



Guide to using the ACCURAD - Ionising radiation meter

The ACCURAD is a general use handheld or attached meter that can be used for measuring ionising radiation in the environment. The meter measures gamma radiation in dose rate units of microSieverts per hour ($\mu\text{Sv/h}$) and radiation dose in units of microSieverts (μSv).

More information can be found on the [understanding radiation page](#) on our website.

Key

- | | |
|------------------|------------------------------------|
| 1 Display window | 4 Power button |
| 2 Back button | 5 Menu slider buttons (up/down) |
| 3 Menu button | 6 USB C charging port (do not use) |

Instructions

- Step 1** Turn on unit by pressing and holding the power button for one second.
- Step 2** Allow 1-2 minutes for ACCURAD to take a background measurement. (ACCURAD will display when a background measurement is being taken figure 2) Do this by holding the detector or placing it in a location which you do not wish to measure e.g. placing it on a bed. Note down the dose rate displayed as your reference number.
- Step 3** When you have determined an area you wish to measure, place ACCURAD in that location for five minutes to take a measurement (see figures 3 and 4 as examples). Note down the dose rate displayed.
- Step 4** Repeat step 3 for as many locations as you wish to measure.
- Step 5** Turn off unit once finished by holding down power button and waiting for the countdown (3-2-1-OFF) and press the menu button to selecting ok to turn meter off.

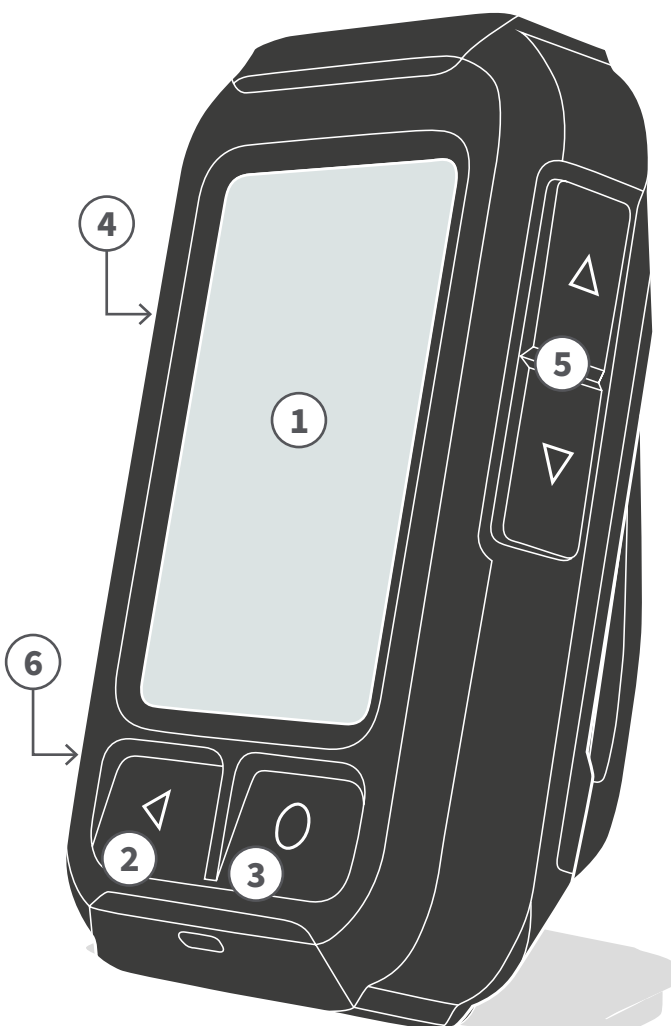


Figure 1: image of ACCURAD

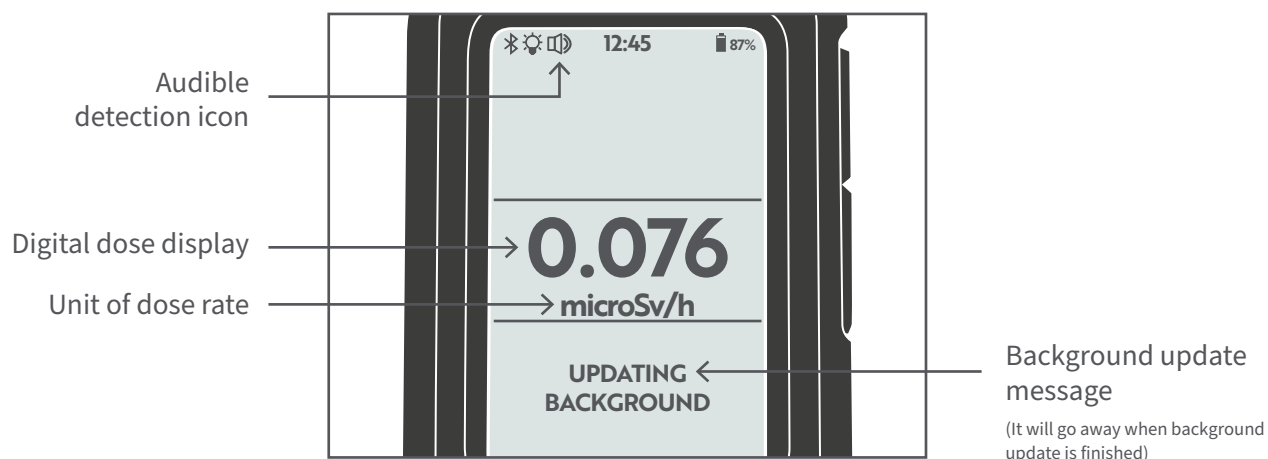


Figure 2: zoomed-in image of the display window

Measurement source	Typical gamma dose rate ($\mu\text{Sv/h}$)
Natural background in Australia	0.05–0.4
Granite bench top (on contact)	0.1–0.3
House bricks (on contact)	0.1–0.3
Flying at 36 000 ft	2.0–5.0
Springs of Paralana, Arkaroola, Australia	1.0–5.0
Some locations in Guarapari Beach, Brazil	10.0–20.0
Radiation source (30 cm from 1MBq Cs-137)	1.0

Should you wish to obtain advice on the measurements you have taken, please contact the ARPANSA Talk to a scientist team:

Phone: 1800 022 333 / Email: info@arpansa.gov.au

- If the dose rate measured is between 1.0–10.0 $\mu\text{Sv/h}$, please inform ARPANSA at your earliest convenience or on return of device.
- The dose rate alarm is set to 10.0 $\mu\text{Sv/h}$. If this alarm is triggered, please contact ARPANSA immediately.
- The accumulated dose alarm is set to 100.0 μSv . If this alarm is triggered, please contact ARPANSA.

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Figure 3: measurement of a bench top



Figure 4: measurement of an item (mug)