

BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings

Field Convertible from Trimless or Millwork to Trimmed

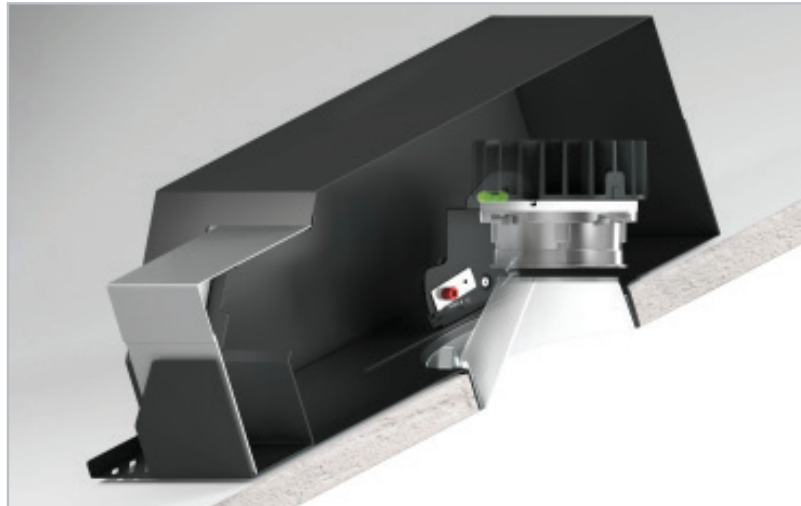
Trimmed - B3SGF



Trimless - B3SGL



Millwork - B3SGM



usailighting.com/slopedceiling-infinitecolor

Introducing Beautiful, Precise Recessed Lighting for Sloped Ceiling Installations Up to 45 Degrees. Now available in full color plus white light flexibility

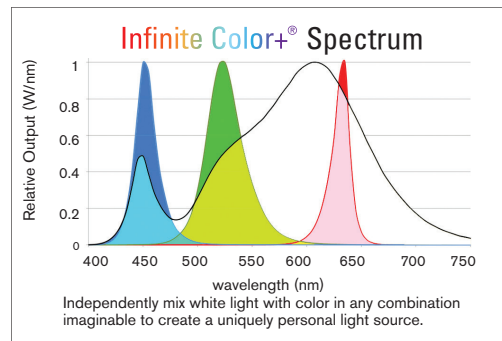
FEATURES

- Solutions for angles from 15° (3/12 pitch) to 45° (12/12 pitch)
- Perfect round and square roomside appearance
- Installations are always aligned with integral leveler
- Works with sheetrock, stone, plaster, and millwork ceilings
- Easily change from trimless or millwork to trimmed in the field

DOWNLIGHT PERFORMANCE DATA

DELIVERED* PERFORMANCE:	Infinite Color +	
	White Light Channel Only	Multi Channel Output
Wattage	16W	18W
Source Lumens:	1000	1200
Lumens Per Watt:	51	45
Delivered Lumens:	775	875

*Based on 40° optic. Performance varies for each specific beamspread and color point; see ies files for exact values at usailighting.com



BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings with Integral Dimming Driver Lighting

Specify fixture part number. (All boxes must be filled in to correctly order)

B3SG		18FC1		SF				UNV			
BeveLED Trim Style	Ceiling Slope	Wattage Options	Beam Options	Lens Options	Bevel Trim Finish Options	*Flange/Millwork Collar Finish	Housing Options	Voltage Options <i>Select one</i>	Dimming Driver Options	Cabling Options <i>Select one</i>	Accessories (Optional)*
F Trimmed with Flange L Trimless Spackle-in M Millwork Knife-edge	30 Angled trim accommodates ceiling slopes from 15° (3/12 pitch) to 30° (7/12 pitch) maximum 45 Angled trim accommodates ceiling slopes from 30° (7/12 pitch) to 45° (12/12 pitch) maximum	18FC1 18W LED	40 40° beam 60 60° beam	SF Solite Frosted	WH White SC Conduit Silver GR Grey BL Black BZ Bronze PR Primer Finish RAL Custom Color Specify RAL#	WH White SC Conduit Silver GR Grey BL Black BZ Bronze PR Primer Finish RAL Custom Color Specify RAL#	NC1 New Construction NCCP Chicago Plenum	UNV 120V-277V	D23X1 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 8 bit D23X2 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 16 bit	RJ RJ45 Jacks WR Manual Wire Splice Connection	EM Emergency Battery EMW Emergency Battery Wet Location * EM battery available with NC1 housing only and requires above ceiling access for service.

* Leave blank for trimless

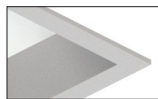
TRIM FINISH OPTIONS



White



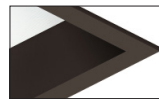
Conduit Silver



Grey



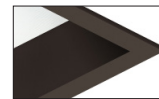
Black



Bronze



Custom RAL (example)



Custom RAL (example)

Custom colors and primer finish also available

BeveLED Mini[®] Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings with Remote Dimming Driver

1. Specify fixture part number. (All boxes must be filled in to correctly order)

B3SG		18FC1		SF				RM	
BeveLED Trim Style	Ceiling Slope	Wattage Options	Beam Options	Lens Options	Bevel Trim Finish Options	*Flange/Millwork Collar Finish	Housing Options	Remote Dimming Driver	Accessories (Optional)
F Trimmed with Flange L Trimless Spackle-in M Millwork Knife-edge	30 Angled trim accommodates ceiling slopes from 15° (3/12 pitch) to 30° (7/12 pitch) maximum 45 Angled trim accommodates ceiling slopes from 30° (7/12 pitch) to 45° (12/12 pitch) maximum	18FC1 18W LED	40 40° beam 60 60° beam	SF Solite Frosted	WH White SC Conduit Silver GR Grey BL Black BZ Bronze PR Primer Finish RAL Custom Color Specify RAL#	WH White SC Conduit Silver GR Grey BL Black BZ Bronze PR Primer Finish RAL Custom Color Specify RAL#	NC1 New Construction NCCP Chicago Plenum NCIC New Construction Insulation Contact Rated	RM Remote Dimming Driver, specify remote power supply in table below	CB27 27" C-Channel Bars CB52 52" C-Channel Bars
						* Leave blank for trimless			

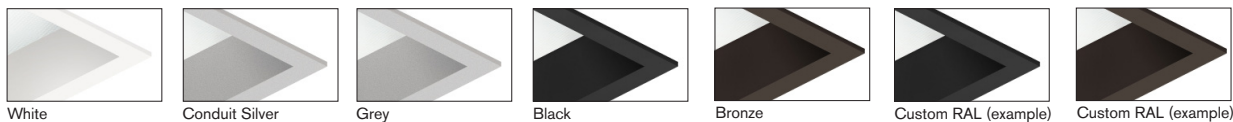
**USAI
Power
Supply
Must Be
Specified**

2. Specify Remote Power Supply ←

RPB-01	18FC1	UNV		
Remote Power Supply	Fixture Wattage	Voltage	Remote Dimming Driver Type*	Cabling Option <i>Select one</i>
RPB-01 BeveLED Mini Infinite Color+ Remote Power Supply	18FC1 18W LED	UNV 120V - 277V	D23X1 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 8 bit D23X2 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 16 bit *Requires remote enclosure by others, minimum size 9"L x 4"W x 2"H	RJ RJ45 Jacks WR Manual Wire Splice Connection

NOTE:
Remote Power Supplies Require Enclosures by Others. See Page 7 for Details.

TRIM FINISH OPTIONS



Custom colors and primer finish also available

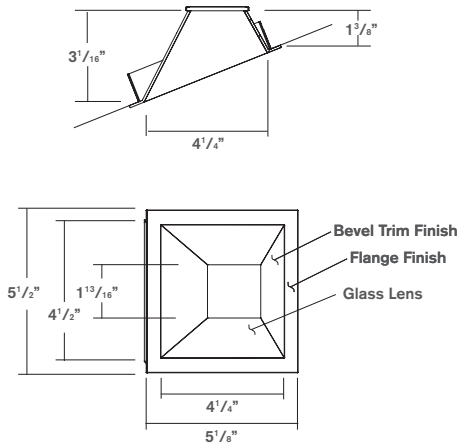
BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings

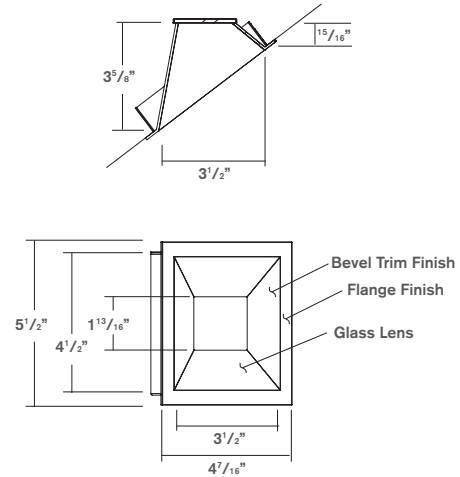
Trimmed - B3SGF

TRIM DETAILS

For 15° (3/12) - 30° (7/12) Slope Ceilings



For 30° (7/12) - 45° (12/12) Slope Ceilings

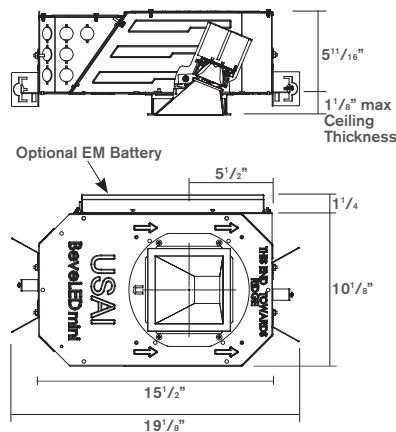


HOUSING OPTIONS

For 15° (3/12) - 30° (7/12) Slope Ceilings

- New Construction - NC1
- Chicago Plenum - NCCP
- Insulation Contact - NCIC (remote driver only)

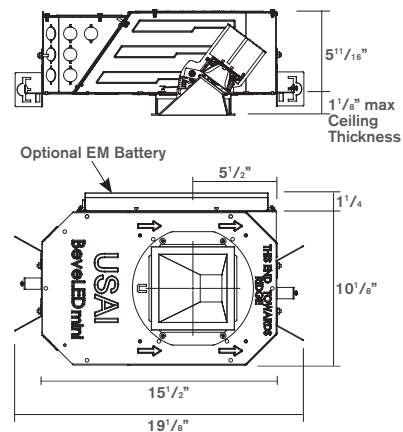
Optional EM battery for NC1 housing shown in drawing below



For 30° (7/12) - 45° (12/12) Slope Ceilings

- New Construction - NC1
- Chicago Plenum - NCCP
- Insulation Contact - NCIC (remote driver only)

Optional EM battery for NC1 housing shown in drawing below



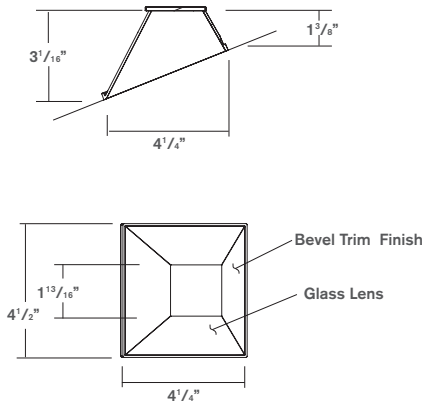
BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings

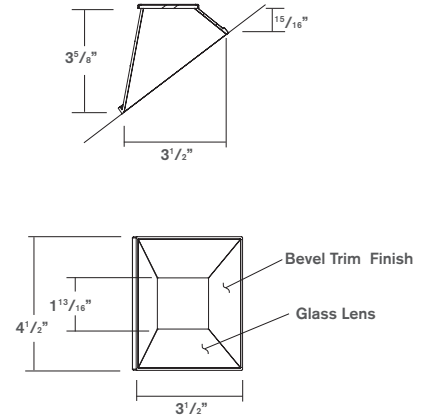
Trimless - B3SGL

TRIM DETAILS

For 15° (3/12) - 30° (7/12) Slope Ceilings



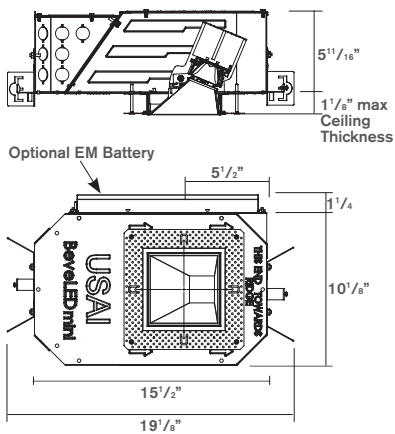
For 30° (7/12) - 45° (12/12) Slope Ceilings



HOUSING OPTIONS

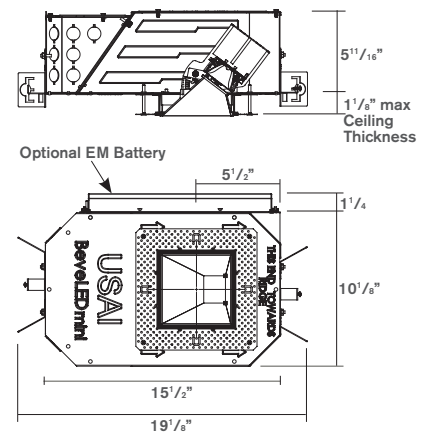
For 15° (3/12) - 30° (7/12) Slope Ceilings

- New Construction - NC1
 - Chicago Plenum - NCCP
 - Insulation Contact - NCIC (*remote driver only*)
- Optional EM battery for NC1 housing shown in drawing below



For 30° (7/12) - 45° (12/12) Slope Ceilings

- New Construction - NC1
 - Chicago Plenum - NCCP
 - Insulation Contact - NCIC (*remote driver only*)
- Optional EM battery for NC1 housing shown in drawing below



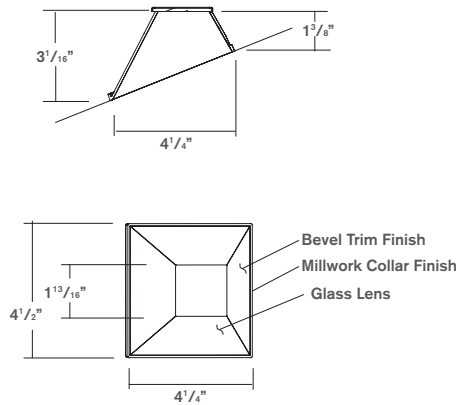
BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings

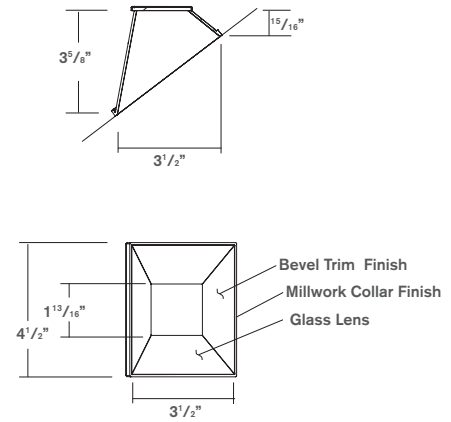
Millwork - B3SGM

TRIM DETAILS

For 15° (3/12) - 30° (7/12) Slope Ceilings



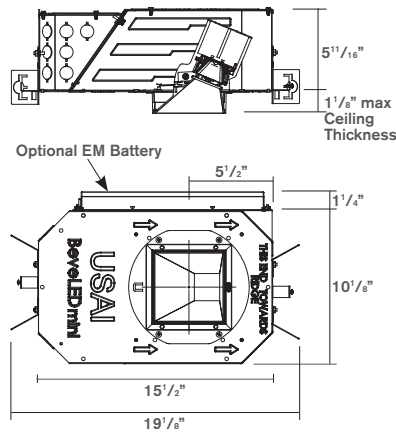
For 30° (7/12) - 45° (12/12) Slope Ceilings



HOUSING OPTIONS

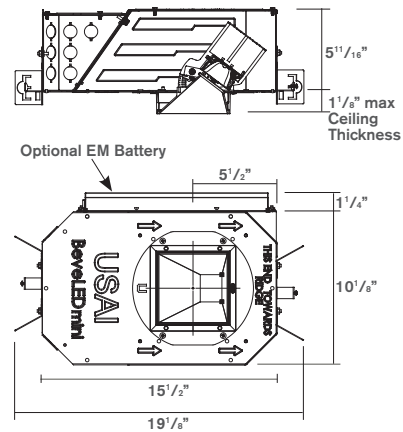
For 15° (3/12) - 30° (7/12) Slope Ceilings

- New Construction - NC1
 - Chicago Plenum - NCCP
 - Insulation Contact - NCIC (*remote driver only*)
- Optional EM battery for NC1 housing shown in drawing below



For 30° (7/12) - 45° (12/12) Slope Ceilings

- New Construction - NC1
 - Chicago Plenum - NCCP
 - Insulation Contact - NCIC (*remote driver only*)
- Optional EM battery for NC1 housing shown in drawing below



BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings



BEVELED MINI INCLINE INFINITE COLOR+ SPECIFICATIONS

FIELD REPLACEABLE LED LIGHT ENGINE

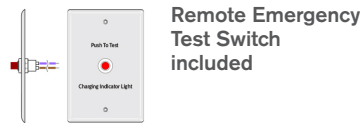
is serviceable through the aperture with a Philips screwdriver. All USAI Lighting light engines feature industry-leading color consistency.

FIELD REPLACEABLE INTEGRAL DRIVER

Solid state electronic constant current DMX512 driver with a high power factor provided standard. Works with universal voltages 120V-277V. All integral dimming drivers are located within the fixture housing and are serviceable from below the ceiling through the aperture. Driver complies with IEEE C62.41 surge protection. Specify D23X1 for 8-bit communication controls; specify D23X2 for 16-bit communication controls. All driver options require remote device management (RDM) communication protocol for addressing.

INTEGRAL EMERGENCY BATTERY

An integral IOTA emergency battery is available as an option with the NC1 housing only and provides backup power for 90 minutes. NC1 EM fixtures are provided with an integral emergency battery that requires above ceiling access for service, and a remote test switch, which comes with a 24" lead length for location of the test switch. Remote EM test switch is dry/damp only; select EMW emergency option for a wet location-rated EM test switch. In emergency mode Infinite Color+ uses the white channel only at ~25% power. Fixtures that have no USAI EM option may be connected to an inverter (by others) for emergency lighting.



REMOTE LOCATION DRIVER

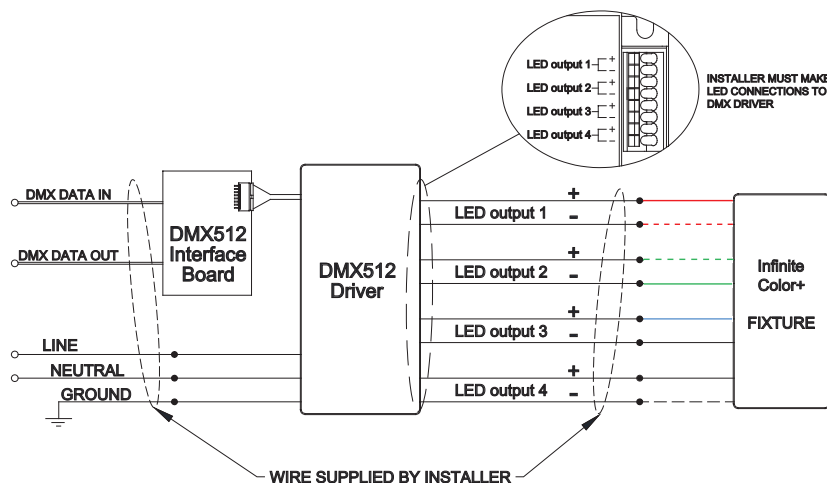
BeveLED Mini Infinite Color+ is supplied with quick connects for use with remotely located driver. Driver is provided separately for remote location on site, enclosure to be provided by others. Remote dimming driver power supply option must be clearly specified in the "RP" table. Remote power supplies require enclosures by others that meet local codes and must be located in an accessible service panel within 100ft of the light fixture; see remote driver table below for coordination of enclosure sizes and wire gauges required. All dimming drivers comply with IEEE C62.41 surge protection.

Remote Power Supply Requirements and Wiring Diagrams Note: Must be wired in homeruns per wiring diagram "A" below.

1 Fixture Maximum Per Power Supply.

Remote Power Supply	Dimming Option	Wire Gauge Required*	Minimum Enclosure Size Required (by others)
RPB-01-18FC1	UNV-D23X1 EldoLED, 8 bit, DMX, 0.1%	18/16	9" W x 4" L x 2" H
	UNV-D23X2 EldoLED, 16 bit DMX, 0.1%		

* Wire gauge 18/16 = Maximum distance from light fixture to remote power supply is 100' using 16 gauge wire, 50' using 18 gauge wire.



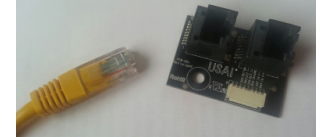
BeveLED Mini® Incline Infinite Color+ - B3SG-FC1

3" Square Downlight for Sloped Ceilings

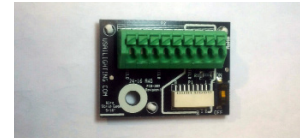
BEVELED MINI INCLINE INFINITE COLOR+ SPECIFICATIONS

CABLING: Data cables must be run in series between fixtures. Choose your preferred method of connection when specifying. To avoid signal transmission problems, the DMX link terminator dip switch should be used in the last fixture in a series on a given DMX bus. NOTE: Data communication cables and AC power lines must not be run in the same conduit.

• **RJ Cabling Option:** If the RJ cabling option is specified, the remote power supply is provided with a DMX interface board that has RJ45 jacks for data connection with CAT5 cable terminated with RJ45 connectors. A link termination dip switch is provided at the connector board; no separate link termination device is required.



• **WR Cabling Option:** If the WR cabling option is specified, the remote power supply is provided with a DMX interface board with terminal blocks for wires to be manually spliced for data connection. A link termination dip switch is provided at the connector board; no separate link termination device is required. The data cable used must meet the following requirements:



- type: shielded, 2-conductor twisted pair
- maximum capacitance between conductors: 30 pF/ft
- maximum capacitance between conductor and shield: 55 pF/ft
- maximum resistance: 0.02 ohms/ft
- normal impedance: 100-140 ohms
- conductive core: 24 AWG is recommended

If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables: they cannot transmit DMX512 data reliably over long distances.

ADJUSTMENT

Sloped ceiling housings are fitted with an integral bubble leveling device to ensure perfectly level installations and optical alignment. Optical assembly can be tilted and locked in position for ceiling slopes from 3/12 pitch to 12/12 pitch, which are visually indicated on tilt mechanism. Butterfly brackets are imprinted with ceiling thickness indexing allow installers to easily preset housing prior to installation: choose from ceiling thicknesses of 1/2", 5/8", 3/4", 7/8", 1", or 1-1/8".

HOUSING

All BeveLED Mini fixtures are field-flexible which allows for field changes from trimless or millwork to trimmed with a simple components change with parts from USAI. Housings are fabricated of 20 ga. steel construction with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring.

MOUNTING

B3RGF overlap flange fixtures are designed for use in sheetrock, acoustical ceiling tile, and many other ceiling materials. B3RGL trimless fixtures are provided with a spackle collar and are designed for use in sheetrock/mud-in ceiling applications. B3RGM millwork fixtures are provided with a millwork collar and are designed for use in wood/millwork and stone construction applications. Butterfly brackets and adjustable channel bars extendible from 16" to 24" centers with integral nails are provided for attachment to building structure.

FIXTURE WEIGHT

NC1, NCCP and NCIC housings weigh 11 lbs. NC1 housing with EM weighs 14 lbs.

WARRANTY

Based on IESNA LM80-2008, BeveLED has a 50,000 hour rated life at 70% lumen maintenance (L70). USAI Lighting Warranty covers replacement parts for 5 years from date of shipment. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

CEILING CUT OUT

B3SGF Trimmed Overlap Flange: 5-1/16" X 5-1/16"

B3SGL Trimless Spackle Frame: 5-1/16" X 5-1/16"

B3SGM Millwork Knife Edge: 4-15/16" 4-15/16"

LISTINGS

Dry/Damp/Wet location. Remote EM test switch is dry/damp only. Select EMW option for wet location remote test switch. UL2043 rated for use in air handling plenums. NRTL/CSA-US tested to UL standards. IBEW union made.



NOTES

- Not for use in corrosive environment
- Use of pressure washer voids warranty

PHOTOMETRICS

Consult factory or website for IES files. Tested in accordance with IESNA LM79.

DIMMING DRIVER WIRING SCHEMES:

NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS
- SAVE THESE INSTRUCTIONS**

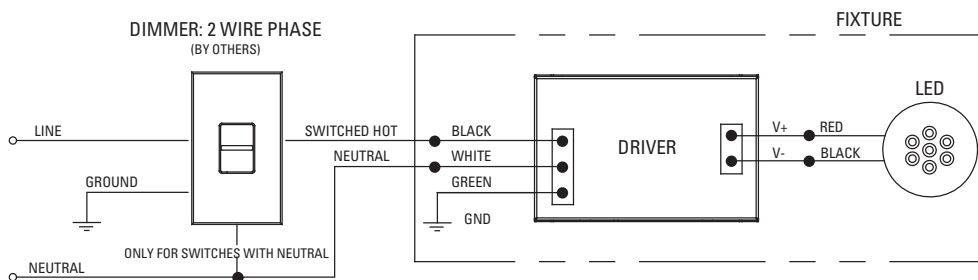
1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

D3 / DIML3 LED: Lutron Hi-Lume A-Series 2 Wire Fwd Phase (with neutral) / LED Dimming Driver Wiring (Dims down to 1%) 120V

D3 / DIML3 Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*	
				Fixture Wattage	
120V Only					
				39W and Less	40W - 80W
ETC	Sensor+ Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
ETC	Unison DRd Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
Lutron	Maestro Wireless® 600W dimmer	MRF2-6ND-120-	100% - 1%	1 - 8	1 - 4
Lutron	Maestro Wireless® 1000W dimmer	MRF2-10ND-120-	100% - 1%	1 - 13	1 - 6
Lutron	HomeWorks® QS adaptive dimmer	HQRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 600W dimmer	HQRD-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 1000 W dimmer	HQRD-10ND-	100% - 1%	1 - 13	1 - 6
Lutron	Caseta Wireless® Pro 1000W dimmer	PD-10NXD-	100% - 1%	1 - 13	1 - 6
Lutron	Stanza® dimmer	SZ-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 adaptive dimmer	RRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 1000 W dimmer	RRD-10ND-	100% - 1%	1 - 6	1 - 3
Lutron	myRoom DIN power module	MQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® QS wallbox power module	HQRJ-WPM-6D-120-	100% - 1%	1 - 26	1 - 13
Lutron	Homeworks® DIN power module	LQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® wallbox power module	HV1-WPM-6D-120	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® QS control unit	QSGR-, QSGRJ-	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® 3000 control unit	GRX-3100-, GRX-3500-	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4U module	HW-RPM-4U-120, LP-RPM-4U-120	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4A module	HW-RPM-4A-120, LP-RPM-4A-120	100% - 1%	1 - 26	1 - 13
Lutron	GP dimming panels	Various	100% - 1%	1 - 26	1 - 13
Lutron	Ariadni CL 250W dimmer	AYCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Diva CL 250W dimmer	DVCL-253P-, DVSCCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Grafik T CL or RF CL dimmer	GT-250M-, GTJ-250M-	100%-1%	1 - 8	1 - 4
Lutron	Nova T CL 250W dimmer	NTCL-250-	100%-1%	1 - 10	1 - 5

* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**D3 / DIML3
2 WIRE PHASE DIMMING**



DIMMING DRIVER WIRING SCHEMES:

NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS
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1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

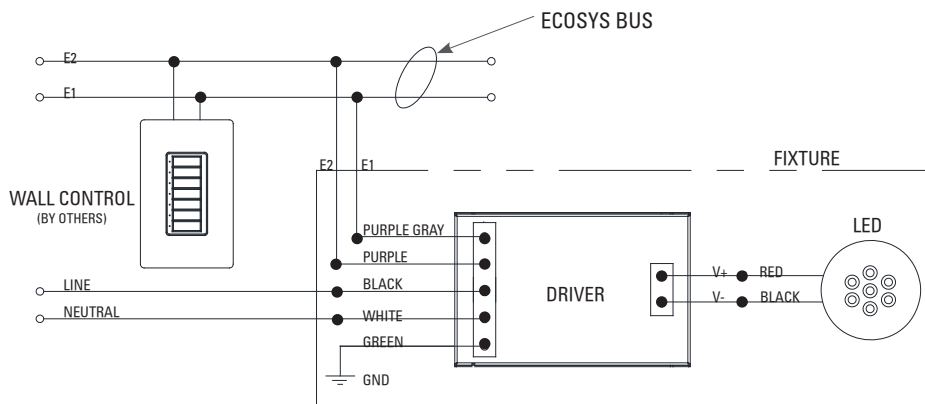
D4A / DIML4A LED: Lutron Hi-Lume Premier EcoSystem LED Driver (Dims down to 0.1%)

D4P / DIML4P LED: Lutron Hi-Lume Premier EcoSystem LED Driver (Dims down to 1%)

D4A / D4P EcoSystem Controls Dimmer Compatibility Chart			
Manufacturer	Product	Part Number	Maximum Quantity Light Fixtures Per Control
120V / 277V			
Lutron	PowPak dimming module	RMJ-ECO32-DV-B	32
		FCJ/FCJS-ECO	3
120V ONLY			
Lutron	Energi Savr Node	QSN-1ECO-S	64
		QSN-2ECO-S	128
	GRAFIK Eye QS/ Homeworks QS control unit	QSGRJ- E, QSGR- E	64
		QP2- 2C	128
	Quantum Hub	QP2- 4C	256
		QP2- 6C	384
		QP2- 8C	512
	HomeWorks QS / myRoom Plus power module	LQSE-2ECO-D	128

* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**D4A / DIML4A and D4P / DIML4P
EcoSystem CONTROLS**



DIMMING DRIVER WIRING SCHEMES:

NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

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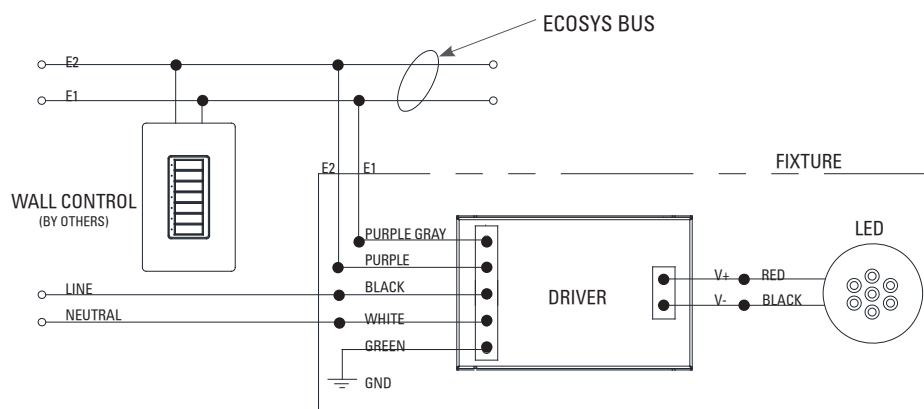
1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

D4H / DIML4H LED: Lutron H Series EcoSystem LED Driver with Fade to Black (dims down to 1%)

D4H / DIML4H EcoSystem Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Fixture Wattage	
120V / 277V				39W and Less	40W - 80W
Lutron	PowPak dimming module	RMJ-ECO32-DV-B	100%-1%	1-32	1-16
Lutron	Energi Savr Node	QSN-1ECO-S, QSN-2ECO-S	100%-1%	1-64	1-32
Lutron	GRAFIK Eye QS (120V ONLY)	QSGRJ- E, QSGR- E	100%-1%	1-64	1-32
Lutron	Quantum	Various	100%-1%	1-64	1-32

* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**D4H / DIML4H
EcoSystem CONTROLS**



IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

D6A / DIML6A and D6E / DIML6E LED Dimming Compatibility Table

D6A / DIML6A and D6E / DIML6E are linearly programmed dimming drivers for use with the dimming controls listed in the table below.

D6A / DIML6A = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1%

D6E / DIML6E = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6A / DIML6A and D6E / DIML6E Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
			DIML6A	6E	
120V & 277V					
Lutron	Diva	DVTV/NFTV with PP-20	99% - 0.1%	1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Lutron	Nova T	NFTV with PP-20	99% - 0.1%	1%	
Lutron	Energi Savr Node	QSN-4T16-S	100% - 0.1%	1%	
Lutron	GP Dimming Panels	TVM2 Module	99% - 0.1%	1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% - 0.1%	1%	
Sensor Switch	nIO	nIO EZ	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

D6B / DIML6B and D6F / DIML6F LED Dimming Compatibility Table

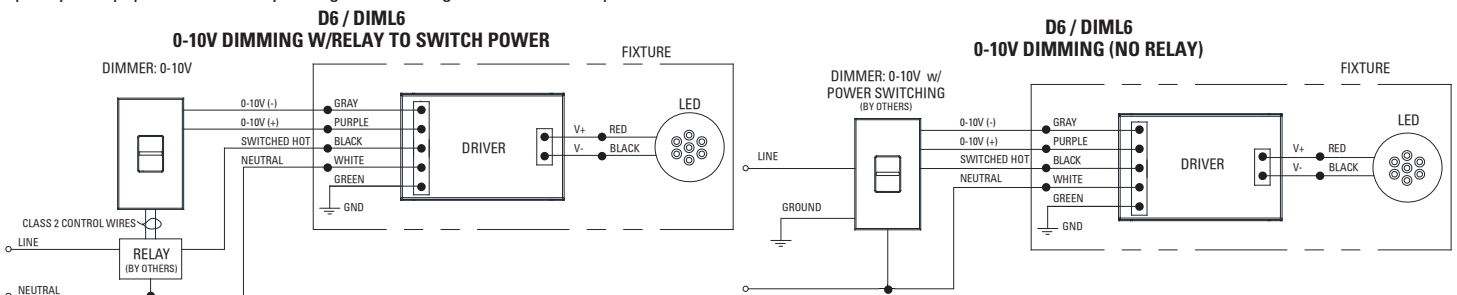
D6B / DIML6B and D6F / DIML6F are logarithmic-programmed dimming drivers for use with the dimming controls listed in the table below.

D6B / DIML6B = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1% D6F / DIML6F = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6B / DIML6B and D6F / DIML6F Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
			DIML6B	6F	
120V & 277V					
Bush-Jaeger	Electronic potentiometer	2112U-101	100% - 0.1%	1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Jung	Electronic potentiometer	240-10	100% - 0.1%	1%	
Leviton	Iluma Tech dimmer	IP710-DLX	100% - 0.1%	1%	
Lightolier (Philips)	Momentum (120V ONLY)	ZP600FAM120	100% - 0.1%	1%	
Merten	Electronic potentiometer	5729	100% - 0.1%	1%	
Pass & Seymour	Titan	CD4FB-W	100% - 0.1%	1%	
Watt Stopper	Miro	DCLV1	100% - 0.1%	1%	
Synergy	Wallbox Dimmers	ISD BC	100% - 0.1%	1%	
ABB	i-bus	SD/S 2.16.1	100% - 0.1%	1%	
Crestron	Modules	GLX-DIMFLV8, GLXP-DIMFLV8	100% - 0.1%	1%	
Crestron	Green Light	GLPAC-DIMFLV4-, GLPAC-DIMFLV8-	100% - 0.1%	1%	
Crestron	Green Light Power Pack	GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM	100% - 0.1%	1%	
Crestron	DIN Rail Analog Output Module	DIN-A08	100% - 0.1%	1%	
Crestron	DIN Rail 0-10V Fluorescent Dimmer	DIN-4DIMFLV4	100% - 0.1%	1%	
Crestron	iLux 0-10V Dimmer Expansion Module	CLS-EXP-DIMFLV	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

DIMMING DRIVER WIRING SCHEMES:

NOTES: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.



DIMMING DRIVER WIRING SCHEMES:

NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

IMPORTANT SAFETY INSTRUCTIONS

- SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

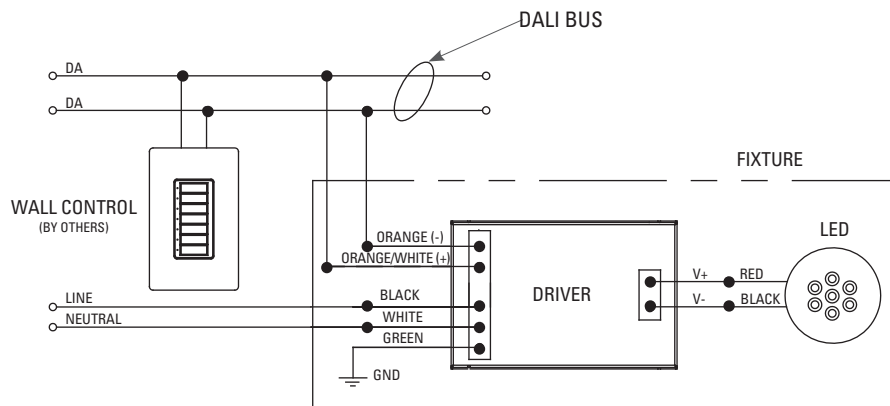
D7 / DIML7 and D7E Dimming Driver Wiring

D7 / DIML7 and D7E are linearly programmed dimming drivers.

D7 / DIML7 = EldoLED SOLOdrive DALI control dims from 100% to 0.1%

D7E = EldoLED ECOdrive DALI control dims from 100% to 1%

**D7 / DIML7 / D7E
DALI CONTROLS**



DIMMING DRIVER WIRING SCHEMES:

NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS
- SAVE THESE INSTRUCTIONS**

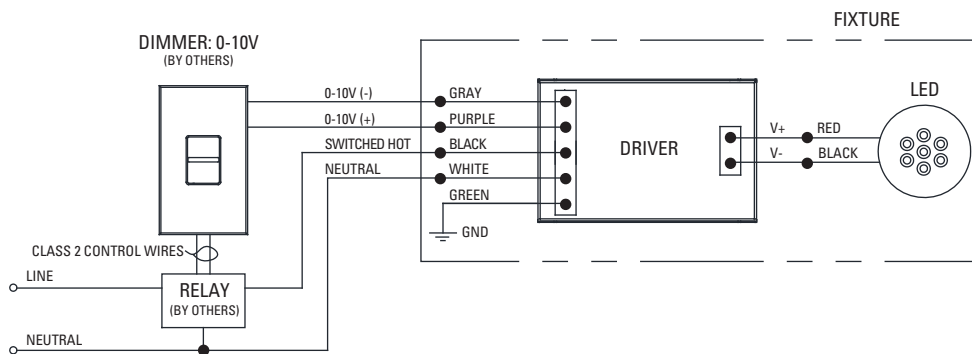
1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

D15 / DIML15 LED: 0-10V, 347V Dimming Driver Wiring (Dims down to 1%) 347V Only

D15 / DIML15 Dimmer Compatibility Chart			
Manufacturer	Product	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
347			Use source current per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
Acuity	Synergy ISD-BC	100% - 1%	
Douglas Lighting	WPN-5721, WPN-5822	100% - 1%	
Hubbell	Light Hawk2 LHD-IRS3-N347-xx	100% - 1%	
Leviton	Illumatech IP710-DLZ with 347V relay	100% - 1%	
Leviton	Centura Fluorescent Control System	100% - 1%	
Lutron	Nova NFTV-* dimmer plus 347V relay	100% - 1%	
Lutron	Diva DVTV-* dimmer plus 347V relay	100% - 1%	

* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**D15 / DIML15
0-10V DIMMING W/RELAY TO SWITCH POWER**



NOTE:
If switched, non-dimming operation is desired, cap off purple and gray wires individually at installation. Do NOT cap purple and gray wires together.

DIMMING DRIVER WIRING SCHEMES:

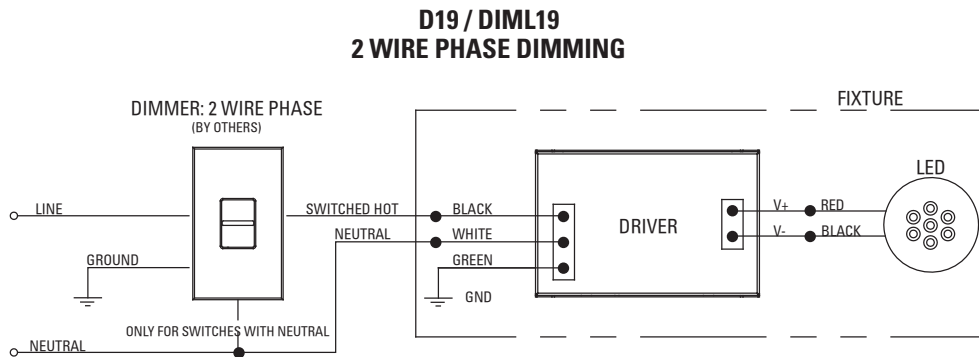
NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS
- SAVE THESE INSTRUCTIONS**

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

**D19 / DIML19 LED: Hatch XTC series or equivalent - Forward and Reverse Phase Dimming Driver.
Dims down to 1% contingent upon dimmer specification and load. 120V only.**



D19 / DIML19 Dimmer Compatibility Chart

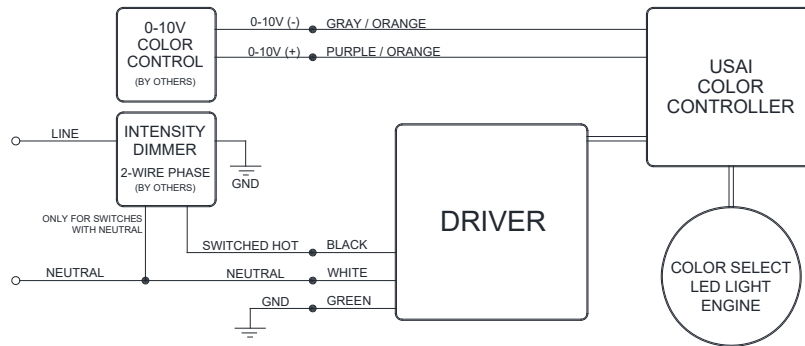
120V ONLY		
Forward Phase / TRIAC Dimming		
Manufacturer	Product	Qty Fixtures Per Dimmer
Leviton	IPL06-10Z	Use fixture wattage per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
	6613-xxx	
Lutron	S-600P	Use fixture wattage per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
	S-603P	
	DVSC-603P	
	CT-600P	
	CT-603P	

120V ONLY		
Reverse Phase / ELV Dimming		
Manufacturer	Product	Qty Fixtures Per Dimmer
Leviton	6615	Use fixture wattage per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
	IPE04-xxx	
Lutron	NTELV-300	Use fixture wattage per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
	NTELV-600	
	SELV-300P	
	SELV-303P	
	DVELV-300P	
	DVELV-303P	

INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

DIML3 LED: Lutron Hi-Lume A-Series 2 Wire Fwd Phase (with neutral) / LED Dimming Driver Wiring (Dims down to 1%) 120V only.



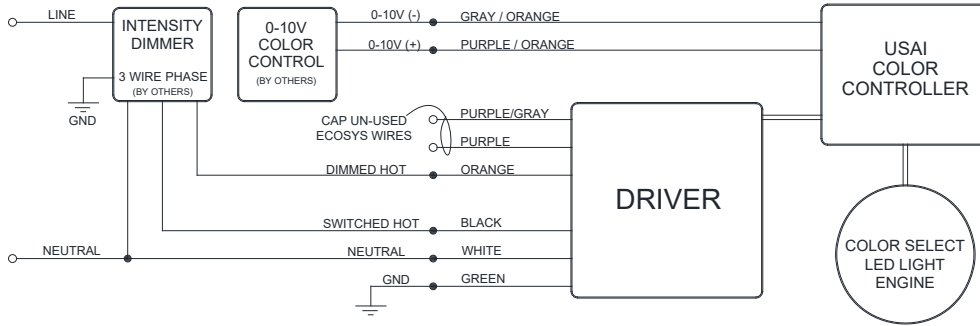
D3 / DIML3 Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*	
				39W and Less	40W - 80W
120V Only					
ETC	Sensor+ Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
ETC	Unison DRd Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
Lutron	Maestro Wireless® 600W dimmer	MRF2-6ND-120-	100% - 1%	1 - 8	1 - 4
Lutron	Maestro Wireless® 1000W dimmer	MRF2-10ND-120-	100% - 1%	1 - 13	1 - 6
Lutron	HomeWorks® QS adaptive dimmer	HQRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 600W dimmer	HQRD-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 1000 W dimmer	HQRD-10ND-	100% - 1%	1 - 13	1 - 6
Lutron	Caseta Wireless® Pro 1000W dimmer	PD-10NXD-	100% - 1%	1 - 13	1 - 6
Lutron	Stanza® dimmer	SZ-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 adaptive dimmer	RRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 1000 W dimmer	RRD-10ND-	100% - 1%	1 - 6	1 - 3
Lutron	myRoom DIN power module	MQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® QS wallbox power module	HQRJ-WPM-6D-120-	100% - 1%	1 - 26	1 - 13
Lutron	Homeworks® DIN power module	LQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® wallbox power module	HVI-WPM-6D-120	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® QS control unit	QSGR-, QSGRJ-	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® 3000 control unit	GRX-3100-, GRX-3500-	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4U module	HW-RPM-4U-120, LP-RPM-4U-120	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4A module	HW-RPM-4A-120, LP-RPM-4A-120	100% - 1%	1 - 26	1 - 13
Lutron	GP dimming panels	Various	100% - 1%	1 - 26	1 - 13
Lutron	Ariadni CL 250W dimmer	AYCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Diva CL 250W dimmer	DVCL-253P-, DVSCCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Grafik T CL or RF CL dimmer	GT-250M-, GTJ-250M-	100%-1%	1 - 8	1 - 4
Lutron	Nova T CL 250W dimmer	NTCL-250-	100%-1%	1 - 10	1 - 5

* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

DIML4 LED: Lutron Hi-Lume A-Series LED Driver with Eco System Control / LED Dimming Driver Wiring (Dims down to 1%)



D4 / DIML4 LED: Lutron Hi-Lume A-Series LED Driver with 3-Wire FL Control / LED Dimming Driver Wiring (Dims down to 1%)

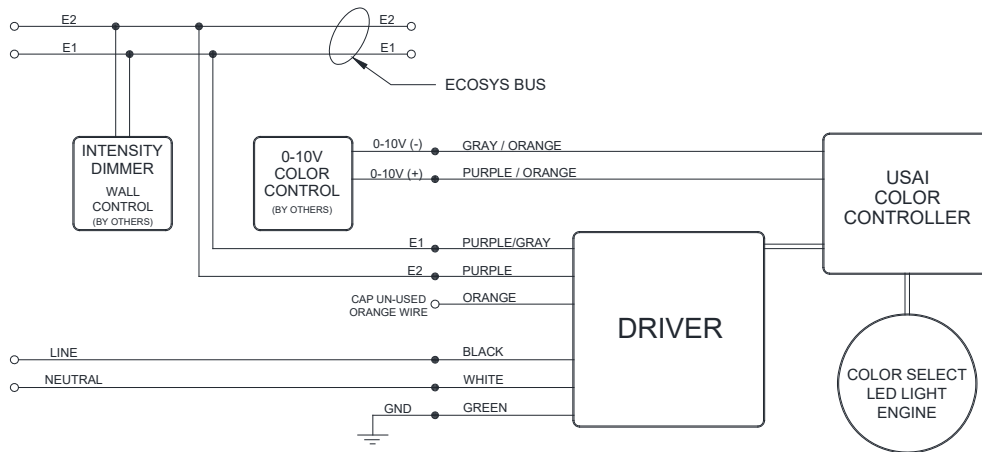
D4 / DIML4 3-Wire Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Fixture Wattage	
120V Only				39W and Less	40W - 80W
ETC	Sensor+ Cabinet	D20 Dimming module	100% - 1%	1-53	1-26
ETC	Unison DRd Cabinet	D20F Dimming module	100% - 1%	1-53	1-26
Lutron	Nova T	NTF-10-	100%-1%	1-41	1-20
Lutron	Nova T	NTF-103P-	100%-1%	1-20	1-10
Lutron	Nova	NF-10-	100%-1%	1-41	1-20
Lutron	Nova	NF-103P-	100%-1%	1-20	1-10
Lutron	Vareo	VF-10-	100%-1%	1-20	1-10
Lutron	Skylark	SF-10P-, SF-103P-	100%-1%	1-20	1-10
Lutron	Diva	DVF-103P-, DVSCF-103P-	100%-1%	1-20	1-10
Lutron	Ariadni	AYF-103P-	100%-1%	1-20	1-10
Lutron	Vierti	VTF-6A-	100%-1%	1-15	1-7
Lutron	Maestro	MAF-6AM-, MSCF-6AM-	100%-1%	1-15	1-7
Lutron	Maestro Wireless	MRF2-F6AN-DV-	100%-1%	1-15	1-7
Lutron	RadioRA 2	RRD-F6AN-DV-	100%-1%	1-15	1-7
Lutron	HomeWorks QS	HQRD-F6AN-DV	100%-1%	1-15	1-7
Lutron	Interfaces	PHPM-3F-120, PHPM-3F-DV	100%-1%	1-41	1-20
Lutron	GP Dimming Panels	Various	100%-1%	1-41	1-20
277V Only				40W and Less	41W - 80W
ETC	Sensor+ Cabinet	D20 Dimming module	100% - 1%	1-53	1-26
ETC	Unison DRd Cabinet	D20F Dimming module	100% - 1%	1-53	1-26
Lutron	Nova T	NTF-10-277-	100%-1%	1-44	1-22
Lutron	Nova T	NTF-103P-277-	100%-1%	1-33	1-16
Lutron	Nova	NF-10-277-	100%-1%	1-44	1-22
Lutron	Nova	NF-103P-277-	100%-1%	1-33	1-16
Lutron	Skylark	SF-12P-277-, SF-12P-277-3	100%-1%	1-33	1-16
Lutron	Diva	DVF-103P-277-, DVSCF-103P-277-	100%-1%	1-33	1-16
Lutron	Ariadni	AYF-103P-277-	100%-1%	1-44	1-22
Lutron	Vierti	VTF-6A-	100%-1%	1-33	1-16
Lutron	Maestro	MAF-6AM-277-, MSCF-6AM-277-	100%-1%	1-20	1-10
Lutron	Maestro Wireless	MRF2-F6AN-DV-	100%-1%	1-33	1-16
Lutron	RadioRA 2	RRD-F6AN-DV-	100%-1%	1-33	1-16
Lutron	HomeWorks QS	HQRD-F6AN-DV	100%-1%	1-33	1-16
Lutron	Interfaces	PHPM-3F-DV	100%-1%	1-88	1-44
Lutron	GP Dimming Panels	Various	100%-1%	1-88	1-44

* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

DIML4 LED: Lutron Hi-Lume A-Series LED Driver with Eco System Control / LED Dimming Driver Wiring (Dims down to 1%)



D4 / DIML4 LED: Lutron Hi-Lume A-Series LED Driver with EcoSystem Control / LED Dimming Driver Wiring (Dims down to

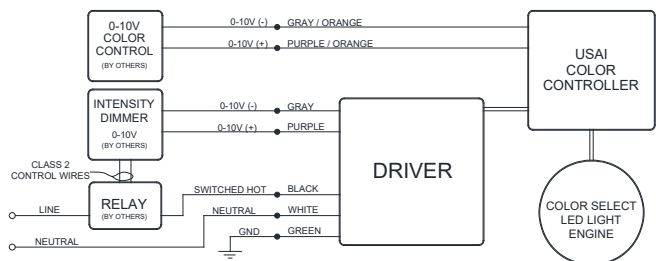
D4 / DIML4 EcoSystem Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Fixture Wattage	
120V / 277V				39W and Less	40W - 80W
Lutron	PowPak dimming module	RMJ-ECO32-DV-B	100%-1%	1-32	1-16
Lutron	Energi Savr Node	QSN-1ECO-S, QSN-2ECO-S	100%-1%	1-64	1-32
Lutron	GRAFIK Eye QS (120V ONLY)	QSGRJ- E, QSGR- E	100%-1%	1-64	1-32
Lutron	Quantum	Various	100%-1%	1-64	1-32

* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

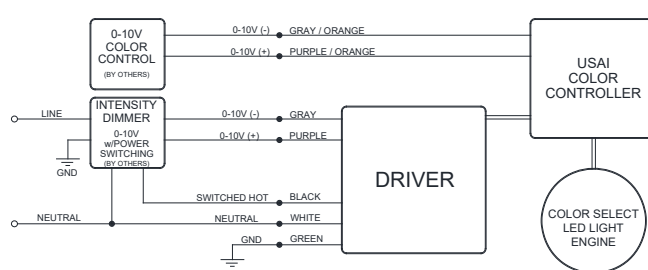
INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

0-10V Dimming w/ Relay Switch to Power



0-10V Dimming



D6A / DIML6A and D6E / DIML6E LED Dimming Compatibility Table

D6A / DIML6A and D6E / DIML6E are linearly programmed dimming drivers for use with the dimming controls listed in the table below

D6A / DIML6A = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1%

D6E / DIML6E = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6A / DIML6A and D6E / DIML6E Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
			DIML6A	6E	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
120V & 277V					
Lutron	Diva	DVTV/NFTV with PP-20	99% - 0.1%	1%	
Lutron	Nova T	NFTV with PP-20	99% - 0.1%	1%	
Lutron	Energi Savr Node	QSN-4T16-S	100% - 0.1%	1%	
Lutron	GP Dimming Panels	TVM2 Module	99% - 0.1%	1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% - 0.1%	1%	
Sensor Switch	nIO	nIO EZ	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

D6B / DIML6B and D6F / DIML6F LED Dimming Compatibility Table

D6B / DIML6B and D6F / DIML6F are logarithmic-programmed dimming drivers for use with the dimming controls listed in the table below

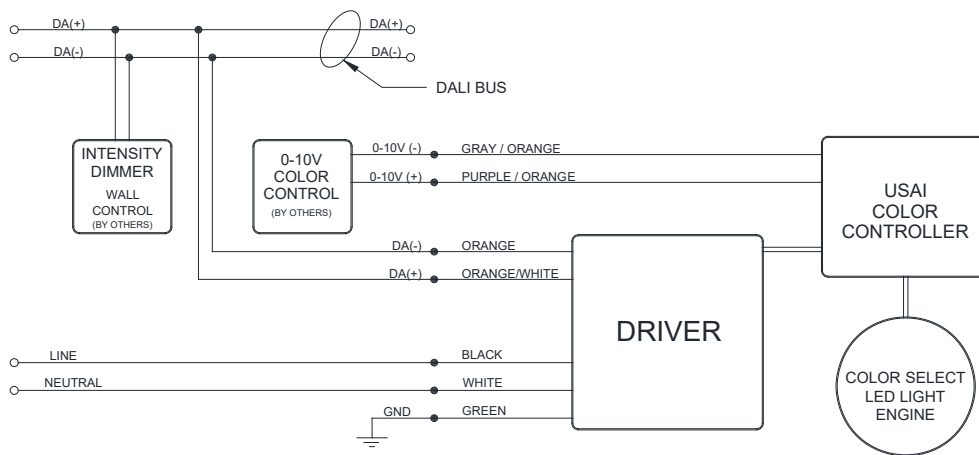
D6B / DIML6B = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1% D6F / DIML6F = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6B / DIML6B and D6F / DIML6F Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
			DIML6B	6F	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
120V & 277V					
Bush-Jaeger	Electronic potentiometer	2112U-101	100% - 0.1%	1%	
Jung	Electronic potentiometer	240-10	100% - 0.1%	1%	
Leviton	Iluma Tech dimmer	IP710-DLX	100% - 0.1%	1%	
Lightolier (Philips)	Momentum (120V ONLY)	ZP600FAM120	100% - 0.1%	1%	
Merten	Electronic potentiometer	5729	100% - 0.1%	1%	
Pass & Seymour	Titan	CD4FB-W	100% - 0.1%	1%	
Watt Stopper	Miro	DCLV1	100% - 0.1%	1%	
Synergy	Wallbox Dimmers	ISD BC	100% - 0.1%	1%	
ABB	i-bus	SD/S 2.16.1	100% - 0.1%	1%	
Crestron	Modules	GLX-DIMFLV8, GLXP-DIMFLV8	100% - 0.1%	1%	
Crestron	Green Light	GLPAC-DIMFLV4-, GLPAC-DIMFLV8-	100% - 0.1%	1%	
Crestron	Green Light Power Pack	GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM	100% - 0.1%	1%	
Crestron	DIN Rail Analog Output Module	DIN-A08	100% - 0.1%	1%	
Crestron	DIN Rail 0-10V Fluorescent Dimmer	DIN-4DIMFLV4	100% - 0.1%	1%	
Crestron	iLux 0-10V Dimmer Expansion Module	CLS-EXP-DIMFLV	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

DIML7 LED: eLdoLED DALI dimming driver (dims down to 0.1%)

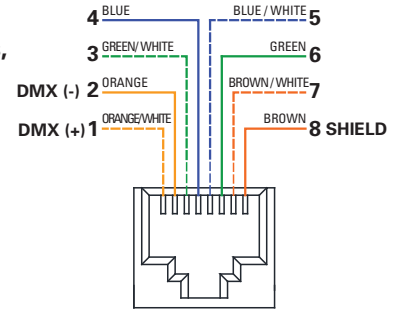


NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

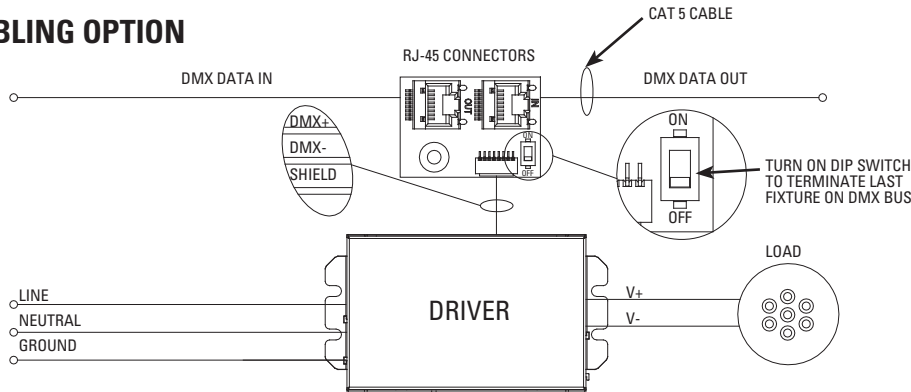
DMX1M: EldoLED DMX dimming with manual addressing, 8-bit (Dims down to 0%)

DMX2M: EldoLED DMX dimming with manual addressing, 16-bit (Dims down to 0%)

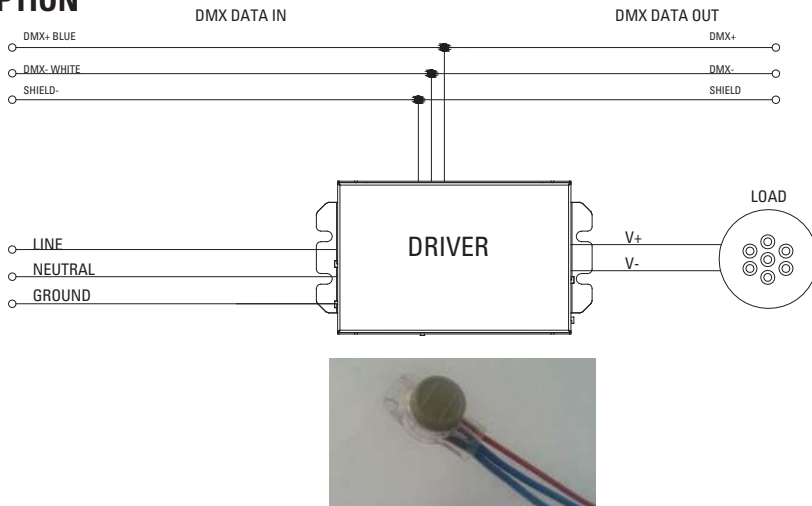
Choose from **WR** (splice connection), **RJ** (RJ45 jacks) and **XL** (XLR5 connectors) cabling options, and refer to corresponding wiring diagram below:



RJ CABLING OPTION



WR OPTION



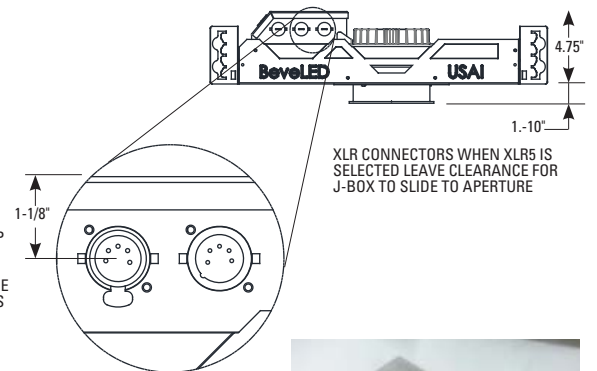
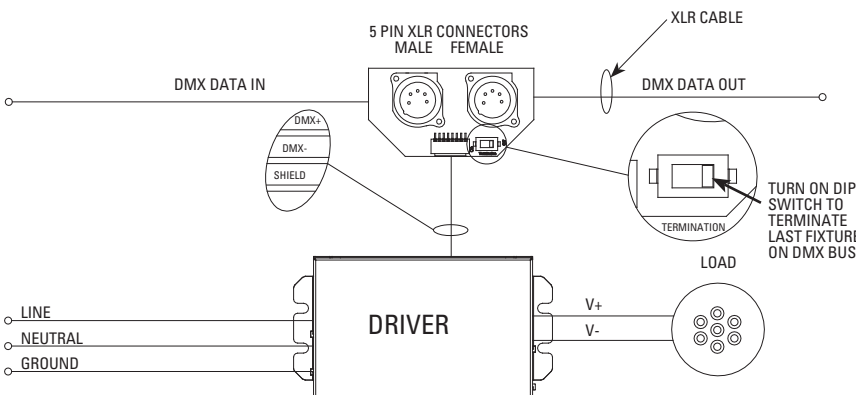
• **WR Cabling Option:** no interface board is supplied; cables must be spliced inside the junction box for connection. The data cable used must meet the following requirements:

- type: shielded, 2-conductor twisted pair
- maximum capacitance between conductors: 30 pF/ft
- maximum capacitance between conductor and shield: 55 pF/ft
- maximum resistance: 0.02 ohms/ft
- normal impedance: 100-140 ohms
- conductive core: 24 AWG is recommended

If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables: they cannot transmit DMX512 data reliably over long distances. **NOTE:** DMX link termination device (by others) should be used on last fixture in line on a circuit to avoid signal loss.

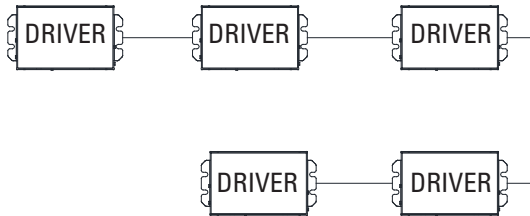
XL CABLING OPTION

NOTE: This cabling option requires above ceiling access.

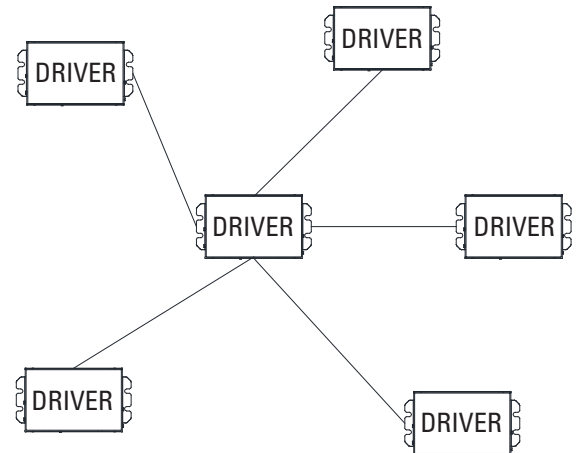


DMX MUST BE DAISY CHAINED IN SINGLE LINE

CORRECT !



INCORRECT !



NOTES FOR DRIVERS:

1. DMX signal cable must NOT be run in same conduit as high voltage AC power lines.
2. Fixtures must be daisy chained in one serial line using Data in and Data out
3. Maximum of 32 DMX devices on a single DMX bus
4. Maximum of 1600 ft serial communication link distance
5. To avoid signal loss, DMX signal terminator should be used on last fixture in line. For RJ and XL cabling options, this is provided through a dip-switch on the connector board. For WR cabling options, this device (120 ohm resistor) is provided by others.
6. For best results when using WR cabling option use communication data splices.
7. Default state for fixtures off. Luminaire will not light until DMX signal is received.