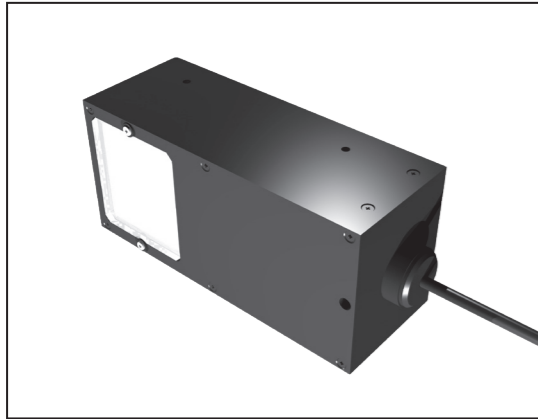


## LED Lighting System

# Instruction Manual

Thank you for choosing the MORITEX LED Lighting System.

This Instruction Manual describes precautions and handling procedure for this LED lighting system to prevent troubles. Before use of the LED lighting system, be sure to read this Instruction Manual to insure safe operation. In addition, keep the Instruction Manual at hand for future reference.



- MCBP-CR3430
  - MCBP-CG3430
  - MCBP-CB3430
  - MCBP-CW3430
- MCBP-CR5440
  - MCBP-CG5440
  - MCBP-CB5440
  - MCBP-CW5440

LED Illumination System

**MG+Wave**

## Specification

Model	MCBP-CR3430 MCBP-CR5440	MCBP-CG3430 MCBP-CG5440	MCBP-CB3430 MCBP-CB5440	MCBP-CW3430 MCBP-CW5440
LED color	Red	Green	Blue	White
Dominant wavelength	625nm	530nm	470.6nm	-
Color temperature	-	-	-	5000 ~ 10000K
Max. rated current	70mA			
Max. power consumption	0.3W			
Operating temperature / humidity	0 ~ 45°C / 20 ~ 80%RH (with no condensation)			
Storage temperature / humidity	-20 ~ 60°C / 20 ~ 85%RH (with no condensation)			
Weight	MCBP-C*3430: 260g MCBP-C*5440: 411g			

\* Please note that the specification is subject to change without notice.

## Accessories

- Illumination 1 unit (including: Aperture  $\phi$  1, Spacer)
- Aperture (  $\phi$  0.5,  $\phi$  2) 1 each
- Hexagon socket screw M2 3 pieces
- Hexagon wrench 0.9mm 1 piece

## Options (Available at extra cost)

- Dedicated power supply units
 

Analog type 1-ch dedicated power supply	MLEK-A080W1LR
Analog type 2-ch dedicated power supply	MLEK-A080W2LR
Digital type 1-ch dedicated power supply	MLEK-A080W1LRD
Digital type 2-ch dedicated power supply	MLEK-A080W2LRD
- \* MLEK-A230 series and MLEK-D770 series can also be used.

- Extention cables
 

Extention cable (1m)	M-RCB401L
Extention cable (2m)	M-RCB402L
Extention cable (3m)	M-RCB403L

## For Safe Use

This LED Lighting System is designed and manufactured with thorough consideration given to safety. However, mishandling this LED lighting system will result in an accident or injury, thus inducing a hazardous situation. To avoid that, be sure to observe precautions shown below.

- Meaning of Warning Labels

This Instruction Manual describes precautions for safe use. Thoroughly check the warning pictograms and descriptions, etc. for their meaning.

	<b>WARNING</b>	Cases where mishandling will result in human suffering such as death or serious injury or serious damage to equipment around this LED lighting system.
	<b>CAUTION</b>	Cases where mishandling may result in moderate injury, or damage to equipment around this LED lighting system.

- Meaning of Pictograms

Prohibition pictograms: Used to prohibit the act indicated with the pictogram for handling this LED lighting system.



Caution pictograms: Used to alert you for handling this LED lighting system.



Instruction pictograms: Used to force you to act according to the instruction for handling this LED lighting system.



MANDATORY

	<b>WARNING</b>	Cases where mishandling will result in human suffering such as death or serious injury or serious damage to equipment around this LED lighting system.
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DISASSEMBLY PROHIBITED

**Do not disassemble or make any modification to the LED lighting system.**

Doing so will result in a malfunction or a fire, etc. If it needs to be disassembled or modified, contact your MORITEX sales representative or local authorized distributor.



NO WET

**Avoid exposure to water and intrusion of foreign objects.**

Intrusion of water and/or foreign objects may cause failure and/or fire. In the event of such a case, switch off the power immediately and disconnect all the cables from the lighting equipment, and contact contact your MORITEX sales representative or local authorized distributor.



DO NOT USE WET HAND

**Do not touch the light or cable with wet hand.**

Doing so will result in an electric shock.



PROHIBIT

**Do not look straight at illuminated light.**

Doing so will affect your eyes. If exceedingly high light intensity is used or light passes through an optical system, pay utmost attention to look at the light.



MANDATORY

**Use the relevant power supply unit and cables.**

Using any power supply unit or cables other than those specified will result in a malfunction or a fire. To avoid that, be sure to use power supply units and cables dedicated to this LED Lighting System. To separately provide power supply units or cables, contact your MORITEX sales representative or local authorized distributor.

	<b>CAUTION</b>	Cases where mishandling may result in moderate injury, or damage to equipment around this LED lighting system.
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PROHIBIT

**Do not cause damage to cables (e.g. lighting cable or junction cable).**

Doing so may result in a malfunction. To avoid that, pay utmost attention to install the LED lighting system or mount it to moving parts. Should any cable cause damage or a broken wire in it, contact your MORITEX sales representative or local authorized distributor for repair or replacement of the cable.



HEAT HAZARD

**Do not touch during illumination or right after switch-off.**

Some of the LED lighting equipment generate much intense during illumination. Please pay extra attention not to touch the equipment, for direct skin contact during illumination or right after switch-off may result in skin burn.



CAUTION TOUCH

**Do not touch at electrostatically charged state.**

Doing so may result damage to LED lighting system.

## Alignment of Light Unit

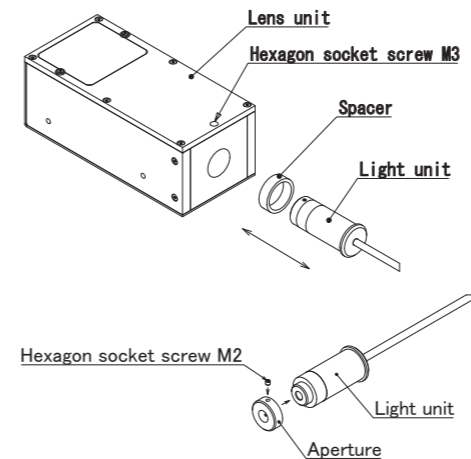
Alignment is different by optical system.

- MORITEX MML (object-side telecentric)
  - Please attach a spacer.
- Other Optics
  - Please remove a spacer. Fix the light unit in the appropriate position.

## Aperture Exchange

And replacing the aperture to change the brightness.

- 1 Loosen the screw, remove the light unit.
  - 2 Remove the screws that secure the aperture.
- \* Please use the hexagon wrench 0.9 mm.
- 3 Replace the aperture fixed.



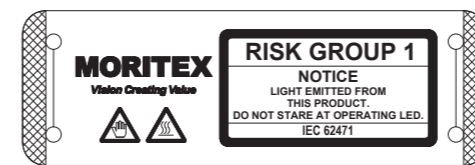
## Safety of LED

LED products are required to meet the evaluating guidelines for safety defined by International Electrotechnical Commission (IEC). Users are requested to use the product sensibly and responsibly with a good understanding of applicable regulations.

The product is considered to be classified as Risk Group 1 (Low Risk) by IEC62471.

- Labelling on the Product

The label shown below is attached to the cable of each product.



## Product Label

Each product is attached with a label, on which its product name, serial number, maximum rate, and other relevant data are printed. Please keep it in place while in use.

An example of the label



## Maintenance

- Should any foreign particle deposits on the LED lighting system, completely wipe it off the LED lighting system.
- Should the LED lighting system cause any failure, contact MORITEX for repair without disassembling it.

## Precautions for Installation and Use

To install this LED lighting system, pay careful attention to the following. Improper installation of the LED lighting system may result in a malfunction or a fire, etc. To install it under any conditions other than those described below, contact your MORITEX sales representative or local authorized distributor.

- ① Operating and Storage conditions to protect the specifications.
- ② Securely install the LED lighting system through making use of the mounting holes, etc. made on the light side. For the mounting holes, check with the relevant drawing.
- ③ Install the LED lighting system in places with less vibration.
- ④ Check to be sure that the LED lighting system has anything discharging moisture, steam, alcohol or gasses, etc. or contains it in the vicinity.
- ⑤ Do not touch any optical parts such as the lens or the diffuser. Furthermore, to perform maintenance on the LED lighting system, do not use solvents.

## Disposal

To dispose of this LED Lighting System, dispose of it as industrial waste under laws and regulations applicable in the relevant region.

## Warranty

\* The warranty period of this product shall be two (2) years from the date of shipment from MORITEX (the Company).

\* Should this LED Lighting System causes any failure attributable to the Company during the period of warranty aforementioned, the Company shall repair or replace faulty parts without charge; provided, however, that this Warranty Clause shall not apply in the event of any of the following events:

- ① The failure could not be predicted by the technical level available at the time of shipment;
- ② The failure results from causes other than this LED Lighting System;
- ③ The failure results from modification or repair made by any party other than the Company;
- ④ The failure results from use other than the original use of this LED Lighting System;
- ⑤ The failure results from improper handling such as a drop or an impact;
- ⑥ The repair of this LED Lighting System involves business trip;
- ⑦ The failure is not attributable to the Company such as acts of God or pollution; or
- ⑧ The Company has no opportunity to prove the phenomenon of the failure.

\* The Company shall not be liable for any direct or indirect damage associated with this LED Lighting System. In addition, the scope of the warranty shall not exceed the unit price of the LED Lighting System.

\* The specification of this LED Lighting System (including accessories and options) is subject to change without notice due to improvement or other reasons.

\* The detail specification of this LED Lighting System shall be referred to the Outline Drawing or Delivery Specification.

For inquiry, please contact to:

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