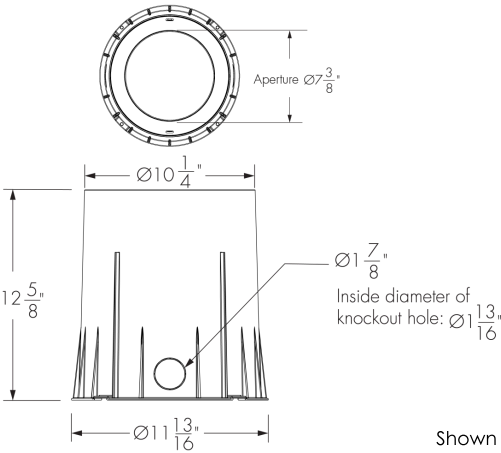


Project Name \_\_\_\_\_

Qty \_\_\_\_\_

Type \_\_\_\_\_

Catalog / Part Number \_\_\_\_\_



Top view

Front view

Shown with FLN trim type

Photometric Summary (Discrete)

Symmetric

	Delivered output (lm)	Intensity (peak cd)
VN (6°)	1,108	51,908
NS (10°)	1,136	31,645
M (30°)	1,073	3,289
FL (40°)	971	1,789
WFL (60°)	898	832

Bi-symmetric

	Delivered output (lm)	Intensity (peak cd)
6°x90°	1,036	5,314
90°x6°		
15°x90°	915	3,108
90°x15°		
25°x90°	912	1,789
90°x25°		
35°x90°	779	882
90°x35°		

Asymmetric

	Delivered output (lm)	Intensity (peak cd)
NAS	1119	17,313
WW	889	1,099

Based on RGBW40K full output, DMX/RDM configuration.  
Lens type: LFR lens for VN optic, SFR lens for NAS optics, SL lens for M, FL, WFL and WW optics and CL lens for all other optics.  
Power consumption: 33 W for RGB, 35W for RGBW30K, RGBW40K and RGBA.  
Photometric performance is measured in compliance with IESNA LM-79-08.

Description

The Lumenbeam Inground Large Colour Changing is a high-performance, ground-recessed LED projector that offers a choice of colour mixing, as well as Legacy or Custom output modes. Designed to solve a range of inground lighting challenges with a choice of optics, trim, lenses and control options, the plug-and-play design simplifies installation, protecting the system from water infiltration and ensuring long-lasting performance. Built with robust, high-quality materials that are resistant to harsh environments, the Lumenbeam Inground Large delivers L70 LED lifetimes up to 79,000 hours, has a Drive-Over rating of 5000kg, IK10 glass lens, and an IP68 factory-sealed optical chamber.

Features

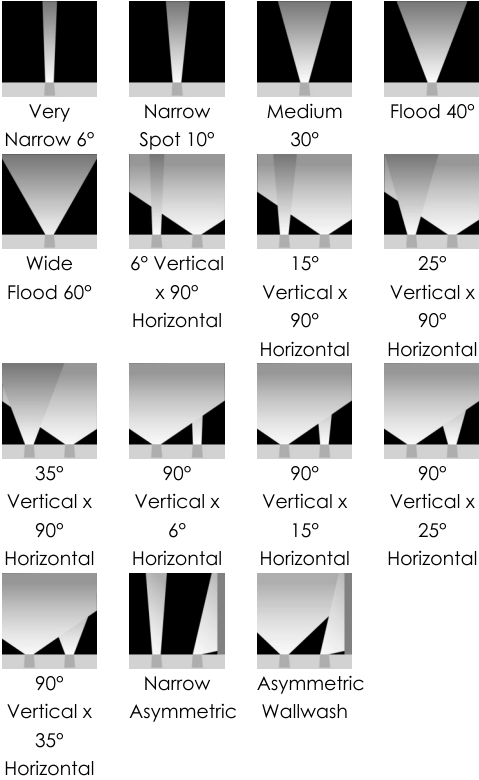
Construction	Walk over compliant up to 1000 kg in any type of ground, Drive over compliant up to 5000 kg in concrete
Colors and Color Temperature (Discrete)	<b>RGB:</b> RGB <b>RGBW30K:</b> RGB + White 3000K <b>RGBW40K:</b> RGB + White 4000K <b>RGBA:</b> RGB + Amber
Colors and Color Temperature (Opticolor™)	<b>MRGB:</b> MRGBW30K and MRGBW40K can be configured to MRGB via RDM (consult factory for more details) <b>MRGBW30K:</b> Opticolor Cluster with MRGBW (Red, Green, Blue, White 3000K) <b>MRGBW40K:</b> Opticolor Cluster with MRGBW (Red, Green, Blue, White 4000K) <b>MRGBA:</b> Opticolor Cluster with MRGBA (Red, Green, Blue, Amber)
Optics (Nominal Distribution)	VN (6°), NS (10°), NF (20°), M (30°), FL (40°), WFL (60°), 6° x 90°, 10° x 90°, 15° x 90°, 25° x 90°, 35° x 90°, 90° x 6°, 90° x 10°, 90° x 15°, 90° x 25°, 90° x 35°, NAS (Narrow Asymmetric), WW (Asymmetric Wallwash)

Photometric Summary (Opticolor™)

Symmetric		
	Delivered output (lm)	Intensity (peak cd)
NS (10°)	970	13,816
NF (20°)	953	7,173
M (30°)	943	4,036
FL (40°)	926	2,230
WFL (60°)	870	847
Bi-Symmetric		
10°x90°	752	1,681
90°x10°		
15°x90°	703	1,198
90°x15°		
25°x90°	760	1,085
90°x25°		
35°x90°	699	838
90°x35°		

Based on MRGBW40K full output, DMX/RDM, CL lens configuration.  
Power consumption: 31W for MRGBW30K, MRGBW40K and MRGBA.  
Photometric performance is measured in compliance with IESNA LM-79-08.

Optic (Discrete)

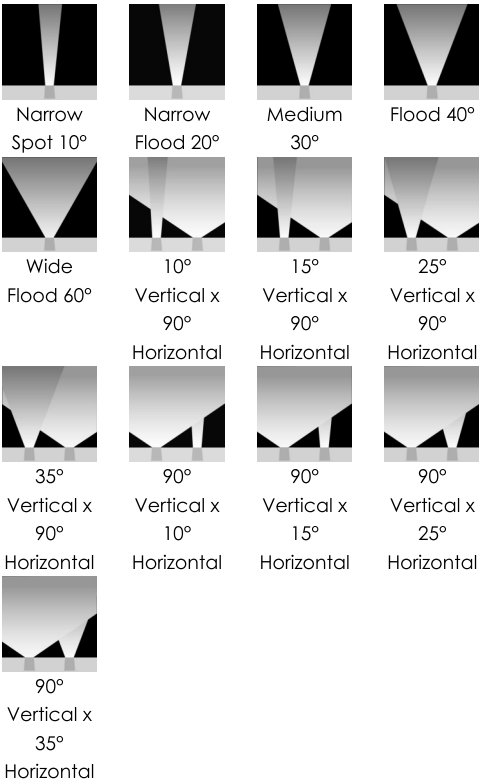


Lens	Clear Lens, Small Frosted Ring, Large Frosted Ring, Softening Lens
Lens	Clear Lens, Small Frosted Ring, Large Frosted Ring, Softening Lens, (lens type will vary according to optic, see optics and lens section)
Optical Option (factory installed)	Internal Louver
Trim Type	Flush Trim with Hardware, Flush Trim no Hardware, Bevel Edge Trim with Hardware, Bevel Edge Trim no Hardware
Blockout	Recessed Blockout, Recessed Blockout with Mounting Brackets
Option	Anti-Slip Lens
Adjustment	-3° to +15° tilt, 360° rotation
Power Consumption	33 W for RGB 35 W for RGBW30K, RGBW40K and RGBA 31 W for MRGBW30K, MRGBW40K and MRGBA
Warranty	5-year limited warranty

Performance

Maximum Delivered Output (Discrete)	943 lm (RGB full output, NS 10°, CL lens, DMX/RDM) 1,113 lm (RGBW30K full output, NS 10°, CL lens, DMX/RDM) 1,136 lm (RGBW40K full output, NS 10°, CL lens, DMX/RDM) 911 lm (RGBA full output, NS 10°, CL lens, DMX/RDM)
Maximum Delivered Output (Opticolor™)	951 lm (MRGBW30K full output, NS 10°, CL lens, DMX/RDM) 970 lm (MRGBW40K full output, NS 10°, CL lens, DMX/RDM) 786 lm (MRGBA full output, NS 10°, CL lens, DMX/RDM)
Maximum Delivered Intensity (Discrete)	43,105 cd at nadir (RGB full output, VN 6°, LFR lens, DMX/RDM) 50,870 cd at nadir (RGBW30K full output, VN 6°, LFR lens, DMX/RDM) 51,908 cd at nadir (RGBW40K full output, VN 6°, LFR lens, DMX/RDM) 41,642 cd at nadir (RGBA full output, VN 6°, LFR lens, DMX/RDM)
Maximum Delivered Intensity (Opticolor™)	13,540 cd at nadir (MRGBW30K full output, NS 10°, CL lens, DMX/RDM) 13,816 cd at nadir (MRGBW40K full output, NS 10°, CL lens, DMX/RDM) 11,191 cd at nadir (MRGBA full output, NS 10°, CL lens, DMX/RDM)
Illuminance at Distance (Discrete)	Minimum 1 fc at 208 ft (RGB full output, VN 6°, LFR lens, DMX/RDM) Minimum 1 fc at 226 ft (RGBW30K full output, VN 6°, LFR lens, DMX/RDM) Minimum 1 fc at 228 ft (RGBW40K full output, VN 6°, LFR lens, DMX/RDM) Minimum 1 fc at 205 ft (RGBA full output, VN 6°, LFR lens, DMX/RDM)

Optic (Opticolor™)



Color and Color Temperature



Control



Construction



Trim Finishes



Illuminance at Distance (Opticolor™)	Minimum 1 fc at 116 ft (MRGBW30K full output, NS 10°, CL lens, DMX/RDM)
	Minimum 1 fc at 118 ft (MRGBW40K full output, NS 10°, CL lens, DMX/RDM)
	Minimum 1 fc at 106 ft (MRGBA full output, NS 10°, CL lens, DMX/RDM)
Lumen Maintenance	L70 79,000 hrs (Ta 25 °C)
	L70 77,000 hrs (Ta 40 °C)
Physical	
Optical Chamber Material	Brass for walk-over and drive-over construction in harsh environments
Blockout Material	Fiberglass reinforced polymer
Lens Material	Tempered glass
Hardware Material	Stainless steel
Gasket Material	Silicone
Trim Finish	Brushed Stainless Steel, Polished Stainless Steel
Weight	23 lbs
Electrical and Control	
Voltage	120-277 Volts, 220-240 Volts
Leader Cable Conductor	6C #14-3/ #24-3
Leader Cable Connector	IP68 6-pin push-lock
Control	DMX/RDM Enabled, DALI 2 T8 Enabled Dimming 0.1%
Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit, 3 channels (RGB) or 4 channels (RGBW30K, RGBW40K, RGBA, MRGBW30K, MRGBW40K, and MRGBA)
RGB Color Mixing	12 LEDs (4x Red, 4x Green, 4x Blue)
RGBW30K Color Mixing	12 LEDs (3x Red, 3x Green, 3x Blue, 3x White 3000K)
RGBW40K Color Mixing	12 LEDs (3x Red, 3x Green, 3x Blue, 3x White 4000K)
RGBA Color Mixing	12 LEDs (3x Red, 3x Green, 3x Blue, 3x Amber)
MRGBW30K Color Mixing	12 LEDs in 3 clusters (1x Red, 1x Green, 1x Blue, 1x White 3000K per cluster)
MRGBW40K Color Mixing	12 LEDs in 3 clusters (1x Red, 1x Green, 1x Blue, 1x White 4000K per cluster)
MRGBA Color Mixing	12 LEDs in 3 clusters (1x Red, 1x Green, 1x Blue, 1x Amber per cluster)
Environmental	
Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 104 °F
Operating Temperature	-40 °F to 122 °F

Options



Anti-slip lens

Ratings

IP68      IK10

Certifications



Ingress Protection Rating	IP68 (submerged up to 3.3 ft for up to 24 hours), not suitable for permanent immersion applications
Impact Resistance Rating	IK10
Environment	Wet location rating
Accessories (Order Separately)	
Cables	3 Conductor Power and 3 Conductor Data Leader Cable with Connector, 3 Conductor Power and 3 Conductor Data Cable
Electrical Accessories	Large Junction Box for Lumenbeam Inground
Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration)
Control Systems	Lumenscene™ (LSC), Pharos® Lighting Control Kit (PHAROS)
Diagnostic and Addressing Tools	LumenID (LID)

Important

Virtual Patent Marking Notice

This website (<https://www.lmpg.com/patents-trademarks>) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

Construction Details

WO - Walk over compliant up to 1000kg		DO - Drive over compliant up to 5000kg	
Trim type	All trim options are suitable (FLH, FLN, BVH and BVN)	Trim type	Only trim options with visible hardware are suitable (FLH and BVH)
Ground type	Installed in sand, soft soil, compacted soil, pavement or concrete	Ground type	Installed in concrete

Optics and Lens Options

Optics and Lens Options (Discrete)



Optics / Lens	Clear	Small frosted ring	Large frosted ring	Softening	Anti-slip
VN			☑	Optional	Optional (can be combined with all lenses and optics)
NS	☑				
M/FL/WFL				☑	
6° /15°/25°/35° x 90°	☑			Optional	
NAS		☑			
WW				☑	

☑ Recommended for optimal performance, may be replaced by a softening lens. A softening lens will affect beam distribution and output. Consult factory for application support.

Optics and Lens Options (Opticolor™)

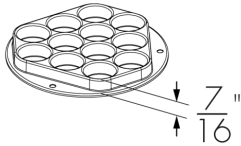
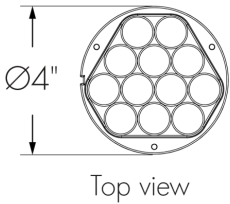
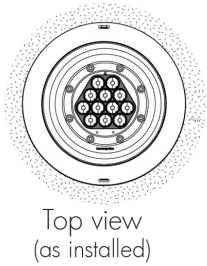


Optics / Lens	Clear	Softening	Anti-slip
NS	☑	Optional	Optional (can be combined with all lenses and optics)
NF	☑		
M	☑		
FL	☑		
WFL	☑		
10°/15°/25°/35° x 90°	☑		

☑ Recommended for optimal performance, may be replaced by a softening lens. A softening lens will affect beam distribution and output. Consult factory for application support.

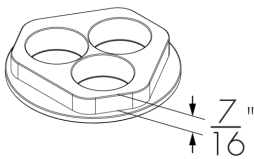
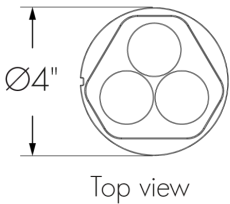
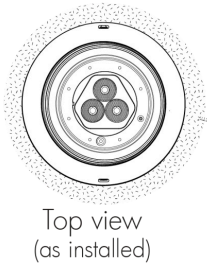
Optical Accessories (Factory Installed)

INTL - Internal Louvre (Discrete)



- The internal louvre is factory installed and not adjustable in the field.
- Not available for NAS, WW optics.
- The addition of an internal louvre will affect beam distribution, consult factory for application support.

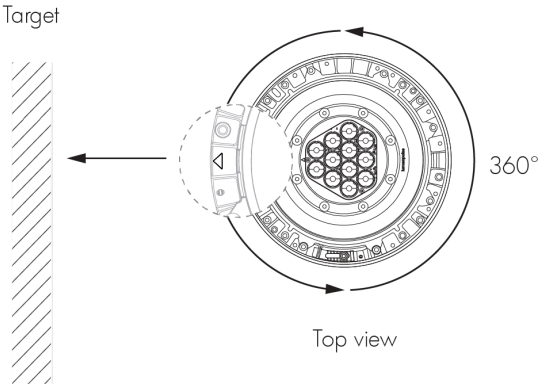
INTL - Internal Louvre (Opticolor™)



- The internal louvre is factory installed and not adjustable in the field.
- The addition of an internal louvre will affect beam distribution, consult factory for application support.

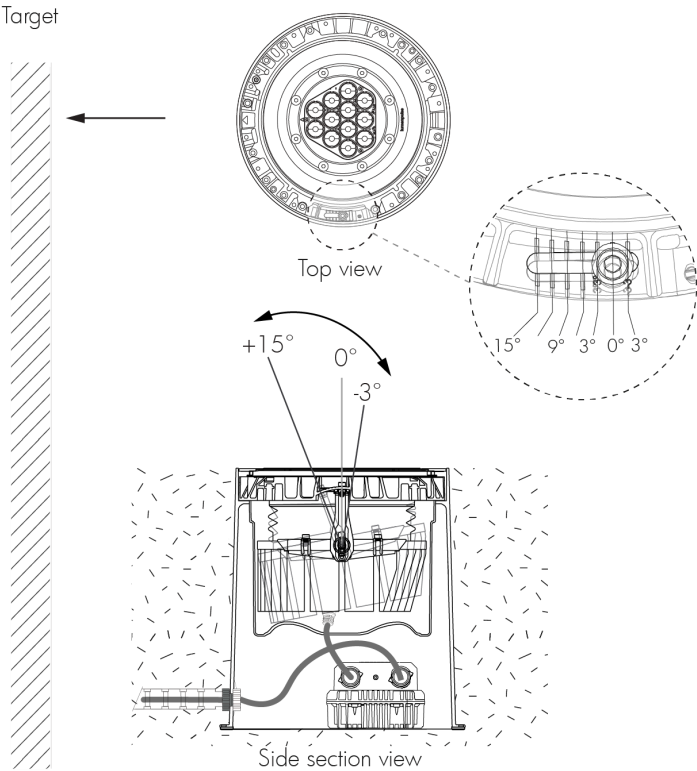
Adjustment

360° Orientation



The optical chamber can be rotated until the arrow faces the target. Refer to the installation instructions for details.

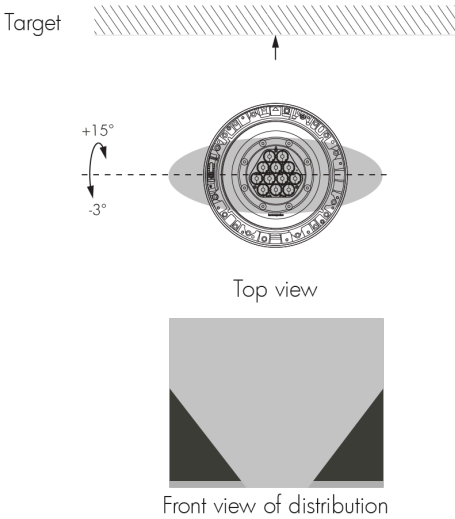
-3° to +15° Tilt Adjustment



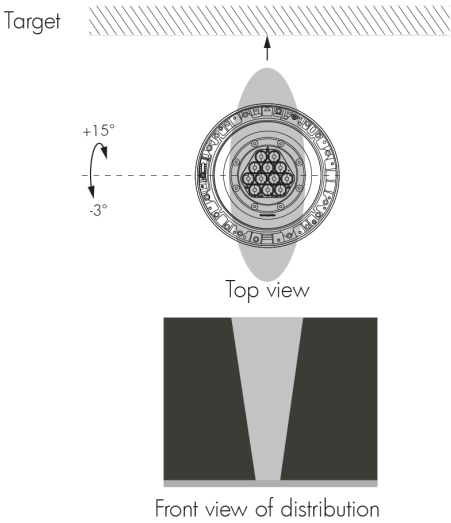
- Tilt can be adjusted on site without opening the factory sealed optical chamber.
- **Asymmetrical optics:** The optical chamber is factory-set to 0°. For optimal results with asymmetrical optics, a 3° tilt is recommended for the NAS optic, and a 5° tilt is recommended for the WW optic.

Bi-Symmetrical Distributions

Horizontal Distribution: 6°x90°, 10°x90°, 15°x90°, 25°x90°, 35°x90°

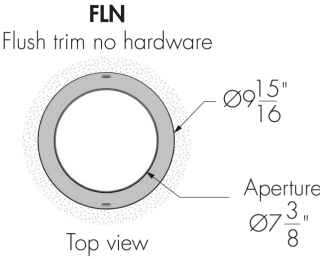
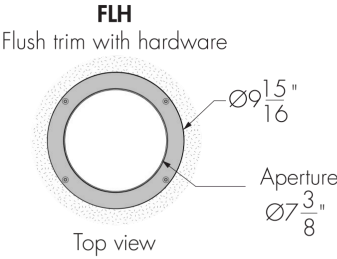
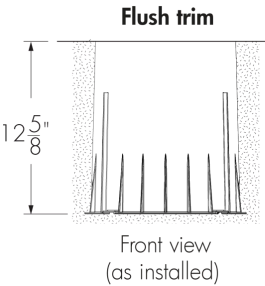


Vertical Distribution: 90°x6°, 90°x10°, 90°x15°, 90°x25°, 90°x35°



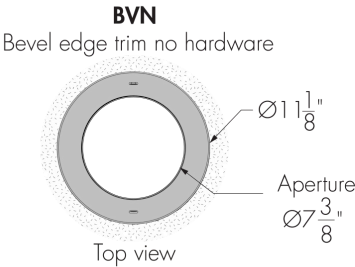
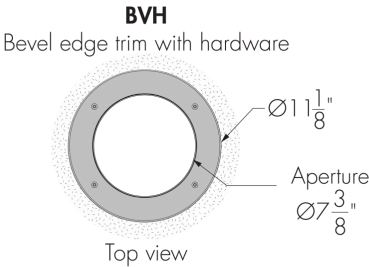
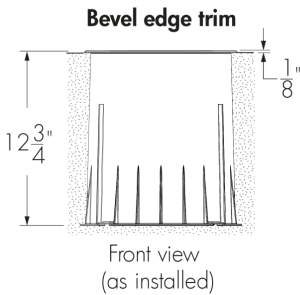
Trim Type

Flush Trim



Only trims with hardware are drive-over compliant.

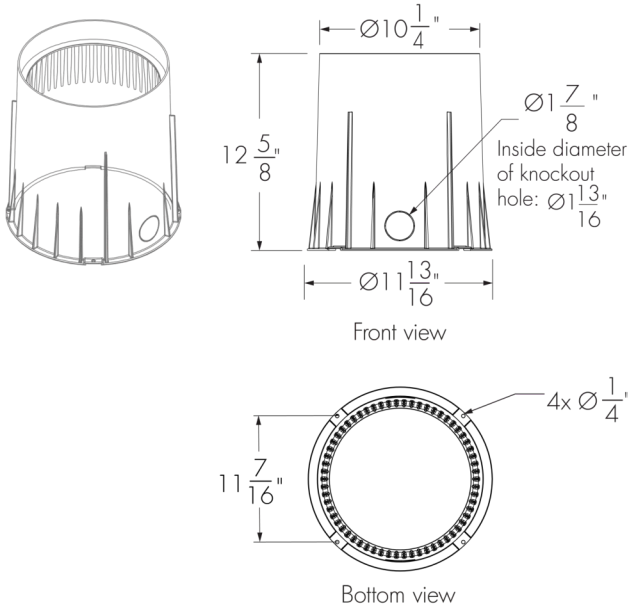
Bevel Edge Trim



Blockout

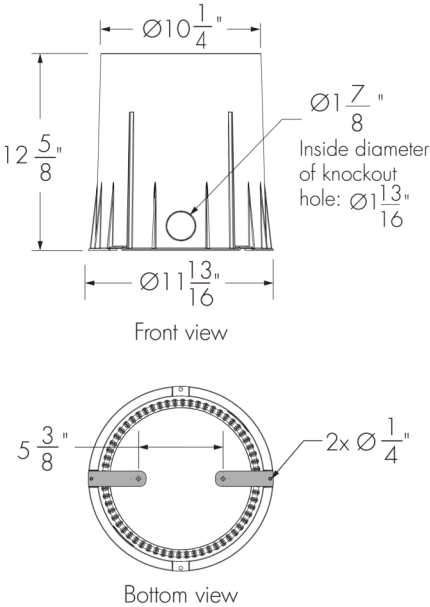
RBO - Recessed Blockout

RBO - Recessed blockout



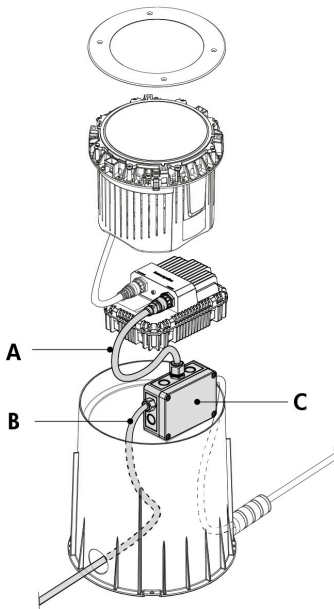
RBM - Recessed Blockout With Mounting Brackets

RBM - Recessed blockout with mounting brackets





Overview - Cables and Accessories



**A - 3P3DLC:** 3 Conductor Power and 3 Conductor Data Leader Cable with Connector

**B - 3P3DC:** 3 Conductor Power and 3 Conductor Data Cable

**C - LBI-JBOX-L:** Large Junction Box for Lumenbeam Inground (required for continuous runs and DMX/RDM daisy chain layouts)

Refer to typical wiring diagrams for details.

Cables (Order Separately)

**3P3DLC - 3 Conductor Power And 3 Conductor Data Leader Cable With Connector**



**CERTIFICATION:** UL or CE  
**LENGTH:** 10 ft, 25 ft or 50 ft

- Sealing endcap is mandatory for all unused connectors. One (1) included with every leader cable.
- Consult 3P3DLC specification sheet for details.

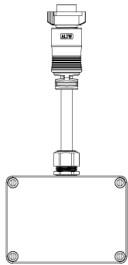
**3P3DC - 3 Conductor Power and 3 Conductor Data Cable**



**CERTIFICATION:** UL or CE  
**LENGTH:** 50 ft, 100 ft, 150 ft, 200 ft or complete spool of cable 250 ft

Electrical Accessories (Order Separately)

**LBI-JBOX-L - Large Junction Box For Lumenbeam Inground (Required For Continuous Runs And DMX/RDM Daisy Chain Layouts)**

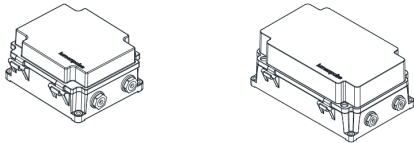


- Included**
- 1x Junction box with 16 in 3P3DLC cable whip
  - 4x Strain reliefs
  - 1x IP68 insulating resin
  - 1x Sealing cap

Refer to LBI-JBOX-L installation instructions for details.

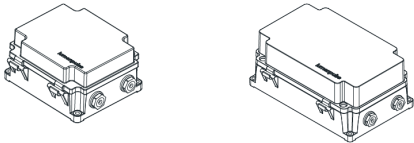
Control Boxes (Order Separately)

CBX-DMX/RDM - DMX/RDM Enabled (Daisy Chain or Star Configuration)



DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for Daisy Chain configuration, 6x for Star configuration), consult factory to order spares.

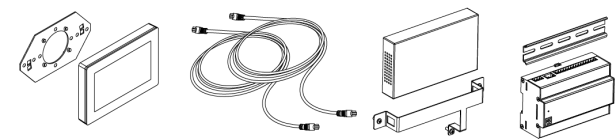
CBX-ENET - Ethernet Enabled (Daisy Chain or Star Configuration)



Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

Control Systems (Order Separately)

PHAROS - Pharos® Designer Lighting Control Kit



The Pharos Designer Lighting Control Kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations.

Diagnostic And Addressing Tools (Order Separately)

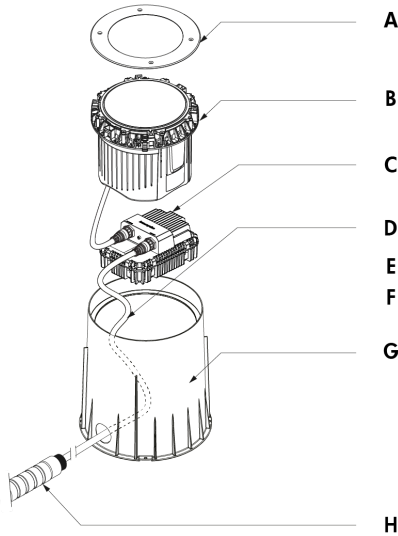
LID - LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Consult LID specification sheet for details.

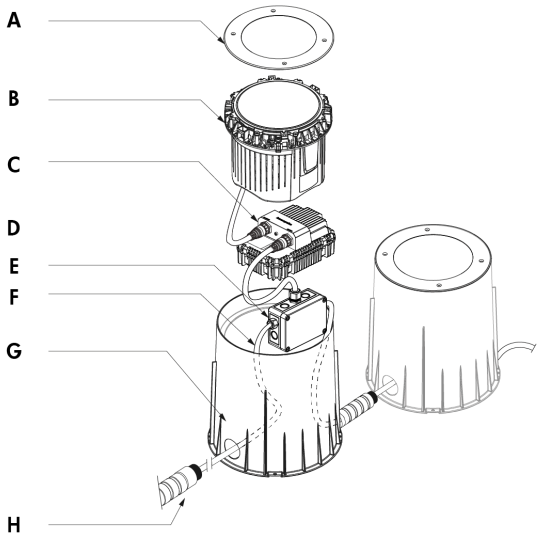
Typical Wiring Diagrams

Typical Installation with Leader Cable



Single unit

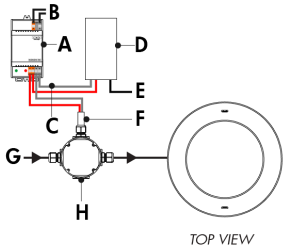
Typical Installation with LBI-JBOX-L Accessory



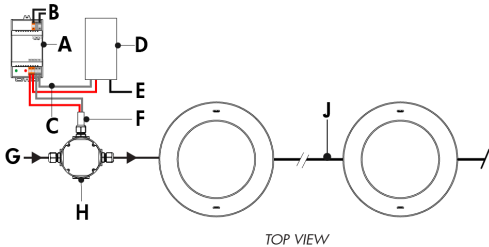
Continuous run

- A - Trim
- B - Optical chamber (LBILC)
- C - Power and Control Box (PCBX)
- D - 3 Conductor Power and 3 Conductor Data Leader Cable with Connector (3P3DLC)
- E - Large Junction Box for Lumenbeam Inground (LBI-JBOX-L)
- F - 3 Conductor Power and 3 Conductor Data Cable (3P3DC) from Lumenpulse or cable by others
- G - Blockout (RBO or RBM)
- H - Conduit (by others)

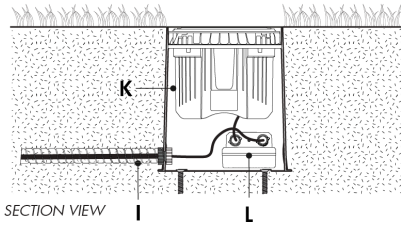
DALI 2 T8 (DALI8)



TOP VIEW

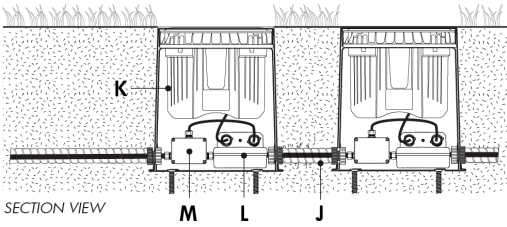


TOP VIEW



SECTION VIEW

I L



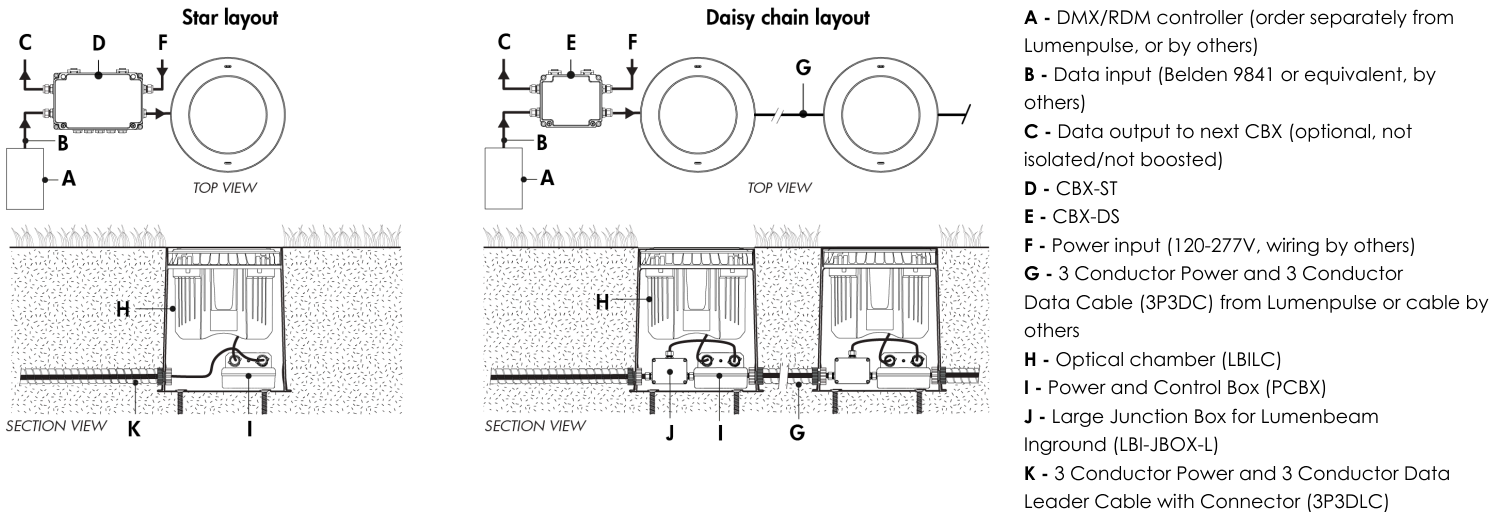
SECTION VIEW

M L J

- A - DALI bus power supply (by others)
- B - Power input for DALI bus power supply (wiring by others)
- C - To DALI controller (by others)
- D - DALI controller (by others)
- E - Power input for DALI controller (if required, wiring by others)
- F - Data output to fixture
- G - Power input (120-277V, wiring by others)
- H - Junction box (by others)
- I - 3 Conductor Power and 3 Conductor Data Leader Cable with Connector (3P3DLC)
- J - 3 Conductor Power and 3 Conductor Data Cable (3P3DC) from Lumenpulse or cable by others
- K - Optical chamber (LBILC)
- L - Power and Control Box (PCBX)
- M - Large Junction Box for Lumenbeam Inground (LBI-JBOX-L)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- The Lumenbeam Inground Large responds to RGBWAF controls.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.
- Refer to Photometric Summary table for wattage information.

DMX/RDM Enabled (DMX/RDM)



Maximum Fixture Count

Configuration/Voltage	120V	208V	240V	277V
LBIL (Maximum number of fixtures per run)	28	32	32	32

Based on 15A maximum, 14AWG cable, fixtures spaced 10 ft on center, first fixture 50ft from CBX.

- Refer to CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run. Maximum of 4 DMX/RDM repeaters/CBX cascading in line. Each fixture requires 1 DMX address. Maximum of 1 output per CBX-DS. Maximum of 6 outputs per CBX-ST.
- Refer to Photometric Summary table for wattage information.
- DMX terminator is required at the end of each run to maintain data integrity. (2x) DMX lumenterminators included per CBX-DS, (6x) included per CBX-ST. See installation instructions for details.

How to Order

Housing <sup>(1)</sup>	Construction	Voltage	Color and Color Temperature	Optic	Lens <sup>(14)</sup>	Optical Option	Control	Trim Type	Trim Finish	Blockout	Option
LBIL Lumenbeam Inground Large <sup>(2)</sup>	WO Walk Over	120/277 120-277 Volts <sup>(4)</sup>	RGB RGB <sup>(6)</sup>	VN Very Narrow 6° <sup>(11)</sup> <sup>(12)</sup>	CL Clear Lens <sup>(15)</sup> <sup>(16)</sup>	INTL Internal Louver <sup>(20)</sup> <sup>(21)</sup>	DMX/RDM DMX/RDM Enabled <sup>(22)</sup>	FLH Flush Trim with Hardware	SSB Brushed Stainless Steel	RBO Recessed Blockout	ASL Anti-Slip Lens
	DO Drive Over <sup>(3)</sup>	220/240 220-240 Volts <sup>(5)</sup>	RGBW30K RGB + White 3000K <sup>(6)</sup> <sup>(7)</sup>  RGBW40K RGB + White 4000K <sup>(6)</sup> <sup>(7)</sup>  RGBA RGB + Amber <sup>(6)</sup>  MRGBW30K Opticolor with MRGBW 3000K <sup>(8)</sup> <sup>(9)</sup> <sup>(10)</sup>  MRGBW40K Opticolor with MRGBW 4000K <sup>(8)</sup> <sup>(9)</sup> <sup>(10)</sup>  MRGBA Opticolor with MRGBA Amber <sup>(8)</sup> <sup>(9)</sup>	NS Narrow Spot 10° <sup>(11)</sup>  NF Narrow Flood 20° <sup>(13)</sup>  M Medium 30° <sup>(11)</sup>  FL Flood 40° <sup>(11)</sup>  WFL Wide Flood 60° <sup>(11)</sup>  6x90 6° Vertical x 90° Horizontal <sup>(11)</sup> <sup>(12)</sup>  10x90 10° Vertical x 90° Horizontal <sup>(13)</sup>  15x90 15° Vertical x 90° Horizontal <sup>(11)</sup>  25x90 25° Vertical x 90° Horizontal <sup>(11)</sup>  35x90 35° Vertical x 90° Horizontal <sup>(11)</sup>  90x6 90° Vertical x 6° Horizontal <sup>(11)</sup> <sup>(12)</sup>  90x10 90° Vertical x 10° Horizontal <sup>(13)</sup>  90x15 90° Vertical x 15° Horizontal <sup>(11)</sup>  90x25 90° Vertical x 25° Horizontal <sup>(11)</sup>  90x35 90° Vertical x 35° Horizontal <sup>(11)</sup>  NAS Narrow Asymmetric <sup>(11)</sup> <sup>(12)</sup>  WW Asymmetric Wallwash <sup>(11)</sup> <sup>(12)</sup>					FLN Flush Trim no Hardware <sup>(24)</sup>  BVH Bevel Edge Trim with Hardware  BVN Bevel Edge Trim no Hardware <sup>(24)</sup>	SSP Polished Stainless Steel	RBM Recessed Blockout with Mounting Brackets

Notes:

1. A Lumenbeam Inground fixture includes one optical chamber (LBILC), one Power and Control Box (PCBX), one recessed blockout with temporary blockout cover (RBO or RBM) and one trim (FLH, FLN, BVH or BVN). The LBILC and PCBX are provided according to the optic and control configuration.

2. Consult factory for products that are BAA-approved (Buy American Act).
3. A trim option with hardware (FLH or BVH) must be specified for DO construction.

4. Available for UL certification only.

5. Available for CE certification only.

6. Available for all optics except NF, 10x90 and 90x10.

- 7. 2700K, 3500K and Royal Blue available, consult factory. Longer lead times apply.
- 8. Not available for VN, 6x90, 90x6, NAS and WW optics.
- 9. Consult factory for the availability of more color and CCT options [e.g. royal blue].
- 10. MRGBW30K and MRGBW40K can be configured to MRGB via RDM, consult factory for more details.
- 11. Factory installed, not interchangeable on site.
- 12. Not available with MRGBW30K, MRGBW40K and MRGBA Opticolor options.
- 13. Available with MRGBW30K, MRGBW40K and MRGBA Opticolor options only.
- 14. Consult Optics and Lens Options section for details.
- 15. When combined with RGB, RGBW30K, RGBW40K or RGBA, CL Lens is available for all optics except for VN, M, FL, WFL, NAS and WW.
- 16. Recommended lens for MRGBW30K, MRGBW40K and RGBA Opticolor options. SL Lens available as an alternate lens. A Softening Lens will affect beam distribution and output. Consult factory for application support.

- 17. Available for NAS optic only.
- 18. Available for VN optic only.
- 19. Standard lens for M, FL, WFL and WW optics when combined with RGB, RGBW30K, RGBW40K or RGBA. Available as an alternate lens choice for all other optics. A softening lens will affect beam distribution and output. Consult factory for application support.
- 20. Not available for NAS and WW optics.
- 21. Not available when MRGBW30K, MRGBW40K and MRGBA Opticolor options are combined with SL lens.
- 22. A control box (CBX) and LumenID (LID) must be specified.
- 23. DALI 2 T8 controller required, provided by others. DALI2 T8 control uses a single DALI short address.
- 24. Not available for DO construction.

How to Order

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Environment	Certification
<b>HRS</b> Standard Brass Material Suitable for Harsh Environments	<b>UL</b> UL Compliant  <b>CE</b> CE Compliant (25)

Notes:

25. Consult European specification sheet and installation instructions for CE wiring information.