


**product introduction**

The DDL-100 Series is a diffuse 4" dome light designed to read code and imperfections on rounded or highly reflective products and product inspection with an even, uniform, and repeatable light intensity. The 40 LED design and the constant current regulation the built in driver provides along with the semi-reflective white dome further backs the DDL-100 light's performance. The DDL-100 was designed with simplicity and functionality in mind. Built in constant ON operation and OverDrive Strobe technology allows for use in either operation depending on wiring method. NPN and PNP strobe operation with a built in 0-10VDC analog intensity control allows for further versatility. The industry standard 5-pin M12 connector makes for easy installation.


**product features**


- 5 Pin M12 Quick Disconnect
- Driver Built In – No External Wiring To A Driver
- NPN or PNP Signal Options
- Analog Intensity 0-10VDC Signal
- 100mm Dome Diameter
- 25mm Camera Viewing Hole
- Continuous Operation and OverDrive Built In


**product specifications**

<b>Electrical Input</b>	24 VDC +/- 5%
<b>Current</b>	Constant ON - Max. 700mA   OverDrive - Max. 2A during strobe
<b>Wattage</b>	Constant ON - Max. 17W   OverDrive - Max. 48W during strobe
<b>Continuous Mode</b>	Light will be in continuous mode by leaving signal on NPN/PNP input active
<b>Connection</b>	5 pin M12 connector
<b>Lifespan</b>	100,000 hrs
<b>Ambient Temp.</b>	-20° - 50° C (-4° - 122° F)
<b>IP Rating</b>	IP50
<b>Compliances</b>	CE and RoHS
<b>IEC 62471 Rating</b>	See page 3


**product number key**

## DDL-100 – XXX —» Part Number Key

**Product Family:**  
Dome Light  
DDL-100

**Color:**  
470 – Blue  
530 – Green  
625 – Red  
WHI – White

CE and RoHS Compliant



## warnings

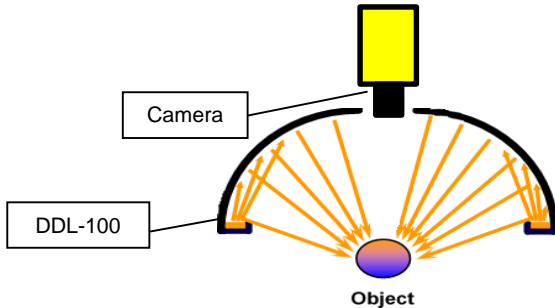


### Attention

Please note that the power requirements are 700mA at 24VDC in continuous ON operation or 2A at 24VDC in OverDrive operation. Failure to supply light with 700mA in continuous ON or 2A in OverDrive operation can result in non-repeatable lighting. Contact Smart Vision Lights for more information.



## light output cutaway



The dome shape gives this product a particular advantage in uniformity when illuminating and reading OCR codes on reflective or round surfaces.

25mm Camera Viewing Hole and 100mm Dome diameter



## 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.



## mounting



Standard industrial T-slots on  
each side accepts T-nuts

Includes (2) T-nuts and (2) screws



## safety group

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: 470, 530, and 625

### 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: WHI