

# PRD SERIES

# Spot projectors

PRD19.01

Ideal lighting system designed for applications in which great amount of light is needed in a small surface. It is used to produce great contrast and emphasize textures, relieves and fissures that the lighted object could have due to the fact that any relief, even the smallest one, produces a shadow.

## Technical specifications¹

| Lighting model                           | PRD0200A  | PRD0500B  |
|--|---|---|
| <b>②</b>                                 | 4   |   |
| Dimensions                               | n20x58  | n46x31  |
| RWD (mm)                                 | >50   | >50   |
| Weight                                   | 75g   | 95g   |
| IP rating                                | IP40  | IP65  |
| Mounting holes                           | B0DYn12x39  | (x4)M4×6  |
| Connection                               | BN/RD = +24V ±3%<br>BU/BK = 0V  | 2P aerial male connector. PIN 1 = $\pm$ 24V $\pm$ 3% PIN 2 = 0V                                     |
| Power cable                              | Pre-cabled with flying<br>leads 2x0.5mm <sup>2</sup><br>L=1.8m  | VCB Series<br>(Not-included)  |
| Modifiers <sup>3</sup>                   | N/A   |   |
| Accessories <sup>4</sup>                 |   |   |
| iBlueDrive tech.                         | inline  | inline  |
| iBlueDrive connection                    | 3P aerial male inline<br>connector. L= 715mm.<br>PIN 1 = +24V ±8%<br>PIN 2 = 0V<br>PIN 3 = Control <sup>5</sup> | 3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control <sup>5</sup> |
| iBlueDrive power cable<br>(Not-included) | VCC Series  | VCC Series  |
| iBlueDrive accessories <sup>4</sup>      | <b>%</b> @ <b>1</b>   | <b>%@</b> ()  |

#### Instantaneous consumption<sup>6</sup> (max.)

| instantaneous consumptions (max.) |          |                 |                 |  |       |
|-----------------------------------|----------|-----------------|-----------------|--|-------|
| Lighting model                    |          | PRD0200A        | PRD0500B        |  |       |
| TVDE 0                            | B        | 0.5W            | 1.3W            |  | -470C |
| TYPE C                            | G        | 0.2W            | 0.6W            |  | -525C |
| 24VDC                             | B        | 0.5W            | 2W              |  | -630C |
|                                   | 0        | 0.5W            | 1.6W            |  | -850C |
| TYPE P                            | •        | 0.5W            | 1.6W            |  | -365P |
| Dmax= ½                           | 0        | 0.5W            | 1.6W            |  | -400P |
| Ton max= 60s                      | W        | 0.5W            | 1.6W            |  | -WOOP |
|                                   | 0        | 90mA/2.2W       | 265mA/6.4W      |  | -365S |
|                                   | 0        | 90mA/2.2W       | 265mA/6.4W      |  | -400S |
|                                   | <b>B</b> | 90mA/2.2W       | 265mA/6.4W      |  | -470S |
| TYPE S                            | <b>O</b> | 55mA/1.3W       | 165mA/4W        |  | -525S |
| Dmax= ½0<br>Ton max= 2ms          | B        | 90mA/2.2W       | 265mA/6.4W      |  | -630S |
| IOII IIIdA— ZIIIS                 | 0        | 210mA/5W        | 420mA/10W       |  | -850S |
|                                   | w        | 90mA/2.2W       | 265mA/6.4W      |  | -W00S |
|                                   | •        | 0.8W[2.9W/0.7W] | 1.3W[7.7W/1.1W] |  | -365i |
|                                   | 0        | 1.0W[2.9W/0.7W] | 1.9W[7.7W/1.2W] |  | -400i |
| TYPE i <sup>7</sup>               | B        | 0.9W[2.9W/0.8W] | 1.8W[7.7W/1.3W] |  | -470i |
|                                   | <b>G</b> | 0.8W[1.7W/0.7W] | 1.5W[4.1W/1.1W] |  | -525i |
| iBlue                             | B        | 1.2W[2.9W/1.0W] | 2.6W[7.7W/1.9W] |  | -630i |
| Drive                             | 0        | 1.8W[5.3W/1.2W] | 3.1W[10W/1.9W]  |  | -850i |
|                                   | W        | 1.0W[2.9W/0.7W] | 1.9W[7.7W/1.2W] |  | -WOOi |

N/A= Not available 
CUS = Custom

<sup>(7)</sup> Values of maximum instantaneous consumption of 'Type i' lighting systems in Powered mode [Strobe mode / Continuous mode]



\*WT

<sup>(1)</sup> Environmental specifications and iconography legend in additional annex Z1.4 and Z2 respectively.

<sup>(2)</sup> IP43 if the system is positioned so that the light falls vertically.

<sup>(3)</sup> Prior to manufacturing optional modifications in standard lighting systems. Please, consult the code before ordering (additional annex Z2.1).

<sup>(4)</sup> Accessories are not-included. More information in accessories section.

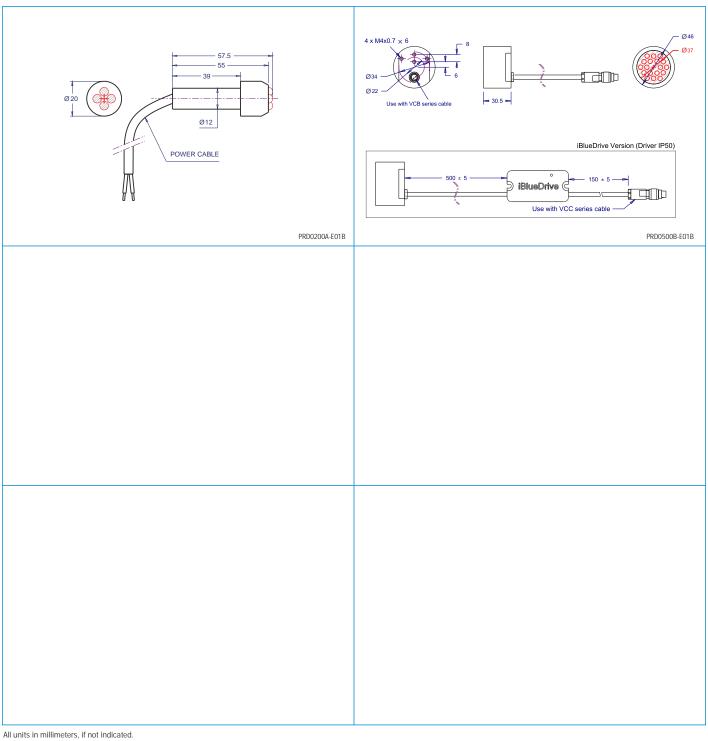
<sup>(5)</sup> iBlueDrive control input wiring specifications in additional annex Z1.2.

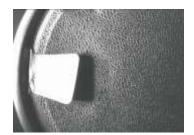
<sup>(6)</sup> Bear in mind that consumption table is only to be used as a guide. To refer to real values, please, consult product label when purchasing.



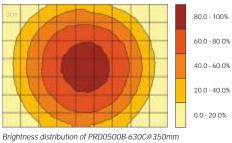
PRD SERIES

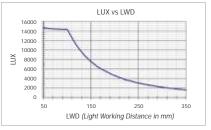
PRD19.01





Example of PRD captured image





PRD0500B-630C light intensity.

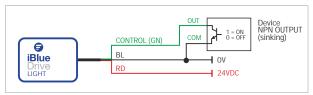


ZXA17.03

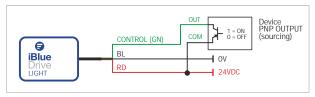
## ► Z1.2 - iBlueDrive control input wiring

All iBlueDrive products come together with a quick-start guide for connection and working conditions. Refer to iBlueDrive Manual for extended information.

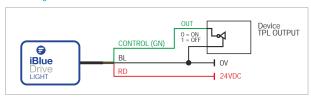
#### NPN wiring for strobe or ON/OFF mode



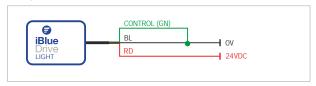
#### PNP wiring for strobe or ON/OFF mode



#### TTL wiring for strobe or ON/OFF mode



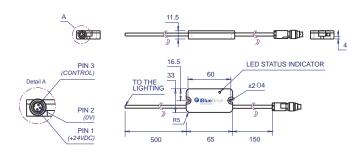
## Wiring for continuous mode



#### ► Z1.3 - iBlueDrive inline

iBlueDrive inline is the driver for iBlueDrive technology integrated as a box of 65x33mm to the cable that goes from the lighting system to the connector. It is used when iBlueDrive driver can not be integrated on chassis. See diagram:





**WARNING!:** In continuous and powered mode, clamp driver to a metal surface for heat dissipation. In Strobe mode is not required, but recommended.



## ► Z1.4 - Environmental Specifications

| Max. Operating Humidity 85% non-condensing |                    |
|--|--------------------|
| Operating Temperature                      | 0 - 40°C           |
| Storage Temperature                        | 0 - 60°C           |
| Housing material                           | Anodized aluminium |
| Standards                                  | CE X POHS          |

# ▶ Z2.1 - Modifiers legend

| icon         | Description                                       | Code |
|--------------|---|------|
| $\bigcirc$ N | Narrow angle of emission                          | /AN  |
| <b>∠</b> M   | Medium angle of emission (By default)             | /AM  |
| ∆w)          | Wide angle of emission                            | /AW  |
| <u>a</u>     | Oval angle of emission = 23-24° (x)<br>17-18° (y) | /AO  |
| <u>(10)</u>  | Diffuse emission                                  | /AD  |
| $\boxtimes$  | Polarizer filter                                  | /FPL |
| <u></u>      | Diffuser filter                                   | /FDR |
| CC1          | Dome hole of 46mm                                 | /CC1 |
| CC2          | Dome hole of 40mm                                 | /CC2 |
| IP67         | IP Rating = IP67                                  | /67  |
| PNP          | PNP input model                                   | /P   |
| <i>f</i> 1   | 50mm focal Length                                 | /F1  |
| <i>f</i> 2   | 150mm focal Length                                | /F2  |
| f3           | Infinite focal Length                             | /F3  |
|              |   |      |

## ► Z2.2 - Accessories legend

| icon Description             | Serie                |
|------------------------------|----------------------|
| Power cable/s                | VCB, VCC, VCD Series |
| Other cable/s                | VCU, VCL             |
| Strobe and RGB controller/s  | VST, VSC Series      |
| Polarizer filter             | VPF, VPC             |
| Diffuser filter              | VDF                  |
| Collimater filter on x axis  | VCFx                 |
| Collimater filter on y axis  | VCFy                 |
| Collimater filter on xy axis | VCFxy                |
| Darkfield converter          | VRF                  |
| Protector filter             | VPT                  |
| Heat dissipator              | VHD                  |
| Fixing bracket               | VBA, VBB, VBC Series |

## ➤ Z2.3 - iBlueDrive Accessories legend

| icon                  | Description  | Serie/Product                   |
|-----------------------|--|---------------------------------|
| <b>Q</b> <sub>0</sub> | Accessorie to configure iBlueDrive devices: iBlueDrive Box, iBlueDrive USB | VTA0005A, VTA0006A,<br>VTA0007A |
| 1                     | iBlueDrive optocoupler   | VTA0020A                        |
| 0                     | iBlueDrive potentiometer   | VTA0030B                        |

## ► Z2.4 - Technical drawings legend

|                             | icon  | Description |  |  |
|-----------------------------|---|-------------|--|--|
| ★ Optical axis              |   |             |  |  |
|                             | <ul><li>✓ Viewing window dimensions</li><li>— Lighting elements</li><li>+ Light emission center</li></ul> |             |  |  |
|                             |   |             |  |  |
|                             |   |             |  |  |
| Lighting surface dimensions |   |             |  |  |
|                             |   |             |  |  |

## ▶ Z2.5 - Colours & Wavelegths legend

| icon     | Wavelength  | Colour | Code      |
|----------|-------------|--------|-----------|
| <b>①</b> | 365nm       | UV-    | -365      |
| 0        | 400nm       | UV     | -400      |
| B        | 470nm       | BLUE   | -470      |
| G        | 525nm       | GREEN  | -525      |
| ß        | 630nm       | RED    | -630      |
| •        | 850nm/880nm | IR     | -850/-880 |
| w        |             | WHITE  | -W00      |
| <b>P</b> |             | RGB    | -RGB      |
|          |             |        |           |

## ► Z2.6 - Types of lighting legend

| icon     | Description   |
|----------|---|
| 77       | Radial lighting                                     |
| 7 4      | 'Darkfield' lighting effect. Low angle illumination |
| 1        | Backlight illumination                              |
| <b>1</b> | 'Cloudy day' lighting effect                        |
|          | 'Bright field' lighting effect                      |
| 11       | Projector lighting                                  |
|          | Axial lighting                                      |

## ► Z2.7 - Types of light legend

|   | icon       | Description         |
|---|------------|---------------------|
| - | <b>3</b>   | Direct light        |
|   | <b>(5)</b> | Diffuse light       |
|   | <b>(%)</b> | Ultra-diffuse light |

