# **>**Knightsbridge

INSTALLATION & MAINTENANCE MANUAL

## TE5



**DIGITAL LUX METER** 





#### **GENERAL INSTRUCTIONS**

These instructions should be read carefully and retained after installation by the end user for future reference and maintenance.

These instructions should be used to aid the use of the following product: TE5

#### **DESCRIPTION**

The Knightsbridge lux meter has a measuring range of between 1 lux and 50,000 lux; accurate to within +/-4%. Please note that this device is for indication purposes only. Comes with a backlit LCD screen (4 digit). Very easy to use, hand-held, and ideal for surveying or testing light outputs. Supplied with its own carry case. Requires 1 x 9V battery (not included).



#### **GENERAL SPECIFICATIONS**

Display: 3 ½ digits LCD display, maximum reading value display 1999

Range: 1 - 50,000 Lux resolution: 1 lx

Accuracy:  $\leq$  10,000lx:  $\pm$ 4%rdg $\pm$ 0.5f.s  $\geq$  10,000lx:  $\pm$ 5%+10 digits

(Calibrated to standard incandescent lamp at colour temperature 2856K)

Operation temperature: (0°C to 40°C) 0-70% RH Storage temperature: (-10°C to 50°C) 0-80% RH

#### **OPERATING INSTRUCTIONS**

- Connect the battery and switch "ON" (see fig. 1)
- Set the range selection switch to desired range: 2 reads up to 2,000lx; 20 reads up to 20,000lx;
   50 reads up to 50,000lx
- Remove the photo detector cap and face it to the light source in a horizontal position
- The photo detector can be detached from the body of the sensor to take measurements at an optimum position
- · Read the test value from the LCD display
- Over range: if the instrument only displays "1" the input signal is too strong, and a higher range should be selected. If the display reads "OVER" then the light source is out of range
- Slide the switch to "HOLD". When "HOLD" mode is selected, the lux meter stops all further measurements
  and the test value will be held on the LCD display. Slide the switch from the "HOLD" position to the "ON"
  position and the held value will be cancelled
- When the measurement is completed, replace the photo detector cap and slide the switch to the "OFF" position

#### **BATTERY CHECK AND REPLACEMENT**

- Low battery indicator appears in the left hand corner of the LCD display when battery power is running low
- After turning off the meter, remove the screw securing the battery cover and push the cover in the direction of the arrow to expose the battery
- · Replace battery and slide the battery cover into place and fasten screw

### **MAINTENANCE**

- The white plastic disk at the top of the detector should be cleaned with a soft dry cloth only, do not use
  aggressive cleaning products or solvents which may damage the sensor
- Do not store the instrument where temperature or humidity is excessively high
- These units are calibrated at the factory at time of manufacture but are for indication purposes only
- The calibration interval for the photo detector will vary according to operational conditions, but generally the
  sensitivity decreases in direct proportion to the product of luminous intensity by the operational time. In order to
  maintain the basic accuracy of the instrument, periodic calibration is recommended

#### **GENERAL**

The unit should be recycled in the correct manner when it reaches the end of its life. Check local authorities for where facilities exist

#### **WARRANTY**

This product has a warranty of 1 year from date of purchase. Improper use, or removal of the batch codes will invalidate the warranty. If this product should fail within its warranty period it should be returned to the place of purchase for a free of charge replacement. Your statutory rights are not affected. ML Accessories reserve the right to alter product specification without prior notice.

#### Maintained Illuminance Guide

Sector Ma	Maintained illuminance lux	Sector Maintained	Maintained illuminance lux	
Nursing homes		Education		
Entrance lobbies	200lux	Classrooms,tutorial rooms	300lux	
Lounges (communal)	100-300lux	Lecture hall	500lux	
Kitchens	150-300lux	Technical drawing rooms	750lux	
Bathrooms	150lux	Practical rooms and laboratories	500lux	
Toilets	100lux	Computer practice rooms	300lux	
Corridors	20-100lux	Entrance halls	200lux	
Staircases	100lux	Circulation areas & corridors	100lux	
Quiet/rest rooms	100lux	Stairs	150lux	
Dining rooms	150lux	Sports halls, gymnasiums & swimming pools	300 lux	
Stores	100lux	School canteens	200lux	
Offices		Hospitals		
Filing, Copying, etc	300lux	Waiting rooms	200lux	
Writing, typing reading,		Corridors: during the day	200lux	
data processing	500lux	Corridors: during the night	50lux	
Technical drawing	750lux	Day rooms	200lux	
CAD work stations	500lux	Staff office	500lux	
Conference and meeting rooms	500lux	Staff rooms	300lux	
Reception desk	300lux	Autopsy room	5000lux	
Archives	200lux	Simple examination room	300lux	
		Operating theatre	1000lux	
Public houses		Bathroom & toilets for patients	200lux	
Cashier desk	300lux	·		
Kitchen	500lux	Hotels and Leisure		
		Reception & Porters desk	300lux	
Retail		Kitchen	500lux	
Sales area	300lux	Self-service restaurant	200lux	
Till area	500lux	Buffet	300lux	
Wrapper table	500 lux	Conference rooms	500lux	
Dressing rooms	300 lux	Corridors	100lux	
		Bathroom (hotel suite)	150 lux	
Car parks		Toilets (hotel suite)	100 lux	
Parking bays (multi-story/undergro		Foyers	200lux	
Access lanes (multi-story/undergrou				
Ramps (multi-story/underground)	150lux	Justice and Custodial		
Corners (multi-story/underground)	150lux	Main entrances	200lux	
Intersections (multi-story/undergro		Corridors	100lux	
Multi-story roof level	30lux	Staircases	150lux	
Entrance/exit zones (multi-story/		Lounges	150lux	
underground) Day300lux/Night	75lux	Dining rooms	150lux	
Pedestrian areas (multi-story/unde		Launderies	300lux	
Stairs (multi-story/underground)	100lux	Stores	100lux	
Lifts (multi-story/underground)	100lux	Staff office	500lux	
Rural zones E1 and E2 (outdoor)	15lux	Staff room	300lux	



Urban zones E3 and E4 (outdoor)