






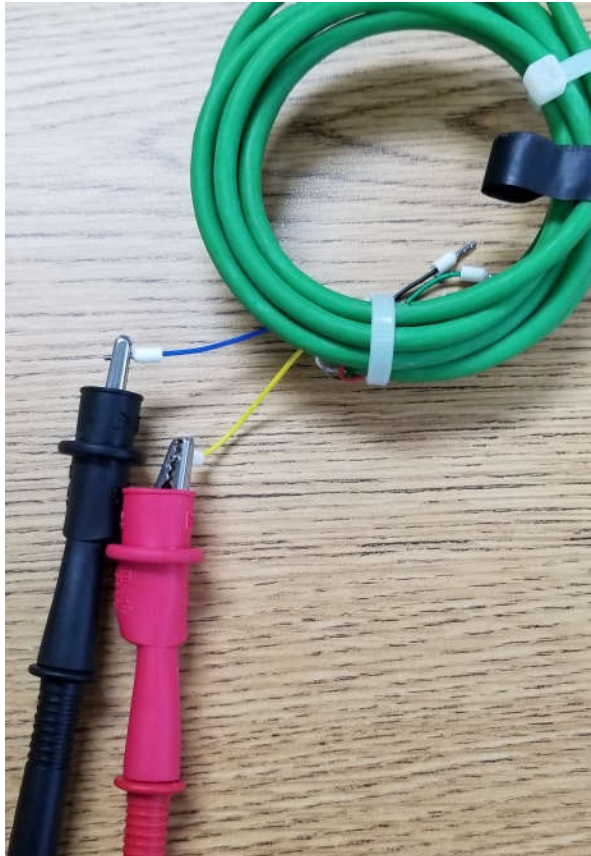
mA Readout – User Guide


To read a mA sensor, follow the below instructions:

STEP	TASK	ACTION	IMAGE
1	Insert test lead	<ul style="list-style-type: none"> • Plug the red test lead into the red receptacle labeled +LOOP • Plug the black test lead into the red receptacle labeled mA 	
2	Connect to mA sensor	<ul style="list-style-type: none"> • Connect the other end of the red test lead to the mA sensor wire for POWER • Connect the other end of the black test lead to the mA sensor wire for RETURN 	

3	Turn on the readout	<ul style="list-style-type: none"> Turn the rotary switch on the readout to the position labeled mA-LOOP POWER (in white and yellow) 	
4	View the mA reading	<ul style="list-style-type: none"> The LCD display of the readout will display the current sensor reading in mA 	

To read a thermistor sensor, follow the below instructions:

STEP	TASK	ACTION	IMAGE
1	Insert test lead	<ul style="list-style-type: none"> • Plug the red test lead into the red receptacle labeled VΩ • Plug the black test lead into the black receptacle labeled COM 	
2	Connect to thermistor sensor	<ul style="list-style-type: none"> • Each thermistor has 2 wires with no polarity • Connect the other end of the red test lead to one of the wires of the thermistor • Connect the other end of the black test lead to the other wire of the thermistor 	

3	Turn on the readout	<ul style="list-style-type: none"> Turn the rotary switch on the readout to the position labeled Ω 	
4	View the thermistor reading	<ul style="list-style-type: none"> The LCD display of the readout will display the current resistance of the thermistor in $k\Omega$ Use the Steinhart-Hart equation below to convert the resistance of the thermistor to temperature in degrees C: $\text{Temperature} = 1 / (0.0014051 + 0.0002369 * \ln(\text{resistance}) + 0.0000001019 * (\ln(\text{resistance}))^3) - 273.15$ <p>Note:</p> <ul style="list-style-type: none"> The resistance value in Ω in the above formula The above equation is for 3K thermistor only The calculated temperature for 3.257 $k\Omega$ (shown on the right) is 23.1283 degrees C. 	