

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
- Option of connecting lights together >> Connect-a-Light®
- 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 6A draw during strobe - Max Average 600mA	
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	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	
Power	Smart Vision Lights recommends 6 amps of supply current per light.	



Important

Please note that the power requirements are 6 amps at 24VDC. Failure to supply light with 6 amps (peak) will result in non-repeatable lighting. Contact Smart Vision Lights for more information.

ODL300 – XXX – X* → Part Number Key

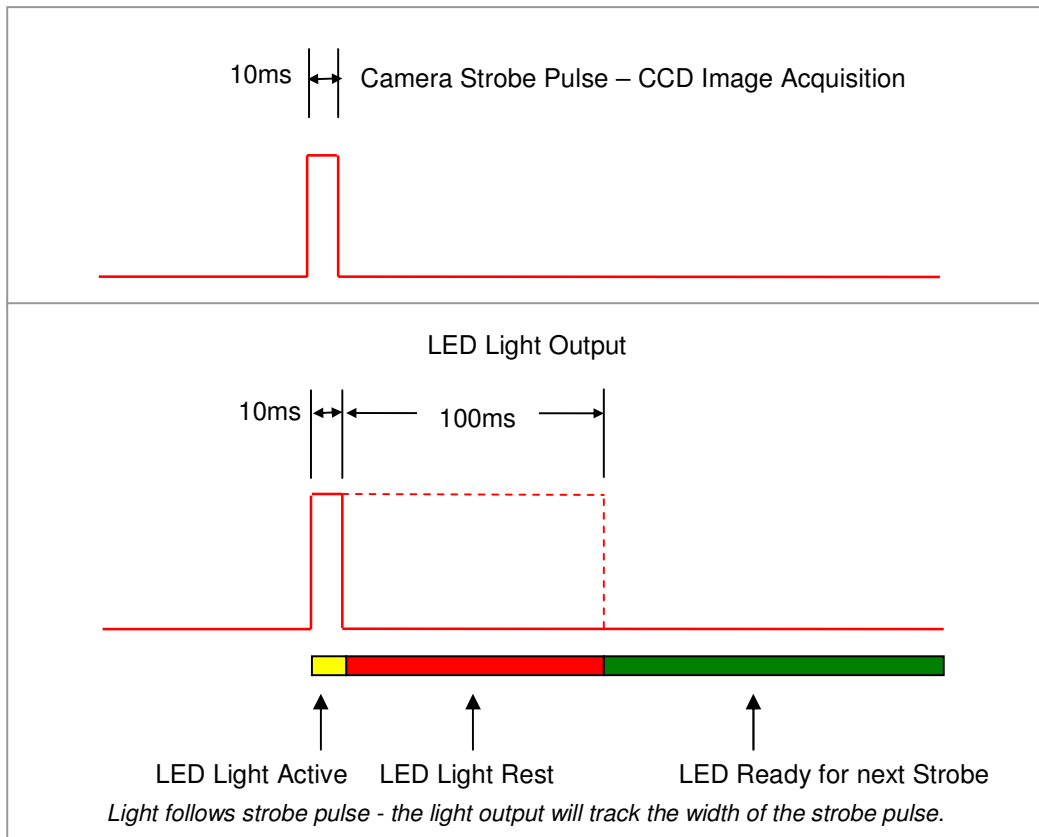
Product Family:
Linear Light
ODL300

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

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

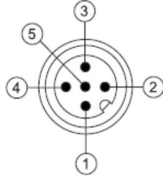
Rest Time is 100ms for 10ms Strobe Time



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>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.</p>	

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