smart vision lights

ODS75 Series
Brick Light
OverDrive

Over Drive Features

- Highest Output LED Lights available in the Vision Industry
- SafeStrobe Technology ensures protected operation of LED's
- Driver built in – No External wiring to a driver
- 5 times brighter than standard high current LED Lights
- Industry Standard M12 Quick Disconnect
- PNP and NPN Strobe input
- High Speed >> Fast Response (up to 2000 Strobes Per Second)

Electrical Input	Voltage: 24 VDC +/- 5%	
Duty Cycle	Maximum 10%	
Strobe Input	PNP ► +4VDC or greater to activate.	NPN ► GND (<1VDC) to activate
Current	Max 4A draw during strobe - Max Average 400mA	
Strobe / Pulse Time	Maximum Single Pulse = 125ms	
Strobe Mode	The Light will track the pulse width of the strobe pulse.	
RED Indicator LED	Duty Cycle	ON = LED Rest (LED inactive) OFF = LED/Light Ready
GREEN Indicator LED	ON = Power	
Power	Smart Vision Lights recommends 4 amps of supply current.	
Analog Intensity	The output is adjustable from 10-100% of brightness by a 0 -10 VDC signal	
Dimmable	The output is manually adjustable from 10-100% of brightness by potentiometer	

Important

Please note that the power requirements are 4 amps at 24VDC. Failure to supply light with 4 amps (peak) will result in non-repeatable lighting. Contact Smart Vision Lights for more information.

ODS75 – XXX – X* —» Part Number Key

Product Family:
Linear Light
ODS75

Color:
365, 395, 470, 505, 530, 590, 625, 850, 940 & WHI (White)

Lenses:
W - Wide
L - Line

* Lights come standard with Narrow lenses

CE and RoHS Compliant

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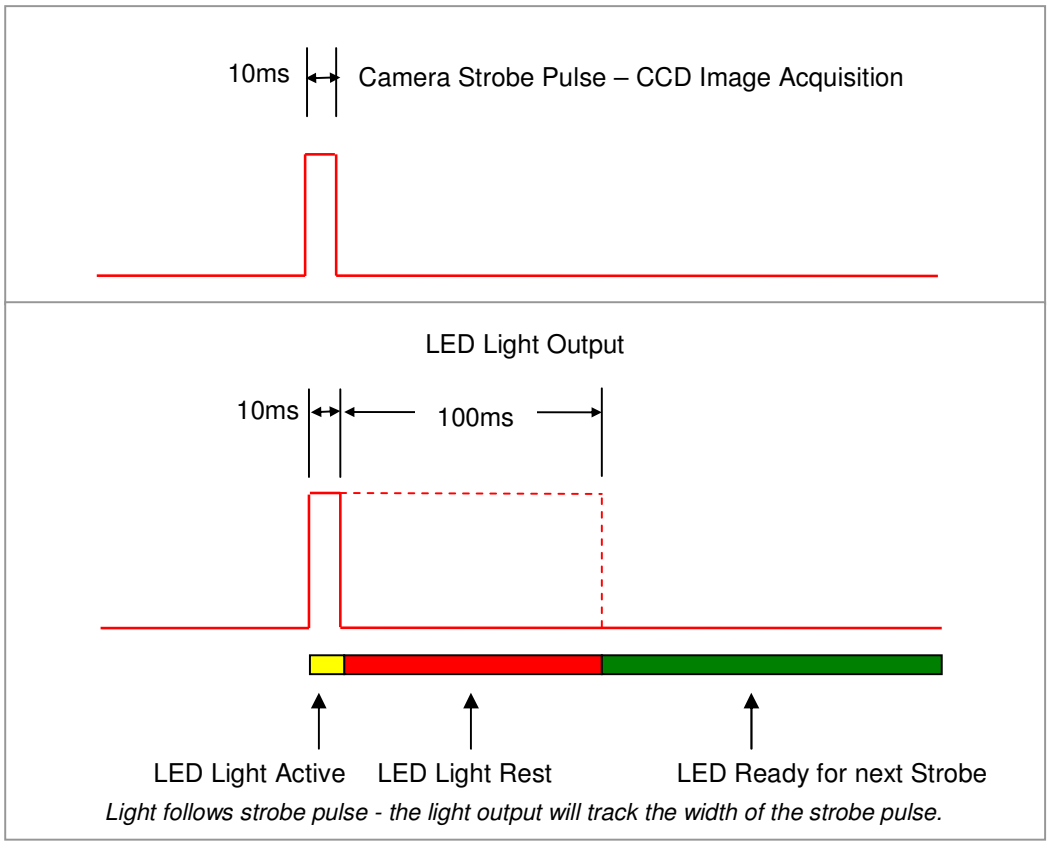
Duty Cycle on Performance of Light



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

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

Calculating Rest Time - R_T

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

where

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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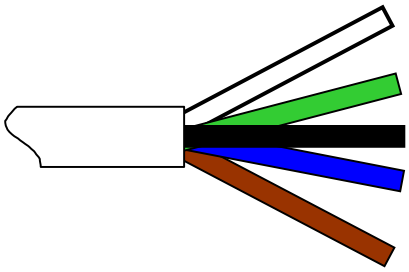
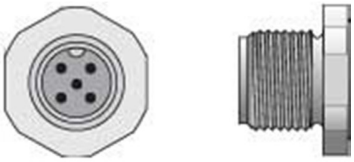
DATA SHEET
WIRING

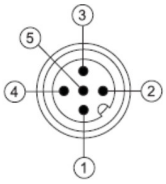




Standard M12 5 Pin cable with Euro color code

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 or greater for Active ON
5	GREEN	Analog Intensity Control	0-10 VDC

Smart Vision Lights offers M12 cables with 5 conductor 18AWG wires. 18AWG or larger must be used on OverDrive series to guarantee correct current to drive the light. Smart Vision Lights recommends cable length be kept to a minimum.

Pin and Cable Color Assignment	
 Connector on Light 1 = 24VDC 2 = NPN STROBE 3 = GND 4 = PNP STROBE 5 = 0-10VDC Analog	Standard M12 mating cable color BROWN WHITE BLUE BLACK GREEN (GRAY)
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 or Green wire to Brown wire.	

- 5 pin Standard M12 mating cable must be used.
- 0 – 10 VDC Analog controls intensity of light from 10-100%.