

**PROJECT:**

**TYPE:**

### Features

The FINCH family of recessed downlights with a 1" aperture, features exceptional output, and a broad range of configurations to provide discreet quality illumination while integrating into the architecture. It is available in fixed, adjustable (30° tilt) and wall wash. Round or square, trimmed, trimless or millwork and is serviceable from below.

The FINCH recessed downlight can be coupled with the surface cylinder to create a broader composition and a unique design.



### Product Overview

Type: Recessed Square Downlight  
 Wattage: 6W, 8W, 10W, 12W  
 Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K  
 CRI: 80+ or 90+ typ.  
 Dimming: 0-10V, DALI, TRIAC/ELV, Hi-lume®

### Certifications



### Fixture Summary

#### Performance Data

Watts	Delivered Lumens	LPW	Color Temp	CRI
6	667	115	3000K	80+
8	823	100.4	3000K	80+
10	979	95	3000K	80+
12	1112	87.1	3000K	80+

Data is based on Wide Flood optics, 120V, 3000K, 80+ IES files available on website.

#### Electrical Data

Voltage	6W		8W		10W		12W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	5.8	0.05	8.2	0.06	10.3	0.08	12.7	0.10
277V	6.2	0.03	8.5	0.04	10.4	0.04	12.6	0.05

Electronic constant current LED driver.

Data is based on tests using TRIAC/ELV (LE/TE) driver.

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**1" Recessed Square Downlight Housing/Frame Ordering Information**

<b>1</b>	<b>2</b>	<b>3</b>
<b>1 Model</b>	<b>2 Style</b>	<b>3 Options/Accessories</b>
<b>FIN-SD-NC</b> (non-IC) <b>FIN-SD-CP</b> (Chicago Plenum (CEEA), 10W max) <b>FIN-SD-IC</b> (Insulated Ceiling/air tight, 10W max)	<b>T</b> trimmed <b>TL</b> trimless <b>MWK</b> millwork	<b>HB49</b> - hanger bars from min 29" to max 49" <i>Note: 26" hanger bars are included as standard.          Choose <b>HB49</b> option above for larger mounting spaces only.</i>

**1" Recessed Square Downlight Trim Ordering Information**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>1 Model</b>	<b>2 Style</b>	<b>3 Finish</b>		<b>4 Beam Spread</b>	
<b>FIN-SD</b> downlight <b>FIN-SSHW</b> shower (available for use with trimmed (T) style only)	<b>T</b> trimmed <b>TL</b> trimless <b>MWK</b> millwork	<u>Trimmed</u> <b>MBW</b> matte black, white flange <b>MWW</b> matte white, white flange <b>SLVW</b> matte silver, white flange <b>MBB</b> matte black, black flange <b>SLVS</b> matte silver, silver flange _____ other <i>(RAL#, consult factory for lead time)</i>		<u>Trimless/Millwork</u> <b>MB</b> matte black <b>MW</b> matte white <b>SLV</b> matte silver _____ other <i>(RAL#, consult factory for lead time)</i>	
<b>5 Color Temp and CRI</b>			<b>6 Options/Accessories</b>		
<b>80+ CRI</b> <b>90+ CRI</b> <b>30</b> 3000K, 80+ <b>249</b> 2400K, 90+ <b>35</b> 3500K, 80+ <b>279</b> 2700K, 90+ <b>40</b> 4000K, 80+ <b>309</b> 3000K, 90+ <b>359</b> 3500K, 90+ <b>409</b> 4000K, 90+		<b>SOL</b> solite beam softening lens (comes standard with RSHW trim) <b>HEX</b> hexcell louver (not available for use with RSHW trim) <b>LS</b> linear spread lens 10°x60°			

**Remote Driver Ordering Information**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1 Model</b>	<b>2 Wattage</b>	<b>3 Driver</b>	<b>4 Drive Enclosure Options</b>
<b>FINPW</b>	<b>6</b> 6W (623 lm) <b>8</b> 8W (789 lm) <b>10</b> 10W (914 lm) <b>12</b> 12W (1039 lm)	<b>O-10V</b> 0-10V dimming, 1% dim, 120/277VAC <b>DALI</b> DALI dimming, 1% dim, 120/277VAC <b>LE/TE</b> TRIAC/ELV dimming, 5% dim, 120/277VAC <b>HILUME-H-ECO</b> - Lutron LDE1 Hi-lume® 1% dim Soft-On/ Fade-to-Black, 120/277VAC (for use with 10W & 12W only)	<b>MP</b> mounting plate (standard) <b>RBX</b> remote box (1 driver) <b>RBX2</b> remote box (2 drivers)

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**Specifications**

**Construction**

- Galvanized steel frame
- Galvanized steel splice housing and hanger brackets
- Screwless plaster frame with perforated face for easier installation  
*(for trimless version only)*
- Aluminum heatsink
- Die-cast aluminum trim

**Optical**

- Beam Spreads: Spot 18°, Flood 28°, Wide Flood 34°,  
Very Wide Flood 52°, Linear Spread 10°x60°

**LED**

- Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K
- CRI: 80+ typ. *(3000K, 3500K, 4000K)*  
90+ typ. *(2400K, 2700K, 3000K, 3500K, 4000K)*
- R9 Values: 11 *(83 CRI)*; 55 *(92 CRI)*
- Binning: 3 MacAdam *(SDCM)*
- Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

**Electrical**

- Wattage: 6W, 8W, 10W, 12W
- Electronic constant current remote LED driver, 120/277VAC input

**Finish**

- Powder coat paint/wet paint
- Consult factory for custom finishes*

**Mounting**

- 26" Hanger bars included.
- Optional **HB49** - hanger bars from min 29" to max 49" available.

**Trimmed Fixture:**

For use in grid or sheetrock ceilings, 1" max ceiling thickness.

**Trimless Fixture:**

For use in sheetrock ceilings, 1" max ceiling thickness.

**Millwork Fixture:**

Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material. 1" max ceiling thickness.

**Certifications**

- CSA tested to UL standards
- Indoor use only
- Chicago Plenum *(optional)*
- IC/AT rated *(optional)*
- Damp location

**Warranty**

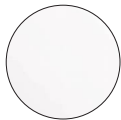
- 5 year limited warranty

**Finish Options**

Powder coat paint.  
Consult factory for custom finishes.



Matte Black



Matte White



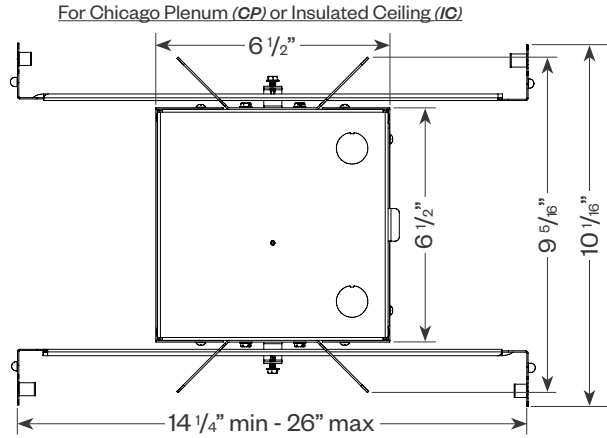
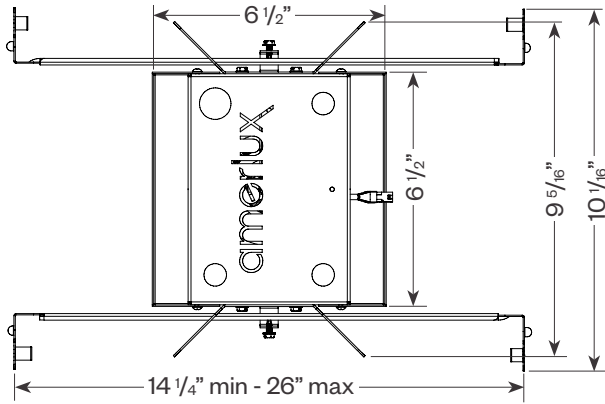
Matte Silver

PROJECT:

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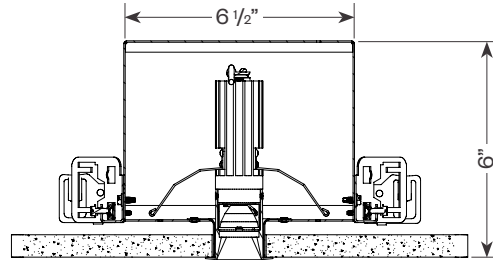
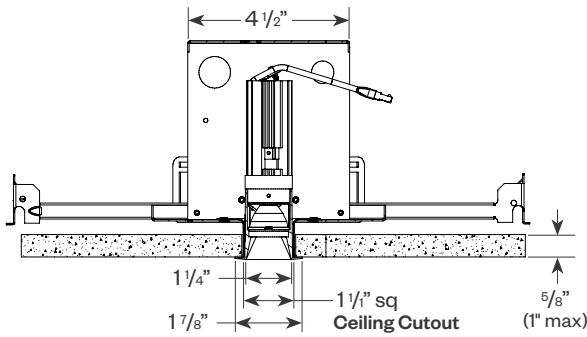
**Product Details - Trimmed**

Housing/Frame

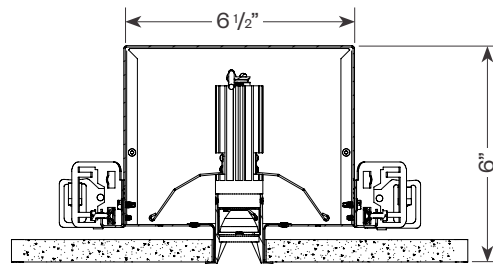
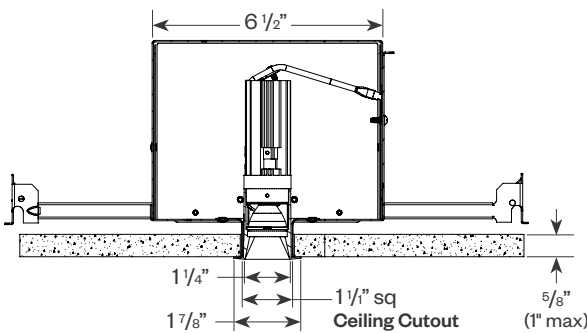


Trimmed

FIN-SD-NC.T



FIN-SD-CP/IC.T



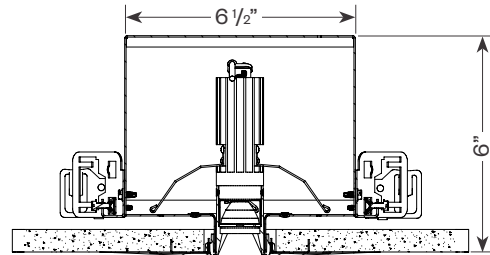
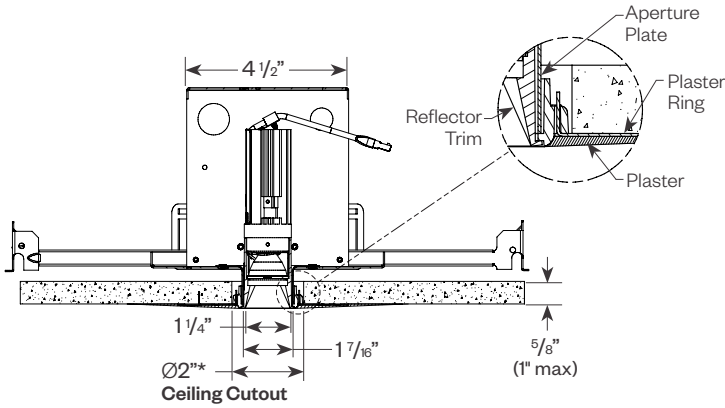
PROJECT:

TYPE:

**Product Details - Trimless and Millwork**

**Trimless**

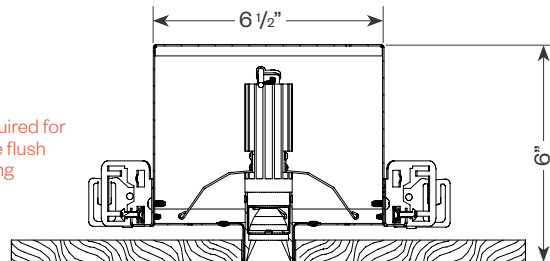
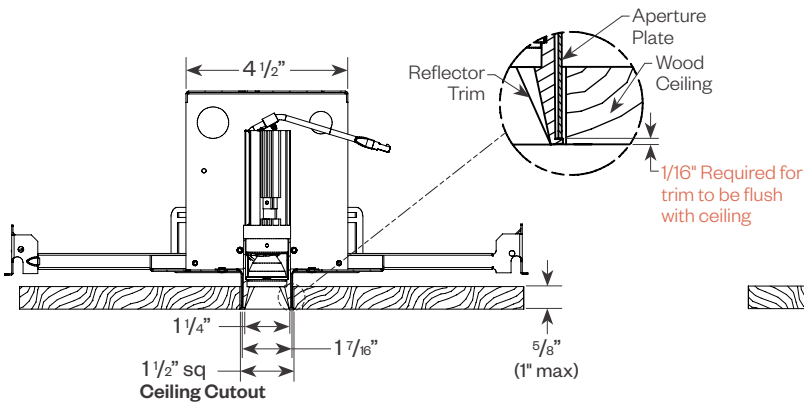
FIN-SD-NCTL



*\* Note: Round cutout will work for this application.*

**Millwork**

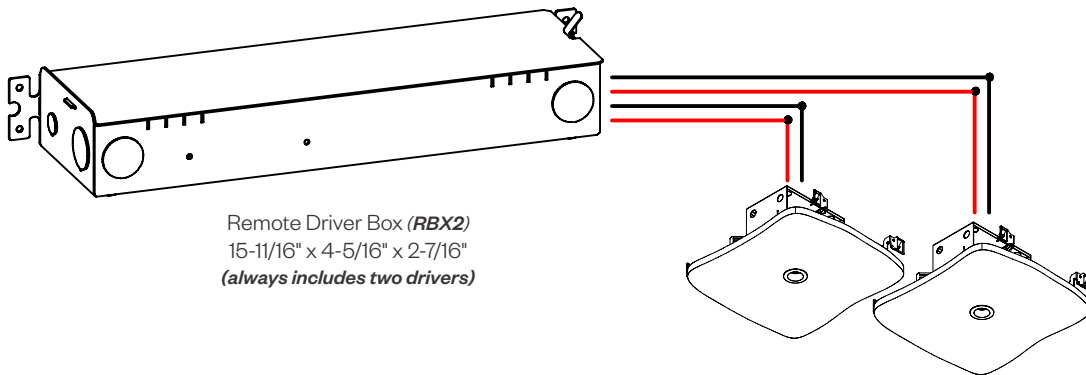
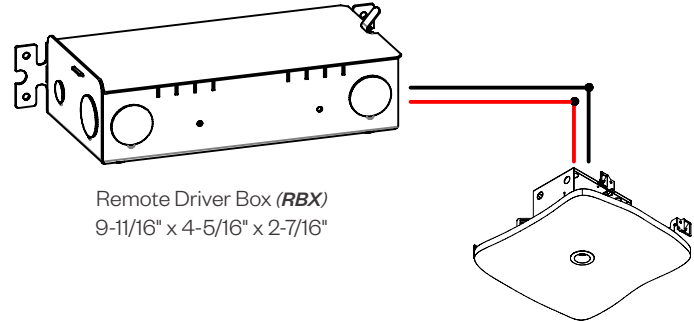
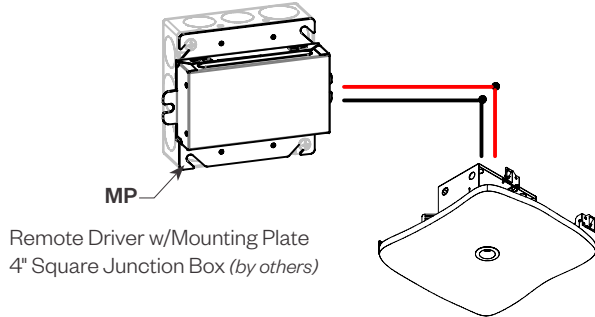
FIN-SD-NC.MWK



PROJECT:

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**Enclosure Options for Remote Driver**



**Note:** Maximum remote wiring distance is 100 linear feet of 18 AWG wire and 50 linear feet of 22 AWG wire.

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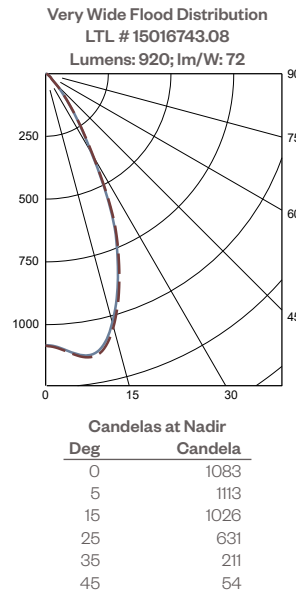
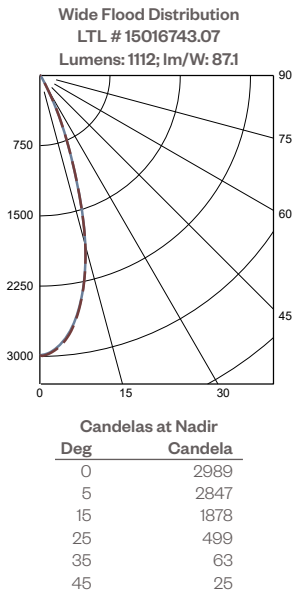
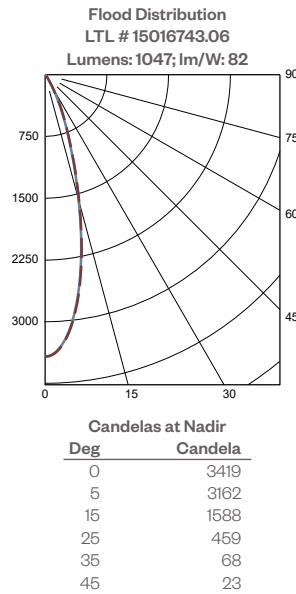
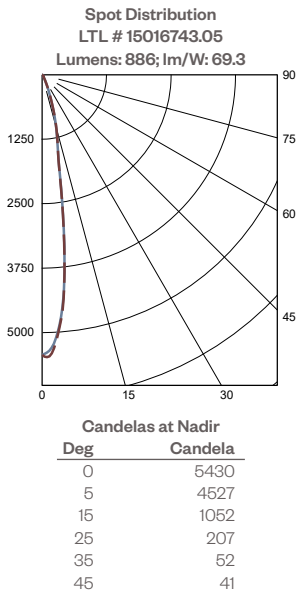
**Performance Data**

**Multiplying Factors:** (Multiplying Factor is based on 3000K, 80+, 120V IES file on website)

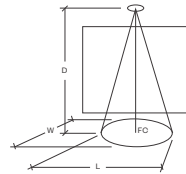
<b>Wattage:</b>	<b>6W</b>	<b>8W</b>	<b>10W</b>	<b>12W</b>
Factor:	0.60	0.74	0.88	1.0

<b>CCT:</b>	<b>3000K, 80+</b>	<b>3500K, 80+</b>	<b>4000K, 80+</b>	<b>2400K, 90+</b>	<b>2700K, 90+</b>	<b>3000K, 90+</b>	<b>3500K, 90+</b>	<b>4000K, 90+</b>
Factor:	1.0	1.04	1.06	0.76	0.83	0.88	0.92	0.93

**12W, 3000K, 80+**



**Application Data**



**Notes and Definitions:**

- Beam spread is to 50% center beam candlepower (CBCP).
- D**=Distance to floor or wall.
- FC**=Footcandles on floor or wall at center beam aiming location.
- L**=Effective Visual Beam length in feet (50% of maximum footcandle level).
- W**=Effective Visual Beam width in feet (50% of maximum footcandle level).

**Spot**  
0° Aiming Angle  
Horizontal Footcandles

D	FC	L	W
5.0'	148	1.9	1.9
7.5'	81	2.6	2.6
10.0'	49	3.2	3.2
12.5'	33	3.8	3.8

**Flood**  
0° Aiming Angle  
Horizontal Footcandles

D	FC	L	W
5.0'	115	2.7	2.7
7.5'	56	3.7	3.7
10.0'	33	5.0	5.0
12.5'	21	6.1	6.1

**Wide Flood**  
0° Aiming Angle  
Horizontal Footcandles

D	FC	L	W
5.0'	107	3.0	3.0
7.5'	50	4.5	4.5
10.0'	29	5.9	5.9
12.5'	19	7.3	7.3

**Very Wide Flood**  
0° Aiming Angle  
Horizontal Footcandles

D	FC	L	W
5.0'	44	4.3	4.3
7.5'	20	6.5	6.5
10.0'	11	8.6	8.6
12.5'	7	10.8	10.8

PROJECT:

TYPE:

### Dimming Compatibility

Amerlux® Finch fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (*Dimmer, Fixture Quantity, Voltage, etc*) may affect dimming performance.

**--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---**

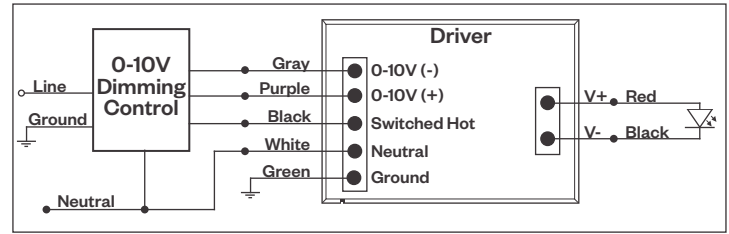
#### 0-10V DIMMING

Integrates into a variety of building management and daylighting controls

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

#### 0-10V Wiring Diagram



**Compatible Dimmers\*:**

**Wall Box**

Lutron "Diva" - DVSTV | Leviton Renoir II 0-10V

**Central System**

Lutron Grafik Eye with GRX-TVI Interface

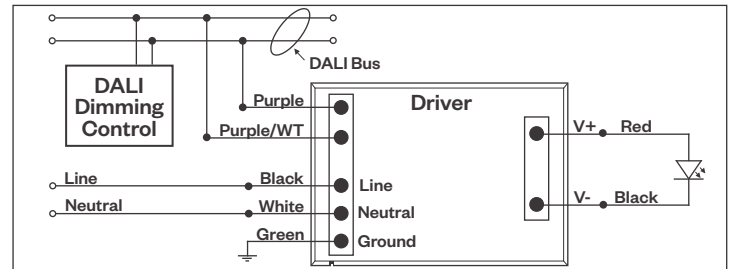
#### DALI DIMMING

Digital control protocol allows individual fixture control

**Notes:**

- 120VAC - 277VAC\*
- Dims down to 1% light output in most cases

#### DALI Wiring Diagram



**Compatible Dimmers\*:**

**Wall Box (3-Wire Fluorescent)**

Leviton CD250 Controller

**Central System**

Dynalite

Fifth Light

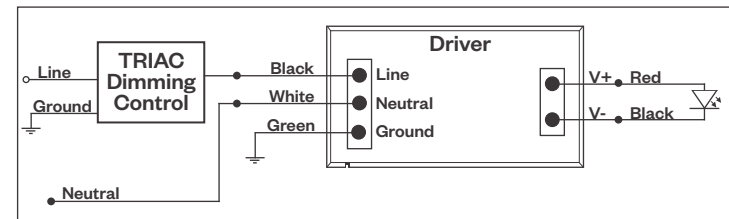
#### TRIAC (Forward Phase) DIMMING (Standard)

Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

#### TRIAC Wiring Diagram



**Compatible Dimmers\*:**

**Wall Box (TRIAC 120VAC)**

Lutron "Diva"

Lutron "Nova-T"

Lutron "Maestro"

Lutron "Skylark"

**Central System**

Lutron "GP" Panel

Lutron Grafik Eye QS

**Notes:**

\* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.



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**Dimming Compatibility** *(continued)*

Amerlux® Finch fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (*Dimmer, Fixture Quantity, Voltage, etc*) may affect dimming performance.

**--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---**

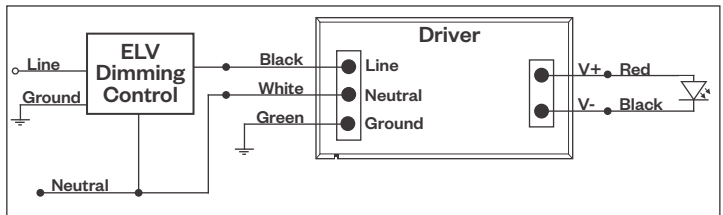
**ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)**

Utilizes specialized "ELV" dimmers.

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

**ELV Wiring Diagram**



Compatible Dimmers†:		
Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Maestro"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

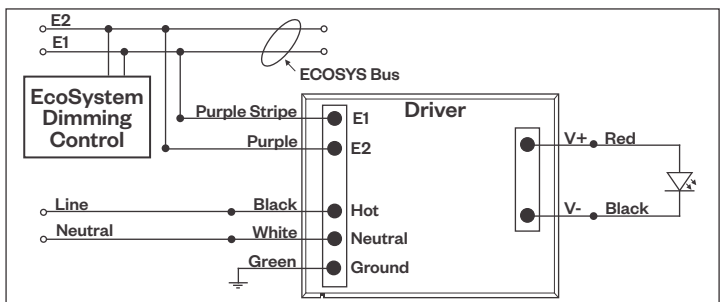
**LUTRON LDE1 DIMMING**

Integrates into Lutron EcoSystem building management

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

**LDE1 (HILUME-H-ECO) EcoSystem Digital Control Wiring Diagram**



Compatible Dimmers†:	
Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

**Notes:**  
 \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.  
 † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.