

**kaise**


# DIGITAL LIGHT METER

## Instruction Manual

**KG-75**

KAISE CORPORATION

### For Safety Measurements!!

To prevent an electrical shock hazard to the operator and/or damage to the instruments, read this instruction manual carefully before using the instrument. **WARNINGS** with the symbol  on the instrument and this instruction manual are highly important.



The symbol listed in IEC 61010-1 and ISO 3864 means "Caution" (refer to instruction manual).

### WARNING

The symbol in this manual advises the user of an electrical shock hazard that could result in serious injury or even death.

### CAUTION

The symbol in this manual advises the user of an electrical shock hazard that could cause injury or material damages.

## Introduction

Thank you for purchasing "KG-75 DIGITAL LIGHT METER". To obtain the maximum performance of this instrument, read this Instruction Manual carefully, and take safe measurement.




## 1. Unpacking And Inspections

Confirm if the following items are contained in the package in good condition. If there is any damage or missing items, ask your local dealer for replacement.

- 1. Digital Light Meter 1 pce.
- 2. 9V 6F22 Battery 1 pce.
- 3. Instruction Manual 1 pce.

## 2. Specifications

### 2-1. GENERAL SPECIFICATIONS

1. **DISPLAY (LCD)** :
  - a. Numerical Display : Maximum reading 9999, 11mm high
  - b. Units and Symbols : Lux, Fc, ×10, MAX, MIN, HOLD, , 
2. **SENSOR** : Silicon photodiode and filter
3. **MEASURING RANGE** : 0 to 99990Lux, 0 to 9999Fc ×10 sign when exceeding 9999Lux  
Example : 99990Lux → display 9999 and ×10
4. **RANGE SELECTION** : Auto Ranging
5. **OVERRANGE INDICATION** : "OL" appears when the upper limit of measuring range is exceeded
6. **SAMPLING RATE** : 2.5 times/second
7. **BATTERY WARNING** :  
"" indication at approx. 6.8V or less
8. **DISPLAY HOLD** : Hold indicating values by HOLD Key
9. **AUTO POWER OFF** :  
Power turns off automatically after approx. 10 minutes (cancelable)
10. **OPERATING TEMPERATURE & HUMIDITY** :  
0°C to 40°C, less than 80%RH in non-condensing
11. **STORAGE TEMPERATURE & HUMIDITY** :  
-10°C to 50°C, less than 70%RH in non-condensing
12. **ALTITUDE** : Up to 2000m
13. **POWER SUPPLY** : 9V 6F22 x 1
14. **POWER CONSUMPTION** :  
Normal : 3mA, With LCD Backlight : 4mA
15. **OPERATING POWER SUPPLY VOLTAGE** :  
approx. 6.8V to 9.6V
16. **CONTINUOUS OPERATING TIME** : approx. 60 hours
17. **DIMENSIONS** : 192(H) x 67(W) x 44(D)mm
18. **WEIGHT** : Approx. 198g (include battery)
19. **ACCESSORIES** :  
9V 6F22 Battery x 1(Installed), Instruction Manual
20. **OPTIONAL ACCESSORIES** : 1026 Carrying Case

### 2-2. MEASUREMENT SPECIFICATION

(23°C±5°C, <80%RH in non-condensing)

Range	Accuracy	Resolution
0.00 to 19.99Lux	0 to 300Lux : ±6%±3dgt	0.01Lux
20.00 to 199.9Lux		0.1Lux
200 to 9999Lux	301 to 4000Lux : ±6%	1Lux
1000 x 10 to 9999 x 10Lux	4001 to 99990Lux : ±10%	10Lux

**ANGLED INCIDENT LIGHT CHARACTERISTICS** : not specified  
**TEMPERATURE COEFFICIENT** : Accuracy at 23°C±5°C×0.1/°C

## 3. Safety Precautions

### WARNING

- Do not replace the battery with the wet hands. Electric shock may occur.

### WARNING

- Keep the instrument away from babies or children.
- Do not attempt to disassemble or modify the instrument.
- Do not heat or disassemble the battery. Do not put the battery into the fire or water.

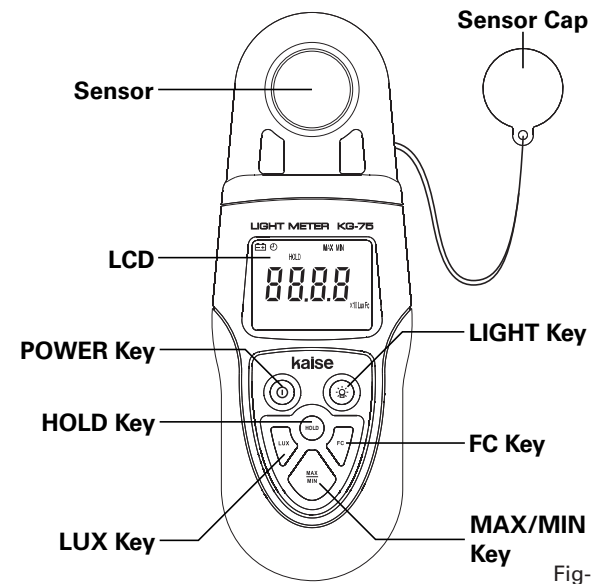
### CAUTION

- The shock such as dropping or beating might damage the instrument and may cause the trouble.
- Do not get the instrument wet. Keep dry.
- Do not polish the case with the fluid that contains alcohol to prevent the cracking.
- Remove the battery when the instrument is out of use for a long time. The exhausted battery might leak electrolyte and corrode the inside.
- Do not use any battery that have wrong rated specification.
- Install the battery with the correct polarity as shown in the plus⊕ and minus⊖ indications.
- Dispose the exhausted battery in accordance with the local government rule after applying adhesive tape to both electrodes for insulation.

### Cautions for safekeeping

- Do not keep the instrument in the following place.
- The place where has the water splash
  - The place where applies the hard shock
  - -10°C or less, 50°C or more, 70%RH or more
  - The place where has the condensation
  - The place where is exposed to direct sunlight

## 4. Name Illustration



### 4-1. LCD

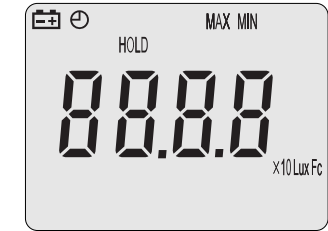




Fig-2

-  : Low battery warning
-  : Auto power off
- MAX : MAX measurement
- MIN : MIN measurement
- HOLD : Display Hold
- ×10 : Measurement value exceeds 9999Lux
- Lux : Unit of Lux
- Fc : Unit of Fc (Foot-Candle)

**Tear off the Display Film on LCD when using this instrument for the first time.**

### 4-2. POWER Key

Press this key to turn on / turn off.

### 4-3. LIGHT Key (Backlight LCD)

Press this key to turn on / turn off the LCD backlight.

### 4-4. HOLD Key (Display Hold)

Press this key to hold displayed value on LCD. ("HOLD" lights up).  
To release it : Press HOLD Key again.

### 4-5. LUX Key

Press this key to select the unit of Lux. ("Lux" lights up).

### 4-6. FC Key

Press this key to select the unit of Fc (Foot-Candle). ("Fc" lights up).

### Measurement units

- 1Lux : Equal to one lumen per square meter.
- 1Fc : Equal to one lumen per square feet.
- 1Lux ≒ 0.09290Fc    1Fc ≒ 10.764Lux

### 4-7. MAX/MIN Key (MAX/MIN)

MAX/MIN measurement is possible by pressing this key.  
Normal Measurement → MAX Measurement ("MAX" lights up)  
→ MIN Measurement ("MIN" lights up) → Normal Measurement

#### 4-8. AUTO POWER OFF (Default setting : ON)

Power turns off automatically after approx. 10 minutes of last operation.

**NOTE :** Small current consumption remains even in the auto power off condition.

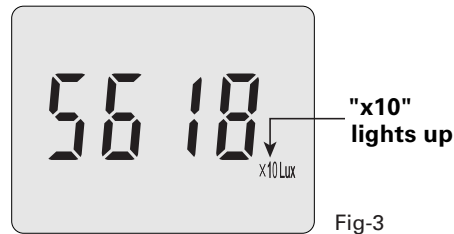
**To cancel it :** Turn the power on holding down MAX/MIN Key. Auto power off is disabled and "⊕" disappears from LCD.

### 5. Measurement Procedures

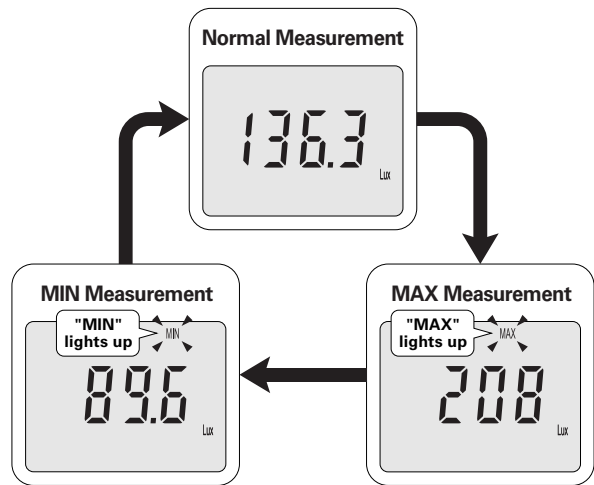
- ① Press POWER Key and turn the power on.
- ② Remove the sensor cap.
- ③ Hold out the sensor to the object to be measured.
- ④ Read the measurement value on LCD.

• LCD shows ×10 sign when measurement value exceeds 9999Lux.

Example : 56180Lux



• MAX/MIN measurement  
Display should change as following by pressing MAX/MIN Key.



- Press HOLD Key for display hold. (refer to 4-4)
- Press LIGHT Key for back-lighting. (refer to 4-3)

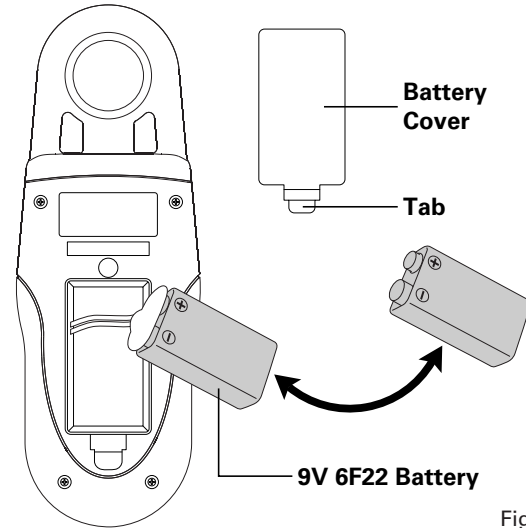
### 6. Maintenance

#### 6-1. BATTERY REPLACEMENT

##### ⚠ WARNING

- Do not replace the battery with the wet hands. Electric shock may occur.
- Turn off the instrument before starting the replacement.

Replace the batteries when "⊕" lights up on LCD.



1. Finish the measurement, and turn the instrument off.
2. Remove the Battery Cover with pressing the tab.
3. Remove the exhausted battery.
4. Insert new 9V 6F22 battery in the correct polarity.
5. Set the battery, and put on the battery cover.

Supplied battery are for inspection purpose and might be exhausted earlier than new battery.

##### ⚠ CAUTION

- Remove the battery when the instrument is out of use for a long time. The exhaust battery might leak electrolyte and corrode the inside.

#### 6-2. PERIODICAL CHECK AND CALIBRATION

Periodical check and calibration is necessary to make safety measurements and to maintain the specified accuracy. The recommended check and calibration term is once a year and after the repair service. This service is available at **KAISE AUTHORIZED SERVICE AGENCY** through your local dealer.

#### 6-3. REPAIR

Repair service is available at **KAISE AUTHORIZED SERVICE AGENCY** through your local dealer. Pack the instrument securely with your name, address, telephone number and problem details, and ship prepaid to your local dealer.

##### Check the following items before asking repair service.

1. Check the battery connection, polarity, and capacity ("⊕" lights up or not).
2. Confirm that measured accuracy is adopted in the operating environment.
3. Confirm that the body of this instrument has no cracks or any other damages.

##### WARRANTY

KG-75 are warranted in its entirety against any defects of material or workmanship under normal use and service within a period of one year from the date of purchase of the original purchaser. Warranty service is available at **KAISE AUTHORIZED SERVICE AGENCY** through your local dealer. Their obligation under this warranty is limited to repairing or replacing KG-75 returned intact or in warrantable defect with proof of purchase and transport charges prepaid. **KAISE AUTHORIZED DEALER** and the manufacturer, **KAISE CORPORATION**, shall not be liable for any consequential damages, loss or otherwise. The foregoing warranty is exclusive and in lieu of all other warranties including any warranty of merchantability, whether expressed or implied.

This warranty shall not apply to any instrument or other article of equipment which shall have been repaired or altered outside of **KAISE AUTHORIZED SERVICE AGENCY**, nor which have been subject to misuse, negligence, accident, incorrect repair by users, or any installation or use not in accordance with instructions provided by the manufacturer.

KAISE AUTHORIZED DEALER



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Product specifications and appearance are subject to change without notice due to continual improvements.

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