

PROJECT:

TYPE:

Features

The Finch® family of cylinders with a 1" aperture, features exceptional output, flexibility, and a broad range of configurations to provide discreet quality illumination while integrating into the architecture. It is available in a fixed downlight, adjustable (*with 50° tilt*), wall mount and even exterior ground mount options. Whether installed on ceilings, walls/mullions or the ground, the Finch® family blends seamlessly into its surroundings.

The Finch® surface downlight cylinder is available in lengths from 3" to 18," up to 1500 lm output and has a choice of beveled front door options for additional shielding. Use alone or in a composition to create a unique design.

Product Overview

Type: Surface Mount, Direct
 Wattage: 6W, 8W, 10W, 12W, 15W, 17W, 20W
 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	643	102.1	3000K	80+
8	787	93.7	3000K	80+
10	927	88.3	3000K	80+
12	1065	83.9	3000K	80+
15	1200	79.9	3000K	80+
17	1331	76.9	3000K	80+
20	1459	73.9	3000K	80+

Data is based on 9" cylinder with 20W, flood optic, standard bevel, 3000K, 80+ 120V IES file available on website.. Consult ordering information and data for other wattages & beam spreads.

Electrical Data












Voltage	6W		8W		10W		12W		15W		17W		20W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	6.3	0.054	8.4	0.071	10.5	0.088	12.7	0.107	14.9	0.125	17.3	0.144	19.7	0.164
277V	6.7	0.034	8.6	0.038	10.7	0.044	12.8	0.051	15	0.058	17.3	0.065	19.6	0.073

Electronic constant current LED driver.

PROJECT:

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STEP 1: 1" Surface Mount Cylinder Ordering Information

1	2	3	4	5	6	7	8	9
1 Model	2 Wattage	3 Color Temp and CRI	4 Beam Spread	5 Body Finish	6 Bevel Finish	7 Door Style	8 Mounting	9 Options/Accessories
FIN3-SMF 3" FIN6-SMF 6" FIN9-SMF 9" FIN12-SMF 12" FIN18-SMF 18"	6 6W (643 lm) 8 8W (787 lm) 10 10W (927 lm) 12 12W (1065 lm) 15 15W (1200 lm) 17[†] 17W (1331 lm) 20^{††} 20W (1459 lm) <i>† Only 6" and up</i> <i>†† Only 9" and up</i>	30 3000K, 80+ 35 3500K, 80+ 40 4000K, 80+ 249 2400K, 90+ 279 2700K, 90+ 309 3000K, 90+ 359 3500K, 90+ 409 4000K, 90+	SP spot, 15° FL flood, 28° WF wide flood, 35° VWF very wide flood, 50°	WT white texture  BT black texture  SLV matte silver  BRZ bronze  DBZ dark bronze  <i>For custom RAL finish, consult factory</i>	MW matte white  MB matte black  SLV matte silver  BRZ bronze  DBZ dark bronze  GLD gold  <i>For custom RAL finish, consult factory.</i> <i>Omit from nomenclature when ordering</i> <i>GLOW door style.</i>	SB standard bevel (1/4" recess) DB deep bevel (5/8" recess) GLOW frosted glow lens (1/2" drop)	F flush mount C canopy (Ø5") RC reduced canopy (Ø3-1/2") CDC conduit canopy (Ø4-1/8")	SOL solite beam softening lens HEX hexcell louver LS linear spread lens

STEP 2: Remote Driver Ordering Information

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

FINPW			
1	2	3	4
1 Model	2 Wattage	3 Drivers/Controls	4 Driver Enclosure
FINPW	6 6W (643 lm) 8 8W (787 lm) 10 10W (927 lm) 12 12W (1065 lm) 15 15W (1200 lm) 17 17W (1331 lm) 20 20W (1459 lm)	O-10V 0-10V dimming, 1% dim, 120/277VAC DALI DALI dimming, 1% dim, 120/277VAC LE/TE TRIAC/ELV dimming, 5% dim, 120/277VAC HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% dim Soft-On/ Fade-to-Black, 120/277VAC (10W min)	MP mounting plate (1 driver) RBX remote box (1 driver) RBX2 remote box (2 drivers) Note: One wattage & dimming protocol per box.

For enclosure drawings & wiring schematics, see pages 6-8.

PROJECT:

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Specifications

Application

Retail, commercial and hospitality ambient/task lighting

Construction

Extruded aluminum precision machined body, door & heatsink

Optical

TIR optics

Beam Spreads: Spot 15°, Flood 28°, Wide Flood 35°,
Very Wide Flood 50°

Linear Spread Lens (LS) recommended for use with Spot beam
spread for maximum linear effect.

LED

Color Temp: 2400K, 2700K, 3000K, 3500K, 4000K

CRI: 80+ & 90+ typ.

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

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Finish

Powder coat paint

Consult factory for custom finishes

Mounting

Surface mount

Certifications

CSA tested to UL standards

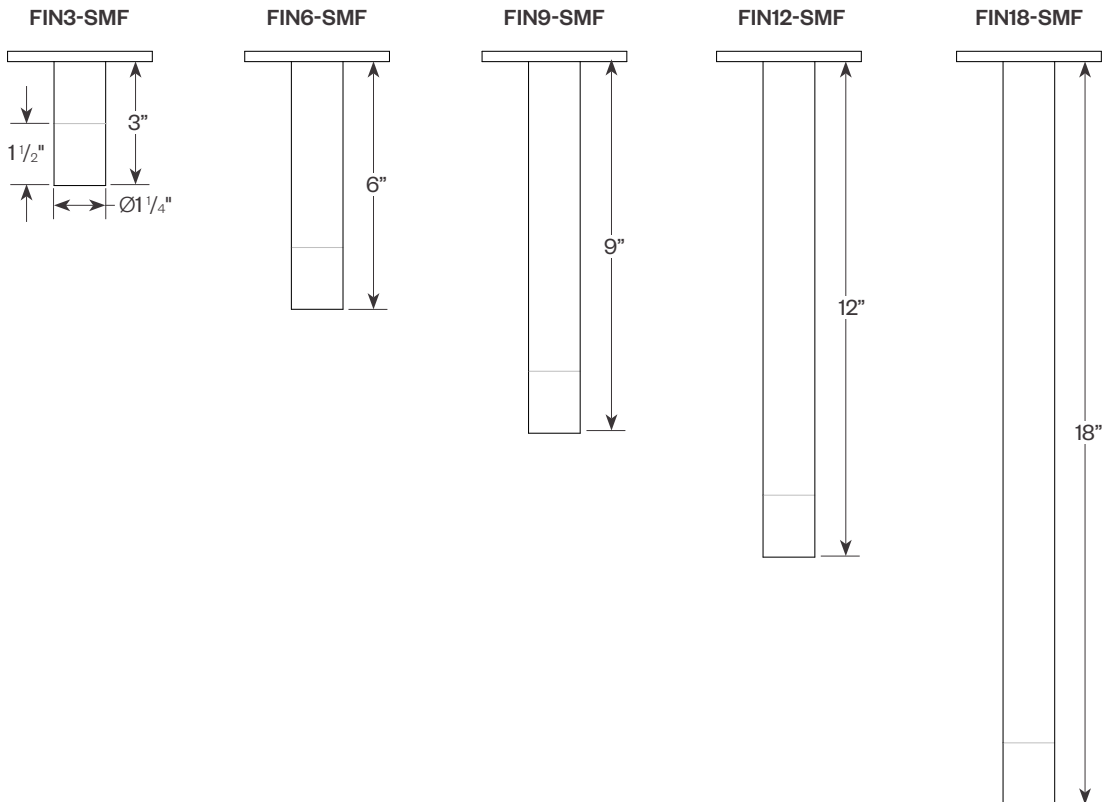
Indoor use only

Damp location

Warranty

5 year limited warranty

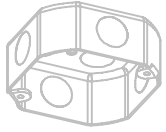
Product Details



PROJECT:

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Junction Box Mounting Requirements



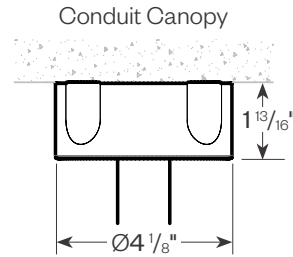
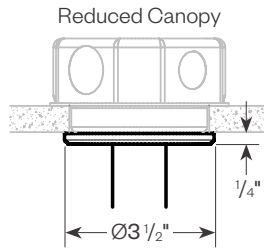
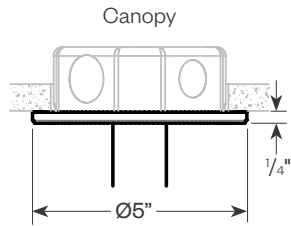
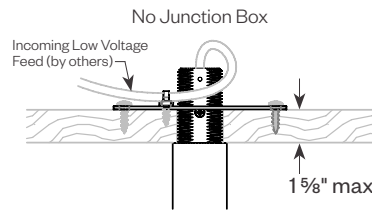
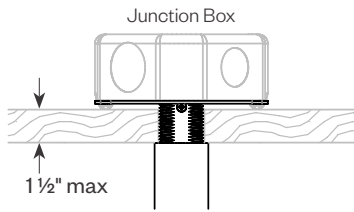
All Mounts Require 4" Octagonal
Junction Box *(by others)*



Reduced Canopy (RC) Mounts also
Require Raised Cover *(by others)* for
4" Octagonal Junction Box

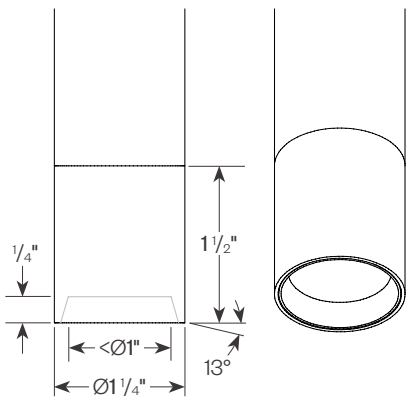
Mounting Options

Flush

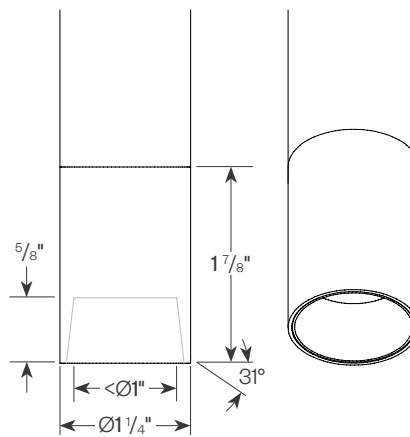


Door Styles

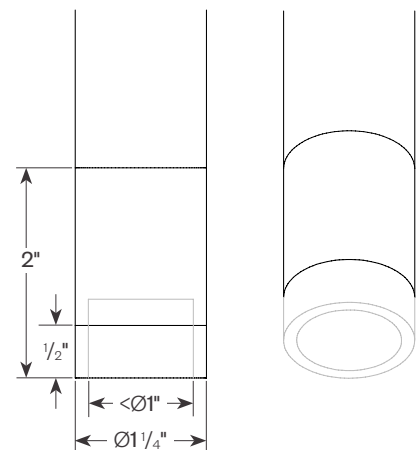
Standard Bevel



Deep Bevel



Glow Lens



Finish Options

Powder coat paint. Consult factory for custom finishes.



Matte Black



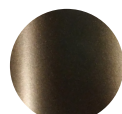
Matte White



Matte Silver



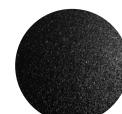
Bronze



Dark Bronze



White Texture



Black Texture



Gold

Available for
Bevel Finish only

PROJECT:

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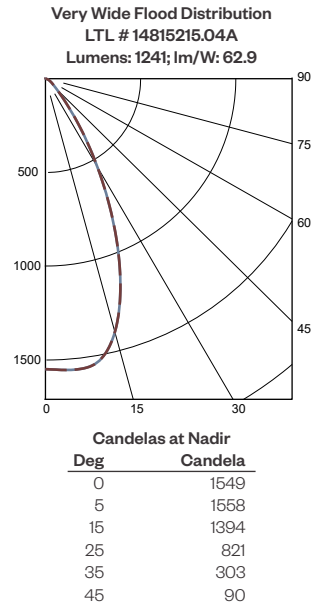
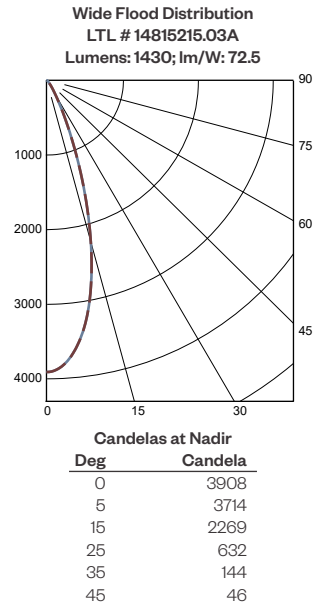
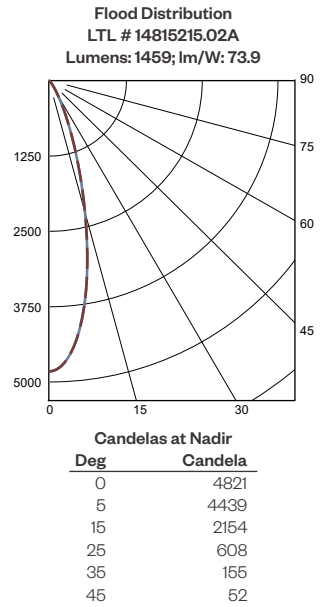
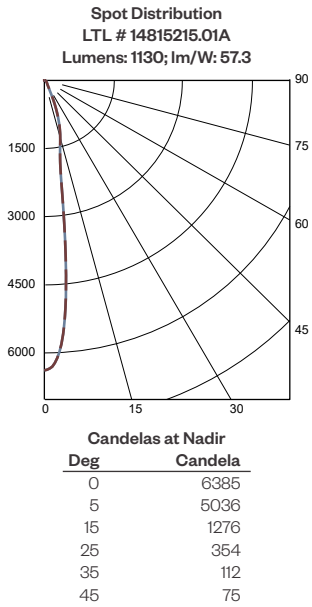
Performance Data

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

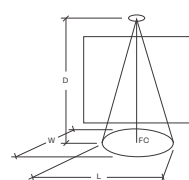
Wattage:	6W	8W	10W	12W	15W	17W	20W
Factor:	0.44	0.54	0.64	0.73	0.82	0.91	1.0

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

20W, Standard Bevel, 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'	158	1.9	1.9
7.5'	91	2.5	2.5
10.0'	57	3.0	3.0
12.5'	38	3.5	3.5

Flood


0° Aiming Angle
Horizontal
Footcandles



D	FC	L	W
5.0'	178	2.6	2.6
7.5'	85	3.6	3.6
10.0'	49	4.7	4.7
12.5'	31	5.8	5.8

Wide Flood


0° Aiming Angle
Horizontal
Footcandles



D	FC	L	W
5.0'	138	3.0	3.0
7.5'	66	4.3	4.3
10.0'	38	5.6	5.6
12.5'	25	7.0	7.0

Very Wide Flood

0° Aiming Angle
Horizontal
Footcandles

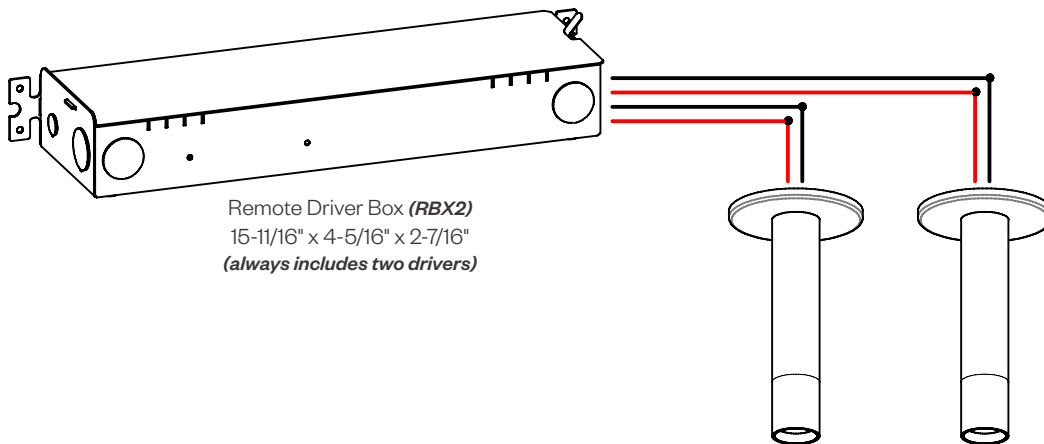
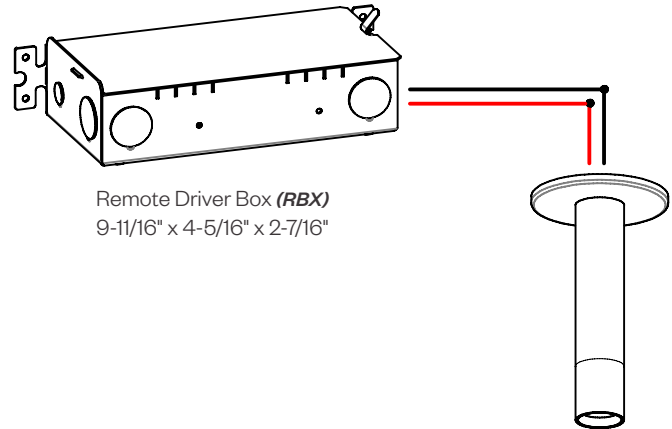
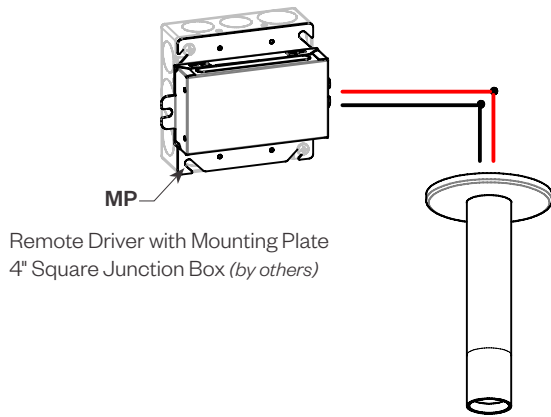


D	FC	L	W
5.0'	61	4.2	4.2
7.5'	27	6.3	6.3
10.0'	16	8.4	8.4
12.5'	10	10.6	10.6

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Enclosure Options for Remote Driver



Please see the example below when choosing the remote driver mounting or enclosure.

With 10 Finch[®] Cylinders, would be: 10 FINPW-MP, or 10 FINPW-RBX1, or 5 FINPW-RBX2

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

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 ---

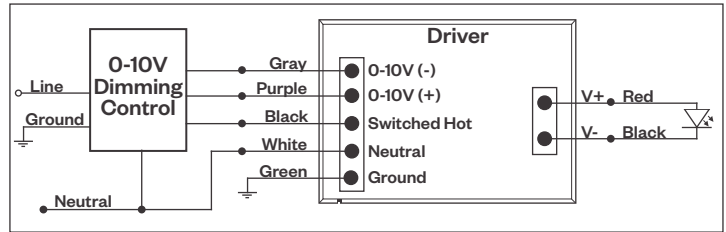
0-10V DIMMING

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
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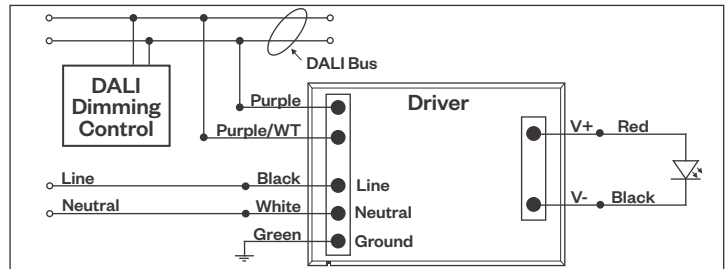
DALI DIMMING

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)

Central System

Leviton CD250 Controller	Dynalite
	Fifth Light

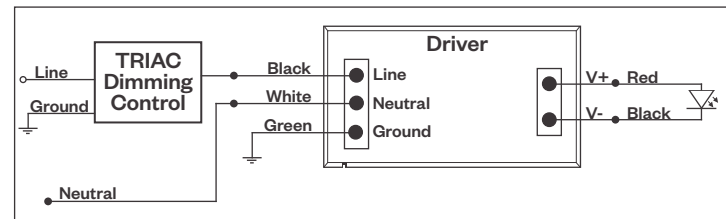
TRIAC (Forward Phase) DIMMING (Standard)

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)

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 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:
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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 ---

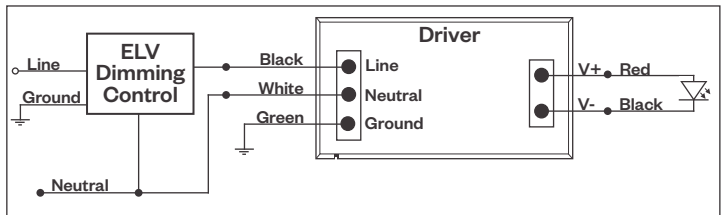
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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"		

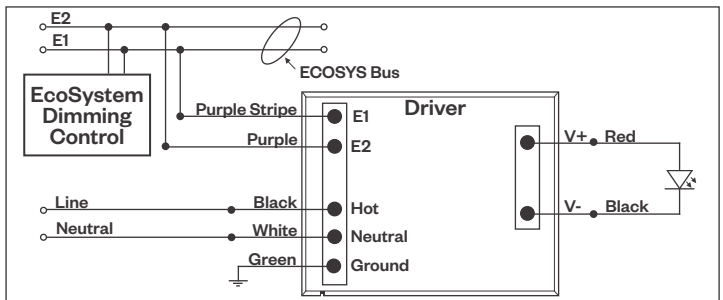
LUTRON LDE1 DIMMING

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.