

#1 Selling LED Brand



**The Navy specifies the use of Dr. LED's lights...Shouldn't you?**



**Dr. LED High-Quality Marine LED Products you can count on!  
Designed in the USA and built to last.**

# Marine Lighting Catalog



[www.DoctorLED.com](http://www.DoctorLED.com)  
LED Conversion Guide



MMXIX



## The Dr. LED Story

With their extensive background in aerospace and being avid boaters themselves, the engineers at Dr. LED provide the perfect mix of experience and enthusiasm to develop high-tech, durable, and energy-efficient LED lighting products specially designed for the marine environment.

Their use of cutting-edge designs using the highest quality components (yes, there is a difference) and thorough testing of each product before it leaves the factory, ensures that each Dr. LED product will provide the performance and durability that you expect.

### The Dr. LED Advantage:

- US-based engineering - designed in Seattle, Washington, USA.
- Extensive background in aerospace.
- Truly innovative marine quality LED products.
- Multiple US patents were awarded.
- High-quality components and designs.
- Every product was tested for 2 hours at the factory.
- Specified by the US Navy, Air Force, Coast Guard, and the US Government.
- First and only aftermarket 2NM LED bulbs for navigation lights.

### Milestones:

- 2005 First to use regulated LED bulbs in the marine market.
- 2006 First and only one to obtain USCG COLREG 1972 ABYC 2NM certified LED aftermarket replacement bulbs for navigation lights.
- 2007 First to use US CREE high-power LEDs in the marine market.
- 2007 First to use warm white LED bulbs in the marine market.
- 2008 First to provide a single high-power bi-color LED chart light for the marine market.
- 2010 The US Navy & USAF specifies the use of Dr. LED's lights in their boats and specified by the US Federal Government with National Stock Numbers.
- 2006-2015 First to develop true 1-to-1 LED replacements for 2NM LED bulbs for navigation and interior lights (BA15, festoon S8.5, BA9S, wedge bases etc.).
- 2016-2017 Developed 1-to-1 28-31mm and 36-44mm festoon LED replacements.
- 2018 Developed 1-to-1 12/24V waterproof G4 LED replacement.
- 2019 Developed 1-to-1 120/240V 6NM P28S LED replacement.
- 2019 Developed 120/240V UL 1598A Marine Vessel LED Lights.
- 2020 Developed 120/240V UL listed marine high-pressure sodium light LED replacement.

### Dr. LED:

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 **WARNING: Cancer and Reproductive Harm—** [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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**LED Searchlight: LED Star Phaser™**  
**With Handy Laser Pointer**

**PN: 8001030**



**US Patent D628,326S**



**LED Star Phaser™:**

The LED Star Phaser searchlight is so bright you can read a book when the light is held 50 feet (15m) away. This high-quality marine-grade 1,000 Lumen LED search / flash / strobe light outperforms any other LED light in the same category in terms of price, performance, and versatility. Three U.S. CREE LEDs provide the most lumens-per-watt LED light ever made. Both flood and spot beams are provided for area and distance illumination. The light is equipped with a red laser pointer for general and emergency use. (No more yelling to your shipmates to get this and that!) The Star Phaser is so bright it may disorient an intruder at close quarters. With the LED Star Phaser on strobe to attract attention, it will provide 6-hour 5-mile (8km) visibility.

US Patent: D628,326S

**PN: 8001030**

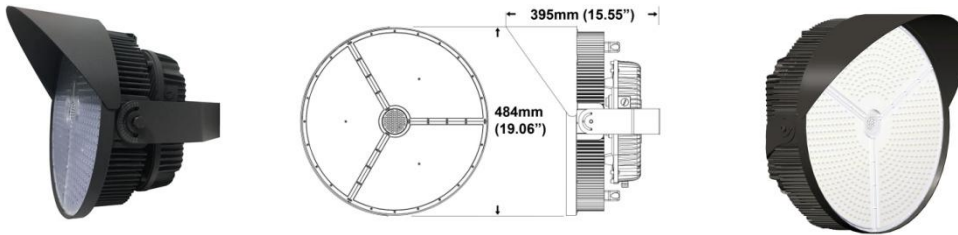
**Features**

- Three state-of-the-art 5W U.S. CREE high-quality high-power LEDs.
- High-intensity white LED light travels farther for maximum visibility.
- Instant-on, no warm-up of bulb needed.
- Water-resistant polycarbonate body (IP65).
- Anodized aluminum heat sink to ensure long LED life.
- Durable rubberized head and handgrip.
- Two brightness settings: 1,000 lumens / 270 lumens.
- High / Low / Strobe trigger switch.
- Long operating time: 1.5 hours on high / 4 hours on low / 6 hours on strobe.
- Powered by a 7.2V 6-cell NiMH rechargeable battery with an intelligent battery management circuit and LED battery charging status indicator.
- Universal 100-240 VAC wall charger and 12 VDC chargers are included.
- Weight: 579g (1.3 lbs).

**Replacement NiMH Rechargeable Battery: PN:9000227.**

**High-Pressure Sodium (HPS) Marine Light LED Replacement (120/240VAC).  
120VAC 240VAC 2200°K Amber LED Light**

**PN:9000739**



**The Pinnacle Marine Lighting Series: 2200°K 700W Amber LED Light  
Beam pattern specially designed for Forward-Facing Lights**

**PN:9000739**

**\*\*\* 1000W Marine Vessel High-Pressure Sodium (HPS) Light LED Replacement \*\*\*  
Instant-on, no warm-up needed. No re-strike issues. No more reflected glaring white light.**

This 700W 2200°K amber LED light is an ideal LED replacement for the ubiquitous 1000W high-pressure sodium lights used in many commercial marine vessels.

This light uses state-of-the-art ultra-efficient heat management and LED technologies to ensure high reliability and robust marine operation.

- UL Listed / FCC Compliance (EMI Suppression)
- Wide input voltage range (120V, 208V, 240V) & Under / Over Voltage Protected
- 40kV Transient Voltage Protected
- Stainless steel U bracket and Fasteners

**Specifications: [Preliminary Release Nov 2020]**

<b>Part Number</b>	<b>9000739</b>
<b>Model Name</b>	<b>700W Pinnacle HPS LED Light</b>
<b>Light Output (Color Temp)</b>	<b>Amber 2200 K</b>
<b>Lumen Output</b>	<b>&gt;80,000 Lumens</b>
<b>Beam Patterns</b>	<b>16°</b>
<b>LED Lifespan</b>	<b>50,000+ Hours</b>
<b>Nominal Wattage</b>	<b>700W</b>
<b>Input Voltage Range</b>	<b>100-277VAC 47~63Hz 40kV Surge Protection</b>
<b>Nominal Current Draw</b>	<b>5.8A (120V), 3.4A (208V), 2.9A (240V)</b>
<b>Electrical Connection</b>	<b>18AWG 600V 3C 1200mm (47") Cable</b>
<b>Operating Temperature</b>	<b>-40°F to 131°F (-40°C to +55°C)</b>
<b>Weight (lb)</b>	<b>48 lb</b>
<b>Dimensions</b>	<b>19.06" dia. x 15.55"</b>
<b>Case Material</b>	<b>Powder Coated Die Cast Aluminum Case</b>
<b>Fixture Color</b>	<b>Gray</b>
<b>Mounting</b>	<b>Stainless Steel U Bracket</b>
<b>Water-Proof Rating</b>	<b>IP67 Rated</b>



# LED Spreader/Deck/Rail Light (12/24V): Kevin X4

The Navy specifies the use of this light. Shouldn't you?

PN: 8001344-02 (White GEN 5)  
PN: 8001993 (Black)

NSN: 5961016025452



## #1 High-Power 1380+ Lumen LED Light



1380+ lumen rated high-power LEDs provide the highest lumen-per-watt light, outperforming most other LED lights in their class.

Designed to be mounted up to 30' above deck with aerodynamic shape.

Replaces 50W halogen spotlight.



Die-cast aluminum alloy housing provides an ample heat sink as well as ingress protection to ensure a long operational life.

Marine grade 3-stage durable powder coated finish.

Ultra long-life. Shock and vibration resistant.

NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection Compliant.

PN: 8001344-02	Features	National Stock Number: 5961016025452
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- Use and specified by the US Government with a national stock number (NSN).
- NMMA, USCG, ISO & SAE Ignition Protection Compliant.
- IP68, MIL-STD-810G Shock & Vibration Resistant, ASTM B117 Salt Spray (Fog) Compliant.
- CE, FCC Part 15, RoHS Compliant.
- 6,000 Degree Kelvin Cool White with 1,380+ Lumens.
- 50,000 Hour Life Span Rated US CREE LEDs.
- Long Service Life, Shock-Resistant, Ultra-Rugged with no filament to burn out or break.
- Operating Temperature: -40 to +145 Degree F (Withstands temperature extremes).
- Designed in the USA.

### Specifications:

#### Electrical:

Input Voltage: 10-30 VDC (1.5A @ 12 VDC, 0.75A @ 24VDC)  
Max Input Power: 20W  
Non-Polarized Connection  
Under-Voltage and Voltage Spike Protected  
Electrically Protected Against RFI/EMC Interference  
Integrated Thermal Management

#### Mechanical:

Durable Powder Coated Finish  
Polycarbonate Lens  
Aluminum Alloy Housing and Lens Bezel  
Low Profile Stainless Steel U Bracket Mount with 1/4" Bolt  
1M Long 7mm dia. 18AWG 300V Red/Black Cable  
Dimensions: 154mm (6") width, 50mm (2") height, 66mm (2.6") depth  
Weight: 522g (18oz)

#### Optional Accessories:

Horizontal Stainless Steel Rail Mount (PN: 9000319) and  
Vertical Stainless Steel Rail Mount (PN: 9000326)  
For 7/8" to 1 1/4" dia. rails.



# LED Spreader/Deck/Rail Light (12/24V): Kevin Jr. X2™

PN: 9000470  
NSN: 6220016463873



## #1 High-Power 600 Lumen LED Light

The Kevin Jr. X2 powers up in "High" beam mode by default. One can use the built-in IP68 magnetic switch to cycle light among its settings (High/Low/Strobe (6Hz)/Off) when the light is installed in an accessible location. When the light is installed in an inaccessible location (say, high on a sailboat mast), a remotely installed switch in the circuit will automatically activate the light at the "High" setting, independent of the built-in switch on the light.

Powerful 600+ lumen high-power LEDs provide the highest lumen-per-watt light, outperforming most other LED lights in their class.

Designed to be mounted up to 20' above deck with aerodynamic shape. Die-cast aluminum alloy housing provides an ample heat sink as well as ingress protection to ensure a long operational life.

Marine grade 3-stage durable powder coated finish.

NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection Compliant.

PN: 9000470

Features

National Stock Number: 6220016463873

- Use and specified by the US Government with a national stock number (NSN).
- Built-In IP68 Magnetic Switch to Cycle Light Between High/Low/Strobe (6Hz)/Off.
- NMMA, USCG, ISO & SAE Ignition Protection Compliant.
- IP67, MIL-STD-810G Shock & Vibration Resistant, ASTM B117 Salt Spray (Fog) Compliant.
- CE, FCC Part 15, RoHS Compliant.
- 6,000 Degree Kelvin Cool White with 600 Lumens (based on LED manufacturer specifications).
- 50,000 Hour Life Span Rated US CREE LEDs.
- Operating Temperature: -40 to +145 Degree F (withstands temperature extremes).
- Light base accepts standard camera 1/4" 20 UNC thread tripod connection.
- Does not work with dimmers.
- Designed in the USA.

### Specifications:

#### Electrical:

Input Voltage: 10-30 VDC (0.6A @ 12V, 0.3A @ 24V)  
Max Input Power: 8W  
Non-Polarized Connection  
Under-Voltage and Voltage Spike Protected  
Electrically Protected Against RFI/EMC Interference  
Integrated Thermal Management

#### Mechanical:

Durable Powder Coated Finish  
Tempered Glass Lens  
Die-Cast Aluminum Alloy Housing  
Low Profile Stainless Steel U Bracket Mount with 1/4" Bolt or 1/4" 20 UNC Thread Tripod Mount  
1M Long 5mm dia. 20AWG 300V Red/Black Cable  
Dimensions: 90mm (3.5") width, 50mm (2") height, 79mm (3.1") depth  
Weight: 400g (14oz)



US Patent D716,986S



**8mm (0.3") Low Profile 800 Lumen LED Recessed Light**

800+ lumen rated high-power LEDs provide the highest lumen-per-watt light, outperforming other LED lights in its class.

Designed to be mounted in most locations including recessed mounting such as cockpits, transom, foredeck, etc.

Replaces 50W halogen spotlight. Flush-mount or bracket-mount.

Die-cast aluminum alloy housing provides an ample heat sink as well as ingress protection to ensure a long operational life.

Marine grade powder coated finish.

Ultra long-life. Shock and vibration resistant.

NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection Compliant.



**PN: 9000685      Features**

- NMMA, USCG, ISO & SAE Ignition Protection Compliant.
- IP67, MIL-STD-810G Shock & Vibration Resistant, ASTM B117 Salt Spray (Fog) Compliant.
- CE, RoHS Compliant.
- 6,000 Degree Kelvin Cool White with 800+ Lumens
- 50,000 Hour Life Span rated US CREE LEDs.
- Long Service Life, Shock Resistant, Ultra-Rugged with no filament to burn out or break.
- Operating Temperature: -40 to +145 Degree F (-40 to +63 Degree C).

**Specifications:**

**Electrical:**

Input Voltage: 10-30 VDC (1A @ 12 V, 0.5A @ 24V)  
 Max Input Power: 12W  
 Polarized Connection, Reverse Polarity Protected  
 Under-Voltage and Voltage Spike Protected  
 Electrically Protected Against RFI/EMC Interference

**Mechanical:**

Marine Grade Powder Coated Finish  
 Acrylic Lens  
 Die-Cast Aluminum Alloy Housing  
 4mm dia. Flush-Mount Holes  
 316 Stainless Steel 1.5" U Bracket-Mount with a 40mm M5 Bolt  
 1M 18AWG 300V Red/Black Cable  
 Dimensions: 150mm (5.9") width, 58mm (2.28") height,  
 40.5mm (1.59") deep  
 Recessed Mount Cut-Out Requirement: 115.8mm (4.56") x 45mm  
 (1.77") x 40.5mm (1.59") deep  
 Weight: 275g (9.7oz)





**Surface Mount Low Profile 5/8" Red / Cool White High-Power Flood LED Light**



Two wire installation with built-in dimming and red / white light selection with only one standard external power switch.

750+ cool white lumen rated high-power flood LEDs provide the highest lumen-per-watt light, outperforming other LED lights in its class.

Low current draw ~0.7A @ 12V, ~0.35A @ 24V.



Die-cast aluminum alloy housing provides an ample heat sink as well as ingress protection to ensure a long operational life.

Marine grade finish.

Ultra long-life. Shock and vibration resistant.

**PN: 9000500**

**Features**

- Switchable between Red or White with built-in dimming.
- By toggling the on/off switch momentary intensity can be set for both red and white.
- NMMA, USCG, ISO & SAE Ignition Protection Compliant.
- IP67, MIL-STD-810G Shock & Vibration Resistant, ASTM B117 Salt Spray (Fog) Compliant.
- CE, FCC Part 15, RoHS Compliant.
- 6,000 Degree Kelvin Cool White with 750+ Lumens
- 50,000 Hour Life Span Rated US CREE LEDs.
- Operating Temperature: -40 to +145 Degree F (withstands temperature extremes).
- Does not work with dimmers.
- Designed in the USA.

**Specifications:**

**Electrical:**

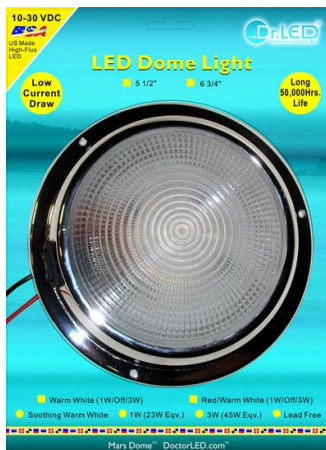
10-30 VDC (~0.7A @ 12V, ~0.35A @ 24V, White Light)  
Max Input Power: 3W (Red), 9W (White)  
Non-Polarized Connection  
Under-Voltage and Voltage Spike Protected  
Electrically Protected Against RFI/EMC Interference  
Integrated Thermal Management

**Mechanical:**

Durable Powder Coated Finish  
Tempered Glass Lens  
Die-Cast Aluminum Alloy Housing  
Low Profile European Design  
6" Long 20AWG 300V Red/Black Cable  
Dimensions: 133mm (~5.24") length, 70mm (~2.76") width, 16mm (~0.63") tall  
Weight: 216g (7.6oz)



# Chrome LED Dome Lights (12/24V): Chrome Mars Dome™



## Mars Dome Lights (GEN 5 Brighter, Warmer, and Better): Now 2700°K

The Mars Dome is a general purpose, surface-mount light fixture with your choice of dual level white light or red/white or blue/white lights for night use, with the added benefit of LED technology. These lights produce a warm white light and are fabricated from the highest quality components to assure long-life and trouble-free use. Their patented internal circuitry provides consistent brightness and makes them immune to life-shortening voltage fluctuations. Their incredibly low power draw makes them the perfect way to reduce energy consumption on your boat. Our latest high-power LED technology provides high lumen-per-watt lighting, outperforming other dome LED lights.



**Most Popular Marine LED Dome Lights in the world. Use and specified by the US Government with national stock numbers (NSN).**

### Features

- Three-position switch (High/Off/Low) to select two warm white brightness levels with the high-level equivalent to about a 45 watts incandescent bulb.
- Red/white and blue/white versions have a three-position switch (Color/Off/Warm White) to select red or blue or warm white.
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life White version.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Available in 5 1/2" (140mm) and 6 3/4" (170mm) overall diameter.
- Very low power consumption, approximately 1 to 5 watts depending on the selection.
- Lead and mercury-free, and no UV output.
- Dimmable with most PWM dimmers except bi-color models.

PART # NSN	8001177 6220016210857	8001184 6220016230649	9000623	8001528	8001504 6220016098772	9000630
Descriptions	5 1/2" Mars Dome Light	5 1/2" Red Mars Dome Light	5 1/2" Blue Mars Dome Light	6 3/4" Mars Dome Light	6 3/4" Red Mars Dome Light	6 3/4" Blue Mars Dome Light
Diameter	5 1/2" Chrome Color	5 1/2" Chrome Color	5 1/2" Chrome Color	6 3/4" Chrome Color	6 3/4" Chrome Color	6 3/4" Chrome Color
LED Color	Warm White (H/L)	Warm White / Red	Warm White / Blue	Warm White (H/L)	Warm White / Red	Warm White / Blue
Lumen Output	250 Lumens (High)	250 / 40 Lumens	250 / 80 Lumens	250 Lumens (High)	250 / 40 Lumens	250 / 80 Lumens
Voltage	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC
Wattage	1W (Low) / 5W (High)	5W (White) / 2W (Red)	5W (White) / 3W (Blue)	1W (Low) / 5W (High)	5W (White) / 2W (Red)	5W (White) / 3W (Blue)
Dimensions	140mm (5 1/2") dia.	140mm (5 1/2") dia.	140mm (5 1/2") dia.	172mm (6 3/4") dia.	172mm (6 3/4") dia.	172mm (6 3/4") dia.
Weight	168g (5.9oz)	168g (5.9oz)	168g (5.9oz)	238g (8.4oz)	238g (8.4oz)	238g (8.4oz)

**(Dome Light LED Conversion Kits are also available.)**

## Brass LED Dome Lights (12/24V): **Brass Mars Dome™**



### Mars Dome Lights (GEN 5 Brighter, Warmer, and Better): Now 2700°K

The Mars Dome is a general purpose, surface-mount light fixture with your choice of dual level white light or red/white lights for night use, with the added benefit of LED technology. These lights produce a warm white light and are fabricated from the highest quality components to assure long-life and trouble-free use. Their patented internal circuitry provides consistent brightness and makes them immune to life-shortening voltage fluctuations. Their incredibly low power draw makes them the perfect way to reduce energy consumption on your boat. Our latest high-power LED technology provides high lumen-per-watt lighting, outperforming other dome LED lights.



### Most Popular Marine LED Dome Lights in the world.

#### Features

- Three-position switch (White/Off/Red) to select warm white or red light; warm white output is equivalent to about a 45 watts incandescent bulb.
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life White version.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Available in 5 ½" (140mm) and 6 ¾" (170mm) overall diameter.
- Very low power consumption, approximately 2 to 5 watts depending on the selection.
- Lead and mercury-free, and no UV output.

PART #	8001498	8001511
Description	5 ½" Red Mars Dome Light	6 ¾" Red Mars Dome light
Diameter	5 ½" Brass Color	6 ¾" Brass Color
LED Color	Warm White / Red	Warm White / Red
Lumen Output	250 / 40 Lumens	250 / 40 Lumens
Voltage	10-30 VDC	10-30 VDC
Wattage	5W (White), 2W (Red)	5W (White), 2W (Red)
Dimensions	140mm (5 ½") dia.	172mm (6 ¾") dia.
Weight	168g (5.9oz)	238 (8.4oz)

(Dome Light LED Conversion Kits are also available.)



## Under-Cabinet LED Lights (12/24V): Warm-White & Red / White John™

Warm White PN: 8001696  
 Red/White PN: 8001719



### Under-Cabinet LED Lights:

A general-purpose surface-mount light fixture with your choice of dual-level white light or red/white lights for night use; with the added benefit of LED technology. These LED lights produce a warm white light and are fabricated from the highest quality components to assure long-life and trouble-free use. Their patented internal circuitry provides consistent brightness and makes them immune to life-shortening voltage fluctuations. Their incredibly low power draw makes them the perfect way to reduce energy consumption on your boat. Our latest high-power LED technology provides high lumen-per-watt lighting, outperforming other LED lights.

#### Features

- The white version has a three-position switch (High/Off/Low) to select two warm white brightness levels; the high level is equivalent to about a 40-watt incandescent bulb.
- The red/white version has a three-position switch (Red/Off/Warm White) to select red or warm white.
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Dimensions & Weight: 8" (203mm) long, 2.5" (63.5mm) wide, 1.4" (35mm) tall. 5.3oz (150g).
- Multi-voltage 12 VDC or 24 VDC.
- Very low power consumption, approximately 1 to 3 watts depending on the setting.
- Lead-free, mercury-free, and no UV output.
- Dimmable with most PWM dimmers except the bi-color model.

Part #	8001696	8001719
Description	Under-Cabinet LED Light	Under-Cabinet LED Light
LED Color	Warm White	Warm White / Red
Lumen Output	120 Lumens	115 (White) / 40 (Red) Lumens
Voltage	10-30 VDC	10-30 VDC
Wattage	1W (Low) / 3W (High)	3W (White) / 1.5W (Red)
Dimensions	203mm (8") long 63.5mm (2.5") wide 35mm (1.4") tall	203mm (8") long 63.5mm (2.5") wide 35mm (1.4") tall
Weight	168g (5.9oz)	168g (5.9oz)

## Recessed LED Lights (12/24V): Saturn Rings™



12/24V Warm White Spot PN: 8001641  
 12/24V Warm White Flood PN: 8001658  
 12/24V Red /White PN: 8001788  
 12/24V Blue /White PN: 8001856

160+ lumen rated. Please note that when comparing brightness using lumen ratings between LED and incandescent lights, you should multiply the LED rated lumen output by about 8. This is because LED beams are mostly focused on 1/8<sup>th</sup> of a quadrant of a sphere's surface while incandescent light covers the whole sphere.

### Saturn Ring Cabin Lights (GEN 5 Brighter, Warmer, and Better):



Now 2700°K

The Saturn Ring is a general-purpose, recessed, water-resistant fixture in your choice of spotlight or floodlight or bi-color (red/white and blue/white) light models with the added benefit of high-power LED technology. These lights produce a warm white light and are fabricated from the highest quality components to assure long-life and trouble-free service. Their patented internal circuitry provides consistent brightness and makes them immune to life-shortening voltage fluctuations. Switching between red or blue and warm white light output is enabled by an external On/Off/On switch.

#### Features

- The spotlight model is equivalent to a 30W incandescent light, bright enough for reading, 180 lux @ 1M.
- The floodlight model is equivalent to a 30W incandescent light, a very good ambient light, 80 lux @ 1M.
- Internal circuitry provides for a constant power draw, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Very low power consumption (approximately 4W – 0.3A).
- Reverse polarity protected.
- Both white and chrome polymer trim rings are included; a gold-plated polymer trim ring is sold separately.
- ~3" (76.2mm) overall diameter; requires a 2" dia. (50.8mm) cut-out, 0.8" (20.3mm) deep.
- Dimmable with most PWM dimmers except bi-color models.

Part #	8001641	8001658	8001788	8001856	8001160
Description	Recessed Spot Light	Recessed Flood Light	Recessed 3 Wire Red / White Light	Recessed 3 Wire Blue / White Recessed Light	Gold Plated Trim Ring
LED Color	Warm White	Warm White	Warm White / Red	Warm White / Blue	-
Lumen Output	160 Lumens	160 Lumens	140 Lumens / 40 Lumens	140 Lumens / 80 Lumens	-
Voltage	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC	-
Power	4W	4W	3W (White) / 1W (Red)	3W (White) / 2.5W (Blue)	-
Overall Dia.	75mm (~3"), 21mm (~0.83") Deep	75mm (~3"), 21mm (~0.83") Deep	75mm (~3"), 21mm (~0.83") Deep	75mm (~3"), 21mm (~0.83") Deep	75mm (~3")
Weight	75g (2.5oz)	75g (2.5oz)	75g (2.5oz)	75g (2.5oz)	

## Low Profile LED Light Bars (12V): 12" and 20" Callahan LED Light Bars™

12" PN: 9000272

20" PN: 9000289



### Low Profile LED Light Bars:

Two general-purpose surface-mount 12" and 20" LED light bars with built-in dimmers. On, off, and light intensity are controlled by motion over an infrared sensor in the light.

Move your hand or finger across the sensor (within 1") to turn the light on or off. The light turns on to the last intensity setting. While the light is on, hold your hand in front of the sensor to adjust the light intensity. Maintain your position in front of the sensor to brighten or dim the light. The light will alternately brighten or dim.

These marine LED lights produce warm-white light (2700 K) and are fabricated from the highest quality components to assure long-life and trouble-free use.

### Features

- Non-Contact Infrared Motion-Controlled On/Off/Dimming LED Light Bars.
- Easy Installation & Operation.
- Turns On to the last light setting.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Lead-free, mercury-free, and no UV output.

Part Number	9000272	9000289
Model Name	Callahan 12" LED Light Bar	Callahan 20" LED Light Bar
LED Color	Warm White, 2700K	Warm White, 2700K
Output	280 Lumens	430 Lumens
Beam Angle	150 Degrees	150 Degrees
Input Voltage	12VDC	12VDC
Max Input Power	5W	7.2W
Current Draw	0.4A	0.6A
Motion-Sensor Idle Current	0.01A	0.01A
Electrical Connection Specifications	20" 22AWG UL2468 Pigtail	20" 22AWG UL2468 Pigtail
Polarized Connection	Polarized Connection	Polarized Connection
Operating Temperature	-4°F to 140°F (-20°C to +60°C)	-4°F to 140°F (-20°C to +60°C)
Length (in)	11.8	19.7
Width (in)	1.2	1.2
Height (in)	0.5	0.5
Weight (oz)	2.8	4.7
Water Ingress Rating	IP20	IP20
Finish Color	Silver	Silver
Mounting Hardware	Stainless Snap-On Brackets, Pigtail	Stainless Snap-On Brackets, Pigtail



**Bi-Color High-Power LED Chart and Reading Light**

Bi-color (red/white) high-power LED chart and reading light with ultra-low current draw (0.2A @12V).

Zero radio frequency emission.

“European” styling.

#1 US CREE LEDs.

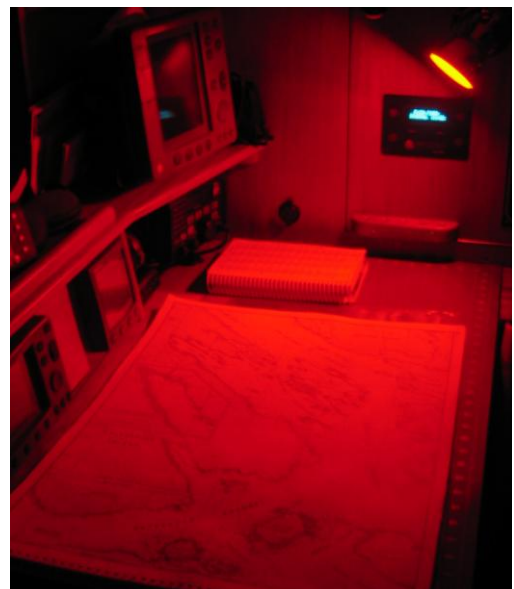
A push button switch located at the base to toggle between red, warm white, and off.

Ultra long-life. Shock and vibration resistant.

**Specifications**

Voltage/ Draw:	White: 0.2A @ 12VDC, Red: 0.1A @ 12V
Fixture Material:	Alloy head polymer base with metal gooseneck.
Fixture Dimensions:	31 mm dia. head, 77 mm oval base, 340mm (~13”) long gooseneck.
Mounting Hardware:	Two 3 mm X 20 mm stainless steel screws included.
Lens Material/Description:	Polycarbonate
Switch Type:	Push Button

Part #	9000029
Description	LED Chart / Reading Light
LED Color	Red / White
Lumen Output	150 Lumens (warm white) 45 Lumens (red)
Wattage Replacement	20 W
Voltage	10-15 VDC
Dimensions	31 mm (~1.2”) dia. head 77 mm (3”) oval base 340mm (13”) long gooseneck
Weight	310g (11oz)



## Motion-Activated LED Night Light: Callahan LED Night Light

PN: 9000234



“With this light, there is always light in the darkness.”

### Battery-Powered LED Night Light:

A general-purpose body motion-activated LED light powered by three (3) AAA batteries. This night light is perfect for many locations such as stairs, closet, inside a safe, engine room, under-cabinet, bedroom (V-berth, state-room), bathroom (head), kitchen (galley), etc... One set of batteries will last for many months of normal night light operation.

This light turns on automatically for ~30 seconds in low ambient light levels upon activation by body motion within ~10 feet. Auto-Off after ~30 seconds if there is no more motion. This light does not turn on in brightly lit environments.

Easy to Install: A 3M adhesive pad is provided, and a hanging hole is also provided. Light can stand on its own as well.

This LED light produces a warm white light (3000 K) and is fabricated from the highest quality components to assure long life and trouble-free use.

Part Number	9000234
Model Name	Callahan LED Night Light
LED Color	Warm White, 3000K
Output	35 Lumens
Batteries	3 x AAA Batteries (Not Included)
LED Power	1W
Switch	Motion Activated
Dimensions	3.1" dia. x 1"
Weight	1.6 oz.
Color	Almond Body
Mounting Hardware	3M Double-Sided Adhesive Pad



**Surface Mount Underwater Lights (12/24V): Dave X3™**  
**Low Profile LED Spreader Lights**

**White PN: 9000203**  
**Blue PN: 9000210**



**Dr. LED's Dave X3 Surface Mount Underwater LED Lights:**

The Dave X3 is the 2<sup>nd</sup> generation of our popular Dave surface mount underwater light. It uses the latest generation of high quality US CREE LEDs with the highest lumen per watt output on the market. The polymer unibody design makes it corrosion as well as ignition-proof. Ultra-rugged and shock resistant.



**Features**

- Low profile surface mount underwater, high-power LED light.
- Small foot-print (~100mm / 4" dia.).
- 10-30 VDC input voltage range.
- ~500 lumens (cool white) or blue, narrow beam.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Polymer unibody design.
- Very low power consumption (approximately 3 W).
- No toxic lead and mercury-free, no UV output (RoHS Compliant).
- US CREE LEDs are designed to last up to 50,000+ hours.
- Designed in the USA, NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection Compliance.

**Specifications:**

Form Factor: 100mm (~4") diameter disk, low profile 24.5mm (~1")

Voltage: 10-30 VDC, 12VAC

Wattage: 3W (typical)

Lumen Output: 500 Lumens (for white)

Color Temperature: cool white 5,000° K (typical) or blue

Ambient operating temperature: -10° C to +30° C

Dimensions: 100mm (~4") dia. 24.5mm (~1") tall

Weight: 193g (6.8oz)

# Stainless Thru-Hull Underwater LED Lights (12/24V): Neptune X6™

## Low Profile Thru-Hull



### Neptune Underwater LED Lights:

This 1500+ lumen Neptune Light outperforms any other LED light in the same category in terms of price and light output. Six US CREE high-power LEDs provide the highest lumen-per-watt underwater light ever made. The SAE 316L stainless steel body makes it extremely corrosion resistant.

Neptune X6 White

PN: 9000487

Cool White (6000K)

1500+ Lumens

Neptune X6 Blue

PN: 9000494

Blue

### Features

- 5mm (~0.2") low profile and 100mm (~3.9") diameter small footprint.
- Same dimensions as our popular three LED aluminum Neptune Light.
- Six state-of-the-art 5W, US CREE LED, high-quality, high-power LEDs provide the most lumens per watt in LED technology.
- High-intensity LED light travels farther underwater for maximum visibility and truer colors.
- Instant-on, no warm-up of bulb needed.
- SAE 316L stainless steel unibody.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Input Voltage: 10-30VDC (~1.5A @ 12.8VDC White / ~1A @ 12.8VDC Blue).
- Max Input Power: ~21W (White), ~13W (Blue).
- Non-Polarized Connection.
- Under Voltage and Voltage Spike Protected.
- Electrically Protected Against RFI/EMC Interference.
- Integrated Thermal Management.
- Operating Temperature: -40 to +145 Degree F (withstands temperature extremes).
- Lens Material: 10mm tempered glass.
- Mechanical Connection: One 68mm (~2 11/16") dia. hole.
- Maximum Hull Thickness: < 100mm (~3.9").

### Compliance:

NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection Compliant  
ABYC H-27 Side Load Test Compliant  
MIL-STD-810G Shock & Vibration Resistant  
ASTM B117 Salt Spray (Fog)  
CE, FCC Part 15, RoHS, IP68



# LED Replacement Bulb (12/24V): AR111 / PAR36 Sealed Beam LED

PN: 9000074



## 700+ Lumens Waterproof Sealed Beam LED Replacement

- ETL US & Canada listed and FCC compliance certified; meaning safe to use close to your VHF antenna.
- US CREE LED 700+ lumen 6000 K output.
- Replaces 50W halogen sealed beam (AR111 & PAR36) for most spreader and foredeck lights.
- 38 degree beam, 2000 lux @ 1M.
- IP67 waterproof.
- Aluminum alloy housing provides an ample heat sink as well as ingress protection to ensure a long operational life.
- Ultra long-life. Shock and vibration resistant.

### PN: 9000074 Features

- Replaces Perko Bulbs 0538000CHR, 0538H00CHR, 044000312V, & 04400332V
- Replaces Aqua Signal series 41 masthead/foredeck light PAR36 sealed beam
- Replaces Aqua Signal E-9040030600, E-9040030800, E-9040030700, E-9040017500, E-9040020200, E-9040022800
- IP67, MIL-STD-810G Shock & Vibration Resistant, ASTM B117 Salt Spray (Fog) Compliant.
- CE, RoHS Compliant.
- 6,000 Degree Kelvin Cool White with 700+ Lumens
- 25,000 Hour Life Span rated US CREE LEDs.
- Long Service Life, Shock-Resistant, Ultra-Rugged with no filament to burn out or break.
- Operating Temperature: -40 to +145 Degree F (-40 to +63 Degree C).

### Specifications:

#### Electrical:

Input Voltage: 10-30VDC or 12 VAC  
Current Draw: 0.8A @ 12 V, 0.4A @ 24V  
Max Input Power: 10W  
Non-Polarized Connection  
Under-Voltage and Voltage Spike Protected  
Electrically Protected Against RFI/EMC Interference

#### Mechanical:

Aluminum Alloy Housing  
Marine Grade Finish  
Acrylic Lens  
Dimensions: 110mm (4.3") diameter, 45mm (1.8") depth  
Weight: 204g (7.2oz)



# LED Replacement Bulbs (12/24/32V): Edison LED 1X & 3X / Edison SideKick™

## Medium Screw Base General Purpose Bulbs:





New model, Edison SideKick, with wider voltage input (12/24/32VDC, 12/24VAC) and higher lumen output (700 Lumens).

US CREE high-quality high-power LEDs. Unique, cutting edge, internal circuitry and the highest quality components make Dr. LED's the longest lasting, most energy efficient LED products on the market. These high-quality, general-purpose bulbs produce a warm white light and are the perfect way to reduce energy consumption in your boat. The Edison 1X & 3X LEDs produce a spot-type beam and are best used in directional light fixtures. The Edison SideKick bulb emits light over a 300 degree area and is best used for lights with a lampshade.



### Features

- Fits E26/27 medium screw base “household” style sockets.
- Ideal for marine and solar panel users.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Edison SideKick (PN:8001818-08) produces the equivalent of about a 100-watt incandescent bulb within the main beam - with 7 watts of consumption.
- Edison 3X (PN:8001801) produces the equivalent of about a 60-watt incandescent bulb within the main beam - with 4 watts of consumption.
- Edison 1X (PN:8001795), produces the equivalent of about a 30-watt incandescent bulb within the main beam - with only 1.5 watts of consumption.
- Lead and mercury-free, no UV output.
- Dimmable with most PWM dimmers.

			
<b>Part #</b>	<b>8001795</b> <b>(Replaces 8001276)</b>	<b>8001801</b> <b>(Replaces 8001283)</b>	<b>8001818-08</b> <b>(Replaces 8001818)</b>
<b>Model</b>	Edison 1X	Edison 3X	Edison SideKick
<b>Color Temp</b>	Warm White ~3000K	Warm White ~3000K	Warm White ~3000K
<b>Voltage</b>	12/24VDC, 12VAC	12/24VDC, 12VAC	12/24/32VDC, 12/24VAC
<b>Current Draw</b>	0.12A @ 12V	0.33A @ 12V	0.6A @ 12V
<b>Lumen</b>	120 Lumens	200 Lumens	700 Lumens






## The Magnum LED Series:

These Magnum LED bulbs come in several models and are ideal for replacing your existing incandescent or halogen bayonet or bi-pin lights. Unique, cutting-edge, internal circuitry and the highest quality components make Dr. LED's the longest-lasting, most energy-efficient LED products on the market. These high-quality bulbs produce a warm white light and are the perfect way to reduce energy consumption on your boat. They have a long service life, are shock-resistant, and UV, lead, and mercury-free. These bulbs are ideal for the cockpit; map reading lights, emergency lights, etc. They produce a spot-type beam and are best used in directional light fixtures.

### Features

- Bayonet style bulbs replace BA type (15 mm) incandescent bulbs used in many boats and RVs; available in single contact (BA15S), double contact indexed (BAY15D), and non-indexed styles (BA15D).
- 2-pin style with 4 mm pin spacing replaces the super-hot "standard" MR11 mini-reflector style halogen bulbs, commonly used in many boats and RVs.
- 2-pin style with 5.3 mm pin spacing replaces the hot MR16, mini-reflector halogen bulbs.
- Lead and mercury-free, no UV output.
- Dimmable with most PWM dimmers.

				
<b>Part #</b>	<b>8001245</b>	<b>9000449</b>	<b>8001252</b>	<b>8001269</b>
Base	BA15S	BA15S	BAY15D	BA15D
Description	Bayonet 2W	Bayonet 2W	Bayonet 2W	Bayonet 2W
Connection	Single Contact	Elongated Single Contact	Double Contact	Double Contact
Side Pins	Level Pins, Non-Index	Level Pins, Non-Index	Offset Pins, Indexed	Level Pins, Non-Index
Lumen Output	150 Lumens	150 Lumens	150 Lumens	150 Lumens
Voltage	10-30VDC, 12VAC	10-30VDC, 12VAC	10-30VDC, 12VAC	10-30VDC, 12VAC

			
<b>Part #</b>	<b>8001825</b>	<b>8001832</b>	<b>8001238</b>
Type	MR16 1X	MR16 3X	MR11
Description	Bi-pin 1.5W	Bi-Pin 4W	Bi-Pin 2W
Lumen Output	120 Lumens	200 Lumens	150 Lumens
Voltage	10-30VDC, 12VAC	10-30VDC, 12VAC	10-30DC, 12VAC

## LED Replacement Bulbs (12V): 12V G4 LED Disks

For reading lights, recessed lights, etc.

These G4 disks come in several models (12V or 24V) and are ideal for replacing your existing incandescent or halogen bi-pin bulbs. Unique, cutting-edge, internal circuitry and the highest quality components make Dr. LED's the longest-lasting, most energy-efficient LED products on the market. These high-quality LED disks produce warm white or blue or red lights and are the perfect way to reduce energy consumption on your boat. They have a long service life, are shock-resistant, and UV, lead, and mercury-free. These LED disks are ideal for cockpit lights; map reading lights, emergency lights, etc. They produce a flood-type beam and work well in many light fixtures.

**Both axial (center) and radial (side) connection pins are provided. Cut off the pins that are not utilized.**

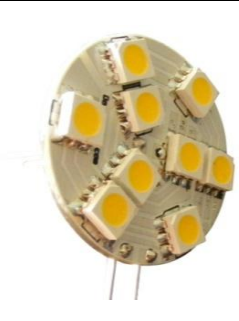

### Features

- Soothing warm white or blue or red lights.
- Zero radio frequency (RF) emission, surface-mount-device design.
- Designed for the marine environment with high-quality SMD components.
- Conformal coated & use of long-life components, e.g. use of a ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant current draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Very low power consumption.      Dimmable with most PWM dimmers.      Designed in the USA.

			
	G4 LED Disk 12V	Red G4 LED Disk 12V	Blue G4 LED Disk 12V
<b>Part #</b>	<b>9000081</b>	<b>9000098</b>	<b>9000364</b>
Description	For reading and recessed lights	For reading and recessed lights	For reading and recessed lights
Bulb Type	G4	G4	G4
Connection	Bi-Pin	Bi-Pin	Bi-Pin
LED Color	Warm White	Red	Blue
Voltage (V)	12 VDC	12 VDC	12 VDC
Current (A)	0.13A	0.05 A	0.13A
Watt Replacement	20W equivalent	10W equivalent	10W equivalent
Lumen Rating	120 Lumens	30 Lumens	30 Lumens
Dimensions	6mm (0.24") thick 30mm (1.2") dia.	6mm (0.24") thick 30mm (1.2") dia.	6mm (0.24") thick 30mm (1.2") dia.

## LED Replacement Bulbs (24V): 24V G4 LED Disks

For reading lights, recessed lights, etc.

		
	G4 LED Disk 24V	Blue G4 LED Disk 24V
<b>Part #</b>	<b>9000340</b>	<b>9000418</b>
Description	For reading and recessed lights	For reading and recessed lights
Bulb Type	G4	G4
Connection	Bi-Pin	Bi-Pin
LED Color	Warm White	Blue
Voltage (V)	24 VDC	24 VDC
Current (A)	0.07A	0.07A
Watt Replacement	20W equivalent	10W equivalent
Lumen Rating	120 Lumens	30 Lumens
Dimensions	6mm (0.24") thick 30mm (1.2") dia.	6mm (0.24") thick 30mm (1.2") dia.



US Patent 7,847,486

## LED Replacement Bulbs (12/24V): **G4 LED Tower and Mini G4 Star**



For reading lights, recessed lights, etc. **PN: 9000104**

**PN: 9000432**

The 12/24V G4 Tower and 12/24V Mini G4 LED bulbs are ideal for replacing your existing incandescent or halogen bi-pin G4 bulbs. Unique, cutting-edge, internal circuitry and the highest quality components make Dr. LED's the longest-lasting, most energy-efficient LED products on the market. These high-quality bulbs produce warm white light and are the perfect way to reduce energy consumption on your boat. These have a long service life, are shock-resistant, and UV, lead, and mercury-free. These bulbs are ideal for cockpit lights, map reading lights, emergency lights, etc. They produce a radial 360-degree beam and work well in many light fixtures.

### Features

- High-Power LED 10-30 VDC Warm White
- Soothing warm white light.
- Surface-mount-device design.
- Encapsulated & use of long-life components, e.g. use of a ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant power draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Very low power consumption
- Lead and mercury-free, no UV output.
- Dimmable with most PWM dimmers.
- Designed in the USA.

		
	G4 Tower 12/24V	Mini G4 Star 12/24V
<b>Part #</b>	<b>9000104</b>	<b>9000432</b>
Description	For reading lights, etc.	For reading, recessed, etc.
Bulb Type	G4	G4
Connection	Bi-Pin	Bi-Pin
LED Color	Warm White	Warm White
Voltage (V)	10-30 VDC	10-30 VDC
Current (A)	0.2A @ 12V, 0.1A @ 24V	0.1A @ 12V, 0.05A @ 24V
Watt Replacement	30W equivalent	10W equivalent
Lumen Output	300 Lumens	120 Lumens
Dimensions	37mm (1.5") long 13mm (0.5") dia.	22mm (0.87") length 10mm (0.39") dia.



## LED Replacement Bulbs (12V): **Wedge, Windex, & Bayonet 1157 Dual Intensity**

For reading, interior lights, Windex light, dual intensity trailer lights, etc.

US Patents 7,450,394 & 7,053,560

These bulbs come in several models and are ideal for replacing your existing incandescent bulbs. They come in wedge base, mini Edison base, E10 (e.g. for Windex light), as well bayonet base. Unique, cutting-edge, internal circuitry and the highest quality components make Dr. LED's the longest-lasting, most energy-efficient LED products on the market. These high-quality bulbs produce a soothing warm white light and are the perfect way to reduce energy consumption on your boat. They have a long service life, are shock-resistant, and UV, lead, and mercury-free. These bulbs are ideal for the cockpit; map reading lights, emergency lights, etc. They produce a flood-type beam and are best used in many light fixtures.

These bulbs are not approved for navigation use. Do not use these bulbs for navigation lights.

### Features

- High-quality US-designed SMD LED bulbs.
- Soothing warm white light.
- Zero radio frequency (RF) emission (except for 1157 and 9000128).
- Conformal coated & use of long-life components, e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Dimmable with most PWM dimmers.
- Designed in the USA: US Patent: 7,053,560.

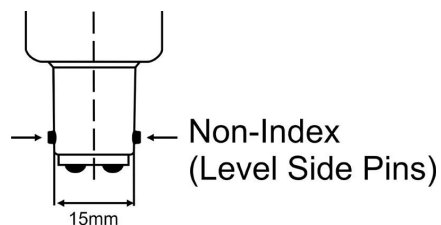
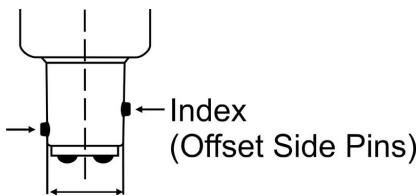
		 Windex Star in Windex Light	
	Single-Sided Wedge Base	Windex Star	Trade 1157, Dual Intensity
<b>Part #</b>	<b>8001559</b>	<b>9000166</b>	<b>8001157</b>
Description	For reading lights	For Windex light	For trailer lights
Bulb Type	Single T5 Wedge	Edison 10mm	BAY15D, Double Contact Index
Connection	Single T5 Wedge	Edison 10mm	15mm Bayonet BAY15D
LED Color	Warm White, 80 Lumens	Warm White	Cool White
Voltage (V)	12 VDC	12 VDC	10-30 VDC
Current (A)	0.08A @ 12V	0.02A @ 12V	0.33A @ 12V
Wattage Replacement	5W equivalent	3W equivalent	15W equivalent
Dimensions	38mm (1.5") long 15mm (0.6") wide 6.5mm (0.26") thick	11mm (0.4") dia. 14.5mm (0.6") long	48mm (~1.89" long) 18mm (~0.71") dia.

## LED Replacement Bulbs: 12/24V Bayonet TOWER LEDs

For reading lights, interior lights, etc.

Bayonet Style

				
<b>Part #</b>	<b>9000111</b>	<b>9000128</b>	<b>9000135</b>	<b>9000142 (Discontinued)</b>
Description	For Reading Lights	For Reading Lights	For Reading Lights	For Reading Lights
Bulb Type	Bayonet 15mm BA15S	Bayonet 15mm BA15D	Bayonet 15mm BA15D	Bayonet 15mm BAY15D
Connection	Single Contact	Double Contact Non-Index	Double Contact Non-Index	Double Contact Index
Wattage Replacement	30W equivalent (330 Lumens)	30W equivalent (300 Lumens)	20W equivalent (50 Lumens)	20W equivalent (195 Lumens)
LED Color	Warm White	Warm White	Red	Warm White
Voltage (V)	10-30 VDC	10-30 VDC	12 VDC	12 VDC
Wattage (W)	3W	3W	2.5W	2.5W
Current (A)	0.25 A	0.25 A	0.2 A	0.2 A
Dimensions	57.5mm (2.3") long 20mm (0.8") dia.	57.5mm (2.3") long 20mm (0.8") dia.	57.5mm (2.3") long 20mm (0.8") dia.	57.5mm (2.3") long 20mm (0.8") dia.



## Dome Light LED Conversion Kits (12V & 24V)

These dome light LED conversion kits come in several models\* and are ideal for replacing your existing incandescent or halogen dome light bulbs. Unique, cutting edge, internal circuitry, and the highest quality components make Dr. LED's the longest-lasting, most energy-efficient LED products on the market. These high-quality LED disks produce a warm white light and are the perfect way to reduce energy consumption on your boat. They have a long service life, are shockproof, and are UV, lead, and mercury-free. These LED disks are ideal for cockpit lights; map reading lights, emergency lights, etc. They produce a flood-type beam and work well used in many light fixtures.

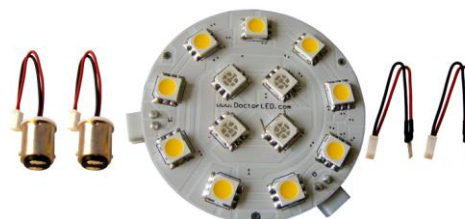
Two voltage models to choose from for 12 VDC and 24 VDC systems. Two output models to choose from: Warm white or warm white / red light.

Both bayonet double contact non-index (BA15D) and bi-pin connection pigtails are provided. Bi-color models are designed for dome lights with two bulbs (one red and one white).



### Features

- High-quality marine environment US-designed SMD LED disks.
- Soothing warm white light or red light.
- Zero radio frequency (RF) emission.
- Conformal coated & use of long-life components: e.g. ceramic capacitor, not low-hour electrolytic type.
- Long service life and shockproof.
- Ultra-rugged with no filament to burn out or break.
- Dimmable with most PWM dimmers.
- Designed in the USA.



	12 VDC Dome Kit	12 VDC Bi-Color Dome Kit	24 VDC Dome Kit	24 VDC Bi-Color Dome Kit
<b>Part #</b>	<b>9000159</b>	<b>9000333</b>	<b>9000395</b>	<b>9000401</b>
Description	For dome lights	For dome lights	For dome lights	For dome lights
Connection	Bi-Pin & 15mm Bayonet	Bi-Pin & 15mm Bayonet	Bi-Pin & 15mm Bayonet	Bi-Pin & 15mm Bayonet
LED Color	Warm White	White / Red	Warm White	White / Red
Voltage (V)	12 VDC	12 VDC	24 VDC	24 VDC
Current (A)	0.18 A	0.18 A	0.09 A	0.09 A
Watt Replacement (White)	30W equivalent	25W equivalent	30W equivalent	25W equivalent
Lumen Rating (White)	180 Lumens	135 Lumens	180 Lumens	135 Lumens
Dimensions	7mm (0.3") thick 50mm (2") dia.	7mm (0.3") thick 50mm (2") dia.	7mm (0.3") thick 50mm (2") dia.	7mm (0.3") thick 50mm (2") dia.



# LED Conversion Guide (p2)

Bulb Image	Ancor #	Trade #	Base	Voltage
	521034	1034	BAY15D	12
	521157	1157		
	12/24V White PN:8001157 Automobile Bulb			
	529338	G4	G4	24
	529368			
	529361			
	529362			
	529367			
	529370			
	529371			
	529421			
	529422			
	529423			
	521125	MR16	G5.3	12
	529424			
	511016	15G12/12	E26	12
	531015	15A17/12		
	531025	25A17/12	E26	12
	531050	50A17/12		
	531075	75A17/12		
	532025	25A17/24	E26	24
	532050	50A17/24		
	522129	Perko Fig. 72	S8.5	24
	529102			
	529200			
	529095	10576	S8.5	12
	529098	10576R		
	521126	T11X41		
	521131	T15X41		
	529104			
	522112	211-2	S8.5	12
	522122	212-2		
	529417			
	529333			
	529419			
	520063	53		
	520057	57		
	521128	1416		
	521815	1815		
	521816	1816		
	521885	1885		
	523357			
	529369			
	520965	965	Edison	10
	521487	1487		12
	Ancor #	Trade #	Base	Voltage
	12/24V White PN:8001157 Automobile Bulb			
	12V White PN:9000142			
	12V White PN:8001252			
	2" Dia. Dome Light Kits: 12V White 9000159 12V Red/White 9000333 24V White 9000395 24V Red/White 9000401 'With two original bulbs.			
	G4 LED Disk 1.2" dia 12V White 9000081 12V Red 9000098 12V Blue 9000364 24V White 9000340 24V Blue 9000418			
	Mini G4 0.4" dia 12/24V White 9000432			
	G4 Tower 0.5" dia 12/24V White 9000104			
	MR11 1.4" dia 12/24V White 8001238			
	MR16 1X 12/24V White PN:8001825			
	MR16 3X 12/24V White PN:8001832			
	Edison 1X 12/24V White PN:8001818			
	Edison 3X 12/24V White PN:8001801			
	12V White 9000173 24V White 9000463 12V Red 9000586 12V Green 9000593			
	12V White 9000241 12V Red 9000548 12V Green 9000555 12V Blue 9000562 24V White 9000357			
	12V White PN:8001849			
	12V White PN:9000166			
	520806	906	Wedge	12
	520812	912		24**
	520167	168		12
	520194	194		
	12V White PN:8001559			
	12V White PN:9000371			
	Dr.LED			

# Navigation Bulb Selection Guide



## Navigation LED Bulb Selection Guide

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V.2018.08



Brand	Series	Nav Light Color	Bulb Style	Mfg. Bulb No.	Dr. LED Model	Dr. LED Part No.	Voltage	Visibility	Base	Remarks		
Aqua Signal		120V White	Double Contact Bayonet Index		120V White Polar Star	9000388	120V	3mm	BAY15D	120V Ancor 529348		
		120V Red		120V Red Polar Star	9000647							
		120V Green		120V Green Polar Star	9000654							
		12/24V White		White Polar Star 40 MKII	8001757							
		12/24V Red		Red Polar Star 40 MKII	8001764							
		12/24V Green		Green Polar Star 40 MKII	8001771							
		12/24V Yellow		Amber/Yellow Polar Star 40 MKII	8000043							
		12/24V Bi-Color (Red/Green)		Bi-Color Polar Star 40 MKII	8001634							
		12/24V (Red/Green/White)		Tri-Color Polar Star 40 MKII	8001450							
		24V Tri-Color (Red/Green/White)		Tri-Color Polar Star 40 MKII	8001450							
		12V White, Red, or Green	Miniature Non-Index		90384 / 90496	Polar Star 20	8001849	12V	2mm	BA9S	Trade 53, 57, 1416, 1815, 1816, 1895 Ancor 520053, 520057, 521126, 521416, 521815, 521816, 521895, 529337, 529355, 539369	
		Series 25 Deck Light										
		White										
		Red										
		Green										
Hella		12/24V White	Double Contact Bayonet Index	78290, 78291, 78292, 78293, 78297, 8GA003488-121	White Polar Star 40 MKII	8001122	12V	2mm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417, 529333, 529419		
		12/24V Red									Red Polar Star 40 MKII	8001764
		12/24V Green									Green Polar Star 40 MKII	8001771
		12/24V Bi-Color (Red/Green)									Bi-Color Polar Star 40 MKII	8001634
		12/24V Tri-Color (Red/Green/White)									Tri-Color Polar Star 40 MKII	8001450
		12V White	Festoon	78206, 8GM002091-131	39-44mm Festoon Star	9000241	12V	2mm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417		
		12V Red									Red 39-44mm Festoon Star	9000548
		12V Green									Green 39-44mm Festoon Star	9000555
		12V White									31mm White Festoon Star	9000173
		24V White									24V 31mm White Festoon Star	9000463
	12V White	Festoon	78202, 8GM 993 406-001	31mm White Festoon Star	9000173	12V	2mm	S8.5	Ancor 529102			
	24V White									24V 31mm White Festoon Star	9000463	
	12/24V White	Single Contact Bayonet	78235, 78236, 8GA002071-131	H2492 Star	8000067	12V	2mm	BA15S	Trade 93, 1141, 1156, 1003 Ancor 520093, 521141, 521156, 521003			

# Navigation Bulb Selection Guide (p2)

Brand	Series	Nav Light Color	Bulb Style	Mfg. Bulb No.	Dr. LED Model	Dr. LED Part No.	Voltage	Visibility	Base	Remarks							
Perko	0200	12/24V White	Double Contact Bayonet Index	037512V10W 037512V25W	White Polar Star 40 MKII	8001757	12/24V	2mm	BAY15D	12V Ancor 521158, 529340, 529343 24V Ancor 521162, 521166, 529341, 529344							
		Red Polar Star 40 MKII			8001764												
		Green Polar Star 40 MKII			8001771												
	0329	12/24V Bi-Color Red/Green	Double Contact Bayonet Non-Index	Fig. 337 0337011DP 0337012DP	Bi-Color Polar Star 40 MKII	8001634	12V	2mm	BA15D	Trade 68, 90, 94, 1004 Ancor 520068, 520090, 520094, 521004, 523030, 521159							
		Tri-Color Polar Star 40 MKII			8001450												
		HEX GE90 Star			9000425												
	1127, 1128, 1129, 1130		12V White	Double Contact Bayonet Non-Index	0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR 0374004CLR	Red HEX GE90 Star	9000517	120V	3mm	BA15D	120V Ancor 521164, 529303						
			12V Red			9000524											
			12V Blue			9000531											
			120V White			9003744											
			120V Red			9000661											
			120V Green			9000678											
			12/24V White			Double Contact Bayonet Non-Index	0374001CLR 0374001CLR 0374001CLR 0374001CLR 0374001CLR 0374001CLR					White Polar Star 40 NI	8001078	12/24V	2mm	BA15D	Ancor 529300, 529301 (24V), 529412, 529413, 529414, 520094, 521076, 521142, 521176
			12/24V Red									8001382					
			12/24V Green									8001405					
12V White			9000173														
12V Red			9000586														
12V Green			9000593														
0120, 0170	Festoon	24V White	Perko Bulb Fig. 72 0072DP8CLR	31mm White Festoon Star	9000173	24V	2mm	S8.5	Ancor 529102								
				31mm Red Festoon Star	9000586												
				31mm Green Festoon Star	9000593												
0106, 0108, 0109, 0110, 0111, 0259, 0639, 0646, 4F, 5F, 7F	Festoon	12V White	Fig. 69 0069DP0CLR Fig. 70 0070DP1CLR 0070DP2CLR Fig. 67 0067DP1CLR 0067DP2CLR	39-44mm White Festoon Star	9000241	12V	2mm	S8.5	Ancor 52126, 52127, 522131, 529104, 522112, 522122, 529417, 529333, 529419								
				39-44mm White Festoon Star	9000241												
				24V 39-44mm White Festoon Star	9000357												
0238, 0239, 1236, 1273, 1274, 1281, 1283, 1284, 1440, 1445, 1450, 1451, 1452, 1455, 1456, 1460, 1461, 1465, 1470, 1604, 1607, 1622, 1634, 1637, 1656	Wedge	12V White	338DP2CLR	P338 Wedge Star	9000371	12V	2mm	T5	Trade 906, 912 Ancor 520906, 520912								
				12V White	9000425												
				12V Red	9000517												
0362, 0371, 0455, 0466, 1134, 1137, 1209, 1301, 1311, 1330, 1400, 1401	Festoon	12V White	WN-211, 132025	39-44mm White Festoon Star	9000241	12V	2mm	S8.5	Ancor 52126, 522127, 522131, 529104, 522112, 522122, 529417, 529333, 529419								
				12V Red	9000517												
				12V Green	9000524												
ML-2	MR16	12/24V White	132035	12/24V MR16 3X LED	8001832	12/24V	Deck Light	G5.3	Ancor 521125, 529424								
				12/24V White	9000425												
				12V Red	9000517												
7200 series: 7208, 7212, 7220, 7250, 7251, 7252, 7254, 7255, etc.	Festoon	12V White 12V Red 12V Green	Festoon	31mm White Festoon Star	9000173	12V	2mm	S8.5	Ancor 529102								
				31mm Red Festoon Star	9000586												
				31mm Green Festoon Star	9000593												

E. & O. E.

# Navigation Light LED Bulbs (12/24V and 120V): **Polar Star 40™** With 2NM Certified Light Engines

2 NM navigation light LED replacement bulbs:

**Red Polar Star 40**  
**Bi-Color Polar Star 40**  
2NM USCG COLREG 1972 ABYC A-16 Certified

**White Polar Star 40**  
**Tri-Color Polar Star 40**

**Green Polar Star 40**



## The Polar Star series Navigation LED Bulbs:



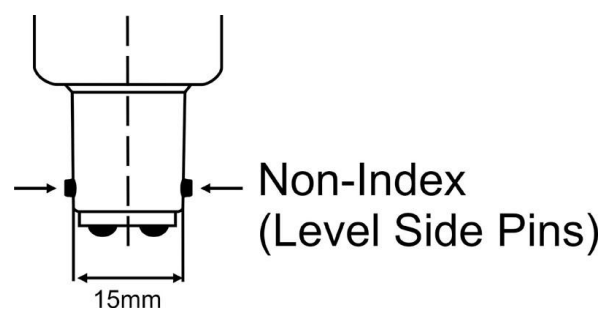
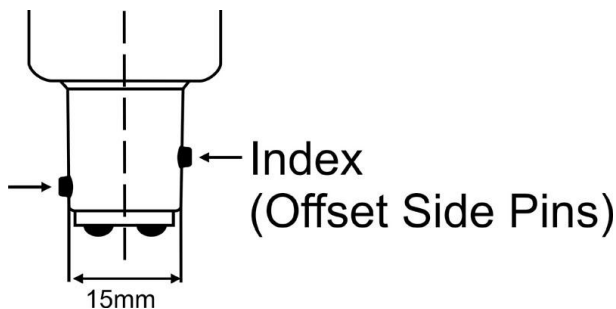
**US Patented.**

These LED bulbs are specially designed as direct replacements for many navigation lights available on the market such as those from Aqua Signal® (series 40, 41, 42, 50, 55) as well as the ones from Attwood®, Hella®, Perko® and several other manufacturers. These high-quality bulbs are the perfect way to reduce energy consumption on your boat with low current draw. They are especially well-suited for mast mounted lights, as their incredible reliability will mean an end to frequent climbs up the mast to replace navigation light bulbs.



### Features

- 15mm Double Contact Bayonet LED Navigation Bulbs, both BAY15D (Index, Offset Side Pins) and BA15D (Non-Index, Non-Offset Side Pins) bases are available.
- BAY15D available for White, Red, Green, bi-color (Red / Green) and tri-color (Red / Green / White) navigation lights.
- BA15D is available for White, Red, and Green navigation lights.
- It is best to use Dr. LED's red LED behind a red lens, green LED behind a green lens, white LED behind a clear lens, red/green LED behind a red/green lens, and tricolor LED behind a tricolor lens.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- Conformal coated & use of long-life components: e.g. ceramic capacitor (not low hour electrolytic capacitor).
- LED bulbs satisfy all brightness, distance (2 NM), and arc requirements set forth by the US Coast Guard for vessels less than 50 m (165 ft.) in length.
- Very low power consumption (approximately 1-2 W).



**US Patent 8,545,046**



## BAY15D (Index, Offset Side Pins, Single Color) Models:

### 2NM Single Color Index Models

(For Aqua Signal series 40, 41, 42, 55 etc.; Perko 200 ( 0375), Hella 2984, 2986, 2988, etc.)



Part #	8001757	8001764	8001771	8000043
Description	For anchor, masthead, & Stern nav. lights	For port sidelights	For starboard sidelights	For amber/yellow nav. lights
LED Color	White	Red	Green	Amber / Yellow
Voltage	10-30 VDC	10-30 VDC	10-30 VDC	10-30 VDC
Bulb Type	Indexed	Indexed	Indexed	Indexed

### Bi-Color

### Tri-Color

Part #	8001634	8001450
Description	For bicolor bow lights	For tricolor lights
LED Color	Red / Green	White / Red / Green
Voltage	10-30 VDC	10-30 VDC
Bulb Type	Indexed	Indexed

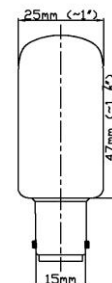
## BA15D (Non-Index, Non-Offset Side Pins, Single Color) Models:

### 2NM Single Color Non-Index Models

(For Perko series 1127, 1130, etc.; Perko Bulb 0374)



Part #	8001078	8001382	8001405
Description	For anchor, masthead, & stern nav. lights	For port sidelights	For starboard sidelights
LED Color	White	Red	Green
Voltage	10-30 VDC	10-30 VDC	10-30 VDC
Bulb Type	Non-Index	Non-Index	Non-Index



Non-Indexed (Level Side Pins)

## 120V 3NM Models for the clear lens:

## 120V 2NM Models for the red and green lens:



9000388  
9000647  
9000654

Part #	9000388	9000647	9000654	9003744	9000661	9000678
Descriptions	For anchor, masthead, & stern nav. lights	For the red port sidelights	For the green starboard sidelights	For anchor, masthead, & stern nav. lights	For the ed port sidelights	For the green starboard sidelights
Lens Color	White 3NM	Red 2NM	Green 2NM	White 3NM	Red 2NM	Green 2NM
Voltage	120VAC	120VAC	120VAC	120VAC	120VAC	120VAC
Wattage	3W	2.5W	2.5W	3W	2.5W	2.5W
Bulb Type	Index	Index	Index	Non-Index	Non-Index	Non-Index
Remarks	For Aqua Signal series 50 etc. Replaces Bulbs 90285 & 90286	For Aqua Signal series 50 etc. Replaces Bulbs 90285 & 90286	For Aqua Signal series 50 etc. Replaces Bulbs 90285 & 90286	Replaces Perko Bulb 374-4.	Replaces Perko Bulb 374-4.	Replaces Perko Bulb 374-4.



9003744  
9000661  
9000678

**Navigation Light LED Bulb (120/240VAC): 120/240V P28S White Polar Star PN:9342004**

120/240VAC 6NM navigation light rough service medium prefocus P28S LED replacement bulb.  
**Replaces Perko 120V 60W Medium Prefocus P28S Base Bulbs: 0342RS4CLR & 0342004CLR etc.**  
 6NM Certified per USCG COLREG 1972 & UL1104:1998 in a Perko 1369 navigation light fixture.



**120/240VAC P28S Medium Prefocus Base Rough Service LED Bulb:**

Finally, a true one-to-one LED replacement for 120/240VAC 6NM navigation light incandescent P28S bulbs. This P28S LED bulb is specially designed as a direct replacement for many 120/240V navigation light P28S bulbs such as those made by Perko and Aqua Signal. It is compatible with these Perko fixtures 1367, 1369, 1370, 1372, 1373, 1374, 1167, 1169, 1170, 1172, 1173, 1174, 1151, 1152, 1153, 0454, 0403, 0412, etc. and Aqua Signal 70 series fixtures.

This high-quality, long lasting P28S LED bulb eliminates having to frequently replace short service life incandescent bulbs.

Developed by Dr. LED at the request of the USCG to improve the reliability of their navigation lights that use P28S bulbs, and to decrease the often hazardous task of having to replace incandescent P28S bulbs while underway, this bulb has also been chosen by the US Navy for use in their P28S bulb navigation lights.

**Features**

- Replaces Perko bulbs 0342RS4CLR and 0342004CLR.
- It is the only USCG-certified after-market replacement P28S LED bulb currently available.
- 6NM certified and much brighter than the original incandescent bulb.
- High-Power LED 6 NM Visibility (Clear Lens) 3 NM Visibility (Red and Green Lens)
- 120VAC and 240VAC Warm White
- Long service life, shock-resistant, and ultra-rugged with no filament to burn out or break.
- Lead and mercury-free, no UV output.
- Designed in the USA.

<b>Part #</b>	<b>9342004</b>
Description	120/240VAC P28S Medium Prefocus Rough Service LED Bulb
LED Color	Warm White
Replaces	Perko Bulbs: 0342RS4CLR (60W 120V) 0342004CLR (60W 120V) 0342003CLR (40W 120V) 0342002CLR (25W 120V) 0342001CLR (15W 120V) 0342000CLR (7.5W 120V) 0342220CLR (65W 220V)  Aqua Signal Bulbs: 90400172, 90172-4 (60W 120V) 90400173, 90173-4 (65W 230V)
Voltage	120/240VAC
Wattage	8W
Lumen Output	880 Lumens (65W Equivalent)
Dimensions	~119mm (4.7") tall 38mm (1.5") dia.

Navigation Light LED Bulbs (12V): **Hex GE90 Star™**  
 Navigation Light LED Bulb (12/24V): **H2492 Star™**

PN: 9000425  
 PN: 8000067

One-to-one 2NM LED replacement for Perko Bulb 337 and Trade #68, #90, #94, #1004, etc. bulbs for navigation and reading lights.



**One-to-one replacement for Perko Bulb 337 Trade #68, #90, #94, & #1004 bulbs.**

**The Hex GE90 Star Navigation LED Bulb:**

These HEX GE90 LED bulbs are specially designed as one-to-one direct replacements for many incandescent navigation lights available on the market, such as those from Perko and other manufacturers.

These high-quality bulbs are the perfect way to reduce energy consumption on your boat with a current draw of only about 0.12A. They are specially well-suited for mast mounted lights, as their incredible reliability will mean an end to frequent climbs up the mast to replace navigation light bulbs.

Compatible with Perko fixture series 0362, 0371, 0455, 0466, 1134, 1137, 1209, 1311, 1330, 1400, 1401, etc.

**Features**

- Bayonet 15mm double contact non-index (non-offset) configuration
- #1004, #90, #68, #94 etc. bulb replacements (one-to-one replacement)
- For 2NM navigation lights
- High-Power LED 2 NM visibility 12VDC and 24VDC
- Conformal coated & use of long-life components: e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break
- Dimmable with most PWM dimmers



**PN:8000067 is the single contact model that works in a Hella 2492 anchor light.**

Utilize the proper colored bulb for each navigation light fixture. Not for bicolor or tricolor.

Part #	9000425	8001627	9000517	9000524	9000531	8000067
Description	12V 2NM White Bulb	12/24V 2NM White Bulb	12V 2NM Red Bulb	12V 2NM Green Bulb	12V Blue Bulb	12/24V 2NM White Bulb
Replaces	#68, #90, #94, #1004 bulbs (one-to-one)	#68, #90, #94, #1004 bulbs	#68, #90, #94, #1004 bulbs (one-to-one)	#68, #90, #94, #1004 bulbs (one-to-one)	#68, #90, #94, #1004 bulbs (one-to-one)	Hella 2492
Bulb Type	Double contact non-index	Double contact non-index	Double contact non-index	Double contact non-index	Double contact non-index	Single contact

## Navigation Light LED Bulb (12V): **Polar Star 20™**

**PN: 8001849**

12 VDC 2NM 9mm single contact miniature bayonet LED replacement bulb for navigation & deck lights.  
**Replaces Aqua Signal series 20 navigation light bulbs and Aqua Signal series 25 deck light bulb.**



Aqua Signal series 20 anchor light



### 9mm Miniature Bayonet Bulb

Finally, a true one-to-one LED replacement bulb for incandescent navigation lights using 9mm miniature bayonet bulbs. This single contact bayonet LED bulb is specially designed as a direct replacement for many navigation and deck lights. It is compatible with Aqua Signal series 20 navigation anchor light and Aqua Signal series 25 deck-light. This high-quality LED bulb is the perfect way to reduce energy consumption on your boat with a current draw of only about 0.1A. Its incredible reliability means an end to frequent climbs up the mast to replace navigation light bulbs.

### **PN: 8001849    Features**

- Replaces 9mm miniature bayonet bulbs.
- Replaces Aqua Signal series 20 navigation bulbs and Aqua Signal series 25 deck light bulb.
- 2 NM visibility    12 VDC    Warm White
- Zero radio frequency (RF) emission, surface-mount-device design.
- Conformal coated & use of long-life components: e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant current draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, and ultra-rugged with no filament to burn out or break.
- Very low power consumption (approximately 1 W).
- Lead and mercury-free, no UV output.
- Dimmable with most PWM dimmers.
- Designed in the USA.

Part #	8001849
Description	2 NM 9mm miniature bayonet LED bulb
LED Color	Warm White
Replaces	Aqua Signal series 20 navigation light bulbs and Aqua Signal series 25 deck light bulb
Voltage	12 VDC
Current Draw	0.1 A
Lumen Output	60 Lumens (10W eqv.)
Dimensions	~28mm (1.1") length    12mm (0.47") width



Aqua Signal series 25 deck light

**Replaces bulb trade # 53, 57, 181, 1416, & 1816.**

**Replaces Ancor bulb # 520053, 520057, 521126, 521416, 529337, & 529355.**

Waterproof version available by special order only (not for navigation light): PN: BA9S-deck  
Replaces Aqua Signal bulb # 9040047000.



## Navigation Light LED Bulb (12V): P338 Wedge Star™

Perko Bulb 338 LED replacement for popular Perko pole lights PN:9000371

### The P338 Wedge Star Navigation LED Bulb:

This LED bulb is specially designed as a direct replacement for most of the incandescent navigation anchor/masthead lights available on the market like those from Perko and other manufacturers.

This high-quality bulb is the perfect way to reduce energy consumption on your boat with a current draw of only about 0.06 A. This is especially well suited for many wedge based white navigation fixtures.



**LED Replacement for Perko Bulb 338**

**Compatible with Perko fixture series 0238, 0239, 1236, 1273, 1274, 1281, 1283, 1284, 1440, 1445, 1450, 1451, 1452, 1455, 1456, 1460, 1461, 1465, 1470, 1604, 1607, 1622, 1634, 1637, 1656, etc.**

#### Features

- Wedge base configuration
- Perko Bulb 338 replacement (a one-to-one replacement)
- For 2NM white navigation lights
- SMD LED 2 NM visibility 12 VDC
- Zero radio frequency (RF) emission
- Conformal coated & use of long-life components: e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides for constant energy consumption, regardless of voltage fluctuations from the source, meaning no flickering and longer LED life
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break
- Very low power consumption (approximately 0.72 W)
- Dimmable with most PWM dimmers

<b>Part #</b>	<b>9000371</b>
Description	For 2NM Anchor / Masthead Light
Replaces	Perko Bulb 338
Bulb Type	Wedge Base
Voltage:	12 VDC
Lumen Output:	60 Lumens (10W equivalent)
Current	0.06 A
Dimensions	38.5mm long, 15mm wide, 7.5mm thick
Dimensions	1.5" long, 0.6" wide, 0.3" thick



**US Patents 7,450,394 & 7,053,560**

## Navigation Light LED Bulbs (12V & 24V): 28-31mm Festoon Star™

12V PN:9000173

24V PN:9000463

12 VDC and 24 VDC 2NM navigation light festoon bulb LED replacement for combination masthead & anchor lights.  
 12VDC Replaces Perko Bulb 71 & Ancor # 529102 & 24VDC Replaces Perko Bulb 72 & Ancor # 522129.



### Short Festoon LED Bulbs:



Finally, true one-to-one LED replacements for small incandescent navigation light festoon bulbs. These short festoon LED bulbs are specially designed as direct replacements for many combination masthead & anchor lights. They are compatible with many Perko fixtures like series 1123, 1124, 1125, 1178, 1181, 1183, 1184, 1196, 1197, etc. These high-quality high-power LED bulbs are the perfect way to reduce energy consumption on your boat with a current draw of about 0.1A. Their incredible reliability means an end to frequent climbs up the mast to replace navigation light bulbs.

### Features

- Replaces small pointed festoon bulbs.
- 12V Replaces Perko bulb # 0071DP0CLR (Perko Bulb 71) and Ancor bulb #529102.
- 24V Replaces Perko bulb # 0072DP0CLR (Perko Bulb 72) and Ancor bulb #522129.
- High-Power LED 2 NM visibility 12 VDC and 24VDC Warm White
- Zero radio frequency (RF) emission, surface-mount-device design.
- Conformal coated & use of long-life components: e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant current draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, and ultra-rugged with no filament to burn out or break.
- Very low power consumption (approximately 1.2 W).
- Lead and mercury-free, no UV output.
- Dimmable with most PWM dimmers.
- Designed in the USA.

Part #	9000173	9000586	9000593	9000463
Description	12V 28-31mm festoon LED bulb	12V 28-31mm festoon LED bulb	12V 28-31mm festoon LED bulb	24V 31mm festoon LED bulb
LED Color	Warm White	Red for red lens.	Green for green lens.	Warm White
Replaces	Perko Bulb 71 (0071DP0CLR) & Ancor # 529102	Perko Bulb 71 (0071DP0CLR) & Ancor # 529102	Perko Bulb 71 (0071DP0CLR) & Ancor # 529102	Perko Bulb 72 (0072DP0CLR) & Ancor 522129
Voltage	12 VDC	12 VDC	12 VDC	24 VDC
Current Draw	0.1 A	0.1 A	0.1 A	0.05 A
Lumen Output	60 Lumens (10W equivalent)	10W equivalent	10W equivalent	60 Lumens (10W equivalent)
Dimensions	~28mm (1.1") long 11mm (0.43") dia.	~28mm (1.1") long 11mm (0.43") dia.	~28mm (1.1") long 11mm (0.43") dia.	~28mm (1.1") long 11mm (0.43") dia.

### Recommended Applications:

Brand	Series	Mfg. Bulb No.	
Hella	2010	78202 8GM 993 406-001	
Perko	0135, 0227, 0228, 0229, 0232, 0252, 0253, 0254, 0260, 0273, 0277, 0281, 0295, 0904, 0915, 0945, 0955, 0963, 0964, 0965, 0972, 1123, 1124, 1125, 1161, 1178, 1181, 1183, 1184, 1196, 1197, 1201, 1211, 1212, 1218, 1264, 1310, 1331, 1332, 1421, 1422, 1601, 1602, 1612, 1614	Fig. 71 0071DP0CLR 0071DP8CLR	
Attwood	7200 series: 7208, 7212, 7220, 7250, 7251, 7252, 7254, 7255, etc.		

## Navigation Light LED Bulbs (12V & 24V): 36-44mm Festoon Star (for clear lens)

12 VDC 36-44mm **Festoon Star™** PN: 9000241  
 12 VDC 39-44mm **Blue Festoon Star™** PN: 9000562  
 24 VDC 39-44mm **Festoon Star™** PN: 9000357

Replaces Perko Bulbs 69 & 70  
 Replaces Perko Bulbs 69 & 70  
 Replaces Perko Bulb 67



### Festoon LED Bulbs, for clear lens fixtures:

Finally, true one-to-one LED replacements for incandescent navigation and interior festoon bulbs. These festoon LED bulbs are specially designed as direct replacements for many navigation as well as interior lights. They are compatible with many Perko fixtures like series 0120, 0170, 106, 108, 109, 110, 111, 259, etc. They also work with Aqua Signal series 25, Forespar ML-2, as well as Hella series 3562 and 8505. These high-quality high-power LED bulbs are the perfect way to reduce energy consumption on your boat with a current draw of only about 0.1A. Their incredible reliability means an end to frequent climbs up the mast to replace navigation light bulbs.

### Features

- Replaces 36mm, 39mm, 41mm, and 44mm pointed and dimpled festoon bulbs.
- 12 VDC Replaces Perko bulbs # 0069DP0CLR (Perko bulb 69) and #0070DPxCLR (Perko bulb 70).
- 24 VDC Replaces Perko bulbs # 0067DP0CLR (Perko bulb 67) and Ancor #522129.
- High-Power LED 2 NM visibility 12 VDC or 24 VDC Warm White and Blue
- Zero radio frequency (RF) emission, surface-mount-device design.
- Conformal coated & use of long-life components, e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant current draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Long service life, shock-resistant, and ultra-rugged with no filament to burn out or break.
- Very low power consumption (approximately 1.8 W).
- Dimmable with most PWM dimmers.
- Designed in the USA.

Part #	9000241 12 VDC	9000562 12 VDC	9000357 24 VDC
Description	2 NM 36-44mm festoon LED bulb	2 NM 39-44mm festoon LED bulb	2 NM 39-44mm festoon LED bulb
LED Color	Warm White	Blue	Warm White
Replaces Perko	Perko Bulbs 69 & 70	Perko Bulbs 69 & 70	Perko Bulb 67
Replaces Ancor	#529095, 529104, 522126, 522131, 522112, 522122, 529333, etc.	#529095, 529104, 522126, 522131, 522112, 522122, 529333, etc.	Ancor #522129
Replaces Generic (Trade)	#211-2, 212-2, 560, 569, 578, etc.	#211-2, 212-2, 560, 569, 578, etc.	
Voltage (W)	12 VDC (~1.8W)	12 VDC (~1.8W)	24 VDC (~1.8W)
Current Draw	0.14A	0.14A	0.07A
Lumen Output	90 Lumens	45 Lumens	90 Lumens
Dimensions	36mm (1.4") long 12mm (0.5") dia.	36mm (1.4") long 12mm (0.5") dia.	36mm (1.4") long 12mm (0.5") dia.

### 12V Recommended Applications:

Brand	Series	Mfg. Bulb No.	
Aqua Signal	25	90200 90201	
Forespar	ML-2	WN-211 132025	
Hella	3562, 8505	78206 8GM002091-131	
Perko	0120, 0170	Fig. 69 0069DP0CLR	
	106, 108, 109, 110, 111, 259, 939, 946, 4F, 5F, 7F	Fig. 70 0070DP1CLR 0070DP2CLR	

### 24V Recommended Applications:

Brand	Series	Mfg. Bulb No.	
Perko	0120, 0170	Fig. 67 0067DP1CLR 0067DP2CLR	

## Navigation Light LED Bulbs (12V): 39-44mm Festoon Star (for colored lens)

12 VDC 39-44mm Red Festoon Star™ PN: 9000548

Replaces Perko Bulbs 69 & 70

12 VDC 39-44mm Green Festoon Star™ PN: 9000555

Replaces Perko Bulbs 69 & 70



### Festoon LED Bulbs, for colored lens fixtures:

Finally, true one-to-one LED replacements for incandescent navigation and interior festoon bulbs. These festoon LED bulbs are specially designed as direct replacements for many navigation as well as interior lights. They are compatible with many Perko fixtures like series 0120, 0170, 106, 108, 109, 110, 111, 259, etc. They also work with Aqua Signal series 25, Forespar ML-2, as well as Hella series 3562 and 8505. These high-quality high-power LED bulbs are the perfect way to reduce energy consumption on your boat with a current draw of only about 0.1A. Their incredible reliability means an end to frequent climbs up the mast to replace navigation light bulbs.

### Features

- Replaces 36mm, 39mm, 41mm, and 44mm pointed and dimpled festoon bulbs.
- 12 VDC Replaces Perko bulbs # 0069DP0CLR (Perko Bulb 69) and #0070DPxCLR (Perko Bulb 70).
- High-Power LED 2 NM visibility 12 VDC
- Zero radio frequency (RF) emission, surface-mount-device design.
- Conformal coated & use of long-life components, e.g. ceramic capacitor (not low hour electrolytic capacitor).
- Internal circuitry provides constant current draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Dimmable with most PWM dimmers.
- Designed in the USA.

Part #	9000548 12 VDC	9000555 12 VDC	8001122 12 VDC
Description	2 NM 39-44mm festoon LED bulb	2 NM 39-44mm festoon LED bulb	2 NM 44mm festoon LED bulb
LED Color	Red	Green	Red/Green
Replaces Perko	Perko Bulbs 69 & 70	Perko Bulbs 69 & 70	For Aqua Signal series 25 ONLY.
Replaces Ancor	#529095, 529104, 522126, 522131, 522112, 522122, 529333, etc.	#529095, 529104, 522126, 522131, 522112, 522122, 529333, etc.	#529333, 529419, 522112, 529417
Replaces Generic (Trade)	#211-2, 212-2, 560, 569, 578, etc.	#211-2, 212-2, 560, 569, 578, etc.	Works as both pointed & dimpled festoon replacements.
Voltage (W)	12 VDC (~1.8W)	12 VDC (~1.8W)	12 VDC (~1.5W)
Current Draw	0.14A	0.14A	0.12A
Dimensions	39mm (1.5") long 12mm (0.5") dia.	39mm (1.5") long 12mm (0.5") dia.	44mm (1.73") tall 32mm (~1.26") dia

### 12V Recommended Applications:

Brand	Series	Mfg. Bulb No.	
Aqua Signal	25	90200 90201	
Forespar	ML-2	WN-211 132025	
Hella	3562, 8505	78206 8GM002091-131	
Perko	0120, 0170	Fig. 69 0069DP0CLR	
	106, 108, 109, 110, 111, 259, 939, 946, 4F, 5F, 7F	Fig. 70 0070DP1CLR 0070DP2CLR	



Bicolor Polar Star 25  
PN:8001122  
Bicolor bulb for Aqua Signal series 25 bicolor light with the lens cover removed for illustration. Works on both pointed and dimpled fixtures.



# LED Replacement Bulbs (12/24V): 31mm / 36mm / 41mm Single-Sided Festoon Bulbs



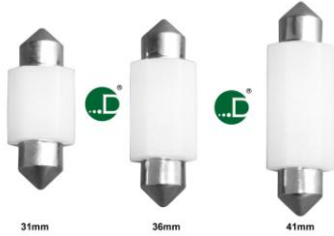
31mm, 36mm, and 41mm

12/24V Single-Sided Cool White Festoon Bulbs (12/24V)

Not for use in navigation lights.

(Sold in Pairs) PN: 31mm:9000982, 36mm:9000999, and 41mm:9001002

## 150 Lumen Cool White Festoon LED Bulbs



12/24V 2W Single-Sided Cool-White Festoon LED Bulbs.

- Replaces pointed festoon bulbs.
- Single-Sided: LEDs on One SIDE ONLY.
- Non-polarized.
- Built-in regulated power supply; constant wattage draw regardless of voltage fluctuations from the source, meaning no flickering and longer LED life.
- Cool-white 6000 K, 150 Lumens.
- Chrome-plated copper contacts.
- Ceramic heat sink.
- White frosted lens cover.
- Long service life, shock resistant, and ultra-rugged with no filament to burn out or break.
- Very low power consumption (approximately 2W).

**PN: 31mm:9000982, 36mm:9000999, and 41mm:9001002**

### Specifications:

#### Electrical:

Input Voltage: 10-30 VDC

Current Draw: 0.15A @ 12 V, 0.08A @ 24V

Max Input Power: ~2W

Non-Polarized Connection

Under-Voltage and Voltage Spike Protected

Electrically Protected Against RFI/EMC Interference

#### Mechanical:

Chrome Plated Copper Contacts

Dimensions: 31mm (1.22"), 36mm (1.42"), or 41mm (1.61"),  
13mm (0.51") diameter.

