



product introduction

The ODSW75 Series features a stainless steel IP68 rated enclosure with sealed bolts and waterproof connector for applications in wash down and corrosive environments. The ODSW75 Series of brick light features an Overdrive driver with NPN or PNP signal options. Six high current LED's pulse at 3-4 times the brightness of a standard S75 and a 75mm active light area provide not only an intense but diffuse light pattern at any given working distance. These series of lights also offers a manual potentiometer intensity control as well as a 0-10 VDC analog intensity control. Heat is dissipated through the aluminum back plate which allows the ODS75 Series to be run at a higher current and hence greater intensity.



product features



- Stainless Steel 316 Housing
- Meets FDA Compliancy
- 4-5 times brighter than standard high current LEDs
- Driver built in – No External wiring to a driver
- PNP and NPN Strobe input
- Overdrive/Strobe only
- Dimmable via built in potentiometer
- Maximum Strobe Time 125mS
- Analog intensity 0-10VDC signal
- Six, 1mm² Die High Current LEDs



product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 4A draw during strobe – Max Average 400mA
Wattage	Max. 9.6W strobe
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. Single Pulse = 125ms
Red Indicator LED	ON = LED Rest (LED inactive) OFF = LED/Light Ready
Green Indicator LED	ON = Power
Potentiometer	Intensity control of 10% to 100% Clockwise increases intensity
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
Connection	5 pin M12 connector
Ambient Temp.	-20° - 50° C (-4° - 122° F)
IP Rating	IP68
Weight	~155g
Compliances	CE and RoHS
IEC 62471 Rating	See page 4



product number key

ODSW75 – XXX – X* —» Part Number Key

Product Family:
Brick Light
ODSW75

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

Lenses:
N - Narrow
W - Wide
L - Line

* Lights come standard with Narrow lenses

CE and RoHS Compliant



warnings

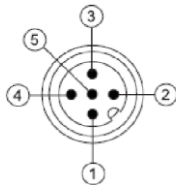


Attention

Please note that the power requirements are up to 4A at 24VDC. Failure to supply light with up to 4A can result in non-repeatable lighting. Contact Smart Vision Lights for more information.



wiring configuration



1 – 24V
2 – NPN
3 – GND
4 – PNP
5 – 0-10V

Standard M12 mating cable color

BROWN
WHITE
BLUE
BLACK
*GRAY (GREEN/YELLOW)

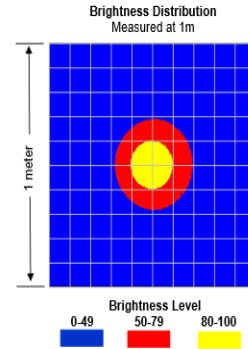
If Analog 0-10 VDC is not used to control light intensity;
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1

PIN	Wire Color	Function	Signal
1	BROWN	Power	+24 VDC
2	WHITE	NPN Strobe	GND for Active ON
3	BLUE	Ground	GND
4	BLACK	PNP Strobe	4VDC to 30VDC for Active ON
5	GREEN	Analog Intensity Control	0-10 VDC



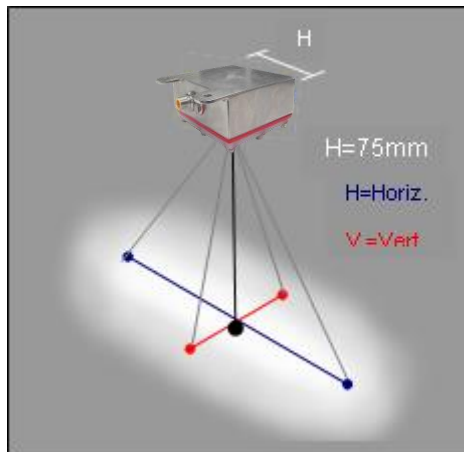
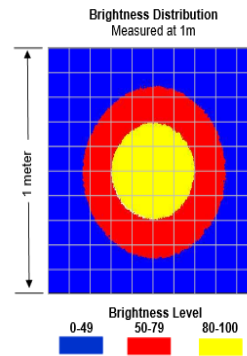
ODSW75-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	100mm (~4") D
1m (39.4")	200mm(~8") D
1.5m (59")	300mm(~12") D
Typical output performance	
Distance = .5 meter	Illumination (Lux) 48000
<i>Illumination measurement taken on White Lights – 6500K</i>	



ODSW75-XXX-W

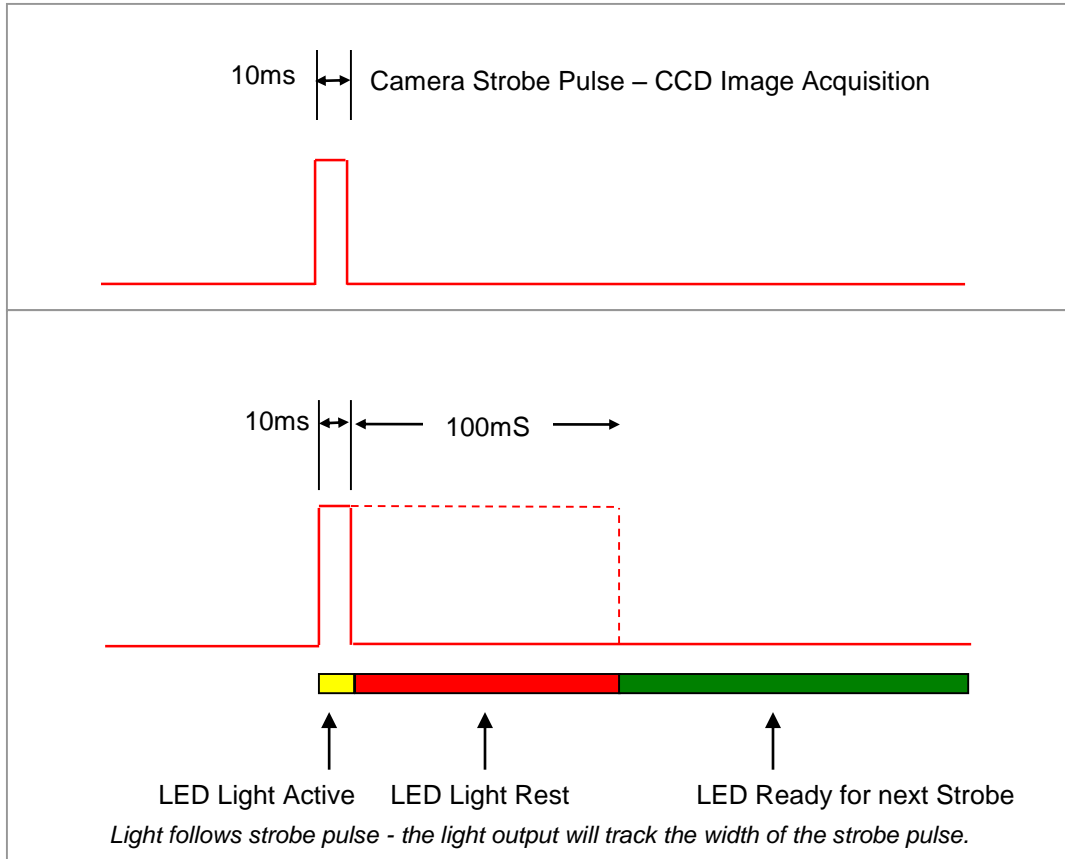
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	210mm(~6") D
1m (39.4")	425mm(~17") D
1.5m (59")	650mm(~22") D
Typical output performance	
Distance = .5 meter	Illumination (Lux) 31500
<i>Illumination measurement taken on White Lights – 6500K</i>	





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 - R_T

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

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

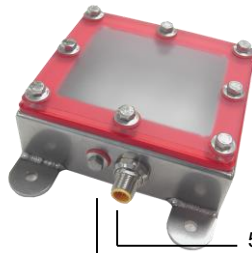
Example: Camera exposure of 10mS where Strobe Time is 10mS.

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

Rest Time is 100ms for 10ms Strobe Time



identification



5 Pin M12 Power Input

Manual Intensity Control



5m, 10m, or 15m Power Cable
Available



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