

MODEL: AR8500

# Ammonia gas detector

Instruction manual



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- 1.Explanation of the appearance ① 🖞 :ON/OFF ② Decrement button( ▼)
  ③ Increment button / backlight (▲♥) ④ MODE : Measurement mode button 5 The first siren (Blue indicator) 6 The second siren (red indicator) ⑦ Buzzer
- 8 LCD Display
- 9 Sensor
- 10 T / R: Temperature ID Battery compartment cover



#### 2. Product description:

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Ammonia analyzer is a continuous quantitative analysis of formaldehyde concentration apparatus, the apparatus using imported high precision electrochemical principle formaldehyde sensor, fast response speed, high precision, of its stability, good repeatability;

The apparatus is widely used in metallurgy, power plant, farms, mines, chemical, scientific research, medical, pharmaceutical, environmental protection and other fields.

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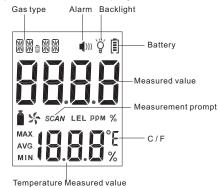
The concentration of ammonia in atmosphere	Human physiological reaction
5 ~ 10ppm	The nose may be aware of the smell.
20 ppm	Aware of the special smell of ammonia.
40ppm	A few people feel mild stimulation of eye.
100ppm	A few minutes of exposure caused by ocular and nasal quite stimulating.
400ppm	Cause throat, nasal cavity and upper respiratory tract acute stimulation.
700ppm	Exposure for more than thirty minutes may cause permanent damage to the eye.
1700ppm	Severe cough, wheeze thirty minutes can be fatal.
5000ppm	Severe pulmonary edema disease, a moment can be fatal asphyxia.

## 3. Characteristics of the instrument:

•Adopt imported abroad electrochemical sensor •Big screen for multiple parameters of LCD backlight display, visual display unit, gas concentration, working state

- •The two grade dual alarm settings, the outstanding audio sound alarm, voice of up to 80 dB
- •The service life of the sensor : 2years(it can be replaced)
- •Power supply : 3.7V Lithium battery •Battery service life : about 100 hours of continuous
- use (when the backlight is off). •Size :182\*66\*32(mm)

## 4. Explanation of the display



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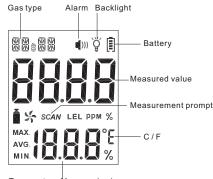
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## 4.Explanation of the display



Temperature Measured value

#### 5. Technical parameters:

Ammonia (NH3)
0-100ppm
0.1ppm
Less than $\pm$ 5% (F.S )
Less than 60 seconds
Less than 60 seconds
Less than $\pm$ 1%
Electrochemical principle, life for two years
3.7V Lithium battery
Large screen liquid crystal display
Acoustic, optical double alarm, can set the alarm value, an alarm sound is divided into 80 dB
-20 ~ 50 ℃
0-95%RH (Non Gel)

### 6.How to operate it

a. Push the cover downwards to open it and put new 3.7V Lithium battery.

b.Power on/off Press the "O" to power on c.Backlight On/Off

You can switch the backlight on or off by slightly touching the " g "

d.How to set up the alarming grade for the meter Switch the meter to the preset status of the grade 4 alarming-line by slightly touching the "MODE" button when the meter is in status of measurement" SCAN" and the "ALM "shows in the display; touch the Position shift button and Figure Adjusting button (0-9) to set up the data of the grade **4** alarming-line (if you touch the "MODE" button now , you would give up setting up the grade 4 alarming-line enters into the measurement status); touch the"MODE" button to save the setup value for the grade 4 alarming-line and switch the meter to the status for setting up the grade  ${\bf 2}$  alarming-line and "ALM"shows in the display .

Touch the position Shift button and Figure Adjusting button (0~9) to set up the data of the grade 2 alarming-line (if you touch the "MODE" button now , you would give up setting up the grade 2 alarming-line enters into the measurement status); touch the "MODE"

### 5. Technical parameters:

Detection of gas:	Ammonia (NH3)
Measuring range:	0-100ppm
Resolution:	0.1ppm
Basic error:	Less than $\pm$ 5% (F.S )
Response time:	Less than 60 seconds
Recovery time:	Less than 60 seconds
Repeatability:	Less than $\pm$ 1%
The principle of sensor:	Electrochemical principle, life for two years
Battery:	3.7V Lithium battery
Display:	Large screen liquid crystal display
To alarm:	Acoustic, optical double alarm, can set the alarm value, an alarm sound is divided into 80 dB
Working temperature:	-20 ~ 50 ℃
Working humidity:	0-95%RH (Non Gel)

### 6.How to operate it

a. Push the cover downwards to open it and put new 3.7V Lithium battery.

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Touch the position Shift button and Figure Adjusting button  $(0 \sim 9)$  to set up the data of the grade **2** alarming-line (if you touch the "MODE" button now you would give up setting up the grade **2** alarming-line enters into the measurement status); touch the "MODE" button to save the setup value for the grade  ${\bf 2}$ alarming-line and switch the meter to the status of 10 ppm calibration. Touch the "MODE" button slightly to exit 10 ppm

calibration and the alarming line of the meter is set up.

### e.Meter alarming

The meter alarming when the meter measurement value is less than the preset value . The buzzer alarming and the vellow indicator flickers when the meter measurement value is less than the value preset for the grade 4 alarming-line ; and the buzzer alarms and the red indicator flickers when the meter measurement value is less than the value preset for the grade 2 alarming-line. 7.Attentions:

1). This meter is a precise measurement apparatus. To avoid damaging the meter , keep it away from water and hot objects (more than 60).

2). If the meter will be measuring for a long time , please turn off the backlight to save power consumption and prolong the service life of the battery.

3).When" is displayed , the battery is fully ; the small black frame in the battery sign reduces as the battery power volume reduces. When """ "is shown the meter cannot work normally. Please promptly replace. First turn off the meter, then take out the unused battery and put new battery in.

4). The meter is automatically power off if no button is pressed in 10 minutes.

. 5).When the buzzer alarms , the measured value is less then the alarming-line you have set up ; so please take measures to protect people's lives and property.

button to save the setup value for the grade 2 alarming-line and switch the meter to the status of 10 ppm calibration. Touch the "MODE" button slightly to exit 10 ppm

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The meter alarming when the meter measurement value is less than the preset value . The buzzer alarming and the yellow indicator flickers when the meter measurement value is less than the value preset for the grade  ${\bf 4}$ alarming-line ; and the buzzer alarms and the red indicator flickers when the meter measurement value is less than the value preset for the grade 2 alarming-line. 7.Attentions:

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4). The meter is automatically power off if no button is pressed in 10 minutes.

5).When the buzzer alarms , the measured value is less then the alarming-line you have set up ; so please take measures to protect people's lives and property.

6). If you are not going to use this meter for a long period of time, turn off the meter and take out the batteries to avoid damage due to the battery oozing liquid. If you take out the batteries when the meter is on , the data preset for the grade 4 and grade 2 alarming-line will be lost; when the meter is powered on and enabled , the previous values preset for the grade 4 and grade 2 alarming will return . If you are going to save the values preset for the two grades of alarming lines , you must turn off the meter normally once.

8. Pay special attention to

The Sensing tip is high precision parts, When in use must be careful to protect, Don't dirty broke. This component cannot repair, not in warranty scope.





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