


product introduction

The DDL-150 Series is a diffuse dome light with a 140mm viewing area 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-150 light's performance. The DDL-150 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


- 140mm Diameter
- 30mm Camera Viewing Hole
- 5 Pin M12 Quick Disconnect
- Driver Built In – No External Wiring To A Driver
- NPN or PNP Signal Options
- Analog Intensity 0-10VDC Signal
- Continuous Operation and OverDrive Built In


product specifications

| | |
|-------------------------|--|
| Electrical Input | 24 VDC +/- 5% |
| Current | Constant ON - Max. 850mA OverDrive - Max. 4A during strobe |
| Wattage | Constant ON - Max. 20.4W OverDrive - Max. 96W during strobe |
| Continuous Mode | Light will be in continuous mode by leaving signal on NPN/PNP input active |
| Connection | 5 pin M12 connector |
| Lifespan | 100,000 hrs |
| Ambient Temp. | -20° - 50° C (-4° - 122° F) |
| IP Rating | IP50 |
| Compliances | CE and RoHS |
| IEC 62471 Rating | See page 3 |


product number key

DDL-150 – XXX —» Part Number Key

Product Family:
Dome Light
DDL-150

Color':
470 – Blue
530 - Green
625 – Red
WHI - White

CE and RoHS Compliant

*Additional wavelengths available. Contact Smart Vision Lights for more information.



warnings

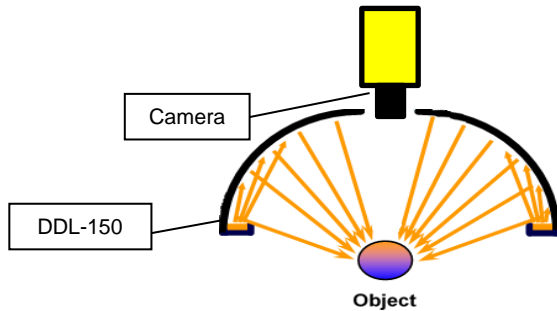


Attention

Please note that the power requirements are 1.4A at 24VDC in continuous ON operation or 4A at 24VDC in OverDrive operation. Failure to supply light with 1.4A in continuous ON or 4A 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.

30mm Camera Viewing Hole and 140mm Dome diameter



wiring configuration

Wiring configuration for **CONSTANT ON** operation

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

* 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 | BROWN |
| | 2 | NPN | Sinking Signal | WHITE |
| | 3 | GND | Ground | BLUE |
| | 4 | PNP | Sourcing Signal | BLACK |
| | 5 | OverDrive Signal | Ground | GREY |

*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

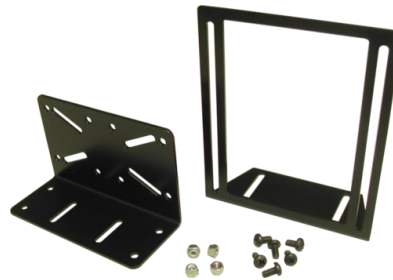
Includes (2) T-nuts and (2) screws



camera brackets

The DDL Series offers a specially designed camera mounting bracket and an optional right angle bracket. Multiple adjustment points means maximum mounting versatility between camera manufacturers. Mounting hardware included.

Camera Mounting Bracket
P/N: BKT0007



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