solid state luminaires

Date:	Approved:
Type:	
Luminaire:	
Project:	

ColourLine Lazer

Part of our LAZER series

1 Module (**1M**)
(36 LEDs)
shown w/ SPH and optical lens

ColourLine Lazer (CLZF) is part of our Lazer Series, featuring high-performance, super optic luminaires with long-casting grazer, wall wash, flood and spot flood capabilities. It's based on our ColourLine RGBW technology that utilizes advanced RDM-DMX protocols combined with a unique optical system to offer one of the most impressive long-throw RGBW lighting solutions in the market. Lazer is equipped with an integrated yoke mount and 180° incremental adjustment setting to direct luminaire lighting. The yoke mount system supports a 1, 2 or 3-module unit. Typical applications include large buildings, arenas, towers, monuments, bridges, tunnels, and more.

SPECIFICATIONS	
color temperature	**RGBW / RGBA / TUNABLE WHITE (using RGBW LEDs)**
PHYSICAL	
beam spread	3°, 5°x 50°, 10°, 10° x 40°, 30°, 60° (full beam angle)
LEDs	36 LEDs per module
lengths / dimensions	26"W x 9.63"H x 7.25"D
weight	24 lbs (1M), 49 lbs (2M), 70 lbs (3M)
housing	Marine grade, corrosion resistant, low copper, solid die-cast aluminum, extruded 6061 body with captive stainless steel fasteners
lens	Anti-reflective-clear, tempered glass with silicone gasketing
mounting	Standard mounting is an integrated steel yoke system, 3 yoke sizes to support the 1, 2 and 3 Module units
ingress protection	IP66 rated for dry, damp or wet locations
impact resistance	IK08 lens impact rating, IK10 with Rock Guard (RG)
luminaire connections	Daisy chain luminaires with male/female twist & lock, 6-pin, IP68 rated connector cables
PERFORMANCE	
lumen output [all on]	4650 lm (RGBW - Full On)
maximum delivered intensity	777,764 cd @ 3 degrees* (RGBW - Full On) *native optical beam
lumen maintenance	L70 > 70,000 hours
operating temperature	-40°F to 122°F (-40°C to 50°C)
protocols	DMX 512, RDM (ANSI E1.20)
ColorClone	***ColourClone*** manufacturing process uses robotic systems to provide step-1 like consistency by calibrating every luminaire to the same exact X, Y, chromaticity coordinates.
ColourSoft	***Colour Soft*** embedded firmware enables 16-bit resolution using only 8-bits of data to enhance the low trim curve for no-flicker at the slowest transition speeds.
ColourMode	***ColourMode (CM)*** RGBW and tunable white in one luminaire using 6 DMX channels. Channels 1-4 - RGBW : Channels 5-6** - CCT tuning (channel 5 = intensity and channel 6 = CCT) **Tunable White mode must use the entire luminaire as one unit.
warranty	5-Year limited warranty
ELECTRICAL	
input voltage	Universal 120 - 277 VAC
power supply	Integral Class II, electronic high-power factor 99% @ 120V
controls	SSL ColourSelect Controller, 3rd party DMX 512, RDM standard based control system (ANSI E1.20)
certification	ETL / cETL, FCC Part 15
standards	UL-Class I
power consumption	100W @ 120V (per module)

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ColourLine Lazer

PART NUMBER

CLZF		UNV		BK		
MODEL	**MODULE**	**VOLTAGE**	**MODE**	**FINISH**	**OPTICS**	**INSTALLED ACCESSORIES**
CLZF ColourLine Lazer	**1M** Single Module	**UNV** 120 - 277 VAC	**RGBW** RGBW	**BK** Black	**3** 3° Extra Narrow Spot	**SPH** Spread Lens Holder
	2M Dual Module†		**RGBA** RGBA (Amber)		**550*** 5°x 50° Narrow Spot	**FV** Full Visor
	3M Three Module†		**RGBW-TW** RGBW-TW (Tunable White) CCT 2200K–6000K Uses RGBW LEDs		**10*** 10° Narrow Flood	**HV** Half Visor
					1040* 10° x 40° Mid Flood	**LVR** Louver
					30* 30° Wide Flood	**RG** Rock Guard
					60* 60° Full Flood	
					* Requires SPH accessory	

† Includes wiring and connections, ready to install as a working unit.

Cable Accessories (order seperately)

REQUIRED: Each run requires a Starter Cable and Terminator Cap.

_____ **SC10CLZ** 10 ft. Starter Connection Cord
_____ **SC25CLZ** 25 ft. Starter Connection Cord
_____ **SC50CLZ** 50 ft. Starter Connection Cord
_____ **TCAPCLZ** Standard Terminator Cap
_____ **TCAPDCLZ** Data Terminator Cap
_____ **EC24CLZ** 24 in. Extension Cord
_____ **EC60CLZ** 60 in. Extension Cord
_____ **EC120CLZ** 120 in. Extension Cord
_____ **EC240CLZ** 240 in. Extension Cord

Control Components (Indicate the quantity needed for each item.)

Controller Data Cables/DMX listed are exterior rated.
(Belden 3105A or equivalent) CD cables have male XLR at one end.

_____ **PHAROS TPS-5-B** 5" Designer Touch Panel Station
_____ **PHAROS XPC1** Expert Controller; 512 channels of eDMX/DMX
_____ **PHAROS XPC2** Expert Controller; 1024 channels of eDMX/DMX
_____ **PHAROS XPT-5-B** Expert Touch Panel; 5" Display in Black
_____ **PHAROS TPC-BB** Touch Panel Controller - Black on Black *(512 Channels EDMX)*
_____ **PHAROS EXT** Extension for TPC Connectivity
_____ **PHAROS LPC1** Lighting Playback Controller 1 (512 channels DMX/eDMX)
_____ **PHAROS LPC2** Lighting Playback Controller 2 (1,024 channels DMX/eDMX)
_____ **PDX2** Power Data Wiring Box *(exterior rated)*
_____ **PDX-RDS2** Power Data Wiring Box w/2-port splitter
_____ **PDX-RDS4** Power Data Wiring Box w/4-port splitter
_____ **SCSC-2WH (2BK)** White or Black Wall Mount ColourSelect Controller *(2 universe)*
_____ **CSC-E** ColourSelect Controller *(2 universe)*
_____ **DE3BK(WH)** Nicolaudie STICK DE-3 Black or White Wall Mount Controller w/color dial
_____ **CW4-WH** Nicolaudie STICK White Touch Screen with Internal WiFi
_____ **GA2WH(BK)** Nicolaudie STICK-GA2 White or Black Wall Mount Controller
_____ **DXC-25** 25 foot DMX cable
_____ **DXC-50** 50 foot DMX cable
_____ **DXC-100** 100 foot DMX cable
_____ **CD-10** 10 foot controller data cable (for CSC only)
_____ **CD-25** 25 foot controller data cable (for CSC only)
_____ **CD-50** 50 foot controller data cable (for CSC only)
_____ **CD-100** 100 foot controller data cable (for CSC only)
_____ **MV 5900** Multiverse Show Baby DMX Wireless Bridge (Indoor)
_____ **7400-5707M** Show DMX Vero DMX Wireless Bridge (Exterior)

Controller Data Cables/DMX Cables listed are exterior rated cables.
(Belden 3105A or equivalent) CD-XX cables have male XLR at one end.

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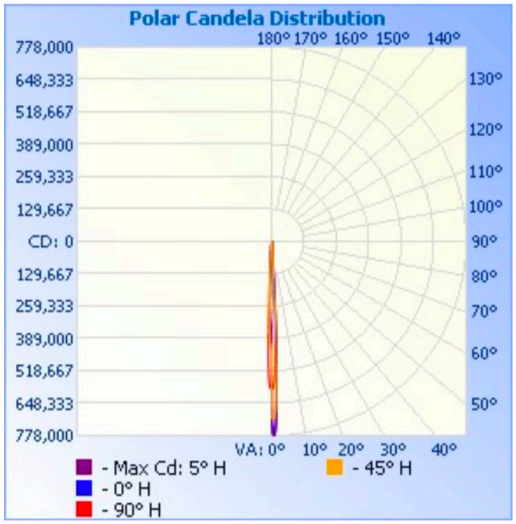
PHOTOMTERIC DATA



Flood Summary

	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	65.8%	3,059.9	6.4	6.7
Beam (50%):	36.8%	1,709.3	3.7	3.4
Total:	99.7%	4,638.8		

Illuminance at a Distance

	Center Beam fc	Beam Width	
125.0ft	36.5 fc	7.3 ft	8.0 ft
250.0ft	9.13 fc	14.6 ft	16.0 ft
375.0ft	4.06 fc	21.9 ft	24.0 ft
500.0ft	2.28 fc	29.3 ft	32.0 ft
625.0ft	1.46 fc	36.6 ft	40.0 ft
750.0ft	1.01 fc	43.9 ft	48.0 ft

Vert. Spread: 3.4°
Horiz. Spread: 3.7°

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	4,123.0	88.7%
0-40	4,279.6	92%
0-60	4,528.7	97.4%
60-90	122.0	2.6%
70-100	50.2	1.1%
90-120	0	0%
0-90	4,650.8	100%
90-180	0	0%
0-180	4,650.8	100%

RGBW

CLZF-1M
RGBW

RGBW supports up to 4.6 billion colors available to use with ColourLine Lazer.

Like all ColourLine products any controllers that support the latest ESTA RDM and ACN standards will allow optimal control of the huge RGBW color spectrum. Regardless of the surface color you're casting light across, you'll be able to adjust color to capture your specific brand colors or add unique settings for subtle or intense color-changing hues.

RGBA

Amber

CLZF-1M
RGBA

Amber is used in place of white in the RGBA color gamut. Adjusting to the lighter color spectrum adds warm tones of amber.

As subjective as color selection is, using amber for a more chromatically warmer color palette allows for a broader yellow color spectrum. The warm rich colors create a more inviting setting for night lighting applications. RGB alone will produce white and yellow but in a smaller color spectrum.

RGBW-TW

Tunable White

CLZF-1M
RGBW-TW

The addition of Tunable White with RGBW-TW makes up a robust all-in-one luminaire.

Having an all-in-one luminaire means full-color lighting control. The white Correlated Color Temperature (CCT) ranges from 2200K- 6000K. The RGBW still offers 4.6 billion colors. You can switch between full color and white CCT with any controllers that support the latest ESTA RDM and ACN standards.

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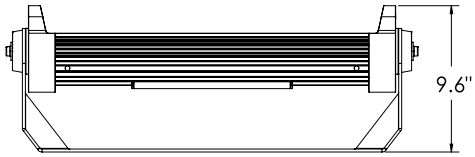
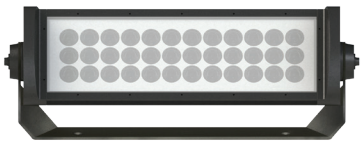
Dimensions

SINGLE MODULE LUMINAIRE (1M)

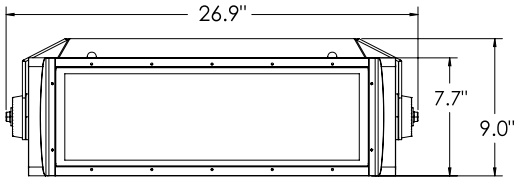
overall length	26" L
overall height	9.63" H
overall depth (1M)	7.25" D

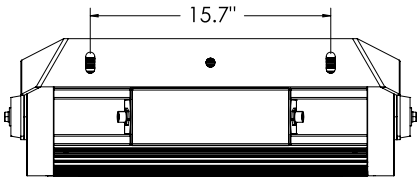


Single Module
24 lbs (**1M**)



Shown with
Spread Lens Holder **SPH**
Required for: 5°x50°, 10°, 10°x40°, 30°, 60°



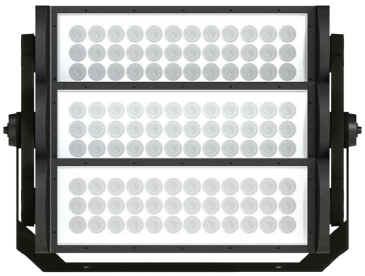


MULTIPLE MODULE LUMINAIRES

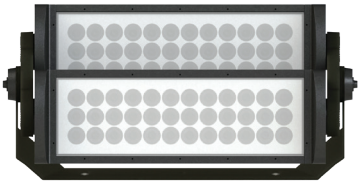
Single Module	1M
Dual Module	2M
Three Module	3M

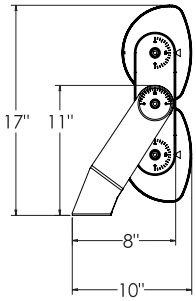
CAUTION: Multiple module luminaires are much heavier than a single unit, requiring two or more people for lifting and installation.

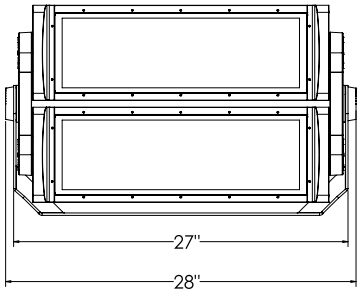
Three Module
70 lbs (**3M**)

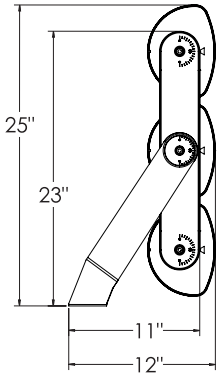


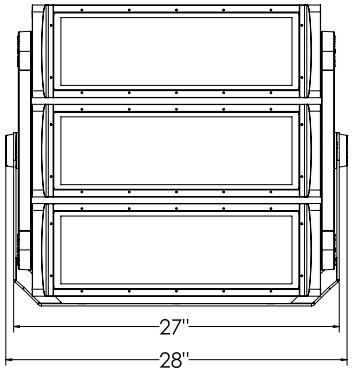
Dual Module
49 lbs (**2M**)











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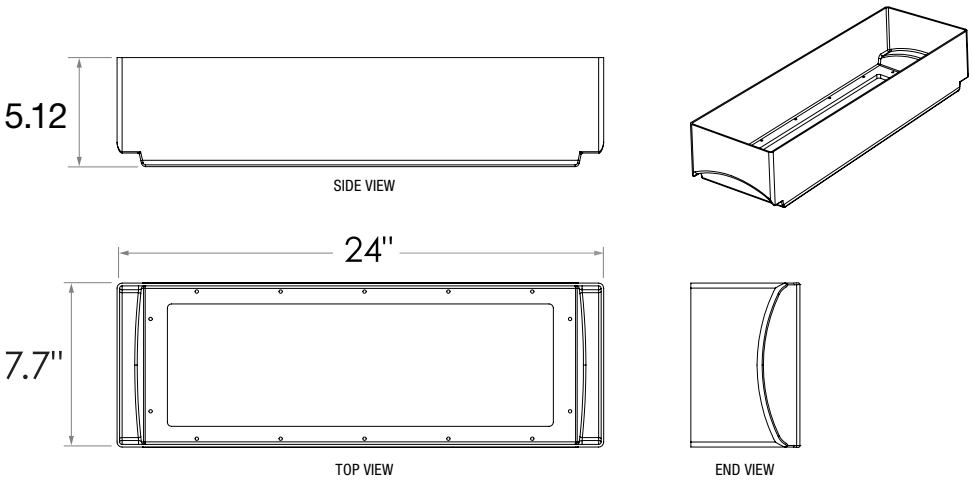
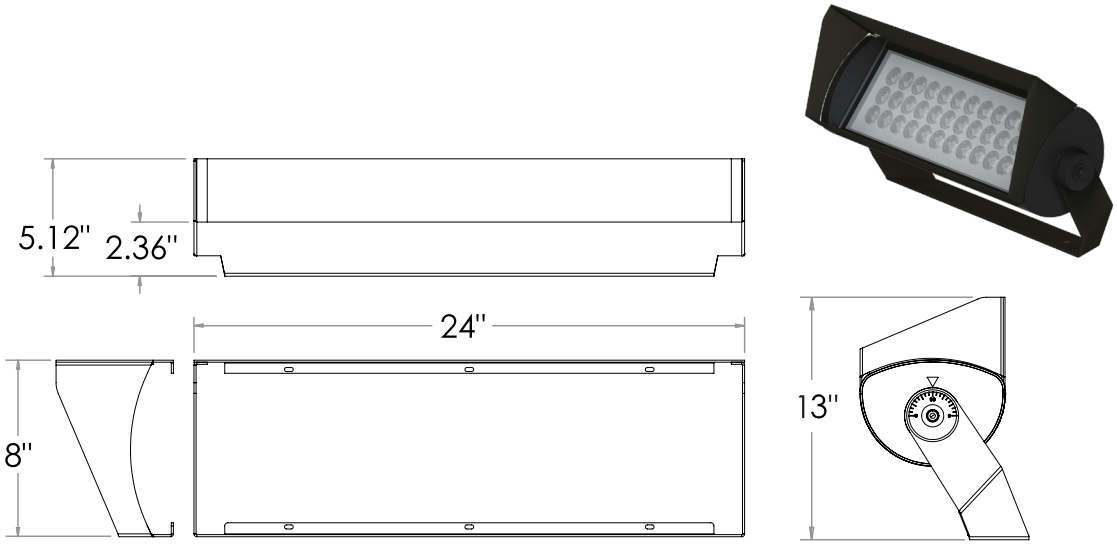
FULL VISOR

Part #	FV



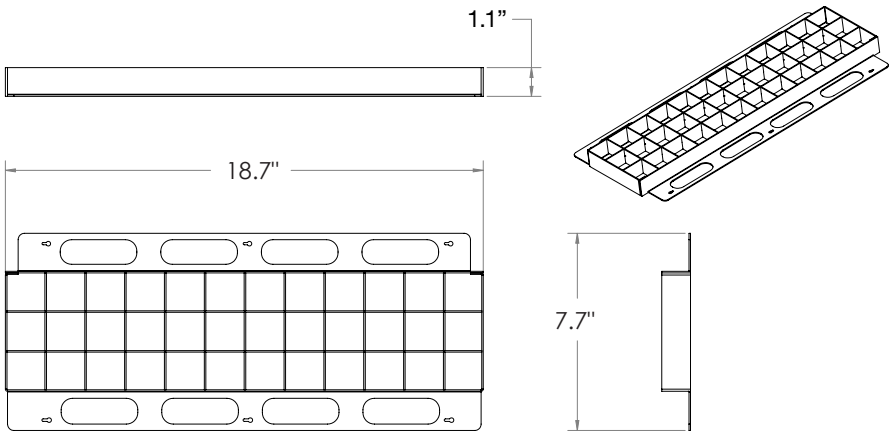
HALF VISOR

Part #	HV



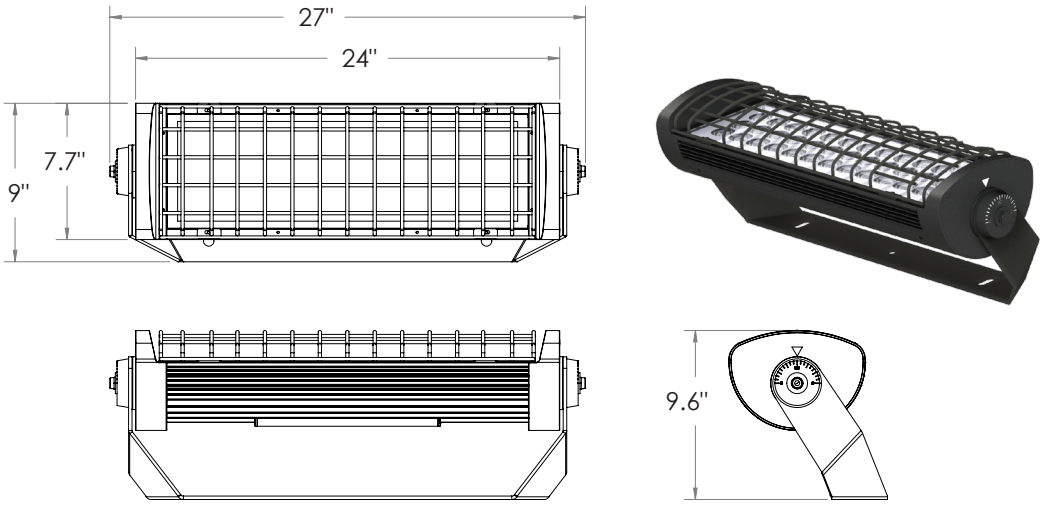
LOUVER

Louver	LVR



ROCK GUARD

Rock Guard	RG



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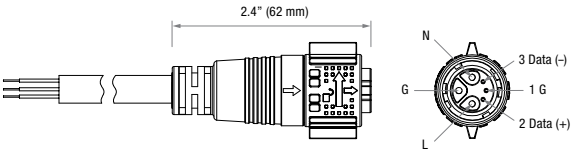
CONNECTIONS

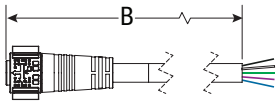
6-PIN CONNECTORS



CABLES

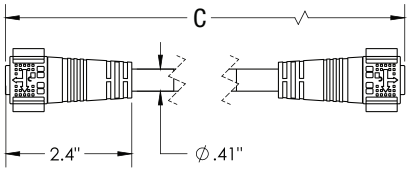
CONNECTIONS & CABLES	
Model	**Description**
SC10CLZ	10 FT Starter Connection Cord
SC25CLZ	25 FT Starter Connection Cord
SC50CLZ	50 FT Starter Connection Cord
TCAPCLZ	Standard Terminator Cap
TCAPDCLZ	Data Terminator Cap
EC24CLZ	24 inch Extension Cord
EC60CLZ	60 inch Extension Cord
EC120CLZ	120 inch Extension Cord
EC240CLZ	240 inch Extension Cord

Starter Cable



Model	B
SC10CLZ	10 FT
SC25CLZ	25 FT
SC50CLZ	50 FT

Extension Cable

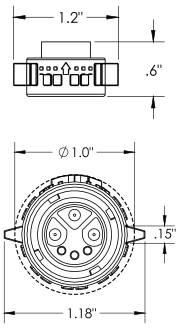


Model	C
EC24CLZ	24 inch
EC60CLZ	60 inch
EC120CLZ	120 inch
EC240CLZ	240 inch

TERMINATOR CAP

Required Terminator Cap is used at the end of each linear lighting run.

TCAPCLZ / TCAPDCLZ



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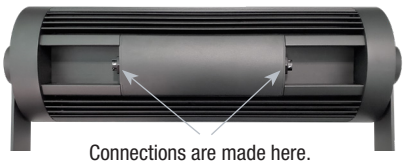
CLZF - LAZER CONFIGURATION EXAMPLES

Component Identification

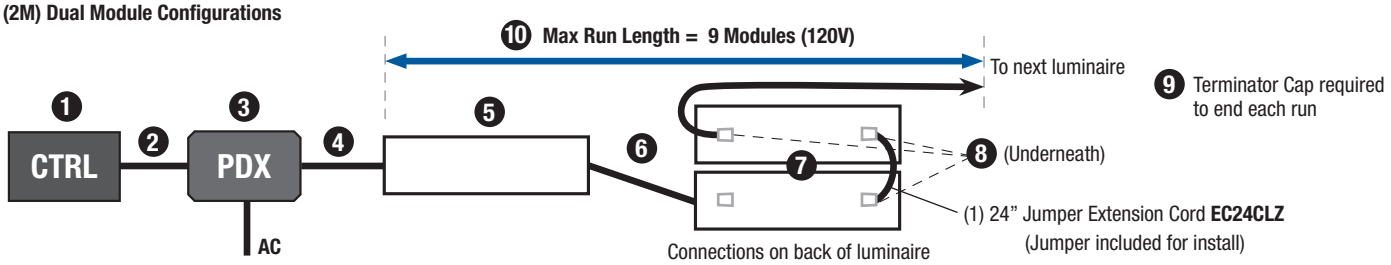
1) DMX Color Controller (see last page)
2) DMX Data Cable **DXC-xx** or **CD-xx** (CSC only)
3) PDX Power Data Wiring Box
4) Starter Cord **SCxxCLZ**
5) ColourLine Lazer (CLZF)
6) Extension Cord **ECxxCLZ** (connect at back of luminaire)
7) Multi Module ColourLine Lazer (CLZF-XM)
8) Extension Cords connect luminaires **ECxxCLZ**
9) Terminator Cap **TCAPDCLZ** (required at end of run)
10) Max Run Length = 9 Modules (120V), 18 Mods (277V)

Fig. 1 Back of Luminaire Connections

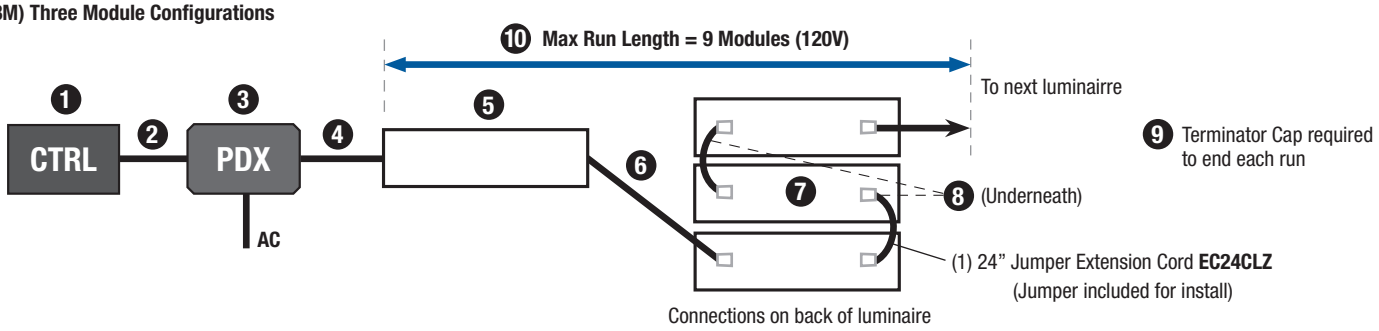


Connections are made here.
Connect to either side, both
connectors are the same.

(2M) Dual Module Configurations



(3M) Three Module Configurations



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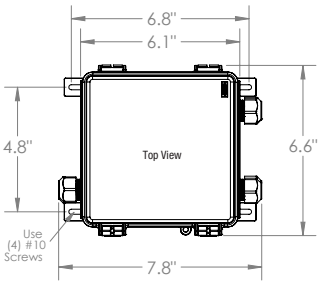
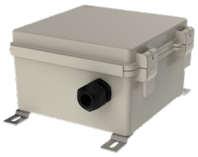
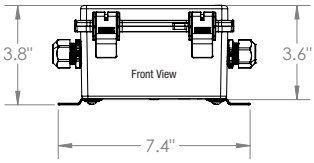
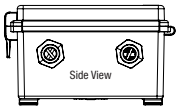
PDX2 - POWER DATA WIRING BOX (ONE PDX2 REQUIRED PER RUN)

The PDX2 is an exterior-rated enclosure that consolidates multiple input sources into one output to the CLZF luminaires. Data input from the RDM Color controller and AC input combine to provide one output to a Starter Cord. One PDX2 box is required per each luminaire run.

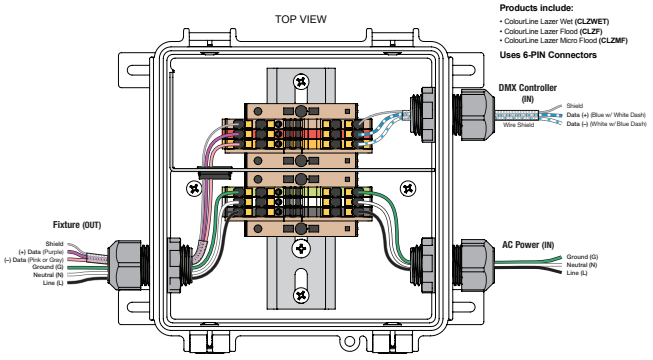




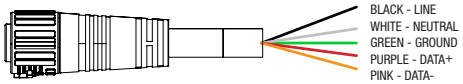




PDX2 Wiring for ColourLine Lazer Series

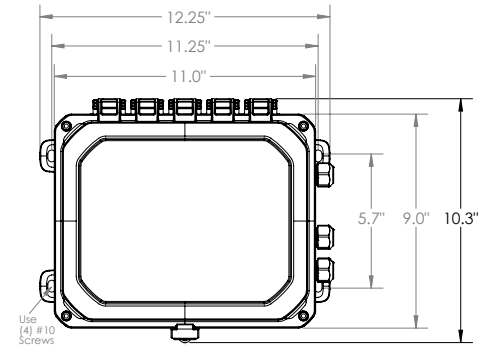


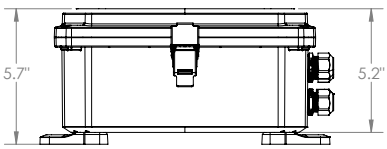
Starter Cable out to luminaire

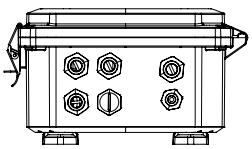


PDX-RDS2 - POWER DATA WIRING BOX - WITH 2-PORT SPLITTER

The PDX-RDS2 is an exterior-rated enclosure with a transparent, hinged cover that latches and seals using a formed in place PUR gasket and a stainless steel hinge pin. The PDX-RDS2 houses a DMX/RDM 2 port splitter/repeater that takes in one DMX input and provides two regenerated DMX outputs that can be any combination of starter cords or straight DMX outputs. The repeater allows you to daisy-chain PDX2 or PDX-RDS2 boxes by providing two maximum DMX run length outputs.







Connector Identification

1) AC Input (Line power)
2) DMX Data Cable **DXC-xx** or **CD-xx** (CSC only)
3) Starter Cord **SCxxLZWET** one
4) Starter Cord **SCxxLZWET** two
5) Auxiliary Ground

Due to continuous development and improvements, specifications are subject to change without notice.
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