

1-5 VOLT SOURCE/SINK MODEL 115

ALTEK

- **DIGITAL ADJUSTMENT**
Continuous 0-100%=1.00 to 5.00 Volts
- **SOURCES AND SINKS UP TO 20mA**
Clamps Receiver at Voltage Desired
- **"QUICK CHECK" SWITCH**
Selects "00.0%," "Dial" and "100%"
- **0.1% ACCURACY**
Any Load, 250 ohm to ∞
- **CLIP-ONS WITHOUT TOOLS**
No Need to Break Loop

Altek's clip-on Model 115* accurately calibrates receiver inputs at 1.00 through 5.00 Volts, "Quick Check" switch selects "0.00%," "Dial" and "100%."

"No-break" — Clip-on connection assures fast, precise settings of recorders, data loggers, alarm trips, controllers, computers and data transmission systems.

Built-in batteries feed any load from 250 ohms to infinity within 0.1% full scale accuracy.

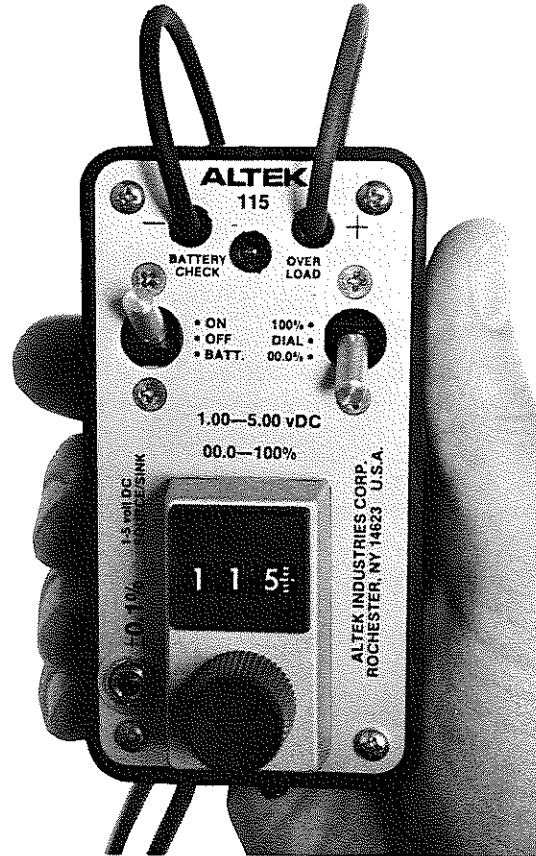
Low output impedance allows accurate calibration whether or not a conventional 250 ohm load resistor is in place.

Current sink feature clamps the desired voltage even with 4-20 mA current flowing in the loop. For example, if 20 mA is passing through the 250 ohm load resistor and a live zero check is desired, the Altek Model 115 will subtract 16mA to clamp the voltage input to precisely 1 volt.

The model 115 will drive the 1-5 volt recorder or other device over its full range. This allows alarm settings to be changed and calibration checked without *any effect* on the other items in an operating 4-20mA loop.

If desired the Altek 115 may be operated off AC power (120VAC or 240VAC, 50/60Hz) using an optional adapter.

Pocket size and light weight make the Altek Model 115 ideal for use in the field, control room, computer center and shop.



DATA SHEET 115

Dial Setting %	Output Voltage Volts
00.0	1.00
05.0	1.20
10.0	1.40
15.0	1.60
20.0	1.80
25.0	2.00
30.0	2.20
35.0	2.40
40.0	2.60
45.0	2.80
50.0	3.00
55.0	3.20
60.0	3.40
65.0	3.60
70.0	3.80
75.0	4.00
80.0	4.20
85.0	4.40
90.0	4.60
95.0	4.80
00.0	5.00

Note: decimal point not shown on dial.

SPECIFICATIONS, ALTEK MODEL 115

VOLTAGE SOURCE/SINK

(Unless otherwise indicated, specifications are in $\pm\%$ of 4 volt span)

Calibrated Accuracy: 0.1%; Source or Sink

Resolution: 0.02%

Output: Switch selected; 1.00 and 5.00 volts DC
Continuous digital dial 00.0% to 100% = 1.00 to 5.00 volts

Output Drive current: Source, 0-20mA
Sink, 0-16mA

Batteries: 2x 9-volt Alkaline, Duracell MN1604 or equivalent

AC Adapter: Optional for 120VAC or 240VAC

Battery life: 200 Hours, High impedance loads
50 Hours, 250 ohm loads

Output impedance: 0.2 ohms or less

Overload protection: withstands misconnection to 24 volts DC of either polarity

Overload indicator: lamp glows

Battery check: momentary switch position causes lamp glow

Operating Ambient Temperature: Minus 10 to plus 140 degrees F (Minus 25 to plus 60 degrees C)

Storage Temperature Limits: Minus 40 to plus 160 degrees F (Minus 40 to plus 70 degrees C).
Remove batteries if stored for extended period.

Warm-up Time: 2 seconds to rated accuracy, 1 minute recovery after 24 volt overload

Size: 2½ x 4 x 2¼ inches (54 x 10 x 55 mm)

Weight: 7 ounces (0.17 kg)

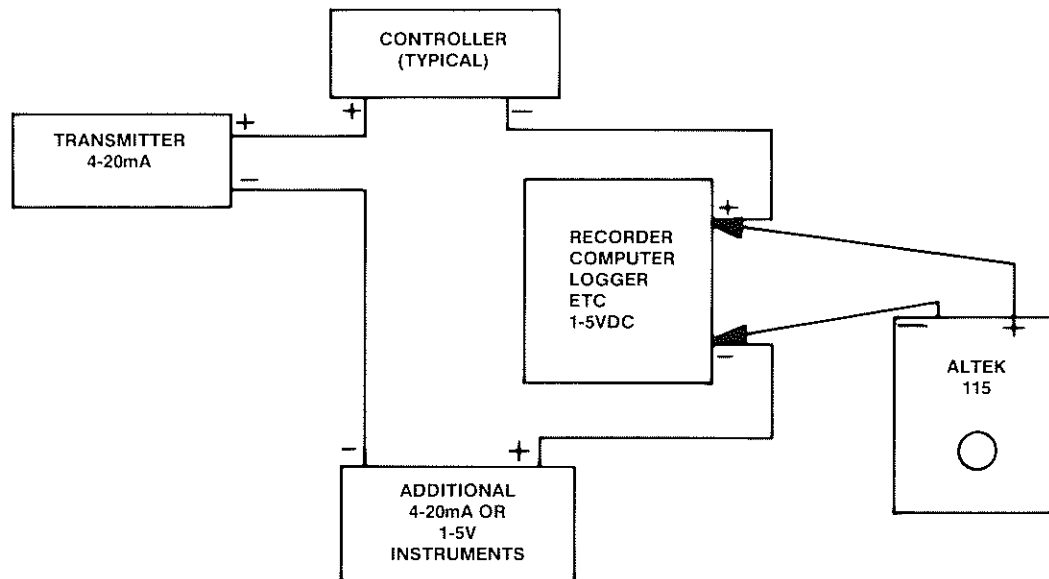
Carrying Case: Optional, zippered with belt loop

OPERATING INSTRUCTIONS ALTEK MODEL 115

Clip the red lead to the positive input terminal and the black lead to the negative of the device to be checked or calibrated. It is not necessary to disconnect any associated 250 ohm resistor. Make certain that changing the signal input will not disturb the process or cause unexpected alarms when checking on-line instruments.

It is important to remember the model 115 drives only the device to which it is connected. It has no effect on other devices in the operating 4-20mA loop.

Turn on the power switch and adjust to the desired voltage. Check the response of the unit to be calibrated. If changes are necessary, readjust until within specifications. Remove the Model 115 clip leads and turn power switch off.



ORDERING INFORMATION:

Model 115: 1-5VDC Source/Sink
AC Adapter: 120VAC
AC Adapter: 240VAC

115-0105
28-0120
28-0240