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## HVAC Meter

### ***INSTRUCTION MANUAL***

### ***PCE-JR 911***



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## **1.Introduction**

Thank you for purchasing this IR Meter Printer This unit has been developed to meet your maximum satisfaction with its user-friendly design.Please review the entire manual for a complete overview of how to operate this new IR Meter Printer

## **2.Material Supplied**

Check for damaged or missing parts in your IR Meter Printer before starting.

The IR Meter Printer Set should contain

1. Meter
2. 4pcs AA batteries
3. Printing Paper
4. Operation manual

## **3.Features**

This IR Meter Printer equipped with three functions:

- IR thermometer with laser targeting.
- Procedure programming function.
- Data logger function.

Please refer to below features of each function for clear understanding.

### **3.1 IR thermometer with laser targeting**

Temperature Range	-40 ~ 500
Resolution	0.1 unit (<100 ) or 1 unit; Unit is or .
Accuracy	+/- 3% or 3 (Whichever is greater)
Repeatability	+/- 1
Emissivity	Adjustable from 0.3 ~ 1.0
Response time	0.2 seconds
Backlight / Laser sighting	Yes / Yes
Distance Ratio	8:1
Printer	38 mm Thermal-Printer (30mm x 30 thermal paper)
Interface with PC	RS-232C (TTL level) *
Power supply	AA x4 Battery or DC 9V, 1000mA adaptor, w/ 5.5 x 2.0mm Center plug Center is positiv
Operating current	500mA(Printing), 6mA(IR active), 2mA(IR standby)
Auto. Power off	No operation for 10 seconds at normal mod 60 seconds for others mode.
Operation temperature	0 - 50
Operation humidity	Less then 90%RH
Dimension	208 x 70 x 53 mm

Remarks:

\* Software for downloading data to PC is optional.

### **3.2 Procedure Programming Function**

Procedure capacity: 4 procedures in total. Indicated as #1 to #4 with procedure name.

Measure point: 99 measure points in each procedure.

Measure point content Each measure point consists of point number point name and temperature value.

### **3.3 Datalogger Function**

Data logger capacity 4 data logger settings. Indicated by #5 to #8

Data logger setting Setting by Begin Date End Date Start Time Suspend Time Rate  
 \*\*.99 measure points in each data logger setting

Measure point Each measure point consists of point number point title and temperature value.\*\*\*

Remarks:

\*\*Rate means the time period to get the temp. Value. For example "20" means getting temp. value every 20 seconds during "Start Time" and " Suspend Time".

\*\*\*Point name consisted by logging's date & time automatically.

### **4. Comparison Table**

Function	Procedure	Logger
Number	#1 to #4	#5 to #8
Name	User defined or automatic (Note 1)	Automatic (Note 2)
Measuring/ Sampling	User pressed	Automatic measure and store by specified setting by user(Note 3).
Max point	99 ON key to measure, then press enter key to confirm/store.	99

Note 1: Meter automatic defines title

if user doesn't key-in any. The name is consisted by current date and time. For example if point name is "05-06 09:21:51" means the date is 6th May and the time is 09:21:51.

Note 2: Meter automatic defines the name of the measured point by current date and time.

Note 3: Logger setting defined by Start-Date, Begin-time, Suspend-time, End-Date, and sample rate. Each logger starts from Start-Date & time, sampling by specified rate until Suspend-time. Start again next day until End-Date.

Logger is stopped by reaching End-Date or 99 points or press "0" key twice.

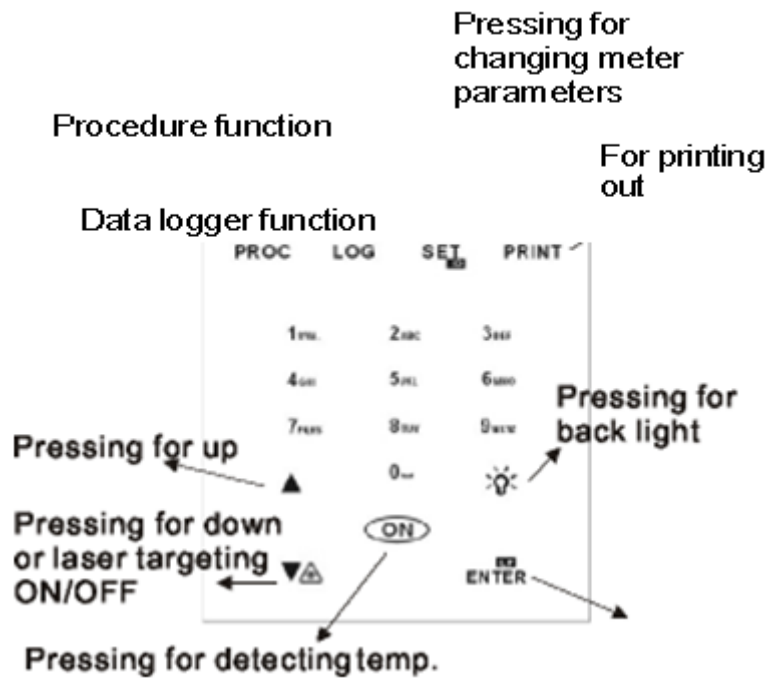
## 5.Front View

Please refer to below photo for the function of each key on the meter



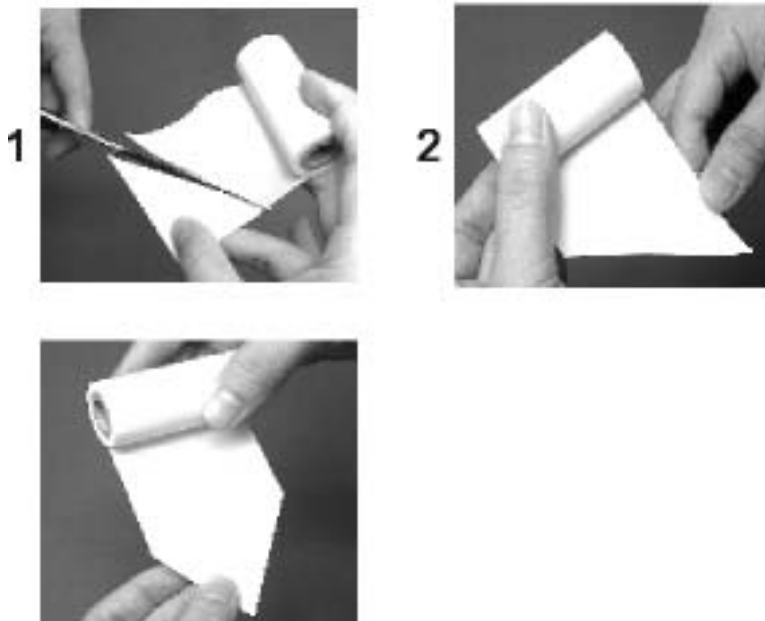
Paper Cover

5



## 6. Paper Replacement

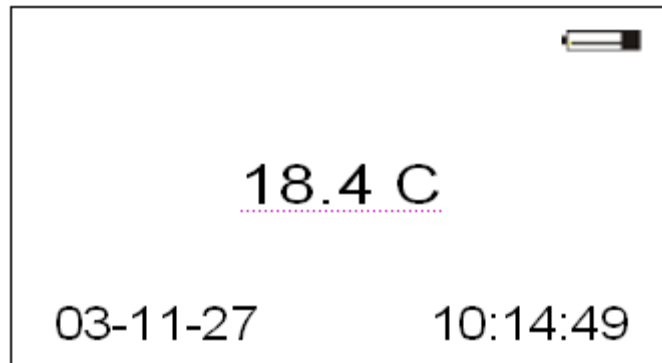
For feed paper and confirming setting. Feed the paper when it's held down except printing. Please follow the pictures to scissor out a paragraph from supplied printing paper To make easier feeding the paper insert the sharp-cut to the cartidge of the printer. Keep the matt surface of the paper upward when inserting the paper



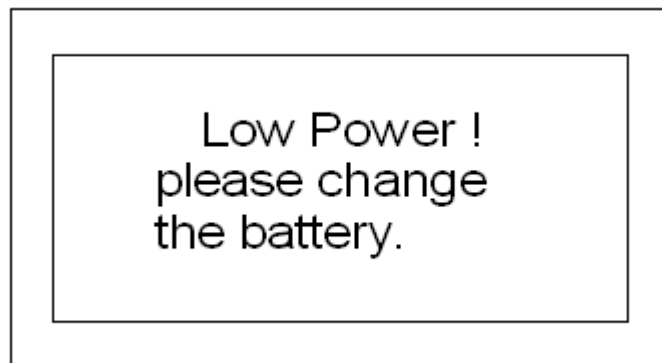
## 7. Battery

## ***Replacement***

When seeing the battery symbol flashing on the right-up corner of the LCD means the batteries are weak.



If the power is too low to operate the IR printer, printer will reset with below indication on LCD monitor.



Follow the steps to remove and replace batteries

1. Open the batteries set cover on the rear side.
2. Remove the expired batteries.
3. Insert new 4pcs AA batteries and make sure the batteries are inserted with correct polarity.
4. Put on the cover.



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## **8. FUNCTION-IR thermometer with laser targeting**

1. Press "ON" key to enter IR mode. LCD will display real-time target temperature until "ON" key released. After releasing the "ON" key, LCD will hold the last value for 10 seconds and then auto power off.
2. Press "ON" key and " " key at the same to in-active the laser targeting while measure the temperature. Once releasing the " " key, laser targeting function activated again.
3. Press "PRINT" key to print out current value date and time.

## **9. FUNCTION-Procedure programming**

1. Press "PROC" key to enter procedure mode.
2. There are #1 to #4 procedures included in this function. Press "SET" key to select the procedure number you want. If selecting #3 LCD will display as below

---

```
#3: ██████████  
01:  
02:  
03:  
04:  
05:
```

---

3. How to name the procedure?

Make sure the procedure number you choose has been highlight. Press "ENTER" key one time and the highlight will start flashing. Editing function is valid only when above highlight is flashing. Pressing alphanumeric keys to edit the name. Release the alphanumeric keys when you select the word you need. Press "0" key for a space or press " " for forward " " for backward. Press "ENTER" key to finish and store the editing.

4. How to name the measured point? First of all press " " or " " to find the point you need. Press "1" to quickly skip to 10 11 or press "2" to skip to 20 21.... Or press "9" to skip to 90 91 etc.

The point naming procedure is the same as "How to name the procedure" section.

Meter will also automatic store current date and time as point name if user didn't edit any.

5. Press "ON" to get the current temperature and then press "ENTER" to save the value. User will see the LCD shown as below

```
#3
01 11-22 07:54:33
    75.4 F
02
    F.
03
    F.
```

6. Press "PRINT" to print out

procedure saved data "Print?" will appear on LCD. If OK, press "PRINT" again to continue. If NO, press "PROC" to back to procedure function. Please refer to below for the printed out data.

7. How to delete data

Press "PROC" key at least 2 seconds to clear procedure name, point name, or temperature value.

## 10. FUNCTION-Data logger

1. Press "LOG" key to enter data logger mode.

2. There are #5 to #8 loggers included in this function. Press "SET" key to select the data logger number you want. If selecting #7, LCD will display as below.

```
#7
Begin:          03-01-01
End:           99-12-31
Start:         00:00:00
Suspend:      23:59:59
Rate:          1
Start Now? Yes
```

3. How to set the data logger parameters?

Press " " for forward and " " for backward to choose the parameters. Pressing alphanumeric keys to modify the parameters one by one. Press "ENTER" key to start the data logger.

Begin means begin date MM-DD-YY or DD-MM-YY or YY-MM-DD it depended on what is the date mode set in "SET" function.

End means end date,same as above.

Start means start time,HH/MM/SS Suspend means stop time,HH/MM/SS

Rate means the time period to get the data.For example "60" means to get the value every 60 seconds.The rate could be from 1 to 9999.

```
#7
Begin:      03-11-22
End:       03-11-23
Start:     08:05:00
Suspend: 08:30:00
Rate:      60
Start Now? Yes
```

5. Meter will record date time and value when the data logger is activated.Please refer to below figure

<b>#7</b>		<b>LOGGING</b>
01	11-22	08:05:00
	<u>75.4 F</u>	
02	F.	
03	F.	
03-11-22 08:07:30		

6.How to stop data logger

Press "0" twice to stop the data logger or the data logger will automatically stop after sampling 99 points

7. Press "PRINT" to print out data logger data "Print?" will appear on LCD. If OK, press "PRINT" again to continue. If NO, press "LOG" to back to data logger function. Press "0" to stop printing. Please be reminded that while data logger is still in recording status, all the other functions of the meter could not be activated.

Please refer to below printed data

### Single print

```
      ○
    xxx.x C(F) Note1 mm-
dd hh:mm:ss

      ○
    xxx.x C(F) mm-dd
hh:mm:ss

    Note2

      ○
xxx.x C(F) mm-dd
hh:mm:ss x x x
company
```

### Procedure / Table print

Procedure Measure

#1.

Procedure Name

Total:                   xxx rec

Unit: C<sup>o</sup>

01.xxx.x C(F)<sup>o</sup>  
Oven A

02.xxx.x C(F)<sup>o</sup>  
Oven B

99.xxx.x C(F)<sup>o</sup>  
Oven B

**Logger / Table print**

Logger Measure  
#5.

Logger Name

Begin: yy-mm-dd End:  
yy-mm-dd Start:  
hh:mm:ss Suspend:  
hh:mm:ss Rate:  
XXXX

Total: XXXX rec

Unit: C

01 .xxx.x C(F) mm-dd  
hh:mm:ss

99 .xxx.x C(F) mm-dd  
hh:mm:ss mm-dd xx:

8. Press "LOG" key at least 2 seconds to clear data logger data

### **11. FUNCTION-Setting Parameters**

1. Press "SET" key to enter setting mode while meter is at IR mode.
2. Parameters could be set by users including LCD contrast( 1to 9 bright to dark) Print contrast(1to 9 light to heavy ) Emissivity Unit( or ) Date mode(MM-DD-YY or DD-MM-YY or YY-MM-DD pressing "ENTER" to select the preferred mode)  
Date and time. Please see below figure.

```
LCD Cont: 5
Prn Cont: 5 Emi
Rate: 0.95 Unit: F
Date: YY-MM-DD
SetClock:
YY-MM-DD hh:mm:ss
03-11-22 08:11:08
```

3. Press "SET" twice at IR mode to enter ID setting Press "Enter" to enter modification mode ID parameter will be highlight and flashing Choose the desired characters and then toggle "enable" or disable by pressing "ENTER" key The desired character will appear on printing data when it is in "enable" mode

## **12.FUNCTION-Link with PC**

Please be reminded that the software & cable for this function is optional and please consult with your supplier if you would like to order this optional item.

1. Plug the cable to your computer and follow up the software install operation procedure indicated in software manual.

2. The software could be used for below functions

Upload and Download #1 to #4 procedure data including updating procedure name and point name.

Download #5 to #8 data logger data