FLUKE®

941

Light Meter

Users Manual

English

PN 4971095

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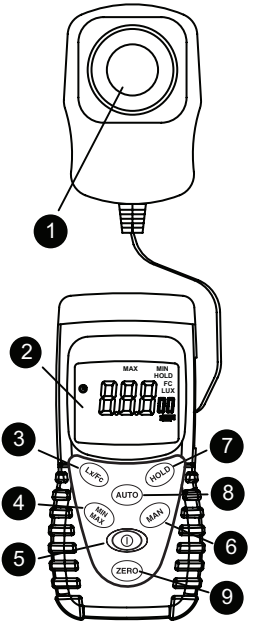
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1. Light sensor
2. Display (LCD)
3. Lux / foot candles
4. MAX Lock up MIN and MAX value
5. Power Button: ON/OFF
6. Manual range selection
7. DATA HOLD button
8. AUTO ranging
9. Light sensor Zero Adjustment

CONTENTS

Symbols 5
Unpacking and Inspection 5
Introduction 6
Operation 6
- Lx / Fc 6
- Data Hold 6
- AUTO / MAN Ranging 6
- MIN/MAX 6
- Auto-Power Off 6
- Zero 6

Specifications 7
Maintenance and Repair 8
Battery Replacement 8

SYMBOLS

The following symbols are used on the Product and in this manual.

Symbol	Description
	WARNING.RISK OF DANGER.
	Battery or battery compartment.
	Consult user documentation.
	Conforms to relevant South Korean EMC Standards.
	Conforms to relevant Australian Safety and EMC standards.
	Conforms to European Union directives.
	This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 “Monitoring and Control Instrumentation” product. Do not dispose of this product as unsorted municipal waste.

⚠ Warning and Precautions

- **Do not operate the meter in explosive gas (material), combustible gas (material) steam or filled with dust.**
- **The light sensor is calibrated to CIE standard incandescent lamp at 2854 °K and may give different readings for spectrums from other lamp types.**

UNPACKING AND INSPECTION

Your shipping carton should include:

1 941 light meter

1 9 volt battery

1 Users Manual

If any of the items are damaged or missing, return the complete package to the place of purchase for an exchange.

INTRODUCTION

The 941 measures the visible light from fluorescent, metal halide, high-pressure sodium or incandescent sources.

One LUX (Lumen) is the illumination from a one candela lamp perpendicular to a surface one meter squared at a distance of one meter. One foot-candle (Fc) is the illumination from a one candela lamp perpendicular to a surface one foot squared at a distance of one foot.

OPERATION

1. Press the ⏻ button to turn power on or off
2. Remove sensor cap and place the sensor perpendicular to the light.
3. Select Illuminance scale and range for reading.
4. When done testing, replace the sensor cover to protect the filter and sensor.

Lx / Fc

Illuminance scales. 1 foot-candle = 10.764 Lux and 1 lux = 0.09290 foot-candles.

Data Hold

Freezes the reading present on the LCD at the moment the button is pressed. Press HOLD again to disable Data Hold.

AUTO / MAN Ranging

Press the AUTO or MANual ranging button for useable reading. AUTO ranging is the default operation.

MIN/**MAX**

Pressing the MIN/MAX button for less than 1 second will put the meter into a mode of displaying the maximum, minimum, or actual readings. Each time the MIN/MAX button is pressed, the meter will cycle from MAX ▶ MIN ▶ off.

Select the proper measurement range before enabling the MIN/MAX feature.

Auto-Power Off

In order to save battery life, your light meter powers down automatically after approximately 6 minutes of inactivity. You can turn it back on by pressing the ⏻ button. You can disable Auto Power Off by pressing and holding the HOLD button while turning the meter ON.

Zero

The light sensor will change the null point over time. To reset the null point, cover the sensor, press the ZERO button. The display will show “ADJ”. When the null reset is done, the display will read ‘00.0’.

SPECIFICATIONS

General

Sampling Rate	2.5 times per second for digital display.
Display	3½ digit, 1999 count LCD
Sensor	Silicon photodiode and filter.
Environment	Indoor operation
Altitude	Up to 2000m.
Temperature / Humidity	
Operating	-10 °C to 50 °C, 0 to 80 % RH.
Storage	-10 °C to 50 °C, 0 to 70 % RH.
Power Supply	9V, IEC 6LR61
Battery life	200 hours
Auto Power Off	approx 6 min
Dimension (Base)	130 x 63 x 38 mm (5.1 x 2.5 x 1.5”)
Dimension (Sensor)	80 x 55 x 29 mm (3.2 x 2.2 x 1.1”)
Weight	220 g (.48 lb.) include battery

Illumination

Measuring Range	20, 200, 2000, 20000, 200000 Lux
	20, 200, 2000, 20000 Foot candles
Accuracy	± 3% (Calibrated to standard incandescent lamp at 2854°K)
	± 6% other visible light sources
	Angle deviation from cosine Characteristics
	30° ± 2%
	60° ± 6%
	80° ± 25%

Cosine Angular corrected per JIS C 1609:1993 and CNS 5119 general A class specifications.

Electromagnetic compatibility (EMC)

International IEC 61326-1:Portable; CISPR 11:Group 1, Class A.

Group1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.

Class A: Equipment is suitable for use in all establishments other than domestic and those directly.

Korea (KCC) Class A Equipment (Industrial Broadcasting & Communication Equipment)

Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.

MAINTENANCE AND REPAIR

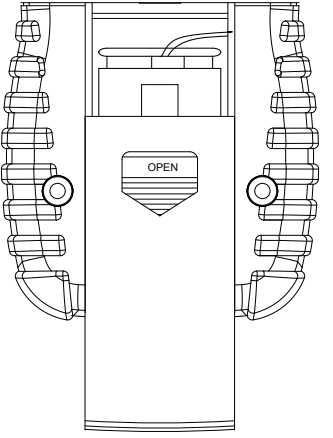
If there appears to be a malfunction during the operation of the meter, the following steps should be performed in order to isolate the cause of the problem.

1. Check the battery. Replace the battery immediately when the symbol "⊟+" appears on the LCD.
2. Review the operating instructions for possible mistakes in operating procedure.

Except for the replacement of the battery, repair of the meter should be performed only by a Factory Authorized Service Center or by other qualified instrument service personnel. The front panel and case can be cleaned with a mild solution of detergent and water. Apply sparingly with a soft cloth and allow to dry completely before using. Do not use aromatic hydrocarbons or chlorinated solvents for cleaning.

BATTERY REPLACEMENT

1. Turn off the meter and slide out the battery cover. Replace the battery with a IEC 6LR61 9V alkaline battery. Replace the cover.
2. Remove battery when the Fluke-941 is not used for extended period.



Battery Replacement