

Model 3001- 2RK

Emergency Response & NORM Kit



Ludlum Measurements, Inc.

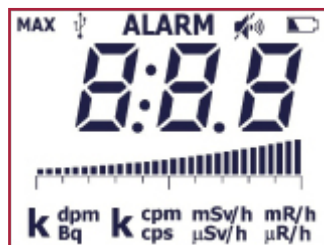
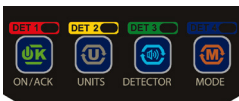
Features

- Ready-to-Go Kit
- Ergonomic Survey Meter with 4 Selectable and Configurable Detector Settings
- Measures Alpha, Beta, and Gamma Contamination
- Convenient In-Field Detector Switching
- Includes:
 - Model 3001 Multi-Detector Survey Meter
 - Model 44-9 Alpha-Beta-Gamma Detector
 - Model 44-2 High Energy Gamma Detector
 - Check Source, Cable, Batteries, Transport & Storage Case



Part Number: 48-4178

Model 3001 display and control buttons



Introduction

The Model 3001-2RK is composed of two dependable, high-quality detectors matched with the versatile Model 3001 survey meter and packaged in a rugged transport and storage case. The Model 3001 can be configured with up to four detector setups, enabling the user to quickly exchange detectors in the field. Once the detector system is configured, a user can select a detector's parameters with a press of a button and choose the desired measurement units and operation mode. The kit includes the Model 44-9 alpha-beta-gamma detector for general survey measurements and the Model 44-2 high-sensitivity gamma detector for locating the source of high readings. The case is cushioned with dense foam padding, and has a large, comfortable grip, a manual pressure relief valve, and padlockable hasps. The kit also includes a 1 μCi (^{137}Cs) check source, check source holder, cable, and batteries, making this kit ready-to-go for emergency response or NORM applications.

Model 44-2 Gamma Detector

DETECTOR: scintillator, 2.5 x 2.5 cm (1 x 1 in.) NaI(Tl)
EFFICIENCY: ^{125}I for 7%; ^{57}Co for 10%; ^{137}Cs for 3%;
 ^{60}Co for 3%
SENSITIVITY: typically 175 cpm/ $\mu\text{R/hr}$ (^{137}Cs gamma)

Model 44-9 Alpha-Beta-Gamma Detector

DETECTOR: pancake-type, halogen-quenched GM
EFFICIENCY (4 π): 5% for ^{14}C ; 22% for $^{90}\text{Sr}/^{90}\text{Y}$; 19% for ^{99}Tc ;
 < 1% for $^{99\text{m}}\text{Tc}$, 32% for ^{32}P ; 1% for ^{239}Pu
SENSITIVITY (^{137}Cs gamma): 3300 cpm/mR/hr

Model 3001 Multi-Detector Survey Meter

ALARMS: count rate, exposure/dose, and scaler alarm setpoints adjustable over the display range

OVERLOAD: high count rate saturation protection prevents false display of lower count rates

LOSS OF COUNT ALARM: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3 digit LCD with 20 mm (0.8 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, (μ)(m)R/(h), (μ)(m)Sv/(h), low-battery indicator, MAX, ALARM, AUDIO

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 $\mu\text{R/h}$ to 999 R/h; 0.00 $\mu\text{Sv/h}$ to 999 Sv/h.

Max Display can be set to limit display to calibrated range

BACKLIGHT: built-in ambient light sensor automatically activates LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life)

USER CONTROLS

- ON/ACK: press to turn ON, tap to acknowledge alarms and silence alarm tone, press to reset Sigma Audio alarm, hold for OFF
- MODE: select NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes).
- DETECTOR: selects active detector
- UNITS: changes the units between count rate (cpm, cps), dose/exposure ($\mu\text{Sv/h}$, mR/h), or disintegration (dpm, Bq)

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

AUDIO: greater than 75 dB at 0.6 m (2 ft)

POWER: four alkaline or four rechargeable "AA" batteries (no in-device charging)

BATTERY LIFE: 500 hours (as low as 100 hours with backlight configured for continuous-on), 16-hour low battery warning

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

ENVIRONMENTAL RATING: NEMA rating of 4x or IP rating of 65

SIZE (H x W x L): 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.)

WEIGHT: 0.9 kg (2.0 lb)

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