

# PYCKO SCIENTIFIC LIMITED

31 London Road, Grantham, NG31 6EX

Telephone 01476 401992

bill@pycko.co.uk

www.pycko.co.uk

Your Alternative  
To The Obvious

## Model 3000 Digital Survey Meter

### Features

- Large Backlit LCD for Ease of Reading
- Autoranging
- Rate, Max, and Count Modes of Operation
- Splash-Resistant Construction for Outdoor Use
- 4-Button Intuitive Interface for Easy Operation
- All-Digital Calibration
- USB Port
- Lighter Weight and Ruggedly Built

### Introduction

The Ludlum Model 3000 is a versatile, lightweight, ergonomically designed instrument with an external detector used 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, mR/hr, or  $\mu\text{Sv/h}$  units. 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. User-adjustable settings include calibration



Part Number: 48-4035  
(Shown with optional Model 44-9 Detector)

constant, dead time correction, efficiency, high voltage, pulse threshold, response time (fast or slow), count time, operational modes, HV current overload level, operational mode (Rate, Max, or Count), and minimum and maximum display levels. The user may also set Primary and Secondary units, unit alarm levels, count units, count alarm levels, and zero pulse protection time limit. This instrument features a large, easily-readable LCD (liquid crystal display), a piercing audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 3000 to be used outdoors. The unit body is made of lightweight, durable, high-impact plastic. The Model 3000 is shipped ready to use with batteries and calibration certificate

### Specifications

**DETECTOR:** may be Geiger-Mueller (GM), scintillator, or proportional

**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 PROTECTION:** 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 large 20 mm (0.8 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, ( $\mu$ )(m)R/(h), ( $\mu$ )(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

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

#### USER CONTROLS:

• ON/OFF/QUIET - press to turn ON, tap to acknowledge alarms and silence alarm tone, 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)

• AUDIO - turn "click" audio On/Off

• UNITS - changes the units between count rate (cpm, cps), dose/exposure ( $\mu\text{Sv/h}$ , mR/h), or disintegration (dpm, Bq)

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

**AUDIO:** greater than 75 dB at 0.6 (2 ft), approximately 4.5 kHz

**POWER:** four alkaline or four rechargeable "AA" batteries (instrument does not support in-device charging)

**BATTERY LIFE:** approximately 750 hours of operation (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

**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 (National Electrical Manufacturers Association) rating of 4x or IP (Ingress Protection) rating of 65

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

**WEIGHT:** 0.9 kg (2.0 lb)