

**GENERAL®**

**UV512C**  
USER'S MANUAL

## Digital UVC Light Meter



*Thank you for purchasing this Digital UVC Light Meter. Read through this instruction manual before operating the unit.*

*Please also store and retain this instruction manual for future reference.*

**STORAGE FOR SENSOR**

The UV sensor is an extremely precise detection instrument. When not in use, store it in a dry environment.

Please keep the manual for future reference.

**DANGER WHEN USING THE EQUIPMENT****ATTENTION**

Improper use may endanger the health of third parties! It may also result in damage to the equipment or other material damage.

**FEATURES:**

The UV-Meter is a mobile, hand-held device for measuring UV irradiation.

- Socket for tripod mounting
- High and Low measurements range in a unit mW/cm<sup>2</sup> or µW/cm<sup>2</sup>
- Backlit LCD and 4 Digits dual display
- 20 points memory
- Low battery indication
- Operation with "9V" battery
- Magnetic mount

**SAFETY SYMBOLS**

Indicates CE conformity

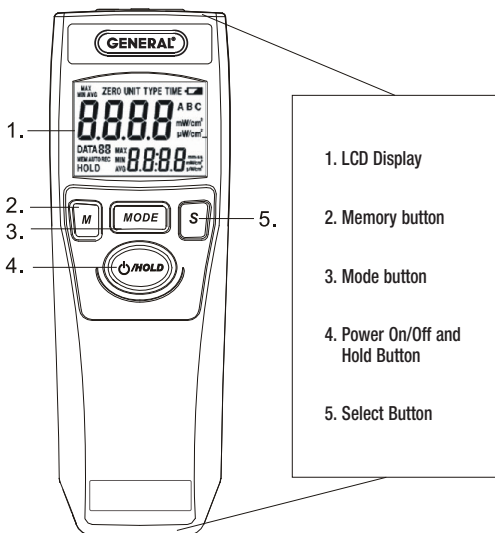


The device may not be disposed of with the trash. It promotes re-use recycling and other forms of recovery of used materials and components, and improves the environmental performance of all operators (manufacturers, traders and treatment facilities) involved in the life cycle of products. Dispose of the product appropriately in accordance with the regulations in force in your Country.

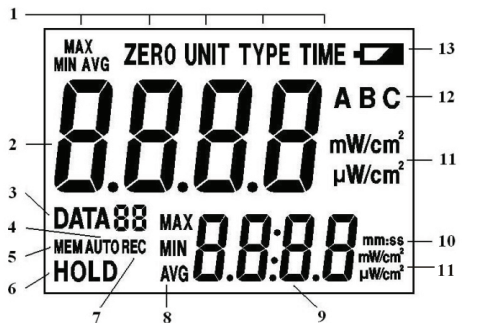
**SPECIFICATIONS:**

Range	Indication ' -HI- '
Zero Adjust	Yes
Auto Record	Yes
Sample Time	Approx. 0.3 sec
Display	Backlit LCD and Dual Display
Memory	20 points and 1 for interval time
Operation Temperature	32° to 122°F (0° to 50°C), 10 to 90% RH
Battery Source	"9V"
Weight	Approx. 3.2 (90g) without battery and detector
Dimensions	5.51 x 1.93 x 1.14" (140 x 49 x 29mm)

### CONTROL PANEL



### LCD DISPLAY



- 1 Main Functions
- 2 Primary Reading
- 3 Data Log
- 4 Auto Mode
- 5 Memory Review

- 6 Data Hold
- 7 Record
- 8 MIN/MAX/AVG
- 9 Secondary Reading
- 10 Time Unit

- 11 Unit
- 12 UV Type
- 13 Low Battery

## OPERATIONS OF INSTRUMENT

### POWER ON

Press **(H/ Hold)** button and hold for 2 seconds. Release the **(H/ Hold)** button after power on. All symbols of LCD will appear for 1 second.

### POWER OFF

Press **(H/ Hold)** button and hold for 2 seconds. All symbols of LCD will appear and shut down after releasing **(H/ Hold)** button.

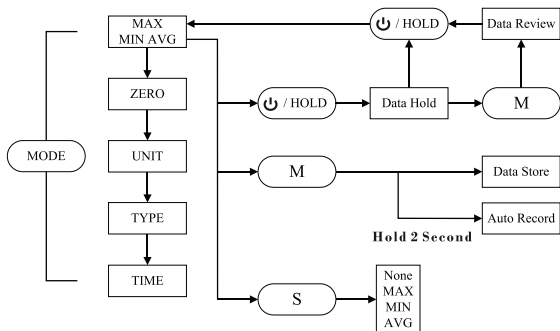
### MEASUREMENT VALUE

The primary reading always displays the value of measuring. The secondary reading displays the outcomes of the advanced functions or data recording.

### MAIN FUNCTION

Press Mode button to choose the main functions (MIN/MAX/AVG) has several extended programs as indicated in the diagram, please read the following descriptions to know how to press **(S)**, **(H/ Hold)** or **(M)** buttons to move to next level!!

### MAIN FUNCTION DIAGRAM



### MAX MIN AVG

### MAX/MIN/AVG MEASURING FUNCTION

There are 4 modes of the measuring function. Press the **(S)** button to change the mode of measuring:

None → Max → Min → Avg.



### DATA HOLD

Press the **(H/ Hold)** button, the value at Secondary Display will be held and the LCD will show the HOLD symbol. To cancel the hold mode, press the button again.

## Data Review

Press the **[M]** button during the hold mode, it will get into the data memory review mode. The LCD will show **[MEM]** symbol.

Press the **[S]** button to review data 0 to 20. Data 0 is always at stored the interval time after auto recording activated. If the data are automatically recorded, the **[AUTO]** symbol appears next to **[MEM]** during the review.

## DATA STORE

### Normal

Press the **[M]** button to store the current measurement displayed at Primary Display. The flashing DATA(01-20) icon becomes steady for 2 seconds, and moves to next storage location.

### Auto

If automatically recording is required, press the **[M]** button and hold for 2 seconds. The LCD will show **[AUTO]** symbol next to **[REC]** symbol. As show **[AUTO]** symbol next to **[REC]** symbol. As soon as it reaches 20 data, the system will turn off.

The following record contents will be stored:

1. Irradiation intensity
2. Maximum, Minimum, Average or none
3. Unit

To cancel auto record mode, press the **[M]** button again.

## ZERO

### Zero Adjust

Cover the sensor and press the **[S]** button to zero adjust. The Secondary Display will display adjust value\*. Press the **[S]** button again and hold for 1 second to clear the adjust value.

*\*When the adjust value is over the range. The Secondary display will display "Err".*

*Please follow the zero adjust step and do it again.*

## Memory Clear

In Zero Mode, press the **[M]** button to clear data 0 to 20.

## UNIT

### Unit Function

Press the **[S]** button to change the unit,  $\mu\text{W/cm}^2$  or  $2\text{mW/cm}^2$

## TIME

### Time Function


Press the **[S]** button to set the interval time of auto recording.

This function allows you to set 9 different time intervals by pressing the **[S]** button.

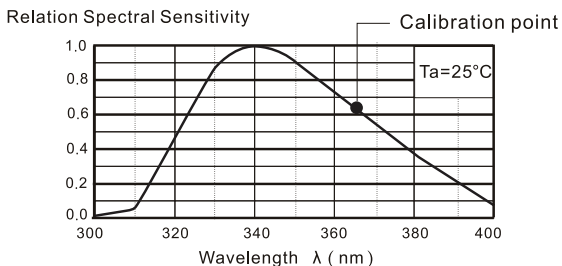
The 9 time intervals are: 1, 2, 5, 10, 30 second or 1, 3, 5, 10 minutes.

## MAINTENANCE

**Clean the housing:** Use soap and water on a damp sponge or soft cloth. Care should be taken to prevent any liquids or moisture from getting inside the unit.

When the battery is low, the battery symbol will be displayed. 

# UVC SENSOR



## Specification

Sensor designation	UVC
Spectrum sensitivity	220~275
Calibration point	254 nm
Temperature range	0° ~50°C
Accuracy( 23±5°C)	±4% ±1 digit

## Units/multi-Ranges

Low illumination	$1 \mu\text{W}/\text{cm}^2 \sim 9999 \mu\text{W}/\text{cm}^2$
High illumination	$0.01 \text{mW}/\text{cm}^2 \sim 40.00 \text{mW}/\text{cm}^2$

**Note: Press "Mode" key to enter Unit selection mode.**

## Surface sensor

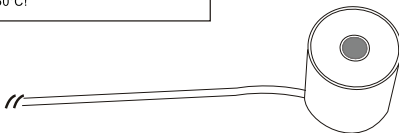


### ATTENTION

The sensors are only suitable for short term measurement in a splash-proof environment, as otherwise premature ageing and thermal destruction of the sensor will occur. The housing temperature must never exceed 50°C!

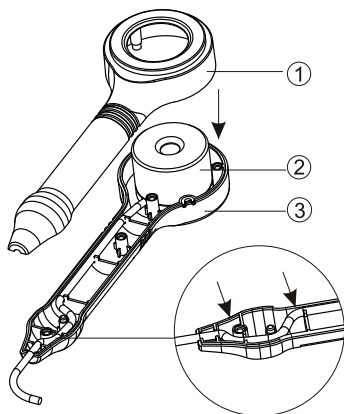
## Dimensions

$\Phi = 35 \text{ mm}$   
 $H = 25.5 \text{ mm}$

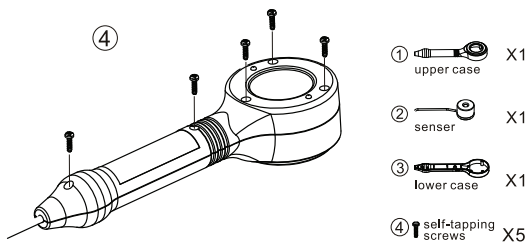


# Extendable Wand

(A)



(B)



**Note:**

It is recommended not to assemble and disassemble the wand too many times to avoid wearing out the screw holes.



**Specialty Tools & Instruments™**

**GENERAL TOOLS & INSTRUMENTS™**

**80 White Street, New York, NY 10013-3567**

**PHONE (212) 431-6100**

**FAX (212) 431-6499**

**TOLL FREE (800) 697-8665**

**e-mail: [sales@generaltools.com](mailto:sales@generaltools.com)**

**[www.generaltools.com](http://www.generaltools.com)**

UV512C User's Manual

Specifications subject to change without notice

©2008 GENERAL TOOLS & INSTRUMENTS™

NOTICE - WE ARE NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

**MAN#UV512C 10/08**