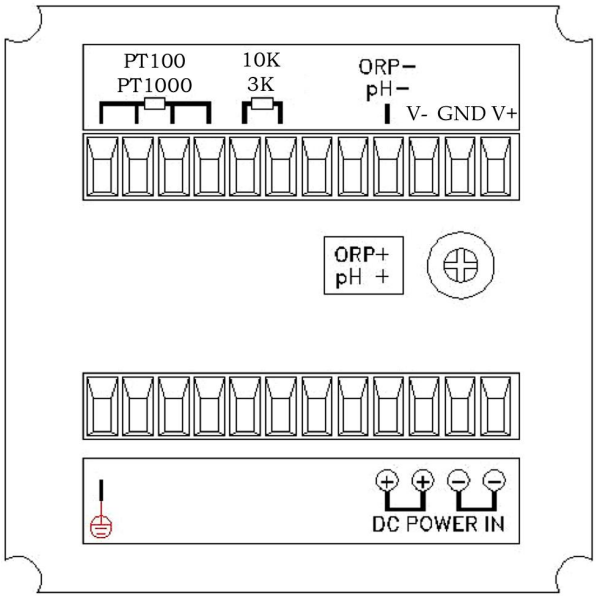
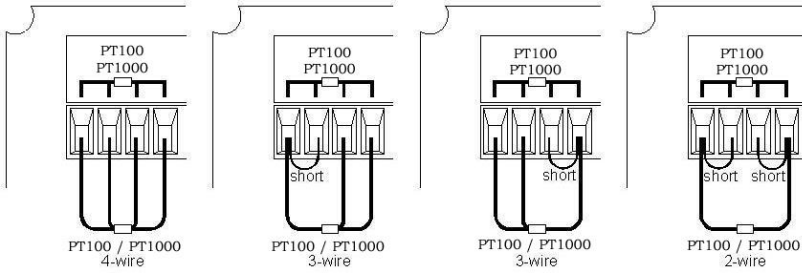
Connection Diagram of Iotron™ Sensors without Preamplifiers to ASTI 2TX 2-Wire pH / ORP Transmitter

Connection from Iotron™ Sensor to Terminal Block on back of Transmitter (READ CAREFULLY)

Cable Color Coding	Sensor Cable Lead Value	Terminal Label As given on Meter	Terminal Value (See Diagram Below)
Black	TC Input	PT100, PT1000 or 3K	ATC IN (No Polarity)
Black	TC Input	PT100, PT1000 or 3K	ATC IN (No Polarity)
Red	Reference Input	pH/ORP (-)	Reference
Clear	pH/ORP Input (Signal)	pH/ORP (+)	pH Glass or ORP



Note: Balco 10K and Balco 3K TC elements are only supported as two-wire TC elements.



Special hook-up schematics of 2-wire and 3-wire PT100 or PT100 temperature compensation (TC) elements to 2TX.

Note 1: Automatic Temperature Compensator (ATC) is 3000 Ohm Balco Resistor (-3000-), 1000 (-1000-) or 100 (-100-) Ohm Platinum Temperature Compensation (TC) Element. You must set this TC Value in the Calibration Mode. Use Code: **baLC** for the ATC setting if a 3000 Ohm Balco Resistor is present or use Code: **100 Pt** or **1000 Pt** for the ATC setting if a 100 or 1000 Ohm Platinum TC Element is present (respectively). *If 100 or 1000 Ohm Platinum TC is used, two jumpers must be employed to support use of 2-wire TC on 4-wire TC input terminal. Each 2TX transmitter is configured for EITHER PT100 OR PT1000 TC changing this setting requires that is be sent back to the ASTI factory.*

Note 2: The Temperature Compensator element employed can be determined by measuring the resistance between the two black wires on any multimeter (in Ohms).

Note 3: Your first pH buffer value must be 7.00 or 6.86! The second pH buffer value can be 4.01 or 10.00 if starting with pH buffer 7.00 as pH buffer 1. The second pH buffer value can be 4.01 and 9.18 if starting with pH buffer 6.86 as the pH buffer 1. Consult the operation manual for further calibration and power hook-up details.