Digital Thermo-Hygrometer

Owners Manual

Read this manual thoroughly before use

GENERAL DESCRIPTION

This instrument is a high-precision thermo-hygrometer for measuring environment temperature and relative humidity. It features low power consumption, stable operation, data hold, Celsius/Fahrenheit exchange, maximum/minimum memory, etc. It can be used for many applications.

FEATURES

1. Data hold
2. Auto/manual power off
3. Max./min. memory
4. Alarm setting
5. Resetting of maximum or minimum readings

SPECIFICATION

Display: LCD

Measuring Range:

Celsius : -40°C ~ 70°C

Fahrenheit : -40°F ~ 158°F

Relative Humidity: 0% ~ 100%

Sampling Rate: about 1 time/3 secs

Response Time:

Humidity Measurement: about 4 seconds

Temperature Measurement: about 5 to 30 seconds

Battery: 1.5V, AAA or equivalent, two pieces

Operating Temperature: 0°C ~ +50°C

Storage Temperature: -10°C ~ +60°C

Size: 132 X 69 X 26mm (for main body only)

Weight: about 155g (including batteries)

TECHNICAL DATA

Function	Range	Accuracy	Resolution
°C	-40°C ~ -30°C	±2.25°C	0.01°C
	-30°C ~ -20°C	±2°C	
	-20°C ~ -10°C	±1.75°C	
	-10°C ~ 0°C	±1.5°C	
	0°C ~ 10°C	±1.25°C	
	10°C ~ 20°C	±1°C	
	20°C ~ 30°C	±0.5°C	
	30°C ~ 40°C	±1°C	
	40°C ~ 50°C	±1.25°C	
	50°C ~ 60°C	±1.5°C	
	60°C ~ 70°C	±1.75°C	
°F	-40°F ~ -22°F	±4.05°F	0.02°F
	-22°F ~ -4°F	±3.6°F	
	-4°F ~ 14°F	±3.15°F	
	14°F ~ 32°F	±2.7°F	
	32°F ~ 50°F	±2.25°F	
	50°F ~ 68°F	±1.8°F	
	68°F ~ 86°F	±0.9°F	
	86°F ~ 104°F	±1.8°F	
	104°F ~ 122°F	±2.25°F	
	122°F ~ 140°F	±2.7°F	
	140°F ~ 158°F	±3.15°F	
%RH	0%RH ~ 10%RH	±7%RH	0.03%RH
	10%RH ~ 20%RH	±6%RH	
	20%RH ~ 80%RH	±4.5%RH	
	80%RH ~ 90%RH	±6%RH	
	90%RH ~ 100%RH	±7%RH	

INSTRUCTION

1. **Probe**
2. **Handle**
3. **" ◀ ALARM " Key**

   In alarm setting mode, it can be used to select the desired number so that you can adjust it.

   It can also be used to enable or disable alarm feature.
4. **" ▲ °C/°F " Key**

   It can be used to switch the instrument between celsius and fahrenheit measurements.

   In alarm setting mode, it can be used to increase the number selected.
5. **" ▼ MIN/MAX " key**

   It can be used to display the maximum or minimum readings recorded.

   In alarm setting mode, it can be used to decrease the number selected.
6. **" HOLD / SET " key**

   a. It can be used to hold the present reading on the display.

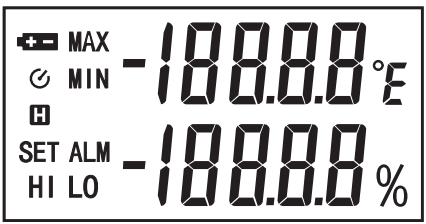
   b. It can also be used to enter or quit alarm setting mode.

c. It can also be used to reset maximum or minimum readings.

7. **" ⏻ " Key**

Used to turn on or off the instrument.

LCD SYMBOL MEANING



MAX	Maximum readings are is being displayed.
MIN	Minimum readings are being displayed.
H	Data hold mode is active.
SET	Indicator for alarm setting mode.
ALM	Indicator for alarm setting mode/Alarm indicator
%	Relative humidity unit
°C	Celsius temperature unit
°F	Fahrenheit temperature unit
-	Negative sign
	Automatic power-off is enabled
HI	Indicator for max. reading in alarm setting mode High temperature/humidity alarm indicator
LO	Indicator for min. reading in alarm setting mode Low temperature/humidity alarm indicator
	Batteries are low and should be replaced immediately

OPERATION INSTRUCTION

1. Turning on or off the Instrument

Press the " ⏻ " key to turn on the instrument and enter the measuring mode, the display shows the current temperature and relative humidity.

Press the " ⏻ " key again to turn off the instrument.

2. Measuring Temperature and Humidity

Make sure that the instrument is in measuring mode, then use a hand to slide the handle out from the instrument, hold the handle and move the probe to the area whose temperature and humidity you want to measure. Wait until the readings on the display are stable, then read the readings.

Note :

Measuring mode is a mode without symbols " MIN ", " MAX " and " H " shown on the display.

3. Changing between Celsius and Fahrenheit Measurements

In measuring mode, press the " ▲ °C/°F " key to switch the instrument between celsius and fahrenheit measurements.

4. Displaying the Max. or Min. Readings.

In measuring mode, after you press the " ▼ MIN/MAX " key, the display shows the symbol " MAX ", meanwhile it shows the maximum temperature reading and the maximum humidity reading of all readings recorded since the instrument is turned on.

Press the "▼ MIN/MAX" key again, the display shows the symbol " MIN ", meanwhile it shows the minimum temperature reading and the minimum humidity reading of all readings recorded since the instrument is turned on.

Press the " ▼ MIN/MAX " key again to return to the measuring mode.

Note: Max. and min. readings are updated only in measuring mode.

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5. Resetting the Max. or Min. Readings

In step 4, when the max. or min. readings are being displayed, press the " HOLD SET " key to erase the current readings from memory, then press the " ▼ MIN/MAX " key to finish the resetting (the meter will return to MIN mode or the measuring mode), the meter will start recording new max. or min. readings after it returns to the measuring mode.

6. Automatic Power-Off

After you turn on the instrument, the display shows the symbol " ↻ " indicating that the automatic power-off feature is enabled. If you don't operate any key for about 10 minutes, the instrument will turn off automatically.

To disable automatic power-off feature, press the " ⏻ " key to turn on the instrument while pressing and holding the " HOLD SET " key.

7. Holding the Readings on the Display

In measuring mode, press the " HOLD/SET " key instantaneously to hold the present readings on the display, the symbol " H " appears on the display as an indicator. Press instantaneously the " HOLD/SET " key again to exit Data Hold mode, the symbol " H " disappears.

8. Setting Alarm Temperature and Alarm Humidity

1. In measuring mode, press the " HOLD/SET " key for about 2 seconds to enter alarm setting mode, the display shows the symbol " **SET ALM HI** " and the current alarm temperature upper limit.
2. Press the " ◀ " key to select desired number place you want to adjust, the selected number flickers. Then press the "▲" or " ▼ " key to increase or decrease the alarm temperature upper limit.
3. After you finish setting the alarm temperature upper limit, press the " HOLD/SET " key to set alarm temperature lower limit by using the method described in step 2, the symbol " **SET ALM LO** " appears on the display.
4. Continue to press the " HOLD/SET " key to set the alarm humidity upper limit (" **SET ALM HI** " will appear) and the alarm humidity lower limit (" **SET ALM LO** " will appear) by using the method described in step 2.
5. After you finish setting the alarm humidity lower limit, press the the " HOLD/SET " key once more to return to the measuring mode.
6. After the instrument returns to the measuring mode and if alarm feature is enabled :
   a. The built-in buzzer will sound and the symbols " HI " and " ALM " as well as the relevant reading will flicker if the measured temperature exceeds the alarm temperature upper limit or if the measured humidity exceeds the alarm humidity upper limit.

b. The buzzer will sound and the symbols " LO " and " ALM " as well as the relevant reading will flicker if the measured temperature is lower than the alarm temperature lower limit or if the measured humidity is lower than the alarm humidity lower limit.

9. To Enable or Disable Alarm Feature

In measuring mode, press the " ALARM " key to enable the alarm feature, the display shows the symbol " ALM " as an indicator. Press the " ALARM " key again to disable alarm feature, the symbol " ALM " disappears.

NOTE

When the symbol " " appears on the display, the batteries are low and should be replaced immediately.
Before you use the instrument , make sure that it operates normally.

WARNING

Do not use this instrument in any application where failure of the instrument could result in personal injury or large economic loss.

MAINTENANCE

Periodically wipe the case with a damp cloth. Do not use abrasives or solvents. Don't let water or liquid touch the sensor or enter the case.

Store the instrument in dry and clean place when it is not in use. Remove the batteries if you don't use the instrument for more than 2 weeks.

BATTERY REPLACEMENT

When the symbol "  " appears on the display, the batteries are low and should be replaced immediately.

To replace batteries, turn off the instrument first, then press and slide out the battery cover, replace the exhausted batteries with two new batteries of the same type according to the polarity indications in the battery compartment. Reinstall the battery cover.

DECLARATION

1. This manual is subject to change without notice.
2. Our company will not take the other responsibilities for any loss.
3. The contents of this manual can not be used as the reason to use the instrument for any special application.

DISPOSAL OF THIS ARTICLE

Dear Customer,
If you at some point intend to dispose of this article, then please keep in mind that many of its components consist of valuable materials, which can be recycled.
Please do not discharge it in the garbage bin, but check with your local council for recycling facilities in your area.

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