

# IU Series

LED lighting with Intensity Control Unit



HPR2 Series



LDR2 Series



LFR Series



LKR Series



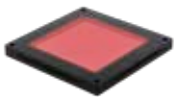
LDR-LA1 Series



LDR2-LA Series



HPD2 Series



LFX3 Series



LDL2 Series



FPQ2 Series



TH2 Series



LFL Series



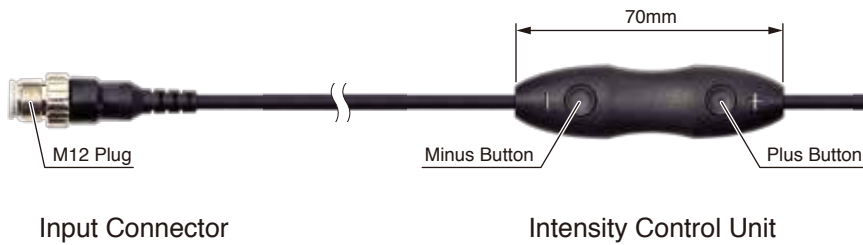
LFV3 Series

## Features

With the IU Series, there is no need for an external controller to change light intensity

Direct connect to smart camera or power source

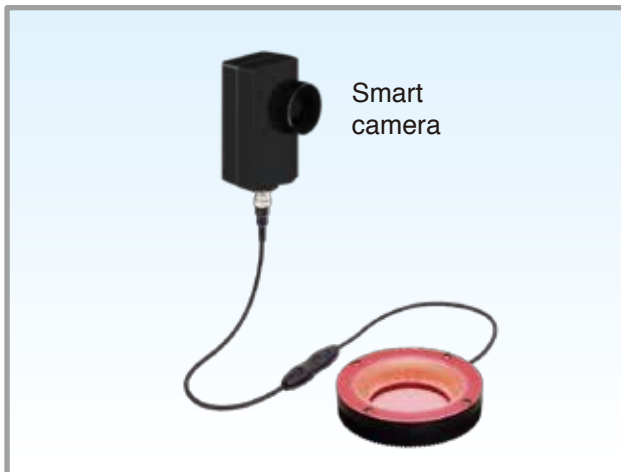
Change light intensity by pressing buttons



More than **117 models** of light units available

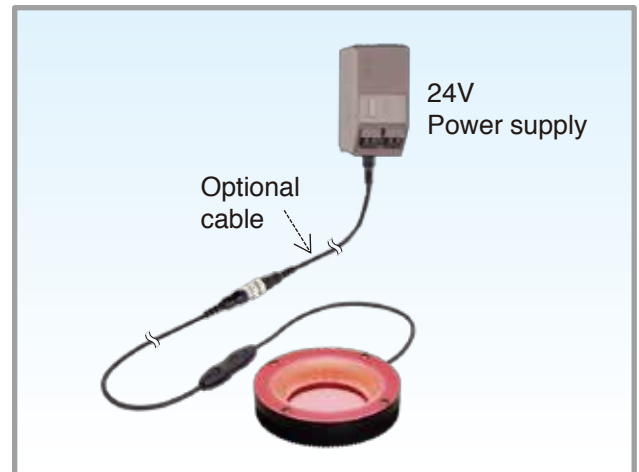
## Using IU Series

### Connect to smart camera



Light unit can receive On/Off signals from a smart camera

### Connect to power source



By using an optional cable, the light can be directly connected to 24V power supply

### Unlock the Intensity Control Unit

Hold down the plus and minus buttons at the same time for 2 seconds or more to release the lock.




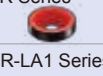



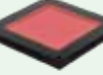
The Intensity Control Unit will automatically lock if it is not used for 5 seconds.








### Changing the Light Intensity

Action	Light intensity
Press	Increases for the plus button. Decreases for the minus button
Hold down for 1 second or more	Changes faster
Press both buttons at the same time	Changes to: minimum, middle, maximum, minimum, middle, maximum, minimum ...

# Line-up

Series	Model name	Color	Power consumption (typ.)
<b>Ring Lights</b> HPR2 Series 	HPR2-50RD-IU	Red	8.1 W
	HPR2-50SW-IU	White	9.6 W
	HPR2-75RD-IU	Red	11.0 W
	HPR2-75SW-IU	White	11.0 W
	HPR2-100RD-IU	Red	11.0 W
	HPR2-100SW-IU	White	11.0 W
	HPR2-150RD-IU	Red	11.0 W
	HPR2-150SW-IU	White	11.0 W
<b>LDR2 Series</b> 	LDR2-32RD2-IU	Red	2.0 W
	LDR2-32SW2-IU	White	2.4 W
	LDR2-42RD2-IU	Red	2.5 W
	LDR2-42SW2-IU	White	3.2 W
	LDR2-50RD2-IU	Red	3.6 W
	LDR2-50SW2-IU	White	4.3 W
	LDR2-70RD2-IU	Red	6.6 W
	LDR2-70SW2-IU	White	8.1 W
	LDR2-90RD2-IU	Red	11.0 W
	LDR2-90SW2-IU	White	11.0 W
	LDR2-50RD2-WD-IU	Red	3.6 W
	LDR2-70RD2-WD-IU	Red	6.6 W
	LDR2-90RD2-WD-IU	Red	11.0 W
	<b>LFR Series</b> 	LFR-100RD2-IU	Red
LFR-100SW2-IU		White	5.1 W
LFR-130RD2-IU		Red	5.1 W
LFR-130SW2-IU		White	6.2 W
<b>LKR Series</b> 	LKR-70RD2-IU	Red	3.0 W
	LKR-70SW2-IU	White	4.3 W
<b>LDR-LA1 Series</b> 	LDR-75RD2-LA1-IU	Red	3.0 W
	LDR-75SW2-LA1-IU	White	4.3 W
	LDR-96RD2-LA1-IU	Red	3.6 W
	LDR-96SW2-LA1-IU	White	4.3 W
	LDR-146RD2-LA1-IU	Red	5.1 W
	LDR-146SW2-LA1-IU	White	6.6 W
	LDR-176RD2-LA1-IU	Red	6.6 W
	LDR-176SW2-LA1-IU	White	8.1 W
	LDR-206RD2-LA1-IU	Red	7.6 W
LDR-206SW2-LA1-IU	White	9.6 W	
<b>LDR2-LA Series</b> 	LDR2-48RD2-LA-IU	Red	2.5 W
	LDR2-48SW2-LA-IU	White	3.6 W
	LDR2-74RD2-LA-IU	Red	5.1 W
	LDR2-74SW2-LA-IU	White	6.2 W
	LDR2-100RD2-LA-IU	Red	9.6 W
	LDR2-100SW2-LA-IU	White	11.0 W
	LDR2-132RD2-LA-IU	Red	11.0 W
	LDR2-132SW2-LA-IU	White	11.0 W
<b>Dome Lights</b> HPD2 Series 	HPD2-75RD-IU	Red	11.0 W
	HPD2-75SW-IU	White	11.0 W
	HPD2-100RD-IU	Red	11.0 W
	HPD2-100SW-IU	White	11.0 W
	HPD2-150RD-IU	Red	11.0 W
	HPD2-150SW-IU	White	11.0 W
<b>Flat Dome Lights</b> LFX3 Series 	LFX3-50RD-IU	Red	11.0 W
	LFX3-50SW-IU	White	11.0 W
	LFX3-75RD-IU	Red	11.0 W
	LFX3-75SW-IU	White	11.0 W
	LFX3-100RD-IU	Red	11.0 W
	LFX3-100SW-IU	White	11.0 W

CCS accepts custom orders for such as types of LED light unit, sizes, and colors of LED.

Series	Model name	Color	Power consumption (typ.)
<b>Bar Lights</b> LDL2 Series 	LDL2-33X8RD2-IU	Red	3.0 W
	LDL2-33X8SW2-IU	White	2.5 W
	LDL2-41X16RD2-IU	Red	4.3 W
	LDL2-41X16SW2-IU	White	4.3 W
	LDL2-41X16RD2-WD-IU	Red	4.3 W
	LDL2-41X16SW2-WD-IU	White	4.3 W
	LDL2-80X16RD2-IU	Red	8.1 W
	LDL2-80X16SW2-IU	White	8.1 W
	LDL2-80X16RD2-WD-IU	Red	8.1 W
	LDL2-80X16SW2-WD-IU	White	8.1 W
	LDL2-119X16RD2-IU	Red	11.0 W
	LDL2-119X16SW2-IU	White	11.0 W
	LDL2-119X16RD2-WD-IU	Red	11.0 W
	LDL2-119X16SW2-WD-IU	White	11.0 W
	LDL2-74X30RD2-IU	Red	11.0 W
	LDL2-74X30SW2-IU	White	11.0 W
	LDL2-74X30RD2-WD-IU	Red	11.0 W
LDL2-74X30SW2-WD-IU	White	11.0 W	
<b>Square Lights</b> FPQ2 Series 	FPQ2-32RD-IU	Red	6.6 W
	FPQ2-32SW-IU	White	5.6 W
	FPQ2-48RD-IU	Red	6.3 W
	FPQ2-48SW-IU	White	11.0 W
<b>Back Lights</b> TH2 Series 	TH2-27X27RD-IU	Red	2.8 W
	TH2-27X27SW-IU	White	3.4 W
	TH2-43X35RD-IU	Red	5.4 W
	TH2-43X35SW-IU	White	5.3 W
	TH2-51X51RD-IU	Red	7.0 W
	TH2-51X51SW-IU	White	8.7 W
	TH2-63X60RD-IU	Red	10.4 W
	TH2-63X60SW-IU	White	10.2 W
	TH2-83X75RD-IU	Red	11.0 W
	TH2-83X75SW-IU	White	11.0 W
	<b>LFL Series</b> 	LFL-612RD2-P-IU	Red
LFL-612SW2-P-IU		White	0.9 W
LFL-1012RD2-IU		Red	1.0 W
LFL-1012SW2-IU		White	1.3 W
LFL-1012RD2-P-IU		Red	1.0 W
LFL-1012SW2-P-IU		White	1.3 W
LFL-3212RD2-IU		Red	2.0 W
LFL-3212SW2-IU		White	2.8 W
LFL-4012RD2-IU		Red	2.5 W
LFL-4012SW2-IU		White	3.2 W
LFL-50RD2-IU		Red	3.0 W
LFL-50SW2-IU		White	3.6 W
LFL-100RD2-IU		Red	5.6 W
LFL-100SW2-IU		White	5.8 W
<b>Coaxial Lights</b> LFV3 Series 	LFV3-34RD-IU	Red	4.2 W
	LFV3-34SW-IU	White	3.7 W
	LFV3-35RD-IU	Red	3.6 W
	LFV3-35SW-IU	White	4.2 W
	LFV3-40RD-IU	Red	5.1 W
	LFV3-40SW-IU	White	5.1 W
	LFV3-50RD-IU	Red	8.6 W
	LFV3-50SW-IU	White	11.0 W
	LFV3-70RD-IU	Red	11.0 W
	LFV3-70SW-IU	White	11.0 W
	LFV3-CP-13RD-IU	Red	2.5 W
	LFV3-CP-13SW-IU	White	2.8 W
	LFV3-CP-18RD-IU	Red	3.8 W
	LFV3-CP-18SW-IU	White	4.6 W

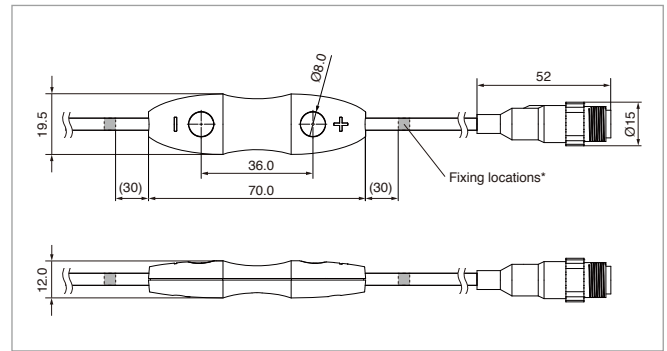
\*LDL2-IU Series will be available from January , 2017.

# Dimensions (mm) and specifications

## Common Specifications

Lighting method	Continuous lighting
Drive Method	Constant-voltage system
Intensity control method	PWM control
PWM frequency	125 kHz
Input voltage (rating)	24 VDC
Input voltage (range)	21.6 to 24 VDC
Input connector	M12 (4pins, plug)
Power consumption (typ.)	Refer to our web page and others
Cable length	670mm (including the Intensity Control Unit)

## Intensity Control Unit



## Input Connector

	Pin No.	Signal
	1	24 VDC*1
	2	NC
	3	COMMON GND
	4	ON/OFF input (+24 V)*2

\*1 Voltage rating: 24 VDC, Voltage range: 21.6 to 24 VDC  
 • The brightness of the Light Unit will be lower when the input voltage is less than 24 VDC.  
 • Use a stable power source with an output voltage that does not fluctuate.  
 \*2 Voltage rating: 24 VDC, Voltage range: 20 to 26.4 VDC

For specifications of each model, please refer to our web page.

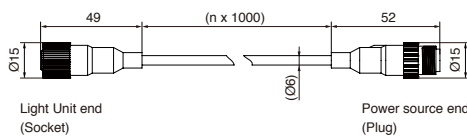
For quick access.

## Optional Accessories

### Extension Cable

Model name: **FRCB-n-M12-4M-4F**

This robot cable is used to extend the Light Unit cable length.



Select the required cable length.

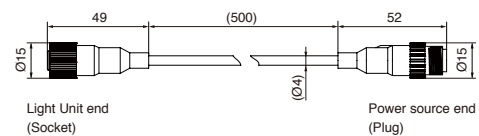
Model name	FRCB-1-M12-4M-4F	FRCB-2-M12-4M-4F	FRCB-3-M12-4M-4F
Length	1 m	2 m	3 m
Weight	190 g max.	340 g max.	500 g max.

Note: If you want to make your own cable, use a cable that is no more than 5 m long.

### Continuous Lighting Adapter

Model name: **FRCB-0.5-M12-AL-4M4F**

This Adapter is used to continuously turn ON the Light Unit. A robot cable is used. (Pins 1 and 4 are internally connected.)



Weight: 50 g max.

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## CAUTION

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of this product are subject to change without notification for product improvement.
- The workpiece imaging examples included in this pamphlet are intended to serve only as references to help you select a suitable Light Unit. Please verify the functionality and conditions required for your particular application before you make a final selection. The sample workpieces used in this pamphlet have been processed specifically for sample imaging. They are not intended to represent product quality and performance.



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