



## GZD Series ALARM SYSTEMS GAS DETECTION INSTALLATION MANUAL

www.edselectronic.com

### WARNING

- Keep the instructions for use, follow all warnings, follow all procedures and instructions.
- Do not approach the battery with fire.
- Do not reverse voltage.
- Do not short circuit.
- For good performance, follow the instructions given in the installation section.
- If there is a problem with the operation of the device, immediately disconnect the power supply and call the authorized service.

Technical specifications are subject to change without prior notice.

**EDS Elektronik Destek San. ve Tic. Ltd. Sti.**  
Meclis Mah. Teraziler Cad. Hayran Sk No: 4 34785  
Sancaktepe / İstanbul / Turkey  
+90 216 528 45 00 eds@eds.com.tr



Scan this code with your smartphone to visit  
www.edselectronic.com

### 1 SPECIFICATIONS

Model	GZD01	GZD03	GZD05
Environmental class	II indoor		
<b>Electrical</b>			
Operating voltage	12V DC ± %10	220V AC ± %10	12-24V DC ± %10
Voltage output	12V DC connector		12-24V DC connector
Relay contact output	1A/12V(COM,NC,NO) / 125V AC 0.6/30V DC, 2A		(COM,NC,NO) 2A@24V DC/ 1A@120V AC
<b>Sensor</b>			
Sensor type	Semiconductor		
Sensor life	5 years		
Warm-up time	45 sec.		
Response time	<10sec.		
Lower explosion limit	8LEL		
Protection area	50m <sup>2</sup>		
Fuse	Automatic		
<b>Indications</b>			
Audio warning	Buzzer 85dB		
Visual warning	System operating	Green LED	
	Alarm	Red LED	
<b>General</b>			
Housing material	ABS Plastic		
Housing shape/Color	Standard / White		
Power consumption	2.5W		
Operating temperature	-10°C~+50°C		
Operating humidity	%95RH		

2

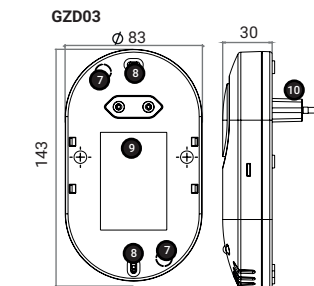
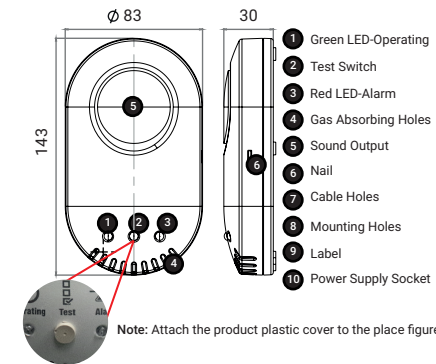
Protection class	IPX2D		
Dimension (HxWxD)	143x83x30mm		
Weight	140g	156g	140g
<b>Certification</b>			
	GZD01	GZD03	GZD05
Certification body	TSE	-	-
Certification no	002749-TSE-01/01	-	-
Standard no	TS EN 50194-1	-	-
Year of manufacture	The year and week of manufacture is included in the first four digit of your product serial number (located on the product identification label)		
Manufacturer	EDS Elektronik Destek Sanayi ve Ticaret Ltd. Meclis Mah. Teraziler Cad. Hayran Sk. No: 4 34785 Sancaktepe / İstanbul / Turkey		
Recycle			

In terms of monitoring of technical developments, technical specifications may change without notice.



3

### 2 PHYSICAL



4

### 3 CONNECTION

#### Electrical Connections

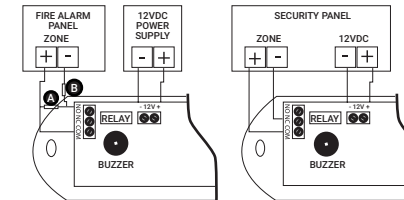


Figure 1  
GZD01 Connection diagram

Figure 2  
GZD01 Connection diagram

- Power connection of the detector, from a panel or a power supply by the double ribbed cable which has Radius of 1.5 square millimeters.
- Double ribbed cable connected to device relay output terminal by sending alarm signal.
- For using relay outputs (NC&NO), read instruction manual of panel. According to the instruction manual of panel, you may use suitable alarm Resistor (B) or end of line resistor (A), for the relay output connections. Connection Schemas are Figure 2 and Figure 3
- For suitable resistors and connection schemas of panel, look inside instruction manual of panel.

#### Outdoor Horn and Parallel Warning Lamp Connection

- When there is a requirement for sound power and high sound level warning, GZD01 could be connected to these devices through voltage output and contact relay.

If more than one GZD01 device will be used there will be need for warning device with light to receive warnings from other locations.

- Output voltage is 12 V DC. Moreover, Parallel Warning Lamp could be connected to the gas detector's outdoor sound indicator connection output.
- To the (+) end connect Vout (+) terminal, (-) end, connect Vout (-) terminal as shown in the Figure 3.
- If the device will be integrated to a station, proceed with the station instructions.

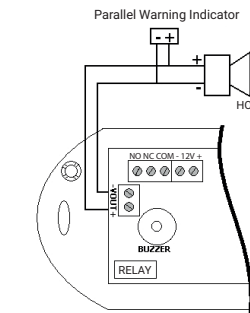


Figure 3

5

### 4 MOUNTING

- Attach the plastic cover included in the package to the place indicated in the figure (2).
- Installation GZD01 should be done with 2pcs of 6mm wall plugs and 2pcs of 3.5x30mm screw.
- Take off the plastic cover during the test, put it back on after the test.
- Install GZD01 by using mounting holes and gas absorbing holes which refers to the base of the room, smooth surface on the wall.
- Install wall plugs and bottom part of plastic cover (8).
- Make suitable cable connection.
- Place upper part of plastic cover, gas absorbing holes refers to the base.
- After power up, push test switch (2) and test gas detector.
- Pushing test switch lights red LED and buzzer.
- Installation of the device should be made as shown in figure (4/5).

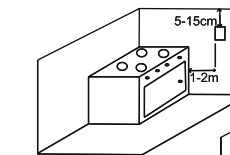


Figure 4  
Natural gas

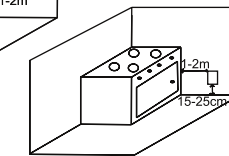


Figure 5  
LPG

#### Mounting Warning

- Methane gas is lighter than air, it will moves higher in the room, install the detector due to the Figure 4.
- LPG exists in lower side of the room, install the detector due to Figure 5.
- Install detector away from fans and air absorbing equipments.

6

7

## 5 OPERATION OF THE DEVICE

- After power connection power LED(green) turns on.
  - System begins operating. If the concentration of gas exceeds LEL, in 10 seconds, buzzer warns by sound and alarm LED(red) blinks.
  - During the concentration of gases above LEL, detector gives alarm, if the concentration reduces under LEL, system immediately returns normal condition and detecting concentration of gases again.
- Note:** Detector storage life is 5 years. After 5 years sensor should be replaced. Please contact with your authorized service provider to replace the sensor after 5 years. Detector should be replaced by authorized officers.

### Alarm Conditions

Existing gases have explosion and sparking limit concentration, this limit called LEL(Lower Explosion Limit). LEL of natural gas is %5 volume, LPG's LEL is %2,1 value. GZD01 detects gas leakage under these limits, 1/5 value of these limits and warns by alarm led or sound.

### In Alarm Situation

- Stay calm. Do not touch any sockets or switches. Do not use any electrical devices. Do not smoke. Turn off all gas valves. Immediately evacuate the place, if you don't know source of gas leakage.
- Do not interrupt any electrical device for stopping alarm sound. Inform authorized service provider about gas leakage. If the natural gas blazing up, first turn off all gas valves, otherwise fires don't extinguish. If the LEL of gas reduces under alarm level, detector turns normal condition.
- Do not open or make changes on detector, except making suitable cable connections. Adjustment of detector must be done by authorized technical services. Alcohol and its' steams, sprays, saturated smoke, lighter gas, strong smell of cleaning chemicals confuses and giving wrong alarm by detector.

## 6 TEST

- While green LED turns on, close up a lighter to the gas absorbing holes, push gas button for a minute. If the detector gives alarm by red LED blinking and by sound, test succeeded.
- Repeat this test every month.
- Unless management and supervision regarding the device are ensured by a person responsible for safety of the devices, this device isn't designed to be used by physically and mentally disabled people (including children) or people who are lack of experience and knowledge.
- Children must be supervised in order to ensure keeping them away from the device.

## 7 OPERATING AREAS

- GZD01 gas detector operating areas are places that have consumption and stockpiling of Natural Gas and LPG which are houses, offices plants, kitchens, bathrooms, heating plants or cisterns, stairwells, and anywhere gas leakage could occur. Moreover, it could be used in caravan or ship if it supports 12V DC.

## 8 CAUTIONS

- Ventilate place and do not smell any gas leakage suitable cable connections. Adjustment of detector must be done by authorized technical services.
- Alcohol and its steam, sprays, saturated smoke, lighter gas, strong smell of cleaning chemicals causes false alarm.
- Use wet packs for cleaning outside of detector. Never use spray or chemicals.

## 9 RECYCLE

You could send your old devices back to our company for free recycling.



The above symbol indicates that this product and / or battery must not be disposed of with household waste.

When your device has reached the end of its useful life, contact your local authority for disposal and recycling options, take it to a collection point for the recycling of electrical and electronic equipment, or hand it over to EDS Elektronik.

This product does not contain harmful or prohibited substances specified in the Regulation on the Control of Waste Electrical and Electronic Equipment issued by the Turkish Republic Ministry of Environment and Urbanization.

Complies with WEEE regulations.

### European Union

The above symbol means that your product and / or battery must be disposed of separately from household waste in accordance with local laws and regulations. When this product has reached the end of its useful life, hand it in at the collection point indicated by your local authority. The separate collection and recycling of your product and / or battery at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

## 10 WARRANTY CERTIFICATE

- The terms of the warranty is valid for products sold in Europe Union.
- Failure to occur during loading, unloading and shipment after delivery of the goods is not covered by the warranty.
- Damage, malfunction and information services caused by operating errors are not covered by the warranty.
- Damage and malfunctions due to low or high voltage, faulty electrical installation, voltage other than the voltage indicated on the product label are not covered by the warranty.
- Failures and damages resulting from natural disasters (earthquake, flood, etc.), fire and lightning are not covered by the warranty.
- The warranty is void if the document is tampered with and the original serial number is removed.

## WARRANTY CONDITIONS

1. The warranty period starts from the delivery date of the product and is for 1 year.
2. The product is completely under the warranty scope of our company including all the pieces.
3. In case of the product's breaking down within the warranty period, so the repair period is added to the warranty period. The maximum repair period of the product is 20 working days. This period starts from the notification date of the product's failure to the service station and in default of the service station, so one of those as the product's seller, dealer, agent, representation, importer or importer-producer. If the product is not troubleshot within 10 days, the importer-producer or importer must assign another product within similar properties to the use of the consumer till the product's repair is completed.
4. In case of the product's breaking down within the warranty period either due to material and labor or mounting failures; then the repair shall be made without requesting any charge as labor cost, shanged part fee or under any name.
5. Despite the consumer uses the repair right;

5.1. Since the product is delivered to the consumer and provided that being within the warranty period, if the same failure repeats more than 2, or the different failures occur more than 6, or the total elements of the different failures exceed 6 times with in the specified warranty period in 1 year, as well as these failures perpetuate not to benefit from the product,

5.2. If the maximum period required to repair is exceeded,

5.3. In the situations of the determination that the failure's repair is impossible with a report to be issued by the firm's service station and in the unavailability of the firm's service station, respectively by one of the seller, dealer, agent, representation, importer or importer-producer; the consumer can request the free change of the product, refund or price discount at defection rate.

6. The failures arising from the use of the product contrary to the particulars in the user's manual are outside the scope of warranty.

7. For the problems to be arisen regarding the Warranty Certificate, you can apply to the Directorate-General of Consumer Protection and Market Surveillance of the Ministry of Customs and Trade.

### Manufacturer title / Service address:

EDS Elektronik Destek San. ve Tic. Ltd. Şti.  
Meclis Mah. Teraziler Cad. Hayran Sok.  
No:4 34785  
Sancaktepe/İstanbul/Turkey  
Tel: 0216 528 45 00 Fax: 0216 314 17 80  
e-mail: eds@eds.com.tr www.eds.com.tr

## MANUFACTURER

Title : EDS Elektronik Destek San. ve Tic. Ltd. Şti.  
Address : Meclis Mah. Teraziler Cad. Hayran Sok.  
No:4 34785 Sancaktepe/İstanbul/Turkey.  
Phone : 0216 528 45 00  
Fax : 0216 314 17 80  
E-mail : eds@eds.com.tr - www.eds.com.tr

### Producer

### Stamp / Signature:



## SELLER COMPANY

Title :  
Address :  
Phone :  
Fax :  
E-mail :  
Date and Number of Invoice :  
Delivery Date and Place :

### Seller

### Stamp / Signature:

## PRODUCT INFORMATION

Type of Product : Alarm Systems  
Brand : EDS  
Model : GZD Series  
Serial No and Bandrol :  
Warranty Period : 2 years  
Maximum Repair Time: 20 days  
Product LifETIME : 5 years  
Delivery Date and Place :