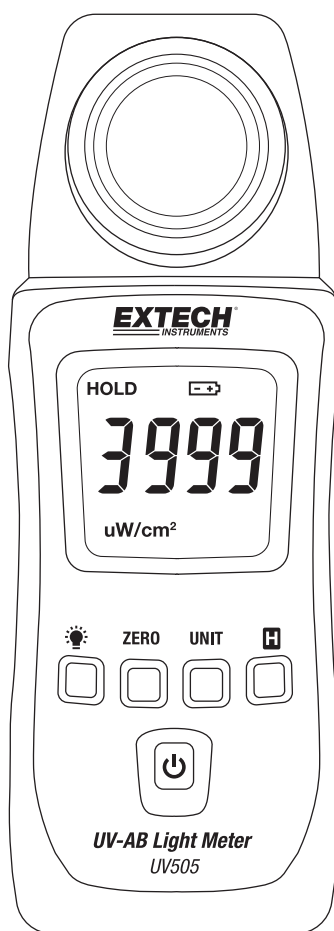




USER MANUAL

UV-AB Light Meter

Model UV505



Introduction

Thank you for selecting the Extech Model UV505 UV-AB Light Meter. This device measures UV-AB ultraviolet light in the wavelength range of 290~390nm. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website

Features

- Professional, high quality UV meter
- Measures ultra-violet irradiation
- Wavelength range 290 nm to 390 nm
- Two measurement ranges for greater accuracy (0~3999 $\mu\text{W}/\text{cm}^2$ / 0~39.99 mW/cm^2)
- Auto power off after 15 minutes
- Lightweight, ergonomic design

General Safety

Please read the entire User Manual before operating this device. Use the meter only as specified and do not attempt to service or open the meter housing. Do not allow children to handle the meter or the protective cover. Please dispose of batteries and meter responsibly and in accordance with all applicable laws and regulations.

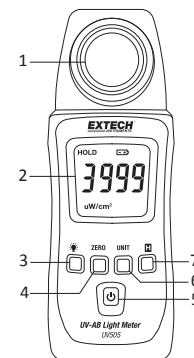
- To prevent damage to this precision device, do not attempt measurements outside of the ranges specified in this manual
- Do not use this meter in direct sunlight or any place where it is excessively hot and/or humid
- Do not submerge the meter in liquid

UV Safety Information

Use extreme caution when using this meter to test an ultraviolet light source. Exposure to UV radiation can be hazardous depending on the exposure time, intensity of radiation, wavelength and an individual's sensitivity to ultraviolet.

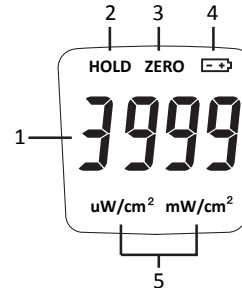
Meter Description

1. Light Sensor (protective cover not shown)
 2. LCD
 3. Backlight button
 4. Zero button
 5. Power ON-OFF button
 6. Unit of measure toggle button
 7. Display Data Hold button
- Note: Battery compartment and tripod mount are located on the back of the meter



LCD Description

1. Measurement Reading
2. Data Hold
3. Zero mode
4. Low battery indicator
5. Unit of measure ($\mu\text{W}/\text{cm}^2$ or mW/cm^2)



Button Descriptions

	Press to turn the meter ON or OFF
	Press to freeze/unfreeze the readings on the display
UNIT	Short press to toggle between $\mu\text{W}/\text{cm}^2$ and mW/cm^2
	Short press to power ON the backlight. The backlight switches OFF automatically after 10 seconds.
ZERO	With the protective cover over the sensor, press to zero the display. Press again to exit.

Operation

Meter Power

Short press the  power button to switch the meter ON/OFF. If the LCD does not switch on, check the batteries located in the rear battery compartment. The meter powers off automatically after 15 minutes of inactivity.

Zero the Sensor

With the sensor's protective cover attached, short press the **ZERO** button to zero the display before taking measurements. The **ZERO** display alert will appear while the meter is zeroing. Press the **ZERO** button again to exit the mode; the **ZERO** display alert will switch off.

Taking Measurements

Remove the sensor cover and aim the light sensor at the UV light source. View the measurement on the meter's display.

Selecting Range and Unit of Measure

Short press the **UNIT** button to toggle the range (mW/cm^2 and $\mu\text{W}/\text{cm}^2$); the lower display area will show the selected range.

Data Hold

Short press the  button to freeze or unfreeze a reading on the display.

Backlight

The LCD is equipped with backlighting for easier viewing, especially in dimly lit areas. Short press the backlight  button to turn on the backlight. The backlight will automatically turn off after 10 seconds.

Measurement Considerations

- Keep the light sensor clean and free of scratches. Dust lightly with dry lint free cloth.
- Avoid reflections or shadows on the sensor while taking measurements.
- For best accuracy, repeat the measurement several times to ensure that the light source has remained stable.

Maintenance

Battery Replacement

1. Power OFF the meter.
2. Press and hold the locking button above the battery compartment (back of the meter) and slide the battery compartment door off in a downward motion.
3. Replace the two 'AAA' 1.5V batteries observing correct polarity. Re-assemble the meter before use.

Battery Safety: Please dispose of batteries responsibly; never dispose of batteries in a fire, batteries may explode or leak. If the meter is not to be used for 60 days or more, remove the batteries and store separately.



Never dispose of used batteries or rechargeable batteries in household waste.

As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

Cleaning and Storage

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents. Use a dry lint free dust cloth to clear debris and dust from the sensor. Avoid any materials that could potentially scratch the sensor surface.

Specifications

Display	Backlit 3-3/4 digit (4000 count) LCD Size: 35 x 30mm (1.4 x 1.2")		
Sampling rate	Approx. 3 seconds		
Measurements	Ultraviolet Light (UV-AB)		
UV sensor spectrum	290 to 390 nm		
Peak Sensitivity Wavelength	365 nm		
Input Overload Display	"OL"		
Tripod mount	On rear panel		
Power	2 x 1.5V 'AAA' batteries		
Battery life	Approx. 50 hours		
Automatic power off	After approx. 15 minutes of inactivity		
Operating Temperature/Humidity	5 to 40°C (41 to 104°F) / 80% RH max		
Operating Altitude	2000 meters (7000ft) maximum		
Storage Temperature/Humidity	-10 to 60°C (14 to 140°F) / 70% RH max		
Dimensions/Weight	133 x 48 x 23mm (5.2 x 1.9 x 0.9") /90g (3.2oz)		
Safety	For indoor use only. EMC: EN61326 (1997), A1 (1998), A2 (2001); Pollution degree 2		
Electrical Specifications (23±5°C)			
Ultraviolet (UV-AB)			
Unit	Range	Resolution	Accuracy
mW/cm ²	0 to 39.99	0.01	± 4% full scale
μW/cm ²	0 to 3999	1	± 4% full scale

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