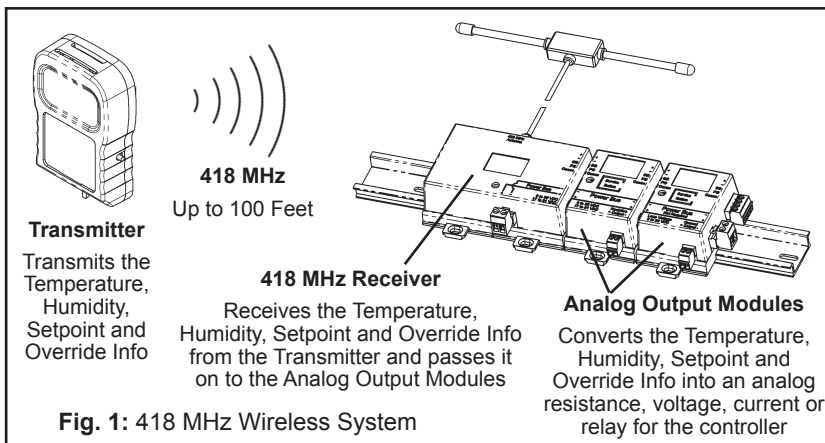


### Wireless System Overview

#### 418 MHz System:

The Transmitter measures the temperature or temp/humidity and transmits the data at 418MHz to the 418 MHz Receiver up to 100 feet away. The optional temperature setpoint and override status are also transmitted at 418 MHz to the receiver. The transmit rate is about once every 10 seconds with an estimated battery life of 5 to 8 years.

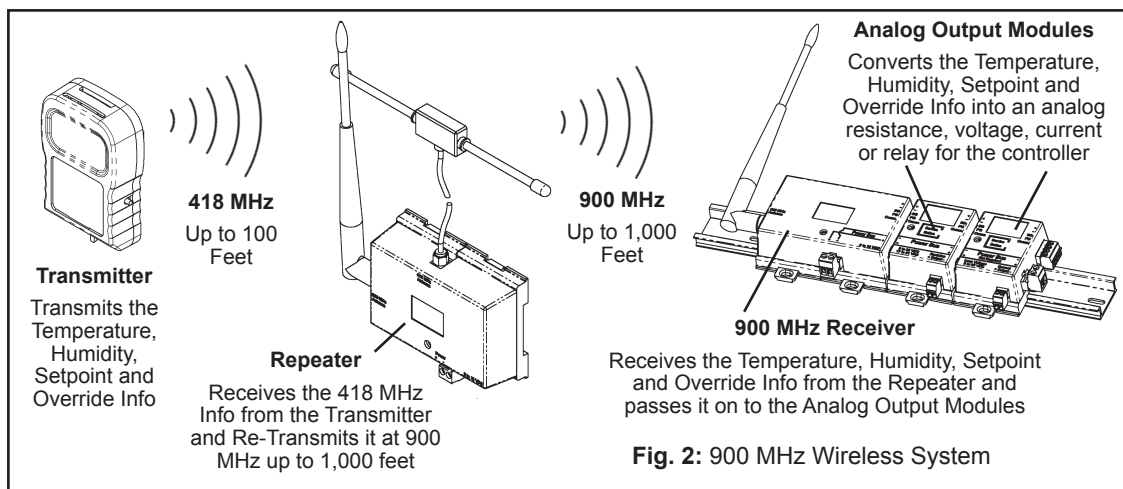
The information sent by the Transmitter is picked up by the 418 MHz Receiver and passed along to the Analog Output Modules. Each transmitted variable (temperature, humidity, setpoint, etc.) is converted by a separate output module into an analog resistance, voltage, current or relay contact which is hard wired to the analog inputs of the controller.



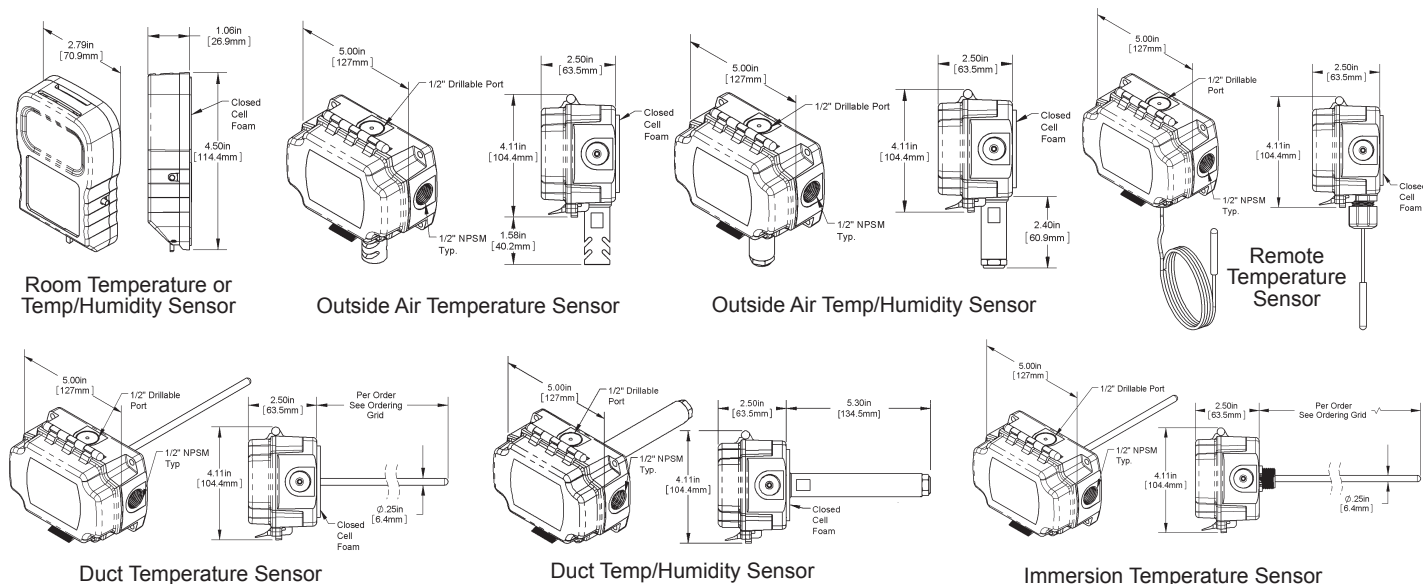
#### 900 MHz System:

The Transmitter measures the room temperature or temp/humidity and transmits the data at 418MHz to a Repeater up to 100 feet away. The optional temperature setpoint and override status are also transmitted at 418 MHz to the Repeater. The transmit rate is approximately once every 10 seconds with an estimated battery life of 5 to 8 years.

The 418 MHz information sent by the Transmitter is picked up by the Repeater and then Re-Transmitted at 900 MHz to a 900 MHz Receiver up to 1,000 feet away. The 900 MHz receiver picks up the information from the repeater and then passes it along to the Analog Output Modules. Each transmitted variable (temperature, humidity, etc.) is converted by a separate output module into an analog resistance, voltage, current or relay contact which is hard wired to the analog inputs of the controller.



### Wireless Temperature and/or Humidity Transmitters



## Analog Output Module Training

The installation process requires that each transmitter is trained to its associated output modules so that they communicate with each other. Pushing buttons in a defined sequence on the units will bind them together.

The training process is easiest on a test bench with the units within arm's reach of each other. Training can be done in the field but requires two people and a set of walkie talkies or cell phones. Be sure to place an identification mark on the transmitter and associated output modules after they have been trained so that they can be matched together at the job site.

If more than one variable is transmitted by the transmitter (temperature, humidity and setpoint for instance), each variable requires a separate output module. Perform the training sequence for each output module. Any transmitted variable can be trained to more than one output module. If a Repeater is used in the system, be sure it is powered and within reception range of the transmitter and the 900 MHz Receiver to train the output modules.

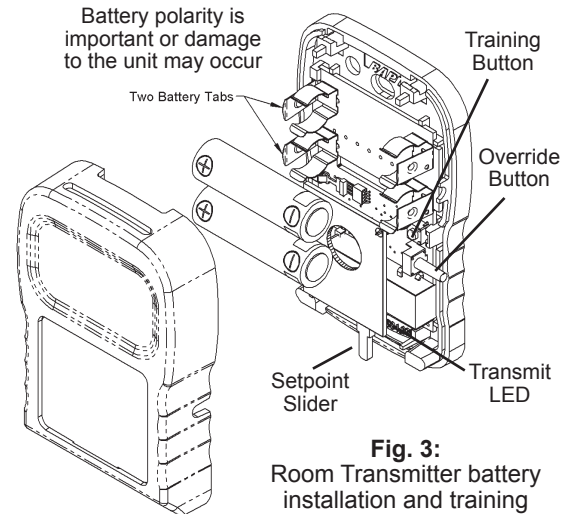
### TEMPERATURE OR HUMIDITY VARIABLE TRAINING

1. To train an output module to a temperature or humidity variable, select the Resistance, Voltage or Current Output Module calibrated to the proper temperature or humidity range and connect it to the wireless receiver. Note: Multiple output modules can be trained to the same transmitter variable if desired.
  2. Apply power to the receiver which will supply power to the connected output modules. The power LED on the receiver will light and remain lit. (**Current Output Modules must have loop power supplied to the module itself before they can be trained.**)
  3. Remove the cover of the room transmitter and remove the battery tabs or install the batteries, observing polarity as shown in Fig 3. Or open the cover of the BAPI-Box on non-room transmitters and remove the battery tabs or install the batteries as shown in Fig 4. The "transmit LED" will flash about once every 10 seconds, indicating a transmission. (The flash is very quick.)
  4. Press and hold down the "Service Button" on the top of the output module (Fig 5) that you wish to train. Then, press and release the "training button" (see Fig 3 & Fig 4) on the transmitter. When the output module receives the "training transmission" from the transmitter, the output module's red LED will light steady. Release the "Service Button" on the output module and the red LED will go out. The transmitter and output module are now trained to each other. During normal operation, the output module's LED will flash about once every 10 seconds indicating data reception from the transmitter trained to it.
- Note:** Combination transmitters send both the temperature and humidity information when the "Training Button" is pressed. However, each Analog Output Module is configured at the time of order as a temperature, humidity, setpoint or override module and will only recognize the relevant information and will ignore the rest.
5. Mount the transmitter at the desired location, removing the batteries if needed. (The units will remain trained to one another through power failures and battery replacement.)

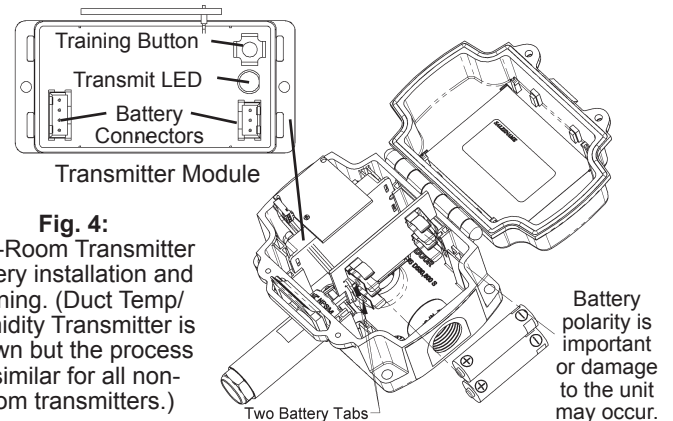
### SETPOINT VARIABLE TRAINING

1. To train an output module to a Setpoint variable, select the Setpoint Output Module (SOM) calibrated to the proper setpoint range and connect it to the wireless receiver. Note: Multiple output modules can be trained to the same transmitter variable if desired.
2. Apply power to the receiver which will supply power to the connected output modules. The LED on the Receiver will light and remain lit.
3. Remove the cover of the room transmitter and remove the battery tabs or install the batteries, observing polarity as shown in Fig 3. The "transmit LED" will flash about once every 10 seconds, indicating a transmission. (The flash is very quick.)
4. Press and hold down the "Service Button" on the top of the output module (Fig 5). Then, press and release the OVERRIDE button on the transmitter (See Fig 3). (Note: If the unit was not ordered with an override function, then the OVERRIDE button will be shorter and will not extend outside the case but will still be accessible upon removing the cover.) When the output module receives the "Training Setpoint" info from the transmitter, the output module's red LED will light. Release the "Service Button" on the output module and the red LED will go out. The transmitter and output module are now trained to each other. During normal operation, the output module's LED will flash about once every 10 seconds indicating data reception from the transmitter trained to it.
5. Mount the transmitter at the desired location, removing the batteries if needed. (The units will remain trained to one another through power failures and battery replacement.)

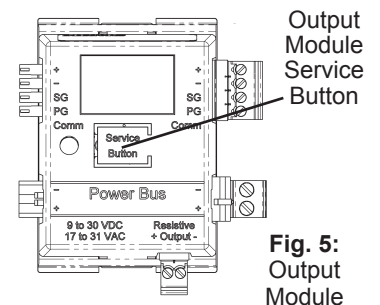
*Continued on next page....*



**Fig. 3:**  
Room Transmitter battery installation and training



**Fig. 4:**  
Non-Room Transmitter battery installation and training. (Duct Temp/ Humidity Transmitter is shown but the process is similar for all non-room transmitters.)

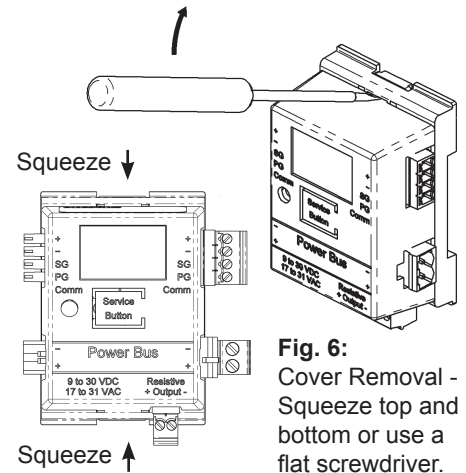


**Fig. 5:**  
Output Module

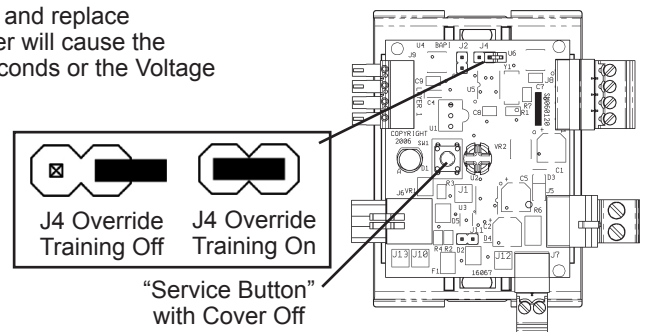
## Analog Output Module Training continued....

### **VERRIDE TRAINING - OVERRIDE IN PARALLEL WITH THE TEMP VARIABLE**

1. An Override function can be added to a Resistance Output Module or Voltage Output Module that has been previously trained to the Temperature variable. (Current Output Modules cannot be used with the override function.) Select the previously trained output module that will have the override function. Remove the cover by squeezing the top and bottom or using a flat screwdriver as shown in Fig 6. Place the module's jumper J4 in the "Override Training ON" position as shown in Fig 7.
2. Apply power to the receiver which will supply power to the connected output modules. The power LED on the Receiver will light and remain lit.
3. Remove the room transmitter cover and remove the battery tabs or install the batteries, observing polarity as shown in Fig 3. The "transmit LED" will flash about once every 10 seconds, indicating a transmission. (The flash is very quick.)
4. Press and hold down the "Service Button" on the top of the output module (or on the circuit board if the cover is removed, see Fig 7). Then, press and release the OVERRIDE button on the room transmitter (See. Fig 3). When the output module receives the "Training Override" info from the transmitter, the output module's red LED will light. Release the "Service Button" on the output module and the red LED will go out. This module is now trained to the override function on the room transmitter.
5. Return the jumper on J4 to the "Override Training OFF" position (Fig 7) and replace the output module's cover. Pressing the override on the room transmitter will cause the Resistance Output Module output to go to less than 100 Ohms for 5 seconds or the Voltage Output Module output to go to 0 Volts for 5 seconds.
6. To remove the override function, retrain the module to the temperature variable (pg 2). This removes the override function.
7. Mount the transmitter at the desired location, removing the batteries if needed. (The units will remain trained to one another through power failures and battery replacement.)



**Fig. 6:**  
Cover Removal -  
Squeeze top and  
bottom or use a  
flat screwdriver.



**Fig. 7:** Override Training Jumper Positions (J4) and "Service Button"

### **VERRIDE TRAINING - OVERRIDE IN PARALLEL WITH THE HUMIDITY VARIABLE**

1. An Override function can be added to a Voltage Output Module that has been previously trained to the Humidity variable. (Current Output Modules cannot be used with the override function.)
2. Apply power to the receiver which will supply power to the connected output modules. The power LED on the Receiver will light steady.
3. Remove the room transmitter cover and remove the battery tabs or install the batteries, observing polarity as shown in Fig 3. The small LED at the bottom right of the circuit board, next to the setpoint, will flash approximately once every 10 seconds indicating a transmission. (The flash is very quick.)
4. Press and hold down the "Service Button" on the top of the Voltage Output Module. Then, press and release the OVERRIDE button on the room transmitter (See. Fig 3). When the output module receives the "Training Override" info from the room transmitter, the output module's red LED will light. Release the "Service Button" on the output module and the red LED will go out. This output module is now trained to the override function on the room transmitter Pressing the override button on the room transmitter will cause the Voltage Output Module output to go to 0 Volts for 5 seconds.
5. To remove the override function, retrain the module to the humidity variable. This removes the override function.
6. Mount the transmitter at the desired location, removing the batteries if needed. (The units will remain trained to one another through power failures and battery replacement.)

### **VERRIDE TRAINING - OVERRIDE AS A SEPARATE OUTPUT WITH A RELAY OUTPUT MODULE (RYOM MODEL ONLY)**

1. To train a Relay Output Module (RYOM model only) to the Override function, connect the output module to the receiver.
2. Apply power to the receiver which supplies power to the connected output modules. The receiver's power LED will light and remain lit.
3. Remove the room transmitter cover and remove the battery tabs or install the batteries, observing polarity as shown in Fig 3. The small LED at the bottom right of the circuit board, next to the setpoint (see Fig 3), will flash approximately once every 10 seconds indicating a transmission. (The flash is very quick.)
4. Press and hold down the "Service Button" on the Relay Output Module (Fig 5). Then, press and release the OVERRIDE button on the room transmitter. When the output module receives the "Training Override" info from the room transmitter, the output module's red LED will light. Release the "Service Button" on the output module and the red LED will go out. This Relay Output Module is now trained to the override function on the room transmitter.
5. Pressing the override button on the room transmitter will cause the output of a "Momentary" Relay Output Module to switch states for 5 seconds — the output of a "normally open" version will go to closed for 5 seconds, the output of a "normally closed" version will go to open for 5 seconds.
6. Mount the transmitter at the desired location, removing the batteries if needed. (The units will remain trained to one another through power failures and battery replacement.)

## Mounting of the Room Transmitter

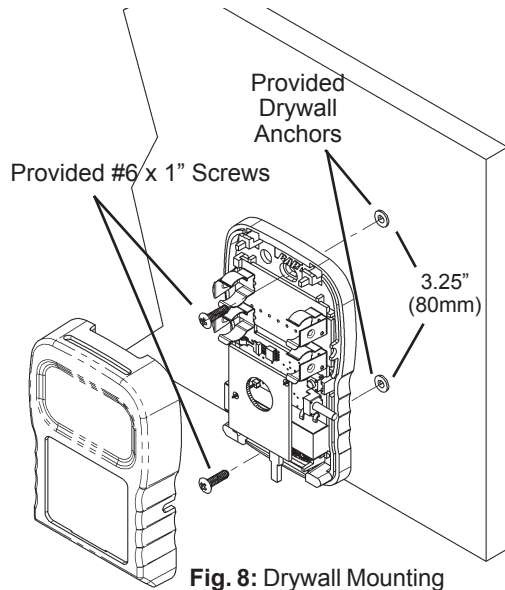


Fig. 8: Drywall Mounting

**Note:** The transmitter should have been trained to the output module at this point of the installation.

### Drywall Mounting

1. Place the base plate against the wall where you want to mount the sensor. Typically 5 feet above the floor.
2. Using a pencil, mark out the two mounting holes.
3. Drill two 3/16" (4.7 mm) holes in the center of each marked mounting hole. Insert a drywall anchor into each hole.
4. Secure the base to the drywall anchors using the #6 x 1 inch mounting screws provided.
5. Install provided batteries or pull battery tabs and follow polarity as shown in figure 3 or damage may occur. The unit will work on just one battery however the battery life will be cut in half.
6. Attach cover by latching it to the top of the base, rotating the cover down and snapping it into place.
7. Secure the cover by backing out the lock-down screws using a 1/16" Allen wrench until they are flush with the bottom of the cover.

**Note:** Mounting of Non-Room Transmitters is covered in the individual installation and Operation documents for that unit.

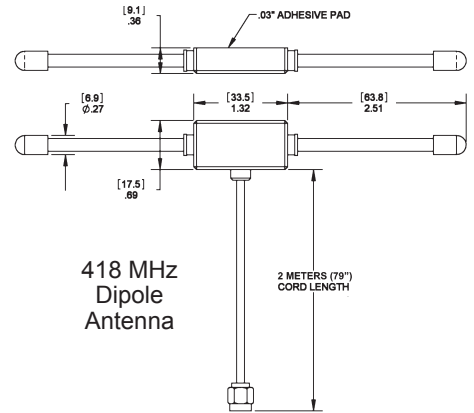
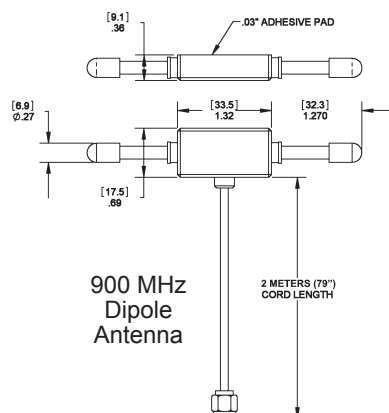
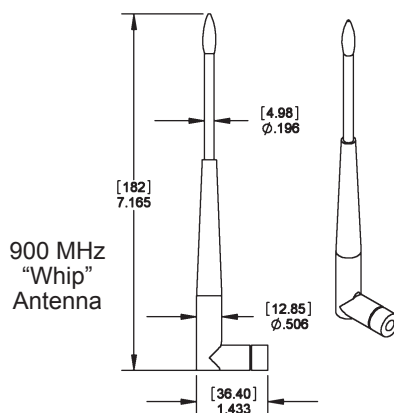
## Mounting and Locating of the Antennas on the 418 MHz Receiver, 900 MHz Receiver and the Repeater

The 418 MHz Receiver, 900 MHz Receiver and Repeater may be located inside a metal enclosure but their antennas must be outside the enclosure. The 418 MHz Receiver comes with a 418 MHz Dipole Antenna. The 900 MHz Receiver comes standard with a 900 MHz "Whip" Antenna but is available with a 900 MHz Dipole Antenna. The Repeater comes standard with a 418 MHz Dipole Antenna and a 900 MHz "Whip" Antenna, but is available with a 900 MHz Dipole Antenna.

To mount the 418 MHz Dipole Antenna or 900 MHz Dipole Antenna, peel off the protective film from the adhesive pad and stick the antenna to a wall or other non-metallic support so that antenna is vertical for best reception. Antenna's should be mounted as far away from metal plates or bars as possible to avoid RF energy being reflected back or blocked on the other side of the metal. An antenna will not work inside a metal box. Mounting to drywall between studs, ceiling tiles, brick, or concrete is very common.

Transmission distance performance will vary based on environment. 100 feet is the maximum that can be expected if there are no obstructions. In general, each obstruction will half the expected transmission distance. Obstructions include but are not limited to; walls, partitions, floors, ceilings, doors, tinted glass, ground, many people, vehicles, foliage, rain, snow and fog. Metal (solid or screen) blocks the RF signal preventing propagation but also can bounce the signal around the potential obstacle. Wood, drywall, plaster, brick, and concrete attenuates the signal but will let it pass (if it's not too thick) at a reduced signal strength. Anything that holds water absorbs the signal to the point of blockage like rain, fog, people, ground, dense foliage etc. Elevator shafts and stairwells usually block RF signals.

The 900 MHz "Whip" Antenna simply screws onto the 900 MHz Receiver or the Repeater. Mounting the antenna on a metal surface may limit reception from behind the surface.



**Note:** The Dipole antennas above are displayed horizontally to show dimensions but they should be mounted vertically for best reception.



## Mounting of the 418 MHz Receiver, 900 MHz Receiver, Repeater and Analog Output Modules

The 418 MHz Receiver, 900 MHz Receiver, Repeater and Analog Output Modules can be mounted in snap track, DIN Rail or surface mounted. The text and figures in this section refer to the 418 MHz Receiver, but the mounting process is the same for the 900 MHz Receiver and the Repeater (although there are no Analog Output Modules connected to the Repeater).

### SNAPTRACK MOUNTING

Push in the blue mounting tabs on the bottom of the receiver and output modules. These units will now fit into the board slots of 2.75" snap track. Insert the receiver at the far left of the snap track, then insert each analog output module and slide it to the left until its connectors are fully mated into the receiver or the next analog output module. You may attach up to 127 analog output modules to a receiver.

If your output modules cannot fit in one piece of snap track, then mount another piece of snap track nearby and insert the additional modules. Connect wires from the right side of the first string of modules to the left side of the second string of modules on the second snap track. (See "Extending the RS485 Network..." on pg. 7.) This configuration requires one or more Pluggable Terminal Block Connector Kits for the extra wire terminations on the left and right side of the Analog Output Modules. Each kit includes 4 connectors for the left and right connections.

### DIN RAIL MOUNTING

Push out the blue mounting tabs on the bottom of the receiver and output modules. These units will now snap onto DIN Rail. Catch the EZ mount hook on the edge of the DIN rail as shown in Fig 11. Then rotate into place.

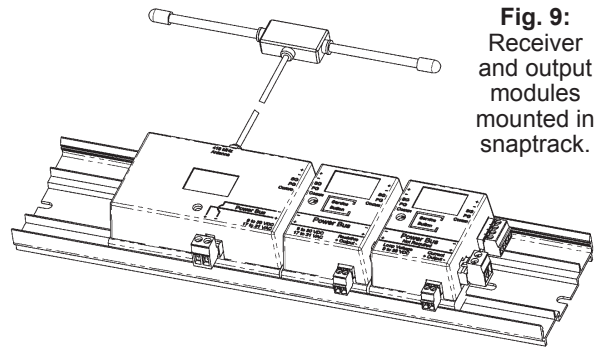
Attach the receiver at the far left of the DIN Rail, then attach each analog output module and slide it to the left until its connectors are fully mated into the receiver or the next analog output module. You may attach up to 127 analog output modules to a receiver.

If your output modules cannot fit onto one piece of DIN Rail, then mount another piece nearby and attach your additional modules. Connect wires from the right side of the first string of modules to the left side of the second string of modules on the second DIN Rail. This configuration requires one or more Pluggable Terminal Block Connector Kits for the extra wire terminations on the left and right side of the Analog Output Modules. Each kit includes 4 connectors for the left and right connections.

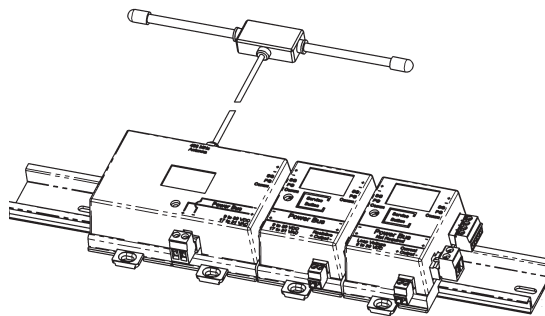
### SURFACE MOUNTING

Push out the blue mounting tabs on the bottom of the receiver and output modules. Attach the receiver to the surface by inserting a screw in each blue tab. Attach Analog Output Modules by placing each one against the surface and sliding it to the left until its connectors are fully mated into the receiver or the next analog output module. Attach each module to the surface with two screws, one in each blue tab. You may attach up to 127 analog output modules to a receiver.

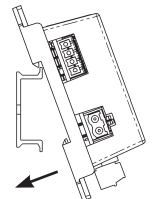
If your output modules cannot fit in one straight line on the surface, then mount a second string of modules nearby. Connect wires from the right side of the first string of modules to the left side of the second string of modules. This configuration requires one or more Pluggable Terminal Block Connector Kits for the extra terminations on the left and right side of the Analog Output Modules. Each kit includes 4 connectors for the left and right connections.



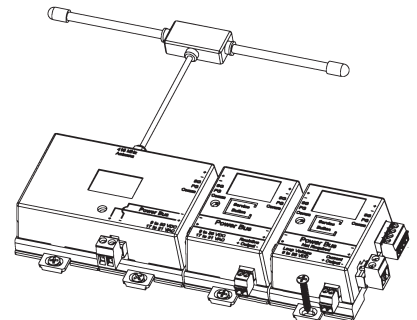
**Fig. 9:** Receiver and output modules mounted in snaptrack.



**Fig. 10:** Receiver and output modules mounted on DIN Rail.



**Fig. 11:** Catch the EZ Mount hook on the edge of the DIN Rail, then rotate into place.



**Fig. 12:** Receiver and output modules surface mounted.

## FCC Approval and Compliance

**FCC Approval #:** T4F061213RSO (418MHz Room Transmitter Only) • T4F060811TEMP (418MHz Temperature Probe Only)  
T4F060811RH (418MHz Temp & Humidity Probe Only) • OUR9XSTREAM (Repeater Unit Only)

**Compliance:** This device complies with Part 15 of the FCC rules Operation is subject to the following conditions.

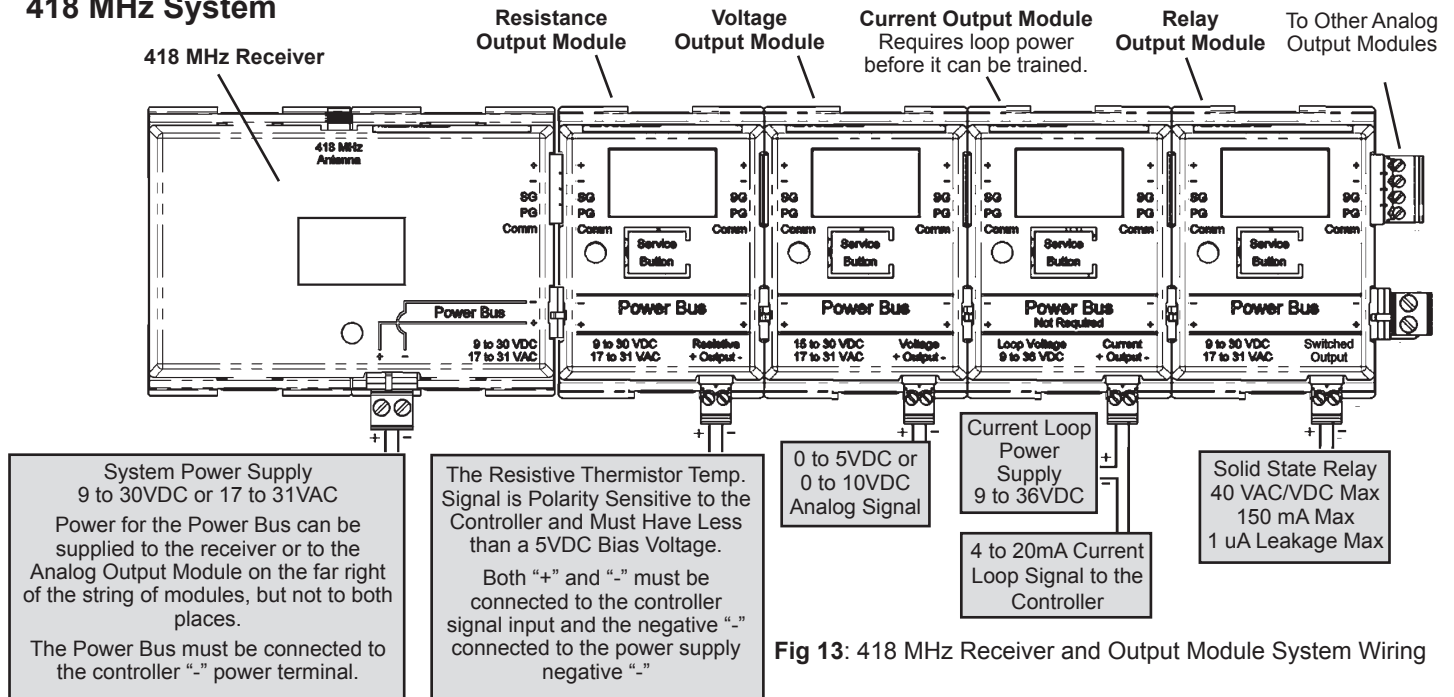
1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

### FCC Radio Frequency Interference Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15, Subpart B, of the FCC Rules. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause interference to radio communications.

## 418 MHz Receiver and 900 MHz Receiver with Analog Output Modules Termination

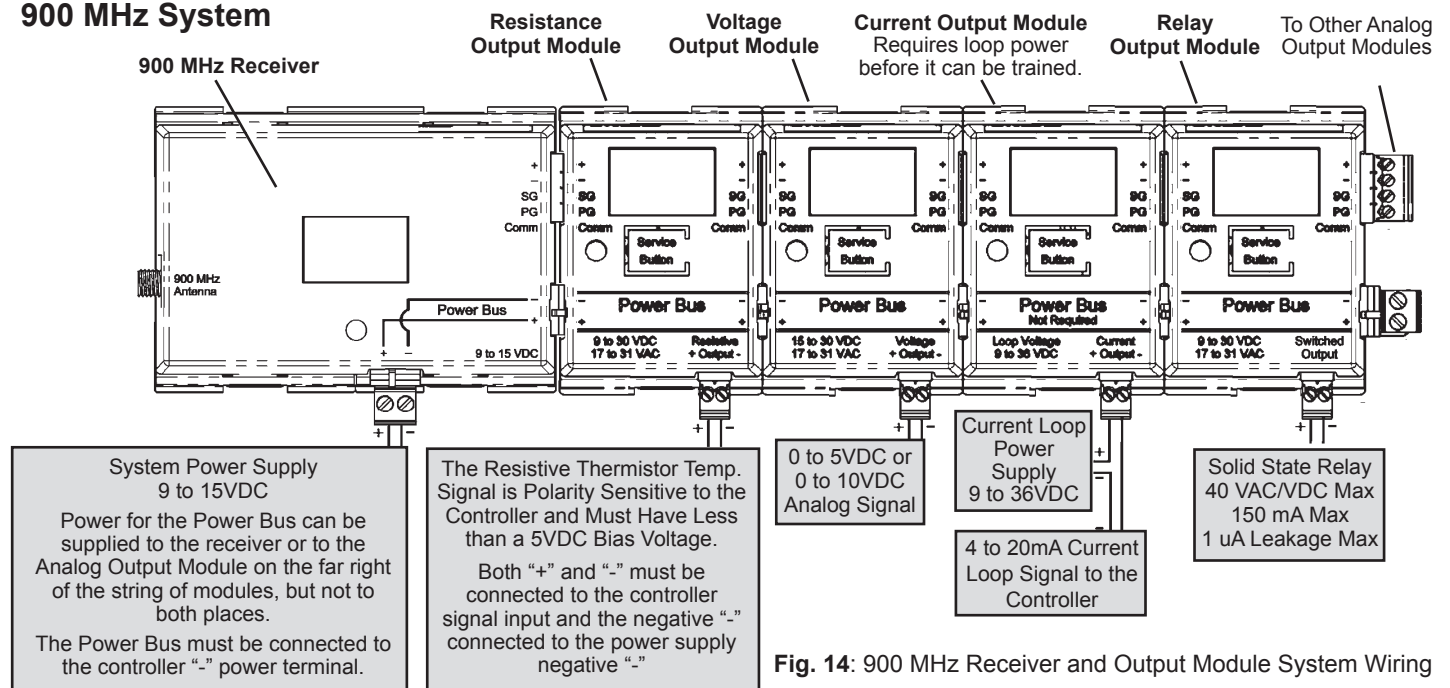
### 418 MHz System



#### Termination Notes for 418 MHz and 900 MHz Systems:

1. The wireless receiver and Analog Output Modules are interconnected and require module power along the "Power Bus" terminals. The bus can be powered from either the receiver end on the left or the last output module on the right side. Be sure you have enough DC current or AC VA for all the devices on the bus.
2. The **Current Output Module signal is LOOP POWERED** and must be externally powered with 9 to 36 VDC separate from the Power Bus. The Loop Power must be connected to the Current Output Module before it can be trained.
3. Be sure to follow the polarity (+ or -) symbols listed on each receiver and the output modules to maintain communication and Power Bus integrity.

### 900 MHz System



## Specifications

### WIRELESS TRANSMITTER SPECS

**Supply Power:** Two AA 3.6V Lith. batteries, 2.25 AH  
5 to 8 year battery life at 10 second transmit rate

**Potential Inputs:**

Temperature - Thermistor • Relative Humidity – Capacitive  
Setpoint – Potentiometer • Override – SPST switch

**Accuracy:**  $\pm 0.54^{\circ}\text{F}$  ( $\pm 0.3^{\circ}\text{C}$ ) /  $\pm 2\%$  RH

**Transmitted Range:** -40 to 185°F (-40 to 85°C) • 0 to 100% RH

**Antenna:** Built inside the enclosure

**Dimensions:** Shown at the bottom of page 1

**Environmental Operation Range:**

Temp: 32° to 140°F (0° to 60°C)  
Humidity: 5% to 95% RH non-condensing

**Enclosure Material & Rating:** ABS Plastic, UL94 V-0

**Radio Frequency:** 418 MHz North America

**Transmitter Interval:** ~10 seconds

### **ALL ANALOG OUTPUT MODULE SPECS:**

**Overall Dimensions:** 2.5"H x 2"W x 1.25"D, (63.5 x 49 x 31.7mm)

**Enclosure Material & Rating:** ABS Plastic, UL94 V-0

### **RESISTANCE OUTPUT MODULE (ROM):**

**Resolution:** ~0.5°F

**ROM-102:** 35 to 120°F (1 to 50°C), 10K-2 Thermistor Curve

**ROM-103:** 32 to 120°F (0 to 50°C), 10K-3 Thermistor Curve

**ROM-10311:** 32 to 120°F (0 to 50°C), 10K-3 (11K) Therm. Curve

**ROM-20:** 53 to 120°F (12 to 50°C), 20K Thermistor Curve

**Power Consumption:** 11.9 mA max. DC, .36 VA max AC

**Thermistor Bias:** Less than 5 VDC max

**Output Resolution:** 10 bit

### **VOLTAGE OUTPUT MODULE (VOM):**

**Output Voltage Range:** 0 to 5 volts or 0 to 10 Volts

**Output Current:** 1 mA

**Power Consumption:** 11.9 mA max. DC, .36 VA max AC

**Output Resolution:** 10 bit

### **Setpoint Output Module (SOM):**

**Setpoint Output Ranges:** See data sheet

**Power Consumption:** 11.9 mA max. DC, .36 VA max AC

**Output Resolution:** 10 bit

### **CURRENT OUTPUT MODULE (COM):**

**External Loop Power Required:** 9 to 36VDC at 25mA min

**Output Current Range:** 4 to 20 mA (factory calibrated)

**Supply Bus Power:** Not used by module just feeds through

**Output Resolution:** 12 bit

**Note:** Loop must be powered to train the output module.

### **RELAY OUTPUT MODULE (RYOM ONLY):**

**Relay Output:** 40V (DC or AC peak), 150 mA max.

Off state leakage current 1 uA max.

On state resistance 15Ω max.

5 second momentary actuation

**Note:** Full device specifications are on the individual  
Analog Output Module installation/operation  
sheets.

### WIRELESS REPEATER SPECS

**Supply Power:** 9 to 15 VDC

**Power Consumption:** 150 mA max. DC

**Input and Output:** 418 MHz Input, 900 MHz Output

**Dimensions:** 3.32" W x 2.87" L x 1.28"H (84.3 x 98.2 x 32.5mm)

**Environmental Operation Range:**

Temp: 32 to 140°F (0 to 60°C)

Humidity: 5% to 95% RH non-condensing

**Enclosure Material & Rating:** ABS Plastic, UL94 V-0

### WIRELESS 418MHZ & 900 MHZ RECEIVER SPECS

**Supply Power:**

418 MHz Unit: 9 to 30 VDC or 17 to 31 VAC

900 MHz Unit: 9 to 15 VDC

**Power Consumption:** 80 mA max. DC, .5 VA max AC

**Inputs:** 418MHz or 900 MHz (depending on model)

**Input Sensitivity:** -112db

**Indicators:** Red Power LED, blinks during reception

**Antenna:**

418 MHz Unit: 418 MHz Dipole with 79" Cable

900 MHz Unit: 900 MHz Whip or 900 MHz Dipole w/ 79" Cable

**Typical Reception:**

418 MHz Unit: Up to 100 feet in building, line of sight

900 MHz Unit: Up to 1,000 feet in building

**Bus Cable Distance:**

4,000 ft with shielded, twisted pair cable

(Belden 9841, Belden 8132 or equivalent)

**Output Modules per Receiver:** Any mix of up to 127

**Overall Dimensions:** 3.32" W x 2.87" L x 1.28"H  
(84.3 x 98.2 x 32.5mm)

**Environmental Operation Range:**

Temp: 32°F to 140°F (0°C to 60°C)

Humidity: 5% to 95% RH non-condensing

**Enclosure Material and Rating:** ABS Plastic, UL94, V-0

## Wireless System Diagnostics

### Possible Problems:

Temperature or Humidity is reading its low limit or high limit, or the LED at the top of the Analog Output Module is blinking rapidly:

### Possible Solutions:

- Check for proper wiring and connections from the output modules to the controller.
- Check to see if the controller's software is configured properly.
- Check for proper power to the receiver, repeater (if used) and output modules.
- Check that the associated transmitter is transmitting (the LED will flash about once every 10 seconds when it transmits). If not, replace the batteries. Check that the associated receiver is receiving the transmissions (its LED will blink right after the transmitter LED if it receives that transmission.) If it is not receiving the transmissions, move it closer to the transmitter or reposition the antenna for maximum reception. **Note:** The receiver will receive transmissions from all transmitters that are within range, not just the one you are testing.
- Retrain the Analog Output Module.

Temperature or Humidity reading is coming out the wrong output module

- Retrain the Analog Output Module.

Temperature or Humidity reading is incorrect

- Check for proper wiring and connections from the output modules to the controller.
- Check to see if the controller's software is configured properly.
- Check to see if the correct output module is connected to the correct controller.

### **Default Status when wireless transmission is interrupted:**

If an output module does not receive data from its assigned transmitter for 15 minutes, the red LED on the top of the module will blink rapidly. If this happens, the individual Analog Output Modules will react as follows:

- Resistance Output Modules (BA/ROM) calibrated for temperature will output the highest resistance in their output range.
- Voltage Output Modules (BA/VOM) calibrated for temperature will set their output to 0 volts.
- Current Output Modules (BA/COM) calibrated for temperature will set their output to 4 mA.
- Voltage Output Modules (BA/VOM) calibrated for humidity will set their output to their highest voltage (5 or 10 volts).
- Current Output Modules (BA/COM) calibrated for humidity will set their output to 20 mA.
- Setpoint Output Modules (BA/SOM) will hold their last value indefinitely.
- Relay Output Modules (BA/RYOM Units Only) will go to their default state (example: open for a normally open unit).

When a transmission is received, the output modules will revert to normal operation in 60 seconds or less.



## Notes:

---

## LIMITED WARRANTY STATEMENT

Taco Electronic Solutions, Inc. (TES) will repair or replace without charge (at the company's option) any product or part which is proven defective under normal use within one (1) year from the date of start-up or one (1) year and six (6) months from date of shipment (whichever occurs first).

In order to obtain service under this warranty, it is the responsibility of the purchaser to promptly notify the local TES stocking distributor or TES in writing and promptly deliver the subject product or part, delivery prepaid, to the stocking distributor. For assistance on warranty returns, the purchaser may either contact the local TES stocking distributor or TES. If the subject product or part contains no defect as covered in this warranty, the purchaser will be billed for parts and labor charges in effect at time of factory examination and repair.

Any TES product or part not installed or operated in conformity with TES instructions or which has been subject to accident, disaster, neglect, misuse, misapplication, inadequate operating environment, repair, attempted repair, modification or alteration, or other abuse,

will not be covered by this warranty.

TES products are not intended for use to support fire suppression systems, life support systems, critical care applications, commercial aviation, nuclear facilities or any other applications where product failure could lead to injury to person, loss of life, or catastrophic property damage and should not be sold for such purposes.

If in doubt as to whether a particular product is suitable for use with a TES product or part, or for any application restrictions, consult the applicable TES instruction sheets or in the U.S. contact TES at 401-942-8000 and in Canada contact Taco (Canada) Limited at 905-564- 9422.

TES reserves the right to provide replacement products and parts which are substantially similar in design and functionally equivalent to the defective product or part. TES reserves the right to make changes in details of design, construction, or arrangement of materials of its products without notification.

TES OFFERS THIS WARRANTY IN LIEU OF ALL OTHER EXPRESS

WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS IS IN EFFECT ONLY FOR THE DURATION OF THE EXPRESS WARRANTY SET FORTH IN THE FIRST PARAGRAPH ABOVE.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF TES.

TES WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.

This warranty gives the purchaser specific rights, and the purchaser may have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or on the exclusion of incidental or consequential damages, so these limitations or exclusions may not apply to you

## CONTROLS MADE EASY®

**Taco Electronic Solutions, Inc.**, 1160 Cranston Street, Cranston, RI 02920 Telephone: (401) 942-8000 FAX: (401) 942-2360.

**Taco (Canada), Ltd.**, 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8. Telephone: 905/564-9422. FAX: 905/564-9436.

**Taco Electronic Solutions, Inc. is a subsidiary of Taco, Inc. Visit our web site at: <http://www.taco-hvac.com>**