



Transmitter Simulator Model 46



- 2-wire simulator
Calibrate Receivers
- 5 point calibration
4, 8 12, 16, 20mA
- Loop powered
No Batteries Required
- Easy to use
One Hand Operation

General Information

Simulate 2-wire transmitters to calibrate receivers, recorders, controllers, indicators and computers. Loop power eliminates the need for batteries. Loop current is clamped at the key value you select. Accuracy is $\pm 0.08\%$ of 4 to 20 mA, even with changes in load and supply voltage.

Switch settings of 0, 25, 50, 75 and 100% give you fast, full range checkout of instrument or system. The single switch and palm sized case have been designed for simple, one handed operation. Just clip the built-in leads to the 2-wire terminals in the field, junction box or control room.

When you check out receivers, recorders or controllers in a 2-wire 4 to 20mA loop, simply disconnect the 2-wire transmitter and hook up a Model 46. Flip a switch to get instant full scale and zero outputs. The calibrator operates just like a 2-wire transmitter by modulating the external power supply voltage into a 4 to 20mA signal.

The Model 46 receives all of its operating power from the loop. This lets you operate continuously for days when long term loop testing is required. Use it as a manual loading station when a controller needs repair or replacement. Minimize process shutdowns installing a new controller.

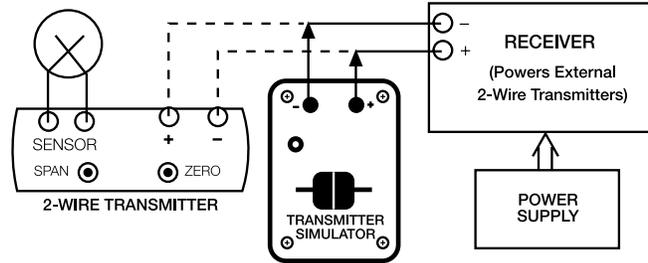
Operating Instructions

Simulate 2-wire transmitters

- 1) Disconnect existing 2-Wire transmitter from the loop
- 2) Connect the red lead of the calibrator to the plus (+) terminal of the field connections and the black lead to the minus (-).

The LED will glow steadily to indicate that the loop current is present. If the LED doesn't glow, check the connections and the power supply.

Select the 0.0% and 100.0% switch positions to quickly calibrate the endpoints of your receivers. Intermediate positions of 25, 50 and 75% may be selected.



Specifications

(Unless otherwise indicated, specifications are in $\pm\%$ of 16 mA span @ 23°C)

Accuracy: $\pm 0.08\%$

Temperature effect: $\pm 0.01\%$ /Degree C

Operating temperature range: -10 to 140°F (-25 to +60°C)

Storage temperature range: -40 to +160°F (-40 to +70°C)

Power supply effect: $\pm 0.005\%$ /Volt

Warm up time: 2 Seconds to rated accuracy

Weight: 3 ounces (85 grams)

Size: $1\frac{1}{2} \times 2\frac{1}{8} \times 3\frac{1}{4}$ inches (38x54x63 mm)

Loop voltage limits: 6 to 45 VDC

Warranty

Altek products are warranted to be free from defects in material and workmanship (excluding fuses, batteries and leads) for a period of three years from the date of shipment. Warranty repairs can be obtained by returning the equipment prepaid to our factory. Products will be replaced, repaired, or adjusted at our option. *Altek gives no other warranties, including any implied warranty of fitness for a particular purpose.* Also, Altek shall not be liable for any special, indirect, incidental or consequential damages or losses arising from the sale or use of its products.

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PN 1886437 Rev A April 2002

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