

# TSD-5135

## Optical Smoke Detector for Intruder Alarm Systems Installation & Operating Guide



Issue Date: 19/09/2017  
Rev:01

### Important Warnings

#### General

- ✓ Before using the device read this manual carefully. Keep it just in case of necessity.
- ✓ Abide all the rules and precautions stated in the manual. Follow all the instructions one by one.
- ✓ Keep the devices away from water and moisture

#### Conditions

Do not energize the device above or below the given limits of extreme hot or cold conditions,

Temperature: Between -10°C and +55°C

Relative Humidity: %95 RH max

#### Service

Do not try to fix the device on your own. Removal of cover may end up with electricity shock.

In case of any defect or malfunction, contact with your dealer or with authorized service. All the technical interventions have to be done by technicians of company.

**Warning:** Do not attempt to remove the electronic board from its plastic case. The electronic board is closed for your safety. Users should avoid from interference.

#### Malfunctions that require technical service

In case of any malfunction or below conditions contact with your authorized service,

- ✓ When Mains cable or the plug is harmed,
- ✓ Contact of device with a fluid,
- ✓ Exposure of rain and water,
- ✓ Fell down of device or harmed outer cover,
- ✓ Serious performance fall on the device,
- ✓ Depending on the instructions stated in manual, if your device not working properly

Contact with your authorized service in such terms.

#### Maintenance on your own

Do not try to fix the device on your own. Removal of cover may end up with electricity shock. In case of any defect or malfunction, contact with your dealer or with authorized service. All the technical interventions have to be done by technicians of company. Device must be cleaned up with a dry fabric. No-chemicals are allowed for cleaning

#### Transportation

Device must be carefully transported avoiding all physical bump, stroke and possible fluid entry. Malfunctions that caused by improper transportation is not under warranty.

#### Human and Environmental Health

This device contains no chemical or biological elements that could harm human condition.

### General Features

- ✓ Advanced smoke detection algorithm that minimizes false alarms
- ✓ Rejection of transient signals that can be detected as alarms
- ✓ Adaptive intelligent protection by constantly sampling the environment
- ✓ Dust algorithm and warning to understand that it is getting polluted and unable to detect
- ✓ Easy to clean smoke chamber
- ✓ NC alarm Dry contact output
- ✓ Two leds used for status indicators
- ✓ 15s start time
- ✓ Compatible with TFA-0120 Universal Detector Base.

### Technical Features

Power Input	10V(min) – 18V(max)
Average Current Consumption	10mA (@12V)
Contact Output	NC 1A-10W
Humidity	95% RH max
Dimensions (mm)	Ø110, h42
Housing Material	White Color, UV-added ABS Plastic
Used Cable Cut	0.4mm <sup>2</sup> ~ 1.5mm <sup>2</sup>
Weight (incl. Base / excluding base)	184 gr / 126 gr
Start Time	15 sn

### Indicator Leds

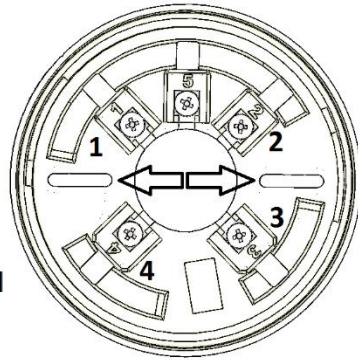
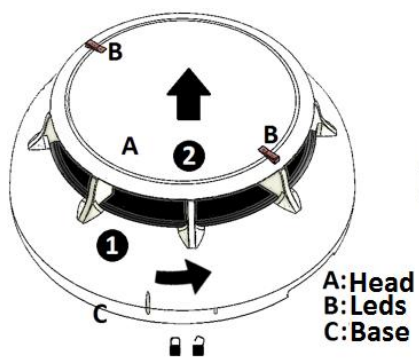
	Blue Led	Red Led
When the unit is first energized for 15 s, while sampling the environment	Blinks for 5s period	X
Any error condition (dust or power failure)	Blinks for 1s period	X
In normal operating condition	Blinks for 20s period	X
In alarm condition	X	It is constantly lit

### Terminals

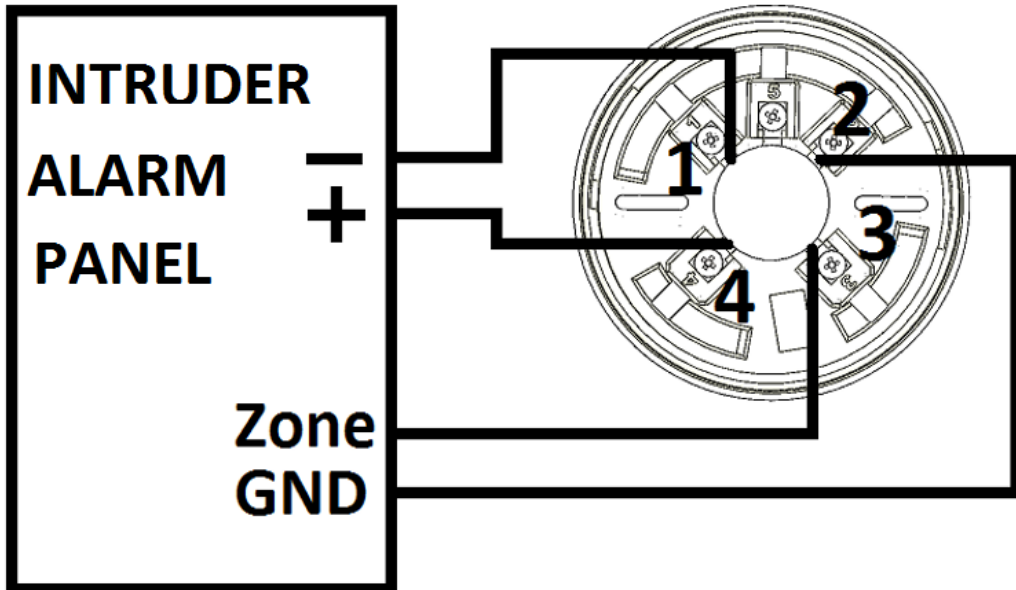
Number 1	Negative (-) power input
Number 2	Alarm panel ZONE GND
Number 3	Alarm panel ZONE input
Number 4	Positive (+) power input
Number 5	Earth connection

## Mounting and Connection

1. Remove the head of the detector by pulling it upwards (2) by turning it (1) up to the short line in the direction of the counterclockwise direction as seen from the base.
2. Mount the base using the 2 mounting locations shown.



3. Make the cable connection according to the following diagram. Direction is important in connection. Connect the (+) supply of the alarm panel to the number 4 and the (-) supply to the number 1. Connect the contact leads to the foot of the detector number 2-3.
4. Replace the detector head. Make sure the line on the head matches the long line on the base.
5. Give the detector power from alarm panel. In the absence of an alarm, the LED on the detector indicates that it is operating with a blue color for approximately 20 seconds. (the first 15 seconds a blue LED lights up in the detector for 5 seconds).



## Test

Observable smoke flow must be provided to obtain accurate results.

For the smoke test, allow the smoke to enter the smoke detection chamber for at least 1 minute with a flammable material or a test aerosol. When enough amount of smoke enters the chamber, the LED illuminates and reports the alarm.

1. Remove the smoke source when the alarm condition is reached.
2. Check that the red LEDs are lit continuously. Reset the detector on the panel.
3. If the detector does not give an alarm within 1 minute, the detector should go to service.
4. The system can be activated after the test has been performed.

CE

1922

**Bilgi Elektronik San. ve Tic. A.Ş.**  
Dudullu OSB 1. Cad. İsmet Tarman İş Merkezi  
No:1 Kat:2 No:32 Ümraniye / İstanbul

**17**  
**1922-CPD-0874**

EN 54-7:2000; EN 54-7:2000/A1:2002; EN 54-7:2000/A2:2006  
Point type smoke detector (scattered light)  
TSD-5135

Technical data: see BİLGİ-TEC-170731-1 held by the manufacturer.

## Manufacture

**Bilgi Elektronik San. ve Tic. A.Ş.**

Dudullu Organize Sanayi Bölgesi 1. Cadde İsmet Tarman İş Merkezi  
No:1 Kat:2 No:32 Ümraniye / İstanbul / Türkiye

Telephone: +90 216 455 88 46 Fax: +90 216 455 99 06

Sales: [sales@bilgielektronik.com.tr](mailto:sales@bilgielektronik.com.tr)

Technical Support: [support@bilgielektronik.com.tr](mailto:support@bilgielektronik.com.tr)



\* 2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).