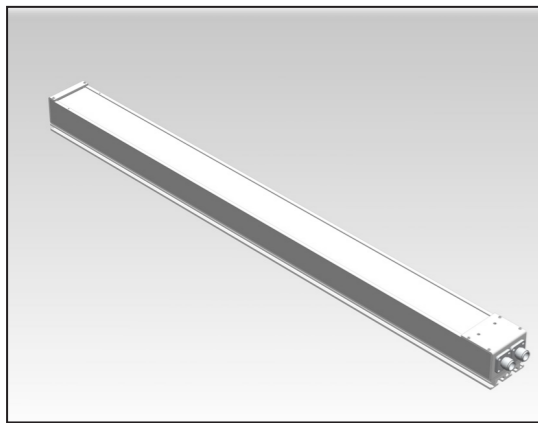


LED Lighting System

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.



- MHBC-CW150-DF
- MHBC-CW300-DF
- MHBC-CW450-DF-2CH
- MHBC-CW600-DF-2CH

LED Illumination System

MG+WAVE

Specification

Model	MHBC-CW150-DF	MHBC-CW300-DF	MHBC-CW450-DF-2CH	MHBC-CW600-DF-2CH	
LED color	White				
Color temperature	5000 ~ 8300K				
Max. rated current	1.15A	2.3A	1.15A	2.3A	2.3A×2
Max. power consumption	14W	28W	14W	28W	28W×2
Operating temperature / humidity	0 ~ 45°C / 20 ~ 80%RH (with no condensation)				
Storage temperature / humidity	-20 ~ 60°C / 20 ~ 85%RH (with no condensation)				
CE Marking	EMC : 2014/30/EU RoHS : 2011/65/EU, 2015/863				
Weight	0.45kg	0.85kg	1.3kg	1.6kg	

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

Options (Available at extra cost)

• Dedicated power supply units	
Analog type 1-ch dedicated power controller	MLEK-A230W1LR
Analog type 2-ch dedicated power controller	MLEK-A230W2LR
Digital type 1-ch dedicated power controller	MLEK-A230W1LRD
Digital type 2-ch dedicated power controller	MLEK-A230W2LRD
• Special cables	
Special cable (0.18m)	M-RCB40018XS
• 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.

	WARNING	Cases where mishandling will result in human suffering such as death or serious injury or serious damage to equipment around this LED lighting system.
	CAUTION	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

	WARNING	Cases where mishandling will result in human suffering such as death or serious injury or serious damage to equipment around this LED lighting system.
--	----------------	--



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.



LED EMITTING

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.

	CAUTION	Cases where mishandling may result in moderate injury, or damage to equipment around this LED lighting system.
--	----------------	--



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.

Installation

● Installation on a frame

1. Side installation

Required Parts

A: M4 nut, M4 bolt

* Recommended tightening torque: 0.6 N·m

* You can use M4 screw of length up to 6mm.

2. Rear installation

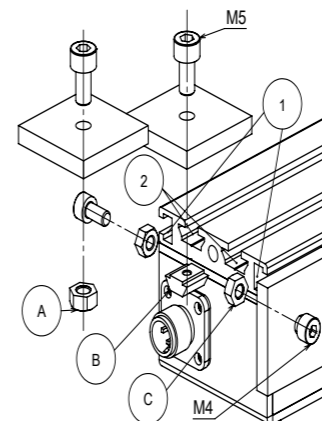
Required Parts

B: M5 nut or special bolt M5 bolt

* Recommended tightening torque: 0.6 N·m

* You can use M5 screw of length up to 6mm.

* Concerning special bolt, please contact us.



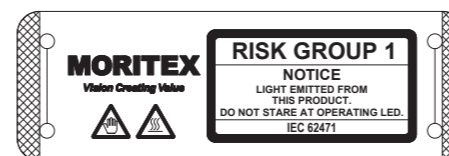
Safety of LED

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 representative or our sales agent.

- 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:

MORITEX Corporation
3-13-45, Senzui, Asaka-shi, Saitama 351-0024 Japan
Phone +81-(0)48-218-2525 FAX +81-(0)48-462-6713
moritex.sales@moritex.com www.moritex.co.jp

MORITEX North America, Inc.
6862 Santa Teresa Blvd. San Jose, CA 95119 USA
Phone +1-(0)408-363-2100 FAX +1-(0)408-363-9980
machine.vision@moritex.com www.moritex.com

MORITEX Asia Pacific Pte. Ltd.
60 Paya Lebar Road #06-31, Singapore 409051
Phone +65-(0)6898-0835 FAX +65-(0)6898-0836
sales.AP@moritex.com www.moritex.com

MORITEX Europe representative office
Mühlbachstr. 20 82229 Seefeld, Germany
inf.eu@moritex.com www.moritex.com

MORITEX Technologies (Shenzhen) Co., Ltd.
No.20, Guiri Road, Daping Village, Guanlan, Longhua New District,
Shenzhen, 518110 China
Phone +86-(0)755-2798-8282 FAX +86-(0)755-2798-8575
sales.china@moritex.com www.moritex.com