Specification Sheet

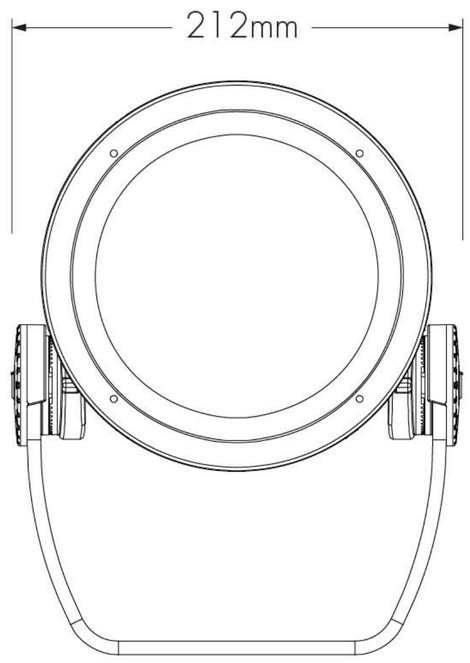
lumenbeam

Medium

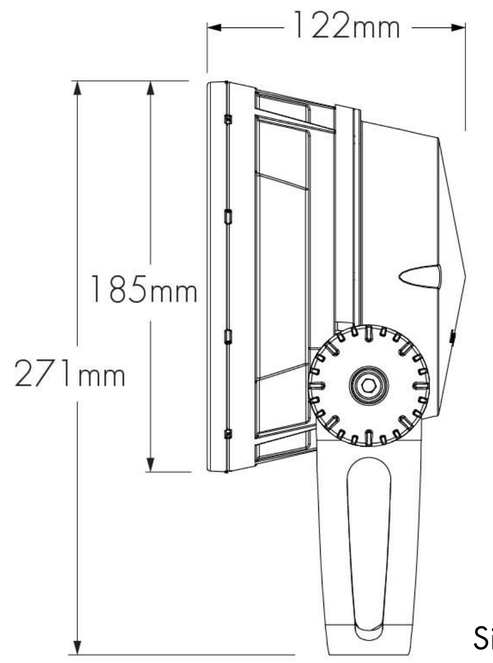
COLOUR CHANGING

Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____



Front view



Side view

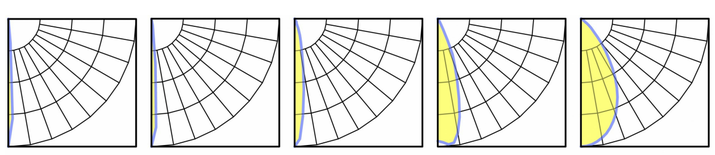
Photometric Summary

Based on RGBW color mix, full output

	Delivered output (lm)	Intensity (peak cd)
VN	1,024	43,534
NS	947*	34,718*
NF	905*	6,636*
FL	871*	2,442*
WFL	836*	800*

Photometric performance is measured in compliance with IESNA LM-79-08.
*Estimated. Consult website for the latest IES and LDT files.

Optics



Control

DMXrdm

Rating

Description

The Lumenbeam Medium Colour Changing is a high-performance, 28W luminaire for applying dynamic colour to facades, columns, trees and other landscape features. It provides great flexibility offering a choice of optics for flood or accent lighting; RGB, RGBW or RGBA colour mixing; various mounting options, accessories, spread lenses and controls.

Features

Colour and Colour Temperature	Additive RGB, Additive RGB + white 4000K, Additive RGB + amber
Optics (nominal distribution)	6°, 10°, 20°, 40°, 60°
Optical Option	Linear spread lens horizontal distribution, Linear spread lens vertical distribution
Options	Short Yoke, 3G ANSI C136.31 Vibration Rating for bridge applications, Corrosion-resistant coating for hostile environments
Power Consumption	28 W
Warranty	5-year limited warranty

Performance

Delivered Output	887 lm (RGB full white, VN optic), 1,024 lm (RGBW full output, VN optic), 855 lm (RGBA full output, VN optic)
Delivered Intensity	36,162 cd at nadir (RGB full output, VN optic), 43,534 cd at nadir (RGBW full output, VN optic), 33,350 cd at nadir (RGBA full output, VN optic)
Colour Consistency	2 SDCM
Lumen Maintenance	L70 120,000 hrs (Ta 25 °C)

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Physical

Housing Material	Low copper content high pressure die-cast aluminium
Yoke Material	Heavy aluminium (standard yoke included)
Lens Material	Clear tempered glass
Hardware Material	Stainless steel
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	3.04 kg
EPA	Front = 0.04 sq m, Side = 0.03 sq m

Electrical and control

Voltage	100 to 277 volts
Fixture Cable	Power and data in 1 cable, 0.9 m cord standard (5 x 1.5 sq mm), other lengths available
Inrush Current (peak)	21A @230VAC (RGB), 75A @230VAC (RGBW, RGBA)
Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
Control	DMX/RDM enabled, Lumentalk system is enabled with LDB accessory - see typical wiring diagrams for details

Environmental

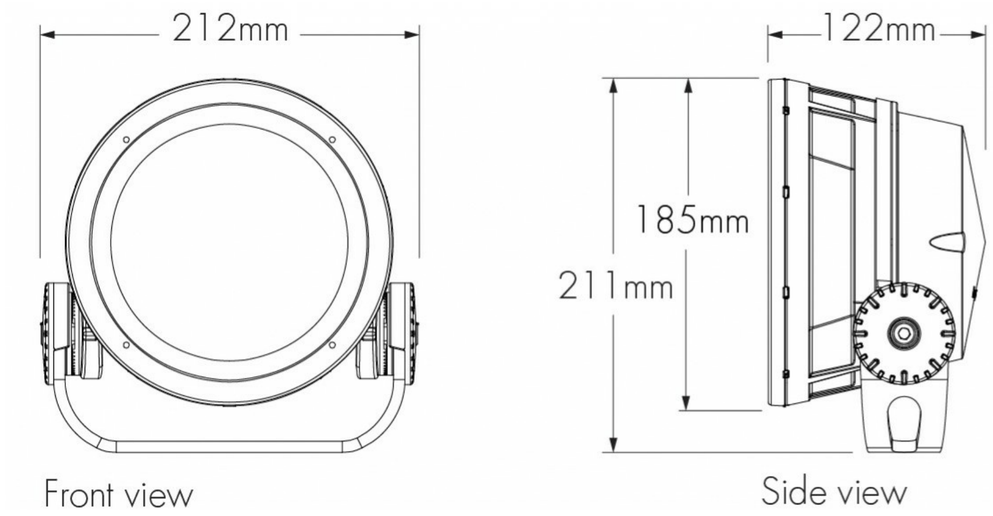
Operating Temperature	-25 °C to 50 °C
IP Rating	IP66
IK Rating	IK09

Accessories (order separately)

Control Boxes	Power and control box - daisy chain configuration, Power and control box - star configuration, Lumentalk Data Bridge
Control Systems	Lumentouch 2.0™, Lumencue
Diagnostic and Addressing Tools	LumenID, LumentalkID

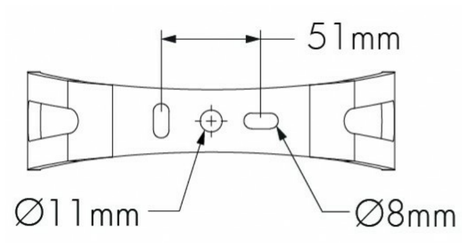
Mounting options

SY - Short yoke

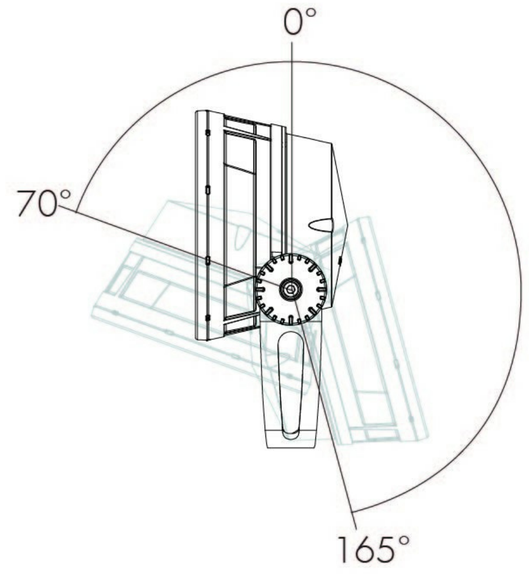


Mounting details

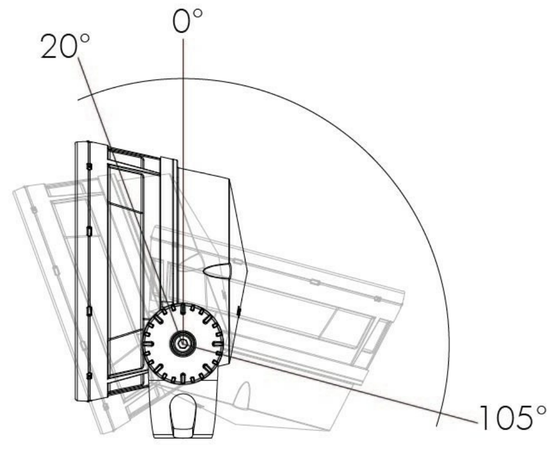
Mounting hole pattern - standard and short yoke



Adjustable pivot limits



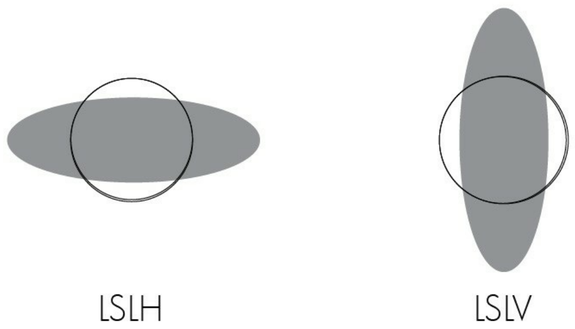
Standard yoke



Short yoke

Optical options

LSLH - Linear spread lens horizontal distribution
LSLV - Linear spread lens vertical distribution



LSLH

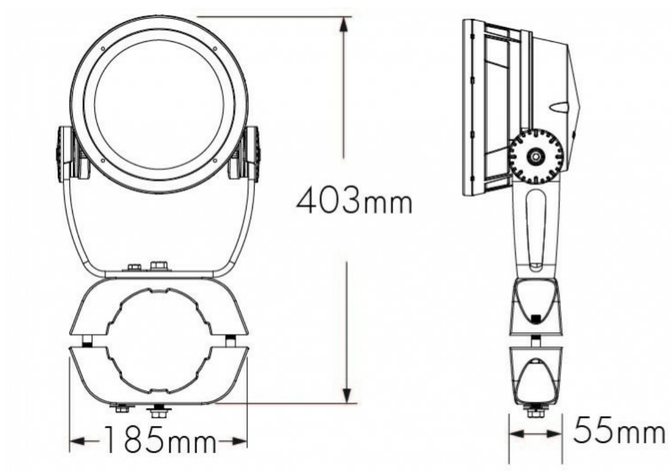
LSLV

	Beam angle with LSLH/LSLV
VN	8° x 60°
NS	9° x 60°
NF	18° x 65°
FL	32° x 72°

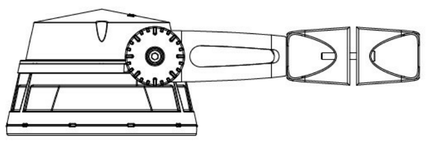
Factory installed, not adjustable on site. Not available for WFL optic.
See 'Optical Accessories' section for field adjustable spread lens (LSLA).

Mounting accessories (order separately)

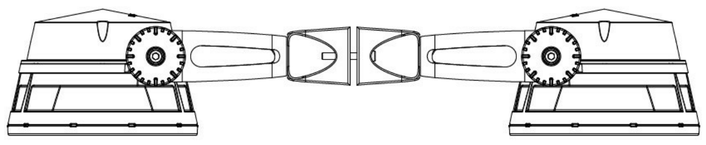
Round pole mounting accessory



PM4 model shown.
Consult factory for square pole section.



PM4-1, PM4.5-1, PM5-1 - Round pole mounting accessory - single fixture

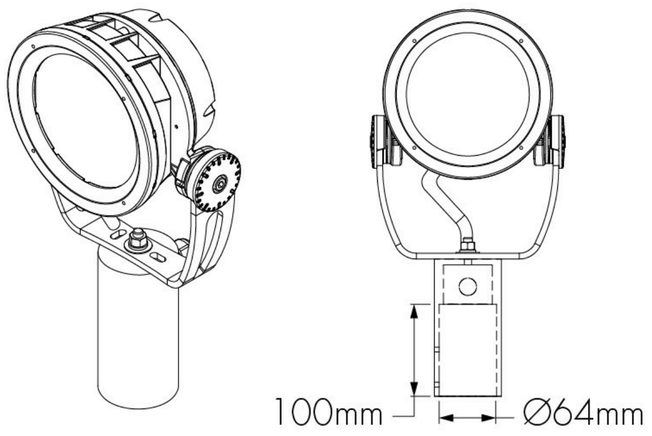


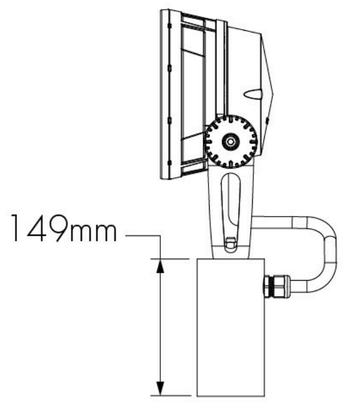
PM4-2, PM4.5-2, PM5-2 - Round pole mounting accessory - twin fixures
*One bracket assembly is supplied per 2 fixtures unless otherwise specified.

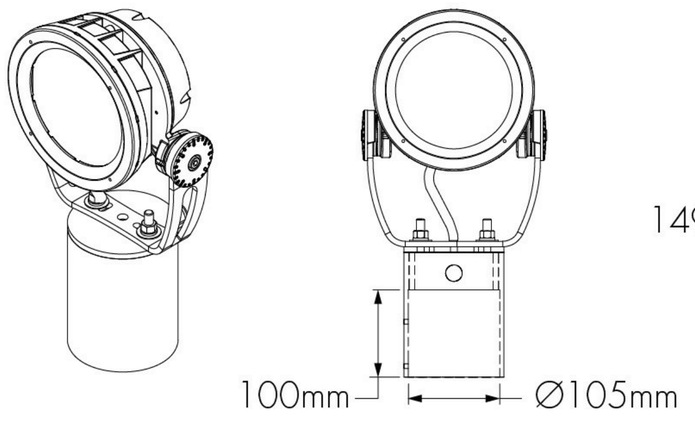
	PM4	PM4.5	PM5
For pole Ø	101.6mm ± 1.6mm	114.3mm ± 1.6mm	127mm ± 1.6mm

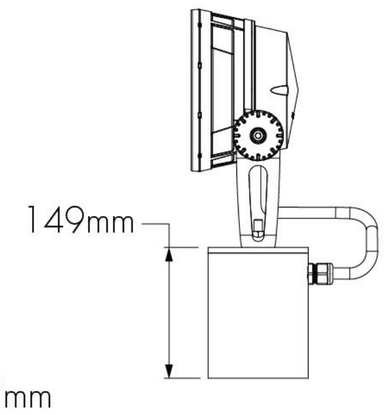
Consult factory for other pole diameters.

Tenon adapter





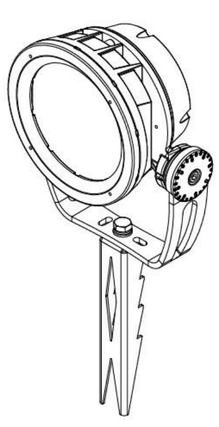


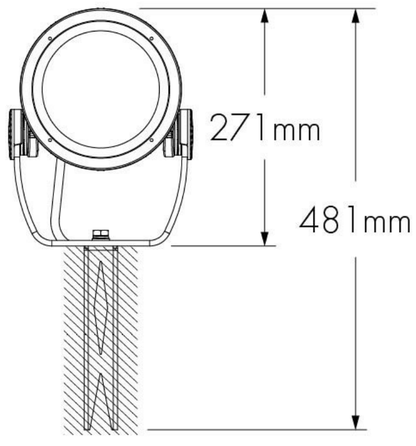


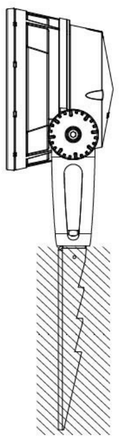
TN2 - Tenon adapter to fit on 60 mm O.D. tenon

TN4 - Tenon adpater to fit on 102 mm O.D. tenon

SK - Stake mounting





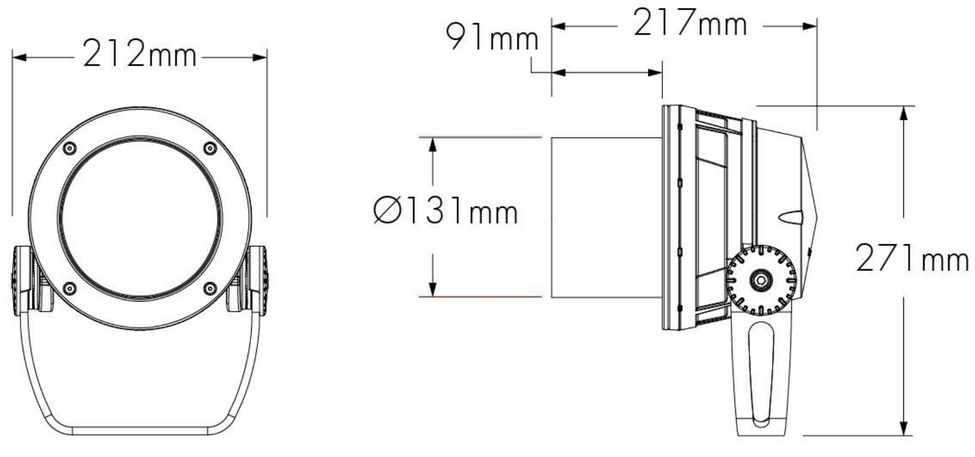


MG - R28

Optical accessories (order separately)

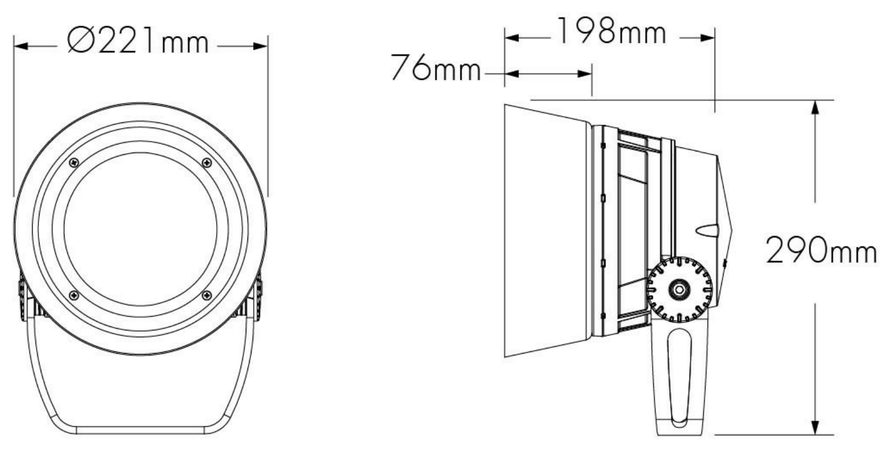
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.

SN - Snoot



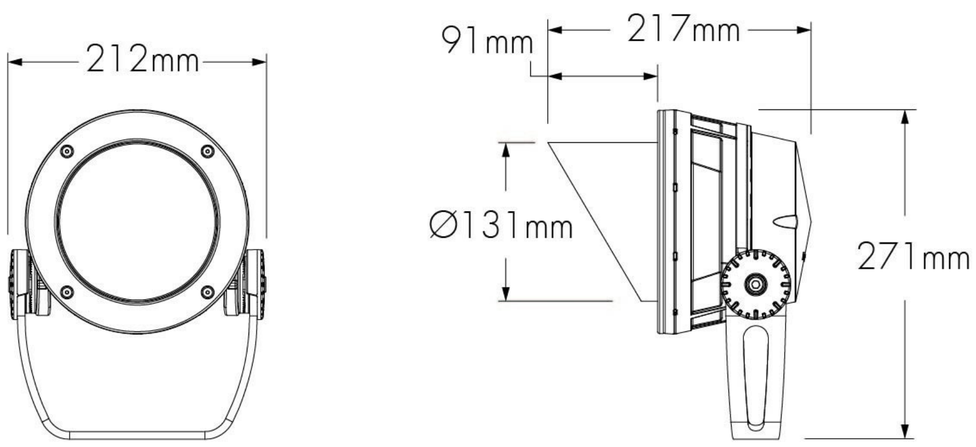
LBMSN-FINISH-BK
Interior surface painted black. Please specify desired exterior FINISH from list of available finishes.

SNW - Snoot wide



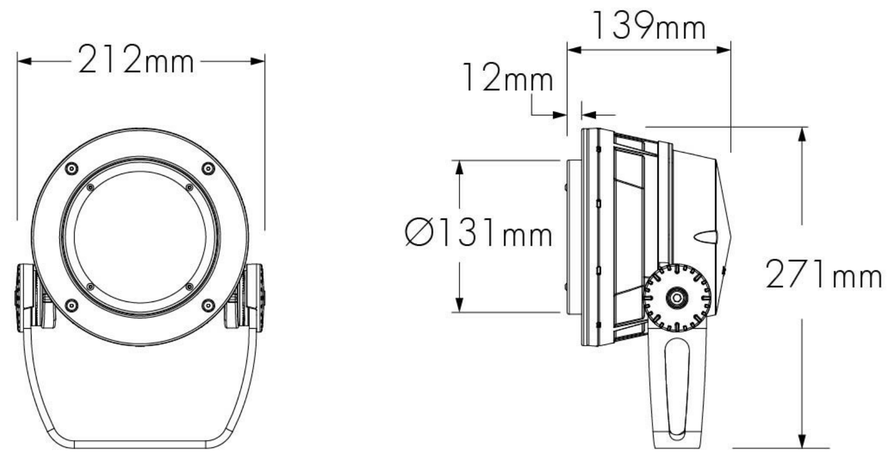
LBMSNW-FINISH-BK
Interior surface painted black. Please specify desired exterior FINISH from list of available finishes.

VS - Visor



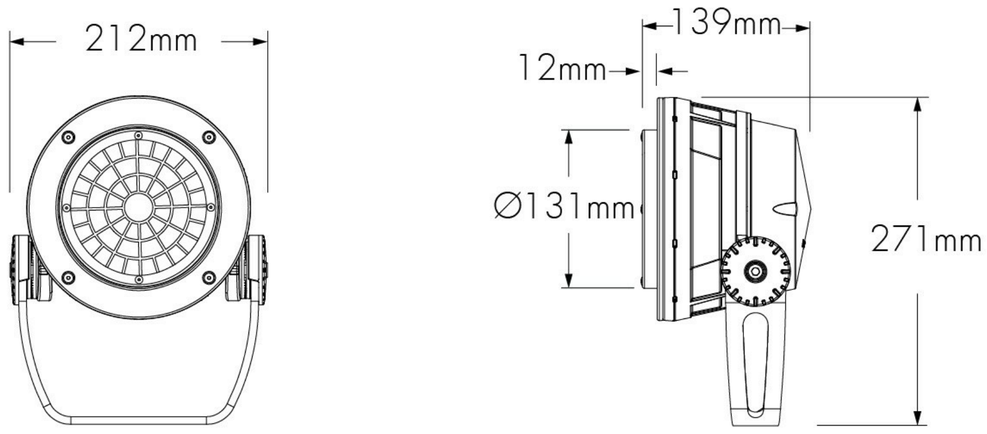
LBMVS-FINISH-BK
Interior surface painted black. Please specify desired exterior FINISH from list of available finishes.

LSLA - Linear spread lens adjustable



LBMLSLA-FINISH
Please specify desired exterior FINISH from list of available finishes.

WG - Wire guard



LBMWG-FINISH
Please specify desired exterior FINISH from list of available finishes.

Accessory combinations

+	Snoot	Snoot wide	Visor
Linear spread lens adjustable	YES	NO*	YES
Wire guard	YES	NO	YES

Accessory combinations must be ordered together on a single line.
Ex: A snoot + wire guard combination order code is LBMSNWG-BK-BK.
*Consult factory for a linear spread lens adjustable + snoot wide combination.

Available exterior finishes for optical accessories

BK - Black Sandtex®
BRZ - Bronze Sandtex®
SI - Silver Sandtex®
WH - Smooth white
BKTX - Textured black
BRZTX - Textured bronze, non-metallic
GRATX - Textured medium grey
GRNTX - Textured green
WHTX - Textured white
CC - Custom colour and finish (please specify RAL colour)*

*Lumenpulse offers a wide selection of RAL CLASSIC (K7) colours with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colours, other RAL textures and glosses, or to match alternate colour charts. Final colour matching results may vary.

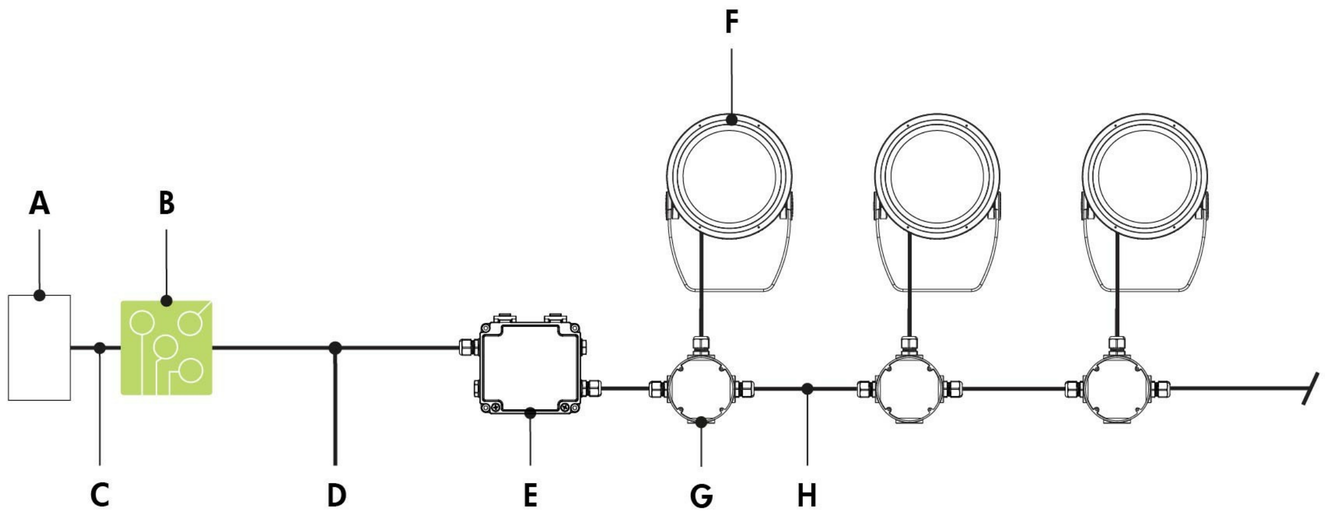
Typical wiring diagrams

Wiring colour code

CE Colour Code	USE
Yellow/Green Brown Blue Black Grey	Ground Live 100-277V Neutral 1-10V / Data + 1-10V / Data -

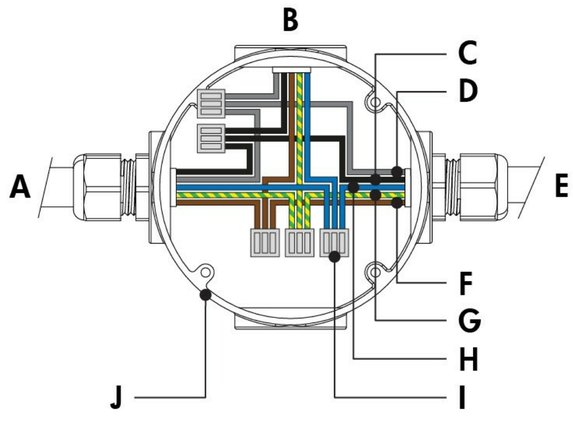
CE Class II Colour Code	USE
Brown Blue Black 1 Black 2 Grey	Live 100-277V Neutral Signal common (DMX/RDM only) 1-10V / Data + 1-10V / Data -

Lumentalk (LT)



A - Third party DMX/RDM controller
B - Lumentranslator (LTL-DMX)
C - Data wiring (by others)
D - Power line (120-277V AC)
E - Lumentalk Data Bridge (LDB-DMX)
F - Lumenbeam Medium
G - Junction box (by others)
H - Power wiring (by others)

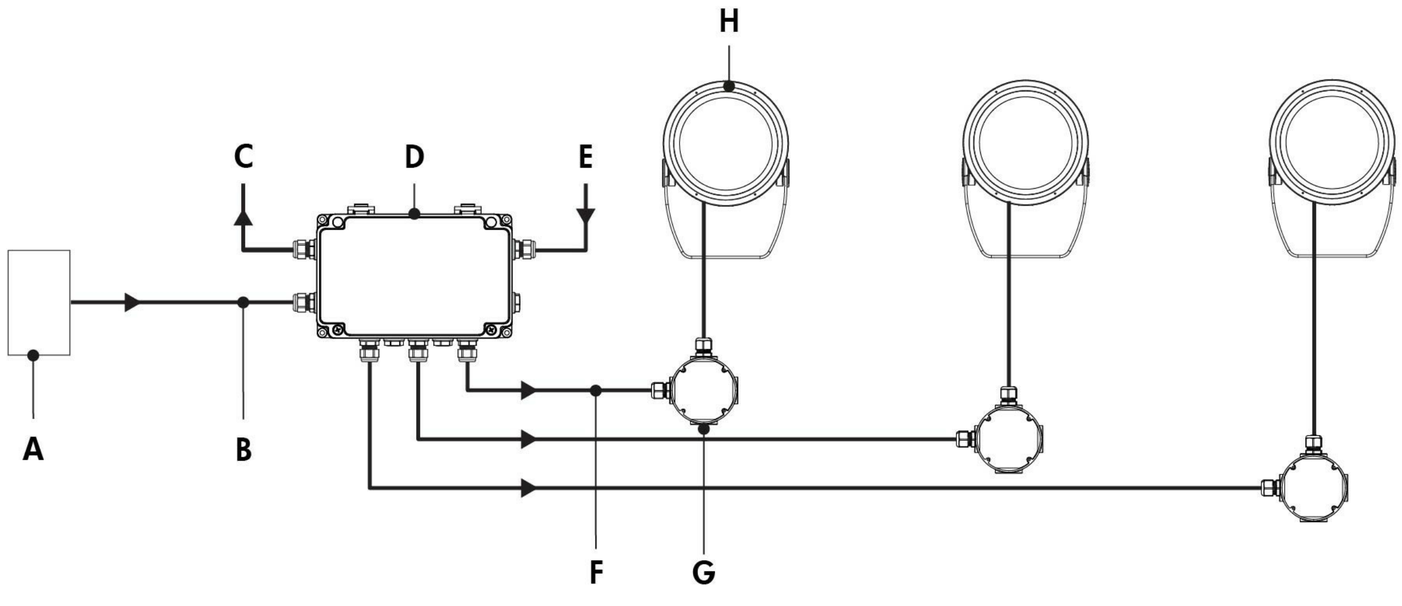
Lumentalk (LT) - wiring detail using LDB



A - From Lumentalk Data Bridge (control over power line via Lumentalk system) or from previous fixture
B - To fixture
C - 0-10 V + / Data +
D - 0-10 V - / Data -
E - To next fixture
F - Live
G - Ground
H - Neutral
I - Terminal connector (by others)
J - Junction box (by others)

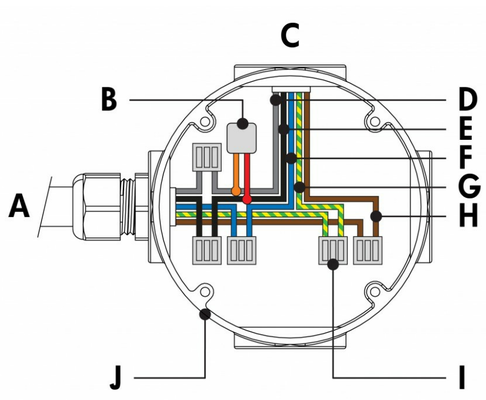
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for Lumentalk system, see LDB installation instructions for details. Fixtures must be specified as DMX/RDM and the Lumentalk Data Bridge must be specified as DMX. 2-step commissioning process: 1 - DMX/RDM system using LumenID software and a LID, 2 - Lumentalk system using LumentalkID software and a LID-LT. Consult factory for details.
- Maximum of 32 fixtures per LDB-DMX. Consult factory for details.
- 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colours is 1 minute). Consult factory for applications that require additional capabilities.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- 28 watts per fixture.

Star Layout (DMX/RDM)



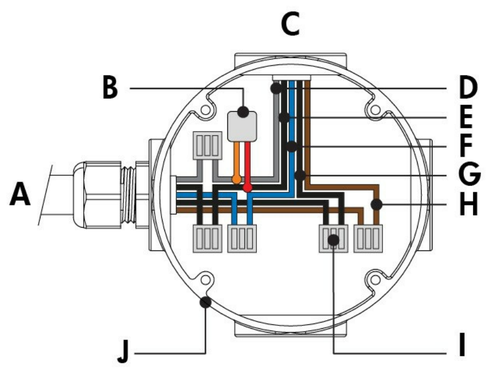
A - Third party DMX/RDM controller
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-ST
E - Power input (100-277V)
F - Power and data output to fixture (wiring by others)
G - Junction box (by others)
H - Lumenbeam Medium

Star Layout (DMX/RDM) - wiring detail - CE



A - From CBX or previous fixture
B - Lumenterminator*
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Live
I - Terminal connector (by others)
J - Junction box (by others)

Star Layout (DMX/RDM) - wiring detail - CE Class II option



A - From CBX or previous fixture
B - Lumenterminator*
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Signal common
H - Live
I - Terminal connector (by others)
J - Junction box (by others)

Maximum number of fixtures per run (Based on16A maximum, 1,5mm² cable, fixtures spaced 3m on center, first fixture 15m from CBX)				
Configuration/Voltage	**120V**	**208V**	**240V**	**277V**
LBM	29	32	32	32

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Run length calculations are based on a voltage drop of no more than 25V.
- 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.
- Maximum of 6 outputs per CBX-ST.
- RGB colour mixture option requires 3 DMX addresses. RGBW colour mixture option requires 4 DMX addresses. RGBA colour mixture option requires 4 DMX addresses.
- 28 watts per fixture.

* DMX terminator is required at the end of each run to maintain data integrity. (6x) DMX lumenterminators included per CBX-ST. See installation instructions for details.

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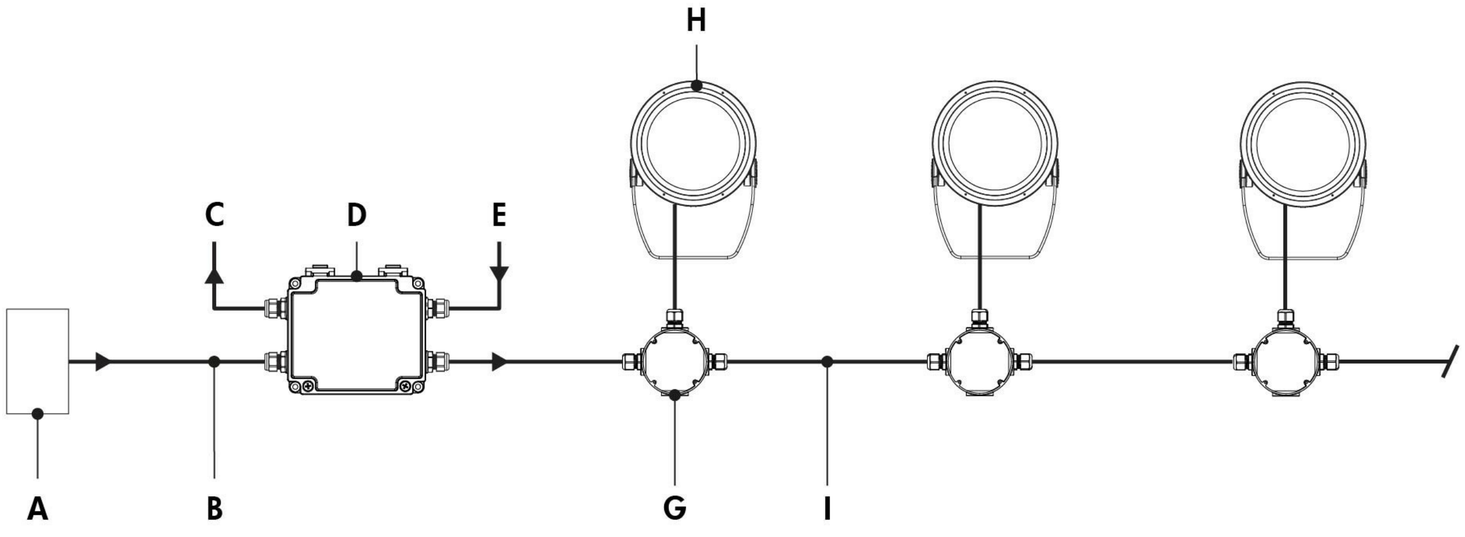
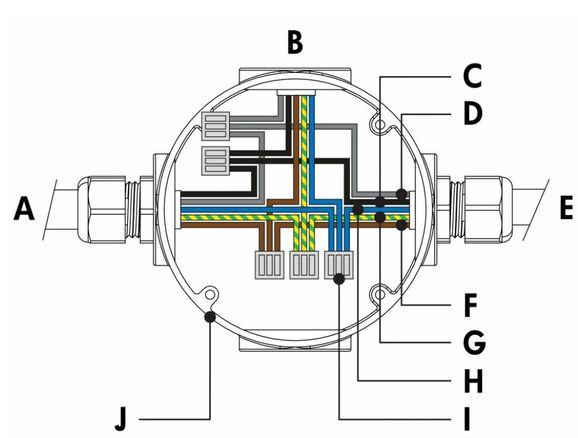
Daisy Chain Layout (DMX/RDM)



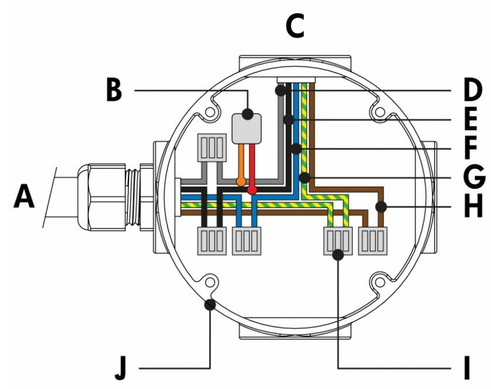
A - Third party DMX/RDM controller
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-DS
E - Power input (100-277V)
F - Power and data output to fixture (wiring by others)
G - Junction box (by others)
H - Lumenbeam Medium
I - Power and data wiring (by others)

Daisy Chain Layout (DMX/RDM) - wiring detail (first or middle of run) - CE



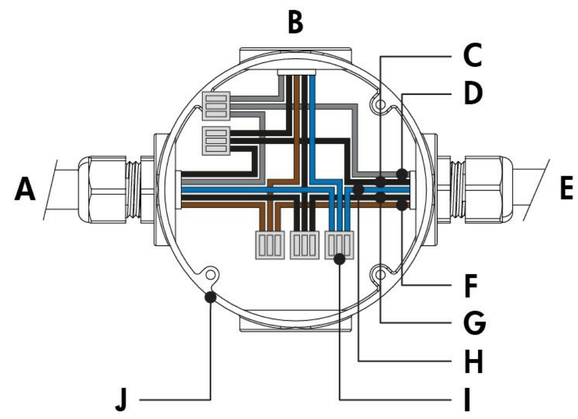
A - From CBX or previous fixture
B - To fixture
C - Data +
D - Data -
E - To next/from previous fixture
F - Live
G - Ground
H - Neutral
I - Terminal connector (by others)
J - Junction box (by others)

Daisy Chain Layout (DMX/RDM) - wiring detail (end of run) - CE



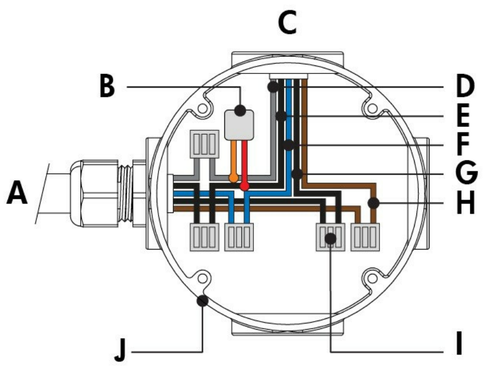
A - From CBX or previous fixture
B - Lumenterminator*
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Live
I - Terminal connector (by others)
J - Junction box (by others)

Daisy Chain Layout (DMX/RDM) - wiring detail (first or middle of run) - CE Class II option



A - From CBX or previous fixture
B - To fixture
C - Data +
D - Data -
E - To next/from previous fixture
F - Live
G - Signal common
H - Neutral
I - Terminal connector (by others)
J - Junction box (by others)

Daisy Chain Layout (DMX/RDM) - wiring detail (end of run) - CE Class II option



A - From CBX or previous fixture
B - Lumenterminator*
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Signal common
H - Live
I - Terminal connector (by others)
J - Junction box (by others)

Maximum number of fixtures per run (Based on16A maximum, 1,5mm^2 cable, fixtures spaced 3m on center, first fixture 15m from CBX)				
Configuration/Voltage	**120V**	**208V**	**240V**	**277V**
LBM	29	32	32	32

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Run length calculations are based on a voltage drop of no more than 25V.
- 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.
- Maximum of 1 output per CBX-DS.
- Maximum of 0.9 m cable length between fixture and next junction box for daisy chain layout.
- RGB colour mixture option requires 3 DMX addresses. RGBW colour mixture option requires 4 DMX addresses. RGBA colour mixture option requires 4 DMX addresses.
- 28 watts per fixture.

* DMX terminator is required at the end of each run to maintain data integrity. (2x) DMX lumenterminators included per CBX-DS. See installation instructions for details.

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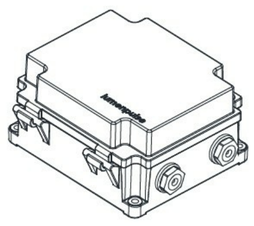
Accessories (order separately)

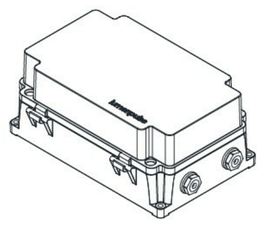
Control Boxes

CBX-DS-Power and control box - daisy chain configuration



DMX/RDM control box. One power and data output to fixture or fixture run. Ethernet enabled option. Refer to CBX specification sheet for details.

CBX-ST-Power and control box - star configuration



DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Ethernet enabled option. Refer to CBX specification sheet for details.

LDB-Lumentalk Data Bridge

Lumentalk Data Bridge, 0-10V or DMX output. Refer to LDB specification sheet for details.

Control Systems

LTO2-Lumentouch 2.0™

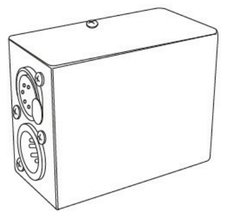
Lumentouch is a wall mount DMX 512 controller keypad.

LCU-Lumencue

Lumencue is a USB / mini SD DMX 512 controller.

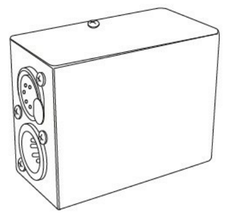
Diagnostic and Addressing Tools

LID-LumenID



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

LID-LT-LumentalkID



LumentalkID is a diagnostic and addressing tool. It must be specified for all Lumentalk (LT) applications. Refer to LID-LT specification sheet for details.

Specification Sheet

lumenbeam

Medium

COLOUR CHANGING

How to order

1	2	3	4	5	6	7	8
LBM							

9	10

1 . Housing

LBM	Lumenbeam™ Medium

2 . Voltage

100	100 volts
120	120 volts
208	208 volts
220	220 volts
240	240 volts
277	277 volts

3 . Colour and Colour Temperature (1)

RGB	Additive RGB
RGBW	Additive RGB + white 4000K
RGBA	Additive RGB + amber

4 . Optics

VN	Very Narrow 6°
NS	Narrow Spot 10°
NF	Narrow Flood 20°
FL	Flood 40°
WFL	Wide Flood 60°

5 . Optical Option

LSLH	Linear spread lens horizontal distribution (2)
LSLV	Linear spread lens vertical distribution (2)

6 . Finish

BK	Black Sandtex®
BRZ	Bronze Sandtex®
SI	Silver Sandtex®
WH	Smooth white
BKTX	Textured black
BRZTX	Textured bronze non-metallic
GRATX	Textured medium grey
GRNTX	Textured green
WHTX	Textured white
CC	Custom colour and finish (please specify RAL colour) (3)

7 . Control (4) (5)

DMX/RDM	DMX/RDM enabled

8 . Options

SY	Short Yoke
3GV	3G ANSI C136.31 Vibration Rating for bridge applications
CRC	Corrosion-resistant coating for hostile environments (6)

9 . Certification

UL	UL compliant
CE	CE compliant
CEII	CE compliant Class II double insulated

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10 . Cable Length [7]

1M	1 m [7] [8]
5M	5 m
10M	10 m
15M	15 m
20M	20 m
30M	30 m

Notes:

[1] Consult factory for colour mix with Royal Blue, 3000K or other white colour temperature LEDs.

[2] Factory installed, not available for 60° optic. Field adjustable spread lens optical accessory available, order separately.

[3] Lumenpulse offers a wide selection of RAL CLASSIC (K7) colours with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colours, other RAL textures and glosses, or to match alternate colour charts. Final colour matching results may vary.

[4] Lumentalk system is enabled with LDB-DMX accessory, DMX/RDM must be specified in the order code. See the typical wiring diagrams in the specification sheet for details.

[5] A Lumentranslator and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator and Lumentalk pages and specification sheets for details.

[6] Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure.

[7] 1 m cable length is standard unless otherwise specified.

[8] Maximum of 1 m cable length for daisy chain DMX applications with CBX-DS.

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