

# Model L-177 H&F

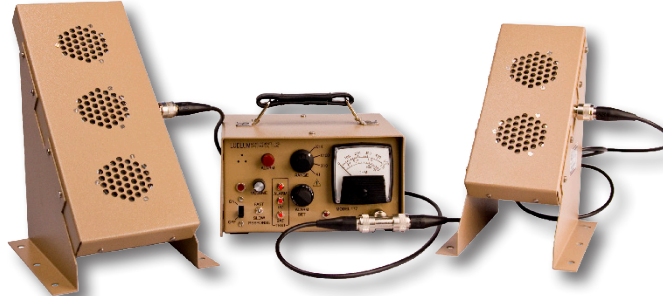
## Low Cost Hand & Foot Monitor



Ludlum Measurements, Inc.

### Features

- Detects Alpha, Beta, and Gamma Radiation
- Low Cost
- Easy to Set Up
- User-Adjustable Alarms
- 4-Decade Range
- 50-Hour Rechargeable Battery



### Specifications

#### Model 177 Benchtop Counter (PN 48-1632)

**HIGH VOLTAGE:** adjustable from 200 to 1500 volts

**INPUT SENSITIVITY:** adjustable from -10 to -100 mV

**LINEARITY:** within 5% of full scale

**METER:** 6.4 x 6.4 cm (2.5 x 2.5 in.) 1 mA, DC movement

**METER DIAL:** 0 to 500 cpm; 0 to 1.5 kV; BAT TEST

**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 audible tone (greater than 60 dB at 61 cm [2 ft])

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

**RESET:** pushbutton to zero meter and/or reset alarm

**MULTIPLIERS:** x1, x10, x100, x1k

**RESPONSE:** toggle control selects FAST (2.2 seconds) or SLOW (22 seconds) response, for 90% of full scale 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 0 to 1.25 volt at 1 mA)

**POWER:** 95 to 250 Vac and built-in 6-volt sealed lead-acid rechargeable battery

**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 L)

**WEIGHT:** 1.9 kg (4.2 lb)

#### Model 44-25 Alpha Beta Gamma Hand Monitor Detector (Part Number 47-1508)

**INDICATED USE:** alpha, beta, gamma survey of hands  
**SUGGESTED INSTRUMENTS:** general purpose survey meters, ratemeters, and scalers

**DETECTOR:** 2 pancake-type, halogen quenched GMs

**SENSITIVITY:** typically 6600 cpm/mR/hr

**BACKGROUND:** 120 cpm

**WINDOW:** 1.7 + 0.3 mg/cm<sup>2</sup> mica

**WINDOW AREA:** active: 31 cm<sup>2</sup> (4.8 in<sup>2</sup>)  
open: 18 cm<sup>2</sup> (2.8 in<sup>2</sup>)

**EFFICIENCY (4π):** 5% for <sup>14</sup>C; 22% for <sup>90</sup>Sr/<sup>90</sup>Y; 19% for <sup>99</sup>Tc; 32% for <sup>32</sup>P; 15% for <sup>239</sup>Pu

**ENERGY RESPONSE:** energy dependent

**OPERATING VOLTAGE:** 900 volts

**CONSTRUCTION:** aluminum housing

**SIZE:** 24.1 x 15.2 x 19.8 cm (9.5 x 6.0 x 7.8 in.) (H x W x L)

**WEIGHT:** 1.5 kg (3.3 lb)

#### Model 44-26 (Part Number 47-1509)

**INDICATED USE:** alpha, beta, gamma foot monitor

**SUGGESTED INSTRUMENTS:** typically used with alarm ratemeters

**DETECTOR:** 3 pancake-type, halogen quenched GMs

**SENSITIVITY:** typically 9900 cpm/mR/hr

**BACKGROUND:** 180 cpm

**WINDOW:** 1.7 + 0.3 mg/cm<sup>2</sup> mica

**WINDOW AREA:** active: 46 cm<sup>2</sup> (7.1 in<sup>2</sup>)  
open: 27 cm<sup>2</sup> (4.2 in<sup>2</sup>)

**EFFICIENCY (4π):** 5%—<sup>14</sup>C; 22%—<sup>90</sup>Sr/<sup>90</sup>Y; 19%—<sup>99</sup>Tc; 32%—<sup>32</sup>P; 15%—<sup>239</sup>Pu

**ENERGY RESPONSE:** energy dependent

**OPERATING VOLTAGE:** 900 volts

**CONSTRUCTION:** aluminum housing

**SIZE:** 27.4 x 17.8 x 22.9 cm (10.8 x 7 x 9 in.) (H x W x L)

**WEIGHT:** 2 kg (4.4 lb)

**Other Required Components:** connection tee (Part Number 13-7788); 1.5 m (5 ft) cable (Part Number 40-1004-5)

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

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