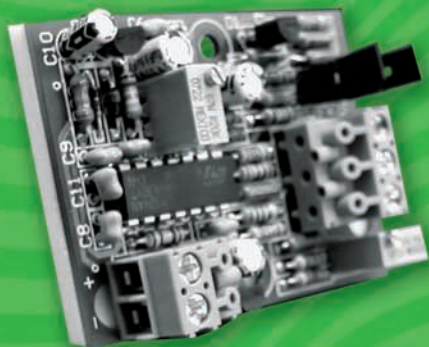


## TX Series

### Temperature Transmitters



## Description

The TX Series consists of accessory temperature transmitters that accept either 100  $\Omega$  or 1000  $\Omega$ , two wire or three wire, platinum RTD sensors and provide a two-wire, 4 to 20mA output that is linear and proportional to the sensed temperature. All transmitters in this series are factory calibrated, however field calibration for any span greater than 25°F can be done.

## Mounting

These transmitters are designed to be mounted with TS Series platinum RTD sensors. All transmitters in this series come with an adhesive backing that will adhere to any clean, dry surface.

Mount the temperature transmitters as close to the RTD sensor as possible and avoid adding any extra lead wire to the original sensor leads. Adding long runs of sensor lead wire may change the actual temperature transmitter readings because of added resistance from the lead wire.

## Wiring

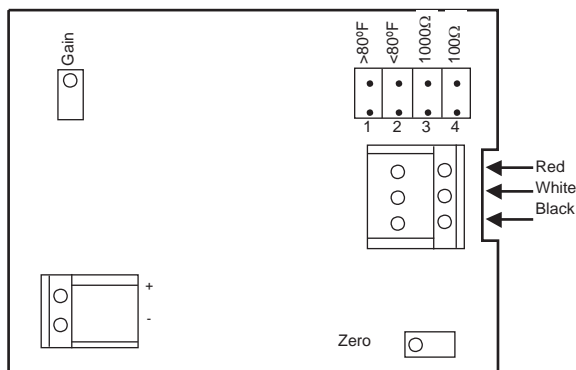
**Input:** The transmitters in this series accept either 100  $\Omega$  or 1000  $\Omega$  platinum RTD sensors. These sensors must conform to IEC751 standards and have a temperature coefficient of 0.00385  $\Omega/\Omega/^\circ\text{C}$ .

Make sure the sensor type jumper is on the correct pins for the sensor to be connected (either a 100  $\Omega$  or 1000  $\Omega$  RTD). See diagram #1.

### Using Two-Wire RTD Sensors:

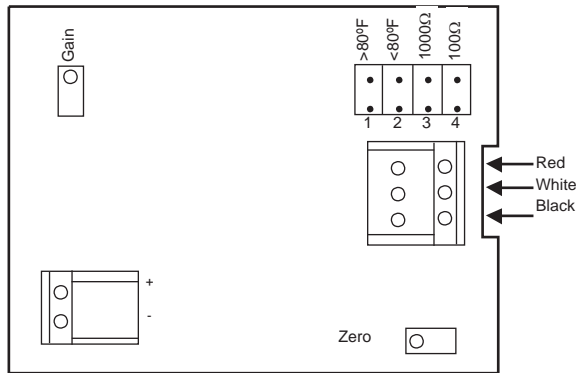
1. Insert the two wires into the far terminals, leaving the middle terminal open.

Diagram #1: 2-wire RTD Connection



### Using Three-Wire RTD Sensors:

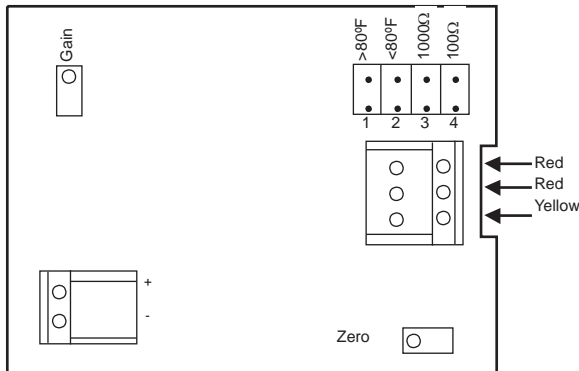
1. Insert the three wires into the terminals as indicated in the Diagram #2.



### Using Three-Wire Averaging Elements:

The lead wires of our averaging elements do not have the same color coding as the single point RTDs. The following two diagrams illustrate the correct wiring for these sensors.

Diagram #4: 1000 Ω Averaging Connection



### Power/Output

#### Using a separate power supply:

1. Connect the positive (+) lead of the power supply to the positive (+) terminal of the transmitter.
2. Connect the negative (-) terminal of the transmitter to the positive (+) input of the controller or monitoring device.
3. Connect the negative (-) input of the controller to the ground lead of the DC power supply.

#### Using a built in power supply of the controller:

1. Connect the positive (+) and negative (-) terminals of the transmitter to the respective power and channel input of the controller or monitoring device.

## Operating Adjustments

This series is factory calibrated to specific spans. The shorting block on position 3 or 4 should not be moved if a factory calibrated span is used.

To make a minor adjustment and maintain the same temperature span, adjust only the ZERO potentiometer.