TSD-701 / ☐ NO ☐ NC

Ceiling Type Gas Detector

teknim®
Fire and Security Technologies

Mounting and User Manual

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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 0°C and +55°C

Relative Moisture: %0- 95 concentrated

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, further usage or possible wrong usage may cause other malfunctions. Contact with your authorized service in such terms.

INFORMATION RELATING TO USAGE ERRORS

Do not allow to change the opening or setting up your device by unauthorized persons. As a result of such a situation, your device can start working differently compared to the first case.

SECURITY CHECK

Please ask your dealer to check that the service is working properly and safe conditions.

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TO BE CONSIDERED AND CONSUMER CAN DO TO MAINTAIN, REPAIR AND CLEANING

- Do not attempt to repair the device yourself, because if you open the oven door or tampering can be exposed to possible electric shock or cause a malfunction of the device.

- If a fault occurs, please contact your dealer or authorized service center. Device technical intervention must be carried out by authorized service personnel qualified.

- The device should be cleaned with a damp cloth. Never spray, polish, do not use any chemicals such as detergents.

- Alcohol, thinner, cologne, sprays, lighter too intense, pungent cleaning agents do not mislead the device to false alarms and may cause deterioration of the detector. In addition, gas detection holes must be clean and dry.
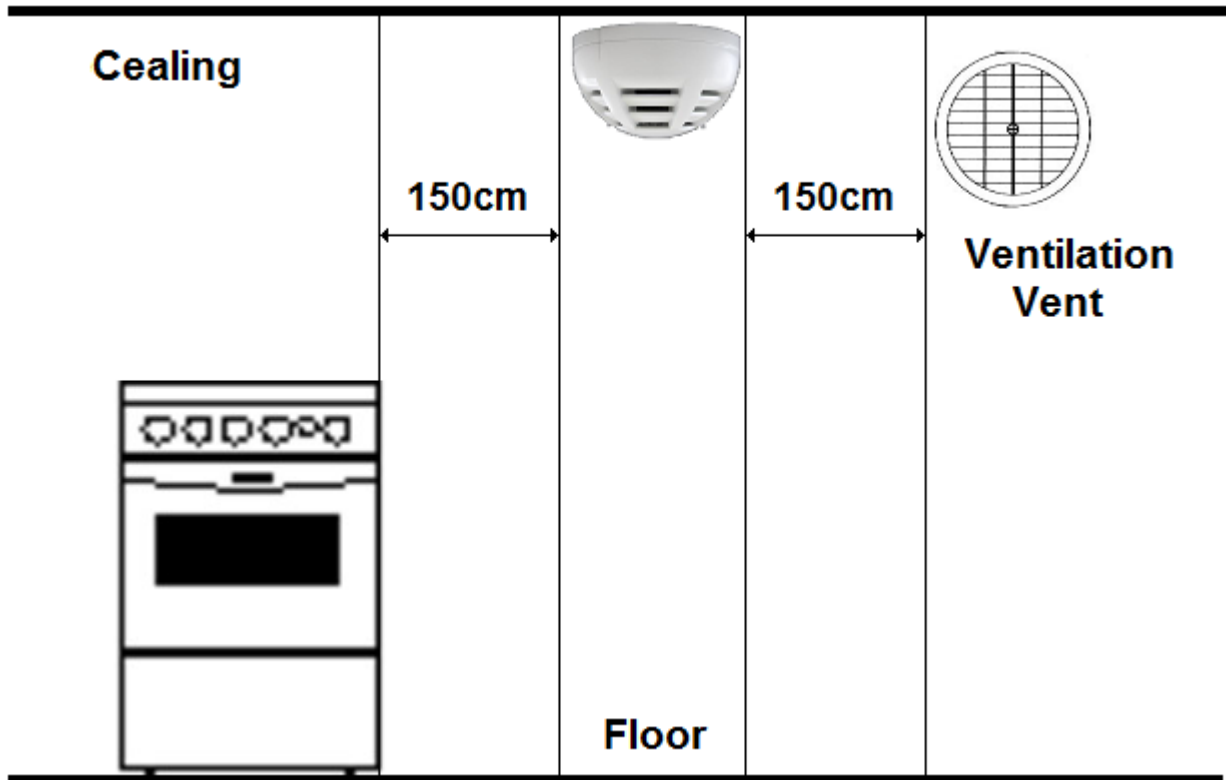
TRANSPORTATION

Device must be carefully transported avoiding all physical bump, stroke and possible fluid entry. Malfunctions that caused by improper transportation is not under warranty.
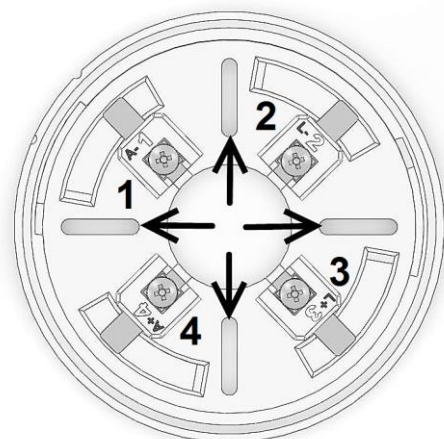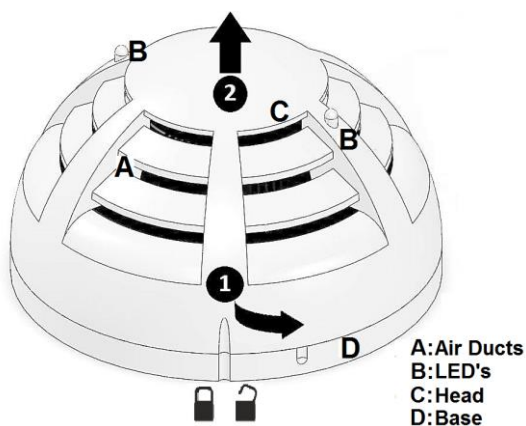
Model	TSD-701
Supply Voltage	12-24 VDC
Type	A
IP Rating	IPX2D
Compatible Standard	TS EN 50194-1
Contact Output	1 pcs, NC or NO
Startup Time	3 minutes
Normal Condition Led Color	Green
Error Condition Led Color	Yellow
Alarm Condition Led Color	Red
Alarm Level (Natural gas)	%10 LEL
Output Relay	30 V DC, 50mA
Alarm Output	Solid State Relay + Voice and flashing leds
Alarm Buzzer Sound Level	85 dB

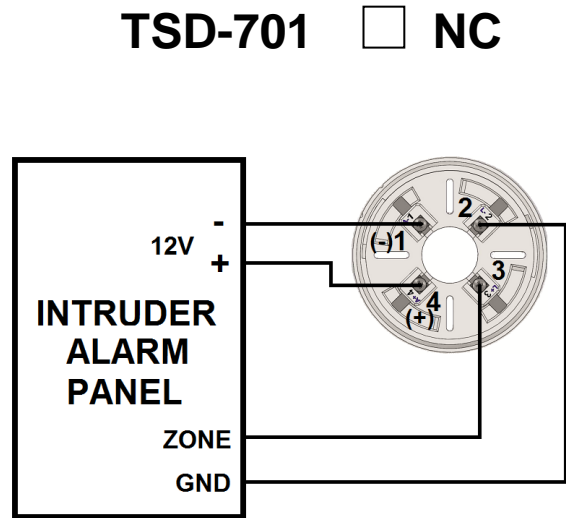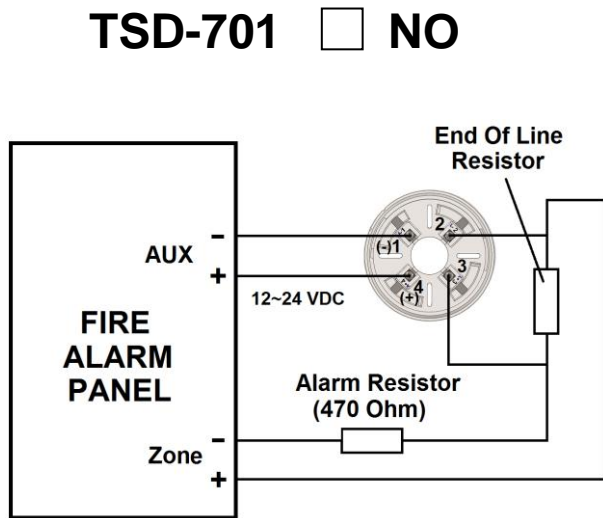## EQUIPMENT LOCATION SELECTION, INSTALLATION AND CONNECTION

1. To mount your device must be performed by authorized person.
2. Selecting the mounting location of the device:
    - From any device powered by natural gas will be far away at least 1.5 meters from the projection of a place.
    - In case of a gas leak it would be a likely place to be the most accumulation of gas.
    - The detector will **NOT** be over direct cooked meals, sink and toilet bowl (which should be at least 1.5 meters away).
    - The detector will **NOT** be adjacent Aspirator, fan and ventilation (which should be at least 1.5 meters away).

3. Remove the head of the detector attached to base by turning it counter clock wise until you reach the short line on the base (1), then pull it off (2).

4. Use at least 2 opposite ones from 4 of the screw holes on the base to fasten it.

A: Air Ducts
B: LED's
C: Head
D: Base

5. Do the wiring according to schematic shown below
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TSD-701 ☐ NO

End Of Line Resistor

AUX **−**

+

FIRE ALARM PANEL

12~24 VDC

Alarm Resistor (470 Ohm)

Zone **−**

+

(−)1 2 3 4 (+)

TSD-701 ☐ NC

12V **−**

+

INTRUDER ALARM PANEL

ZONE

GND

(−)1 2 3 4 (+)

6. Place the detector head back. Make sure the short line on head fits with long one on the base.

7. Energise the detector. If there is no alarm condition the LED on detector will be green color.

TEST
1. After mounting of detector is done and it's operating, gas exposed by a lighter to the convection window.
2. Detector turns to alarm mode in 30-40 seconds. It shut down the output and beeps continuously. Also LED turns green to red.
3. Gas alarm density has been adjusted due to TS EN 50194-1 criteria. Detector stops alarm condition and turns normal operating mode when gas density is decreased.
4. If the gas test is applied frequently, it shorten the life of detector reduces the sensitivity.
5. Detector that passed the test can be integrated to the system.

NOTES ON USING OF DETECTOR
- TSD-701 series detectors must be used for detecting the type of gas which is written on it.
- Average life of the detector and sensor are 5 years. It's recommended that all detectors be tested in every year.

LED INFORMATION

Visual markings

Red LED	Gas Alarm
Yellow LED	Sensor Error
Green LED Continuous	Normal Operation
Green LED Flashing	Sensor Prepares

Audible Alerts

Continuous Beep	Gas Alarm
Cut Alert Sound	Sensor Error

WARNING – IN THE CASE OF GAS ALARM

Stay calm and act as follow

- do not operate any switch
- do not use any kind of phone in the location of the gas leakage
- open windows
- stop the gas leakage if possible or leave the place and call a fire company

Model	Alarm Condition	Contact Output	Supply	Standby Current / Alarm Current	Operation Temperature (°C)	Startup Time	Dimensions (mm)	Body Material
TSD-701	%10 LEL	**NC / NO**	12 – 24 VDC	12 VDC / 100mA / 100mA 24 VDC / 50mA / 50mA	-10 ~ +55	3 Mins	Ø110, h50	White Color ABS

MANUFACTURER

Bilgi Elektronik San. Ve Tic. A.Ş.

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