

LX300 Features

- Direct Connect
- T-Slot for mounting and connecting together
- Driver built in – No External wiring to a driver
- PNP and NPN Strobe input
- Continuous operation or Strobe mode
- Dimmable via built in potentiometer
- Analog intensity 0-10VDC signal
- Twelve, 1mm² Die High Current LEDs



Electrical Input	Voltage: 24 VDC +/- 5%
Current	Max 900mA draw
Strobe Input	PNP ► +3VDC 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)
Yellow Indicator LED	LED Strobe Indicator ON = Light Active
Green Indicator LED	ON = Power
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Potentiometer	10 turn pot – 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 Integral QD connector
Daisy Chain	Up to eight LX300
Lifespan	Constant ON: <100,000 hrs Strobing: >100,000hrs
IP Rating	IP50
Weight	~540g

LX300 – XXX – X* —» Part Number Key

Product Family: Linear Light LX300	Color: 365, 395, 470, 505, 530, 590, 625, 850, 940 & WHI (White)	Lenses: W - Wide L - Line
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* Lights come standard with Narrow lenses
 CE and RoHS Compliant

Warnings



Important

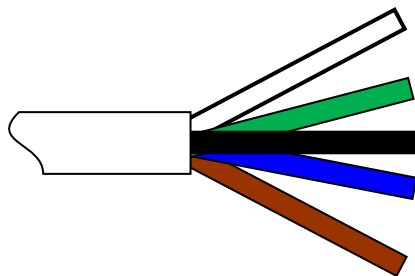
Please note that the power requirements are 900 mA at 24VDC. Failure to supply light with 900 mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



Caution

UV emissions may be present in this product. 365nm and 395nm LEDs emit a harmful UV radiation known to lead to eye damage after long repeated exposures. Proper eye protection suggested with UV products.

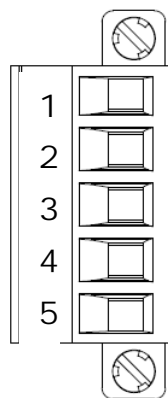
Wiring Diagrams



Pin and Cable Color Assignment

Connector on Light

- 1 = 24VDC
- 2 = NPN STROBE
- 3 = 0-10VDC Analog
- 4 = PNP STROBE
- 5 = GND



If Analog 0-10 VDC is not used to control light intensity;
+VDC (24VDC) must be connected to Analog Input - Jumper pin 3 to pin 1

- 0 – 10 VDC Analog controls intensity of light from 10-100%.
- PNP and NPN strobe – In strobe mode the light output will track the pulse width of the strobe input.

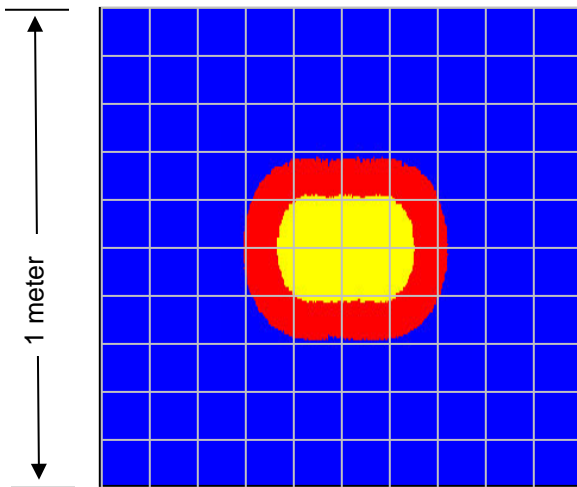
Optical Performance

LX300-XXX

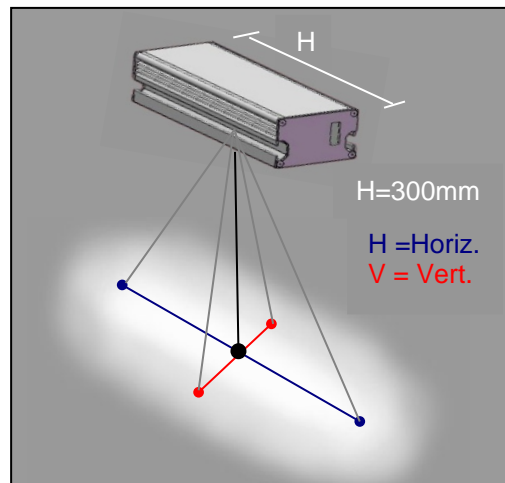
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	240mm(~9") H x 100mm(~4") V
1m (39.4")	250mm(~10") H x 220mm(~9") V
1.5m (59")	360mm(~14") H x 360mm(~14") V

Typical output performance	Illumination (Lux)
Distance = .5 meter	18000
<i>Illumination measurement taken on White Lights – 6500K</i>	

Brightness Distribution Measured at 1m



Brightness Level

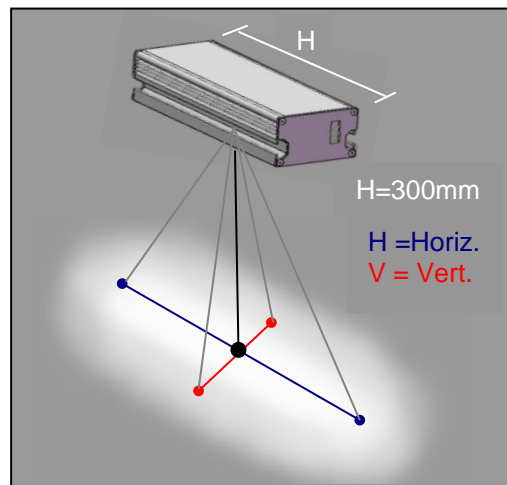
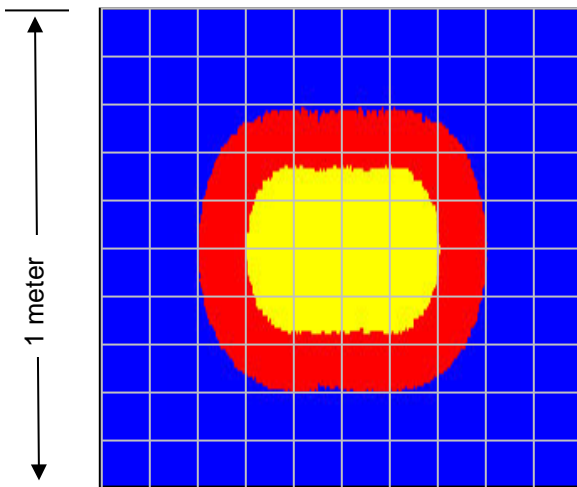


LX300-XXX-W

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	240mm(~9") H x 180mm(~7") W
1m (39.4")	400mm(~16") H x 350mm(~14") W
1.5m (59")	530mm(~21") H x 540mm(~21") W

Typical output performance	Illumination (Lux)
Distance = .5 meter	8300
<i>Illumination measurement taken on White Lights – 6500K</i>	

Brightness Distribution
Measured at 1m

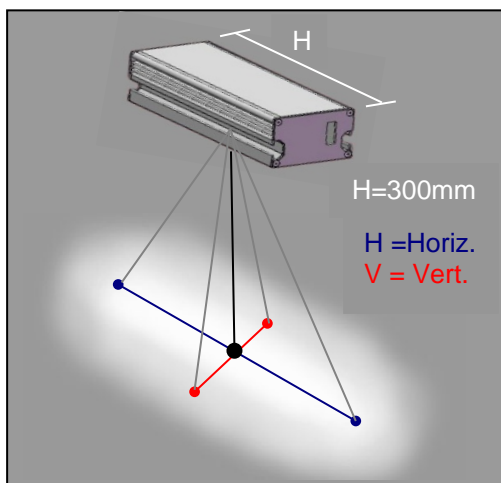
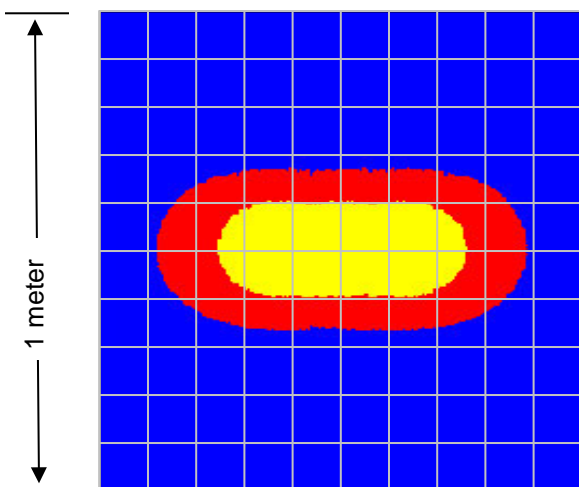


LX300-XXX-L

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	240mm(~9") H x 100mm(~4") V
1m (39.4")	510mm(~20") H x 190mm(~8") V
1.5m (59")	830mm(~33") H x 330mm(13") V

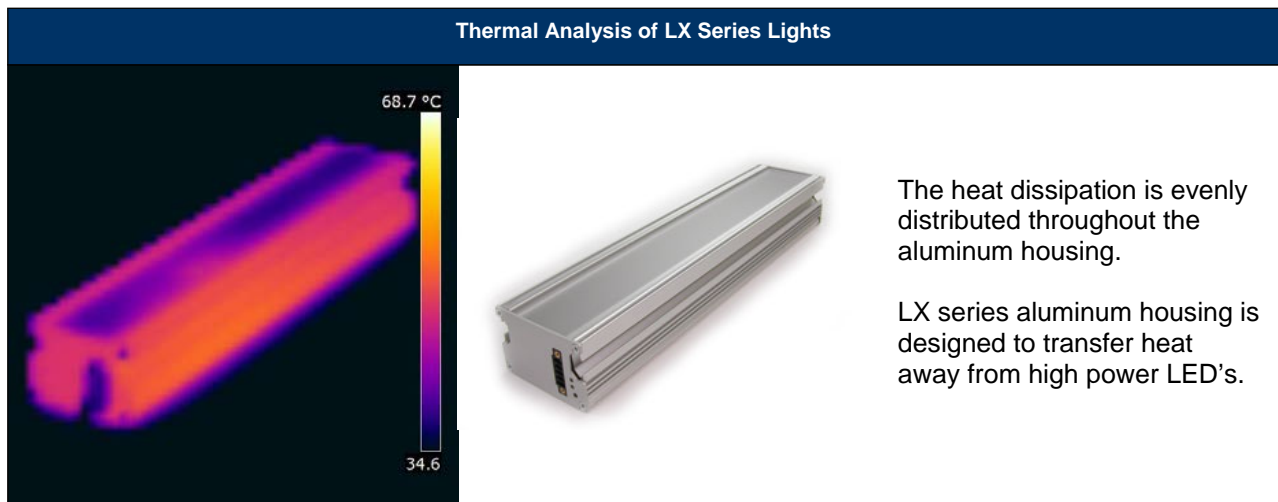
Typical output performance	Illumination (Lux)
Distance = .5 meter	14000
<i>Illumination measurement taken on White Lights – 6500K</i>	

Brightness Distribution
Measured at 1m



Heat Dissipation

The LX series of linear lights is the brightest in the vision industry due to the heat dissipation of the housing. Lifespan and power output for LED lights are based on the junction temperature of the high current LED. The junction is the point where the light is generated inside the LED and the point of heat generation. To dissipate heat, Smart Vision Lights directly mounts high current LED's to an aluminum circuit board. The aluminum circuit board is in direct contact with LX series aluminum housing. This design efficiently transfers heat away from the high powered LEDs. Therefore, the LX series Linear Light can be run at higher current, producing an increased output due the even heat dissipation of the aluminum housing. In constant operation the housing on Smart Vision Lights LX series lights will run at 50 C° in an ambient temperature of 25 C°.



Aluminum Housing Advantages

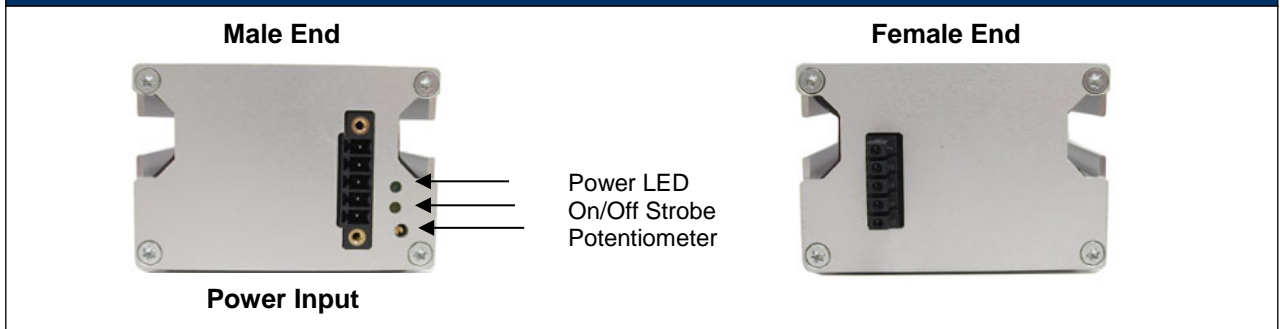
- Increased current for a brighter light
- Higher uniformity and stable light
- Increased LED lifespan

Connector Style / Mounting

Power Input Connection



End view of Light Connections



Connecting Lights Together – Daisy Chain

