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 fixture 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 w/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 w/ Rock Guard (RG)
fixture connections	daisy chain fixtures 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	> 70,000 hours / L70 or better
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 fixture 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 fixture using 6 DMX channels. Channels 1-4 - RGBW : Channels 5-6** - CCT tuning (channel 5 = intensity and channel 6 = CCT) **Tuneable White mode must use the entire fixture as one unit.
warranty	5 year limited warranty (refer to website for details)

ELECTRICAL

input voltage	Universal 120–277V AC
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)

US Commercial Lighting Manufacturer Since 1982

Specification Sheet

ColourLine Lazer

PART NUMBER

CLZF		UNV		BK		

MODEL	MODULE	VOLTAGE	MODE	FINISH	OPTICS	INSTALLED ACCESSORIES
CLZF ColourLine Lazer	**1M** Single Module	**UNV** 120V−277V	**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 (Tuneable White)		**10*** 10° Narrow Flood	**HV** Half Visor
			CCT 2200K−6000K		**1040*** 10° x 40° Mid Flood	**LVR** Louver
			Uses RGBW LEDs		**30*** 30° Wide Flood	**RG** Rock Guard
					60* 60° Full Flood	

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

> * Requires SPH accessory

Cable Accessories (order seperately)

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

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

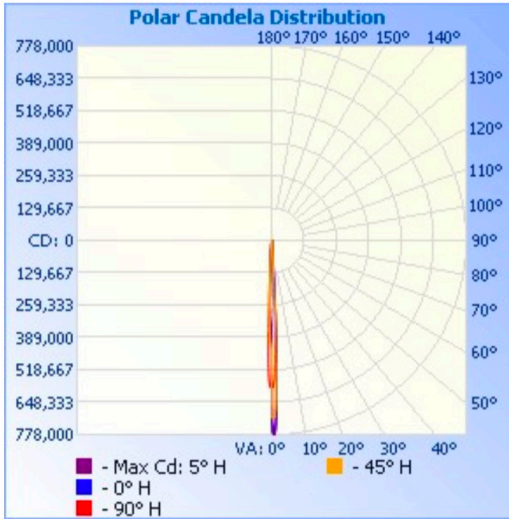## Control Components (Indicate the quantity needed for each item.)

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)

_____ **PDX** Power Data Wiring Box _(exterior rated)_

_____ **PDX-S** Power Data Wiring Box w/2-port splitter

_____ **PDX-RS4** Power Data Wiring Box w/4-port splitter

_____ **CL-RS4** 4 Port RDM splitter w/120V power supply

_____ **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.

US Commercial Lighting Manufacturer Since 1982

Specification Sheet

PHOTOMTERIC DATA

Polar Candela Distribution

778,000	180° 170° 160° 150° 140°
648,333	130°
518,667	120°
389,000	110°
259,333	100°
129,667	90°
CD: 0	90°
129,667	80°
259,333	70°
389,000	60°
518,667	50°
648,333	50°
778,000	

VA: 0° 10° 20° 30° 40°

■ - Max Cd: 5° H   ■ - 45° H
■ - 0° H
■ - 90° H

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
Tuneable White

CLZF-1M
RGBW-TW

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

Having an all-in-one fixture 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.
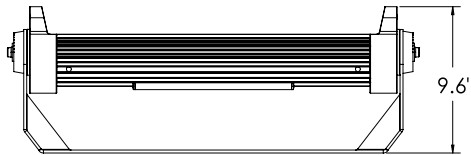
Dimensions

SINGLE MODULE FIXTURE (1M)

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

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

9.6"

26.9"

7.7"

9.0"

15.7"
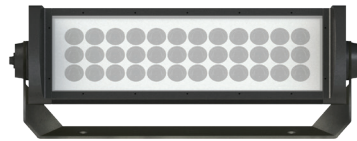
Shown with
Spread Lens Holder **SPH**
Required for: 5°x 50°, 10°, 10°x 40°, 30°, 60°
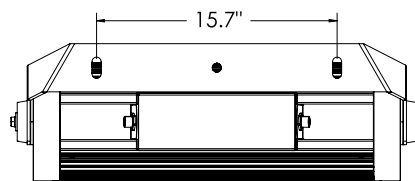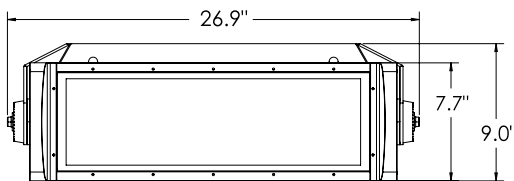
MULTIPLE MODULE FIXTURES

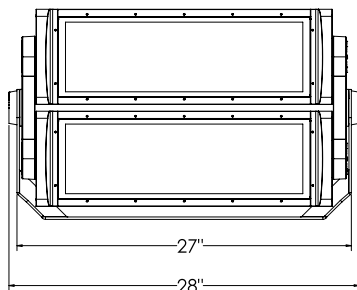|	
Single Module	**1M**
Dual Module	**2M**
Three Module	**3M**

CAUTION: Multiple module fixtures are much heavier than a single unit, requiring two or more people for lifting and installation.
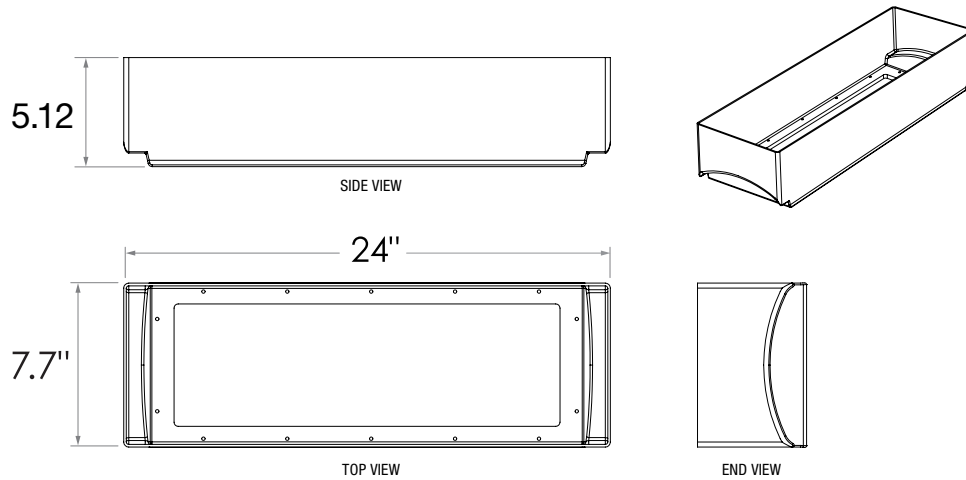
Three Module
70 lbs (**3M**)

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

17" 11"

8"

10"

27"

28"

25"

23"

11"

12"

27"

28"

Due to continuous development and improvements, specifications are subject to change without notice. Solid State Luminaires reserves the right to change lab test details or specifications without notice. Product use certifies agreement to Solid State Luminaires terms and conditions. All stated specifications have a tolerance of +/- 7%.
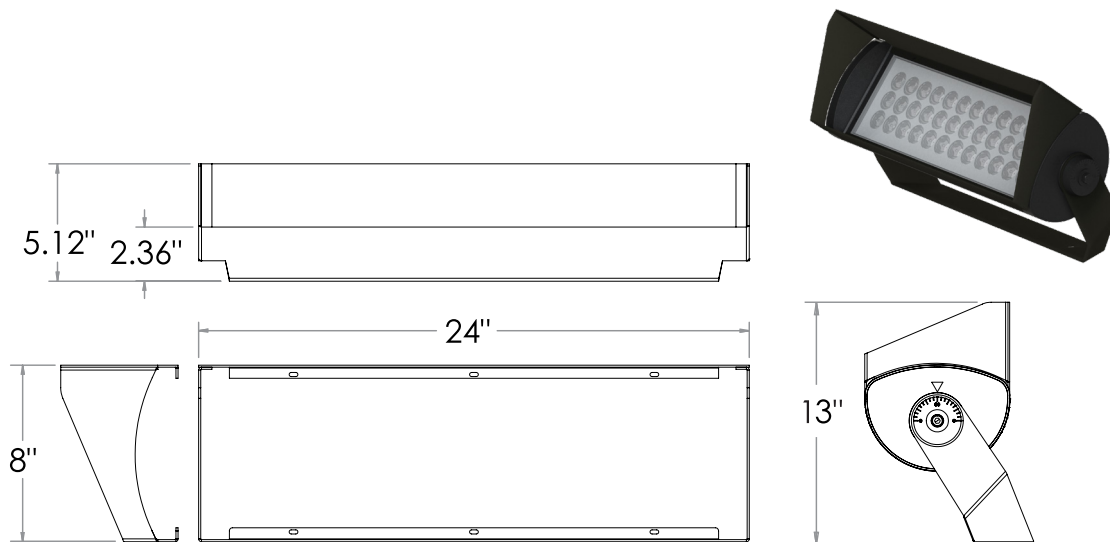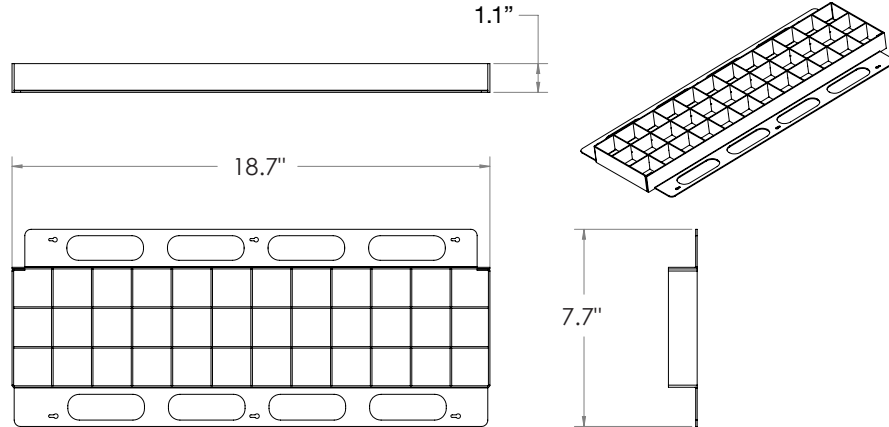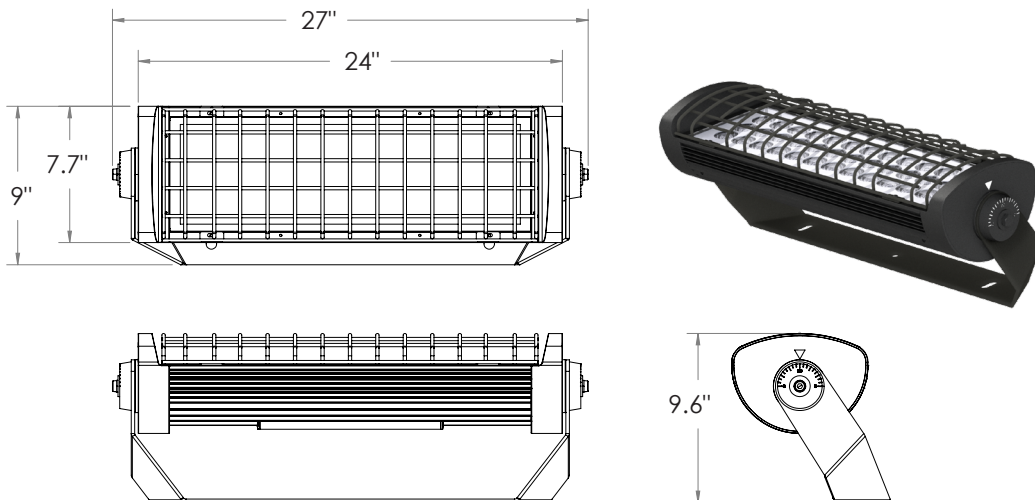
US Commercial Lighting Manufacturer Since 1982

Specification Sheet

FULL VISOR

Part #	FV

5.12

SIDE VIEW

24"

7.7"

TOP VIEW

END VIEW

HALF VISOR

Part #	HV

5.12" 2.36"

24"

8"

13"

US Commercial Lighting Manufacturer Since 1982

Specification Sheet

LOUVER

Louver	LVR

1.1"

18.7"

7.7"

ROCK GUARD

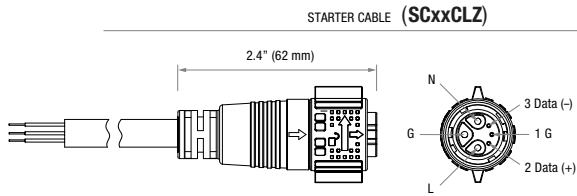| Rock Guard	RG

27"

24"

7.7"

9"

9.6"

Due to continuous development and improvements, specifications are subject to change without notice. Solid State Luminaires reserves the right to change lab test details or specifications without notice. Product use certifies agreement to Solid State Luminaires terms and conditions. All stated specifications have a tolerance of +/- 7%.
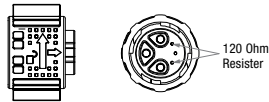
CONNECTIONS & CABLES

6-PIN CONNECTORS

STARTER CABLE (**SCxxCLZ**)

2.4" (62 mm)

N
G
L

3 Data (−)
1 G
2 Data (+)

TERMINATOR CAP (**TCAPDCLZ**)

120 Ohm Resister
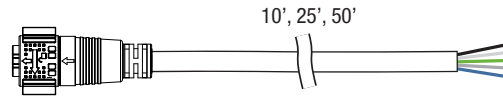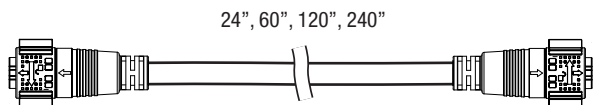
STARTER CORD (SCxxCLZ)

Required Starter Cord comes in multiple lengths with a fixture connector at one end and lead wires at the other end for connecting power & data.

10', 25', 50'

EXTENSION CORD (ECxxCLZ)

The Extension Cord comes in multiple lengths with a fixture connection at each end for power & data and adding space between fixtures in a linear run.
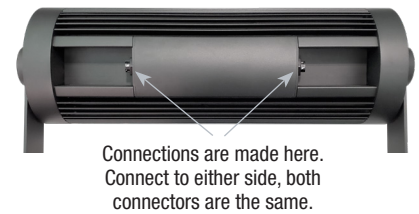
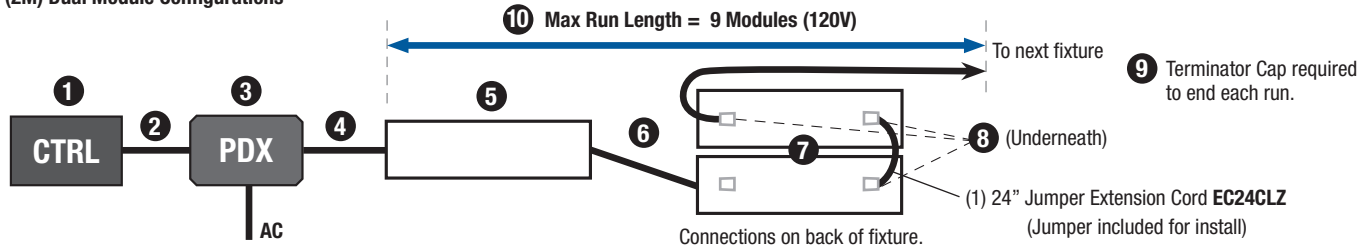24", 60", 120", 240"

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 fixture)
7) Multi Module ColourLine Lazer (CLZF-XM)
8) Extension Cords connect fixtures **ECxxCLZ**
9) Terminator Cap **TCAPDCLZ** (required at end of run)
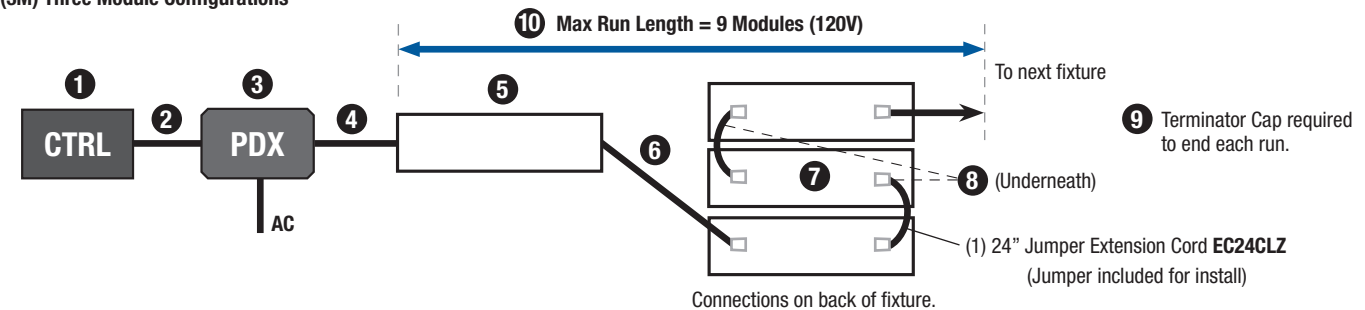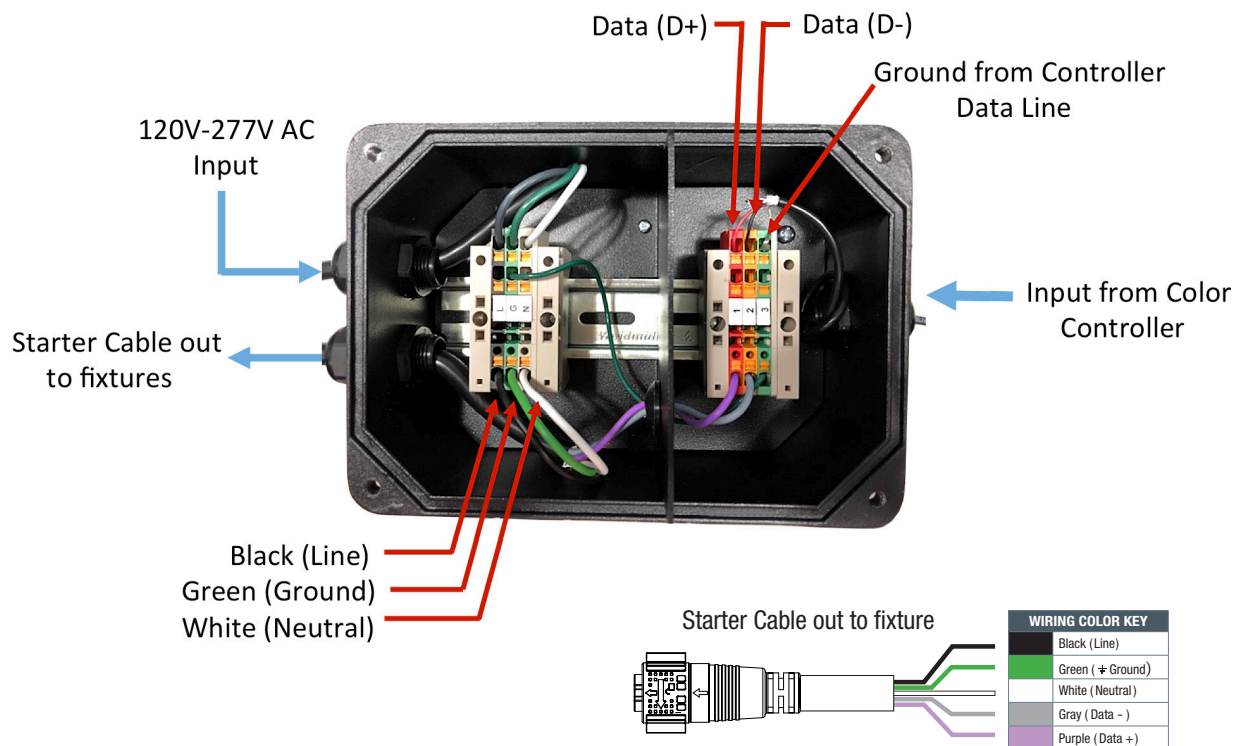10) Max Run Length = 9 Modules (120V), 18 Mods (277V)

Fig. 1   Back of Fixture Connections

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

(2M) Dual Module Configurations

❿ **Max Run Length = 9 Modules (120V)**

To next fixture

CTRL
PDX
AC

❶ ❷ ❸ ❹ ❺ ❻ ❼

❾ Terminator Cap required to end each run.

❽ (Underneath)

(1) 24" Jumper Extension Cord **EC24CLZ** (Jumper included for install)

Connections on back of fixture.

(3M) Three Module Configurations

❿ **Max Run Length = 9 Modules (120V)**

To next fixture

CTRL
PDX
AC

❶ ❷ ❸ ❹ ❺ ❻ ❼

❾ Terminator Cap required to end each run.

❽ (Underneath)

(1) 24" Jumper Extension Cord **EC24CLZ** (Jumper included for install)

Connections on back of fixture.

US Commercial Lighting Manufacturer Since 1982

Specification Sheet

PDX - POWER DATA WIRING BOX

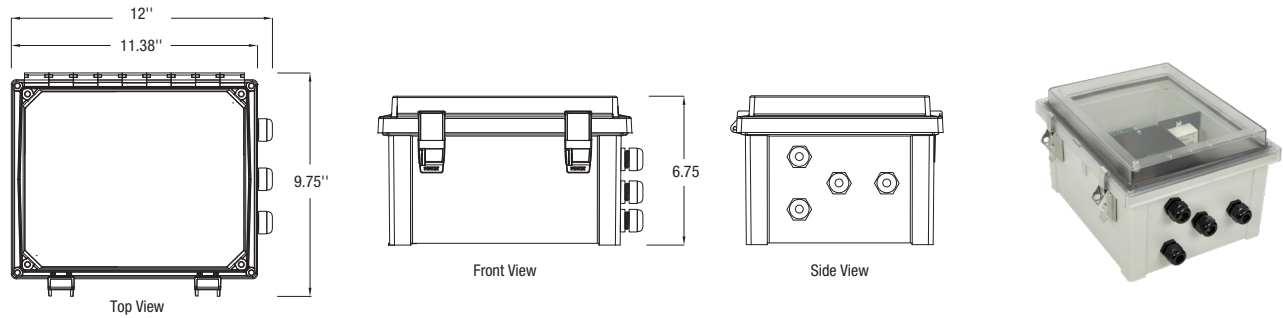The PDX is an exterior-rated enclosure that consolidates multiple input sources into one output to the Lazer Flood fixtures. Data input from the RDM Color controller and AC input combine to provide one output to a Starter Cord.
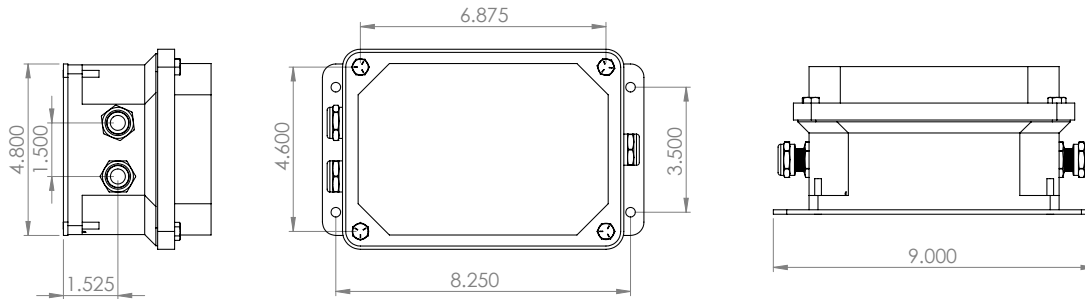
6.875

4.800

1.500

1.525

4.600

3.500

8.250

9.000

Data (D+)   Data (D-)

Ground from Controller
Data Line

120V-277V AC
Input

Input from Color
Controller

Starter Cable out
to fixtures

Black (Line)
Green (Ground)
White (Neutral)

Starter Cable out to fixture

WIRING COLOR KEY	
Black (Line)	
Green (⏚ Ground)	
White (Neutral)	
Gray (Data –)	
Purple (Data +)	

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

The PDX-S 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. It consolidates multiple input sources into two outputs to the fixtures. Data input from the RDM Color controller and AC input combine to provide output to two Starter Cords.

12''
11.38''
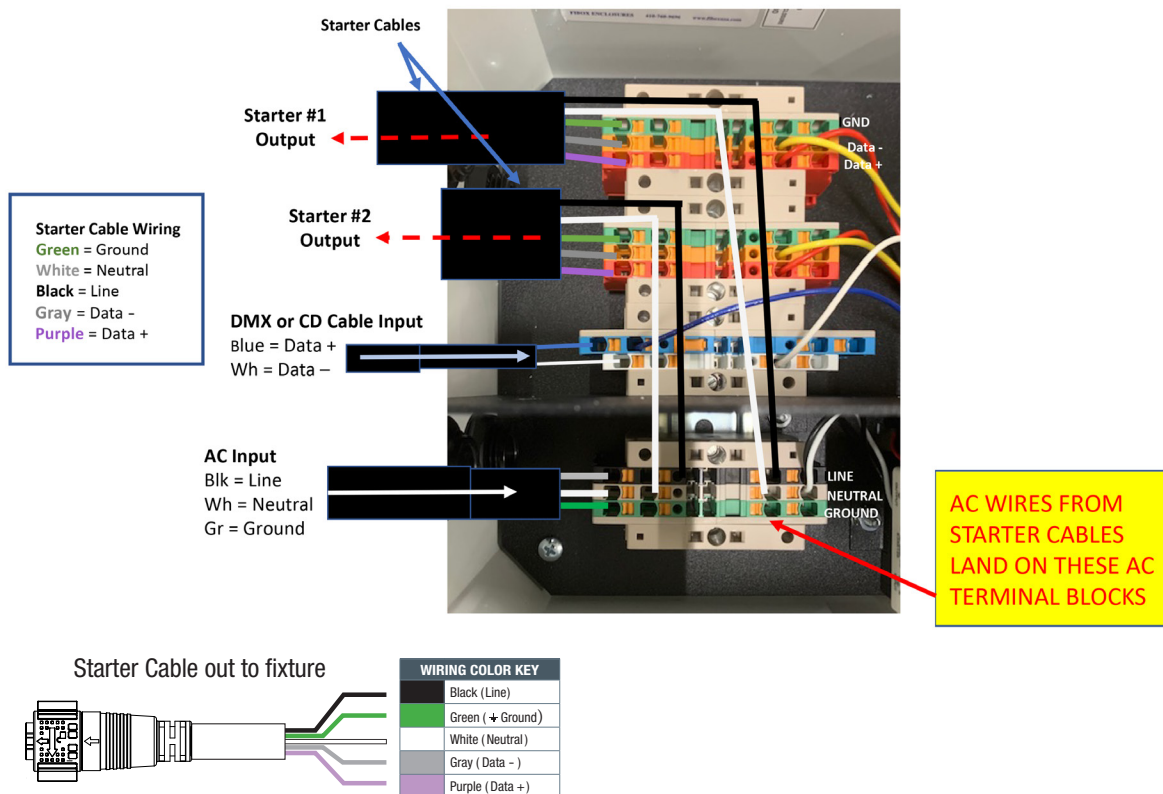9.75''

Top View

6.75

Front View

Side View

PDX-S WIRING CONNECTIONS

Starter Cables

Starter #1
Output

GND
Data –
Data +

Starter #2
Output

Starter Cable Wiring
Green = Ground
White = Neutral
Black = Line
Gray = Data –
Purple = Data +

DMX or CD Cable Input
Blue = Data +
Wh = Data −

AC Input
Blk = Line
Wh = Neutral
Gr = Ground

LINE
NEUTRAL
GROUND

AC WIRES FROM
STARTER CABLES
LAND ON THESE AC
TERMINAL BLOCKS

Starter Cable out to fixture

WIRING COLOR KEY	
	Black (Line)
	Green (⏚ Ground)
	White (Neutral)
	Gray (Data –)
	Purple (Data +)

US Commercial Lighting Manufacturer Since 1982

Specification Sheet

Color Controls

DMX / RDM PROTOCOL CONTROLLERS

PHAROS TPC-BB - Pharos Touch Panel Controller - Black on Black finish

TPC Touch Panel Controller is an elegant lighting controller with a customizable 4.3" touch screen, 512 channels of eDMX output and flexible interfacing potential. The TPC must work in conjunction with the EXT or LPC. Pharos Backbox is available for mounting.

PHAROS EXT - Extension Device for TPC Connectivity

The Pharos EXT is an extension for the Pharos TPC for making the physical DMX or eDMX output connections. It also provides a PoE connection for the TPC. It's DIN rail monted. This device supports electrical input of 120-240V AC power.

PHAROS LPC - Lighting Playback Controller

Pharos offers two playback controllers, LPC1 (512 channels DMX/eDMX) and LPC2 (1024 channels DMX/eDMX) Pharos LPC (Lighting Playback Controller) is a versatile control solution. The LPC family features individually controllable and independently running timelines and scenes, letting you build dynamic, precise, fully customizable lighting effects. The LPC can be ordered with 1 to 100 Universe capability. It requires a TPC or PC to interface and is powered via 9V to 48V DC or PoE (IEEE802.3af, Class 2), 4W typical.

DE3BK(WH) - Nicolaudie STICK-DE3 Black or White Wall Mount Controller with color dial

STICK DE3 provides an elegant solution to controlling your DMX fixtures. The glass, touch-sensitive panel can be used in multiple ways to select a programmed scene, change a color attribute or directly select a color from the color wheel. Scenes are displayed on the graphical color display. The DE3 provides 1024 DMX Channels with up to 500 scenes and 10 separate zones can be created and controlled separately. 120V AC is required for operation. The DE3 is programmed via Nicolaudie's ESA2 or ESA PRO software. Programs are stored on the internal MicroSD card.
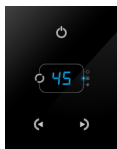
CW4-WH - Nicolaudie STICK CW4 White Touch Screen with Internal WiFi CW4 touch controller provides 1024 channels of
control. 36 scenes can be created in 1 zone. An internal access point provides remote control via any WiFi device using the LIghtpad app from Nicolaudie.

GA2BK(WH) - Nicolaudie STICK-GA2 Black or White Wall Mount Controller

GA2 is an economical controller with glass, touch-sensitive screen for basic control of up to 99 scenes and 1 available zone. It can control 512 DMX Channels. An LED display makes it easy to determine which scene number is playing.

CSC-E - SSL ColourSelect Controller

ColourSelect Controller 2 Universe provides (1024 Channels) of output data capable of controlling 5 zones independently. CSC-E has two 3-pin female XLR connectors to connect to your DMX network and is defaulted in splitter mode, so two separate runs can be connected and controlled. It can store a total of 80 programmable presets. Additionally buttons control speed, dimming, scenes and static colors. The CSC can be powered via a PC USB port or with the PS-CSC external 120V AC power supply included.

SCSC-2WH (or 2BK) - SLIM White ColourSelect Controller Wall mount versions of the CSC-E, includes power supply.

US Commercial Lighting Manufacturer Since 1982

Specification Sheet