Essenza® HP
## 2000 LM Round Downlight

amerlux
A Delta Group Company

Features

Essenza HP LED Downlights are designed to deliver high punch of light for high ceilings and high ambient applications. The shallow frame (only 3-1/8" plenum depth*) is universal to accept either the round or square Essenza HP downlight trims.
* New construction only (see pg 4&5 for CP & REM requirements)

Product Overview

Type:	Recessed Round Downlight
Wattage:	23
Lumen Output:	2081 lm (WF optic, 3000K, 83 CRI)
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K)
	90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
	CrispWhite & 3K Class A available
Dimming:	TRIAC & ELV (120/277VAC) - 5% Dim
	Lutron Hi-lume® H Series/EcoSystem - 1% dim with soft on, fade to black, 120/277VAC
	0-10V (120/277VAC) - 1% Dim
	DALI dimming - 1% Dim
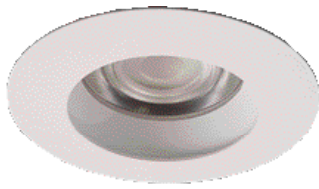
PROJECT:

TYPE:

Trimless

Fixture Type

New Construction	Remodeler	Trim	Trimless
Yes	Yes	Yes	Yes

Performance Chart

Wattage	Delivered Lumens	LPW	Color Temp
23	2081	91	3000K-83

Data based on Wide Flood optic, 3000K-83 ies files available on website. See page 6 for other performance data.

Electrical Data

	23W	
	System Watts	Amps
120V	23	0.19
277V	23	0.08

Electronic constant current LED driver
Includes 2W thermal protector

CSA
C US

3 year limited warranty
AMERLUX LED

Essenza® HP
2000 Lumen Round Downlight

PROJECT: **TYPE:**

Housing/Frame Ordering Information

_____._____._____._____._____._____
　　　　　　　1　　　　　　　　　2　　　3　　　　　4　　　　　　5　　　　　　6

1　Model
For New Construction
EZ-HP-NC-A17† (New Construction)
EZ-HP-CP-A17† (Chicago Plenum (CCEA) housing)

For Existing Ceilings
EZ-HP-REM-A17† (Remodeler, for existing ceilings)

2　Style
T - trimmed
RTL - round trimless

3　Wattage
23

4　Voltage
120
277

5　Driver (for non-dimming, select LE/TE option)
LE/TE - TRIAC/ELV dimming, 5% dim
HILUME-H-ECO - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black
0-10V - 0-10V dimming, 1% dim
DALI - DALI dimming, 1% dim

6　Options/Accessories
EM - integral emergency battery pack with remote test switch, requires 7" ceiling clearance for servicing (not available for use with REM or CP option)

Trim Ordering Information

_____._____._____._____._____
　　　　　　　1　　　　　　　2　　　　3　　　　　4　　　　　5

1　Model
EZ-HP-RD-A17† (downlight)

2　Style
T - trimmed
TL - trimless

3　Finish

Trimmed	Trimless
MWW - matte white, white flange	**MW** - matte white
SLVW - matte silver, white flange	

For other finishes consult factory, specify internal cone and trim ring finishes separately

4　Beam Spreads
NF - narrow flood, 21°
WF - wide flood, 45°
VWF - very wide flood, 60°

5　Color Temp

83 CRI	90+ CRI	
27 - 2700K-83	**229** - 2200K-90+	**CRISP** - CrispWhite
30 - 3000K-83	**279** - 2700K-90+	**3CLA** - 3K Class A
35 - 3500K-83	**309** - 3000K-90+	
40 - 4000K-83	**359** - 3500K-90+	
	409 - 4000K-90+	

† The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

Essenza® HP

2000 Lumen Round Downlight

PROJECT: **TYPE:**

Specifications

Application

Hospitality, retail and commercial ambient

Construction

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets (not for use with Remodeler version)
Cast aluminum plaster frame with perforated face (for trimless version only)
Die-cast optical housing, trim and heatsink

Optical

Molded acrylic TIR optic
Beam spreads:
Narrow Flood, 21º; Wide Flood, 45º;
Very Wide Flood, 60º

LED

Color Temp Options:
2200K, 2700K, 3000K, 3500K, 4000K
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite* LED available,
Class A** 3000K (high CRI, high gamut)
R9 Values: 11 (83 CRI), 55 (92 CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

*CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.
**Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.

Electrical

Wattage: 23
Electronic constant current LED driver, 120/277VAC input

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.
Note: Drivers are universal but thermal protector is voltage specific

Drivers

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron and DALI systems also available
See pages 7-8 for more dimming information

Finish

Powder coat paint
Consult factory for custom finishes

Mounting

Trimmed
For use in T-grid or sheetrock ceilings, max thickness 1"
Trimless
For use in sheetrock ceilings, max thickness 5/8"

Certifications

CSA listed to UL standards
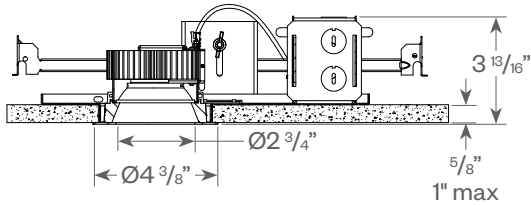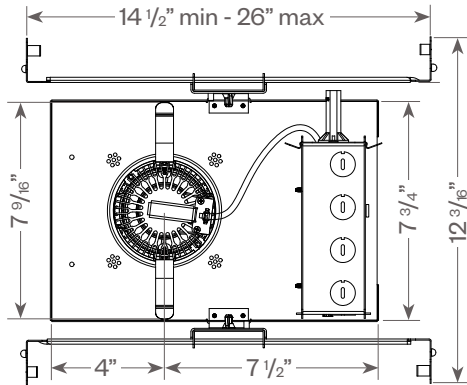Damp location
Chicago Plenum (CCEA) optional

Warranty

3 year limited warranty

Essenza® HP
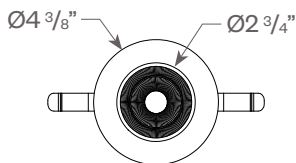## 2000 Lumen Round Downlight

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PROJECT: **TYPE:**

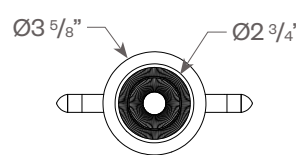## Essenza 2000 LM Round Downlight:

Trimmed Downlight

14 1/2" min - 26" max
7 9/16"
7 3/4"
12 3/16"
4"
7 1/2"

3 13/16"
Ø2 3/4"
Ø4 3/8"
5/8"
1" max

Ceiling cut out: 4" dia.

Ø4 3/8"   Ø2 3/4"

Trimless Downlight

14 1/2" min - 26" max
6 13/16"
7 3/4"
12 3/16"
4"
7 1/2"

3 13/16"
Ø3 5/8"   Ø2 3/4"
5/8" max

Ceiling cut out: 4 1/2" dia.

Ø3 5/8"   Ø2 3/4"

Plaster Frame Detail

Aperture Plate
Screw
Plaster Frame
Ceiling
Fixture Trim
Plaster Skim Coat (by others)

Optional CP Housing

13 5/16"
11 1/2"
13 3/16"
11 5/8"
7 3/4"

13 1/4"
11 5/8"
7 5/8"
7 13/16"

13 3/8"
13 1/4"
7 3/16"
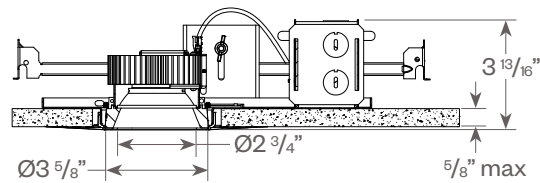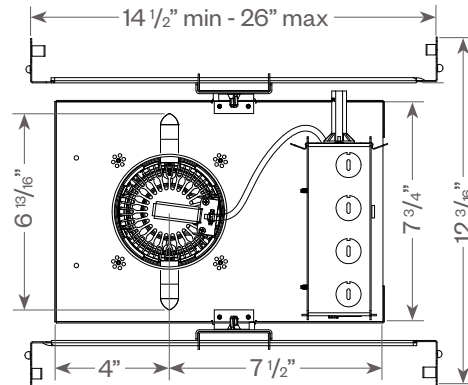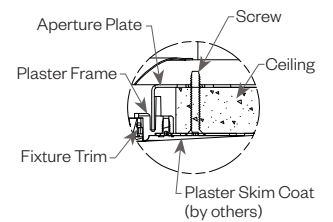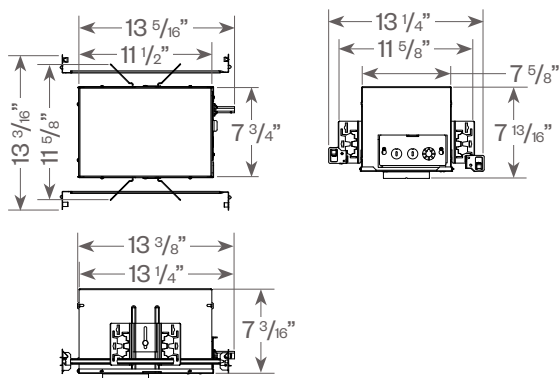
Frame with Emergency Battery Pack

Emergency Battery Pack
7 3/4"
11 7/8"
7 1/2"
5 1/2"
3 1/8"
Ceiling
5/8"
11 1/2"
13 9/16"
14 1/2" min - 26 max
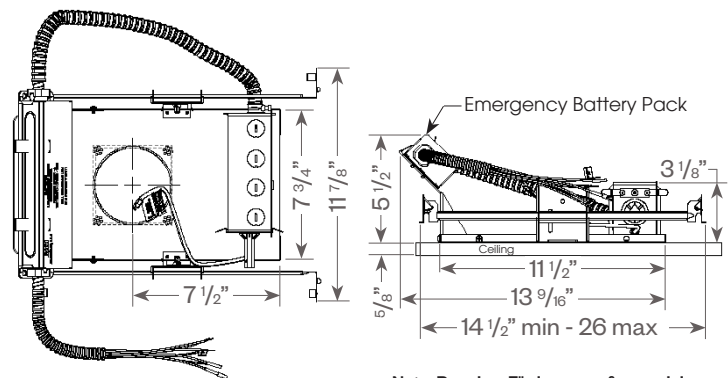
Note: Requires 7" clearance for servicing.

Essenza® HP

2000 Lumen Round Downlight

PROJECT: **TYPE:**

Essenza 2000 LM Round Downlight Remodeler:
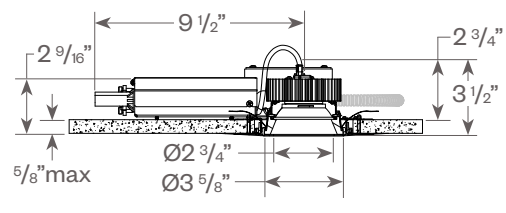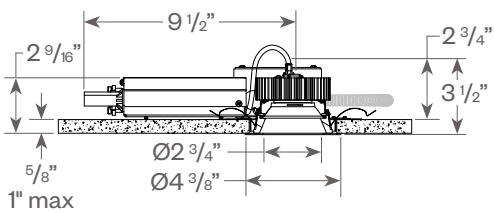
Trimmed Downlight
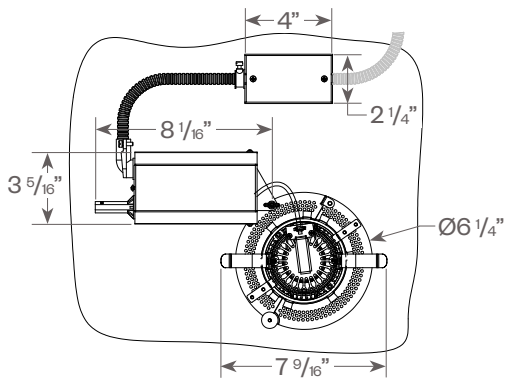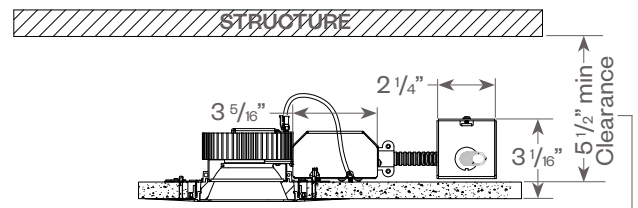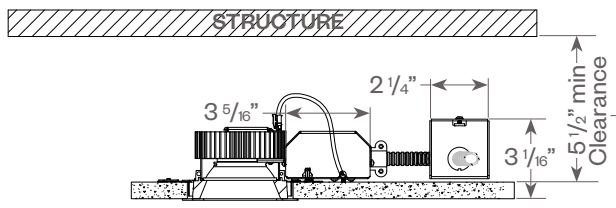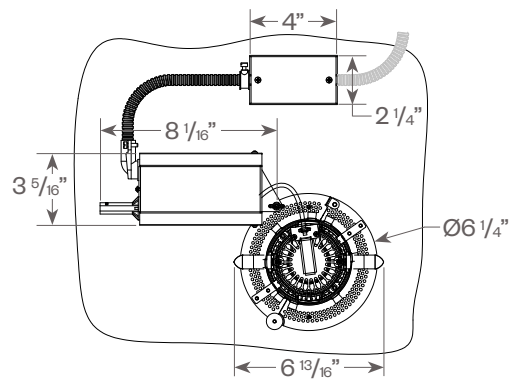
4"
2 ¹/₄"
8 ¹/₁₆"
3 ⁵/₁₆"
Ø6 ¹/₄"
7 ⁹/₁₆"

STRUCTURE
3 ⁵/₁₆"
2 ¹/₄"
3 ¹/₁₆"
5 ¹/₂" min Clearance

To allow driver removal through cut out.

9 ¹/₂"
2 ⁹/₁₆"
2 ³/₄"
3 ¹/₂"
Ø2 ³/₄"
Ø4 ³/₈"
⁵/₈"
1" max

Ceiling cut out: 4" dia.

Ø4 ³/₈"
Ø2 ³/₄"

Trimless Downlight

4"
2 ¹/₄"
8 ¹/₁₆"
3 ⁵/₁₆"
Ø6 ¹/₄"
6 ¹³/₁₆"

STRUCTURE
3 ⁵/₁₆"
2 ¹/₄"
3 ¹/₁₆"
5 ¹/₂" min Clearance

To allow driver removal through cut out.

9 ¹/₂"
2 ⁹/₁₆"
2 ³/₄"
3 ¹/₂"
Ø2 ³/₄"
Ø3 ⁵/₈"
⁵/₈" max

Ceiling cut out: 4 ¹/₂" dia.

Ø3 ⁵/₈"
Ø2 ³/₄"

Plaster Frame Detail

Aperture Plate
Screw
Ceiling
Fixture Trim
Plaster Frame
Plaster Skim Coat (by others)

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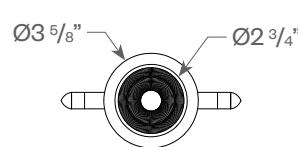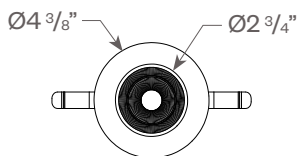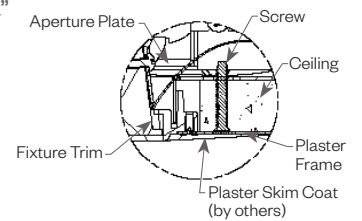
PROJECT: TYPE:

**FIXTURE DATA:** (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.71	0.80	0.83	0.87	0.90	0.65	0.75

23W LED, 3000K-83

Narrow Flood (NF), 21º
LTL # 12197412.01
Lumens: 2008; lm/w: 87.3
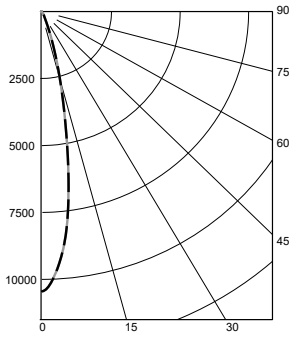
Candelas at Nadir

Deg	Candela
0	10450
5	8955
15	2620
25	463
35	180
45	101

Wide Flood (WF), 45º
LTL # 12197412.03
Lumens: 2081; lm/w: 91
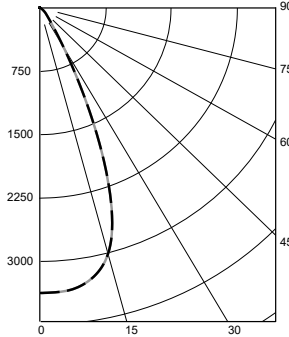
Candelas at Nadir

Deg	Candela
0	3374
5	3363
15	3010
25	1325
35	256
45	102

Very Wide Flood (VWF), 60º
LTL # 12197412.04
Lumens: 2073; lm/w: 90.1
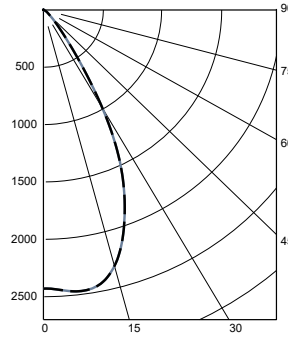
Candelas at Nadir

Deg	Candela
0	2431
5	2461
15	2315
25	1573
35	479
45	117

Application Data:

0º Aiming Angle Horizontal Footcandles

Narrow Flood

D	FC	L	W
5.0'	419	1.7	1.7
7.5'	186	2.8	2.8
10.0'	105	3.6	3.6
12.5'	67	4.5	4.5

Wide Flood

D	FC	L	W
5.0'	136	3.8	3.8
7.5'	60	5.8	5.8
10.0'	34	7.8	7.8
12.5'	22	9.8	9.8

Very Wide Flood

D	FC	L	W
5.0'	98	4.6	4.6
7.5'	44	6.9	6.9
10.0'	25	9.2	9.2
12.5'	16	11.5	11.5
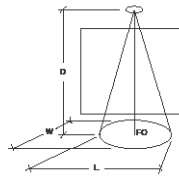
Notes and Definitions:
Beam spread is to 50% center beam candlepower (CBCP).
D=Distance to floor or wall.
FC=Footcandles on floor or wall at center beam aiming location.
L=Effective Visual Beam length in feet (50% of maximum footcandle level).
W=Effective Visual Beam width in feet (50% of maximum footcandle level).
CB=Distance across or down to center beam location.

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PROJECT: **TYPE:**

DIMMING COMPATIBILITY:
Amerlux® Essenza 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 ---
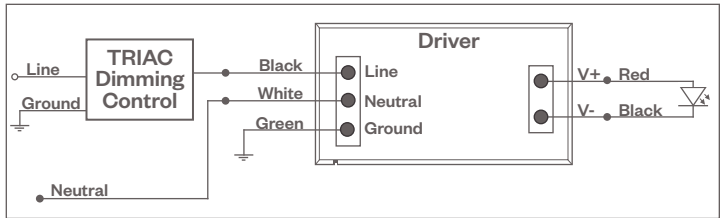
TRIAC (Forward Phase) DIMMING (Standard)
Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

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†:

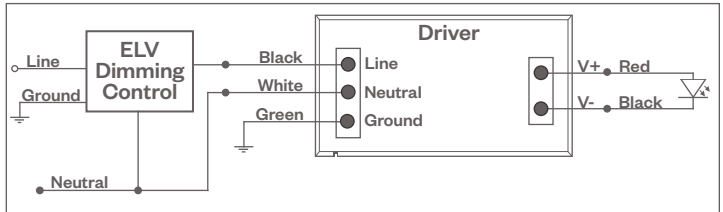| Wall Box (TRIAC 120VAC)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Vareo"	
Lutron "Skylark"	

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

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 "Vareo"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

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.

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PROJECT: TYPE:

DIMMING COMPATIBILITY:
Amerlux® Essenza 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 ---
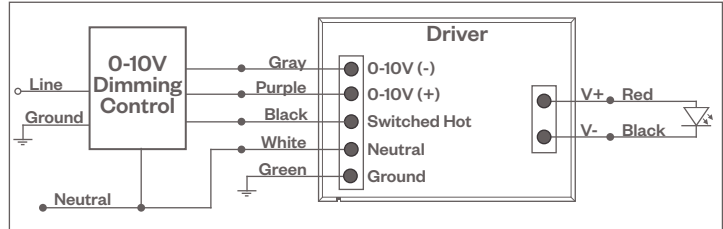
0-10V DIMMING
Integrates into a variety of building management and daylighting controls

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" - DVTV with PP-120H Interface	Leviton Renoir II 0-10V	Lutron Grafik Eye with GRX-TVI Interface

LUTRON H-SERIES / ECOSYSTEM 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!

HILUME-H-ECO, HILUME-5-ECO
EcoSystem Digital Control Wiring Diagram
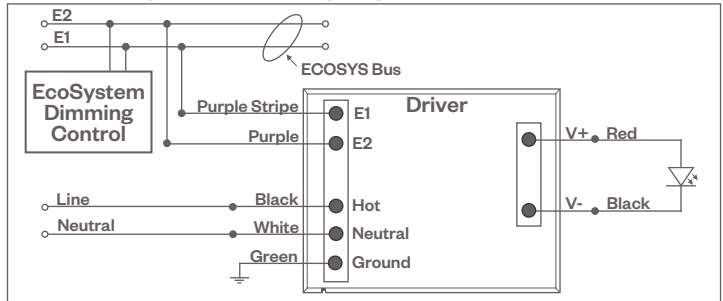
Compatible Dimmers†:

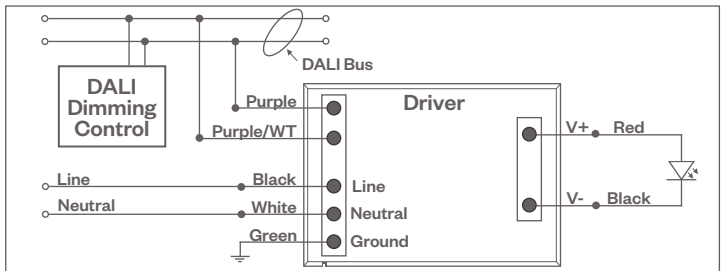| Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

DALI DIMMING
Digital control protocol allows individual fixture control

Notes:
- 120VAC - 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

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.