



# BS-655

## OPTICAL SMOKE DETECTOR



### TECHNICAL CHARACTERISTICS

OPERATION VOLTAGE	18-30V DC
START UP POWER CONSUMPTION	150µA for 50 sec
STAND BY POWER CONSUMPTION	50µA
ALARM POWER CONSUMPTION	20-30mA
SENSITIVITY	0.120dB/m
INDICATORS	Alarm LED
OUTPUT	To panel / to external LED driver (BS-572)
DEGREES OF COVER PROTECTION	IP20
PRODUCED IN ACCORDANCE WITH	EN 54-7
OPERATION TEMPERATURE RANGE	-10 to 60 °C
RELATIVE HUMIDITY	Up to 95%
EXTERNAL DIMENSIONS	103 (diam.) x 48 (height) mm
TYPICAL WEIGHT	160gr.
GUARANTEE	2 years

Thank you for your trust in our products.  
Olympia Electronics - European manufacturer.

#### GENERAL

Before installing the detector, the user must read these instructions carefully and store this manual for future reference.

The detectors BS-655 were created to offer quick detection in case of fire.

They have two parts, one plastic base which is installed on the ceiling and the main unit of the detector which is fastened to the base by a simple turning to the right. The detectors have an indication led which lights continuously in case of fire detection until there is a reset signal from the panel. The indication led also flashes every 4 sec to indicate good operation. These detectors can cooperate with conventional fire alarm panels like BS-632 and BS-636.

#### OPERATION CHECK

The operation check can be done by spraying a small amount of smoke into the detector's chamber. You can use the special smoke device A-752 of our company, or a similar device.

It is advised to conduct a good operation test every 6 months and every time the detector position is changed.

It is essential to have good air circulation inside the detector. Therefore care must be taken so that the vents of the detector are not covered.

#### NOTE

The detectors must be placed in the ceiling on visible areas with no side obstacles and away from sides with no air circulation or strong air currents and vapors. Each detector covers almost 50 m<sup>2</sup> and the distance between two detectors must not exceed 15m. Also the detectors must be placed away from fluorescent tubes at least 50 cm.

The cables cross section must be from 0.5 to 1.5mm<sup>2</sup>.

#### ATTENTION!!

After the device is installed, care must be taken, so that the detector vents are not blocked by anything (i.e. dust, paint). Failing to do so will prevent the smoke particles to enter the detection chamber.

After the installation, it is the sole responsibility of the user to maintain the detector for good operation.

#### Certification

The optical smoke detector BS-655 is certified from LPCB. Also LPCB controls the production under CPR number:

<b>BS-655</b> Optical smoke detector	
<b>0832-CPR-F0122</b> <b>EN-54-7</b>	<b>0832</b> <b>95</b>
	<b>LINDROS</b> <b>PIERIAS</b> <b>60061</b> <b>GREECE</b>

## Installation procedure

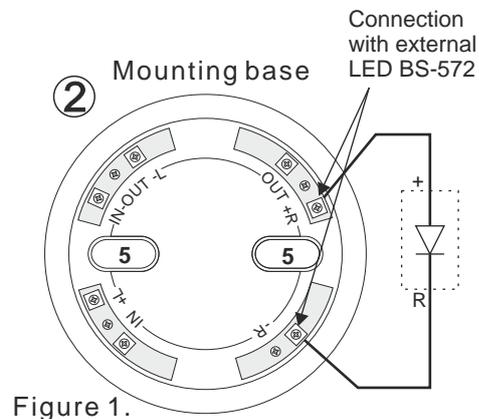
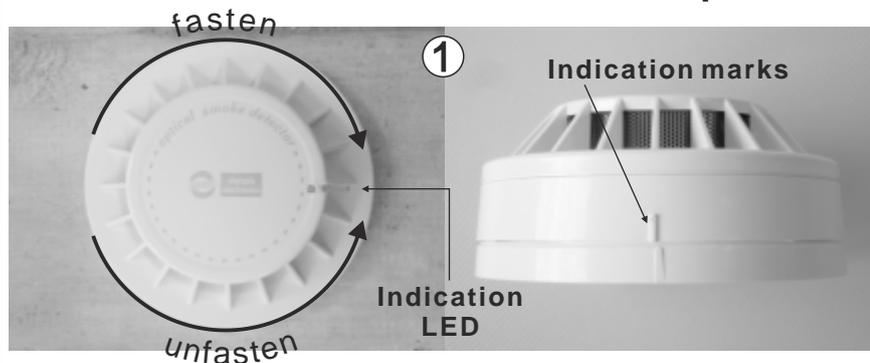


Figure 1.

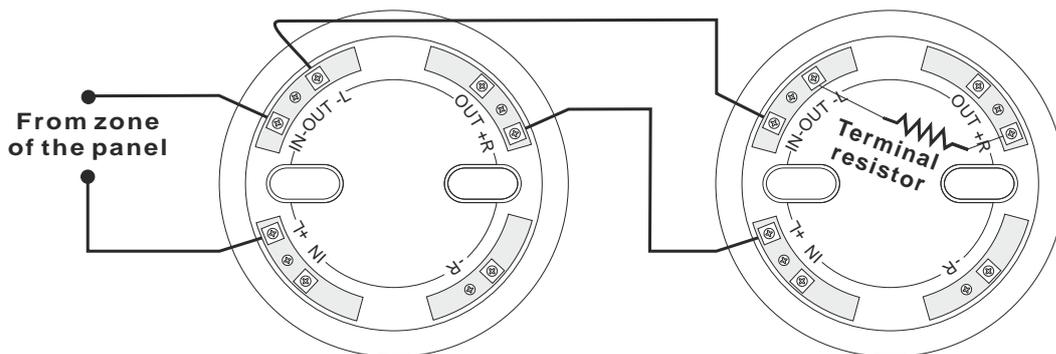


Figure 2

### Connection

You can connect up to 30 detectors BS-655 on each zone.

If the power of the detectors is turned off, wait for 3-5 seconds before you turn the power on again.

1. Detach the detector from it's base by turning it anticlockwise until the side marks are aligned.
2. Install the base with the included mounting parts (point 5).
3. Connect the power cables (respect to polarity) according to the installation requirements (figure 1,2).
4. Place carefully the detector, so as to align the side marks and turn it clockwise all the way.  
Power the device and after 3-5 seconds will be ready to operate.

### CONNECTION

1. **IN-OUT-L**: It is connected to the zone of the panel or to the (IN-OUT-L) contact of the previous detector.
2. **OUT+R**: It is connected to the next detector (IN+L) or if it is the last one to the terminal resistor.
3. **OUT+R and -R**: It is connected with BS-572.
4. **IN+L**: It is connected to the zone of the panel or to the (OUT+R) contact of the previous detector.

### WARRANTY

Olympia Electronics guarantees the quality, condition and operation of the goods. The period of warranty is specified in the official catalogue of Olympia Electronics and also in the technical leaflet, which accompanies each product. This warranty ceases to exist if the buyer does not follow the technical instructions included in official documents given by Olympia Electronics or if the buyer modifies the goods provided or has any repairs or re-setting done by a third party, unless Olympia Electronics has fully agreed to them in writing. Products that have been damaged can be returned to the premises of our company for repair or replacement, as long as the warranty period is valid.

Olympia Electronics reserves the right to repair or to replace the returned goods and to or not charge the buyer depending on the reason of deflection. Olympia Electronics reserves the right to charge or not the buyer the transportation cost.

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