

# Model 177-61 Benchtop Counter



Ludlum Measurements, Inc.

## Features

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



## Introduction

The Model 177-61 is a rugged benchtop ratemeter with user-adjustable 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

Part Number: 48-1382

**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 volt at 1 mA)

**CALIBRATION CONTROLS:** accessible from back of instrument (protective cover provided)

**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

**MULTIPLIERS:** 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 external 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)



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Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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