

PDI (V1.0) Manual
Model: PDI-K03 Portable data Indicator (PDI)

Application:

Portable data indicator is useful product for monitoring temperature and humidity data. With this live data can be analyze and monitor continuously. This is battery power and Device battery life of minimum 1 year. This device can be reuse after replacing battery once its battery drains. These devices can be use in following applications.

1. Pharma labs to monitor Temperature and humidity.
2. Transit to monitor temperature and humidity.
3. Can be use in residential and in commercial area to map or monitor temperature and humidly.
4. Data servers were temperature and humidity parameter are monitored.

Feature and Specifications:

1. LCD display with temperature and humidity data with battery operated.
2. Device uses Coin Cell battery (Type CR2450) which is commonly found in local electronic market with the battery life of minimum 1 Year. Display indicates battery life.
3. Sleek design with descent color combination.
4. Once you install battery, set RTC, Temperature MIN and Temperature MAX, Humidity MIN and Humidity MAX setting, this is use to set lower and upper alarm limit.
5. Alarm can be indicated with 'BEL' symbol on it and 'AL' red led blinks on alarm excursion condition.
6. Large display to view Temperature and humidity data and can be viewed from longer distance.
7. Device toggle Temperature and Humidity data after 10 seconds, also toggles Date and Time after 10 second on top side.
8. Device can be place on desktop with vertically standing position or can be hang on wall with given provision on top of the device enclosure.

Specifications:

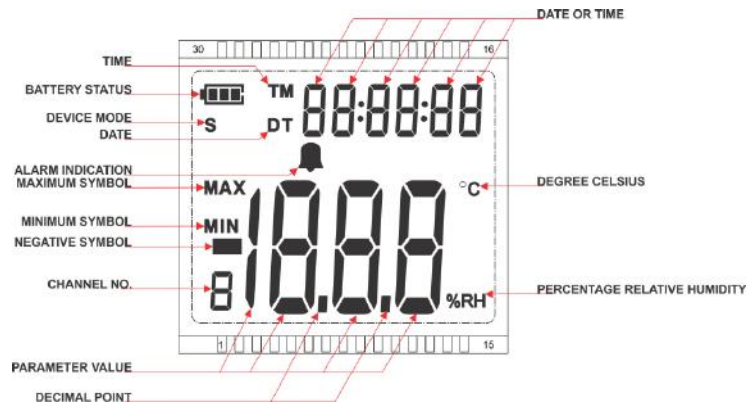
Sr.No.	Description	PORTABLE DATA INDICATOR
HARDWARE SPECIFICATION		
1	No of Channel	Two
2	Channel Type	Temperature Humidity
3	Input Range Specification	Temperature : -30°C ... 70°C (-22 °F ... 140 °F) Humidity : 0 % RH ... 100 % RH
4	Accuracy	Temp:- +/-0.3°C (for the range of 0°C to 40°C) for rest of the range +/-0.7 Maximum Humidity:- +/-3%RH (for the range of 20 to 80 %RH) for rest of the range +/-6%RH Maximum
5	Channel Resolution	Temp:- 0.1°C Humidity:- 0.1%RH
6	Sensor Location	Inbuilt Digital sensor Band Gap temperature/capacitive humidity sensor
1	Keypad	Two Key 1:- SET key or function key 2:- MIN/ MAX key
2	RTC	1:- Date and Time in 24 hours format only
3	Power Supply Source	CR2450 3.0V Battery (610mAh)
FIRMWARE FEATURE		
1	RTC	Yes, Real time Clock
2	Alarm setting for parameter	Temperature and Humidity Minimum and Maximum alarm setting
3	Minimum and Maximum value	You can view minimum and maximum reading with Min/Max key.
3	Alarm Indication	Yes (alarm indication on display with bell icon, and red led blinks for alarm indication)
4	Battery Life	1 year (battery self life)
MECHANICAL / ENCLOSURE		
1	Enclosure / Mounting	Customize Enclosure (66mm x 55mm x 20mm)

Precaution and troubleshooting:

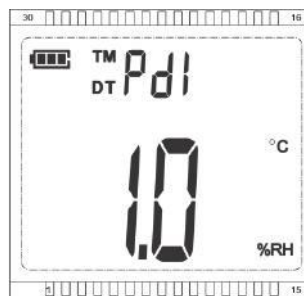
1. Use genuine standard CR2450 Panasonic battery for better performance and battery life.
2. Do not drop device.
3. Do not keep any material or liquid on device.
4. Dispose drain battery properly as per local rule.
5. If you do not want to use the device then remove battery from its compartment.
6. If battery is drain then replace it or remove it from device, do not keep battery inside the device.
7. If device is not working then replace the battery or clean the battery contact.

Operation:

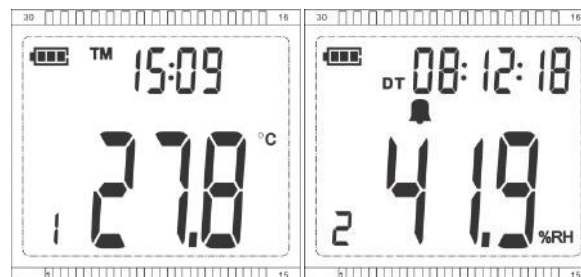
1. Display information.



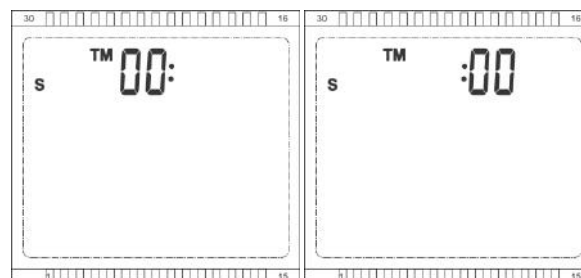
2. After inserting battery device will show information on display as below image.



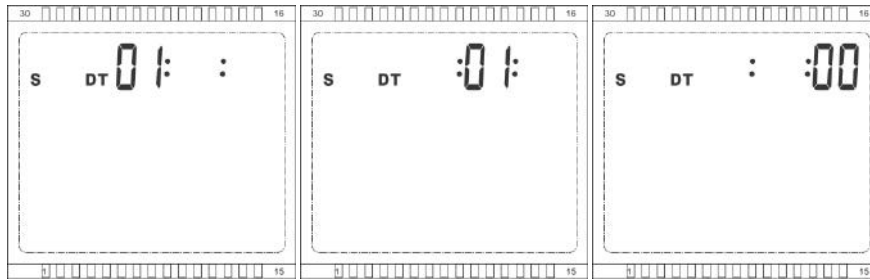
3. Power on device will start to show temperature and humidity reading. User can set date and time after replacing battery. Normally device shows data on display with temperature and humidity alternatively with 20 sec toggling time.



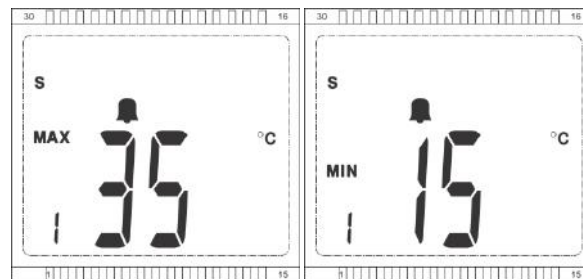
4. User can set DATE and TIME with pressing both 'SET' and "MIN/MAX' key at a time for maximum 5 sec. display will show 'S' symbol to indicate the device is in set mode. Display will show '00:' in time ('TM').
5. User can increment Time in Hours (0-23 Hours) with pressing 'SET' key, after setting hour press 'MIN/MAX' key to shift setting for Minutes. Again press 'SET' key to increment minutes (0-59 Minutes).



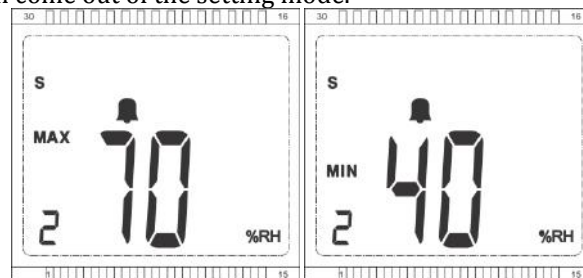
6. Now pressing 'MIN/MAX' key will allow to set DATE. Set DATE (1-31 Days) by incrementing with 'SET' key. Again pressing 'MIN/MAX' key will allow you to set MONTH (1-12 Months), use 'SET' key to set Month. Again press 'MIN/MAX' to set YEAR (1-99 Years), with 'SET' key Year can be set.



7. Further setting press 'MIN/MAX' key this will set Temperature Maximum alarm setting, it will indicate MAX symbol at left side. With incrementing using 'SET' key Maximum temperature alarm limit (0-70°C with no decimal value) can set. Pressing 'MIN/MAX' key device will allow to set MIN temperature alarm limit (0-70°C no decimal value). Using 'SET' key lower alarm limit can be set. While setting alarm display show bell symbol.



8. Further pressing 'MIN/MAX' key device will set humidity Maximum alarm setting. Using 'SET' key set humidity maximum alarm limit (0-99%RH no decimal value). Pressing 'MIN /MAX' key will set humidity minimum alarm limit (0-99%RH no decimal value). While setting alarm device will show bell symbol. Pressing 'MIN/MAX' key will save data in device and will come out of the setting mode.



9. **Note :-** if we keep device in setting mode for more then 15-20 sec device will come out off the set mode. In this case device will save only new modified data up till it is modified, rest data will be as older value.
10. After setting all data device will show RTC with temperature and humidity reading.
11. Device will show live Temperature Minimum and Maximum value by pressing 'MIN/MAX' key when display showing temperature reading. MIN MAX value can be identified with MIN and MAX symbol with °C symbol. (Note this is not alarm limit value)
12. Device will show live Humidity Minimum and Maximum value by pressing 'MIN/MAX' key when display showing Humidity reading. MIN MAX value can be indetified with MIN and MAX symbol with %RH symbol. (Note this is not alarm limit value)
13. User can reset LIVE MIN and MAX value by pressing 'SET' key for maximum 5 sec continuously. Reset will be indicated by MIN MAX symbol it will turn on at a time for less than 5sec.