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## Manual Air Humidity Meter PCE-THA 10



# OPERATION MANUAL

## USB HAND HELD ON-LINE LOGGING

### ANEMO-THERMO-HYGROMETER

#### PCE-THA 10



## INTRODUCTION

Thank you for purchasing USB interface hand held on line logging Anemo-thermo-hygrometer, the meter features for simply , easily operate to reach the air source.Measure air velocity and calculate air volume in one meter. 20 points manual memory can be stored.

## SUPPLIED

1. Meter
2. Batteries AAA x 3 pcs (Same type and brand batteries are requested
3. USB cable
4. Online logging
5. Plain box with foam
6. Operation manual
7. Black pouch

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## KEY FUNCTION

- HOLD** : Freeze current readings, increase value(Set area mode), viewing up stored data.
- MODE** : Long press into VEL mode, VOL mode, REC mode . Short press cycle viewing Temp.RH%,DP,WBT. Change area L(L1),W(L2),D (Set Area mode) .
- POWER** : Power on or power off, Toggle  $M^2$  and  $ft^2$  . **+SET** quick to select stored area group (At VEL mode).
- MAX/MIN** : Cycle viewing Max. Min. Avg. ( at REC mode) , return to record mode.
- SET** : Set area value( Set area mode), **+POWER** quick to select stored area group. Save velocity reading and return to normal velocity mode. Sav e purposes.
- UNIT** : Short press to change unit of Temp.DP,WBT. Long press to change velocity unit (Both VEL,VOL mode)
- BKLT** : Activate backlight function or inactivate , Decrease value (At Set area mode), viewing back the stored data. (Back-light is optional)

## SPECIFICATION

|                    | PCE-THA 10                              |
|--------------------|-----------------------------------------|
| Temp. range        | -15~50°C(5~122°F)                       |
| Air Velocity range | 0.4~30m/s,80~5900ftm                    |
| Accuracy           | ±3% of FS                               |
| Wind unit          | m/s,ftm,kmh,mph,knot,cms,cfm            |
| Air Volume range   | 0~9999m³/S                              |
| RH% range          | 5.0~95.0%                               |
| Accuracy           | ±3% RH(at 25°C,30~95% RH)±5% RH(others) |
| DP/WB Temp.        | YES                                     |
| Memory             | 20 points                               |
| Average            | Store 5 areas, 20point average          |
| Meter size         | 237(with vane)*77(max)*36mm(T)          |
| USB interface      | YES                                     |

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## OPERATION DESCRIPTION

### POWER:

Power on meter by pressing **POWER** button to VEL (Air velocity) mode, press and hold **POWER** button to turn off meter operation.

### MODES:

Long press **MODE** for 2 seconds from VEL mode to VOL (Air volume) mode to enter REC (Record) mode, long press again to back VEL mode.

### UNIT:

Long press **UNIT** to change wind unit from M/S→KM/H→M/H→FT/M→BFT/→KNT and back to M/S  
Short press **UNIT** to change Temp. unit °C/°F

### BACKLIGHT(BKLT):

Press **BKLT** button for 2 seconds to activate backlight, to escape backlight by pressing 2 seconds **BKLT** button again.

### AUTO POWER OFF:

The meter will shut off automatically after approximately 15 minutes, if no action is taken.  
To disable auto power off, when meter off and press **HOLD+POWER** button, "n" icon will appear on the LCD. the meter will return to normal measurement.

### SELECT AREA VALUE:

While at VOL mode, press **SET** button to set area value, the meter may store up to each 5 square size and round size of areas. i.e. Total 5 areas storage for easier and faster to get area for calculate air volume.  
After set area value please follow the operation to select:  
Press and hold **SET** button + short press **POWER** button quick select stored area(1L1→1d→2L1→2d→3L1→3d→4L1→4d→5L1→5d),release the button to save (While at VEL mode).

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**1. VEL mode operation:**( While at VEL mode ) VEL icon shows on the bottom layer.

- a) Press **HOLD** button to hold current VEL value.
- b) Press **MODE** button to cycle viewing Temperature, RH%, DP (Dew Point) and WB(Wet bulb temperature).
- c) Press **UNIT** button to change the unit of Temp., DP, WB
- d) Press and hold **UNIT** for 2 seconds to change velocity unit(M/S,FT/M)
- e) Press **POWER** button to select  $FT^2/M^2$
- f) Press **SET** button to save velocity reading, LCD shows and stores the number with the readings and "REC" icon appears then disappear after data stored.

**2. VOL mode operation:** ( While at VOL mode ) FLOW icon shows on the bottom layer

- a) Press **HOLD** button to hold current VOL value.
- b) Press **MODE** button to cycle viewing Temperature, RH%, DP(Dew Point) and WB(Wet bulb temperature).
- c) Press **UNIT** button to change the unit of Temp., DP, WB
- d) Press and hold **UNIT** for 2 seconds to change velocity unit
- e) Press **POWER** momentarily to change are unit .
- f) Press **SET** button to enter set area value mode

**2-1 Set AREA value :** (While entering from VOL mode )

- a) Press **MODE** button to change area type L1(Length)/L2(Width)/D(Diameter)... cycle.
- b) Press **UNIT** button to select the storage area from 1st to 5th group, (Ex:1L1→2L1→3L1→4L1→5L1)

Note: After you set 1L1 (Length) value, press **MODE** to 1L2 (Width), edit completed, press **SET** button to save, as now you don't need to edit Diameter (1D). If you want to set diameter, keep pressing

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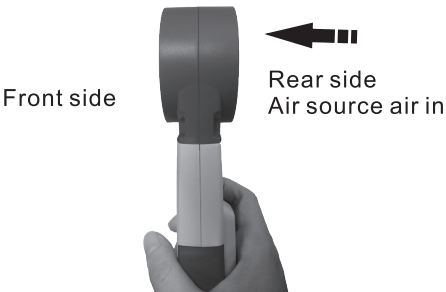
- c) There are two units of area for selection: M (Meter) and FT (Feet), as the air volume units are: CMS and CFM. You may press **POWER** button to toggle M<sup>2</sup> or FT<sup>2</sup> .
- d) To edit value of area, press momentarily the **BKLT** button to change with -0.01 ( Max. area value is 99.99 ),i.e. To decrease the stored area value. If no value is stored, press **BKLT** button, it won't active and still remain as 00.00
- e) Press **HOLD** button to change area value with +0.01 (i.e. Increase the value)
- f) Press and hold **BKLT** button for 2 seconds to change area value with -0.1 once ( i.e. Decrease the value), or keep pressing and holding **HOLD** button to quick select the numbers. Release the button for the number you desired.
- g) Press and hold **HOLD** button for 2 seconds to change area value with +0.1 once (i.e. Increase the value), same operation as decreasing value per step f)
- h) Press **SET** button to automatically save and return to VOL mode

3. **REC mode operation** ( While at RECORD mode )  
While VEL mode ,short press set to record reading.  
Long press **MODE** to go through Vol. mode then long press **MODE** again to enter REC mode.
- a) Press **HOLD** button to increasingly recall stored air velocity reading ↑
- b) Press **BKLT** button to decreasingly recall stored air velocity reading ↓
- c) Press and hold **SET** button for 2 seconds to clear stored readings
- d) Press **MAX/MIN** button to circularly viewing Maximum. Minimum. Average readings from powered on , press **MAX/MIN** button again to return to record mode
- e) While viewing Max/Min/Avg readings, you may press **UNIT** button to change AVG unit, press **UNIT** button again to return.



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

**DIRECTION**



**WARRANTY**

This instrument is warranted for two years from the date of purchase (One year limited warranty applies to cables). A Return Authorization letter must be issued before returning for any reason. This warranty does not apply to defects resulting from action of the user such as misuse, abuse, alteration neglect, improper wiring, improper maintenance or repair, or unauthorized modification, damage resulting from leaking batteries, operation outside of specification. During the warranty period the manufacturer reserved the right to decide either to repair or replace the product. The meters are to be returned along with good packing to prevent any damage in shipment and insured against possible damage or loss.

The two years' warranty doesn't apply to:

- Accessories and batteries (not covered by warranty).
- Claims is not acceptable for improper use (including adaptation to particular applications not foreseen in the instructions manual) or improper combination with incompatible accessories or equipment, or by previous attempts for repair carried out by none skilled or unauthorized personnel.