

## 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 Strokes 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 2A draw during strobe - Max Average 200mA	
Strobe / Pulse Time	Maximum Single Pulse = 125ms	
RED Indicator LED	Duty Cycle	ON = LED Rest (LED inactive) OFF = LED/Light Ready
GREEN Indicator LED	ON = Power	
Potentiometer	10 turn pot – Intensity control of 10% to 100% Clockwise decreases intensity	
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal	
Power	Smart Vision Lights recommends 2 amps of supply current per light.	



## Important

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

## ODS30 – XXX – X\* → Part Number Key

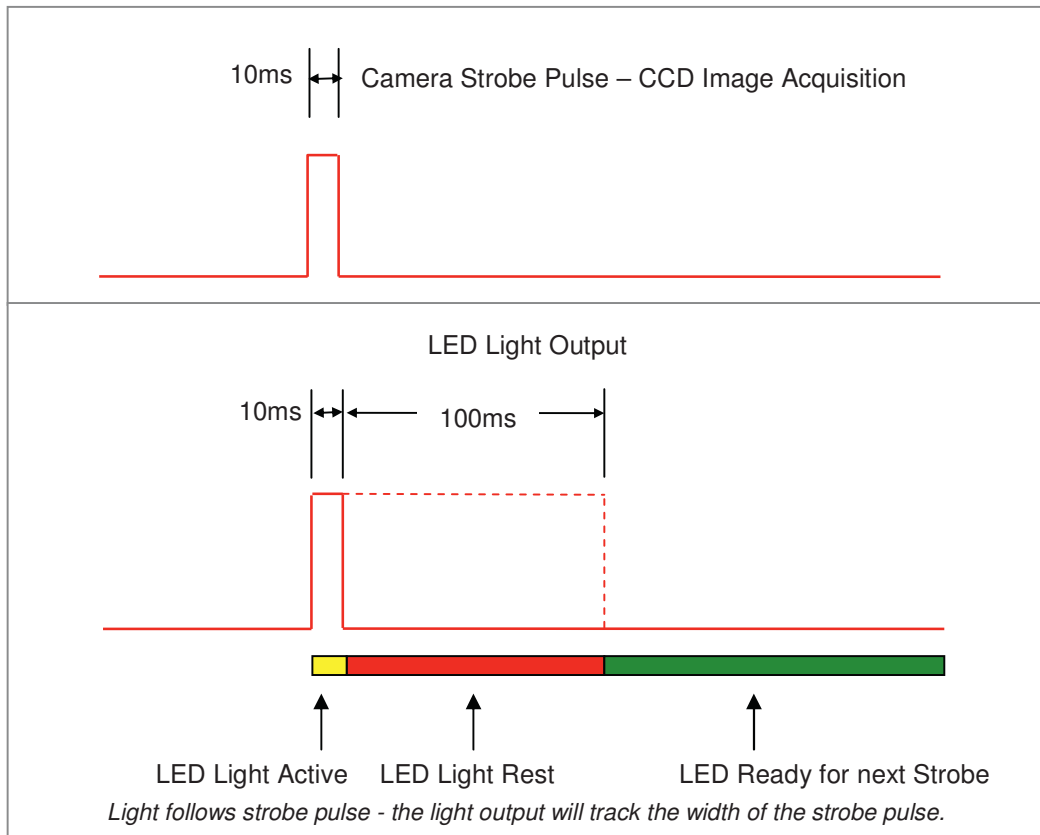
Product Family:  
Linear Light  
ODS30

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

## 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

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

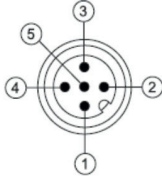
Rest Time is 100ms for 10ms Strobe Time



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	
	<p>Connector on Light</p> <p>1 = 24VDC 2 = NPN STROBE 3 = GND 4 = PNP STROBE 5 = 0-10VDC Analog</p>
	<p>Standard M12 mating cable color</p> <p>BROWN WHITE BLUE BLACK GREEN (GRAY)</p>
<p><b>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.</b></p>	

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