# Hornet<sup>®</sup> HP

# Recessed 4-Light Square Multiple



**PROJECT:** 



# Features

Hornet High Power (HP) Multiples perform beautifully, punching through higher ambient light with strong output making them perfect for retail applications. For a clean ceiling aesthetic or when track is not an option, Hornet HP Multiples are ideal for delivering great performance, energy efficiency, and maximum control over where and how you want to place light.

# **Product Overview**

Type: Wattage:	Recessed Multiple, Accent & Display 11, 16		
Lumen Output:	1,205 max; Lm/W (spot optic)		
CBCP:	10,749 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		

TYPE:

# Fixture Summary (see following pages for more information)

# **Fixture Type**

# of Heads	New Construction	Remodeler	Trim	Trimless
4SQ	Yes	No	Yes	No

See separate spec sheet for Semi-Recessed version.

# **Performance Chart**

Watts	Delivered Lumens	LPW	CBCP	Color Temp
11	972	88	8,673	3000K-83
16	1,205	75	10,749	3000K-83

Data is based on 3000K-80, 120V IES files available on website Data is per head and based on Spot optic

# **Electrical Data**

	4 x 1	1W	4 x 1	6W
	System Watts	Amps	System Watts	Amps
120V	44	0.37	64	0.53
277V	44	0.16	64	0.23

Electronic constant current LED driver





**PROJECT: Frame Ordering Information** HORNET-HP-R/SR-4SQ-NC-FRAME . 3 4 5 1 2 Driver (for non-dimming select LE/TE option) <u>Model</u> 4 1 HORNET-HP-R/SR-4SQ-NC-FRAME (new construction) 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 2 <u>Style</u> T - trimmed 0-10V - 0-10V dimming; 1% dim DALI - EldoLED; 1% dim Voltage 3 120 **Options/Accessories** 5 277 EM - emergency battery pack, powers only 1 head of the the total fixture **Trim Ordering Information** HORNET-HP-R-4SQ-NC-TRIM 120-277 6 7 8 3 4 5 9 1 2 Color Temp Model 7 HORNET-HP-R-4SQ-NC-TRIM (new construction) 83 CRI: 90+ CRI: **27** - 2700K-83 **229** - 2200K-90+ **CRISP** - CrispWhite **279** - 2700K-90+ **30** - 3000K-83 3CLA - 3K Class A Style 2 T - trimmed **35** - 3500K-83 309 - 3000K-90+ **40** - 4000K-83 359 - 3500K-90+ 3 Wattage 409 - 4000K-90+ 11 16 Driver (for non-dimming select LE/TE option) 8 LE/TE - TRIAC/ELV dimming, 5% dim HILUME-H-ECO - Lutron Hi-lume® H Series, EcoSystem, Finish (for housing, head & trim) 4 WT - white texture 1% dim with soft on, fade to black BT - black texture 0-10V - 0-10V dimming; 1% dim DALI - EldoLED; 1% dim ST - silver texture Other finishes, consult factory **Options/Accessories** 9 SNAH - snoot accessory holder, 1" length, matte black interior, 5 <u>Voltage</u> 120-277 exterior finish matches fixture finish, accepts cross blade plus 2 additional forms of media AH - accessory holder, finish matches fixture finish, accepts 2 6 **Beam Spreads** <u>3LT</u> 4LT <u>1LT</u> 2LT forms of media SP SP SP SP (spot 15°) HEX - hexcell louver, 1/8" x 1/8" (requires SNAH or AH) NF NF NF NF (narrow flood 22°) **CB** - cross blade, matte black finish (requires SNAH) MFI MFI MFI MFI (medium flood 25°) SOL - solite lens (requires AH or SNAH) EM - emergency battery pack, powers only 1 head of the the total FL FL FL FL  $(flood 28^\circ)$ WF WF WF WF (wide flood 45°) fixture VWF VWF VWF VWF (very wide flood 60°) LS LS LS LS (linear spread lens 60°x10°)

# **PROJECT:**

# TYPE:

# Specifications

# Application

Retail, commercial and hospitality accent and display lighting

# Construction

Stamped steel mounting frame with integral mounting bars Thermally protected (adds 2W to total fixture wattage) Steel driver housing Steel upper housing and laser cut trim ring

Complete die-cast optical head construction No exposed wiring

# Optical

Tilt: 0-45°x45° 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 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.

#### Accessories (diagrams show installation order)



Accessory holder, hexcell louver, solite lens

Electrical

# Wattage: 11, 16

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.

A Delta Group Company

# Drivers

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

0-10V, Lutron and DALI systems also available See pages 5-6 for more dimming information

# Finish

Powder coat paint Consult Factory for custom finishes

# Mounting

For use in T-Grid or GB ceilings; max ceiling thickness 1" Adjustable hanger bars included (14 ½" - 25" std.) (32"-48" Adjustable hanger bars available) Consult Factory for thicker ceilings

# Certifications

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

# Warranty

5 year limited warranty

# **Emergency Battery Pack (EM)**

Powers single head at 5.1 watts (approx. 400 Lm) for 90 minutes.



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

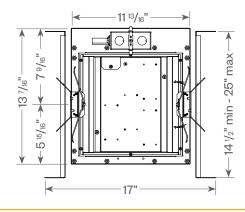


# PROJECT:



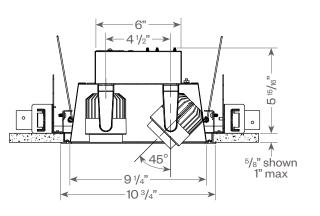
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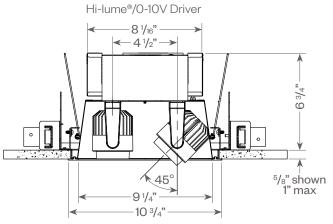




# **End View**

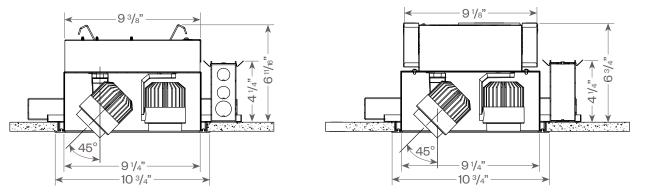
Standard Driver (ELV/TRIAC)



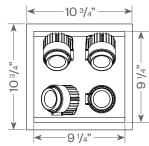


**Ceiling cut out:** 10 <sup>3</sup>/<sub>8</sub>" × 10 <sup>3</sup>/<sub>8</sub>"

**Side View** 



# **Bottom View**





TYPE:

#### DIMMING COMPATIBILITY:

Amerlux<sup>\*</sup> 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.

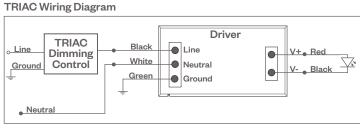
# --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

# 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



# Compatible Dimmers<sup>†</sup>:

Wall Box (Incandescent Sty	Central System	
Lutron "Diva"	Lutron "Vareo"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron "Skylark"	Lutron Grafik Eye QS
Lutron "Maestro"		

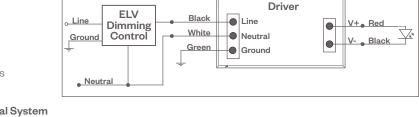
# ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

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

# 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)

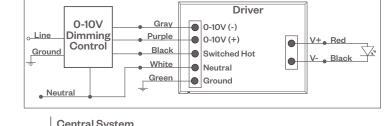
Integrates into a variety of building management and daylighting controls

#### 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

**ELV Wiring Diagram** 



# Compatible Dimmers<sup>+</sup>:

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



#### TYPE:

#### DIMMING COMPATIBILITY:

Amerlux<sup>®</sup> 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 ---

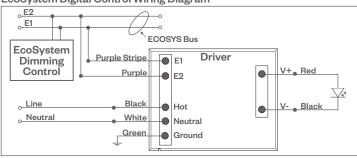
# LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

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>:

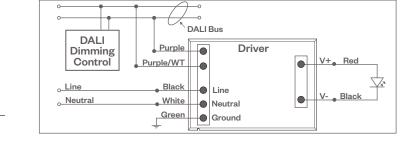
Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

# DALI DIMMING (-DALI OPTION)

Digital control protocol allows individual fixture control

#### Notes:

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

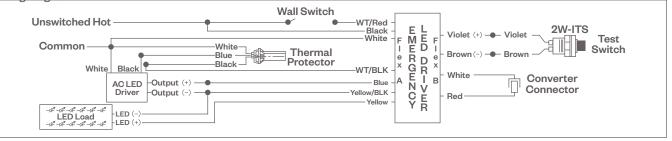


# Compatible Dimmers<sup>+</sup>:

wall Box (3-wire Fluorescent)	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

# EMERGENCY DIMMING (-EM OPTION)





**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.