

## product introduction

The Multi-Drive controller combines the Constant ON operation and the high pulse operation into one easy to use product. The Multi-Drive controller allows the user to run the product in Constant ON operation or pulse/strobe the light at the maximum allowed intensity by the LED manufacturer by simply setting the product parameters. The built-in Multi-Drive also protects the LEDs from premature degradation and failure caused by excessive heat by regulating the current delivered to the LEDs and limiting the duty cycle of the light. NPN or PNP signal input options, a 0-10V analog intensity control, and an industry standard M12 power cable allow for versatility and eases installation time.

## product features



- Continuous Operation or OverDrive
- Sealed to IP65 standards
- Driver Built In – No External Wiring To A Driver
- NPN and PNP Signal Input Options
- Industry Standard 5-Pin M12 connector

## Constant ON product specs

Electrical Input	24VDC +/- 5%
Current	750mA per 300mm (12")
Wattage	18W per 300mm (12")
ON/OFF Input	PNP ► +4VDC or greater to activate   NPN ► GND (<1VDC) to activate   5µS LED activation time
PNP Line	3.7mA @ 3VDC   6.2mA @ 5VDC   12.6mA @ 10VDC   30.4mA @ 24VDC
NPN Line	22mA @ Common (0VDC)
Continuous Mode	Light will be in continuous mode by leaving signal on NPN/PNP input active
Connection	5 pin M12 connector
Ambient Temperature	-40° - 50° C (-40° - 122° F)
IP Rating	IP65
IEC 62471 Rating	See page 4 for details

## OverDRIVE product specs

Electrical Input	24VDC +/- 5%
Current	5A during strobe per 300mm   500mA Max. Avg. per 300mm
Wattage	120W during strobe per 300mm   12W Max. Avg. per 300mm
Strobe Input	PNP ► +4VDC or greater to activate   NPN ► GND (<1VDC) to activate   5µS LED activation time
PNP Line	3.7mA @ 3VDC   6.2mA @ 5VDC   12.6mA @ 10VDC   30.4mA @ 24VDC
NPN Line	22mA @ Common (0VDC)
OverDrive Mode	Connect Pin 5 to GND (more info. in wiring configuration)
Duty Cycle	Max.10%
Strobe Duration	Max. 125mS
Connection	5 pin M12 connector
Ambient Temperature	-40° - 50° C (-40° - 122° F)
IP Rating	IP65
IEC 62471 Rating	See page 4 for details



## product number key

# LEXXX – XXX- X\* —» Part Number Key

**Product Family:**  
Linear Light  
LE Series

**Length:**  
300mm  
600mm  
900mm  
1200mm

**Color:**  
470- Blue  
505 - Cyan  
530- Green  
625- Red  
850/940- IR  
WHI- White

**Lenses:**  
L- Line  
W - Wide

\* Lights come standard with narrow lenses

CE and RoHS Compliant



## warnings



### Attention

Please note that the power requirements are 750mA per 300mm at 24VDC for constant ON operation and 5A per 300mm at 24VDC for strobe mode. Failure to supply light with 750mA for constant ON or 5A for strobe per 300mm may result in non-repeatable lighting. Contact Smart Vision Lights for more information.



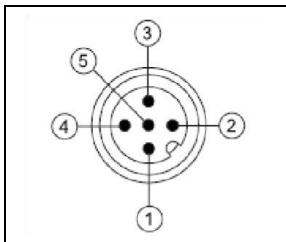
### Attention

Light is not designed for outdoor use.



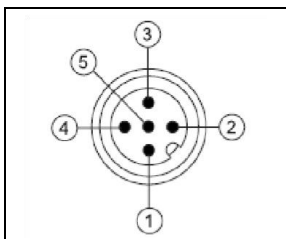
## wiring configuration

### Wiring configuration for **CONSTANT ON** operation

	Pin	Function	Signal	Wire Color
1	Power In	+24VDC	<b>BROWN</b>	
2	NPN	Sinking Signal	<b>WHITE</b>	
3	GND	Ground	<b>BLUE</b>	
4	PNP	Sourcing Signal	<b>BLACK</b>	
5	Intensity Control	1-10VDC	<b>GREY</b>	

\* Some cables use green with yellow stripe for 1-10V adjustment.

### Wiring configuration for **OverDrive** operation

	Pin	Function	Signal	Wire Color
1	Power In	+24VDC	<b>BROWN</b>	
2	NPN	Sinking Signal	<b>WHITE</b>	
3	GND	Ground	<b>BLUE</b>	
4	PNP	Sourcing Signal	<b>BLACK</b>	
5	OverDrive Signal	Ground	<b>GREY</b>	

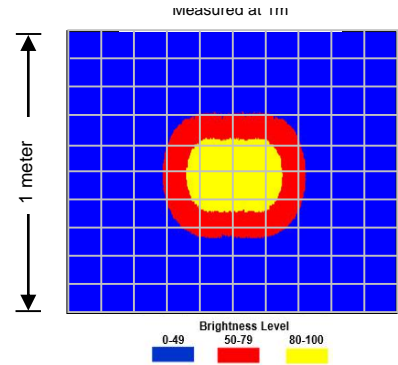
\*Analog intensity control is disabled in OverDrive Mode. Light operates at maximum pulse intensity.



## optical performance

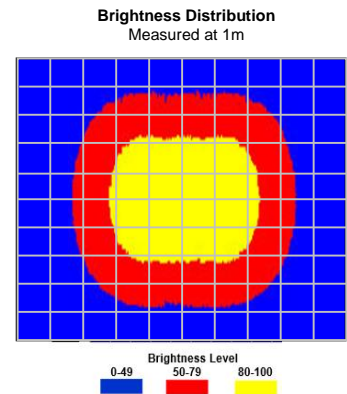
### LE300-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	210mm(~8") H x 100mm(~4") V
1m (39.4")	250mm(~9.8") H x 210mm(~8.3") V
1.5m (~59")	270mm(~10.6") H x 255mm(~10") V
Typical output performance	
	Illumination (Lux)
	Constant ON
Distance = .5 meter	8800 lux
	OverDrive
	44000 lux
<i>Illumination measurement taken on White Lights – 6500K</i>	



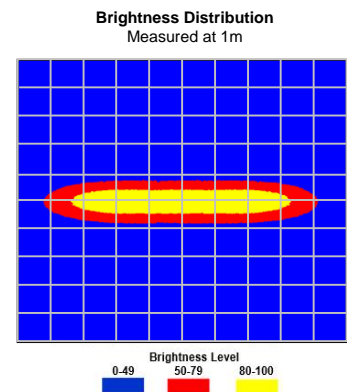
### LE300-XXX-W

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	220mm(~9") H x 160mm(~6") V
1m (39.4")	460mm(~18") H x 420mm(~16.5") V
1.5m (59")	570mm(~22") H x 550mm(~22") V
Typical output performance	
	Illumination (Lux)
	Constant ON
Distance = .5 meter	5200 lux
	OverDrive
	26000 lux
<i>Illumination measurement taken on White Lights – 6500K</i>	



### LE300-XXX-L

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	330mm(~13") H x 50mm(~2") V
1m (39.4")	660mm(~26") H x 100mm(~4") V
1.5m (59")	990mm(~39") H x 150mm(6") V
Typical output performance	
	Illumination (Lux)
	Constant ON
Distance = .5 meter	6800 lux
	OverDrive
	34000 lux
<i>Illumination measurement taken on White Lights – 6500K</i>	



## mounting options



T-slot channel on the back for mounting



3-Axis Pan and Tilt Mount  
P/N: PB300 - M5  
(Sold separately)



Right Angle Bracket Kit  
P/N: LE - Kit  
(Included)



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

**Notice**

Exempt Group: No photobiological 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: 470, 505, 530, and WHI.