



## product introduction

The ODSXA30 Series of Adjustable Prox Lights feature a telescoping lens for full control of projected spot size. Light projected has a homogenous pattern that is about 3-4 times brighter than the standard SXA30 and is great for applications where very diffuse and even lighting is required. The ODSXA30 also features a compact yet robust 30mm diameter threaded housing that allows for simple mounting and ultimate versatility. Built in SafeStrobe Technology ensures protection of the LED while providing maximum output. NPN and PNP strobe inputs and a 0-10VDC analog intensity control make this series of spot lights a very dependable and versatile light.



## product features



- Telescoping lens
- Compact 30mm diameter design
- SafeStrobe Technology ensures protected operation
- Driver built in – No External wiring to a driver
- Homogenous light pattern
- Analog intensity 0-10VDC signal
- Maximum strobe pulse 125mS
- Up to 2000 strobes per second



## product specifications

<b>Electrical Input</b>	24 VDC +/- 5%
<b>Current</b>	Max. 2A during strobe – Max. Average 200mA
<b>Wattage</b>	Max. 48W during strobe – Max. Average 4.8W
<b>Strobe Input</b>	PNP ▶ +4VDC or greater to activate.   NPN ▶ GND (<1VDC) to activate
<b>Duty Cycle</b>	Max. 10%
<b>Strobe/Pulse Time</b>	Max. Single Pulse = 125ms
<b>Red Indicator LED</b>	ON = LED Rest OFF=LED/Light Ready
<b>Green Indicator LED</b>	ON = Power
<b>Analog Intensity</b>	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
<b>Connection</b>	5 pin M12 connector
<b>Lifespan</b>	100,000 hrs
<b>Ambient Temp.</b>	-20° - 50° C (-4° - 122° F)
<b>IP Rating</b>	IP65
<b>Weight</b>	~145g
<b>Compliances</b>	CE and RoHS
<b>IEC 62471 Rating</b>	See page 4



## product number key

# ODSXA30 – XXX –» Part Number Key

**Product Family:**  
Adjustable Spot  
ODSA30

**Color:**  
365, 395, 470, 505,  
530, 625, 850, 940  
& WHI (White)



## warnings



### Attention

Please note that the power requirements are 2A at 24VDC. Failure to supply light with 2A will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



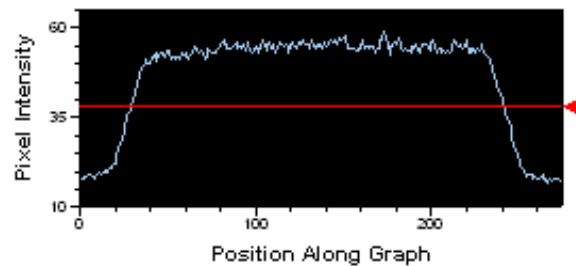
## wiring configuration

	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



## optical performance



The ODSXA30 offers a homogenous light pattern at any defined working distance. The Pixel Graph representation shows a steep drop off in intensity outside of the projected spot size with a very diffuse light pattern inside.

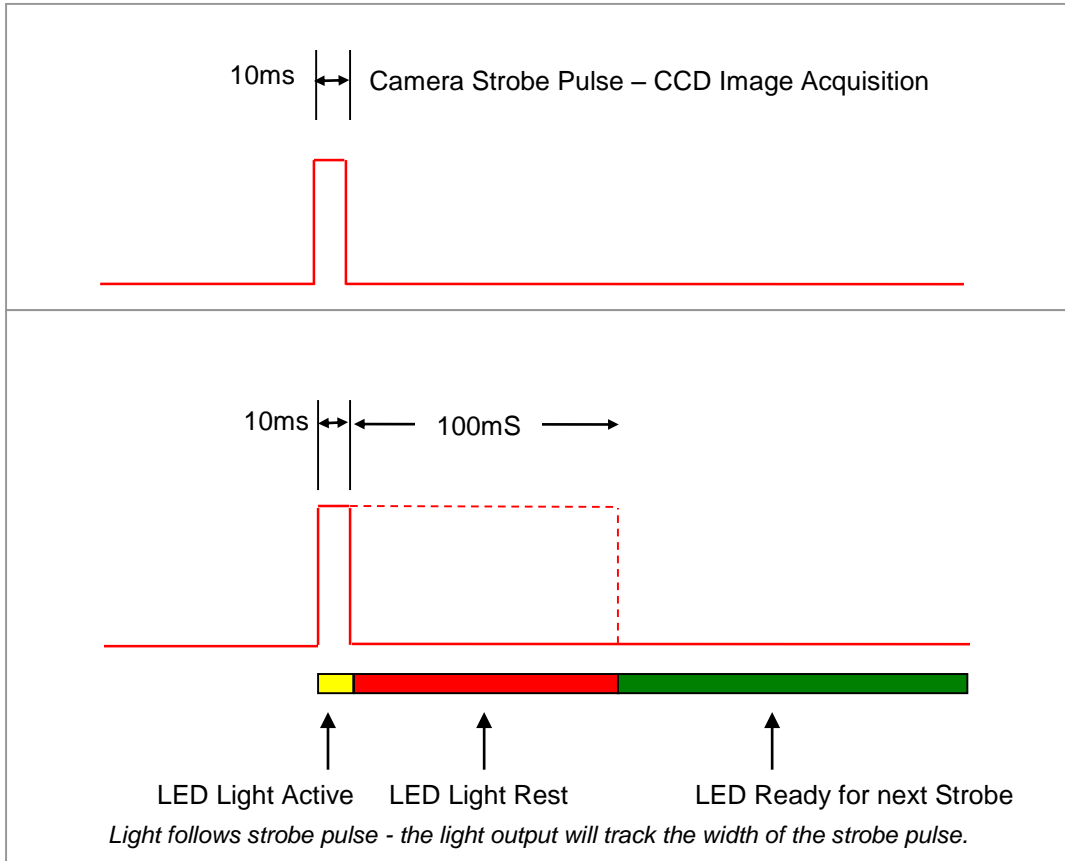
Average Intensity Rating	200mm diameter	5800 lux
	700mm diameter	1600 lux

\*Lux measurement taken at .5m distance.



### Duty Cycle on Performance of Light

All lights are pulse following



**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 - RT

$$RT = \frac{ST}{D}$$

ST is the Strobe Time  
RT is the Rest Time  
D is Duty Cycle

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

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

Rest Time is 100ms for 10ms Strobe Time



## mounting & accessories



**PB30-M1**  
Swivel Mount



**PB30-M2**  
Slotted Block Mount



**PB30-M3**  
Slotted Right Angle



**PB30-M6**  
Bolt-on Block Mount



## risk group

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

### Notice

**Exempt Group:** No photo biological hazard to eyes or skin even for continuous, unrestricted use.  
Applicable for wavelengths: 625, 850, and 940.

### 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: 395, 470, 505, 530, and WHI.

### Notice

**Risk Group 1:** UV emitted from this product. Minimize exposure to eyes and skin. Use appropriate shielding. Safe for most applications except prolonged exposures.  
Applicable for wavelengths: 395

### Caution

**Risk Group 2:** UV emitted from this product. Eye or skin irritation may result from exposure. Use appropriate shielding. Does not pose optical hazard if aversion responses limit exposure.  
Applicable for wavelengths: 365