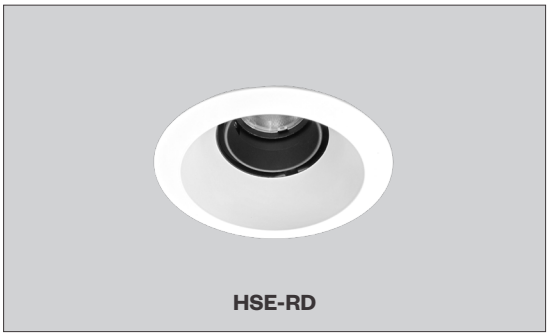
# Hornet® HP Select

## Round Downlight

| PROJECT: | TYPE: |
|---|---|

## Features

The Hornet HP Select round downlight series provides powerful yet comfortable accent lighting for retail and commercial spaces without compromising on budget or design. It delivers over 2000 lumens in a variety of beam distributions and features quiet optics for visually pleasing aesthetics. The Hornet HP Select offers trimmed, trimless, or millwork trim options and is perfect for both retrofit and new construction projects.



HSE-RD

## Product Overview

| | |
|---|---|
| Type: | Recessed Round Downlight |
| Wattage: | 10W, 12W, 16W, 21W |
| Color Temp: | 2700K, 3000K, 3500K, 4000K<br>Signature LED options in 2700K & 3000K |
| CRI: | 90+ typ. |
| Dimming: | **Wired:** TRIAC & ELV, Hi-lume®, 0-10V, DALI<br>**Wireless:** Lutron Athena RF node, BubblyNet Bluetooth |
| UGR: | <5 overall *(see pg 6 for detailed values)* |

## Certifications

5 year limited warranty AMERLUX LED

## Fixture Summary

**Performance Data**

| Watts | Delivered Lumens | LPW | CBCP | Color Temp-CRI |
|---|---|---|---|---|
| 10 | 945 | 94.5 | 3415 | 3000K-90+ |
| 12 | 1166 | 97.2 | 4214 | 3000K-90+ |
| 16 | 1609 | 100.6 | 5812 | 3000K-90+ |
| 21 | 2011 | 96.6 | 7265 | 3000K-90+ |

*Data is based on Medium Flood optic, 3000K-90+ 120V IES files available on website.*
*All wattages and LPW's include 2W for thermal protector.*

**Electrical Data**

| | 10W | | 12W | | 16W | | 21W | |
|---|---|---|---|---|---|---|---|---|
| Voltage | System Watts | Amps | System Watts | Amps | System Watts | Amps | System Watts | Amps |
| 120V | 10 | 0.08 | 12 | 0.10 | 16 | 0.13 | 21 | 0.18 |
| 277V | 10 | 0.04 | 12 | 0.04 | 16 | 0.06 | 21 | 0.08 |

*Electronic constant current LED driver.*
*Includes themal protector, 2W power consumption.*

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## Round Downlight

amerlux

| PROJECT: | TYPE: |
|---|---|

## Ordering Information - Housing/Frame

_____ . _____ . _____ . _____ . _____ . _____

1 2 3 4 5 6

### 1 Model

For New Construction

**HSE-R-NC** *(New Construction)*

**HSE-R-CP** *(Chicago Plenum (CCEA) housing)*

**HSE-R-IC** *(Insulated Ceiling/air tight, 16W max)*

For Existing Ceilings

**HSE-R-REM** *(Remodeler)*

### 2 Style

**T** trimmed

**TL** trimless

**MWK**[R] millwork *(for 1/2" - 11/16" ceiling thickness)*

**MWK1**[R] millwork *(for 3/4" - 1-1/2" ceiling thickness)*

**MWK2**[R] millwork *(for 1-1/2" - 2" ceiling thickness)*

***[R]Not available for use with Remodeler model***

### 3 Wattage

**10**

**12**

**16**

**21***

**** Not available for use with IC housing***

### 4 Voltage

**120**

**277**

**120/277** *(for use with IC housing only)*

### 5 Driver *(for non-dimming, select LE/TE option)*

Wired

**LE/TE** TRIAC/ELV dimming

**HILUME-H-ECO** - Lutron LDE1 Hi-lume®, 1% dim, Soft-On/Fade-to-Black

**0-10V**[T24] 0-10V dimming, 1% dim

**DALI** DALI dimming, 1% dim

Wireless

**AWNR-010*** Lutron Athena wireless node, RF only, 0-10V

**BN-BT-010*** BubblyNet Bluetooth node, 0-10V

**** Consult factory for lead time.***

### 6 Options/Accessories

**EM** - emergency battery pack with remote test switch *(not available for use with REM, CP or IC options)*

**HB49** - hanger bars from min 29" to max 49" *(not available for use with REM options)*

***Note: 26" hanger bars are included as standard. Choose HB49 option above for larger mounting spaces only.***

## Ordering Information - Trim

HSE-RD _____ . _____ . _____ . _____ . _____ . _____

1 2 3 4 5 6

### 1 Model

**HSE-RD** *(downlight)*

### 2 Style

**T** trimmed

**TL** trimless

**MWK** millwork

### 3 Finish

Trimmed

**MBW** matte black, white flange

**MWW** matte white, white flange

**SLVW** matte silver, white flange

**MBB** matte black, black flange

**SLVS** matte silver, silver flange

Trimless/Millwork

**MB** matte black

**MW** matte white

**SLV** matte silver

### 4 Beam Spread

**20D** narrow flood 20°

**30D** medium flood 30°

**40D** flood 40°

**50D** wide flood 50°

### 5 Color Temp

**279** 2700K-90+

**309** 3000K-90+

**359** 3500K-90+

**409** 4000K-90+

**SA27** Signature Ambiance 2700K-90+

**SA30** Signature Ambiance 3000K-90+

**SW30** Signature White 3000K-90+

**SC30** Signature Color 3000K-90+

### 6 Options/Accessories

**HEX** hexcell louver

**SOL** solite beam softening lens

# Hornet® HP Select

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## Specifications

**Application**

Retail and commercial ambient lighting

**Construction**

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

**Optical**

Beam Spreads: 20°, 30°, 40°, 50°

**LED**

Color Temp Options: 2700K, 3000K, 3500K, 4000K
Signature Ambiance, White, and Color options available *(see below)*
CRI: 90+ typ.
R9 Values: 55 *(92 CRI)*
Binning: 3 MacAdam *(SDCM)*
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

***Signature Ambiance*** *(2700K & 3000K): A refined, warm light recipe ideal for hospitality, residential-style commercial spaces, and retail. It accentuates woods, textiles, bronze, and darker finishes, creating a relaxed and inviting luxury environment.*

***Signature White*** *(3000K): A premium white option built for crisp displays, clean architectural finishes, and retail settings. It enhances white surfaces and visual clarity, ensuring whites read brighter without sacrificing refinement.*

***Signature Color*** *(3000K): A vibrant, color-enhancing option designed for spaces where merchandise, fabrics, and finishes need to stand out. It heightens the contrast between colors and whites, delivering deeper, richer presentations for dynamic retail and hospitality experiences.*

**Electrical**

Wattage: 10W, 12W, 16W, 21W
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 available
*See pages 10-12 for more dimming information*

**Finish**

Powder coat paint/wet paint
Consult factory for custom finishes

**Mounting**

26" Hanger bars included *(except for Remodeler versions)*
Optional **HB49** - hanger bars from min 29" to max 49" available
Trimmed Fixture:
For use in grid or sheetrock ceilings, 5/8" - 2" standard
Trimless Fixture *(not available with Shower trim)*:
For use in sheetrock ceilings, max ceiling thickness 5/8"
Millwork Fixture:
Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material. Max thickness 2"
***Not available for use with Remodeler model***

**Certifications**

CSA damp as tested to UL 1598 standards
CP - Chicago Plenum *(CCEA)* option
IC/AT rated *(16W max)*
Damp location

**Warranty**

5 year limited warranty

**Emergency Battery Pack** *(EM)*

Powers fixture at 5.1 watts *(approx. 400 lm)* for 90 minutes
*(not for use with CP, IC or REM versions)*

**Optional RF Node**

Amerlux® has partnered with control companies to create building environments that are safer, and smarter, than ever before. At the heart of our partnership is intelligent RF nodes, the most advanced digital wireless communication available today. Integrated into Amerlux products.

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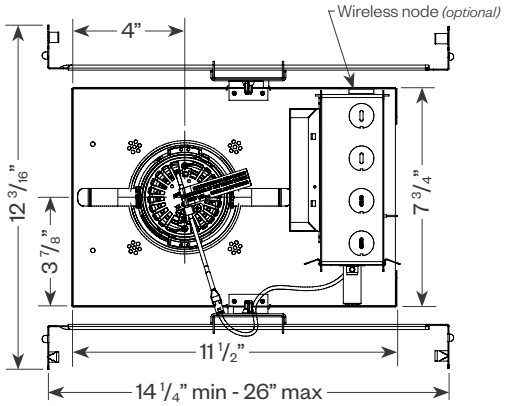
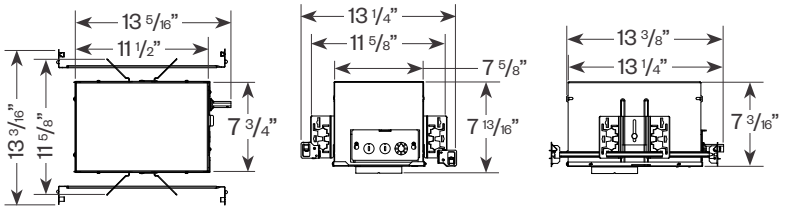
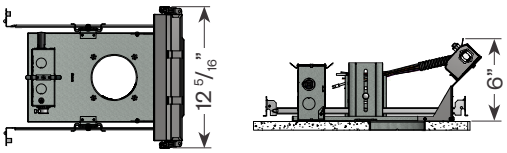
## Product Details



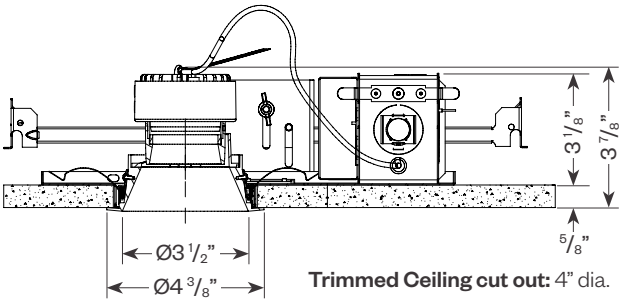

**Optional CP or IC/AT housing**



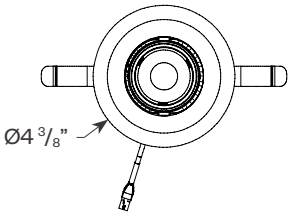

**Emergency Battery Pack (EM) option**



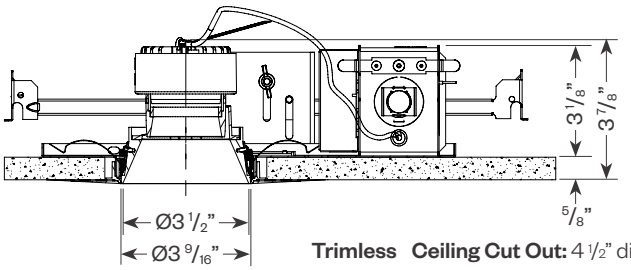

## Trimmed



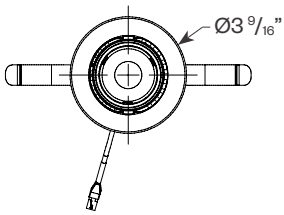

**Trimmed Ceiling cut out:** 4” dia.




## Trimless

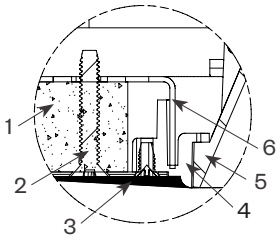



**Trimless Ceiling Cut Out:** 4 1/2” dia.




## Plaster Frame Installation Detail *(for trimless fixture only)*

1. Ceiling 5/8”
2. 6-32 Type F Thread Cutting Screw
3. Plaster Skim Coat *(by others)*
4. Cast Aluminum Plaster Frame
5. Reflector Trim
6. Aperture plate



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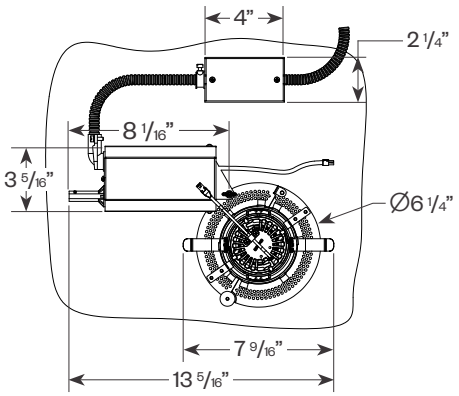
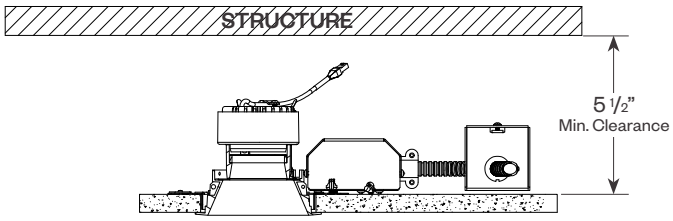
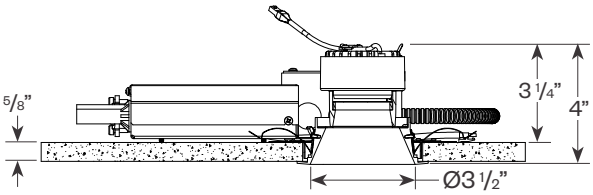
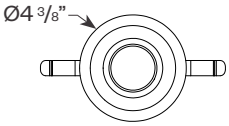
## Product Details - Remodeler



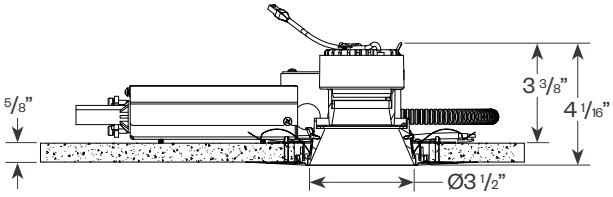

### Trimmed

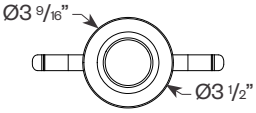



**Ceiling Cut Out:** 4” dia.

### Trimless

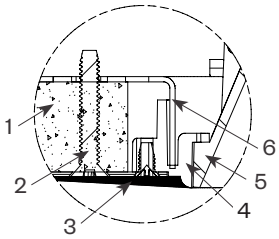



**Ceiling Cut Out:** 4” dia.

## Plaster Frame Installation Detail *(for trimless fixture only)*

1. Ceiling 5/8”
2. 6-32 Type F Thread Cutting Screw
3. Plaster Skim Coat *(by others)*
4. Cast Aluminum Plaster Frame
5. Reflector Trim
6. Aperture plate



# Hornet® HP Select

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|---|---|

## Performance Data

**Multiplying Factors:** *(Multiplying Factor is based on 3000K-90+ 120V IES file on website)*

| Wattage: | 10W | 12W | 16W | 21W |
|---|---|---|---|---|
| Factor: | 0.47 | 0.58 | 0.80 | 1.0 |

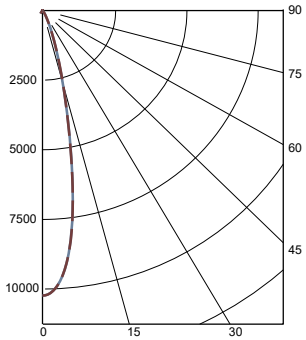
| CCT: | 2700K-90+ | 3000K-90+ | 3500K-90+ | 4000K-90+ |
|---|---|---|---|---|
| Factor: | 1.0 | 1.0 | 1.02 | 1.03 |

| Beam: | 20D | 30D | 40D | 50D |
|---|---|---|---|---|
| UGR: | <5 | <1 | <4 | <5 |

*Tested with Matte White Finish.*
*UGR values calculated using UGR table method.*

### 21W LED, 3000K-90+

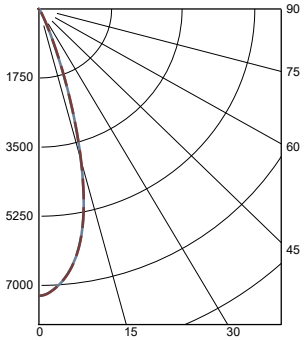
**Narrow Flood (20°)**
**LTL # 15432052.01**
**Lumens: 1779 lm; 85.5 lm/W**




**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 10240 |
| 5 | 9128 |
| 15 | 2508 |
| 25 | 436 |
| 35 | 94 |
| 45 | 14 |

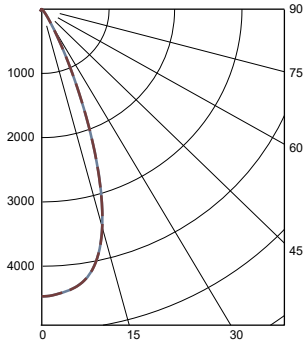
**Medium Flood (30°)**
**LTL # 15432052.02**
**Lumens: 2011 lm; 96.6 lm/W**




**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 7265 |
| 5 | 6885 |
| 15 | 3987 |
| 25 | 497 |
| 35 | 65 |
| 45 | 9 |

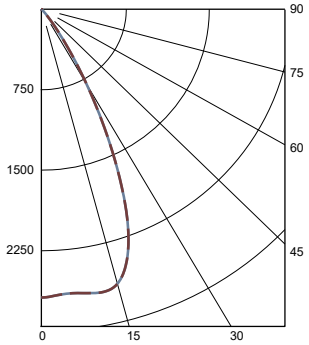
**Flood (40°)**
**LTL # 15432052.03**
**Lumens: 1935 lm; 92.9 lm/W**




**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 4469 |
| 5 | 4400 |
| 15 | 3481 |
| 25 | 990 |
| 35 | 133 |
| 45 | 14 |

**Wide Flood (50°)**
**LTL # 15432052.04**
**Lumens: 1926 lm; 92.4 lm/W**

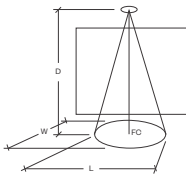



**Candelas at Nadir**

| Deg | Candela |
|---|---|
| 0 | 2686 |
| 5 | 2660 |
| 15 | 2642 |
| 25 | 1558 |
| 35 | 308 |
| 45 | 20 |

## 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).




**Narrow Flood (20°)**

**0° Aiming Angle Horizontal Footcandles**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 313 | 2.1 | 2.1 |
| 7.5' | 162 | 3.0 | 3.0 |
| 10.0' | 96 | 3.7 | 3.7 |
| 12.5' | 63 | 4.7 | 4.7 |

**Medium Flood (30°)**

**0° Aiming Angle Horizontal Footcandles**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 256 | 2.8 | 2.8 |
| 7.5' | 122 | 4.0 | 4.0 |
| 10.0' | 70 | 5.4 | 5.4 |
| 12.5' | 45 | 6.7 | 6.7 |

**Flood (40°)**

**0° Aiming Angle Horizontal Footcandles**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 169 | 3.3 | 3.3 |
| 7.5' | 77 | 5.0 | 5.0 |
| 10.0' | 44 | 6.8 | 6.8 |
| 12.5' | 28 | 8.4 | 8.4 |

**Wide Flood (50°)**

**0° Aiming Angle Horizontal Footcandles**

| D | FC | L | W |
|---|---|---|---|
| 5.0' | 104 | 4.5 | 4.5 |
| 7.5' | 47 | 6.7 | 6.7 |
| 10.0' | 27 | 8.9 | 8.9 |
| 12.5' | 17 | 11.1 | 11.1 |

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## Dimming Compatibility

Amerlux® Hornet® 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 ---**

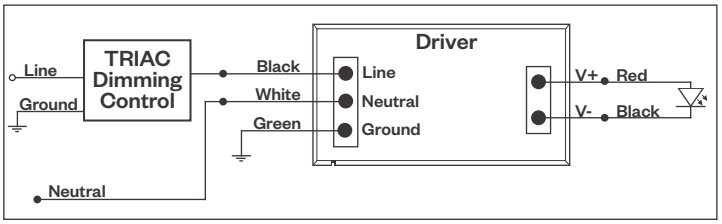
### TRIAC *(Forward Phase)* DIMMING *(Standard)*

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 "Skylark" | |

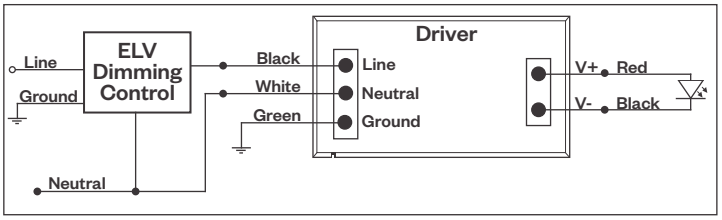
### ELV - Electronic Low Voltage *(Reverse Phase)* DIMMING *(Standard)*

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 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" | | |

**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® Hornet® 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 ---**

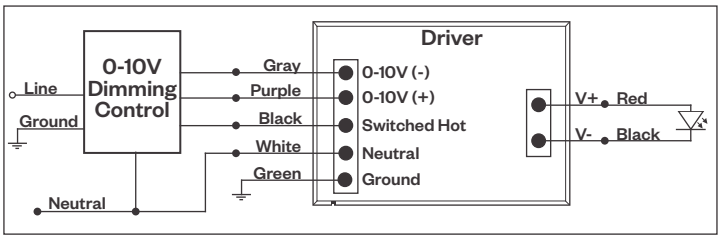
### 0-10V DIMMING

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 |

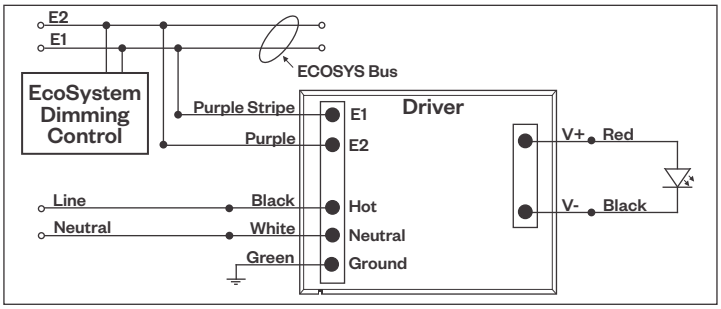
### LUTRON LDE1 DIMMING

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 | |

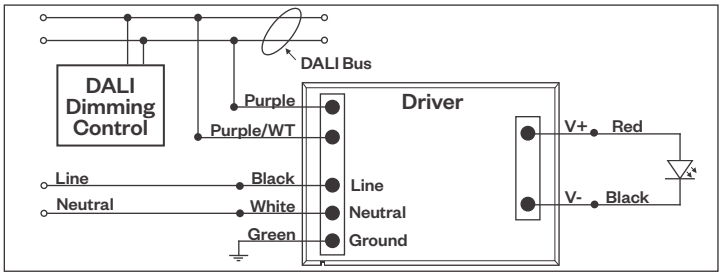
### DALI DIMMING

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 |

**Notes:**

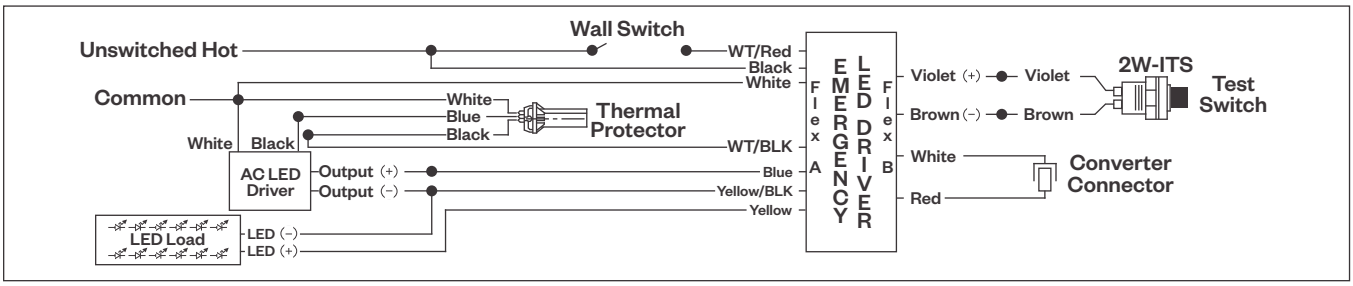
* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

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

# Hornet® HP Select

## Round Downlight

| PROJECT: | TYPE: |
|---|---|

## Emergency Battery Pack

Wiring Diagram