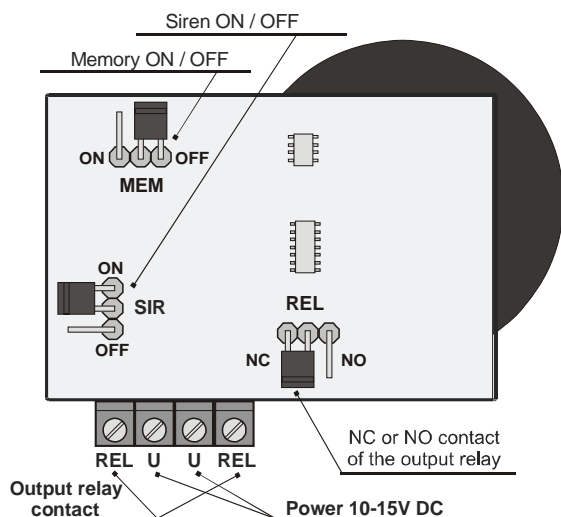


# SD-212SP OPTICAL SMOKE DETECTOR

The SD-212SP is designed to detect smoke and is well suited for most fire detection applications. It has also built in siren to warn locally in the case of a fire hazard. The relay jumper offers selectable NO or NC relay output, the memory jumper enables the memory function and also the built in siren can be enabled by its jumper. The smoke detector also performs regular auto testing.

A dispersion of infrared light on smoke particles in the optical chamber is used in the detector. This detection is especially suitable to detect all kinds of visible smokes, for example smoldering wood, paper, fabrics etc. The detector can be also used to detect smokes from sources creating small amount of smoke but fast increase of the temperature (for example alcohol). For this situations the detector has a built-in temperature sensor, which triggers an alarm when the temperature exceeds 60°C-70°C (it depends on the speed of the temperature increase)



## Specifications

Power	10 – 15 V DC (polarity does not matter) / 3 mA (25 mA alarm)
Output relay	0,1 A / 60 V, max 16 Ω
Sensitivity	m = 0,06 ÷ 0,08 dB by 1 m/s (EN 54-7)
Method of detection	optical dispersion
Temperature detection	60°C – 70°C (depends on the temperature increase)
Lifetime	10 years
EMC immunity	30 V/m
Built-in siren	95 dB/m
Working environment	general, indoors
Working temperature	from -10 °C to +55 °C
Relative humidity	25 % to 75 %
Storage conditions	-20 °C to +70 °C
Housing	IP 40 (EN 60 529)
Dimensions	φ120 x 40 mm
Weight	150 g
Package includes	Detector SD-212SP, 2x dowel, 2x screw

Can be operated according to prEN 14604, EN 54-7



Hereby Jablotron Ltd. Declares that this SD-212SP is in compliance with the essential requirements and other relevant provisions of Directive 1989/336/ES  
Original of the conformity assessment can be found at the web page [www.jablotron.com](http://www.jablotron.com), section Technical support.

## Installation

The detector can be installed in all premises, especially where is a fire hazard.

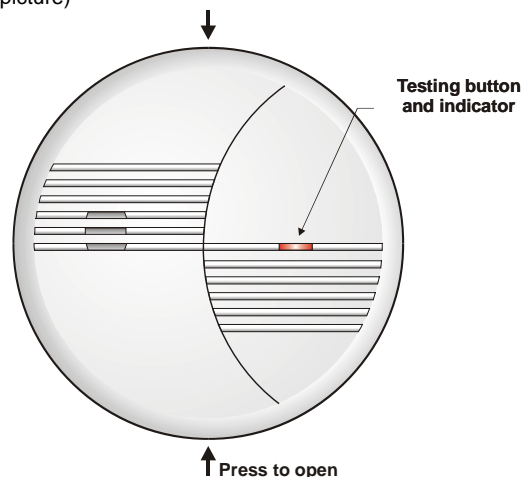
The detector should be installed on the ceiling, with a minimum distance 0.1m from walls and 0.6m from any corner. The detector can protect area of about 50m<sup>3</sup> of free space. If the detector is installed in the hallway longer than 9 meters, we recommend installing at least 2 detectors (one on each end).

Avoid its location in a place with poor air circulation in places with high concentration of dust, in bathrooms and close to the air conditioning units or close to the heaters.

The detector can be used in places with an increased concentration of paint solvents or fumes from cooking. But it should not be located close to the cooker (oil fumes can disable its function after certain period).

## Installation steps:

- Open the cover of the detector (press it from both sides – see the picture)



- Attach the rear panel with two provided screws to the desired location. Tighten the screws being sure that the panel is not crooked.

- Set up desired functions using jumpers:

<b>MEM ON</b>	memory function - the optical indicator will stay on after a smoke alarm, can be terminated by pressing of the testing button or by disconnecting the power supply
<b>MEM OFF</b>	optical indicator will turn off after the sensor is cleared of the smoke
<b>REL NO</b>	normally open relay contact provided
<b>REL NC</b>	normally closed relay contact provided
<b>SIR ON</b>	built in siren enabled
<b>SIR OFF</b>	built in siren disabled

- Before connecting wires to the terminal, please read the installation manual of the used control panel
- Connect wires to the terminal (for easier wiring the terminals are removable)
- Attach the detector's front cover to the rear panel so that both tabs click. Check that the detector is fixed firmly.

## Testing

To test the detector – press and hold the testing button. The detector should indicate alarm within 3 seconds (relay & siren if enabled). If detector does not confirm testing by the relay reaction and acoustic warning (or only the indicator is flashing rapidly), the sensor is not working properly and the detector should be replaced. We recommend testing monthly. Do not use a fire to test this detector.

## Normal mode

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

If a smoke is detected, the SD-212SP will start an alarm (relay & siren – if enabled). By pressing testing button during the alarm you can disable the built in siren sound. After the smoke concentration drops, the detector will go to stand by mode again (if the memory function is not enabled).

**Warning:** the detector can be triggered by a cigarette smoke or by a smoke generated from cooking. It can also trigger a false alarm if there is a high concentration of dust or fog in the air.

## Maintenance

We recommend removing dust from the detector every 6 months as a minimum by using a dry cloth. It is not recommended to blow to the chamber (dust could get inside the chamber). Under any circumstances do not try to open the optical chamber inside the detector.



**Note:** although this product does not contain any harmful materials we suggest you to return the product to the dealer or directly to the producer after usage.



Pod Skalkou 33  
466 01 Jablonec nad Nisou  
Tel.: 483 559 999  
fax: 483 559 993  
Internet: [www.jablotron.cz](http://www.jablotron.cz)