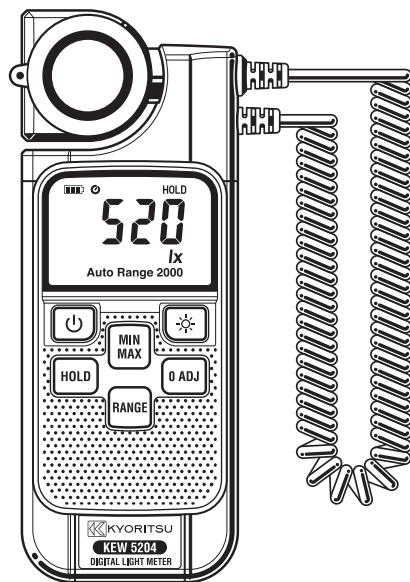


# INSTRUCTION MANUAL



DIGITAL LIGHT METER

## LIGHT METER SERIES

# KEW 5204

**KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.**

## 1. SAFETY WARNINGS

This instruction manual contains warnings and safety rules which must be observed by the user to ensure safe operation of the instrument and to retain it in safe condition.

### ⚠ WARNING

- Read through and understand instructions contained in this manual before starting using the instrument.
- Save and keep the manual handy to enable quick reference whenever necessary.

The symbol ⚠ indicated on the instrument means that the user must refer to related parts of the manual for safe operation of the instrument. Be sure to carefully read the instructions following each ⚠ symbol in this manual.

- ⚠ **DANGER** : is reserved for conditions and actions that are likely to cause serious or fatal injury.
- ⚠ **WARNING** : is reserved for conditions and actions that can cause serious or fatal injury.
- ⚠ **CAUTION** : is reserved for conditions and actions that can cause minor injury or instrument damage.

### ⚠ WARNING

- Do not install substitute parts or make any modification to the instrument. Return the instrument to Kyoritsu or your distributor for repair or re-calibration.

### ⚠ CAUTION

- Do not expose the instrument to the direct sun, extreme temperatures or dew fall.
- This instrument isn't dust & water proofed. Keep away from dust and water.
- Be sure to set the Function Selector Switch to the "OFF" position after use. When the instrument will not be used for a long period of time, place it in storage after removing the batteries.
- Use a damp cloth and detergent for cleaning the instrument. Do not use abrasives or solvents.
- The instrument should be calibrated once a year or so for the accurate measurement



This symbol is marked where the user must refer to the instruction manual so as not to cause personal injury or instrument damage.



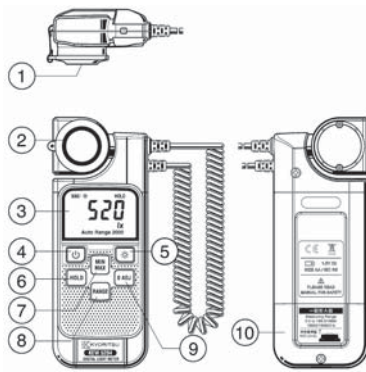
This instrument satisfies the marking requirement defined in the WEEE Directive. This symbol indicates separate collection for electrical and electronic equipment.

## 2. Features

- Wide Range 0.1~199900 lux
- MAX/MIN function
- Automatic Zero Adjust function
- Large LCD Display with Backlight

## 3. Name of Parts and Position/Operation

- ① Lens Protecting Cover  
This is used to protect the photocell from scratching and create complete dark environment for the meter to perform dark current calibration.
- ② Light Sensing Probe/Photocell
- ③ LCD Display
- ④ Power button  
Push this button to turn on the meter. Please push the button again to turn it off. The unit will automatically turn itself off after 30 minutes if no key operation. To disable the automatic power off function, turn the meter off, push and keep holding button, then push power button to turn on.
- ⑤ Backlight button  
Push this button to turn on and off the LCD backlight. The backlight will be automatically off after 30 seconds to save battery power.
- ⑥ HOLD button  
The user may hold the present and keep it on the LCD display by pressing the button.
- ⑦ Max/Min button  
Push this button to set the meter working under MAX/MIN mode. By pushing this button, the user may swap the LCD reading among current, maximum and minimum reading. Push and hold this key for 3 seconds to exit MAX/MIN mode.
- ⑧ Range selector button.  
The user may use this button to select the preferred measuring or automatically selected by the meter. The available ranges are: AUTO 200, 2000, 20000, 200000 lx
- ⑨ 0 ADJ button (Please refer to Measurement)
- ⑩ Battery cabinet cover  
When battery capacity segment is less than one, the user should replace the battery. The battery cabinet can be opened with a screw driver and two AA type batteries should be installed.



## 4. Specifications

MODEL	KEW 5204
Light detector	Silicon photo diode
Measuring Range	0.0~199,900 lx
Range	199.9/1,999/19,990/199,900 lx
Resolution	0.1 lx
Accuracy	±4%rdg±5dgt (23°C±2°C)
Angle deviation from cosine characteristics	10° ±1.5% 30° ±3% 60° ±10% 80° ±30%
Temperature characteristics	±5% (at 23°C reference and a range of 0 to 40°C)
Relative spectral sensitivity characteristics	Deviation from spectral luminous efficiency:9% or less
Response time	Auto range:5s or less Manual range:2s or less
Auto power off	30 min.
Dimensions	169(L)x63(W)x37(D)mm
Weight	210g approx..
Power source	R6(AA)(1.5V) x 2
Operation Temperature/Humidity	0°C~40°C,80%RH or less (without condensation)
Storage Temperature/Humidity	-10°C~60°C,70%RH or less (without condensation)
Continuous measuring time	Approx. 80 hours
Applicable Standards	JIS C 1609-1:2006 IEC61326
Accessories	Carrying case Instruction Manual R6(AA)(1.5V)×2

## DISTRIBUTOR

Kyoritsu reserves the rights to change specifications or designs described in this manual without notice and without obligations.

**KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.**

2-5-20, Nakane, Meguro-ku,  
Tokyo, 152-0031 Japan  
Phone: +81-3-3723-0131  
Fax: +81-3-3723-0152  
Factory: Ehime, Japan

[www.kew-ltd.co.jp](http://www.kew-ltd.co.jp)

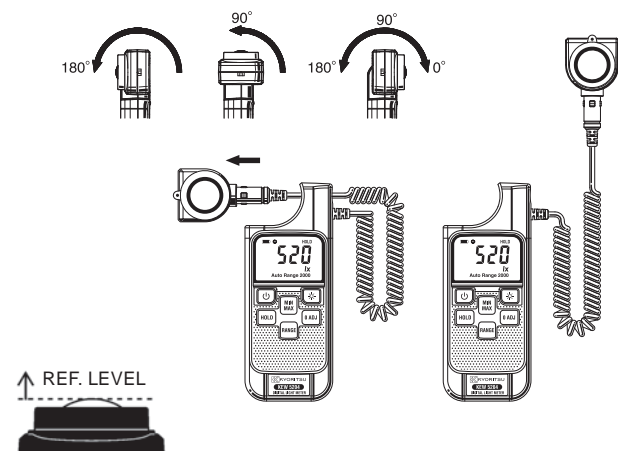
## 5. Measurement

### 5-1 Zero adjust

Please perform zero adjustment before measurement.  
Press 0 ADJ button with the Lens Protecting Cover attached to the Light Sensing Probe.  
"CAP-" will auto-appear on the LCD display. After "CAL-" appears, the meter enters the automatic zero adjustment. When automatic zero adjustment is completed, "CAL-" disappears and "0.0" appears. After confirming the "0.0" display, remove the cap to start measuring.  
If "ERR1" appears, check the cap to make sure it is on properly.  
After the measurement has been completed, press the power button again to turn off the power, and cover the light-detecting surface with the cap for protecting against stray light.

### 5-2 Measurement

Place the light sensing probe parallel to the measuring object and measure it. At this time, please be careful that your own shadow does not hit the sensing probe.  
The light sensing probe can be fixed on the meter parallel or perpendicular to the LCD Display. Or it may be detached from the unit to fit the measuring requirement.



## ADEQUATE LIGHT LEVELS FOR YOUR WORKING OR AT YOUR WORK AREAS.

(JIS Z9110-2010)

LUXES (lx)	3,000	2,000	1,500	1,000	750	500	300	200	150	100	75	50	30	20	15	10	7	
<b>OFFICE</b>				Entrance hall (day-time) Director room		Inquiry office, Dining room Night-duty room		Stair					Indoor emergency staircase					
				Council room Electronic computer room Reception room Guard station		Library, Tearoom Dressing room Toilet, lavatory		Warehouse, Lift, Passage										
<b>FACTORY</b>		Extra fine visual work		Design room Drawing room		Control room, Electric room Air conditioning machine room, lavatory, Toilet		Stair		Entrance Passage Path Warehouse			Indoor emergency staircase					
				Drawing room		Classroom, Faculty room, Dining room, Gymnasium Night-duty room		Stair										
<b>SCHOOL</b>				Clothing classroom, Electronic computer room Experimental laboratory Reading room Healthcare room		Auditorium, Assembly room Locker room lavatory, Toilet		Passage										
				Operating room Emergency room		Consultation room Nurse station Pharmacist office Pharmacist's office General examination room Physiological examination room, Radioisotope room Funeral chapel		Nursery room Waiting room Visiting room Passage for outpatients Changing room, lavatory Hospital charts room Toilet		Ward			Emergency staircase					
						X-ray room Physiotherapy room, Exercise machine room Night-duty room Endoscopy room, X-ray fluoroscopy room						Ophthalmic dark room						
<b>STORE</b>		Most important part of display				Lift lobby, Escalator		Reception room lavatory, Toilet		Passage, Resting room								
						Important part of display, Register, Packaging stand Sample case		Negotiation room		Stair								
<b>RESTAURANT</b>						Cookroom Dining table Counter		Waiting room Guest room lavatory, Toilet		Porch, Passage								
						Ticket office		Spectator seats, Lobby Electric room Mechanical room lavatory, Toilet		Entrance Resting room Projection room Passage								
<b>THEATRE CONCERT HALL</b>						Stall, Green room Monitoring room		Stair Theatre basement work room						Monitoring room (during performance)		Projection room (during performance)		
						Front desk Counter, Office		Carriage porch Dining room		Stair			Important parts of garden					
<b>INN, HOTEL</b>						Cuisine Guest room desk		Banqueting hall, Salle Lobby, lavatory, Toilet					Game room, Guest room, Entrance, Passage, Bathroom Undressing room					
<b>BEAUTY SALON BARBAR SHOP</b>						Hair dressing, Hair dyeing Hair set, Make-up		Hair cut, Shaving Dressing Shampooing, Register		Stair								
								Toilet inside the shop		Passage								