



Catalog Number(s): WZ3TSTATH

Country of Origin: Made in China

For the latest version of this document please visit:

<https://www.legrand.us/wiring-devices/smart-lighting/smart-hospitality/smart-thermostat-with-zigbee-3.0-hub/p/wz3tstathbk>



READ & SAVE THESE INSTRUCTIONS!

WARNING:

To reduce the risk of fire, electric shock, or product damage, do not expose this apparatus to rain, moisture, immersion, dripping or splashing. No objects filled with liquids, such as vases, should be placed on this apparatus.

CAUTION:

- Do not obstruct the unit's ventilation openings with curtains, fabrics, and similar items.
- Do not place sources of open flames such as candles on the unit.
- Do not place in areas of direct heating or cooling vents
- 5.2 GHz band is restricted to indoor use only.

Purpose of Control: Operating Control
 TYPE 1 or TYPE 2 Action: TYPE 1.C
 External Pollution Situation: Pollution Degree 2
 Rated Impulse Voltage: 330V

REGULATORY INFORMATION

FCC NOTICE: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

NOTE: Any changes or modifications to this device that are not expressly approved by the manufacturer will void the warranty and the user's authority to operate the equipment.

FCC ID: 2AU5DWZ3TSTAT

The distance between user and device should be no less than 20cm.

IC Notice: This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

IC: 25764-WZ3TSTAT

HVIN: WZ3TSTATH

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these instructions for future reference.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow the instructions.
5. Do not use this apparatus in or near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Use only attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power plug damage, liquid spills or objects falling onto the apparatus. Also, if the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

THERMOSTAT OVERVIEW

1. System overview

The WZ3TSTATH is an integrated smart thermostat and room gateway that enables new user experiences for today's smart hotel rooms. It is intended to be installed by trained installers and requires integration into an Enseo hospitality system.



1.1. Indicators

Temperature – Indicates the current room temperature. Display can be in Fahrenheit or Celsius. The temperature decimal is used in Celsius mode

System Off – Indicates that the HVAC system is off

Auto – Indicates that the HVAC is in auto mode. Note: Auto and Off are exclusive of each other

Set Temperature – Indicates set point temperature for thermostat

Room Temperature – Indicates current room temperature

Fan Speed – Indicates fan speed. Indicators are speeds 1-3 and Auto.

1.2. End User Input & Operations

Power/Modes

Item	Description	Default
Power / Modes	1. When system powerup, it will first enter sleep mode. 2. Proximity triggers the system into wakeup mode. 3. Press to power on the HVAC system into Auto mode.	Off
F/C	1. Press once, select the C, Celsius mode. 2. Press again, toggle to F, Fahrenheit mode. 3. When user change to C or F, the corresponding room temperature and set point temperature needs to be updated 4. The F/C button only active at wakeup mode	F
Fan	1. Fan speed. Press to toggle between Auto->1->2->3 if HVAC system is at auto mode.	Auto
Increase	Press increase shall increase the set point temperature of Auto Mode. Each step is 1 degree in F or 0.5 degree in C mode) When the user touches the temperature increase button, the display will switch to the current set point temperature. It can be modified using the increase/decrease buttons. After 3 seconds of inactivity the system will set the last set point temperature.	68F or 20C
Decrease	Press decrease shall decrease the set point temperature of Auto Mode. Each step is 1 degree in F or 0.5 degree in C mode) When the user touches the temperature decrease button, the display will switch to the current set point temperature. It can be modified using the increase/decrease buttons. After 3 seconds of inactivity the system will set the last set point temperature.	68F or 20C

2. INSTALLATION

The thermostat is typically mounted to an industry standard double gang junction box or trim ring about 5 feet above the floor. Example Legrand part numbers are shown in the chart below.

Thermostats should be placed away from windows to avoid solar heating to improperly affect the units temperature sensitivity. Be certain that the thermostat will not be covered by objects such as a bathroom or closet door when open. The thermostat should not be mounted near the heating/cooling equipment in a manner where direct airflow, or the waterfall effect of a heating or cooling unit would impact the measurement of the overall room.

2.1 Flush Mounting

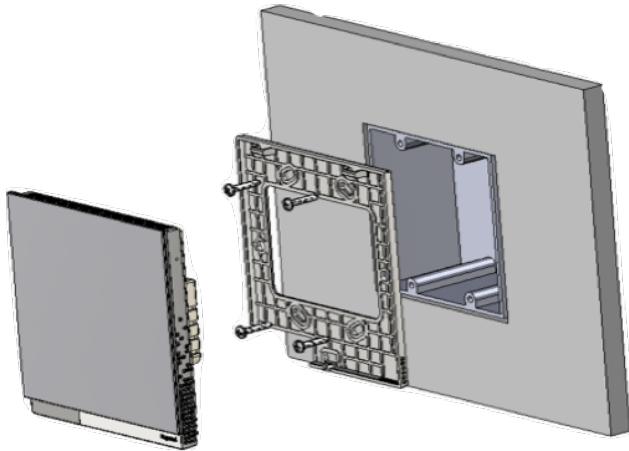


Figure 3 – Flush Mounting

Applicable Legrand Double Gang Boxes	
New Work Plastic	S235RAC
New Work Steel Stud	S235S50AC
Screw Steel Stud	S235RACS
Old Work Plastic	S232W

2.2. Wall Mounting

The product may also be wall mounted using the included wall mount bracket. The bracket can mount over a double gang wall box pattern or be secured appropriately to the wall using suitable fasteners.

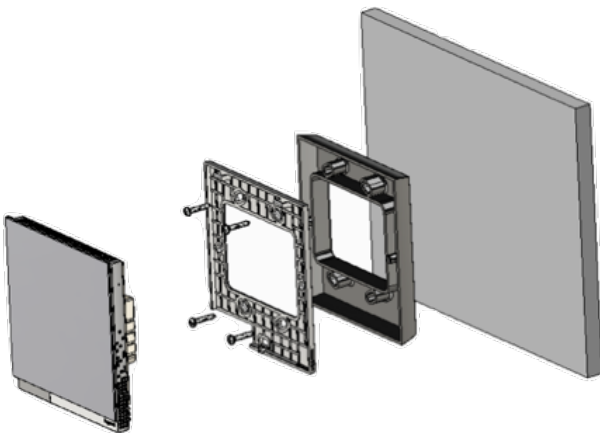


Figure 4 – Wall Mounting

2.3. Wiring

The WZ3TSTATHx Thermostat can connect to various different types of HVAC systems. It utilizes 4 different wiring harnesses to access specific features.

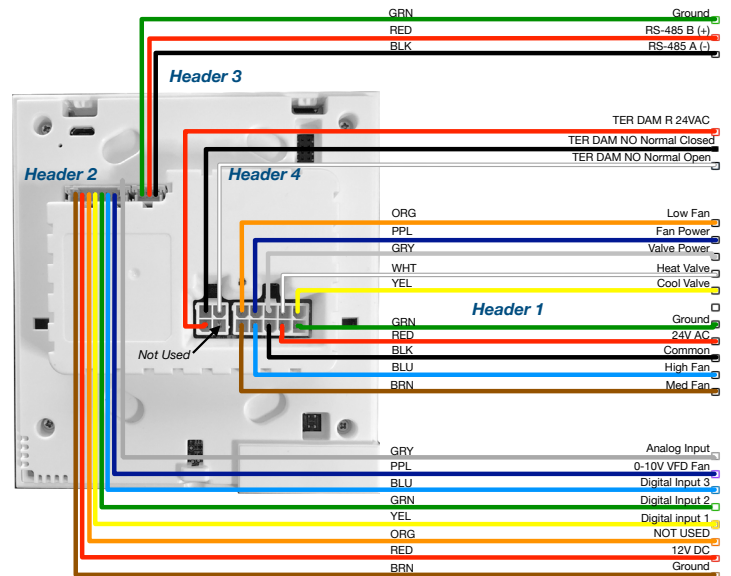


Figure 5 – Wiring Harness Locations

2.3.1 Harness 1 – Main Harness PN WATSTATH101

Pin Number	Function	Color
1	Ground	Green
2	24 VAC	Red
3	Common	Black
4	High Fan	Blue
5	Medium Fan or Second Stage Heat	Brown
6	Cold Water Valve or Compressor Signal (Heat Pump)	Yellow
7	Hot Water Valve or Reversing Valve (Heat Pump)	White
8	Valve Power	Grey
9	Fan Power	Violet
10	Low Fan	Orange

2.3.2 Harness 2 – Digital Wiring Harness PN WATSTATH201

Pin Number	Function	Color
1	Analog Input - Remote Thermistor	Grey
2	Analog Output - 0-10V VFD Fan	Purple
3	Digital Input 3 - External PIR/motion sensor	Blue
4	Digital Input 2 - Balcony Door/Window, 2 transitions to active	Green
5	Digital Input 1 - Entry Door, 2 transitions to active	Yellow
6	Not Used	Orange
7	VEE (12 Vdc)	Red
8	GND Ground	Brown

2.3.3. Harness 3 - RS485 PN WATSTATH301

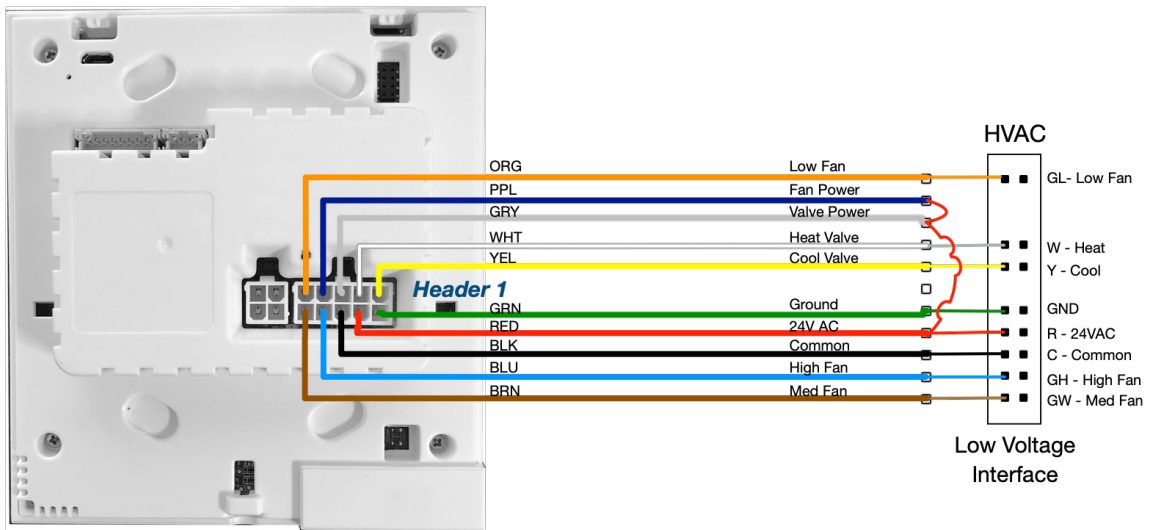
Pin Number	Function	Color
1	RS-485 A (-)	Black
2	RS-485 B (+)	Red
3	GND	Green

2.3.4. Harness 4 – Damper PN WATSTATH401

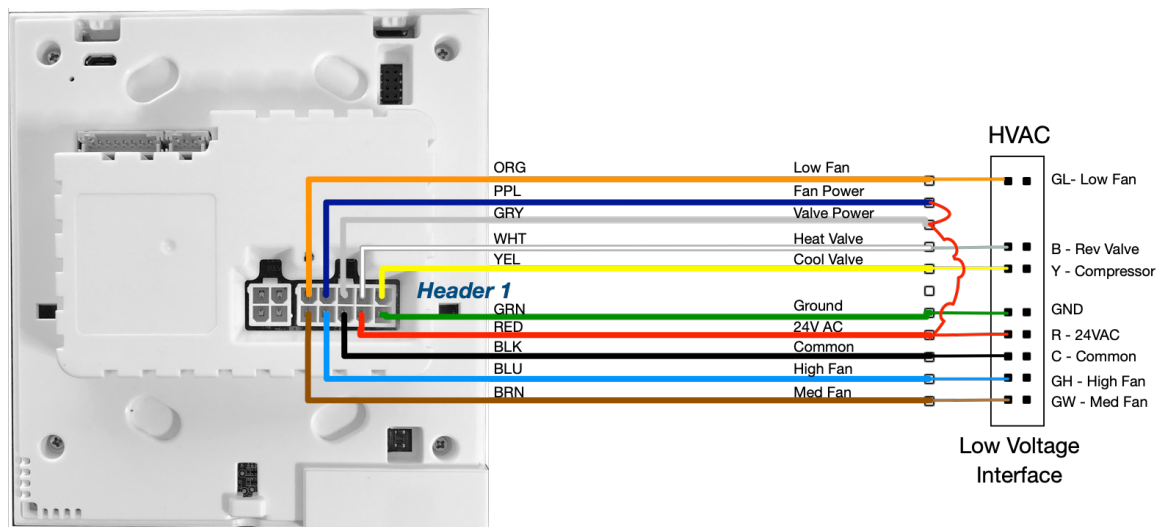
Pin Number	Function	Color
1	Reserved no connection	N/A
2	TER_Dam R 24 VAC	Red
3	TER Dam No Normally Open	White
4	TER Dam No Normally Closed	Black

2.3.5 Wiring Diagrams

2.3.5.1 Diagram 1 – 24VAC 4-Pipe FCU – Maestro App Type 3F 1S H/C

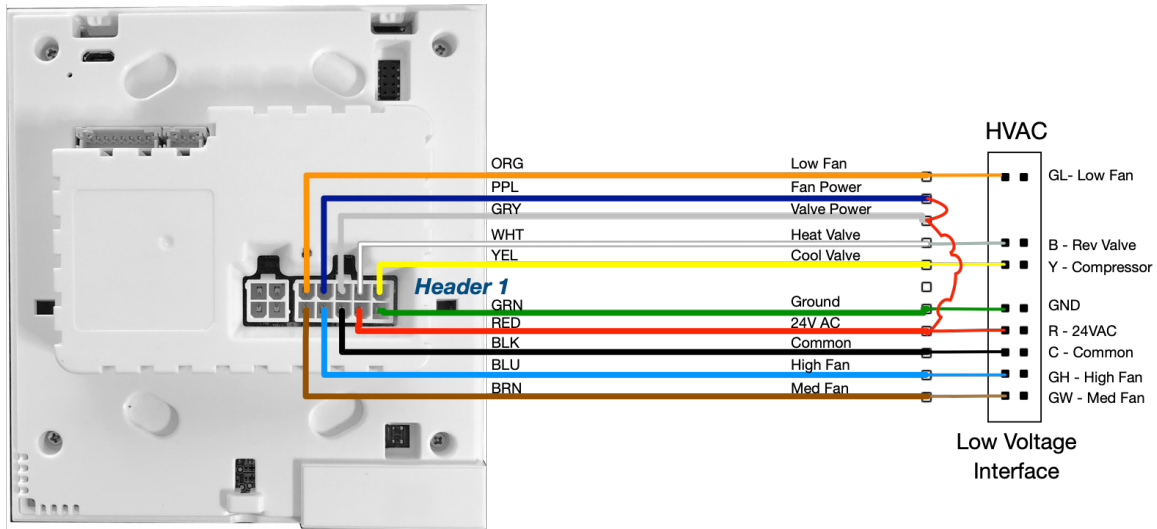


2.3.5.2 Diagram 2 – HpB Single Stage Heat 24VAC – Maestro App Type 3F HpB-1SH

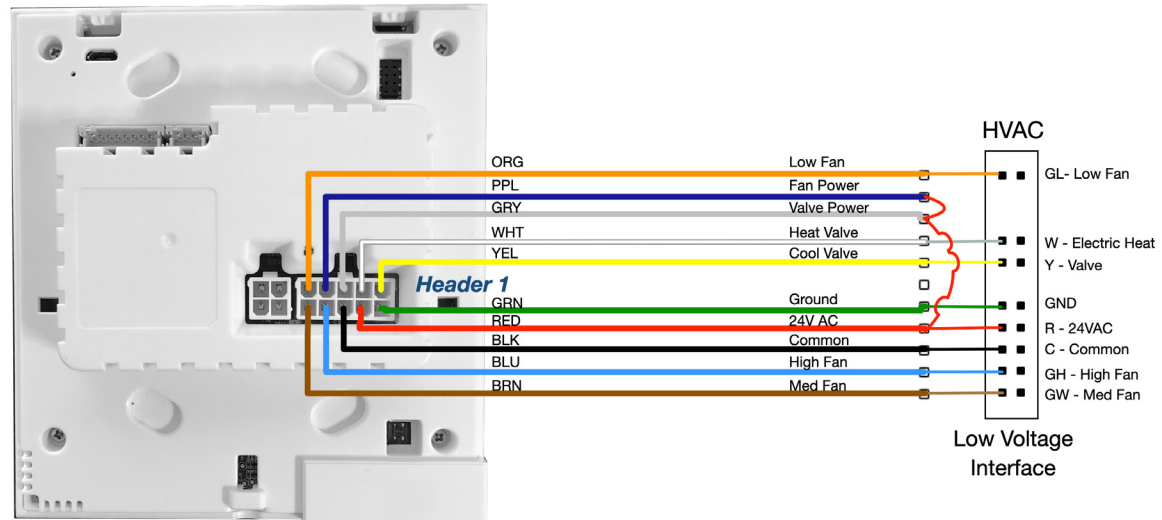


2.3.5 Wiring Diagrams (continued)

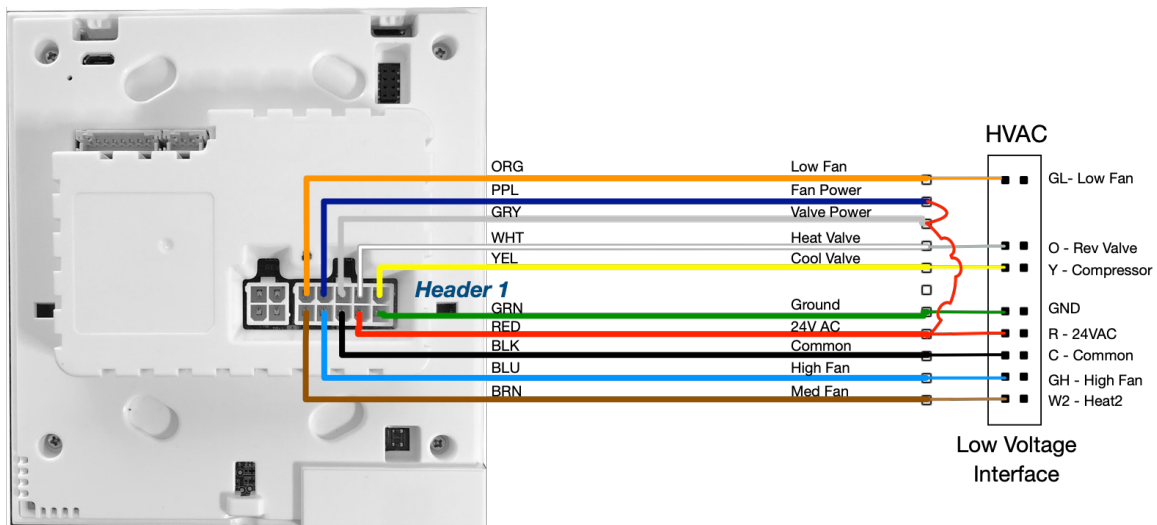
2.3.5.3 Diagram 3 – HpO Single Stage Heat 24VAC – Maestro App Type 3F HpO-1SH



2.3.5.4 Diagram 4 – HpB Second Stage Heat 24VAC – Maestro App Type 2F HpB-2SH

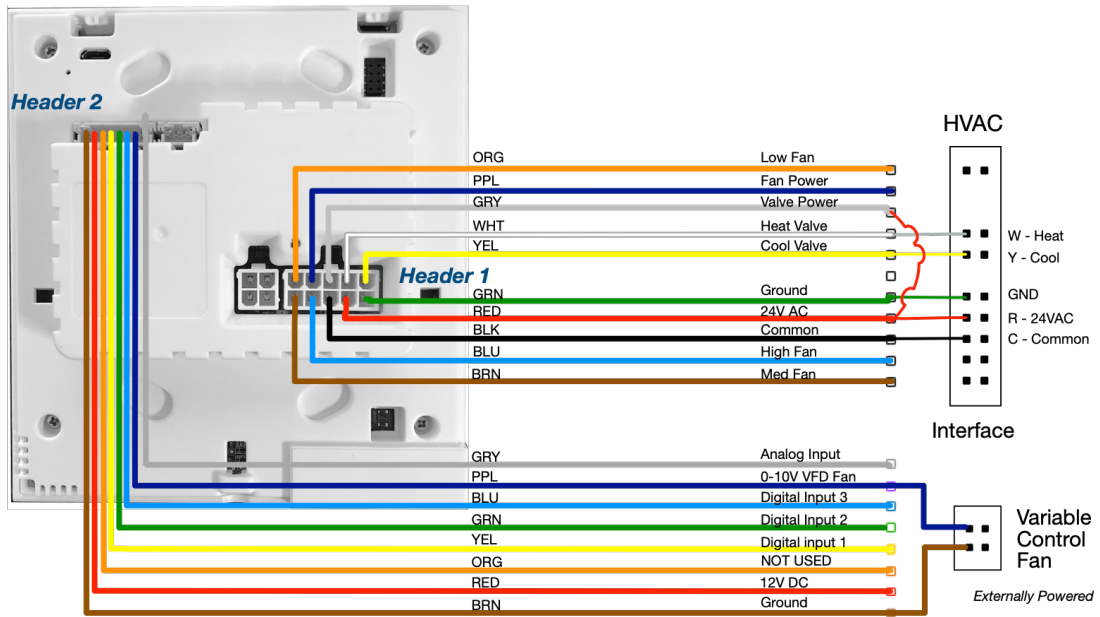


2.3.5.5 Diagram 5 – HpO Second Stage Heat 24VAC – Maestro App Type 2F HpO-2SH

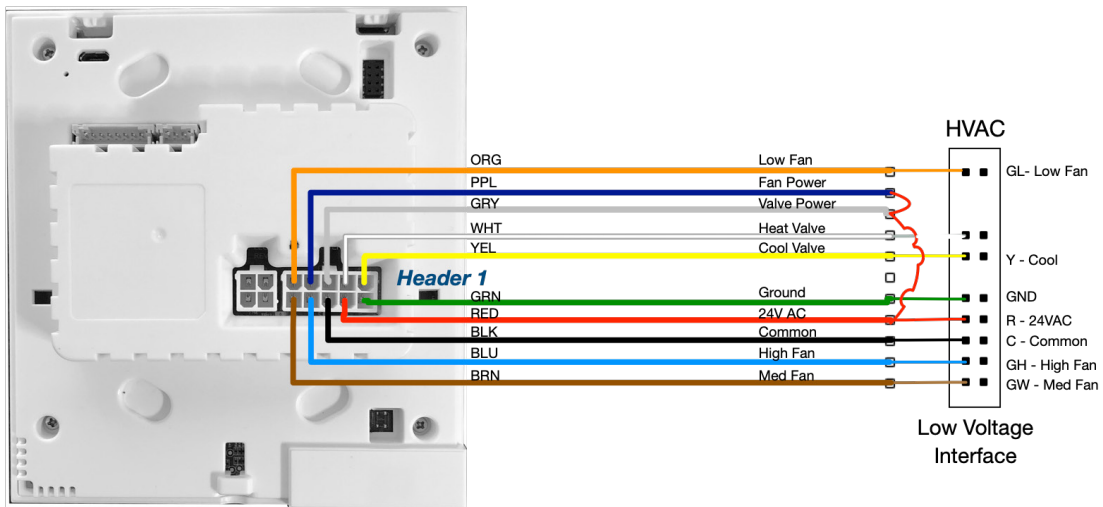


2.3.5 Wiring Diagrams (continued)

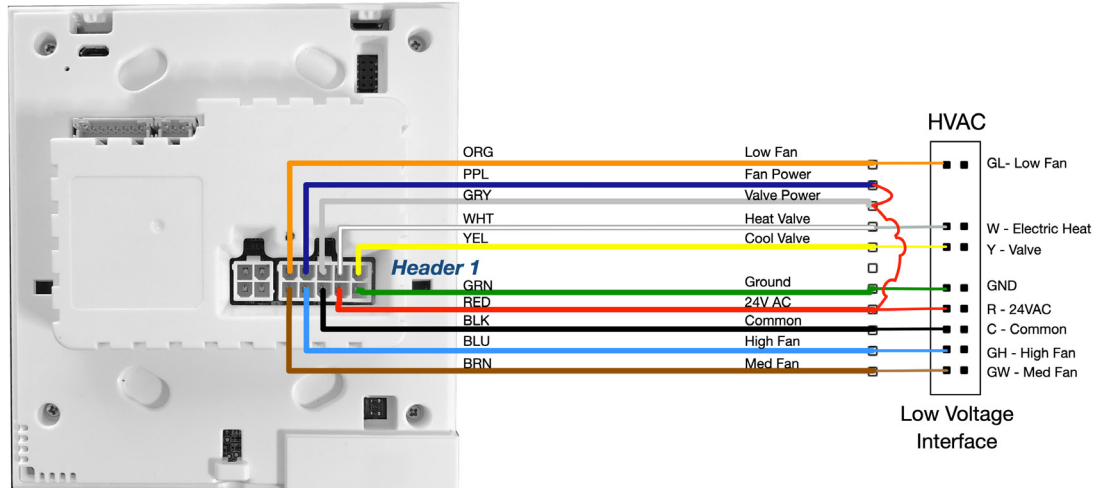
2.3.5.6 Diagram 6 – VFD & Heat/Cool – Maestro App Type VFD HC



2.3.5.7 Diagram 7 – 3 Fan&Cool – Maestro App Type 3F C

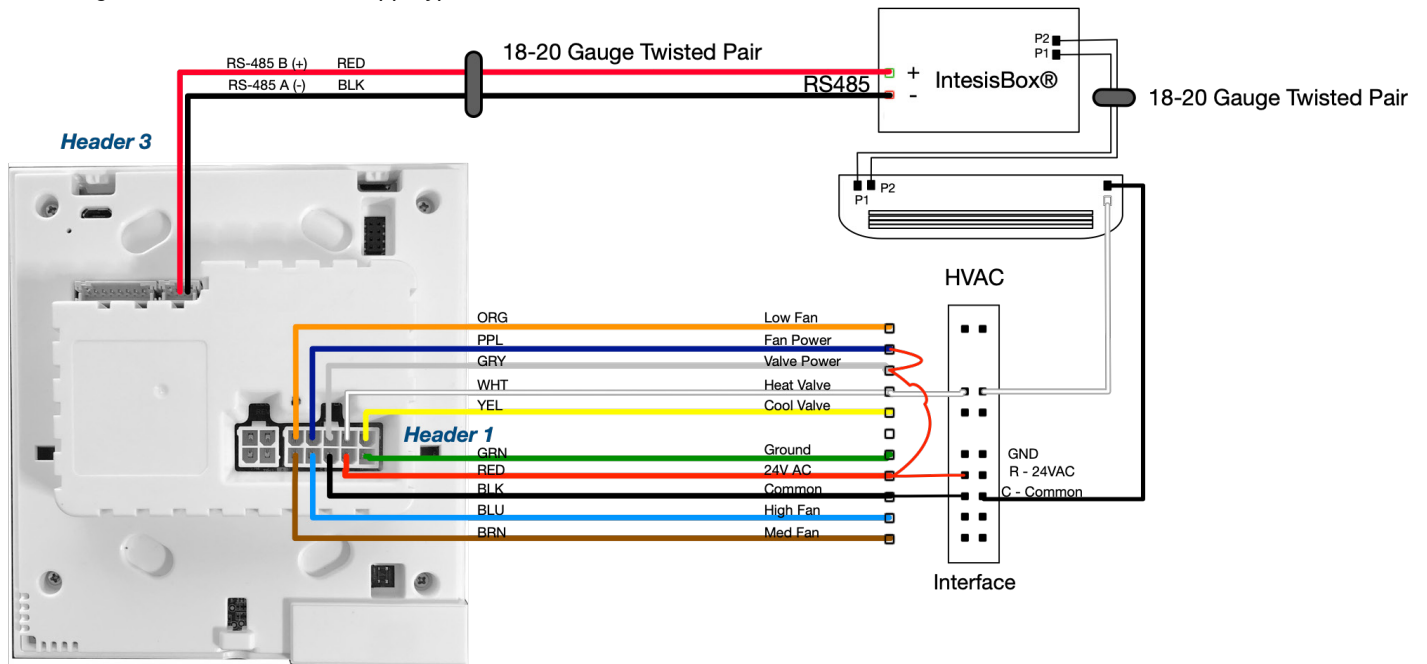


2.3.5.8 Diagram 8 – 2 Pipe Cool with Electric Heat – Maestro App Type 3F C+EH

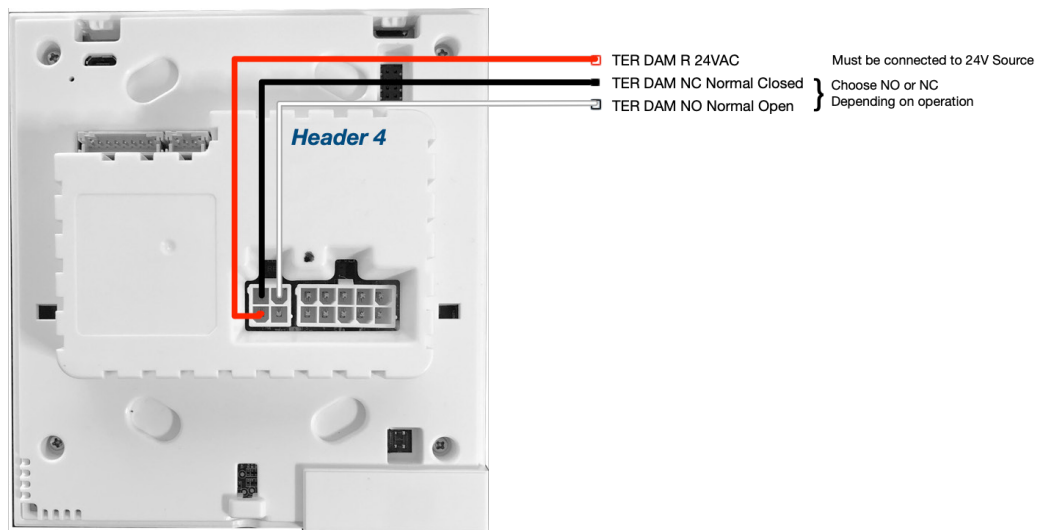


2.3.5 Wiring Diagrams (continued)

2.3.5.9 Diagram 9 – VRF – Maestro App Type VRF



2.3.5.10 Diagram 10 – Damper



3. INITIAL SETUP

Before going through initial setup, please make certain that the thermostat is properly mounted to the wall. When the thermostat is initially powered up the factory defaults are set to disable any calls for heat, cool, or fan speeds to protect any HVAC equipment.

Settings for HVAC equipment type is done via the Enseo's Maestro Installation tools. Documentation for those tools are available from Enseo and are outside the scope of this installation document.

3.1. Settings Configurations From The Thermostat UI

3.1.1. Changing Room Temperature

From the user interface select the Arrow up or Arrow down button to adjust the temperature

3.1.2. Change Thermostat Modes

Thermostat modes can be adjusted by pressing the Mode button in the upper right.

3.1.3. Change Fahrenheit / Celsius

The unit of measure can be changed by pressing the F/C button on the mid left portion of the user interface.

3.1.4. Change Fan

Fan speed can be changed by pressing fan icon on the lower left. Speeds can be change set to function automatically (Auto) or Low (1), Medium (2) or High (3)

3.1.5. Change Set-point Heat

Set-point heat is set by pressing the mode button until the indicator above the temperature readout says Heat. Using the Up and down arrows modify the set-point as desired.

3.1.6. Change Set-point Cool

Set-point Cool is set by pressing the mode button until the indicator above the temperature readout says cool. Using the Up and down arrows modify the set-point as desired.

3.1.7. Change Backlight Control

Please reference Maestro user instructions for changes to backlight settings.

3.2. Advanced Settings

3.2.1. Wi-Fi Settings

Out of the box the thermostat will default in its AP mode waiting to be configured by the Enseo Maestro provisioning tool. The Maestro tool will scan the installation QR code on the thermostat.

3.2.2. Zigbee Settings

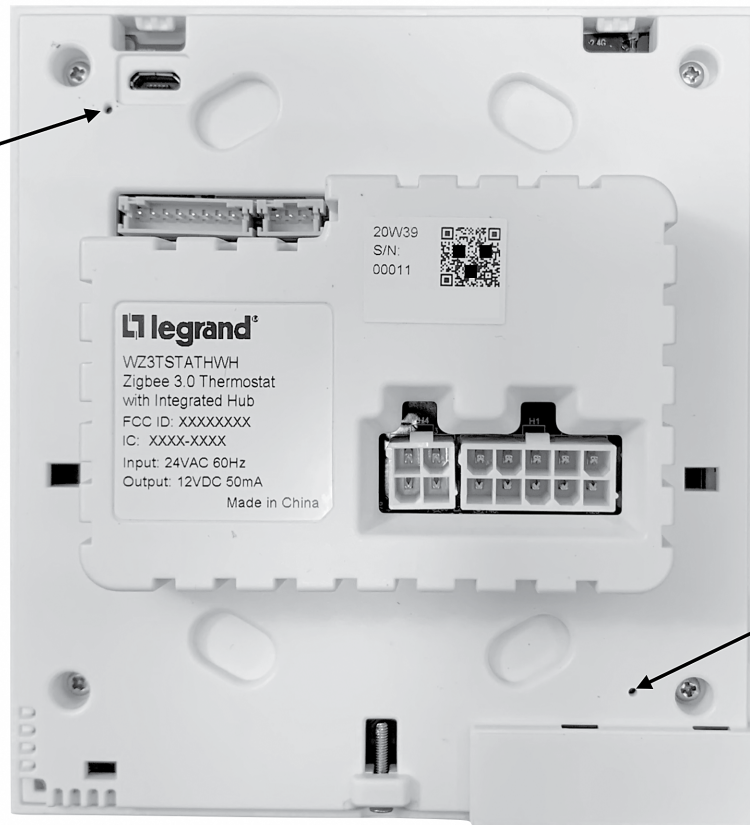
Zigbee settings are controlled via the Enseo Maestro provisioning tool. Please reference the Enseo Maestro APP for more details.

3.2.3. LED Display Brightness

Ambient light settings are controlled via the Enseo Maestro provisioning tool. Please reference the Enseo Maestro APP for more details.

3.3. Factory Reset

Press and hold the reset button in hole in the upper left of the Thermostat while it is powered up. Once depressed the thermostat will reset.



Factory Reset

Using a paper clip or other suitable device depress for 30 seconds and release

AP Announce

Using a paper clip or other suitable device depress for 2 seconds and release

A. DEFAULT SETTINGS LIST

Function	Default Value*
COMFORT CONTROL	
Guest Selectable Temperature Control Limits (rented/occupied) - Low	80 F
Guest Selectable Temperature Control Limits (rented/occupied) - High	60 F
LEM Guest Selectable Temperature Control Limits (rented/occupied) - Low	85 F
LEM Guest Selectable Temperature Control Limits (rented/occupied) - High	72 F
Check-in temperature	72 F
Default Thermostat Dormant Mode Display	Set Point
ENERGY CONSERVATION	
Rented Room - Temperature Clipping Heating	85 F
Rented Room - Temperature Clipping Cooling	55 F
Occupied Mode Temperature Control Delta	1 F
Rented / Unoccupied Setback Temperature Variance (Delta from Guest selected Temperature Setting)	4 F

Function	Default Value*
TEMPERATURE CONTROL	
Thermostat Off low limits	50 F
Thermostat Off high limits	90 F
Un-rented / Un-Occupied temperature low limits (no PMS Present)	62 F
Un-rented / Un-Occupied temperature high limits (no PMS Present)	80 F
User interface mode configuration for manual heat / cool with no auto	No
User Interface mode configuration for manual heat / cool	No

Function	Default Value*
HVAC EQUIPMENT OPERATION	
Latent Heat Blowout	45 seconds
Latent Cool Blowout	45 seconds
Fan Operation When Temperature is Satisfied (Occupied Room)	Fan Off
Fan operation Unoccupied / Satisfied	Fan Off
Fan operation Unoccupied /HVAC Off	Fan Off
EXPOSURE	
Time Delay for Balcony Door Exposure	30 seconds
Disable Fan	Operate as satisfied
Disable Cooling	Apply cool at danger high
Disable Heating	Apply heat at danger low

Function	Default Value*
OCCUPANCY	
Guest Occupancy Timeout with Door Sensor	10 min