PRODUCT DATA SHEET

ODRL200 Series | **RING LIGHT** | Large Area/Long Distance

product features

- 4-5 Times Brighter Than Standard High Current LED Lights
- SafeStrobe Technology
- 40, 1mm² Die High Current LEDs
- Different Lenses Available
- Conversion Adapters For Different Cameras
- PNP and NPN Strobe Input
- Up to 5000 Strobes Per Second
- Maximum Strobe Time 125mS
- Analog Intensity 0-10VDC Signal

product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 15A draw during strobe – Max. Average 1.5A
Wattage	Max. 360W during strobe - Max. Avg. 36W
Strobe Input	PNP ► +4VDC or greater to activate. | NPN ► GND (<1VDC) to activate
PNP Line	3.7mA @ 3VDC | 6.2mA @ 5VDC | 12.6mA @ 10VDC | 30.4mA @ 24 VDC
NPN Line	22mA @ Common (0VDC)
Duty Cycle	Max. 10%
Strobe/Pulse Time	Max. 5000 SPS (Strobes Per Second) | Max. Single Pulse = 125ms
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
Connection	5 pin M12 connector
IP Rating	IP50
Certification	CE and RoHS certified
IEC 62471 Rating	See page 4

product number key

ODRL200 – XXX – X* —» Part Number Key

Product Family:
Ring Light
ODRL200

Color:
470 – Blue
505 – Cyan
530 – Green
625 – Red
850, 940 – IR
WHI - White

Lenses:
N- Narrow

* Lights come standard with Wide lenses

CE and RoHS Compliant

Smart Vision Lights • 2359 Holton Rd. • Muskegon, MI 49445 • Phone 231.722.1199
www.smartvisionlights.com

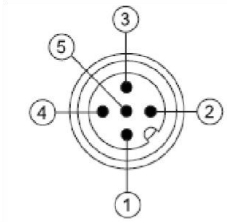
warnings

Attention

Please note that the power requirements are up to 15A at 24VDC. Failure to supply light with up to 15A can result in non-repeatable lighting. Contact Smart Vision Lights for more information.

wiring configuration

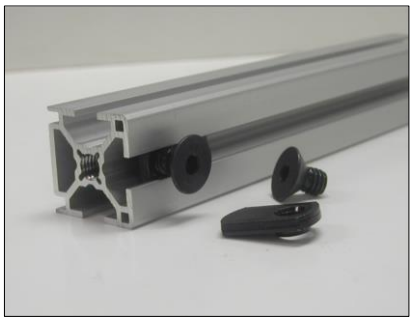
If Analog 0-10 VDC is not used to control light intensity;
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1



Pin	Function	Signal	Wire Color
1	Power In	+24VDC	BROWN
2	NPN	Sinking Signal	**WHITE**
3	GND	Ground	**BLUE**
4	PNP	Sourcing Signal	**BLACK**
5	Intensity Control	0-10VDC	**GREY** '

' Some cables use green with yellow stripe for 0-10V adjustment

mounting & accessories

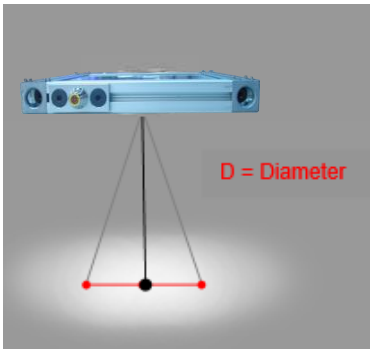


Standard T-nut with
5/16-18x1/2" bolt

optical performance

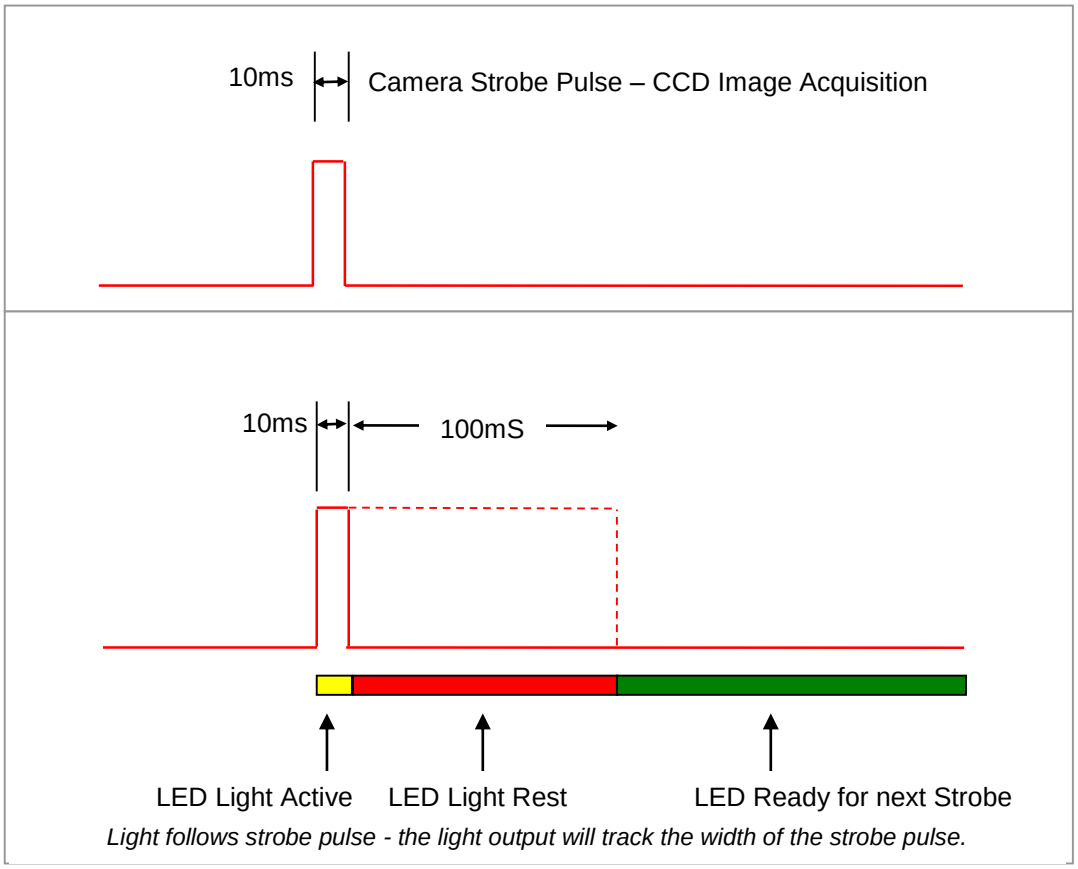
ODRL200-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (20")	21cm(8") D
1m (40")	35cm(14") D
Typical output performance	Illumination (Lux)
Distance = .5 meter	100000
Illumination measurement taken on White Lights – 6500K	



Duty Cycle on Performance of Light

All lights are pulse following



Light follows strobe pulse - the light output will track the width of the strobe pulse.

Duty Cycle (*D*) is defined as the ratio between Strobe Time and Rest Time

Maximum Duty Cycle for OD Light is 10% = .1

Calculating Rest Time - R_T

$$R_T = \frac{S_T}{D}$$

S_T is the Strobe Time
R_T is the Rest Time
D is Duty Cycle

Example: Camera exposure of 10mS where Strobe Time is 10mS.

$$R_T = \frac{10ms}{.1} = 100mS$$

Rest Time is 100ms for 10ms Strobe Time

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risk group

According to IEC 62471:2006. Full documentation upon request.

Notice

Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use.
Applicable for wavelengths: 625 and 850.

Caution

Risk Group 1: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eye. Safe for most applications except prolonged exposures.
Applicable for wavelengths: 470, 505, 530, and WHI.

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