INSTRUCTION MANUAL

DIGITAL LIGHT METER

LIGHT METER SERIES

KEW 5204BT

KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.

DISTRIBUTOR

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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.
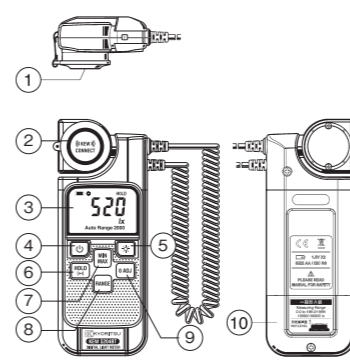● The instrument should be calibrated once a year or so for the accurate measurement

| ⚠ | This symbol is marked where the user must refer to the instruction manual so as not to cause personal injury or instrument damage. |
| [WEEE symbol] | This instrument satisfies the marking requirement defined in the WEEE Directive. This symbol indicates separate collection for electrical and electronic equipment. |

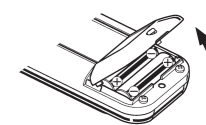## 5. Measurement

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.

↑ REF. LEVEL

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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）

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6. Bluetooth communication

6-1 Bluetooth communication
KEW 5204BT has a Bluetooth communication function and can exchange data with Android/ iOS tablet devices. Before starting to use this function, download the special application "KEW Smart∗" via the internet.
Some functions are available only while connected to the internet. For further detail, please refer to **6-2. KEW Smart ∗**.

⚠ WARNING
Radio waves at Bluetooth communication may affect the operations of medical electronic devices. Special care should be taken when using Bluetooth connection in the areas where such devices are present.

Cautions:
● Using the instrument or tablet devices near wireless LAN devices (IEEE802.11.b/g) may cause radio interferences, lowering of communication speed, resulting in significant time lag in the display update rate between the instrument and tablet device. In this case, keep the instrument and the tablet device away from the wireless LAN devices, or turn off the wireless LAN devices, or shorten the distance between the instrument and the tablet device.
● It may be difficult to establish communication connection if either the instrument or tablet device is in a metal box. In such a case, change the measurement location or remove the metal obstacle between the instrument and the tablet device.
● If any leaking of data or information occurs while making a communication using Bluetooth function, we assume no responsibility for any released content.
● Some tablet devices, even if the application runs properly, may fail to establish communication with the instrument. Please use another tablet device and try to communicate with. If you still cannot confirm the connection, there may be some problem with the instrument unit. Please contact your local KYORITSU distributor.
● The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. and we, KYORITSU, are licensed by them for use.
● Android, Google Play Store, and Google Map are the trademark or registered trade mark of Google Inc.
● iOS is the trademark or registered trade mark of Cisco.
● Apple Store is the service mark of Apple Inc.
● In this manual, the "TM" and "®" marks are omitted.

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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.
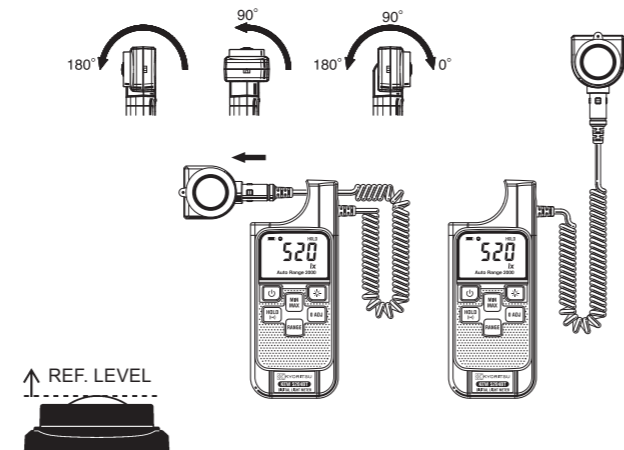

4. Specifications

MODEL	KEW 5204BT
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℃±2℃）
Angle deviation from cosine characteristics	10°　±1.5% 30°　±3% 60°　±10% 80°　±30%
Temperature characteristics	±5 %（at 23℃ reference and a range of 0 to 40℃）
Relative spectral sensitivity characteristics	Deviation from spectral luminous efficiency:9% or less
Response time	Auto range:5s or less Manual range:2s or less
Communication	Bluetooth Ver.5.0
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℃～40℃,80%RH or less（without condensation）
Storage Temperature/ Humidity	-10℃～60℃,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

6-2 KEW Smart ∗
The special application "KEW Smart∗" is available on download site for free. (An Internet access is required.) Please note that communication charge is incurred separately for downloading applications and using special features of them. For your information, "KEW Smart∗" is provided on-line only.

Features of KEW Smart∗:
● Remote monitoring/ checking
● Data save/ recall function
● Map display
The GPS imfomation at the time of measurement is added to the measurement data using the location information service.
● Comment editing
Measured result can be saved with comments.

The latest information about "KEW Smart∗" can be checked with the site on Google Play Store or App Store.