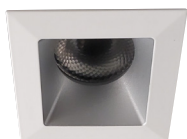




## 1" Square Downlight



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

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

| 1  | 2   | 3   | 4   | 5   | 6  |
|--|---|---|---|---|--|
| 1 Model  | 2 Style   | 3 Finish  | 4 Beam Spread   | 5 Color Temp and CRI  | 6 Accessories  |
| <b>FIN-SD</b> downlight<br><b>FIN-SSHW</b> shower<br>(available for use with trimmed (T) style only) | <b>T</b> trimmed<br><b>TL</b> trimless<br><b>MWK</b> millwork | <b>Trimmed</b><br><b>MBW</b> matte black, white flange<br><b>MWW</b> matte white, white flange<br><b>SLVW</b> matte silver, white flange<br><b>MBB</b> matte black, black flange<br><b>SLVS</b> matte silver, silver flange | <b>Trimless/Millwork</b><br><b>MB</b> matte black<br><b>MW</b> matte white<br><b>SLV</b> matte silver | <b>SP</b> spot 18°<br><b>FL</b> flood 28°<br><b>WF</b> wide flood 34°<br><b>VWF</b> very wide flood 52° | <b>SOL</b> solite beam softening lens<br>(comes standard with SSHW trim)<br><b>HEX</b> hexcell louver (not available for use with SSHW trim)<br><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.

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

**PROJECT:**
**TYPE:**
**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)

**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



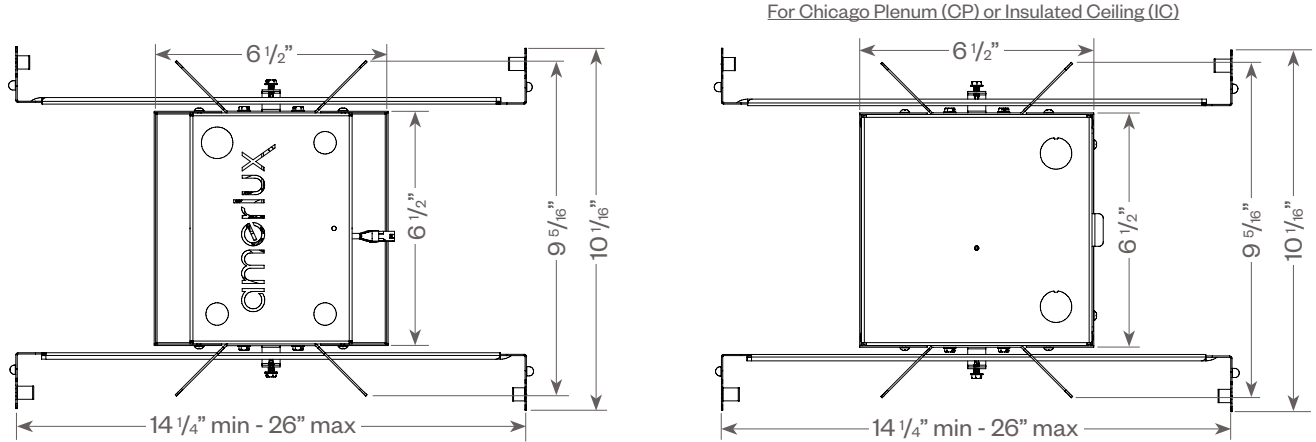
Matte Silver

PROJECT:

TYPE:

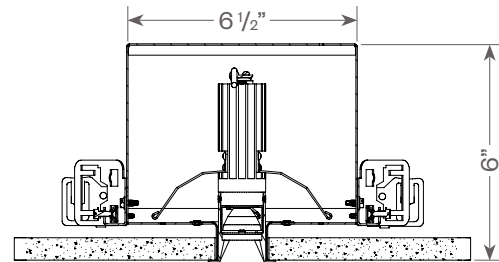
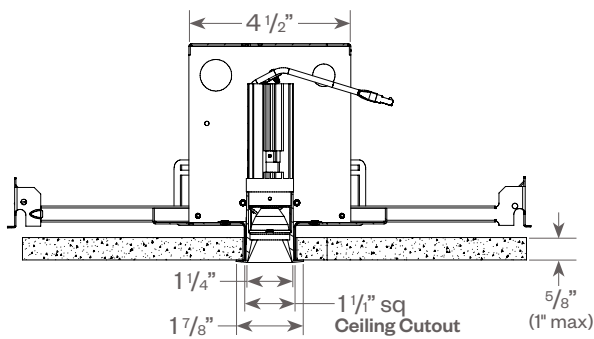
### Product Details

Housing/Frame

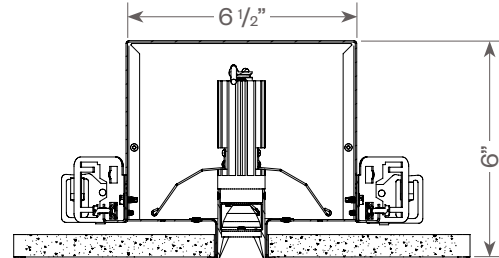
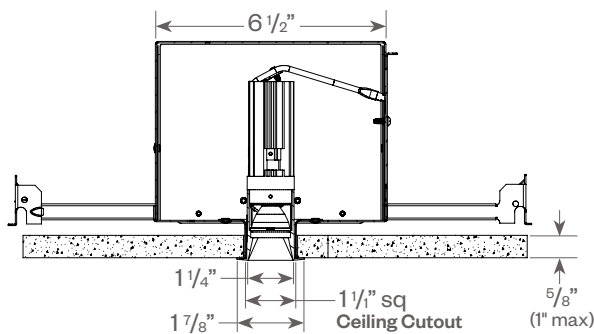


Trimmed

FIN-SD-NC.T



FIN-SD-CP/IC.T



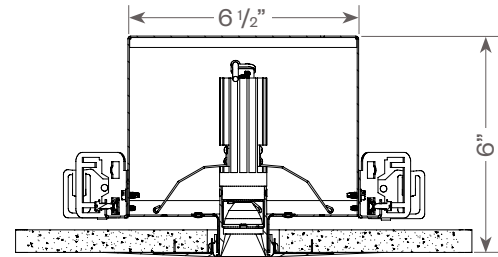
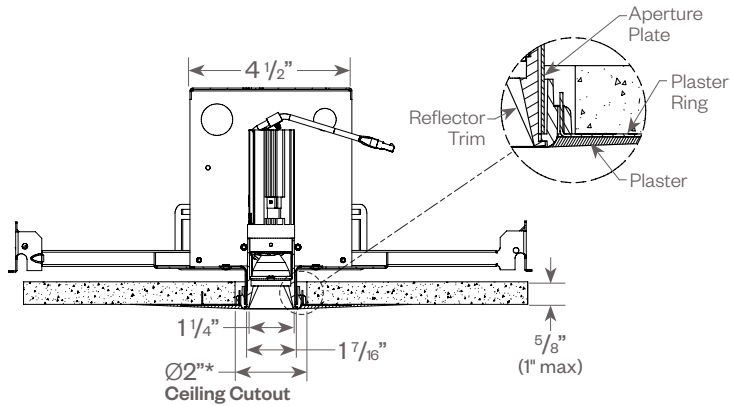
**PROJECT:**

**TYPE:**

**Product Details (continued)**

Trimless

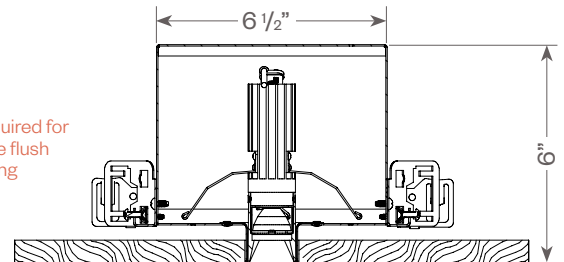
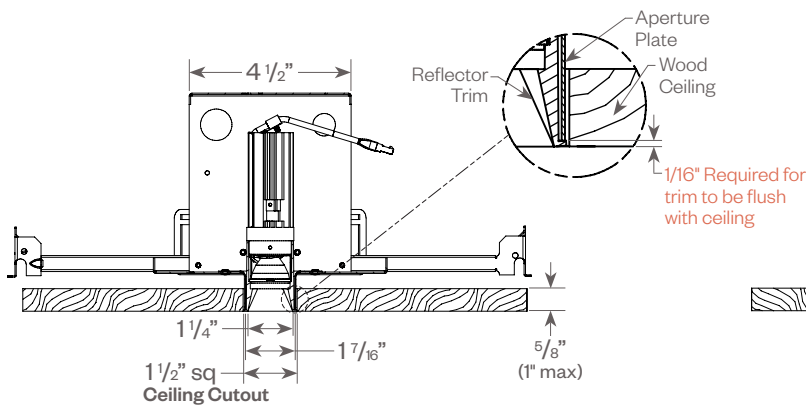
FIN-SD-NC.TL



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

Millwork

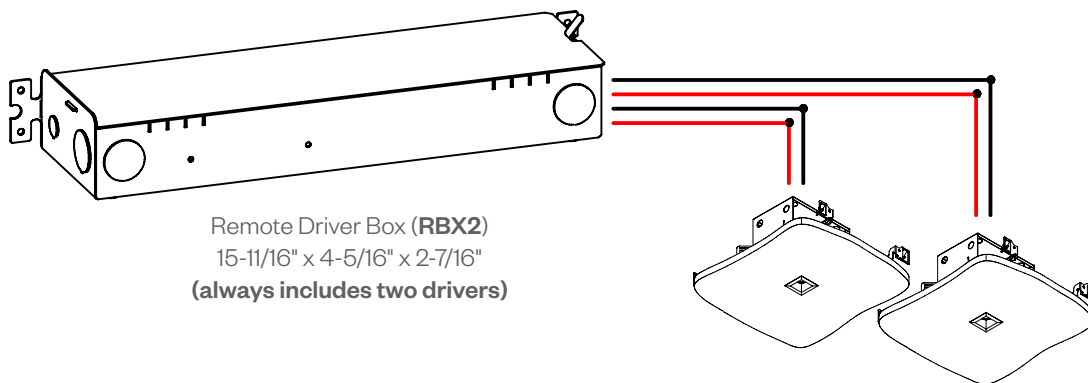
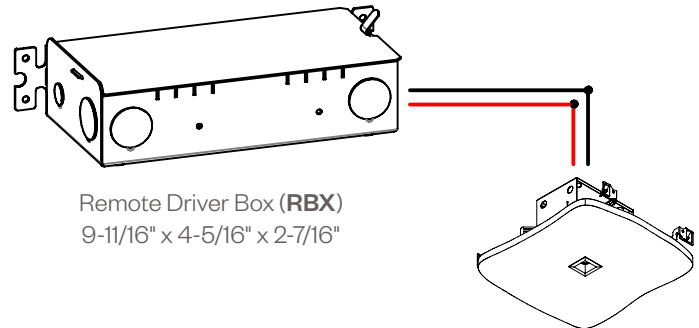
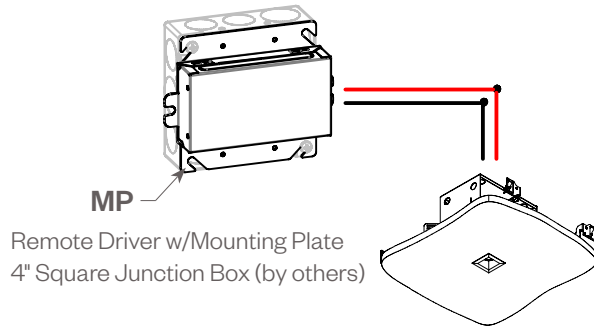
FIN-SD-NC.MWK



PROJECT:

TYPE:

### Enclosure Options for Remote Driver



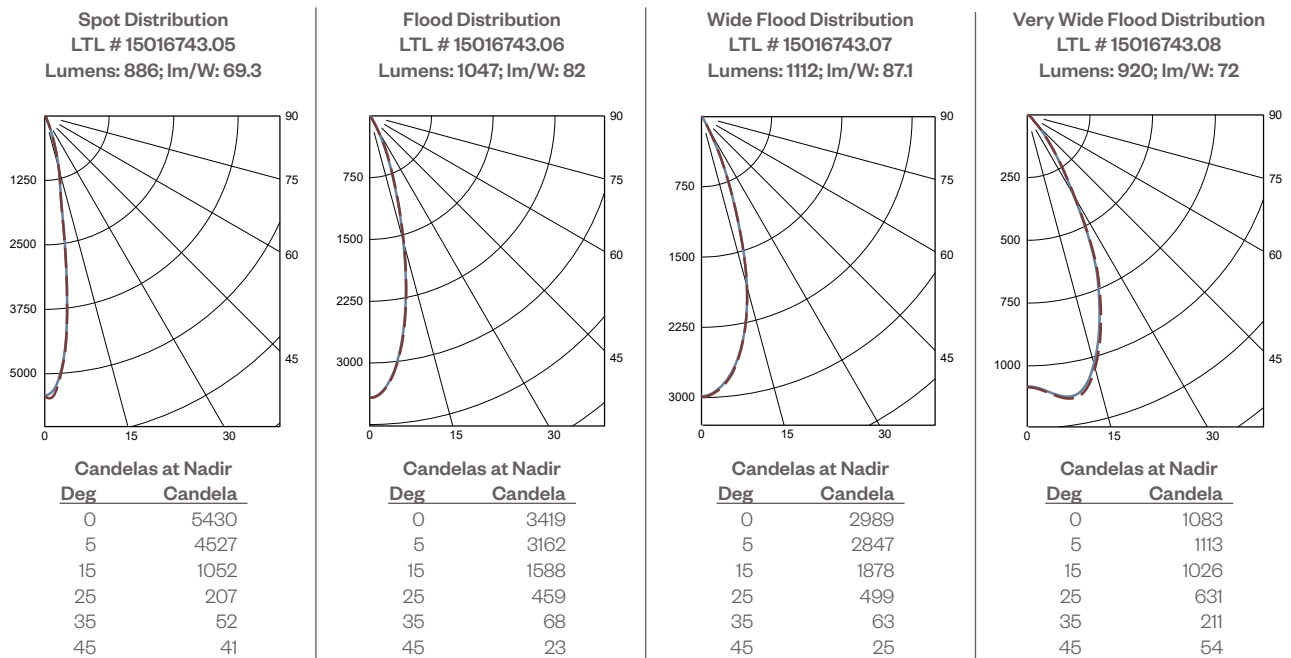
*Note: Maximum remote wiring distance is 100 linear feet of 18 AWG wire and 50 linear feet of 22 AWG wire.*

**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).

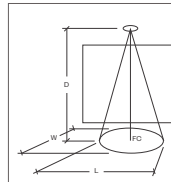
D=Distance to floor or wall.

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                                   |     |     |     |  | Flood                                  |     |     |     |  | Wide Flood                             |     |     |     |  | Very Wide Flood                        |    |      |      |  |
|--|-----|-----|-----|--|--|-----|-----|-----|--|--|-----|-----|-----|--|--|----|------|------|--|
| 0° Aiming Angle Horizontal Footcandles |     |     |     |  | 0° Aiming Angle Horizontal Footcandles |     |     |     |  | 0° Aiming Angle Horizontal Footcandles |     |     |     |  | 0° Aiming Angle Horizontal Footcandles |    |      |      |  |
| D                                      | FC  | L   | W   |  | D                                      | FC  | L   | W   |  | D                                      | FC  | L   | W   |  | D                                      | FC | L    | W    |  |
| 5.0'                                   | 148 | 1.9 | 1.9 |  | 5.0'                                   | 115 | 2.7 | 2.7 |  | 5.0'                                   | 107 | 3.0 | 3.0 |  | 5.0'                                   | 44 | 4.3  | 4.3  |  |
| 7.5'                                   | 81  | 2.6 | 2.6 |  | 7.5'                                   | 56  | 3.7 | 3.7 |  | 7.5'                                   | 50  | 4.5 | 4.5 |  | 7.5'                                   | 20 | 6.5  | 6.5  |  |
| 10.0'                                  | 49  | 3.2 | 3.2 |  | 10.0'                                  | 33  | 5.0 | 5.0 |  | 10.0'                                  | 29  | 5.9 | 5.9 |  | 10.0'                                  | 11 | 8.6  | 8.6  |  |
| 12.5'                                  | 33  | 3.8 | 3.8 |  | 12.5'                                  | 21  | 6.1 | 6.1 |  | 12.5'                                  | 19  | 7.3 | 7.3 |  | 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 ---

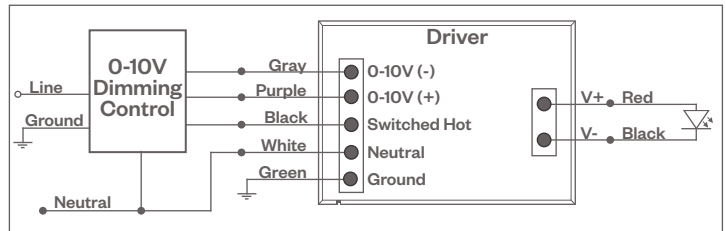
#### 0-10V DIMMING

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

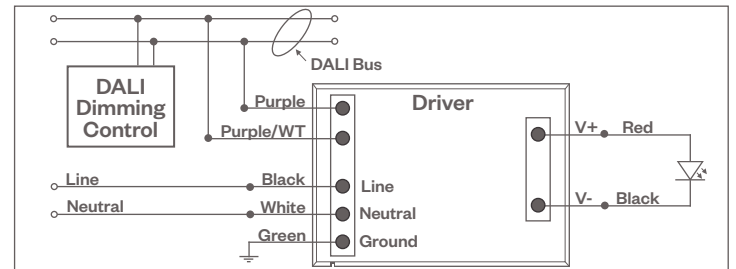
**Compatible Dimmers†:**
**Wall Box (3-Wire Fluorescent)**

Leviton CD250 Controller

**Central System**

Dynalite  
Fifth Light

DALI Wiring Diagram



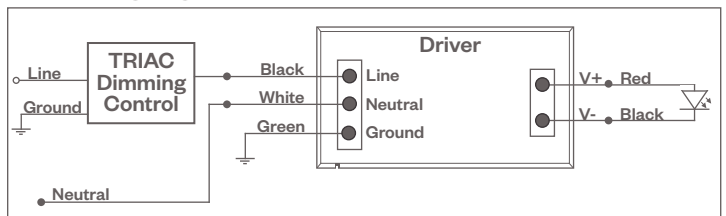
#### TRIAC (Forward Phase) DIMMING (Standard)

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)**

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 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

##### Compatible Dimmers†:

###### Wall Box (ELV 120VAC)

Lutron "Diva"  
Lutron "Nova-T"  
Lutron "Maestro"  
Lutron "Skylark"  
Leviton "Surslide"  
Leviton "Vizio"

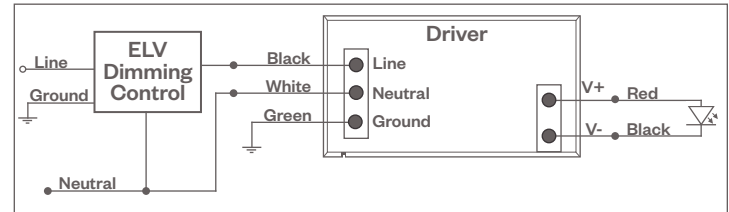
###### Wall Box (ELV 277VAC)

Leviton Revoir II AWSMT-E

###### Central System

Lutron "GP" Panel with PHPM-PA 120/277VAC  
Lutron Grafik Eye QS with PHPM-PA 120/277VAC

#### ELV Wiring Diagram



#### 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!

##### Compatible Dimmers†:

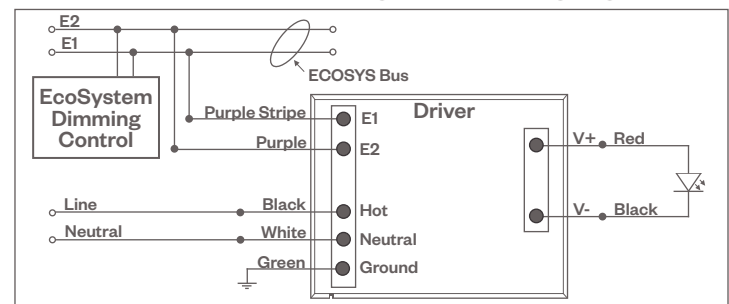
###### Lutron ECO System

Pow Pak Dimming Modules  
Energi Savr Node  
Grafik Eye QS/Homeworks  
QS Control Unit  
Quantum Hub  
Homeworks QS/My Room

###### Central System

Lutron EcoSystem compatible controls

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



##### 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.