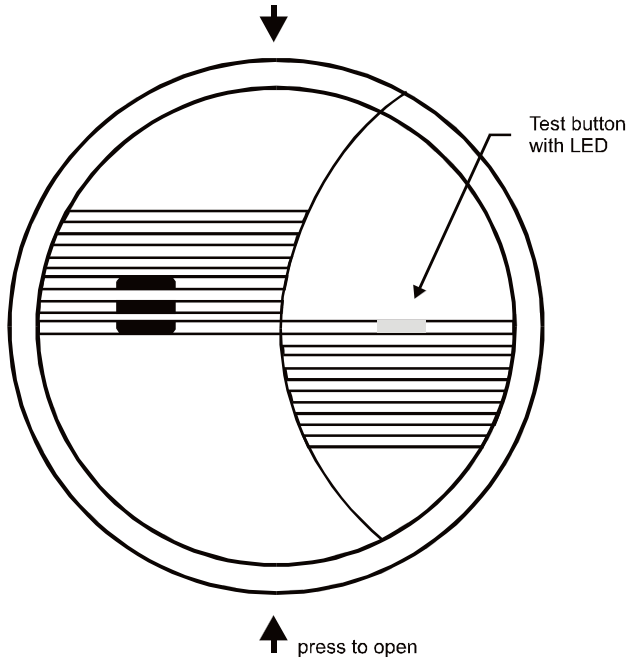# SD-103 Digital Stand Alone Smoke Detector

The SD-103 is a latest stand alone smoke detector which uses advanced digital signal processing. Thanks to this fact it has unique features comparing to other detectors (two levels acoustic warning, extremely long battery life time, smart battery testing etc.).

If smoke is detected, the SD-103 will make a "soft" warning sound at first (preventing shock of sleeping people) and if the smoke concentration does not go down in 4 seconds, it will trigger a siren sound.

The detector makes regular auto testing and reports its condition with its LED indicator.

Test button with LED

press to open

Specifications

power	3 V - 2 x AA alkaline battery 1.5V
battery life time	more than 1 year
built in sensor	ionic chamber
radiation of sensor	max. 4 kBq
sensitivity	$y = 0,5 \div 0,7$ (EN 54-7)
built in siren	95 dB/1m
life time	10 years
max. air flow	12 m/s
EMC immunity	30 V/m
Rel. humidity	25% to 75 %
working environment	indoor use , -10 to +60°C
complies with ISO 12239, EN 54-7, EN 50134-2	

Contents of the set: detector, 2 plastic dowels, 2 screws, 2 AA batteries

Installation

The detector should be installed on the ceiling, with the distance from walls 0,6 m as a minimum. The detector should not be installed in a place with poor air circulation. If you install the SD-103 in a long corridor (9 m and more), install at least two detectors , one at each end. A detector can cover an area of about 50 m^3 of free space (no partitions). The detector should not be installed close to any fan, heating/cooling vent, fluorescent lamp or air ionizer. The SD-103 is not suitable for places with a high concentration of paint solvents or car exhausts (fumes). While deciding where to install, keep in consideration that detector's batteries have to be replaced from time to time.

Note: the detector can also be triggered by heavy cigarette smoke or fumes from cooking.

- Open the cover of the detector (press in from both sides up to the lines on the housing. – see the picture)
- Attach the rear panel with the two provided screws to the desired location. Tighten the screws firmly, being sure that the panel is not crooked.
- Install the two provided AA batteries into the detector (polarity is marked in the holder). The SD-103 will make a sound and from this moment the detector is ready to work.
- Attach the detector's front cover to the rear panel so that both tabs click. Check that the detector is fixed firmly. Warning – for safety reasons it is **impossible to close the detector without the batteries!**
- Press and hold the testing button. The detector will make an alarm sound in few seconds.

Normal operating mode of the detector

The detector, in normal operating mode, performs self testing every 60 seconds (indicated by a short flash of the LED).

If smoke is detected, the SD-103 will make a "soft" warning sound at first and if the smoke concentration does not go down in 4 seconds, it will start an alarm.

After the smoke concentration drops, the detector will go to stand by mode again.

To test the detector - press and hold the testing button. The detector should make an alarm sound after a few seconds.

Battery testing and replacement

The detector checks the condition of its batteries automatically. If it is necessary to replace batteries, the detector will start to generate "soft" beeps every minute.

Use only high quality alkaline AA batteries for replacement. After installation of new batteries the detector's buzzer will make a sound to confirm that is ready again.

If there is no sound after the batteries are installed and the LED is flashing, it means, that the installed batteries have a low voltage and should be changed for new ones.

*Warning – for safety reason it is **impossible to close the detector without batteries!***

Note: we recommend to remove dust from the detector every time you replace its batteries. Use a dry cloth or blow on it gently.