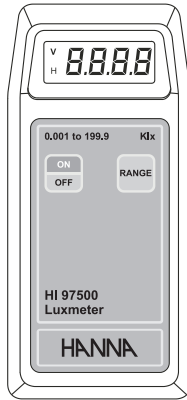


Instruction Manual

HI 97500 Portable Lux Meter



WARRANTY

All Hanna Instruments **meters are warranted for two years** against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. **Sensors and probes** are warranted for a period of **six months**. This warranty is limited to repair or replacement free of charge.

Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered.

If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

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Hanna Instruments reserves the right to modify the design, construction and appearance of its products without advance notice.

Dear Customer,

Thank you for choosing a Hanna product.

This manual will provide you with the necessary information for the correct operation of the meter. Please read it carefully before using the meter.

If you need additional technical information, do not hesitate to e-mail us at tech@hannainst.com.

This instrument is in compliance with **CE** directives.

PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If there is any damage, notify your Dealer.

Each meter is supplied complete with:

- 1 x 9V alkaline battery
- instruction manual.

Note: Conserve all packing material until the instrument has been observed to function correctly. Any defective item must be returned in its original packing.

GENERAL DESCRIPTION

HI 97500 is a portable lux meter designed for simplicity of use in taking rapid light measurements.

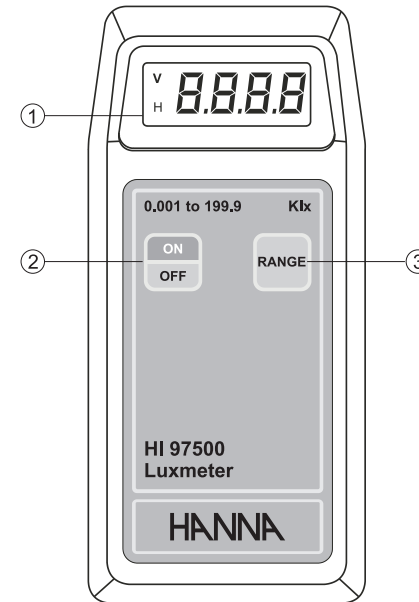
The instrument is provided with a light sensor connected to the meter through a flexible coaxial cable, allowing measurements from a distance without any interference from the operator.

By simply pressing the RANGE key, it is possible to switch among three ranges and choose the best resolution according to the environment to be tested.

The **HI 97500** lux meter is housed in a rugged and water-resistant body for outdoor use without any problem.

The 9V battery and the automatic shut-off feature guarantee about 200 hours of operation.

FUNCTIONAL DESCRIPTION



- 1) Liquid Crystal Display (LCD)
- 2) **ON/OFF** key, to switch the meter ON and OFF
- 3) **RANGE** key, to select the measurement scale

SPECIFICATIONS

Range	0.001 to 1.999	Klux
	0.01 to 19.99	Klux
	0.1 to 199.9	Klux
Resolution	0.001	Klux
	0.01	Klux
	0.1	Klux
Accuracy	$\pm 6\%$ of reading ± 2 digits	
Calibration	factory calibrated	
Light Sensor	human-eye-response silicon photodiode with 1.5m coaxial cable (fixed)	
Battery Type	1 x 9V alkaline	
Battery Life	approx. 200 hours of continuous use	
Auto-off	after 7 minutes of non-use	
Environment	0 to 50°C (32 to 122°F); 100% RH	
Dimensions	164 x 76 x 45 mm (6.5 x 3.0 x 1.8")	
Weight	180 g (6.3 oz.)	

Recommendations for Users

Before using this product, make sure that it is entirely suitable for the environment in which they are used.

Operation of this instrument in residential area could cause unacceptable interferences to radio and TV equipments, requiring the operator to take all necessary steps to correct interferences.

Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance.

To avoid electrical shock, do not use this instrument when the voltage at the measurement surface exceeds 24 Vac or 60 Vdc.

To avoid damages or burns, do not perform any measurement in microwave ovens.

OPERATIONAL GUIDE

- The meter is supplied complete with a 9V battery. Remove the battery compartment cover on the back of the meter and install the battery while paying attention to its polarity.
- Put the light sensor on a stable surface and the meter at a proper distance to avoid any interference or disturb to the illumination of the sensor.

- Turn the meter on by pressing the ON/OFF key.



- Press the RANGE key to select the proper scale according to the intensity of the light.



- "1." on the LCD indicates that it is necessary to change the measure scale. Press again the RANGE key. The decimal point moves through the display and finally the correct value is shown.



- Wait for about 1 second for the reading to stabilize.
- After 7 minutes of nonuse, the meter shuts off.

Note: Before taking any measurement, check if the sensor is clean.

LIGHT MEASUREMENT

Illuminance is measured by Luxmeters in *lux* scale, which can achieve up to 200 *Klux* for reliable outdoor readings.

For accurate measurements the photosensor has to be cosine and color corrected.

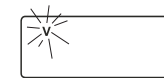
The cosine correction allows for the effects of light falling on the cell at oblique angles, while color correction is necessary to match the spectral sensitivity of the human eye, and it is defined by the CIE V_{λ} ("V-lambda") curve.

The color correction filters usually limit the sensitivity to UV (ultraviolet) and IR (infrared) radiations.

Note: In many situations the "measuring plane" is either not specified or nonexistent. In these cases, a height of one meter above ground or floor level is generally considered acceptable.

BATTERY REPLACEMENT

When the battery becomes weak, the meter displays a blinking "V" on the left side of the LCD.



When the low battery indicator appears only a few hours of battery life is remaining. A low battery level may also result in unreliable measurements. It is recommended to replace the battery immediately.

Unscrew the 3 screws on the back of the meter, remove the battery cover and replace the battery while paying attention to its polarity.

Before replacing the cover and tightening the screws, check that the gasket is in place to ensure a watertight seal.

Battery replacement must only take place in a safe area and using an alkaline 9V battery.