



TRANSMITTER SIMULATOR TYPE 108-1



FUNCTION

The Type 108-1 Transmitter Simulator is a portable, battery operated, five range signal source for the accurate calibration of instruments in process control loops.

APPLICATION

By connecting the simulator into the loop in place of the signal transmitter, instruments such as signal converters, recorders, panel meters, trip amplifiers etc. can be checked for accuracy under controlled conditions. The Simulator can source current to the loop or sink current in systems incorporating a loop power supply.

DESCRIPTION

A three way rotary switch sets the mode; sink or source current, or to provide a voltage output. There are two current ranges and three voltage ranges selected by a five way rotary switch.

The output is continuously adjustable between 0% and 100% by a high quality 10 turn potentiometer and dial. In addition a three way lever switch can override the dial setting by forcing the output to zero or span.

Features

- * **Source and Sink Capability**
- * **Ten Turn Dial Resolution**
- * **Direct Percentage Scaling**
- * **Battery Powered**
- * **Five ranges**
- * **Low Battery Indication**

A green low current LED is illuminated when the simulator is switched on and a red low current LED is illuminated when the battery voltage reaches its low threshold.

A red LED in series with the output varies in brightness according to the current flowing. If this fails to illuminate then either the output is at zero or the loop is open circuit. The simulator is powered by two 9V PP3 style batteries which are housed in an externally accessible compartment.

A soft zipped carrying pouch is available as an option.

SPECIFICATIONS

OUTPUT MODES

Current source
Current sink
Voltage

OUTPUT RANGES

4 - 20mA into 500 ohms maximum
0 - 20mA into 500 ohms maximum
1 - 5V into 500 ohms minimum
0 - 5V into 500 ohms minimum
0 - 10V into 1000 ohms minimum

CALIBRATED ACCURACY

Set at 0% and 100% to be within 0.1% fsd.

DIAL LINEARITY ERROR

< +/- 0.25% span

TEMPERATURE COEFFICIENT

150 ppm / °C

POWERED LOOP VOLTAGE

Maximum. 100V

BATTERIES (Not included)

2 x 9V (PP3) dry cell
Battery life 4.5 hours at 20mA continuous.
Battery low warning by LED indicator (BAT LO).

CONNECTIONS

4mm terminal binding posts

CASE SIZE

196mm x 100mm x 40mm

CARRYING POUCH

Colour: Black
Material: Soft Vinyl with Zip

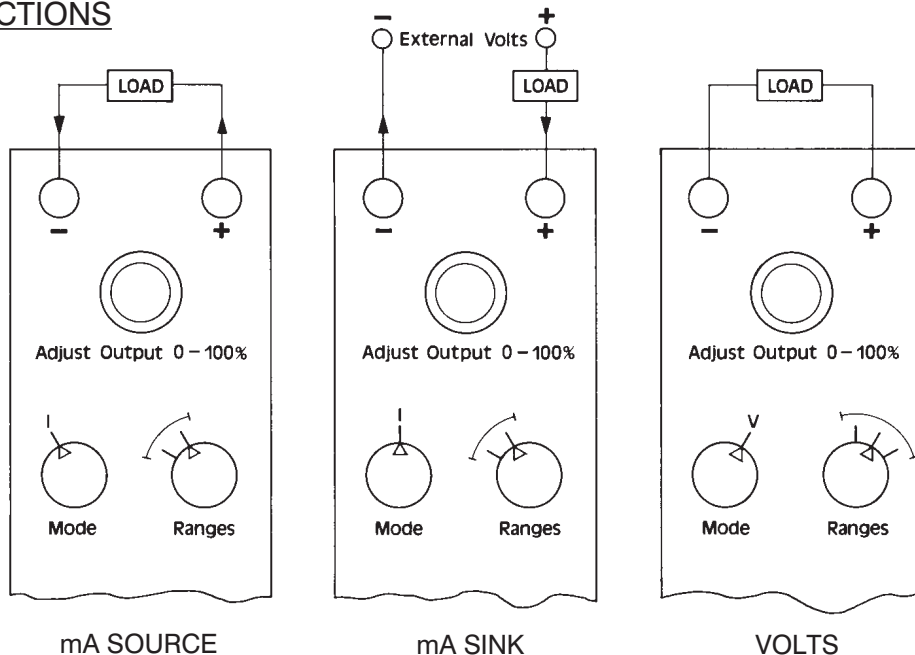
WEIGHT

500 grams (excluding batteries)

OPERATING TEMPERATURE

-10°C to +60°C

CONNECTIONS



Continuous development may necessitate changes in these details without notice

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