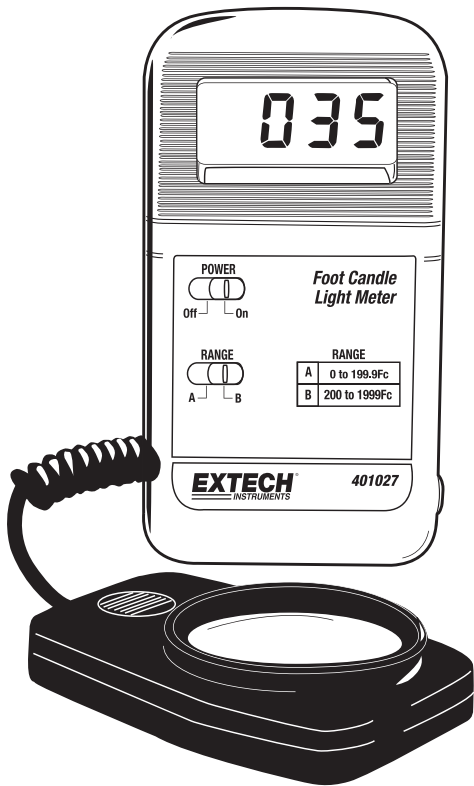


User's Manual

EXTECH[®]
INSTRUMENTS
A FLIR COMPANY

Model 401027

Pocket Foot Candle Light Meter



Introduction

Congratulations on your purchase of the Extech Pocket Foot Candle Light Meter which measures and displays light intensity in foot candle units. Two ranges can be selected (200.0 and 2000 Fc). The precision color-corrected photo-diode sensor provides 5% accuracy.

Specifications

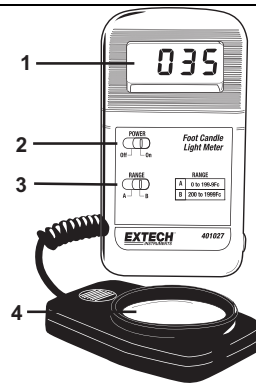
| | |
|-------------------------|---|
| Circuit | Custom LSI microprocessor based design |
| Display | 0.5" (13mm) 3-1/2 digit (1999 count) LCD display |
| Sensor | Photo-diode with color correction filter (meets CIE regulations) |
| Out of range indication | "1" is displayed |
| Sampling time | Approx. 0.4 seconds |
| Power Supply | 9V battery |
| Power consumption | Approx. 2.7mA |
| Operating temperature | 32°F to 122°F (0°C to 50°C) |
| Operating Humidity | < 80% RH |
| Weight | 0.43 lb. (195g) |
| Dimensions | Meter: 5.2x2.8x1" (131x70x25mm); Probe: 3.2x2.2x0.3" (82x55x7mm) |
| Accessories | Probe and 9V battery |

Range Specifications

| Range | Resolution | Accuracy |
|----------------|------------|------------------------------|
| 0 to 199.9 Fc | 0.1 Fc | ± (5% + 4 digits) Full Scale |
| 200 to 1999 Fc | 1 Fc | |

Meter Description

1. Display
2. ON/OFF switch
3. Range switch
4. Light sensor



Meter Operation

1. Slide the ON/OFF Switch to the ON position.
2. Fold out the meter's rear tilt stand and set the meter on a desktop.
3. Select range "B"
4. Hold the Light Sensor with the white lens facing the light source to be measured. The sensor can also be placed on the desktop facing in the direction of the light source.
5. Read the light measurement on the LCD display.
6. If the measurement is less than 200 fc, select the lower "A" range

Battery Replacement

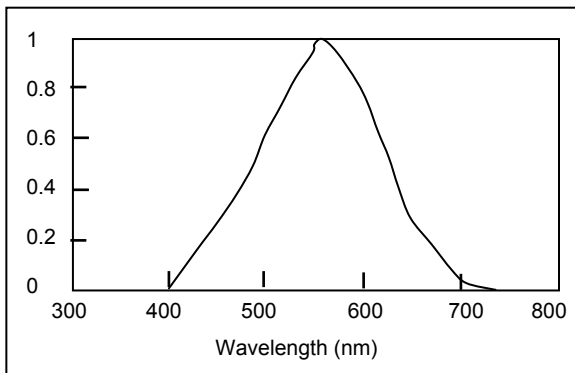
The low battery indicator "LO BAT" appears on the LCD display when it is nearing the time to replace the 9V battery. Reliable readings can still be obtained for several hours after the first appearance of the low battery indicator. To replace the batteries:

1. Slide the rear battery compartment cover off of the meter and remove the old battery
2. Replace the battery and reinstall the compartment cover

Typical Light Levels For Work Areas

| | | Foot Candles | Lux |
|------------|-------------------------------|---------------------|-----------------|
| Factories | Emergency Stairs, Warehouse | 2 to 7 | 20 to 75 |
| | Exit/Entrance Passages | 7 to 15 | 75 to 150 |
| | Packing Work | 15 to 30 | 150 to 300 |
| | Visual Work: Production Line | 30 to 75 | 300 to 750 |
| | Typesetting: Inspection Work | 75 to 150 | 750 to 1,500 |
| | Electronic Assembly, Drafting | 150 to 300 | 1,500 to 3,000 |
| Office | Indoor Emergency Stairs | 7 to 10 | 75 to 100 |
| | Corridor Stairs | 10 to 20 | 100 to 200 |
| | Conference, Reception Room | 20 to 75 | 200 to 750 |
| | Clerical Work | 75 to 150 | 750 to 1,500 |
| | Typing, Drafting | 150 to 2000 | 1,500 to 2,000 |
| Store | Indoors | 7 to 15 | 75 to 150 |
| | Corridor/Stairs | 15 to 20 | 150 to 200 |
| | Reception | 20 to 30 | 200 to 300 |
| | Display Stand | 30 to 50 | 300 to 500 |
| | Elevator | 50 to 75 | 500 to 750 |
| | Show Window, Packing Table | 75 to 150 | 750 to 1,500 |
| | Storefront, Show Window | 150 to 300 | 1,500 to 3,000 |
| | | | |
| Home | Washing | 10 to 15 | 100 to 150 |
| | Recreational Activities | 15 to 20 | 150 to 200 |
| | Drawing Room, Table | 20 to 30 | 200 to 300 |
| | Makeup | 30 to 50 | 300 to 500 |
| | Reading, Study | 50 to 150 | 500 to 1,500 |
| | Sewing | 100 to 200 | 1,000 to 2,000 |
| Restaurant | Corridor Stairs | 7 to 15 | 75 to 150 |
| | Entrance, Wash Room | 15 to 30 | 150 to 300 |
| | Cooking Room, Dining Table | 30 to 75 | 300 to 750 |
| | Show Window | 75 to 150 | 750 to 1,500 |
| Hospital | Emergency Stairs | 3 to 7 | 30 to 75 |
| | Stairs | 7 to 10 | 75 to 100 |
| | Sick Room, Warehouse | 10 to 15 | 100 to 150 |
| | Waiting Room | 15 to 20 | 150 to 200 |
| | Medical Examination Room | 20 to 75 | 200 to 750 |
| | Operating/Emergency Room | 75 to 150 | 750 to 1,500 |
| | Eye Inspection | 500 to 1000 | 5,000 to 10,000 |

Light Sensor Spectrum



Calibration and Repair Services

Extech offers repair and calibration services for the products we sell. Extech also provides NIST certification for most products. Call the Customer Care Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.

Warranty

EXTECH INSTRUMENTS CORPORATION (A FLIR COMPANY) warrants this instrument to be free of defects in parts and workmanship for **one year** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.



Support line (781) 890-7440

Technical Support: Extension 200; E-mail: support@extech.com

Repair & Returns: Extension 210; E-mail: repair@extech.com

Product specifications subject to change without notice

For the latest version of this User Guide, Software updates, and other up-to-the-minute product information, visit our website: www.extech.com
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