

The next generation of machine vision lighting, powered by LuxiBright®



# MACHINE VISION RING LIGHTS USER MANUAL

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# PREAMBLE



## LuxiRing WHITE 5400°K

This manual contains safety instructions and instructions for installing, connecting and using the LuxiRing. It is essential to follow these instructions to ensure optimal and safe use. Any improper use may invalidate the product warranty.

## UNPACKING

The product is packaged with care. In the event of visible damage on receipt, it is essential to report this to the carrier on the delivery note, and then to your supplier within 24 hours. Open the packaging without using a blade to avoid any damage to the product.

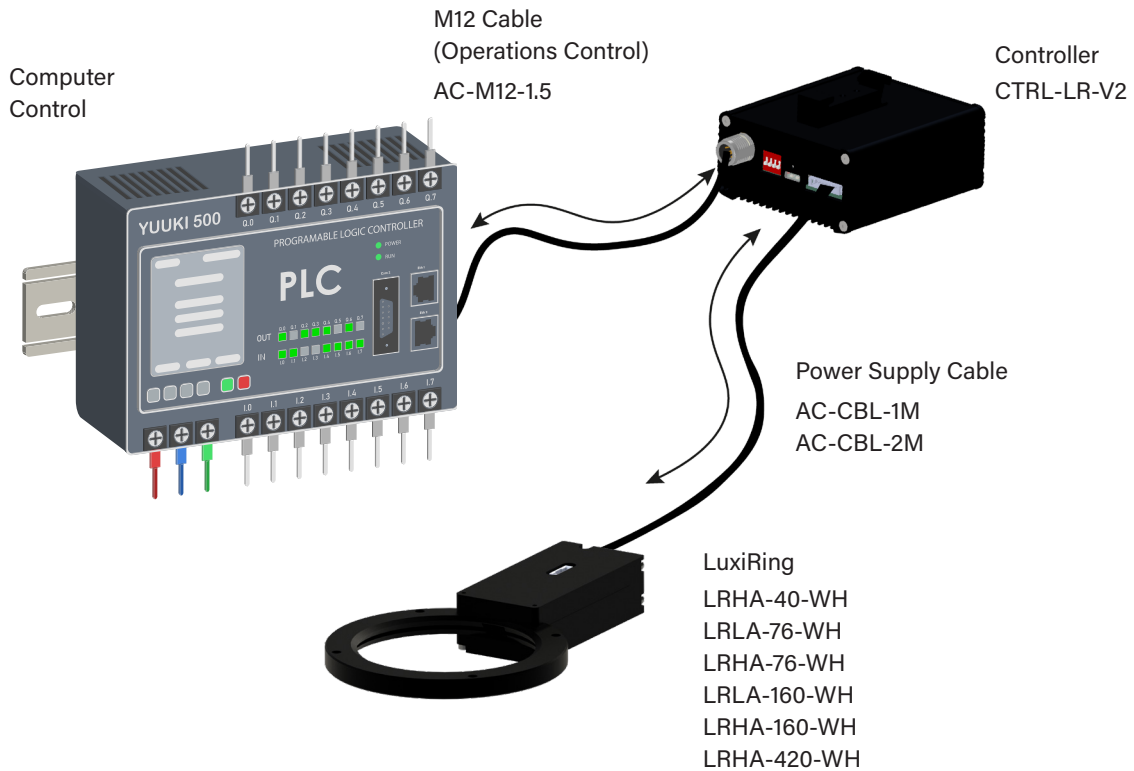
## ORDER INFORMATION

LuxiRing	Diameter	Angle	M12 Cable	Power Supply Cable	Controller
LR	XX <sup>⊗</sup>	Low Angle High Angle	AC-M12-1.5	AC-CBL-1M AC-CBL-2M	CTRL-LR-V2

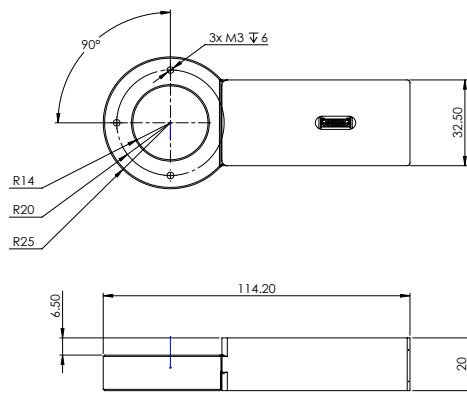


## DIMENSIONS & FIXING

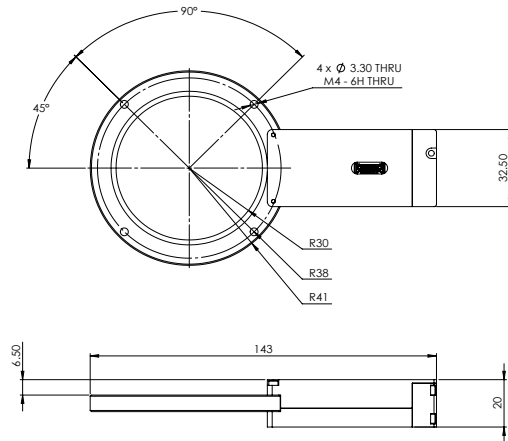
Standard dimensions are available. LuxiRing is fitted with M4 captive nuts for mounting. Use M4 screws (not supplied), with a tightening torque of 0.5 to 1.5 Nm.



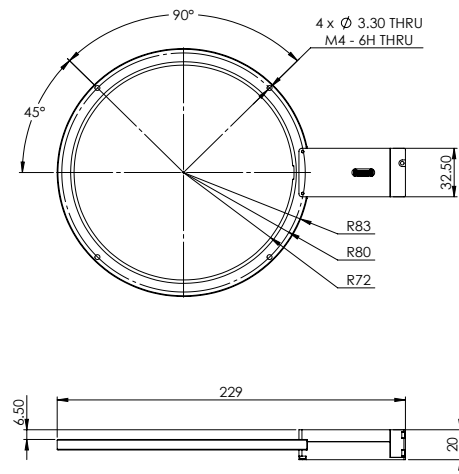
## LuxiRing Mini Ø40mm



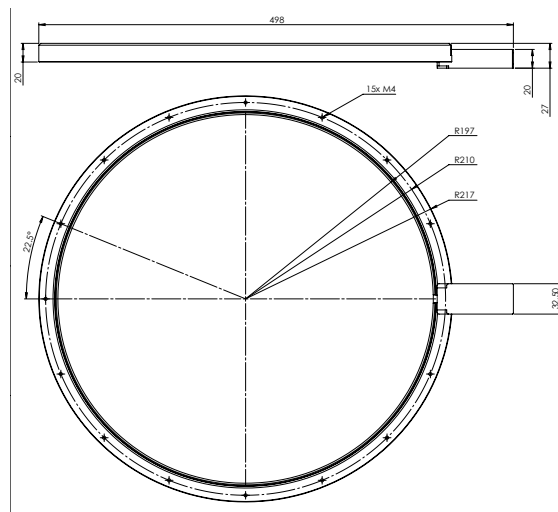
## ■ LuxiRing Mini **Ø76mm**



## ■ LuxiRing Mini **Ø160mm**



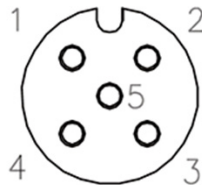
## ■ LuxiRing Mini **Ø420mm**





## CONNECTION & WIRING

Controller's input: 5 wires terminal-to M12 5-pin-power supply and external trigger



1	BN	
2	WH	
3	BU	
4	BK	
5	GY	

24 VDC  
Analog Dimming  
0-10 VDC\*  
GND  
Trigger en 12-26 VDC  
n.d.

Ref : AC-M12-1.5

\*Analog dimming range: 0-10 VDC.

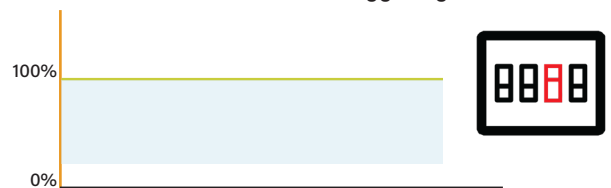
At 0 VDC, light intensity is 20%; at 10 VDC, light output is 100%.

## OPERATING MODES (via DIP SWITCH)

LuxiRing uses LuxiBright technology which may present photobiological risks. To ensure safety, wear suitable safety goggles. See classification table below:

Mode	Configuration	Description
0	SW3 ON	Continuous 100% without triggering
1	ALL OFF	Continuous nominal or via high/low trigger
2	SW1 ON	Rising edge detection + Overdrive
3	SW2 ON	Pulse tracking + Overdrive
4	SW4 ON	Analog Voltage DIMING

### 0. Continuous 100% without triggering



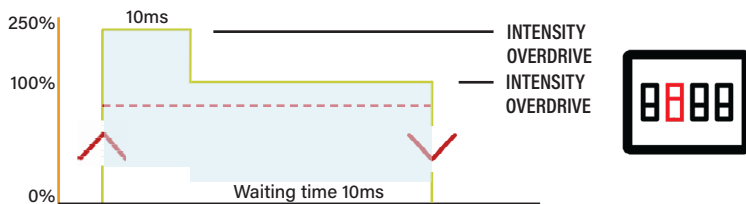
### 1. Continuous nominal or via high/low trigger



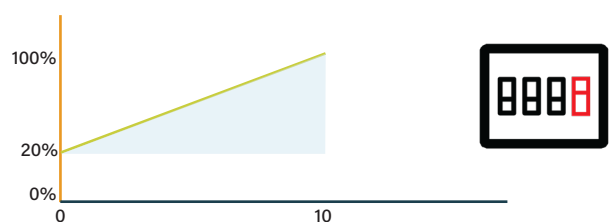
### 2. Rising edge detection + Overdrive



### 3. Pulse tracking + Overdrive



### 4. Analog Voltage DIMING



— Light Intensity     - - - Trigger     — Tension (VDC)      0-10 VDC Dimming Range  
— Laser Current     — Time     ^ Trigger Edge

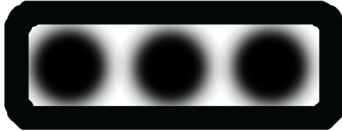
\* The operating cycle can have an impact on the temperature of the lighting system. A built-in temperature control system constantly monitors the system, and if the preset temperature limit is exceeded, the lighting automatically shuts down to prevent overheating. In order to reboot the system, the power of the M12 Cable needs to be reset.



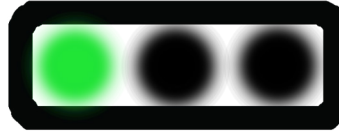
## LED INDICATORS

- **Mode 1** : Ready without light (green LED)
- **All Modes** : Flashing red LED = error
- **Mode 2 & 3** : Constant green LED, blue LED on trigger detection

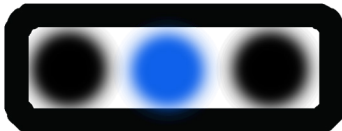
### Mode 1



### Mode 2



### Mode 3



### All Modes



## POWER SUPPLY

- **Operating voltage** : 24V (+/- 10%)
- **Max voltage** : 26V
- **Min voltage** : 12V
- **Input voltage** : 24V
- **Trigger input** : 12-26 VDC, PNP
- **IP Rating** : IP30

## OPERATING CONDITIONS

- **Temperature** : 0°C to +40°C
- **Humidity** : max 80%, non-condensing
- Do not use outdoors
- Do not dismantle or modify the product
- Never look directly at the light source

## MAINTENANCE

- Cleaning only at standstill
- Use a soft, dry cloth
- Do not use solvents or abrasive products

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