Formaldehyde Gas Detector AR820 Operation Manual

Version NO. AR820-0-1

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Introduction

AR820 household formaldehyde gas detector, which adopts imported advanced sensors, are of excellent performance, high accuracy and stability, and are able to implement continuous real-time detection. This type of detectors can be applied in household, offices and any other dwellings.

I. Product Specifications

1.Technical Specs

Technical Specs	
Measurement range	0～5.0 PPM
Resolution	0.01 PPM
Accuracy	±5%
Temp. Measuring Range	0℃～ 40℃/ 32℉～104℉
Temp. resolution	0.1℃/0.1℉
Temp. accuracy	±2℃
Humidity Measuring Range	10～ 95%RH
Humidity resolution	0.1%RH
Humidity accuracy	±5%RH

2. General Specs

General Specs	
Sensors	Electrochemical sensors
Detection method	Auto
Display	LCD screen
Power supply	3 AA batteries
Operating Temp.	0℃ ～50℃/32℉～122℉
Storage Temp.	- 20～60℃/ - 4～140℉

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Ⅱ. Product Drawings

1.Complete Machine View

① LCD display   ⑥ Radiator grille
② Buttons   ⑦ Position of probe
③ Main unit housing   ⑧ Battery cover
④ Base   ⑨ Fixed screw holes
⑤ Base nameplate   ⑩ External power

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2. LCD Screen
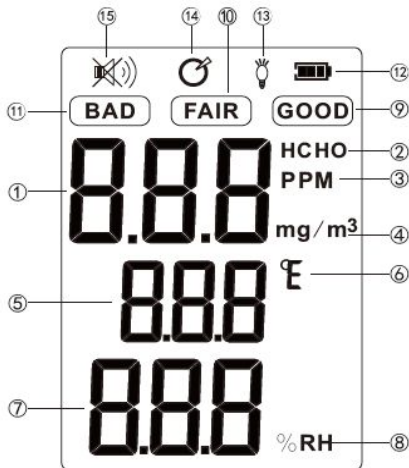
① Value display area
② Chemical name
③ Formaldehyde unit
④ Formaldehyde unit
⑤ Temperature value display area
⑥ Temperature unit
⑦ Humidity value display area
⑧ Humidity unit
⑨ Concentration within safety range
⑩ Concentration exceeds safety range
⑩11 Concentration reaches danger range
⑩12 Battery level PROMPT
⑩13 Back-light on symbol
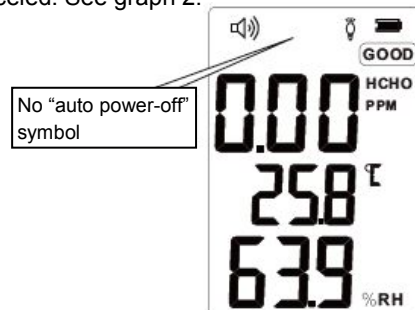⑩14 Auto power-off symbol
⑩15 Alarm PROMPT symbol

Ⅲ. User instruction
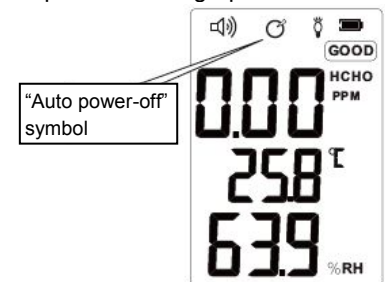
1.Turn-on or turn-off

① Turn-on: open the battery cover at the back, put 3 AA batteries into it, and then push " ⏻ "button to turn the unit up. LC whole display for 1s, and then enters a 10s process of system stabilizing. After that the LCD will be like graph 1.

Measured value of **formaldehyde**
Measured value of **temperature**
Measured value of **humidity**
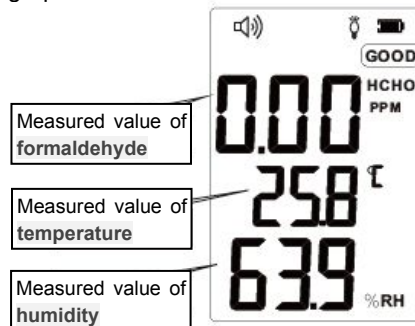
② Cancel auto power-off: when the unit is operating normally, touch and hold "💡"button，until the "auto power-off" symbol disappears. It shows that the auto power-off function is canceled. See graph 2.


No "auto power-off" symbol

③ Auto power-off: When the unit's auto power-off function is canceled, touch and hold "💡" button，until the "auto power-off" symbol is displayed on LCD. It shows that the unit will automatically shut down after 30min of non-operation. See graph 3.


"Auto power-off" symbol

④ Manual power-off: when the unit is operating normally, touch and hold "⏻" to turn off the unit.

2．Turn on or turn off back-light

When the unit is operating normally, press "💡" button to turn on or turn off the back-light. See graph 4.


"Back-light on" symbol
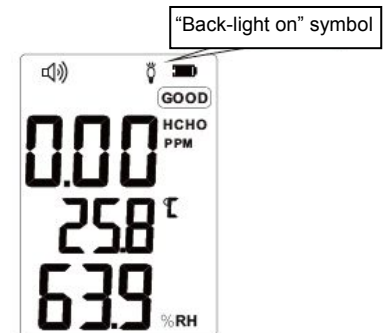
3. Battery level symbol

The unit has a function of displaying battery level. When the battery level symbol is a blank like [⬜], please timely replace the batteries with new ones before continue to use the unit. See graph 5.

Low battery level alarm
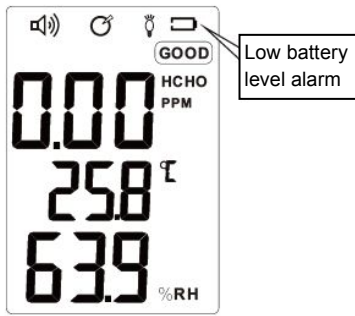
4. Unit conversion

①formaldehyde unit conversion: press "UNIT" button to start a conversion of formaldehyde. Each press will convert the unit between [PPM] and [mg/m3] once. See graph 6.

Unit conversion between [PPM] and [mg/m3]
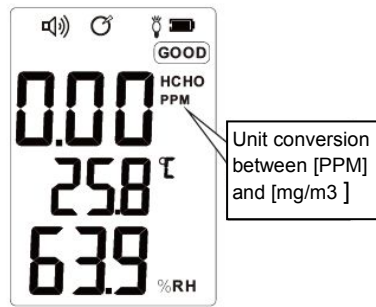
② Temperature unit conversion: press "UNIT" button to start a conversion of temperature. Each press will convert the unit between [℃]and[℉]. See graph 7.

Unit conversion between [℃] and [℉]
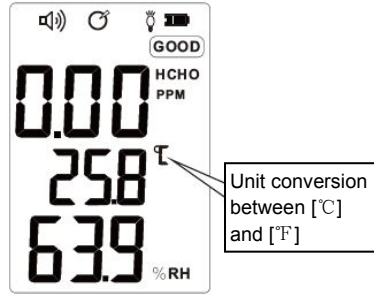
5. Dismiss an alarm: press "Alarm" button once to dismiss the formaldehyde over-proof alarm.

6. Enable or disable alarm function
① If alarm function needs to be disabled for a long while, press and hold"Alarm"button for 2s until LCD shows [🔇)]. It means that the formaldehyde over-proof alarm buzzer is disabled. See graph 8.

Symbol of Disabling alarm function
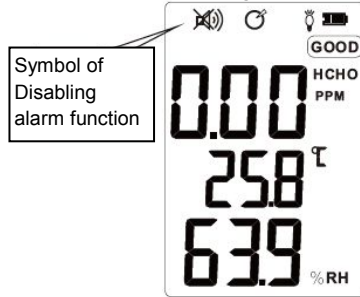
②When the alarm function is disabled, press and hold "Alarm" button for 2s until LCD shows[🔊]. It means that the formaldehyde over-proof alarm buzzer is enabled. See graph 9.

Symbol of enabling alarm function
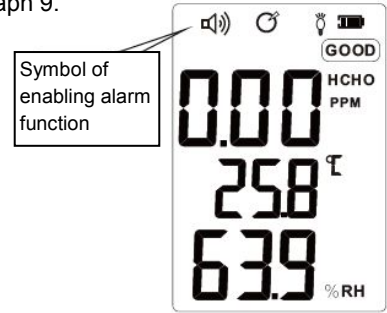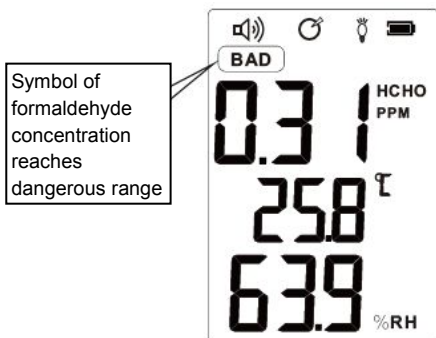
7. Indoor formaldehyde concentration detection
When formaldehyde concentration is no more than 0.1mg/m3 （Chinese standard GB/T18883- 2002）, it means that the ambient air is within national regulated safety range, and the LCD screen will display symbol [GOOD]. See graph 10.

Symbol of formaldehyde concentration within safety range
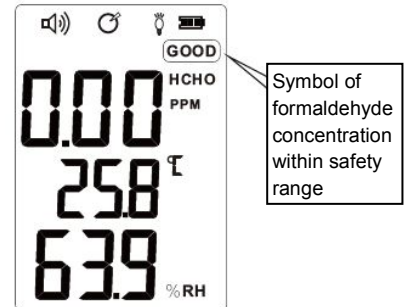
② when formaldehyde concentration is between 0.1mg/m3 and 0 .3 mg/m3, it means that the formaldehyde in ambient air exceeds safety range, then the LCD will show symbol[FAIR], The buzzer and red back-light will alarm once per 5 seconds for immediate ventilation. See graph 11.

Symbol of formaldehyde concentration exceeds safety range
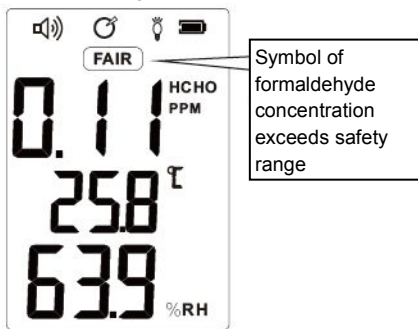
When formaldehyde concentration reaches 0 .3 mg/m3, it means that the formaldehyde in ambient air reaches danger range. The LCD will show symbol [BAD]，and the buzzer and red back-light will alarm once per 5 seconds for immediate ventilation. See graph 12.

Symbol of formaldehyde concentration reaches dangerous range

Particular Statement
Used batteries must be treated according to local laws and regulations!

Our company reserves the rights to update and change the design and specs of this product and the content of this manual.there will be no prior notice for any changes.

IntelliSafe CE SGS UKAS

Warranty Card	
Unit	
Name	
Address	
Contact Number	
Zip code	
Purchase price	
Date of purchase	
Product model	
Product ID	
Seller's signature	
User's signature	

Warranty Clauses
1. In one month since the product is sold, if any performance faults occurs on the product while its packing and itself are kept perfectly, it can be replaced by another product of the same model. This replacement doesn't includes artificial damage.
2. The product enjoys one year warranty and lifelong maintenance. The accessories are not included in the warranty.
3. Any artificial damage, breaking seal, disassembling or misuse is not included in warranty. This card must be provided when applying warranty. Fail to provide this card or unilateral amendment of this card may lead to charge required for repairing.
4. In warranty period, the expense for product transportation is afforded by the buyer.

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