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LICHTING

High Intensity Scene Lighting





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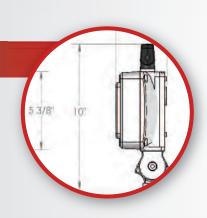


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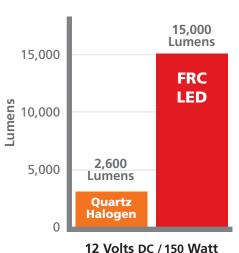


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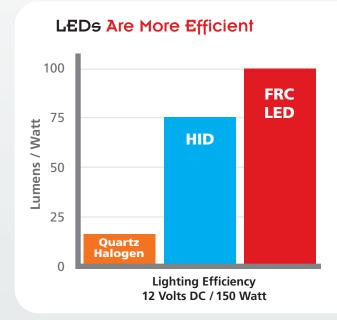
Firefly

MORE Light LESS Power

LEDs Produce More Light

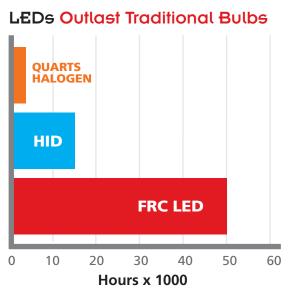


A quartz halogen bulb utilizes 8% of the energy supplied to produce light. By comparison, LEDs use 40% of the supplied energy to produce light.



MORE Efficient LONGER Life

Different types of light sources that use the same amount of power (watts) can have very different luminous efficacy (lumens / watt) and therefore different lighting efficiency.



- The typical operational life of an LED is 50,000 hours compared to the average life of an incandescent bulb, which is approximately 2,000 hours.
- LEDs can operate well past the lifetime of the average apparatus.
- Because of their inherent solid state design without filaments, LEDs are much more rugged than incandescent bulbs and can better withstand shock and vibrations.

LEDs produce more than 5 times the amount of light as an incandescent bulb while consuming the same amount of power.

Actual side-by-side comparison of Halogen vs LED lighting



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LED lighting is whiter, brighter, and will outlast traditional bulbs.



Fire Research LED lampheads are designed to operate in a range that is as close to natural daylight as possible.

Closer to Natural Daylight

Candlelight	Incandescent Bulb	Quartz Halogen Bulb	HID Bulb	Daylight	Blue Sky	
(1800-1900)	(2500-2900)	(3300-3500)	(4200-4500)	(5000-7500)	(10000-12000)	

Color Temperature (measured in Kelvins)



All FRC LED Lampheads are rated 5500 - 7000K. As close to natural daylight as a light can get.

Visible light has a color temperature scale from 1800 to 12,000 Kelvins (K). As you can see, a candle burns at around 1800K and a blue sky is at 10,000K. Daylight is between 5000K and 6500K. Different types of light sources emit a different color of light. The color of the light is measured in Kelvins and is not a measure of brightness.

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SPECIFIA



20,000 Lumens of Bright Light



Slimmest LED Profile in the Industry • Unique Combination of Flood / Spot LEDs

Instant-On at Full Intensity • Longer LED Life Rated at 50,000 Hours

Available in 15,000 or 20,000 Lumens • Five Year LED Lighting Warranty

Innovative Cooling Fins Provide Higher Efficiency Available on FRC Pole, Brow, Fixed or Surface Mounts

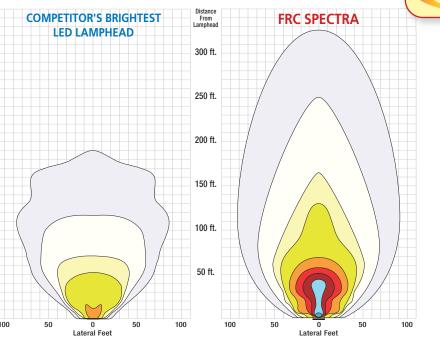
Puts All Light Directly on the Work Area & Scene Beyond

Three rows of LEDs - Top and bottom rows are flood LEDs designed to light up the work area. The Middle row of focused spot LEDs provide long distance illumination.

SPECTRA unique lens design provides a smooth and uniform flood and spot combination bringing firefighters the widest light pattern for improved work area visibility as well as illuminating objects at a farther distance.



All LED Lampheads Are Not Created Equal **Brightness Comparisons using LED Illumination Patterns**



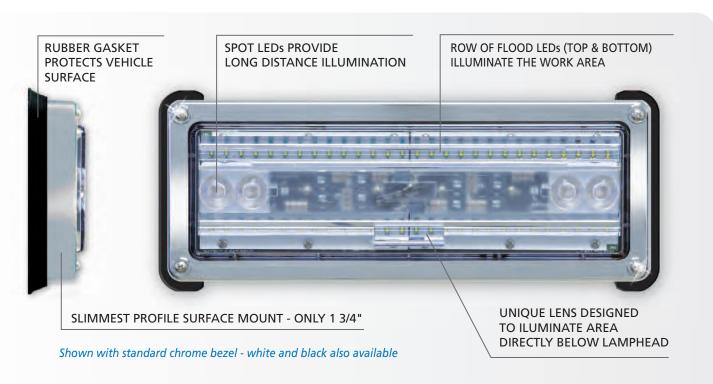




SPECIFIC Surface Mount

15,000 Lumens of Bright Light

The Brightest Surface Mounted LED Lamphead Available





SPECTRA surface mount & SPECTRA 900 have extremely low profiles extending less than 1-3/4" from the panel.

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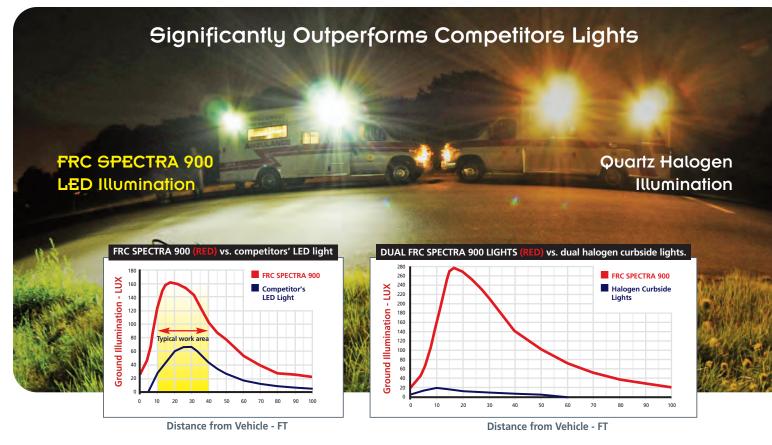
SPECIFICAL SOO



UltraBright Scene Lighting for Emergency Response Vehicles

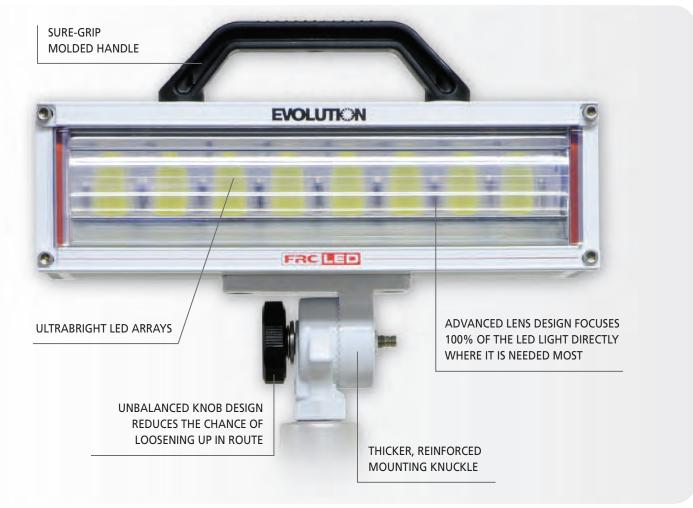


- UltraBright 5,000 Lumens Light Output Using 24 White LEDs
- Completely Waterproof Even if Light is Fully Submerged
- Easy to Install, No Panel Cut-Out
- Innovative Lens Focuses 100% of the Light Directly Where it is Needed



EVOLUTION

The Cost Effective, Affordable LED Solution. Ideal for Upgrading Your Existing Fleet





EVOLUTION lampheads easily mount to emergency warning lightbars.

15,000 Lumens of Bright Light



- Brighter Light More than 15,000 Lumens of UltraBright LED Light
- Whiter Light Closest Thing to Natural Sunlight
- Uniform High Quality White Light with the Widest Light Pattern
- Long Operating Hours Rated at 50,000 Hours
- Full Brightness at Power On Instant Restarts
- Parabolic Reflector & Lens Designed to Direct All the Light Onto the Scene
- Lamphead Can Be Used With 12 or 24 Volt DC systems (13/6.5 amps)
- Five Year LED Lighting Warranty

Advanced Lens Design See All the Action Further Away!



Evolution fits all FRC mounts.

Easily upgrades your existing vehicles.





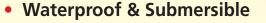


SUNSIRIP

UltraBright White LED Light for Compartments,
Panels, Under Body Applications, Walkways & Stairwells



- UltraBright Strip Light More than 300 Lumens of LED Light per 18" Length
- LEDs Housed in a Strong 5/8" Diameter Lexan Tube
- Designed Tough to Withstand Any Vehicle Vibration



- Great for All Applications
- Easy to install
- Long Operating Hours Rated at 50,000 Hours
- Five Year LED Lighting Warranty

Available in 9" length increments from 9" to 63"

Ordering Info

Part No.	Tube Length*	Lumens	Current @ 12V
LED200 - A09	9"	150	0.17 amps
LED200 - A18	18"	300	0.35 amps
LED200 - A27	27"	450	0.52 amps
LED200 - A36	36"	600	0.70 amps
LED200 - A45	45"	750	0.87 amps
LED200 - A54	54"	900	1.05 amps
LED200 - A63	63"	1050	1.22 amps

*Add 2" for end caps & wire clearance Mounting clips supplied • 24V also available

FIREFLY

Most Compact UltraBright White LED Light for Compartments, Panels, & Under Body Applications

- Small and Compact Four (4) White, Long Life LEDs
- UltraBright 650 Lumens Light Output
- Mounts in Any Orientation & On Any Flat Surface
- 12 VDC-0.8 Amps / 24 VDC-0.4 Amps
- Low Power Consumption Saves Energy
- Instant on at Full Intensity
- Can be Used in Compartments, on Panels, & for Ground or Surface Lighting
- Five year LED Lighting Warranty



The LEDs are housed in a waterproof anodized aluminum case, built tough for all environments

LED 110 Flood Beam for wider illumination

LED 100
Directed Beam
for focused light



LED110 - Q01 Work Light perfect for under vehicle





LED100 - Q01 Compartment Light with glare reducing lens





Direct the Light Where You Want It.

Light tube can be rotated to adjust the beam direction

HALOGENLIGHTING



A Revolutionary Design

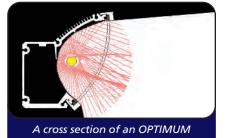
The **OPTIMUM** is a revolutionary lamphead that puts more light on the scene without the need for an increase in power. The **OPTIMUM** lamphead provides the maximum transfer of light from the bulb to the scene.

Setting the Trend

14

The **OPTIMUM** uses a uniquely designed, vacuum deposit, polished reflector to maximize light emission. **OPTIMUM**'s large curved front lens and exclusive "head down" shape produces a uniform beam that lights up an area 100° vertically by 150° horizontally. The OPTIMUM lamphead has been designed to take advantage of the HID (High Intensity Discharge) and HIR (Halogen Infrared) bulbs. The HID is offered with both 70 and 150 watt bulbs that operate at 12 or 24 VDC and produce light up to 11,250 lumens without the need of a generator. The HIR is offered with a 900 watt, 240 VAC bulb that produces 32,000 lumens.

ADVANCED TECHNOLOGY



lamphead showing it's unique reflector that directs 100% of the light onto the work and action areas.



Fire Research uses high output, metal halide bulbs for all of our HID lights.

No Generator, No Problem

Operates from the vehicle DC battery system -

no generator needed.



www.fireresearch.com

120 VAC/500W **Quartz Halogen** 10,500 Lumens



Resembles Daylight 11,250 Lumens

High Energy Efficiency

More Lumens

Metal Halide bulbs generate 75 lumens per watt. A 150 watt Metal Halide bulb provides 4 to 5 times the lumen output when compared to a 150 watt quartz halogen bulb.

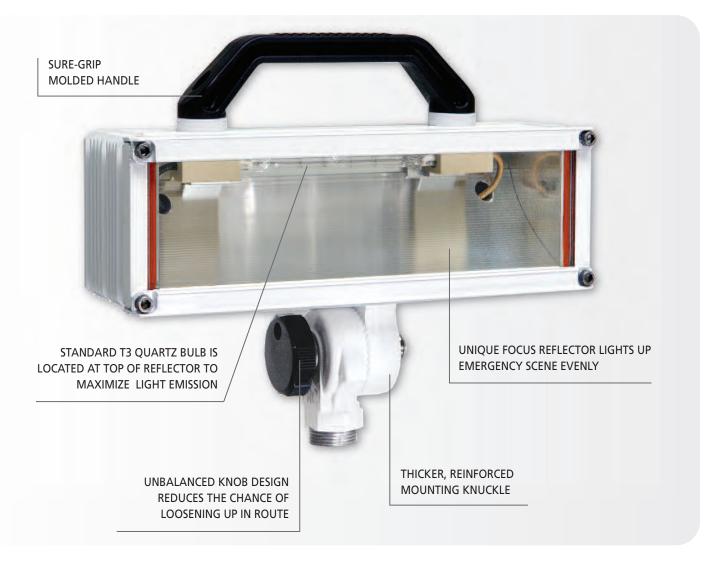
Longer Life

Metal Halide bulbs last 7 times longer than quartz halogen bulbs and even though the initial cost is higher, Metal Halides have a lower total operating cost over the life of the bulb.

Excellent Light Color

The output light from a Metal Halide bulb is closer to natural sunlight than most other light sources. This white light is preferred because it provides better visual acuity and it provides 4 to 5 times more light than quartz halogen bulbs.

FOCUS®



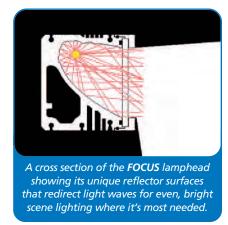
Don't Waste Precious Light

The high intensity FOCUS lamphead does not waste precious light. It is designed to focus 100% of the light produced into the area where it is needed. The FOCUS is built tough and has a compact design that allows it to be mounted in places that traditional lighting fixtures do not fit.

A Breakthrough In Scene Lighting

The **FOCUS** lamphead was designed to light up the emergency scene evenly, putting 100% of the light on the scene. A high percentage of the light produced by a conventional light fixture is wasted away from the emergency scene and gets dim at a distance. The **FOCUS** lamphead uses a uniquely designed patented reflector to eliminate wasted light. The curved reflector has over 50 parabolic surfaces that redirect all of the light produced and focus it evenly into the action areas. This allows the **FOCUS** to put all of the light onto the scene, providing more light close to the vehicle as well as being brighter at a distance.

ADVANCED TECHNOLOGY



Cost Effective Traditional Quartz Lighting

The **NIGHTMASTER** line has been serving the emergency services for almost 20 years. Compatible with most standard FRC pole and fixed mount assemblies.

Die-cast Aluminum Housing

NIGHTMASTERS

- Silicone Gasketed "Floating" Hinge Design Frame
- High Temperature and Shock Resistant Lens
- Standard 3/4" Thread
- Adjustment Handle and Knob



Spot/Flood Light

A high intensity 12V, 250W spot light using an "aircraft landing" lamp. Ideal on brush trucks. Lamphead is 9"w by 9"h with a wire guard.



Portable

The P50 is a 500W, 120V portable light that can be fitted on any FRC telescopic pole or tripod. When removed from mount, it can be used as a ground light. Supplied pin can be set in the handle to use as a hanging light. Includes a wire guard, 5 ft. coiled cord, and a L5-15 three pronged twist lock plug.



Triple Cluster Spot/Flood Light

A 12V, 300W triple cluster lamp with three 100W spot/flood bulbs. Select spot/flood/off via a switch on rear of light. Chrome fixtures may be individually aimed from side to side.

Measures 19"w x 10"h.







OPTIMUM Lampheads utilize a superefficient design to offer a maximum transfer of light from bulb to scene. Includes HIR and HID bulb options not available on classic FOCUS lights.



\			OPI	IMUM	SEF	RIES		
	4014 0 414	•	H70	70W	12V	6.0A	5,000	Lumens
	12V•24V	•	H15	150W	12V	12.5A	11,250	Lumens
	e11 C C	•	E70	70W	24V	3.0A	5,000	Lumens
	023347	•	E15	150W	24V	6.25A	11,250	Lumens
	120V (•	S30 S50 S75	300W 500W 750W	120V 120V 120V	2.5A 4.2A 6.3A	5,900 10,500 19,600	Lumens Lumens Lumens
	4 (8150)	•	M10	1000W	120V	8.3A	22,000	Lumens
	240V	•	S72	750W	240V	3.1A	16,100	Lumens
	A		R90	900W	240V	3.75A	32,000	Lumens
	(11) €		M12	1000W	240V	4.2A	22,000	Lumens
			M15	1500W	240V	6.25A	35,000	Lumens
/								

FOCUS[®]

FOCUS Low Profile Lampheads were the first lampheads to introduce the concept of re-directing light with fifty parabolic curved and aimed surfaces. The innovative design directs light where it is needed.

The low profile of the classic FOCUS offers mounting options that many other lights cannot.



- 1									
	12V•24V Ϣ (€	•	H70* H15* D15 D30 H30	70W 150W 150W 300W 300W Models FC	12V 12V 12V 12V 24V 4800, FCA	6.0A 12.5A 12.5A 25.0A 12.5A 830, and F0	5,000 11,250 2,600 5,200 5,000 CA850 only	Lumens Lumens Lumens Lumens Lumens	
	120V (l) (€	•	S30 S50 S75 M10	300W 500W 750W 1000W	120V 120V 120V 120V	2.5A 4.2A 6.3A 8.3A	5,900 10,500 19,600 22,000	Lumens Lumens Lumens Lumens	
	240V (J) (€	•	S72 M12 M15	750W 1000W 1500W	240V 240V 240V	3.1A 4.2A 6.25A	16,100 22,000 35,000	Lumens Lumens Lumens	

FOCUS SERIES

NIGHTMASTERS

NIGHTMASTER Lampheads are affordable scene lights that have a proven track record on emergency apparatus. Simple, functional, and available in multiple styles and mounting configurations.



		NIG	HTMA	STE	R SE	RIES	
12V•24\ Ϣ (€	•	DT0 TC0	250W 300W	12V 12V	20.0A 25.0A	•	CP CP (Spot) CP (Flood)
120V (Ϳ <u>ͺ</u>) (€	•	S30 S50 P50 M10	300W 500W 500W 1000W	120V 120V 120V 120V	2.5A 4.2A 4.2A 8.3A	10,500 10,500	Lumens Lumens Lumens Lumens
240V Ϣ (€	•		1000W 1500W	240V 240V	4.2A 6.25A	,	Lumens Lumens

SPECTRA SERIES

12V•24V (€	•		13.0/6.5 A 18.0/9.0 A	•	
120V (€		120 VAC 120 VAC	1.5 A 2.0 A	•	Lumens Lumens
240V (€	J15* J20	240 VAC 240 VAC * Surface m	0.75 A 1.0 A ount SPECTRA	20,000	Lumens Lumens



SPECIRA

SPECTRA LED Lampheads output an impressive 20,000 lumens of super bright white light making them the brightest LED scene lights available. The advanced lens and arrangement of LEDs generate a combination flood and spot light pattern. This light pattern provides enhanced work area visibility as well as illuminating objects at a much farther distance.

SPECTRA 900 SERIES

12V•24V		OCE 12/24 VDC C	\/2.0A	1
l c€	-	Q65 12/24 VDC 6.0	J/3.0A 5,000	Lumens



SPECIFA 900

SPECTRA 900 LED flood and loading light was designed specifically for Ambulance and Emergency Response Vehicles. Rated at an incredible 5,000 lumens, this surface mount light is easy to install with NO PANEL CUT OUT required! The innovative lens directs 100% of the ultra bright white LED light along the vehicle and onto the working area.

EVOLUTION SERIES



EVOLUTION

EVOLUTION low profile LED lampheads generate more than 15,000 lumens of ultra bright white light. The unique LED arrays, parabolic reflector, and lens produce more usable light in a compact lamphead. EVOLUTION lampheads are available with all FRC telescopic poles, fixed, and brow mounts.

Quartz Halogen

The quartz halogen bulb is a type of incandescent bulb that has been refined to produce more light per unit of energy. The filament tube has a small amount of halogen gas in it that prevents the darkening of the bulb and evaporation of the filament. This increases the bulb life, while producing crisp white light.

♦ High Intensity Discharge (HID)

Unlike the halogen incandescent bulbs, the HID bulb does not contain a filament. Instead, it creates light from an electrical discharge between two electrodes. This technology provides a brighter and crisper white light that is superior to halogen sources because it most resembles natural daylight and is very efficient.

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▲ Halogen Infrared (HIR)

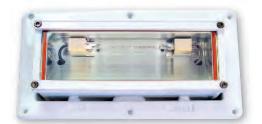
HIR bulbs provide all the benefits of standard halogen bulbs and operate more efficiently. An IR (infrared) coating is applied to the filament tube. This multiple layer coating redirects IR (heat) back on to the filament to produce more light for the same amount of energy. The amount of heat generated is reduced and the light is whiter than a standard halogen bulb.

Light Emitting Diode (LED)

LEDs are semiconductor diodes that emit visible light when electricity is applied. Compared to halogen incandescent bulbs, the solid-state design of LEDs provide reduced power consumption, lamp temperature, and long-term operating cost, as well as increased operational life, luminous efficacy, and shock resistance.

FOCUS[®]









Model FCA200

Model **OPA200**Model **OPA250**

Model **OPA230**



Vehicle recessed lights are required to provide work light for firefighters or EMT personnel at an emergency scene. The unique light pattern from the OPTIMUM or FOCUS lamphead is ideal for focusing light on the work area and scene evenly without having to adjust or tilt the lamphead. Recessed lights can be mounted into the exterior vehicle wall for applications where side mounted poles or fixed mounts are not practical. The bezel and glass are removable from the front of the fixture (by removing 4 cap head screws) for easy access to the bulb as needed. The OPA 200 and OPA 250 are available with bulb sizes from 300W to 1500W. The FCA 200 is available with bulb sizes from 150W to 1000W.

RECESSED LIGHTS AVAILABLE FOR FOCUS D15, D30, H30, S30, S50, S75, S72, M10, M12

OPTIMUM S30, S50, S75, S72, M10, M12, M15, R90,

(H70, H15, E15, E70, available with OPA230 only)



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AC surface mount model SPA260 requires a 6 3/8" w x 4 11/16" h cut-out

SPECIRA

Lowest Profile LED Surface Mount

Model SPA260



- Unique Arrangement of LEDs Generate a Combined Flood & Spot Light Pattern
- Impressive 15,000 Lumens of Light
- Available in 12/24 VDC or 120/240 VAC



Model SPA 900



- Ideal for Ambulances & Emergency Response Vehicles
- UltraBright 5,000 Lumens of Light

SURFACE MOUNTS AVAILABLE FOR SPECTRA Q15, K15, J15 & SPECTRA 900 Q65





Generates
12,000 Lumens
of Light

Recess requires only 2" of depth

www.fireresearch.com www.fire



LIGHTINGMOUNTS

LIGHTINGMOUNTS

- All FRC telescopic poles are made of anodized aluminum for maintenance free performance and longer service life.
- All extension poles rotate 360°.
- All extension poles have the exclusive twist lock mechanism to secure the pole in position.
- All standard extension poles have a four foot retractible cord extending from the bottom for direct wiring.
- All outer tubes have a grooved surface.
- All pole mounted lampheads have a pivot in the mounting arm with a knurled knob to adjust the angle of elevation.

Model **510**

Top Mount, Pull Up Telescopic Pole

- 3.25" round mounting flange is standard
- 2.5" square flange is available on the 510C and 510E (see insets)

OPTIONS:

- -CL (custom length pole)
- -SW (raised pole switch and indicater)
- (wire out of the top of the pole)



Model 510C Model 510 pole with a Square Flange Option



Model 510E Model 510 pole with a Square Flange Option for mounting in a 3" extrusion

Model 512

Thru The Roof, **Push Up Telescopic Pole**

- Extension pole has a knurled aluminum push-up handle
- A round. "no drip" mounting flange is provided

No-Drip Thru the Roof, Push up Pole

OPTIONS:

- -CL (custom length pole)
- -SW (raised pole switch and indicator)
- -TW (wire out of the top of the pole)
- (steady rest bottom bracket)

Model 530

Side Mount, Push Up Telescopic Pole

- Extension pole has a knurled aluminum push-up handle
- Outer tube is grooved aluminum extrusion and qualifies as an NFPA compliant handrail
- Standard outer tube (shown) is 20". Choosing an optional 10" outer tube allows for a 40" extension.

OPTIONS:

- -CL (custom length pole)
- -SW (raised pole switch and indicater)
- -TW (wire out of the top of the pole)
- -SR (steady rest bottom bracket)
- (10" outer tube)



Side Mount. Pull Up **Telescopic Pole**

- An internal brake slows the extension pole during lowering
- Outer tube is grooved aluminum extrusion and qualifies as an NFPA compliant handrail

OPTIONS:

- -CL (custom length pole)
- -SW (raised pole switch and indicater)
- -TW (wire out of the top of the pole)



Model **542**

Side Mount, **Pull Up Telescopic Pole**

- Outer tube is grooved aluminum extrusion and qualifies as an NFPA compliant handrail
- Standard outer tube (shown) is 20". Choosing an optional 10" outer tube allows for a 43" extension

OPTIONS:

- -CL (custom length pole)
- -SW (raised pole switch and indicater)
- -TW (wire out of the top of the pole)
- **-ST** (10″ outer tube)

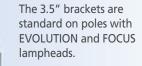


-A

The 2.75" side mount brackets are standard on poles with SPECTRA, OPTIMUM, and **NIGHTMASTER** lampheads (excluding HID).

Supplied as Pair

-H



-B

Side mount brackets with a 5" offset. Standard on poles used with OPTIMUM HID lampheads.



-C

Side mount brackets with a 7" offset.

Optional Mounts

-SR

-F

Optional Steady Rest

Steady Rest bracket provides added bottom support for "inside pole" when it is in the retracted (down) position. Bracket can be used with 512 and 530 push-up poles.

Optional Flush Mount

Flush mount brackets allow poles to securely mount flush to a surface. Total width is 3.75". Supplied as pair.







Grooved Grab Handle

- FRC's exclusive GRAB-HANDLE is a standard feature on all 530, 540 and 542 telescopic poles.
- It provides a secure grip when wearing heavy gloves.
- The grab handle qualifies as an NFPA compliant handrail.









The Industry's Finest Tripods with the Best Features:

- Twist Lock FRC's unique locking ring operates from either direction. It is simply the best way to deploy a light with the gloved hand!
- Air Cushioned pole release This innovation allows the pole to lower slowly, when released, on a cushion of air. This helps to prevent pinched fingers and damage to the bulb.
- Ease of set-up FRC tripods are designed to deploy all three legs at the same time, allowing the unit to be set up quickly and easily at an incident.
- Lightweight anodized aluminum poles The standard tripod weighs just 16 pounds!
- Extends up to 12 feet! Fire Research tripods are designed to permit "overextension" of its legs so the tripod's lamphead can reach this incredible height.
- Cammed knobs The pole tightening knob will not unscrew or come off due to vibration.
- Anti-chatter legs Rubber covers at the bottom of the legs ensure a quiet ride.
- Small footprint When closed the unit sets into an incredibly small lower bracket allowing ease of mounting just about anywhere!
- Truck mountable All tripods are truck mountable, allowing them to be used as telescoping lights on the vehicle and off!
- Wire Guard As shown is standard.
- Removable lamphead option (NIGHTMASTER Series only) The lamphead on the tripod can be removed for even more versatile use without compromising space or function.







UltraBright Spectra Tripod

Tripods are Available with the Following Lampheads:

SPECTRA: J20, K20

OPTIMUM: \$30, \$50, \$75, \$72, M10, M12, M15, R90 **FOCUS:** \$30, \$50, \$75, \$72, M10, M12, M15

NIGHTMASTERS: \$30, \$50, M10, M12, M15, P50

SPECTRA tripod shown mounted with FRC QUICK RELEASE brackets on emergency vehicle.

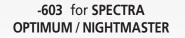


Optional Dual Release Tripod Brackets

- Similar to the 603, the dual bracket consists of a small triangular bracket for the feet and a DUAL QUICK RELEASE spring loaded dead-bolt lock to hold the tripod at its midpoint. The lock can be released from either side.
- -603D for SPECTRA / OPTIMUM / NIGHTMASTER
- -6F3D for FOCUS









-6F3 for FOCUS

Optional Quick Release Tripod Brackets

- The 603 bracket sets consist of a small triangular bracket for the feet and a QUICK RELEASE spring loaded dead-bolt lock to hold the tripod at its midpoint
- The brackets can be used on the exterior of a vehicle or in a compartment
- The 6F3 has spacers needed for FOCUS lampheads





LIGHTINGMOUNTS

Fixed Top Mount

Model 570

More than a simple top mounted base, the 570 allows for a full 450° of rotation. This means that light coverage can be a full circle, plus another quarter turn which ensures no blind

spot. The 570 base has a built-in stop to prevent the internal wiring from binding.

A built-in friction mechanism ensures the light will not rotate when the vehicle is in motion.



SPECTRA, OPTIMUM & NIGHTMASTER lampheads use a 2.75" bracket. EVOLUTION & FOCUS lampheads use a 3.5" bracket. OPTIMUM HID lampheads use a 5" bracket.

mounting base attached to a side mount bracket.



Portable Base

Model **700**

The 700 provides a portable and sturdy ground base to light up a remote scene. Aim the lamphead and tighten into place with the knurled locking knob

Portable Bases Are Available With The Following Lampheads

OPTIMUM & FOCUS: \$30, \$50, \$75, M10 NIGHTMASTER: S30, S50, M10

SPECTRA: K20



Light Up Your Rescue Scene & **Overhaul Operations Without Running** Wires or Starting Gasoline Engines

This LED portable light should be first-line equipment on all apparatus, ambulances, and police vehicles.

The LED lamphead and the all metal battery case are designed rescue tough.









Under Aerial

Model 300

The 300 adjustable aerial mounting brackets allow the EVOLUTION and FOCUS lamphead to be mounted under an aerial bucket or platform. Aim the light forward or directly downward. Commonly set at 30° downward as shown.



Required Clearance

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Aimed Directly Forward - 4" Aimed At 30° Downward - 6.5" Aimed At 45° Downward - 6.75" Aimed Straight Down - 7.5"

Optional Quick Release Brackets

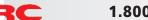
For Model 700 Ground Base Optional bracket to mount

the portable light on a flat surface (703) or pole (705) so it can be easily removed.



- 12V Battery in Rugged Metal Housing
- A selector switch to choose full light output at 5,000 lumens or half the light output at **2,500 lumens**
- Provides 5,000 lumens of light for 3 hours and 6 hours at 2,500 lumens
- Battery can be recharged using a truck DC system or using a separate 120 VAC charger





Contour, Universal & Flat Mounting

Perfect for Mounting on Roof of Cab



Custom Contoured Mount DESIGNED TO MOUNT ON YOUR CAB



Model **OPA 800**



Universal Mount

DESIGNED TO MOUNT ON ANY CAB

Universal Mounting Bracket Easily Installs on All Apparatus

Flat Mount designed to mount on any flat surface





Highly Efficient LEDs Provide Five-Times More Light than Halogen Bulbs



Turn Night into Day

Arrive at a Nightime Scene & Power-up Your New SPECTRA or EVOLUTION Brow Mounted LED Lampheads for the Brightest Light.

Perfect for new and existing vehicles.



Model SPA 800 **CONTOUR BROW MOUNT**

Brow Lights are Available with the Following Lampheads:

SPECTRA: Q15, Q20, J20, K20 **EVOLUTION**: V08, V15 **OPTIMUM:** E70, E15, H70, H15, S30, S50,S75, S72, M10, M12, M15, R90 **FOCUS**: H70, H15, D15, D30, H30, S30, S50, S75, S72, M10, M12, M15

LIGHTINGOPTIONS



Patented No-Scratch Option

Ordered with the 530 pole by adding the suffix -NS to the part number. -NS Option includes:

- (2) Rubber Bumpers (FOCUS only)
- (1) Guide Collar & Guide Rail
- (1) Steady Rest Bracket

FC-NS31K

The Rubber Bumpers can be ordered separately and installed on all standard FOCUS lampheads.

FC-NS31K Kit includes:

- (2) Rubber Bumpers
- (2) 1/8" Rivets with Backing Plates

FC-NSK

The No-Scratch option can be retrofitted on existing 530 poles.

FC-NSK Kit includes:

(1) FC-NS31K Kit

30

(1) Guide Collar & Guide Rail Assembly

Note: It is recommended that the Steady-Rest bracket be installed with the No-Scratch retrofit kit. Order FC-NSK-SR

No Scratch Guide & Rubber Bumpers

Prevents Scratching & Denting

The No-Scratch option combines a guide collar and guide rail assembly, a steady-rest bracket, and two rubber bumpers on the lamphead (FOCUS only) to prevent scratching and denting of apparatus body surfaces. The complete No-Scratch option is available on 530 side mount, bottom raise, telescopic pole.

When the pole is raised the guide collar disengages from the guide rail and the lamphead is free to rotate 360°. As the pole is lowered the guide collar engages the guide rail. The guide collar and rail prevents the pole from being lowered if the lamphead is not correctly aligned.



-SW

-RB

Raised Pole Indicator & Switch

In order to alert the vehicle operator that an extendable pole is raised, FRC offers a switch and indicator option for all permanently mounted

www.fireresearch.com

telescopic poles. The parts associated with this option will differ dependent upon the type of pole in question.

Note: To retrofit this option the type of pole being used needs to be specified when ordering.

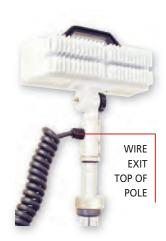
If retrofitting this option on a 530 push-up pole the steady rest lower bracket is required.





When retrofitting a wire guard on an OPTIMUM or FOCUS lamphead not originally fitted with one order the OP150-S/FC150-S or OP150-M/FC150-M kit. There is no retrofit kit available to fit a wire brush guard on the NIGHTMASTER lampheads.

Wire Guards are not available on Model 200, 230, and 250 recessed mounts.



-TW Wire Exits Top Of Pole

For most permanently mounted lampheads the power cord exits through the bottom of a pole assembly. Specifying this option will bring the power cord out of the top of the pole.



AC Plugs

- A Nema 5-15 Straight (household type) plug B Nema L5-20 3-Prong twist lock plug
- Nema L5-15 3-Prong twist lock plug







-ON On/Off Lamphead Switch

For NIGHTMASTER lampheads, the switch is built into the side.

On SPECTRA, EVOLUTION, **OPTIMUM and FOCUS** lampheads a switchbox is provided underneath the lamphead.





-CL Custom Length Pole

FRC telescopic poles can be shipped pre-cut to a custom length. Total length will include pole and lamphead.

Note: Custom length poles are available for 510, 540 & 542 pull-up poles, 512 and 530 push-up poles.

(Some restrictions apply)

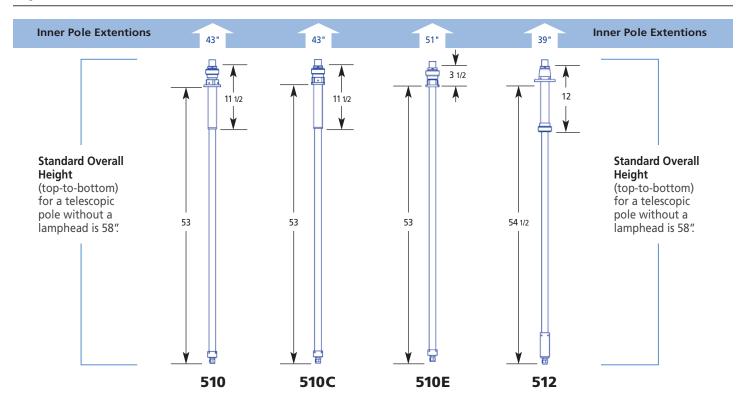




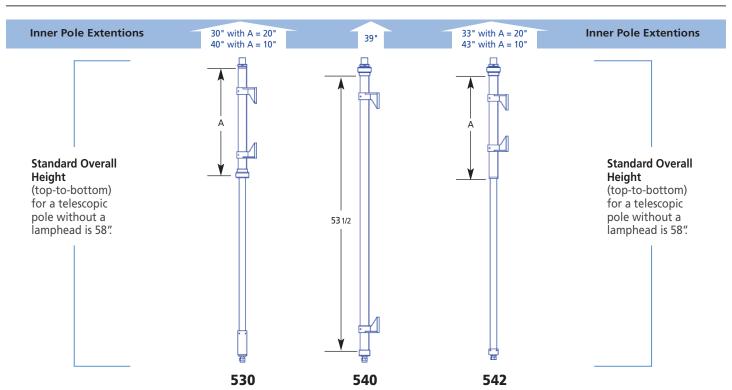


TECHNICALSPECIFICATIONS

Top Mount Poles



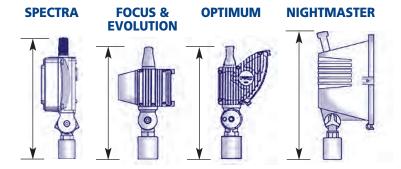
Side Mount Poles



FRC

Lamphead Height Dimensions

	All	All FOCUS	All		IGHTMASTE	
	SPECTRA	& EVOLUTION	OPTIMUM	S50	M10,12,15	P50
Lamphead	12 7/16	10 3/8	10 3/8	12 1/2	12 3/4	14 3/4
With ON/OFF Switch	13 7/16	11 3/8	11 3/8	12 1/2	12 3/4	14 3/4
With Wire Guard	N/A	10 3/8	10 3/8	12 5/8	13 3/8	14 3/4
With Top Wire	13 7/16	11 3/8	11 3/8	13 1/2	13 3/4	15 3/4

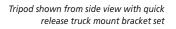


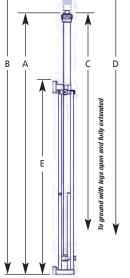
NOTE: Lamphead to pole adapter (LT100) is included in lamphead dimensions. When adding the lamphead height to a standard pole height (58") subtract 1 1/4" to obtain overall dimension.

Tripod Pole Dimensions

	600	656	642	
Α	59	45 1/4	31 3/4	
В	99	73 1/2	48 3/8	
C	75 1/8	61 1/2	44 3/4	
D	115 1/8	89 3/4	61 3/8	
Ε	43 1/2	43 1/2	30 1/2	

NOTE: The tripod comes with the power cord exiting from the bottom of the pole. For the power cord to exit from the top of the pole add the -TW option. When the -TW option is installed add 1" to the lamphead dimension and on a standard pole add 8" to dimensions B and D.

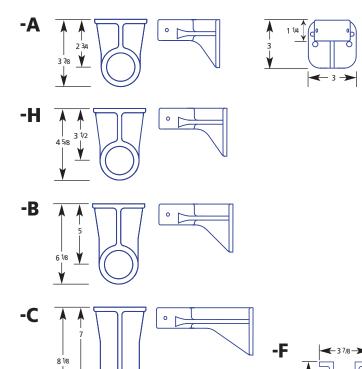


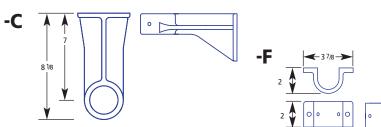


Pole Fully Extended

Side Mount Bracket Dimensions

All Dimensions In Inches

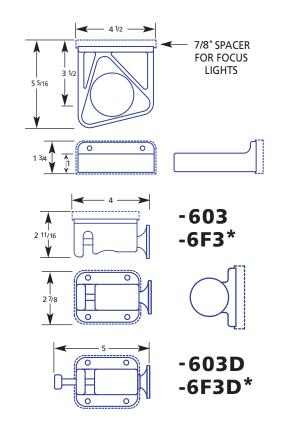




Tripod Bracket Dimensions

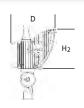
All Dimensions In Inches

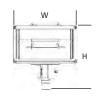
*FOCUS Lampheads Require the included 7/8" spacer.



OPTIMUM

TECHNICALSPECIFICATIONS





OPA100, OPA500, OPA600, OPA700

Model	W	D	Н	H ₂
S30, S50, S75, S72	8 11/16	4 3/4	9 1/16	5 3/8
H70, H15, E70, E15	8 11/16	7 1/16	9 1/16	5 3/8
M10, M12, M15, R90	14 1/16	4 3/4	9 1/16	5 3/8



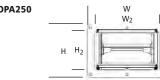






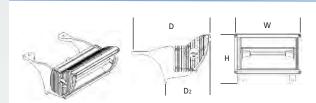






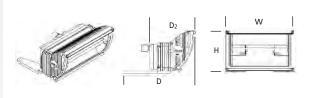
OPA200, OPA230, OPA250

Model OPA200	W	D	Н	W ₂	D ₂	H ₂
S30, S50, S75 S72	11	2	5 5/8	9 3/4	3 1/8	4 1/4
M10, M12, M15, R90	17 1/2	2	5 5/8	16 1/8	3 1/8	4 1/4
OPA230 H70, H15, E70, E15	10 3/16	3 1/4	4 3/4	8 3/4	3 3/4	3 7/8
OPA250 S30, S50, S75, S72	11 3/16	4 1/8	7 1/2	9 9/16	1 3/4	5 3/4
M10, M12, M15, R90	16 9/16	3 1/4	7 1/2	15	1 3/4	5 3/4





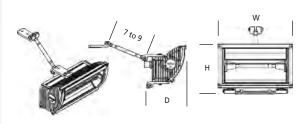
Model	W	D	н	D_2 Max
S30, S50, S75, S72,	8 11/16	10 7/16	6 7/16	7 1/2
H70, H15, E70, E15	8 11/16	12 1/8	6 7/16	8 3/16
M10, M12, M15, R90	14 1/16	10 7/16	6 7/16	6 7/16



OPA850

Model	W	D	Н	D_2
S30, S50, S75, S72,	9	8 5/8	5 5/16	4 3/4
H70, H15, E70, E15	9 5/16	9 3/8	5 5/16	7 1/16
M10, M12, M15, R90	14 3/8	8 5/8	5 5/16	4 3/4

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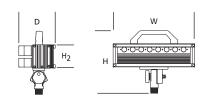
OPA830

FRC

Model	w	D	н
S30, S50, S75, S72,	8 11/16	5 7/16	5 7/8
H70, H15, E70, E15	8 11/16	6 15/16	5 7/8
M10, M12, M15, R90	14 1/16	5 7/16	5 7/8

FCA100, FCA500, FCA600, FCA700

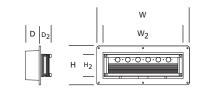
Model	W	D	Н	H ₂
D15, H30, S30, S50, S75, S72	10	5	9	3 5/16
D30	11 1/2	5 3/16	9	3 5/16
M10, M12, M15	15	5	9	3 5/16
V08	7 5/8	5 3/16	9	3 5/16
V15	11 1/2	5 3/16	9	3 5/16



TECHNICALSPECIFICATIONS

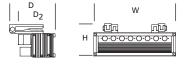
FCA200, FCA210

el W
00
H30, S30, S50 11
M10, M12 17 1/2
10
572 13 7/8
13 7/8
H30, S30, S50 11 M10, M12 17 1/2 10 672 13 7/8



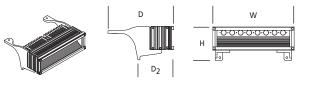
FCA300

5
5
5



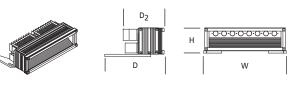
FCA800

Model	W	D	н	D_2Max
D15, D30, H30, S30, S50, S75, S72	11 1/2	9 5/16	4 3/4	5 5/16
H70, H15	10	12 1/8	4 7/8	8 3/16
M10, M12, M15	15	9 5/16	4 3/4	5 5/16
V08	7 5/8	9 5/16	4 3/4	5 5/16
V15	11 1/2	9 5/16	4 3/4	5 5/16



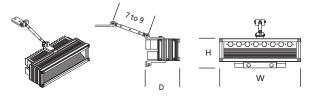
FCA850

Model	W	D	Н	D_2
D15, H30, S30, S50, S75, S72	12	7 1/2	3 5/8	5
H70, H15	10	9 3/8	3 3/4	7 1/16
D30	12	7 1/2	3 5/8	5 3/16
M10, M12, M15	15 1/2	7 1/2	3 5/8	5 3/16
V08	8 1/8	7 1/2	3 5/8	5 3/16
V15	12	7 1/2	3 5/8	5 3/16

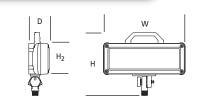


FCA830

Model	W	D	Н
D15, D30, H30, S50, S72	11 1/2	5 3/16	4 5/8
H70, H15	10	7	4 3/4
M10, M12, M15	15	5 3/16	4 5/8
V15	11 1/2	5 3/16	4 5/8

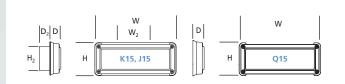






SPA100, SPA500, SPA600, SPA700

Model	W	D	Н	H_2
Q15, Q20, K20, J20	14	3 3/4	11	5 3/8

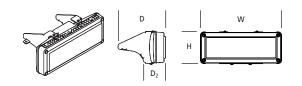


TECHNICALSPECIFICATIONS

SPA260

Model	W	D	н	$\mathbf{W_2}$	D_2	H ₂
Q15	14 1/2	1 3/4	5 7/8	-	-	-
K15, J15	14 1/2	1 3/4	6	6 3/8	1 13/16	4 11/16

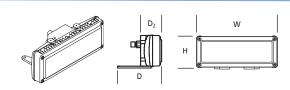
AC surface mount requires a cut-out



SPA800

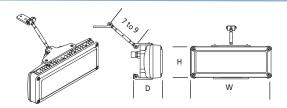
Model	W	D	Н	D_2 Max
Q15, Q20, K20, J20	14	*	5 7/8	*

* Measurement varies dependent upon cab model



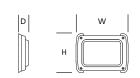
SPA850

Model	W	D	н	D_2
Q15, Q20, K20, J20	14	7 5/8	5 3/4	3 5/8



SPA830

Model	W	D	Н
Q15, Q20, K20, J20	14	4 3/4	6



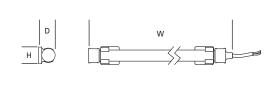
SPA900, SPA902

Model	W	D	Н
Q65	9	1 3/4	6 3/4



LED100, LED110

Model	W	D
Q01	2 5/8	3/4



LED200, LED201

Model	W	D	н
A09	10 1/8	1 1/16	1
A18	19 1/8	1 1/16	1
A27	28 1/8	1 1/16	1
A36	37 1/8	1 1/16	1
A45	46 1/8	1 1/16	1
A54	55 1/8	1 1/16	1
A63	64 1/8	1 1/16	1

4 Simple Steps

Simply follow the four steps shown below to get your final product number. Refer to our mounts & options chart on pages 38 & 39 for compatability. As always, our friendly customer service staff will assist you when ordering.



Choose a

or Mount

(Refer to Pages 22 – 25)

Poles

510 510C

510E

512

530

540

542

Tripods

530

www.fireresearch.com

Pole Style

Choose a Lamphead

(Refer to Pages 18 – 19)

Choose **Options**

; -	-Q15
	-Q20
;	-Q65
; -	-K15
-	-K20
	-J15
	-J20
; €le	-V08

-V12

-V15

-H70



SPA

for SPECTRA

EVOLUTION

FCA

for **EVOLUTION**

OPA for OPTIMUM

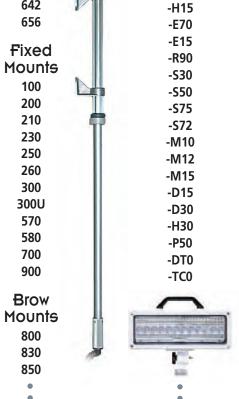


NIGHTMASTER

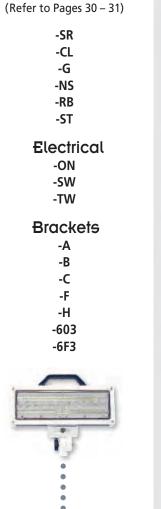


SPA





- K 2 0



37

-ON = SPA530-K20-ON

ORDERINGINSTRUCTIONS

Lamphead Mounts



Lamphead Options

(Q15	Q20	Q65	K15	K20 J1	5 J20	vo	8 V12	V15	H70	H15	E70	E15	D15	D30	Н30	DT0	тсо	S30	S50	S75	S72	P50	R90	M	10 M	12 M15	3	-A	-В	-C	-CL	-D	-F -	G -H	-NS	-ON	-RB	-SR	-SW	-TW	6F3 6	F3D :	703 705	_
100	♦	*			•	•	A		A	•	•	•	•	•	•	•	>	>	•	•	*	*	>		•) (0							3	€		*	••			*			100	0
200														•	•	•			*	*	•	•		•	•		•																	200	0
210								A													•	•																						210	0
230										•	•	•	•																															230	0
250																			•	•	•	•																						250	0
260	♦			•	•	•																																						260	0
300									A					•	•	•			•	•	•	•					•																	300	0
300U														•	•	•			•	•	•	•				•	•																	300	JU
510	♦	•			•	•	A		A			•	•	•	•	•	>	>		•	*	*	>		•		0					*	★ 2	3	k		*	•		*	*			510	0
510C	♦	•			•	•	A		A			•	•	•	•	•	>	>		•	*	*	>		•		0					*	★ 2	3	k		*	•		*	*			510	C
510E	♦	•			•	•	A	L	A	•	•	•	•	•	•	•	>	>		•	*	*	>		•		0					*	*	8	ķ		*	••		*	*			510	ĴΕ
512	♦	•			•	•	A	L	A	•	•	•	•	•	•	•	>	>		•	*	*	>		•		0		*	*	*	*	★ 2	\$	* *		*	•	*	*	*			512	2
530	♦	•			•	•	A		A			•	•	•	•	•	>	>		•	*	*	>		•		0		*	*	*	*	★ 2	*	k *	*	*	•	*	★ 4	*			530	0
540	♦	♦ 1			•	•	A		A			•	•	•	•1	•	≻ 1	≻ 1	•		*	*	>		•		0		*	*	*	*	★ 2	*	k *		*	•		*	*			540	0
542	♦	•			•	•	A		A	•	•	•	•	•	•	•	>	>		•	*	*	>	•	•				*	*	*	*	★ 2	* *	* *		*	••		*	*			542	2
570	♦	•			•	•	A		A	•	٠	•	•	•	•	•	>	>		•	*	*	>	•	•									8	k		*	••			*			570	0
580	♦	•			•	•	A		A			•	•	•	•	•	>	>			*	*	>		•				*	*	*		★ 2	3	* *		*	••			*			580	0
600					•	•															*	*	>		•								★ 2	*	3		*	••			*	*	*	600	0
642					•	•															*	*	>		•								★ 2	*	3		*	••			*	*	*	642	2
656					•	•															*	*	>		•								★ 2	*	3		*	••			*	*	*	650	6
700					•																*				•	3								*	3		*	••						★ 700	0
800	♦	♦			•	•	A		A	*	*			•	•	•			*	*	*	*			•	*	*																	800	0
830	♦	•			•	•			A	*	*	•	•	•	•				*	*	*	*			•	*	*																	830	0
850	♦	•			•	•	A		A	*	*	•	•	•	•	•			*	*	*	*			•	*	*																	850	0
900			•																																									900	0

240 VAC lampheads are not available in 700 type mounts.

1.800.645.0074

FOCUS HID lampheads are only available on 800, 830, and 850 type mounts.

SPECTRA surface mount 260 models are only available in 15,000 lumens (-Q15, -K15, and -J15).

EVOLUTION recessed mount 210 model is only available in 12,000 lumens (-V12).

Lamphead Mount Restriction Notes

Notes

- 1 Must have the -TW option installed (wire from top of pole).
- 2 Lampheads that are less then 12" in width only.
- 3 The wire guard is standard on these mounts.
- 4 Must have the -SR option installed to mount switch.

Key

- = OPA Series (Optimum)
- = FCA Series (Focus)
- > = LTA Series (NightMaster)
- = FCA Series (Evolution)
- = SPA Series (Spectra)
- ♦ = Optimum & Focus Series
- Optimum & Focus & Nightmaster Series
- **※** = All Lampheads except Spectra
- ★ = All Lampheads

Pole Styles / Tripods / Mounts

Pole Styles / Tripods / Mounts