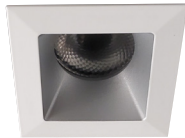


## 1" Square Downlight



### 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+ & 90+ typ.
Dimming:	0-10V, DALI, TRIAC/ELV, Hilume

### PROJECT:

### TYPE:

### Performance Data

Watts	Lumens	LPW	CCT	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

	6W		8W		10W		12W	
	Watts	Amps	Watts	Amps	Watts	Amps	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 ELV/TRIAC (LE/TE) driver.*

**PROJECT:**

**TYPE:**

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

1	2	3
<b>1 Model</b> <b>New Construction</b> <b>FIN-SD-NC</b> (non-IC) <b>FIN-SD-CP</b> (Chicago Plenum (CCEA), 10W max) <b>FIN-SD-IC</b> (Insulated Ceiling/air tight, 10W max)	<b>2 Style</b> <b>T</b> trimmed <b>TL</b> trimless <b>MWK</b> millwork	<b>3 Options/Accessories</b> <b>HB49</b> hanger bars from min 29" to max 49"

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

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

**Remote Driver Ordering Information**

Amerlux offers a mounting plate for each remote driver for mounting in enclosure by others, or a single remote box for one driver (RBX), or a single remote box for two drivers (RBX2). Electrical Contractor (EC) is responsible for adherence to all local codes.

**FINPW**

1	2	3	4
<b>1 Model</b> <b>FINPW</b>	<b>2 Wattage</b> <b>6</b> 6W (667 lm) <b>8</b> 8W (823 lm) <b>10</b> 10W (979 lm) <b>12</b> 12W (1112 lm)	<b>3 Driver</b> <b>0-10V</b> 0-10V dimming, 1%, 120/277VAC <b>DALI</b> DALI dimming, 1%, 120/277VAC <b>LE/TE</b> TRIAC/ELV dimming, 5%, 120/277VAC <b>HILUME-H-ECO</b> Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black, 120/277VAC (for use with 10W & 12W only)	<b>4 Driver Enclosure Options</b> <b>MP</b> mounting plate (standard) <b>RBX</b> remote box (1 driver) <b>RBX2</b> remote box (2 drivers)

**PROJECT:**

**TYPE:**

**Specifications**

**Construction**

- Galvanized steel frame
- Galvanized steel splice housing and hanger brackets
- Screwless plaster frame (patent-pending) 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
- 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



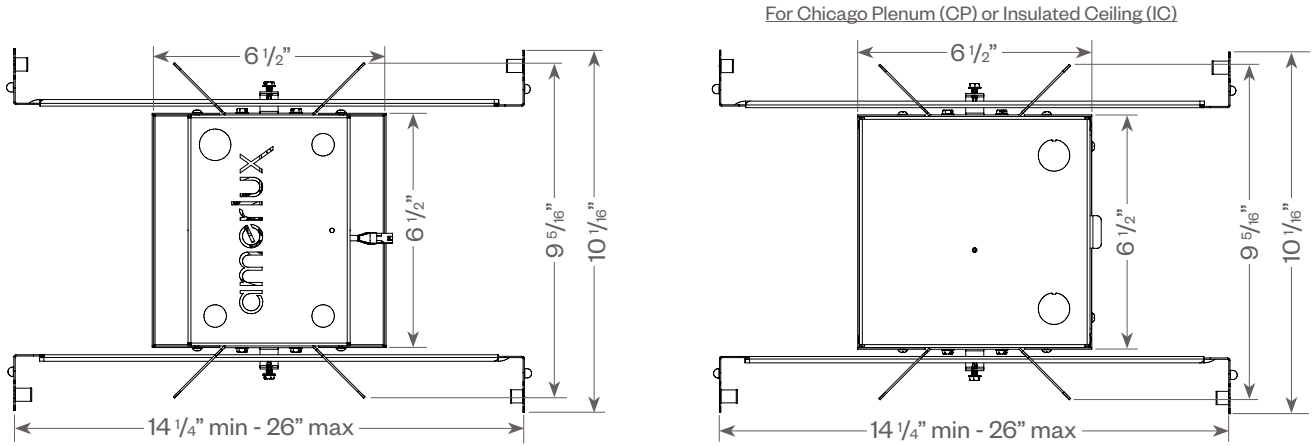
Matte Silver

PROJECT:

TYPE:

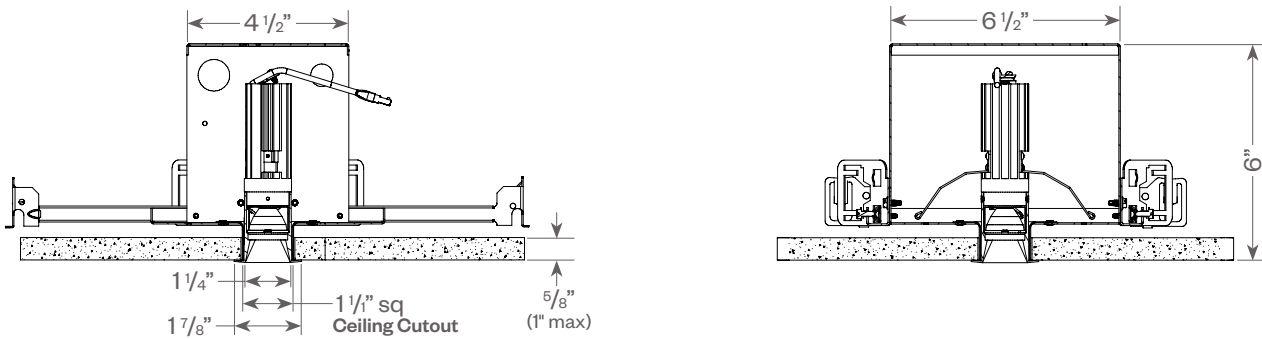
**Product Details**

Housing/Frame

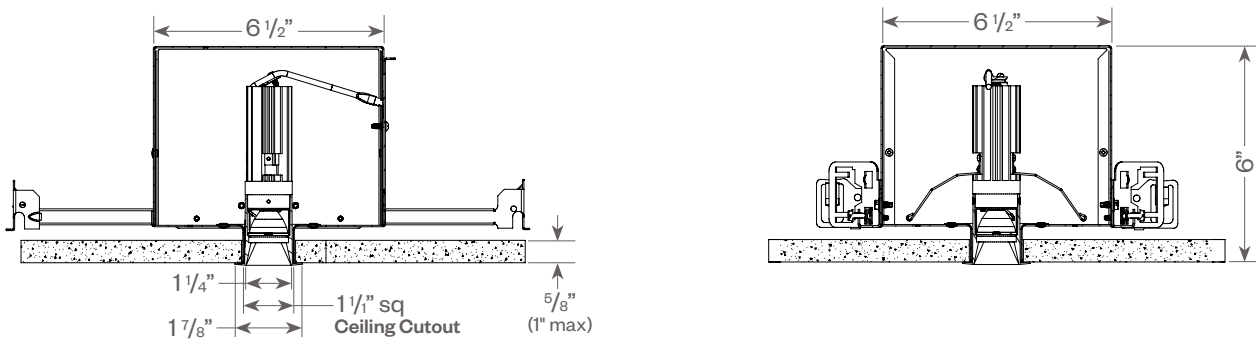


Trimmed

FIN-SD-NC.T



FIN-SD-CP/IC.T

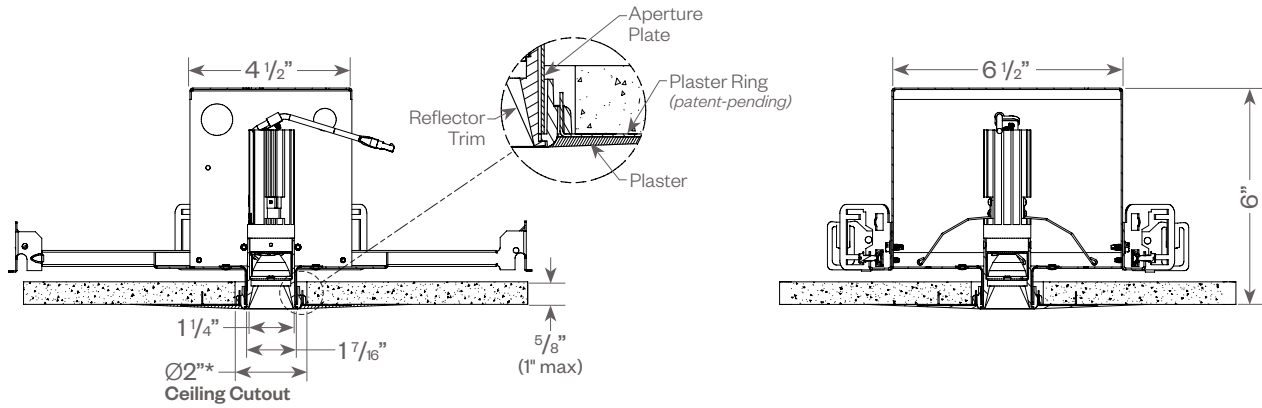


PROJECT:

TYPE:

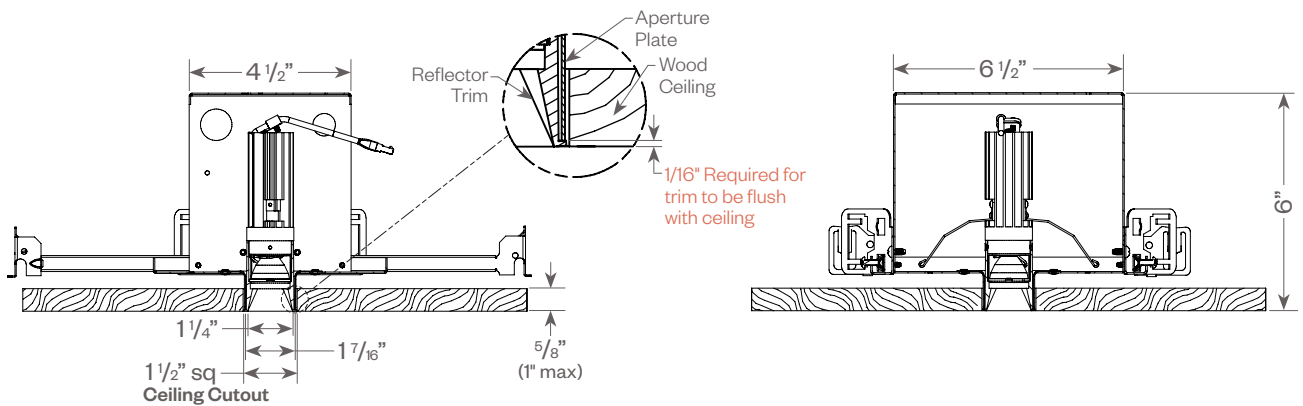
**Product Details (continued)**

Trimless  
FIN-SD-NC.TL



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

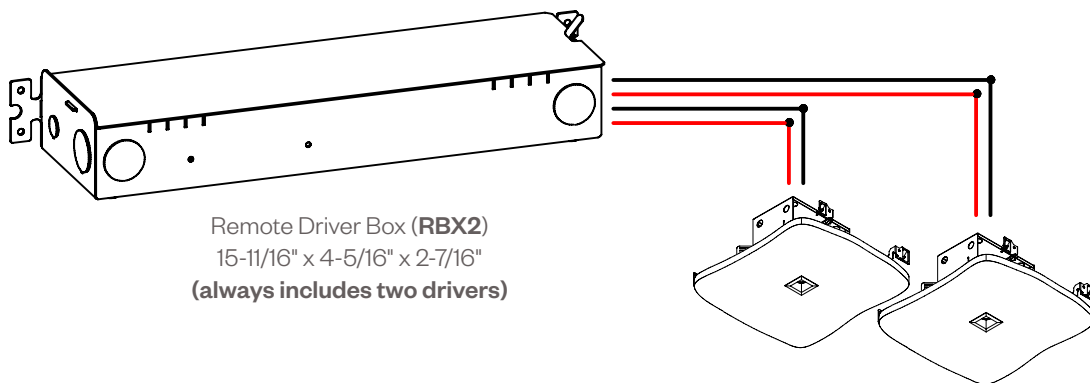
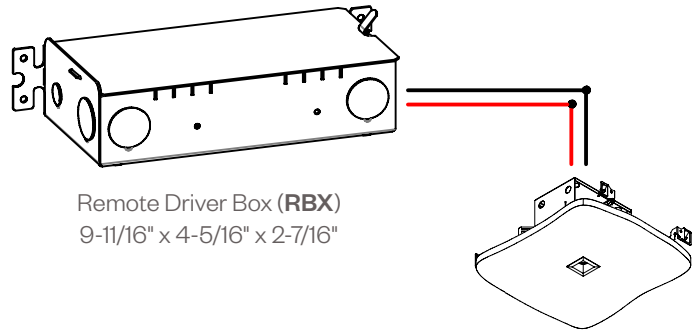
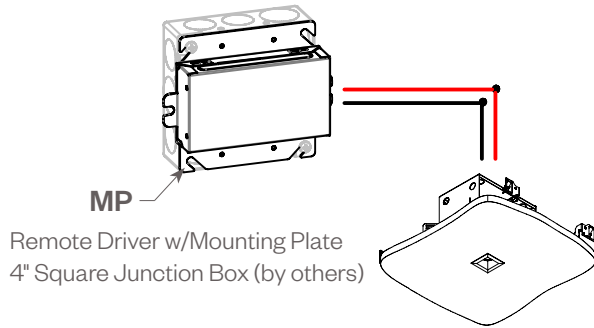
Millwork  
FIN-SD-NC.MWK



PROJECT:

TYPE:

**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.*

**PROJECT:**

**TYPE:**

**Performance Data**

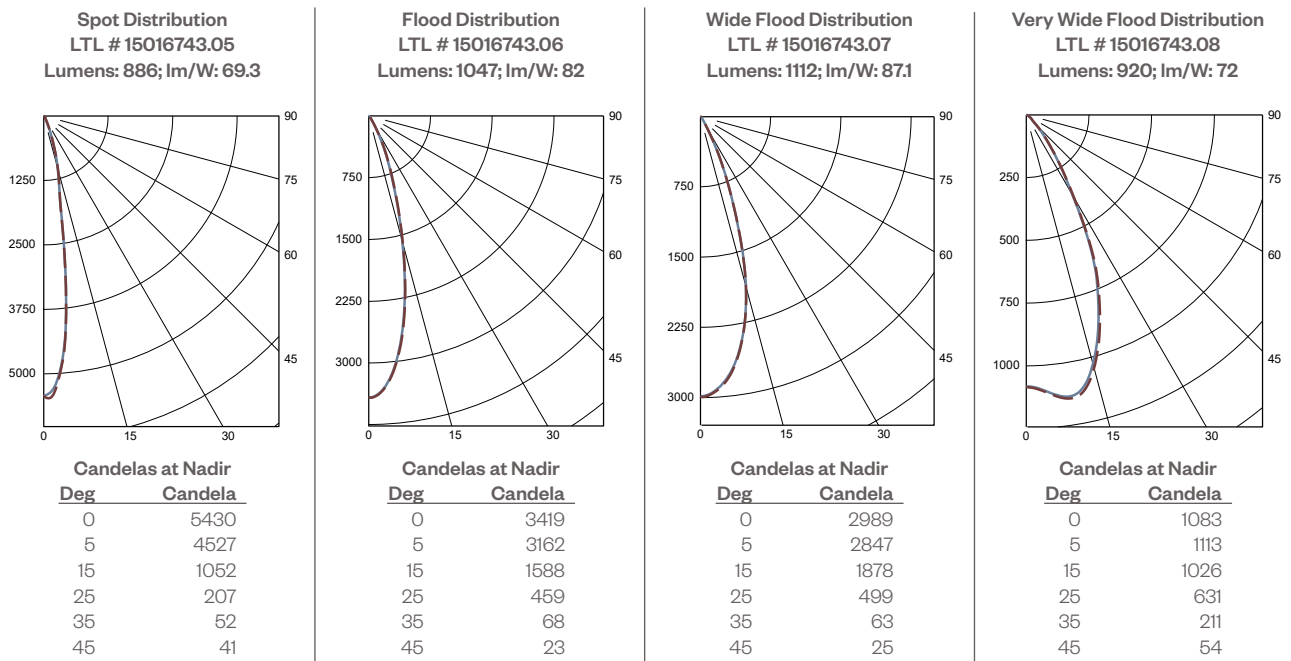
**Multiplying Factors:**

Wattage:	6W	8W	10W	12W
Factor:	0.60	0.74	0.88	1.0

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

Multiplying Factor is based on 3000K, 80+ 120V IES file on website.

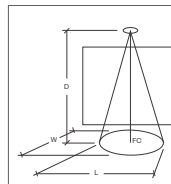
**12W, 3000K, 80+**



**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).
- CB=Distance across or down to center beam location.



**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 ---**

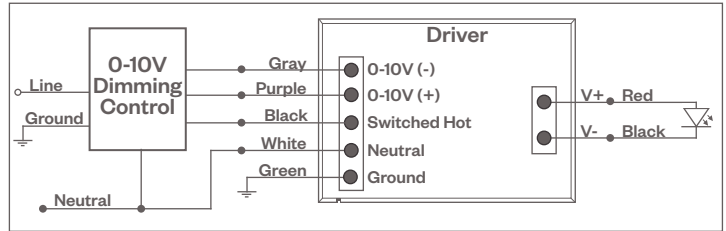
**0-10V DIMMING**

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	Central System
Lutron "Diva" - DVSTV   Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface

**DALI DIMMING**

Digital control protocol allows individual fixture control

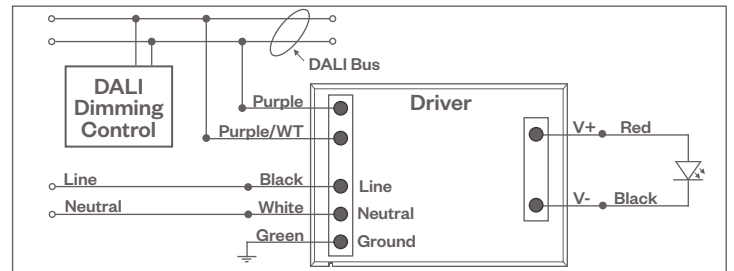
**Notes:**

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

**Compatible Dimmers†:**

Wall Box (3-Wire Fluorescent)	Central System
Leviton CD250 Controller	Dynalite Fifth Light

**DALI Wiring Diagram**



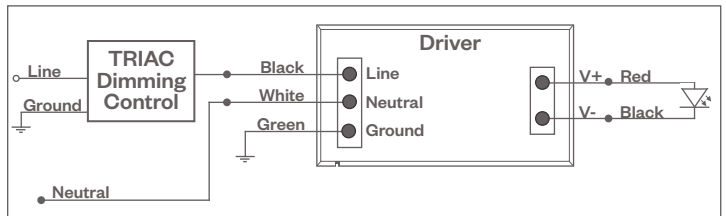
**TRIAC (Forward Phase) DIMMING (Standard)**

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)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Skylark"	

**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 manufacturer 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.



**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 ---**

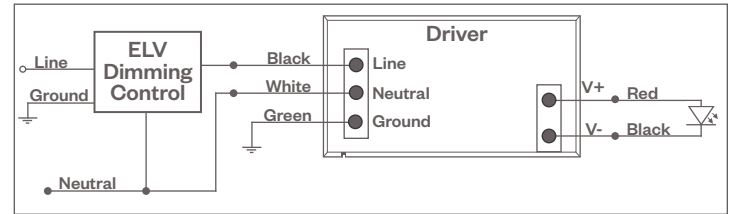
**ELV - Electronic Low Voltage (Reverse Phase) DIMMING**

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

**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"		

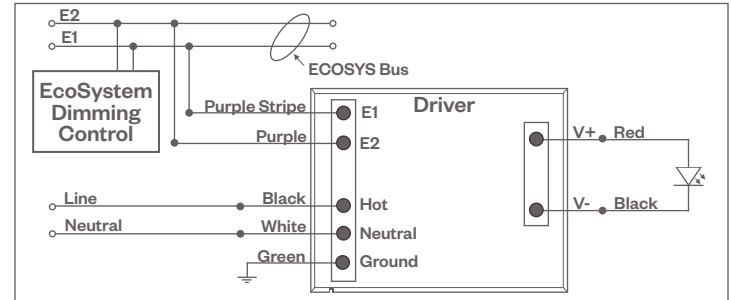
**LUTRON LDE1 DIMMING**

Integrates into Lutron EcoSystem building management

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 1% Soft-On/Fade-to-Black
- 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 manufacturer 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.