

WALTECH RV THERMOSTAT – VERSION 5.0

USER MANUAL

Last updated - 06/10/2024



IMPORTANT NOTE: Firmware must be updated at initial startup while connected to Wi-Fi or cellular data. After a few minutes of connectivity, a popup will show for update. This might occur a few times and may take up to 20 minutes. The most up-to-date version will show in the information screen (Example: FW 6B, VC:43). Failure to update firmware may result in a non-functioning device or otherwise inaccurate operation.

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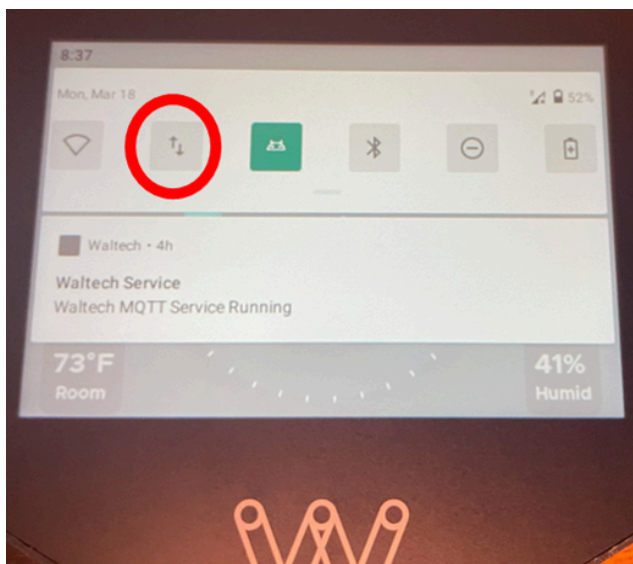
INITIAL SETUP INSTRUCTIONS & CONNECTIVITY

What if I don't have stable Wi-Fi in my camper?

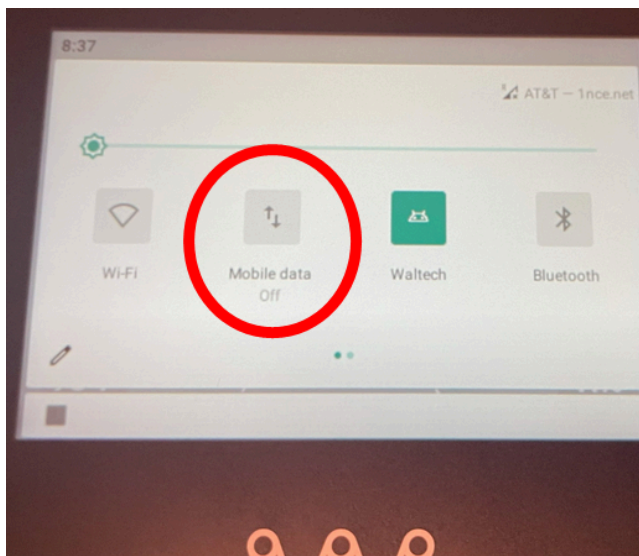
WalTech 2.0 by default comes with a global SIM card connectivity.

To switch on cellular connectivity in WalTech:

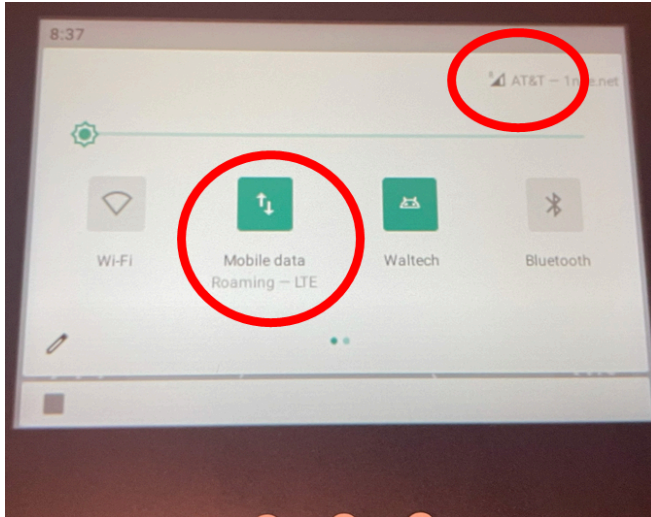
- Touch the top of the screen and pull down the screen to see the connectivity options and view the "Mobile Data" option. The icon is highlighted below:



- If you are unable to identify the icon, pull the screen down one more time, scroll left or right to see the full name of all the options.



- You can turn on the Global SIM card by simply pressing on the “Mobile data” option. You will see that the icon will be highlighted in Green color and the network will be visible on the top right of the screen as shown below.

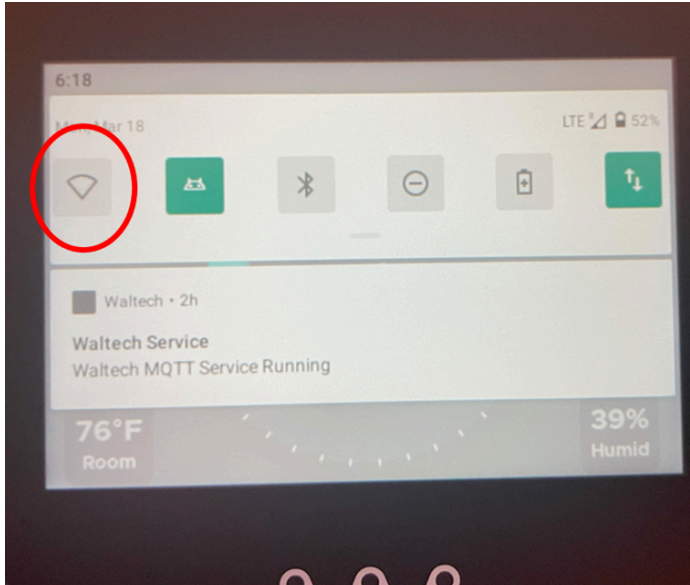


- The photo above shows that the device is connected to the AT&T network. The global SIM card will automatically detect the strongest signal available (between AT&T, T-Mobile, and Cellular One)

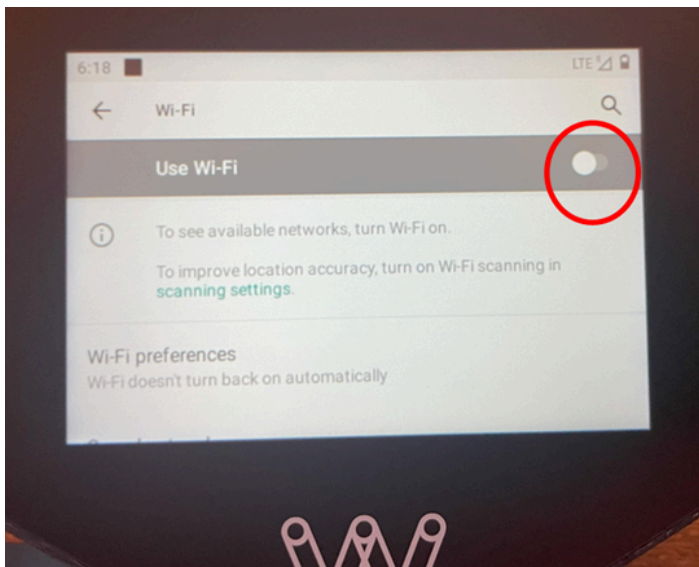
Note: Your cellular subscription must be active in the app to use this feature.

If I have stable Wi-Fi in my camper, how do I connect WalTech 2.0 to Wi-Fi?

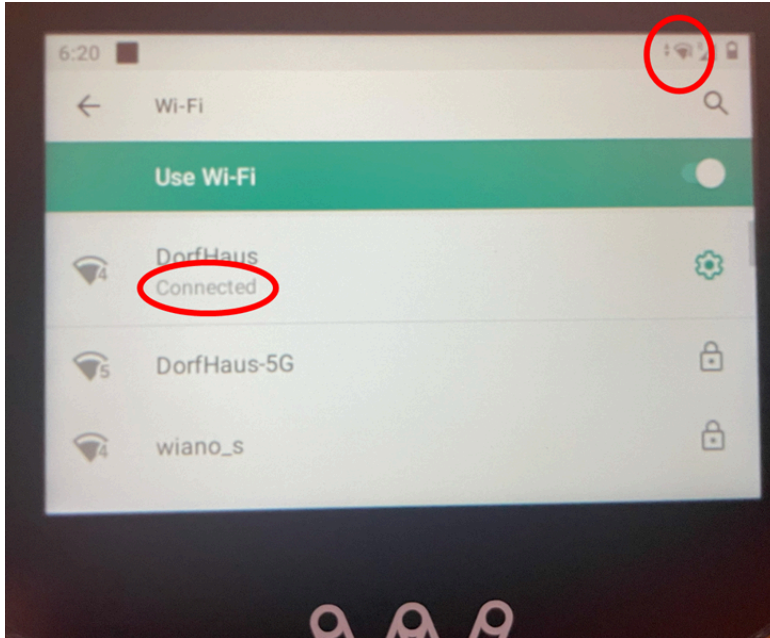
- Touch the top of the screen and pull down the screen to see the connectivity options. Locate the Wi-Fi symbol on the top left of the screen.



- Press and hold the Wi-Fi Icon. This will open the Wi-Fi set up page.
- Toggle the Wi-Fi options to “ON” on the top right side of the screen.



- After a few seconds, all available Wi-Fi networks will display.
- Select the Wi-Fi that you would like to pair, and type in the password.



- Ensure that the Wi-Fi is connected by checking the icon on the top of the screen and also the connectivity status.

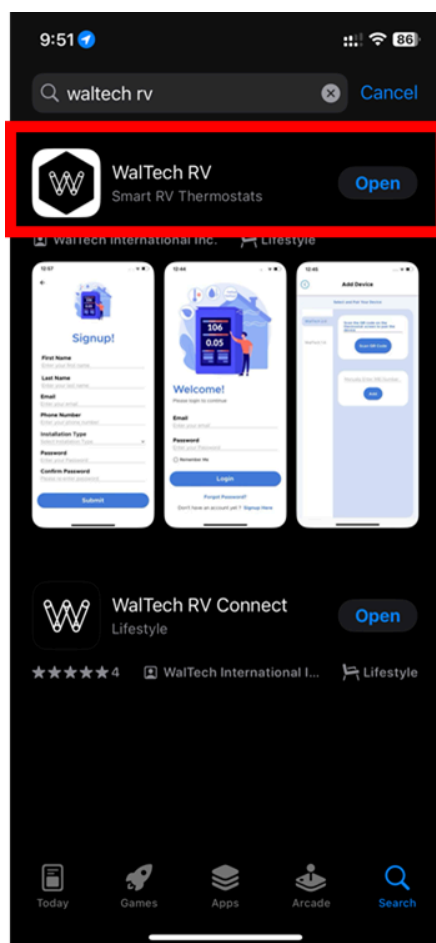
NOTE:

- Users can see the time, connectivity, and battery status on the top of the screen.
- There is an additional option in the notification bar to launch the app. You can also launch the WalTech app by resetting the device using the reset button (hold for 3 seconds).

Downloading the mobile app and registering the device.

Android: The app is still in review and not yet available in Google Play. In the interim, we have emailed a direct download link. Please check your email.

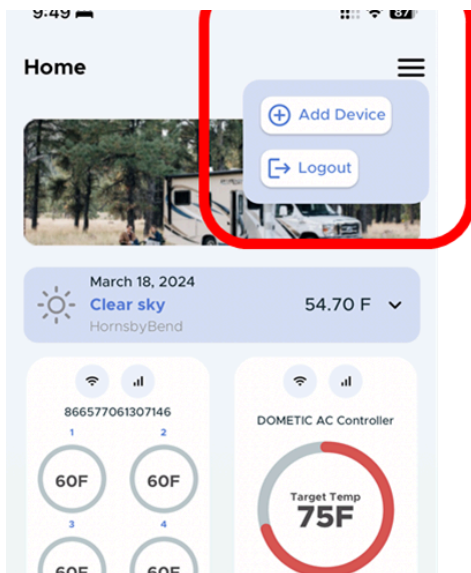
IOS: To use WalTEch 2.0, search for and download “**WalTech RV**” (pictured below) in the IOS App Store. Note that the app called “Waltech RV Connect” is specific to WalTech 1.0 and will not work for this device.



- **Sign up and register as a new user.**

Please select the installation type (this should be your camper type).

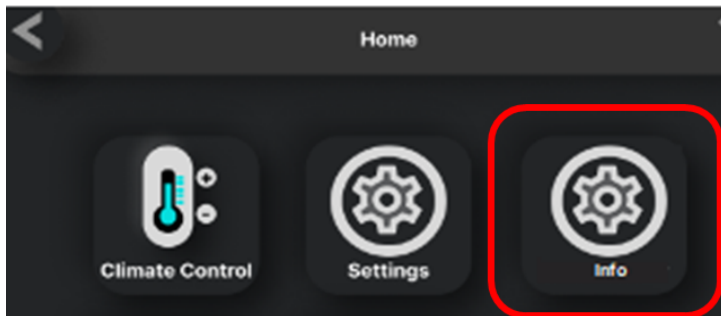
- When you click on “Submit,” you will be prompted to enter your credit card information on the following page.
 - **Note: You will not be charged unless you activate your SIM card subscription or make a new purchase from the app.**
 - By entering your card, we are able to verify your account and ensure that any potential future purchases through the app are seamless.



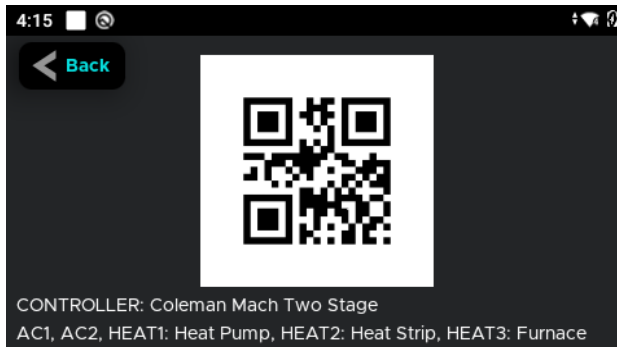
- After registering the app, go to the “Home” page, and click on the icon on the three lines on the top right. Then click “Add Device”. This will open the device selection screen, giving you the option to scan the QR code.



Find the QR code in the INFO PAGE



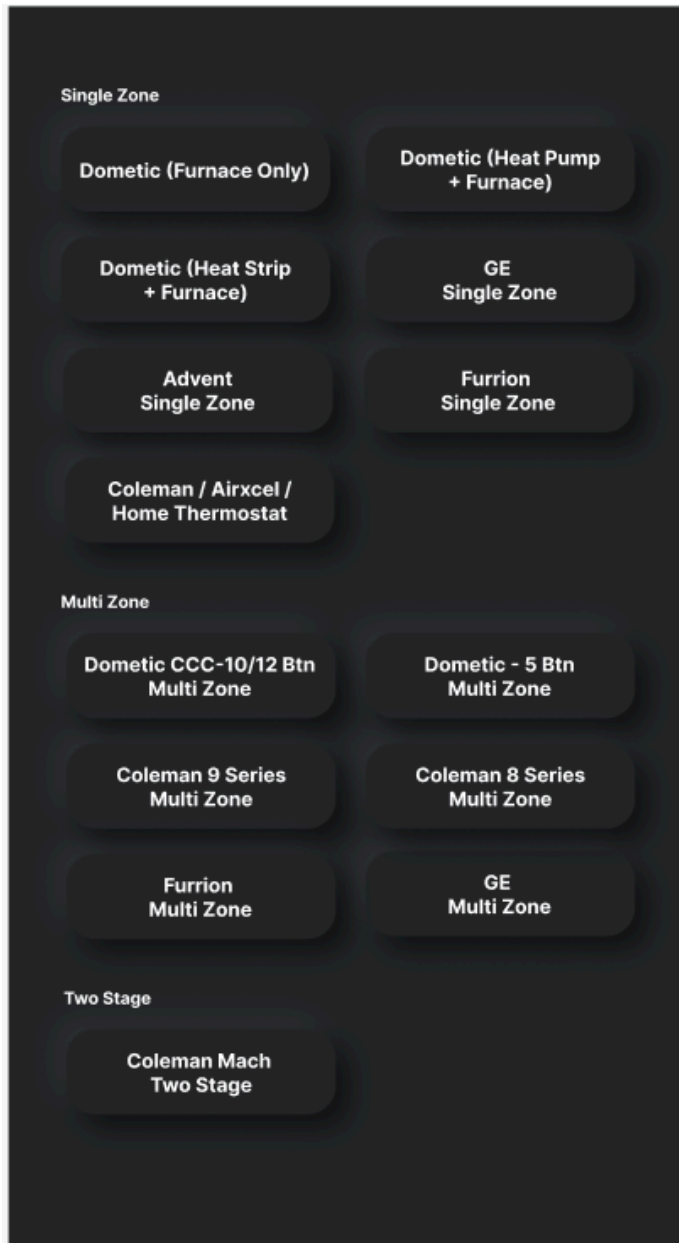
The QR code helps to identify and pair the correct device to the mobile app. You can add multiple devices to a single WaTech app.



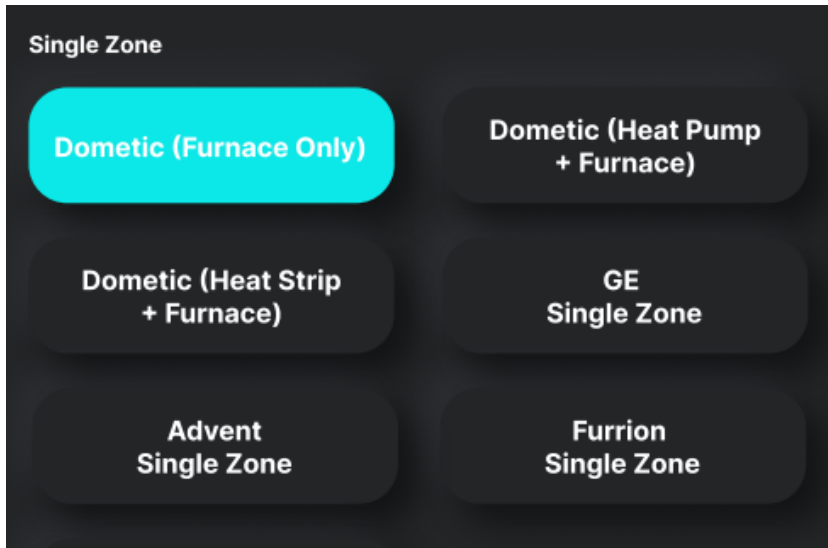
OPERATING THE THERMOSTAT

General Settings

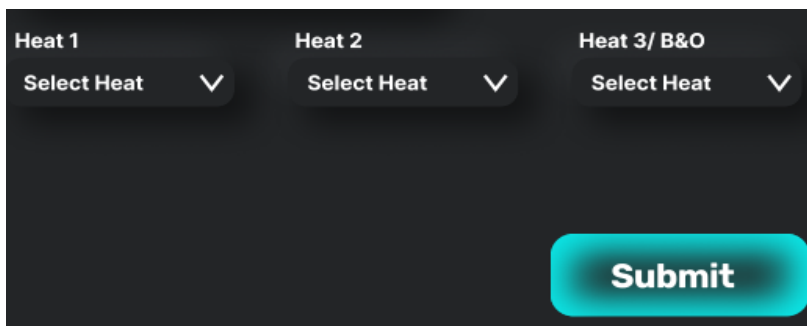
Initial Set-Up Screen



1. Select the desired device.

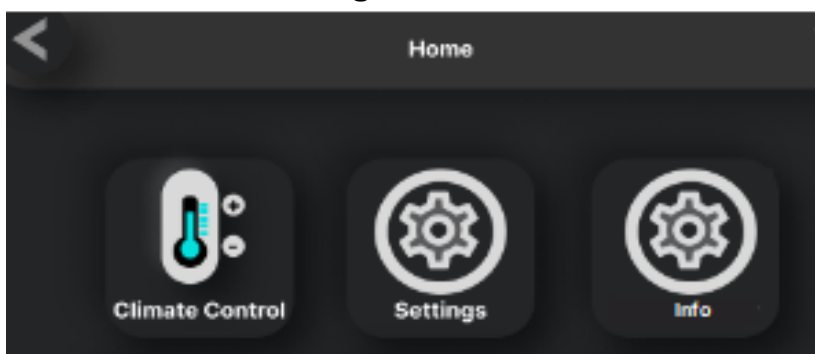


2. Configure the heaters as per the manual for each device.



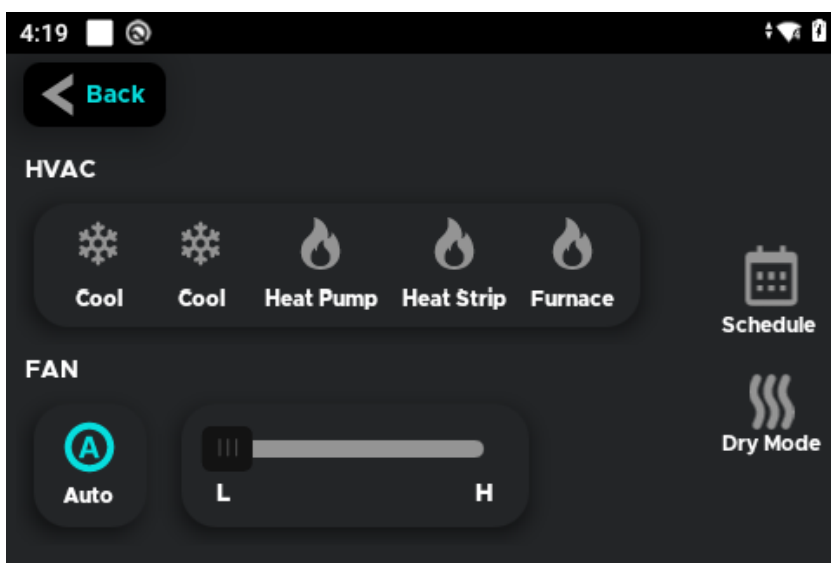
After submit is pushed, please reboot or restart the device.

3. Change the climate control settings to your desired level by selecting climate control settings





You can change the target temperature using the dial on the main screen of the climate control setting and you can access the mode using the **control** button. . The **control** button is on the top right corner of the dial page .

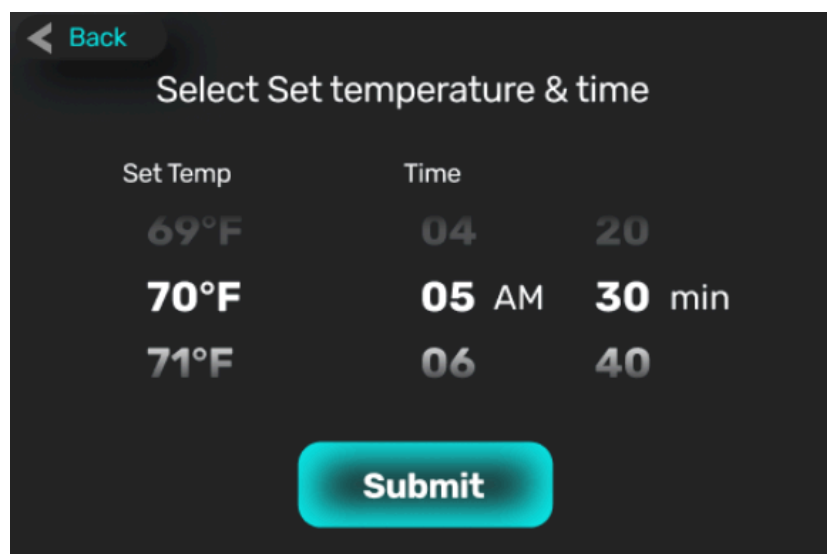
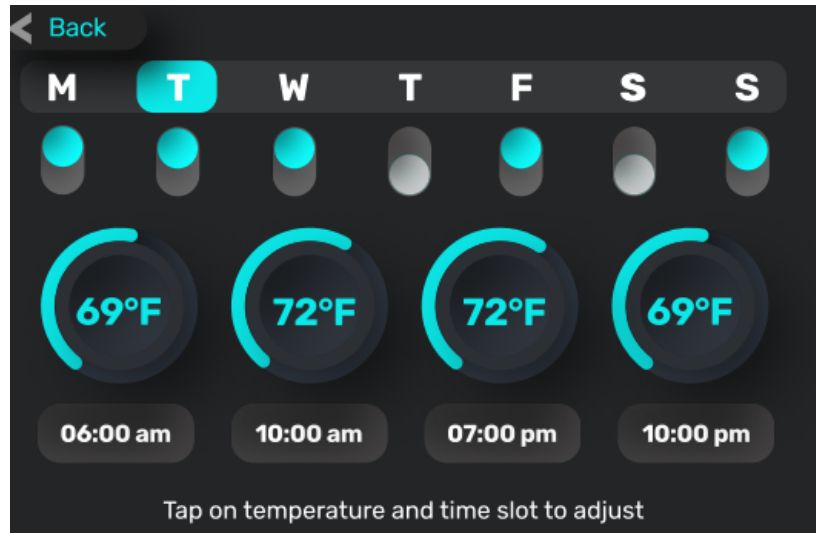


Users can enable the heater or cool element according to their needs or user can select the both (auto mode) . And users can set the fan speed according to their needs and also select the on/auto for the fan .

NOTE: The element is only available as per the specification of your corresponding device. Configure the device as per the manual exactly for the proper working .

SCHEDULER:

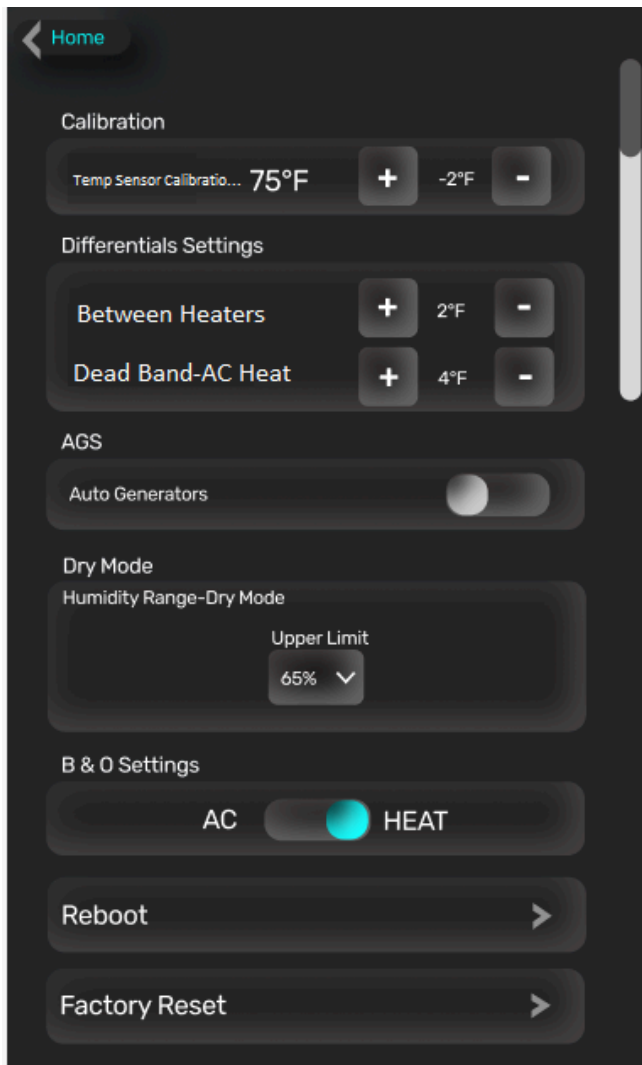
It allows users to set specific temperature preferences for different times of the day or week. It enables them to create personalized heating or cooling schedules based on their daily routines, helping to optimize comfort and energy efficiency. Users can program the thermostat to automatically adjust the temperature according to their schedule.



AUTO MODE :

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

4. SETTINGS PAGE



Users can configure the settings as per their needs.

Calibration: Users can calibrate the temperature for zones .

Differentials Settings: Users can set staging between heater differentials and the gap between heat and cool .

AGS: Users can enable or disable the AGS.

Dry mode settings : Users can set the upper limit of humidity for dry.

B&O Settings: Users can select the B&O settings , decides to select it for AC or HEAT

Reboot: For normal restarting the device .

Factory Reset: For resetting the device to Factory settings . All the saved configurations will be lost .

NOTE: The user needs to do Factory Reset if the user needs to change the controller.

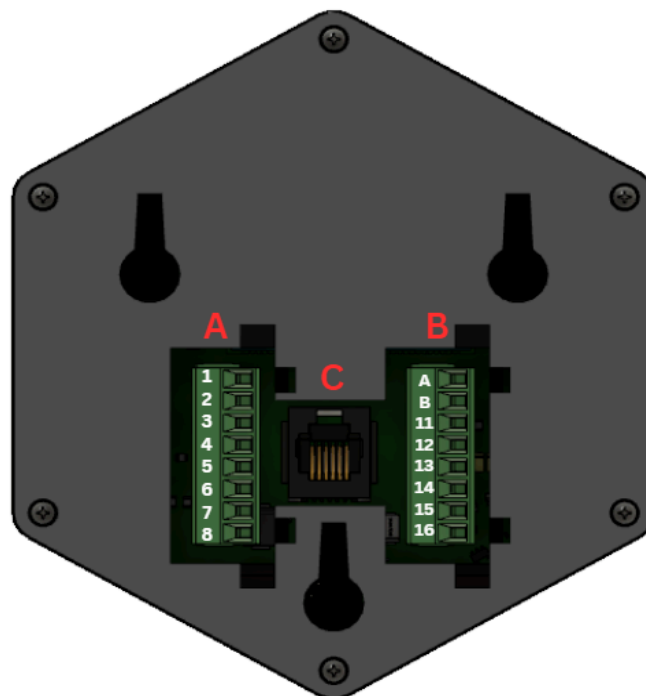
INFO PAGE

Users can get the information from the info page . Such as QR code of the IMEI number, selected controller, selected elements , main voltage, battery voltage, firmware version, app version, contact mail and the error codes .

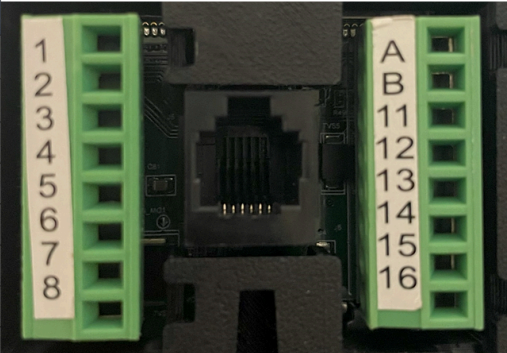
NOTE: The corresponding Error codes will show on the info screen.



5. GENERIC PINS of RV THERMOSTAT



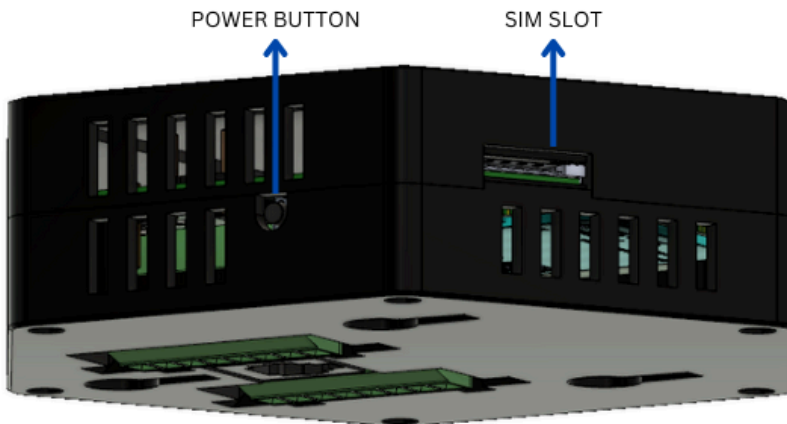
Pin No	Connector A	Pin No	Connector B
1	Heater / AC 2	A	RS485 A / CAN H
2	AC1	B	RS485 B / CAN L
3	Heater 3	11	Single wire
4	Heater 2	12	AGS
5	Heater 1	13	Fan High
6	Relay COM	14	Fan Low
7	Power AC / DC+	15	Freeze IN / Colman 8 series
8	Power AC / DC-	16	GND



Pin No	Connector A	Pin No	Connector B
1	Heater / AC 2	9	RS485 A / CAN H
2	AC1	10	RS485 B / CAN L
3	Heater 3	11	Single wire
4	Heater 2	12	AGS
5	Heater 1	13	Fan High
6	Relay COM	14	Fan Low
7	Power AC / DC+	15	Freeze IN / Colman 8 series
8	Power AC / DC-	16	GND

NOTE : please cross check the connection of **Relay COM** (**Relay COM** can connect with **Power AC / DC+** or **Power AC / DC-** , connect the pin as per your requirement. Most common non communicating systems (Coleman Mach relay type) use (+), place jumper wire from pin 6 to 7. Some older systems use (-) for the relay common.

6. POWER BUTTON AND SIM SLOT POSITIONS



POWER OFF:

Press and hold the power button for more than 6 seconds for power off the device

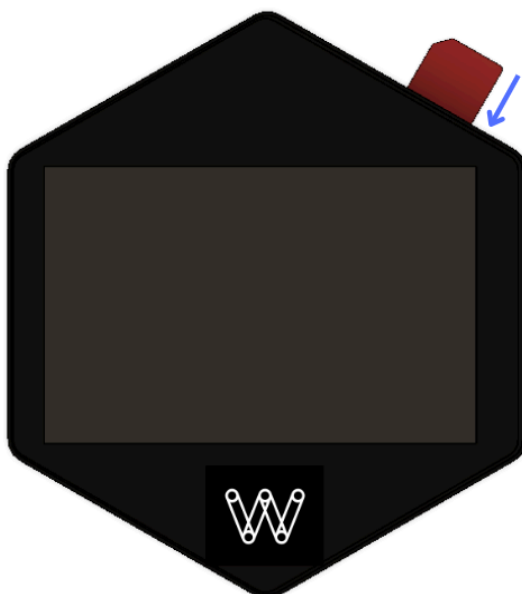
REBOOT:

Press and hold the power button for 2 to 4 seconds to reboot the device

POWER ON:

Press and hold the power button for more than 5 seconds for power on the device. The device will take about a minute to start.

SIM INSERTING IMAGE



FIRMWARE AND APPLICATION UPDATES

The pop up to download the app or firmware will show on the display if the newer version of app or firmware is available . Users can download the latest versions by clicking on the download button on the pop up.

Available controllers

1. Coleman/Airxcel/Home Thermostat
2. Coleman Mach Two Stage
3. Furrion Single Zone
4. Furrion multi Zone
5. Dometic (Furnace Only)
6. Dometic (Heat Pump + Furnace)
7. Dometic (Heat strip + Furnace)
8. Dometic CCC-10/12 Btn multi zone
9. GE Single Zone
10. Coleman 8 Series Multi Zone
11. Coleman 9 Series Multi Zone

1 - COLEMAN/AIRXCEL/WALTECH 1.0/HOME THERMOSTAT

Any devices shipped after the **20th of May 2024** will have updated furnace relays and all of these devices with new furnace relays either will have a **WHITE "R"** symbol behind the device or will have either a manufacturing date that is after 20th of May 2024 for identification.

All devices shipped **before the 20th of May 2024 need a manual relay for using Furnace**. This is only applicable for Coleman Mach/Airxcel single zone thermostats.

Once the user has **COLEMAN/AIRXCEL/HOME THERMOSTAT** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - HEAT PUMP/HEAT STRIP/ FURNACE

HEATER 2 - HEAT PUMP/HEAT STRIP/ FURNACE

HEATER 3 - NA (B&O)

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial . On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT , FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed.

High

The fan operates continuously at high speed.

Auto

The fan speed varies depending on the selection. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

There are 2 heater selections available.

HEATER 1 - HEAT PUMP/HEAT STRIP/ FURNACE

HEATER 2 - HEAT STRIP/ FURNACE

HEATER 3 - HEATER NA (B&O)

Heater 3 is act as B&O

The heaters will work individually if they select individually . If the user selects both the heaters then it will work according to the stage gap, the user can select the gap 0 to 10 from the settings screen. In this condition the HEATER 1 will turn ON first and after the gap the HEATER 2 will also turn ON.

- The system will cycle the heaters on and off based on the room temperature and temperature setpoint.
- There are 3 fan speed selections in this mode.

Low

The fan operates continuously at low speed.

High

The fan operates continuously at high speed.

Auto

The HEATER or HEATERS only works and the fan is in the off state .

NOTE: The **B&O** has two modes: AC ON mode and HEATER ON mode. In the AC ON mode, the B&O gets turned on only when the AC is activated . And in the heater on mode, the B&O gets turned on only when the HEATER is activated . Do not select both heaters as the same.

FAN MODE**Low**

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump/heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

Compressor Time Delay

A time delay of approximately 2 minutes occurs any time the compressor is required to begin the cooling cycle.

NOTE: The time delay occurs automatically after a mode is selected or a power event occurs to ensure pressure in the compressor is equalized appropriately, to prevent damage.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off. There will be a delay of 2 minutes to turn on the heating or cooling element once the AGS is turned on.

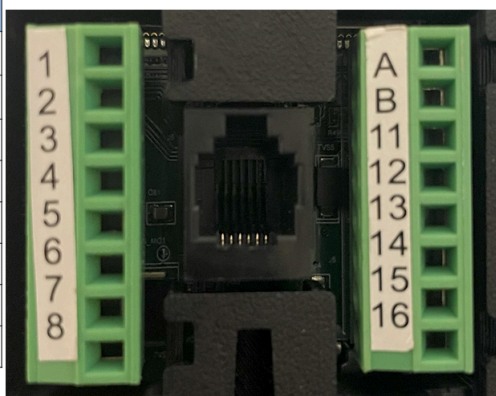
WIRING INSTRUCTIONS: COLEMAN/AIRXCEL/WALTECH 1.0/HOME THERMOSTAT

Only two ports are enabled to handle FURNACE - **PIN#5 & PIN#4**

Pin No	Connector A	Pin No	Connector B
2	AC1		
3	B&O / NA		
4	Heater 2	12	AGS
5	Heater 1	13	Fan High
6	Relay COM	14	Fan Low
7	Power AC / DC+		
8	Power AC / DC-		

- Pin 6 will almost always need a jumper from pin 7 (most common) or pin 8. See Pin terminal description.

Pin No	Connector A
1	
2	AC1
3	
4	Heater 2
5	Heater 1
6	Relay COM
7	Power AC / DC+
8	Power AC / DC-



Pin No	Connector B
13	Fan High
14	Fan Low

Any devices shipped after the **20th of May 2024** will have updated furnace relays and all of these devices with new furnace relays either will have a **WHITE "R"** symbol behind the device or will have either a manufacturing date that is after 20th of May 2024.

All devices shipped **before the 20th of May 2024 need a manual relay for using Furnace. This is only applicable for Coleman Mach/Airxcel single zone thermostats.**

- You **MUST** use an additional **relay** anytime connecting a furnace.

Connecting an Additional Relay to the Furnace

Make sure you have the following items ready:

- One relay with four wires
- Three wire nuts
- Three small wires (one blue and two pink)

Step 1: Gather Your Materials

Make sure you have the following items ready:

- One relay with four wires
- Three wire nuts
- Three small wires (one blue and two pink)

Step 2: Identify Connections

First, let's match up the wires:

- Ground wire (Pin#8)
- Black wire from the relay
- Small blue wire

Step 3: Connect the Ground

Join these wires together using a wire nut. Also, connect the small blue wire to Pin #8.

Step 4: Power Connections

Next, combine:

- Both small pink wires
- Yellow wire from the relay
- Red +12v wire from Pin#7

Connect one small pink wire to PIN #7 and the other to PIN#6. This provides power and creates a jumper connection.

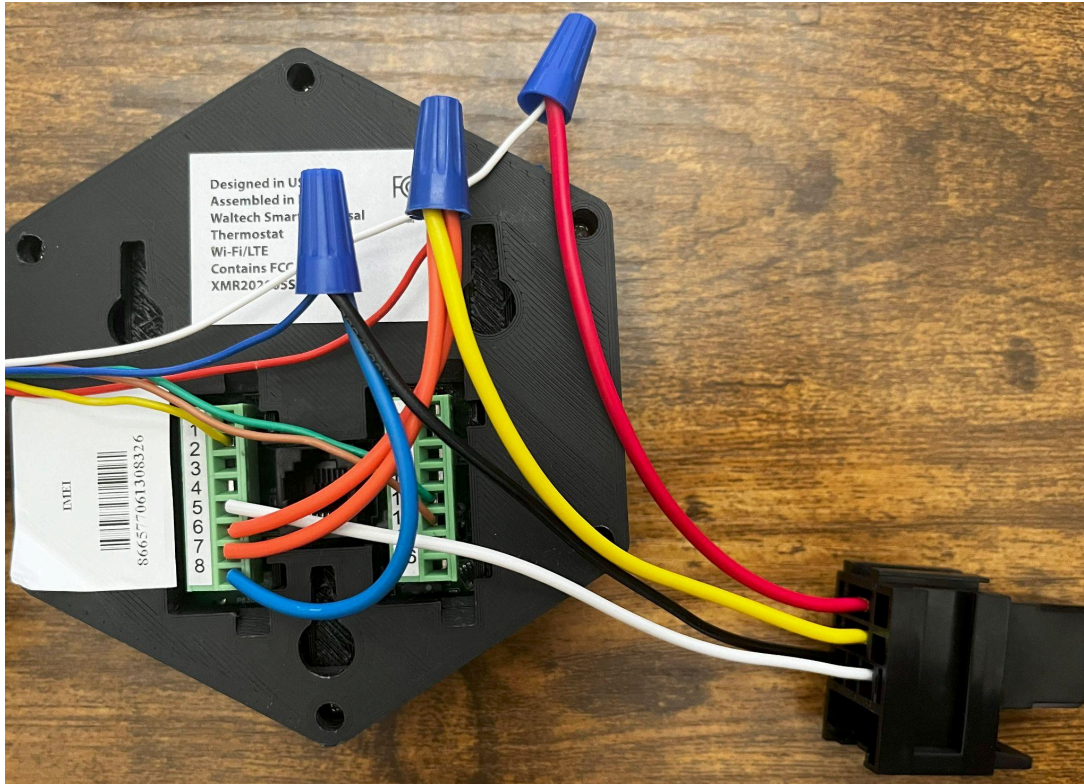
Step 5: Connect to Furnace

If connecting to Heat 1, link the white wire from the relay to Pin#5. For Heat 2, use Pin#4.

Step 6: Connect Furnace Wire

Lastly, connect the white wire from the furnace wire to the red wire in the relay. Use a wire nut to secure them together.

Safety Tip: Cover the wire nuts with tape to ensure safety and prevent wires from coming loose during travel.



2 - COLEMAN MACH TWO STAGE THERMOSTAT

Any devices shipped after the **20th of May 2024** will have updated furnace relays and all of these devices with new furnace relays either will have a **WHITE "R"** symbol behind the device or a manufacturing date that is after 20th of May 2024.

All devices shipped **before the 20th of May 2024 need a manual relay for using Furnace. This is only applicable for Coleman Mach/Airxcel single zone thermostats & Coleman Mach Dual Stage Thermostat**

Once the user has **COLEMAN MACH TWO STAGE THERMOSTAT** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - HEAT PUMP/HEAT STRIP/ FURNACE

HEATER 2 - HEAT PUMP/HEAT STRIP/ FURNACE

HEATER 3 - HEAT PUMP/HEAT STRIP/B&O

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial . On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen .

There are 5 available modes (AUTO, COOL, HEAT , FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

In the cool mode there are two AC units in **COLEMAN MACH TWO STAGE THERMOSTAT**. The ACs will work individually if they select individually . If the user selects both the ACs then it will work according to the stage gap, the user can select the gap 0 to 10 from the settings screen. In this condition the AC1 will work first and after the gap the AC2 will also work.

- The system will cycle the compressors on and off based on the room temperature and the temperature set-point.

- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

There are 3 HEATER selections available .

HEATER 1 - HEAT PUMP

HEATER 2 - HEAT STRIP/ FURNACE

HEATER 3 - Heat Pump/B&O

The heaters will work individually if they select individually . If the user selects all the heaters then it will work according to the stage gap, the user can select the gap 0 to 10 from the settings screen. In this condition the HEATER 1 will turn ON first and after the first gap the HEATER 2 will turn ON and after the second gap the HEATER 3 will turn ON.

If the user selects HEATER 3 as B&O then the HEATER 3 will work as B&O. And there will be only two HEATERS.

- The system will cycle the heaters on and off based on the room temperature and temperature setpoint.
- There are 3 fan speed selections in this mode.

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The HEATER or HEATERS only works and the fan is in the off state .

NOTE: The **B&O** has two modes: AC ON(default) mode and HEATER ON mode. In the AC ON mode, the B&O gets turned on only when the AC is activated . And in the heater on mode, the B&O gets turned on only when the HEATER is activated .

Do not select both heaters as the same.

FAN MODE**Low**

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump/heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

Compressor Time Delay

A time delay of approximately 2 minutes occurs any time the compressor is required to begin the cooling cycle.

NOTE: The time delay occurs automatically after a mode is selected or a power event occurs to ensure pressure in the compressor is equalized appropriately, to prevent damage.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off. There will be a delay of 2 minutes to turn on the heating or cooling element once the AGS is turned on.

NOTE: If the temperature goes below 5 degrees the freeze sensor will get activated and turn off the AC.

ERROR CODES

1. Freeze sensor temperature out of order

WIRING INSTRUCTIONS

Only two ports are enabled to handle FURNACE - **PIN#5 & PIN#4**

Waltech Pin No	Connector A	Original Thermostat wire color and pin no	Waltech Pin No	Connector B	Original Thermostat wire color and pin no
1	AC 2	Orange (9 pin CON Pin6)	9	NA	
2	AC1	Yellow (9 pin CON Pin5)	10	NA	
3	Heater 3 / B&O	Orange/White (4 pin CON Pin4)	11	Freeze IN 1	Gray (9 pin CON Pin1)
4	Heater 2	White (4 pin CON Pin3)	12	AGS	Green(9 pin CON Pin3)
5	Heater 1	White/Black (9 pin CON Pin 8)	13	Fan High	Black (9 pin CON Pin7)
6	Relay COM	Insert jumper to pin 7	14	Fan Low	Purple (9 pin CON Pin9)
7	Power AC / DC+	Red/White (4 pin CON Pin1)	15	Freeze IN 2	Gray (9 pin CON Pin3)
8	Power AC / DC-	Blue/White (4 pin CON Pin2) & Blue (9 pin CON Pin4)	16	NA	

All devices shipped **before the 20th of May 2024** need a manual relay for using Furnace. This is only applicable for Coleman Mach/Airxcel single zone thermostats.

- You **MUST** use an additional **relay** anytime connecting a furnace.

Connecting an Additional Relay to the Furnace

Make sure you have the following items ready:

- One relay with four wires
- Three wire nuts
- Three small wires (one blue and two pink)

Step 1: Gather Your Materials

Make sure you have the following items ready:

- One relay with four wires
- Three wire nuts
- Three small wires (one blue and two pink)

Step 2: Identify Connections

First, let's match up the wires:

- Ground wire (Pin#8)

- Black wire from the relay
- Small blue wire

Step 3: Connect the Ground

Join these wires together using a wire nut. Also, connect the small blue wire to Pin #8.

Step 4: Power Connections

Next, combine:

- Both small pink wires
- Yellow wire from the relay
- Red +12v wire from Pin#7

Connect one small pink wire to PIN #7 and the other to PIN#6. This provides power and creates a jumper connection.

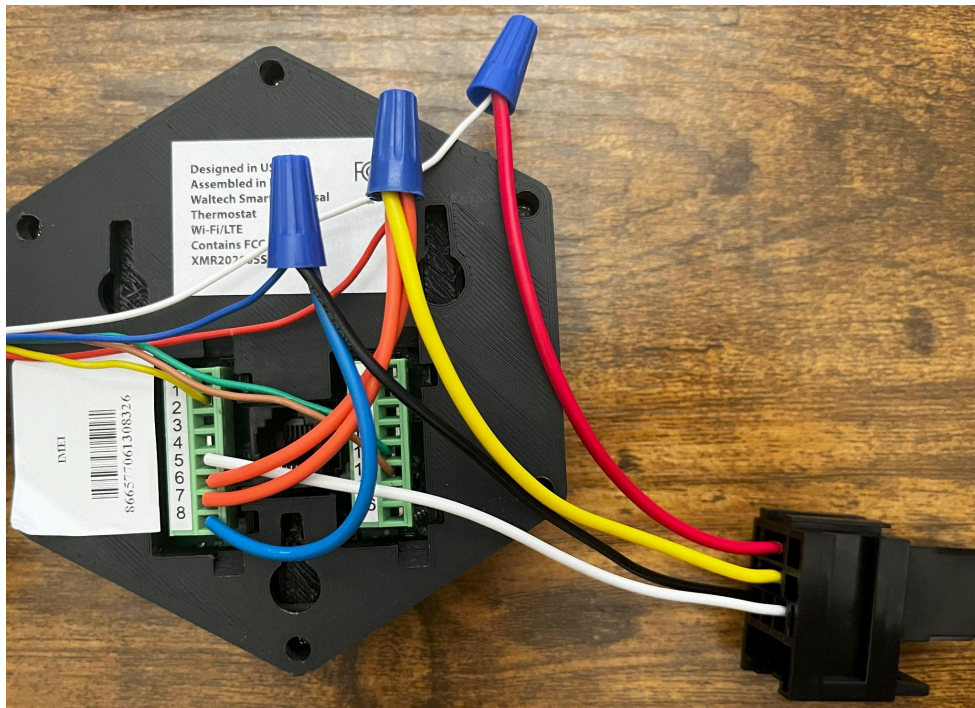
Step 5: Connect to Furnace

If connecting to Heat 1, link the white wire from the relay to Pin#5. For Heat 2, use Pin#4.

Step 6: Connect Furnace Wire

Lastly, connect the white wire from the furnace wire to the red wire in the relay. Use a wire nut to secure them together.

Safety Tip: Cover the wire nuts with tape to ensure safety and prevent wires from coming loose during travel.



3 - FURRION SINGLE ZONE THERMOSTAT

Once the user has selected **FURRION SINGLE ZONE** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - FURNACE

HEATER 2 - NA

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 4 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

Med

The fan operates continuously at medium speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

NOTE: The HEAT mode is only available when the furnace is enabled.

- The system will cycle the furnace on and off based on the room temperature and temperature setpoint.
- There are 4 fan speed selections in this mode.
- The fan speed selections only apply to the rooftop fan that is part of the Air Conditioner. The fan speed selection does not change the fan speed of the furnace.

Low

The fan operates continuously at low speed and the icon displays on the screen.

Med

The fan operates continuously at medium speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The furnace only works and the fan is in the off state .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

Med

The fan operates continuously at medium speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level. If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode. In heat mode the fan Auto is in off state and for the fan mode also.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

- 1.Communication Loss**
- 2.Freeze sensor temperature out of order**
- 3.Indoor sensor temperature out of order**

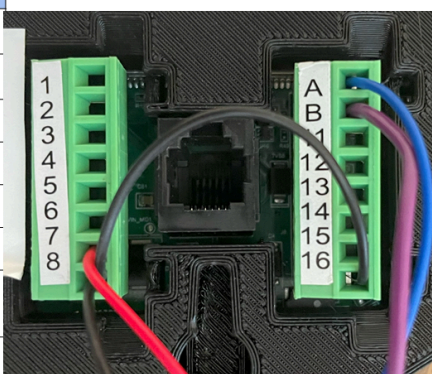
4.Low DC power

WIRING INSTRUCTIONS: FURRIION SINGLE ZONE THERMOSTAT

Pin No	Connector A	Pin No	Connector B
1	NA	A	RS485 A (Connect to Furion BLUE wire)
2	NA	B	RS485 B (Connect to Furion PURPLE wire)
3	NA	11	NA
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (Connect to Furion RED wire)	15	NA
8	Power AC / DC- (Connect to Furion BLACK wire)	16	GND (Connect to Furion BLACK wire)

NOTE : Here GND (16th pin) connect recommended. There is no issue if not connected. We used Green wire instead of VIOLET wire for demonstration purposes only.

Pin No	Connector A
6	Relay COM
7	Power AC / DC+ (Connect Furion RED wire to Pin#7)
8	Power AC / DC- (Connect Furion BLACK wire to pin#8)



Pin No	Connector B
A	RS485 A (Connect Furion BLUE wire to Pin# A)
B	RS485 B (Connect Furion PURPLE wire to Pin# B)
12	AGS
16	GND (Connect a jumper wire between Pin#8 & Pin#16)

4 - FURRIION MULTI ZONE THERMOSTAT

Once the user has selected **FURRIION MULTI ZONE** from the initial home screen, press the finish button on the top right corner. Then configure the heater selection page exactly as given below. And submit the settings.

HEATER 1 - FURNACE

HEATER 2 - NA

HEATER 3 - NA

After submitting the heater selection, the user can access the climate controls, and once the user selects the climate control option the user can see the ZONE's and the user selects the available zones and controls the temperature using a set temperature dial which appears when the user selects the available zone . On the left side of the dial the room temperature is shown and on the right side the humidity value is shown. There are a maximum of 4 zones in **FURRIION MULTI ZONE**. The user can control all the zones individually.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 4 fan speed selections in this mode

Low

The fan operates continuously at low speed.

Med

The fan operates continuously at medium speed.

High

The fan operates continuously at high speed.

Auto

The fan speed varies depending on the selection. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

NOTE: The HEAT mode is only available when the furnace is enabled.

- The system will cycle the furnace on and off based on the room temperature and temperature setpoint.
- There are 4 fan speed selections in this mode.
- The fan speed selections only apply to the rooftop fan that is part of the Air Conditioner. The fan speed selection does not change the fan speed of the furnace.

Low

The fan operates continuously at low speed.

Med

The fan operates continuously at medium speed.

High

The fan operates continuously at high speed.

Auto

The furnace only works and the fan is in the off state .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

Med

The fan operates continuously at medium speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level. If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode. In heat mode the fan Auto is in off state and for the fan mode also.

Zone Selection

- Press the climate control option on the thermostat screen to see available zones. ZONE 1, ZONE 2, ZONE 3 or ZONE 4 if they are connected and if it's available , the user can select the zones.
- Use the control slider to adjust the set points for the selected zone and control option for selecting the operation of the system in one particular zone.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

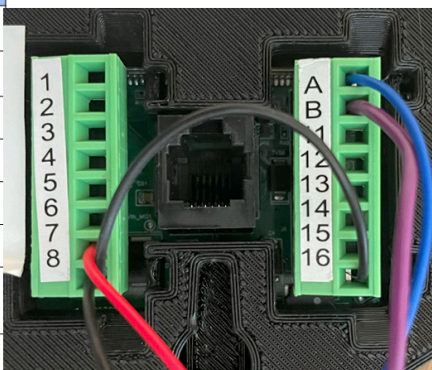
- 1.Communication Loss**
- 2.Freeze sensor temperature out of order**
- 3.Indoor sensor temperature out of order**
- 4.Low DC power**

WIRING INSTRUCTIONS: FURRION MULTI ZONE THERMOSTAT

Pin No	Connector A	Pin No	Connector B
1	NA	A	RS485 A (Connect to Furion BLUE wire)
2	NA	B	RS485 B (Connect to Furion PURPLE wire)
3	NA	11	NA
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (Connect to Furion RED wire)	15	NA
8	Power AC / DC- (Connect to Furion BLACK wire)	16	GND (Connect to Furion BLACK wire)

NOTE : Here GND (16th pin) connect recommended. There is no issue if not connected. We used Green wire instead of VIOLET wire for demonstration purposes only.

Pin No	Connector A	Pin No	Connector B
		A	RS485 A (Connect Furion BLUE wire to Pin# A)
		B	RS485 B (Connect Furion PURPLE wire to Pin# B)
		12	AGS
6	Relay COM		
7	Power AC / DC+ (Connect Furion RED wire to Pin#7)		
8	Power AC / DC- (Connect Furion BLACK wire to pin#8)	16	GND (Connect a jumper wire between Pin#8 & Pin#16)



5 - DOMETIC AC (FURNACE ONLY)

Once the user has selected **DOMETIC(FURNACE ONLY)** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - FURNACE(If you do not have heating unit please select NA)

HEATER 2 - NA

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

NOTE: The HEAT mode is only available when the furnace is enabled.

- The system will cycle the furnace on and off based on the room temperature and temperature setpoint.
- There are 3 fan speed selections in this mode.
- The fan speed selections only apply to the rooftop fan that is part of the Air Conditioner. The fan speed selection does not change the fan speed of the furnace.

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The furnace only works and the fan is in the off state .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.

- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode. In heat mode the fan Auto is in off state and for the fan mode also.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

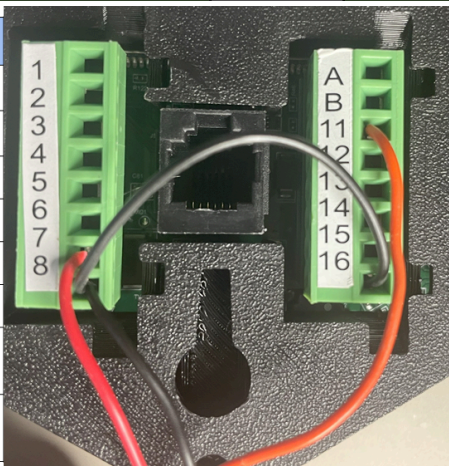
1.Communication Loss

2. Freeze sensor temperature out of order

WIRING INSTRUCTIONS: DOMETIC AC (FURNACE ONLY)

Pin No	Connector A	Pin No	Connector B
1	NA	9	NA
2	NA	10	NA
3	NA	11	Single wire (connect to Dometic ORANGE wire)
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (Connect to Dometic RED wire)	15	NA
8	Power AC / DC- (connect to Dometic BLACK wire)	16	GND (Connect to Dometic BLACK wire)

Pin No	Connector A	Pin No	Connector B
6	Relay COM		
7	Power AC / DC+ (Connect to Dometic RED wire)		
8	Power AC / DC- (Connect to Dometic BLACK wire)		
		11	Single wire (connect to Dometic ORANGE wire)
		12	AGS
		16	GND (Connect a jumper wire between Pin#8 & Pin#16)



6 - DOMETIC AC (HEAT PUMP + FURNACE)

Once the user has selected **Dometic(Heat Pump+Furnace)** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat Pump

HEATER 2 - Furnace

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan. HEAT PUMP and FURNACE will work along with all fan speed except the furnace in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT PUMP will work first then after the heat gap reaches the FURNACE will turns on and the HEAT PUMP will turns off .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.

- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump. In furnace mode the fan Auto is in off state and for the fan mode also.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

1.Communication Loss

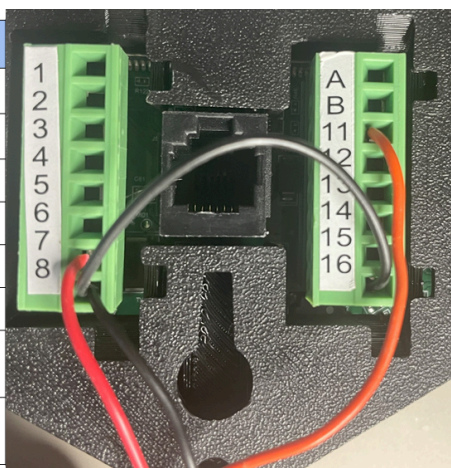
2.Freeze sensor temperature out of order

3.Outdoor sensor temperature out of order

WIRING INSTRUCTIONS- DOMETIC AC (HEAT PUMP + FURNACE)

Pin No	Connector A	Pin No	Connector B
1	NA	9	NA
2	NA	10	NA
3	NA	11	Single wire (connect to Dometic ORANGE wire)
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (Connect to Dometic RED wire)	15	NA
8	Power AC / DC- (connect to Dometic BLACK wire)	16	GND (Connect to Dometic BLACK wire)

Pin No	Connector A	Pin No	Connector B
6	Relay COM		
7	Power AC / DC+ (Connect to Dometic RED wire)	11	Single wire (connect to Dometic ORANGE wire)
8	Power AC / DC- (Connect to Dometic BLACK wire)	12	AGS
		16	GND (Connect a jumper wire between Pin#8 & Pin#16)



7 - DOMETIC AC (HEAT STRIP + FURNACE)

Once the user has selected **Dometic(Heat Pump+Furnace)** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat strip

HEATER 2 - Furnace

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan. HEAT STRIP and FURNACE will work along with all fan speed except the furnace in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT STRIP will work first then after the heat gap reaches the FURNACE will turns on and the HEAT STRIP will turns off .

FAN MODE**Low**

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current

temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

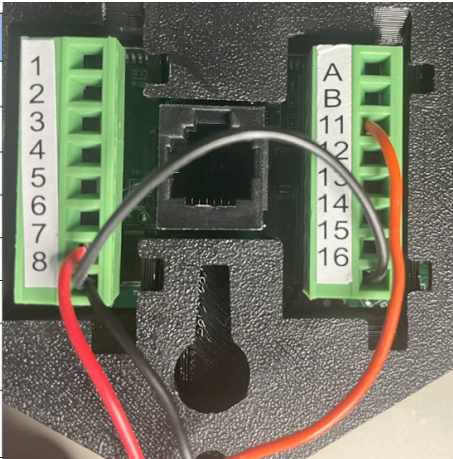
1.Communication Loss

2.Freeze sensor temperature out of order

WIRING INSTRUCTIONS- DOMETIC AC (HEAT STRIP + FURNACE)

Pin No	Connector A	Pin No	Connector B
1	NA	9	NA
2	NA	10	NA
3	NA	11	Single wire (connect to Dometic ORANGE wire)
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (Connect to Dometic RED wire)	15	NA
8	Power AC / DC- (connect to Dometic BLACK wire)	16	GND (Connect to Dometic BLACK wire)

Pin No	Connector A	Pin No	Connector B
6	Relay COM		
7	Power AC / DC+ (Connect to Dometic RED wire)	11	Single wire (connect to Dometic ORANGE wire)
8	Power AC / DC- (Connect to Dometic BLACK wire)	12	AGS
		16	GND (Connect a jumper wire between Pin#8 & Pin#16)



8 - DOMETIC CCC-10/12 BTN MULTI ZONE

Once the user has selected **Dometic CCC-10/12 Btn multi zone** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat Pump/Heat strip/Furnace

HEATER 2 - Furnace/NA

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 4 fan speed selections in this mode

Low

The fan operates continuously at low speed.

Med

The fan operates continuously at medium speed.

High

The fan operates continuously at high speed.

Auto

The fan speed varies depending on the selection. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan. HEAT PUMP/HEAT STRIP (as per the selection) and FURNACE will work along with all fan speed except the furnace in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT PUMP/HEAT STRIP (as per the selection) will work first then after the heat gap reaches the FURNACE will also works along with the HEAT PUMP/HEAT STRIP (as per the selection) .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

Med

The fan operates continuously at medium speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level. If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when

the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump/heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

Zone Selection

- Press the climate control option on the thermostat screen to see available zones. ZONE 1, ZONE 2, ZONE 3 or ZONE 4 if they are connected and if it's available , the user can select the zones .
- Use the control slider to adjust the set points for the selected zone and control option for selecting the operation of the system in one particular zone.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

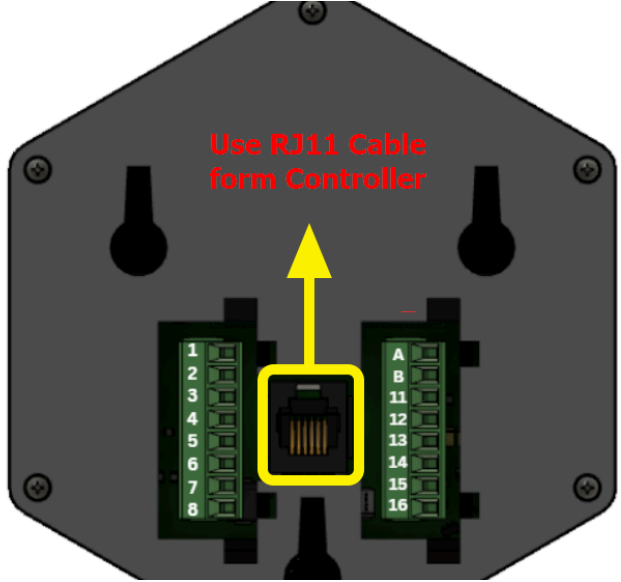
- 1.Communication Loss**
- 2.Freeze sensor temperature out of order**
- 3.No AC power**
- 4.Invalid dip switch config**
- 5.Shorted indoor temperature sensor**

NOTE: Configure the dip switch according to the mode selected in the thermostat.

WIRING INSTRUCTIONS: DOMETIC CCC-10/12 BTN MULTI ZONE

Pin No	Connector A	Pin No	Connector B
1	NA	9	NA
2	NA	10	NA
3	NA	11	Single wire (connect with RJ11 cable)
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	NA	15	NA
8	NA	16	NA

NOTE : Here +12VDC power included in RJ11 Connector



9 - DOMETIC 5 Button BTN MULTI ZONE

Once the user has selected Dometic 5 multi zone from the initial home screen, press the finish button on the top right corner. Then configure the heater selection page exactly as given below. And submit the settings.

HEATER 1 - Heat Pump

HEATER 2 - Heat strip

HEATER 3 - Furnace

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. The user can change the target temperature as needed. And select whether cool or heat mode from the control screen.

The Dometic control boards used in the air conditioning system do not report the local temperature at the air conditioner down to the thermostat. As a result, the thermostat will report only the temperature derived from sensor inside the thermostat. This temperature will be displayed as room temperature for all zones regardless of location.

There are 4 available modes (**AUTO, COOL, HEAT and FAN**) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- There are 2 fan speed selections in this mode

Low

The fan operates continuously at low speed.

High

The fan operates continuously at high speed.

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature set point.

The heaters will work individually as per selection along with the fan. HEAT PUMP works with FAN LOW and FAN HIGH, HEAT STRIP works with FAN LOW and FAN will not work with FURNACE.

FAN MODE

Low:

The fan operates continuously at low speed and the icon displays on the screen.

High:

The fan operates continuously at high speed and the icon displays on the screen.

AUTO:

The fan speed varies depending on the selection. In fan auto mode when the set temperature reaches the target the fan is also turned off.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected. And there is a dead band in this mode. The dead band is from current temperature - band gap to current temperature + band gap. In the dead band any of the elements will not work, everything is in off state.

NOTE:

- 1.Auto mode and Fan auto only works for Zone 1.
- 2.Only one heater should be selected at a time for Zone 2, 3 and 4.
- 3.A time delay of approximately 3 minutes occurs any time the compressor is required to begin the cooling/heating cycle.

Zone Selection

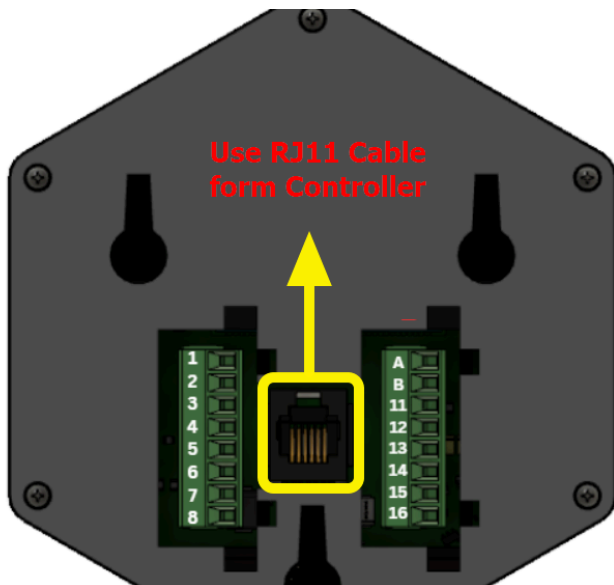
- Press the climate control option on the thermostat screen to see available zones. **ZONE 1, ZONE 2, ZONE 3 or ZONE 4** if they are connected and if it's available, the user can select the zones.
- Use the control slider to adjust the set points for the selected zone and control option for selecting the operation of the system in one particular zone.

ERROR CODES 1.Communication Loss

NOTE: Configure the dip switch according to the mode selected in the thermostat.

WIRING INSTRUCTIONS: **DOMETIC Multi-Zone-5 BTN Thermostat**

PLUG the RJ 11 cable to the port in the back of the thermostat.



Pin No	Connector A	Pin No	Connector B
1		9	
2		10	
3		11	Single wire (connect with RJ11 cable)
4		12	
5		13	
6		14	
7	Power AC / DC+ (connect with RJ11 cable)	15	
8	Power AC / DC- (connect with RJ11 cable)	16	

10 - GE SINGLE ZONE

Once the user has selected **GE Single Zone** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat Pump

HEATER 2 - Furnace

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan. HEAT PUMP and FURNACE will work along with all fan speed except the furnace in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT PUMP will work first then after the heat gap reaches the FURNACE will works along with the HEAT PUMP.

FAN MODE

Low

The fan operates continuously at low speed.

High

The fan operates continuously at high speed.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level. If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump. In furnace mode the fan Auto is in off state and for the fan mode also.

AGS

The user can enable the AGS option in the settings. If the user enables the AGS; the AGS will turn on when the compressor is getting turned ON. And turns off when the compressor is turned off.

ERROR CODES

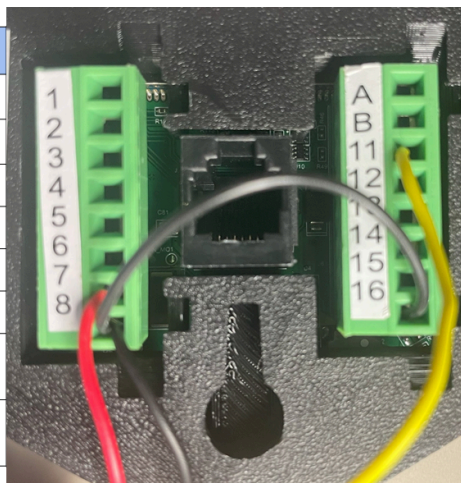
1.Communication Loss

WIRING INSTRUCTIONS - GE SINGLE ZONE

Pin No	Connector A	Pin No	Connector B
1	NA	9	NA
2	NA	10	NA
3	NA	11	Single wire (connect GE YELLOW wire)
4	NA	12	AGS
5	NA	13	NA
6	Relay COM	14	NA
7	Power AC / DC+ (connect GE RED and WHITE wire)	15	NA
8	Power AC / DC- (connect GE BLACK and WHITE wire)	16	GND (Connect to GE BLACK and WHITE wire)

Please note that in the picture below we are using Red wire instead of [Red & White wire] and Black wire instead of [Black and white wire] since this is just for demonstration purposes.

Pin No	Connector A	Pin No	Connector B
6	Relay COM		
7	Power AC / DC+ (connect GE RED and WHITE wire)	11	Single wire (connect GE YELLOW wire)
8	Power AC / DC- (connect GE BLACK and WHITE wire)	12	AGS
		16	GND (GND (Connect a jumper wire between Pin#8 & Pin#16)



11 - COLEMAN 8 SERIES MULTI ZONE

Once the user has selected **Coleman 8 Series Multi Zone** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat Pump/Heat strip/NA

HEATER 2 - Furnace/NA

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan.

HEAT PUMP will only work with fan speed HIGH,HEAT STRIP will only work with fan speed LOW,FURNACE in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT PUMP/HEAT STRIP (as per the selection) will work first then after the heat gap reaches the FURNACE will also works along with the HEAT PUMP/HEAT STRP (as per the selection) .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.

- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current

temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level. If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump/heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

Zone Selection

- Press the climate control option on the thermostat screen to see available zones. ZONE 1, ZONE 2, ZONE 3 or ZONE 4 if they are connected and if it's available , the user can select the zones .
- Use the control slider to adjust the set points for the selected zone and control option for selecting the operation of the system in one particular zone.

ERROR CODES

1.Communication Loss

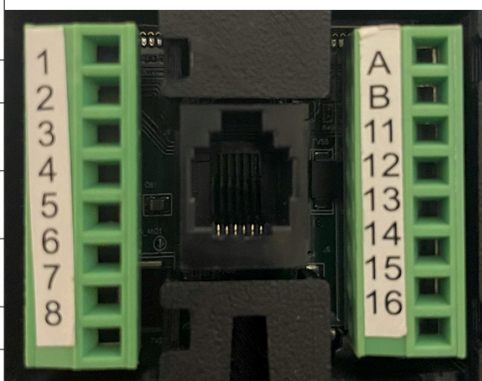
2.Indoor sensor temperature out of order

WIRING INSTRUCTIONS: COLEMAN 8 SERIES MULTI ZONE

Pin No	Connector A	Pin No	Connector B
1	Heater 4	9	NA
2	NA	10	NA
3	Heater 3	11	NA
4	Heater 2	12	NA
5	Heater 1	13	NA
6	Relay COM (Connect to Coleman 8 Series R+ pin)	14	NA
7	Power AC / DC+ (Connect to Coleman 8 Series RED & RED White Wire) Suggested to use a wire nut.	15	Colman 8 series (Connect to Coleman 8 Series SIG pin)
8	Power AC / DC- (Connect to Coleman 9Series Blue & BLue/White Wire)	16	GND (Connect to 8 Series B- pin)

- ❖ Connect **jumper wire** between **pin number 8** to **pin number 16** & **pin number 7** to **pin number 6**
- ❖ You do not need a DIODE or a relay to connect your Furnace on both 8 or 9 series.

Pin No	Connector A
1	Heater 4 (Original tstat Wiring color GREEN)
3	Heater 3 (Original tstat wiring Color YELLOW)
4	Heater 2 (Original tstat wiring Color ORANGE)
5	Heater 1 (Original tstat Wiring color WHITE)
7	Power AC / DC+ (Both Red & Red/White stripe wire should be connected to PIN#7)
8	Power AC / DC- (Both Blue & Blue/White stripe wire should be connected to PIN#8)



Pin No	Connector B
15	Signal Wire Purple (Connect to Coleman 8Series Signal pin)
16	(Connect a jumper wire between Pin#8 & Pin#16)

12 - COLEMAN/AIRXCEL AC 9 SERIES MULTI ZONE

Once the user has selected **Coleman 9 Series Multi Zone** from the initial home screen, press the finish button on the top right corner . Then configure the heater selection page exactly as given below . And submit the settings.

HEATER 1 - Heat Pump/Heat strip/NA

HEATER 2 - Furnace/NA

HEATER 3 - NA

After submitting the heater selection the user can access the climate controls, and once the user selects the climate control option the user can see the set temperature dial. On the left side of the dial the room temperature is shown and on the right side the humidity value is shown.

The user can change the target temperature as needed. And select whether cool, heat or both - AUTO mode from the control screen.

There are 5 available modes (AUTO, COOL, HEAT, FAN and DRY) for you to select. See the following for detailed information of each mode.

COOL MODE

- The system will cycle the compressor on and off based on the room temperature and the temperature set-point.
- The fan will be turned on after the compressor is running.
- There are 3 fan speed selections in this mode

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan speed varies depending on the selection . The icon displays on the screen. In fan auto mode when the set temperature reaches the target the fan is also turned off .

HEAT MODE

The system will cycle the heaters on and off based on the room temperature and temperature setpoint.

The heaters both will work individually as per selection along with the fan.

HEAT PUMP will only work with fan speed HIGH,HEAT STRIP will only work with fan speed LOW,FURNACE in FAN AUTO mode the FAN is in off state, only the furnace will work .

If both heaters are selected , the heaters will work according to the heat gap , that is they both work as stages , if the setpoint is greater than the current room temperature the HEAT PUMP/HEAT STRIP (as per the selection) will work first then after the heat gap reaches the FURNACE will also works along with the HEAT PUMP/HEAT STRP (as per the selection) .

FAN MODE

Low

The fan operates continuously at low speed and the icon displays on the screen.

High

The fan operates continuously at high speed and the icon displays on the screen.

Auto

The fan is in off state and it displays on the screen.

AUTO MODE

- The system will changeover between COOL and HEAT mode according to the room temperature.
- The cool and the heater or heaters are selected . And there is a dead band in this mode . The dead band is from current temperature - band gap to current

temperature + band gap . In the dead band any of the elements will not work, everything is in off state.

DRY MODE

The air conditioning system will turn on and run until the humidity level in the room reaches a preset threshold, typically lower than the current humidity level.

If the room temperature rises above the set temperature, the air conditioning system will turn on again to maintain the desired temperature and continue reducing humidity levels.

The air conditioning system will remain in dry mode until explicitly deactivated by the user, or until the humidity level in the room falls below the preset threshold.

Example: Suppose the current temperature is 80. Current humidity level is 75. The set temperature is 80 and the dry mode humidity set value is 70. Once the user activates the dry mode, the AC will turn on and run until the temperature reaches 80 to 78. If the AC is turned off when it reaches 78, it will turn on when the temperature reaches 80. The AC will turn on again if the user doesn't deactivate dry mode.

NOTE: The fan AUTO works only for cool mode and heat pump/heat strip. In furnace mode the fan Auto is in off state and for the fan mode also.

Zone Selection

- Press the climate control option on the thermostat screen to see available zones. ZONE 1, ZONE 2, ZONE 3 or ZONE 4 if they are connected and if it's available , the user can select the zones .
- Use the control slider to adjust the set points for the selected zone and control option for selecting the operation of the system in one particular zone.

ERROR CODES

1.Communication Loss

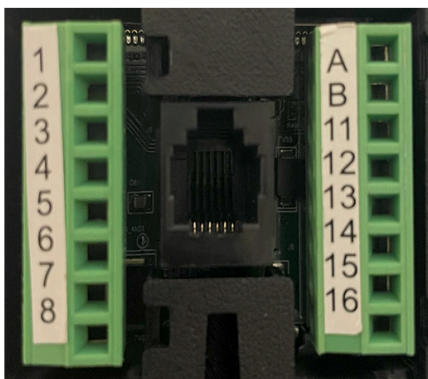
2.Indoor sensor temperature out of order

WIRING INSTRUCTIONS: COLEMAN/AIRXCEL AC 9 SERIES MULTI ZONE

Pin No	Connector A	Pin No	Connector B
1	Heater 4	9	RS485 A (Connect to Coleman 9Series 1G pin)
2	NA	10	RS485 B (Connect to Coleman 9Series 2S pin)
3	Heater 3	11	NA
4	Heater 2	12	NA
5	Heater 1	13	NA
6	Relay COM (Connect to Coleman 9Series R+ pin)	14	NA
7	Power AC / DC+ (Connect to Coleman 9Series RED & RED White Wire)	15	NA
8	Power AC / DC- (Connect to Coleman 9Series Blue & Blue/White Wire)	16	GND (Connect to 9 Series B- pin)

- ❖ Use a **jumper wire** between **pin number 8** to **pin number 16** & **pin number 7** to **pin number 6**
- ❖ You do not need a DIODE or a relay to connect your Furnace on both 8 or 9 series.

Pin No	Connector A
1	Heater 4 (Original tstat Wiring color GREEN)
3	Heater 3 (Original tstat wiring Color YELLOW)
4	Heater 2 (Original tstat wiring Color ORANGE)
5	Heater 1 (Original tstat Wiring color WHITE)
6	Relay Common (Connect a jumper wire between Pin#6 & PIN#7)
7	Power AC / DC+ (Both Red & Red/White stripe wire should be connected to PIN#7)
8	Power AC / DC- (Both Blue & Blue/White stripe wire should be connected to PIN#8)



Pin No	Connector B
A	RS485 A (Original tstat wiring Color PURPLE) Signal 1
B	RS485 B (Original tstat wiring Color BLACK) Signal 2
16	Should be connected to GND (Connect a jumper wire between Pin#8 & Pin#16)

13- Recommended USB adaptor and Cable

- The purpose of the USB port is data transfer (logs) in case of troubleshooting and updating the firmware manually. It is designed for troubleshooting. But, that doesn't mean that you cannot charge or power on the device with a USB cable. It will mostly accept a **USB-C to USB-A cable**. This means that one end of the cable should be a type-A connector. These are most commonly used for data transfer cables. Type A is the commonly used black rectangular connector.
- The minimum requirement is 5V 2A with a USB Type-C cable. Please refer to the link below for a similar product
- Adaptor -
https://www.amazon.com/Amazon-Basics-Charger-480Mbps-Certified/dp/B01GGKYN0A/ref=pd_bxgy_d_sccl_1/131-9360766-3786068?pd_rd_w=Zgli7&content-id=amzn1.sym.2b132e63-5dcd-4ba1-be9f-9e044543d59f&pf_rd_p=2b132e63-5dcd-4ba1-be9f-9e044543d59f&pf_rd_r=7D6HJH0F402SNZG3AZDK&pd_rd_wg=szE6E&pd_rd_r=53c54cc4-f2f5-42a5-8737-9df9c51d3922&pd_rd_i=B01GGKYN0A&th=1
- Type C cable -
https://www.amazon.com/Amazon-Basics-Charger-480Mbps-Certified/dp/B01GGKYN0A/ref=pd_bxgy_d_sccl_1/131-9360766-3786068?pd_rd_w=Zgli7&content-id=amzn1.sym.2b132e63-5dcd-4ba1-be9f-9e044543d59f&pf_rd_p=2b132e63-5dcd-4ba1-be9f-9e044543d59f&pf_rd_r=7D6HJH0F402SNZG3AZDK&pd_rd_wg=szE6E&pd_rd_r=53c54cc4-f2f5-42a5-8737-9df9c51d3922&pd_rd_i=B01GGKYN0A&th=1

SPECIFICATIONS

WIRELESS DETAILS:

- Wifi supports 2.4 GHZ and 5GHZ.

LTE DETAILS:

- SUPPORTS LTE SIM.