

M LUDLUM MEASUREMENTS, INC.

Model 177-61 Benchtop Counter

Part Number: 48-1382

Features

- 4-Range Meter
- Linear Analog Scale Readout
- Adjustable Alarms
- 50 Hour Rechargeable Battery
- Operates with GM, Proportional & Scintillation Detectors



The Model 177-61 is a rugged benchtop ratemeter with useradjustable alarm capability. These units are popular for frisking operations at stations where line power is available but can also be used in portable applications for up to 50 hours using the internal rechargeable battery.

The Model 177-61 Benchtop Counter supports GM, proportional, and scintillation detectors, and displays the results on a four decade linear readout analog meter.

Front-panel controls include a four-position rotary switch for selecting each detector decade, alarm set control, audio volume adjust, fast/slow response switch, power on/off switch, and pushbuttons for count reset, battery test, high-voltage test, and alarm test. The back panel contains the power cord connection and a 9-pin type "D" plug that supports rapid battery charging, power output, alarm output, pulse output, and a recorder output.





Specifications

INDICATED USE: multi-purpose radiation monitoring; frisking **SUGGESTED DETECTORS**: GM; proportional; scintillation

LINEARITY: within 10% of true value

HIGH VOLTAGE: adjustable from 400-2500 volts THRESHOLD: adjustable from -2 to -100 mV

RESPONSE TIME: toggle switch control FAST (2.2 seconds) SLOW

(22 seconds) from 10%-90% of final reading

DATA OUT: 9-pin series "D" connector allowing for external connections of the following items: battery, unregulated supply, instrument common ground, alarm signal (current sink), pulse out, external background subtract, and recorder output **RECORDER OUTPUT**: correlated to meter reading (adjustable to 1

CALIBRATION CONTROLS: accessible from back of instrument (pro-

tective cover provided)

volt at 1 mA)

RESET: pushbutton to zero meter and/or reset alarm

METER: 6.4 cm (2.5 in.) arc 1 mA analog type

METER DIAL: 0-500 cpm; 0-2.5 kV; BAT TEST

MULIPLIERS: x1, x10, x100, x1000

AUDIO: built-in unimorph speaker with volume control to provide click-per-event audio or audible alarm indicator

ALARM SET: front-panel locking control allowing alarm to be set at any point on the meter (can be read on meter)

ALARM: indicated by red lamp and full volume audible tone (greater than 60 dB at 61 cm [2 ft])

POWER: 95–135 Vac (178-240 Vac available), 50–60 Hz, 6-volt sealed lead-acid rechargeable battery (built in)

BATTERY LIFE: typically 50 hours in non-alarm condition (battery

condition can be checked on meter) BATTERY CHARGER: battery is continuously trickle-charged when instrument is connected to line power and turned on (optional exter-

nal fast charger available) **SIZE**: 12.7 x 20.3 x 15.2 cm (5 x 8 x 6 in.) (H x W x D)

WEIGHT: 1.9 kg (4.2 lb)