# Hornet<sup>®</sup> HP

### Pendant/Surface Multiples



2 Light Pendant Straight Multiple

## ameriux A Delta Group Company

#### **Features**

Hornet High Power (HP) Pendant Multiples perform beautifully, punching through higher ambient light with strong output making them perfect for retail applications. Designed for use in open or closed ceiling applications as an alternate to Pendant Track, Hornet HP Pendant Multiples are ideal for delivering great performance, energy efficiency, and maximum control over where and how you want to place light. And they switch from recessed to semi-recessed to meet any aiming requirement.

#### **Product Overview**

Type: Pendant Multiple, Accent & Display

Wattage: 11, 16, 18

Lumen Output: 1,369 max; 76 Lm/W (spot optic)

CBCP: 12,215 max (spot optic)

**Color Temp:** 2200K, 2700K, 3000K, 3500K, 4000K, CRISP

CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)

90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K) CrispWhite (16W max) & 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 (120/277VAC) - 1% Dim

#### **PROJECT:**



3 Light Pendant Straight Multiple



3 Light Pendant Curved Multiple





#### TYPE:

#### **Fixture Summary** (see following pages for more information)

#### **Performance Chart**

Watts	Delivered Lumens	LPW	СВСР	Color Temp
11	972	88	8,673	3000K-83
16	1,205	75	10,749	3000K-83
18	1,369	76	12,215	3000K-83

Data is based on 3000K-83, 120V IES files available on website Data is "per head" and based on Spot optic See pg 10 for other beam spreads





PROJECT: TYPE:

#### **Ordering Information**

	·		_•·	٠٠		120-277	·•		•		•
1	2	3	4	5	6	7	8	9	10	11	12

Model
HHP-PM (pendant straight multiple)
HHP-PCM (pendant curved multiple)

2 # of Heads

<u>Straight</u>	Curved
1	2
2	3
3	
4	

3 Mounting

ASW10 - aircraft cable through ceiling tile or gyp board, white, 10'
ASW20 - aircraft cable through ceiling tile or gyp board, white, 20'
ASB10 - aircraft cable through ceiling tile or gyp board, black, 10'
ASB20 - aircraft cable through ceiling tile or gyp board, black, 20'

ASW10T - aircraft cable over ceiling tee, white, 10'

ASW20T - aircraft cable over ceiling tee, white, 20'

ASB10T - aircraft cable over ceiling tee, black, 10'

ASB20T - aircraft cable over ceiling tee, black, 20'

RSW4\* - rigid stem, white, 4' (field cuttable)

RSW8\* - rigid stem, white, 8' (field cuttable)

RSB4\* - rigid stem, black, 4' (field cuttable)

RSB8\* - rigid stem, black, 8' (field cuttable)

**SM**<sup>e</sup> - surface mount

**CDSM**<sup>e</sup> - conduit surface mount

\*For custom length, consult factory

<sup>e</sup>Not available for curved multiples

- 4 Circuiting
  - 1 single circuit
  - 2 dual circuit (middle head(s) on secondary circuit)
- 5 Wattage

11

16

18

6 Housing Finish

WT - white texture

BT - black texture

ST - silver texture

WT/MB - white texture exterior/matte black interior

ST/MB - silver texture exterior/matte black interior

7 <u>Voltage</u> 120-277

8 Head Finish

WT - white texture

BT - black texture

ST - silver texture

<u>9</u> Beam Spreads (see additional details below)

1LT	2LT	3LT	4LT	
SP	SP	SP	SP	(spot 15°)
NF	NF	NF	NF	(narrow flood 22°)
MF	L MFL	MFL	MFL	(medium flood 25°)
FL	FL	FL	FL	(flood 28°)
WF	WF	WF	WF	(wide flood 45°)
VW	F VWF	VWF	VWF	(very wide flood 60°)
LS	LS	LS	LS	(linear spread lens 60°x10°

10 Color Temp

83 CRI:	90+ CRI:	
<b>27</b> - 2700K-83	<b>229</b> - 2200K-90+	CRISP - CrispWhite
<b>30</b> - 3000K-83	<b>279</b> - 2700K-90+	(16W max)
<b>35</b> - 3500K-83	<b>309</b> - 3000K-90+	3CLA - 3K Class A
<b>40</b> - 4000K-83	<b>359</b> - 3500K-90+	
	<b>409</b> - 4000K-90+	

<u>Driver</u> (for non-dimming select LE/TE option)

**LE/TE** - TRIAC/ELV dimming, 5% dim (standard)

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 - EldoLED, 1% dim

Options/Accessories (see additional details below)

**SNAH** - snoot accessory holder, 1" length, matte black interior, exterior finish matches fixture finish, accepts cross blade plus 2 additional forms of media

**AH** - accessory holder, finish matches fixture finish, accepts 2 forms of media

HEX - hexcell louver, 1/8" x 1/8" (requires SNAH or AH)

CB - cross blade, matte black finish (requires SNAH)

**SOL** - solite lens (requires AH or SNAH)



#### PROJECT: TYPE:

#### **Specifications**

#### Application

Retail, commercial and hospitality accent and display lighting

#### Construction

Extruded Fixture Body (Roll formed for curved version)

Cast Corner Pieces

Stamped Steel top panel

Complete die-cast optical head construction

No exposed wiring

#### Optical

Changeability from Recessed to Semi-Recessed in field

Tilt: 0-35° Recessed. 0-50° Semi-Recessed

Rotation: 360°+

Beam Spreads: Spot, 15°; Narrow Flood, 22°;

Medium Flood, 25°; Flood, 28°; Wide Flood, 45°;

Very Wide Flood, 60°; Linear Spread, 60° x 10°

#### LED

#### Color Temp Options:

2200K, 2700K, 3000K, 3500K, 4000K, CRISP

CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)

90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)

CrispWhite\* LED available, 16W max

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: 11, 16, 18

Electronic constant current LED driver, 120V-277V 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: For EM fixture - remote EM inverter by others

#### **Drivers**

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase

0-10V, Lutron and DALI systems also available See pages 10-11 for more dimming information

#### **Finish**

Powder coat paint

Consult Factory for custom finishes

#### Mounting

2-Point Aircraft Cable with adjustable balance connector Rigid Stem (field cuttable)

Surface Mount and Conduit Surface Mount available

#### Certifications

CSA listed to UL standards. Suitable for damp locations Indoor use only

#### Warranty

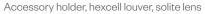
5 year limited warranty

#### Accessories (diagrams show installation order)















Snoot accessory holder, cross blade, hexcell louver, solite lens



#### **Electrical Data**

#### 1 Light

	1 x 11W		1 x 16W		1 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	11	0.09	16	0.13	18	0.15
277V	11	0.04	16	0.06	18	0.07

Electronic constant current LED driver

#### 2 Light

	2 x 11W		2 x 16W		2 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	22	0.18	32	0.27	36	0.30
277V	22	0.08	32	0.12	36	0.13

Electronic constant current LED driver

#### 3 Light

	3 x 11W		3 x 16W		3 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	33	0.28	48	0.40	54	0.45
277V	33	0.12	48	0.17	54	0.19

Electronic constant current LED driver

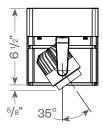
#### 4 Light

	4 x 11W		4 x 16W		4 x 18W	
	System Watts	Amps	System Watts	Amps	System Watts	Amps
120V	44	0.37	64	0.53	72	0.60
277V	44	0.16	64	0.23	72	0.26

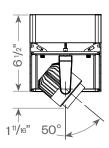
Electronic constant current LED driver

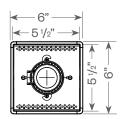
#### Hornet HP Pendant Multiples: 1 Light Straight

#### Recessed

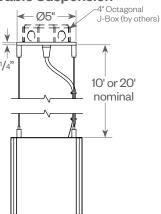


#### Semi-Recessed

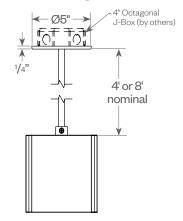




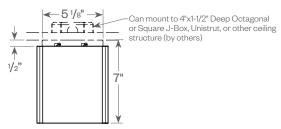
#### **Aircraft Cable Suspension**



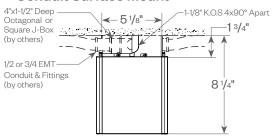
#### **Rigid Stem Mounting**



#### **Surface Mount**



#### **Conduit Surface Mount**



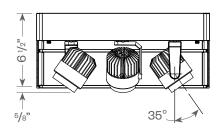


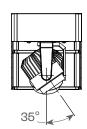


#### **PROJECT:**

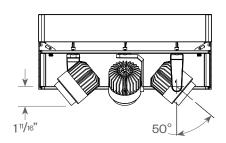
#### Hornet HP Pendant Multiples: 2-4 Lights Straight

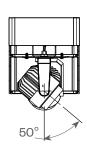
#### Recessed

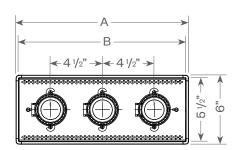




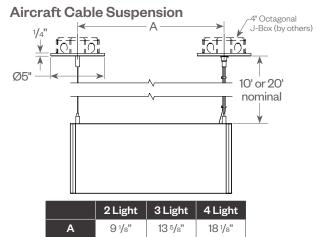
#### Semi-Recessed

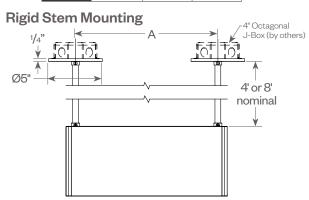




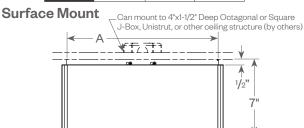


	2 Light	3 Light	4 Light
Α	10 1/2"	15"	19 1/2"
В	10"	14 1/2"	19"

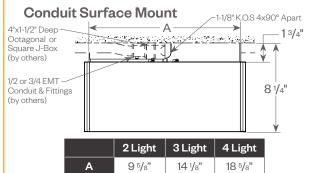




	2 Light	3 Light	4 Light	
Α	8 3/4"	13 1/4"	17 <sup>3</sup> / <sub>4</sub> "	



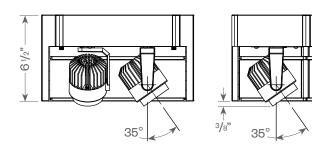
	2 Light	3 Light	4 Light
Α	9 5/8"	14 ¹/s"	18 <sup>5</sup> /8"



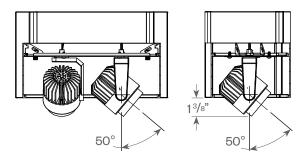


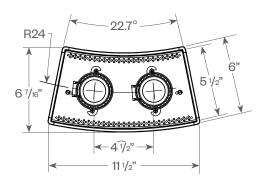
#### Hornet HP Pendant Multiples: 2 Light Curved

#### Recessed

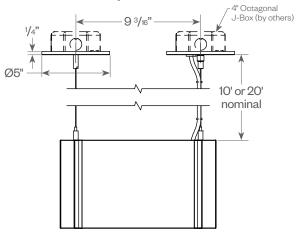


#### Semi-Recessed

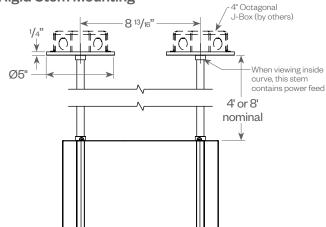




#### Aircraft Cable Suspension



#### **Rigid Stem Mounting**

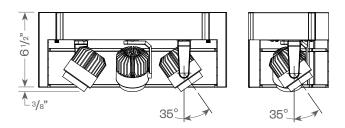




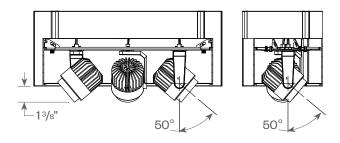


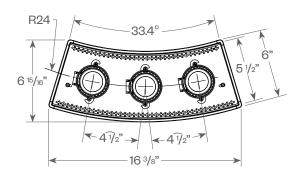
#### Hornet HP Pendant Multiples: 3 Light Curved

#### Recessed

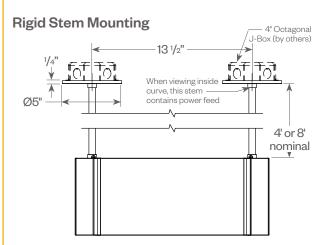


#### Semi-Recessed





# Aircraft Cable Suspension 4" Octagonal J-Box (by others) 13 7/8" 10' or 20' nominal





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

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

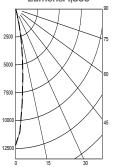
Wattage:	11W	16W	18W		
Factor:	0.71	0.88	1.0		

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

#### 18W LED, 3000K-83 (Note: Data is per head)

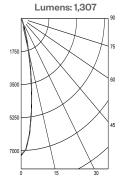
Spot (SP) Distribution, 15° LTL #855377 Lumens: 1,369



Candelas at Nadir

Deg	Candela
0	12215
5	8436
15	1705
25	204
35	77
45	26

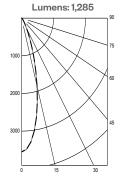
Narrow Flood (NF) Distribution, 22° LTL#860527



Candelas at Nadir

Deg	Candela
0	7252
5	6128
15	1841
25	309
35	93
45	41

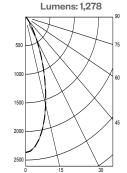
Flood (FL) Distribution, 28° LTL # 860528



Candelas at Nadir

Deg	Candela
0	3551
5	3304
15	1861
25	612
35	156
45	57

Wide Flood (WF) Distribution, 45° LTL # 860529



Candelas at Nadir

Deg	Candela
0	2369
5	2268
15	1592
25	754
35	251
45	82

#### **Application Data:**

#### Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

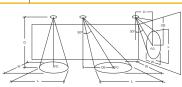
 $\mathbf{D} = \mathsf{Distance}$  to floor or wall.

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.



	$\triangle$	}	° Aiming Horizoi Footcan	ntal	30		Н	Aiming A orizonta otcandl	al	30°		V	ming A ertical tcandle		60°	No.		ning An ertical candle	
	D	FC	L	W	D	FC	L	W	СВ	D	FC	L	W	CB	D	FC	L	W	CB
	5.0'	484	1.4	1.4	5.0	' 313	1.8	1.5	3.0	 3.0'	178	3.0	1.6	5.0	3.0'	630	1.6	1.1	2.0
Spot	7.5'	216	2.0	2.0	7.5	' 136	2.8	2.4	4.0	4.0'	105	3.8	2.1	6.0	4.0 '	450	1.6	1.3	2.0
S	10.0'	122	2.7	2.7	10.0	' 76	3.7	3.2	6.0	5.0'	67	4.8	2.7	8.0	5.0'	298	2.0	1.6	3.0
	12.5'	78	3.4	3.4	12.5	' 46	4.8	4.2	7.0	6.0'	47	5.9	3.2	9.0	6.0'	200	2.4	1.9	3.0
р	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
Flood	5.0'	289	1.7	1.7	5.0	' 187	2.4	2.1	3.0	 3.0'	127	3.3	1.8	4.0	3.0'	422	1.9	1.3	2.0
≥	7.5'	129	2.8	2.8	7.5	' 86	3.5	3.1	4.0	4.0'	70	4.4	2.7	6.0	4.0'	298	1.9	1.5	2.0
Narrow	10.0'	73	3.6	3.6	10.0	47	4.7	4.1	5.0	5.0'	47	5.3	3.2	7.0	5.0'	181	2.5	2.1	3.0
R	12.5'	47	4.5	4.5	12.5	' 31	5.8	5.2	7.0	6.0'	32	6.7	3.9	8.0	6.0'	133	2.8	2.5	3.0
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
-	5.0'	142	2.7	2.7	5.0	92	3.4	3.1	3.0	3.0'	75	3.8	2.7	4.0	3.0'	232	2.3	1.7	2.0
Flood	7.5'	63	3.9	3.9	7.5	43	4.9	4.4	4.0	4.0'	44	4.9	3.3	5.0	4.0'	154	2.7	2.4	2.0
正	10.0'	36	5.2	5.2	10.0	' 25	6.4	5.8	5.0	5.0'	29	6.1	4.1	6.0	5.0'	95	3.4	3.0	2.0
	12.5'	23	6.5	6.5	12.5	' 16	8.0	7.2	6.0	6.0'	20	7.4	5.1	7.0	6.0'	69	3.8	3.5	3.0
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
Flood	5.0'	95	3.2	3.2	5.0	' 67	3.9	3.4	2.0	3.0'	63	3.7	2.8	3.0	3.0'	180	2.4	2.0	1.0
픋	7.5'	42	4.8	4.8	7.5	' 30	5.7	5.3	3.0	4.0'	36	4.9	3.7	4.0	4.0'	105	3.2	2.9	2.0
Wide	10.0'	24	6.4	6.4	10.0	' 17	7.6	7.1	4.0	5.0'	23	6.1	4.8	5.0	5.0'	69	3.8	3.5	2.0
≶	12.5'	15	8.0	8.0	12.5	' 11	9.6	8.9	5.0	6.0'	16	7.5	5.7	6.0	6.0'	47	4.7	4.3	3.0



PROJECT: TYPE:

#### 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 ---

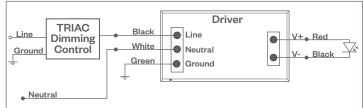
#### TRIAC (Forward Phase) DIMMING (Standard)

Utilizes "Standard" incandescent 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 (Incandescent Sty	Central System	
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

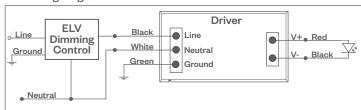
#### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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<sup>†</sup>:

Wall Box (ELV Style)		Central System
Lutron "Diva"	Leviton "Surslide"	Lutron "GP" Panel with PHPM-PA Interface
Lutron "Nova-T"	Leviton "Vizio"	Lutron Grafik Eye QS with PHPM-PA Interface
Lutron "Maestro"		
Lutron "Vareo"		
Lutron "Skylark"		

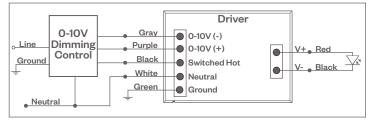
#### 0-10V - DIMMING (-0-10V Option)

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<sup>†</sup>:

Wall Box		Central System
Lutron "Diva" - DVTV with PP-120H Interface	Leviton Renoir II 0-10V	Lutron Grafik Eve with GRX-TVI Interface

#### 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:

#### 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 ---

#### LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

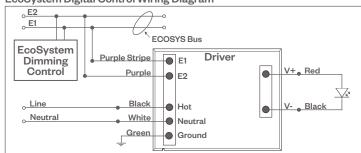
Integrates into Lutron EcoSystem building management

#### 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<sup>†</sup>:

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 (-DALI OPTION)

Digital control protocol allows individual fixture control

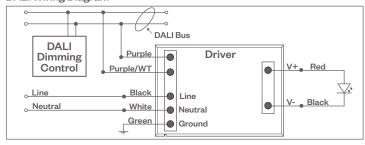
#### Notes

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

#### Compatible Dimmers<sup>†</sup>:

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 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.