SOEKS
MODERN ECOLOGICAL SYSTEMS

SOEKS 112

USER MANUAL
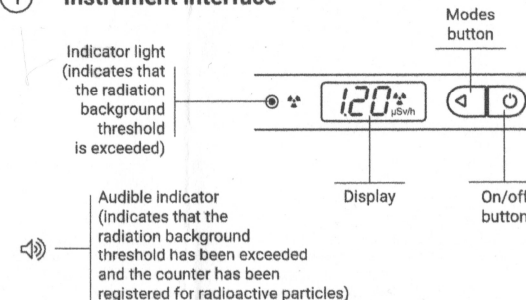NULS.414313.014RP

PORTABLE DOSIMETER
SOEKS 112

Designed and manufactured in Russia — ISO 9001:2008 — PC
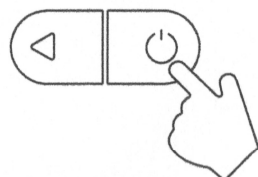
Portable dosimeter SOEKS112

Device functions and characteristics:

- measurement of radiation background (gamma radiation and beta particle flux) in the range from 0.01 to 999 µSv/h
- measurement of accumulated dose up to 999 Sv (sievert)
- dump of the accumulated dose
- time of continuous work, not less, 170 hours
- sound and led indication of radiation detection (of particles) by a Geiger-Muller counter
- sound and LED indication of the threshold exceeding of radiation background (the threshold is set in the settings)
- indication of undervoltage
- setting the background radiation threshold
- setting the time of automatic shutdown
- enable/disable sound indicator
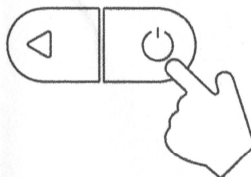- enable/disable the LED indicator

① Instrument interface

Indicator light (indicates that the radiation background threshold is exceeded)

Modes button

Audible indicator (indicates that the radiation background threshold has been exceeded and the counter has been registered for radioactive particles)

Display

On/off button

② Turn on the device

To turn on the device, it is necessary to press and hold the button until the segments fill
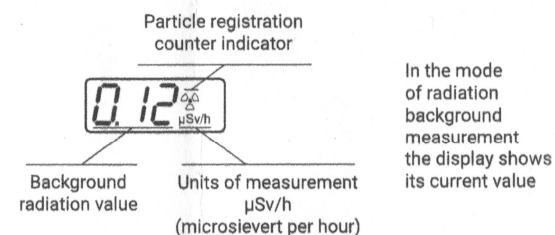
888

③ Turn off the device

To turn off the device, it is necessary to press and hold the power button until the inscription appears on the display « OFF »

OFF µSv/h

④ Radiation background measurement mode

Particle registration counter indicator

0.12 µSv/h

Background radiation value

Units of measurement µSv/h (microsievert per hour)

In the mode of radiation background measurement the display shows its current value
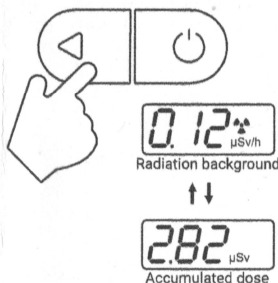
⑤ Accumulated dose display mode

2.82 µSv

Accumulated dose value

Units of measurement depending on accumulation µv (microsievert) µ (milievert) Sv (sievert)
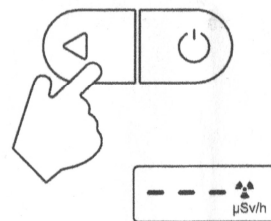
In the accumulated dose display mode, the display shows its current value since the last reset or the last battery installation

⑥ Mode switching

0.12 µSv/h
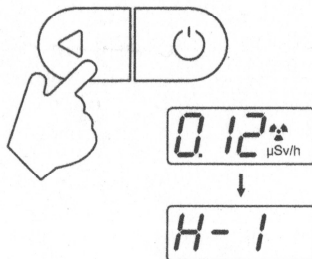Radiation background

↑↓

2.82 µSv
Accumulated dose

The transition between the radiation background measurement modes and the accumulated dose is carried out by briefly pressing the mode button

⑦ Dump of the accumulated dose

- - - µSv/h

To reset the accumulated dose, it is necessary to press and hold the mode button in the mode of its displaying (the segments will flash on the display as you continue to hold the button, the accumulated dose will reset)
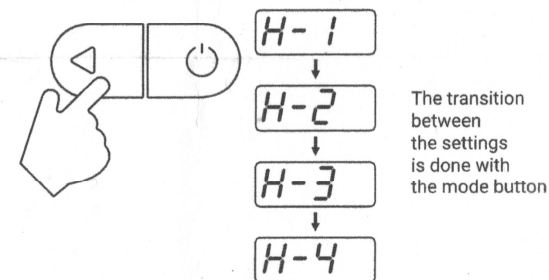
⑧ Settings mode

0.12 µSv/h

↓

H-1

To enter the settings mode, it is necessary to press and hold the mode button in the radiation background measurement mode

⑨ Settings list

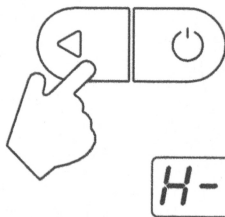| H-1	Auto off time, **minutes**		
	Value:	0 1 3 5 10 60 120	
H-2	Threshold exceeding of radiation background, **µSv/h**		
	Value:	0 0.2 0.4 0.6 0.8 1.0 1.2 1.5 2 5 10 50 100	
H-3	Sound indicator		
	Value:	0 - off 1 - on 2 - only the threshold exceeding of radiation background	
H-4	Световой индикатор		
	Value:	0 - off 1 - on 2 - only the threshold exceeding of radiation background	

⑩ Transition between settings

H-1
↓
H-2
↓
H-3
↓
H-4

The transition between the settings is done with the mode button

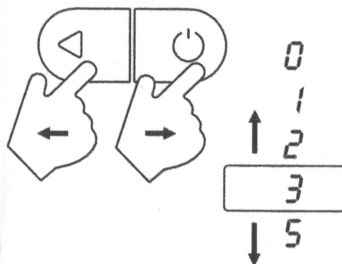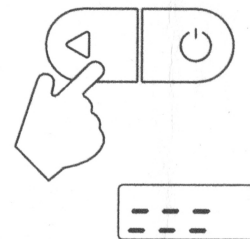## ⑪ Editing settings

To edit the setting, press and hold the mode selection button until the value of the edited parameter appears flashing frequently
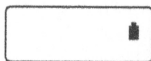
H - 1

⑫ Change setting values

Change the setting values made by the control buttons to the right or left
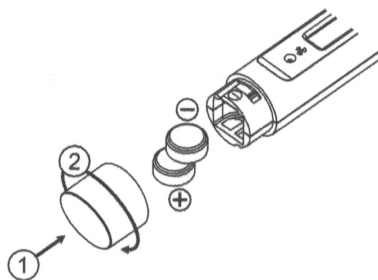
0
1
2
3
5

⑬ Save the settings

To save the setting value, it is necessary to press and hold the mode selection button. « ⹀ ⹀ ⹀ » segments will flash on the display as you continue to hold the button, the set value of the edited parameter appears

- - -

⑭ Low battery charge

When the battery level is low, an "🔋" indicator appears on the display. Battery needs to be replaced

⑮ Battery installation