

# **GAS Detector - Wired**

Model: GDWRD
Manual



We extend a warm welcome to you on becoming a part of the Copper Connections family.

Our service support Engineers shall be working hard through our channel partners to ensure your satisfaction with the product and after sales services.

We welcome your feedback / query at service@copperconnections.com

#### **Features**

#### **Detects Natural GAS / LPG**

It detects and alarms in case of presence of Natural GAS as well as LPG gas beyond a certain density.

#### **Sensitivity Adjustment**

The sensor has a preset to adjust its sensitivity.

#### **Manual Magnetic Test Sensor**

It has a Magnetic Sensor for testing working of the Sensor. Bring any Magnet close to the RED LED and the GDWRD will sound buzzer indicating proper working of the unit. This test should be periodically carried out to confirm that the unit is working. Use of Magnet avoids any false alarm which could happen if a manual switch is given.

Operates on 12V DC – Although it can be connected to a 12V DC 0.5A Adapter to operate as Stand Alone unit.

#### **Audio Alarm**

When GAS is detected, an audio indication is given by the sensor.

#### **LED indication for Supply and Alarm**

When 12V DC supply is present, a Green LED remains ON.

When GAS is detected, Green LED turns RED.

### NC or NO type contacts

It can be connected to a Burglar Alarm System at the NC wired Zone or NO wired Zone.

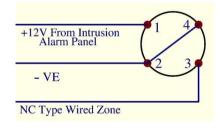
In default the unit is configured for NC type wired zone.

#### Installation

- Install the sensor nearest to the expected source of GAS. For example: GAS Stove, GAS Cylinder & GAS pipe joints. It should be placed at 1 feet from ground for detecting LPG (which is heavier than air) and at height not more than 1 feet from the Ceiling for detecting CNG (which is lighter than air).
- Slide open the bracket from the back of the sensor.
- Fix the bracket on wall with 2 screws.
- On connecting 12V DC supply to Terminal no 1 & 2, the 2 LEDs (Red & Green) would glow. After 3 minutes, the Red LED would switch OFF. Now the unit is ready for use.
- -Whenever GAS is sensed by the unit, buzzer would sound and the RED LED would glow.

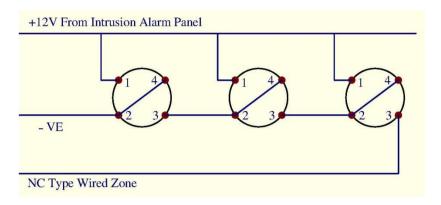
### Installing one GDWRD with Intrusion Alarm Panel

- The 4 Screw Type Terminals of the unit are connected as shown below:



#### Installing more than one GDWRD with Intrusion Alarm Panel

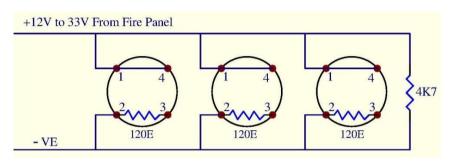
- Multiple Sensors can be connected in series with 2 wires and one single wire from the last Sensor to the Intrusion Alarm Panel, as shown below:



#### Installing GDWRD (optional modified) with Conventional Fire Alarm Panel

- Optional GDWRD with modification can be used with conventional Fire Alarm Panels.

  With modification, GDWRD is converted to work from 12V DC to 33V DC and has NO type contacts.
- Connect Resistance between Terminals and connect all the Sensors in parallel with 2 wires as shown below:



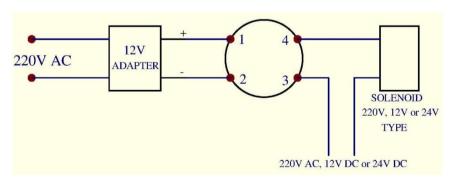
Sensitivity Adjustment: Rotate Variac at R12 clockwise to increase the sensitivity and Anti Clock wise to reduce.

**Precautions:** . Do not install it in windy surroundings or in dusty surroundings.

- . Clean the Sensor slots openings every 6 months.
- . Test the Sensor every 3 months by pressing the TEST switch. If defective, replace or get it repaired.

#### Installing it as a Stand Alone unit with option to connect to a Solenoid for disconnecting GAS supply.

A Solenoid of 220V, 12V or 24V type can be connected to it as shown in the diagram below, to disconnect GAS supply on detection of GAS. In this case an Adapter of 12v 0.5A needs to be additionally connected to give supply to GDWRD



## **Technical Specifications**

Power Input	DC 12V
Standby current	80 mA
Alarm current	140 mA
Detection GAS	LPG, CNG & Coal GAS (Methane +
	Hydrogen)
Alarm Density	Calibrated at 1000ppm of LPG (70%
	Butane + 29.5% Propane) and 5000ppm of
	CNG (95% of Methane)
Buzzer Level	70 db at 1 m
Operating Temperature	-10°C to +50°C
Operating Humidity	90% RH Maximum

Alarm Output	NC contacts – Can be changed to NO Type
Dimensions	103mm Dia & 50mm Height

#### **Terms of Warranty**

Copper Connections Pvt. Ltd warrants that this product is manufactured under stringent quality standards, making it free from defects in material and workmanship, as per the following terms and conditions:

- The limited warranty for the system is valid for a period of twelve months from the date of purchase or fifteen months from the date of manufacture which
  ever is earlier.
- The limited warranty extends only to the original consumer/ purchaser of the product and is not assignable or transferable to any subsequent purchaser/ end user.
- 3. During the limited warranty period, Copper Connections Pvt. Ltd or its authorised service network will repair or replace, at Copper Connections Pvt. Ltd option, any defective product or parts thereof with a new or factory rebuild replacement items and return the product to the consumer in working conditions. No charge will be made to the consumer for either parts or labour in repairing or replacing the product. All replaced parts shall becomes the property of Copper Connections Pvt. Ltd.
- 4. Repaired product will be warranted for a balance of original warranty period.
- 5. Upon request from Copper Connections Pvt. Ltd or its authorised service centre, the consumer must provide purchase receipt or other information to prove the date and place of purchase.
- This Burglar Alarm System (like any other commercial or residential alarm system) does not guarantee protection against burglary, fire or other emergency because of variety of reasons.
  - A properly installed and maintained system may reduce the risk of a burglary, robbery, fire or other events, but it is not an insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.
- 7. In no case shall seller be liable to anyone for any consequential or incidental damages for breach of this warranty, even if the loss or damage is caused by the seller's own negligence or fault. Consequently, seller shall have no liability for any personal injury, property damage or other loss based on a claim "The product failed to give warning / alarm". However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this warranty or otherwise regardless of cause, seller's maximum liability shall not in any case exceed the purchase price of the product.
- 8. The consumer shall have no benefit or coverage if any of the following conditions are applicable:
- a) The product has been subjected to abnormal use, abnormal condition, improper storage, exposure to excessive temperature, moisture, dampness or fire etc., unauthorised modifications, unauthorised connections, unauthorised repairs.
- c) Copper Connections Pvt. Ltd was not notified by consumer of the alleged defect or malfunction of the product during the limited warranty period.
- c) The product was used with or connected to equipment not fit for use with Copper Connections Pvt. Ltd system or used in other than its intended use.
- d) INCASE HIGH VOLTAGES APPEAR ON EARTH.
- e) THE DAMAGE IS CAUSED BY LIGHTENING OR DUE TO SPIKES/ SURGES/ HIGH VOLTAGES FROM AC MAIN SUPPLY.
- 9. The consumer may contact the authorised dealer to call the service personnel for carrying out repairs or maintenance and the same would be attended within a reasonable response time assigned to the dealer. The consumer will be billed for parts or labour charges not covered by this limited warranty.
- The consumer will be billed for parts or labour charges not covered by this limited warranty.
- 11. If the product is brought to Copper Connections Pvt. Ltd for repairs, after the warranty period, Copper Connections Pvt. Ltd normal service policy shall apply and customer shall be charged accordingly.
- 12. In no event shall Copper Connections Pvt. Ltd or their authorised dealer be liable for special or consequential damages or any delay in the performance of this warranty due to causes beyond their control. Copper Connections Pvt. Ltd shall not be liable for incidental or consequential damage or a loss of anticipated benefits or profits, loss or impairment of privacy of conversation, work stoppage or loss or impairment of data arising out of the use or inability to use the product. Company's liability in no event and under no circumstances shall exceed the price paid to the company for goods stated in the invoice.
- 13. Copper Connections Pvt. Ltd neither assumes nor authorises any authorised service centre or any person or entity to assume for it any other obligation or liability beyond what is expressly provided by this limited warranty. All warranty information, product features and specifications are subject to change without prior notice.
- 14. Any dispute arising out of this warranty shall be subjected to jurisdiction of the arbitrator within the city of Delhi.
- 15. The decision of Copper Connections Pvt. Ltd on defects, damages etc shall be final and binding on the parties and no dispute regarding this, could be agitated before any civil court.
  Ver: GDWRD-4

An ISO:9001:2008 Certified Company

# Copper Connections Pvt. Ltd

195-196, DSIDC Complex, Okhla Industrial Area, Ph-1, New Delhi-110020. Ph: +91-11-40625555 www.copperconnections.com