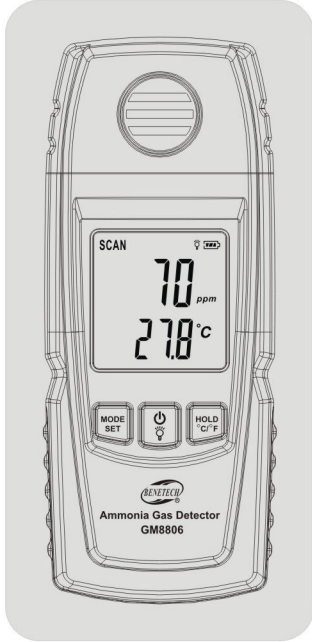




MODEL: GM8806

## Ammonia Gas Detector operation instruction



Version: GM8806-EN-02

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### A. Introduction

This portable unit adopting electrochemical test principle monitors the ammonia content in the air, is widely applied in industries of petroleum, chemistry, coal mining, fire control, public works, communication, food and poultry. It monitors the content of ammonia in the operative environment to secure the safety of the workers there.

Features:

1. Ammonia content detecting
2. Detecting mode selection among current value, maximum value and average value.
3. Alarm of over high/low ammonia content
4. High/low limits capable of private setup
5. LED backlight
6. Selectable of automatic turn-off or non-automatic turn-off
7. Switching between temperature units and environment temperature
8. Reading hold function
9. Zero point calibration

### B. Safety

For your safety please read this paragraph before operation  
"WARNING": Indicating that this operation may result in material danger to the operator.

#### ⚠ warning!

Please take the measure as following:

1. Do not put the battery into the water or humid environment .
2. Do not put the unit by the fire or heater.
3. Do not put the unit in the fire.
4. Take out the battery to avoid erosion resulting from the battery leakage if the unit is supposed not for operation for a long time.
5. In case there is any leakage of the battery please apart it far away from the fire to avoid explosion or being on fire.

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### C. LCD display

- ① Current value icon
- ② Maximum value icon
- ③ Average value icon
- ④ Data hold
- ⑤ Backlight icon
- ⑥ Battery volume icon
- ⑦ Gas content icon
- ⑧ Gas content unit
- ⑨ Temperature value
- ⑩ Temperature unit

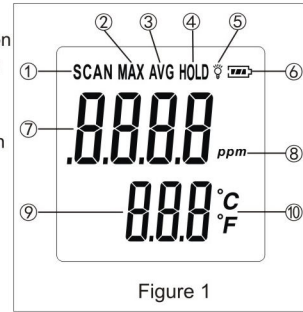


Figure 1

### D. Components

- ① Opening
- ② LCD
- ③ Mode switch and setup key
- ④ Power on/off & backlight key
- ⑤ Data hold & temperature unit switch

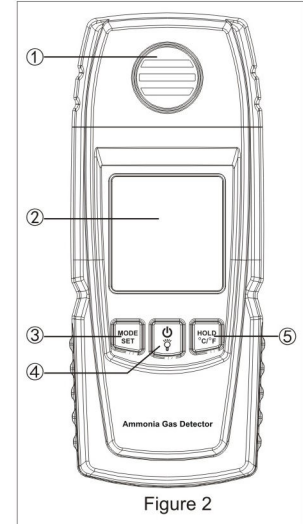


Figure 2

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### E. Operation instruction

- I. Power on: press the on/off key to turn on the unit
  - (1) Automatic power off mode: press the on/off key until the full display is on, then the low/high limits of the alarm appears, after that the unit enters into normal measure mode.
  - (2) Non-automatic power off: long press on the unit until the full screen display and followed by UOFF (indicating no automatic power off after power on), then low/high limits of the alarm appears, after that the unit enters into normal measure mode.
- II. Current value, maximum value, average value
  - (1) Current value: after entering into the normal measure mode, the upper LCD shows SCAN icon indicating the current value.
  - (2) Maximum value: press the MODE key, the unit display the maximum value of that from the beginning of turning on to the current with MAX character on the LCD.
  - (3) Average: press the MODE key again, the unit display the average value with AVG character on the LCD.
- III. Data hold
 

This will allow the unit to hold an value measured, press the HOLD key to hold the current value appears on LCD with HOLD character on LCD. Press the HOLD key again to exit this function.
- IV. Temperature unit switch
 

Long press on the switch key leads to switch of the temperature unit between the Celsius and Fahrenheit system.
- V. Low/high gas content limits setup
  - (1) Low limit setup(25ppm as default): under the state of normal measurement, long press on the SET key until the Lo character flash under the bottom of the LCD, then press the SET key to increase the setup value for low limit while press on the HOLD key to decrease.
  - (2) High limit setup(50ppm as default): under the state of low limit setup, long press on the SET key until the Hi character flash under the bottom of the LCD, then press the SET key to increase the setup value

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- for low limit while press on the HOLD key to decrease.
  - (3) Confirm : long press again on the SET key will confirm the setup above and enter into normal measurement mode again.
- Notice: under the Low/high alarm limits setup state, if there is no further operation on the key without confirmation of the setup, the unit will return to the normal measurement state and the preset operations before will be invalid.
- VI. Alarm sound
 

If the gas content is below the low limit preset, the unit beeps constantly. If the gas content is higher than the high limit preset, the unit beeps in a short and rapid rhythm.
  - VII. Backlight
 

In operation, short press on backlight key to activate the backlight function with the icon "☾" appears on the upper LCD and press on the backlight key again to deactivate this backlight.
  - VIII. Power off:
    - (1) Manual power off: long press on the "⏻" key until OFF appears.
    - (2) Automatic power off: if there is no further operation on the key, the unit will be turned off automatically within 30 minutes.
  - IX. Replacement of battery
 

"☾" icon indicates low battery and replacing the battery immediately. Take out the battery if the unit is supposed not in use for a long time.

### F. Zero calibration

Put the unit into the environment of air without ammonia and keep on pressing the MODE key to power on the unit with pressing on the on/off key to enter into zero point calibration. In the content zone the first two digits denote the calibration value "00" and the last two digits denote the real gas content, and the CAL appears in the temperature zone.

1. Manual calibration: In case that the real gas content is steady, long press on the on/off key until a PASS appears on the LCD indicating calibration is done and

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- power off the unit.
  2. Automatic calibration: In case that on operation on the on/off key as described above, the unit will calibrates automatically 8 minutes later and exit the calibration to return to the normal measurement state and the temperature zone display the temperature value.
- Note: In cases of first time operation, or an operation after a long time, or operation in environment of dramatically changed environmental factors (for example the temperature or humidity changes sharply), the unit should be calibrated.

### G. Technical parameters

Gas detected	Nh3 content in the air
Range	0-100ppm
Resolution	1ppm
Minimum reading	1ppm
Maximum error	≤50ppm;±5ppm;(50-100)ppm:±10%
Response time	≤120s
Sensor type	Electrochemical ammonia sensor
Alarm	Sound alarm
Operating environment	0°C~40°C (32°F~104°F) ; 10%RH ~90%RH (Without condensation)
Powered by	2x1.5V AAA batteries
Size	55.7*29.9*135.5mm
weight	104g

Note: the AVG value is the average result after 20 times sampling at an interval of 0.9 seconds

Specific Declarations:  
Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence.  
We reserves the right to modify product design and specification without notice.



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