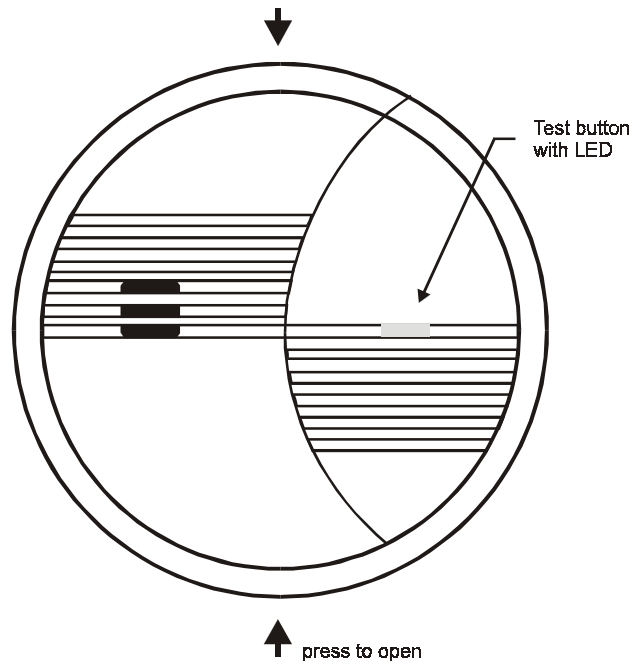
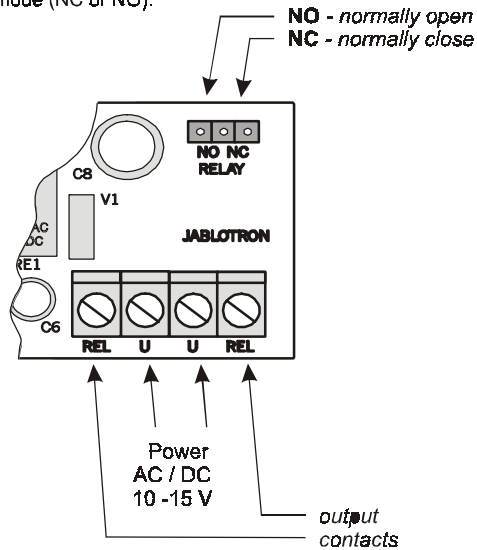


SD-112 Smoke Detector

The SD-112 is a smoke detector, which provides output relay and can be used as a part of house alarm system. If smoke is detected, the SD-112 will make a warning sound and its output relay will be triggered.

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

The switch on the PCB sets the relay mode (NC or NO).



- 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.
- Connect wires to the terminals (the terminals are removable from the board for easier wiring):
 - U, U** - external power (11 – 15 V AC or DC)
 - REL, REL** - output relay contact. Using RELAY jumper on the board select Normally Open = NO or Normally Closed = NC function of the relay
- Attach the detector's front cover to the rear panel so that both tabs click. Check that the detector is fixed firmly.
- Turn on the power, the SD-112 will make a sound and from this moment the detector is ready to work.
- Press and hold the testing button. The detector will make an alarm sound and the relay will be triggered in few seconds.

Specifications

power	11 V – 15 V - external (AC or DC)
stand by consumption	2 mA
alarm consumption	max. 25 mA
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
built in relay contact	max. 1A / 60V (NC or NO selectable)
life time	10 years
max. air flow	12 m/s
EMC immunity	30 V/m
rel. humidity	25 % to 75 %
size	Ø120 x 40 mm
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

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-112 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 m³ 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-112 is not suitable for places with a high concentration of paint solvents or car exhausts (fumes).

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

Normal operating mode of the detector

The detector, in normal operating mode, performs self testing every 40 seconds (indicated by a short flash of the LED).

If smoke is detected, the SD-112 will start an alarm (siren & relay). 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 and the relay should be activated after a few seconds.

Note: we recommend to remove dust from the detector every 6 months. Use a dry cloth or blow on it gently.