OPERATION MANUAL

RPD INFORMATION

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Item Number	Description
343-600	RAD-60 Personal Electronic Dosimeter-REM Display
343-602	RAD-60 Personal Electronic Dosimeter-Sievert Display

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ATTENTION! The Rad-60 Personal Alarm Dosimeter does not contain any hazardous substances and can be recycled accordingly.

1. GENERAL

The RAD-60 is microprocessor controlled and is operated using the display and the push button. The push button gives a bleep each time it is pressed. To complete an action, release the button or press again (bleep) and hold it down until a second bleep is heard.

The three digit display shows the dose, the dose rate and various messages. The display and the sound signal are used to indicate the alarms (the dose, the dose rate, low battery, defect, dose/ dose rate overflow).

The RAD-60 is ready for use after the battery has been installed. It must be worn in a chest pocket (pocket clip on the outside) with no metal objects in the same pocket.
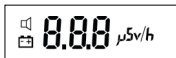

RAD-60 Top View — Pocket clip — Push button — Buzzer — Three digit numerical display

2. Switch on

Press the push button until all the segments are displayed and the dosimeter bleeps

3. Change display (dose/dose rate)

Press the push button once.

-The display changes to the dose/dose rate for 5 seconds.

4. Change display mode permanently (dose/dose rate)

Press the push button once.

     -The display changes to the dose/dose rate.

Press the push button until a bleep is audible.

     -The display mode is now changed.

5. Switch off (OFF)

Press the push button shortly until

     -The display changes to "OFF".

Press the push button until a bleep occurs.

     -The display goes blank.

6. Chirp on/off (CHr)

Press the push button shortly until

     -The display changes to "CHr".

Press the push button until a bleep occurs.

     -The chirp is activated/deactivated.

     -The loudspeaker symbol is displayed when the chirp is active.

7. Reset cumulative dose (CLr)

Press the push button shortly until

     -The display changes to "CLr".

Press the push button until a bleep occurs.

     -The display blinks cumulative dose.

Press the push button until a bleep occurs.

     -The cumulative dose is now reset.

8. Show dose alarm level (dAL)

Press the push button shortly until

     -The display changes to "dAL".

Press the push button until a bleep occurs.

     -The current alarm level is displayed.

Wait for the return to the dose/dose rate display.

9. Change dose alarm level (dAL)
There are 7 different levels for the dose alarm:
0 µSv, 10 µSv, 100 µSv, 1 mSv, 10 mSv, 100 mSv, 1 Sv (or 0 mR, 1 mR, 10 mR, 100 mR, 1 R, 10 R, 100 R for R-version).
The user may select any of these for the alarm level.
If 0 mSv is selected, the alarm is deactivated.

Press the push button shortly until
- The display changes to "dAL".
Press the push button until a bleep is audible.
- The current dose alarm level is blinking.
- Select the alarm level by short pushes
- Confirm the selected level with a long push until a long bleep is audible.
10. Show dose rate alarm level (drA)
Press the push button shortly until
- The display changes to "drA".
Press the push button until a bleep is audible.
- The current alarm level is displayed.
Wait for the return to the dose/dose rate display.
11. Change dose rate alarm level (drA)
There are 7 different levels for the dose rate alarm: 0 µSv/h, 10 µSv/h, 100 µSv/h, 1 mSv/h, 10 mSv/h, 100 mSv/h, 1 Sv/h
(or 0 mR/h, 1 mR/h, 10 mR/h, 100 mR/h, 1 R/h, 10 R/h and 100 R/h for R-version) .
The user may select any of these for the dose rate alarm levels.
If '0' is selected, the dose rate alarm is deactivated.
Press the push button shortly until
- The display changes to drA.
Press the push button until a bleep is audible.
- The current dose rate alarm level blinks.
- Select the alarm level by short pushes.
- Confirm the selected level with a long push until a long bleep is audible.

12. Battery and display test (dIA)
Press the push button shortly until
  - The display changes to "dIA".
Press the push button until a bleep is audible.
  - The alarm sounds for 5 seconds.
  - If the battery symbol appears in the display after the test, the the battery is weak and must be replaced.

13. Low battery
The battery symbol is blinking constantly and a long bleep is audible once an hour. The dose measurement is continued.

14. Exhausted battery (Lob)
The display shows "Lob" and the battery symbol is blinking. A short alarm bleep is audible once a second. The dose measurement is prevented.
Note! The push button functions are disabled when the exhausted battery (Lob) alarm is displayed.

15. Dose alarm or Dose rate alarm (Blinking display)
The dose/dose rate display is blinking and the continuous audible alarm is on. The dose alarm can be reset by pressing the push button. The display changes to the previously selected mode.
Audible alarms
Dose rate: - - - -
(4 bleeps each second)
Dose: __
(1 bleep each second)

16. Simultaneous Dose and Dose rate alarm
The dose rate display is blinking and the continuous audible alarm is on. The dose rate alarm is dominating. Reset the alarm by pressing the push button. The display changes to the previously selected mode.

17. Dose overflow alarm (doo) / Dose rate overflow alarm (dro)
When the measurement limits are exceeded, the display shows:
"doo" dose overflow alarm
"dro" dose rate overflow alarm

Audible alarms
Dose rate overflow: . . . .
(8 bleeps each second)
Dose overflow: __   __
(2 bleeps each second)
Overflow alarms cannot be reset.

18. Error (dFn)
A "dFn" text is blinking in the display (where n is a number
between 0 - 5).

Error codes and types

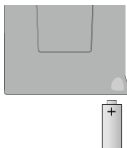|	
dF0 = Memory	dF1 = Calibration
dF2 = EEPROM	dF3 = Detector
dF4 = RAM memory	dF5 = Service Counter

If an error occurs, write down the Error number (dFn) and return
the dosimeter for service.

19. Maintenance and Decontamination
No specific maintenance is required except for a periodic check of
the calibration. Cleaning and decontamination may be performed
with decontamination solutions suitable for use with ABS polymer
and polycarbonate materials.

20. Replacement of the alkaline battery

Open the battery compartment cover with a coin. Remove the old battery and replace with new one. Insert the battery with the '+' pole first. Use only an AAA alkaline battery (IEC LR03). Close the cover. The dosimeter turns on automatically after the battery has been replaced.

Note! After fitting a fresh battery it is recommended to perform a functional test (dIA). If the battery symbol appears in the display after the test, refit the battery.