

# Hygro-Thermometer

## HT-390



HB4HT3900000

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Thank you for your patronage, please do read the operation instructions in details before you use this ammeter, so that operate correctly, make a machine give play to the best function.

## **1 PREFACE**

The Hygro-Thermometer is with a design of single chip relative humidity and temperature multi sensor. The unit can be used to measure temperature in  $^{\circ}\text{C}$  and  $^{\circ}\text{F}$ .

It is useful to the industry of electrical engineering , refrigeration , air conditioning , food processing .

The sensor measure the range

Temperature:  $-40.0^{\circ}\text{C} \sim +60.0^{\circ}\text{C}$  ( $-40.0^{\circ}\text{F} \sim +140.0^{\circ}\text{F}$ ).


Humidity:  $1.0\% \text{RH} \sim 99.0\% \text{RH}$ .

## **2 CHARACTERISTICS**

- It show both the value of temperature and humidity.
- It give the selection of  $^{\circ}\text{C}$  or  $^{\circ}\text{F}$ .
- It contains LCD digital data hold function to measure temperature and humidity.
- It contains LCD digital data MAX/MIN function to measure temperature and humidity.
- REC function
- SET function
- Auto Power off.

## 3 SPECIFICATIONS

### 3.1 General Specifications

- Display: Double rows LCD, humidity MAX reading 999, temperature MAX reading 1999.
- Low battery indication: When LCD display  means that battery should be change.
- Sampling: 2.5 times/second.
- Power: 9V battery 、 NEDA 1604 、 IEC 6F22 or JIS 006P.
- Size: 200 × 55 × 38 mm (L × W × H)
- Battery life: 200 consecutive hours.
- Weight: 165g ◦
- Accessories: Instruction manual 、 battery 、 Carrying case.

### 3.2. Electrical Specification

(Temperature: 25°C 、 Humidity: below 90%RH)

- Storage temperature: -40.0°C ~ +60.0°C (-40.0°F ~ +140.0°F)
- Operational temperature: -40.0°C ~ +60.0°C (-40.0°F ~ +140.0°F).
- Operational Humidity: 1.0% ~ 99.9%RH.

### 3.3. Accuracy

- Humidity: ±2.5% RH.
- temperature: ±0.5 °C, ±0.9°F.

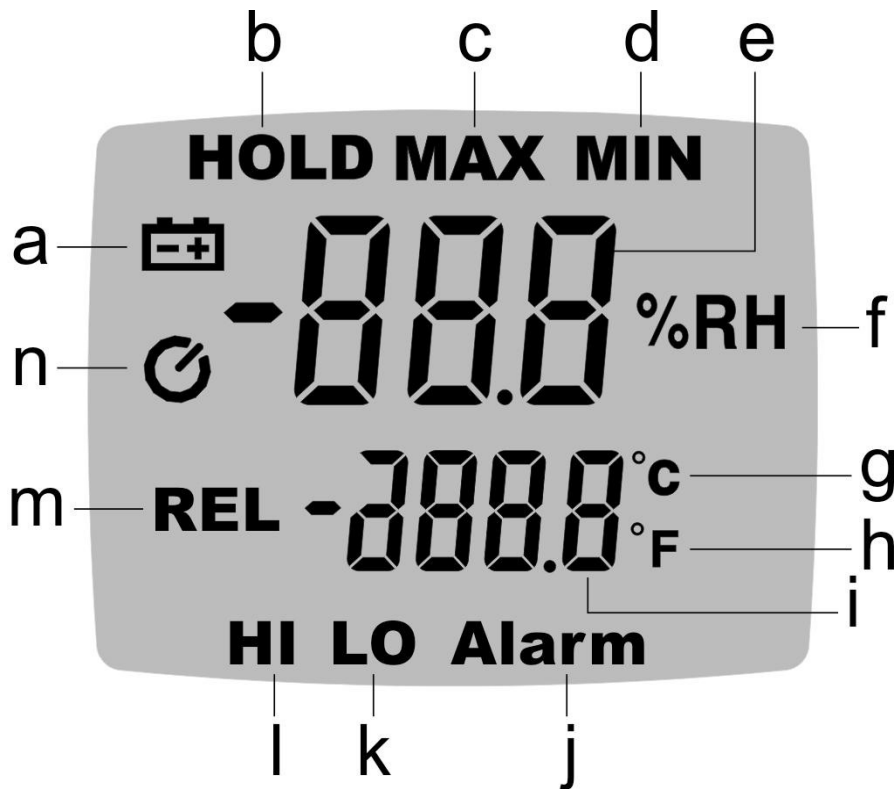
# 4 OPERATING INSTRUCTIONS

## 4.1. Instrument description











1. Temperature & Humidity sensor
2. LCD
3. Temperature Unit Change Button
4. Data Hold & UP Button
5. REL Button
6. Maximum and Minimum Button
7. Back Light & Down Button
8. Power Button
9. SET Button

## 4.2. LCD description





- a. Low battery
- b. Data hold
- c. Max data hold
- d. Min data hold
- e. Humidity reading code
- f. Humidity unit
- g. Temperature unit
- h. Temperature unit
- i. Temperature reading code
- j. Alarm symbol
- k. Lo symbol
- l. HI symbol
- m. Rel symbol
- n. Auto power off symbol


### 4.3. FUNCTION KEYS

- Temperature Unit Change When meter temperature unit display  $^{\circ}\text{C}$  you want change temperature unit to  $^{\circ}\text{F}$ , you can press  button to change temperature unit.
- Data Hold   
Press  the reading data shown on LCD can be locked while pressing  again to cancel this function.
- REL:  
The REL function subtracts value from the present measurement and display the result. Press  button to set the relative mode. It will set the display to zero and stores the displayed reading as a reference value, also REL is displayed. Press  button again to exit the relative mode.
- MAX/MIN Hold :  
when press  button to activate the function. the “max” symbol appears on the display and instrument measures and show the maximum value of parameter which automatically updates itself when a larger value is measured. press the button again and the “min” symbol appears on the display and the instrument measures and displays the minimum value of the parameter which automatically updates itself when a lower value occurs.  
The MAX/MIN function will be disable can press the  button more than 1 second.





- Backlight :

Press  you enable the display backlight to easy readings in dark environments. Press  button again can cancel this function, which however it automatically OFF after 15 seconds.


- Power:

Press  button for 1sec to turn the sound level meter ON or OFF. The auto power will be off automatically after 5 minutes idle time.

- SET:

Press  button meter into the HI temperature alarm deploy and LCD display HI Alarm , press  button again meter into the hi temperature alarm deploy and LCD display HI Alarm , press  button again meter into the low humidity alarm deploy and LCD display HI Alarm , press  button again meter into the low humidity alarm deploy and LCD display LO Alarm.

Alarm deploy method : IF you want add range

please press  , if you want subtract range

please press 


**Alarm range** : Temperature →  $-40.0^{\circ}\text{C} \sim +60.0^{\circ}\text{C}$   
( $-40.0^{\circ}\text{F} \sim +140.0^{\circ}\text{F}$ )

Humidity →  $1.0\% \text{RH} \sim 99.0\% \text{RH}$


If you want to cancel this function please press function more than 1 sec.

If you want restore function please set up SET function again or turn on meter again.




- Cancel Auto Power Off:  
Please press  first and then push the power button before starting the meter, and you can cancel auto power off.

## 5 INSPECTION BEFORE USING

- Confirm the battery has already been fitted appropriately, If LCD display , must be change new battery.
- Turn on the meter LCD will display all word approximately 1 Sec.
- Confirm the function switches are all set up in the correct position.( Confirm not to have on LCD “LCD” Symbol show).

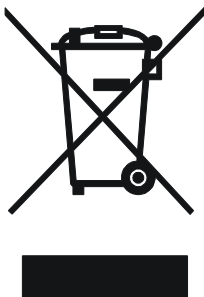
## 6 MEASURE

- First please turn on the meter, if want cancel auto power off please press  button first than turn on the meter.
- Please get meter into the test space and wait more than 15 minute meter will show best data in LCD.( And increase and decrease to some extent in accordance with testing the space different from testing the temperature, humidity.)

## 7 PRECAUTIONS

- The place that please avoid changing sharply in the surrounding environment is used, and does not leave in the high temperature, high and wet, moves the place terribly, and try one's best to prevent the ammeter from exposing in the chemical environment.
- When using the ammeter for a long time, please take down the battery, cause the ammeter to be damaged in order to prevent the battery from leaking the liquid.
- Cleanness and checking of the warm humidity inductor: Pay attention to the cigarette, dust that are adhered to the humidity inductor, will make the reaction of the warm humidity inductor obtuse, cause the error reason tested, so need to remove regularly, can blow the dust with a small amount of low-voltage air, such chemical solvents as available water or the alcohol etc. are washed.
- Please don't put the ammeter in any liquid, in order to avoid ammeter damage.

## 8 END OF LIFE



Caution: this symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal