RIO RGBW(A) ALL IN ONE
SPECIFICATION SHEETS

BAYLED®
www.bayled.eu

| LED | Energy Saver | ♻ | IP66 | CLASS I | CE | RoHS | FC | RDM MONITORING | DMX RDM | 5 YEARS WARRANTY |

EXPLANATION

RIO RGBW(A) AIO Series is a powerful and outdoor rated inground with high lumen output and excellent color consistency. RIO RGBW(A) AIO are excellent solution for accent lighting, spot lighting, wall washing, façade lighting applications and widely used in illuminating historical places, monuments in parks and other areas.

RIO RGBW(A) AIO Series is produced in 18 pcs colored LED. RIO RGBW(A) AIO Series has a sturdy die cast aluminium body. It works at universal power input 90 ~ 264VAC to ensure connections over long distances. RIO RGBW(A) AIO Series provides easy setup and programming with standard DMX 512 and RDM protocols without special or complex communication protocols.

• RIO RGBW(A) AIO provides compatible communication with other fixtures using standard DMX 512 and RDM protocols without requiring any other special communication protocol or production ID. They are remotely addressable in group via RDM protocol. This feature allows for easy pixel mapping and addressing after all installations have been completed.

• RIO RGBW(A) AIO surface enable flexible application using very long starter and jumper cables, since they operate in 90 ~ 264VAC 50/60HZ universal voltage range.

• RIO RGBW(A) AIO Series work through Madrix® or Enttec software and hardware in coordination. Pixel mapping can be made easily by selecting fixtures in Madrix® or Enttec library.

• IP66 class RIO RGBW(A) AIO, are designed to meet the challenging equirements of exterior applications with their robust and durable structure. It is resistant to shock, vibration and other harsh conditions through die cast aluminium body and 3mm PMMA cover.

• Input and output is delivered through a cable and requires an extra junction box. This junction allows cable connection between distances. Jumper cables can be determined according to the desired length of cable.

• RIO RGBW(A) AIO Series is produced in grey color as standard, and is also available in different colors in RAL code upon request.

Output	RGBW(A) 25W	RGBW(A) 35W
Light Source	18 High Power Colored LEDs	18 High Power Colored LEDs
Lumen Maintenance	60.000 > hours L70 @ 50°C (full output)	60.000 > hours L70 @ 50°C (full output)
Color Range	16.7 Million additive RGB colors, white CCT 6500K	16.7 Million additive RGB colors, white CCT 6500K
Ra(CRI)	RGBW(A) Full on ≥70CRI	RGBW(A) Full on ≥70CRI
Beam Angle	8°/ 25°/ 45°/ 60°	8°/ 25°/ 45°/ 60°
Luminous Flux	1400 lm	1901 lm
Efficacy (lm/W)	56 lm/W	54 lm/W

Control & Programming

Color Resolution:	4 x 8-bit (Gamma correction)
Addressing:	RDM (Group of Remote Addressable Systems)
PWM Frequency:	1000Hz flicker free dimming
DMX / DALI Compliance:	USITT DMX512-1990
RDM Compliance:	ANSI/ESTA E1.20-2010

Electrical

Operating Voltage:	90 ~ 264VAC 50/60Hz Universal AC input	
Power Consumption:	25W	35W
Connections:	Wire and Connector	

Physical

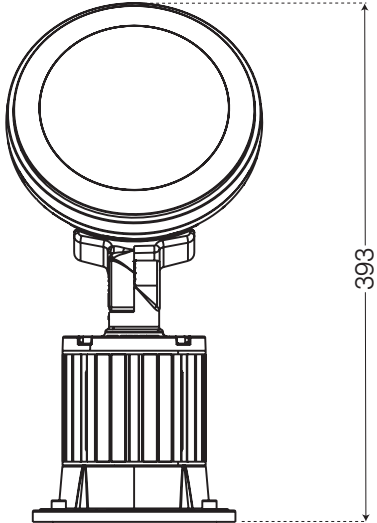|	
Housing:	Die cast
Front Material:	PMMA
Installation Brackets:	Plastic and stainless steel
Gasket:	Silicon
Color:	Grey (standard) or Custom Any RAL (optional)

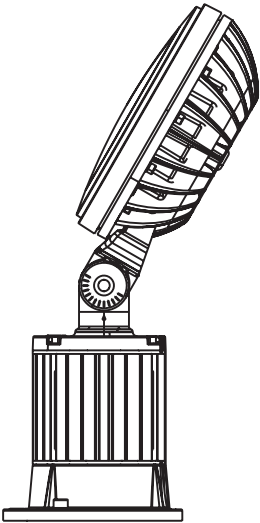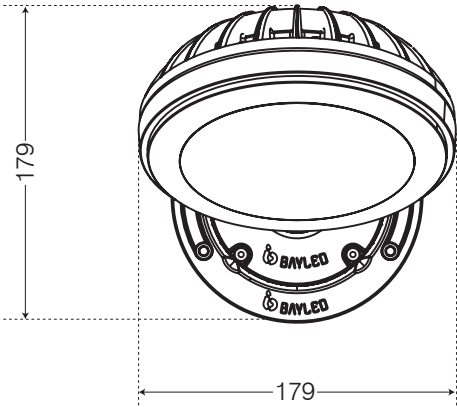**Measurements:**

Dimensions: (height x width x depth)	393 x 179 x 179 mm
Net weight:	2,23 kg

Environmental

Storage Temperature:	-40°C / +85°C
Ambient Temperature:	-25°C / +50°C
Operating Temperature:	-25°C / +65°C
Thermal Protection	Automatic over temperature protection(+70°C)
Cooling:	Cooling by free air convection
Ingress Protection Rating:	IP66

Certificate:	EN 60598, CE

Warranty:	5-year Limited Warranty

179

179

393

INDOOR ZONE

Ethernet

AC Input
3-Pin VDE

RISK OF ELECTRIC SHOCK

90~264V AC 50/60Hz

RJ45

Madrix Luna

RJ45

MADRIX LIGHTING CONTROL

LUNA8

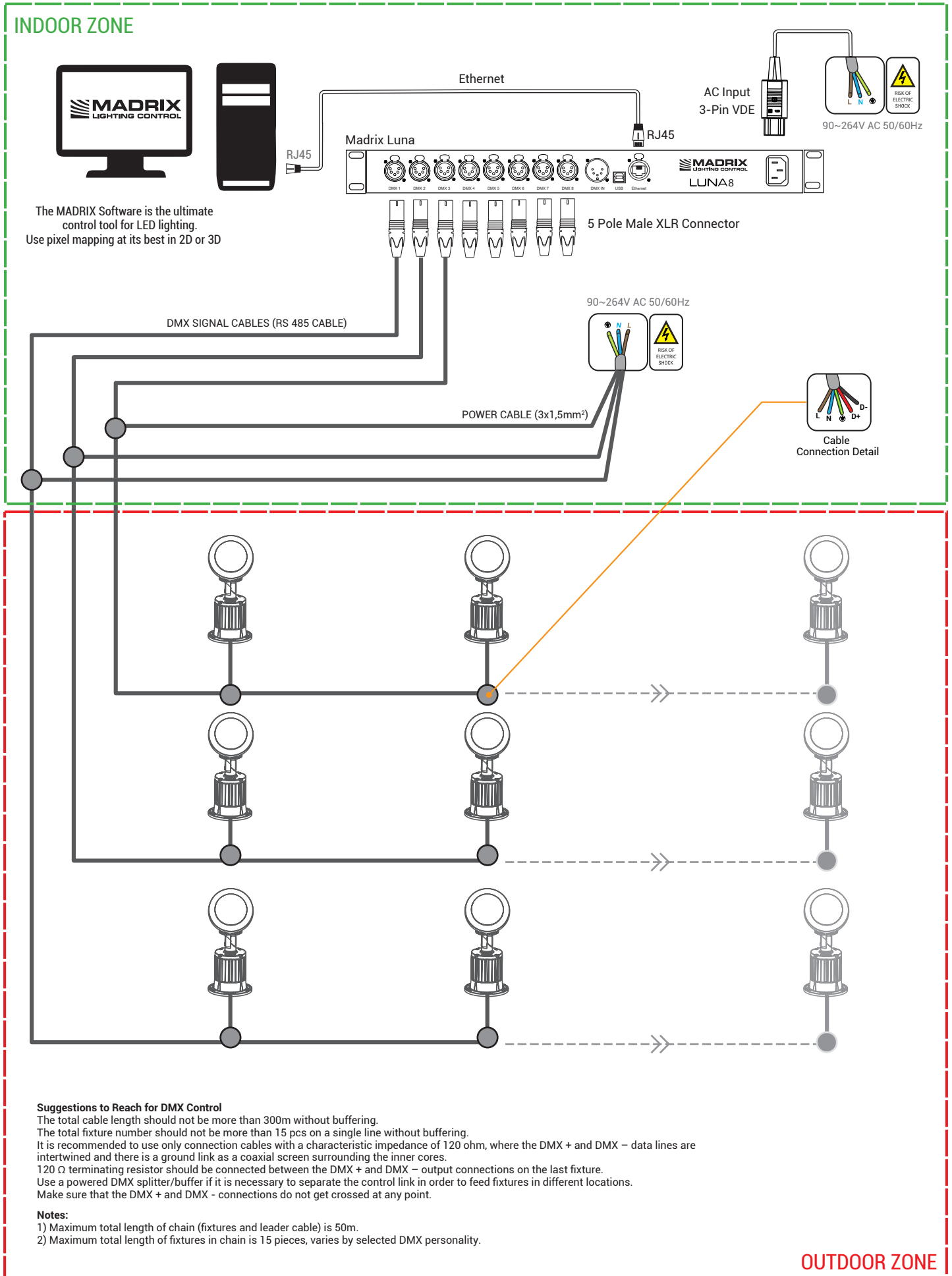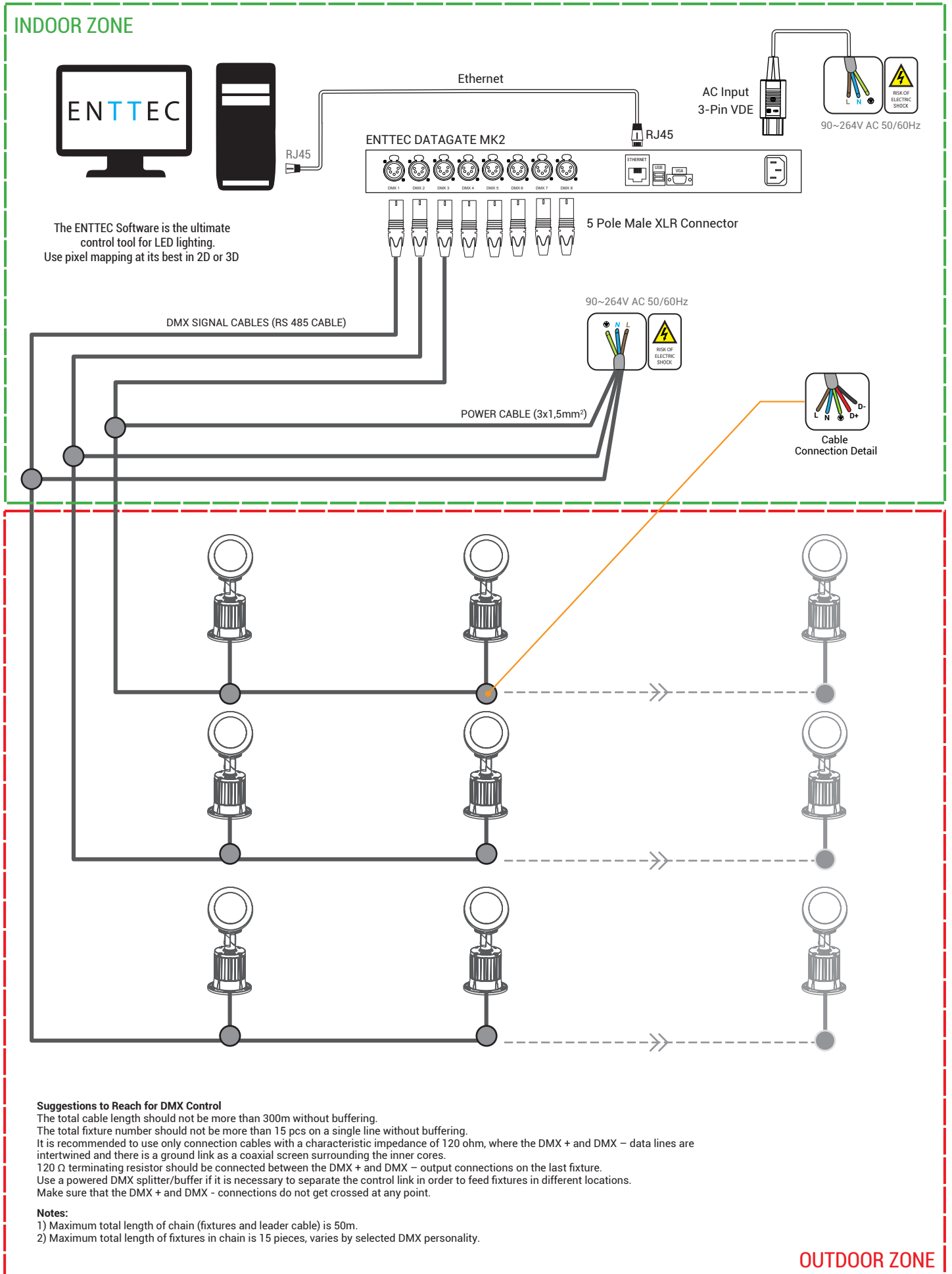DMX 1 DMX 2 DMX 3 DMX 4 DMX 5 DMX 6 DMX 7 DMX 8 DMX IN USB Ethernet

The MADRIX Software is the ultimate control tool for LED lighting.
Use pixel mapping at its best in 2D or 3D

5 Pole Male XLR Connector

90~264V AC 50/60Hz

N L

RISK OF ELECTRIC SHOCK

DMX SIGNAL CABLES (RS 485 CABLE)

POWER CABLE (3x1,5mm^2)

L N D+ D-

Cable Connection Detail

Suggestions to Reach for DMX Control
The total cable length should not be more than 300m without buffering.
The total fixture number should not be more than 15 pcs on a single line without buffering.
It is recommended to use only connection cables with a characteristic impedance of 120 ohm, where the DMX + and DMX − data lines are intertwined and there is a ground link as a coaxial screen surrounding the inner cores.
120 Ω terminating resistor should be connected between the DMX + and DMX − output connections on the last fixture.
Use a powered DMX splitter/buffer if it is necessary to separate the control link in order to feed fixtures in different locations.
Make sure that the DMX + and DMX - connections do not get crossed at any point.

Notes:
1) Maximum total length of chain (fixtures and leader cable) is 50m.
2) Maximum total length of fixtures in chain is 15 pieces, varies by selected DMX personality.

OUTDOOR ZONE

INDOOR ZONE

ENTTEC

The ENTTEC Software is the ultimate
control tool for LED lighting.
Use pixel mapping at its best in 2D or 3D

Ethernet

RJ45

ENTTEC DATAGATE MK2

DMX 1 DMX 2 DMX 3 DMX 4 DMX 5 DMX 6 DMX 7 DMX 8

ETHERNET USB VGA

AC Input
3-Pin VDE

RJ45

RISK OF ELECTRIC SHOCK

90~264V AC 50/60Hz

5 Pole Male XLR Connector

DMX SIGNAL CABLES (RS 485 CABLE)

90~264V AC 50/60Hz

RISK OF ELECTRIC SHOCK

POWER CABLE (3x1,5mm²)

Cable
Connection Detail

L N D+ D-

OUTDOOR ZONE

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RDM EXPLANATION

RIO RGBW(A) ALL IN ONE
complies with the RDM Monitoring Command System. In order to use RDM Monitoring System, a compatible controller is required depending on the installation.

Through DMX data connection, it is possible to control the fixture's settings, send commands and receive or monitor the fixture's data.

DEVICE MANAGEMENT

	GET	SET
Device Info	√	√
DMX Start Address	√	√
Identify Device	√	√
Device Model Description	√	
Device Label	√	√
Software Version Label	√	
DMX Personality	√	√
DMX Personality Description	√	
Device Power Cycles	√	
Status ID Description	√	
Supported Parameters	√	
Parameter Description	√	

٭ The command names and command functions used on different RDM controllers may vary.
٭ Incompatible RDM controllers may cause drawbacks such as partial operation, no-operation, or incorrect fixture information.
٭ You can check the recommended RDM controllers on the www.bayled.eu website.

18 LED - HIGH POWER LED - RGBW(A)
(Beam angle options: 8°- 25°- 45° - 60°)

20-03-25-18-XX-H-RGBW(A)

20-03-35-18-XX-H-RGBW(A)
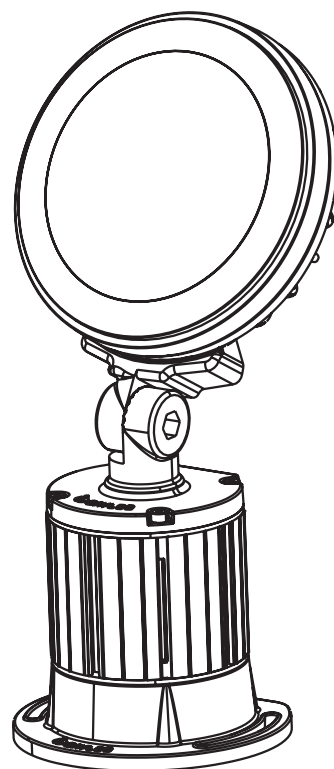
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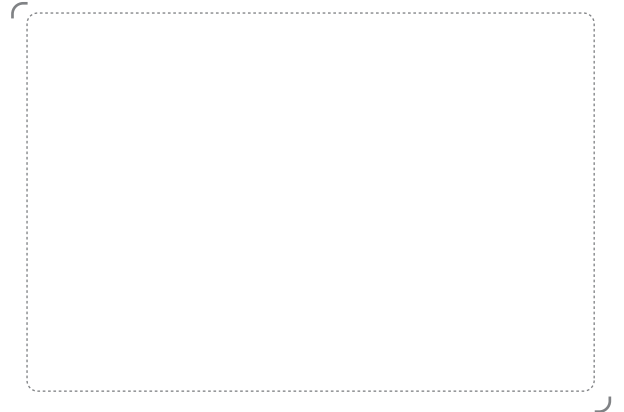
Company _____

Project _____

BAYLED®

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www.bayled.eu

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