

The Model TA is a 2-Wire Temperature Transmitter with an adjustable range. Standard models are available for the Pt100 RTD. Other sensor inputs are available on special order.

With the TA Transmitter the following ranges are covered: INPUT - RTD (Pt100), ZERO -50°C to 50°C, SPAN 50 to 800°C (a minimum span of 50°C is required).

Desired Span in °C

Connect	Pt100
1 - 1A	50 - 100
2 - 2A	100 - 200
3 - 3A	200 - 400
4 - 4A	400 - 800

Note: fine adjustment by potentiometer

Example: to make a range of 0 - 60°C with Pt100, connect 1 and 1A and adjust to desired value with ZERO and SPAN potentiometers.

HOW TO ADJUST THE RANGE

1. Select desired span from table above. Please note if a range of -50 to +150 is required the span is 200°C, and not 150°C. Make the connection by linking two pads as desired with solder.
2. Connect a DC Voltage Power Supply of 24 VDC (note + and -), and a DC Milliammeter (0 - 20 mADC range, minimum) as shown in figure 1, or use a loop-calibrator.
3. Connect a Sensor Input Simulator (resistance box for RTD (Pt100)). The connection is shown in figure 1.
4. Simulate required Zero with the Sensor Input Simulator and adjust with the ZERO potentiometer on the TA Transmitter to read 4 mA in the output loop.
5. Simulate the maximum input and adjust with the SPAN potentiometer on the TA transmitter to read 20 mA in the output loop.
6. Repeat step 4 and step 5 until correct reading is achieved. Because the accuracy of any transmitter is determined by the exact location of the ZERO point, it is good engineering practice to always recheck the ZERO as the last step in any calibration procedure.
7. Remove calibrator and power supply, fill in label with permanent marker (fiber tip is recommended).
8. The TA transmitter is now ready to install.

