

## Model 30 Digital Survey Meter

### Features

- Compact Meter Attaches Directly to Detector for Significant Weight Reduction
- Easy One-Handed Operation with Intuitive Interface
- Large, Informative Display has Adjustable Viewing Angle
- Simple Green, Yellow, and Red Status Indicators
- All-Digital Calibration with Lock-Out Feature
- Robust Construction with Water-Resistant Seals
- Available in Stretch Scope Configuration



### Introduction

The Ludlum Model 30 is a versatile instrument used with an external detector for alpha, beta, or gamma radiation survey. Three modes of operation – RATE, MAX, and COUNT – are available for the user. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, rem/hr, R/h, or Sv/h units. In COUNT mode, units include cps, cpm, c (counts), Bq, dpm, d (disintegrations), rem/h, or rem.

The user can switch between two sets of chosen units by simply pressing the Units button. An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from

inadvertent modification. Setup is also available via software available from Ludlum Measurements.

Features include a large, easily-readable LCD (liquid crystal display), audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 30 to be used outdoors in a variety of configurations, including stretch scope versions. The unit body is made of lightweight, durable, high-impact plastic. The Model 30 is shipped ready to use with batteries, a 53 cm (21 in.) detector cable and calibration certificate.

### Specifications

Part Number: 48-4108

**COMPATIBLE DETECTORS:** Geiger-Mueller (GM), scintillator, or proportional; default "C" connector (others available)

**LCD DISPLAY:** 3 digit LCD with large 13.4 mm (0.53 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, ( $\mu$ )(m)R(/h), ( $\mu$ )(m)Sv(/h), ( $\mu$ )(m)rem(/h), low-battery indicator, MAX, ALARM, MUTE

**DISPLAY RANGE:** 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00  $\mu$ R/hr to 999 R/hr; 0.00 rem/hr to 999 rem/hr; 0.00  $\mu$ Sv/h to 999 Sv/h. Display range can be set to limit display to calibrated range

**BACKLIGHT:** Built-in ambient light sensor automatically activates low-power LED backlight, unless internal dipswitch is set to continuous-on (will reduce battery life). Alarm light intensity varies based on ambient light levels.

#### USER CONTROLS:

- ON/OFF/ACK - Press to turn ON; Tap to acknowledge alarms and silence alarm tone; Press to reset Sigma Audio alarm; Turn "click" audio On/Off; Turn Sigma Audio beep On/Off; Hold for OFF
- MODE - Alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes). Number of modes can be reduced in setup.
- UNITS - Changes the units between count rate (cpm, cps), dose/exposure ( $\mu$ Sv/h, mR/rem/hr), or disintegration (dpm, Bq)

**RESPONSE TIME:** User-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

**ALARMS:** Count rate, exposure/dose, and scaler alarm set points adjustable over the display range

**OVERLOAD PROTECTION:** High count rate saturation protection prevents false display of lower count rates

**LOSS OF COUNT PROTECTION:** After a user-settable time interval (default 60 seconds) of no pulses from detector, the instrument will flash zero reading and the alarm audio will be triggered

**DEAD TIME CORRECTION:** Employs first and second order corrections for extended performance

**HIGH VOLTAGE:** 400 to 1500 Vdc

**THRESHOLD:** 2 to 120 mVdc

**AUDIO:** Greater than 75 dB at 0.6 (2 ft), approximately 4 kHz

**POWER:** Two alkaline or two rechargeable "AAA" batteries

**BATTERY LIFE:** Approximately 100 hours of operation, 24-hour low battery warning

**CONSTRUCTION:** High-impact plastic with water-resistant rubber seals and separate battery compartment

**TEMPERATURE RANGE:** -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

**ENVIRONMENTAL RATING:** NEMA rating of 3x or IP rating of 52, with audio hole seal option (hole seal option will reduce maximum volume by approximately 10 dB)

**SIZE:** 8.5 x 8.0 x 4.8 cm (3.4 x 3.1 x 1.9 in.) (H x W x L)

**WEIGHT:** 174 g (0.38 lb)

#### OPTIONS:

Lumic Calibration Software Kit: PN 4498-1020

Headphone Jack: PN 4498-697

Audio Hole Seal: PN 4498-913

Clamp Set for Model 44-2: PN 4498-820

Clamp Set for Model 44-10: PN 4498-769

Clamp Set for Model 43-92: PN 4498-819

Clamp Set for Model 42-41L: PN 4498-957

Telescoping Fiberglass Pole Assembly (1.2-2.4 m / 4-8 ft): PN 4498-865