

#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
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 individual 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.
- US patents awarded.
- High-quality components and designs.
- Each and every product 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.

Dr. LED:

Dynamic Engineering Inc. d.b.a. Dr. LED
US Federal Government CAGE Code: 636L3

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WARNING: Cancer and Reproductive Harm— www.P65Warnings.ca.gov

Table of Contents

LED SEARCHLIGHT: LED STAR PHASER™	1
LED SPREADER/DECK/RAIL LIGHT (12/24V): KEVIN X4	2
LED SPREADER/DECK/RAIL LIGHT (12/24V): KEVIN JR. X2™	3
LOW PROFILE RECESSED LED LIGHT (12/24V): RECESSED KEVIN X4	5
LED ENGINE & UTILITY LIGHT (12/24V): THE GOLD STANDARD™	6
CHROME LED DOME LIGHTS (12/24V): CHROME MARS DOME™	7
BRASS LED DOME LIGHTS (12/24V): BRASS MARS DOME™	8
UNDER-CABINET LED LIGHTS (12/24V): WARM-WHITE & RED / WHITE JOHN™	9
RECESSED LED LIGHTS (12/24V): SATURN RING™	10
RED/WHITE LED CHART & READING LIGHT (12V): BLACK COBRA™	11
SURFACE MOUNT UNDERWATER LIGHTS (12/24V): DAVE X3™	12
STAINLESS THRU-HULL UNDERWATER LED LIGHTS (12/24V): NEPTUNE X6™	13
LED REPLACEMENT BULB (12/24V): AR111 / PAR36 SEALED BEAM LED	14
LED REPLACEMENT BULBS (12/24V): EDISON LED / EDISON SIDEKICK™	15
LED REPLACEMENT BULBS (12/24V): BAYONET AND BI-PIN MAGNUM LEDS	16
LED REPLACEMENT BULBS (12V): 12V G4 LED DISKS.....	17
LED REPLACEMENT BULBS (24V): 24V G4 LED DISKS.....	18
LED REPLACEMENT BULBS (12/24V): G4 LED TOWER AND MINI G4 STAR.....	19
LED REPLACEMENT BULBS (12V): WEDGE, WINDEX, & BAYONET 1157 DUAL INTENSITY.....	20
LED REPLACEMENT BULBS: BAYONET TOWER LEDS	21
DOME LIGHT LED CONVERSION KITS (12V & 24V).....	22
LED CONVERSION GUIDE (P1)	23
LED CONVERSION GUIDE (P2)	24
NAVIGATION BULB SELECTION GUIDE (P1)	25
NAVIGATION BULB SELECTION GUIDE (P2)	26
NAVIGATION LIGHT LED BULBS (12/24V AND 120V): POLAR STAR 40™	27
NAVIGATION LIGHT LED BULBS (12V): HEX GE90 STAR™	29
NAVIGATION LIGHT LED BULB (12V): POLAR STAR 20™	30
NAVIGATION LIGHT LED BULB (12V): P338 WEDGE STAR™	31
NAVIGATION LIGHT LED BULBS (12V & 24V): 28-31MM FESTOON STAR™	32
NAVIGATION LIGHT LED BULBS (12V & 24V): 36-44MM FESTOON STAR (FOR CLEAR LENS)	33
NAVIGATION LIGHT LED BULBS (12V): 39-44MM FESTOON STAR (FOR COLORED LENS).....	34
LED REPLACEMENT BULBS (12/24V): 31MM / 36MM / 41MM SINGLE-SIDED FESTOON BULBS	35

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 lumens 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 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.

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 other LED lights in its 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

NSN: 5961016025452

- 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.



**#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 other LED lights in its 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**

- 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**

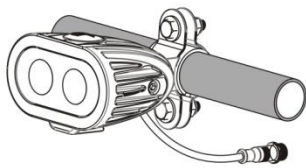
LED Spreader/Rail Light (12/24V): **Kevin Jr. X2™**

Optional Accessories:

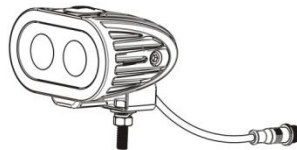
Horizontal Stainless Steel Rail Mount (PN: 9000319) and
Vertical Stainless Steel Rail Mount (PN: 9000326)
for 7/8" to 1 1/4" dia. Rails.



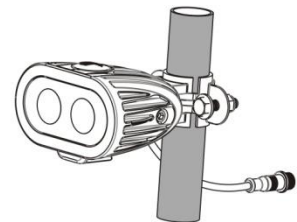
Dealer Display Available Upon Request.



Horizontal Rail Mount



**Low Profile U
Bracket Mount**



Vertical Rail Mount

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

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





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

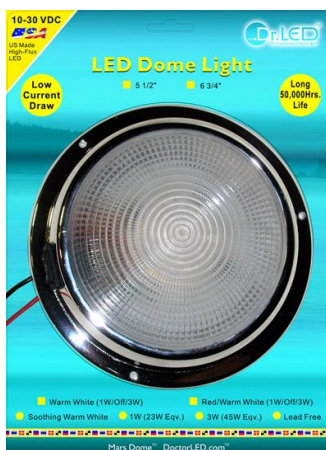
6" Long 20AWG 300V Red/Black Cable

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 ½" (140mm) and 6 ¾" (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.

PART # NSN	8001177 6220016210857	8001184 6220016230649	9000623	8001528	8001504 6220016098772	9000630
Descriptions	5 ½" Mars Dome Light	5 ½" Red Mars Dome Light	5 ½" Blue Mars Dome Light	6 ¾" Mars Dome Light	6 ¾" Red Mars Dome Light	6 ¾" Blue Mars Dome Light
Diameter	5 ½" Chrome Color	5 ½" Chrome Color	5 ½" Chrome Color	6 ¾" Chrome Color	6 ¾" Chrome Color	6 ¾" 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 ½") dia.	140mm (5 ½") dia.	140mm (5 ½") dia.	172mm (6 ¾") dia.	172mm (6 ¾") dia.	172mm (6 ¾") 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.
- Dimmable with most PWM dimmers.

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

- White version has a three-position switch (High/Off/Low) to select two warm white brightness levels; high level equivalent to about a 40-watt incandescent bulb.
- 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" (200mm) long, 3" (76mm) wide, 1.4" (36mm) 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.

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 1/8th 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 included; gold plated polymer trim ring 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.

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)	

Red/White LED Chart & Reading Light (12V): **Black Cobra™**

PN: 9000029
NSN: 6240016128960



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.

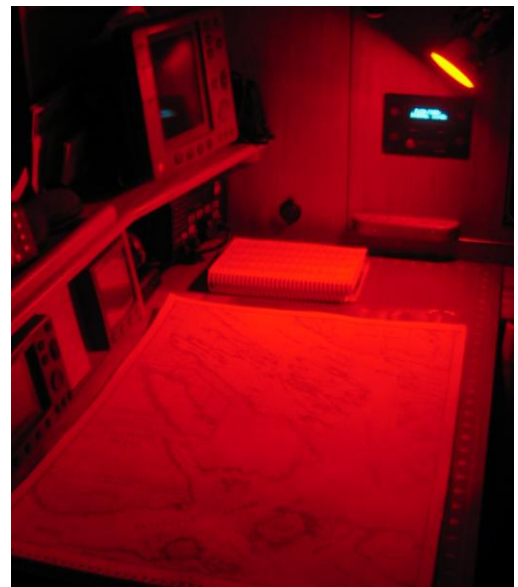
A push button switch located at the base to toggle between red, warm white, and off.

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)



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 2nd 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 in 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, 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+ Lumen 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
- 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 (12/24V): Edison LED / Edison SideKick™

Medium Screw Base General Purpose Bulbs:

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, or even your home. These Edison LEDs produce a spot-type beam and are best used in directional light fixtures. The Edison SideKick bulb emits light over a 180 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.
- Internal circuitry provides for constant energy to LEDs regardless of voltage fluctuations from the source, meaning no flickering, optimal brightness, and longer LED life.
- Long service life, shock-resistant, ultra-rugged with no filament to burn out or break.
- 1X US CREE high-quality high-power LEDs produce the equivalent of about a 30-watt incandescent bulb within the main beam - with only 1.5 watts of consumption.
- 3X US CREE high-quality high-power LEDs produce the equivalent of about a 60-watt incandescent bulb within the main beam - with 4-6 watts of consumption.
- Lead and mercury free, no UV output.
- Dimmable with most PWM dimmers.

			
Part #	8001795 (Replaces 8001276)	8001801 (Replaces 8001283)	8001818 (Replaces 8001351)
Model	Edison 1X	Edison 3X	Edison SideKick 3X
Color Temp	Warm White ~3000K	Warm White ~3000K	Warm White ~3000K
Voltage	10-30 VDC, 12VAC	10-30 VDC, 12VAC	10-30 VDC, 12VAC
Current Draw	0.12A @ 12V	0.33A @ 12V	0.5A @ 12V
Lumen	120 Lumens	200 Lumens	300 Lumens



LED Replacement Bulbs (12/24V): Bayonet and Bi-Pin Magnum LEDs



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 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), and 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.

				
Part #	8001245	9000449	8001252	8001269
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

			
Part #	8001825	8001832	8001238
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
Part #	9000081	9000098	9000364
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
Part #	9000340	9000418
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 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
Part #	9000104	9000432
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 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
Part #	8001559	9000166	8001157
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	Warm White	Cool White
Voltage (V)	12 VDC	12 VDC	10-30 VDC
Current (A)	0.045A @ 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.

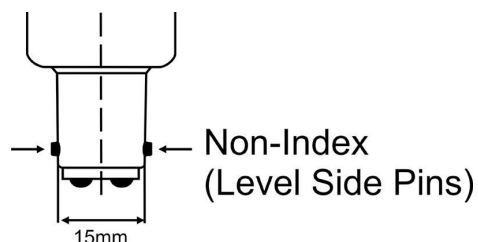
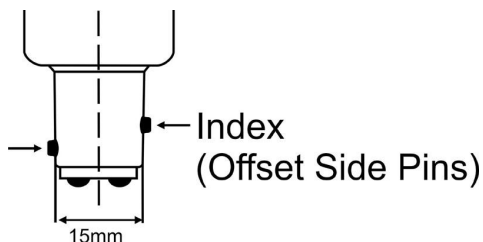
LED Replacement Bulbs: Bayonet TOWER LEDs

For reading lights, interior lights, etc.

Bayonet Style



				
Part #	9000111	9000128	9000135	9000142
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	20W equivalent (195 Lumens)	30W equivalent (280 Lumens)	20W equivalent (50 Lumens)	20W equivalent (195 Lumens)
LED Color	Warm White	Warm White	Red	Warm White
Voltage (V)	12 VDC	10-30 VDC	12 VDC	12 VDC
Wattage (W)	2.5W	3W	2.5W	2.5W
Current (A)	0.2 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 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 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 pigtailed 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.
- Long service life and shock-resistant.
- 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
Part #	9000159	9000333	9000395	9000401
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 (p1)

Incandescent Bulbs:					LED Conversion Guide					Dr. LED 2019 ©				
Bulb Image	Ancor #	Trade #	Base	Voltage	Bulb Image	Ancor #	Trade #	Base	Voltage	Bulb Image	Ancor #	Trade #	Base	Voltage
	521158		BAY15D	12		For yellow lens	12/24V Yellow	PN:8000043			For yellow lens	12/24V Yellow	PN:8000043	
	521162			24		For bicolor lens	12/24V Red/Green	PN:8001634						
	521166			24		For red lens	12/24V Red	PN:8001764						
	529340			12		For clear lens	12/24V White	PN:8001757						
	529341			24		For green lens	12/24V Green	PN:8001771						
	529342			32**		For tricolor lens	12/24V R/G/W	PN:8001450						
	529343		BAY15D	12		For green lens	12/24V Green	PN:8000654			For green lens	12/24V Green	PN:8000654	
	529344			24		For clear lens	12/24V White	PN:8000388						
	529416			12/24		For green lens	12/24V Green	PN:8000678						
	529420			12/24		For clear lens	12/24V White	PN:8003744						
	529348			120		For green lens	12/24V Green	PN:8000678						
	521164			120		For clear lens	12/24V White	PN:8001078						
	529303		BA15D	120		For green lens	12/24V Green	PN:8000654			For green lens	12/24V Green	PN:8000654	
	529300			12		For clear lens	12/24V White	PN:8003744						
	529301			24		For green lens	12/24V Green	PN:8003744						
	529412			12		For clear lens	12/24V White	PN:8003744						
	529413			12		For green lens	12/24V Green	PN:8003744						
	520094	94				12	For clear lens	12/24V White				PN:8001269		
	520306	306	BA15D	24		12V White	PN:9000425			12V White	PN:9000425			
	521076	1076		12V Red		PN:9000128-07	12V Red				PN:9000135			
	521140	1142R		12V Green		PN:9000517	12V Green				PN:9000524			
	521142	1142		12V Blue		PN:9000531	12V Blue				PN:9000531			
	521160			12		12V White	PN:9000425				12V White	PN:9000425		
	521176	1176		12		12V Red	PN:9000128-07				12V Red	PN:9000135		
	521204	1204	BA15D	24		12V White	PN:8001627			12V White	PN:8001627			
	521004	1004		12V Red		PN:9000128-07	12V Red				PN:9000135			
	521159			12		12V Green	PN:9000517				12V Green	PN:9000524		
	521226	1226		12		12V Blue	PN:9000531				12V Blue	PN:9000531		
	521252	1252		12		12V White	PN:9000425				12V White	PN:9000425		
	521692	1692		12		12V Red	PN:9000128-07				12V Red	PN:9000135		
	520068	68	BA15S	12		12V White	PN:8001245			12V White	PN:8001245			
	520082	82		12		12V Red	PN:8001269				12V Red	PN:8001269		
	520090	90		6**		12V Green	PN:8001269				12V Green	PN:8001269		
	520304	304		12		12V Blue	PN:8001269				12V Blue	PN:8001269		
	521224	1224		12		12V White	PN:8001269				12V White	PN:8001269		
	523030	90		12		12V Red	PN:8001269				12V Red	PN:8001269		
	520093	93	BA15S	12		12V White	PN:8001269			12V White	PN:8001269			
	521141	1141		12		12V Red	PN:8001269				12V Red	PN:8001269		
	521156	1156		12		12V Green	PN:8001269				12V Green	PN:8001269		
	521003	1003		12		12V Blue	PN:8001269				12V Blue	PN:8001269		
	520067	67		12		12V White	PN:8001269				12V White	PN:8001269		
	520097	97		12		12V Red	PN:8001269				12V Red	PN:8001269		

LED Conversion Guide (p2)

Bulb Image	Ancor #	Trade #	Base	Voltage		
	521034	1034	BAY15D	12		12/24V White PN:8001157 Automobile Bulb
	521157	1157				12V White PN:9000142
	529338	G4	G4	24		G4 LED Disk 1.2" dia 12V White 9000081 12V Red 9000098 12V Blue 9000364 24V White 9000340 24V Blue 9000418
	529368					
	529361					
	529362					
	529367					
	529370					
	529371					
	529421					
529422						
529423						
	521125	MR16	G5.3	12		MR16 1X 12/24V White PN:8001825
	529424					
	521125	MR16	G5.3	12		MR16 3X 12/24V White PN:8001832
	529424					
	511016	15G12/12	E26	12		Edison 1X 12/24V White PN:8001795
	529424					
	531015	15A17/12	E26	12		Edison 3X 12/24V White PN:8001801
	531025	25A17/12				
	531050	50A17/12				
	531075	75A17/12				
	532025	25A17/24	E26	24		Edison 3X 12/24V White PN:8001801
	532050	50A17/24				
	522129	Perko Fig. 72	S8.5	24		Edison 3X 12/24V White PN:8001801
	529102	Perko Fig. 71				
	529200		S8.5	12		Edison 3X 12/24V White PN:8001801
	529095	10576				
	529096	10576R				Edison 3X 12/24V White PN:8001801
	522126	T11x41				
	522127	T11x41				Edison 3X 12/24V White PN:8001801
	522131	T15x41				
	529104					Edison 3X 12/24V White PN:8001801
	522112	211-2				
	522122	212-2	S8.5	12		Edison 3X 12/24V White PN:8001801
	529417					
	529333					Edison 3X 12/24V White PN:8001801
	529419					
	520053	53				Edison 3X 12/24V White PN:8001801
	520057	57				
	521126	1416				Edison 3X 12/24V White PN:8001801
	521815	1815				
	521816	1816				Edison 3X 12/24V White PN:8001801
	521895	1895				
	523325					Edison 3X 12/24V White PN:8001801
	523355					
	523359					Edison 3X 12/24V White PN:8001801
	520965	965				
	521487	1487	Edison	12		Edison 3X 12/24V White PN:8001801
	521487	1487				
Bulb Image	Ancor #	Trade #	Base	Voltage		

Bulb Image	Ancor #	Trade #	Base	Voltage		
	521034	1034	BAY15D	12		12/24V White PN:8001157 Automobile Bulb
	521157	1157				12V White PN:9000142
	529338	G4	G4	24		G4 LED Disk 1.2" dia 12V White 9000081 12V Red 9000098 12V Blue 9000364 24V White 9000340 24V Blue 9000418
	529368					
	529361					
	529362					
	529367					
	529370					
	529371					
	529421					
529422						
529423						
	521125	MR16	G5.3	12		MR16 1X 12/24V White PN:8001825
	529424					
	521125	MR16	G5.3	12		MR16 3X 12/24V White PN:8001832
	529424					
	511016	15G12/12	E26	12		Edison 1X 12/24V White PN:8001795
	529424					
	531015	15A17/12	E26	12		Edison 3X 12/24V White PN:8001801
	531025	25A17/12				
	531050	50A17/12				Edison 3X 12/24V White PN:8001801
	531075	75A17/12				
	532025	25A17/24	E26	24		Edison 3X 12/24V White PN:8001801
	532050	50A17/24				
	522129	Perko Fig. 72	S8.5	24		Edison 3X 12/24V White PN:8001801
	529102	Perko Fig. 71				
	529200		S8.5	12		Edison 3X 12/24V White PN:8001801
	529095	10576				
	529096	10576R				Edison 3X 12/24V White PN:8001801
	522126	T11x41				
	522127	T11x41				Edison 3X 12/24V White PN:8001801
	522131	T15x41				
	529104					Edison 3X 12/24V White PN:8001801
	522112	211-2				
	522122	212-2	S8.5	12		Edison 3X 12/24V White PN:8001801
	529417					
	529333					Edison 3X 12/24V White PN:8001801
	529419					
	520053	53				Edison 3X 12/24V White PN:8001801
	520057	57				
	521126	1416				Edison 3X 12/24V White PN:8001801
	521815	1815				
	521816	1816				Edison 3X 12/24V White PN:8001801
	521895	1895				
	523325					Edison 3X 12/24V White PN:8001801
	523355					
	523359					Edison 3X 12/24V White PN:8001801
	520965	965				
	521487	1487	Edison	12		Edison 3X 12/24V White PN:8001801
	521487	1487				
Bulb Image	Ancor #	Trade #	Base	Voltage		

Bulb Image	Ancor #	Trade #	Base	Voltage		
	521034	1034	BAY15D	12		12/24V White PN:8001157 Automobile Bulb
	521157	1157				12V White PN:9000142
	529338	G4	G4	24		G4 LED Disk 1.2" dia 12V White 9000081 12V Red 9000098 12V Blue 9000364 24V White 9000340 24V Blue 9000418
	529368					
	529361					
	529362					
	529367					
	529370					
	529371					
	529421					
529422						
529423						
	521125	MR16	G5.3	12		MR16 1X 12/24V White PN:8001825
	529424					
	521125	MR16	G5.3	12		MR16 3X 12/24V White PN:8001832
	529424					
	511016	15G12/12	E26	12		Edison 1X 12/24V White PN:8001795
	529424					
	531015	15A17/12	E26	12		Edison 3X 12/24V White PN:8001801
	531025	25A17/12				
	531050	50A17/12				Edison 3X 12/24V White PN:8001801
	531075	75A17/12				
	532025	25A17/24	E26	24		Edison 3X 12/24V White PN:8001801
	532050	50A17/24				
	522129	Perko Fig. 72	S8.5	24		Edison 3X 12/24V White PN:8001801
	529102	Perko Fig. 71				
	529200		S8.5	12		Edison 3X 12/24V White PN:8001801
	529095	10576				
	529096	10576R				Edison 3X 12/24V White PN:8001801
	522126	T11x41				
	522127	T11x41				Edison 3X 12/24V White PN:8001801
	522131	T15x41				
	529104					Edison 3X 12/24V White PN:8001801
	522112	211-2				
	522122	212-2	S8.5	12		Edison 3X 12/24V White PN:8001801
	529417					
	529333					Edison 3X 12/24V White PN:8001801
	529419					
	520053	53				Edison 3X 12/24V White PN:8001801
	520057	57				
	521126	1416				Edison 3X 12/24V White PN:8001801
	521815	1815				
	521816	1816				Edison 3X 12/24V White PN:8001801
	521895	1895				
	523325					Edison 3X 12/24V White PN:8001801
	523355					
	523359					Edison 3X 12/24V White PN:8001801
	520965	965				
	521487	1487	Edison	12		Edison 3X 12/24V White PN:8001801
	521487	1487				
Bulb Image	Ancor #	Trade #	Base	Voltage		

Bulb Image	Ancor #	Trade #	Base	Voltage		
	521034	1034	BAY15D	12		12/24V White PN:8001157 Automobile Bulb
	521157	1157				12V White PN:9000142
	529338	G4	G4	24		G4 LED Disk 1.2" dia 12V White 9000081 12V Red 9000098 12V Blue 9000364 24V White 9000340 24V Blue 9000418
	529368					
	529361					
	529362					
	529367					
	529370					
	529371					
	529421					
529422						

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** Not Available.

Navigation Bulb Selection Guide (p1)



Navigation LED Bulb Selection Guide

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



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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		120V Ancor 529348
		120V Red			120V Red Polar Star	9000647				
		120V Green			120V Green Polar Star	9000654	12/24V	2mm	BAY15D	12V Ancor 521158, 529340, 529343
		12/24V White		90005	White Polar Star 40 MKII	8001757				
		12/24V Red		90002	Red Polar Star 40 MKII	8001764				
		12/24V Green		90002	Green Polar Star 40 MKII	8001771				
		12/24V Yellow		90002	Amber/Yellow Polar Star 40 MKII	8000043				
		12/24V Bi-Color (Red/Green)		90002	Bi-Color Polar Star 40 MKII	8001634				
		Tri-Color (Red/Green/White)		90002	Tri-Color Polar Star 40 MKII	8001450				
		24V Tri-Color (Red/Green/White)		90003	Tri-Color Polar Star 40 MKII	8001450				
	20	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, 529369
	25	Series 25 Deck Light								
	25	White	Festoon	90200, 90201	39-44mm Festoon Star	9000241	12V	2mm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417, 529333, 529419
		Red			Red 39-44mm Festoon Star	9000548				
		Green			Green 39-44mm Festoon Star	9000555				
	2386	Bi-Color (Red/Green)	Festoon	90200	Bi-Color Polar Star 25	8001122	12V	2mm	S8.5	12V Ancor 521158, 529340, 529343
		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 Bi-Color (Red/Green)			Bi-Color Polar Star 40 MKII	8001634				
Hella	3562, 8505	12/24V Tri-Color (Red/Green/White)	Double Contact Bayonet Index	78290, 78291, 78292, 78293, 78297, 8GA003488-121	Tri-Color Polar Star 40 MKII	8001450	12/24V	2mm	BAY15D	24V Ancor 521162, 521166, 529341, 529344
		12V White			39-44mm Festoon Star	9000241				
		12V Red			Red 39-44mm Festoon Star	9000548				
	2010	12V Green	Festoon	78206, 8GM002091-131	Green 39-44mm Festoon Star	9000555	12V	2mm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417
		12V White			31mm White Festoon Star	9000173				
	2492	24V White	Festoon	8GM 993 406-001	24V 31mm White Festoon Star	9000463	24V	2mm	S8.5	Ancor 529102, Ancor 522129
		12/24V White			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		12/24V White	Double Contact Bayonet Index	037512V10W 037512V25W	White Polar Star 40 MKII	8001757	12/24V	2nm	BAY15D	12V Ancor 521158, 529340, 529343 24V Ancor 521162, 521166, 529341, 529344
		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 Bi-Color Red/Green/White	Double Contact Bayonet Non-Index	Fig. 337 0337011DP 0337012DP	Tri-Color Polar Star 40 MKII	8001450	12V	2nm	BA15D	Trade 68, 90, 94, 1004 Ancor 520068, 520090, 520094, 521004, 523030, 521159
		12V White			HEX GE90 Star	9000425				
		12V Red			Red HEX GE90 Star	9000517				
		12V Green			Green HEX GE90 Star	9000524				
		12V Blue	Double Contact Bayonet Non-Index	0374004CLR 0374004CLR 0374004CLR 0374004CLR	Blue HEX GE90 Star	9000531	12V	2nm	BA15D	120V Ancor 521164, 529303
		120V White			120V White P374-4 NI	9003744				
		120V Red			120V Red P374-4 NI	9000661				
		120V Green			120V Green P374-4 NI	9000678				
		12/24V White	Festoon	Fig. 71 0071DP0CLR 0071DP8CLR	White Polar Star 40 NI	8001078	12V	2nm	S8.5	Ancor 529102
		12/24V Red			Red Polar Star 40 NI	8001382				
		12/24V Green			Green Polar Star 40 NI	8001405				
		24V White			24V 31mm White Festoon Star	9000463				
Forepar		12V White	Wedge	Fig. 69 0069DP0CLR Fig. 70 0070DP1CLR 0070DP2CLR Fig. 67 0067DP1CLR 0067DP2CLR	31mm White Festoon Star 31mm Red Festoon Star 31mm Green Festoon Star	9000173 9000586 9000593	12V	2nm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417, 529333, 529419
		12V White			39-44mm White Festoon Star	9000241				
		12V White			39-44mm White Festoon Star	9000241				
		24V White			24V 39-44mm White Festoon Star	9000357				
		12V White	Festoon	3380P2CLR	P338 Wedge Star	9000371	12V	2nm	T5	Trade 906, 912 Ancor 520906, 520912
		12V White			HEX GE90 Star	9000425				
		12V White			Red HEX GE90 Star	9000517				
		12V Green			Green HEX GE90 Star	9000524				
		12V White	Double Contact Bayonet Non-Index	Fig. 337 0337011DP 0337012DP	HEX GE90 Star	9000425	12V	2nm	BA15D	Trade 68, 90, 94, 1004 Ancor 520068, 520090, 520094, 521004, 523030, 521159
		12V Red			Red HEX GE90 Star	9000517				
		12V Green			Green HEX GE90 Star	9000524				
		12V White			39-44mm White Festoon Star	9000241				
Scotty		12V White	Festoon	WN-211, 132025	39-44mm White Festoon Star	9000241	12V	2nm	S8.5	Ancor 522126, 522127, 522131, 529104, 522112, 522122, 529417, 529333, 529419
		12V Red			39-44mm White Festoon Star	9000241				
Altwood		12/24V White	MR16	132035	12/24V MR16 3X LED	8001832	12/24V	Deck Light	G5.3	Ancor 521125, 529424
		12/24V White			HEX GE90 Star	9000425				
Altwood		12V Red	Double Contact Bayonet Non-Index		Red HEX GE90 Star	9000517	12V	2nm	BA15D	Ancor 529300, 529412, 529413, 529414, 529301
		12V Green			Red HEX GE90 Star	9000517				
Altwood		12V White	Festoon		31mm White Festoon Star	9000173	12V	2nm	S8.5	Ancor 529102
		12V Red			31mm Red Festoon Star	9000586				
		12V Green			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

White Polar Star 40

Green Polar Star 40

Bi-Color Polar Star 40

Tri-Color Polar Star 40

2NM USCG COLREG 1972 ABYC A-16 Certified



The Polar Star series Navigation LED Bulbs:



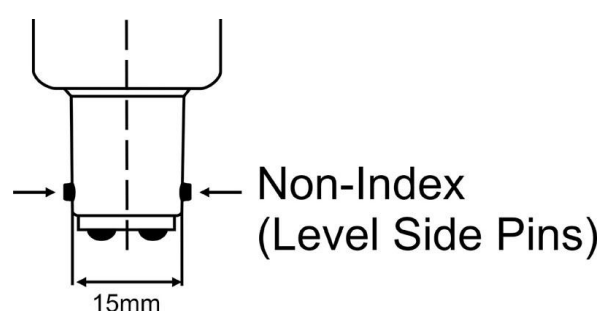
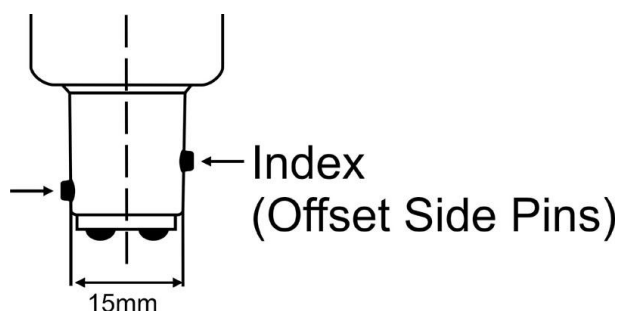
US Patented.

These LED bulbs are specially designed as direct replacements for many navigation lights available in 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 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 side lights	For starboard side lights	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

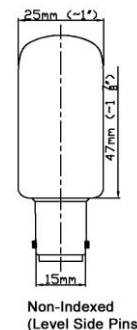
BA15D (Non-Index, Non-Offset Side Pins, Single Color) Models:

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 side lights	For starboard side lights
LED Color	White	Red	Green
Voltage	10-30 VDC	10-30 VDC	10-30 VDC
Bulb Type	Non-Index	Non-Index	Non-Index



120V 3NM Models for clear lens:

120V 2NM Models for red and green lens:



9000388
9000647
9000654

Part #	9000388	9000647	9000654	9003744	9000661	9000678
Descriptions	For anchor, masthead, & stern nav. lights	For red port side lights	For green starboard side lights	For anchor, masthead, & stern nav. lights	For red port side lights	For green starboard side lights
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 Bulbs (12V): **Hex GE90 Star™**

PN: 9000425

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

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 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.

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

Waterproof version available by
special order only (not for
navigation light): PN: BA9S-deck

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

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



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 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

Part #	9000371
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



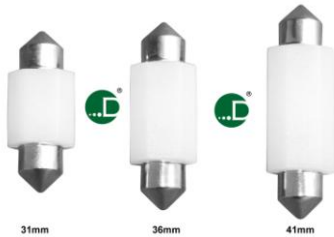
31mm, 36mm, and 41mm

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.



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

120/240VAC 5NM navigation light bulb LED replacement for medium prefocus P28S bulbs.

Replaces Perko 120V 60W Medium Prefocus P28S Base Bulbs: 0342RSCLR & 0342004CLR etc.



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

Finally, a true one-to-one LED replacement for 120/240VAC 5NM navigation light incandescent bulbs. This LED bulb is especially designed as direct replacement for many 120/240V navigational light bulbs such as those made by Perko and aqua signal. They are compatible with Perko fixtures series 1373, 1374, 1367, 1173, 1174, 1167, 1151, 1152, 1153, 0454, 0403, 0412, etc. This high-quality high-power LED bulb is a mean to end frequent incandescent bulb replacements.

Features

- Replaces Perko bulbs 0342RSCLR and 0342004CLR
- High-Power LED 5 NM visibility (clear 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.

Part #	9000173			
Description	120/240VAC P28S Medium Prefocus Rough Service LED Bulb			
LED Color	Warm White		.	
Replaces	Perko Bulbs: 0342RSCLR 0342004CLR 0342003CLR 0342002CLR 0342001CLR 0342000CLR 0342220CLR			
Voltage	120/240VAC			
Wattage	8W			
Lumen Output	880 Lumens (60W equivalent)			
Dimensions	~119mm (4.7") long 38mm (1.5") dia.		.	