

# Model 19A MicroR Ratemeter

*Radiation Detection for a Safer World*



Ludlum Measurements, Inc.

## Features

- High Sensitivity to Gamma
- Analog Meter with Audible & Visual Alarms
- Range: 0–5  $\mu\text{Sv/h}$  (0–500  $\mu\text{R/hr}$ )
- Rugged
- Splashproof Protection for Outdoor Use
- CE Certified



Part Number: 48-2117

## Introduction

The Model 19A is a highly sensitive portable survey meter with audio and visual alarm indicators. It employs an internally housed, 2.5 cm diameter by 2.5 cm thick (1.0 x 1.0 in.) NaI detector. The cast aluminum instrument housing with its sealed battery compartment and accompanying metal handle offer an industrial robustness and quality that promote long-lasting protection and instrument life.

The front-panel controls include a rotary switch for selecting instrument On, Off, or BAT check, an Audio On/Off switch, and a pushbutton Alarm Reset. The alarm circuit is adjustable over the entire scale range. The Model 19A is a complete turn-key system, and includes two "D" cell batteries.



## Specifications

**INDICATED USE:** low-level ( $\mu\text{R}$ ) gamma survey

**DETECTOR:** 2.5 x 2.5 cm (1 x 1 in.) (Dia x L) Sodium Iodide (NaI[Tl]) scintillator

**SENSITIVITY:** approximately 17,500 cpm/ $\mu\text{Sv/h}$  (175 cpm/ $\mu\text{R/hr}$ ) ( $^{137}\text{Cs}$  gamma)

**ENERGY RESPONSE:** energy dependent

**LINEARITY:** reading  $\pm 10\%$  of true value

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

**METER DIAL:** 0–5  $\mu\text{Sv/h}$  (0–500  $\mu\text{R/hr}$ ) dual colored logarithmic scale, BAT TEST

### CONTROLS

**ROTARY KNOB SELECTOR:** Instrument Off, Battery Check, Instrument On

**AUDIO:** built-in unimorph speaker (greater than 60 dB at 0.6 meters [2 ft]) with ON/OFF switch

**ALARM RESET:** pushbutton to reset alarm

**ALARM:** 0 to off-scale (audio and visual indication when above alarm threshold)

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

**WORKING ENVIRONMENT:** splashproof shields for outdoor use

**TEMPERATURE RANGE:** -20 to 50  $^{\circ}\text{C}$  (-4 to 122  $^{\circ}\text{F}$ ), may be certified for operation from -40 to 65  $^{\circ}\text{C}$  (-40 to 150  $^{\circ}\text{F}$ )

**POWER:** 2 each "D" cell batteries (housed in sealed compartment that is externally accessible)

**BATTERY LIFE:** typically 600 hours with alkaline batteries (battery condition can be checked on meter)

**CONSTRUCTION:** cast and drawn aluminum with beige powder coat paint

**SIZE:** 19.8 x 8.9 x 21.6 cm (7.8 x 3.5 x 8.5 in.) (H x W x L), with handle

**WEIGHT:** 2.1 kg (4.5 lb), including batteries

## Options:

Shoulder Strap: Model L-4363-413

Lighted Handle: Model L-4464-154

Check Source ( $^{137}\text{Cs}$ , 1  $\mu\text{Ci}$ ): Model L-01-5196

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: [ludlum@ludlums.com](mailto:ludlum@ludlums.com)

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

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