

**Ludlum Model 2241-2
Digital Scaler/Ratemeter**



INDICATED USE: General purpose survey, gross counting

COMPATIBLE DETECTORS: G-M, proportional, scintillation

CONNECTOR: Series "C" (others available on request)

AUDIO: Built in unimorph speaker with ON/OFF switch (greater than 60 dB at 2 feet)

ALERT/ALARM: Indicated by annunciator on display and audible tone

DISPLAY: 4 digit LCD display with 0.5" (1.3cm) high digits, separate annunciators for display units, alert, alarm, low battery, detector overload, counting overflow, and scaler counting

BACKLIGHT: Push-button to activate

RATEMETER: Can display in R/hr, Sv/hr, cpm, or cps when control switch is in RATEMETER position

DISPLAY RANGE: Auto ranging from 0.0 R/hr - 9999 R/hr; 0.000 Sv/hr - 9999 Sv/hr; 0 cpm - 999k cpm; or 0 cps - 100k cps

LINEARITY: Reading within plus or minus 10% of true value with detector connected

SCALER: Activated by push-button in handle (count time adjustable from 1 - 9999 seconds in 1 second intervals)

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

HIGH VOLTAGE: Adjustable from 200 - 2500 volts

DISCRIMINATOR: Adjustable from 2 - 100 mV

OVERLOAD: Indicated by OVERLOAD on display (adjustable depending on detector selected)

RESET: Push-button to zero display, acknowledge and/or reset alarm

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

BATTERY LIFE: Typically 200 hours with alkaline batteries (low battery indicated on display)

CONSTRUCTION: Cast and drawn aluminum with beige polyurethane enamel paint

TEMPERATURE RANGE: -4 degrees F (-20 degrees C) to 122 degrees F (50 degrees C)

May be certified for operation from -40 degrees F (-40 degrees C) to 150 degrees F (65 degrees C)

SIZE: 6.5"(16.5cm)H X 3.5"(8.9cm)W X 8.5"(21.6cm)L
WEIGHT: 3.5 lbs (1.6kg) including batteries

The following parameters are adjusted by removable switchboard. Once initial setup and calibration have been completed the switchboard can be removed without affecting normal operation of the instrument (Model 2241 may be ordered without switchboard)

BACKLIGHT "ON" TIME: 5, 30, 60, 90, 180, or 240 seconds for the backlight to stay "ON" when activated.

SET MINIMUM DISPLAY: Allows lower limit of auto-ranging display to be fixed. For example, display can be set to not show values less than 1 R/hr.

RS-232 DATA DUMP MODE: Enables or disables dump mode to RS-232 port. When enabled data will be dumped every 2 seconds

RS-232 DETECTOR SETUP MODE: Allows for detector parameters to be input by RS-232 port

BAUD RATE: 150, 300, 600, 1200, 2400, 4800, 9600, or 19200 bps.

DEAD TIME: Adjustable from 0 - 9999 seconds

CALIBRATION CONSTANT: Adjustable from 0.001 - 280 X 10⁹ counts/display unit

DISPLAY UNITS: Can read in R/hr, Sv/hr, cpm, or cps

TIME BASE: Can read in seconds or minutes

AUDIO DIVIDE: 1, 10, 100, or 1000 events-per-click

RESPONSE:

FIXED: FAST response time adjustable from approximately 2 - 50 seconds. SLOW response is 5 times fast setting

VARIABLE: Dependant on number of counts present. Typical times FAST - 4 - 25 seconds, SLOW - 4-60 seconds (All times stated from 10% to 90% of final reading)

RATEMETER ALERT/ALARM: Set at any point corresponding to pre-selected ratemeter range

SCALER ALARM: Adjustable from 1 - 999999 counts

SCALER COUNT TIME: Adjustable from 1 - 9999 seconds
