

OPERATION MANUAL

UV LIGHT METER

UVA and UVB measurement

Thanks for your purchase of our UV LIGHT METER , please read the following instructions carefully and always keep this manual within easy reach. UV light meter is with extremely precise structure. Once don't use it, be sure to store it in the dry environment. We suggest you put the whole light meter including Desiccant into to the plastic bag and seal the bag as tightly as possible.

Please take the sensor out of the bag only when use it and replace the Desiccant periodically.

Comply to above method will extend the life of UV light meter. Otherwise, the gain of the UV sensor may be decreased and shorten the calibration period.

1.FEATURES

- *Professional, high quality UV light meter
- *Measurable of UVA & UVB.
- *UV detector spectrum from 280 nm to 380 nm.
- *Three range selection switchable.
- *Exclusive UV sensor structure.
- *LSI-circuit use provides high reliability and durability
- *Separate UV LIGHT sensor allows user to measure the UV light at an optimum position
- *LCD display, easy readout.

2. APPLICATIONS

Industrial:

- *Monitoring blue light radiation hazards in welding
- *UV sterilization
- *Graphic arts
- *Photochemical matching
- *UV EPROM erasure
- *Photoresist exposure
- *Curing of inks, adhesives and coatings.

Laboratory:

- *Weathering 'degradation studies'
- *UV sterilization
- *Virology
- *Microbial genetics
- *DNA research
- *Biologic hoods
- *General laboratory use

3. SPECIFICATIONS

- *Display: 3 3/4 LCD display, maximum indication 3999
- *Measurement ranges & resolution: 0-40 mW/cm²(3 Ranges),
 - 400 μ W/cm² range
 - 4000 μ W/cm² range

40 mW/cm² range

(1000 μW/cm² = 1 mW/cm²)

*UV sensor spectrum: Band pass 280 nm – 380 nm

*Accuracy: $\pm(4\%FS + 2dgt)$ FS: full scale (Calibration is executed under the UVA light & and compare with the standard UVA light meter; Special tested under the environment RF Field Strength less than 3V/M & frequency less than the 30 MHz only)

*Sensor structure: The exclusive UV photo diode & UV color correction filter.

*Sample Time: Approx. 0.4 sec.

*Over Range indication: indication of 'OL'

*Operating Temperature & Humidity:

-10°C to 40°C (32°F-104°F) 0~70%Rh

*Storage temperature-humidity:

-10°C to 50°C (14°F-140°F) 0~80%Rh

*Power Supply: DC 9V battery, 006P, MN 1604 (PP3) or equivalent.

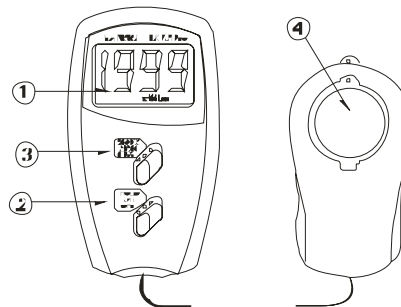
*Power Consumption: Approx. DC 2.7 mA

*Dimension: 106x57x26mm (photo detector)

230x72x30mm (meter body)

4. PANEL DESCRIPTIONS

1. LCD display
2. Turn off, turn on, Peak value hold
3. Range select button
4. Photo detector




5. OPERATION INSTRUCTIONS

- 1) Connect the battery, and then press the button to 'on'

- 2) Press the range selection switch to desired range.
- 3) Remove the photo detector cap and face it to UV light source in a horizontal position, read the test value from the LCD display.
- 4) If the instrument displays “OL” on the LCD, then a higher range should be selected to measure.
- 5) Data-Peak mode: press the ‘PEAK’ key to select PEAK Hold model, the instrument display ‘PH’, the UV light meter shows the peak measuring value on the LCD. Press the button ‘PEAK’ to the ‘ON’, the peak value will be cancelled.
- 6) When the measurement is completed, replace the photo detector cap and turn the power selector ‘OFF’.

6. BATTERY REPLACEMENT

- 1) It is necessary to replace another one 9V battery, when left corner of LCD display show “ ”.
- 2) After turning off the meter, slide the battery cover and push in the direction of the arrow to open. Disconnect the battery from the instrument and replace it with a standard 9-volt transistor battery and reinstate the cover.
- 3) Make sure that the battery cover is secured after changing the battery.

1. MAINTENANCE

- 1) Do not store the instrument where temperature or humidity is excessively high.
- 2) The white plastic disc on the top of the detector should be cleaned with a damp cloth when necessary.
- 3) The reference level, as marker on the face plate, is on the top of the sensor.

4) The calibration interval for the sensor will vary according to operational conditions, but general the sensitivity decreases in direct proportion to the product of luminous intensity by the operational time. In order to maintain the basic accuracy of the instrument, periodic calibration is recommended.