



**WTS-A Room Temperature Sensor with Override & Slider Setpoint**

The WTS family of Wall Temperature Sensors are designed to be used with the M2 family of Solidyne controllers. They are designed with a rugged anodized aluminum housing and a unique one screw attachment to its base plate.

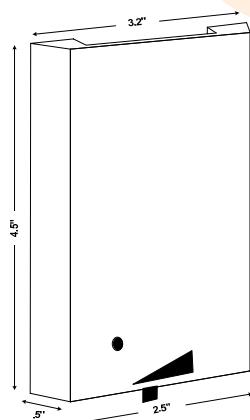
The WTS-A has a push button on the face of the sensor for zone override and a 10k thermistor for temperature sensing. A slider 10k potentiometer is used for zone setpoint. The WTS-A can either be wired via CAT-5 and RJ-45 cabling or using 3 conductor cabling.

**Specifications**

- Input Power:** Supplied by M2 controller
- Temperature Input:** 10k Thermistor (Type III)
- Slider Setpoint:** 10k potentiometer (configure Input as ZTS-A)
- Override Button:** Shorts temperature input
- Operating Temperature:** +23°F to +150°F (-5°C to +66°C)
- Storage Temperature:** -40°F to +230°F (-40°C to +110°C)
- Operating Humidity:** 10 to 95 %RH non-condensing
- Storage Humidity:** 10 to 95 %RH non-condensing

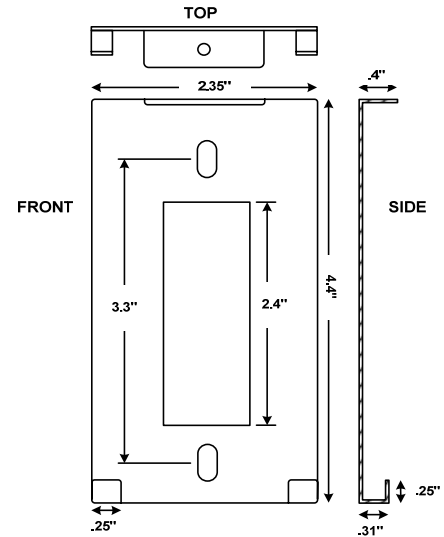
**Physical Dimensions**

**WTS-A Housing:**



**Figure 1**

**WTS-A Backplate:**

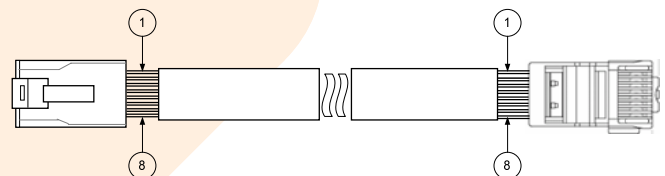


**Figure 2**

**Wiring**

The WTS-A can be wired to an M2 family controller in 2 ways. The first would be via the CAT-5 connection on the back of the device. This method uses any straight through CAT-5 cable. See figure 3 for the proper RJ-45 crimping polarity. One end of the CAT-5 cable terminates into either of the two RJ-45 female connectors on the back of the WTS-A. The other end will terminate into the middle M2 RJ-45 female connector. When the WTS-A is wired via this method, the temperature sensor input will automatically use Input #1 (AI1) of the M2 controller that it is attached. The slider setpoint input will automatically use Input #2 (AI2) on an M2 and Input #3 (ADJ) on an M2V controller.

The second method is to hard wire the WTS-A to any of the inputs (AI) of the M2 family of controllers. The WTS-A has a 3 position screw terminal block where only 3 wires are needed to properly connect the WTS-A to any of the M2 inputs.



**Figure 3**

## Wiring Cont'd

### CAT-5 Wiring:

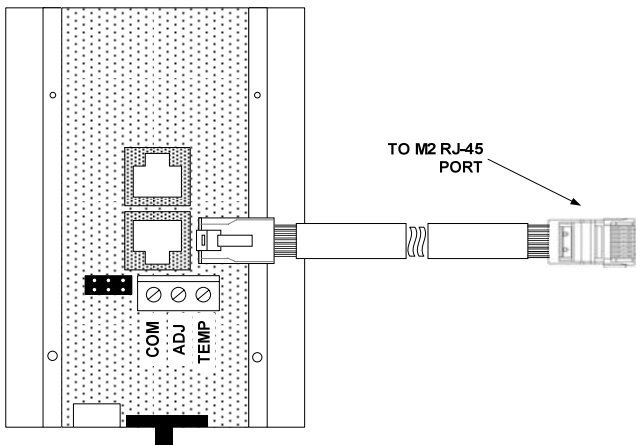


Figure 4

### CAT-5 Input Assignment:

When using the CAT-5 wiring, the M2 controllers will automatically assign its inputs to pre-defined locations:

	M2	M2V
Temperature Sensor	Input 1 (AI1)	Input 1 (Zone Temp)
Slider Setpoint	Input 2 (AI2)	Input 3 (ADJ)

Table 1

### Hard Wiring:

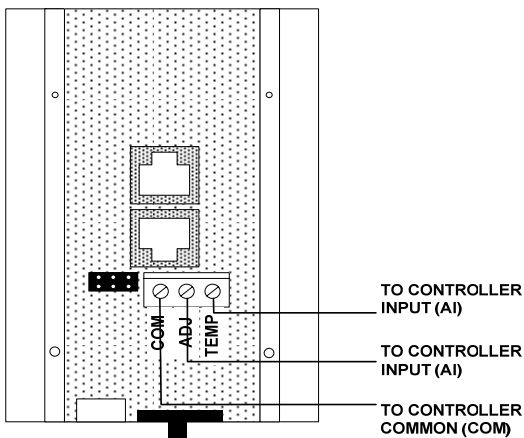


Figure 5

When hard wiring the WTS-A, Solidyne recommends using 18ga shielded conductors.

## Slider Setpoint Input Configuration

The slider setpoint should be configured as a Type ZTS-A which will have the setpoint range value of 55 to 85 which can be adjusted with the input's multiplier and offset for your desired range.

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## Jumper Configuration

The WTS-A has 3 jumper configurations. The default jumper position is JP2 only. Other jumper configurations are reserved for future use and not applicable at this time.

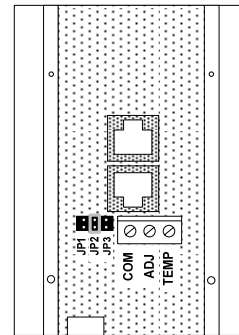


Figure 6

## M2-HH Commissioning Tool

The WTS-A has a small 5 pin connector on the bottom end of the device which is used to connect the M2-HH hand held commissioning tool. Please see the 00-M2-HH documentation for more information.

## Installation

The WTS-A backplate will install easily onto any 2"x4" electrical box with the supplied 1" screws. An electrical box is not necessary for proper installation of the WTS-A. The 1" screws have a flat head, if longer screws are needed, please make sure they have a flat head.

Once the backplate is installed and wiring is completed, install the WTS-A sensor onto the backplate at an angle starting at the bottom of the sensor as shown in figure 7.

After sliding the WTS-A sensor onto the support bracket of the backplate, rotate the sensor towards the wall and secure the WTS-A sensor in place by installing the supplied set screw as shown in figure 8.

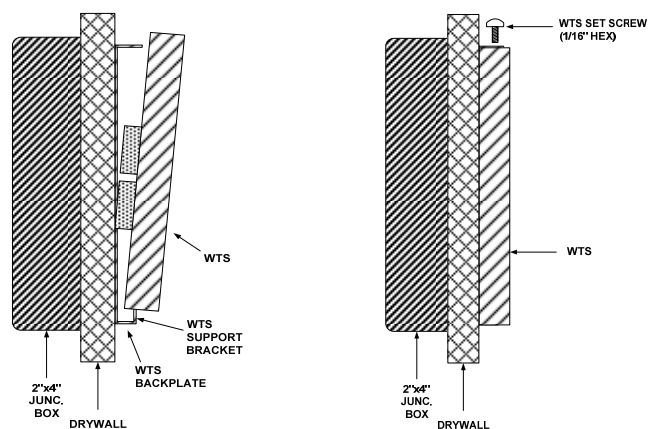


Figure 7

Figure 8