WalTech 2.0 - User Manual (Last updated 11/13/2025)

Basic Thermostat Working Principle

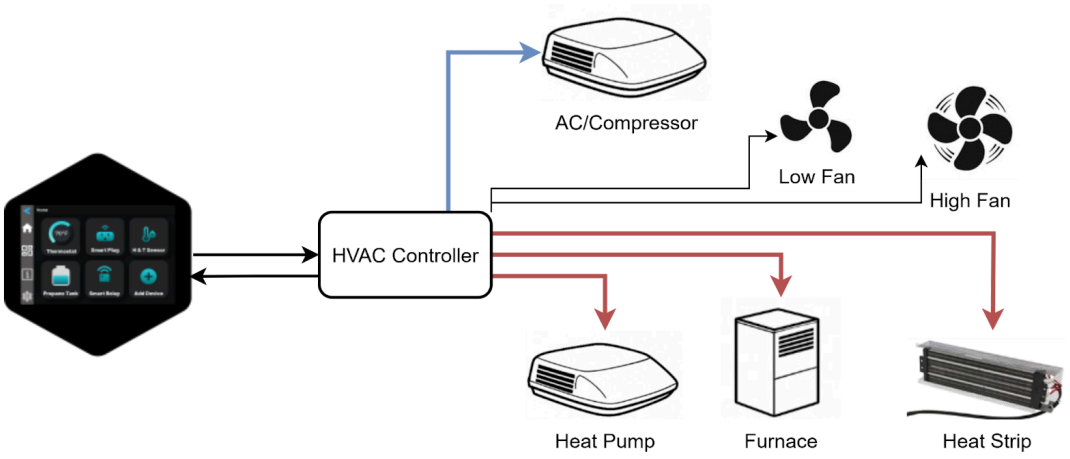
A thermostat directly communicates with the **HVAC controller**, and based on the commands it sends, the controller turns the HVAC components ON or OFF as needed.

The **HVAC controller is connected to multiple components**, which usually include:

- Air Conditioner (Compressor), Fan System, Heating Units (like a Furnace, Heat Pump, or Heat Strip)

Look at the below diagram to understand this better, the below is for a single zone thermostat(means connected to one controller)

Diagram for Single-Zone Controller



How Thermostats Communicate with HVAC Controllers

Before we jump into multi-zone systems, let's quickly look at how thermostats connect to HVAC controllers. Different systems use different wiring methods:

Types of Connections:

- **Direct Wire (Relay-Based):**
  Used in Coleman Mach & Airxcel single-zone systems and most home thermostats.
  - Each wire controls a specific component (AC, Heat, Fan).
  - WalTech supports this setup—even in 24V home systems.
- **Single Communication Wire:**
  Found in Dometic & GE single-zone systems.
  - Along with power wires, there's one signal wire that sends all messages to the controller.
- **Dual Communication Wires (RS-485)**:
  Common with Furrion single and multi-zone systems.
  - Uses two wires for data communication with the controller.
- **Direct + Communication Wires:**
  Used in Coleman Mach/Airxcel multi-zone systems.
  - Relay wires for heaters
  - Signal wires for AC & Fan controls

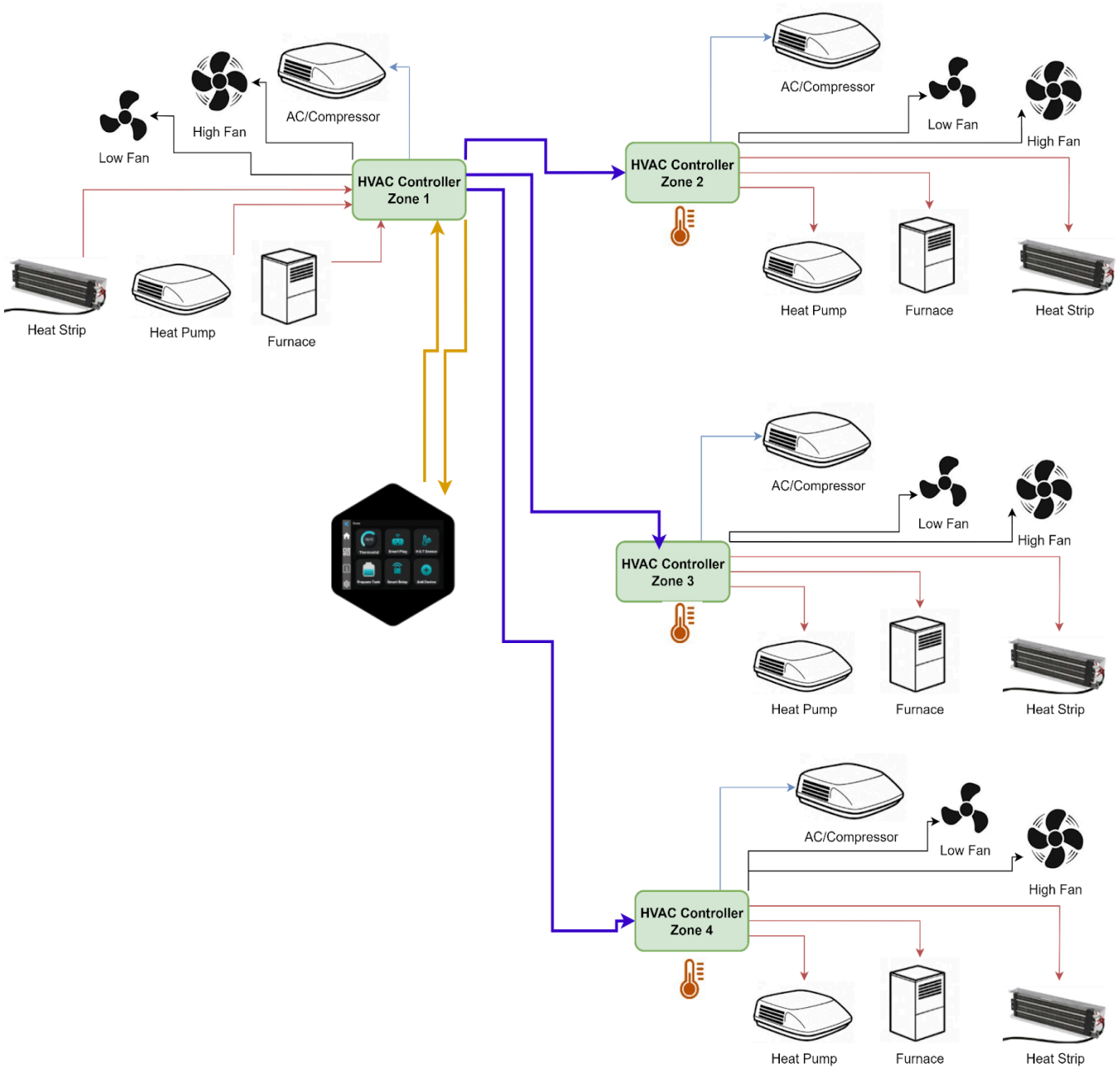
How Multi-Zone Systems Work

Below is the diagram for multi-zone system for better understanding

- You can have up to 4 zones.
- Each zone has its own HVAC controller.
- All controllers are interconnected.
- The thermostat connects to Zone 1's controller, which talks/listens to the other zones.
- Each zone reports its own temperature back to the thermostat.

When you install your WalTech thermostat, it automatically checks for each zone by asking:
"**Hey Zone 1**… *what's your temperature?*", "**Hey Zone 2**… *what about you?*"
If a zone controller replies with its temperature, WalTech knows that zone exists and initializes it. If there's no reply, WalTech assumes that zone isn't connected—or is inactive.
This smart check helps WalTech know exactly which zones are active in your system, so everything runs smoothly.

Diagram for Multi-Zone Controller



Basic Wiring Info- [High-Level]

Universally Compatible - Works on both **RVs & Homes (7.5V to 32V on both DC&AC)**
Let us explore how to wire each controller's - refer manual to see detailed wiring.

1- AirXcel/ Coleman mach Single-Zone (Direct relay based wiring)

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.
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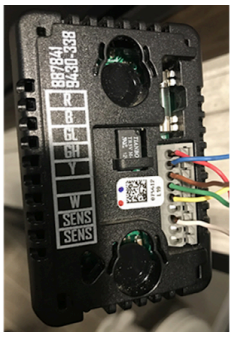
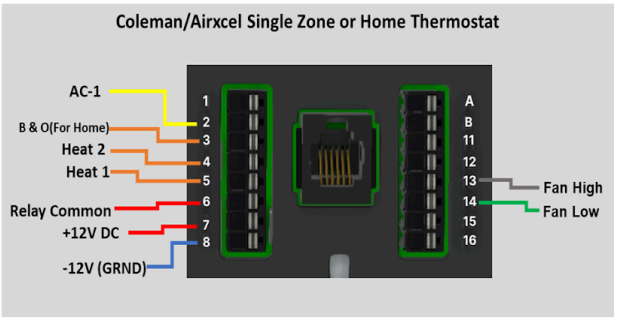
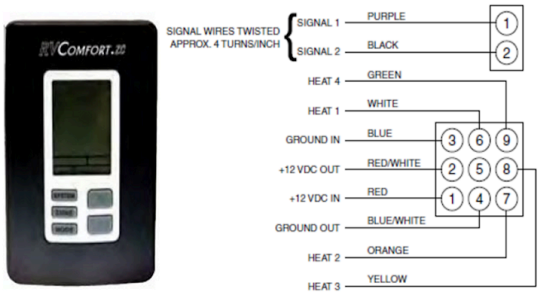
#	Wire Color	HVAC System
R	Red Wire	+12V DC
B	Blue Wire	Ground
GL	Green Wire	Low Fan
GH	Grey Wire	High Fan
Y	Yellow Wire	AC - Compressor
WHP	White & Black	Heat Pump
W	White	Furnace

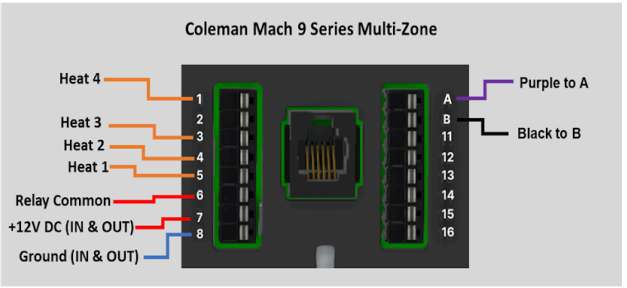




2- AirXcel/ Coleman mach RV Comfort Multi-Zone (9-Series) (Direct + Signal wiring)

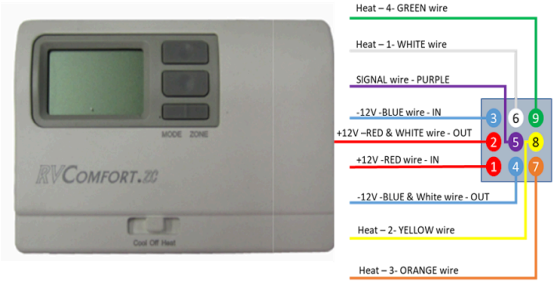
The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

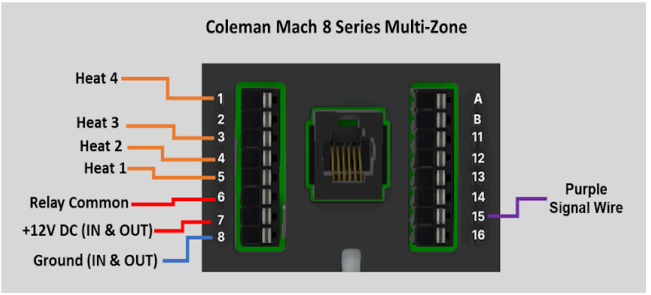




3- Coleman mach Multi-Zone (8-Series) (Direct relay+Signal based wiring)

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

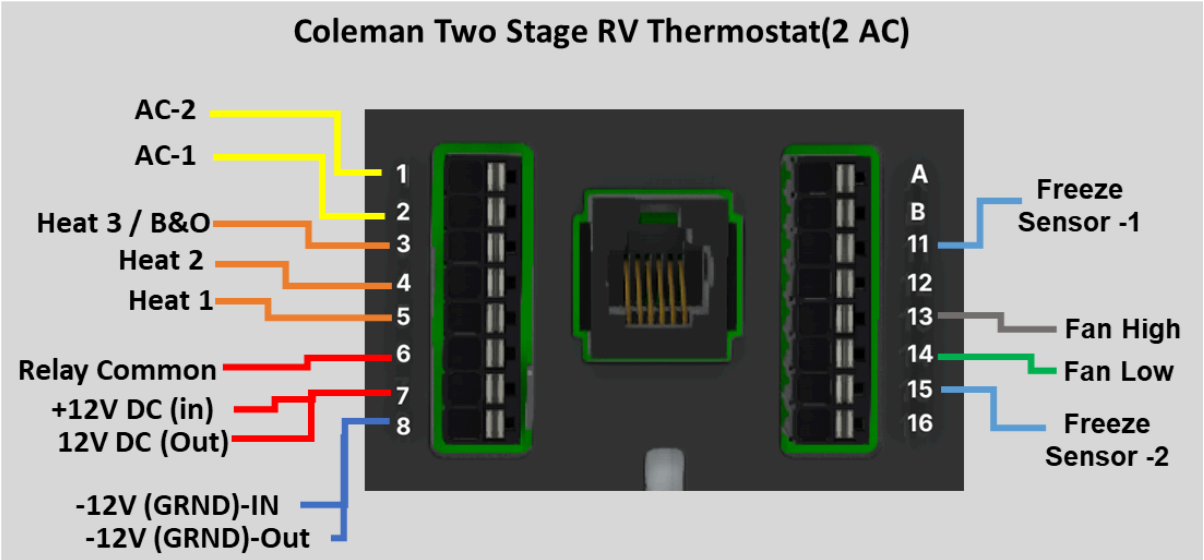




4- Coleman mach Two Stage Single -Zone (Direct relay based wiring)

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

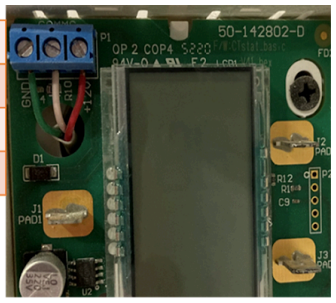
These are old systems that use two compressors on a single zone.

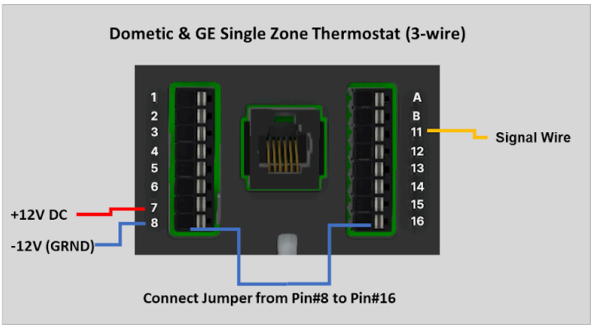


5- Dometic & GE Single-Zone (3 wire) (Signal based wiring)

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

#	Wire Color	HVAC System
R	Red Wire	+12V DC
G	Green Wire	Ground
W	White Wire	Signal Wire

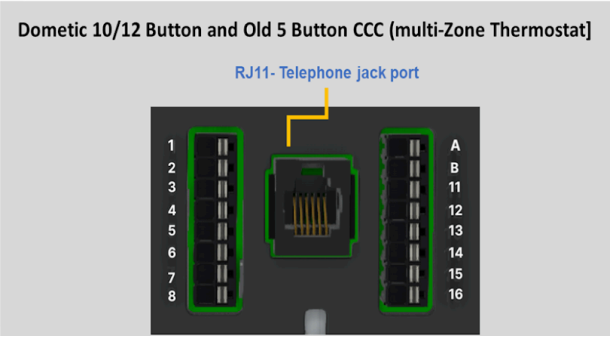




6- Dometic CCC10 or 12 Button or Old model 5 button Multi-Zone

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

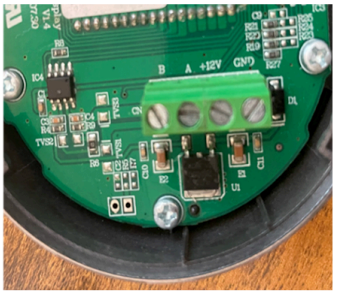
Unplug the telephone-style (RJ11) jack from your old thermostat and plug it directly into the RJ11 port on the back of the WalTech thermostat.

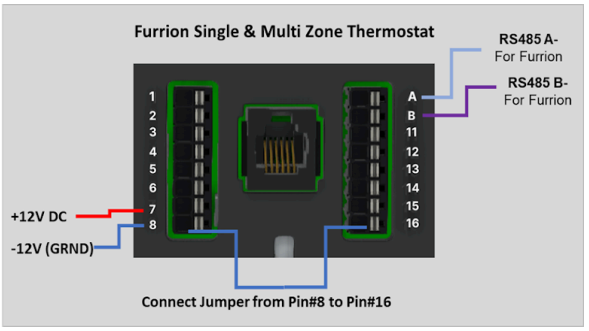


7- Furrion Single & Multi Zone (dual communication wire system)

The left side shows the wiring for your original thermostat, and the right side shows how to connect it to your WalTech thermostat.

#	Wire Color	HVAC System
G	Green Wire	Ground
R	Red Wire	+12V DC
B	Blue- A Wire	RS485 A
P	Purple- B Wire	RS485 B

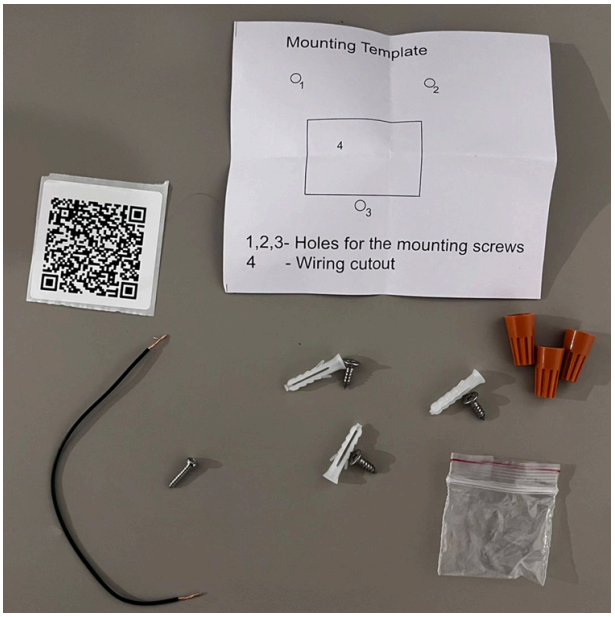




Not currently compatible with Furrion Variable speed HVAC systems.

What Is inside The WalTech Installation Package

1x Jumper Wire (black) – used for making jumper relay or other connections
3x Screws – for mounting the thermostat to the wall
3x Wall Anchors – to secure screws into drywall or other surfaces
3x Orange Wire Nuts – for safe and secure wire connections
1x Tightening Screw – Installed in the bottom hole of the thermostat to lock it in place, to prevent falling off while driving on rough roads.
1x Mounting Template – shows where to drill holes and where the wiring cutout should go
1x QR Code Sticker – links to installation instructions/User Manual



Detailed- Wiring Instructions for

Coleman Mach / Airxcel (Single Zone) or Home Thermostat

⚠️ Safety Warning:
Always turn off power to your thermostat before starting any wiring work.
For Special Home thermostat Wiring see the wiring section at the end of the manual.

Airxcel (formerly known as Coleman Mach) uses **simple relay-based wiring**. These wires directly power ON your AC, heat, or fan—so it's important to connect them correctly.

Step 1: Identify Your Existing Wiring
Before removing your old thermostat:k

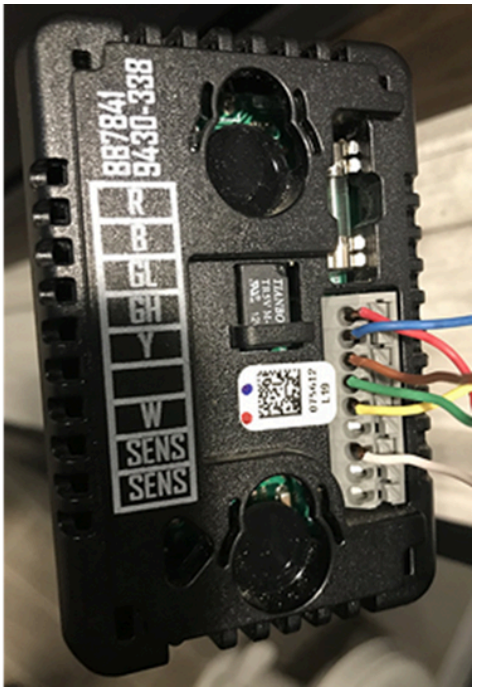
- Take a photo of the wires and their terminal labels.
- Don't rely on wire colors alone! Colors can vary, especially if the system was rewired at some point.

Instead:

- Look at the label grid on the back of your Coleman or Airxcel thermostat.
- Use that to identify which wire goes to: Power, Ground, AC, Heater and Fan

✅ Write it down or mark it clearly—this step is critical for a smooth installation. Look at the below picture for a sample wiring diagram of Airxcel single zone thermostat.

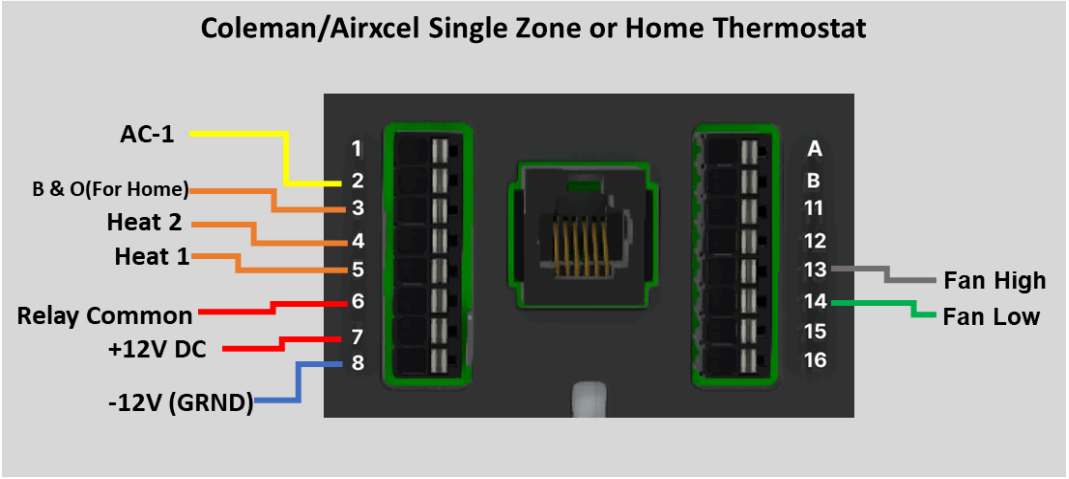
#	Wire Color	HVAC System
R	Red Wire	+12V DC
B	Blue Wire	Ground
GL	Green Wire	Low Fan
GH	Grey Wire	High Fan
Y	Yellow Wire	AC - Compressor
WHP	White & Black	Heat Pump
W	White	Furnace



Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Match and Connect Wires To WalTech Thermostat



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WalTech thermostat has three connection points:

Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

Powering the Thermostat

Pin #8 = Ground (–12V DC)

Pin #7 = Power (+12V DC or for home thermostat +24V AC)

Once powered, we'll add a jumper wire to send power to the relays (explained in the earlier jumper setup section).

Setting Up the Power Jumper (Pin #7 to Pin #6)

Your WalTech uses relay-based control, so we need to send power to the relays through a jumper wire between Pin #7 (Power) and Pin #6 (Common Relay Input).

Option 1: Direct Jumper Method

Plug your +12V red power wire directly into Pin #7.

Use the included black jumper wire to connect Pin #7 to Pin #6.

Option 2: Wire Nut Method

Cut the black jumper wire in half.

Insert one end into Pin #7 and the other into Pin #6.

Now take the +12V red wire, and connect it to both jumper ends using a wire nut.

✅ Either method works—choose the one that's easiest for your install space.

Connecting Heaters

Pin #5 = Heat 1

Pin #4 = Heat 2

Pin #3 = Heat 3 Only used for B&O(home thermostat)

If Using Heat Staging (Heat 1 + Heat 2): If both Heat 1 and Heat 2 are connected:
WalTech will first turn on Heat 1. After a short delay (called the dead band gap, which you can adjust in the settings), it will turn on Heat 2 if more heating is needed.

✅ If you only need one heat source, just connect that one and skip the others.
But make sure you select the correct type of heating system for both Heat 1 and Heat 2 during setup.

Connecting AC

Pin #2 = AC Compressor (usually the yellow wire)

If you're replacing a **residential thermostat:**
Pin #7 = +24V AC, Pin #8 = 24V AC common, Everything else works the same—just one note:
If your home system uses B&O (for heat pumps):Use Pin #3 (Heater 3) for B or O control.
You can set this in the settings screen.

✅ Powering On

Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

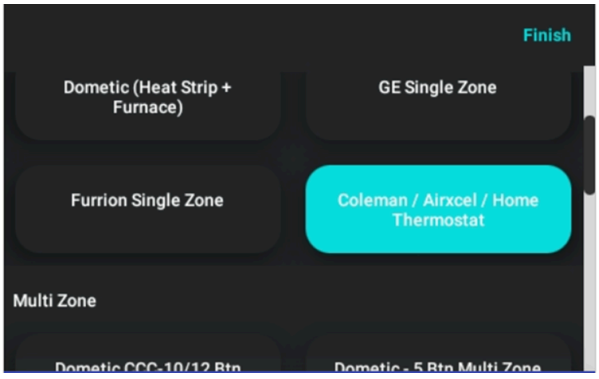
Configure Your Thermostat

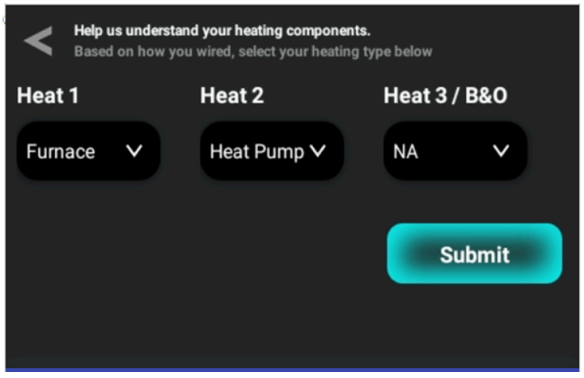
Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose "Coleman Mach / Airxcel / Home Thermostat" from the options. Tap the “Finish” button in the top right corner.

Choose Your Heat Stages

Next, select how you wired your heating setup: Select “NA” if you do not have a heat system wired. Example: If Heat-1 is your Heat Pump and Heat-2 is your Furnace, and “NA” as Heat 3, choose those options accordingly. Then tap “Submit.”

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don’t worry—just give it a minute to reboot.





Please refer to the **“Connecting Your WalTech Smart Thermostat”** section to learn how to connect your device to the internet, and check out the **“Understand Your WalTech Thermostat”** section to learn how to operate it confidently and correctly.

Coleman Mach - (9 Series Multi ZoneThermostat)- Detailed Wiring

⚠️ **Safety Warning**

Always turn off power to your thermostat before starting any wiring work.

Coleman Mach 9 Series (Multi-Zone) thermostats use two terminal blocks on the back:

- One 9-pin connector
- One 2-pin connector

Step 1: Identify Your Existing Wiring

Before removing your old thermostat:

- Take a clear photo of all wires and their corresponding terminal labels.
- Do not rely on wire colors alone—wire colors may vary, especially if the system has been rewired.

Understanding the 9-Pin Terminal Block

The 9-pin connector manages power flow between the RV battery and the control board, along with wiring for heating systems.

- +12VDC IN: **Solid red wire** — brings power from the RV battery.
- +12VDC OUT: **Red and white wire** — sends power to the control board.
- Ground IN: **Solid blue wire** — ground connection from the RV battery.
- Ground OUT: **Blue and white wire** — ground connection to the control board.

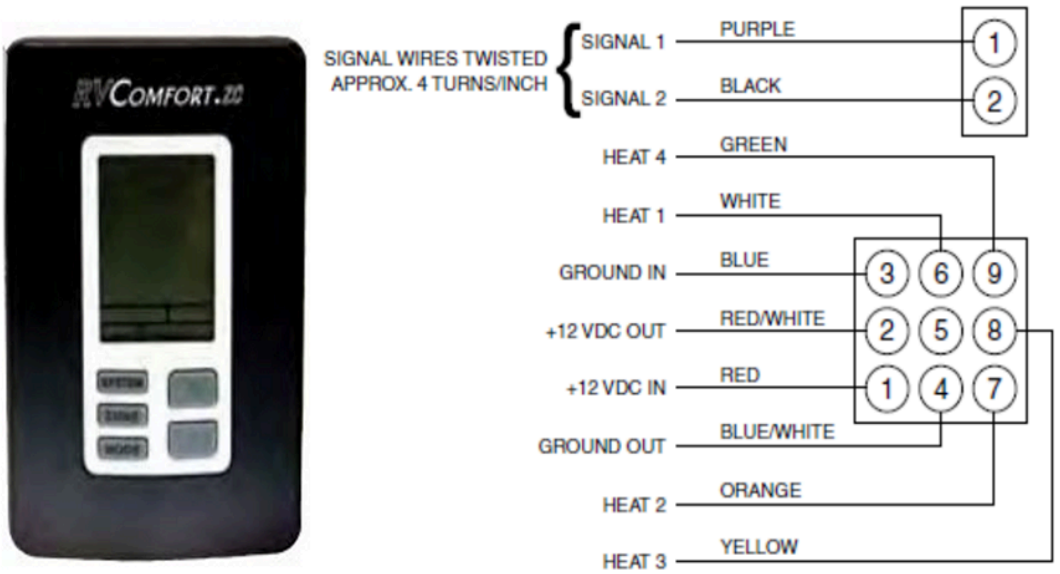
These four wires complete the power circuit from the RV battery to the controller box.

Heating Wires

The remaining four terminals on the 9-pin block connect directly to the heating units.

- If your RV has up to four heating zones, you may see four wires connected here.
- If it only supports two heat systems, you’ll typically see only two wires connected.

✅ Take a photo of the wires and their terminal labels., Write it down or mark it clearly—this step is critical for a smooth installation. Look at the below picture for a sample wiring diagram.



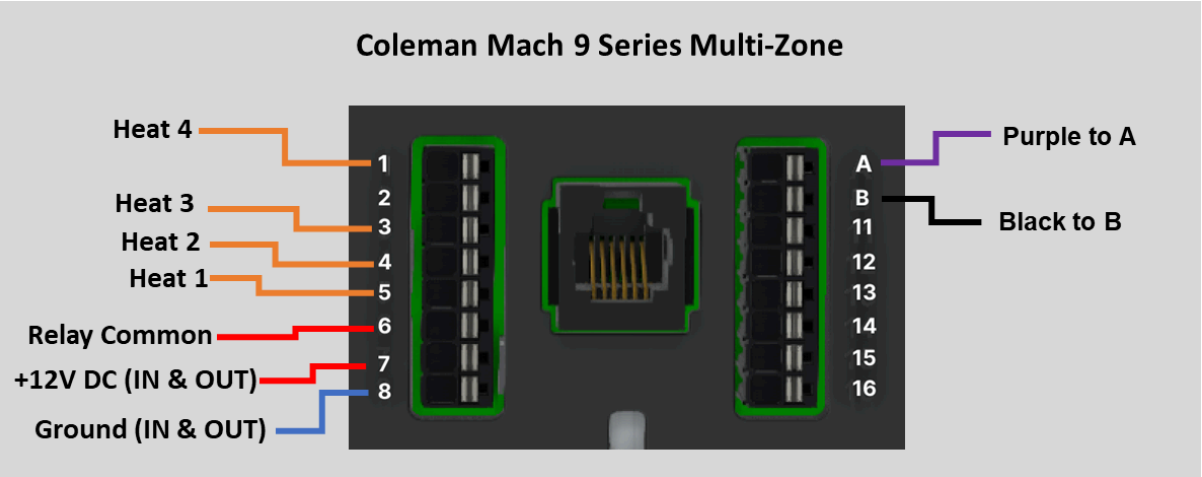
The 2-pin connector : typically includes a **purple wire** and a **black wire**. These are signal wires responsible for establishing communication between the thermostat, the AC compressor, fan, and the control board.
This connection is essential for:

- Exchanging temperature data for each zone
- Relaying commands to activate or deactivate the compressor and fan
- Synchronizing communication across the multi-zone system

Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect Wires To WalTech Thermostat



WalTech thermostat has three connection points:

Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

Powering the Thermostat

- **Pin #8** = Connect the Ground IN & OUT wires here.
- **Pin #7** = Connect both +12V DC IN & OUT wires here.

Once power is connected, we'll add a jumper wire to send power to the relays (as explained earlier in the jumper setup section).

✅ Using the Wire Nut Method (Recommended)

While you can connect the wires directly, we recommend using wire nuts since you're working with multiple wires. This makes the connection more secure and easier to manage.
Steps:

1. Cut three small wires (3 inches long) – one each for Pin #8, Pin #7, and Pin #6.
2. Insert one wire into each pin (Pin #8 for Ground, Pin #7 for Power, Pin #6 for Relay Jumper).
3. Now use wire nuts to join the following:

For Ground (Pin #8):
Join the Ground IN (Blue), Ground OUT (Blue & White), and the wire from Pin #8.
For +12V DC and relay (Pins #7 & #6):
Join the Power IN (Red), Power OUT (Red & White), and the wires from Pin #7 and Pin #6.
✅ This setup ensures:

- Power is coming from the RV battery to your thermostat, Power is being sent to the control board, A jumper is created to feed power into the relay system for AC and heating control.

Connecting Heaters

Pin #5 = Heat 1
Pin #4 = Heat 2
Pin #3 = Heat 3
Pin #1 = Heat 4

You might not have all four heating wires—and that's totally fine! Just connect the wires you do have. Before selecting your heating stages (like Heat 1, Heat 2, etc.), make sure you know:

- Which wire goes to the Heat Pump
- Which wire goes to the Furnace

✅ Once you've identified them, assign them properly in the setup screen. This helps WalTech control your heating exactly the way you want.

Connecting AC & Fan + Understanding Zone Temperature

To control the AC and Fan for each zone and receive temperature readings from multiple zones, Coleman Mach uses signal-based communication through RS-485 wires. These wires send data back and forth between the thermostat and the control board.

Signal Wire Connections:

- **Pin A = Purple Wire → RS-485 A**
- **Pin B = Black Wire → RS-485 B**

✅ Make sure to connect these signal wires correctly—this ensures smooth communication with the control board and allows WalTech to control the fan, AC, and get temperature updates from each zone.

✅ **Powering On**
Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

Configure Your Thermostat

Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose **"Coleman Mach 9 Series Multi Zone"** from the options.
Tap the **"Finish"** button in the top right corner.

You'll typically have no more than two heating stages per zone, so choose your setup accordingly.

- **Heat 1** → Select **Heat Pump or Heat Strip** if you have one.
  If not, set it to **NA** (Not Available).
- **Heat 2** → This is usually where you select **Furnace**, especially in Coleman Mach systems where the furnace is tied to the second stage.
  If you don't have a furnace, set this to **NA**.
- **Heat 3** → Always set this to **NA.** It's not used in multi-zone Coleman Mach setups.

Choose those options accordingly. Then tap **"Submit."**

Fan Operation During Heat Pump or Heat Strip Mode:

When a heat pump or heat strip is activated, the fan automatically turns on in Auto mode and is controlled by the HVAC system. In most systems, setting the fan to ON keeps it running continuously, even when heating or cooling is off. However, in Coleman Mach 8 and 9 Series systems, this behavior is restricted - the fan cannot operate independently when the heat pump or heat strip is active. The fan will only run automatically as commanded by the controller.

How WalTech Reads Room Temperature in Each Zone

Once setup is complete, your WalTech thermostat will start communicating with each zone's control board, asking: "What's the temperature in your zone?"

How Zones Are Detected

When a zone controller replies with its temperature, WalTech will detect and initialize that zone. For Zone 1, it's common for the system to use the thermostat's built-in sensor instead of a remote one. In this case, WalTech will automatically show the temperature from its internal sensor for Zone 1.

Small Differences? That's Normal!

You might notice that Zone 2 or 3 shows slightly different temperatures than Zone 1—and that's okay! This can happen because:

- Sensors are in different locations (floor, wall, sunlight exposure, etc.)
- Airflow varies from one part of the RV to another

✅ WalTech will self-adjust over time. Give it about an hour to stabilize and adapt to your environment.

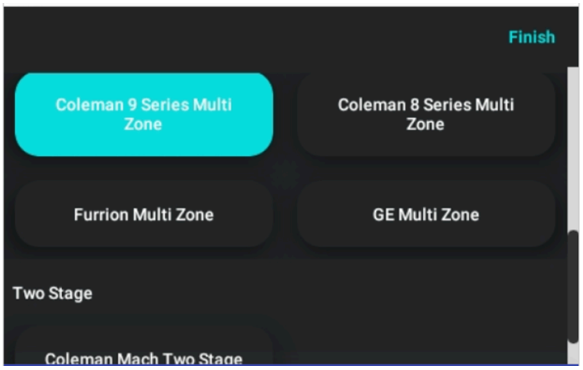
Fine-Tune with Calibration

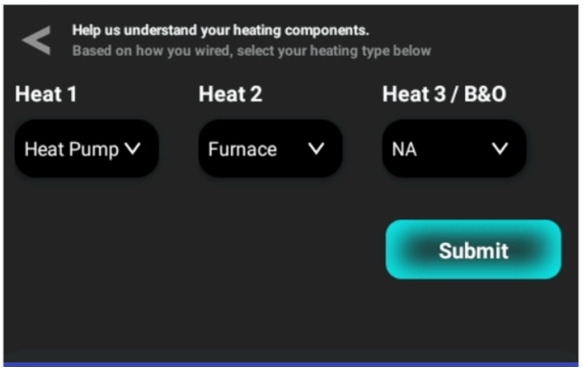
If you still feel like Zone 1's temperature doesn't seem right, you can fix it easily:

1. Go to **Settings** > Tap on **Calibration** > Adjust the reading up or down to match how it feels to you. You're in full control—make it feel just right!

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.

Note: The device may automatically restart after setup. If it does, don't worry—just give it a minute to reboot.





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Before removing your old thermostat:

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Understanding the 9-Pin Terminal Block

The 9-pin connector manages power flow between the RV battery and the control board, along with wiring for heating systems.

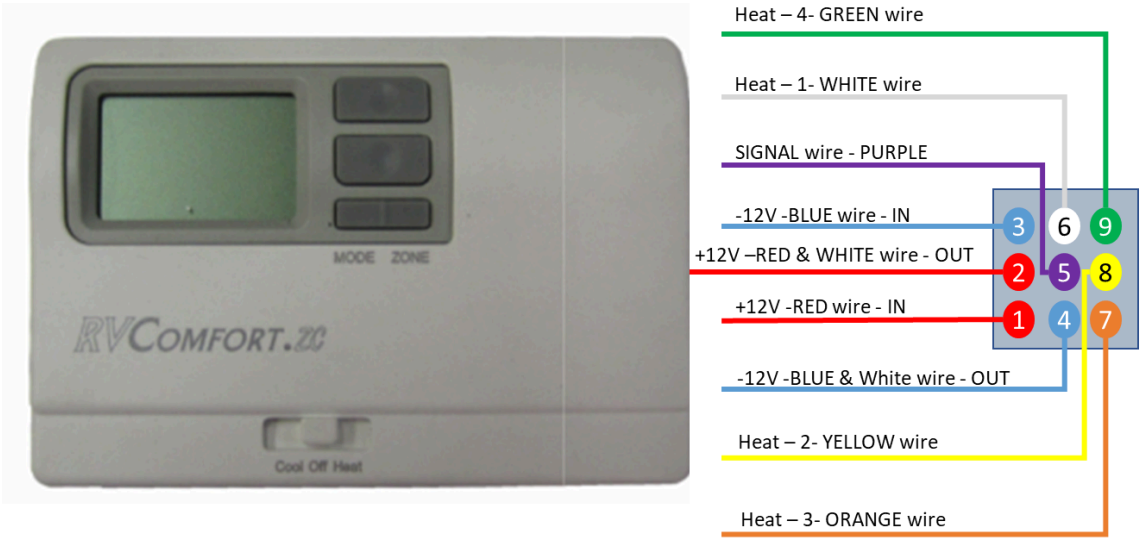
#1, +12VDC IN: **Solid red wire** — brings power from the RV battery.
#2, +12VDC OUT: **Red and white wire** — sends power to the control board.
#3, Ground IN: **Solid blue wire** — ground connection from the RV battery.
#4, Ground OUT: **Blue and white wire** — ground connection to the control board.
These four wires complete the power circuit from the RV battery to the controller box.

Heating Wires

The four terminals, **#6, #7, #8 & #9** on the 9-pin block connects directly to the heating units.

- If your RV has up to four heating zones, you may see four wires connected here.
- If it only supports two heat systems, you'll typically see only two wires connected.

✅ Take a photo of the wires and their terminal labels., Write it down or mark it clearly—this step is critical for a smooth installation. Look at the below picture for a sample wiring diagram.



#5 Signal Wire : typically includes a **purple wire**. This is a signal wire responsible for establishing communication between the thermostat, the AC compressor, fan, and the control board.
This connection is essential for:

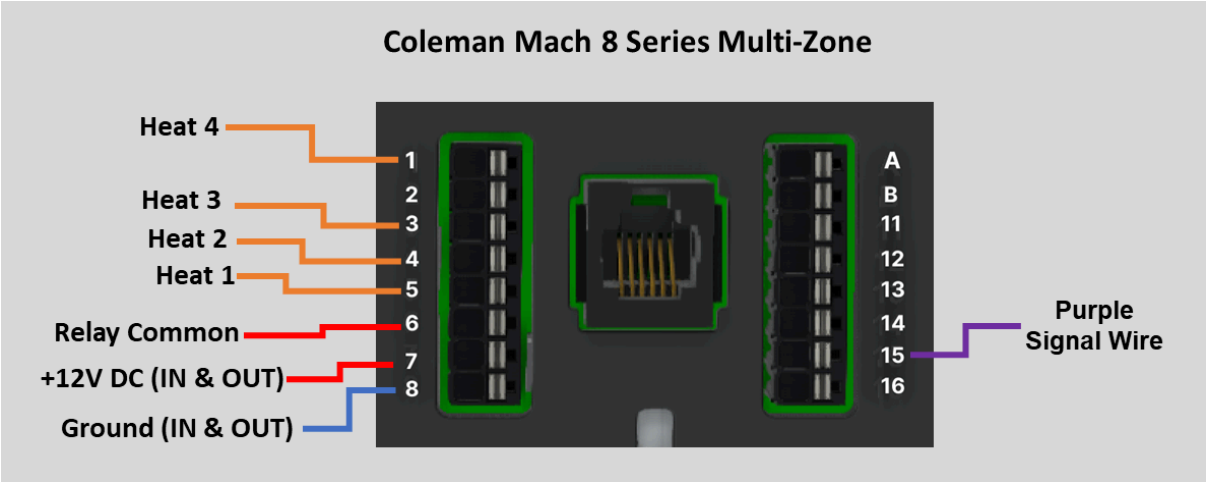
- Exchanging temperature data for each zone
- Relaying commands to activate or deactivate the compressor and fan
- Synchronizing communication across the multi-zone system

Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a

secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect Wires To WalTech Thermostat



WalTech thermostat has three connection points:

Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

Powering the Thermostat

- **Pin #8** = Connect the Ground IN & OUT wires here.
- **Pin #7** = Connect both +12V DC IN & OUT wires here.

Once power is connected, we'll add a jumper wire to send power to the relays (as explained earlier in the jumper setup section).

✅ Using the Wire Nut Method (Recommended)

While you can connect the wires directly, we recommend using wire nuts since you're working with multiple wires. This makes the connection more secure and easier to manage.

Steps:

4. Cut three small wires (3 inches long) – one each for Pin #8, Pin #7, and Pin #6.
5. Insert one wire into each pin (Pin #8 for Ground, Pin #7 for Power, Pin #6 for Relay Jumper).
6. Now use wire nuts to join the following:

For Ground (Pin #8):

Join the Ground IN (Blue), Ground OUT (Blue & White), and the wire from Pin #8.

For +12V DC and relay (Pins #7 & #6):

Join the Power IN (Red), Power OUT (Red & White), and the wires from Pin #7 and Pin #6.

✅ This setup ensures:

- Power is coming from the RV battery to your thermostat, Power is being sent to the control board, A jumper is created to feed power into the relay system for AC and heating control.

Connecting Heaters

Pin #5 = Heat 1

Pin #4 = Heat 2
Pin #3 = Heat 3
Pin #1 = Heat 4

You might not have all four heating wires—and that's totally fine! Just connect the wires you do have. Before selecting your heating stages (like Heat 1, Heat 2, etc.), make sure you know:

- Which wire goes to the Heat Pump
- Which wire goes to the Furnace

✅ Once you've identified them, assign them properly in the setup screen. This helps WalTech control your heating exactly the way you want.

Connecting AC & Fan + Understanding Zone Temperature

To control the AC and Fan for each zone and receive temperature readings from multiple zones, Coleman Mach uses signal-based communication through a single signal wire. This wire sends data back and forth between the thermostat and the control board.

insert the signal Wire from 9 terminal block #5 (**Purple)** to **Pin #15** in WalTech as shown in the picture above.

✅ Make sure to connect this signal wires correctly—this ensures smooth communication with the control board and allows WalTech to control the fan, AC, and get temperature updates from each zone.

✅ Powering On

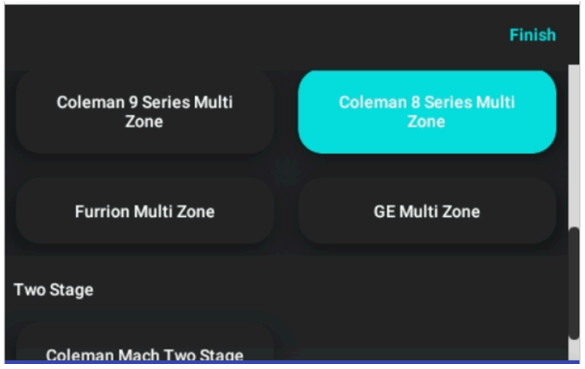
Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

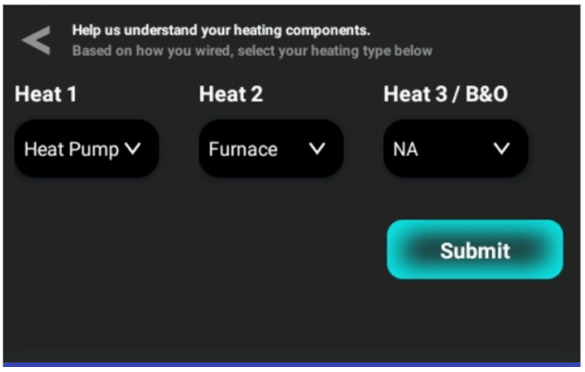
Configure Your Thermostat

Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose **"Coleman Mach 8 Series Multi Zone"** from the options.
Tap the **"Finish"** button in the top right corner.
You'll typically have no more than two heating stages per zone, so choose your setup accordingly.

- **Heat 1** → Select **Heat Pump or Heat Strip** if you have one.
  If not, set it to **NA** (Not Available).
- **Heat 2** → This is usually where you select **Furnace**, especially in Coleman Mach systems where the furnace is tied to the second stage.
  If you don't have a furnace, set this to **NA**.
- **Heat 3** → Always set this to **NA.** It's not used in single-zone Coleman Mach setups.

Choose those options accordingly. Then tap **"Submit."**





How WalTech Reads Room Temperature in Each Zone

Once setup is complete, your WalTech thermostat will start communicating with each zone's control board, asking: **"What's the temperature in your zone?"** to each zone controller.

How Zones Are Detected

When a zone controller replies with its temperature, WalTech will detect and initialize that zone. For Zone 1, it's common for the system to use the thermostat's built-in sensor instead of a remote one. In this case, WalTech will automatically show the temperature from its internal sensor for Zone 1.

Fan Operation During Heat Pump or Heat Strip Mode:

When a heat pump or heat strip is activated, the fan automatically turns on in Auto mode and is controlled by the HVAC system. In most systems, setting the fan to ON keeps it running continuously, even when heating or cooling is off. However, in Coleman Mach 8 and 9 Series systems, this behavior is restricted - the fan cannot operate independently when the heat pump or heat strip is active. The fan will only run automatically as commanded by the controller.

Small Differences? That's Normal!

You might notice that Zone 2 or 3 shows slightly different temperatures than Zone 1—and that's okay! This can happen because:

- Sensors are in different locations (floor, wall, sunlight exposure, etc.)
- Airflow varies from one part of the RV to another

✅ WalTech will self-adjust over time. Give it about an hour to stabilize and adapt to your environment.

Fine-Tune with Calibration

If you still feel like Zone 1's temperature doesn't seem right, you can fix it easily:

2. Go to **Settings** > Tap on **Calibration** > Adjust the reading up or down to match how it feels to you. You're in full control—make it feel just right!

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don't worry—just give it a minute to reboot.

Please refer to the **“Connecting Your WalTech Smart Thermostat”** section to learn how to connect your device to the internet, and check out the **“Understand Your WalTech Thermostat”** section to learn how to operate it confidently and correctly.

Coleman Mach Two Stage RV Thermostat - Detailed wiring

⚠️ **Safety Warning**

Always turn off power to your thermostat before starting any wiring work.
For Special Home thermostat Wiring see the wiring section at the end of the manual.

Airxcel (formerly known as Coleman Mach) uses **simple relay-based wiring**. The two stage thermostats generally come with options to connect up to two air conditions.

Step 1: Identify Your Existing Wiring

Before removing your old thermostat:

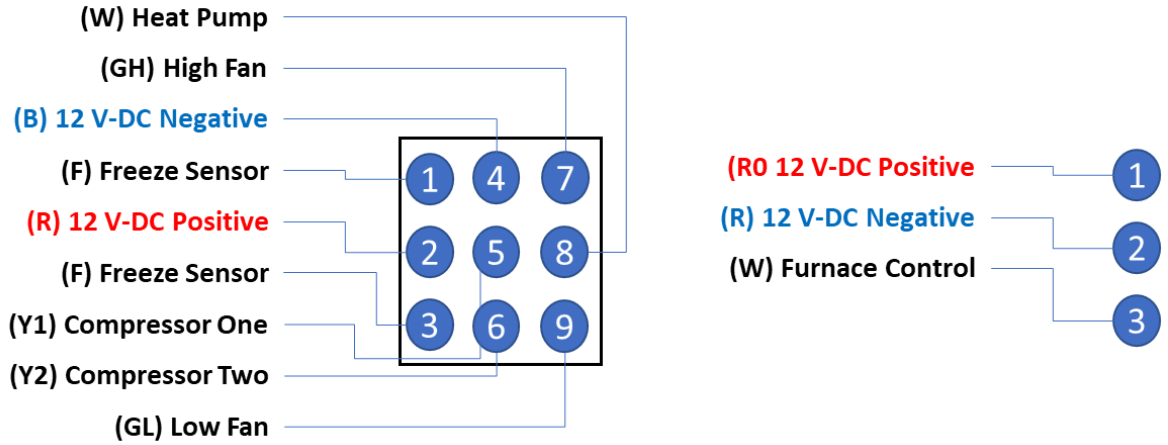
- Take a photo of the wires and their terminal labels.
- Don’t rely on wire colors alone! Colors can vary, especially if the system was rewired at some point.

Connector Overview

This system uses two connectors:

- One 9-pin connector
- One 3-pin connector

These carry power, heating, cooling, fan control, and optional sensors. Please see the below diagram for wiring details.



Special Note: Coleman Mach Two-Stage Thermostat

This system supports two AC compressors that can either:

1. Run individually, or
2. Run together with a stage gap (user-selectable from 0 to 10) in the WalTech settings.

Here’s how it works:

- If both ACs are enabled:

    - **AC 1 turns on first.**
    - **AC 2 turns on after the stage gap delay.**
- If only one AC is selected, only that AC will run.

✅ The system will automatically cycle the compressors ON and OFF based on:

- Your room temperature
- Your set temperature

The **fan** will turn on **after the compressor starts** to ensure efficient airflow.

Heating System Setup & Optional Connections

Your system may support up to three heating units, such as:

- Furnace
- Heat Pump
- Heat Strip

Heat 3 & B&O Compatibility

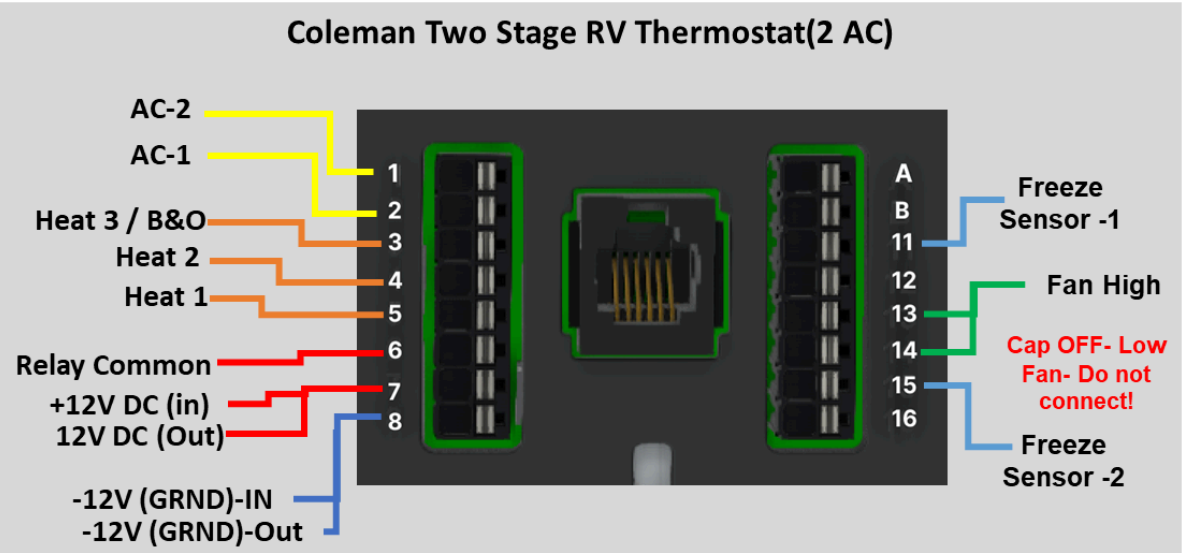
- Heat 3 (Pin #3) can be used for a B&O heating system, which is typically found in some home HVAC setups.

⚠️ Important: If you do not have a B&O heating system, simply leave Heat 3 unconnected and ignore this step.

Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect Wires To WalTech Thermostat



WalTech thermostat has three connection points:

Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push

the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

Powering the Thermostat

Both connectors supply power. These must be combined correctly.

WalTech Power Pins

- Pin #7 → +12V DC (Positive)
- Pin #8 → –12V DC (Ground)
- Pin #6 → Common Relay (Jumper Required)

Recommended: Wire-Nut Method

Because the terminal ports are small, this method is safer and cleaner.
You will need:

Three short wires (~3 inches each)

- One to Pin #6
- One to Pin #7
- One to Pin #8

Positive (+12V DC) Connection

Using a wire nut, join all of the following together:

- Both +12V DC positive wires (from both connectors)
- Short wire going to Pin #7
- Short wire going to Pin #6

👉 This creates power + relay feed in one secure connection.

Negative (Ground) Connection

Using a wire nut, join:

- Both –12V DC negative wires
- Short wire going to Pin #8

✅ Power section is now complete.

Heating Connections

- Pin #5 → Heat 1
- Pin #4 → Heat 2
- Pin #3 → Heat 3 / B&O (Home Heat Pump only)

Heat Staging

- Heat 1 turns on first
- Heat 2 turns on after a short, adjustable delay
- Heat 3 is optional (leave disconnected if unused)

✅ If you only have one heat source, connect only that one

⚠️ Select the correct heat type in WalTech settings

Connecting AC

Pin #2 = AC Compressor (usually the yellow wire)
Pin #1 = 2nd AC Compressor (usually the Orange wire)

🧊 Freeze Sensor Support

WalTech allows you to connect a freeze sensor to help prevent damage in coil freezing conditions:

- Freeze Sensor Wire 1: Connect to Pin #11
  Freeze Sensor Wire 2: Connect to Pin #15

🚫 **No Freeze Sensor?**

If you're not using a freeze sensor, you'll need to create a bypass:

✅ Use jumper wires to connect:

- **Pin #11 to Pin #15**

This tells the thermostat all is well and prevents an error resulting in system non-operation.

Fan Wiring – VERY IMPORTANT (Coleman Mach Heat Pump)

⚠️ Do NOT connect LOW FAN on Two stage heat pump systems

- Pin #13 → High Fan
- Pin #14 → Low Fan

If you have a Heat Pump

✅ Connect High Fan (Pin #13)
🚫 Do NOT connect Low Fan (Pin #14)

High Fan Only Wiring – Wire Nut Method (Coleman Mach Multistage Heat Pump)

⚠️ Important: Do NOT allow LOW and HIGH fan circuits to energize separately on Coleman Mach multistage heat pump systems.

Steps:

- Cut two short jumper wires (about 3 inches each).
  Insert one jumper into Pin #13 (High Fan)
  Insert the other jumper into Pin #14 (Low Fan)
- Using a wire nut, join both jumper wires together with the original HIGH FAN wire.
  This connects both fan outputs to HIGH FAN only.
- Cap off the original LOW FAN wire individually.
  Do not connect it to any terminal or wire.
  Tape or cap it for safety to prevent accidental contact.

✅ Result:

System operates using HIGH FAN ONLY
Prevents simultaneous LOW/HIGH fan activation
Protects the blower motor and control circuitry

⚠️ Failure to follow this wiring method may result in blower motor damage and is not covered under warranty.

Why this matters

On Coleman Mach multistage systems:
LOW and HIGH fan signals can energize at the same time. This can cause blower motor failure. Damage is NOT covered under warranty

Required Action

- Cap or tape off LOW FAN wire
- Configure system to run HIGH FAN ONLY

Need Help?
Due to variations across Coleman Mach two-stage models:
Contact WalTech Support for approved alternate wiring diagrams
We can provide model-specific guidance for your RV

✅ Powering On

Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

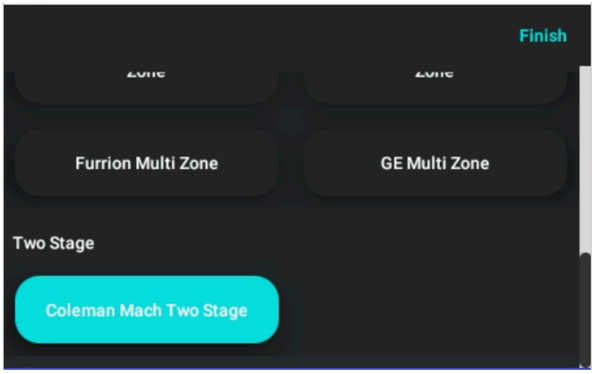
Configure Your Thermostat

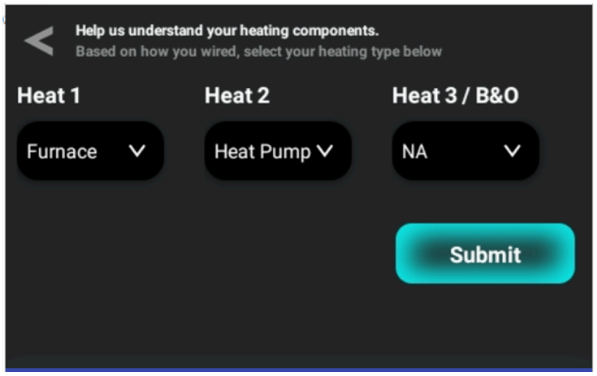
Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose "Coleman Mach Two Stage Thermostat" from the options.
Tap the “Finish” button in the top right corner.

Choose Your Heat Stages

Next, select how you wired your heating setup: Select “NA” if you do not have a heat system wired. Example: If Heat-1 is your Heat Pump and Heat-2 is your Furnace, and “NA” as Heat 3, choose those options accordingly. Then tap “Submit.”

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don’t worry-just give it a minute to reboot.





Please refer to the **“Connecting Your WalTech Smart Thermostat”** section to learn how to connect your device to the internet, and check out the **“Understand Your WalTech Thermostat”** section to learn how to operate it confidently and correctly.

ERROR CODES

1.Freeze sensor temperature out of order

Dometic or GE (Single Zone- 3 wire)- Detailed Wiring

⚠️ **Safety Warning**

Always turn off power to your thermostat before starting any wiring work.

Dometic and GE thermostats use a 3-wire system:

- 2 wires bring power from the RV battery to the thermostat
- 1 wire handles all communication and control signals

That single communication wire sends commands to control all HVAC components—like the AC, heat pump, fan, and more—through the main controller.

Step 1: Identify Your Existing Wiring

Before removing your old thermostat:

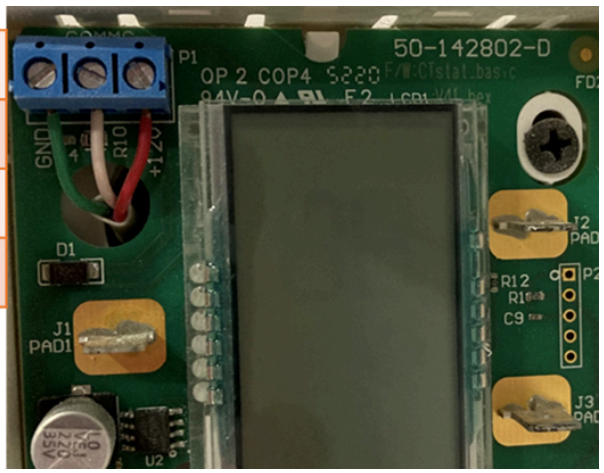
- Take a photo of the wires and their terminal labels.
- Don’t rely on wire colors alone! Colors can vary, especially if the system was rewired at some point.

Instead:

- In both GE and Dometic single-zone systems, the 3-wire layout is:
    - Middle Wire = Signal Wire (handles communication) , Right Wire = +12V DC (Power), Left Wire = Ground (–12V DC)

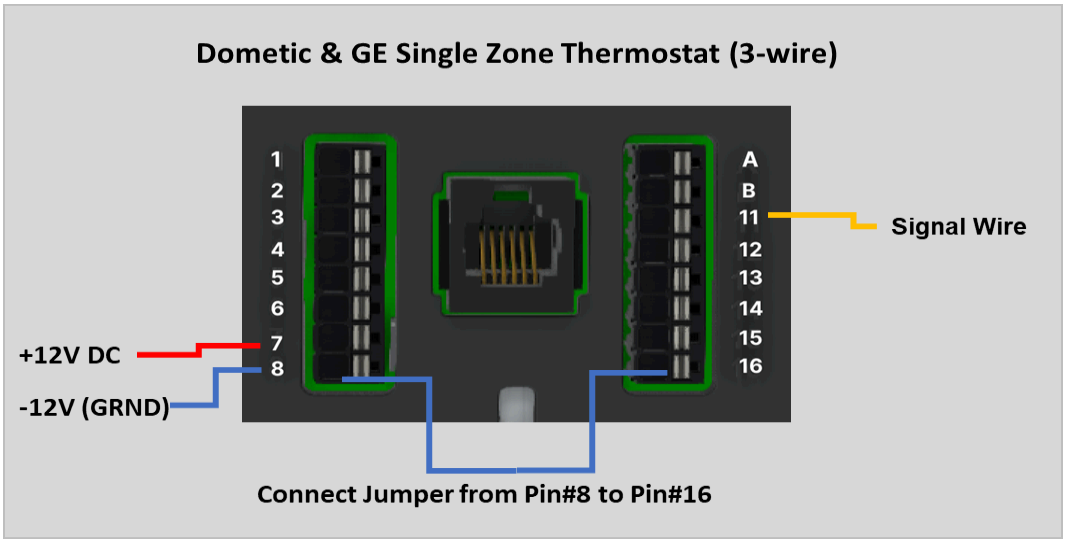
✅ Write it down or mark it clearly—this step is critical for a smooth installation. Look at the below picture for a sample wire grid representation to identify GE & Dometic wires.

#	Wire Color	HVAC System
R	Red Wire	+12V DC
G	Green Wire	Ground
W	White Wire	Signal Wire



Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!
The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect Wires To WalTech Thermostat



WalTech thermostat has three connection points:

Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

Powering the Thermostat

Pin #8 = Ground (–12V DC)
Pin #7 = Power (+12V DC)

No jumper wire needed since that is only used for relay based systems.

Connecting Communication/Signal wire

Pin #11 = Communication or signal wires (Generally come as white in color)

✅ Powering On
Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

Understanding Multiple Dometic System Types
After wiring your WalTech thermostat for a Dometic replacement, it's important to choose the right configuration, because Dometic has three common system types:

1️⃣**Dometic with AC + Furnace Only**
- Cooling: Uses AC - Heating: Uses Furnace only

2️⃣**Dometic with AC + Heat Pump + Furnace**
- Cooling: Uses AC - Heating Stage 1: Heat Pump and Heating Stage 2: Furnace

3️⃣**Dometic with AC + Heat Strip + Furnace**
- Cooling: Uses AC - Heating Stage 1: Heat Strip and Heating Stage 2: Furnace

GE System Configuration

GE systems are more flexible:
- Stage 1 Heat: Use Heat Pump (if available) and Stage 2 Heat: Use Furnace

✅ If you only have a furnace, simply set Furnace as Stage 1 and leave others as NA

Safety Tip for Communication-Based Thermostats (GE & Dometic)
For all thermostats that use communication wires, it's recommended to short the ground connection using a jumper wire from Pin #8 to Pin #16 for added safety.
➡️ Use the jumper wire included in your kit to connect **Pin #8 (Ground) to Pin #16.**
✅ This helps stabilize the system and ensures safe operation across all communication-based controllers.

Configure Your Thermostat
Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: based on what type of dometic or GE systems you have. For example "GE Single Zone" from the options. Tap the "Finish" button in the top right corner.

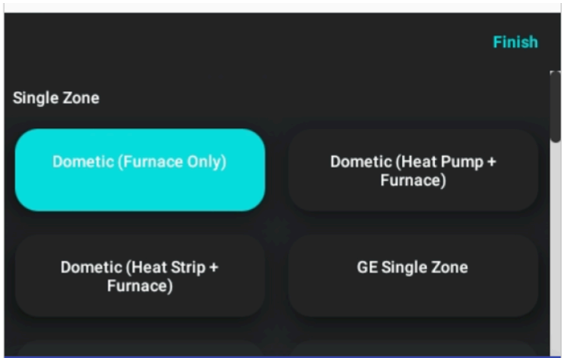
Recommended Heating Stage Setup
If your system includes a Heat Pump or Heat Strip, it's best to use those as Stage 1 heating, and set the Furnace as Stage 2.

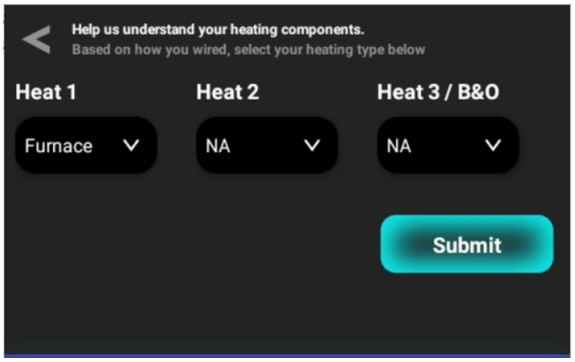
Why?
- Heat pumps and heat strips are usually more energy-efficient and work great for mild to moderate heating.
- The furnace is more powerful and is better used as a backup when extra heat is needed—especially in colder conditions.

So during setup:

- Stage 1 Heat: Select Heat Pump or Heat Strip (if available) and Stage 2 Heat: Select Furnace

If you only have a furnace, just set it as Stage 1, and leave the others as NA.





Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don't worry—just give it a minute to reboot.

Please refer to the **"Connecting Your WalTech Smart Thermostat"** section to learn how to connect your device to the internet, and check out the **"Understand Your WalTech Thermostat"** section to learn how to operate it confidently and correctly.

DOMETIC SINGLE ZONE ERROR CODES

E1 : Communication Loss
E2 : Freeze sensor temperature out of order
E3 : Outdoor sensor temperature out of order

GE SINGLE ZONE ERROR CODES

1. F1 : Unplugged Indoor coil sensor
2. F2 : Shorted Indoor coil sensor
3. F3 : Unplugged Outdoor Coil Sensor
4. F5 : Outdoor Sensor temperature out of order
5. F6 : Outdoor Sensor temperature out of order

Fault Codes (RARWT_ _)

Fault Codes			
	Display Code	Affected Sensor	Potential Cause
All Models	F1	Indoor Coil	Unplugged Sensor or Temp less than -22°F (-30°C)
	F2	Indoor Coil	Shorted wires or temp greater than 149°F (65°C)
Heat Pump Models	F3	Outdoor Coil	Unplugged Sensor or Temp less than -22°F (-30°C)
	F4	Outdoor Coil	Shorted wires or temp greater than 149°F (65°C)
Dip Switch 1 ON	F5	Outdoor Temp	Unplugged sensor, or Dip Switch 1 set to "ON" for AC only model. Temp less than -22°F (-30°C)
	F6	Outdoor Temp	Shorted wires or temp greater than 149°F (65°C)

Dometic Multi-Zone CCC Thermostats (10/12 Button) - Detailed Wiring

⚠️ **Safety Warning**

Always turn off power to your thermostat before starting any wiring work.

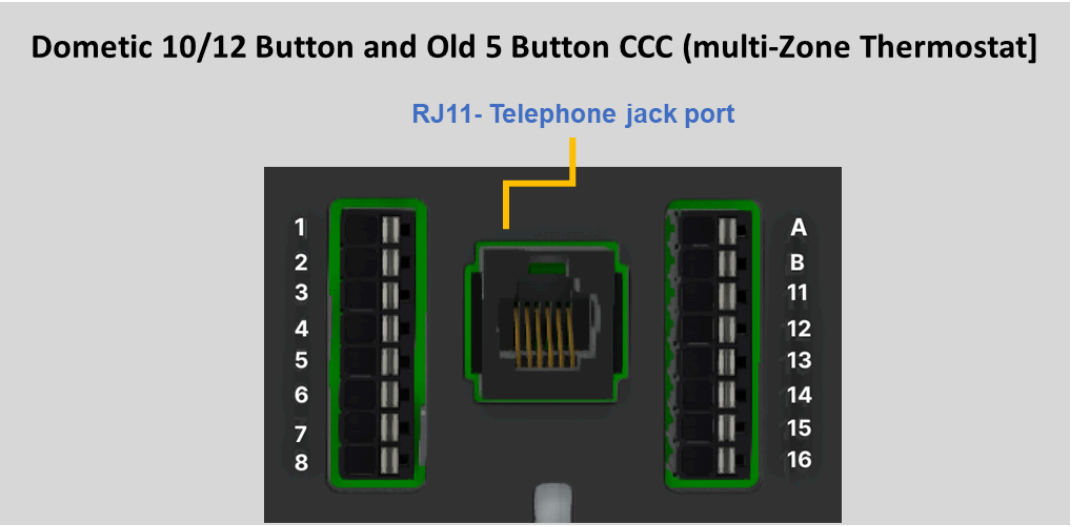
Step 1: Identify how it works

The Dometic 10/12-button Multi-Zone Thermostat, also known as the CCC (Comfort Control Center), is one of the easiest systems to upgrade.
It uses a simple telephone-style RJ11 cable connected at the back. To install WalTech, just unplug the RJ11 from the old thermostat and plug it into the RJ11 port on the back of your WalTech device.
✅ That's it—no extra wiring required!

Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect the plug To WalTech Thermostat



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Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

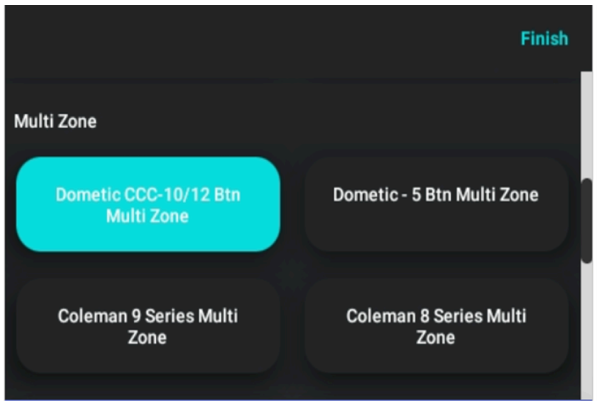
✅ Powering On

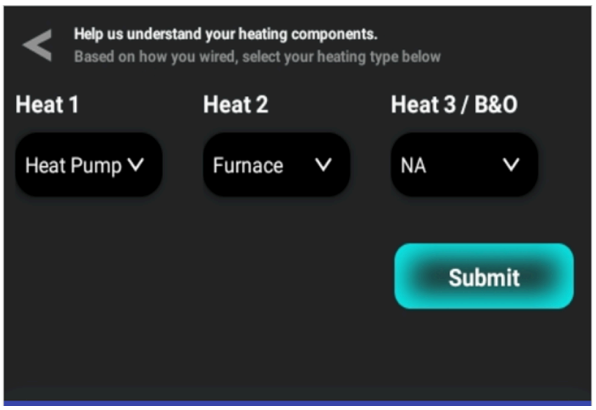
Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

Configure Your Thermostat

Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose **"Dometic 10/12 button CCC multizone"** from the options.

If you are configuring the old Dometic 5 button controller select “**"Dometic 5 button CCC multizone"**. Tap the **“Finish”** button in the top right corner. The pic below is just for representation.





Recommended Heating Stage Setup

If your system includes a Heat Pump or Heat Strip, it’s best to use those as Stage 1 heating, and set the Furnace as Stage 2.

Why?

- Heat pumps and heat strips are usually more energy-efficient and work great for mild to moderate heating.
- The furnace is more powerful and is better used as a backup when extra heat is needed—especially in colder conditions.

So during setup:

- Stage 1 Heat: Select Heat Pump or Heat Strip (if available) and Stage 2 Heat: Select Furnace

If you only have a furnace, just set it as Stage 1, and leave the others as NA. then tap “SUBMIT”.

How WalTech Reads Room Temperature in Each Zone

Once setup is complete, your WalTech thermostat will start communicating with each zone’s control board, asking: **“What’s the temperature in your zone?”** to each zone controller.

How Zones Are Detected

When a zone controller replies with its temperature, WalTech will detect and initialize that zone. For Zone 1, it’s common for the system to use the thermostat’s built-in sensor instead of a remote one. In this case, WalTech will automatically show the temperature from its internal sensor for Zone 1.

Small Differences? That’s Normal!

You might notice that Zone 2 or 3 shows slightly different temperatures than Zone 1—and that’s okay! This can happen because:

- Sensors are in different locations (floor, wall, sunlight exposure, etc.)
- Airflow varies from one part of the RV to another

✅ WalTech will self-adjust over time. Give it about an hour to stabilize and adapt to your environment.

Fine-Tune with Calibration

If you still feel like Zone 1's temperature doesn't seem right, you can fix it easily:

3. Go to **Settings** > Tap on **Calibration** > Adjust the reading up or down to match how it feels to you. You're in full control—make it feel just right!

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don't worry—just give it a minute to reboot.
Please refer to the **"Connecting Your WalTech Smart Thermostat"** section to learn how to connect your device to the internet, and check out the **"Understand Your WalTech Thermostat"** section to learn how to operate it confidently and correctly.

ERROR CODES (DOMETIC 12 BUTTON THERMOSTAT)
E1 : Freeze Sensor temperature out of order
E2 : Shorted Indoor temperature sensor
E3 : No AC Power
E4 : Invalid dip switch config
E6 : Communication Loss

No AC Power :
The "No AC Power" error occurs only under three specific conditions: when the AC along with the fan is operating at low, high, or medium speed.

Dometic 5 button Multi-Zone Thermostats (old 5 Button) - Detailed Wiring

⚠️ **Safety Warning**
Always turn off power to your thermostat before starting any wiring work.

Special Note on Temperature Sensors Used in the Dometic 5-Button System (WALTECH)

Instruction Applicability Notice: The following instructions apply specifically and exclusively to RVs equipped with the Dometic 5-button zoned control system. Although the Dometic 4-button system may appear similar, it is NOT compatible, and these instructions do not apply to that system.

The WALTECH thermostat operates in conjunction with the air conditioner control boards installed in the RV. The Dometic CCC1 control boards used in these systems do not transmit local air-conditioner temperature data to the thermostat. As a result, the WALTECH thermostat displays the interior temperature measured by the sensor located inside the thermostat itself. This displayed temperature will be the same for all zones, regardless of where the individual air conditioners are located.

Each air conditioner control board relies on its own internal temperature sensor to determine when to activate heating or cooling. These sensors may be located in various areas of the RV, including inside ductwork, and their placement and accuracy can vary. Because of this, it is possible for a difference to exist between the temperature shown on the WALTECH thermostat display and the actual heating or cooling behavior of a specific zone. A significant mismatch between the thermostat setpoint, displayed temperature, and actual room temperature may indicate a poorly positioned or defective air conditioner sensor.

Important Note Regarding Zone 1 Thermistors

Some Dometic 5-button zoned systems were manufactured without a dedicated Zone 1 thermistor. In these configurations, the original Dometic wall thermostat was used as the temperature sensor for Zone 1.

The WALTECH system requires an external Zone 1 thermistor to be installed and connected at the Zone 1 air conditioner control box in order for the heating function to operate properly. If your Zone 1 does not operate in heating mode, or if your system does not currently have this thermistor installed, this is a likely cause.

If your RV lacks the required Zone 1 thermistor, please contact WALTECH support. WALTECH can provide and ship the correct thermistor, which plugs directly into the Zone 1 control box.

Any alerts or notifications generated by the WALTECH smart device application are based solely on the temperature measured at the thermostat faceplate. The physical location of the thermostat directly affects these readings. To minimize temperature discrepancies, the thermostat should be mounted in a location that accurately represents the general living space-away from direct sunlight, drafts, exterior walls, or heat-producing appliances.

Proper thermostat placement is essential for achieving the most accurate temperature reporting and overall system performance.

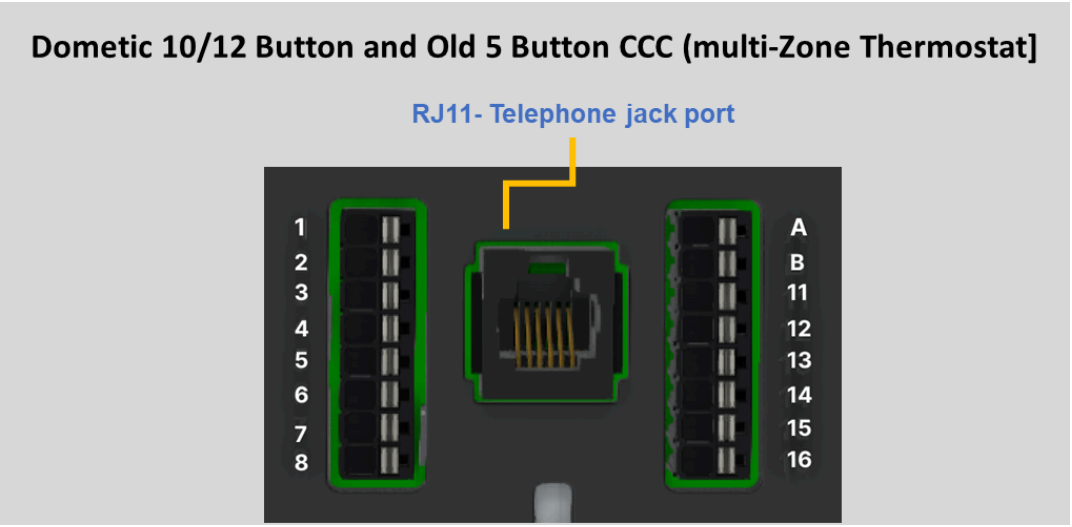
Step 1: Identify how it works

The Dometic 5-button Multi-Zone Thermostat, also known as the CCC (Comfort Control Center), is one of the easiest systems to upgrade.
It uses a simple telephone-style RJ11 cable connected at the back. To install WalTech, just unplug the RJ11 from the old thermostat and plug it into the RJ11 port on the back of your WalTech device.
✅ That's it—no extra wiring required!

Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!

The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

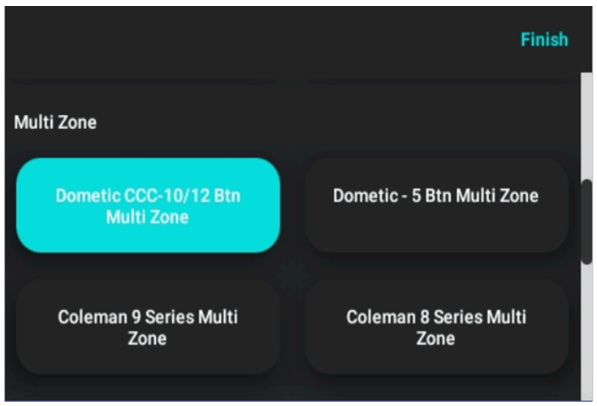
Step 2: Connect the plug To WalTech Thermostat

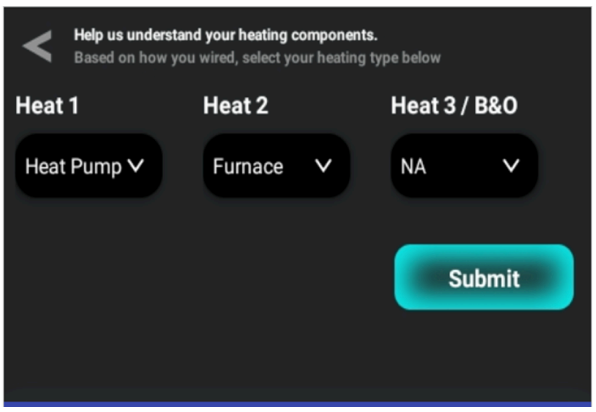


WalTech thermostat has three connection points:
Left Side: 8-pin connector / **Right Side:** 8-pin connector & **Middle: RJ11 port** – used only for **Dometic Multizone systems**. All connections use a **push-and-lock system**: Just push the wire into the slot—it locks in place. To remove, press the small white button near the pin to release it.

✅ **Powering On**
Now you can turn the power back on.
Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

Configure Your Thermostat
Once WalTech powers on, it will take you to the Controller Selection screen.If you are configuring the old Dometic 5 button controller select "**"Dometic 5 button CCC multizone"**.
Tap the **"Finish"** button in the top right corner. The pic below is just for representation.





Note About Old Dometic 5-Button CCC Systems

Configure Your Thermostat

Once WalTech powers on, it will take you to the Controller Selection screen.
Select your system type: Choose **"Dometic- 5 button CCC multizone"** from the options.
Tap the **“Finish”** button in the top right corner. The pic below is just for representation.

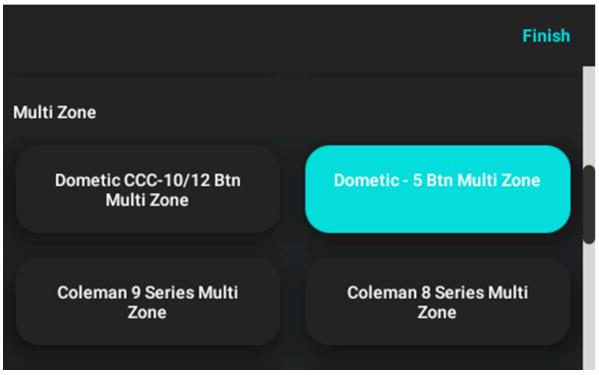
Heater settings for Dometic 5-Button CCC Systems

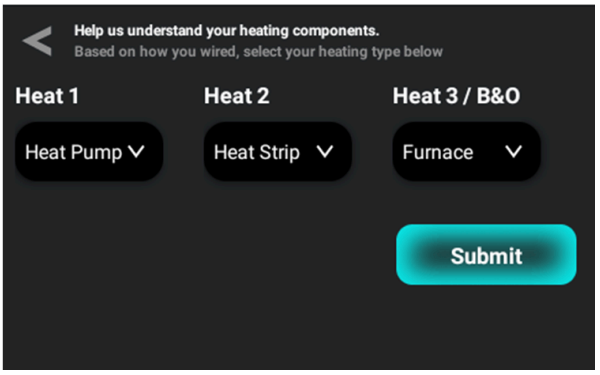
This is a mandatory setting and no other settings will work in Dometic 5 Bttn thermostats.

So during setup:

- Stage 1 Heat : Select Heat Pump, Stage 2 Heat:Select Heat Strip and Stage 3 Heat: Select Furnace. This is irrespective of whether you have these systems available or not.

then tap “SUBMIT”.





Older Dometic 5-button CCC systems typically do not send room temperature data back through the RJ11 connection.

- This means WalTech cannot display the actual room temperature for other zones.
- Instead, WalTech sends your target temperature to the control board, and the control board handles turning the HVAC system ON or OFF based on that target.

✅ The system still works reliably—you just won’t see live temperature readings from each zone.

Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.

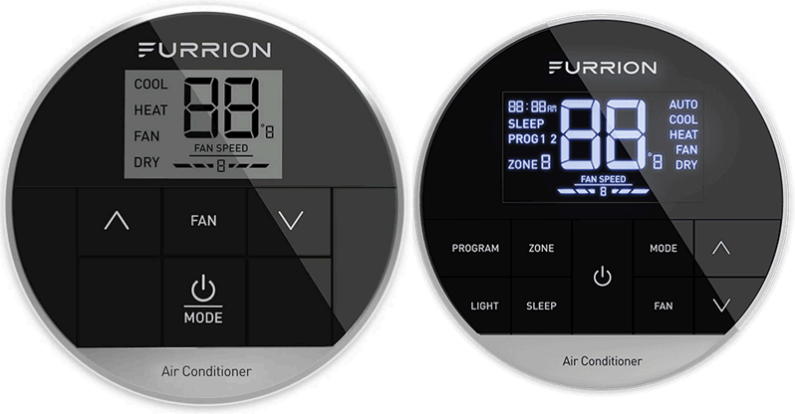
Note: The device may automatically restart after setup. If it does, don’t worry—just give it a minute to reboot.
Please refer to the **“Connecting Your WalTech Smart Thermostat”** section to learn how to connect your device to the internet, and check out the **“Understand Your WalTech Thermostat”** section to learn how to operate it confidently and correctly.

ERROR CODES (DOMETIC 12 BUTTON THERMOSTAT)
E1 : Freeze Sensor temperature out of order
E2 : Shorted Indoor temperature sensor
E3 : No AC Power
E4 : Invalid dip switch config
E6 : Communication Loss

No AC Power :
The "No AC Power" error occurs only under three specific conditions: when the AC along with the fan is operating at low, high, or medium speed.

FURRION (Single and Multi Zone) - Detailed Wiring

⚠️ **Safety Warning**
Always turn off power to your thermostat before starting any wiring work.



Both Furrion single-zone and multi-zone systems use the same wiring setup:
2 wires bring power from the RV battery to the thermostat: +12V DC (Red) & Ground / –12V DC (Green). 2 wires handle communication with the HVAC controller: RS-485 A (Blue) & RS-485 B (Purple). These communication wires send signals that allow the thermostat to control the AC, heat pump, and furnace through the HVAC control board.

Step 1: Identify Your Existing Wiring

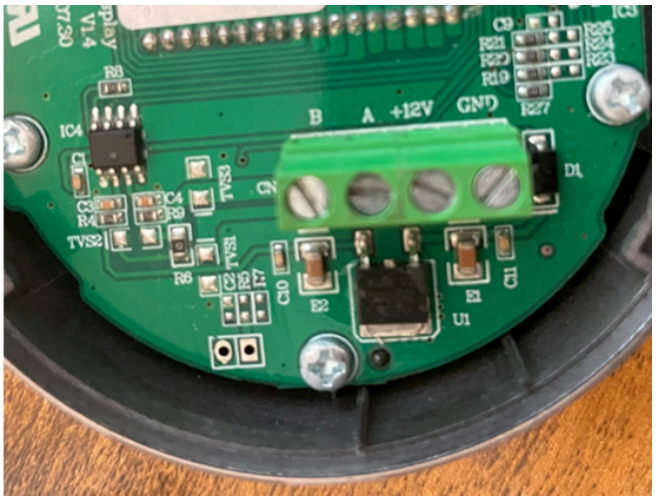
Before removing your old thermostat:

- Take a photo of the wires and their terminal labels.
  In Furrion thermostats (both single-zone and multi-zone), the wire layout typically goes from right to left as follows:

- Rightmost Wire → Ground (–12V DC) – usually Green, Next Left → +12V DC Power – usually Red, Next Left → A Wire (RS-485 A) – usually Blue, and finally the Leftmost Wire → B Wire (RS-485 B) – usually Purple

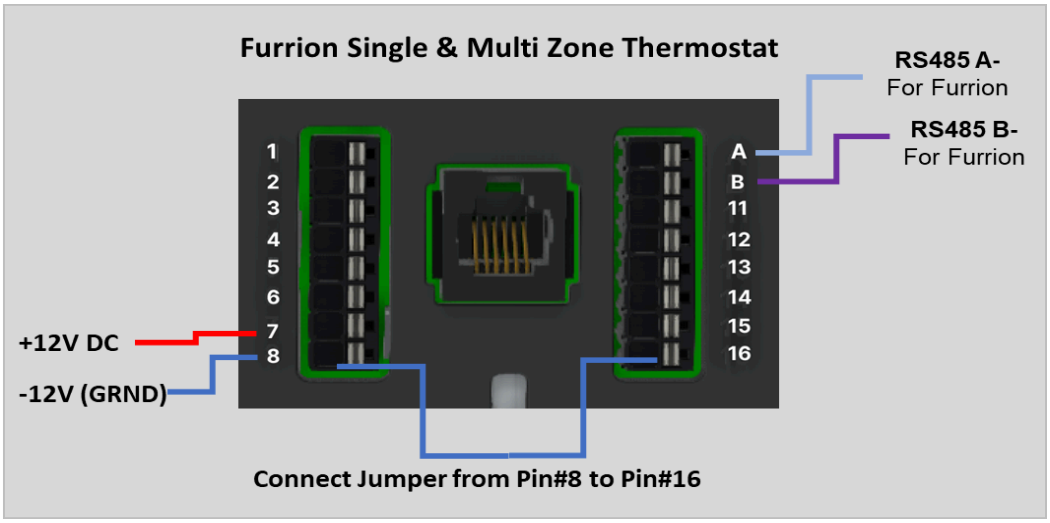
✅ Always double-check your wiring labels or diagram, as colors can sometimes vary depending on the installer.Look at the below picture for a sample wire grid representation to identify Furrion wires.

#	Wire Color	HVAC System
G	Green Wire	Ground
R	Red Wire	+12V DC
B	Blue- A Wire	RS485 A
P	Purple- B Wire	RS485 B



Now that you've removed the wires from your old thermostat, let's get your new WalTech device mounted and wired up!
The Mounting Template shows you exactly where to drill the screw holes and where the wiring cutout should go. Tape it to the wall to guide your drilling. Use the Wall Anchors for a secure hold. Insert the anchors, then screw in the 3 mounting screws provided. Bring the wires through the center cutout.

Step 2: Connect Wires To WalTech Thermostat



Powering the Thermostat

Pin #8 = Ground (–12V DC)

Pin #7 = Power (+12V DC)

No jumper wire needed since that is only used for relay based systems.

Connecting Communication/Signal wire

Pin #A = Communication A wire - RS485-A (usually Blue color)

Pin #B = Communication B wire - RS485-B (usually Purple color)

Safety Tip for Communication-Based Thermostats (GE, Dometic & Furrion)

For all thermostats that use communication wires, it's recommended to short the ground connection using a jumper wire from Pin #8 to Pin #16 for added safety.

➡️ Use the jumper wire included in your kit to connect **Pin #8 (Ground) to Pin #16.**

✅ This helps stabilize the system and ensures safe operation across all communication-based controllers.

✅ Powering On

Now you can turn the power back on.

Your WalTech thermostat will boot up and be ready to use in just a couple of minutes.

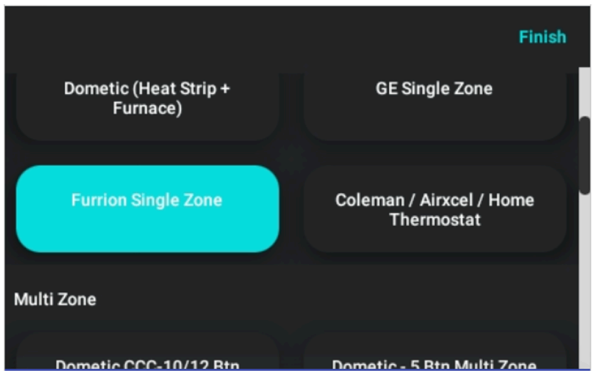
Configure Your Thermostat

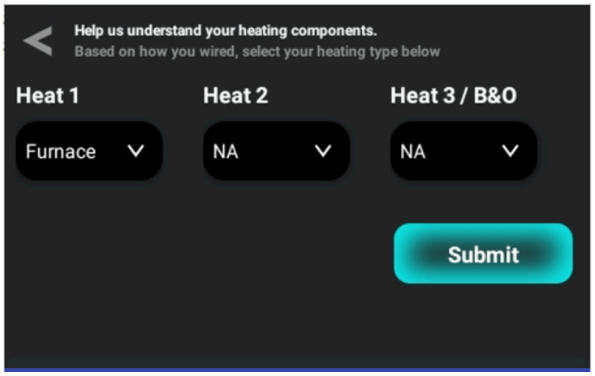
Once WalTech powers on, it will take you to the Controller Selection screen in a few minutes. Select your system type based on the Furrion controller you have. For example, "**Furrion Single Zone**" from the options. Tap the **"Finish"** button in the top right corner.

Recommended Heating Stage Setup

WalTech is currently compatible with Furrion systems that use only a Furnace. It does not yet support staged heating systems (those with both a Heat Pump and Furnace), but our team is working to add that feature soon.

Set **Heat 1 to "Furnace"**, **Set Heat 2 and Heat 3 to "NA"**. Tap "Submit" when you're done.





Your WalTech will now start on the Climate Control screen. You can turn the dial (default is set to 40°F) to your desired room temperature.
Note: The device may automatically restart after setup. If it does, don't worry—just give it a minute to reboot.

Please refer to the **"Connecting Your WalTech Smart Thermostat"** section to learn how to connect your device to the internet, and check out the **"Understand Your WalTech Thermostat"** section to learn how to operate it confidently and correctly.

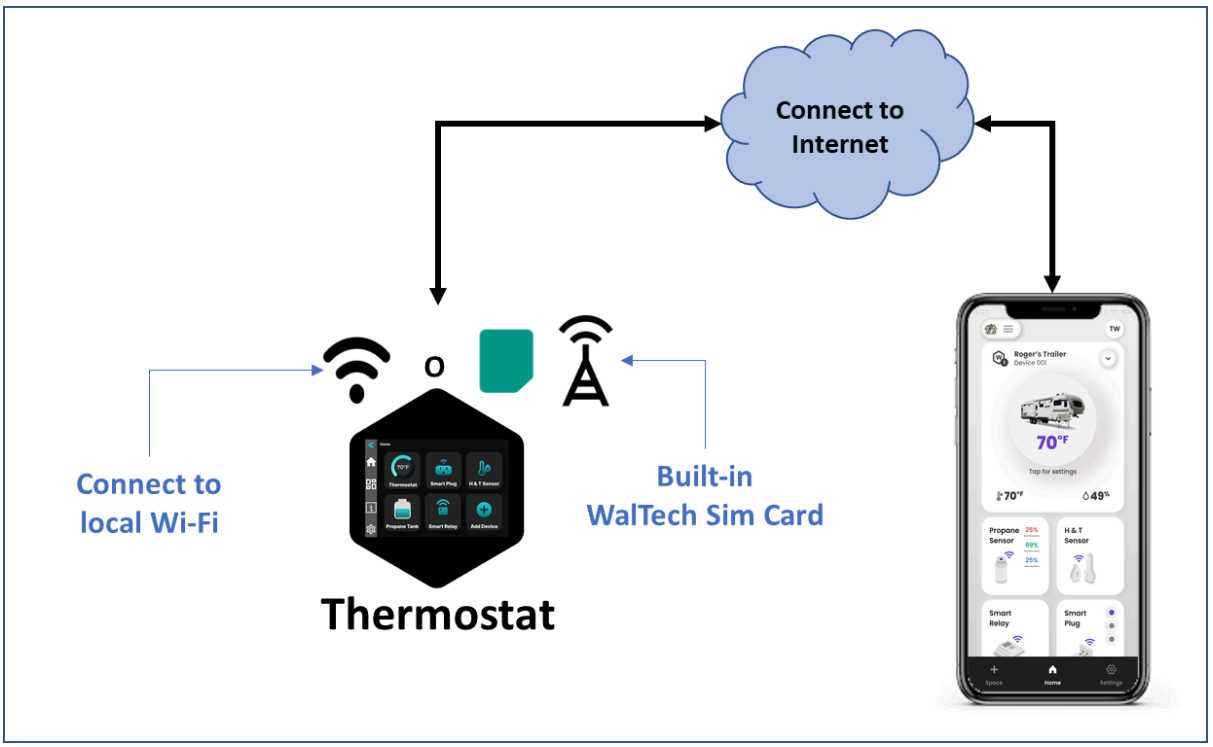
ERROR CODES

E1 : Communication Loss
E2 : Freeze sensor temperature out of order
E3 : Indoor sensor temperature out of order
E4 : Low DC power

Connecting WalTech Smart Thermostat

Your WalTech Thermostat works in two ways:

1. 🖐 **Manually** – using the touch screen on the thermostat.
2. 📱 **Remotely** – using the WalTech mobile app, when connected to the internet.



If you want to monitor and change your RV temperature from anywhere using your phone, the thermostat needs to be online(connected to the internet). **There are two easy ways to do that:**

1. Built-in Cellular:

All WalTech 2.0 devices come with built-in cellular connectivity. The WalTech SIM card is a global SIM that automatically connects to the strongest available network (**T-Mobile, AT&T, or Verizon**).

2. Wi-Fi:

If you have strong Wi-Fi inside your camper, you can connect the WalTech device to your local Wi-Fi network.

Option 1: Use Built-In Cellular (No Wi-Fi Needed!)

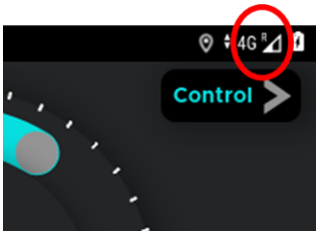
Perfect for RVers who travel and want control even off-grid. Every WalTech 2.0 thermostat comes with a built-in SIM card. It connects to the best network near you (T-Mobile, AT&T, or Verizon). It does not use your phone plan or need a separate data plan from your cellular provider – this is a separate WalTech data plan.

You can do activate in just two steps

STEP: 1 Turn on Mobile Data on your Device

Swipe down from the top of the thermostat screen > Tap **on Mobile data icon** > ensure the icon has turned green in color.

You can confirm that your device is connected to the network by checking the cellular signal on the top right side of your device screen.



STEP: 2 Turn ON the subscription from your Mobile App. If you have not purchased the subscription while signing up you can do that by

> Taping on **settings** icon from home screen > click **Subscription tab** > **Toggle ON** the subscription > (Add payment option if you have not done so already)
> You may need a device reboot after making connectivity changes to establish a connection.

📦 **Cellular Plans:**

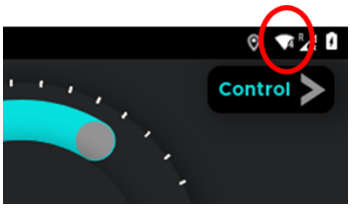
- $7.99/month (paid yearly)
- $10.99/month (paid monthly- No commitment you can cancel and activate based on your need.)

Option 2: Connect to Wi-Fi

If you have strong Wi-Fi in your camper, you can always use that.

- **Swipe down** from the top of the thermostat screen >**Tap and hold the Wi-Fi icon** > **Turn Wi-Fi ON** and choose your **network** > Enter your **password and connect**.

You can confirm that your device is connected by checking the WiFi signal on the top right side of your device screen.



Understanding your WalTech Thermostat

The Info Page – Your Device Snapshot

The first page we recommend exploring is the Info Page. This screen gives you a quick overview of your thermostat's current configuration.

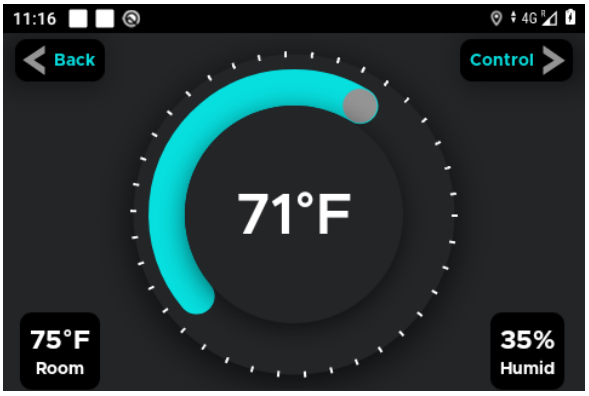
👉 To access it, tap the **Info tab** on the left side of the home screen.

What You'll See on the Info Screen:

1. **QR Code:** The QR code is linked to your device's IMEI number.
   Scan this using the WalTech mobile app to add your device quickly.
2. **Controller:** Displays the controller type you selected during setup (e.g., Coleman, Dometic, etc.).
3. **HVAC Components**: Shows which ACs, heat pumps, or furnaces are currently connected and configured during initial set-up..
4. **Device Info:**
   MV = Main Voltage / **BV** = Device Battery Voltage for older WalTech Devices)/ **FW** = Firmware Version / **VC/VN** = Android Version Code/Name used by the system
5. **Download Beta Update:** This button is for testing purposes only, used to install beta firmware made available to select users with passcode.

Thermostat Function & Control Screen

Now that you know how your thermostat is configured, let's now explore how to **use your thermostat** to control the temperature in your RV.



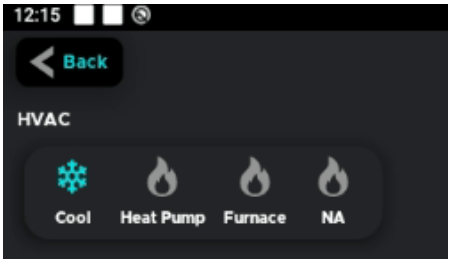
Tap the **Thermostat icon** from the Home screen. This takes you to the **Control Screen**—the main place where you can adjust how warm or cool you want it inside.

Setting the Temperature

- The dial starts at 40°F by default > **Touch and turn the dial** or + / - arrows if available to set the temperature you want > Bottom Left = Current **Room Temperature** > Bottom Right = **Room Humidity**

Control HVAC Settings:

Click Control Button (Top Right Corner and go to **HVAC Settings**)



Tap this to turn heating or cooling ON or OFF.

You will see to options:

- Cool (Cool mode) – to use your AC
- Heat (Heat mode) – to use your Furnace or Heat Pump or Heat Strip

Important:

Tapping “Cool” or “Heat” doesn’t immediately turn your AC or Furnace ON.
It just tells the system, “Hey, I want to keep it cool or warm”—and it will turn ON automatically only when needed based on your desired target temperature.
It is always best to test all settings for correct operation before leaving to insure comfort.

Delay Zone-The 2-Degree Rule (Very Important!)

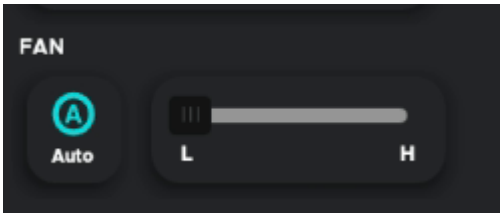
Your thermostat is smart. Let’s say you set the temp to **70°F**—the system won’t jump on at **71°F.** Instead, it waits until it really needs to. That’s what we call the **Delay Zone**—a little buffer to keep things running smoothly.

- **Cool Mode:**
  For cooling, let’s say your target temp is **70°F.**
  The AC won’t kick on until it hits **72°F**, then cools you back down to 70.
- **Heat Mode:**
  For heating, let’s say your target temp is **70°F**.
  The heat waits until it drops to **68°F**, then warms it back up to 70.

✅ **This is totally normal** - This stops your system from constantly turning on and off, which saves energy and helps your AC and furnace last longer.

Fan Control:

Below the HVAC settings, you'll see Fan Settings. You can adjust:



1. **Fan Speed** – Choose how fast the fan runs (Low or High)
2. **Fan Mode** – Decide when the fan runs

Fan Auto:

In **Fan Auto**, the fan only runs **when the AC or heat pump is ON**.
This means the fan turns on and off **automatically** with a heat pump or AC.

Fan ON:

In **ON Mode**, the fan runs **all the time**, even if the AC or heat pump is **OFF**.
This is great for circulating air inside your RV without turning on heating or cooling.

Fan Speed:

You can choose **Low or High fan speed.**
When the fan turns ON (whether automatically or manually), it will use your selected speed. Some fan speed and functions may be different from your existing thermostat.

Auto Mode:

Auto Mode is when you enable **both Cool and Heat together**. This means your thermostat will **automatically switch** between cooling and heating to keep your RV comfy—without needing to change it manually.

📝 Note: Auto Mode always works with Dead Band logic to prevent heating and cooling from clashing. Dead band will not override the minimum and maximum set points available on the thermostat (40-90 deg F)

What's Dead Band?

A dead band is a small zone where the thermostat does nothing at all- no AC, no heat.
It's a **"no action zone"** that helps prevent the AC and heater from turning on too close together.

- If your RV isn't too hot or too cold, the system simply rests.

Example (Target Temp = 70F, Dead Band = ±2F)

- From 68°F to 72°F = No action
  (This is the dead band range)

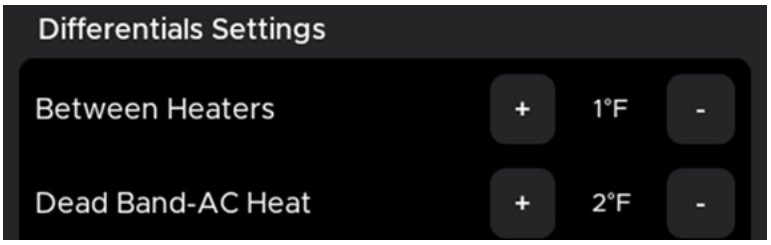
Now add the **Delay Zone** (2°F buffer):

- AC turns ON at 74°F > AC turns OFF at 72°F
- Heat turns ON at 66°F > Heat turns OFF at 68°F

👉 You can adjust the dead band range in the Settings menu. Under “Differentials Settings”.

Dead Band Between Heat-1 and Heat-2

If your RV has two stages of heating—like a **heat pump and a furnace**—your thermostat uses a **dead band** between Heat-1 and Heat-2 to keep them from running at the same time. You can customize it from the settings page using **“Differential settings”** between heaters.



- **Heat-1** turns on first (usually the heat pump or lower-stage heat).
- If the room keeps getting colder and Heat-1 isn’t enough, **Heat-2** (like your furnace) kicks in **after a set gap**—that’s the dead band.

✅ This saves energy and only uses extra heating power when it’s really needed.

User-Selectable Heater Control

With WalTech, you’re in control of how your heat works.

You can choose to:

✅ Use both Heat-1 and Heat-2 – They’ll activate one after the other, with a dead band in between to prevent overlap. If dead band is set to 0 then both will start simultaneously and not be staged.

✅ Use only Heat-1 – Turn off Heat-2 if you prefer to rely on just the first stage (like a heat pump).

✅ Use only Heat-2 – Skip Heat-1 entirely and run just the furnace or secondary heat source.

This gives you total flexibility.

Example: In spring, you might only want the furnace. Easy—just turn on Heat-2 and leave Heat-1 off.

Understanding Room Temperature Readings

Your WalTech thermostat has a built-in temperature sensor that reads the room temperature—just like how a weather app tells you how it feels outside.

But here's something important to know: **Not all sensors read exactly the same**, and that's totally normal!

Where's the Sensor?

The temperature sensor is located at the **bottom left of your WalTech thermostat**.
It reads the **air around** the thermostat—not the whole RV.

So, if you compare it with:

A remote thermometer, A weather station Or even another thermostat...

…it might show a slightly different number. That's okay!

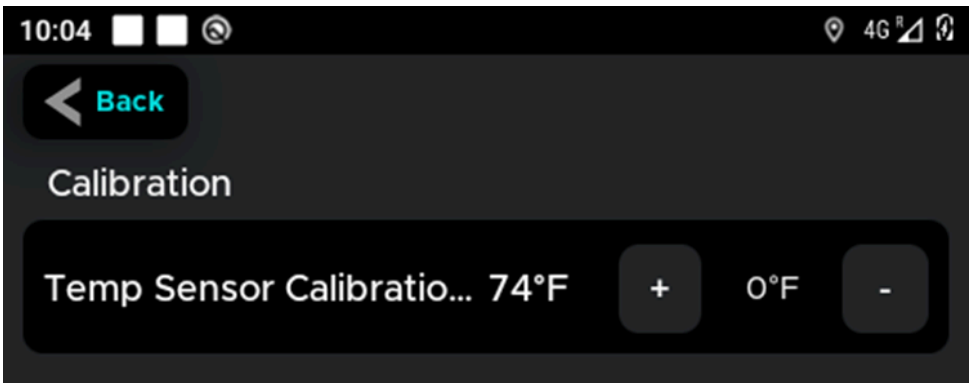
Why It Might Feel "Off"

Some customers call in and say,
"Hey, your thermostat says 72°F but my other thermometer says 70°F!"
That happens because: Sensors can vary by **±2°F**. Things like **sunlight, airflow**, or even a nearby **window or appliance** can affect the reading

👉 **It doesn't mean the sensor is broken.** That's just how sensors are, it reads the air around it.

Good News: You Can Fix It!

To make things easy, we've added a **Temperature Calibration** feature.
If the temperature feels off: Go to **Settings** > **Calibration**. Adjust it up or down a few degrees to match your preferred reading



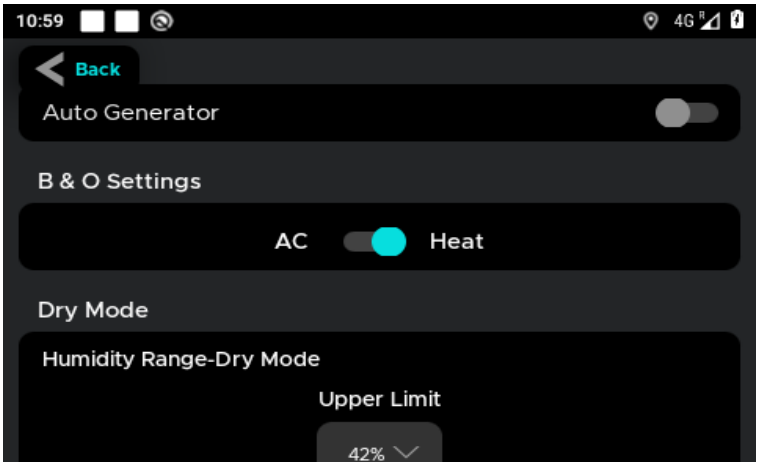
✅ Simple Fix. Big Comfort.
You're in control of what feels right!

What About Multi-Zone RVs?
If you have a **multi-zone setup**, here's how it works:

- **Zone 1** is usually (unless your zone 1 has its own sensor) read by the sensor **inside your WalTech thermostat** (that's your main device). So calibration can only be done for **zone -1** which uses Waltech sensors.
- For **other zones**, WalTech reaches out to the **other controllers** and asks them: "Hey, what temperature are you reading over there?"

Then it shows those readings in the app or displays home screens for the respective zones. We are unable to calibrate temperature for other zones.
What If a Zone Doesn't Show a Temperature?
Sometimes a zone may not respond. When that happens, WalTech marks that zone as:
"Zone is Inactive" or "being Initializing"
This isn't a problem with your thermostat—it just means the controller for that zone hasn't sent its temperature yet. It's like calling someone and they didn't pick up right away. WalTech will wait for a response and try again.

AGS, B&O and Dry Mode



AGS & B&O- Yet to update

Dry Mode (Humidity Control): Dry Mode helps reduce humidity in your RV.

- The AC turns ON and keeps running until the humidity drops to the level you set.

- If the room cools too much (it will cool up to 2 deg lower than setpoint) the AC pauses—but it will start again if the temp rises back up.
- Dry mode stays active until you turn it off manually or humidity goes below the target.

Example: If temp = 80°F, humidity = 75%, and your dry setting is 70%:

→ AC turns ON to cool and reduce humidity
→ It cycles between 78°F–80°F while working to reach that 70% target

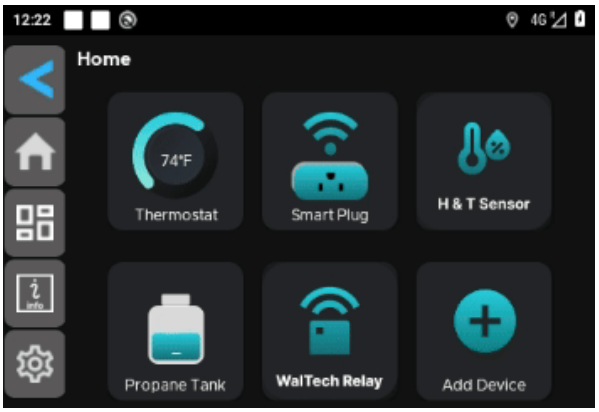
📝 **Note**: Fan Auto only works in Cool Mode or Heat Pump Mode.
In Furnace Mode, the fan will not auto-cycle.

Factory Reset, Reboot, and Power Off Instructions

Your WalTech thermostat offers multiple ways to manage power and system resets. Below are the available options:

Factory Reset

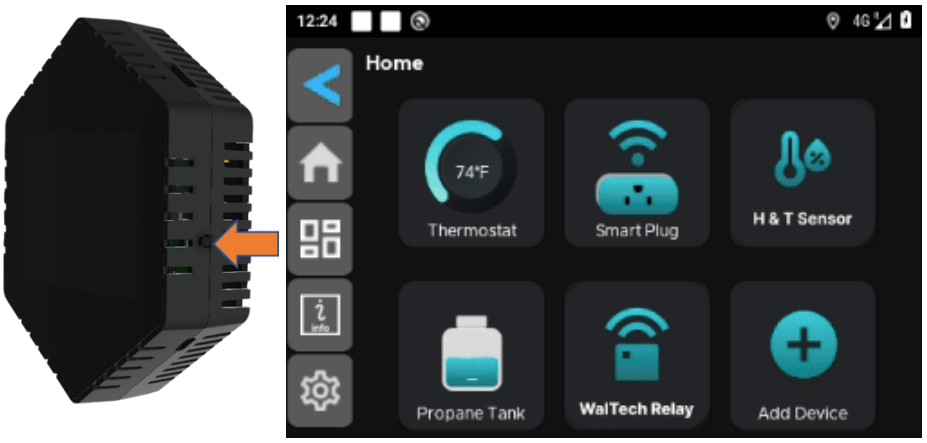
⚠️ A factory reset will erase all user data and settings. The device will return to the initial configuration screen. Please write down your system set up configuration from the info page before a factory reset so you can easily enter it again after reset.



Using the Touchscreen:

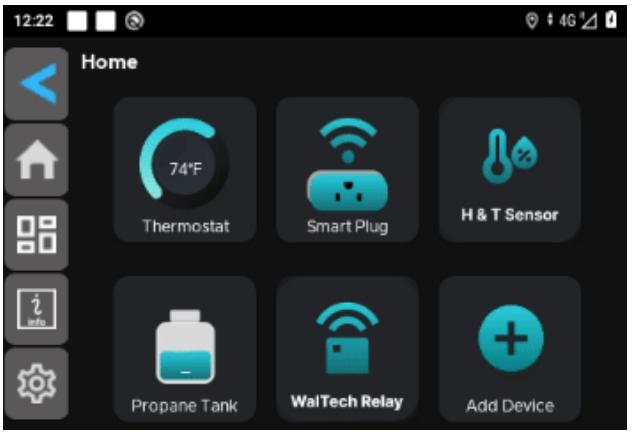
Tap **Settings** on the home screen > **Scroll to the bottom** and tap Factory Reset > A confirmation message will appear > Tap **Yes** to proceed.
Wait a few minutes for the reset to complete. **Keep it uninterupted**. The device will return to the controller configuration page. The thermostat will generally reboot within a few minutes after the new information is entered.

Reboot (Restart) the Device
Manual Reboot:



1. Locate the small button on the right side of the thermostat.
2. Using a pen or pointed object, **press and hold the button for 4 - 6 seconds, then release**.
3. A prompt will appear on the screen. Tap Restart to reboot the device.

Touchscreen Reboot:



Tap **Settings** on the home screen > **Scroll down and tap Reboot** > Confirm the prompt by selecting **Yes**.
The device will restart and return to the home screen after a few moments. **Keep it uninterupted during the process.**

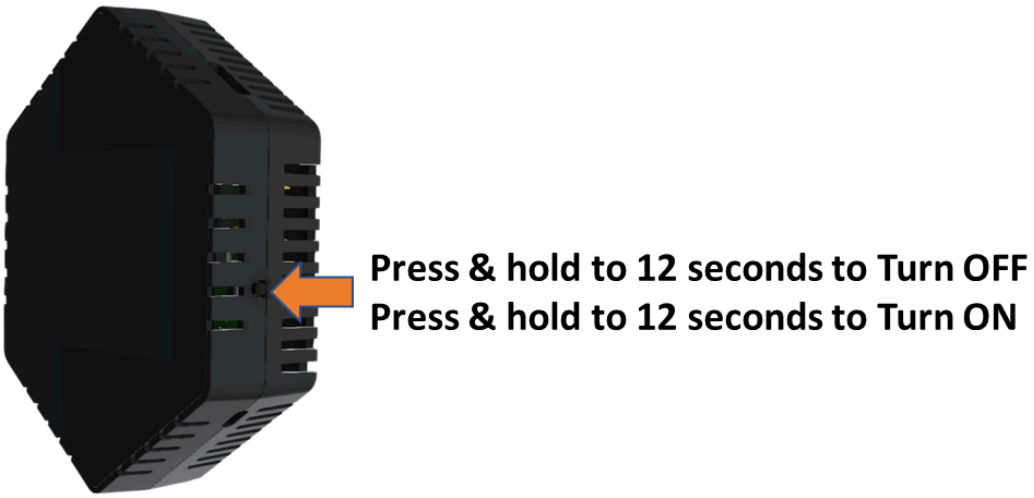
Power Off / Power On (Manual Method Only)

Turning the Device OFF:

Press and hold the side button with a pen or pointed object for 10-12 seconds > The screen will turn off, and the device will shut down completely.

Turning the Device ON:

Press and hold the same side button for 10-12 seconds > The screen will flash, and the display will power on shortly.



Firmware update

Your WalTech thermostat operates with two firmware systems:

- **Thermostat Logic Firmware(FW)** – Manages HVAC control and system logic.
- **Display & Experience Firmware (VC/VN**) – Powers the touch screen interface and user experience features.

How Firmware Updates Work

When your thermostat is **connected to Wi-Fi or cellular**, it automatically checks for the latest firmware versions every 5 minutes interval..
If an update is available:

- A pop-up message will appear on the screen prompting you to Download the Latest Firmware.
- You can choose to Download Now or Cancel and install the update later at your convenience. The popup will reappear again as long as a fw or vc update is available.

Important Notes for Updating

- Ensure your device has a **stable internet connection** before starting the update.
- **Do not power off, unplug, or interact** with the device during the update.
- The update process may take a few minutes. **Please be patient**.
- **Wait until the device fully returns** to the home screen or controller selection screen before using it.

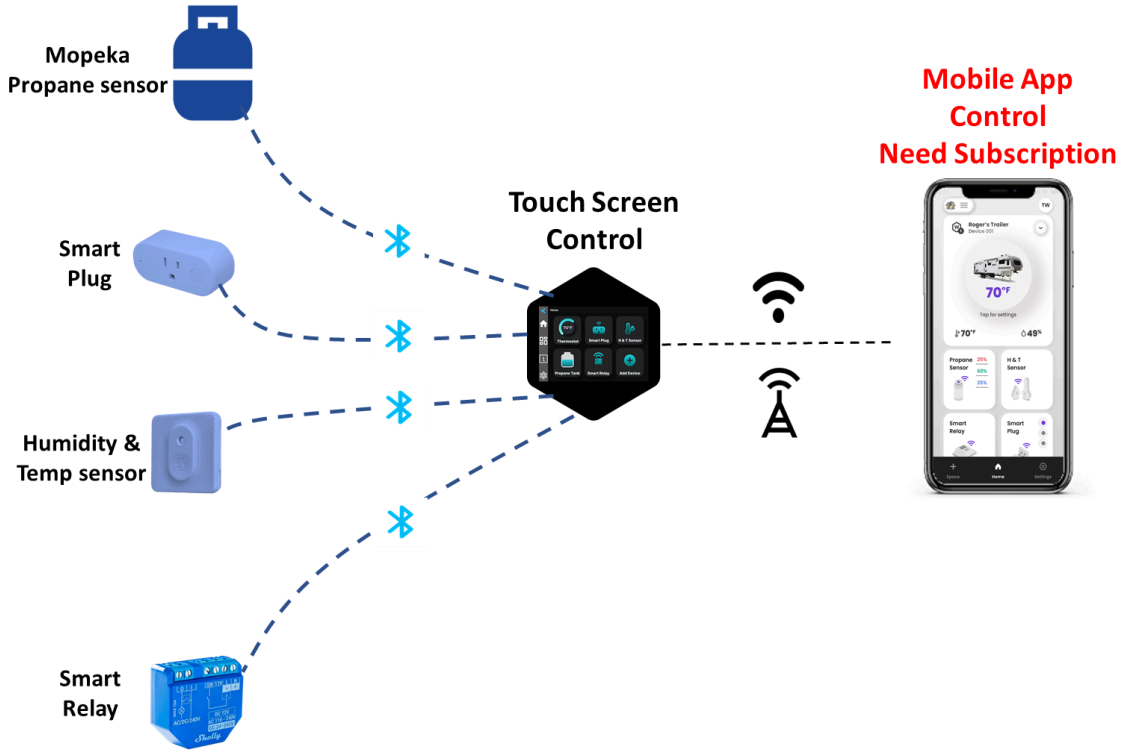
WalTech As Your Bluetooth Gateway

Make Your RV Smarter—One Sensor at a Time

Your WalTech thermostat isn't just for heating and cooling—it's the brain of your smart RV. It also acts as a Bluetooth Gateway, which means it can talk to other helpful devices around your RV—like your:

- Mopeka propane tank sensor
- Remote temperature and humidity sensors
- Smart plugs and smart relays

You can see all this info right on the WalTech touch screen—no extra hub or add-on required. It's built right in.



📱 Want to Check Things from Far Away?

Here's the cool part—because your WalTech is connected to the internet (via Wi-Fi or Cellular), it can send that sensor data to your mobile app too.

So you can do things like:

- ✅ Check your propane level while you're miles away
- ☕ Turn on your coffee machine from bed
- ❄️ Monitor your freezer temp so your food doesn't spoil
- 💧 Get alerts if there's a water leak

What You Need to Know About the Subscription

To get all this information on your phone, WalTech uses the cloud to store and send the data. That means there's a small monthly cost to cover those cloud services:

- $7.99/month when paid annually

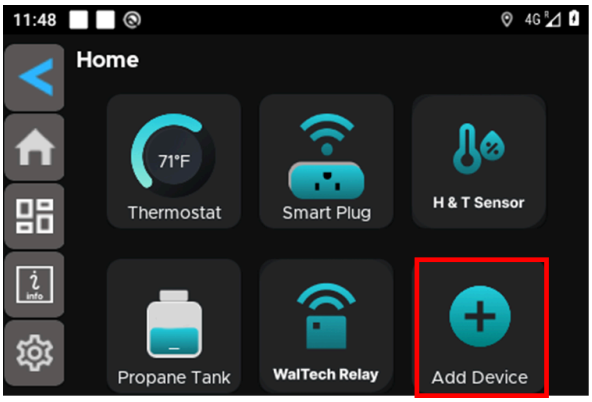
- $5.99/month if paid monthly

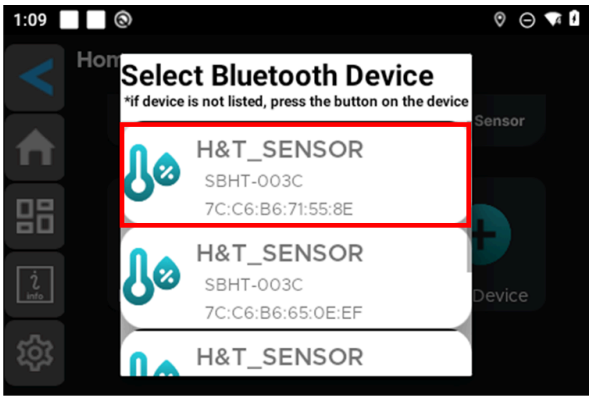
We don’t sell your data like some big companies. Instead, we keep it private and secure, and only charge what’s needed to keep the service running.

✅ Good news:
You can still see everything on the thermostat screen for free, even if you don’t subscribe.
No hidden fees. No surprise charges.

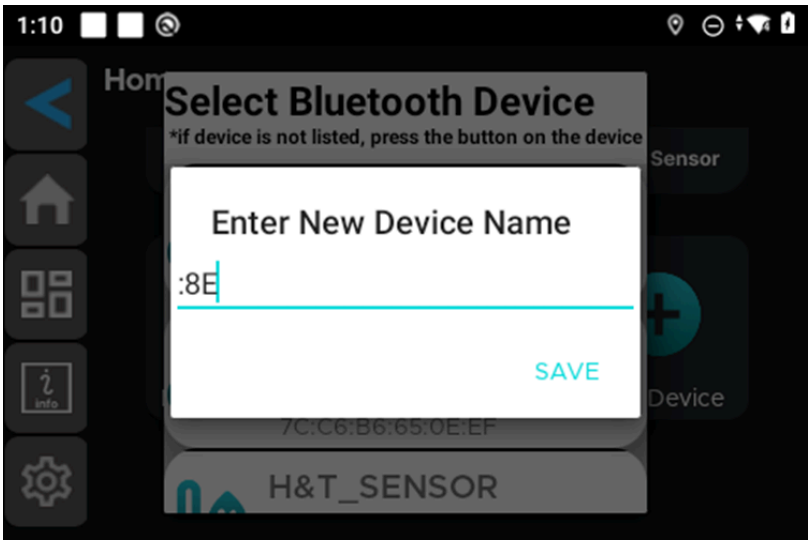
How to Add a Bluetooth Sensor

Adding a Bluetooth sensor to your WalTech thermostat is simple and quick. Just follow these steps:





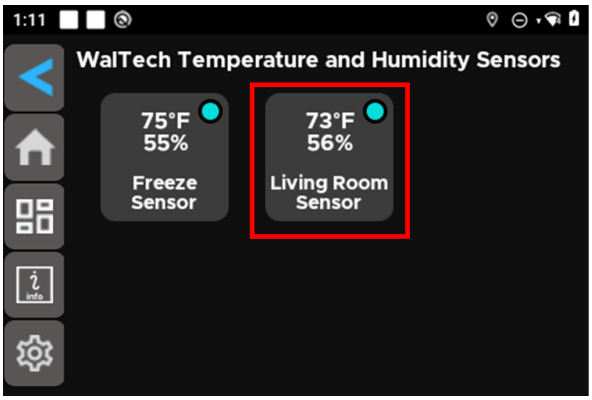
1. Tap “Add Device” on the home screen.
2. WalTech will automatically search for nearby Bluetooth devices that are sending signals.
   [Please click on the sync button or check battery of sensor is not sending signals]
3. When the list pops up (you might see several devices like H&T sensors),
   - Select the sensor you want to connect.
   - Give it a name (like “Bedroom Temp” or “Propane Tank”) so you can easily recognize it later.

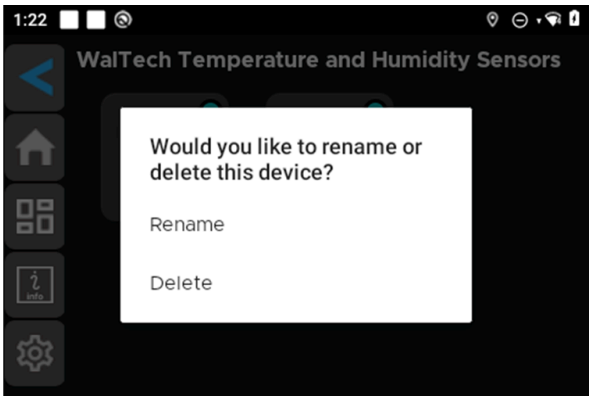


✅ That’s it! The sensor is now paired.

Where to Find It

Once added, your Bluetooth H&T sensor will appear in the H&T Sensor section on the home screen.





Rename or Delete a Sensor

Want to make changes later?

- Just touch and hold the sensor icon for 5 seconds
- A menu will pop up with options to:
    - Rename the sensor
    - Delete it from the list

These same steps work for all Bluetooth sensors, including:

- Smart Plug **[Tap the icon to turn ON & OFF the smart plug]**
- Smart Relay **[Tap the icon to turn ON & OFF the smart relay]**
- H&T (Humidity & Temperature) Sensors
- Mopeka Propane sensor

Troubleshooting & FAQ

Unlike traditional thermostats, WalTech runs on an Android-based system. That means it's smarter and more capable—but it also means there are more features running in the background (like screen brightness settings, time sync, etc.).
If you ever feel stuck while navigating, don't worry! This section will walk you through some common questions and quick fixes.

FAQ

Q: I accidentally left the main screen and don't know how to get back. What should I do?

No problem—here's how to return to the WalTech Home Screen:
Swipe down from the top of the screen.
If you swipe down once, you'll see a row of icons. There is an Android icons
Swipe down again, and you'll see the name of the icon that says "WalTech".
Tap on that icon—it will take you right back to the main screen.

⚠️ Connectivity Disclaimer

Note: WalTech is a smart IoT device that relies on Wi-Fi or cellular networks for remote access. Due to the nature of wireless connectivity, temporary network issues or changes may require a manual reboot of the thermostat to restore communication.
This is normal for connected devices, and not a malfunction of the thermostat.
We recommend ensuring a stable network environment for the best experience.

Main Device Technical Specifications

Power Supply:

- DC Input Voltage: 7V to 36V
- AC Input Voltage: 5V to 32V
- Input Supply Current: 1.5A
- Maximum Operating Frequency: 1.3 GHz

Relay Specifications

🔹 Relay 1: G3VM-61VY2
- Continuous Load Current: 500mA
- Load Voltage (AC Peak/DC): 60V

🔹 Relay 2: HRB1-S-DC5V
- Maximum Switching Voltage: 125VAC / 30VDC
- Maximum Load Current: 2A
- Maximum Switching Power: 250VA / 48W
- Nominal Coil Power: 150mW
- Nominal Voltage: 5VDC
- Coil Resistance: 167 ohms
- Operate Voltage: >3.75VDC

Smart Module & Connectivity

- Module: SC200R Smart Android-based module
    - 64-bit Quad-core ARM Cortex-A53 processor
    - Clock Speed: Up to 1.3 GHz
    - RAM: 1 GB
    - Flash Storage: 8 GB
- Connectivity Options:
    - 4G with fallback to 2G for GSM
    - Dual-band Wi-Fi (2.4GHz & 5GHz)
    - Built-in Bluetooth 4.2 for external sensor connectivity
    - Built-in GPS to display the device’s current location

Home Thermostat Wiring and Relay – WALTECH 2.0 Protection Manual Insert

This wiring method is specifically designed for home thermostat environments. The WALTECH 2.0 Thermostat is intended for use in residential HVAC systems, where it connects to standard furnace control boards and outdoor condensing units. While it may be adaptable to other HVAC configurations, users should only attempt non-standard applications with guidance from a licensed HVAC professional and prior approval from WALTECH Support.

Why an External Relay Is Required
The internal Y (cooling) relay in the WALTECH 2.0 Thermostat is rated for a maximum of 500 mA. Many standard outdoor air-conditioner contactors—and even some isolation relays—can draw more current than this limit. Without proper protection, this may cause relay failure or thermostat damage. To prevent this, an external isolation relay must be installed. In a typical home setup, the thermostat sends the Y signal to the furnace board, which energizes the relay coil. The relay's normally open (NO) contacts then safely switch the outdoor contactor coil power from R through to C.

CORRECT WIRING CONNECTIONS FOR HOME THERMOSTAT USE
THERMOSTAT CONNECTIONS
Thermostat C (T8)(–) ® Furnace C
Thermostat R (T7)(+)&(T6 Relay Power – Jumpered) ® Furnace R
Thermostat W (T5)(Heat) ® Furnace W
Thermostat Y (T2)(Cool) ® Furnace Y
Thermostat G (T13 + T14 – Jumpered) Fan ® Furnace G

RELAY CONNECTIONS
Relay Coil Terminal 1 (A) ® Furnace C
Relay Coil Terminal 2 (V) ® Furnace Y
Relay NO Contact 1 (NO) ® Outdoor Contactor Coil Terminal 1
Relay NO Contact 2 (COM feed from R) ® Furnace R
Outdoor Contactor Coil Terminal 2 ® Furnace C

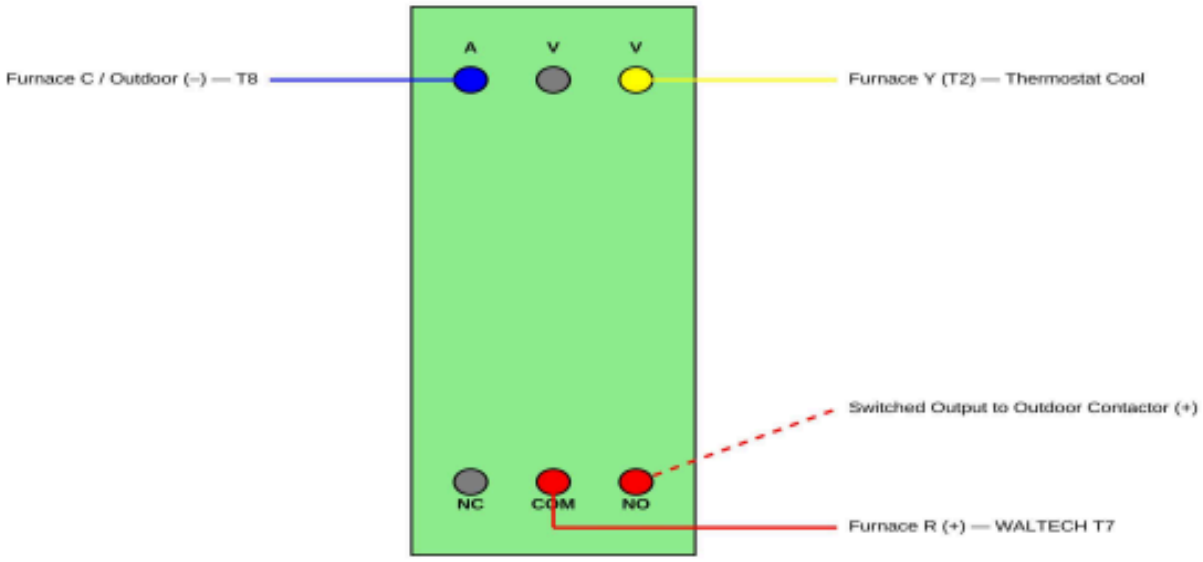
WALTECH Isolation Relay Wiring Diagram (v5 RouteFix Balanced)
(Relay image is shown below.)

WALTECH Isolation Relay Wiring Manual v5 — November 2025

(Balanced COM Vertical Route — Clean Alignment and Visibility)

Relay Terminals and WALTECH Cross-References:

TOP row: A (left), V (middle), V (right)
BOTTOM row: NC (left), COM (middle), NO (right)
A (Blue): Furnace C / Outdoor (–) — WALTECH Terminal 8
Right V (Yellow): Furnace Y — WALTECH Terminal 2 (Thermostat Cool)
COM (Red): Furnace R (+) — WALTECH Terminal 7
NO (Red, dashed): Switched Output to Outdoor Contactor (+)



Functional Wiring Summary:

- Relay includes 3 top and 3 bottom terminals (A/V/V top, NC/COM/NO bottom).
- Thermostat Y (WALTECH T2) energizes coil between A (Blue) and right V (Yellow).
- Furnace R (+) (WALTECH T7) connects only to COM (middle bottom).
- COM wire now drops longer vertically before turning right, staying fully in relay body.
- NO (right bottom) provides a separate, dashed red output to Outdoor Contactor (+).
- Furnace C (WALTECH T8) provides common/return via A terminal to Outdoor (–).

WALTECH Isolation Relay Wiring

For exact relay specifications, contact WALTECH. Compromised thermostat internal relays are not covered if the specified isolation relay is not used.

Note: Wire colors shown are for illustrative purposes only and may not match your system's actual wiring colors.

Text questions to 1■44■WALTECH or email contact@waltechint.com

INSTALLER AND WARRANTY NOTES

- Many isolation relays exceed 500 mA coil draw and are not compatible. Confirm relay type with WALTECH before use.
- For relay selection and verification, contact 1-844-WALTECH (phone or text).
- Wire colors may vary; always verify before applying power.
- Failure to include the required isolation relay may void warranty coverage.

SUPPORT

For diagrams, approved relay lists, and wiring assistance:
1-844-WALTECH
contact@waltechint.com