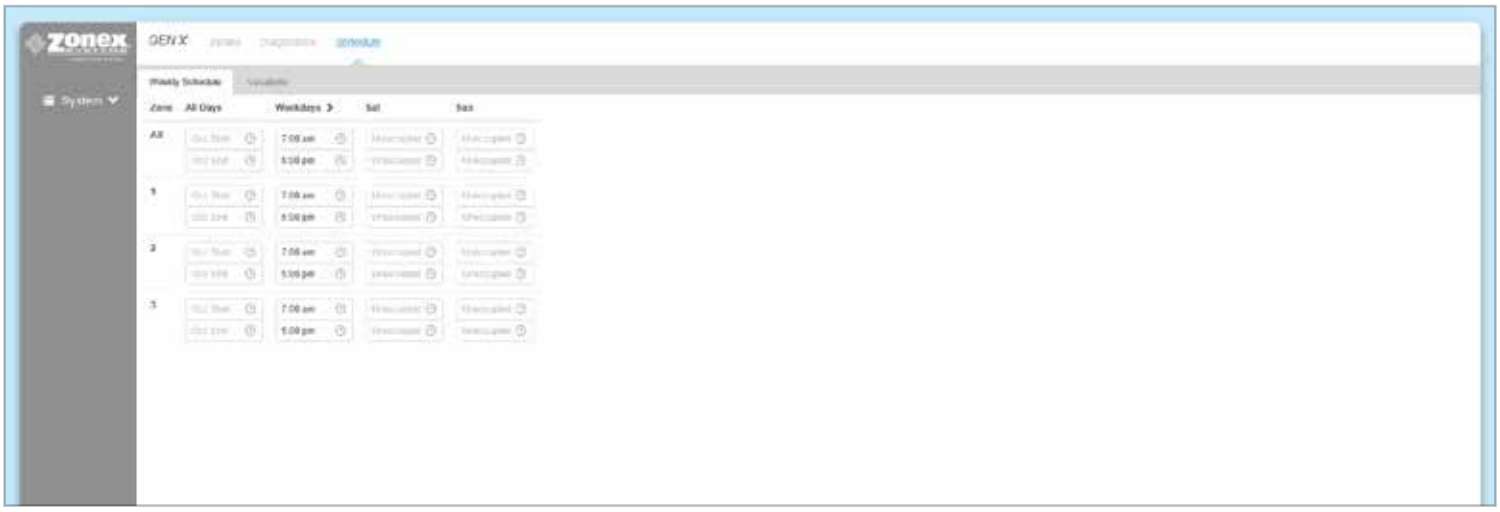
SCHEDULE / VACATION SET UP

To set up schedules for the thermostats, click on Schedule.

To set the same schedule for all thermostats for all 7 days click on Occ Start under All Days in the All row. Select the time (hour, minute, and am/pm) you want the thermostats to start cooling / heating the zones. Next click on Occ End and enter the time you want the thermostats to stop cooling / heating the zones.

To set the schedule for all thermostats for weekdays ONLY (Monday - Friday) click on the field under the Weekdays column and the All row and follow the steps for changing time outlined above. Repeat this process for Saturday and Sunday fields. If a zone is to be unoccupied for the entire day select Unoccupied All Day.

Each thermostat can also be configured to follow its own unique schedule by clicking on the appropriate field in the row that corresponds to the thermostat you wish to setup.

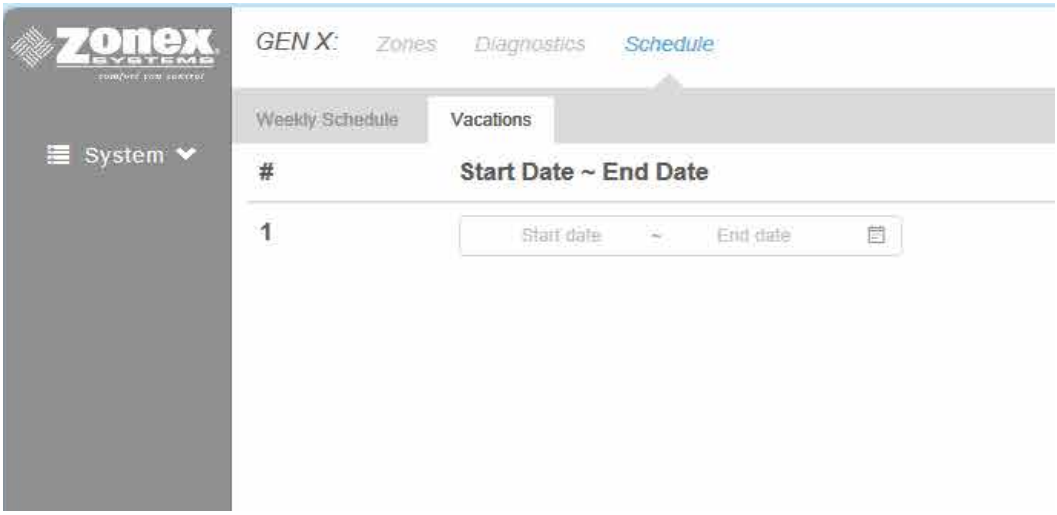


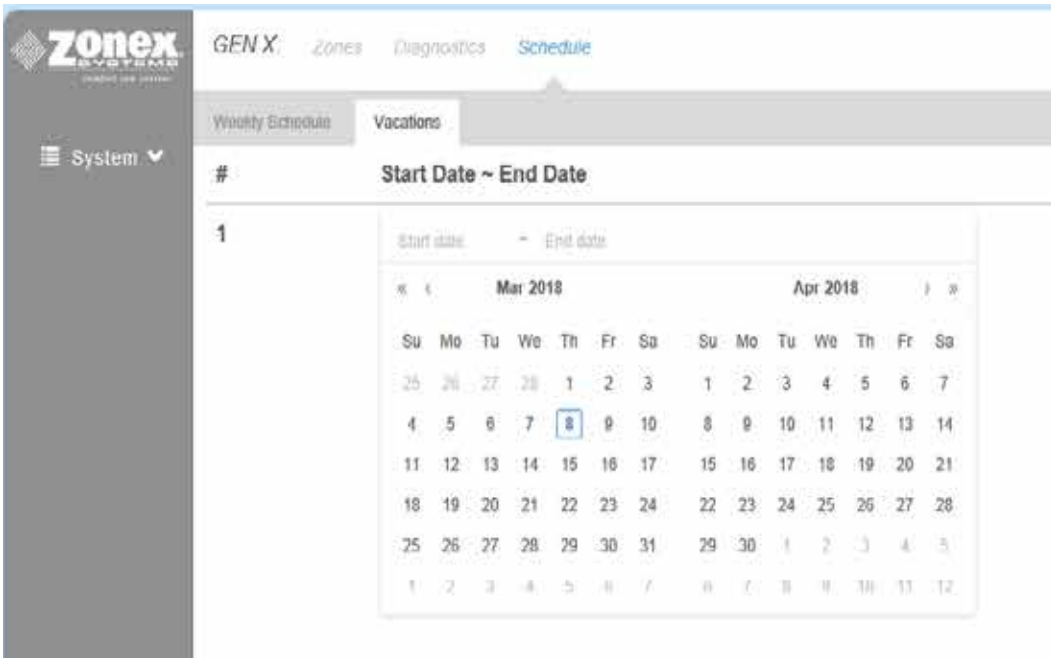
VACATION SET UP

To set a new vacation schedule or modify an existing one click on the Schedule menu and then click on the Vacations tab.

Under the Start Date ~ End Date column click on the Start date field and a calendar will pop up. The first date selected is the vacation start date and second date selected is the vacation end date. The system will go into unoccupied mode during these days and will follow the normal schedule thereafter.

To delete a vacation schedule simply click on the DELETE button next to the one you wish to delete.



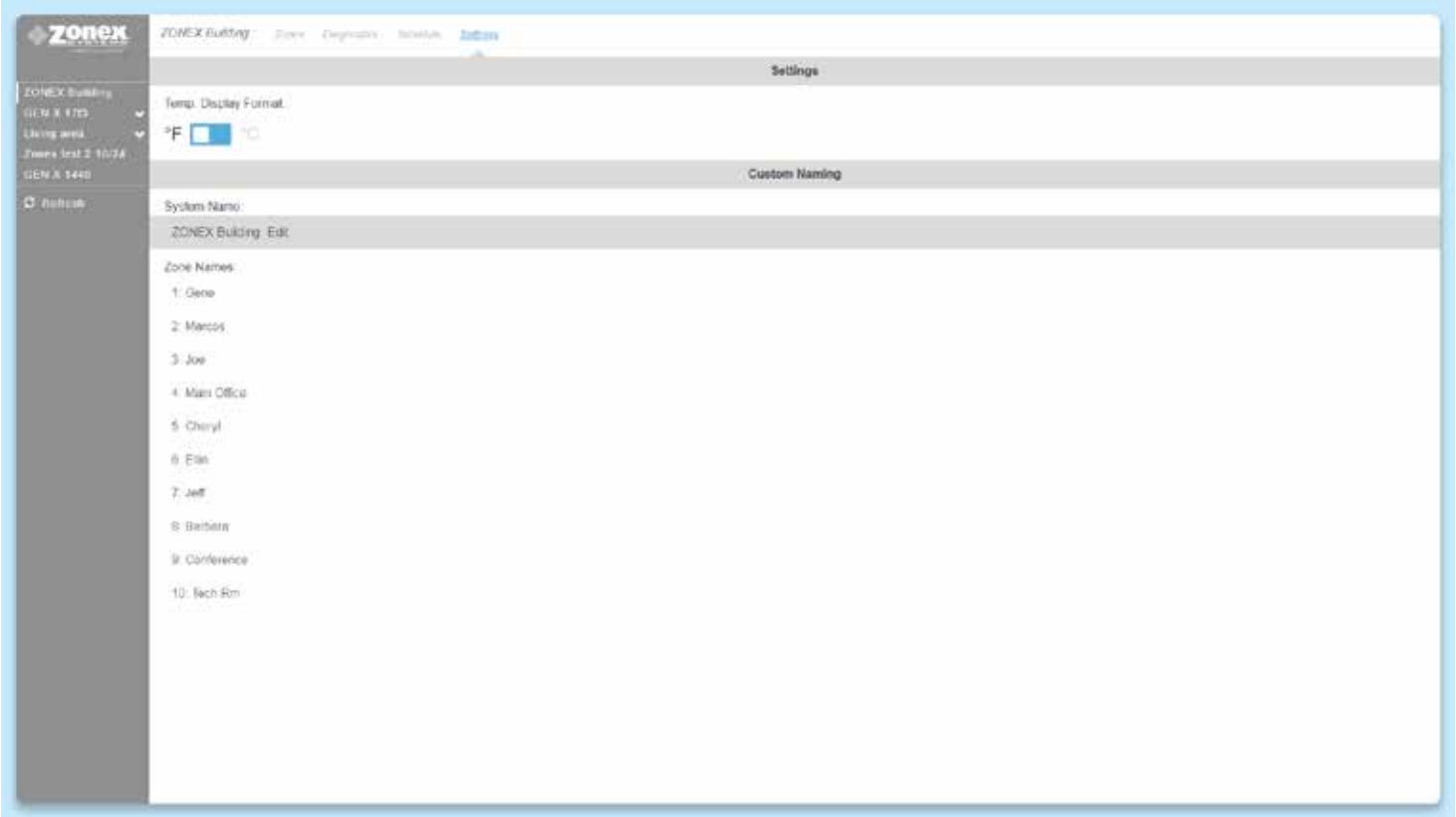


CHANGING TEMPERATURE FORMAT AND ZONE NAMES

The options under the Settings menu will allow changes to the temperature format, system name and zone names.

To change the temperature scale click on the button below Temp. Display Format and the switch will move to the left for Fahrenheit and to the right for Celsius.

To change either the System Name or Thermostat Names move the pointer over the name to be changed, click on Edit, change the field to the desired name and click on Save.



SYSTEM SETUP DIRECTORY

INSTALLING CONTRACTOR	DATE OF INSTALL
PHONE NUMBER	

STAT ID	THERMOSTAT NAME	NOTES

NOTES

GEN UC



NETWORK ALL YOUR HVAC EQUIPMENT

MONITOR, UPDATE AND CONTROL SYSTEM INFORMATION FROM THE MOBILE APP

Internet Access to system information and TOTAL building control
RIGHT IN THE PALM OF YOUR HAND

Remotely control multiple stand alone RTU's or splits, with our App and your wireless device...from ANYWHERE

1 to 400 RTU or Split Systems

HOTLINE
(800) 228-2966

Zonex SYSTEMS
comfort you control

5622 Engineer Drive
Huntington Beach, CA 92649
Factory **(714) 898-9963**
Fax **(714) 898-6802**

VISIT OUR WEBSITE
www.zonexproducts.com

PATENTED PRODUCT
Zonex Systems reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations

Copyright 2020 by Zonex Systems

THE EASY WAY TO *GET QUOTES FAST*

http://www.zonexproducts.com/us/quote/

PART # GENUCMAN
May 2021