

# BeveLED<sup>®</sup> BASIC



# DOWNLIGHT 1020




1" REGRESS

## PROJECT INFORMATION

PROJECT \_\_\_\_\_  
 \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TYPE \_\_\_\_\_

**BeveLED Basic Recessed Downlight** - Our narrow footprint housing provides an economical architectural solution while delivering high performance with LEDs.

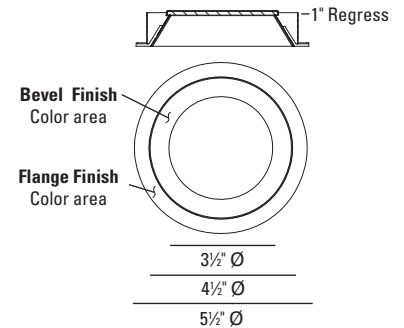
## DELIVERED PERFORMANCE

BeveLED Basic DOWNLIGHT 	14 Watts	20 Watts
Color Rendering Index	80+ CRI	80+ CRI
Lumens per Watt	66	59
Source Lumens	1100	1500
<b>Delivered Lumens</b>	<b>975</b>	<b>1250</b>
Color Consistency	2-Step MacAdam Ellipse	

Performance based on 3000K

CCT MULTIPLIER	2700K	3000K	3500K
Color Rendering Index	80+ CRI	80+ CRI	80+ CRI
Multiplier for Lumen Output	1.00	1.00	1.08

1" Regress

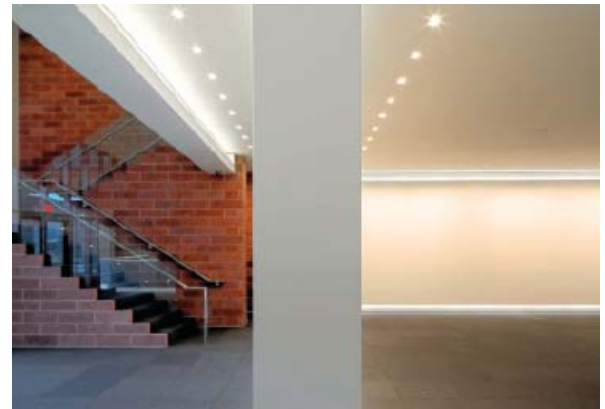


## HOW TO SPECIFY

**Ordering Example:** Specify trim code and housing code to order: Example : **1020W - B1 - 10 - LRTD4 - 9014 - M2 - 27KS - 30 - NCSM - 277V - DIML2 - CB27**

### TRIM ORDERING INFORMATION

TRIM	OPTION	BEVEL STYLE	FLANGE FINISH
1020	_____	_____	_____
<b>1020</b> Round Downlight 1" Regress	<b>W</b> Wet location <sup>1</sup> <b>EML</b> Emergency <sup>2</sup> <b>EMLW</b> Emergency and wet location <sup>1,2</sup> <b>TZ</b> TechZone <sup>2</sup> (NCSM only)	<b>B1</b> 1" Regress Bevel, Die Cast <b>AB1</b> 1" Regress Bevel, Black Anodized <b>AC1</b> 1" Regress Bevel, Clear Matte	<b>01</b> Clear Matte (w/ AC1 Bevel) <b>02</b> Black Anodized (w/ AB1 Bevel) <b>10</b> White <b>13</b> Statuary Bronze <b>21</b> Black <b>28</b> Metalized Grey <b>RAL</b> Custom Color (specify RAL #)
	<sup>1</sup> Wet location, use with B1 trims only. <sup>2</sup> not for use with IC housing.		

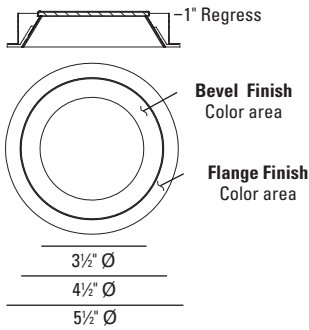


### HOUSING ORDERING INFORMATION

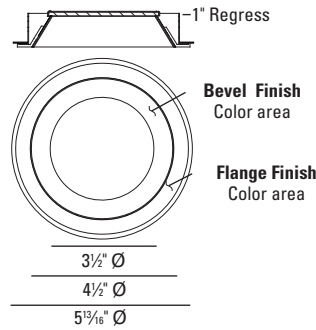
HOUSING CODE	WATTAGE	ENGINE CODE	COLOR	REFLECTOR	HOUSING TYPE	VOLTAGE	OPTIONAL DIMMING DRIVER	ACCESSORIES
LRTD4	_____	M2	_____	_____	_____	_____	_____	_____
<b>LRTD4</b>	<b>9014</b> 14W LED, 975 lumens <b>9020</b> 20W LED, 1250 lumens	<b>M2</b>	<b>27KS</b> 2700K, 80+ CRI <b>30KS</b> 3000K, 80+ CRI <b>35KS</b> 3500K, 80+ CRI	<b>30</b> 30° beam <b>50</b> 50° beam <b>80</b> 80° beam	<b>NCSM</b> New Construction, Narrow Width <b>IC</b> Insulation-Contact Rated / Airtight	<b>120V</b> <b>277V</b>	<b>DIML2</b> 0-10V dim, 10% <b>DIML3</b> Lutron Hi-Lume 1% 2-wire, 120V only <b>DIML4</b> Lutron Hi-Lume 1% 3-wire/ECO <b>DIML6A</b> ELDO 0-10V 0.1%, logarithmic <b>DIML6B</b> ELDO 0-10V 0.1%, linear <b>DIML7</b> ELDO DALI 0.1% <b>DIML9</b> TRIAC 15% 2-wire, 120V only <b>DIML10</b> ELV 15% 2-wire, 120V only	<b>CB27</b> 27" C-Channel Bars <b>CB52</b> 52" C-Channel Bars <b>EML</b> Emergency battery <sup>3</sup> <b>EMLW</b> Emergency battery, wet location <sup>3</sup> <b>TZ</b> TechZone ceiling compatible <sup>4</sup>
			2 Step MacAdam ellipse is standard for all					<sup>3</sup> NCSM housings require above ceiling access. Not for use with IC housing. <sup>4</sup> With NCSM housing only

## TRIM INFORMATION

### 1" Regress

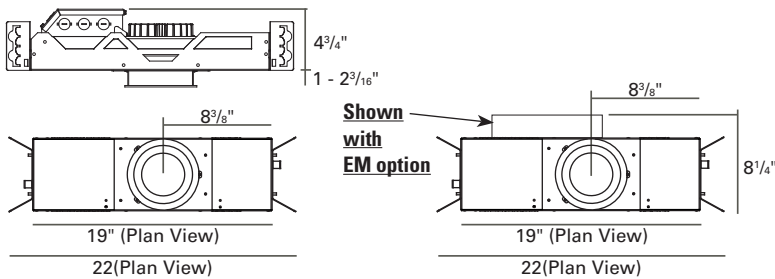


### 1" Regress - TechZone Compatible

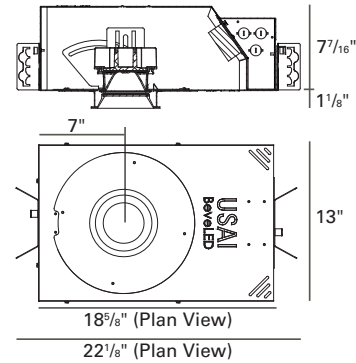


## HOUSING INFORMATION

### New Construction, Narrow Width - NCSM



### IC / Airtight - IC



## SPECIFICATIONS

**TRIM:** 4-1/2" round aperture with a 1" regressed bevel and 1/2" flange, retained by two mounting clips. Die cast aluminum bevel is self-flanged and is available in white, statury bronze, black, and metalized grey finishes. Also available in black anodized or clear matte bevel, with self finish or painted flange. Custom color flanges available (provide RAL#).

**TRIM LENS:** Trim is shipped with integral solite lens standard.

**REFLECTOR:** Interchangeable precision injection molded specular polycarbonate reflector optimized for 30°, 50° or 80° beam distribution.

**FIELD REPLACEABLE LIGHT ENGINE:** Available in 2 lumen packages: 14W (975 delivered lumens) and 20W (1250 delivered lumens). Engine is field replaceable through the aperture without tools.

**COLOR:** BeveLED is available in 3 color temperatures (2700K, 3000K, 3500K). All color options are tightly binned for fixture-to-fixture color consistency within a 2-Step MacAdam Ellipse. 80+ color rendering index provided standard.

**RATED LIFE:** Based on IESNA LM80-2008 50,000 hours at 70% lumen maintenance (L70).

**THERMAL MANAGEMENT:** Proprietary high performance aluminum die cast heatsink for maximum LED life. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

**FIELD REPLACEABLE DRIVER:** Solid state electronic constant current driver with a high power factor provided standard. Specify 120V or 277V. Driver complies with IEEE C62.41 surge protection.

**DIMMING OPTIONS:** Multiple dimming drivers available. See compatibility chart attached. Some on-time delay may be experienced depending on control system used. Note: DIML6A logarithmic control is intended for use with Lutron control systems; DIML6B linear control is intended for use with non-Lutron controls. DIML2 and DIML6 drivers source 2mA.

**EMERGENCY:** Emergency lighting battery pack is provided with remote test switch and require above ceiling access for service. EM option is not available with IC housings.

**MOUNTING:** Butterfly brackets and adjustable nailer bars with integral nails provided. Nailer bars are extendible from 14" to 24" centers.

**HOUSING:** Fabricated of 20 ga. galvanized steel with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring. IC rated housing rated for direct contact with insulation. NCSM with TZ option is compatible with TechZone ceiling systems.

**MAXIMUM CEILING THICKNESS:** As per drawings above.

**CEILING CUT OUT:** 5-1/16" Ø

**LISTINGS:** Dry/Damp. Wet location option available with B1 trim only. NRTL/CSA-US tested to UL standards. IBEW union made.

**WARRANTY:** 5 years



### 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 LM79-2008.

**DIMMING DRIVER WIRING SCHEMES:**

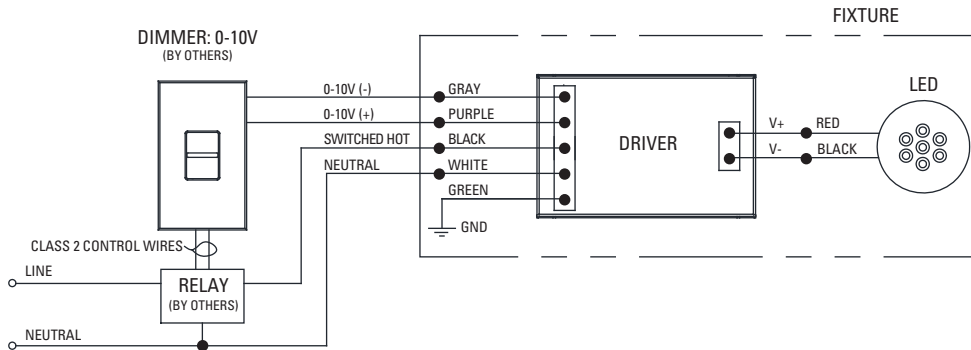
Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**DIML2 LED: 0-10V Dimming Driver Wiring (Dims down to 10%)**

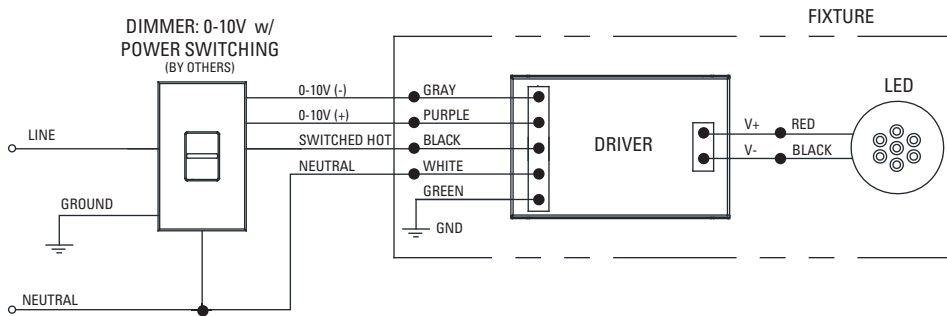
DIML2 Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V / 277V</b>				
Crestron	iLux dimmer expansion module	CLS-EXP-DIMFLV	100% - 10%	Use source current per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
Crestron	DIN Rail dimmer	DIN-4DIMFLV4	100% - 10%	
Crestron	DIN Rail analog output module	DIN-A08	100% - 10%	
Crestron	8 Channel dimmer module	GLX-DIMFLV8	100% - 10%	
Crestron	8 Channel dimmer module	GLXP-DIMFLV8	100% - 10%	
Leviton	IllumaTech dimmer	IP710-DLX	100% - 10%	
Lightolier (Philips)	Vega	V2000FAMU	100% - 10%	
Lutron	Diva	DVTV-XX	100% - 10%	

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

**DIML2  
0-10V DIMMING W/RELAY TO SWITCH POWER**



**DIML2  
0-10V DIMMING (NO RELAY)**



**DIMMING DRIVER WIRING SCHEMES:**

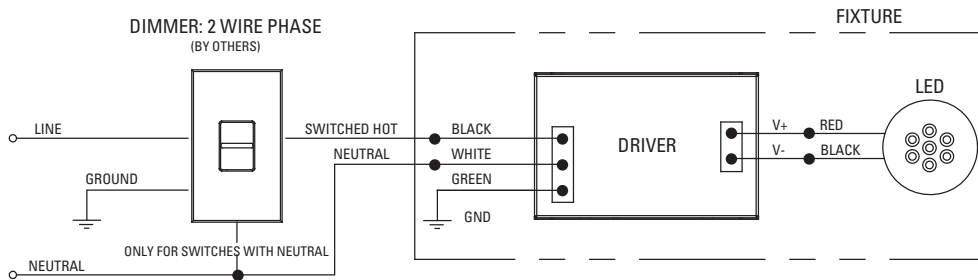
Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

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

DIML3 Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*	
				Typical	High Wattage
<b>120V Only</b>					
				40W and Less	41W - 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® dimmer	MRF2-6ND-120-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS adaptive dimmer	HQRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 60W dimmer	HQRD-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 1000 W dimmer	HQRD-10ND-	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 - 13	1 - 6
Lutron	HomeWorks® QS wallbox power module	HQRJ-WPM-6D-120-	100% - 1%	1 - 26	1 - 13
Lutron	HomeWorks® wallbox power module	HWI-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

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

**DIML3  
2 WIRE PHASE DIMMING**



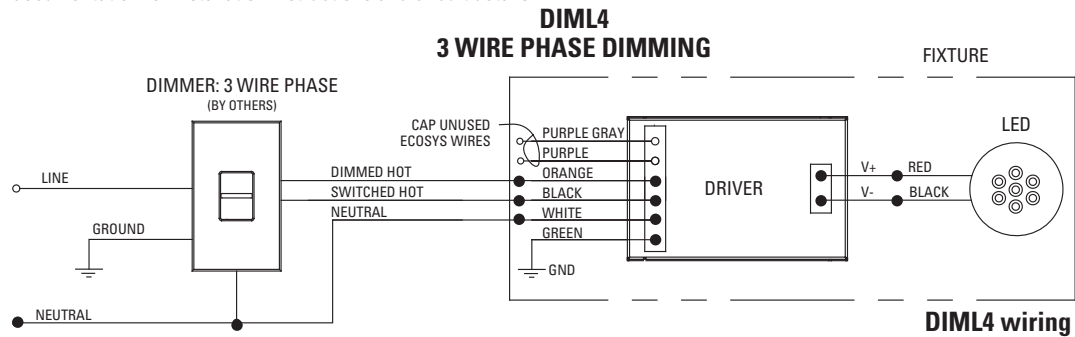
**DIMMING DRIVER WIRING SCHEMES:**

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 3-Wire FL Control / LED Dimming Driver Wiring (Dims down to 1%)**

DIML4 3-Wire Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Typical 40W and Less	High Wattage 41W - 80W
<b>120V Only</b>					
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	RadioTouch	RTA-RX-F-	100%-1%	1-41	1-20
Lutron	Spacer System	SPSF-6A-, SPSF-6AM-	100%-1%	1-15	1-7
Lutron	Lyneo Lx	LXF-103PL-	100%-1%	1-20	1-10
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, GRX-FDBI-16A	100%-1%	1-41	1-20
Lutron	GP Dimming Panels	Various	100%-1%	1-41	1-20
<b>277V Only</b>				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	RadioTouch	RTA-RX-F-	100%-1%	1-88	1-44
Lutron	Spacer System	SPSF-6A-277-, SPSF-6AM-277-	100%-1%	1-20	1-10
Lutron	Lyneo Lx	LXF-103PL-277-	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, GRX-FDBI-16A	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.



DIML4 wiring diagrams continued on next page

**DIMMING DRIVER WIRING SCHEMES:**

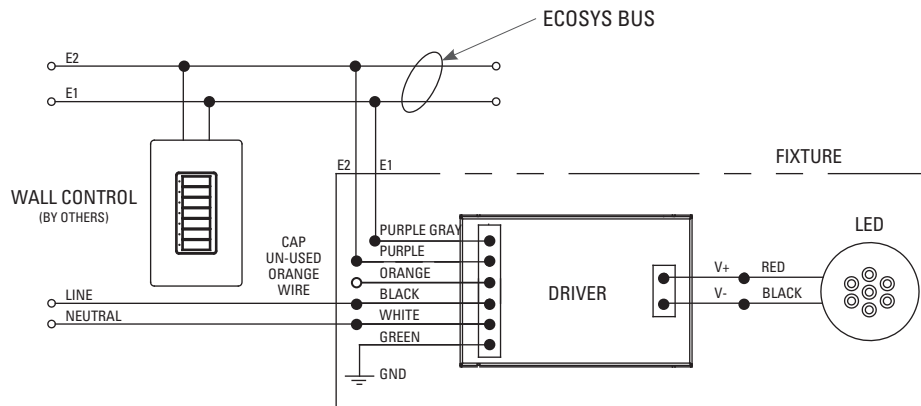
Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

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

DIML4 3-Wire Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Typical	High Wattage
<b>120V / 277V</b>					
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.

**DIML4  
ECOSYS CONTROLS**



**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.

**DIML6A LED: EldoLED SOLOdrive 561/S 0-10V control 100%-0.1% linear-programmed dimming driver for use with logarithmic-style controls (e.g., Lutron and others listed in the table below)**

DIML6A Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V &amp; 277V</b>				
Lutron	Diva	DVTV/NFTV/NTFTV with PP-20	99% - 0.1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer.
Lutron	Energi Savr Node	QSN-4T16-S	100% - 0.1%	
Lutron	GP Dimming Panels	TVM2 Module	99% - 0.1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% - 0.1%	
Sensor Switch	nIO	nIO EZ	100% - 0.1%	

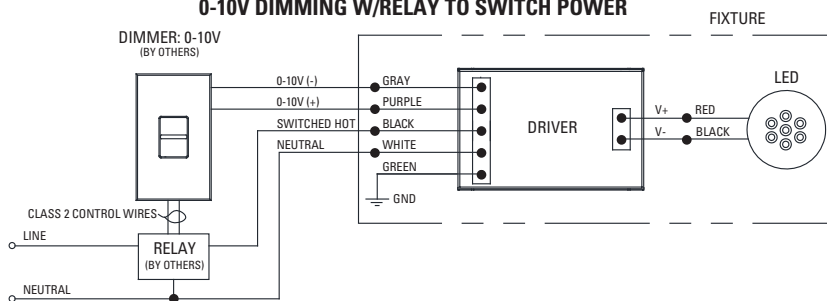
\* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**DIML6B LED: EldoLED SOLOdrive 561/S 0-10V control 100%-0.1% logarithmic-programmed dimming driver for use with linear-style controls (e.g., Crestron, non-Lutron, and others listed in the table below)**

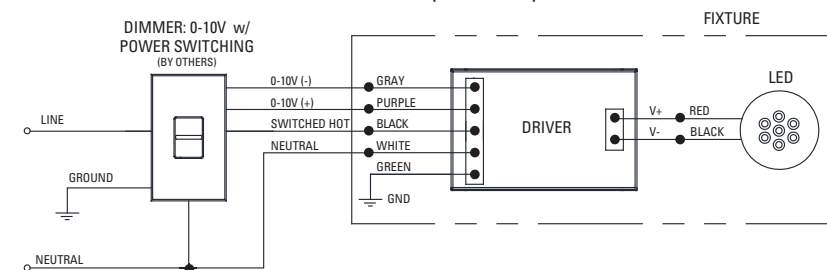
DIML6B Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V &amp; 277V</b>				
Bush-Jaeeger	Electronic potentiometer	2112U-101	100% - 0.1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer.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

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

**DIML6A, 6B  
0-10V DIMMING W/RELAY TO SWITCH POWER**



**DIML6A, 6B  
0-10V DIMMING (NO RELAY)**

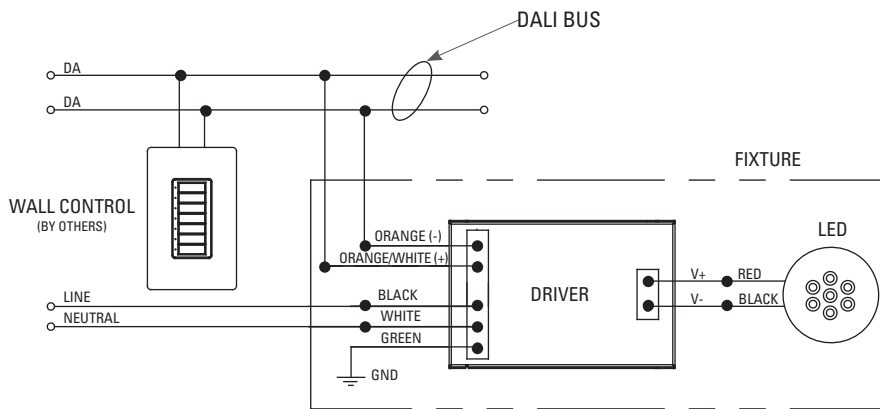


**DIMMING DRIVER WIRING SCHEMES:**

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 Wiring (Dims down to 0.1%)**

**DIML7  
DALI CONTROLS**



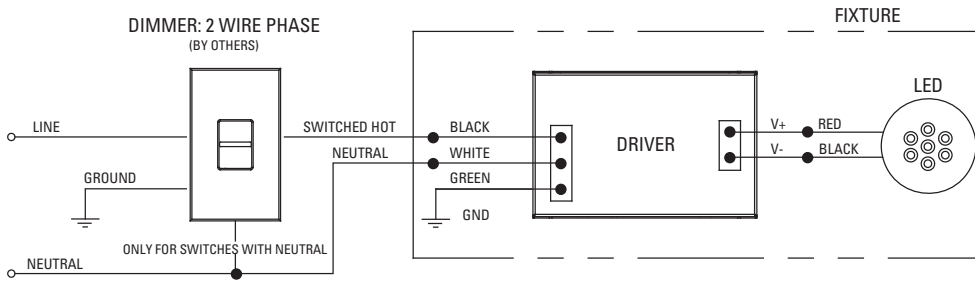


**DIMMING DRIVER WIRING SCHEMES:**

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.

**DIML9 LED: TRIAC Forward Phase Dimming Driver Wiring (Dims down to 15%) 120V Only**

**DIML9  
2 WIRE PHASE DIMMING**



**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.

**DIML10 LED: ELV Reverse Phase Dimming Driver Wiring (Dims down to 15%) 120V Only**

