

LED Lighting for Cabinetry

Direct Ring / Backlight

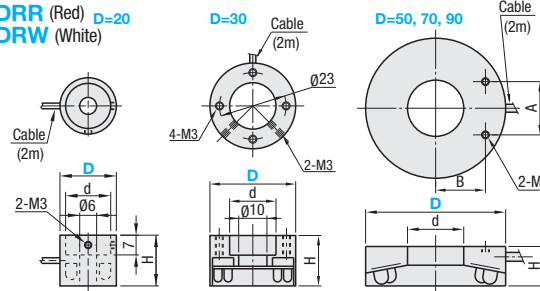
■ **Features:** By illuminating from 360 deg. direction, even lighting without a shadow is obtained.

Image Sample P.1060.

Direct Ring Type



LPDRR (Red) D=20
LPDRW (White)



End of the cable has a connector for the power controller.

M Material : Aluminum (Main Body)
S Surface Treatment : Black Anodize (Main Body)

| Part Number Type | D | * Illumination Angle (degree) | Illumination Area | WD | d | H | A | B | M | Mass (g) | Unit Price 1 ~ 4 pc(s). | Volume Discount Rate 5 ~ 20 pcs. |
|------------------|----|-------------------------------|-------------------|--------|------|----|----|----|---|----------|-------------------------|----------------------------------|
| LPDRR LPDRW | 20 | 90 | Ø10~30 | 30~70 | 16.1 | 18 | - | - | - | 70 | | |
| | | 30 | Ø40~60 | 50~100 | 16.1 | 18 | - | - | - | 75 | | |
| | 50 | 80 | Ø60~80 | 50~100 | 20 | 14 | 20 | 18 | 3 | 60 | | |
| | | 25 | 10~20 | 20 | 80 | | | | | | | |
| | 70 | 80 | Ø60~80 | 50~100 | 34 | 15 | 30 | 25 | 4 | 100 | | |
| | | *25 | 10~20 | 51 | 140 | | | | | | | |
| | 90 | 80 | Ø60~80 | 50~100 | 40 | 16 | 40 | 32 | 4 | 120 | | |
| | | *25 | 10~20 | 62 | 120 | | | | | | | |

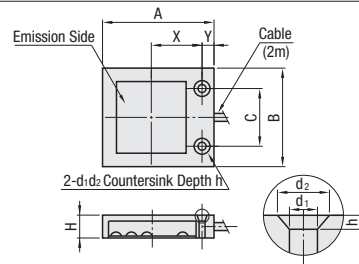
* For LPDRR and LPDRW, use LEDCNR0.5 (P.1060) controller. (Third-party controllers cannot be used.) * LPDRR 70-25 and 90-25 in the Specification Table are not available. * For orders larger than indicated quantity, please check with WOS.
* When selecting an illumination angle, refer to the "Features and Usage of LED Lighting" below.

Image Sample P.1060.

Backlight Type (Embedded Light)



LPDRR (Red)
LPDRW (White)



M Material : Aluminum (Main Body), Polyacetal (Emission Side)
S Surface Treatment : Black Anodize (Main Body)
A Accessory : Flat Head Screw for Attachment, 2 pcs.

| Part Number Type | No. | Emission Side | A | B | C | X | Y | H | | d1 | d2 | h | LPBLR | | LPBLW | | Unit Price 1 ~ 4 pc(s). | Volume Discount Rate 5 ~ 20 pcs. |
|------------------|-----|---------------|----|----|----|----|-----|-------|-------|-----|-----|---|-------------------------|----------------------------------|-------|--|-------------------------|----------------------------------|
| | | | | | | | | LPBLR | LPBLW | | | | Unit Price 1 ~ 4 pc(s). | Volume Discount Rate 5 ~ 20 pcs. | | | | |
| LPBLR LPBLW | 25 | 25x25 | 40 | 35 | 20 | 18 | 4.5 | 8 | 25 | 3.4 | 6 | 2 | 55 | 100 | | | | |
| | 50 | 50x50 | 70 | 60 | 40 | 33 | 7 | 10 | | 4.5 | 8.5 | 3 | 150 | 320 | | | | |
| | 75 | 75x75 | 95 | 85 | 50 | 46 | 6.5 | 10 | | 4.5 | 8.5 | 3 | 150 | 320 | | | | |

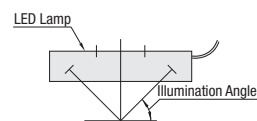
* Use the controller LEDCNR1/LEDCNRF2 (P.1060). (Do not use the controllers of other manufacturers.) * For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number LPDRR50 - 80, LPBLW50

Features and Usage of LED Lighting

① Direct Ring Type

- By illuminating from 360 deg. direction, even lighting without a shadow is obtained.
- Units with large illumination angle (80°) provide large amounts of illumination on workpieces and are suitable when ample lighting is desired (a). However, the reflection of LED Lighting may occur in the case of the glossy products. In such cases, reflection can be reduced by using a diffuser board.
- Units with small illumination angle (25°) do not cause the LED light source reflections on gloss workpieces and are suitable for detection of shallow bumps and scratches (b).

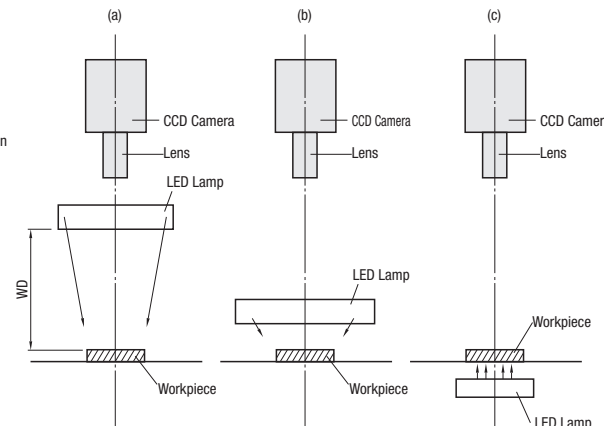


② Backlight Type

- A lighting unit providing a large amount of illumination with LEDs facing directly upwards.
- Does not occupy much space as it is designed to be compact (c).

Examples of LED Lamp Placements

• Direct Ring Type Illumination Angle 80° • Direct Ring Type Illumination Angle 25° • Backlight Type



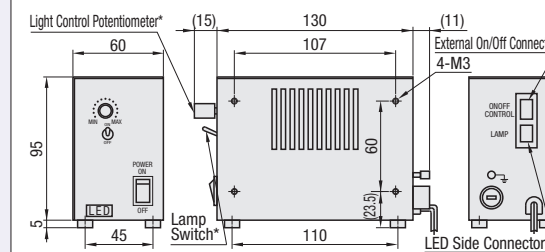
Power Controller for Image Processing LED Light

■ **Features:** The worldwide voltage specifications (F1, F2) can be used with AC100~240V.

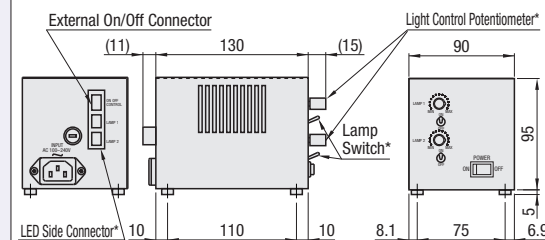
LED Lighting for Cabinetry Dedicated Power Controller



LEDCNR Japanese Specifications (No. 0.5, 1)



Worldwide Specifications (No. F1 and F2)



Specifications

| | |
|-------------------------------|---|
| Input Power Supply | No.0.5, 1 AC100V±10% 50/60Hz |
| No.F1, F2 AC100V-240V 50/60Hz | |
| Operating Temperature | 0~45°C |
| Operating Temperature | 75%RH or Less (No Condensation) |
| Light Control | External Input ON/OFF Signal |
| Lighting Method | Constant Voltage Power (Voltage Variable) |
| Light Control | Continuously Variable (Knob on the Panel) |

* Light control differs according to the model of LED lamp. For details, refer to instruction manual for individual LED lamp.

* No. 0.5 and 1 come with a 2m electrical cable and an external input connector.
* No. F1 or F2 does not come with an electrical cable.
Receptacle spec. IEC60320/C14

| Part Number Type | No. | Number of Circuits | Output Current | Capacity | Input Power Supply | Specifications | | Unit Price 1 ~ 4 pc(s). | Volume Discount Rate 5 ~ 10 pcs. |
|------------------|-----|--------------------|----------------|----------|---------------------|--|-------------------------|-------------------------|----------------------------------|
| | | | | | | Applicable Lighting (MISUMI Type) | Unit Price 1 ~ 4 pc(s). | | |
| LEDCNR | 0.5 | 1 | 1.1A or less | 25W | AC100V±10% 50/60Hz | LPDRR_20, LPDRR_50-25 | | | |
| | 1 | | | | | MMD, LPDRR_30, LPDRR_50-80, LPDRR_70, LPDRR_90, LPBLR_ | | | |
| | F1 | 2 | 1.3A or less | 30W | AC100V-240V 50/60Hz | LPDRR_20, LPDRR_50-25 | | | |
| | F2 | | | | | MMD, LPDRR_30, LPDRR_50-80, LPDRR_70, LPDRR_90, LPBLR_ | | | |

* For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number LEDCNR1

Operation Method

- Confirm that cables, connectors, etc. are all connected.
 - Turn ON the power switch.
 - The ON/OFF of the LED lamp is operated with LAMP ON/OFF switch.
 - When LED lamp is ON, brightness is adjusted with the light control knob.
 - Turn-off/on of the LED lamp device is facilitated by the external ON/OFF signal inputs.
Input Signal Range : Voltage (VDD) =DC12V (Min.) ~ DC24V (Max.).
LEDs are turned off when Input Current (IF) = 10mA (Max.) is applied.
 - Turn OFF the power switch.
- * Be sure to turn off the power switch before removing or mounting the lamps. Never remove or install lamps while the power is ON, or it may result in malfunctioning of the lighting device.

Image Sample

| Image Sample | Workpiece | LED Lamp | CCD Camera, WD |
|--------------|--|-------------|----------------|
| | Wire-Bonds on Circuit Boards | LPDRR30-90 | 2/3 inch, 37 |
| | Package of Tea Bag | LPDRW90-80* | 2/3 inch, 75 |
| | IC (Laser Mark) | LPDRR90-25 | 2/3 inch, 130 |
| | Lead Frame | LPBLR75 | 2/3 inch, 370 |
| | Printing on Cardboard | LPDRR90-80 | 2/3 inch, 130 |
| | Semiconductor Lead Bending | LPDRR70-25 | 2/3 inch, 65 |
| | Fuse | LPBLR50 | 2/3 inch, 95 |
| | Engraving on Cutter Edge | LPDRR30-90 | 2/3 inch, 75 |
| | Chip Capacitor | LPDRR30-90 | 2/3 inch, 75 |
| | Chip Components on Tape (Presence Check) | LPBLR50 | 2/3 inch, 95 |
| | Flat Washer (Scratch Detection) | LPDRR50-25 | 2/3 inch, 68 |
| | Circuit Board Patterns | LPDRR30-90 | 2/3 inch, 45 |