

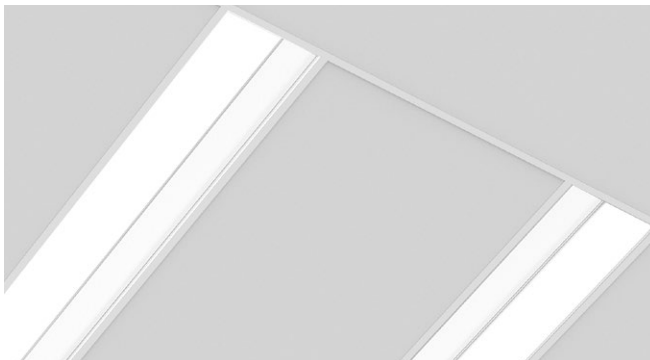
# RIZE

RECESSED LIGHT FOR HEALTH CARE



Project: \_\_\_\_\_

Type: \_\_\_\_\_



Rize offers dual function luminaires with ambient and exam illumination complete with Chromawerx SOLA and DUO providing dim-to-warm and full-range tunable white capabilities. The pair of Rize luminaires operate in a master and satellite configuration.

Rize's durable linear form combined with dual light sources and control options make this luminaire particularly well suited to a variety of healthcare environments, including senior living, specialty day procedures and patient rooms. Rize is also available in static white and BIOS (see separate spec sheet).

IP54

IC RATED (DUO)

NON-IC RATED (SOLA)

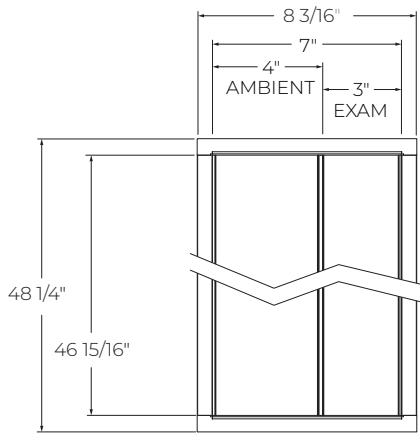
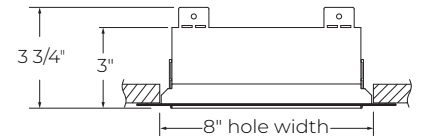
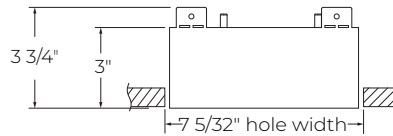
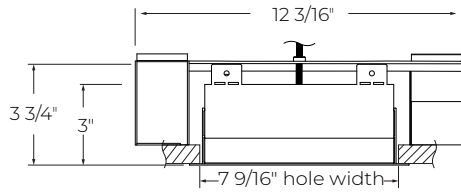
## Code

LUMINAIRE ID	LENGTH	LIGHT SOURCE	CRI	EXAM (2 FIXTURES)	AMBIENT (2 FIXTURES)
	4FT				
<b>RIZD</b> - Rize <b>RIZSD</b> <sup>1</sup> - Rize Seal  <sup>1</sup> IP54 rated with Rize Seal option.	4FT - 4'	<b>SOLA</b> - Dim-to-warm single channel control 35K to 22K <b>DUO</b> - Tunable white 2-channel control 65K to 27K	<b>80CRI</b> - 80 CRI <b>90CRI</b> - 90 CRI	<b>EXH</b> - High output 6000 lm <b>EXM</b> - Medium output 4000 lm <b>EXL</b> - Low output 3000 lm	<b>AMBH</b> - High output 8000 lm <b>AMB M</b> - Medium output 6000 lm <b>AMBL</b> - Low output 4000 lm

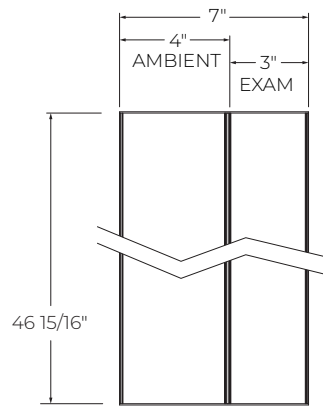
FUNCTION CONTROL <sup>2</sup>	VOLTAGE	MOUNTING	FINISH	OPTIONS <sup>5</sup>
<u>SOLA</u> <b>SD1</b> - Single 0-10V input  <u>DUO</u> <b>DMX</b> <sup>3,4</sup> - DMX <b>DDA</b> <sup>4</sup> - DALI DT6 <b>DDA8</b> <sup>4</sup> - DALI DT8 <b>DD1</b> - Dual 0-10V input for CCT/Intensity <b>PSQO</b> <sup>4</sup> - Lutron T-Series 1% Tunable White  <sup>2</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>3</sup> For more information see pages 6 and 7. <sup>4</sup> On-site commissioning of functions is required.	<b>120V</b> - 120V <b>277V</b> - 277V	<b>TG9</b> - Tegular 9/16" <b>TG15</b> - Tegular 15/16" <b>TB9</b> - T-bar 9/16" <b>TB15</b> - T-bar 15/16" <b>ST</b> - Screw slot T-bar <b>DTR</b> - Drywall trim <b>DTL</b> - Drywall trimless <b>DMF</b> - Drywall mud flange	<b>W</b> - Matte white <b>AL</b> - Aluminum <b>WA</b> - White antimicrobial Silverwerx <b>CF#</b> - Custom finish, specify RAL#	<b>CP</b> - Chicago Plenum <b>GCK</b> - Grid gasket <b>NA</b> - None  <sup>5</sup> Separate codes with a "+" if more than one is specified.

## Dimensions

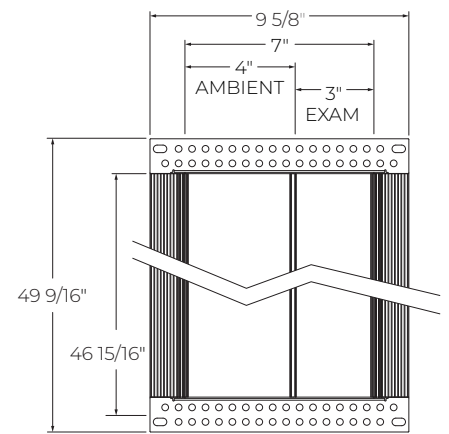
### DRYWALL



**DTR** - Drywall Trim

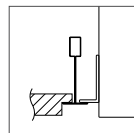
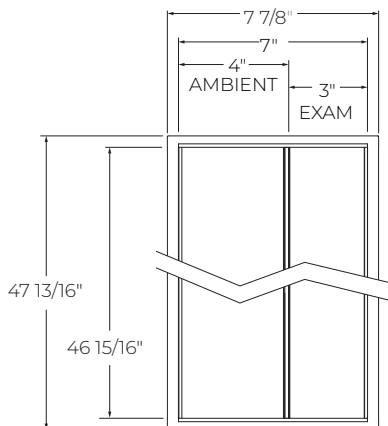
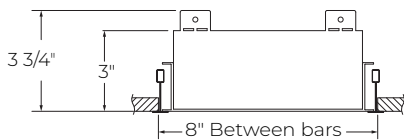


**DTL** - Drywall Trimless

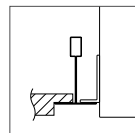


**DMF** - Drywall Mud Flange

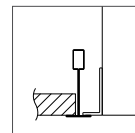
### GRID



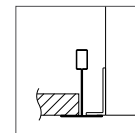
TG9  
Tegular 9/16"



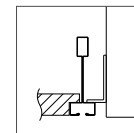
TG15  
Tegular 15/16"



TB9  
T-bar 9/16"



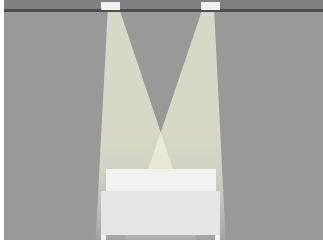
TB15  
T-bar 15/16"



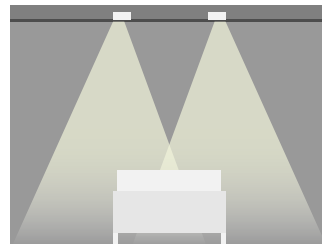
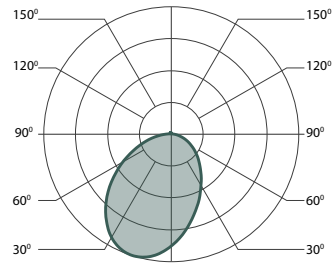
ST  
Screw slot T-bar

## Photometry

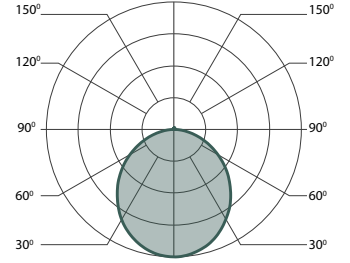
Light distribution shows the right side fixtures only.



Exam  
No dimming



Ambient  
Dimmable



## Technical Specifications

### OPTICS

The ambient function is lensed with a High-Efficiency Lambertian Optic (HLO) while the exam function is lensed with a ribbed High-Efficiency Lambertian Optic (HLO).

### LIGHT SOURCE

Custom linear array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the DUO products, a color temperature range from 6500K-2700K is achievable with color points on or below the black body curve. For the SOLA products, a color temperature range from 3500K-2200K is controlled synchronously with intensity. Color consistency between fixtures is maintained to within 3 SDCM. LEDs operate at reduced drive current to optimize efficacy and lumen maintenance.

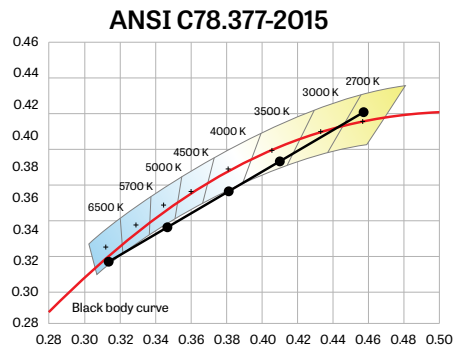
All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

### Chromawerx SOLA

It is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable but the default option runs from 3500K at 100% of full power to 2200K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

### Chromawerx DUO

It is a two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI and PSQ0) protocol for synchronous control of both warm and cool LED arrays to enable the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of cool (6500K) to warm (2700K) color that can be useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. CRI is maintained above 80. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve.



### FUNCTION CONTROL

#### SOLA

##### SDI

Factory-set, adjustable output current LED driver with universal (120-277 VAC) input. Using a single 0-10V control signal, the light output warms in color temperature as it dims down to 1% and 2200K. At maximum driver load, efficiency<86%, PF>0.9, THD<20%.

#### DUO

##### DMX

Factory-set adjustable output current electronic driver with 120-277 VAC line input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, both channels of LEDs are independently adjustable. Each DMX driver can be independently addressed using the built-in RDM (Remote Device Management) in the field. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

### DALI

Factory-set adjustable output current electronic driver with 120-277 VAC line input. Using an existing DALI control system (supplied by others), one control channel adjusts the fixture color temperature, and the other control channel adjusts fixture brightness. With DALI Type 6, two DALI addresses are required to control both channels. With DALI Type 8, one DALI address is required to control both channels. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency < 84%, PF > 0.9, THD < 20%.

### DDI

Factory-set adjustable output current LED driver with universal (120-277 VAC) input. Controlled via two individual 0-10V signals, one for setting light output down to a minimum of 1% and the other for adjusting the CCT (default range of 6500K-2700K). Rated life of 50,000 hours at 70°C maximum driver case temperature and 100% load conditions. Typical efficiency of 86%, PF > 0.9, THD < 20% at 100% load conditions.

### PSQO

Lutron T-Series 2-Channel tunable white drivers enable high-performance human centric lighting (HCL) applications. Digital control of color temperature (CCT) and intensity are achieved when used with the ESN T-Series tunable white controller as a part of a Lutron Quantum System.

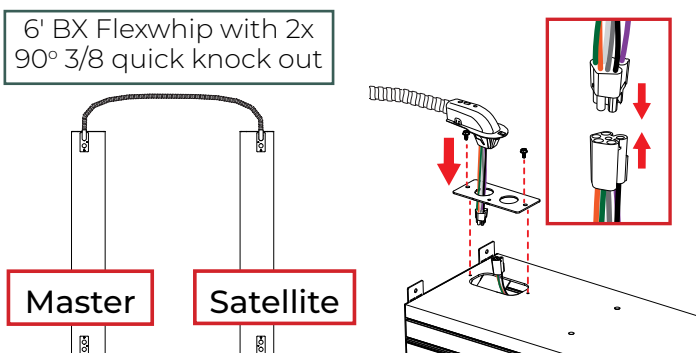
### PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, DUO (tunable white), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

### ELECTRICAL

The Rize comes with a master and satellite configuration. Power comes into the master housing and a low voltage quick connect is used to attached the satellite housing.

The low voltage cable connecting the master and satellite fixture is a 6' BX Flexwhip with 2 times 90° 3/8 quick knock out.



### MOUNTING

Recessed fixtures can be mounted into exposed or concealed T-bar or tegular ceiling, as well as in drywall ceilings with trim, trimless, or mud flange options.

### FINISH

Matte white, aluminum, or white antimicrobial Silverwerx powder coating. Custom finishes are also available.

### CONSTRUCTION

**Housing (RIZD):** Extruded aluminum

**Housing (RIZSD):** IP54 rated extruded aluminum housing sealed with a gasketed lens for extra protection.

**End caps:** Aluminum

**Reflector:** 98% reflective, white painted aluminum

**Grid gasket (CGK option):** 1/16" closed-cell silicone foam, assures a better seal between the fixture and the grid.

### LENGTH

The fixture has a standard length of 4'.

### WEIGHT

30 lbs - 13.6 kg

### CERTIFICATIONS

**ETL:** Rated for indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

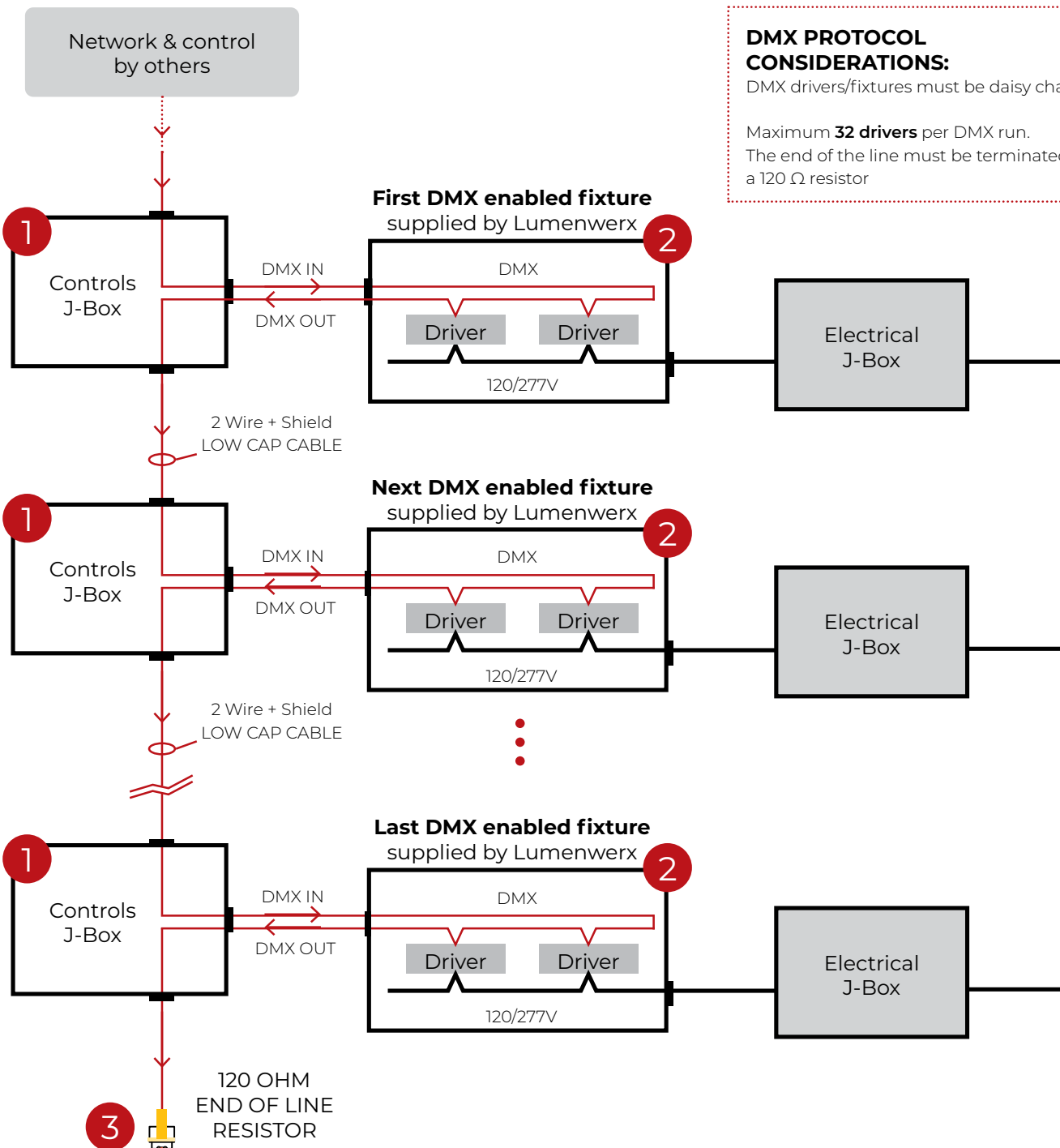
**IC rated (DUO only):** Rize DUO is suitable for direct contact with insulation. Rize SOLA is only suitable for non-IC applications.

**Chicago Plenum:** City of Chicago Approved (CCEA) when specified with CP option.

### WARRANTY

Lumenwerx provides a five-year limited warranty of electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.

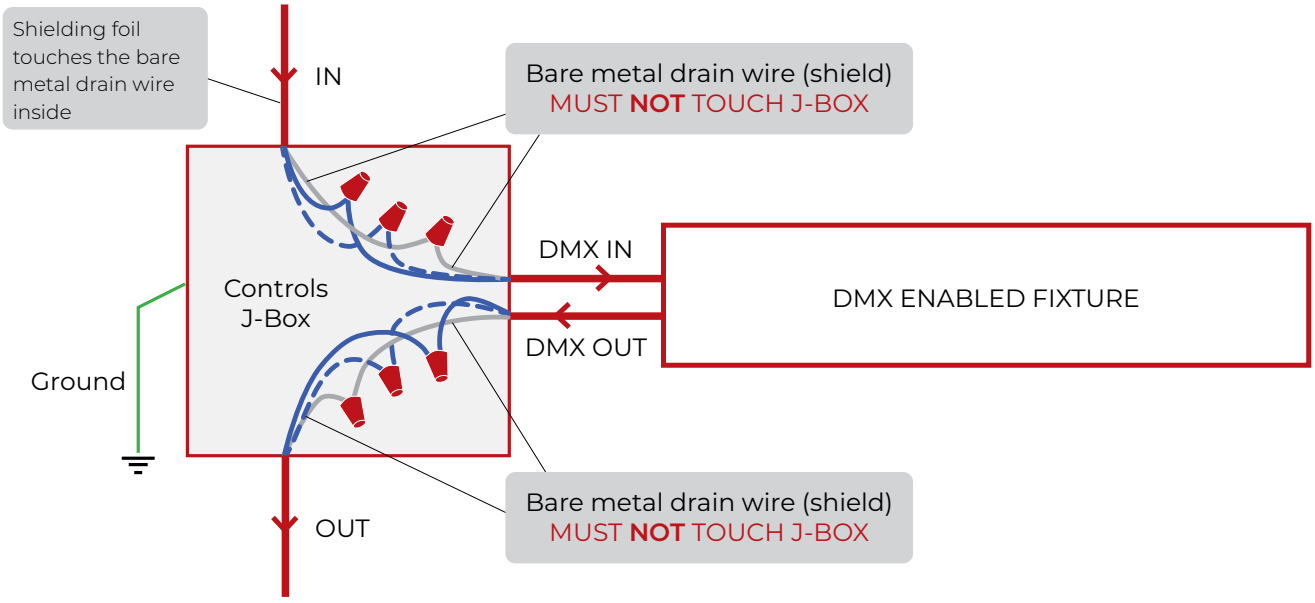
GENERIC DMX NETWORK ARCHITECTURE



**DMX PROTOCOL CONSIDERATIONS:**  
 DMX drivers/fixtures must be daisy chained.  
 Maximum **32 drivers** per DMX run.  
 The end of the line must be terminated by a 120  $\Omega$  resistor

## 1 J-BOX DMX DAISY CHAIN DETAIL

Low capacitance DMX Cable from Previous Fixture



Low capacitance DMX cable to next fixture

## 2 DMX CONNECTION RECESSED & SURFACE

