



Connection Diagram of Iotron™ pH/ORP Sensors
Without Preamplifiers (Tinned Lead Wires Only) to
ABB AX416, AX436, AX460, AX466, & AX468
Single and Dual Channel Channel pH/ORP Analyzers

For Sensor A on Terminal Block B

<u>Cable Color Coding</u>	<u>Terminal Name</u>	<u>Terminal Number</u>
Black	Temperature Compensator	B9
Black	Temperature Compensator	B11
Red	Reference Electrode	B14
Clear	Sensing Electrode (pH or ORP)	B16

Note 1: **A jumper is required between Terminal Numbers B9 and B10 on Terminal Block B.** This disables the automatic cable length compensation for the 100 or 1000 Ohm Platinum Temperature Element (temperature must be calibrated manually in the transmitter, if required). No manual calibration of the temperature element should be required for cable lengths of less than 16 feet.

For Sensor B on Terminal Block B

<u>Cable Color Coding</u>	<u>Terminal Name</u>	<u>Terminal Number</u>
Black	Temperature Compensator	B1
Black	Temperature Compensator	B3
Red	Reference Electrode	B6
Clear	Sensing Electrode (pH or ORP)	B8

Note 2: **A jumper is required between Terminal Numbers B1 and B2 on Terminal Block B.** This disables the automatic cable length compensation for the 100 or 1000 Ohm Platinum Temperature Element (temperature must be calibrated manually in the transmitter, if required). No manual calibration of the temperature element should be required for cable lengths of less than 16 feet.

Note 3: The temperature compensator is 100 or 1000 Ohm Platinum with nominal resistance values of ~ 110 Ohms and ~ 1100 Ohms at 25 degrees Celsius, respectively.

Note 4: ORP sensors are not temperature compensated (NO TC element is required nor supplied as the default configuration). Please set Temperature Sensor to "NONE". IF a temperature compensation element is used for an ORP sensor to provide a display of the temperature, be sure to set the Temperature Sensor to the correct type (PT100 or PT1000 as appropriate).