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Manual
Hygrometer
PCE-TH 5

OPERATION MANUAL

Pen Type Thermo-Hygrometer

Temp./RH/ Dew point/Wet bulb

PCE-TH5

CE

1. INTRODUCTION

Thank you for purchasing PCE's Thermo-Hygrometer. It is used to measureTemperature and Relative Humidity, using the precision capacitor RH sensor with high accuracy, rarely need to calibrate.

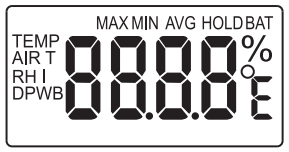
2. PACKAGE SUPPLIED

- Meter
- Battery (CR 2032 battery included)
- Operation manual
- Box

3. FEATURES

- Temperature and relative humidity measurement.
- Calculate dew point temperature and wet bulb temperature
- Hi/ Lo alarm setting (Air Temp./ RH) .
- Data hold & Maximum/ Minimum/ Average function.
- Auto power off function.
- Quick response and high accuracy.

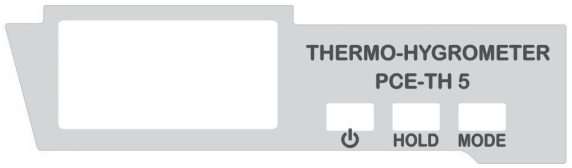
4. LCD DISPLAY



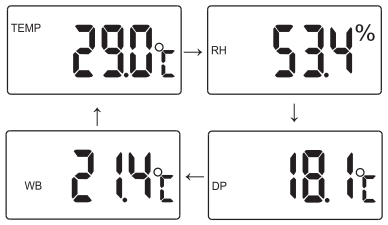
5.SPECIFICATION

	PCE-TH 5
Temp.range	-20~50°C(-4~122°F)
RH % range	0~99.9%RH
Resolution	0.1°C/0.1°F(Temp.),0.1%RH
Accuracy(Temp.)	±0.6°C
Accuracy(RH %)	±3%RH(at 25°C,10~90%RH), others ±5%RH
Dew Point Temp.(DP)	YES
Wet Bulb Temp.(WB)	YES
Hi/ Lo Alarm Setting (Air Temp./RH)	YES

6. KEY FUNCTION



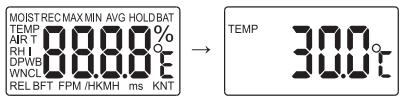
(1) ⏻ : Turn ON/OFF the meter or enter into Max/Min/AVG mode
(2) **HOLD** : Data hold mode
(3) **MODE** : Select measurement modes → Temp. (Temperature) — RH (Relative Humidity) - DP (Dew Point) - WB (Wet Bulb)



7. OPERATION

(1) Power On/Off

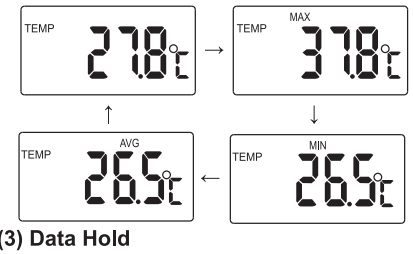
With meter off, press ⏻ button to turn on the meter.



The meter displays full segments in 1 second and then TEMP icon with reading appears on LCD with a beep sound. To turn off the meter, press ⏻ button for more than 2 seconds.

(2) Maximum and Minimum mode

With meter on, press ⏻ button less than 2 seconds, MAX icon with the highest reading appears on LCD since powered on, press ⏻ button again, MIN icon with the lowest reading appears on the LCD since powered on. Press ⏻ button again, AVG icon appears on the LCD. Press ⏻ again the meter will return to normal measurement.

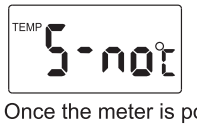


(3) Data Hold

Press **HOLD** button to freeze reading(see below).
Press **HOLD** button again, meter will return to normal measurement.

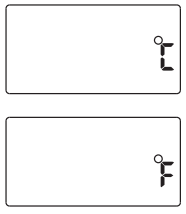
(4) Auto power off

The meter will shut off automatically after approximately 15 minutes if no action is taken.
With meter off, to disable auto power off, press **HOLD** and ⏻ button at the same time until "S-no" is appeared and then release buttons to return to normal measurement.



Once the meter is powered off, it is default with auto power off function.

(5) Select Temp. unit ℃ / ℉



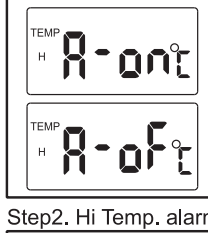
When Power off,
press **MODE**+⏻ to enter setting function
Press **MODE** button to select ℃ / ℉
Press ⏻ button again to save and move to next setting.

NOTE:
(a) During set operation,if you want to escape any modes setting, please go through all setting mode by keeping press ⏻ button to normal measurement.
(b) If you want to set alarm threshold, please follow steps below.

(6) Setting mode - Alarm setting (After selecting Temp. unit℃ / ℉)

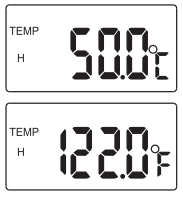
6-1. Hi/ Lo Temp. and RH threshold setting.
(For RH Hi/Lo alarm setting, press ⏻ button to go through all the Temp. setting to Step5.)

Step1. Hi Temp. alarm select



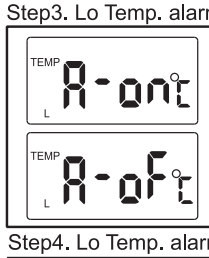
Press **MODE** to select Hi Temp. alarm ON or OFF
(a) When Hi Temp. alarm function is on, press ⏻ button to enter Hi Temp. alarm setting. (Move to Step2)
(b) When alarm function is off, press ⏻ button to set Lo temp. alarm setting. (Step3)

Step2. Hi Temp. alarm setting



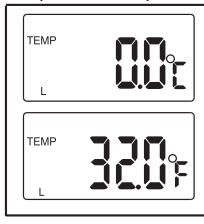
When Hi Temp. alarm is on, TEMP. H icons with the default value 50℃ (122℉) or the last setting will appear on the LCD. Keep pressing **MODE** button to increase digit sequencely from hundred digit and release the button when the digit you desired, then for setting ten digit, unit digit and decimal point are the same as hundred unit. (Please refer to #Example 1 on Page6.)
Press ⏻ button to save Hi Temp.setting and go to Lo Temp. alarm setting.

Step3. Lo Temp. alarm select



Press **MODE** to select Lo Temp. alarm ON or OFF.
(a) When Lo Temp. alarm function is on, press ⏻ button to enter Lo Temp. alarm setting. (Move to Step4)
(b) When alarm function is off, press ⏻ button to set Hi RH alarm setting.(Step5)

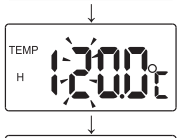
Step4. Lo Temp. alarm setting



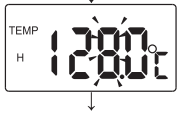
The meter will display TEMP L icons with the default value 0℃ (32℉) or the last setting on the LCD, Keep pressing **MODE** button to increase digit sequencely from hundred digit and release the button when the digit you desired. (Please refer to #Example 1)
Press ⏻ button to save Lo temp. setting and go to Hi RH alarm setting. (Step5)

Example 1 - Set Hi Temp. alarm at 128.3℃:

Step1. Keep pressing **MODE** button,the number at decimal point cycle from 0 to 9 then jump to unit digit from 0 to 9,too. Then the same action to ten digit then hundred digit,until the hundred digit shows "1" then release the button.



Step2. Keep pressing **MODE** button, the same action as step1. until the ten digit shows"2" then release the button.



Step3. Keep pressing **MODE** button, the same action as step1. until the unit digit shows "8" then release the button.

Step4. Keep pressing **MODE** button, the same action as step1. until the decimal point shows "3" then release the button.

Step5. Hi RH alarm selecting

RH I A-on % RH I A-oF %	Press **MODE** button to select Hi RH alarm ON/OFF. (a) When the alarm function is on, press ⏻ button to enter Hi RH setting. (Move to Step6) (b) When the alarm function is off, press ⏻ button to select Lo RH alarm. (Step7)

Step6. Hi RH setting

RH I 90.0 %	When HI RH alarm is on, RH I icons with the default value 90% or the last setting will appear on the LCD. Keep pressing **MODE** button to increase digit sequencely from hundred digit and release the button when the digit you desired. (Please refer to #Example 1 on Page6.) Press ⏻ button to save Hi RH setting and go to Lo RH alarm setting.

Step7. Lo RH alarm selecting

RH L A-on % RH L A-oF %	Press **MODE** button to select Lo RH alarm ON / OFF. (a) When the alarm function is on, press ⏻ button to enter Lo RH setting (Move to Step8) (b) When the alarm function is off, press ⏻ button to go back normal measurement.

Step8. Lo RH setting

RH L 0.1 %	When Lo RH alarm is on, RH L icons with the default value 0.1% or the last setting will appear on the LCD. Keep pressing **MODE** button to increase digit sequencely from hundred digit and release the button when the digit you desired. (Please refer to #Example 1 on Page6.) Press ⏻ button to save Lo RH setting and go back to normal measurement.

Note:

1. The alarm sound can not be disable unless you enter setting mode to change the threshold setting.
2. You will hear the alarm sound continuously if Temp. or RH reach the Hi / Lo threshold setting. To distinguish the alarm sound, you need to enter into the Temp. or RH mode to see if Temp. H/ L or RH H/L is blinking .
3. The default settings of Hi / Lo Temp. or RH is off.

(7) Trouble Shooting

Error messages:

E-2	Humidity Sensor is failed.
E-3	Temperature Sensor is failed.
E-4	Operation Temperature is too high.
E-5	Operation Temperature is too low.
E-6	Some hardware are failed.

Note: If above error messages appear on the display,please contact with local distributor for technical service.

8. BATTERY REPLACEMENT

When low battery indication “ BAT ” icon appears on the LCD, the battery need to be replaced.

Use a coin to remove the battery compartment cover on the rear of the meter. Replace the CR-2032 lithium battery; install the new battery face up (+) in the battery compartment.

	As the end users, are legally bound (Battery ordinance) to return all used batteries and accumulators; disposal in the household garbage is prohibited! You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold!

Disposal: Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle.

9. WARRANTY

This instrument is warranted for two years from the date of purchase against material or production defects, in accordance with our general sales conditions. During the warranty period the manufacturer reserves the right to decide either to repair or replace the product.
The warranty doesn’t apply to:

- Accessories and batteries (not covered by warranty).
- Repairs made necessary by improper use (including adaptation to particular applications not foreseen in the instructions manual) or improper combination with incompatible accessories or equipment.
- Repairs made necessary by improper shipping material causing damages in transit.
- Repairs made necessary by previous attempts for repair carried out by non skilled or unauthorized personnel.
- Instruments for whatever reason modified by the customer himself without explicit authorization of our Technical Dept.

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