



Your Next Level To COMFORT  
[zonefirst.com](http://zonefirst.com)





***Installation is easier than you think!***

The easy-to-follow mobile app walks you through step-by-step instructions, so you don't miss a beat

Check out our website at [zonefirst.com/bliss](https://zonefirst.com/bliss) for how-to videos and useful tips to get you started

**Need Help?**

**Installation FAQ:** [zonefirst.com/bliss-faq](https://zonefirst.com/bliss-faq)

**Support:** [support@zonefirst.com](mailto:support@zonefirst.com)

**Installation Help:** 877.FIRSTZONE (347.7896)

## DISCLAIMER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions

- (1) this device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment interferes with radio or television reception, which can be determined by turning the equipment on or off, the user is encouraged to try to correct the interference by one or more of the following measures; 1.) Reorient or relocate the receiving antenna; 2.) Increase the separation between the equipment and receiver; 3.) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; 4.) Consult the dealer or an experienced radio /TV technician for help.

**WARNING:** Any changes or modifications not expressly approved by ZONEFIRST could void the user's authority to operate this equipment. Power sources for the Heat Cool Module (HCM) & the Zone Control Gateway (ZCG) should be plugged into a surge protector.

## WARRANTY

*Warranty : One year limited warranty included.*

Final disposition of any warranty claim will be determined solely by ZONEFIRST. If inspection by ZONEFIRST does not disclose any defect covered by the warranty, the product will be returned or scrapped as instructed by the customer. Products returned to the customer may be sent shipping charges collect.

For any questions and information please write, call or email:

E: [info@zonefirst.com](mailto:info@zonefirst.com) T: 201-794-8004

ZONEFIRST 6 Aspen Drive Randolph, NJ 07869

## Notes:

This image shows a vertical rectangular sheet of white paper. It features approximately 20 evenly spaced, horizontal blue lines running across its width. The lines are thin and consistent in color, resembling standard notebook paper. There is no text or other markings on the page.

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## PRE INSTALL CHECKLIST

- It is optimal to set this up with internet access. Not required.
- Make sure you are installing during the day, as you may be without light while light switches are being installed
- The installation of this system requires you to use power tools and, handle high-voltage wiring, ensuring power is disconnected.
- Invis-A-Stat (LST) does not support dimmable light fixtures or multi-way switch applications.

A licensed trade professional should install this system.

Each Bliss System comes with everything you need to install a two or three zone system, except the dampers. Additional zones require an adder kit, that includes a damper, LST & WDS for each additional zone.

# Additional Setups

**Bypass**

**Schedule**

**Fan**

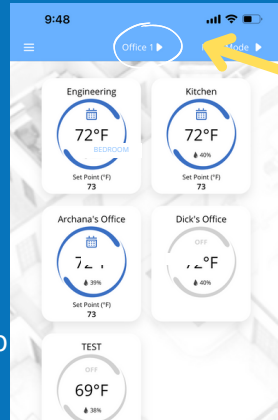
The image displays three mobile application screens for system configuration.

**Left Screen (Bypass):** Titled "Please unselect zone(s) you would not like to bypass into." It shows "Zones selected: 2/2". Below are two toggle switches: "Zone1 zone" and "Zone2 2", both of which are turned on (indicated by a checkmark icon).

**Middle Screen (Schedule):** Titled "Setup Schedule". It has a "Create a new schedule" button and a radio button selection for "No Schedule". At the bottom is a "+ NEW SCHEDULE" button.

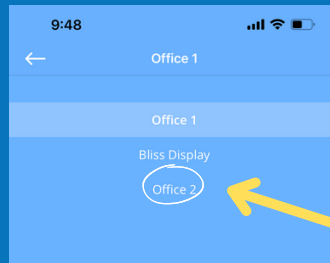
**Right Screen (Fan):** Titled "Setup HVAC Fan". It includes a toggle for "Enable DS/BK mode?". Under "Engage Lower Speed:", there are two radio buttons: "OVAC" and "24VAC", with "24VAC" selected. A "Speeding Fan:" section shows a slider set to 50, with values 25, 50, and 75 visible. A note states: "Note: Fan speed will be reduced when less than 50% of zones are calling." A "DONE" button is at the bottom.

# App



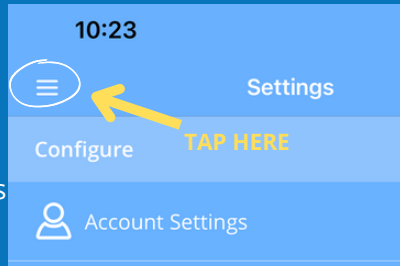
**TAP HERE**  
THIS WILL BRING YOU TO  
THE NEXT DROP DOWN

Toggle between controlling your lights, or thermostats using the top right dropdown

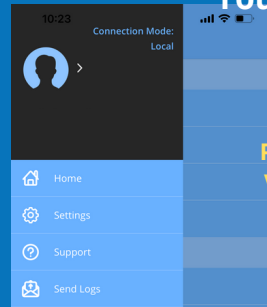


If you have multiple systems you can toggle between them using the top middle drop down

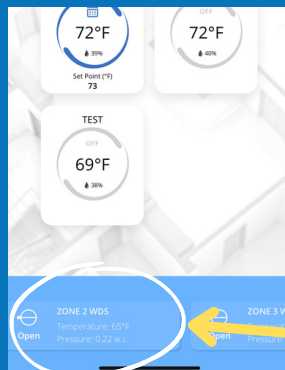
**Select System**  
Your paragraph text



You can adjust settings and access features using the sidebar menu



**Side Panel View**



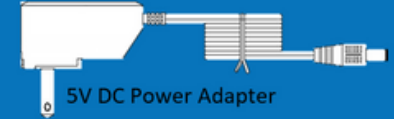
**Damper Tiles**

You can see the temperature and pressure readings at each zone by clicking on the zone damper tiles at the bottom of the screen. Swipe the bottom to toggle through dampers.

## WHAT'S INCLUDED



ZCG [Zone Control Gateway]

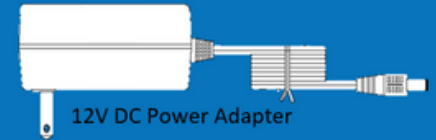


5V DC Power Adapter

**⚠ Make sure to use 5v DC with ZCG**



HCM [HVAC Control Module]



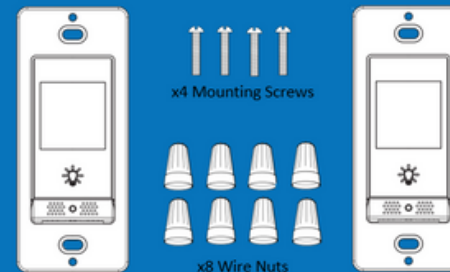
12V DC Power Adapter

⬆ ⬆ ⬆ ⬆ x4 Mounting Screws

**⚠ Make sure to use 12v DC with HCM**

**\*MINIMUM 2 ZONE SYSTEM\***

x2 LST [Light Switch Thermostat]



x4 Mounting Screws

x8 Wire Nuts

**\*PER ADDITIONAL ZONE\***

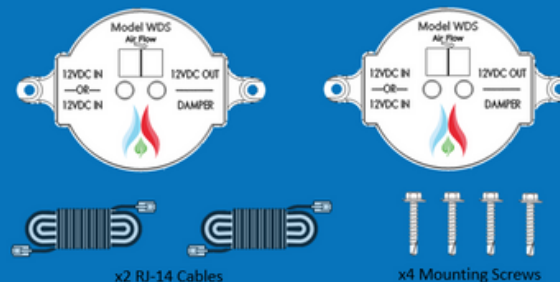
LST [Light Switch Thermostat]



x4 Wire Nuts x2 Screws



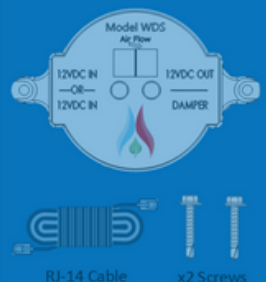
x2 WDS [Wireless Damper Sensor]



x2 RJ-14 Cables

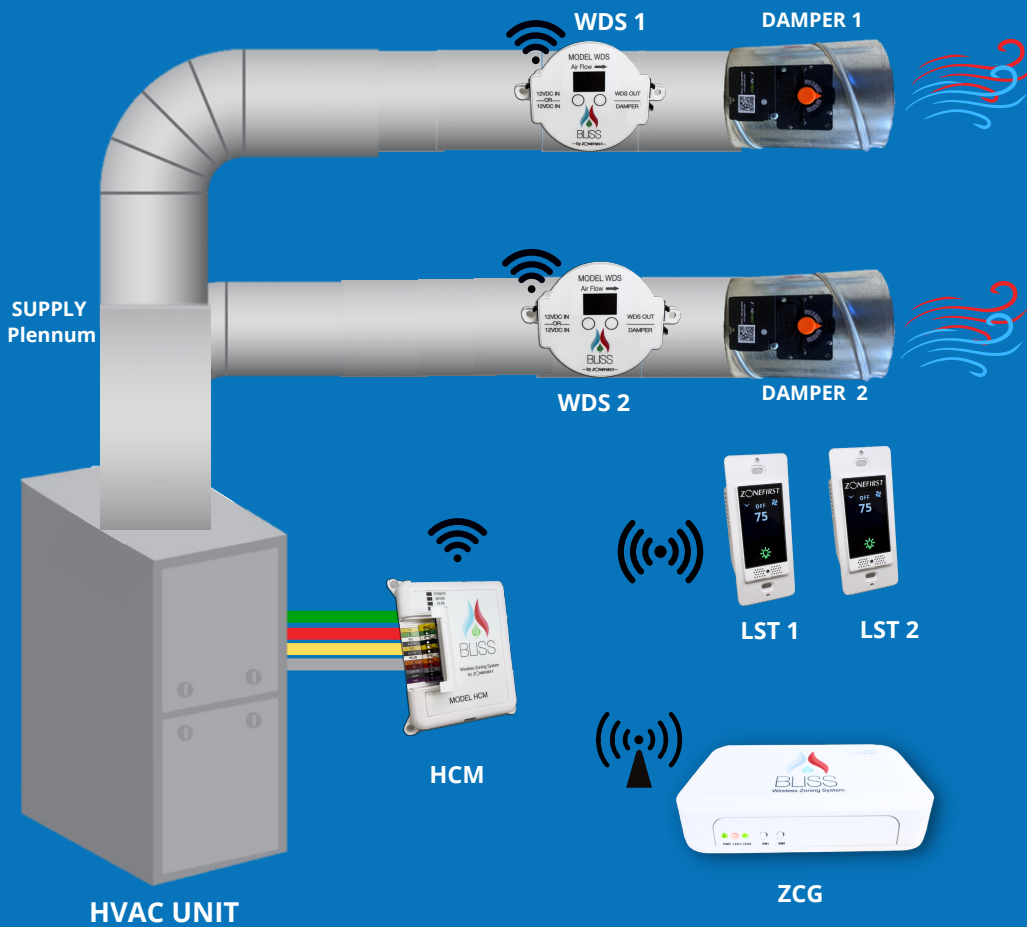
x4 Mounting Screws

WDS [Wireless Damper Sensor]

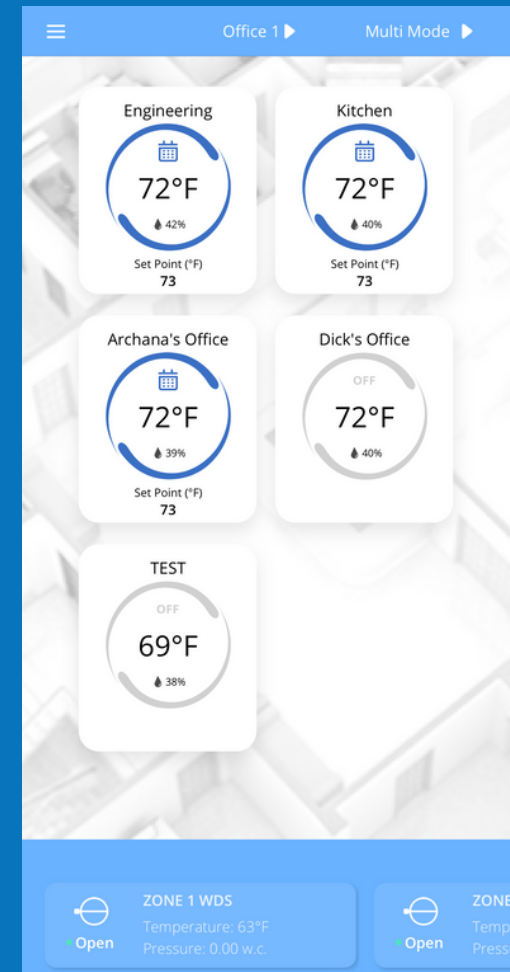


RJ-14 Cable x2 Screws

# SYSTEM OVERVIEW



The Bliss System by ZONEFIRST mobile app is intuitive and easy to use. Each zone is represented as a tile that displays the set point and temperature reading for that zone.



# App Installation

After Installing all the ZCG, HCM, WDSs, and LSTs, head over to the Apple App Store or Google Play Store to download the BLISS by ZONEFIRST app.

Using the Homeowner's phone, scan the QR code below to bring you to the app download screen.



1. Launch the application and select NEW INSTALL if this system is new.
2. Select I'm a Homeowner and tap NEXT.
3. Tap SIGN UP. Have the customer enter their email address, create a password for their system, and tap REGISTER.
4. A Verification code will be sent to the homeowner's email. Enter the code and tap CONFIRM
5. Have the customer log into their new account
6. Tap Multi-Zone and tap NEXT.
7. Locate the sheet with the QR code that can come with the system and scan
8. From here the app will walk you through installation

## ZCG Install



The ZCG is used as a gateway to communicate with all the components of the system and give them access to the internet.

We suggest placing your ZCG in a centralized location, preferably close to the Wi-Fi router, or service room.

- When installing the ZCG you will have two network connection options. Either Wi-Fi or ethernet. If possible, we suggest connecting the gateway to your Wi-Fi router via ethernet for the most robust connection.
- ⚠ • Make sure to use the white 5VDC power adapter labeled "ZCG only" Using the incorrect power source will lead to damaging your system
- If your building or home does not have a Wi-Fi router yet, install the ZCG, however until the system is connected to Wi-Fi it will not communicate to the rest of the system.

**For detailed instructions and videos on how to install the ZCG, please visit [zonefirst.com/bliss](https://zonefirst.com/bliss)**

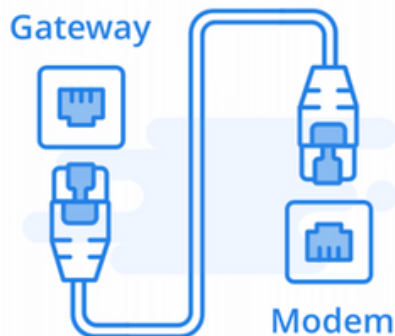




Please power the ZCG as shown in the diagram.



**Make sure to use the white 5VDC power adapter labeled "ZCG only." Using the incorrect power source will lead to damaging your system**



Connect the ethernet cord to ZCG as shown in the diagram and check the back side of ZCG for small light next to ethernet cord.

Proceed next when that small light is blinking.

1. The WDS can be powered by two options. Choose between power from the HCM or a 12VDC power supply.

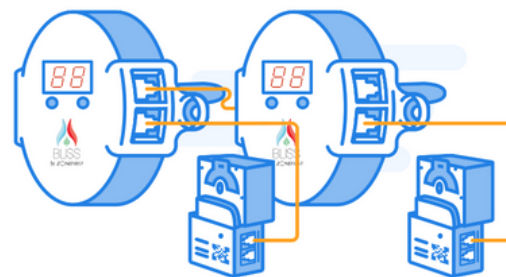
HCM Power

12VDC Power Supply



2. Wire the WDS to the MP12M on the damper as shown below. Use the jack labeled "DAMPER" for this connection.

3. Use the 12VDC OUT jack to power the next WDS as shown below. Repeat this process until all Zone Dampers are on.



\* You can also power other WDS from the HCM or a 12VDC power supply!

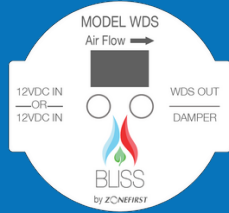
(Optional) If you have multiple dampers in one zone you can daisy chain the MP12Ms as shown below.



Please refer to the damper installation guide included with you dampers.



# WDS Install



The WDS is used to sense the temperature and pressure in the ductwork and control the zone dampers. It communicates wirelessly with the ZCG, so you only need to supply the WDS with power. There are two powering options on the left side of the device. The 12VDC RJ11 telephone jack which can be supplied from the HCM RJ11 output, or the 12VDC 5.5mm jack can be purchased separately.

- The flexibility of powering options allows you to power the WDS without needing to run wires all the way back to the HCM.



- We advise to only power the WDS with either the RJ11 jack or 5.5mm jack, not both.
- The "WDS OUT" can be used to daisy chain multiple WDS using home run wiring, giving you a wide range of flexible powering options.
- Be sure to connect the damper to the "DAMPER" output for the corresponding WDS.
- You will assign the zone number of the WDS using the segment-LED display and the gray buttons.



- Be sure to place the WDS before the damper, not after in the supply duct.
- Be sure to keep the open side of the pickup tube facing the airflow as indicated on the top label.

**For detailed instructions and videos to install visit:**  
**[zonefirst.com/bliss](http://zonefirst.com/bliss).**

# HCM Install

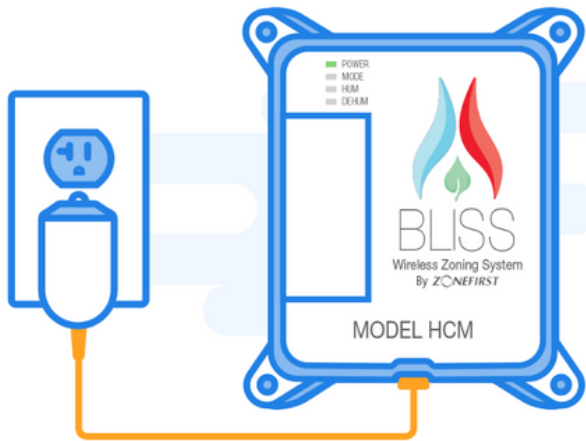


The HCM is used to control the HVAC equipment. The mobile app will walk you through how to properly wire it, based on your equipment set up.

We suggest installing the HCM in a dry location, with moderate temperatures if possible. Try to mount the HCM on a wall near the HVAC unit, instead of directly on the plenum. This will assure the radio module will have the most robust connection.

- **IF the Master QR code provided in this manual does not work, you can find an individual QR code on the HCM under the terminal block cover and printed on the back label.**
- **When the HCM has connected to the system, the mode LED will turn solid green**
- **To mount the HCM, install the 4 mounting screws provided in the kit, in the holes around the 4 edges.**

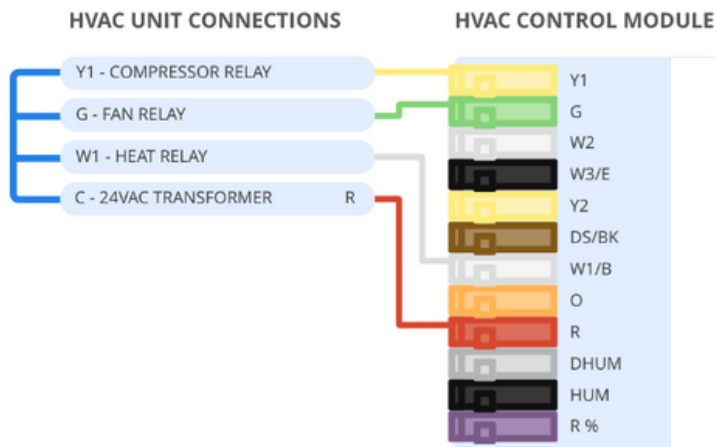
**For detailed instructions and videos on how to install the HCM, please visit [zonefirst.com/bliss](http://zonefirst.com/bliss)**



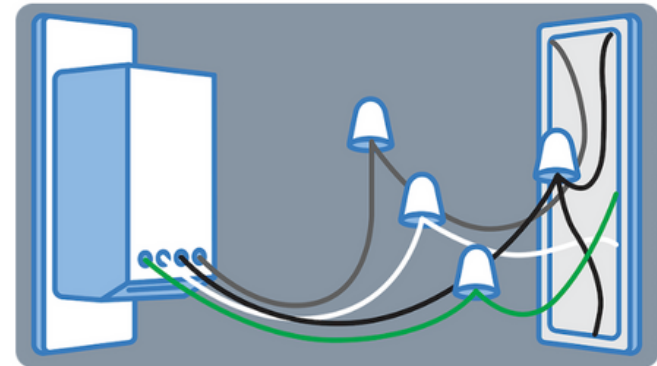
Power the HCM using the 12VDC power supply. The Power LED will turn on solid green.

**!** Make sure to use 12v DC with HCM

## Single Stage Gas/Electric



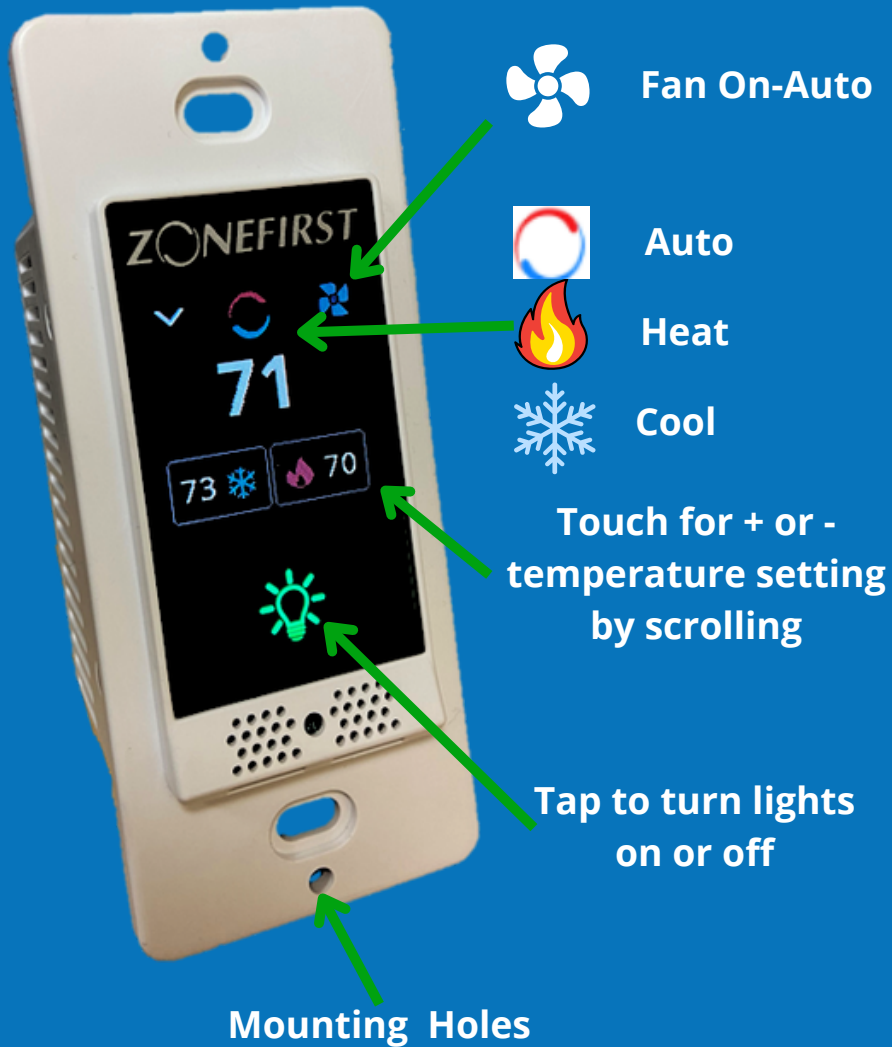
1. Turn off circuit breakers.
2. Remove light switch cover and existing light switch.
3. Wire LST as shown below:



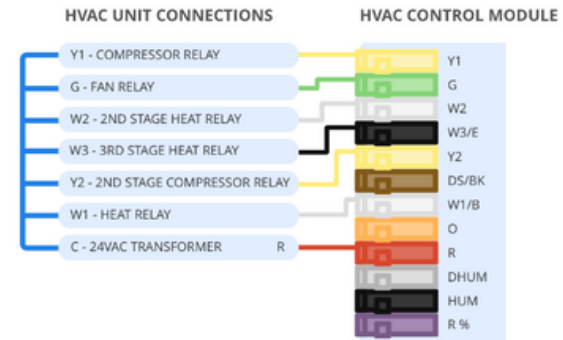
4. Reinstall the light cover and repeat the process for each LST.
5. Once all LST are installed turn the circuit breakers back on and continue.

**!** Make sure to NOT CROSS wires

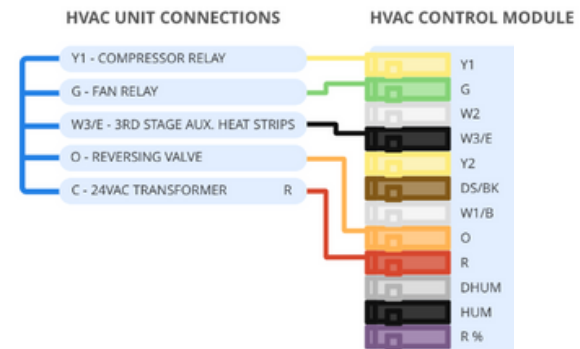
# How to Control Your LST



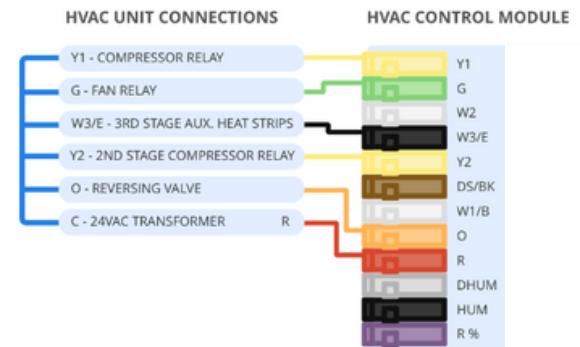
## Multi Stage Gas/Electric



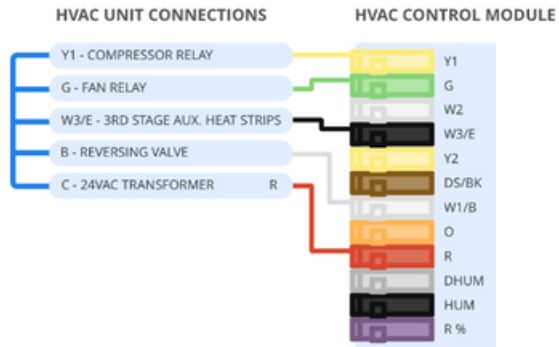
## Single-Stage Heat Pump (O)



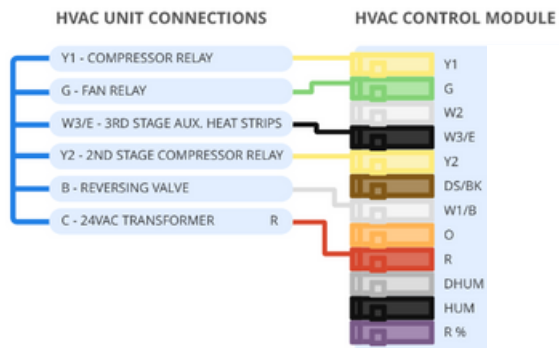
## Multi-Stage Heat Pump (O)



## Single-Stage Heat Pump (B)



## Multi-Stage Heat Pump(B)



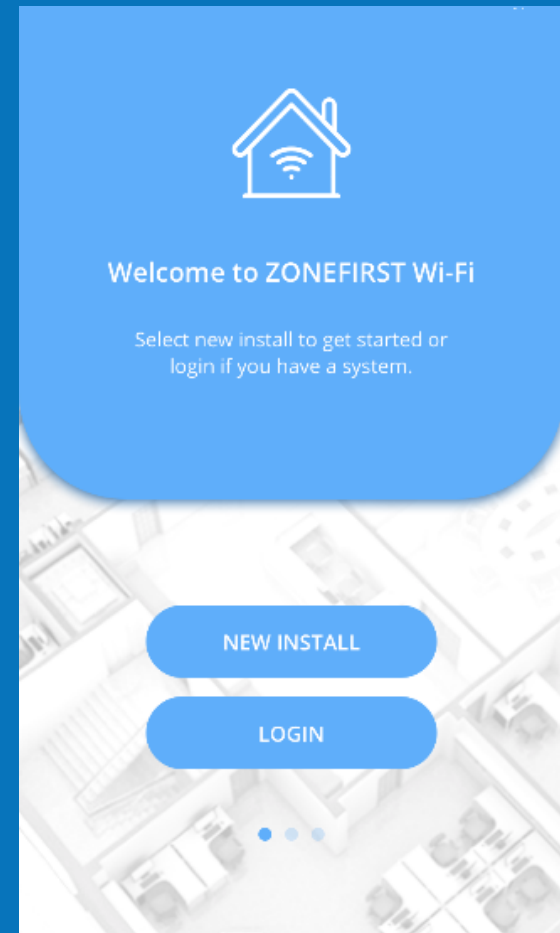
# LST Install Invis-A-Stat



The LST is a combination smart light switch and thermostat. It is used to control the temperature set point in a given zone or room. The LST can be used to also control the light switch.

- LST does not support multiway light control.  
This means it cannot control a light that has more than one switch.
- The LST does not support a dimming feature.
- The LST supports a 110/120VAC, 60Hz power supply.

# App Screenshots



←

New Installation

Select Installation Type:

I'm a Contractor

I'm a Homeowner

←

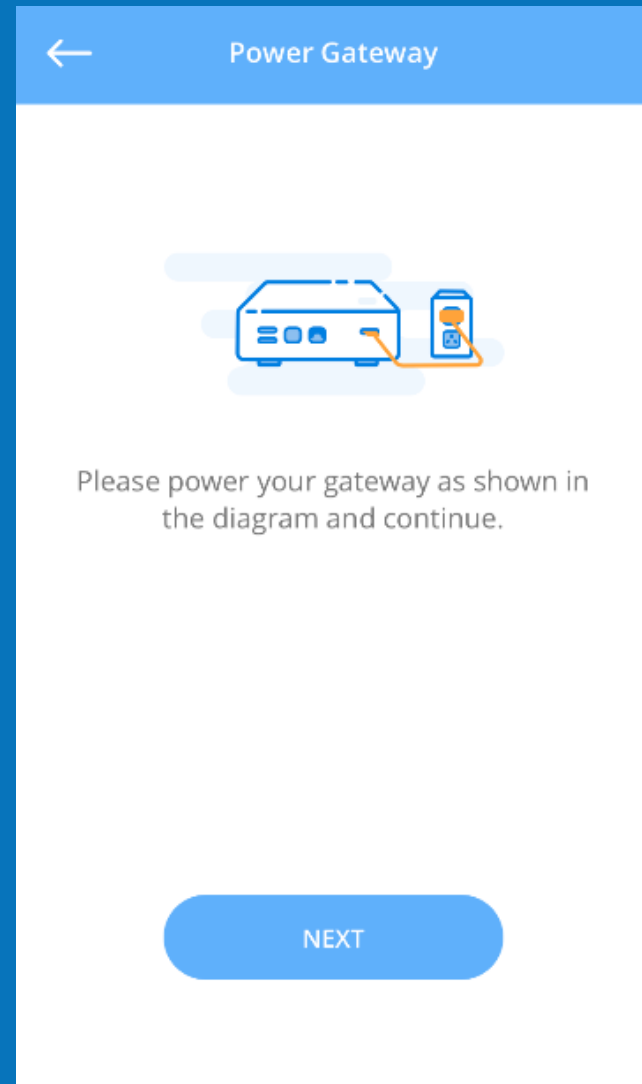
New Installation

Select Installation Type:

I'm a Contractor ✓

I'm a Homeowner

NEXT



**Make sure to use the white 5VDC power adapter labeled "ZCG only"**

**Using the incorrect power source will lead to damaging your system**







## Gateway Initializing



Please wait until blue indicator LED is solid then continue.

NEXT

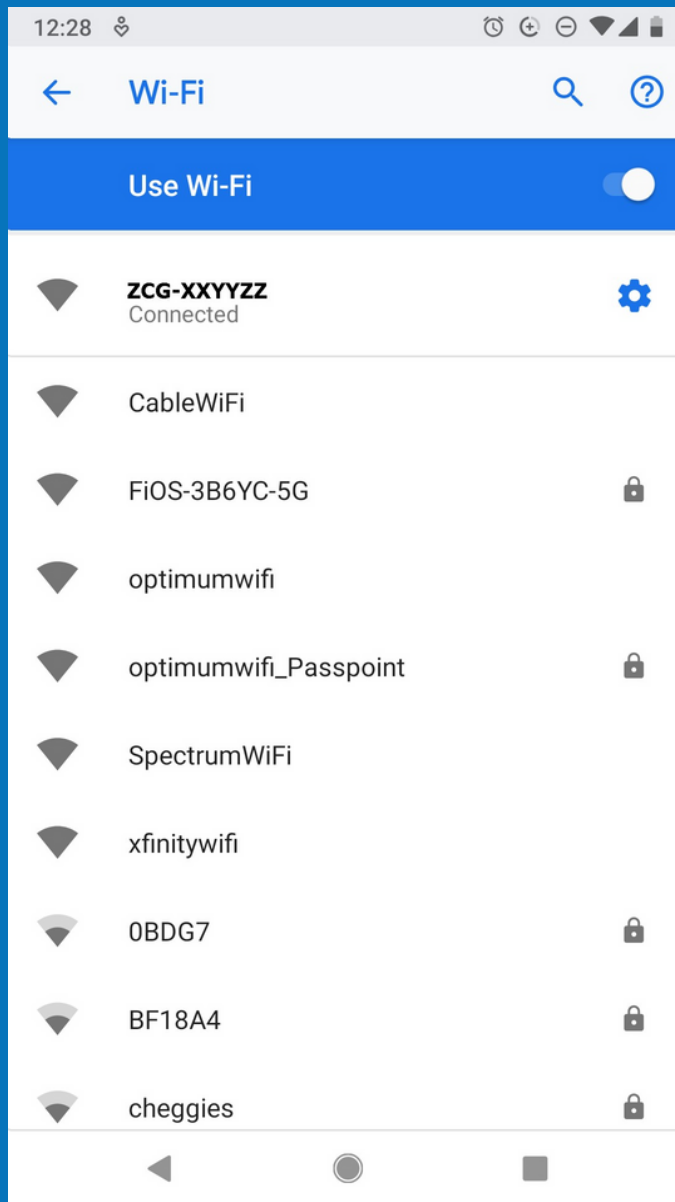


## Gateway Access Point



Hold SW1 on the gateway to set to commissioning mode. Select gateway in your Wi-Fi settings to connect as access point.

OPEN WI-FI SETTINGS





## Gateway Access Point



**Check connection status LED1 on the gateway is solid green. This indicates successful connection to Gateway Access Point!**

Continue to next step.

NEXT



## Gateway Unique ID



Enter the Unique ID number found on the bottom of your gateway.

Enter Gateway Unique ID

The Gateway Unique ID field is required.



NEXT



## Installer Information

Enter installer information:

First Name

John

\*

Last Name

Jackson

\*

Company

\*

Email Address

\*

The Email Address field is required.



Phone number

NEXT



## Gateway Connectivity

If no internet is available choose skip to continue local installation. Otherwise select network interface:

☒ Ethernet

☐ Wi-Fi

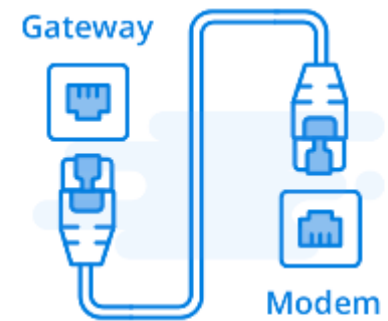
SKIP

NEXT





## Ethernet Connection



Connect the ethernet cord to the gateway as shown in the diagram.

NEXT



## Ethernet Connection



**You are connected to your network!**

Continue to next step.

NEXT



## Gateway Connectivity

If no internet is available choose skip to continue local installation. Otherwise select network interface:

- ☐ Ethernet
- ☒ Wi-Fi

SKIP

NEXT



## Wi-Fi Connection

### Wi-Fi networks:

DEFHome



ZoneFirst\_WiFi



HTC\_9EF2



HTC\_B8B8





## Wi-Fi Connection



**You are connected to Wi-Fi!**

Continue to next step.

NEXT



## System Type

Do you want to setup as a single thermostat (LST) or multi-zone system?

Single

Multi-Zone



## System Type

Do you want to setup as a single thermostat (LST) or multi-zone system?

Single

Multi-Zone



NEXT



## Scan QR Code

### Multi-Zone Setup



Scan QR codes of all devices in system or Master QR code provided in the package. These include the LST, WDS, and HCM devices.

SCAN QR CODE





9 devices found!

DEVICE LIST

DONE



## Device List

9 devices found:

HCMxxxx

LST1xxx

LST2xxx

LST3xxx

LST4xxx

WDS1xxx

WDS1xxx

WDS1xxx



## HVAC Control Module

Select HVAC Control Module:



**No HCM QR code found**

Please scan QR Code of HCM to  
continue.

[SCAN QR CODE](#)



## HVAC Control Module

Select HVAC Control Module:

HCM12vdc123



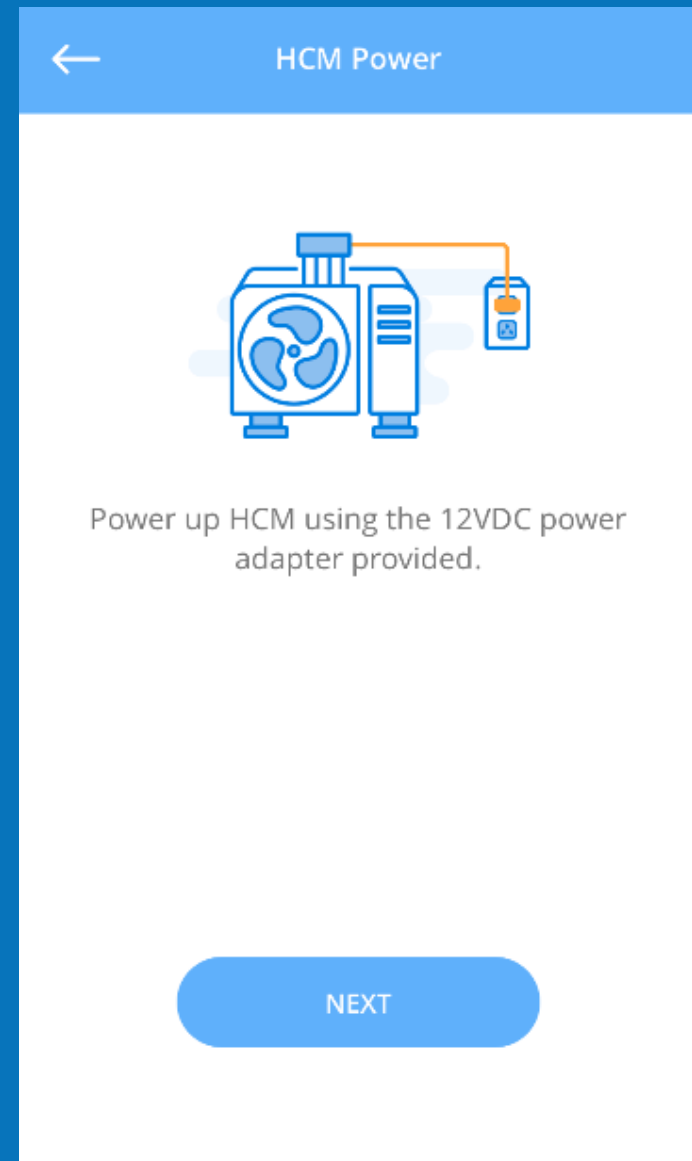
## HVAC Control Module

Select HVAC Control Module:

HCM12vdc123



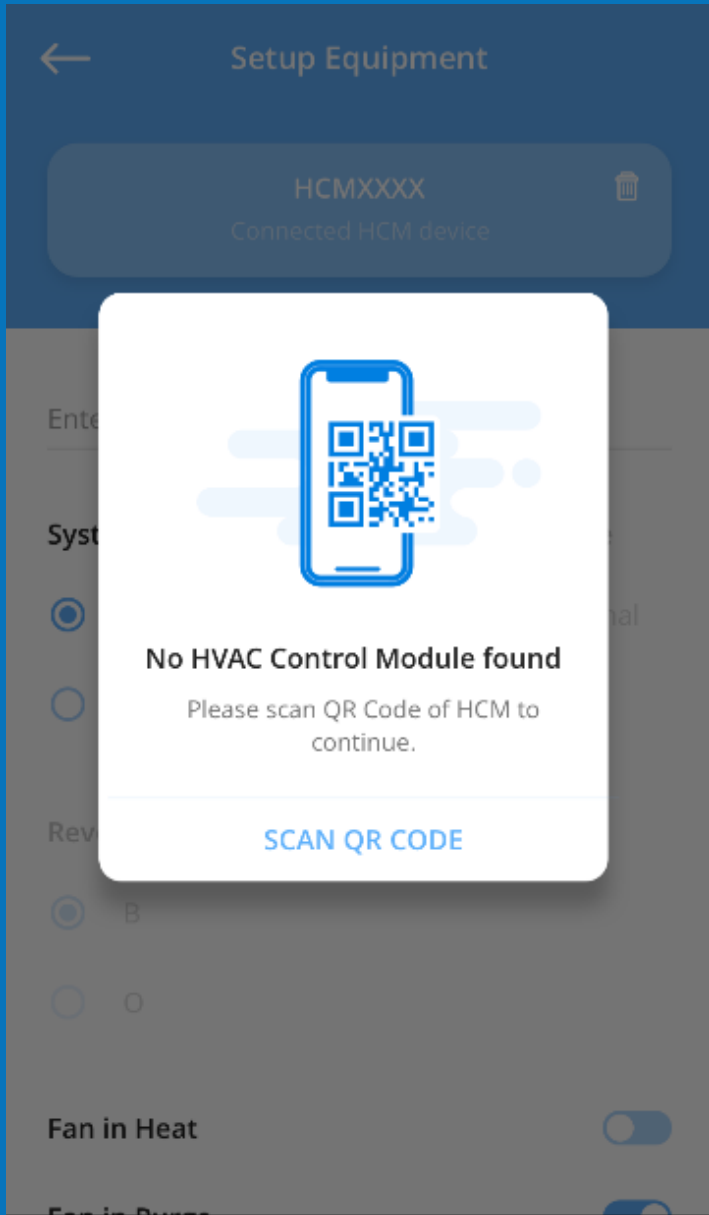
NEXT



**Make sure to use 12v DC with HCM**

**Using the incorrect power source  
will lead to damaging your system**







## Setup Equipment

Select Equipment Type:

Gas/Electric

Heat Pump with Heat Strips

Heat Pump with Fossil Fuel





## Setup Equipment

Select Equipment Type:

Gas/Electric

Heat Pump with Heat Strips



Heat Pump with Fossil Fuel

NEXT



## Setup Equipment

HCMXXXX

Connected HCM device



Enter CFM of Unit:

### System



Gas/Electric



Heat Pump

### Heat Pump Type



Conventional



Fossil Fuel

### Reverse Valve



B



O

Fan in Heat



Fan in Purge



HCMXXXX



Connected HCM device

Enter CFM of Unit:

**System**

☐ Gas/Electric

☒ Heat Pump

**Heat Pump Type**

☐ Conventional

☒ Fossil Fuel

**Reverse Valve**

☒ B

☐ O

Fan in Heat



Fan in Purge



NEXT

## ← Configure Fossil Fuel Changeover

When enabled and the measured temperature in the duct is less than the FF Changeover Temperature, the Heat Pump is shut down and the EM heat is activated.

Enable FF Changeover?



Fossil Fuel Changeover Temperature, ° F:

75

80

85

NEXT



## Equipment Staging Mode

Enable staging if using a multi-stage HVAC unit. Only one mode can be activated at a time.

Enable Staging?



Select Staging Mode:



Stage Timer



Zone Staging



Stage Optimization

NEXT



## Equipment Staging Mode

Enable staging if using a multi-stage HVAC unit. Only one mode can be activated at a time.

Enable Staging?



Select Staging Mode:



Stage Timer



Zone Staging



Stage Optimization

NEXT



## Setup Stage Timer

Adjust the time delay between each stage of heating or cooling.

Stage Timer, min:

10

15

20

NEXT



## Setup Zone Staging

Second stage of heating or cooling will engage when more than 50% of the total zones are calling. Once second stage is engaged the stage timer will start in heating for the purpose of going into 3rd stage.

The total number of zones installed is **4**.  
Second stage will engage when **3** or more zones are calling.

Third Stage Heat Timer, min:

10

15

20

NEXT

## ← Setup Stage Optimization

The duct temperature is used to determine whether additional stages should be engaged. A minimum of 5 minutes must run for each stage.

SO Heat limit, ° F:

130

135

140

SO Cool limit, ° F:

55

60

65

NEXT

## ← Configure Heat and Cool Limits

Enable Limits Protection?



Heating limit, ° F:

140

145

150

Cooling limit, ° F:

40

45

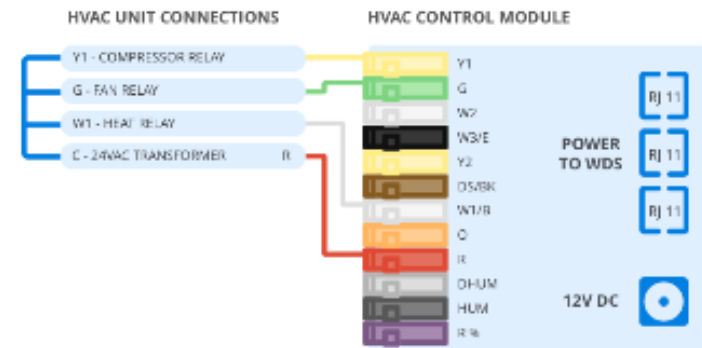
50

NEXT



## Setup Equipment Wiring

### Single Stage Gas/Electric



Suggested wiring diagram based on configuration.

CONFIRM





**HCM SUCCESSFULLY SET UP!**

Tap next to continue.

**NEXT**



**HCM CONNECTION FAILED!**

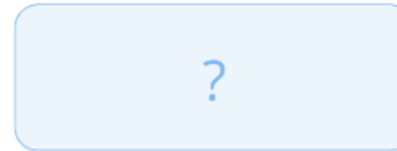
Retry connecting.

**RETRY**



## LST Installation

1. Turn off circuit breakers.
2. Remove light switch cover and existing light switch.
3. Wire LST as shown below:



4. Reinstall Switch plate cover.

NEXT



## LST Installation

1. Repeat steps 1-4 for all LSTs.
2. Turn breakers back on.
3. Screen should boot up with ZF logo.
4. Screen should then give option to select zone number using +/- on thermostat.
3. Hold down +/- at same time to set.
4. Notification appears when successfully paired.
5. Repeat pairing process for all LSTs.

NEXT



## LST Installation

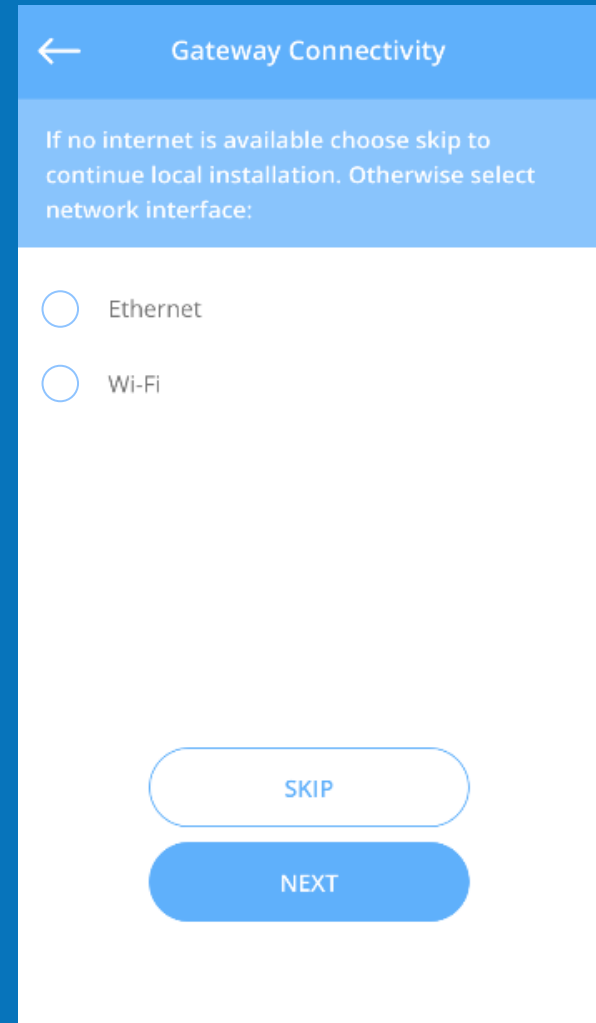
Now test light switch on both LST and app...



If a light doesn't turn on check wiring and test again. Don't forget to turn off breaker before removing wires.

NEXT

## Setting Up Without Internet:



The screenshot shows a mobile application interface for 'Gateway Connectivity'. At the top, there is a blue header bar with a white back arrow on the left and the title 'Gateway Connectivity' on the right. Below the header, a light blue instruction box contains the text: 'If no internet is available choose skip to continue local installation. Otherwise select network interface:'. The main area of the screen is white and contains two radio button options: 'Ethernet' and 'Wi-Fi'. At the bottom, there are two rounded rectangular buttons: a white 'SKIP' button and a blue 'NEXT' button.

← Gateway Connectivity

If no internet is available choose skip to continue local installation. Otherwise select network interface:

☐ Ethernet

☐ Wi-Fi

SKIP

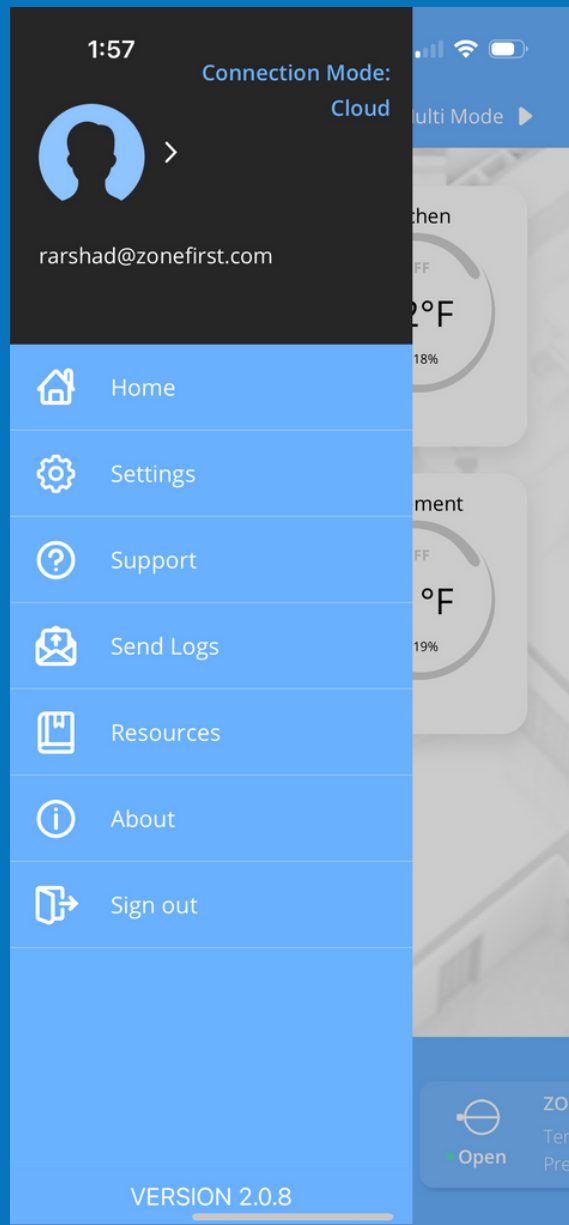
NEXT

If no internet is available, choose skip to continue local installation.

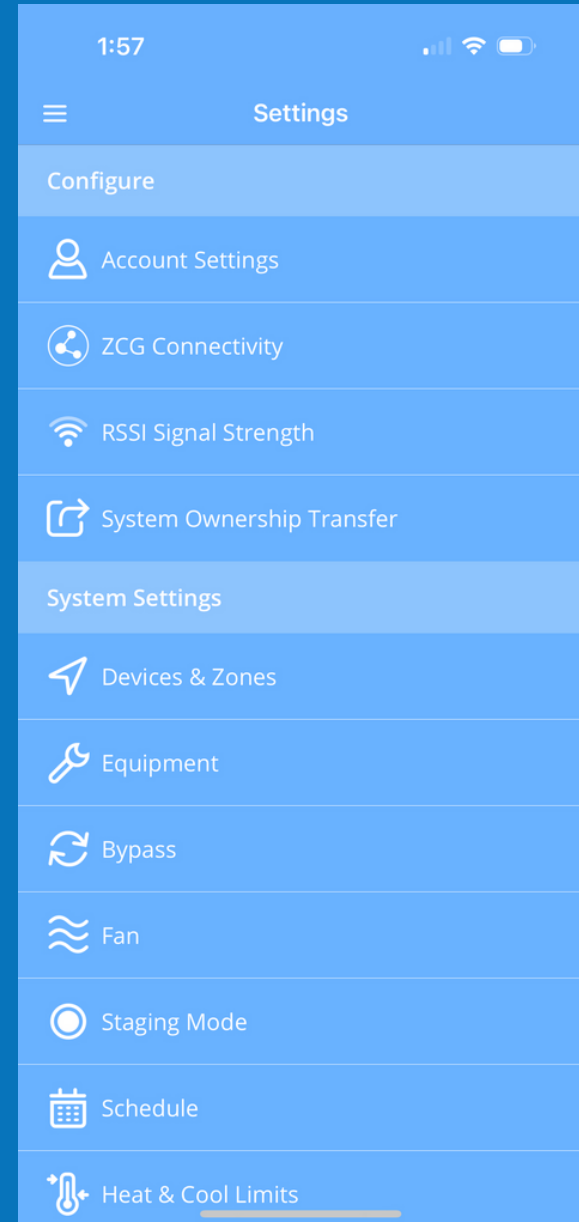
You can still connect the LSTs to the ZCG for set up.

Once Wi-Fi is set up you can connect that through the ZCG settings.

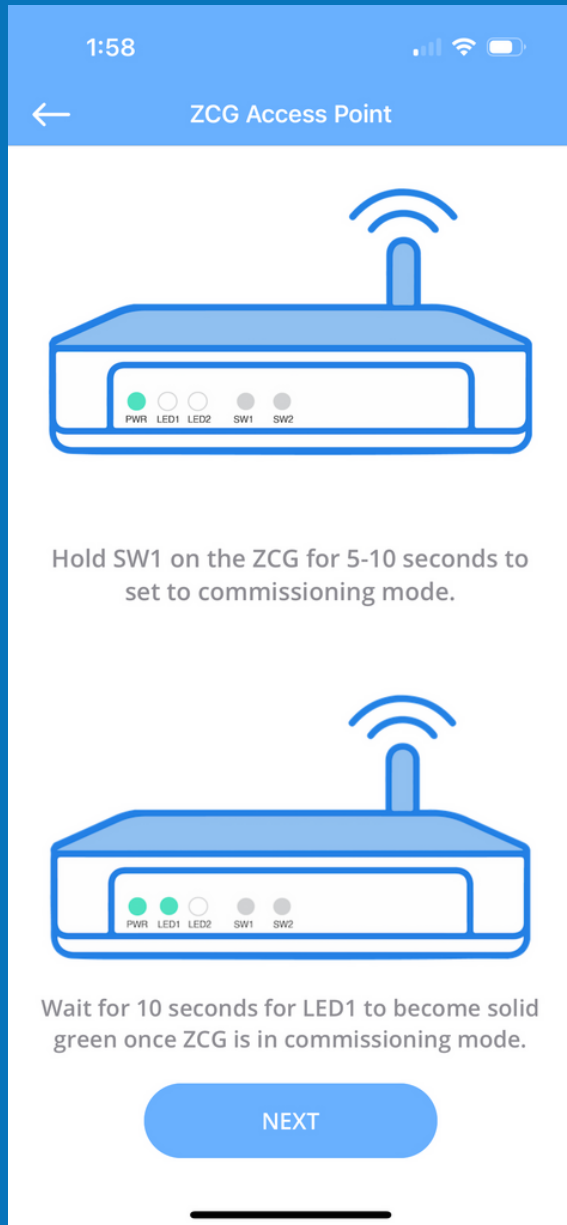
# Go to Settings



## Select ZCG Connectivity



# Set to commissioning mode



## Follow the instructions to finish setting up from your phone's settings

