GAS DETECTOR
GA0030
Product Manual

Introduction

Since Formaldehyde and TVOCs are highly toxic and carcinogenic to human, it is necessary to monitor gas leakage or concentration to ensure safety as well as our well-being, especially in places like house, recently-finished construction, storehouse etc.

This Gas Detector can be utilized for verifying concentration of Formaldehyde and TVOCs within a few minutes. The product is easy to use with only one button to start analyzing.

Product Description

<table>
<thead>
<tr>
<th>Model Number</th>
<th>GA0030</th>
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</thead>
<tbody>
<tr>
<td>Detects</td>
<td>Formaldehyde, TVOCs</td>
</tr>
<tr>
<td>Detection Technology</td>
<td>Semi-conductor Sensor Technology</td>
</tr>
<tr>
<td>Detection Range</td>
<td>0~9.999 mg/m³</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.001 mg/m³</td>
</tr>
</tbody>
</table>

Tips
Beware of the +/- poles of the batteries

Safety Precaution, Consideration

- Do not drop the device.
- Do not let the device get wet.
- Ensure batteries are correctly installed.
- Do not use near fire or high temperature locations.
- Please take out the batteries when device will no longer be used for a long period of time.
- Product will shut down automatically when battery power is low.
- Do not disassemble the product.
- Please handle the battery waste properly according to local laws and regulations.
- Avoid straight wind flow from electrical appliances like electric fans.
- Avoid contact with ethanol, perfume or gas like H2S, CO, SO2 and smoke:
  To prevent disturbance on the sensor of the detector with high precision.
- To locate average concentration in an area take several readings from different spots and take the average.
- Do not contaminate or block the detection window to maintain high sensitivity.

Reference

TVOC Concentration
- TVOC Concentration < 0.1 mg/m³ → Green light turns on.
- 0.1 mg/m³ ≤ TVOC Concentration < 0.3 mg/m³ → Yellow light turns on.
- 0.3 mg/m³ ≤ TVOC Concentration < 3.888 mg/m³ → Red light turns on.
- TVOC Concentration ≥ 3.888 mg/m³ → Red light flashes.

Formaldehyde Concentration
- Formaldehyde Concentration < 0.1 mg/m³ → Green light turns on.
- 0.1 mg/m³ ≤ Formaldehyde Concentration < 0.3 mg/m³ → Yellow light turns on.
- 0.3 mg/m³ ≤ Formaldehyde Concentration < 2.0 mg/m³ → Red light turns on.
- Formaldehyde Concentration ≥ 2.0 mg/m³ → Red light flashes.

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**Operation**

**Calibration (only for the first time use)**

1. Press and hold the On/Off button for a few seconds.
2. Device will start up.
3. The screen will display 120-second countdown.
4. Keep the product in outdoor fresh air for 120 seconds.
5. Press and hold the On/Off button until the green light is flashing.

**Power On**

1. Press and hold the On/Off button for a few seconds.
2. Device will start up.
3. The screen will display 200-second countdown.

**Detection**

1. After 200-second countdown, results will display on screen.
2. Indicator lights will turn on.
3. Press the On/Off button to turn on/off the backlight.

**Switch Off**

1. Press and hold the On/Off button for a few seconds.

**Indicator lights definition**

1. **Green light**: good air quality.
2. **Yellow light**: gas concentration is out of limits, ventilation is needed.
3. **Red light**: gas concentration is severely out of limits, a comprehensive indoor air cleanup is recommended.
4. **Red light twinking**: gas concentration is out of detection range, please vacate the premises immediately.

**FAQS**

1. **Why does the detector have a very high power consumption?**

   Ans: A lot of complicated operations is carried out by the device during the process to guarantee the detection accuracy and sensitivity, and thus large power consumption is necessary.

   Please turn off the product to prevent waste of electricity when detection ends.

2. **How big is the “detection area”? How many square meters specifically?**

   Ans: 1. For area which is less than 50 m², 1~3 locations test should be conducted.

   2. For area which is between 50~100 m², 3~5 locations test should be conducted.

   3. For area which is larger than 100 m², at least 5 locations test should be conducted.

   4. All the detection locations should be distributed on the diagonal or in a quincunx form.

   5. Detection locations should be kept away from air vent, and at least 0.5m distance from walls.

   6. Height of detection locations is about 0.5~1.5 m, comparable to height of an adult.

3. **What’s the standard value of TVOC and formaldehyde concentration?**

   Ans: 1. TVOC: ≤ 0.6 mg/m³. (Refer to GB/T 18883-2002 and 50325-2001 II)

   2. Formaldehyde: ≤ 0.1 mg/m³. (Refer to GB/T 18883-2002)