# Radhound X/E

### Hand-held Radiation Monitor

The Radhound X/E is an advanced hand-held general purpose radiation monitor, suitable for a wide range of probes, including an optional internal dose rate detector.

This feature packed instrument boasts some unique features, such as the ability to switch between probes via the menu allowing for example, a dose rate probe and a contamination probe to be configured for use with one instrument. This flexibility allows any standard probe to be used (300 - 1200 V).

#### Simple and easy to use

The menu on the Radhound X/E can be easily locked by the user to ensure only basic options are available, giving greater security and protection against accidental setting changes.

#### Alarm

The Radhound X/E has an adjustable alarm threshold. Additionally separate alpha and beta alarms can be set. The sounder is loud and clear, and is suitable for use in many different environments. A symbol flashes on the display when in alarm.

#### Self test

The Radhound X/E automatically checks its health on turn on. It checks the high voltage, battery level, keyboard and sounder.

#### Multiple probe library/configuration

In addition to operating as a traditional single probe instrument, the Radhound X/E allows the user to switch quickly between alternative probe set-ups (the user is instructed to plug in the correct probe before the new settings are applied, protecting against possible over voltage or use of incorrect settings).

An example use of this feature is two set-ups for the same probe which allow counting of different gamma energies.

#### Peak mode

Records the maximum value seen since the last reset.

#### Scaler timer

The Radhound X/E has a scaler timer mode, allowing the integration of count for a preset time (or time to preset count). Additionally in dose rate mode, time to dose can be indicated.



#### **Over range**

Detector current measurement allows over range detection to prevent count saturation. Additionally the maximum count rate can be limited in the menu.

#### Long battery life

The Alkaline battery version uses two standard 1.5 V C-cells. Alternatively a Lithium Ion rechargeable version is available.

The screen has a battery level indicator in all counting modes.

#### **Rugged case**

The Radhound X/E case is waterproof to IP65, chemical resistant and can be safely wiped clean. A tough stainless steel case with impact resistant polymer ends means it will stand up to the rigours of daily use.

## Specifications

Main modes of operation	Count (or dose rate), integrate/Scaler Timer, histogram (Count rate graph), Peak Value. Menu gives control of system parameters and multiple probe library.
Display	Large backlit LCD 70 mm x 40 mm Automatic backlight movement sensor – when instrument is picked up, the backlight comes on.
Displayed units	CPS, CPM, Sv/hr, µSv/hr, mSv/hr (R/hr, mR/hr, µR/hr) Bq/cm²
Response time	0.5 second response. Adjustable averaging time 5, 10, 15 seconds. Integration time adjustable up to 24 hours.
Operational parameters	High voltage adjustable from 300 - 1200 V User definded probe library up to 5 probes with adjustment of HV, gain, threshold, dead time, over range, probe name. Adjustable alarm levels. MHV Connector (other available on request).
Mechanical	Size: 165 mm x 115 mm x 59 mm excluding handle. Impact resistant, Waterproof to IP65. Weight typically 1.4 kg
Environmental	Operating temperature: -10°C to + 50°C Storage temperature: -25°C to +60°C In conformity with EMC directive (2004/108/EC), EN61326-1, EN61000-3-2, EN6100-3-3 Low Voltage Directive (2006/95/EC) Designed to meet IEC 60325-2006 and IEC 60846-2004 Nuclear Instrumentation Standards.
Power	On screen battery status indication. Uses 2 x 1.5 V Alkaline C-Cell (or optional Lithium Ion rechargeable). Battery life typically >40 hours of continuous use.
Options	Internal Lithium Ion Rechargeable Cell External Probes: SS300/315/330/335, SS440, SS404A, SS404B, SS500/600/700



Scientific House, The Henfield Business Park Shoreham Road, Henfield, West Sussex, BN5 9SL Tel: +44 (0)1273 497600, Fax: +44 (0)1273 497626 E-mail: info@southernscientific.co.uk, Web: www.southernscientific.co.uk