

# West Marine®

Annual Catalog  
**2011**

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Duracell

### AGM Batteries

The Duracell is an AGM (absorbed glass mat) dual purpose battery that is completely spillproof and leakproof for your roughest off-road adventures, and provides added protection for sophisticated electronic equipment. A closer look inside shows the "Cube" Design engineered for high performance and efficiency. Active material and plates fill all available space for more power. It is 100% maintenance-free, eliminating the need to check fluid lev-

els. Faster recharge than conventional batteries allows for faster turnaround times. Superb dual purpose design delivers great starting and deep cycle service. Computer-cast power path grids assures highest quality and optimum performance. Molded-in offset SAE post and vertical 5/16" negative terminal. 5/16" positive stainless steel studs and hex nuts. 18-months free replacement, five-year pro-rata warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	DURAC#	Only
34	55	120	795	970	10 3/4"	6 7/8"	8 3/8"	41 1/2lb.	<b>11015153</b>	AGM34M	<b>199.99</b> ◇
31	105	200	800	1000	13"	12 3/4"	9 1/2"	69lb.	<b>12039434</b>	AGM31DC	<b>249.99</b> ◇

West Marine

### SeaVolt® Marine Starting Batteries

Sealed, maintenance-free lead-calcium batteries deliver more power per pound than competitive starting batteries. They feature a no-spill design that allows you to heel over to angles up to 45°. The exclusive molded-in stainless steel studs and hex nut terminals make connections easy, while protecting against corrosion and failure. Low-profile flush covers keep the battery top clean and acid-free, make them easy to restrain and eliminating lost caps.

Plate separators prevent life-shortening internal short circuits. Manufactured by East Penn, one of the most reputable battery companies in the US, these batteries receive over 250 quality control checks to guarantee superior starting performance every time. SeaVolt® Starting Batteries cannot be shipped. Available at stores only. One-year free replacement; three-year pro-rata warranty.

Group	CCA	MCA	Res. Min.	Weight	Model	WMBAT#	Only
24*	460	550	65	34lb.	<b>1196641</b>	24M4	<b>89.99</b> ◇
	550	665	90	34 1/2lb.	<b>1196666</b>	24M5	<b>99.99</b> ◇
	650	800	110	38 1/2lb.	<b>1196708</b>	24M6	<b>109.99</b> ◇
	800	1000	130	45lb.	<b>2347979</b>	24M7	<b>119.99</b> ◇
27**	750	1050	182	55 1/2lb.	<b>5817861</b>	27M6	<b>159.99</b> ◇

\*10 3/4"L x 6 3/4"W x 9 1/8"H

\*\*12 1/16"L x 6 13/16"W x 8 7/8"H

◇ Symbol Hazard Shipping ⚠

† Symbol Oversized Shipping 📦

‡ Symbol Truck Freight 🚚

Extra shipping costs may apply on items bearing any of these identifying marks

## The West Advisor®

### Sizing Your House Battery Bank

#### How much energy do you use?

Before you start replacing batteries and adding solar panels, start by analyzing your energy requirements. There are two ways to calculate how much energy is used in a given time period (we recommend that you use 24 hours).

- **Create an energy budget** by adding up the current draw for each item, and its anticipated length of use. This number, expressed in Amp-hours, determines the size of your battery banks. Examine how much energy each device consumes. We have a handy **Electrical Budget Worksheet** in the Product Advice/You Can Do It section of westmarine.com. Download the .pdf file, print it and start itemizing your appliance loads.
- **Use an energy monitor**, like the Xantrex LinkPRO, or LinkLITE, and let it do the calculating for you. The Vessel Systems Monitor from Blue Sea Systems is even more impressive, tracking data on four critical ship's systems (DC and AC electrical systems, fuel, water and waste tank levels and bilge pump operation). The new Argus battery monitors are simple and affordable solutions for small boat owners with trolling motors.



Argus Battery Bug

**Cruising Sailors** generally plan on being "engineless" for a day at a time, hoping to operate their boats with their engine running only one or two hours each day. This allows other engine-driven functions (refrigeration, watermaking) to be performed while charging batteries with the engine. Their battery storage requirements are 100% related to the time between engine-driven charges, plus the added input from other sources they utilize: solar, wind, etc.

**Powerboaters** generally have very modest battery capacity and charging needs until they anchor in some nice spot and want to be free of engine noise and exhaust odor. Under these circumstances, they operate in "sailboat mode," discharging their batteries deeply and periodically recharging them.

Loads like inverters, refrigeration and lighting have a large impact on your energy budget, so it is difficult to estimate your needs without actually adding up the loads and duty cycles to find the total consumption. Most boaters who operate on battery power (no AC generator) end up using from 60-200 amp-hours (Ah) per day. Calculate your own needs using one of the two methods above.

#### How much battery storage capacity do you need?

A proven rule of thumb is to have 3-4 times your daily energy consumption in battery capacity. That means that boats that consume 120 Ah per day of energy should consider having 360-480 Ah of capacity. This rule allows you to avoid damaging deep discharges, and it reduces your recharging time.

#### Extremely Approximate Battery Bank Size Rule:

- 30' boat 200Ah house bank
- 35' boat 300Ah house bank
- 40' boat 400Ah house bank
- 45' boat 500Ah house bank
- 50' boat 600Ah house bank



8D group AGM battery  
Model 1231489, 245Ah

## SeaVolt® Dual-Purpose AGM Batteries

AGM batteries are great in both deep cycle and starting applications. They charge more quickly than conventional batteries, they have low self-discharge rates and they're maintenance-free—no need to add water. The completely sealed, valve-regulated design eliminates acid spills and terminal corrosion. AGM batteries are

safer to operate than conventional flooded batteries, as the chance of explosion or acid spray is reduced. Their flexible design allows them to be installed in almost any position (except upside-down), and they are resistant to vibration damage. Rated at 300 cycles. 18-months free replacement; 5-year pro-rata warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
U-1	32	48	200	240	8 5/16"	5 1/8"	7 1/4"	24lb.	<b>1231349</b>	8AU1H	<b>129.99</b> ◊
24	79	135	525	735	10 7/8"	6 13/16"	9 7/8"	53lb.	<b>1231398</b>	8A24M	<b>189.99</b> ◊
27	92	175	580	810	12 3/4"	6 3/4"	9 7/8"	63lb.	<b>1231406</b>	8A27M	<b>249.99</b> ◊
31	105	195	800	1000	12 7/8"	6 3/4"	9 3/8"	70lb.	<b>1231422</b>	8A31DT	<b>279.99</b> ◊
6V	187	380	680	915	10 1/4"	7 1/8"	10 7/8"	69 1/2lb.	<b>5177985</b>	8AGC2	<b>359.99</b> ◊
4D	198	380	1110	1420	20 3/4"	8 1/2"	10 1/8"	129lb.	<b>1231455</b>	8A4D	<b>599.00</b> ◊
8D	245	510	1450	1800	20 3/4"	11"	10"	161lb.	<b>1231489</b>	8A8D	<b>689.00</b> ◊†



## Associate's Choice



"I've had great longevity from these batteries."

### SeaVolt Dual-Purpose AGM Batteries

Like many of our customers, members of our Associate team have chosen to upgrade from conventional flooded batteries to AGM batteries on their own boats. Jennifer Reed of our St. Augustine, Florida store says, "I use these aboard a 30' sailboat to supply power for a PC, lights, stereo, communications electronics and many other loads. I've had great longevity from these batteries." With their extended cycle life and ease of maintenance, AGM batteries are a great way to enhance your boat's electrical system.

**Jennifer Reed, St. Augustine, FL**

*Jennifer holds a 100 ton USCG Master's license with sailing and towing endorsements. A boater for 17 years, she's owned a Cape Dory 22, C&C 25 and a 30' S2 sloop.*

## SeaVolt® AGM Batteries for Personal Watercraft

Six month free replacement, one-year pro-rated warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
PWC	18	25	310	375	6 3/4"	3 3/8"	6"	16lb.	<b>303750</b>	ETX20L	<b>129.99</b> ◊
PWC*	19	34	325	385	6 3/4"	4"	6"	17lb.	<b>3782612</b>	ETX16L	<b>134.99</b> ◊
PWC*	26	47	400	500	6 5/8"	5 5/16"	7 3/4"	21lb.	<b>9955436</b>	ETX30LA	<b>139.99</b> ◊

\*Includes 13/16" height adapter



## SeaVolt® 12V Dual-Purpose Marine Batteries

If your engine runs frequently, and your electrical demands at anchor are light, dual-purpose batteries are an effective and economical choice. Our SeaVolt® Dual-Purpose batteries are specially designed to perform like deep cycle batteries. The result is batteries that deliver plenty of marine starting power while still being able to handle moderate deep-cycle loads. SeaVolt® Dual-Purpose batteries can last through 200+ deep cycles (more than

other brands advertising so-called "Deep-Cycle" or "Marine and RV" batteries) and still provide plenty of cranking power. Built for West Marine by East Penn. Combination marine terminals (tapered posts and hex nuts) included. SeaVolt® Dual-Purpose batteries cannot be shipped. Available at stores only. One-year free replacement; three-year pro-rata warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
24	65	120	550	685	10 3/4"	6 3/4"	9 7/8"	39lb.	<b>1231000</b>	DP24	<b>119.99</b> ◊
27	80	150	650	810	12 1/2"	6 3/4"	9 7/8"	49lb.	<b>1231059</b>	DP27	<b>129.99</b> ◊
904D	135	290	1050	1280	20 3/4"	8 1/2"	10 1/8"	98 1/2lb.	<b>1196740</b>	904D	<b>324.99</b> ◊
908D	185	430	1400	1700	20 3/4"	11"	10"	131 1/2lb.	<b>1231083</b>	908D	<b>379.99</b> ◊



## SeaVolt® 12V Deep Cycle Flooded Marine Batteries

Our SeaVolt® batteries are true heavy-duty, deep cycle batteries capable of 350 complete cycles, while averaging 175 reserve minutes per cycle (Group 27 size). Cycle-life is what counts when you compare battery value. Compared to other so-called "deep cycle marine" batteries in the same price range, SeaVolt® batteries deliver 30-100% more energy over their lives. SeaVolt® batteries have rugged polypropylene cases with convenient handles for easy

installation and removal. While normally used as house batteries, SeaVolt® batteries make great trolling batteries—and you won't have to replace them every season. Combination marine terminals (tapered posts and hex nuts) included. SeaVolt® batteries cannot be shipped. Available at stores only. One-year free replacement; three-year pro-rata warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
24	75	130	500	625	10 3/4"	6 3/4"	9 7/8"	45lb.	<b>1231109</b>	DC24	<b>149.99</b> ◊
27	90	175	575	715	12 1/2"	6 3/4"	9 7/8"	53lb.	<b>1231133</b>	DC27	<b>169.99</b> ◊
31	105	185	650	810	13"	6 3/4"	9 1/2"	59lb.	<b>1231158</b>	DC31DT	<b>219.99</b> ◊





Electrical

## SeaVolt® 6V Deep Cycle Flooded Marine Batteries

Although 6V batteries were originally designed for golf carts, they make great marine batteries when combined in series to make a 12V bank. Golf carts make tough demands on their batteries all day, seven days a week. Deep discharges, high amp draws and constant vibration demand that golf cart batteries be rugged, long lasting and cost-effective. They are capable of 700 complete discharge/charge cycles before losing half of their capacity. While not optimized for engine starting loads, they will not be damaged when

used to start large engines. The 8L16 industrial battery is ideal for a very long-life house bank. Two of these batteries will provide 370Ah over 1,000 cycles if properly maintained. While they have a compact footprint, they're tall, so make sure your mounting location can accommodate them. SeaVolt® batteries cannot be shipped. Available at stores only. One-year free replacement; three-year pro-rata warranty.

Group	Ah	Res. Min	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
GC2	215	4	780	1250	10 1/4"	7 1/8"	10 7/8"	63 1/2lb.	<b>1231307</b>	GC15	<b>209.99</b> ◇
8L16	370	840	740	930	11 3/4"	7"	16 1/2"	113lb.	<b>1231315</b>	8L16	<b>369.99</b> ◇

## SeaGel® Marine Gel Batteries

We recommend these batteries without hesitation. They're remarkably resistant to damage from deep discharges and extended storage. Maintenance-free and completely sealed, so they can be inverted without danger of acid spills or chlorine gas production, greatly increasing your installation options for hard-to-reach or unusually-configured locations. They can even be immersed without leaks, spills or other damage. Once charged, their low self-discharge rate allows the batteries to sit unattended an entire winter

without significant power loss. Even when left discharged for 30 days, these SeaGels® will still come up to 100% capacity, unlike conventional flooded batteries. Extra-thick lead calcium plates won't sulfate even when left discharged for 30 days. They're capable of over 500 full discharges (over 1000 cycles for the 8GGC) in temperatures from -22° to +122°. Gel batteries charge at lower voltages than deep cycle or AGM, so smart regulation is advised. 18-month free replacement, five-year pro-rata warranty.

Group	Ah	Res. Min.	CCA	MCA	Length	Width	Height	Weight	Model	WMBAT#	Only
U-1	31	44	175	310	8 5/16"	5 1/8"	7 1/4"	24lb.	<b>319830</b>	8GU1H	<b>139.99</b> ◇
24	73	132	410	575	10 7/8"	6 3/4"	9 7/8"	53 1/2lb.	<b>437467</b>	8G24M	<b>279.99</b> ◇
27	86	160	505	700	12 3/4"	6 3/4"	9 7/8"	63lb.	<b>437475</b>	8G27M	<b>299.99</b> ◇
31	97	180	550	780	12 7/8"	6 3/4"	9 3/8"	72lb.	<b>327025</b>	8G31DTM	<b>369.99</b> ◇
4D	183	375	970	1245	20 3/4"	8 1/2"	10 1/4"	130lb.	<b>350462</b>	8G4D	<b>579.00</b> ◇
8D	225	475	1150	1470	20 3/4"	11"	10"	161lb.	<b>350470</b>	8G8D	<b>699.00</b> ◇‡
6 Volt	180	345	585	850	10 1/4"	7 1/8"	10 7/8"	68 1/2lb.	<b>129355</b>	8GGC2	<b>319.99</b> ◇

◇ Symbol Hazard Shipping ⚠

† Symbol Oversized Shipping

‡ Symbol Truck Freight

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## The West Advisor®

# Selecting a Marine Storage Battery

## Types of batteries

Batteries on your boat handle two basic kinds of tasks, starting an engine and running electrical loads like lights, electronics and accessories for longer time periods. To choose a battery, first determine the battery's application and then choose from one of the three battery chemistries: Flooded, Gel or AGM.

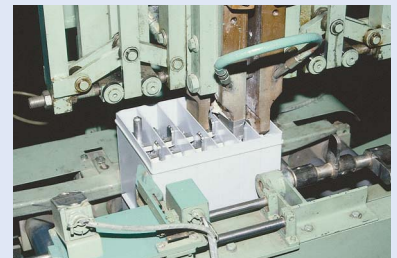
**Starting Batteries:** Starting batteries, which crank the starter of your boat's engine, are the sprinters of your electrical system. They deliver between 75 and 400 amperes for 5-15 seconds, and then are recharged in short order by your engine's alternator. Like all lead-acid batteries, they are constructed with alternating layers of negative and positive plates with insulation between them. Starting batteries have thinner and more numerous plates, providing extra surface area to generate high amperage bursts of current. The two drawbacks of this construction are that the plates are relatively fragile in high-impact environments, and that starting batteries do not tolerate deep discharges, which reduce their operating lifespan.

**Deep Cycle Batteries:** Your boat's House battery bank uses Deep Cycle batteries, the marathon runners of the storage system. They power the electrical loads on your boat when no charge source (shore power charger, engine alternator, wind generator or solar panel) is available. Consider them a kind of savings account into which energy is deposited or withdrawn. Compared to starting batteries, which deliver high bursts of energy for short periods, deep cycle batteries recover fully after being heavily discharged over longer periods because their design features thicker plates with a high content of antimony. Overnight, their use might deplete 50-70% of the battery capacity, depending on the house loads of the boat. When the batteries are recharged, energy is re-deposited into the bank, and the process, or cycle, starts over. Generally, deep cycle batteries should be sized to store three to four times the expected amount of energy to be used between recharge cycles.

**Dual-Purpose Batteries:** We generally advise that you choose either a deep cycle or starting battery for best performance and battery life, but dual-purpose batteries work well in some applications. With large, thick plates containing more antimony than starting batteries and an active lead paste chemistry, dual-purpose batteries are a good compromise, tolerating deep discharges that would ruin a typical starting

battery. Since they have lower storage capacity than comparably-sized deep cycles, we recommend them for the following applications:

- **Runabouts** or other small powerboats using a single battery for both starting and running loads with the engine turned off.
- **Sailboats with two identical batteries** used interchangeably for starting and house electrical loads
- **Boats with one battery bank** that does double-duty for house applications and engine starting. Dual-purpose batteries will last longer and give more reliable service than a starting battery, for about \$20 more per battery.



**Green Tech:** East Penn Manufacturing builds West Marine batteries at its award-winning plant. State-of-the-art recycling includes virtually everything.

## What to look for

**Starting functions:** The amount of power available for cranking a starter is measured several ways.

**CCA vs. MCA:** The two common power measurements are CCA (Cold Cranking Amps, the number of amps a battery can deliver for 30 seconds at 0°F while maintaining its voltage above 7.2 volts) and MCA (Marine Cranking Amps, similar but measured at 32°F instead of 0°F). The reason that MCA is 20-25% higher than the CCA is because batteries work better at higher temperatures.

**Reserve Minutes** indicate how long a battery can sustain a load of 25 amps before it drops to 10.5 volts. A battery rated at 150 minutes can operate a 25A load for 2 1/2 hours (at 80°F). Starting batteries aren't used to handle loads for long periods, so reserve minutes are less critical.

(Continued on next page.)

# Battery Selection Chart



Battery Type	Starting Flooded	Dual Purpose Flooded	Deep Cycle Flooded	Gel	Absorbed Glass Mat (AGM)
<b>Best Use</b>	Starting engines. Short high-current, shallow-discharge applications	Double-duty for either starting or deep cycle. Runabouts, boats with one battery bank, two identical banks	House battery bank in multi-bank system	House battery bank in multi-bank system. Greatest longevity. Submersible	High-performance dual purpose batteries with maximum ruggedness. Offshore, cruising, off-road, off-the-grid applications
<b>Engine Cranking Power</b> Marine Cranking Amps: Group 24	<b>Best</b> 550-1000 MCA	<b>Better</b> 650 MCA	<b>Good</b> 625 MCA	<b>OK</b> 410 MCA	<b>Better</b> 660 MCA
<b>Charge/Discharge Cycles</b>	N/A	200	350 6V Golf Cart 700-1000	1000	300
<b>Charging Acceptance Rate</b>	<b>NA</b> Deep discharges ruin these	<b>Good</b> 25% of Ah	<b>Good</b> 25% of Ah	<b>Good</b> 25% of Ah	<b>Best</b> 40% of Ah (lowest internal resistance)
<b>Self-Discharge Rate</b> (per month)	3%	6%	6%	3%	3%
<b>Ruggedness and Maintenance</b>	Fragile Vents hydrogen Can spill	Vents hydrogen, Add water, Can spill, Equalize periodically	Vents hydrogen, Add water, Can spill, Equalize periodically	Sealed Vents almost no hydrogen Submersible Mount in almost any position	Sealed Vents almost no hydrogen Submersible Mount in almost any position Vibration tolerant

Electrical

## Selecting a Marine Storage Battery (Continued)

**Size:** Engine size, type, and ambient temperature determine what size cranking battery you need. High cranking power (and a larger battery) is required for cold temperatures, diesel engines, or large and high compression gas engines. The first sizing criteria is to meet the minimum CCA (if any) stated by the engine or boat manufacturer. If a Group 24, 550 CCA battery worked well for five years, we'd recommend replacing it with a similar model. If, however, it cranked too slowly, or failed after a season or two, we'd suggest that you look for a battery with a higher CCA or MCA rating.

**Deep Cycle Functions:** Battery Capacity measurements are commonly expressed in Amp-hours (Ah) and Reserve Minutes. Amp-hours measure the total amount of energy that a battery can deliver for 20 hours at a constant rate of discharge, before the voltage drops to 10.5 volts. This means that a 200Ah battery can run a 10A load for 20 hours. The reserve minute rating is the number of minutes that a battery can run a 25A load until dropping to 10.5V, just like with starting batteries. A Group 27 deep cycle battery with a rating of 180 reserve minutes will run a 25A load for three hours. House loads range from 5A to 25A or more. Ah is generally the more relevant measurement for house banks.

**Longevity:** Battery manufacturers measure longevity by discharging full batteries at a temperature of 80°F until their voltage drops to 10.5 volts. The batteries are recharged under controlled conditions, and the process is repeated until the battery fails to hold half of its rated capacity. This measurement, called cycle life, shows how many discharge cycles a battery provides over its lifespan. This ability to cycle repeatedly is what differentiates deep cycle batteries from starting batteries, which can't withstand more than a few deep discharges before they begin to fail. If nothing else, cycle life provides a baseline for comparing one battery to another.

### Battery tips for best performance

No matter what kind of battery chemistry you choose, follow these recommendations to get the best performance:

- **Stay with one battery chemistry** (flooded, gel or AGM). Each battery type requires specific charging voltages. Mixing battery types can result in under- or over-charging. This may mean replacing all batteries on board at the same time.
- **Never mix old batteries with new ones** in the same bank. While it seems like this would increase your overall capacity, old batteries tend to pull down the new ones to their deteriorated level.
- Regulate charge voltages based on battery temperature and acceptance (manually or with sensing) to maximize battery life and reduce charge time. Ensure that your charging system is capable of delivering sufficient amperage to charge battery banks efficiently. This generally means an alternator with 25% to 40% as many amperes as the capacity of your entire battery bank.
- Keep batteries clean, cool and dry.
- Check terminal connectors regularly to avoid loss of conductivity.
- Add distilled water to flooded lead acid batteries when needed. Keep them charged. Leaving them in a discharged state for any length of time will damage them and lower their capacity.
- Clean corrosion with a paste of baking soda and water.



Six volt "Traction Batteries" are heavily over-built for industrial applications. This battery (Model 1231315) is rated at 370 Ah and weighs 113lb.

# Portable Power / Battery Accessories



Wagan  
**Power Dome EX**

This rugged multi-purpose portable power center is perfect for marine, automotive or home emergency use. Use it as a power source for 110V AC or 12V DC applications such as computers, TVs, fax machines, audio, fans, electrical tools, etc. It can also start your car engine in an emergency situation. Features an 18Ah maintenance-free battery and a built-in 400W inverter with two AC outlets and one DC outlet, compressor with gauge, charge level indicator and worklight. Jumper cables nest neatly at each end and the airhose stores in a compartment at the back. It also boasts a high-intensity five-LED light, built-in AM/FM radio, convenient USB power port, and a handy audio input socket suitable for iPod connection!

**Features:** 260PSI air compressor inflates a 16" tire in 5-10 minutes, 600A jump-starter, 400W inverter (800W surge), Charge level indicator, five-LED worklight. **Dimensions:** 12 1/4"L x 11 1/2"H x 9"D **Battery Bank Size/Configuration:** Sealed 18Ah Lead Acid (Maintenance-free) **Safety Features:** Overload protection, short circuit protection, UL Listed AC charger, 40A external fuse **Recovery Time:** Charging Time: AC: 24-36 hours; Fully charged 48 hours before initial use, after each use and every 2-3 months **Warranty:** One year

Model 9341579 | WAGAN#2454 | ShWt 20 | **149.99**



Wagan  
**300 Amp Battery Jumper with Air Compressor**

Our smallest and most portable emergency power center packs the roadside features you need in a small case. It cranks 300 amps through its neatly stowed heavy-duty booster cables to get your engine running. Its 260psi air compressor can inflate a 16" tire in 5-7 minutes, with a convenient pressure gauge to get your tires inflated just right. Five-LED work light shines brightly on the work area, and indicates the state of charge in the Battery Jumper's sealed, maintenance-free battery.

**Features:** Multi-functional: 260psi air compressor, 300A jump-starter, built-in 5 LED worklight, 2 DC outlets, convenient USB power port **Dimensions:** 9"H x 9 1/4"W x 6 1/4"D **Battery Bank Size/Configuration:** Sealed 12Ah Lead Acid (Maintenance-free) **Output Wiring:** Jumper cables, 2 cigarette lighter DC outlets **Safety Features:** Short circuit protection **Warranty:** One year

Model 9341587 | WAGAN#2467 | ShWt 9.8 | **69.99**

◇ Symbol Hazard Shipping	⚠	† Symbol Oversized Shipping	📏	‡ Symbol Truck Freight	🚚
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**Extra shipping costs may apply on items bearing any of these identifying marks**

Electrical

## Battery Boxes & Accessories



West Marine  
**Battery Hold Down Trays**

We redesigned these hold down trays to be the best on the market! Trays hold batteries securely in a sturdy frame made from noncorrosive, rigid black polypropylene with two 1/4" stainless-steel tie rods with adjustable self-locking security knobs. Pre-drilled holes in the base allow for easy tray installation.

Sized to hold West Marine's line of SeaVolt® and SeaGel® batteries plus many other brands.

Dimensions	Fits Group	Model	SFELE#	ShWt	Only
11 1/4"L x 9"W x 9 3/4"H	24	2235539	WMBT24	2	<b>14.99</b>
13 1/4"L x 9"W x 9 3/4"H	27	2235562	WMBT27	2.2	<b>15.99</b>



Fits Group U-1

Fits Group 27 & 31

West Marine  
**Battery Boxes**

Designed to fit West Marine batteries, these boxes are constructed of rigid polypropylene to resist acid and include hold-down straps and mounting hardware. With the lid in place,

batteries are completely contained—eliminating possible acid spills or shorts. Black. Inside dimensions do not include cover.

Inside Dimensions	Fits Group	Model	WMELE#	ShWt	Only
8 1/4"L x 5 1/2"W x 6"H	U-1	406314	WMBBU1	1.4	<b>12.49</b>
10 1/4"L x 7"W x 8 3/8"H	24	2235596	WMBB24	2.5	<b>13.49</b>
12 15/16"L x 7 1/16"W x 8 3/8"H	27 and 31	2235604	WMBB27	2.7	<b>15.49</b>



Moeller  
**Large Battery Boxes**



Heavy-duty design stands up to the elements to ensure long-life battery storage and performance. High-strength polyethylene withstands vibration, resists chemicals and cannot rust. Constructed to meet CFR 177.150 standards. Fully conform to USCG regulations when properly installed.

Inside Dimensions	Fits Battery Size	Model	MOELL#	ShWt	Only
18"L x 13"W x 13"H	Two, std. low	11882636	042222	18	<b>77.99</b>
25"L x 15"W x 13"H	One 8D, low	11882644	042223	18	<b>99.99</b>
28"L x 25"W x 14"H	Two 8D, low	11882651	042224	27	<b>152.99</b>
25"L x 15"W x 16"H	One 8D, high	11882669	042225	19	<b>99.99</b>
28"L x 25"W x 17"H	Two 8D, high	11882677	042226	28	<b>152.99</b>



West Marine  
**Battery Tiedown Strap**

Tough and durable strap anchors your battery box top in place for added security. High-quality, 3" polypropylene webbing with nylon mounting hardware and buckle are resistant to battery acid spills.

Model 2441061 | SFELE#87017 | ShWt .2 | **4.99**



Kwik Tec  
**20' Jumper Cables**

Jump start a dead battery in a boat alongside you with these cables. 8 gauge can take up to 200A.

Model 7792807 | KWIK#JC-20 | ShWt 3.3 | **44.99**

Blue Sea Systems

## CableCaps For Marine Battery Terminals

Protect against accidental short circuits and reduce corrosion. Elastic PVC allows crimped terminals to pass through the opening. For batteries with integral marine terminals only. One pair, red and black. Wire gauges 4-2/0AWG, 1/2" opening.

**Model 540716** | BLUES#4001 | ShWt. 1 | **6.49**

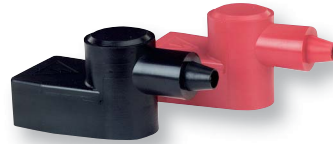


Blue Sea Systems

## CableCaps For Automotive-Style Battery Terminals

Use on batteries with automotive-style terminals to which you've added clamp-on marine terminals. Molded PVC enables installation of the CableCap after the terminals are crimped on cables. One pair, red and black.

Size	Gauge	Opening	Model	BLUES#	ShWt	Only
Small	4, 2, 1	1/2"	<b>540690</b>	4005	.3	<b>3.99</b>
Medium	1/0, 2/0	5/8"	<b>540708</b>	4006	.3	<b>3.99</b>



Blue Sea Systems

## CableCap Stud Insulators

These simple boots cover positive terminals with an insulating layer of PVC, greatly reducing the chances of accidental shorting with a screwdriver, wrench, etc. and accidental 12V welding. Use with inverters, windlasses, shunts, sense wires, meters, alternators, battery switches, etc.

Fits wires	Quantity/Package	Model	BLUES#	ShWt	Only
18-10	3	<b>192500</b>	4008	.1	<b>2.89</b>
8-4	2	<b>192510</b>	4010	.1	<b>3.89</b>
2-2/0	1	<b>192528</b>	4012	.2	<b>2.89</b>
3/0-4/0	1	<b>215055</b>	4014	.1	<b>2.89</b>



## Battery Terminal Protection

Ancor

### Dielectric Silicone Compound

A silicone "grease" that's great for waterproofing coax connections, butt splices, and other sliding electrical connections.

**Model 1201250** | ANCOR#700115 | ShWt. 1 | **9.79/1.3oz.**



Ancor

### Battery Terminal Cleaner Brush

Brush cleans terminals and lugs and self-stores inside handle.

**Model 594259** | ANCOR#700103 | ShWt. 1 | **7.99**



CRC Marine

### Marine Battery Cleaner

Cleans terminals, cables, cases, connectors, hold-downs and carriers to assure maximum current flow and promote longer battery life. Removes corrosion and neutralizes acid spills.

**Model 3732260** | CRC#06023 | ShWt. 1 | **3.66/11oz.**



CRC Marine

### Marine Battery Terminal Protector

Protects hold-downs, bolts, brackets and terminals. Lead-free protective coating prevents battery terminal corrosion.

**Model 3732286** | CRC#06046 | ShWt. 8 | **5.19/7.5oz.**



Ancor

### Anti Corrosion Rings

Felt washers are chemically treated to minimize terminal corrosion caused by acid leaks around terminals. Place one on each positive and negative post for reduced battery maintenance.

**Model 542183** | ANCOR#260405 | ShWt. 1 | **3.19**



Ancor

## Premium 4 Gauge Battery Cable Assemblies

Marine-grade heavy-duty cables are pre-assembled with tinned copper lugs and adhesive-lined heat shrink tubing. Ready-to-use cables are acid-oil-moisture- and corrosion-resistant. For continuous current draws up to 136A. Each ShWt. 4



Length	Hole Diameter	Color	Model	ANCOR#	Only
18"	5/16"	Black	<b>1201284</b>	189130	<b>36.99</b>
18"	3/8"	Red	<b>1201318</b>	189131	<b>36.99</b>
32"	5/16"	Black	<b>1201367</b>	189134	<b>43.99</b>
32"	3/8"	Red	<b>1201375</b>	189135	<b>43.99</b>
48"	5/16"	Black	<b>1201383</b>	189136	<b>59.99</b>
48"	3/8"	Red	<b>1201391</b>	189137	<b>59.99</b>

Ancor

## Premium 2 Gauge Battery Cable Assemblies

Same as 4AWG above, but handles continuous current draws up to 178A. Each ShWt. 6



Length	Hole Diameter	Color	Model	ANCOR#	Only
18"	5/16"	Black	<b>1201425</b>	189140	<b>43.99</b>
18"	3/8"	Red	<b>1201441</b>	189141	<b>43.99</b>
32"	5/16"	Black	<b>1201516</b>	189144	<b>57.99</b>
32"	3/8"	Red	<b>1201615</b>	189145	<b>47.99</b>
48"	5/16"	Black	<b>1201672</b>	189146	<b>69.99</b>
48"	3/8"	Red	<b>1202001</b>	189147	<b>54.99</b>

Seafit

## 4AWG Economy Battery Cables

Ideal for freshwater applications; Non-tinned wire is rated @ 160A (136A in engine spaces)



Length	Color	Model	SFELE#	Only
18"	Black	<b>5349030</b>	5349030	<b>14.99</b>
18"	Red	<b>5349022</b>	5349022	<b>14.99</b>
24"	Black	<b>5349014</b>	5349014	<b>16.99</b>
24"	Red	<b>5349006</b>	5349006	<b>16.99</b>
32"	Black	<b>5348990</b>	5348990	<b>19.99</b>
32"	Red	<b>5348982</b>	5348982	<b>19.99</b>
48"	Black	<b>5348974</b>	5348974	<b>24.99</b>
48"	Red	<b>5348966</b>	5348966	<b>24.99</b>

## Battery Terminals

Ancor

### Tinned Copper Battery Terminals

Tinning defends against corrosion. Includes one each positive and negative terminals with brass wingnuts.

**Model 191728** | ANCOR#260322 | ShWt. 4 | **22.99**



Ancor

### Lead Battery Terminals

Includes positive terminal with 3/8" post and negative terminal with 5/16" post.

	Model	ANCOR#	ShWt	Only
Pos. w 3/8" Post	<b>385658</b>	260200	.4	<b>5.49</b>
Neg. w 5/16" Post	<b>385641</b>	260100	.4	<b>5.49</b>
Both Pos. & Neg.	<b>541797</b>	260325	.8	<b>8.99</b>



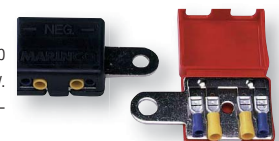
Marinco

### Battery Direct Connector

Brass terminals provide a safe and secure way to connect up to four interface-sensitive instruments directly to your battery.

Both positive and negative quick-connect terminals are included. Positive (red): 3/8"ID. Negative (black): 5/16"ID.

**Model 238220** | MARCO#12VTR | ShWt. 3 | **18.49**



## Charging with Solar Panels

### How Solar Panels Work

Photovoltaic solar panels are a good way to replenish the DC power in your boat's battery system. Small panels trickle charge batteries while you're unplugged from shore power. Larger panels produce enough energy to power appliances, like an inverter used for producing household-type AC power.

As part of our company Mission Statement to reduce our impact on the environment, West Marine has embraced photovoltaic technology. We constructed our own sizable 57,600kW array on the roof of our Santa Cruz, CA, store (with 480 panels of 120W each, connected to 24 inverters, rated at 2,100W each, producing enough electricity to meet 70% of the store's electrical needs). According to the EPA, a 57.6kW solar power system like West Marine's can eliminate 4.4 million pounds of carbon dioxide that would otherwise be produced by a power plant over 30 years. As a clean, renewable energy source, it can save more than 400 million cubic feet of natural gas over the same 30-year period.

### Who Can Use Solar Panels?

- **Small boats:** A solar panel can keep the battery fully charged when the boat is on the trailer or sitting at her slip. All batteries self-discharge, and a small panel can eliminate the problems caused by dead batteries. Using a panel to maintain a battery is also useful on bigger boats that are on a mooring. Without shore power, these boats need a way to keep batteries charged. Since solar panels put out pure DC power, they are excellent chargers as long as they have a regulator in the circuit when they require it (see below).
- **Cruising and racing sailboats** can use solar panels to augment or replace their other charging sources. Many sailboats that go on long passages have to use their propulsion engine for 1 to 2 hours per day to charge batteries and replace the energy that's been consumed. With a couple of solar panels installed, these boats can often extend their time between engine uses by a day or more. Truly efficient solar-equipped boats may not have to use the engine for charging at all.

### Types of Solar Panels

Two types of panels use either silicon crystals or thin chemical films to generate electricity.

**Mono-crystalline and multi-crystalline (c-Si)** panels are the oldest technology and also the most powerful. When sized correctly and matched to appropriate batteries, these are the panels to use for running large DC loads such as lights, a TV, radio or VCR. Our current assortment of this type includes single-crystalline Sunforce panels, multi-crystalline products from Sunforce and Sharp.

In crystalline panels, silicon, the primary material in quartz sand, is grown into crystals, refined, purified (by an expensive process), sliced into thin wafers and "doped" with the addition of chemicals. Solar cells create electrical current, the quantity determined by the size and efficiency of the cell and the amount of light. Solar modules are created by connecting cells in parallel to increase amperage and in series to increase voltage. Typical solar modules have 30 or 36 cells (generating between 14 and 18V DC).

**Amorphous thin film Silicon (a-Si)** panels are only about 50% as efficient as multi-crystalline panels, but can be manufactured in flexible forms so they can roll or fold, or conform to the shape of a cabintop. They are more efficient in low or diffused light conditions and are less subject to voltage drops when they heat up. They're the panels most often used for low amperage charging and battery maintenance. They don't generally have enough output for serious energy replenishment, but can be used to "float" or trickle charge a battery.

The Sunforce solar powered battery chargers represent this type of economical solar cell. So-called "Single Junction" panels of this variety have the fewest number of layers of chemical coatings deposited on their metal plates.

Thin film panels require lower manufacturing costs than c-Si panels like the Sunforce and Sharp panels (with 45% of multi-crystalline panel cost coming from making the raw silicon crystal structure).

### Voltage and output

Solar panels charge 12V batteries, and might have a voltage of 20V with no battery in the circuit, but are engineered to provide their power at the voltage a 12V battery requires for full charging.

Panels are measured in either Watts, or Amps, or both. We rate them in Amps, since most boaters have an idea of how many amp-hours their battery capacity is, or how many amp-hours they use in a day while cruising. We also use a simplifying assumption, and that is the panel will put out its maximum output for five hours a day. As they say in the car commercials, "your mileage may vary," but this rule of thumb works well for estimating a panel's output.



West Marine's Santa Cruz solar array

We arrive at these values by averaging the number of hours the panel spends in full sun (defined as 1000 watts of energy per square meter). Full sun means enough light so you see fairly sharp-edged shadows (most locations get no more than 80 to 85% of full sun). In most of the Continental U. S. the amount of time a panel spends in full sun averages four or five hours per day.

### Problem with shading cells

Shadows covering even a tiny fraction of the panel have a dramatic impact on power output. Shaded cells show a large voltage drop that acts as a barrier to useful power production, and shading a single cell on a panel can cut its output by 20% or more. Shading two or more cells effectively turns off the panel until the shadow is removed.

This defect is corrected somewhat by the use of bypass diodes across each cell, which allow the module to produce power even when partially shaded. Pointing the array squarely with the panels perpendicular to the sun makes a large difference in efficiency as well as does the temperature. The colder the temperature at the panel surface, the higher the output. Performance on a clear, cold winter morning can be 30 to 40% over rated specs.

### Sizing the panels for your battery

**Math shortcut:** Take the output of the solar panel (in milliamps) and multiply it by 100. That's about the size of the battery it can maintain. A 150mA solar panel can maintain a battery up to about 150Ah. The 1500mA panel can provide enough power to keep a large bank of batteries topped off, assuming there are no loads on the batteries other than self-discharge.

### Do I need a charge controller?

As a general rule panels that produce less than 1.5% of a battery's rated capacity in amp hours don't require regulation. This means that a 1.5A panel is the largest you should use without a regulator on a 100-amp-hour battery. Regulators should generally be used any time you have two or more large panels connected to your batteries.

If you're concerned about damaging your new gel or AGM batteries due to overcharging, you can add a small, inexpensive charge controller. These controllers, also called regulators, are rated by the maximum number of amps in your solar array, and we offer versions handling between 7A and 40A. Regulators are ideal if you can't be onboard to monitor your electrical system, and the top units now feature smart, multi-stage charging.

### Simple rules for best power production

- **Keep the panels as perpendicular to the incoming sun's rays as possible.** We understand that if you've mounted panels on a boat on a mooring, you may not be able to guarantee that they are pointing towards the sun, but all panels will produce more power if they get direct sunlight. This is a compelling reason to mount panels on cruising boats so that they can be aimed in the appropriate direction, no matter what the season, course, or latitude.
- **Avoid shadows:** The output of a panel drops dramatically when shadowed, even if only 10% of the panel is in shadow. A small shadow can reduce the panel's output by 50% or more. When something as large as a boom, radar scanner, or mast casts its shadow on a panel, your output goes down dramatically.
- **Keep your panels cool.** It's not easy to keep a black surface cool in the sun, but panel output goes down as temperature rises, so if you can provide some ventilation on the backside of the panel, you may be able to pick up a 5 or 10% increase.

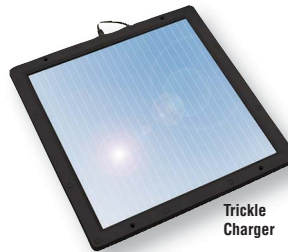


## Solar Panel Comparisons

	Peak Output	Daily Max. Output*	Panel Material	Panel Type	Dimensions Deployed	Model	MANUF#	Only
130W Crystalline Panel	130W	43Ah	Tempered glass	Monocrystalline	59"L x 26 3/4"W x 2 3/4"H	<b>12036240</b>	37130	<b>699.99</b>
Sharp 130W	130W	35.8Ah	Tempered glass, EVA laminate	Multi-crystal silicon	59"L x 26"W x 1 13/16"H	<b>8909350</b>	39310	<b>799.00</b> †‡
85W Crystalline Panel	85W	28Ah	Tempered glass	Monocrystalline	47"L x 21 1/2"W x 1 19/64"H	<b>12036232</b>	37085	<b>499.99</b>
Sharp 80W	80W	23.35Ah	Tempered glass, EVA laminate	Multi-crystal silicon	47 1/4"L x 21 1/8"W x 1 13/16"H	<b>8909343</b>	39810	<b>549.00</b>
Amorphous Solar Kit	60W	20Ah	Tempered glass	Amorphous	38 1/2"H x 57"W x 2 1/2"H	<b>12036224</b>	50048	<b>399.99</b>
Folding Solar Charger	60W	18.0Ah	Silicone, polymer substrate	Amorphous	59"L x 43"W	<b>10933612</b>	F15-3600	<b>899.00</b>
Folding Solar Charger	30W	9.0Ah	Silicone, polymer substrate	Amorphous	41 5/16"L x 31 11/16"W	<b>10933604</b>	F15-1800	<b>669.00</b>
Flexible Solar Panel	28W	9.3Ah	Flexible thin film	Amorphous	79 3/4"L x 14 1/2"W	<b>10933687</b>	R-28	<b>469.99</b>
Flexible Solar Panel	21W	7Ah	Flexible thin film	Amorphous	60 3/4"L x 14 1/2"W	<b>10933679</b>	R15-1200	<b>399.99</b>
Folding Solar Charger	20W	6.0Ah	Silicone, polymer substrate	Amorphous	30"L x 31 11/16"W	<b>10933596</b>	F15-1200	<b>484.99</b>
Battery Charger	15W	5.0Ah	Thin film silicon and ABS plastic	Amorphous	41 1/2"L x 15 1/2"W x 2 1/2"H	<b>11460359</b>	50032	<b>109.99</b>
Flexible Solar Panel	14W	4.6Ah	Flexible thin film	Amorphous	42"L x 14 1/2"W	<b>10933661</b>	R15-600	<b>259.99</b>
Folding Solar Charger	10W	3.0Ah	Silicone, polymer substrate	Amorphous	23 11/16"L x 21"W	<b>10933588</b>	F15-600	<b>249.99</b>
Trickle Charger	5W	1.75Ah	Thin film silicon and ABS plastic	Amorphous	13"L x 14"W x 3/4"H	<b>11460342</b>	50022	<b>69.99</b>
Folding Solar Charger	5W	1.6Ah	Thin film silicone, polymer substrate	Amorphous	24 3/8"L x 10 5/16"W	<b>10933638</b>	F15-300N	<b>134.99</b>
Flexible Solar Panel	5W	1.6Ah	Flexible thin film	Amorphous	23"L x 14 1/2"W	<b>10933653</b>	R15-300	<b>162.99</b>
USB; AA Solar Battery Charger	5W	1.66Ah	Foldable thin film	Amorphous	24"L x 5 1/2"W x 1 3/8"H	<b>10933646</b>	USB+AA CHARGER	<b>99.99</b>
AA Foldable Solar Charger	2.16W	.70Ah	Foldable thin film	Amorphous	31 1/2"L x 5 1/2"W	<b>10933570</b>	AA6 CHARGER	<b>107.99</b>
Battery Maintainer	1.8W	0.625Ah	Silicon and ABS plastic	Amorphous	18"L x 6 1/2"W x 1 1/4"H	<b>11460334</b>	50012	<b>24.99</b>

Based upon five hours of optimum sunlight per day.

Electrical



### Solar-Powered Battery Chargers

Solar chargers eliminate dead batteries on your boat, car, RV, ATV or any occasionally used vehicle. Battery Maintainer and Solar Trickle Charger keep batteries topped up for trolling motors, fishfinders, etc. The Solar Battery Charger will replenish power consumed daily by 12V lighting systems and appliances, extend-

ing battery life. A charge controller is not needed for the two smaller panels however, in most cases, the 7 Amp Charge Controller (see below) should be used with the Solar Battery Charger to prevent overcharging.

**Cell Type:** Thin film **Current Regulation:** Recommended for Battery Charger (depends on battery bank size) **Frame Material:** ABS plastic **Panel Material:** Amorphous silicon and ABS plastic **Warranty:** Five years

	Application	Amps	Amp Hours/Day*	Watts	Dimensions	Model	SUNFO#	ShWt	Only
Battery Maintainer	Keep batteries topped off	125mA	0.625Ah	1.8W	18"L x 6 1/2"W x 1 1/4"H	<b>11460334</b>	50012	1.8	<b>24.99</b>
Trickle Charger	Powerboat and sailboat batteries	350mA	1.75Ah	5W	13"L x 14"W x 3/4"H	<b>11460342</b>	50022	4.7	<b>69.99</b>
Battery Charger	Large power and sailboat batteries	1.0A	5.0Ah	15W	41 1/2"L x 15 1/2"W x 2 1/2"H	<b>11460359</b>	50032	17	<b>109.99</b>

\*Based on 5hrs. average daily sunlight

### 7 Amp Charge Controller

Maintenance-free protection for your batteries and solar panels. Protects batteries from overcharge and discharge. Handles approximately 100W of solar power. Includes Charging and Full Battery LED indicators. 7 5/8"L x 4 5/8"W x 4 1/4"H. One-year warranty.

**Model 11460367** | SUNFO#60012 | ShWt. 6 | **29.99**



### 30 Amp Charge Controller

Handles up to 450W of solar power and 30A of current, and maintains 12V batteries in a fully charged state. Dimensions: 10 1/4"L x 8 3/4"W x 2 5/8"H. One-year warranty.

**Model 11460375** | SUNFO#60022 | ShWt. 3 | **94.99**



### 30 Amp Solar Digital Charge Controller

Maintenance-free protection for your batteries and solar panels. Handles up to 30A and 450W of solar power while maintaining battery voltage and protecting battery from daytime overcharge or nighttime discharge. LED display monitors charging status of the controller, battery voltage and solar power strength. 10 1/4"L x 8 3/4"W x 2 5/8"H.

**Model 12036216** | SUNFO#60032 | ShWt. 8 | **99.99**



◇ **Symbol** Hazard Shipping

† **Symbol** Oversized Shipping

‡ **Symbol** Truck Freight

Extra shipping costs may apply on items bearing any of these identifying marks

# Solar Power / Charge Controllers

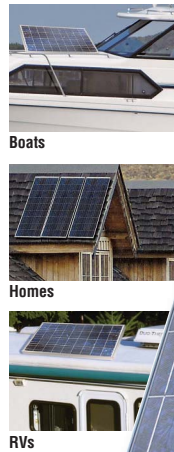
Electrical



Sunforce **Crystalline Solar Panels** **new**

Tempered glass set in a sturdy aluminum frame to assure years of weatherproof and maintenance-free performance, these high-efficiency solar panels feature crystalline silicon cells to provide greater power output. Integral multiple bypass diode design minimizes power drop caused by intermittent shade, ensuring consistent power for battery charging, pumps, lighting or any application requiring reliable 12V power. Complete with wiring, mounting brackets, hardware and voltage tester.

**Panel Type:** Monocrystalline **Panel Material:** Tempered glass **Frame Material:** Aluminum **Warranty:** 25 years



Boats  
Homes  
RVs



Sharp™ **Polycrystalline Solar Panels**

Designed to withstand rigorous weather conditions, these panels provide up to 123 watts of 12V DC power for battery charging, running onboard electronics, and other electrical needs. High-efficiency polycrystalline cells convert sunlight to electricity quietly, without pollution or greenhouse gases, day after day, season after season. Using breakthrough technology perfected by Sharp's nearly 45 years of research, these panels use a textured cell

surface to reduce reflection of sunlight, and BSF (Black Surface Field) structure to improve conversion efficiency. An anti-reflective coating provides a uniform blue color and increases the absorption of light in all weather conditions. For RVs, homes, boats, back-up and remote power use, 12 volt battery charging and solar power stations, pumps, beacons, and lighting equipment.

**Panel Type:** Multi-crystal silicon **Panel Material:** Tempered glass, EVA laminate **Frame Material:** Anodized aluminum **Output Wiring:** Junction box for easy electrical connections in the field **Warranty:** 25-year limited power output warranty

Watts	Amp Hours*	Dimensions	Output Connector	Model	SUNFO#	ShWt	Only
85W	28Ah	47"L x 21 1/2"W x 1 19/64"H	Bare wire	12036232	37085	25	499.99
130W	43Ah	59"L x 26 3/4"W x 2 3/4"H	Bare wire	12036240	37130	34	699.99

\*Based on 5 hours average daily sunlight

Watts	Amp Hours*	Dimensions	Model	SUNFO#	ShWt	Only
80W	23.35Ah	47 1/4"L x 21 1/8"W x 1 13/16"H	8909343	39810	20	549.00
130W	35.8Ah	59"L x 26"W x 1 13/16"H	8909350	39310	22	799.00†

\*Based on 5 hours average daily sunlight



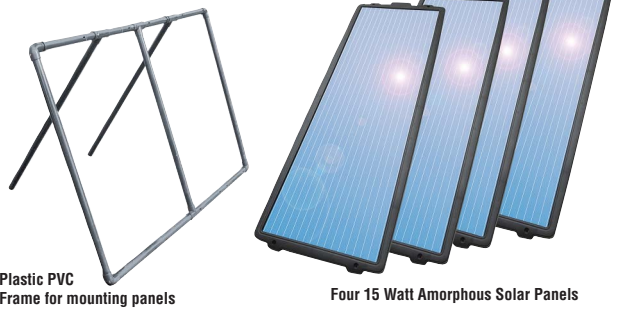
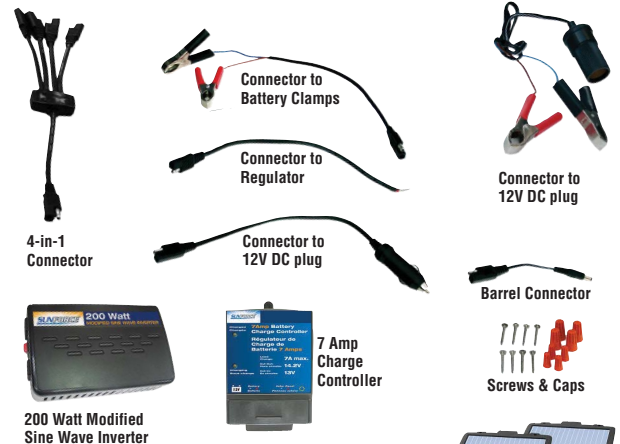
Sunforce **Amorphous Solar Kit** **new**

This complete, land-based system is ideal for producing maintenance-free backup power and 12V battery charging. Provides reliable solar power even in cloudy or overcast conditions and temperatures from -40° to 176°F. Includes everything you need to connect to your existing 12V battery including four, 41"H x 17"W, 15 Watt panels, sturdy mounting frame (38 1/2"H x 57"W x 2 1/2"D), 7-amp charge controller, 200-watt inverter, all necessary connecting cables and complete instructions.

**Watts:** 60W **Amp Hours:** 20Ah **Panel Type:** Amorphous **Panel Material:** Tempered glass **Frame Material:** ABS plastic **Warranty:** Five years

**Model** 12036224 | **SUNFO#**50048 | **ShWt** 64 | **399.99**

Amorphous Solar Kit Parts



◇ Symbol Hazard Shipping
† Symbol Oversized Shipping
‡ Symbol Truck Freight

Extra shipping costs may apply on items bearing any of these identifying marks

**Flexible Solar Panels**

PowerFilm® integrated solar panels (thin film on plastic) are developed and manufactured with a proprietary roll process, and they are truly rollable unlike other thin film technologies that are only somewhat flexible. PowerFilm solar panels are all monolithically integrated, which eliminates the need for damage-prone manual

connections of individual solar cells. PowerFilm is made of silicon, a natural resource in abundant supply. PowerFilm is cadmium-free, unlike some other solar technologies, and performs well in diverse environments including hot sun, and does not suffer from wasted over-voltage.

**Panel Type:** Amorphous **Panel Material:** Flexible thin film **Frame Material:** Polyamide substrate, as thin as 1 mil(0.025mm) **Output Wiring:** Two-wire delphi **Mounting Hardware:** Corner grommets **Warranty:** One year

PFILM#	Watts	Amp Hours*	Operating Current (Amps)	Dimensions Deployed	Dimensions Folded	Weight	Model	ShWt	Only
R15-300	5W	1.6Ah	0.45A	23"L x 14 1/2"W	14 1/2"W x 4"dia.	0.6lb.	<b>10933653</b>	1.4	<b>162.99</b>
R15-600	14W	4.6Ah	0.9A	42"L x 14 1/2"W	14 1/2"W x 4"dia.	0.981lb.	<b>10933661</b>	1.7	<b>259.99</b>
R15-1200	21W	7Ah	1.35A	60 3/4"L x 14 1/2"W	14 1/2"W x 4"dia.	1.42lb.	<b>10933679</b>	2.5	<b>399.99</b>
R-28	28W	9.3Ah	1.8A	79 3/4"L x 14 1/2"W	14 1/2"W x 4"dia.	1.8lb.	<b>10933687</b>	2.8	<b>469.99</b>

\*Based on five hours average daily sunlight



**Folding Solar Chargers**

PowerFilm® Foldable Solar Chargers provide lightweight and portable power for laptop, cell and satellite phones, GPS units and more. Chargers can be combined with standard PowerFilm accessories for even more applications. PowerFilm Foldable Solar Chargers are extremely lightweight and compact, with the largest

charger easily stored in a backpack or laptop bag, and the 5W charger fitting in a cargo pocket. The chargers are designed for durability, and are UV- and weather-resistant. Unlike other portable solar chargers, PowerFilm chargers can be used immediately after being removed from their packaging.

**Panel Type:** Amorphous **Panel Material:** Thin film silicone, polymer substrate **Output Wiring:** Two-wire delphi **Warranty:** One year

PFILM#	Watts	Amp Hours*	Max. Amps	Dimensions Deployed	Dimensions Folded	Model	ShWt	Only
F15-300N	5W	1.6Ah	0.3A	24 3/8"L x 10 5/16"W	10 5/16"L x 3 3/16"W x 1"H	<b>10933638</b>	.6	<b>134.99</b>
F15-600	10W	3.0Ah	0.6A	23 11/16"L x 21"W	10 1/2"L x 3 1/2"W x 1 5/16"H	<b>10933588</b>	.9	<b>249.99</b>
F15-1200	20W	6.0Ah	1.2A	30"L x 31 11/16"W	11"L x 6 1/2"W x 1"H	<b>10933596</b>	1.6	<b>484.99</b>
F15-1800	30W	9.0Ah	1.8A	41 5/16"L x 31 11/16"W	11"L x 9 1/2"W x 1"H	<b>10933604</b>	2.8	<b>669.00</b>
F15-3600	60W	18.0Ah	3.6A	59"L x 43"W	11"L x 9 1/2"W x 2"H	<b>10933612</b>	4.6	<b>899.00</b>

\*Based on 5 hours average daily sunlight



**AA Foldable Solar Charger**

Ultra compact, ultra lightweight and yet very durable, the PowerFilm® AA Foldable Solar Charger is ideal for everyday use. Charging either 2 AA batteries in 3 1/3 hours of full sun or 4 AA batteries in 6 2/3 hours of full sun, the AA Foldable Solar Charger provides highly-effective battery charging. Proprietary charging circuitry maximizes charge into the batteries, and charging lights indicate charging status and charge completion. The lightweight and

durable PowerFilm flexible solar panels are integrated directly onto the fabric, keeping the weight of the charger to less than four spare batteries. Six grommets are built into the charger to allow for secure fastening to a pack or to the ground. Four rechargeable batteries are included.



**Panel Type:** Amorphous **Operating Voltage:** 3.6V DC **Watts:** 2.16W **Amps:** 0.6A **Weight:** 7.9oz. (without batteries) **Folded Dimensions:** 5 1/2"L x 3 5/16"W x 1 3/8"H **Unfolded Dimensions:** 31 1/2"L x 5 1/2"W **Warranty:** One year

**Model 10933570** | PFILM#AA6 CHARGER | ShWt .7 | **107.99**

**USB + AA Solar Battery Charger**

Folding charger uses the sun to charge most small USB devices and rechargeable AA batteries. It provides full charge in four hours of full sun, and a charging light on the side of the enclosure indicates charging status. Six grommets for secure fastening to a pack or to the ground. Folded dimensions 3 1/4" x 5 1/2" x 1 3/8", Unfolded 24" x 5 1/2", USB charging voltage 5.0V with up to 1.0A of charging current.



**Model 10933646** | PFILM#USB+AA CHARGER | ShWt .6 | **99.99**

**PowerFilm Charger Accessories**

**12 Volt Battery Charger Pack for AA and AAA**

Charge 1-4 NiCad or NiMH AA or AAA batteries. Four independent charging indicators. Can charge one battery at a time or in pairs. Includes 12 Volt cigarette lighter adapter. Weight: 5.5oz. Dimensions: 3 3/4" x 2 7/8" x 1 1/2"  
**Model 10933513** | PFILM#RA-3 | ShWt .7 | **59.99**



**12 Volt Standard Battery Charger Pack**

Charge NiCad or NiMH batteries: 2-4 AA, AAA, C, D, or 9 Volt (1-2 batteries). Fast charger with 800 mA charging current. Includes discharge function. Includes 12 Volt cigarette lighter adapter. Weight: 18oz.; Dimensions: 8" x 5 3/4" x 2 3/4"  
**Model 10933521** | PFILM#RA-4 | ShWt 2.4 | **59.99**



**15' Extension Cord with Alligator Clips**

Includes professional marine-grade components ready to attach to your PowerFilm Solar Panel.  
**Model 10933554** | PFILM#RA-8 | ShWt .5 | **13.99**



**Daisy Chain Accessory**

Use this to connect several PowerFilm chargers in parallel for increased current output. Connect multiple panels for a combined output of up to 20A.  
**Model 10933539** | PFILM#RA-6 | ShWt .1 | **13.99**



**15' Extension Cord**

Includes professional marine-grade components ready to attach to your PowerFilm Solar Panel.  
**Model 10933547** | PFILM#RA-7 | ShWt .3 | **14.99**



**12V Cigarette Lighter Adapter**

Charge a vehicle's battery directly through the cigarette lighter adapter.  
**Model 10933497** | PFILM#RA-1 | ShWt .5 | **9.99**



**12V Female Cigarette Lighter Adapter**

Directly charge wireless electronic devices with this 12V cigarette lighter adapter.  
**Model 10933505** | PFILM#RA-2 | ShWt .1 | **14.99**



# Charge Controllers / Wind Generators



Mastervolt

## Solar ChargeMaster

Solar ChargeMaster protects your battery from being overcharged by the solar array and from being deeply discharged by loads. Designed to optimize battery life, Solar ChargeMaster features three-stage charging for 12V or 24V systems and is adjustable for lead acid, gel or AGM battery types. Features include a battery temperature sensor, LCD character display, automatic nighttime detection, extended alarm indications and low battery load disconnect. Includes a serial interface which can be used with an optional interface adapter for PC connection via PC-Link. Solar ChargeMaster works with most PV modules and the three-step charging routine is adjustable for conditions of use and battery type. Includes system alarm.

Solar ChargeMaster works with most PV modules and the three-step charging routine is adjustable for conditions of use and battery type. Includes system alarm.

**Automatic Functions:** Three stage charging, load and disconnect **User Selectable Functions:** Settings for lead acid, Gel or AGM batteries **Solar Input Voltage:** 12-50V DC **System Voltage (Battery):** 12V or 24V **Draw:** No load: <4mA **Display:** LCD display **Connections:** Screw terminals **Dimensions:** 5 1/2"L x 4"W x 1 5/8"H **Warranty:** Two years

Capacity	Model	MVOLT#	ShWt	Only
20A	<b>10976249</b>	131802000	1.3	<b>199.99</b>
40A	<b>10976256</b>	131804000	1.3	<b>249.99</b>



Flexcharge

## Solar Panel Blocking Diodes

Prevent re-radiation of small amounts of energy from the solar panel, which can slowly deplete your battery. Install in the junction box and attached to the positive wire, one diode per panel. Handle 45V/8A. Sold in pairs.

**Model 377814** | SEELY#8A BLK DIODE PR | ShWt. 1 | **15.99**



**PV7D**  
7 Amp Controller



**NC25A-12**  
25 Amp Controller

Flexcharge

## Ultra-High Efficiency Solar & Wind Charge Controllers

Waterproof and better than 99.5% efficient with charging currents of 0.5 to 25 amps, a 2-15% gain over competitors. Handles spikes up to 1,500V/A, so your controller won't be damaged by surges.

7 amp PV7D is a cost effective shunting regulator for smaller 6V, 12V or 24V solar only applications, expandable to handle charging currents from 30 to 500A. Works on single or dual battery bank systems and uses the FlexCharge Energy State Taper Charge Method for high efficiency, giving a full charge without gassing on 12V systems with gel, AGM and flooded battery types. Reverse polarity protected and fully sealed for use in high humidity environments. Green LED indicator.

25 amp NC25A is a series regulator designed for alternative energy charging systems ranging from .1A to 25A. Ideal for solar (PV) and permanent magnet generators including outboard motors and smaller wind generators. Includes a charge divert feature for using excess charging source energy for other tasks, or for placing a load on permanent magnet charging sources such as wind generators to prevent over speed conditions. Draw: 5mA. Expandable up to 100A using an optional contactor. Green LED shows when panels are producing charge current and Red/Green LED display shows charging, divert and low battery levels.

Max Amps	Dimensions	Model	FLEX#	ShWt	Only
7*	1 1/2"W x 2 7/8"H x 1"D	<b>343329</b>	PV7D	2	<b>89.99</b>
25	3 7/8"W x 3 3/4"H x 1 1/2"D	<b>223893</b>	NC25A-12	.8	<b>179.99</b>

\*Two outputs for dual isolated battery banks

## Wind Generators



Sunforce

**600W**  
**Wind**  
**Turbine**

**new**

Marine  
Wind Turbine

Precision-molded, aerodynamic fiberglass blades ensure quiet performance and minimal vibration. Turbine output is AC, reducing power loss over longer wire lengths, that is then converted to DC at the controller. Microprocessor-based controller provides voltage regulation of either 12 or 24V output, peak power tracking, and silent stall control in high winds. At sea the increased blade tip angle improves ability of blades to both engage wind at low speeds as well as shifting the point at which blades would typically 'flutter' in high winds to a point above the rotational speed allowed by the unit's electronic controls. In port, Hysteresis Braking locks the turbine in a silent regulation mode once the batteries are fully charged, preventing the turbine from fluctuating in and out of regulation mode. The result is quieter, more unobtrusive operation both under sail and when docked. Model 12036265 Turbine and Model 12036273 pole kit feature a marine grade powder coat for superior protection from the elements. The controller on Model 12036265 features a corrosion and water-resistant casing to insure longevity in the marine environment.

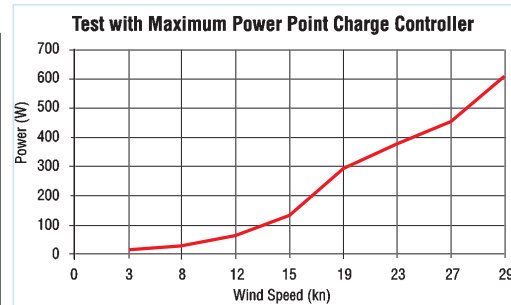
**Number of blades:** 3 **Blade diameter:** 26" **Voltage:** 12/24V **Watts:** 600W **Cut-in speed:** 4mph **Overspeed protection:** Electronic @ 1400rpm **Dimensions:** 7'L x 5'W x 10'H

	Model	SUNFOR#	ShWt	Only
Marine Wind Turbine 600W	<b>12036265</b>	45446	19	<b>799.00</b>
Marine Pole Kit 9'	<b>12036273</b>	45711	50	<b>549.00</b>
Land Wind Turbine 600W	<b>12036281</b>	45444	19	<b>729.00</b>
Land Tower Kit 30'	<b>12036299</b>	45455	63	<b>649.00</b>



Land  
Wind Turbine

Wind Speed Knots (kn)	Power Watts (W)
3	10
8	28
12	62
15	130
19	290
23	374
27	450
29	601





Electrical

Superwind

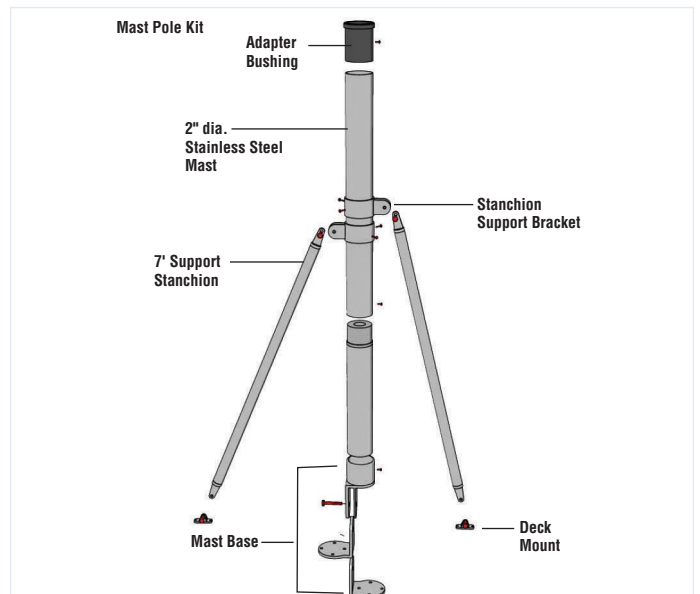
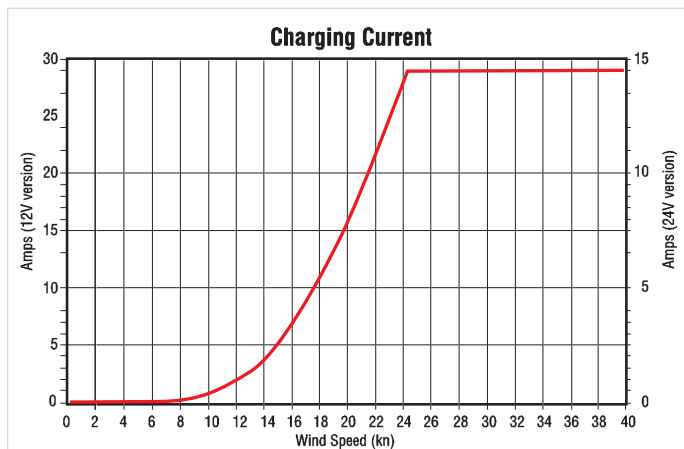
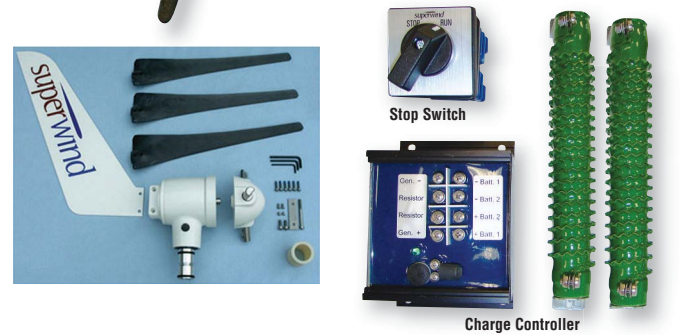
**Superwind 350 Wind Generator**



We believe this to be the best wind generator we have ever seen. If you demand the finest, choose Superwind. Carbon-fiber reinforced blades, optimized to induce micro turbulence, combine outstanding aerodynamic performance with super-quiet operation. Integrated rotor control system continuously adjusts the pitch of the blades to minimize noisy stall effects and limit rotor speed during even the most extreme wind velocities. Fully automatic, without electrical or hydraulic components, the design's mechanical pitch control eliminates the complexity of furling or securing the rotor in high winds. Three-phase, brushless, synchronous generator with Neodymium magnets and internal rectifier produces DC current. Aluminum housing and wind vane are powder-coated, all shafts, axles, bearings and bolts are stainless chromium steel. Kits include generator, charge controller, dumb load resistor bank and a stop switch. Pole kit sold separately. Professional installation strongly recommended to satisfy warranty requirements. Shipped directly from manufacturer.

**Number of blades: 3 Blade diameter: 47" Voltage: 12V Watts: 350W @ 28mph Cut-in speed: 7.83mph Overspeed protection: Rotor blade pitch Dimensions: 28"L x 8"W x 26"H**

	Model	SUPRW#	ShWt	Only
12V Wind Generator Kit	<b>12070629</b>	03120000K	30	<b>2299.00</b>
24V Wind Generator Kit	<b>12070637</b>	03240000K	30	<b>2299.00</b>
Replacement Blade	<b>12070645</b>	300050000	3	<b>289.99</b>
9' Mast Pole Kit	<b>12070652</b>	03KMHKSSTB	65	<b>799.00</b>





## Alternator/Regulator Packages

Factory-matched Balmar charging packages eliminate guesswork and save time by pairing high-output alternators and smart voltage regulators with engine type. Packages feature dual internally fanned 6-Series alternators, combined with microprocessor controlled ARS-5 voltage regulators and MC-TS-A and MC-TS-B temperature sensor cables for alternator and battery. Yanmar-ready 60-YP packages, available in 70-amp (for engines with 3/8" single belt) and 100-amp (for engines with single 1/2" belt) feature Hitachi-style

3.15"ID saddle mount. 621-VUP packages are ideal for Volvo, Universal, Westerbeke and other engines with 1" or 2" single-foot alternator mounts. 70-amp kits are well suited for battery banks to 350AH. 100-amp kits are ideal for battery banks to 450AH. All 6-Series alternators feature isolated ground terminals and Smart Ready internal back up regulation. Alternators meet USCG Title 33, ISO 8846 and SAE J1171 standards for ignition protection and can be used on gas or diesel engines.

**Number of Outputs:** One **Case Construction:** Powdercoated aluminum **Volts:** 12V **Pulley:** Deep V supports 3/8" to 1/2" belts **Approvals:** USCG Title 33, ISO 8846 and SAE J1171 standards for ignition protection **Warranty:** One year

Engine	Mounting Style	Max. Output	Alternator	Model	BALMA#	ShWt	Only
Yanmar 4 Series	Dual Foot (3.15")	100A	60-100-SR-IG	<b>8543787</b>	60YP100SRKIT	18	<b>929.00</b>
Yanmar 2 or 3 Series	Dual Foot (3.15")	70A	60-70-SR-IG	<b>8543779</b>	60YP70SRKIT	19	<b>824.99</b>
Volvo/ Atomic 4	Single Foot (1" or 2")	100A	621-100-SR-IG	<b>8543803</b>	621VUP100SRKIT	18	<b>919.00</b>
Volvo/ Atomic 4	Single Foot (1" or 2")	70A	621-70-SR-IG	<b>8543795</b>	621VUP70SRKIT	17	<b>819.00</b>

◇ Symbol Hazard Shipping

† Symbol Oversized Shipping

‡ Symbol Truck Freight

Extra shipping costs may apply on items bearing any of these identifying marks

## The West Advisor®

### Selecting an Alternator

#### How Alternators Work

Alternators generate electricity by spinning an electromagnetic rotor inside a stationary cocoon of wire (called the stator). As the rotor spins, pulses of electrical current (AC power) are transmitted from the stator to the diodes. The diodes convert AC pulses into DC current, which is used to charge your batteries.

In order for the alternator to produce power, the rotor must be excited by a controlled source of amperage that's applied to one of the alternator's brushes. In automotive type alternators, that current is supplied by an internal regulator, which drives the alternator to a specific voltage value (usually about 14.1 volts). Deep cycle and sealed gel and AGM marine batteries require a more complex program of charging voltages to achieve their optimal charge. Multi-stage external voltage regulators, like the Balmar Max Charge and ARS-5 enable the alternator to vary charging voltages, based on the battery's temperature and level of discharge, to ensure that batteries are recharged quickly and safely.

#### What to Look For

**Safety:** Your replacement alternator should meet U.S. Coast Guard Title 33 safety protection standards. If the alternator is being installed on a gasoline engine, the alternator should also comply with international SAE and ISO standards for ignition protection. Balmar 6-Series alternators meet all three standards.

**Heavy-Duty Construction:** Marine alternators operate at sustained high output for much of their lives. This requires high-temperature grease, large cooling passages, large or multiple fans, heavy-duty bearings, high-amperage diodes, etc. Standard automotive-type alternators rarely offer the construction required to meet the demands of large marine charging systems.

**High Output:** Deep cycle flooded, gel and AGM batteries demand substantially greater charging power than a standard starting battery, and can accept between 25% (lead acid) and 40% (gel and AGM) of their available capacities. Your alternator should be capable of delivering rated output equal to the maximum acceptance rate of your house battery bank. In other words, the alternator's rating should be equal to 25% (lead acid) and 40% (gel and AGM) of your total battery capacity. For flooded batteries, size your alternator toward the bottom of this range.

**It Has to Fit:** Most marine engines use one of four mounting configurations: 1" single foot, 2" single foot, saddle-type dual foot with a distance of 3.15" between mounting feet, or a dual foot with a 4" gap between front and rear feet. Compatibility depends on engine model, engine year, engine compartment layout and other factors. Inspect your existing alternator mount and compare to the diagrams shown to determine the appropriate high-output replacement. You may need spacers or modifications to brackets, tensioners and wiring on any high-output alternator installation.

**Belts & Pulleys:** High-output alternators use one horsepower for every 25 amps of output. A single 3/8" belt will handle an alternator output up to 70 amps. A single

1/2" belt will handle output to 100 amps. Alternators rated higher than 100 amps require dual drive belts.

**Temperature Compensation:** The ambient temperature of your batteries and alternator both effect charging efficiency. Max Charge and ARS-5 regulators both sense battery temperature and can regulate charging voltage accordingly. Alternator temperature sensing can also save your alternator by reducing output if the alternator overheats. Both alternator and battery temperature sensing features require optional temperature sensors (MC-TS-A and MC-TS-B).

**Wiring & Fusing:** Wiring between the alternator and the batteries must be matched to the amperage rating of the replacement alternator. A wiring chart, based on amperage output and wire length, is included in the Balmar alternator installation booklet.

#### Glossary

**Temperature Ratings** are often determined using a military standard of 122°F, measuring the ambient air temperature in the vicinity of the alternator. Sustained operation in hot engine room conditions will reduce alternator output. A "hot" alternator, operating at approximately 180°F -200°F will only supply about 80% of its rated capacity. Large-frame models generally run cooler than their smaller siblings because of their ability to dissipate heat. Small case alternators are not designed for continuous high-output operation.

**Alternator Polarity** depends on whether field (excite) voltage is applied to the alternator's positive or negative brush. Balmar alternators and regulators are P-type. An experienced auto or marine electrical shop should be able to convert your N-type alternator for use with a P-type external regulator.

**Rotor RPM** is the speed at which the alternator turns, not the engine. Most engine pulleys are roughly double the size of alternator pulleys, so alternator speed is typically twice engine speed. Balmar's 7-Series alternators are designed to spin at speeds to 15,000 rpm, making them suitable for diesel or high-revving gasoline engines. Large frame 94 and 95-Series alternators are designed for diesel engines, and shouldn't exceed 6,500 rpm.

**Dual alternators** are an increasingly popular alternative on many engines. If excited by a single multi-stage regulator, both alternators can work together to handle large single battery banks. In addition, many dual alternator applications will use the standard alternator to charge the starting battery, while the second, high-output alternator is dedicated to the house battery.



#### Lots of Alternator Alternatives:

We've got Balmar and Mastervolt products to keep your multi-bank cruising boat system charged, but we also offer OEM replacements for simpler electrical systems, like this Delco from Sierra (both new and re-manufactured). See our Engine Section.

**6-Series Alternators**

Balmar's 6-Series alternators combine the best of traditional Balmar quality with technology that's more universal and user-friendly than ever. The 6-series is the first high-output alternator that gives you the choice of using either its internal regulator or connecting to an external smart regulator. Patented Smart Ready<sup>®</sup> internal regulation offers the 6-Series alternator the unique ability to be used as a stand-alone high-output OEM replacement for performance ski and wakeboard tow boats, day cruisers, or workboats, which have more electrical loads than ever! For sailors or power boaters demanding the very best in multi-stage external regulation, the

Smart Ready<sup>®</sup> system provides a dependable back-up for external voltage regulators. Isolated Ground terminals are now standard, improving the system ground and noise reduction. 6-Series alternators utilize dual internal fans and an open frame case design for improved alternator cooling. A universal crown assures an easy fit on most modern engines. Model 60 alternators fit most Yanmars and other engines using a 3.15"ID saddle mount. Model 621 alternators replace 1" single foot or 2" single foot alternators. Model 604 alternators replace 4"ID saddle mount alternator models. Low amperage (D+) lamp circuit is included.

**Case Construction:** Powdercoated aluminum **Number of Outputs:** One **Approvals:** Ignition-safe design for marine gas or diesel engines and meets USCG Title 33, SAE, and international ISO 8846 and J1171 safety standards. **Warranty:** One year

Mounting Style	Output @2K RPM	Output @5K RPM	Voltage	Case Size	Model	BALMA#	ShWt	Only
3.15"ID saddle	44A	70A	12V	5 1/2"dia. x 5 1/8"L	<b>7807688</b>	60-70-SR-IG	15	<b>619.00</b>
3.15"ID saddle	58A	100A	12V	5 1/2"dia. x 5 1/8"L	<b>7438427</b>	60-100-SR-IG	13	<b>679.00</b>
3.15"ID saddle	64A	120A	12V	5 1/2"dia. x 5 1/8"L	<b>7807654</b>	60-120-SR-IG	16	<b>759.00</b>
4"ID saddle	64A	120A	12V	5 1/2"dia. x 5 11/16"L	<b>7807662</b>	604-120-SR-IG	16	<b>734.99</b>
4"ID saddle	44A	70A	24V	5 1/2"dia. x 5 11/16"L	<b>7807670</b>	604-24-70-SR-IG	15	<b>869.00</b>
1" or 2" single foot	58A	100A	12V	5 1/2"dia. x 5 11/16"L	<b>7807720</b>	621-100-SR-IG	13	<b>679.00</b>
1" or 2" single foot	64A	120A	12V	5 1/2"dia. x 5 11/16"L	<b>7807746</b>	621-120-SR-IG	15	<b>729.00</b>
1" or 2" single foot	44A	70A	24V	5 1/2"dia. x 5 11/16"L	<b>7807761</b>	621-24-70-SR-IG	20	<b>889.00</b>
1" or 2" single foot	44A	70A	12V	5 1/2"dia. x 5 11/16"L	<b>7807779</b>	621-70-SR-IG	15	<b>619.00</b>

**Large Frame Alternators**

Large frame and extra-large frame Balmar alternators deliver the power to handle larger battery banks and greater demands typical of offshore power and sailing yachts. Used in conjunction with Balmar Multi-Stage Regulators, these extra-high output alternators are designed to supply the sustained charging output required to meet big house and inverter loads while supporting extraordinary battery demands. Available in 12-volt and 24-volt models. All large frame alternators include an isolated ground.

**94-Series alternators** are designed with a single 2" Delco-style mounting foot.

**95-Series alternators** feature stout J-180 saddle mounts typi-

cal of most larger marine diesel engines. Dual "V" or serpentine belts are required.

**Extra-large case 97-Series alternators** deliver additional capacity and heavy-duty construction for sustained inverter loads and large-capacity battery banks. Case measures 6 3/4"dia. Selected models feature brushless construction (BL).

**Premium, extra-large case 98-Series alternators** provide maximum power (up to 5 kw) to meet the challenging demands of commercial, military and luxury pleasure yachts. Rugged brushless design, built with oversized bearings and a 7/8" shaft. Case diameter is 6 7/8".

**Case Construction:** Powdercoated aluminum **Number of Outputs:** One **Approvals:** Ignition-safe design for diesel engines and meet USCG Title 33 safety standards. 97 and 98 Series are also safe for marine gas engines and meet SAE and international ISO 8846 and J1171 safety standards **Warranty:** One year

Mounting Style	Output	Voltage	Series	Case Size	Model	BALMA#	ShWt	Only
Single 2" Delco-style	140A	24V	94	6 13/16"dia x 7 1/8"L	<b>7807852</b>	94-140-24-IG	20	<b>1279.00</b>
Single 2" Delco-style	165A	12V	94	6 13/16"dia x 7 1/8"L	<b>7807860</b>	94-165-12-IG	21	<b>1219.00</b>
Saddle-style dual-foot (J180)	165A	12V	95	5 3/4"dia. x 8 1/2"L	<b>7807878</b>	9504-165-12-IG	20	<b>1199.00</b>
Saddle-style dual-foot (J180)	210A	12V	95	5 3/4"dia. x 8 1/2"L	<b>7807886</b>	9504-210-12-IG	21	<b>1279.00</b>
Saddle-style dual-foot (J180)	140A	24V	95	5 3/4"dia. x 8 1/2"L	<b>7807894</b>	9504-24-140-IG	20	<b>1279.00</b>
Saddle-style dual-foot (J180)	160A	12V	97	6 3/4"dia. x 10 7/8"L	<b>7807910</b>	9704-160-IG-BL	32	<b>1279.00</b>
Saddle-style dual-foot (J180)	140A	24V	97	6 3/4"dia. x 10 7/8"L	<b>7807928</b>	9704-24-140IGBL	32	<b>1274.96</b>
Saddle-style dual-foot (J180)	310A	12V	98	6 7/8"dia. x 11 1/4"L	<b>7807936</b>	98-12-310-IG-BL	48	<b>2819.00</b>
Saddle-style dual-foot (J180)	220A	24V	98	6 7/8"dia. x 11 1/4"L	<b>7807944</b>	98-24-220-IG-BL	48	<b>2819.00</b>

**Mounting Hardware Kit Model 8543811**

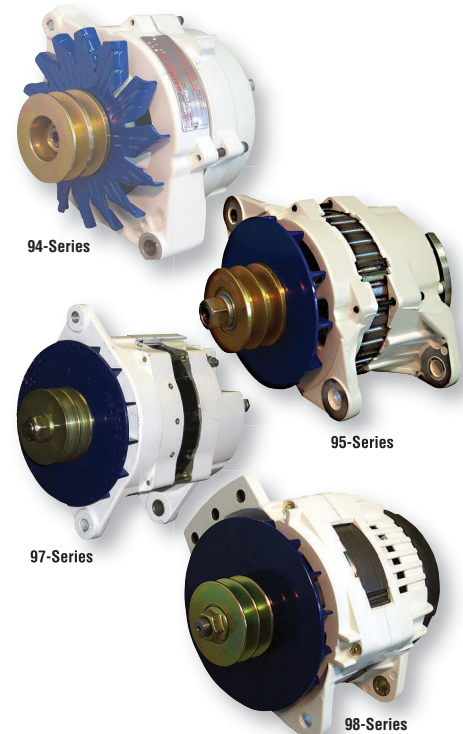


**Mounting Hardware Kit Model 8543829**



**Mounting Hardware Kits**

	Model	BALMA#	ShWt	Only
Yanmar GM, JH Hardware Kit (Mounting Hardware)	<b>8543811</b>	6-0020	1	<b>21.99</b>
Yanmar CX Hardware Kit (Mounting Hardware and Pulley)	<b>8543829</b>	6-0030	3	<b>97.99</b>
Yanmar LP Hardware Kit (Mounting Hardware and Pulley)	<b>8543837</b>	6-0040	3	<b>97.99</b>



**Universal Adjustable Mounting Arm For Marine Alternators**

Many installations call for a longer than standard tensioning arm to support high-output alternators. Rugged, banana-shaped arm is cut from 1/4" stock to ensure minimal twist or flex. Powdercoat finish resists rust and corrosion. 10"L x 1"W.

**Model 596908** | BALMA#UAA | ShWt .8 | **33.99**



# Voltage Regulators



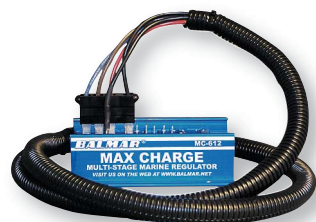
## Balmar ARS-5 Advanced Regulator

Easier than ever to program and operate, the ARS-5 features an easy-to-read, three-digit scrolling LED display and sealed magnetic reed switch that makes it easy to select the battery program that's right for your vessel. Five select-

able programs for universal flooded, deep cycle flooded, gel, AGM and Optima spiral wound batteries. Seven belt load management settings control horsepower load on drive belts to minimize wear on engine and belts. When used with MC-TS-A and MC-TS-B alternator and battery temperature sensors, the ARS-5 ensures even greater charging performance, as well as critical protection for your alternator and batteries. Controls a single alternator only.

**Automatic Functions:** Multi-stage smart charging. Alternator temperature sensing (optional MC-TS-A sensor required). Battery temperature compensation (optional MC-TS-B sensor required) **User Selectable Functions:** Charging for five battery types. Seven belt load management settings based on belt size and alternator rating **Status Display:** Three-character alphanumeric LED display simplifies programming **Dimensions:** 4 7/8" L x 3 1/4" W x 1 1/2" H **Wiring Harness Included:** 54" marine wiring harness, magnetic programming screwdriver, manual included **Warranty:** One year

Model 7807969 | BALMA#ARS-5-H | ShWt 2 | **294.99**



## Balmar Max Charge Digital Regulators

The latest-generation voltage regulator feature an easier-to-use programming interface and a new, faster processor that can respond more quickly to ensure that your batteries will charge more effectively and last longer. Exclusive Belt Load Management system allows the user to control the maximum charging output of the alternator to ensure that horsepower load does not exceed the limits of the drive belt. When used with optional alternator and battery temperature sensors (Alternator sensor: Model 128244, Battery Sensor, Model 128251, sold separately), the regulators will automatically monitor and respond to changes in alternator and battery temperatures, and will reduce or discontinue charging in order to protect the batteries and charging system. During initial programming, the user can choose between a short, basic display on the regulator's three-digit LED, or a long display mode that includes battery and alternator temperature readouts, field output percentage, slope, and a variety of advisory codes.

**Automatic Functions:** Multi-stage digitally controlled charging; 2 Alarm/Advisory circuits **User Selectable Functions:** 7 charging program settings; Battery equalization, advanced programming **Status Display:** 3-Digit Numeric LEDs **Dimensions:** 4 13/16" L x 3 1/4" W x 1 1/2" H **Wiring Harness Included:** 54" L, 14ga., Includes ATC Fuses (2) **Warranty:** One year

**Application**

Application	Model	BALMA#	ShWt	Only
12V, P-Type Alternators	12032983	MC-614-H	2	324.99
24V, P-Type Alternators	1234178	MC-624-H	.1	374.99

**Model 12032983** | BALMA#MC-614-H | ShWt 2 | **324.99**

**Model 1234178** | BALMA#MC-624-H | ShWt .1 | **374.99**



## Balmar Digital Duo Charge

Mounted directly between your house and starting batteries, the Digital Duo Charge ensures that the starting battery is automatically topped off whenever the house battery is being charged—without any need for switches or isolators. Just connect your alternator output directly to the house battery and the Duo Charge will monitor voltage at both batteries. When voltage at the house bank reaches 13 volts (or 26 volts in a 24-volt system) the Duo Charge automatically delivers up to 30 amps to the starting battery. Four preset programs (Standard Flooded, Gel, AGM, and Deep Cycle Flooded) make it possible to mix house and starting battery technologies. Optional solenoid control and battery temperature sensing. Requires optional battery temperature sensor Model 128251. 12- or 24-volt operation. Fused input and output cables included.

**Automatic Functions:** Four preset charging programs. Allows charging of second battery when voltage in first battery exceeds 13.3V **User Selectable Functions:** Battery type, auto or manual operation (with external switch) **Status Display:** Six color-coded LEDs **Dimensions:** 4 13/16" L x 3 1/4" W x 1 1/2" H **Wiring Harness Included:** Input, output wires fused at 30A **Warranty:** One year

**Model 3771243** | BALMA#DDC-12/24 | ShWt 1.9 | **224.99**



## Balmar Max Charge Digital Regulator for Dual Alternator, Single Engine Installations

new

Regulating dual alternators on a single engine has never been easier. Multi-stage regulator provides two sets of terminal outputs, making it possible to connect a single regulator to two alternators at once and direct the combined output from both alternators to the same battery bank. Features, functions and programming options are the same as Model 12032983 (MC-614-H).

**Automatic Functions:** Multi-stage digitally controlled charging; 2 Alarm/Advisory circuits **User Selectable Functions:** 7 charging program settings; Battery equalization, advanced programming **Status Display:** 3-Digit Numeric LEDs **Dimensions:** 4 13/16" L x 3 1/4" W x 1 1/2" H **Wiring Harness Included:** 54" L, 14ga., Includes ATC Fuses (2) **Warranty:** One year

Model 12032991 | BALMA#MC-612-DUAL-H | ShWt 2 | **374.99**



## Balmar Centerfielder II Controller

new

Twin-engine applications provide unique challenges, and unique benefits when charging a large, single battery bank.

The CF-12/24-II was designed to address the twin engine conundrum by allowing port and starboard charging systems to work together and offer the output from both alternators to be combined to optimize charging output. When it detects both regulators are active (both engines are running), the CF-12/24-II directs field current from the dominant voltage regulator to both alternators, so the combined output can be utilized to charge a large battery bank more quickly and efficiently. The CF-12/24-II provides 5-LED indicators to identify system functions, as well as larger-gauge fused regulator power wires to ensure proper current flow. For use with Max Charge 12-volt, Model 12032983 (MC-614-H) or 24-volt, Model 1234178 (MC-624-H) regulators only. One year warranty.

**Automatic Functions:** Directs field current from dominant voltage regulator to both alternators to quickly and efficiently charge battery bank **User Selectable Functions:** Fully automatic **Status Display:** Port and starboard power LEDs, fault Indicators and amber combined indicator **Dimensions:** 4 13/16" L x 3 1/4" W x 1 1/2" H **Wiring Harness Included:** Fused wiring leads **Warranty:** One year

Model 12033007 | BALMA#CF-12/24-II | ShWt 2 | **209.99**



## Xantrex Digital Echo Charge

Conveniently charge an auxiliary or starting battery from an inverter/charger or other source without overcharging. Automatically switches On/Off to charge a starting battery without affecting the main house battery bank. Can be used for 12V or 24V systems. Minimal voltage drop. Max current: 15A. Easy three-wire installation.

**Application:** Charges auxiliary or starting batteries from inverter/charger with limited voltage drop **Features:** Automatically switches on and off without affecting the battery bank or overcharging **Battery Bank Size/Configuration:** Automatic adjustment for 12 or 24V **Charger Output:** 15A max. **Dimensions:** 5 1/2" H x 4 1/2" W x 1 1/4" D **Input Wiring:** Easy three wire installation **Safety Features:** Thermal, over current, reverse polarity protection **Warranty:** One year

Model 333669 | XANTR#82-0123-01 | ShWt 1 | **164.99**



## Balmar Alternator Spike Protector

A common electrical disaster can happen on your boat when the ignition or battery switch is turned OFF and the alternator is ON, resulting in damaged alternator diodes and lost ability to charge your batteries. The Transient Spike Protector (TSP) sacrifices itself to save the other expensive components. NOTE: Dual output alternators require a separate TSP for each positive output terminal.

Model 7434293 | BALMA#TSP-12 | ShWt .1 | **26.99**



## Balmar Temperature Sensors

Use with Max Charge, ARS-5 and Duo Charge alternator regulators to monitor and react to dangerous over-temperature conditions at your alternator and/or batteries. When installed on Max Charge, ARS-5 and Duo Charge regulators, Battery Temperature Sensors assist in adjusting voltage based on ambient battery temperature. Battery sensor mounts on negative battery post.

	Model	BALMA#	ShWt	Only
Alternator (54" L)	128244	MC-TS-A	.3	37.99
Battery (20" L)	128251	MC-TS-B	5.3	46.99



Blue Sea Systems

## VSM 422 Vessel Systems Monitor

Four meters in one, the VSM 422 saves space and costs less than four individual meters! Blue Sea Systems' Vessel Systems Monitor displays data on four critical ship's systems (DC and AC electric systems, tank levels, and bilge), helping you identify problems on your boat before they become emergencies. Programmable legends and adjustable alarms help you customize the VSM 422 for your needs. It features three intuitive display modes: Large Font mode for easy reading from a distance, Icon mode for simple visual status, Multi-line Text mode for monitoring five measurements at a glance. Versatile case design offers three mounting options—front panel, rear panel, and 360 panel mounting. Includes DC shunt, AC current transformer, and battery temperature sensor.



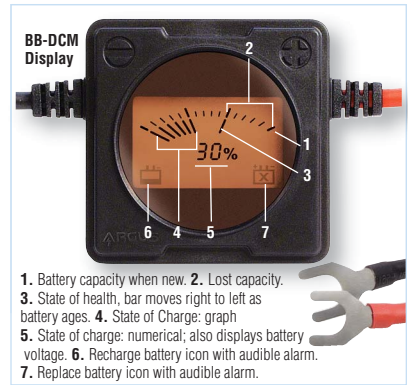
**Functions Monitored with Ranges:** DC voltage for up to three battery banks, amperage, House battery state of charge—amp hours remaining, time remaining, % charge, battery temp; AC voltage, amperage, watts, frequency; fuel, water, waste tank levels; bilge pump—active, cycle count, duration **Display Type:** Three Display Modes: Large Font Display Mode, Icon Display Mode, Multi-line Text Display Mode **Amp Hours:** Monitors amperage, amp hours remaining, time remaining, % charge, battery temperature. Monitors AC amperage, watts, frequency. **Amps:** 0-150A AC +/- 2.0%, 0-500A DC +/- 1.0% **Volts:** System voltage: 12 or 24V DC (8.5-33V), 120V AC 60Hz, 240V 60Hz 230V 50Hz. Measures 0-300V +/- 0.5% **Draw:** Minimum 10mA **Dimensions:** 3"H x 4 1/2"W x 2"D **Approvals:** E Marked for ignition protection and electro-magnetic interference. Meets CE electro-magnetic interference requirements **Waterproof:** Rated IP67—withstands water from heavy seas **Warranty:** Three years

	Model	BLUES#	ShWt	Only
Vessel Systems Monitor	11975968	1801	4	359.99
Diesel/Water Tank 32" Sender	10093870	1810	.1	99.99
Gas Tank 24" Sender	10093888	1811	.1	99.99
Battery Temp. Sender	11037348	1820	.1	16.99



## Argus Battery Bug Deep Cycle Battery Monitors

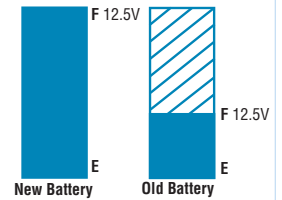
Much more than a voltmeter, the BB-DCM measures your battery's internal resistance every minute and displays charge level in real time. The Battery Bug® provides a digital picture of battery age and capacity, displaying battery charge level and percent remaining life. The BB-DCM tracks battery deterioration and sounds alarms when the battery needs to be recharged or replaced. Can be installed on a single battery, series batteries, or up to two parallel 12V starting or deep cycle batteries. Models available for both AGM and flooded batteries. The BB-SBM, designed for engine starting batteries, tracks battery health and predicts cranking failure. The BB-SBM shows percent remaining life, lost capacity, battery voltage, and alternator/charging voltage. Critical audible alarms for DCM and SBM models indicate "low battery charge" and "replace battery now." 12V batteries in 12V-48V applications. Amperage: <.005A. Waterproof: Splash-resistant IPX5. Approvals: CE Mark. Warranty: One year. Display: 2" x 2" x 1/2"H. Leads: 20"L.



1. Battery capacity when new. 2. Lost capacity.
3. State of health, bar moves right to left as battery ages. 4. State of Charge: graph
5. State of charge: numerical; also displays battery voltage. 6. Recharge battery icon with audible alarm.
7. Replace battery icon with audible alarm.

### Available energy is more important than voltage.

Voltmeter would simply indicate that these are two fully charged batteries. The Battery Bug, however, shows the old battery has two-thirds less energy available.



Battery Type	Model	ARGUS#	ShWt	Only
Deep Cycle AGM	10934362	BB-DCM12-AGM	.3	129.99
Deep Cycle Flooded	10934354	BB-DCM12-WET	.5	99.99
Starting	10934347	BB-SBM12	.5	39.99

## The West Advisor®

# Multi-Stage Smart Charging While Under Way

## Regulator Selection

When it comes to efficient battery charging, a multi-stage smart shore power charger is only part of the story. You need a voltage regulator with intelligence, plus a high-output alternator, to maximize the efficiency of your charging system.

In automotive applications, the alternator's function is to keep a starting battery happy while supplying power to electrical/electronic systems needed to operate the car (headlights, CD player, vanity mirror lights, etc.). In this environment, a simple, internally-regulated alternator is usually more than sufficient to get the job done.

Onboard a boat the alternator and regulator must support a much greater battery capacity to fulfill engine starting and house battery loads. The alternator and regulator must be able to charge effectively at lower rpms and live in an inhospitable environment. In addition, the alternator and regulator may sit for long periods between uses (surprisingly, one of the toughest aspects of alternator life). At the same time, this system must meet the expectations of boaters who want to have their batteries charged with the least amount of engine running time.

Intelligent voltage regulation meets the needs of newer battery types, and the added load that modern electronics and inverter technology demand. Intelligent regulation matches the output of the alternator to the specific needs of your batteries (AGM, gel, Optima, deep-cycle flooded, etc.) so batteries charge faster based on the needs of their unique constructions, and so the charging system can most effectively utilize the increased voltage high-output alternators provide. Max Charge and ARS-5 regulators are equipped with engineered programs for each battery type—just tell the regulator what battery type you are using and the regulator handles the rest.

In addition, many smart voltage regulators are equipped with the ability to monitor both battery and alternator temperature, and respond by increasing or decreasing voltage levels to maximize both safety and performance. In the event of a condition that poses danger to the system or the vessel, the regulator has the ability to discontinue charging completely.

Xantrex

## LinkPRO and LinkLITE Battery Monitors

**LinkPRO** provides advanced battery status at a glance. The large display shows accurate battery measurements (voltage, amps, amp hours with digital resolution to 0.01) plus advanced and historical data on the functional health of one or two battery banks. History Menu keeps track of special battery status events like battery discharges (average discharge, deepest discharge), number of charging cycles, full discharges, and synchronizations with the monitor. Calculates time remaining until battery is fully discharged. Configurable low and high voltage battery alarm includes trigger relay for controlling external equipment, and shutting off devices when the battery voltage exceeds programmable boundaries. Includes shunt. Communication kit (which includes an interface box, cabling and software for networking with your electronics) and temperature sensor inputs sold separately.

**LinkLITE** supplies battery status at a glance, with all the basic information you need. The large backlit LCD display and intuitive user interface shows accurate status of your single or two-bank battery system (digital resolution to 0.1). Includes a low battery alarm with a trigger to control external equipment. Easy to use and install. Includes the key features of the LinkPRO in a simpler and affordable package with lower monitoring limits, and without networking communication or battery temperature monitoring.

**Functions:** Volts, Amps, Amp hours, state of charge, battery history, Low battery alarm **Display Type:** Multifunction LCD **Amp Hours:** Low range: 0-99Ah (+/- 0.1Ah), High range: 200-9999Ah (+/- 1Ah) **Amps:** Low range: 0-199A, High range: 200-9999A (+/- 1A) **Volts:** 12V or 24V systems (9-35V supply voltage) **Mounting Hole Size:** 2 1/16" to 2 1/8" dia. **Waterproof:** Front panel rated IP65 **Draw:** 9mA (12V), 7mA (24V) **Dimensions:** Front panel 2 1/2" dia., Body dia. 2" x 3 1/8" **Warranty:** One year

	Model	XANTR#	ShWt	Only
LinkPRO	10087682	84-2031-00	.1	349.99
LinkLITE	10087690	84-2030-00	.1	269.99



Boaters have historically been forced to cobble together their vessel's electrical system on their own, choosing each component from a different manufacturer and then combining components to create a system that works for their application. This variety of components from different manufacturers complicates the system with varying degrees of quality, support, features, etc.

Mastervolt builds your entire electrical system, with high-quality, feature-rich products designed to work together as a totally integrated network—under one brand with one phone number for support. Sample systems appear on these pages. Bear in mind that Mastervolt products can be mixed and matched or used independently to meet your individual needs.

Electrical



6V AGM Batteries



12V AGM Batteries

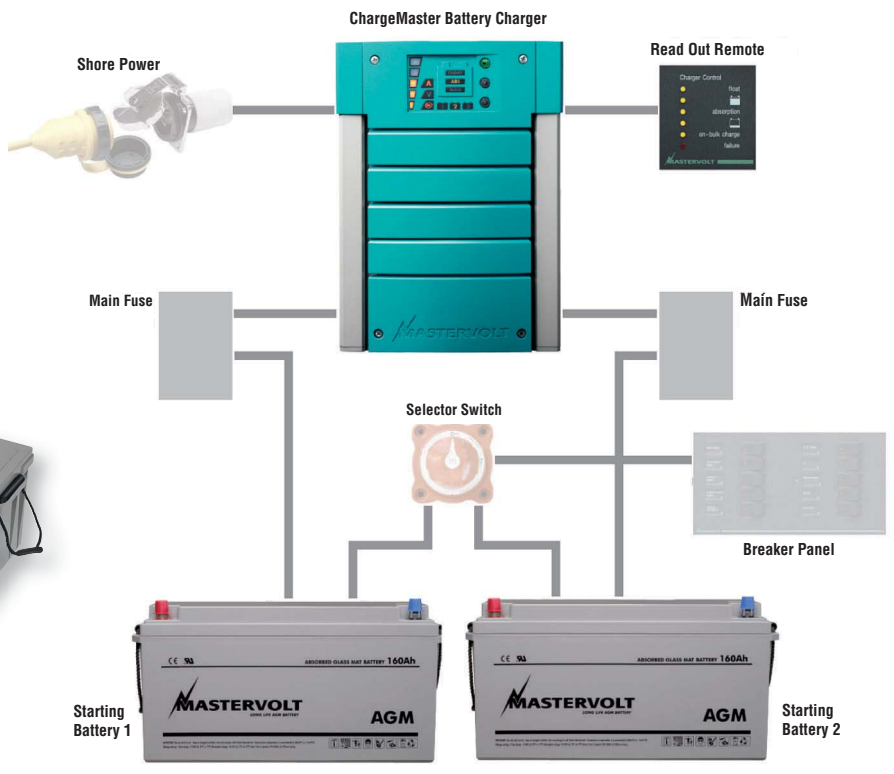


SlimLine Compressed AGM Batteries

## Basic System

Sailboats, center consoles and powerboats 25-30 feet

Redundant dual battery system with selector switch and battery charger when shore power is available



## AGM Batteries

Mastervolt batteries utilize AGM (Absorbed Glass Mat) separators and advanced technology to provide maintenance-free, completely sealed battery power. Great for starting, service and deep-cycle applications, without leaks, spills and the hazards of gassing with unsealed batteries. Special one-way valves prevent pressure buildup if they're overcharged. Can be installed in any orientation, and more compact than traditional batteries, Mastervolt AGM Batteries are built to withstand shock and vibration encountered in

the marine environment. Excellent high-current-discharge behavior, accepts higher charging currents, and multiple batteries are easily linkable.

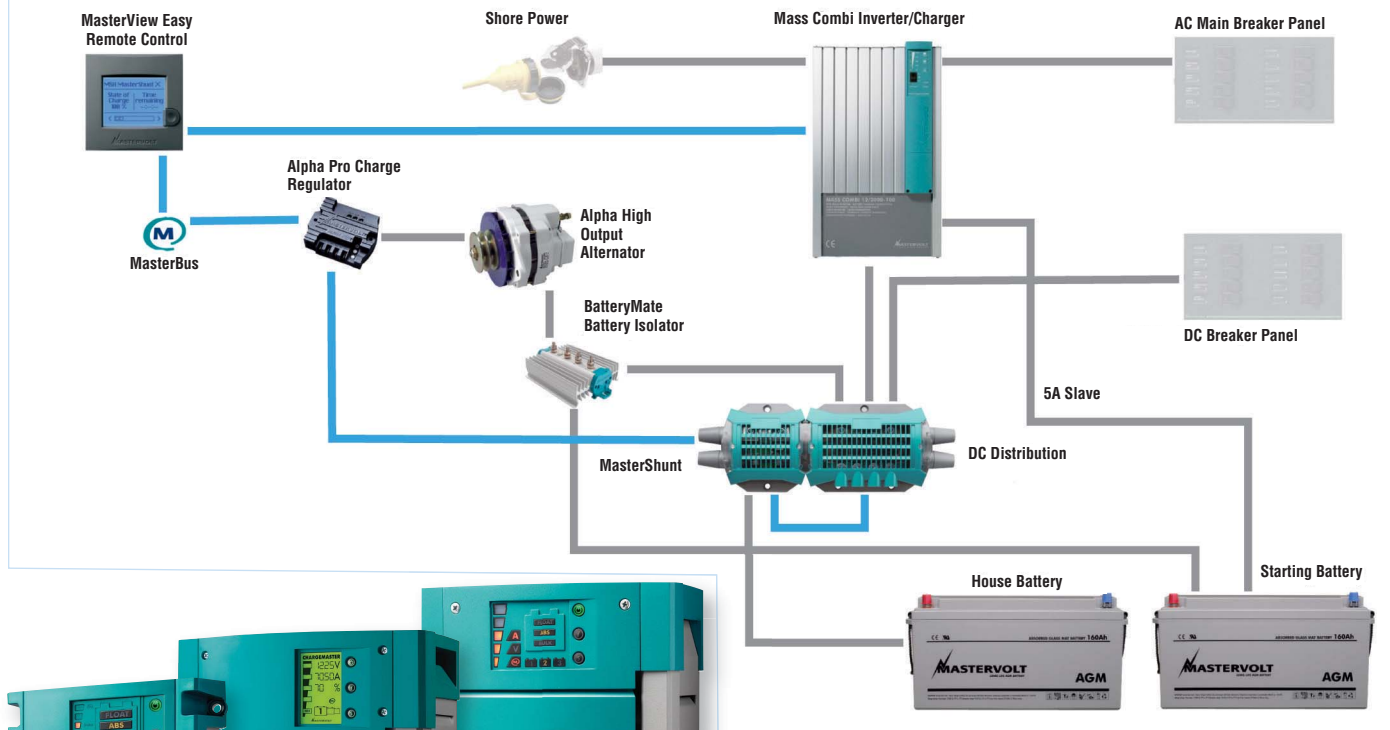
**SlimLine Compressed AGM Batteries** have such a small footprint that two of the SlimLine batteries can fit in the space of one conventional 8D battery. Up to 30% volume savings, and up to 15% weight savings. Threaded M6 insert terminals. Two year warranty.

	Group	Amp Hours	Cold Cranking Amps	Length	Width	Height	Weight	Model	MVOLT#	ShWt	Only
<b>6 Volt</b>											
AGM 6/260	n/a	260Ah	745A	11 5/8"	7 1/8"	11 11/16"	80lb.	<b>12040168</b>	61002600	80	<b>384.99</b> ◇
AGM 6/340	n/a	340Ah	865A	11 5/8"	7 1/8"	14 3/8"	107lb.	<b>12040176</b>	61003400	107	<b>489.99</b> ◇
AGM 6/400	n/a	400Ah	875A	11 5/8"	7 1/8"	16 7/8"	123lb.	<b>12040184</b>	61004000	120	<b>569.00</b> ◇
<b>12 Volt</b>											
AGM 12/55	24	55Ah	480A	10 1/8"	8 3/16"	5 3/16"	37.5lb.	<b>10976363</b>	62000550	38	<b>192.99</b> ◇
AGM 12/70	27	70Ah	615A	13 11/16"	7 1/8"	6 5/8"	49lb.	<b>10976371</b>	62000700	47	<b>239.99</b> ◇
AGM 12/90	31	90Ah	850A	13 1/8"	9.3"	6 13/16"	62lb.	<b>10976389</b>	62000900	62	<b>299.99</b> ◇
AGM 12/130	n/a	130Ah	935A	16 1/8"	9"	7"	83lb.	<b>10976397</b>	62001300	83	<b>414.99</b> ◇
AGM 12/160	4D	160Ah	1000A	19 1/8"	9 5/8"	6 11/16"	95lb.	<b>10976405</b>	62001600	99	<b>539.00</b> ◇
AGM 12/225	8D	225Ah	1300A	20 5/8"	9 1/2"	9 3/8"	141lb.	<b>10976413</b>	62002250	138	<b>659.00</b> ◇
AGM 12/270	Super 8D	270Ah	1600A	20 5/8"	9 5/8"	10 5/8"	161lb.	<b>10976421</b>	62002700	161	<b>789.00</b> ◇‡
<b>12 Volt, SlimLine Compressed</b>											
AGM-SL 12/115	n/a	115Ah	565A	22"	4 5/16"	9 3/16"	78lb.	<b>10976439</b>	63001150	82	<b>399.99</b> ◇
AGM-SL 12/150	n/a	150Ah	700A	22"	4 5/16"	11"	89lb.	<b>10976447</b>	63001500	94	<b>484.99</b> ◇
AGM-SL 12/200	n/a	200Ah	900A	22"	5"	11"	119lb.	<b>10976454</b>	63001851	118	<b>649.00</b> ◇

## Intermediate System

Sailboats, center consoles, cuddy-cabin cruisers and other powerboats 30-40 feet

DC system with alternator for quick charging at sea. Inverter/charger powers household appliances (microwaves, coffeemakers, blenders, laptops, TVs etc.)



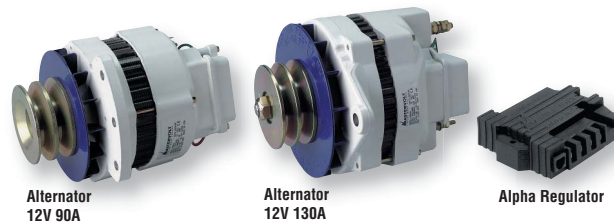
## ChargeMaster Battery Chargers

ChargeMaster Chargers offer a host of battery management and charging features in a lightweight, compact design. High frequency switch mode technology makes them extremely efficient and regardless of the quality of the input power, capable of producing clean, healthy output that extends battery life. They are Power Factor Corrected (>0.98) and accept universal voltage and frequency input (90-265V AC, 50/60Hz) for worldwide marine applications. Provides 3-stage charging of up to 3 banks of flooded, gel or AGM batteries, recharge of dead batteries, DC power and plug-n-play network remote control and monitoring. Includes battery temperature sensor.

**Number of Outputs: 3 Automatic Functions:** Fully automatic 12V, multi-stage, multi-battery, charging **User Selectable Functions:** Settings for lead acid, gel, AGM or spiral batteries. Precise voltages can be customized for each charging stage. **Safety Features:** Over temp., shutdown, ignition protected, overload, surge and short circuit protected **Remote Available:** Yes **Approvals:** CE Certified, Meets ABYC and UL 1236, Ignition protected, EMC FCC Class B **Warranty:** Two years

### ChargeMaster Battery Chargers—Masterbus Network Compatible

Charger Output	DC Voltage	Dimensions	Model	MVOLT#	ShWt	Only
25A	12V	9 3/16" x 5 1/8" x 2 3/8"	<b>10976181</b>	44010250	3.8	<b>409.99</b>
35A	12V	11 1/2" x 8 5/16" x 5 3/16"	<b>10976199</b>	44010350	13	<b>599.00</b>
50A	12V	11 1/2" x 8 5/16" x 5 3/16"	<b>10976207</b>	44010500	13	<b>749.00</b>
70A	12V	14 5/16" x 11" x 5 7/8"	<b>10976215</b>	44010700	21	<b>1249.00</b>
20A	24V	11 7/8" x 8 5/16" x 5 3/16"	<b>10976223</b>	44020200	13	<b>669.00</b>
30A	24V	11 7/8" x 8 5/16" x 5 3/16"	<b>10976231</b>	44020300	13	<b>879.00</b>



## High-Output Alternator/Regulator Packages

Add the power you need onboard with Mastervolt's high output alternator/regulator packages. They provide fast and complete charging of the starter, house and bow-thruster batteries, optimizing charge performance and battery life, and powering your onboard loads. The Mastervolt high output alternators feature industrial durability, corrosion-resistant materials and a double pulley to prevent slipping and premature belt deterioration. They are prepared for custom-made brackets and supports available from the engine supplier or local installers. The Mastervolt package includes the waterproof regulator providing three-stage charging of lead acid, gel or AGM batteries. The Alpha Regulator may be set for quick charging, float voltage and absorption time frame. LED indicators display charge phase, allow you to change settings and offer you simple monitoring and operation. Regulator is 0.9lb, 3 1/2" x 3 11/16" x 1 3/16," IP65 water-resistant, 3-stage charging, bulk voltage: 14.25V, float adjustable 13-13.9V, absorption time adjustable (2 minutes to 4.5 hours), LED indicators display charge phase and allow adjustment of settings. Package includes: Mastervolt alternator, Alpha Regulator, temperature sensor with 20 feet of cable and cable harness. For use with diesel engines only. Two-year warranty.

Continuous Alternator Output	Pulley Diameter	Dimensions	Model	MVOLT#	ShWt	Only
90A	2 7/8"	6 11/16" dia. x 9 3/8"D; (8 1/2" mounting centers)	<b>10976462</b>	48012090	28	<b>1069.00</b>
130A	3 1/2"	5 1/2" dia. x 6 7/8"D	<b>10976470</b>	48012130	18	<b>1389.00</b>

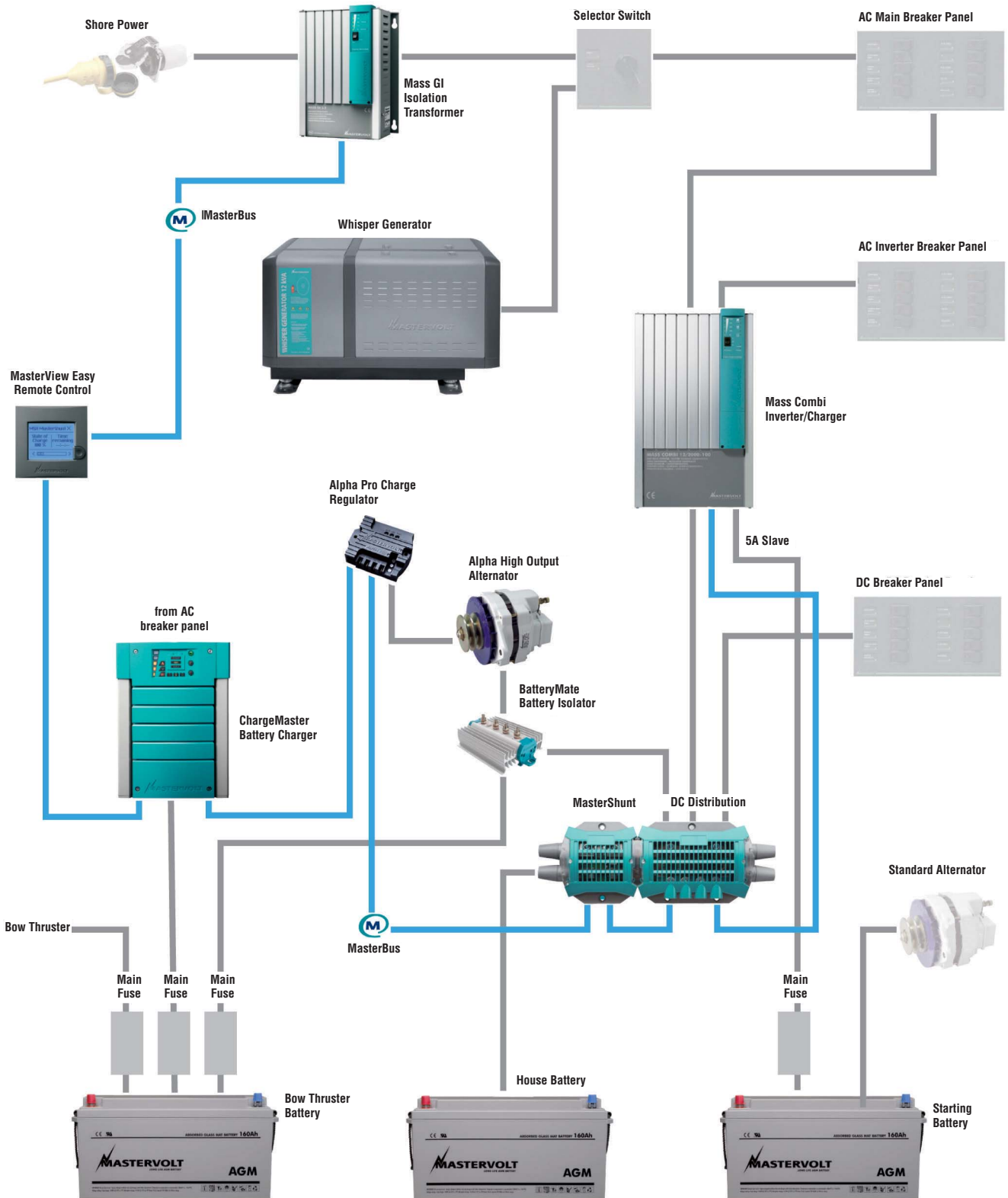
⚠ Symbol Hazard Shipping
⬆ Symbol Oversized Shipping
🚚 Symbol Truck Freight

**Extra shipping costs may apply on items bearing any of these identifying marks**

## Advanced System

Sailboats, cruisers and other powerboats 40-60 feet

Comprehensive DC system including diesel generator and inverter/charger provide power for many of the creature comforts of home, including air conditioning, electric stoves etc. for longer cruising at sea.



Electrical

## Mass Combi Inverter/Chargers

The Mass Combi pure sine wave inverter/chargers are half the weight, and consume less than half the power of traditional inverter/chargers. Utilizing high-frequency switch mode technology for greater efficiency, Mass Combi includes a professional-grade inverter, automatic transfer switch and advanced three-stage-plus battery charger in a lightweight, compact design. Pure, clean sine wave AC power is the only choice for sensitive electronics, and high surge ratings let you operate motor loads, so you can power up your laptop or air condition the cabin for comfort. Charges up to two battery banks with lead-acid, gel or AGM settings, plus the ability to revive a "dead battery", and built-in memory function to prevent overcharging. Power Sharing feature allows Mass Combi to be programmed so that when particular high-amperage loads turn on, the charger automatically de-rates, eliminating nuisance tripping of the shore breaker. Includes ICC Remote Panel, and battery temperature sensor with cable. Optional Mass Combi Interface Module allows connection to MasterBus onboard network. MasterView Easy Remote Touchscreen Panel can show the information from multiple Mastervolt products including chargers, inverters, batteries, etc. on one display.

**Output Waveform:** Pure Sine Wave **Output Type:** Plug-n-play connection to remote panels and temp. sensors **Status Indicators:** LED Indicator **Automatic Functions:** Automatic transfer switch **User Selectable Functions:** Battery Charger: 3-stage, 2-bank battery charging of flooded, gel and AGM batteries or can be set to specific voltages, DC power supply **Included Equipment:** ICC Remote Panel and Temp. Sensor **Approvals:** CE Certified, E certified according to automotive directive 95/54/EG, meets UL and ABYC requirements **Warranty:** Two years

Continuous Capacity	Surge Capacity	Charger Output	Dimensions	Weight	Model	MVOLT#	ShWt	Only
2500W	5000W	100A	19 1/2"L x 12 1/2"W x 6 1/8"D	24.3lb.	<b>10976314</b>	37012505	29	<b>2549.00</b>
4000W	7500W	200A	19 1/2"L x 12 1/2"W x 11"D	46.3lb.	<b>10976322</b>	37014005	53	<b>3999.00</b>

12V, 24V and 120VAC units also available.  
Call 1-800-BOATING (1-800-262-8464) for assistance.



## MasterView Easy Remote Panel

This panel monitors, controls and displays information from one or more Mastervolt power products (battery chargers, inverters/chargers, batteries, etc.) from any on-board location desired. No external power supply is required—and it requires very little power. With a choice of 10 user-selectable languages, the easy-to-read, backlit, touch-screen display shows critical day-to-day information that boaters need to know. Easy plug-n-play connection offers both data and power with only one cable needed to connect the panel to your system—making installation a breeze. Can be flush or surface mounted.



**Functions:** Touch screen display of power product functions and single button on/off **User Selectable Functions:** Product settings, order of what is displayed, color, language **Backlighting:** Yes, with color selection for white, red and dimmer 0-100% **Draw:** Standby 1mA, On 25mA, backlit 60mA **Dimensions:** 4 1/2"W x 4 1/2"H x 3/16"D (flush) or 13/16"D (surface) **Weight:** 2.2lb. **Warranty:** Two years

**Model 10976280** | MVOLT#77010305 | ShWt 1.8 | **349.99**

## MasterShunt 500

**Battery Monitor with System Fuse:** Say goodbye to the days of wondering if your batteries are charged and ready to go boating. MasterShunt takes analog data from the batteries and converts it to precise digital information that can be displayed on the MasterView Easy Remote Panel.

**System Status and Control:** Provides extensive battery status information including voltage, current, amp hours, time remaining and remaining capacity in percentage. Programmable event functions include auto-generator-start when batteries are nearing complete discharge. Historical data and an error counter provide complete insight into the electrical system so you can take preventive measures. Designed to work with the MasterView Easy Remote Panel and DC Distribution 500 to form an integrated power management system.

**Functions Monitored with Ranges:** 0-60V (0.1V resolution), 0-10A: <0.2A resolution, 10-100A: <0.5A resolution, 100-1000A: <5A resolution, Time remaining 0-480 hours (1 min resolution), **Max. Current:** 300A contin., 400A for 10 min., 500A for 5 min., 600A for 2 min. **Max. Battery Bank:** Max. battery bank size: 10,000Ah **User Selectable Functions:** Event-based actions, alarms, timers, auto stop/start for generator **Dimensions:** 5 7/8" x 5 7/8" x 2 1/2" **Voltage:** 12V/24V/48V **Draw:** 18mA(@13.6V) / 10mA(@27.2V) Normal operation mode **Included Equipment:** Includes T-fuse (500A intermittent, 300A continuous) **Warranty:** Two years

**Model 10976298** | MVOLT#77020100 | ShWt 4.1 | **399.99**



MasterShunt 500

## MasterView Read-Out Remote Panel

For use with Mastervolt Power Charger or ChargeMaster battery chargers, this basic, easy-to-read remote panel displays battery charger status, stage of charging and failure information.

**Model 10976272** | MVOLT#77010050 | ShWt .2 | **134.99**

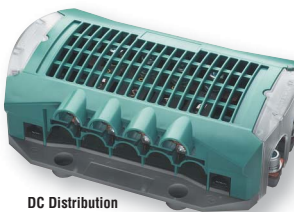


## DC Distribution 500

Space limitations on boats often lead to complex installations and fuses in inaccessible places. DC Distribution 500 offers central fusing of DC power products in a compact, accessible, simple design. Includes four ANL fuses and one spare. Includes negative bus. Comes with allen wrench, 1.6' of network cable, cable protection. DC distribution fuses are monitored and can be displayed on MasterView Easy Remote Panel, Model 10976280.



MasterShunt 500 and DC Distribution connected with optional strain relief



DC Distribution

**Functions:** Fusing for DC power products/negative ground connection. Includes fuse monitoring alarms **Fuses Included:** 80A, 80A, 125A, 150A and spare 80A, all ANL type **Voltage:** 12V/24V or 48V **Current Rating:** 500A intermittent/300A continuous **Dimensions:** 5 7/8" x 7 7/8" x 2 1/2" **Weight:** 2.6lb. **Warranty:** Two years

**Model 10976306** | MVOLT#77020200 | ShWt 4.6 | **374.99**

## MasterBus Mass/Combi Interface

For use with Mass Combi Inverter/chargers, this small module integrates the Mass Combi inverter/charger with the MasterView Easy touchscreen remote panels for information display, control and monitoring of your devices. 2 5/8" x 3" x 1 5/16". Two-year warranty.

**Model 10976355** | MVOLT#77030475 | ShWt .5 | **259.99**



## Battery Temperature Sensor

**Model 10976264** | MVOLT#41500500 | ShWt .5 | **38.99**

## APC Remote Panel with Power Sharing

The AC Power Control (APC) Remote Panel displays critical information about the Mass Combi Inverter Chargers, and allows you to limit input current consumption to prevent the AC shore power breaker from tripping. Also shows failures and AC input ON/OFF. Dimensions: 4 11/16" x 2 5/8". Two-year warranty.

**Model 10976348** | MVOLT#70405050 | ShWt .8 | **249.99**



## ICC Remote Panel

Included as part of the standard package with the Mass Combi Inverter/Chargers, the ICC Remote Panel displays critical information about the inverter/charger; information about DC load consumption, charge phase, failures, AC availability, and includes a "charger only" OFF switch. Dimensions: 4 11/16" x 2 5/8". Two-year warranty.

**Model 10976330** | MVOLT#70405000 | ShWt .7 | **239.99**

## Selecting Inverters and Inverter/Chargers

### What they do

Inverters convert the 12V or 24V DC energy stored in your batteries into household 115V AC electricity to run standard business and household appliances, televisions and tools when shore power is not available, or when running a generator is impractical or inappropriate.

### How they work

Inverters convert the DC energy by electronically increasing the voltage tenfold, and by changing direct current into alternating current. So why not use a generator to do this instead?

While both inverters and gensets (generators) create 120V AC electricity, inverters are better for variable demand and loads up to 2,000 to 3,000 watts. Inverters are silent, require virtually no maintenance, and are easy to install. On the other hand, their effectiveness is limited by your battery capacity.

Gensets are better for large, continuous loads like air conditioning, heating, and refrigeration. While many of our customers would love to run air conditioning off of an inverter, it is pretty impractical unless you are cooling a small area for a relatively short period of time. If your 120V energy requirements exceed 2,000 watt-hours per day, a genset is probably indicated.

Another option is to use an inverter/charger with a genset. The genset is operated during meal times, and other high-load times, during which it recharges the house batteries using the inverter's battery charger. During off-peak times, the inverter takes over, silently supplying power for smaller loads.

### Can I run my air conditioner off my inverter?

Running a small 5000Btu air conditioner for a couple hours is achievable, but will draw heavily from your battery bank. An inverter with enough surge capacity to start the air conditioner is also required. We highly recommend professional installation.

### How much battery capacity is required?

**Design Rule:** To be effective, we recommend inverters have access to a battery bank that is 20% as large in amp-hours as the inverter size in watts. This means a 1000 watt inverter should be supported by at least 200Ah of battery capacity.

The rationale behind this rule is that inverters use about 100Ah of electricity for every 1,000-watt-hours of use. So if a West Marine Slim 1000 were used at its maximum capacity for an hour, it would consume 100Ah. This would discharge a 200Ah battery by 50% if it started out fully charged. This is a recommended minimum: as usual, more battery capacity is better.

**Calculating electrical loads:** Many appliances and electronics have their wattage on a back panel. If only the amp rating is provided, use the following conversion formula: Volts x Amps = Watts. A 7-amp microwave at the standard North American voltage of 115V will need 805 watts of power to run. For each appliance, its wattage, multiplied by hours run per day, divided by 10 will approximate the number of amp-hours consumed from your batteries. For example, if you operate a 1000W heater for an hour, you will consume 1000 watt-hours. 1000 watt-hours divided by 10 is 100 amp-hours of battery power consumed.

### Where should the inverter be located?

We recommend installing a fixed-mount inverter no more than 10' from the battery bank, to avoid a voltage drop or oversized wires. Inverters are not ignition protected, so are not safe for installation in gasoline engine compartments, but can be installed in a diesel engine space. In general, you should pick a location that is cool, dry, well ventilated and safe from explosive gasses produced by batteries, engines and fuels.

### How big should my inverter be?

Inverters range from tiny 100W models, good for laptops, to 4,000W models that can run electric galleys and refrigeration systems. The size you select is governed by the maximum power needed at one time. A computer (200W), TV (200W), and microwave (800W) all running at the same time will need an inverter that delivers more than 1200W of continuous power. Inverters typically fall into three categories:

#### Portable Inverters:

Portable Inverters, like the West Marine 150 and 400, generally connect to your DC electrical system using the common "cigarette lighter socket". These DC sockets are often problematic due to poor contact or an insufficient gauge wire constricting the flow of current and contributing to DC voltage drop at the socket, but we digress. Portable Inverters are instant gratification products: just plug 'em in, and start using their modest AC outputs (typically up to 300 watts). Ideal for laptops, small lights and tools. AC appliances are plugged into the front of the inverter. Portable inverters are also excellent for family trips in the minivan or SUV.

#### Permanent-Mount Inverters:

Permanent-mount inverters (400 watts or more) are hardwired directly to the battery bank. Inverters in this range usually have receptacles for appliances to plug into, but do not integrate with your boat's existing AC wiring. Some allow you to easily wire more receptacles to place in remote locations. Top-of-the-line models include built-in transfer switches enabling full integration with existing AC wiring.



Rooftop Solar Array

#### Inverter/Chargers:

Finally, larger inverter/chargers have outputs that rival small generators (2,000 to 4,000 watts) and include a powerful battery charger and associated battery monitors and remote controls. They should be professionally-installed because they become an integral part of your boat's electrical system and can rapidly replenish battery banks in the 400-800Ah range. We find that many trawler owners are drifting away from a large diesel generator, and are instead installing a large inverter/charger for their AC loads complemented by propane ranges and DC refrigeration systems.

### What to look for

**Wave Form:** Inverters today generally produce one of two types of AC power: Modified Sine Wave (MSW) or True Sine Wave (TSW). Affordable MSW inverters are the most popular type, and work well with common appliances you are likely to use. TSW inverters are more expensive, but will run all AC loads, and are best for stereos, computers and other sensitive electronics. Portable tool chargers, light dimmers, variable speed tools, plasma screens, home theater sound systems and certain other items may not perform as well with MSW.

**Remote Controls:** Being able to control, monitor at-a-glance and program your inverter from inside the cabin is an important consideration, especially when the inverter is in a hard-to-reach place. Remote panels are a "must-have" for inverter chargers.

**Surge Capability:** An inverter must be powerful enough to handle the "surge" or starting requirements of appliances. A 125 watt TV might need 625 watts for a few seconds when starting cold. If you are using an inverter without the adequate surge capability, it won't start the appliance.

#### Electrical Interference

High-frequency inverters frequently produce some EMI, or electromagnetic interference. This can cause problems with SSB and Ham reception and weather fax reception. However, many of the newer designs, especially true sine wave inverters, are meeting FCC Class A requirements so there is great improvement in this area. Of course, a simple solution to the problem of radio interference is to turn off your inverter.

**Power Factors and Generators:** The charger in an inverter/charger presents a large, inductive load for a small generator (under 8kW). Chargers with a high "power factor" are desirable because they are less sensitive to peak voltage and need less AC power. Xantrex recommends that a generator be sized at 2.5 times the power draw of the charger.

### Conclusion

We're great fans of inverters on board. They're relatively maintenance-free, exceedingly quiet and allow us to enjoy some comforts while on the water.





ME2012-20B-U

## ME Series Modified Sine Wave Inverter/Chargers

A safe, reliable inverter/charger for your boat, made to the stringent requirements of UL/cUL 458. Install the ME series in four easy steps: simply connect the inverter's output to your distribution circuits or electrical panel, connect your shore power cable (AC) to the inverter's easy-to-reach terminal block, connect the batteries, and switch on the power. Ruggedly marinated with conformal coated circuit boards, powder-coated chassis and stainless fasteners; the ME Series can be mounted on a shelf or vertical bulkhead. All models include Power Factor Corrected (sine wave) chargers that are 85% efficient instead of the 50-60% efficiency seen in all but the most expensive pure sine wave inverter/chargers currently on the market. Smart chargers include five-stage charging capability (with bulk, absorb, float, equalize and battery saver stages). Battery Saver automatically keeps your batteries charged during storage without drying them out. Magnum's unique die-cast aluminum base allows full ratings up to 45°C for superior high temperature operation.

**Output Waveform:** Modified sine wave **Output Type:** Terminal block for up to #6 AWG wire **DC Input Type:** 5/16" ring terminals **Status Indicators:** LED Inverter/Charger Indicator **Automatic Functions:** Transfer relay **User Selectable Functions:** Low battery cutoff, shore power current, charger amps, battery size and type, battery equalization **Alarms:** Fault alarm **Mounting Hardware:** Mount the ME Series on a shelf, bulkhead, or even upside down **Approvals:** ETL Listed to the stringent requirements of UL/cUL 458 **Warranty:** Three years

MAGNU#	Continuous Capacity	Surge Capacity	Charger Output	Model	ShWt	Only
ME2012-20B-U	2000W	3700W	100A	<b>8632820</b>	43	<b>1159.00</b>
ME2012-U	2000W	3700W	100A	<b>8632812</b>	42	<b>1129.00</b>
ME2512-U	2500W	5000W	120A	<b>8632838</b>	47	<b>1279.00</b>
ME3112-U	3100W	6000W	160A	<b>8632846</b>	52	<b>1479.00</b>

### ME-RC Remote Control

The ME-RC remote control provides convenient finger-tip operation, including one-knob programming for the ME, MS, and RD Series inverters. The ME-RC also has the option of controlling the ME-AGS Automatic Gen Start using network connections. Non-volatile memory saves your settings even if the power is disconnected. The large LCD screen and



at-a-glance LEDs display the inverter/charger status in a straightforward way. Soft keys give simple access to menus and a rotary encoder knob makes it easy to quickly scroll through menus and select settings. The Remote offers multiple functions in one place, including: inverter on/off, charger on/off, shore power breaker settings, AGS control, meter button, setup, and technical menus.

**Model 8632911** | MAGNU#ME-RC50 | ShWt 1.6 | **184.99**

### Auto Generator Start Module

Automatically starts and stops your generator, keeping track of the battery voltage and the temperature inside the cabin. Selectable cabin temp. (65°-85°F), battery voltage (10-12V DC or 20-22V DC), generator run time and quiet time.

**Model 8632929** | MAGNU#ME-AGS1 | ShWt 1.7 | **264.99**



### Battery Monitor Kit

The Battery Monitor gives you a "fuel gauge" type of meter for your batteries that shows their "percentage of charge". Reports state of charge, real time amps, amp hours in/out, and minimum/maximum DC volts. Includes sense module, sense and communication cables, and a 500A shunt.

**Model 9369406** | MAGNU#ME-BMK1 | ShWt 1.1 | **159.99**



ME-RC Remote Control, sold separately

## MS Series Pure Sine Wave Inverter/Chargers

Power your TVs, stereos, plasma screens and other sensitive electronics without worry. This pure sine wave inverter and power-factor corrected charger provides clean, reliable inverter power with a total harmonic distortion of less than 5%. Flash programming allows easy memory upgrades. The transfer relay shifts power automatically in 16 milliseconds whenever shore power is

lost, preventing crashes from damaging sensitive electronics. The inverter/charger keeps its cool, with dual variable-speed brushless cooling fans. Like other Magnum inverter/chargers, the MS Series includes five-stage smart battery chargers (with Bulk, Absorption, Float, Equalization and Battery Saver—which maintains your batteries in storage without drying them out). Ruggedly marinated for corrosion protection in the salt water environment, the MS Series includes conformal coated circuit boards, an aluminum powdercoated chassis and top and stainless fasteners. MS2012-20B-U model includes dual 20A circuit breaker protection on its outputs. Operation requires use of ME-RC Remote Control, Model 8632911, sold separately.

**Output Waveform:** Pure sine wave **Output Type:** Terminal block for up to #6AWG wire **DC Input Type:** 5/16" terminal block **Status Indicators:** Charging/Inverting LED **Automatic Functions:** Five-stage smart charging, Search Mode, transfer relay **User Selectable Functions:** Battery type, Charge rate, Auto Generator Start (with optional AGS Module), Search Mode setup **Mounting Hardware Included/Required:** Shelf, bulkhead or upside-down mounting. 1/4" bolts not included **Warranty:** Two years

MAGNU#	DC Input Voltage	Continuous Capacity	Surge Capacity	Charger Output	ShWt	Model	Only
<b>ETL listed; UL/cUL 458 for mobile and UL 741 for off-grid</b>							
MS2000-U	12V	2000W	3300W	100A	51	<b>9369398</b>	<b>1619.00</b>
MS2012-20B-U	12V	2000W	3300W	100A	48	<b>8632861</b>	<b>1729.00</b>
MS2012-U	12V	2000W	3300W	100A	47	<b>8632853</b>	<b>1689.00</b>
MS2812-U	12V	2800W	3900W	125A	66	<b>8632879</b>	<b>1919.00</b>
MS4024-U	24V	4000W	7200W	105A	61	<b>8632887</b>	<b>2079.00</b>
<b>CE Certified for European Installation</b>							
MS2712E	9-17V	2700W	4100W	125A	60	<b>12036141</b>	<b>1379.00</b>
MS4124E	18-34V	4100W	6300W	105A	60	<b>12036158</b>	<b>1559.00</b>

## MM Series Modified Sine Wave Inverter/Charger

A new generation inverter designed to accommodate entertainment systems and small appliances in smaller RVs, boats and cabins in an all new design. Based on the popular ME and MS Series inverters, the MM is smaller, lighter and less

expensive while retaining all the built-in protection and reliability of ME and MS models. The MM uses a PFC (Power Factor Corrected) charger, which is 85% efficient and the same charger topology used in all Magnum models. The modern, hourglass case, paired with the die-cast aluminum base combines form with function, creating an attractive unit that uses its base as a heat sink for superior high temperature operation. The MM Inverter/Charger is fan cooled, enabling the unit to work well in confined spaces. If the inverter does exceed its temperature limits, it will automatically shut down, then restart when it cools down. The standard 7 or 16 amp transfer relay will pass AC power through the inverter when using shore or generator power.

**Output Waveform:** Modified Sine Wave **Automatic Functions:** Transfer relay, safety functions (overcurrent, over temp., low battery cutoff) **Dimensions:** 16 5/8" x 8 3/8" x 4 11/16" **Status Indicators:** LED **Mounting Hardware Included/Required:** Mount the MM Series on a shelf, bulkhead, or even upside down. Stainless fasteners included **Approvals:** ETL Listed to UL/cUL458, CSA C22.2 #107.1-01 **Warranty:** Two years

MAGNU#	Continuous Capacity	Surge Capacity	Charger Output	Input Wiring	Output Wiring	Model	ShWt	Only
MM1212-U	1200W	2100W	70A	Hardwire	Hardwire	<b>8632804</b>	24	<b>719.00</b>
MM-RC25 Remote Control						<b>8632903</b>	.1	<b>47.99</b>

<b>Extra shipping costs may apply on items bearing any of these identifying marks</b>		





PROwatt 1000

PROwatt 2000

Xantrex

## PROwatt SW Inverters

The PROwatt SW Series provides cost-effective, true sine-wave power. The PROwatt SW Series meets UL 458 and CSA regulatory standards and features low electrical emissions to conform to strict FCC requirements. With conformal coated circuit boards, the PROwatt SW is suitable for all climate conditions. In addition to dual GFCI AC receptacles, the PROwatt SW Series include an innovative USB connection for providing power to most USB chargeable devices. With true sine-wave output, the PROwatt SW Series can provide power for all types of electrical loads including audio visual systems, variable speed power tools, rechargeable devices and many more convenience electronics.

**Output Waveform:** Pure Sine Wave **Output Type:** Dual GFCI **DC Input Type:** Hardwire **Approvals:** UL458, CSA 107.1-01, EMC: FCC Part 15, Class A **Safety Features:** Low voltage shutdown, low voltage alarm, over voltage protection, overload shutdown **Remote Available:** Available ON/OFF remote switch (with ignition lockout) **Warranty:** Two years

	Continuous Capacity	Surge Capacity	Model	XANTR#	ShWt	Only
PROwatt SW 1000	1000W	2000W	<b>10957314</b>	806-1210	9.4	<b>354.99</b>
PROwatt SW 2000	2000W	3000W	<b>10957322</b>	806-1220	14	<b>489.99</b>

Xantrex

## Freedom HF 1000 & 1800 Inverter/Chargers

With modified sine wave output, Freedom HF 1000 and 1800 Inverter/Chargers are designed to run entertainment systems and small appliances in smaller boats, RVs and trucks. Both Freedom HF models stand up to demanding marine and RV conditions. Temperature-controlled multi-stage charging ensures that your batteries are recharged safely and efficiently. Both models include an automatic transfer switch and a detachable digital remote control panel display that provides precise information and can be mounted wherever you require the information. Internal temp. sensitive charging, with one charger output. No equalization function. 4 3/16"H x 9 1/2"W x 15 1/2"L.



**Output Waveform:** Modified Sine Wave **Output Type:** Hardwire using terminal strip, or attached GFCI receptacles **DC Input Type:** Hardwired **Automatic Functions:** Automatic three-stage battery charger. Built-in 30A relay to automatically transfer between inverter power and incoming AC utility power **Remote Available:** Removable digital display included to provide system status **Approvals:** CSA 107.1, UL 458 **Warranty:** One year

	Continuous Capacity	Surge Capacity	Charger Output	Volts	Model	XANTR#	ShWt	Only
Freedom HF 1000	1000W	2000W	20A	12V	<b>9369505</b>	806-1020	13	<b>449.00</b>
Freedom HF 1800	1800W	3600W	40A	12V	<b>9369513</b>	806-1840	15	<b>619.00</b>

## The West Advisor®

### How Many Amps?

**Design Rule:** If you know the load that is placed on an inverter in AC watts, you can divide by 10 to find the DC load in amps. If an inverter is going to run a 500-watt load, it will draw around 50A DC. The math behind this rule is as follows: 500-watts AC ÷ 85% efficiency ÷ 12.5V = 47A DC. Keep two things in mind: 500W is not very much power (think about a small cabin heater that draws 1500W or a large hair dryer that draws 1000W); and 50A is a heck of a lot of DC current use. Not many DC loads on boats 40' and under would draw 50A or more for more than a few minutes. Therefore, an inverter frequently becomes the largest DC load on most boats, and may require substantial changes in the battery capacity and wiring of the boat in which it is installed.

Xantrex

## Freedom SW Series Inverter/Chargers

Designed to meet the requirements of both OEM and aftermarket applications, the Freedom SW series offer premium performance, hard-to-match pricing and convenient, centralized control. It provides utility-grade sine wave output for smooth operation of today's sensitive electronics such as Plasma TVs, laser printers, power tools and more. System Control Panel, Model 5420872 (sold separately),



System Control Panel



Automatic Generator Start

features a backlit LCD screen that displays system configuration, diagnostics and provides basic control for other devices connected to the network, reducing the complexity of separate control panels for each device. The System Control Panel is fully compatible with the Xantrex Automatic Generator Start, Model 5420880, that can automatically activate most popular generators to recharge batteries or assist with heavy loads. The Freedom SW is available in two power levels: 2000-watts and 3000-watts. Both models feature high surge rating complemented with temperature compensated, power factor corrected multi-stage charging. They meet UL458 and FCC-Class B regulatory standards. The feature-packed 3000-watt model is equipped with dual AC input and output and has advanced configuration options for customized applications.

**Output Waveform:** Pure Sine Wave **Approvals:** Meets CSA, UL458 (with marine supplement), ABYC and FCC Part 15, Class B requirements **Automatic Functions:** Built-in transfer switch, power factor-corrected multi-stage charger **Remote Available:** On/Off Remote panel included **Warranty:** Two years

	Continuous Capacity	Surge Capacity	Charger Output	Model	XANTR#	ShWt	Only
Freedom 2000 SW	2000W	4000W	100A	<b>10957330</b>	815-2000	75	<b>1319.00</b>
Freedom 3000 SW	3000W	6000W	150A	<b>10957348</b>	815-3000	75	<b>1719.00</b>
System Control Panel (SCP)				<b>5420872</b>	809-0910	.6	<b>153.77</b>
Automatic Generator Starter (AGS)				<b>5420880</b>	809-0915	1.9	<b>88.66</b>
Freedom SW Network Cable, 75'				<b>12284758</b>	809-0942	1.6	<b>49.99</b>

Magnum Energy

## MMS-Series Pure Sine Wave Inverter/Charger

The MMS Series inverter provides pure sine wave power for entertainment systems and small appliances in smaller RVs and boats using an all new design. Based on the popular ME and MS Series inverters, the MMS is smaller, lighter and less expensive while retaining all the built-in protection and reliability of ME and MS models. The MMS charger uses a PFC (Power Factor Corrected) charger, which is 85% efficient and the same charger topology used in all Magnum models. Includes 20A transfer relay. Operates with remote controls, using either the ME-RC or MM-RC remotes. The MM-RC remote control is simple to install and use. It allows easy control and provides a quick indication of the inverter and charger operation of the MM Series inverter/charger. Includes ON/OFF switch and LED indicators to show the current operating mode of the inverter, to help troubleshoot you system and to provide charging status.



**Output Waveform:** Pure Sine Wave **Continuous Capacity:** 1000W **Surge Capacity:** 1750W **Charger Output:** 50A **Automatic Functions:** Transfer relay, safety functions (overcurrent, over temp., low battery cutout) **Dimensions:** 16 5/8"L x 8 3/8"W x 4 11/16"H **Status Indicators:** LED **Mounting Hardware Included/Required:** Mount the MMS Series on a shelf, bulkhead, or even upside down. Stainless fasteners included **Approvals:** ETL Listed to UL/cUL 458, CSA C22.2 #107.1-01 and meets the KKK-A-822E standard **Warranty:** Two years

MAGNU#	Continuous Capacity	Surge Capacity	Charger Output	Model	ShWt	Only
MMS1012-U	1000W	1750W	50A	<b>9369547</b>	25	<b>969.00</b>
MM-RC25 Remote				<b>8632903</b>	.1	<b>47.99</b>

# Inverters



Continuous Output	Surge Output	Can Power	Dimensions	Model	WMELE#	ShWt	Only
150W	450W	Camcorders, Digital Cameras, Cell Phone, Small TV, Gaming Systems	5" L x 2 3/4" W x 1 3/4" D	<b>10884542</b>	2221-6	.8	<b>24.99</b>
400W	1000W	Laptop Computer, Small TV, VCR, Stereo, CD Player, 12" Desk Fan	6 1/2" L x 4" W x 2" D	<b>8617482</b>	2003-6	2.7	<b>49.99</b>
700W	1800W	Dehumidifier, Blender, 25" Color TV, Jig Saw, 3/8" Drill, PC and Monitor	8 1/2" L x 4 1/2" W x 2 1/2" D	<b>8617490</b>	2016-6	3.6	<b>69.99</b>

West Marine

## Portable Modified Sine Wave Inverters

Convert energy from your battery into 110V AC energy to power small loads such as power tools, cell phones, laptop computers and more! Quiet operation 700W models feature DC terminals for direct battery connection. The 400W inverters include a cigarette lighter plug. The 700W includes battery clips or can be hardwired.

**Output Waveform:** Modified sine wave **Output Type:** Three-prong AC outlets **Outlets:** 400W & 700W models: Two USB ports and two AC outlets; 150W model: One AC outlet and one USB port **DC Input Type:** 400W: Cigarette lighter plug or hardwire 700W: Hardwire only **Automatic Functions:** Overload protection, input short-circuit protection, thermal and low-battery shutdown (10.5V). **Alarms:** Low battery alarm (400W & 700W) **Warranty:** One year

Electrical



## Slim 1000W Inverter

1000 Watt power Inverter converts 12 volt vehicle battery power into 110 volts of AC power. Use the

inverter in your vehicle to operate many types of appliances that use AC power such as TVs, VCRs, portable computers, power tools and lights for emergency or camping use. The inverter works with your vehicle's engine turned on or off (accessory mode). Built-in surge protection allows for safe vehicle or vessel engine startup.

**Application:** Induction motors, belt sander, single-burner electric stove, electric power saw, blender **Output Waveform:** Modified Sine Wave **Output Type:** 3 AC outlets with ground **Continuous Output:** 1000W **Surge Output:** 2500W **Dimensions:** 10 5/16" L x 5 3/8" W x 2 1/2" H **Idle Current:** <0.95A **Input:** Battery clamps and cables included **Max. Efficiency:** 90% **Safety Features:** Auto-reset short circuit protection. Overload protection and indicator. **Warranty:** One year

**Model 10884559 | WMELE#2294 | ShWt 4.8 | 99.99**

West Marine

## 3000 Watt Inverter



This power inverter easily operates TV/VCR combinations, microwave ovens, refrigerators and small air conditioners. It also operates at the highest efficiency (up to 90%) for longer running times and extended battery life compared to other less efficient inverters.

Superior surge capability, with the highest surge rating in its class, allows the inverter to start most difficult motorized induction loads. Advanced circuitry runs cooler and is more reliable.

**Application:** Powers laptop computers, mobile appliances, room air conditioners, clothes washers and dryers, and electric space heaters **Output Waveform:** Modified Sine Wave **Output Type:** 2 AC outlets with ground **DC Input Type:** Connections for distributed wiring. Cables not included. **Idle Current:** <0.95A **Continuous Output:** 3000W **Surge Output:** 6000W **Dimensions:** 13 1/2" L x 8" W x 6 3/4" H **Remote Available:** Wired remote control included **Warranty:** One year

**Model 10884567 | WMELE#2007-2 | ShWt 13 | 399.99**



Sinergex™

## PureSine2 Inverters

PureSine2 power inverters deliver clean and accurate true sine wave AC power, just like the power you use at home. Using the latest technology in power conversion, PureSine2 inverters have increased surge capabilities for starting tough loads and increased efficiency with the Powersaver mode for optimum performance. Their new technology has resulted in smaller and lighter range of inverters incorporating compact aluminum cases that can be easily installed almost anywhere. Delivering clean true sine wave power, the Sinergex PureSine II power inverters are perfect for running sensitive loads such as LCD televisions and tough enough to run the toughest loads like microwave ovens and power tools. PureSine2 inverters include protection features such as overload and low voltage for safe operation. All PureSine II power inverters have remote control capability and models 700-3000 watts include a remote control power switch.

**Output Waveform:** Pure Sine Wave **Safety Features:** Auto overheating/overvoltage/low battery shutdown **Status Indicators:** Tri-Color indicators display input voltage & output load level **Warranty:** Two years

### 12 Volt DC Electric Systems

Continuous Capacity	Surge Capacity	Dimensions	Weight	120V Model	SINER#	240V Model	SINER#	ShWt	Only
200W	400W	8 5/8" L x 5 7/8" W x 2 1/2" H	2.2lb.	<b>10495026</b>	PS2-200-112	<b>10495042</b>	PS2-200-212	3	<b>199.99</b>
350W	700W	8 5/8" L x 5 7/8" W x 2 1/2" H	2.2lb.	<b>10495067</b>	PS2-350-112	<b>10495083</b>	PS2-350-212	3	<b>299.99</b>
700W	1400W	11 5/8" L x 7 1/8" W x 2 13/16" H	5.4lb.	<b>10495109</b>	PS2-700-112	<b>10495125</b>	PS2-700-212	6	<b>399.99</b>
1000W	2000W	15" L x 7 3/16" W x 3 1/2" H	8.8lb.	<b>10495141</b>	PS2-1000-112	<b>10495166</b>	PS2-1000-212	9	<b>499.99</b>
1500W	3000W	16 5/16" L x 7 1/2" W x 3 1/2" H	10.6lb.	<b>10495182</b>	PS2-1500-112	<b>10495208</b>	PS2-1500-212	11	<b>699.00</b>
1500W	4000W	16 5/8" L x 8 3/16" W x 6 1/2" H	19.8lb.	<b>10495224</b>	PS2-2000-112	<b>10495240</b>	PS2-2000-212	20	<b>999.00</b>
3000W	6000W	17 13/16" L x 8 3/16" W x 6 1/2" H	22lb.	<b>10495265</b>	PS2-3000-112	<b>10495281</b>	PS2-3000-212	22	<b>1299.00</b>

### 24 Volt DC Electric Systems

Continuous Capacity	Surge Capacity	Dimensions	Weight	120V Model	SINER#	240V Model	SINER#	ShWt	Only
200W	400W	8 5/8" L x 5 7/8" W x 2 1/2" H	2.2lb.	<b>10495034</b>	PS2-200-124	<b>10495059</b>	PS2-200-224	3	<b>199.99</b>
350W	700W	8 5/8" L x 5 7/8" W x 2 1/2" H	2.2lb.	<b>10495075</b>	PS2-350-124	<b>10495091</b>	PS2-350-224	3	<b>299.99</b>
700W	1400W	11 5/8" L x 7 1/8" W x 2 13/16" H	5.4lb.	<b>10495117</b>	PS2-700-124	<b>10495133</b>	PS2-700-224	6	<b>399.99</b>
1000W	2000W	15 1/8" L x 7 3/16" W x 3 1/2" H	8.8lb.	<b>10495158</b>	PS2-1000-124	<b>10495174</b>	PS2-1000-224	9	<b>499.99</b>
1500W	3000W	16 5/16" L x 7 1/2" W x 3 1/2" H	10.6lb.	<b>10495190</b>	PS2-1500-124	<b>10495216</b>	PS2-1500-224	11	<b>699.00</b>
2000W	4000W	16 5/8" L x 8 3/16" W x 6 1/2" H	19.8lb.	<b>10495232</b>	PS2-2000-124	<b>10495257</b>	PS2-2000-224	20	<b>999.00</b>
3000W	6000W	17 13/16" L x 8 3/16" W x 6 1/2" H	22lb.	<b>10495273</b>	PS2-3000-124	<b>10495299</b>	PS2-3000-224	22	<b>1299.00</b>

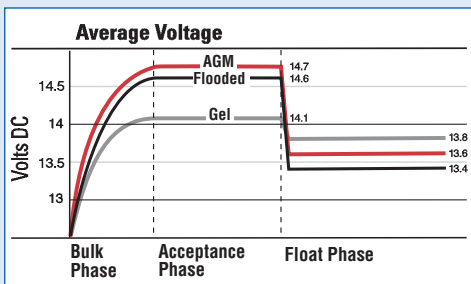
# Selecting a Battery Charger

## What do Batteries Want?

Battery power is a baffling topic to most boaters, but is also critical for starting engines and running lights and accessories. If you don't happen to have an abundance of "smarts" when it comes to managing your charging needs, it helps to have a system with the "smarts" built-in. Fortunately, modern "smart" charging options are available to make proper care of batteries almost idiot-proof.

Marine deep-cycle batteries last the longest and charge the fastest if they are charged in distinct phases, which we refer to as the "Ideal Charge Curve," the charging schedule recommended by virtually all makers of marine batteries. In the description that follows, remember that recommending precise voltages for batteries is subject to at least two caveats: 1) Gel batteries charge at different (and lower) voltages than flooded-type and AGM batteries. 2) The voltages stated are temperature-dependent.

This makes it difficult to recommend precise charging voltages, since they vary according to the temperature of the battery. Most of us generally operate our boats in temperatures between 50°F and 90°F, and the values used in our West Advisors reflect that. Higher temperatures require lower voltages, and lower temperatures require higher voltages. Note: In the following section, we define the capacity of the battery bank (in amp-hours) as C.



## The "Ideal Charge Curve"

**Bulk Phase:** This is where the heavy lifting takes place. Charge at a rate up to 20%-40% of C to a voltage of about 14.6 volts (gel: 14.1V). For example, a 200 amp-hour battery would be charged at 40-80 amperes.

This will bring the battery to about 75% of full charge, and is efficient (more amp-hours replaced per hour of charge time) since the battery accepts more current when it is discharged. AGMs require slightly different voltages, and unless there is an AGM setting, should be charged using lead-acid settings.

**Acceptance Phase:** Maintain battery at 14.6 volts (Gel: 14.1V) while the amperage is steadily reduced. This will restore the next 25% of capacity at a declining rate. Your battery can be considered fully charged if it will accept current equal to 2% of C at 14.6 volts (a 200 amp-hour battery will only accept 4 amps).

**Float Phase:** When the battery's acceptance declines to 2-4% of C, the voltage is reduced to 13.4 volts (Gel: 13.8V) to maintain the battery without losing electrolyte from the cells. This is a maintenance phase, not a charging phase.

**Equalization:** This stage is used to prevent flooded lead acid batteries from aging prematurely, and is an optional, frequently omitted phase. After the battery reaches the end of the acceptance phase, the battery continues to be charged at 4% of C until the voltage stops rising, usually around 15.5-16.2 volts. This forces the battery to its highest possible state of charge, boiling the electrolyte in a controlled manner and dissolving the lead sulfate crystals that have collected on the battery's plates. In industrial applications where maximum energy storage is important, this phase is done every charge cycle. In the marine environment, it is more likely to be done every 20-50 cycles to extend the life and capacity of wet batteries. Gel and AGM batteries should not be equalized. Since electrical equipment and light bulbs can be damaged by high voltage, the battery should be disconnected from all loads during equalization.

This type of battery charging, consisting of multiple stages, is not possible with automotive-type alternator regulators, unregulated solar panels, ferroresonant chargers, or taffrail generators. We strongly encourage the use of efficient charge devices, both for shorepower charging and alternator regulation, that use modern multiple-step regulation.

## What Size Charger do I Need?

Deciding how big your charger needs to be is determined by the size and type of your batteries, and whether your boat has a continuous or intermittent source of AC power to run your charger. Boats that spend most of their week at a dock, constantly hooked up to shore power, require smaller chargers. You need enough capacity to run the continuous loads on your battery system, like DC refrigeration (frequently the biggest user of battery power) and lights, plus enough power to float-charge your batteries. A good rule is to have enough amperage to equal the sum of the DC loads plus 10% of the amp-hour capacity of the batteries.

If you're cruising or anchored out, and aren't plugged in except intermittently, you will want enough capacity to recharge in the time you have available, if possible. You need enough juice to replace the power consumed by all the DC loads, as above, plus an average charge rate equaling the amp hours required divided by the hours available. Maximum amperage that batteries can accept during the Bulk Phase of the charging cycle vary depending on battery chemistry: flooded batteries can accept a charge rate of up to 25% of C; gel batteries have a higher acceptance rate of as much as 30%; AGM batteries accept the highest charging amps, as much as 40% of C.

## How Long Does it Take to Charge?

If you operate your house bank between a 50% and 85% state of charge, as many experts recommend, and charge once daily, you should be able to return the 35% of battery capacity by operating a properly-sized alternator for slightly over an hour. More deeply discharged batteries, or smaller alternators, will require more time. Surprisingly, using a massive charger or monster alternator to pour on the current can be counterproductive, and can shorten your battery life. Excessive current makes batteries heat up and gas excessively (when the electrolyte dissociates into hydrogen and oxygen). Soon the voltage limit is reached, causing a downshift from the Bulk to Acceptance Phase. Adding more battery capacity is a better solution, and may even decrease the needed recharging time. Bigger battery banks can accept more charging amps, so they replenish more quickly and you don't need to run your engine as long.

### Tips for battery longevity

- Shallow discharges lead to a longer battery life.
- 80% discharge is the maximum safe discharge
- Don't leave batteries deeply discharged for any length of time
- Charge batteries after each period of use
- Don't mix old batteries with new ones

## How to Rapidly Kill a Battery

**Undercharging:** consistently failing to fully recharge batteries leaves them with lead sulfate that hardens on their plates—they become sulfated—and gradually lose their ability to perform. Increased resistance when charging causes falsely elevated voltage readings, essentially fooling the battery charger, leading to further undercharging, in a downward spiral. Beyond a certain point, a sulfated battery cannot be returned to a healthy state, and you need a replacement. Keep your batteries charged, and equalize your wet cell batteries every six to eight weeks in temperate climates, and more frequently in the tropics.

**Overcharging:** Especially fatal to Gel and AGM batteries, consistent overcharging (NOT equalization) boils the electrolyte out of the cells, and can even lead to thermal runaway, with the battery becoming hotter and hotter. One of our writers experienced thermal runaway on his liveaboard Catalina 30, caused by a ferroresonant "dumb" charger, with nearly catastrophic results.

**Excessive deep discharge:** Don't completely discharge a deep cycle battery if it can be avoided. The deeper the discharge the less life you will get from the battery. The ideal method is to charge and discharge the batteries through the middle range (50% - 85%) of their capacity and, if they are flooded batteries, to equalize them periodically. Leaving the battery in a fully-discharged state, for example during winter storage, causes it to become sulfated.

Electrical



# Battery Chargers



## Mastervolt Power Chargers

Compact, lightweight and highly efficient (Power Factor Corrected >0.98), the PowerCharger provides a clean output to the batteries regardless of the quality of the input power, extending battery life. Other features include the ability to revive a "dead" battery, 3-stage charging of flooded, gel or AGM batteries, universal input (90-265VAC, 50/60Hz) for worldwide use, temperature compensation, built-in memory functions to prevent overcharging. Not compatible with Mastervolt's network CANbus system. Battery temperature sensor and remote monitoring available.

**Number of Outputs:** 3 **Automatic Functions:** Fully automatic 12V, multi-stage, multi-battery, charging **User Selectable Functions:** Settings for lead acid, gel, AGM or spiral batteries. Precise voltages can be customized for each charging stage. **Safety Features:** Over temp., shutdown, ignition protected, overload, surge and short circuit protected **Remote Available:** Yes **Approvals:** CE Certified, Meets ABYC and UL 1236, Ignition protected, EMC FCC Class B **Warranty:** Two years

Charger Output	Dimensions	Model	MVOLT#	ShWt	Only
20A	8 5/16" x 5 1/8" x 2 3/8"	<b>10976165</b>	44210200	4.3	<b>349.99</b>
40A	11 1/2" x 8 5/16" x 5 3/16"	<b>10976173</b>	44210400	14	<b>499.99</b>

Electrical



## Xantrex TrueCharge2 Battery Chargers

Xantrex TrueCharge2 battery chargers lead the industry with a small footprint and ultra-compact design. In addition to meeting global safety and regulatory standards, TrueCharge2 battery chargers feature low electrical interference and superior, efficient, power factor corrected multi-stage charging. Mount them virtually anywhere, with their unique drip-proof design. With certified ignition protection, even a gasoline engine room is a safe option for installation. Trouble-free installation is ensured with easy-to-access AC and DC wiring compartments and reverse-polarity battery protection. Designed primarily for marine and commercial applications worldwide, TrueCharge2 battery chargers are versatile enough to be used in a wide variety of conditions and locations. Auto-ranging AC input voltage capability (90-270V AC) makes traveling abroad and handling poor-quality power a breeze. The easy-to-read display can be augmented with an optional remote panel, Model 11084597 (sold separately). Dimensions: 2 13/16"H x 6 13/16"W x 10"L. Weight: 8.8lb. Voltage output: Charge-14.2V-15.5V, Float-13.4V-13.8V, Equalize-16V.

**Number of Outputs:** 3 **Automatic Functions:** Microprocessor-controlled multi-stage, 12V charging algorithms. Able to charge "dead" batteries. Auto-ranging universal input voltage (90-270V AC, 47-63Hz) is also compatible with low-quality power sources. **User Selectable Functions:** Settings for flooded, gel, AGM or lead-calcium batteries **Temperature Compensation:** Three temperature settings or optional Remote Battery Temp. Sensor (808-0232) **Input Wiring:** AC hardwire terminals **Output Wiring:** Three positive terminals, one negative terminal **Safety Features:** Over temp, shutdown, overload protection, short circuit/surge protection, reverse polarity protection. **Waterproof:** No **Approvals:** CSA/UL Approved to CSA 107.2, UL 1236 (Marine drip test), UL 458 SA15 (salt fog test), FCC Class B **Warranty:** Two years

	Capacity	Volts	Model	XANTR#	ShWt	Only
TrueCharge2 20 Amp Charger	20A	12V	<b>9369521</b>	804-1220	8	<b>309.99</b>
TrueCharge2 40 Amp Charger	40A	12V	<b>9369539</b>	804-1240	10	<b>409.99</b>
TrueCharge2 60 Amp Charger	60A	12V	<b>11084589</b>	804-1260	9.5	<b>639.99</b>

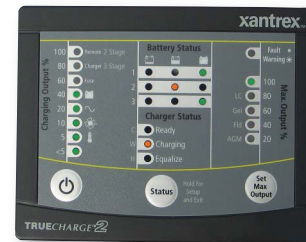


## ProMariner ProTech i-Series Battery Chargers

These chargers use proven advanced electronic technology and innovations like fully automatic global AC power input (accepts 50 or 60 cycle power with voltage from 95V-250V). Fully Automatic multi stage charging includes four complete stages for Fast Charge times, battery conditioning and active full time maintenance of all batteries on board in addition to a 4th stage dockside power supply mode. Proven technology delivering fully charged batteries every time while to extending on board battery life and use. Fast and easy set up with user selectable Conditioning cycles and a Battery Type Selector with precision charge profiles for Flooded, AGM and GEL batteries. ProMariner's Distributed-On-Demand™ feature automatically senses battery bank state-of-charge and distributes 100% of the available charging amps to where it is needed by any one bank or combination of all banks. ProTech 1240i has an exclusive Active Battery Balance Control Feature that allows smaller group size engine batteries to be charged and maintained while fully charging larger 4D & 8D house batteries without overcharging the smaller engine starting batteries.

**Number of Outputs:** 3 **Automatic Functions:** Four-stage 12V charging, Global AC voltage and frequency compatibility. Distributed-On-Demand™ battery sensing and distribution. Active Battery Balance Control (1240i only) **User Selectable Functions:** Battery Type Selector (Lead-acid, AGM and Gel batteries). Absorption/Conditioning Mode **Status Indicators:** Six at-a-glance Hi-visibility LED indicators **Input Wiring:** Hardwire **Output Wiring:** Hardwire **Safety Features:** Ignition protected, with over-temp., over-voltage and reverse-polarity protection **Remote Available:** No **Approvals:** ULC Marine Standards **Warranty:** Two years

Capacity	Dimensions	Model	PRMRN#	ShWt	Only
20A	10 1/2"L x 6 3/8"W x 2 7/8"H	<b>8648891</b>	63320	6.1	<b>299.99</b>
40A	15 1/2"L x 6 3/8"W x 2 7/8"H	<b>8648909</b>	63341	9.5	<b>399.99</b>



## Xantrex Remote Panel for TrueCharge2 Battery Chargers

Full-function control allows you to both monitor and control charger performance with exclusive features not available from the charger's onboard display. Set maximum output, power on and off, switch into standby when connecting to shore power, or program the charger for battery type and temperature, all from the convenience of a remote location. Color-keyed, orange-to-green LED display, readable at a glance, displays battery status for up to three banks, charger output and status, battery settings and system fault warnings. **Model 11084597 | XANTR#808-8040-00 | ShWt .9 | 99.99**

Charles

## 2000 SP Series Electronic Chargers with Battery Type Selector Switch

An excellent choice for value-priced, high-performance DC charging, the 2000 SP Series uses modern 3-stage charging to deliver the greatest charge when the battery is most able to accept it, prevent overcharging and extend battery life. Ignition protected, and the 40A model includes automatic temperature regulation. Restores up to three banks simultaneously. Allows selection of charging cycles and voltages for lead-acid, AGM, or gel batteries. Other features include the ability to act as a power supply, easy-to-read DC ammeter, corrosion-resistant components and housing and heavy-duty heat sink design. Runs cool and quiet, no RFI/EMI interference. All models meet FCC Class B requirements. Exterior slots allow for easy mounting, not Marine UL Listed. Dimensions: 3 11/16" x 9 1/2" x 10 1/2". Made in the U.S.A.



Charles

## 5000 SP Series Electronic Chargers with Battery Type Selector Switch

These chargers are the only Marine UL-Listed chargers available with modern 3-stage charging and automatic temperature compensation which deliver the greatest charge when the battery is most able to accept it, prevent overcharging and extend battery life. Chargers are ignition-protected, so they're safe for engine room installation and they feature virtually no RFI/EMI interference, are AC/DC fuse protected and meet FCC Class B requirements. Restore up to three banks simultaneously. Allows selection of charging cycles and voltages for lead acid, AGM or gel batteries. These units also act as a power supply providing constant voltage to DC components such as bilge pumps or DC lighting. Chargers are designed with corrosion-resistant components and have a heavy-duty enclosure and heat sink for durability. Convenient design features an easy-to-read DC ammeter, access to terminal connections and fuses and exterior slots for easy mounting.



**Number of Outputs:** 3 **Automatic Functions:** Temp. compensation (40A model only); Thermal, over-current & reverse polarity protection **Battery Bank Size/Configuration:** Up to three banks; up to 600Ah total **User Selectable Functions:** Battery type - lead-acid, AGM, or gel **Status Indicators:** Ammeter **Temperature Compensation:** 40 amp model only **Input Wiring:** AC hardwire **Output Wiring:** Enclosed DC terminal block, screw terminals **Safety Features:** Thermal, over current, reverse polarity and ignition protected, overload protection, short circuit/surge protection, internal isolation of outputs, Marine UL spec conformal coated boards **Mounting Hardware Included/Required:** Four #8 fasteners **Remote Available:** No **Warranty:** Two years limited

**Number of Outputs:** Three **Bank Size/Configuration:** Up to three banks **Automatic Functions:** Over-current, thermal & reverse-polarity protection, temperature compensation **User Selectable Functions:** Battery type - Lead-acid, AGM, or gel **Status Indicators:** Ammeter **Temp Compensation:** Yes - All 24V chargers, 12V chargers 30amps and larger **Input Wiring:** AC hardwire **Output Wiring:** Enclosed DC terminal block, screw terminals **Safety Features:** Marine UL Listed; ignition protected; Thermal, reverse-polarity, over-current protected, overload protection, short circuit/surge protection, internal isolation of outputs, conformal coated boards **Mounting Hardware:** Four or six #8 fasteners **Remote Available:** No **Approvals:** Marine UL Approved, FCC Class B **Warranty:** Five years limited

Capacity	Volts	Model	CHARL#	ShWt	Only
10A	12V	<b>5321542</b>	93-12102SP-A	7.1	<b>329.99</b>
15A	12V	<b>5321351</b>	93-12152SP-A	7.2	<b>259.99</b>
20A	12V	<b>5321369</b>	93-12202SP-A	7	<b>279.99</b>
40A	12V	<b>5321385</b>	93-12402SP-A	9.9	<b>479.99</b>

Capacity	Volts	Dimensions	Model	CHARL#	ShWt	Only
20A	12V	3 11/16" x 9 1/2" x 8 3/16"	<b>5321278</b>	93-12205SP-A	9	<b>439.99</b>
30A	12V	3 11/16" x 9 1/2" x 10 1/2"	<b>5321286</b>	93-12305SP-A	10	<b>559.00</b>
40A	12V	3 11/16" x 9 1/2" x 13 1/4"	<b>5321294</b>	93-12405SP-A	13	<b>779.00</b>
20A	24V	3 11/16" x 9 1/2" x 13 1/4"	<b>5321336</b>	93-24205SP-A	13	<b>799.00</b>
30A	24V	3 11/16" x 9 1/2" x 13 1/4"	<b>5321344</b>	93-24305SP-A	14	<b>829.00</b>

Electrical

**The West Advisor**®

## On Board Battery Charger Comparison Chart

	MANUF#	Volts	Capacity	Number of Outputs	Remote Available	Temperature Compensation	Model	Only
<b>Waterproof Battery Chargers</b>								
ProSport 6	42006	12V	6A	1	Yes	Yes	<b>9368598</b>	<b>89.99</b>
Charge Pro	2608A	12V	6A	1	No	No	<b>1903467</b>	<b>79.99</b>
Charge Pro Battery Charger	2611A	12V/24	10A(5/5)	2	No	No	<b>307530</b>	<b>99.99</b>
ProSport 12 Battery Charger	42012	12/24V	12A	2	Yes	Yes	<b>9368606</b>	<b>139.99</b>
ProSport 20	42020	12/24V	20A	2	Yes	Yes	<b>9368614</b>	<b>179.99</b>
ProSport 20 Plus	42021	12/24/36V	20A	3	Yes	Yes	<b>9368622</b>	<b>189.99</b>
<b>Non-Waterproof Battery Chargers</b>								
2000 XP Series	93-12102SP-A	12V	10A	3	No	No	<b>5321542</b>	<b>329.99</b>
2000 XP Series	93-12152SP-A	12V	15A	3	No	No	<b>5321351</b>	<b>259.99</b>
TrueCharge2 20 Amp Charger	804-1220	12V	20A	3	Yes	Yes	<b>9369521</b>	<b>309.99</b>
ProTech 1220i	63320	12V	20A	3	No	No	<b>8648891</b>	<b>299.99</b>
5000 SP Series	93-12205SP-A	12V	20A	3	No	No	<b>5321278</b>	<b>439.99</b>
2000 XP Series	93-12202SP-A	12V	20A	3	No	No	<b>5321369</b>	<b>279.99</b>
Mastervolt 20A Power Charger	44210200	12V	20A	3	Yes	Yes	<b>10976165</b>	<b>349.99</b>
Mastervolt ChargeMaster 25A	44010250	12V	25A	3	Yes	Yes	<b>10976181</b>	<b>409.99</b>
5000 SP Series	93-12305SP-A	12V	30A	3	No	Yes	<b>5321286</b>	<b>559.00</b>
ProNautic 1230P	63130	12V	30A	3	Yes	Yes	<b>12039467</b>	<b>349.99</b>
Mastervolt ChargeMaster 35A	44010350	12V	35A	3	Yes	Yes	<b>10976199</b>	<b>599.00</b>
TrueCharge2 40 Amp Charger	804-1240	12V	40A	3	Yes	Yes	<b>9369539</b>	<b>409.99</b>
ProTech 1240i Plus	63341	12V	40A	3	No	No	<b>8648909</b>	<b>399.99</b>
5000 SP Series	93-12405SP-A	12V	40A	3	No	Yes	<b>5321294</b>	<b>779.00</b>
2000 XP Series	93-12402SP-A	12V	40A	3	No	Yes	<b>5321385</b>	<b>479.99</b>
Mastervolt 40A Power Charger	44210400	12V	40A	3	Yes	Yes	<b>10976173</b>	<b>499.99</b>
Mastervolt ChargeMaster 50A	44010500	12V	50A	3	Yes	Yes	<b>10976207</b>	<b>749.00</b>
ProNautic 1250P	63150	12V	50A	3	Yes	Yes	<b>12039475</b>	<b>449.99</b>
TrueCharge2 60 Amp Charger	804-1260	12V	60A	3	Yes	Yes	<b>11084589</b>	<b>639.99</b>
Mastervolt ChargeMaster 70A	44010700	12V	70A	3	Yes	Yes	<b>10976215</b>	<b>1249.00</b>
5000 SP Series	93-24205SP-A	24V	20A	3	No	Yes	<b>5321336</b>	<b>799.00</b>
Mastervolt ChargeMaster 20A	44020200	24V	20A	3	Yes	Yes	<b>10976223</b>	<b>669.00</b>
5000 SP Series	93-24305SP-A	24V	30A	3	No	Yes	<b>5321344</b>	<b>829.00</b>
Mastervolt ChargeMaster 30A	44020300	24V	30A	3	Yes	Yes	<b>10976231</b>	<b>879.00</b>
ProNautic 2430P	63180	24V	30A	3	Yes	Yes	<b>12039483</b>	<b>689.00</b>

# Battery Chargers



ProMariner

## ProNauticP Battery Chargers



Wherever in the world you cruise, or however long you stay in any port of call, the Power Factor Correction and Conservation Energy Saver Mode features of the ProNauticP will ensure maximum battery life and performance. Auto-ranging (100-250V) AC input operates off standard household power connections anywhere in the world, anytime. Power Factor Correction, with eleven selectable charge profiles and one custom profile charges, conditions and maintains batteries of every type including flooded, sealed AGM, Gel and Lithium. Distributed on Demand Technology™ automatically distributes 100% of available charging power to any combination of batteries in as many as three banks. Conservation Energy Saver Mode in flooded and sealed charge profiles automatically

switches to float voltage after 72 hours of minimal load, reducing energy consumption to protect batteries from overcharging, then automatically resumes normal operation when DC load resumes. Automatically monitors battery bank status and reconditions/desulfates batteries after 21 days of float or standby mode. Analyzes discharge state of the on-board battery banks and incorporates fully automatic temperature compensation. Dual-digital displays of real-time charging voltage, amperage and percentage of power out. Power-on self-start-up diagnostics with pass or fail status, as well as a discreet warning indication to alert users of faulty wiring or adverse battery bank conditions, without the need to decode LED patterns.

**Automatic Functions:** Global AC voltage and frequency compatibility. Distributed-On-Demand™ battery sensing and distribution, Active Battery Balance Control **User Selectable Functions:** Seven charging cycle algorithms, battery type selector **Status Indicators:** LED Status Center and optional remote LCD display **Input Wiring:** Hardwire **Output Wiring:** Hardwire **Safety Features:** Ignition protected, with over-voltage and over-current protection **Remote Available:** Yes **Approvals:** Meets UL, CE, cUL Marine Standards **Warranty:** Five years

Model	Capacity	Volts	Battery Banks	Dimensions	Model	PRMRN#	ShWt	Only
ProNautic 1230P	30A	12V	3	10 1/4"L x 8 1/2"W x 3 1/2"H	12039467	63130	5	349.99
ProNautic 1250P	50A	12V	3	11 1/4"L x 8 1/2"W x 3 1/2"H	12039475	63150	7	449.99
ProNautic 2430P	30A	24V	3	12 1/4"L x 8 1/2"W x 3 1/2"H	12039483	63180	7	689.00

Electrical



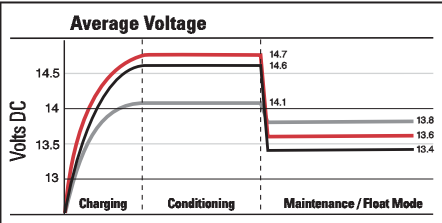
ProMariner

## ProSport Waterproof Marine Chargers

ProSport Generation 2 On-Board Marine Battery Chargers rise to the next level of performance. New features include: three built-in performance charge profiles that can be digitally selected with color-coded programming caps, allowing the ProSport to be simply reprogrammed in the event batteries on board are changed to a different type. Rugged 100% waterproof and shockproof design with advanced electronics in a heavy-duty, compact, lightweight

case. ProSport's Sequential Multi-Stage charging keeps batteries charged, conditioned and maintained with one of three selectable performance charge profile that's friendly to your batteries while extending their life. Maintenance Mode is safe for short- or long-term storage. For group 4D & 8D battery applications, see the ProMariner ProTech i series.

**Automatic Functions:** Multi-stage charging. Distributed-On-Demand™ Charging technology takes 100% of the available charging amps and distributes them to any one battery or combination of all batteries as needed **User Selectable Functions:** 3 Charge Profiles - User selectable performance charge profiles for: Flooded (lead-acid)/Standard AGM, GEL & High Performance (HP) AGM. Conditioning/Maintenance Mode for lead-acid batteries **Status Indicators:** LED Status Center **Temperature Compensation:** Dynamic Thermal Output Control provides appropriate charging amps to your batteries while maintaining recommended charger temperature **Input Wiring:** AC power cord **Output Wiring:** 5' cables with ring terminals **Safety Features:** Reverse polarity, over-temp. & ignition protection **Remote Available:** Yes **Approvals:** Built to UL 1236 Marine Standards **Warranty:** Two years



**Stage 1 - ProSport Charging:** During this mode, the ProSport will use its available charging amps (as controlled by temperature) until battery voltage is raised to 14.6 VDC (Factory setting for standard Flooded (Lead-acid)/ STD AGM batteries).

**Stage 2 - ProSport Conditioning:** The ProSport will hold batteries at 14.6 VDC (Factory setting for Flooded (LeadAcid)/STD AGM batteries) providing a 100% charge to each battery, while conditioning them by desulfating each one. Upon completion, the ProSport will go into its maintenance mode.

**Stage 3 - ProSport Ready / Maintenance Mode:** During this mode, the ProSport will hold batteries at 13.4 VDC. The Red Charging LED and the RED Battery Type LED (Factory set charge profile for standard Flooded (Lead-acid)/ STD AGM batteries) will turn off indicating the charge process is completed, followed by the Green READY LED turning on. ProSport will automatically maintain battery(s) in this mode.

Color	Battery Type	Charge Profile
Red	Flooded (Lead-acid) / STD AGM	14.6 VDC Conditioning 13.4 VDC Maintenance
Black	GEL	14.1 VDC Conditioning 13.8 VDC Maintenance
Blue	High Performance (HP) AGM	14.7 VDC Conditioning 13.6 VDC Maintenance



Remote Battery Bank Status Monitor

ProMariner

## ProSport Accessories

	Model	PRMRN#	Only
Remote Battery Bank Status Monitor	9519455	51060	49.99
Battery Bank Cable Extender 15'	8648917	51070	28.99
Universal AC Plug Holder (Black)	8648925	51202	12.99
Universal AC Plug Holder (White)	8648933	51203	12.99

Guest

## Charge Pro Weather-Resistant Battery Chargers

Guest fixed-mount on-board chargers fit applications ranging from weekend boating to high-stakes tournament fishing. These lightweight, rugged, fully-potted units are weather-resistant, shockproof, vibration-proof, and impervious to rust, corrosion and

caustic gasses. Recovery times are some of the fastest on the market. Three-stage chargers extend the life of your battery by keeping it fresh and ready to go. Can safely charge lead-acid, gel cell or AGM batteries. For 12V or 24V systems.



**User Selectable Functions:** None - fully automatic **Status Indicators:** State of charge LED indicators **Temperature Compensation:** No **Input Wiring:** 6' AC power cord **Output Wiring:** 4' or 6' leads with ring terminals **Waterproof:** Yes **Safety Features:** Shockproof, ignition-protected, reverse polarity protected, vibration protected, DC fusing **Case Size/Material:** ABS Plastic **Mounting Hardware Included/Required:** Requires bolts backed by a flat washer and secured to the mounting surface with a split ring lock washer (not included) **Remote Available:** No **Warranty:** Lifetime for water damage, Two years for manufacturing defects

Capacity	Volts	Dimensions	Model	GUEST#	ShWt	Only
6A	12V	6 3/8" x 3 1/2" x 2 1/4"	1903467	2608A	3.4	79.99
10A(5/5)	12V/24	7 3/4" x 5 1/2" x 2 3/8"	307530	2611A	6.7	99.99

West Marine

## Portable Battery Chargers

These chargers provide precise "permanent mount" charger features in a lightweight, fully portable design. Most of the portable chargers we've tested have been poorly regulated, not automatic, and potentially damaging to quality batteries. We started with an excellent high-frequency power supply design, and added "smarts" so you can alter the charge voltages depending on the chemistry of your batteries and their temperature. This provides nine voltage combinations to ensure the fastest, most complete charge without damaging gel cell or AGM batteries. Lightweight

aluminum and plastic cases allow cable storage in the back. Rugged nickel-plated copper clip leads won't spark when initially attached to a battery to reduce the possibility of an explosion. 6A charger has automatic temperature compensation and is set for flooded batteries. 15A and 30A models feature manual temperature compensation and an LED readout that clearly shows the charge parameters you've chosen, and monitors charge voltage and current while charging. 30A charger includes manually-activated equalization cycle.

**Number of Outputs:** 1 (Battery clips) **Recommended Battery Bank Size/Configuration:** 12V battery systems in the following ranges: 6A=30AH-70AH, 15A=30AH-150AH, 30A=30AH-300AH **Automatic Functions:** Three-stage fully-automatic, fully regulated high-frequency charging **User Selectable Functions:** Fully automatic **Status Indicators:** LED full charge, Temperature, Chemistry, Rev. polarity, fault codes **Input Wiring:** 6' AC power cord **Output Wiring:** DC battery clips **Safety Features:** Spark-resistant, reverse hookup, short circuit and overcharge protection. Not intended for on-board charging due to UL restrictions **Waterproof:** No **Mounting Hardware Included/Required:** None **Approvals:** UL, CUL, FCC Class B **Warranty:** Five years

Capacity	Dimensions	Weight	Model	WMELE#	ShWt	Only
6A	6"L x 5"W x 6 1/2"H	2.1lb.	<b>6885750</b>	CHG-2	4	<b>89.99</b>
15A	8 1/2"L x 5"W x 8"H	3.5lb.	<b>6885768</b>	CHG-3	6	<b>109.99</b>
30A	6"L x 12"W x 10 3/4"H	10.75lb.	<b>6885776</b>	CHG-4	8	<b>129.99</b>

Guest

## Charge Pro 6A Portable Battery Charger

Portable, three-stage electronic charger features built-in thermal and overload protection, reverse polarity protection and LED ready indicators. It's also completely potted, weather-resistant and shockproof. Prewired with a 6 ft. AC cord and 4 ft. DC outputs. Alligator clips can be left connected indefinitely.

**Number of Outputs:** 1 **Capacity:** 6A **Automatic Functions:** 3-stage charging **Status Indicators:** LED **Input Wiring:** 6' AC power cord **Output Wiring:** 4' lead with alligator clips **Safety Features:** Shockproof, ignition protected, reverse polarity protected, vibration protected, DC fusing **Waterproof:** Weather resistant **Dimensions:** 5" x 5" x 2 1/4" **Weight:** 4lbs. **Warranty:** Two years

**Model 1236413** | GUEST#2606A | ShWt 3.8 | **69.99**

West Marine

## 2A Battery Maintainer

Here is a battery charger that will keep your boat, car or RV batteries topped off and ready for your next adventure. It comes standard with a multi-use harness and three connector options; battery clips, 12V DC accessory plug, and battery ring terminals.

Fully automatic charge regimens for flooded, gel cell and AGM batteries. LED status indicators. Reverse hook-up, short circuit and overcharging protection. Weight: 1.3lb. Dimensions: 2 1/2" x 5" x 1 1/2".

**Capacity:** 2A-12V **Number of Outputs:** 1 **Bank Size/Configuration:** To maintain flooded, gel or AGM batteries (5-250Ah) during storage **Automatic Functions:** Switches from full-top charge to float mode monitoring **Selectable Functions:** NA **Status Indicators:** LED full charge, Rev. polarity, charging **Temp Compensation:** None **Input Wiring:** 6' AC power cord **Output Wiring:** 6' lead with multi-use harness **Safety Features:** Spark-resistant, reverse polarity, short circuit and overcharge protection **Waterproof:** No **Mounting Hardware:** Not required **Warranty:** Two years

**Model 6885784** | WMELE#CHG-1 | ShWt 4 | **59.99**

Guest

## Connect Charge Power Inlet

For use only with Guest chargers equipped with the Connect Charge plug. Mounts to the dash from the rear with a threaded locking ring or mounts from the front with three screws through the faceplate. Watertight lid protects AC plug.

**Model 4889903** | MARCO#150CCI | ShWt .3 | **24.99**



Marinco

## Battery Charger Inlet

A grounded AC inlet for use with Guest onboard chargers. It provides quick extension cord connection without opening covers or hatches. Keeps wiring off decks. Waterproof.

**Model 191991** | MARCO#150BBI | ShWt .4 | **24.99**



Electrical

**The West Advisor**

## Portable Battery Chargers Comparison Chart

	MANUF#	Volts	Capacity	Number of Outputs	Temperature Compensation	Waterproof	Model	Only
2A Battery Maintainer	CHG-1	12V	2A	1	None	No	<b>6885784</b>	<b>59.99</b>
Portable Battery Charger	CHG-2	12V	6A	1 (Battery clips)	Automatic	No	<b>6885750</b>	<b>89.99</b>
Charge Pro Portable 6A	2606A	12V	6A	1	No	No	<b>1236413</b>	<b>69.99</b>
Portable Battery Charger	CHG-3	12V	15A	1 (Battery clips)	Manual	No	<b>6885768</b>	<b>109.99</b>
Portable Battery Charger	CHG-4	12V	30A	1 (Battery clips)	Manual	No	<b>6885776</b>	<b>129.99</b>

# DOCKSIDE PRODUCTS



**MARINE RECEPTACLES**  
Corrosion resistant reinforced nylon construction

**WEATHER PROOF COVERS**  
Yellow LEXAN® with lift lid, for use with Marincos receptacles

**MALE PLUGS**  
Superior strain-relief system. Features ribbed nylon construction. Dust seal keeps contaminants out of terminals

**WEATHERPROOF COVERS**  
Features heavy duty vinyl construction, use with male plugs for superior seal

**POWERCORD PLUS™ CORD SETS**  
Marine Grade cable, watertight molded plug and connector, LED power indicator, thumbprint locator

**30A**  
125V  
2 Pole  
3-Wire  
Locking



Model 319954 | MARCO#305CRR | ShWt .3 | **36.99**

Model 379412 | MARCO#7420CR | ShWt .3 | **45.99**

Model 1873934 | MARCO#305CRPN | ShWt .3 | **19.49**

Model 1873942 | MARCO#102N | ShWt .1 | **13.49**

**30 Amp PowerCord Plus Cordsets**  
See below

**50A**  
125V  
2 Pole  
3-Wire  
Locking



Model 410456 | MARCO#6370CR | ShWt .3 | **129.99**

Model 379420 | MARCO#7788CR | ShWt .4 | **52.99**

Model 166371 | MARCO#6361CRN | ShWt .8 | **69.99**

Model 203893 | MARCO#7717N | ShWt .4 | **23.99**

Model 5303755 | MARCO#6153SPP | ShWt 35 | **639.00**

**50A**  
125/250V  
2 Pole  
4-Wire  
Locking



Model 379404 | MARCO#6369CR | ShWt .5 | **124.99**

Model 379420 | MARCO#7788CR | ShWt .4 | **52.99**

Model 194415 | MARCO#6365CRN | ShWt .3 | **97.99**

Model 203893 | MARCO#7717N | ShWt .4 | **23.99**

Model 5303912 | MARCO#6152SPP | ShWt 45 | **599.00**

## 30 Amp PowerCord PLUS Cordsets



### 30A PowerCord PLUS® Cordsets

#### The New Standard for Shore Power Cordsets!

The 125V Marincos PowerCord PLUS cordset, newly packaged exclusively for West Marine, includes a standard threaded ring for hook-up option to ordinary threaded inlets. Marine-grade yellow #10 AWG 3-conductor wire. Also includes combined features you won't find on other power cords including:

- **LED Power Indicator Lights:** When it glows red, you know you have power.
- **Contoured Grip Ends:** Molded to fit your hand.
- **Thumbprint Locator:** When the thumbprint is in 12 o'clock position, the blades line up for easy connection.

Length	Color	Model	MARCO#	ShWt	Only
12'	Yellow	<b>9329863</b>	199116	4.3	<b>59.99</b>
25'	Yellow	<b>9329871</b>	199117	7.9	<b>79.99</b>
50'	Yellow	<b>9386236</b>	199119	15	<b>99.99</b>
50'	White	<b>9329897</b>	199120	15	<b>99.99</b>



### Right Angle Cordset Adapters

When space is tight, convert your existing shore power cordset from a straight connection to a right angle connection. GripLock™ handle design for easy hook-up and correct blade alignment, even in the dark. Includes sealing collar to lock out moisture between adapter and cordset. For 125V only.

Amps	Model	MARCO#	ShWt	Only
30A	<b>9329848</b>	1RPC	1.9	<b>59.99</b>
50A	<b>10066843</b>	1RPC50	3.1	<b>99.99</b>



# SHORE POWER SYSTEMS

# BOATSIDE PRODUCTS

## WEATHERPROOF COVERS

Feature heavy duty vinyl construction, use with female connector for superior seal. 30A models available with Threaded Ring or Easy Lock Ring options

## FEMALE CONNECTORS

Superior strain-relief system. Feature ribbed nylon construction, color coded terminal pockets and screws. Dust seal keeps contaminants out of terminals

## POWER INLETS

Styled to complement any boat, Marincos power inlets are simple to install and feature a protective rear safety enclosure that provides safe, reliable strain relief

Stainless Steel Inlet

Standard Inlet

Contour Inlet



**Model 1873959** | MARCO#103RN | ShWt. 3 | **22.99**



**Model 2041689** | MARCO#103ELN | ShWt. 3 | **23.99**



**Model 147421** | MARCO#303SSEL-B | ShWt 1.2 | **99.99**



**Model 147454** | MARCO#301EL-B | ShWt .8 | **64.99**



**Model 237214** | MARCO#6364CRN | ShWt .7 | **114.99**



**Model 203877** | MARCO#7715CRN | ShWt .4 | **33.99**



**Model 203703** | MARCO#6360CRN | ShWt .7 | **112.99**



**Model 229724** | MARCO#6371EL | ShWt 1.5 | **164.99**



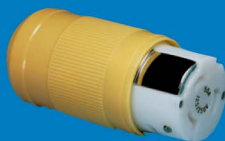
**Model 192015** | MARCO#6351EL | ShWt .9 | **97.99**



**Model 207022** | MARCO#6343EL-B | ShWt 1.1 | **97.99**



**Model 203877** | MARCO#7715CRN | ShWt .4 | **33.99**



**Model 237214** | MARCO#6364CRN | ShWt .7 | **114.99**



**Model 390625** | MARCO#6373EL | ShWt 1.5 | **184.99**



**Model 421893** | MARCO#6353EL-B | ShWt 1.1 | **99.99**



**Model 207048** | MARCO#6344EL-B | ShWt 1.1 | **119.99**

## 50 Amp PowerCord PLUS Cordsets

### 50A, 125V PowerCord PLUS® Cordsets

Vinyl molded watertight plug and connector. Molded contour ends are easy to grip, and include LED power indicator light. Outdoor use vinyl jacketed 6 gauge/3 conductor cable.

**Features:** LED Power indicator light. Contour grip ends. Thumbprint locator  
**Amperage/Voltage Rating:** 50A, 125V **Blade Style:** Locking / Three wire/NEMA SS-1  
**Material:** Vinyl **Warranty:** Five years

Length	Color	Model	MARCO#	ShWt	Only
25'	Yellow	<b>5303813</b>	6153SPP-25	22	<b>519.00</b>
50'	Yellow	<b>5303755</b>	6153SPP	35	<b>639.00</b>



### 50A, 125/250V PowerCord PLUS® Cordsets

Vinyl molded watertight plug and connector. Easy to grip contour ends with LED Power Indicator Light. Outdoor use vinyl jacketed 6 gauge/4 conductor cable.

**Features:** LED power indicator light. Contour grip ends. Thumbprint locator  
**Amperage/Voltage Rating:** 50A, 125/250V **Blade Style:** Locking / Four wire/NEMA SS-2  
**Material:** Vinyl **Warranty:** Five years

Length	Color	Model	MARCO#	ShWt	Only
25'	Yellow	<b>5303995</b>	6152SPP-25	24	<b>459.00</b>
50'	Yellow	<b>5303912</b>	6152SPP	45	<b>599.00</b>
50'	White	<b>5303946</b>	6152SPPW	46	<b>599.00</b>



### 30A and 50A Marine-Grade Shore Power Cable by the Foot

High-quality tinned copper shore power cord with a waterproof jacket and properly color coded conductors. Add Marincos plugs and connectors and vinyl covers to create a custom shore power cord. Per foot.



Wire for	Volts	Gauge	Conductors	Model	ANCOR#	ShWt	Only/ft.
Wire for 30A	125V	10 gauge	3 conductor	<b>124677</b>	153725	.2	<b>8.99</b>
Wire for 50A	125V	6 gauge	3 conductor	<b>427104</b>	153925	1.5	<b>14.99</b>
Wire for 50A	125/250	6 gauge	4 conductor	<b>11039807</b>	100319	1.7	<b>16.99</b>

# Shore Power

## Identifying Shore Power Connections

This can be tricky, especially when you're standing in the pouring rain with your cell phone, trying to place an order for the adapter you need in order to get plugged in. Check the charts at right carefully to ensure that you choose the correct cordsets and adapters for your boat.

## Troubleshooting Shore Power

The majority of dock power troubles can be linked to two simple problems: **overheating and saltwater immersion.**

If you suspect a bad connection, turn off the dock power at the outlet and unplug the dock cord couplings at the outlet and boat. Inspect the male and female plug ends for signs of melting or corrosion. Inspect the outlet and the boat's inlet for heat and corrosion damage.

Replace the connector immediately if you find signs of overheating. Be sure to inspect wire ends for signs of corrosion or overheating when replacing connectors.

Marinco suggests that many dock cord connectors are replaced unnecessarily because boat inlet and dock outlet connectors are at fault. Be sure to inspect all components with equal care.

If your dock cord connector gets dunked in saltwater, disconnect quickly and rinse well in freshwater. Dry thoroughly before use.

## Plugging in Power Tools With Shore Power Adapters

Shore power adapters, which allow you to plug in a variety of cords to a marine power center, must be used carefully or they could inadvertently create a shock or electrocution hazard.

When working around a boat, it's tempting to use a shore power dockside outlet and an adapter to allow the use of a drill motor, sander, or other power tool. There are several problems with this solution:

- The only circuit protection is the 20 or 30 amp breaker on the shore power center, which will undoubtedly exceed the power rating of the cord that is plugged into it.
- There's no operator protection from a GFCI, since that would normally be found on-board the boat, and there's no boat involved. Therefore, the operator of the power tool, while using it in a wet environment, is in danger of electrocution. In fact, shore power centers are only intended to supply power to a boat, using an approved shore power cord, and not as general purpose AC outlets.

### BOAT SIDE: Identify your boat's electrical system



Volts and amps should be printed on the **OUTSIDE COVER** of your existing boat inlet(s) OR



Volts and amps should be printed **INSIDE** the boat inlet(s) next to the blades, OR



50A 125V

Check the blade orientation of these three types of inlets and compare to your boat inlet(s).



50A 125/250V

Notice the additional grounding blade on the 50A/125/250V inlets.

Pay special attention to the 50A 125V and 50A 125/250V blade difference.



The blades look similar, but they are different. The plugs and receptacles for these systems are **NOT** interchangeable!!

### DOCK SIDE: Identify the dockside power source

Find out what type of shore power connection is available at your marina destination.

Newer marinas will most likely have 30A 125V and/or 50A 125/250V locking shore power receptacles.

MARINCO COLOR CODING SYSTEM



### IMPORTANT 50 AMP INFO:

If you are connecting to 50A dockside power service, it is **CRITICAL** to know the dockside receptacle's voltage rating (50A 125V or 50A 125/250V). An adapter designed for 50A 125V will not plug into a dockside receptacle rated for 50A 125/250V service, and vice versa.



So what's a boat maintenance worker supposed to do to keep safe? We think there are two possible answers:

- Plug the power cords into an outlet on the boat which is protected by a 15A breaker and a GFCI somewhere in the circuit.
- Consider buying a portable GFCI which can be installed inline on the power tool's extension cord. See the Dockside 30A to 15A Adapter with Ground Fault Protection, Model 10066835.

## Shore Power Adapters

**5 YEAR WARRANTY**



Marinco

### Shore Power One-Piece Adapters

Marinco straight adapters allow you to connect from one dockside receptacle (or other power source receptacle) to one boatside inlet or equipment of dissimilar power configuration. They are integral fittings with no wire between the end fittings. They are high-quality, but do not have sealing boots and are not recommended for use in wet applications. All components are covered by Marinco's Five-year warranty.

Male Plug	Female Connector	Model	MARCO	ShWt	Only
30A	15A*	147470	81A	.4	57.99
15*	30A	147496	83A	.4	57.99
20A	30A	147504	84A	.1	79.99

\*Straight blade, not locking connections



### GalvanAlert™ Shore Power Corrosion Detector with Reverse Polarity Indicator

When your boat is plugged into shore power, stray current corrosion—caused by badly insulated shore power supplies and defective wiring on other people's boats—can rapidly destroy your anodes and do costly damage to your boat's underwater metals. Enter GalvanAlert—the world's only shore power corrosion detector with reverse polarity indicator. GalvanAlert easily attaches to your 30A shore power inlet and cordset to constantly monitor if there is unsafe corrosion activity or a reverse polarity situation (which can cause a shock or fire hazard). It will protect every boat plugged into 30A power, even if you have a galvanic isolator.

Model 10066827 | MARCO#G30 | ShWt 2.1 | 149.99



### PowerCord Plus™ Adapters

PLUS version adapter with LED power indicator lights, contoured grip end and thumbprint locator on connector end.

Male Plug	Female Connector	Model	MARCO#	ShWt	Only
15A	30A	1874122	104SPP	1.4	72.99
30A	15A	1874155	105SPP	.8	87.99

### Marinco Color Coding System

products for 15AMP	products for 20AMP	products for 50AMP 125V/250V	products for 50AMP 125V	products for 30AMP
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## Dockside 30A To 15A Adapter with Ground Fault Protection

If you use an AC drill, buffer, grinder or other power tool around your dock, this adapter will help protect you. Provides a safer hook-up to 30A dockside power for up to three attached tools, and provides protection against potentially lethal electric shock. GFCI (Ground Fault Circuit Interruptor) trips at 4-6mA. Total load of attached tools must not exceed 15A. Rated corrosion-resistant and rainproof for outdoor use. Five-year warranty.  
**Model 10066835** | MARCO#199128 | ShWt 1.2 | **99.99**



## Reverse Y Adapter

A reverse Y allows you to draw 125V/250V AC current from two 30A outlets. To protect against shock hazard and reverse polarity, a special circuit does not allow current to flow until both plugs are connected properly. This keeps an unplugged plug from being "hot" due to the other plug being energized.



**Application:** Draw AC current from two outlets **Blade Style:** Two 30A 125V male locking plugs; 50A 125/250V female locking connector **Material:** Nylon, tinned stranded copper wire, corrosion-resistant metal **Amperage/Voltage Rating:** Dockside: Two 30A, 125V, Shipside: 50A, 125/250V **Warranty:** Five years

**Model 10072957** | MARCO#RY504-2-30 | ShWt 6.4 | **369.99**

## Pigtail Adapter Guide

Attach this End to Boat Inlet (s) or Shore Power Cordset	Plug this End into Dockside Power Receptacle or Cordset	Attach this End to Boat Inlet (s) or Shore Power Cordset	Plug this End into Dockside Power Receptacle or Cordset
<b>194423</b> 30A 125V Locking			15 125V Straight Blade
<b>203901</b> 15 125V Straight			30A 125V Locking
<b>264598</b> 30A 125V Locking			20 125V Locking
<b>264614</b> 30A 125V Locking			50 125V Locking
<b>350223</b> 50A 125V Locking			30A 125V Locking
<b>410308</b> 50A 125/250V Locking			30A 125V Locking
<b>410332</b> 30A 125V Locking			50A 125/250V Locking
<b>410340</b> 50A 125V Locking			50A 125/250V Locking

## Pigtail Adapters

Water-resistant adapters are fully molded, include sealing covers, and look like very short shore power cordsets. Recommended for use in wet locations. Pigtail adapters allow you to connect from

one dockside receptacle (or other power source receptacle) to one boatside inlet or equipment of dissimilar power configuration. All components are covered by Marincos five-year warranty.

Male Plug	Female Connector	Model	MARCO#	ShWt	Only
15A*	30A	194423	104A	1.4	67.99
30A	15A*	203901	105A	1	77.99
20A	30A	264598	106A	2.1	122.99
50A/125V	30A	264614	110A	3	167.99
30A/125V	50A/125V	350223	111A	2.7	189.99
30A	50A/250V	410308	117A	2.4	209.99
50A/125/250V	30A	410332	121A	2.8	167.99
50A/125/250V	50A/125V	410340	123A	3.5	229.99

\*Straight blade, not locking, connections

# Shore Power Adapters

## Y Adapter Guide

Electrical

Attach this End to Boat Inlet (s) or Shore Power Cordset		Plug this End into Dockside Power Receptacle or Cordset	
<b>410365</b> 2-30A 125V Locking			
<b>410373</b> 2-30A 125V Locking			
<b>308643</b> 2-50A 125V Locking			
<b>308643</b> 2-30A 125V Locking			
<b>233762</b> 2-50A 125/250V X Locking			

Marinco

### Y Adapters

Y-adapters let you split one shore power outlet between two power cords. (You're still limited to the rated amperage of the outlet.) All Y adapters are locking and equipped with covers and sealing collars. Waterproof for use in wet locations.

1 Male Plug	2 Female Connectors	Model	MARCO#	ShWt	Only
30A	30A	<b>308643</b>	157AY	3	<b>209.99</b>
50A, 125V	30A, 125V	<b>410365</b>	152AY	5.8	<b>229.99</b>
50A, 125/250V	30A, 125V	<b>410373</b>	153AY	6.4	<b>234.99</b>
50A, 125/250V	50A, 125V	<b>231618</b>	154AY	2	<b>399.99</b>
50A, 125/250V	50A, 125V/250V	<b>233762</b>	165AY	8.4	<b>529.00</b>



SmartPlug Systems

### 30A Dual Configuration Cordsets

**new**

Pre-assembled Dual Configuration Cordsets feature a SmartPlug 30A boatside connector and a twist-type dockside inlet. Allows you to enjoy all the safety and security of the SmartPlug system without the hassle of modifying your existing cordsets. Forms a weatherproof connection to boats equipped with the SmartPlug Inlet, Model 11697042. Innovative, three-blade, design features 20% greater surface area and is much easier to orient, especially in the dark, instantly forming a firm connection that can be both felt and heard, with no twisting required to secure. Tinned copper wire throughout the full length of the cordset provides superior conductivity and resistance to corrosion. Accessory cover, Model 12283909 protects SmartPlug boatside connectors from moisture when not in use. Includes lanyard to tether the cover to the cordset.

Length	Model	SPLUG#	ShWt	Only
<b>Dual Configuration Cordsets</b>				
25'	<b>12283891</b>	C30253	8	<b>125.00</b>
50'	<b>12283883</b>	C30503	16	<b>150.00</b>
<b>Weatherproof Cover for Dual Configuration Cordsets</b>				
	<b>12283909</b>	A1001	1	<b>19.99</b>



SmartPlug Systems

### SmartPlug Shore Power Inlet and Connector Components

**new**

In the marine environment where motion and moisture are a constant, loose connections or corrosion can easily lead to overheating and shorting of shore power connectors. The SmartPlug's patented sleeve, multi-point locking system and straight contact blade design creates a solid, sealed connection with a 20% greater surface area than traditional twist-style connectors. Much easier to orient, especially in the dark, the SmartPlug's three blade inlet can only be plugged in one way to form a firm connection that can be both felt and heard, with no twisting required to secure boatside connector. Triple weatherproof seals at the inlet, connector and cord guard against water intrusion and corrosion to ensure a safe and dry connection. Boatside inlet (Model 11697042) with stainless steel drop-down cover installs into a standard 4-hole mount and includes an auto-resetting trip thermostat that cuts power at the first sign of overheating. Connector (Model 11697059) features dual side-locking levers to resist movement or tension in the cord and easily retrofits onto your existing cordset using only basic tools. Complete kit (Model 11697034) includes both the inlet and connector, gives you everything you need to adapt your boat and existing power cord for docking at marinas with twist-style connections.

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**Approvals:** Compliant with American Boat and Yacht Council's (ABYC) E-11 standards; USCG Compliant **Amps:** 30A **Volts:** 125V **Warranty:** Seven years

	Model	SPLUG#	ShWt	Only
Inlet	<b>11697042</b>	BM30S	1.2	<b>139.99</b>
Connector	<b>11697059</b>	BF30	.6	<b>69.99</b>
Inlet and Connector Kit	<b>11697034</b>	B30ASSY	2.1	<b>199.99</b>

Marinco

## Coaxial Cord Set for HDTV and Net

High definition coaxial cable features screw-on, F-style connections to ensure the best picture quality on your HDTV. 50' length.

**Model 12043550** | MARCO#TVHD | ShWt 1.8 | **87.99**



Marinco

## Stainless-Steel Cable TV Inlet

316 Stainless steel with locking waterproof cap. Soft Touch cap design. Watertight rear boot.

**Model 8653982** | MARCO#TV6592 | ShWt 1.9 | **132.99**



Marinco

## Marina/RV Phone and TV Outlet

Combined three-prong phone (female) and TV-coax connector.

**Model 209124** | MARCO#PH6597TV | ShWt .3 | **45.99**



Marinco

## Stainless Steel Telephone/Cable TV Boat Inlet

Watertight hull inlet contains both telephone and cable TV connections. Similar to Marinco PH6574TV but constructed from 316 stainless steel.

**Model 152710** | MARCO#PH6592TV-SS | ShWt 1.3 | **85.88**



Marinco

## Contoured Cable TV Inlet

Glass filled polyester. Watertight cap. Stainless steel trim on cap. Soft Touch cap design.

**Model 8653974** | MARCO#TV6444 | ShWt 1.2 | **99.99**

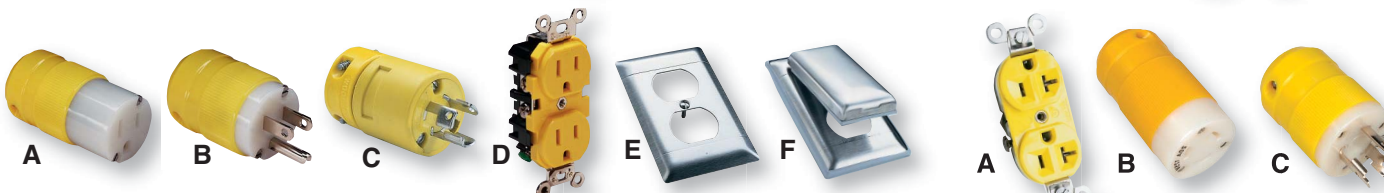


Marinco

## Phone Junction Box

Black nonmetallic FS box.

**Model 152744** | MARCO#PH6619 | ShWt .8 | **42.99**



Marinco

## 15 Amp, 125 Volt Straight Blade Components

High-grade, marine-quality and corrosion-resistant. 2-pole, 3-conductor, grounding devices. Five year warranty.

### A. Female Connector

Yellow nylon.

**Model 147389** | MARCO#5269CR | ShWt .2 | **34.99**

### B. Male Plug

Yellow nylon.

**Model 147371** | MARCO#5266CR | ShWt .1 | **17.99**

### C. Locking Male Plug

2-pole, 3-wire, grounding. Curved blade. Yellow nylon. Strain relief

**Model 206128** | MARCO#4721CR | ShWt .2 | **24.99**

### D. Receptacle, Dual Outlets

Yellow nylon.

**Model 209247** | MARCO#5262CRR | ShWt .3 | **36.99**

### E. Stainless Dual Outlet Plate

**Model 356444** | MARCO#93101 | ShWt .1 | **9.79**

### F. Weatherproof Stainless Steel Duplex Outlet Cover

**Model 356436** | MARCO#7879CR | ShWt .6 | **59.99**

Marinco

## 20 Amp, 125 Volt Components

2-pole, 3-wire components. Yellow nylon. Five-year warranty.

### A. Receptacle

Accepts straight-blade 20A male plugs.

**Model 110199** | MARCO#5739CR | ShWt .2 | **43.99**

### C. 20A Locking Plug

**Model 2041671** | MARCO#205CRPN | ShWt .1 | **18.99**

### B. 20A Locking Connector

**Model 2041663** | MARCO#205CRCN | ShWt .4 | **34.99**

Electrical

## The West Advisor®

### What's a GFCI?

**What's a GFCI?** It stands for Ground Fault Circuit Interrupter (also commonly referred to as a GFI), and it protects people from electrocution in an interesting way. In normal circuits where there is no current leakage, there is exactly as much electricity passing through the black (hot) AC conductor as the neutral (white) conductor (along the theory that what goes in, must come out). That means that the wires are moving all the electricity, and your body is not getting shocked from current leakage due to a short circuit, which could be painful or fatal.

If a GFCI senses that even a tiny bit of current imbalance exists (around 5 milliamps, or 0.005A) between the hot and neutral wires, it breaks the circuit to protect someone who might get electrocuted. This is similar to what a circuit breaker does, but a GFCI works at extremely tiny amounts of current leakage unlike a circuit breaker, which might require 20 (fatal) amps.

For protection when using AC power tools on the dock, see Marinco's Dockside 30A to 15A Adapter with Ground Fault Protection, Model 10066835.



GFCI Outlet



Outlet Cover



Dual Outlet Cover



Blank Outlet Cover

Marinco

## Ground Fault (GFCI) Interrupter Duplex Outlet

Measures imbalances in AC circuits and disrupts service when electrocution danger exists. Sensitive to current leaks of only 4-6mA. 15A capacity. Fits standard 15A, three-blade plugs. Installs in standard outlet boxes. Install first in a series of outlets to protect downstream outlets. Waterproof outlet cover is stainless steel.

**Application:** GFCI outlet **Amperage/Voltage Rating:** 15A 125V **Blade Style:** Straight blade with ground **Material:** Outlet: Plastic Cover: Stainless Steel **Warranty:** Five Years

	Model	MARCO#	ShWt	Only
Outlet	542241	1591-FI	.4	25.99
Outlet Cover	192023	7879CR-FI	.2	48.99

Sea Teak

## Teak Dual Outlet Cover

Solid teak receptacle cover fits all standard dual receptacle outlets. Two per pack. 5 1/16"H x 3 5/8"W.

**Model 113118** | SEATK#60170 | ShWt .5 | **12.99**

Sea Teak

## Teak Blank Outlet Cover

Solid teak blank outlet cover for use in installing telephone and TV connections. Two per pack. 5 1/16"H x 3 5/8"W.

**Model 272633** | SEATK#60174 | ShWt .1 | **11.99**

# Dockside Power Centers / Shore Power Accessories



SPC-21WM-2T

We have many more Dockside Electrical Power Centers available through our Special Order Department!

Dozens of variations to fit all your power needs!

See more Shore Power Solutions online at [westmarine.com](http://westmarine.com)



SPC-36WM-2T

International Dock Products

## Dockside Electrical Power

These dockside power center units are constructed of extruded aluminum and all wiring is complete for the receptacles, breakers, light and photocell. Each marine grade receptacle is protected by a thermal magnetic circuit breaker. Installation is easy with a front

access panel and a distribution block that accepts direct electrical feed (maximum wire size of 2/0). All high- and low-voltage wiring and plumbing are completely isolated. Fluorescent light on three sides through frosted white lenses.

### SPC-21WM-2T

Includes one 30A/125V receptacle with yellow plastic cover, one 20A/125V GFCI duplex Marine Grade receptacle, TV and phone combination receptacle, light and photocell. Brackets for mounting either on a round piling or a vertical flat surface are included. 21"H x 6"W x 6"D. Not for deck mounting.

**Model 5529581** | DOCKP#E55031 | ShWt 26 | **719.00**

### SPC-21WM-3T

Includes one 30A/125V receptacle, one 50A 125/250V receptacle both with yellow plastic covers, one 20A/125V GFCI duplex Marine Grade receptacle, TV and phone combination receptacle, light and photocell. Brackets for mounting on either a round piling or a flat surface are included. 21"H x 6"W x 6"D. Not for deck mounting.

**Model 5530886** | DOCKP#SPC-21WM-3T | ShWt 26 | **859.00**

### SPC-36WM-2T

Includes one 30A/125V receptacle, one 50A 125/250V receptacle with yellow plastic covers, TV and phone combination receptacle, light and photo cell, one hose bib and one cable/hose holder. Mounts directly to the dock. Custom pedestals available. 36"H x 6"W x 6"D.

**Model 5530837** | DOCKP#W2150 | ShWt 26 | **929.00**

Electrical

## Shore Power Accessories



Ancor

### Cable Wraptor

**new**

Bundle, carry and stow cables with these hinged, releasable, ratcheting-action organizers. Oversize locking teeth with easy release trigger. Wide "T" handle to easily carry bundled cables to the dock or below deck. Large hang hole keeps cables neat and organized. Durable, UV-resistant plastic with spring-loaded stainless steel hinge resists corrosion. Securely bundles cables up to 3" in diameter.

**Model 11459658** | ANCOR#CW-T3M25 | ShWt .1 | **2.99**



Marinco

### ZipSleeve

Protects and organizes shore power, phone and cable TV cords and keeps them off the deck. Made

of 600 denier PVC, UV-treated nylon with a marine-grade plastic zipper, the durable ZipSleeve keeps cords handy, yet out of the way. Velcro straps hold cords firmly in place and can be used to hang the sleeve from boat railings and cleats. Holds up to two 30A power cords plus a phone and cable TV cord or one 50A cord and a phone and TV cord. 24"L x 4 3/4"W.

**Model 5463443** | MARCO#ZIP-01 | ShWt 1.3 | **54.99**

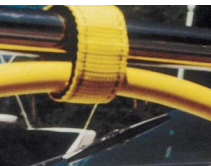


Marinco

### Shore Power Cord Rail Clip

Keep your 30A shore power cords organized and out of the water with these clips that quickly and easily attach to your boat's tube or wire rails. Or use to hang fishing rods, buckets, or other accessories. Made of virtually unbreakable, UV-stable material. Sold as a set of six, for a 25' cordset.

**Model 9329830** | MARCO#CLIP-01 | ShWt .1 | **11.99**



Seafit

### Shore Power Cord Holders

Simple 1" webbing loops with hook-and-loop closures help you tame your shore power cord. Useful for docklines and running rigging, too. For items up to 3" dia.

**Model 287963** | WMELE#6058 | ShWt .1 | **.99**



Windline

### Shore Power Cord Support

Keep heavy shore power cords and water hoses away from the water and off the gunwale. Thick-walled stainless steel cable guide with curved lower portion fits into most rod holders.

2 1/2" eye keeps cords high enough to clear toerails and railings and stands straight up as the pole is bent slightly. Electropolished. 28"H. Lifetime guarantee.

**Model 252983** | WINDL#CH-1 | ShWt 1 | **59.99**



Power Cord Wrap - 2" x 16



Power Cord Wrap (pkg. of 6) - 1" x 6"



Cord Wrap w/Cinch & Eyelet - 2" x 24"



Cord Wrap w/Swivel Snap - 1" x 14"

West Marine

### Shore Power Cord Wraps

Marine grade nylon webbing loops with hook-and-loop closures. Package of six wraps is great for securing Power Cord to the dock. Cord wraps with Swivel Snaps or Cinch and Eyelets work great for attaching cord to lifelines. Useful for docklines or running rigging, too.

	Length x Width	Model	WMELE#	ShWt	Only
Power Cord Wrap	1" x 9"	<b>9837105</b>	VS-021C(1X9)	.1	<b>1.99</b>
Power Cord Wrap	2" x 16"	<b>9837113</b>	VS-021C(2X16)	.1	<b>2.99</b>
Power Cord Wraps (pkg. of 6)	1" x 6"	<b>9837154</b>	VS-023	.1	<b>12.49</b>
Cord Wrap with Cinch & Eyelet	1" x 14"	<b>9837139</b>	VS-023C(1X14)	.1	<b>2.19</b>
Cord Wrap with Cinch & Eyelet	1" x 9"	<b>9837121</b>	VS-023C(1X9)	.1	<b>1.99</b>
Cord Wrap with Cinch & Eyelet	2" x 24"	<b>9837162</b>	VS-023C(2X24)	.1	<b>2.99</b>
Cord Wrap with Swivel Snap	1" x 14"	<b>9837147</b>	VS-024B(1x14)	.1	<b>1.99</b>

West Marine

### Shore Power Cord Bag

The organized way to store and transport your shorepower cord and adapters. Internal pockets hold up to six adapters. A trap door allows the bag to hold the cord while it's connected. Tough nylon-reinforced vinyl fabric is easy to keep clean. Also great as a general-use stuff bag.

**Model 387829** | WMELE#BAG | ShWt 1.2 | **19.99**



Star brite

### Power Cable Cleaner/Protector

Seals and protects cables to prevent soiling and degradation. Contains no harsh chemicals. UV sunscreen helps prevent cable drying and cracking. Cleans and restores old cords to like-new condition. 8oz.

**Model 186140** | STARB#090808 | ShWt 2 | **13.99**

◇ Symbol Hazard Shipping



† Symbol Oversized Shipping



‡ Symbol Truck Freight



Extra shipping costs may apply on items bearing any of these identifying marks



4 Circuit



6 Circuit



4 Circuit + 2 12V Power Outlets

West Marine



**DC Electrical Panels**

Integrated bus bars and simple two-wire connection eliminates wiring harness clutter behind panel. Polycarbonate/ABS panels cannot corrode, are flame retardant and feature LED illuminated ON indication. Carling™ 15A circuit breakers are reset by simply switching the breaker off, then on again. Installation requires placement of an in-line fuse with a maximum rating of 60A between the power source and the panel's positive buss. To further reduce wiring clutter consider the MAXI™ Fuse Block (Model 594343) which accommodates tab-style automotive blade fuses from 30A to 80A in its easily-mounted, insulated case. Designed for mounting in dry locations. Panels include mounting hardware and 15 pre-printed, common circuit name labels. Over 500 additional square format labels are available by Special Order.

	Dimensions	Cutout Size	Model	WMELE#	ShWt	Only
4 Circuit	5 3/4" L x 4 1/4" W	4 1/2" L x 2" W	<b>11861531</b>	8930	.6	<b>39.99</b>
6 Circuit	6 1/2" L x 4 1/2" W	5 1/4" L x 2" W	<b>11861549</b>	8932	.7	<b>49.99</b>
4 Circuit + 2 12V Power Outlets	6 1/2" L x 4 1/2" W	5 1/4" L x 3 1/4" W	<b>11861556</b>	8931	.8	<b>59.99</b>

Electrical



4 Position Gray



6 Position Gray



6 Position Gray



4 Position White

Blue Sea Systems

**WeatherDeck™ Waterproof Breaker Panels**

Designed for flybridge and open cockpit applications, these 12/24V waterproof breaker panels can be mounted in four different orientations. They include ON-OFF toggle switches and 15A thermal reset circuit breakers with waterproof boots. Constructed from corrosion-resistant materials, they feature an independent backlighting circuit for remote switching and dimming that is compatible with Blue Seas electronic dimmer switches. LED backlightings draw 10mA per circuit. Each includes set of 30 labels.

**Functions:** Distribution/Circuit Protection **Switch Type:** Toggle **Current Interrupt Mechanism:** Thermal breaker with waterproof boot **Terminal Material and Size:** Female blade **Waterproof:** Waterproof (IP67) **Meters:** No **Panel Material:** UV stabilized plastic **Labels included:** Yes **Lighting:** Yes **Mounting Hardware:** Screws #6PH included **Approvals:** USCG, ABYC **Warranty:** Five years

Positions	Dimensions	Model	BLUES#	ShWt	Only
4	4.3" x 4.5"	<b>7808744</b>	4374	.3	<b>99.99</b>
6	6" x 4.5"	<b>7808769</b>	4376	1.2	<b>132.99</b>

Blue Sea Systems

**WeatherDeck™ Waterproof Fuse Panels**

Each of these 12V waterproof panels can be oriented in any of four different ways to expand your mounting location options. The square circuit labels are designed to be placed above or below in the horizontal configuration, and to the right or left in the vertical. Rugged UV-stabilized waterproof boots. All panels use ATO/ATC blade fuses. The bi-colored LEDs illuminate circuit labels to quickly reveal "OFF", "ON", or "BLOWN" circuits. Includes a set of common DC labels and a replacement fuse kit—a West Marine exclusive. Panels come loaded with 15A ATC fuses. Each includes set of 30 labels.

**Functions:** Distribution/Circuit Protection **Switch Type:** Toggle **Current Interrupt Mechanism:** ATO/ATC blade Fuses **Terminal Material and Size:** Female blade **Waterproof:** Waterproof (IP67) **Meters:** No **Panel Material:** UV stabilized plastic **Labels included:** Yes **Lighting:** Yes **Mounting Hardware:** Screws #6PH included **Approvals:** USCG, ABYC **Warranty:** Five years

Positions	Dimensions	Gray	BLUES#	White	BLUES#	ShWt	Only
4	3 7/8" x 4 5/16"	<b>6841092</b>	4334	<b>6841126</b>	4344	.9	<b>89.99</b>
6	3 7/8" x 6"	<b>6841100</b>	4336	<b>6841134</b>	4346	1.1	<b>124.99</b>



3-Position Fuse Panel Vertical

6-Position Fuse Panel Vertical

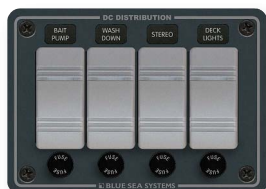


3-Position Breaker Panel Vertical

4-Position Breaker Panel Horizontal



8-Position Fuse Panel Horizontal



4-Position Fuse Panel Horizontal



6-Position Breaker Panel Vertical



8-Position Breaker Panel Horizontal

Electrical

### Contura Switch Waterproof Panel

**Voltage:** 12/24V DC **Amperage Rating:** 20A@12V DC; 15A@24V DC **Fuse/Switch Type:** AGC and MDL 1 1/4" x 1/4" glass fuses; Contura switches **Waterproof:** Rated IP67—protected against immersion up to 1 meter for 30 minutes **Lighting:** Embedded LED "ON" lights **Labels:** Set of 60 common labels included **Terminal Material and Size:** Female blade **Approvals:** USCG, ABYC **Warranty:** Five years

	Panel Dimensions	Model	BLUES#	ShWt	Only
3-Position Vertical	3 3/4"H x 5 1/4"W	335508	8054	.7	97.99
6-Position Vertical	7 1/2"H x 5 1/4"W	335482	8053	1.2	159.99
4-Position Horizontal	3 3/4"H x 5 1/4"W	1931625	8262	.2	119.99
8-Position Horizontal	3 3/4"H x 9 3/8"W	1931294	8261	1.6	167.99

### Water-Resistant DC Circuit Breaker Panels

**Voltage:** 12/24V DC **Amperage Rating:** 20A@12V DC; 15A@24V DC **Breaker/Switch Type:** Push button breakers with waterproof boots, Contura switches **Lighting:** Embedded "On" LED in switch **Draw:** LED 18mA each **Panel Material:** 1/10" 5052 alloy **Waterproof:** Rated IP66—protected against powerful water jets **Labels:** Set of 60 common labels included **Warranty:** Five years

	Panel Dimensions	Model	BLUES#	ShWt	Only
3-Position Vertical	3 3/4"H x 4 1/2"W	5426069	8374	.5	109.99
4-Position Horizontal	4 1/4"H x 5 1/4"W	5426044	8372	.1	129.99
6-Position Vertical	7 1/2"H x 4 1/2"W	5426051	8373	1.9	179.99
8-Position Horizontal	4 1/4"H x 9 3/8"W	5426036	8371	1.5	229.99



### Battery Switch/DC Circuit Panel

An ideal companion for an Automatic Charging Relay (ACR). Separate starting and house circuits protect electronics from startup surges. 100A C-series ignition protected circuit breaker. 300A continuous/500A intermittent ON/OFF primary and emergency cross-connect circuits allow engine ignition from both starting and house banks. Max. 32V DC.

**Functions:** Main breaker, off/on battery switch, emergency cross-connect off/on switch **Switch Type:** Rotary battery switches, toggle breaker **Current Interrupt Mechanism:** 100A Type C circuit breaker **Number of AC Circuits:** None **Number of DC Circuits:** Two **Terminal:** 3/8" **Waterproof:** No **Panel Material:** Urethane coated aluminum **Labels Included:** Yes **Lighting:** None **Panel Dimensions:** 6 1/2" x 5 1/4" **Mounting Hardware:** Mounting Screws included **Approvals:** ABYC **Warranty:** Five years

Model 163233 | BLUES#8080 | ShWt 2 | **219.99**

Hazard Shipping	Oversized Shipping	Truck Freight
Extra shipping costs may apply on items bearing any of these identifying marks		



## 360 Panel System

AC and DC panels feature a modular design with open architecture, allowing for future modification and updates. Flat rocker actuators have a modern appearance and offer protection against accidental switching. Features square-format labeling that's easy to change from the front of the panel, LED ON indicators for all circuit positions, and headers and footers to conceal mounting screws. Design your own 360 Panel at [wm.panelwizard.blueseasystems.com](http://wm.panelwizard.blueseasystems.com). Custom 360 Panels ship in days, not weeks.

**Switch Type:** Rocker **Panel Material:** Heavy 1/8" aluminum 5052 alloy and UV stabilized polycarbonate/ASA blend bezels **Lighting:** LEDs on each circuit illuminate to indicate ON **Labels:** Easy to change backlit labels included **Approvals:** Supports ABYC & NMMA standards **Terminal Material & Size:** Varies by application **Warranty:** Five years

	Circuits	Height	Width	Model	BLUES#	ShWt	Only
<b>12V DC Panels</b>							
DC 4-Position	4/15A	4 3/4"	4 7/8"	<b>9369083</b>	1216	1.3	<b>192.99</b>
DC 8-Position	8/15A	7 3/4"	4 7/8"	<b>9369075</b>	1200	1.6	<b>329.99</b>
DC 16-Position	16/15A	7 3/4"	9 1/4"	<b>9369091</b>	1222	6.4	<b>629.00</b>
<b>120V AC Panels</b>							
AC 4-Position	4/15A	4 3/4"	4 7/8"	<b>9369125</b>	1210	1.3	<b>199.99</b>
AC 2 Sources	2 x 30A	4 3/4"	4 7/8"	<b>9369133</b>	1208	1.3	<b>214.99</b>
AC Main + 2 Positions	2/15A single, 1/30A double	4 3/4"	4 7/8"	<b>9369117</b>	1214	.3	<b>214.99</b>
AC 8-Position	8/15A	4 3/4"	4 7/8"	<b>9369109</b>	1228	3.2	<b>359.99</b>
30A RCBO/ELCI Double Pole	2 x 30A RCBO/ELCI	4 3/4"	4 7/8"	<b>11067667</b>	1502	1.5	<b>249.99</b>
15A GFCI Single Pole	1/15A GFCI	4 3/4"	4 7/8"	<b>11067659</b>	1500	1.3	<b>239.99</b>
AC Main + 6 Positions	6/15A single, 1/30A double	7 3/4"	4 7/8"	<b>11067642</b>	1202	2.7	<b>349.99</b>
<b>12/24V DC CLB Pushbutton Panels</b>							
DC 8-Position	8/15A	4 3/4"	4 7/8"	<b>9369141</b>	1450	1.3	<b>99.99</b>
DC 8-Position	8/10A	0 3/4"	4 7/8"	<b>9369158</b>	1457	3.2	<b>142.99</b>
4-Position CLB + Voltmeter	4/10A	7 3/4"	4 7/8"	<b>9369166</b>	1459	3.2	<b>149.99</b>
Tank Level gauge	1/180mA	4 3/4"	4 7/8"	<b>9369174</b>	1513	1.3	<b>74.99</b>
VSM 422 Vessel Systems Monitor	Blank fits VSM	4 3/4"	4 7/8"	<b>11037330</b>	1519	.5	<b>52.99</b>



DC 8-Position Vertical



DC 16-Position Square



DC 4-position CLB Vertical with Voltmeter



120V AC + 2 Sources



120V AC 4-Position Square



120V AC Main + 2-Positions



DC 4-Position Square



Tank Level Gauge

## AC Electrical Distribution Panels

Blue Sea Systems Panels reflect the quality and attention to detail that premier yacht designers and builders specify for the finest custom and production yachts, as well as commercial vessels worldwide. These panels are cut from heavy 1/8" 5052 aluminum alloy and undercoated with a MIL-C-5541C spec. immersion coating for a lifetime of corrosion resistance. A two-part polyurethane slate finish ensures that each panel will add a handsome, professional touch to your boat's electrical system. Blue Sea Systems panels are visually similar to many factory-installed panels, so they'll fit in attractively with existing controls. Panel heights and widths comply with industry standards, so mounting is easy. Cruisers will appreciate the easy-to-use, circuit breakers with flush-fitting backlit labels. Bright LED panel lights clearly indicate when circuits are on. Breaker panels include pre-wired buses and a set of 30 common labels. The toggle-style magnetic circuit breakers meet all North American and European CE standards. Circuit breaker panels include pre-wired buses, back-lighting and a set of labels. More than 500 additional labels are available for use with these panels. *Note: Circuit breakers are not ignition protected, not for mounting in gas engine compartments or propane lockers.*

**AC Main Rating:** 30A **Branch Circuit Rating:** 15A **Breaker Type:** Toggle **Voltage Rating:** 120V **AC Panel Material:** Heavy-gauge 1/8" 5052 aluminum alloy, Mil-spec immersion undercoating. Two-part polyurethane finish **Lighting:** LED indicators show when circuits are in "On" position **Approvals:** Blue Sea magnetic breakers meet all North American and European standards **Volts:** 120V AC **Terminal Size:** #10-32 **Mounting Hardware Included/Required:** Countersunk mounting holes; mounting screws included **Warranty:** Five years

### AC Panels (120V AC)

	AC Main	Circuit Breakers	Meters	Height	Width	Blank Positions	Positions	Model	BLUES#	ShWt	Only
AC Main + 6-Position Breaker Panel	Yes	4	—	7 1/2"	5 1/4"	3 breakers	6	<b>343683</b>	8027	3	<b>182.99</b>
AC Main + 1-Position Breaker Panel	Yes	1	—	3 3/4"	5 1/4"	1 breaker	1	<b>343675</b>	8029	1.2	<b>129.99</b>
AC Source Selector Breaker Panel	Yes	2	—	3 3/4"	5 1/4"	—	0	<b>594111</b>	8032	1.5	<b>197.99</b>
AC Main + 3-Position Breaker Panel w/Voltmeter	Yes	4	0-150V	7 1/2"	5 1/4"	—	3	<b>594103</b>	8043	2.3	<b>199.99</b>
3-Position Circuit Breaker Panel	No	3	—	3 3/4"	5 1/4"	—	3	<b>343640</b>	8058	.2	<b>142.99</b>
AC Main 30A Circuit Breaker Panel	Yes	1	—	3 3/4"	2 5/8"	—	0	<b>335524</b>	8077	.1	<b>94.99</b>



AC Source Selector Breaker Panel



AC Main 30A Circuit Breaker Panel



AC Main + 1-Position Circuit Breaker Panel



3-Position Circuit Breaker Panel



AC Main + 6-Position Breaker Panel



AC Main + 3-Position Breaker Panel w/Voltmeter

# Distribution Panels



Blue Sea Systems designs innovative, reliable, superior quality electrical system products. The company is made up of avid boaters with decades of blue water experience. Blue Sea Systems products are tested aboard the company's boat to ensure reliability and ease of use in real world conditions. Their engineering staff applies experience ranging from designing test equipment, medical lasers, high amperage bus systems,

circuit breakers, and marine systems to the Blue Sea Systems products they create. This results in the delivery of innovative, reliable electrical products that exceed the quality standards of other companies. Blue Sea Systems' in-house lab is used to load test and thermal test products to ensure they will perform under marine conditions.

Electrical



10-Position Breaker Panel w/ Volt & Ammeter



13-Position Breaker Panel w/Volt & Ammeter



3-Position Breaker Panel



5-Position Breaker Panel w/Volt & Ammeter



8 Position Breaker Panel



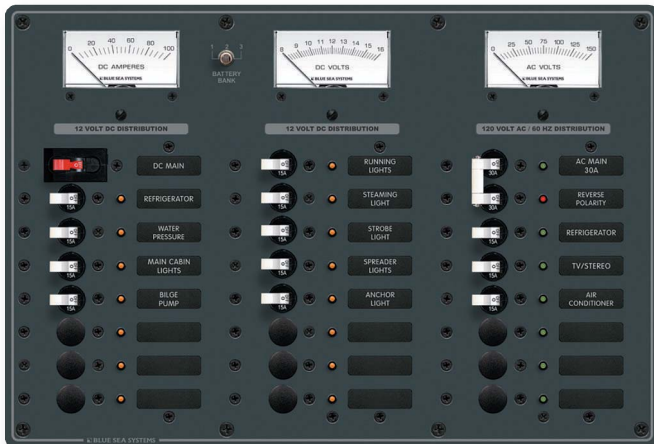
6-Position Breaker Panel

## DC Distribution Panels

**Voltage:** 12 or 24V DC **Breaker Type:** DC Toggle Circuit Breaker **Amperage Rating:** 15A **Labels:** Set of 30 common labels included **Lighting:** Label Backlighting system installed **Panel Material:** Heavy-gauge 1/8" 5052 aluminum alloy, Mil-spec immersion undercoating, Two-part polyurethane finish **Waterproof:** No **Warranty:** Five years

### 12/24V DC Toggle Breaker Panels

	DC Main	DC Main Rating	Included Circuit	Meters	Height	Width	Model	BLUES#	ShWt	Only
8-Position	No	—	5	—	7 1/2"	5 1/4"	<b>343659</b>	8023	2.2	<b>172.99</b>
3-Position	No	—	3	—	3 3/4"	5 1/4"	<b>343634</b>	8025	1	<b>139.99</b>
13-Position w/Volt & Ammeter	No	—	10	8-16V/0-50A Volt/Ammeter	7 1/2"	10 1/2"	<b>335458</b>	8068	4.3	<b>359.99</b>
5-Position w/Volt & Ammeter	No	—	5	8-16V/0-50A Volt/Ammeter	7 1/2"	5 1/4"	<b>163241</b>	8081	1.5	<b>359.99</b>
10-Pos. w/Volt & Ammeter	No	—	7	8-16V/0-50A Volt/Ammeter	11 1/4"	5 1/4"	<b>163258</b>	8082	4.2	<b>429.99</b>
6-Position	No	—	6	—	3 3/4"	10 1/2"	<b>1931286</b>	8096	2.6	<b>204.99</b>



## AC DC Distribution Panel

Contains 30A AC Main and six positions, 100A Main and 15 positions. Includes 8-16V 8003 DC voltmeter, 0-100A 8017 DC ammeter with shunt, and 0-150V AC 9353 voltmeter. Red reverse polarity indicating LED and installed LED "ON" indicators for each circuit. Maximum panel amperage is 100A DC and 50A AC. Includes set of 30 common AC labels and 30 common DC labels. 10"H x 14 3/4"W.

**Breaker Type:** Toggle **AC Main:** Yes **AC Main Rating:** 30A **DC Main:** Yes **DC Main Rating:** 100A **Total Circuit Breakers:** 12 **Number of AC Circuits:** 3 **Number of DC Circuits:** 9 **Branch Circuit Amp Rating:** 15A **Positions:** 6AC/15DC

**Model 1931013** | BLUES#8084 | ShWt 12 | **719.00**



0-25A DC



0-50A DC



0-100A DC

## Analog Electrical Meters

Blue Sea Systems analog meters have a modern, "flat scale" design which makes precise reading easy. Simple two-wire connection. Display 1 1/4"H x 2 5/8"W. Can also be mounted in a 2 1/16" hole using the studs on the back of the case.

Ammeters measure alternator output, battery charger output, distribution panel consumption, inverter consumption or solar panel array output. Meters are accurate to  $\pm 3\%$  full scale.

**Functions:** Ammeter **Display Type:** Analog **Meter Case:** Plastic **Dimensions:** 2 3/8"H x 2 13/16"W x 1 3/4"D **Mounting Hole Size:** 2 1/6" **Fasteners:** Included **Lighting:** Yes **Draw:** 1 Milliamp **Warranty:** Three years

Scale	Model	BLUES#	ShWt	Only
<b>DC Ammeters with internal shunt</b>				
0-25A DC	320335	8005	.1	<b>46.99</b>
<b>DC Ammeters with external 50mV shunt</b>				
0-50A DC	320327	8022	1.8	<b>87.99</b>
0-100A DC	288011	8017	.3	<b>87.99</b>
<b>AC Ammeter with sensing coil</b>				
0-50A AC	335649	9630	.2	<b>69.99</b>



DC Digital Multimeter w/Alarm



DC Digital Voltmeter



AC Digital Multimeter w/Alarm



DC Digital Ammeter

## Digital Electrical Meter Series

Digital electrical meters feature an innovative shape that makes them easy to switch out and install. Large, bright LED display features waterproof front with easy pushbutton controls. Front mounts in a standard 2" round hole. Rear mounts in any full size electrical panel meter cut out. Uses easy spin-on mounting system.

**Display Type:** Digital LED **Digit Size:** 9/16"H (14.29mm) **Meter Case:** Glass-reinforced nylon **Dimensions:** 2 3/8"H x 2 7/8"W x 3 3/8"L **Mounting Hole Size:** 2" round hole x 2 3/4"D **Lighting:** Three brightness levels + off **Draw:** 0.083A or less **Waterproof:** Splashproof front **Warranty:** Three years

	Volts	V	A	Hz	W	Model	BLUES#	ShWt	Only
DC Digital Multimeter w/Alarm	12DC	•	•			1931674	8248	.1	<b>214.99</b>
DC Digital Voltmeter	12DC	•				1931666	8235	1	<b>154.99</b>
DC Digital Ammeter	12DC		•			1931690	8236	.1	<b>199.99</b>
AC Digital Multimeter w/Alarm	120AC	•	•	•	•	1931682	8247	.1	<b>234.99</b>

## Voltmeters

Voltmeters give a "status report" on how charged your batteries are, especially when batteries have been idle for a few days or so. They also alert you to potentially dangerous deep discharges, and to even more hazardous overcharges.

**Functions:** Voltmeter **Resolution:** 8-16V DC; 0-150V AC **Display Type:** Analog **Meter Case:** Plastic **Dimensions:** 2 3/8"H x 2 13/16"W x 1 3/4"D **Mounting Hole Size:** 2 1/6" Hole **Fasteners:** Included **Lighting:** Yes **Draw:** 1 Milliamp **Warranty:** Three years

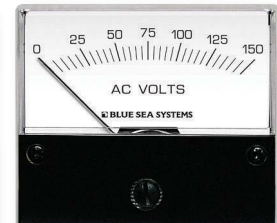
### DC Voltmeter

Measures DC voltage from 8-16 volts and is accurate to  $\pm 3\%$ . Simple two-wire hookup. Display measures 2 1/2" square and requires a 2 1/16" mounting hole.

**Model 320343** | BLUES#8003 | ShWt. .4 | **36.99**



DC Voltmeter



AC Voltmeter

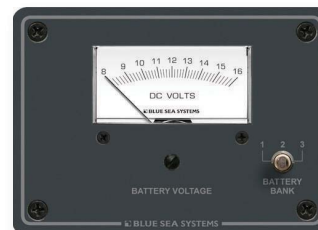
### AC Voltmeter

Measures AC voltage up to 150 volts and is accurate to  $\pm 3\%$ . Simple two-wire hookup. Display: 2 1/2" Square. Cutout: 2 1/16".

**Model 335680** | BLUES#9353 | ShWt. .1 | **39.99**

## Three-Bank Voltmeters

Multi-position switch for multiple battery banks. Digital voltmeter reads to 0.01V. Fasteners included. Three-year warranty.



DC Analog



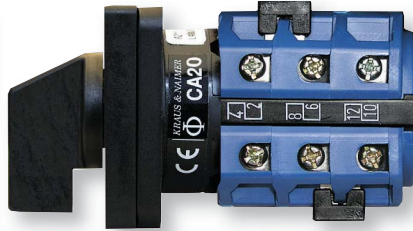
DC Digital

	Functions	Resolution	Display Type	Meter Case	Height	Width	Lighting	Draw	Model	BLUES#	ShWt	Only
DC Digital Voltmeter Panel	Voltmeter	7-60V DC	Digital	Glass Reinforced Nylon	3 3/4"	5 1/4"	Yes	0.083A	594129	8051	.1	<b>244.99</b>
DC Analog Voltmeter Panel	Voltmeter	8-16V DC	Analog	Plastic	3 3/4"	5 1/4"	Yes	0.001A	411645	8015	.6	<b>99.99</b>

# AC Selector Switches & Panel Accessories



5426630  
Off + 2 Position



5426648  
Off + 3 Position

Blue Sea Systems

## AC Rotary Source Selector Switch

AC source selector switches provide a safe method of controlling multiple sources of AC power for boats with AC generators, inverters or multiple shore power connections. The rotary switch offers a compact method of preventing two sources of AC power to the same circuit simultaneously. The switch has heavy-duty contacts and positive step cam mechanisms for smooth contact closure. Rated for 32A at 120V. Two positions. Other Rotary Selector Switches available by Special Order.

**Activation Method:** Rotary manual **Lighting:** No **Waterproof:** No **Mounting Hardware:** Included **Wire Terminal Style:** Clamp, ring **Approvals:** UL Listed, CE **Warranty:** Five years

	Amps	Poles	Voltage Rating	Height	Width	Depth	Model	BLUES#	ShWt	Only
OFF + 2 Pos	32A	2	120V AC	1 7/8"	1 7/8"	1 7/8"	5426630	9009	.4	82.99
OFF + 3 Pos	32A	2	120V AC	2 3/8"	1 7/8"	1 7/8"	5426648	9010	.4	99.99
OFF + 2 Pos	63A	2	120V AC	2 3/8"	2 1/2"	2 1/2"	5426655	9011	.6	209.99
OFF + 2 Pos	63A	3	240V AC	3 5/8"	2 1/2"	2 1/2"	5426663	9019	.3	269.99
OFF + 3 Pos	63A	3	240V AC	6 3/16"	2 1/2"	2 1/2"	5426671	9077	1.4	369.99
OFF + 2 Pos	63A	4	120+120/240V AC	4 1/2"	2 1/2"	2 1/2"	5426689	9093	1.1	329.99

## Electrical Panel Accessories

Cole Hersee

### 12V LED Pilot Indicator Lights

Solid-state LED diodes never need replacement. Bright chrome-plated body, bezel, washer and hexnut. Quick connect terminals are polarized for ease of wiring. Fits into panels 0.020" through 0.300" thick (0.5 to 7.6mm). 12V.

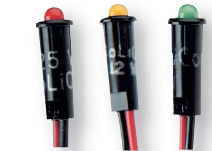


	Model	COLE#	ShWt	Only
Red	9369182	PL-612-R-BP	.1	13.99
Amber	9369190	PL-612-A-BP	.1	13.99
Green	9369208	PL-612-G-BP	.1	13.99
Blue	9369216	PL-612-B-BP	.1	13.99

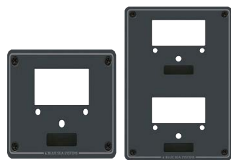
Blue Sea Systems

### LED Indicator Lights

Useful as general indicators or as alarms, these lights easily install in any Blue Sea Systems' circuit breaker panel. Simple push-but-ton installation mounts in any thickness material.



	Volts	Model	BLUES#	ShWt	Only
Red	12/24 DC	3733573	8171	.1	2.99
Red	120 AC	343741	8066	.1	2.99
Amber	12/24 DC	343725	8033	.5	2.99
Amber	120 AC	3733565	8169	.1	2.99
Green	12/24 DC	3733581	8172	.1	2.99
Green	120 AC	343733	8034	.1	2.99



Single Double

Blue Sea Systems

### Blank Panels

Aluminum panels match many factory-installed electrical panels like those from Newmar, Plath, and Professional Mariner. The cutouts are scaled for Blue Sea Systems ammeters and voltmeters.

	Dimensions	Model	BLUES#	ShWt	Only
Single	3 3/4"L x 5 1/4"W	288136	8013	.2	29.99
Double	7 1/2"L x 5 1/4"W	308405	8014	.6	38.99

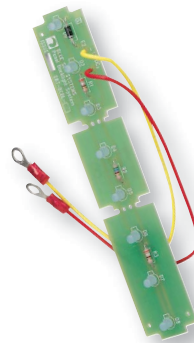


DC Basic

Blue Sea Systems

### Labels

	Model	BLUES#	ShWt	Only
DC Basic (30 assorted labels)	373953	8030	.1	11.99
DC Extended (120 assorted labels)	343717	8039	.4	38.99
AC Extended (120 assorted labels)	343691	8067	.1	38.99



Blue Sea Systems

### Label Backlight System

Easily installed in Blue Seas Systems' Circuit Breaker Panels. Connects to 12 or 24V DC source via two, 6" 18 AWG wire leads and draws only 5 milliamps per label. Included with 2004 and newer non-waterproof panels. Fits panels with eight, five or three positions.

**Model 343758** | BLUES#8065 | ShWt.1 | **19.99**



Blue Sea Systems

### AC Lockout Slide

Allows only one of a pair of double-pole AC breakers to be activated at one time. For A and B-Series double-pole breakers. Glass-filled nylon construction. Mounts with #6 flat head screws included. 6 5/8"L x 1 7/8"W x 11/16"H.

**Model 162961** | BLUES#4125 | ShWt.1 | **17.49**



Blue Sea Systems

### Toggle Guard

Ensures that A or B-Series breakers are not accidentally switched on or off. Fits any brand of A or B-Series breakers. Glass-filled nylon construction. Mounts with #6 flat head screws included. 4 3/8"L x 2 5/8"W x 1 1/4"H.

**Model 163209** | BLUES#4100 | ShWt.1 | **3.89**



Blue Sea Systems

### Panel Back Insulation Covers

These black ABS plastic shells cover Blue Sea distribution panels and meters, as well as dozens of other panels. Wire exits can be drilled or cut where needed. The smaller cover will fit half-height panels and meters, while the larger panel fits full-height panels.

Dimensions	Model	BLUES#	ShWt	Only
5 1/4" x 3 3/4"	287997	4026	.2	21.99
5 1/4" x 7 1/2"	288003	4027	.1	26.99



M-Series Dual Circuit Plus

E-Series Dual Circuit Plus

M-Series Dual Circuit Plus (2)

E-Series Dual Circuit Plus (2)

Blue Sea Systems

## DC Battery Management Panels

These 12/24V battery switch panels use the new-generation Blue Sea battery switches and are designed to work with an Automatic Charging Relay to automate the charging of both House and Starting batteries. The Dual Circuit Plus battery switches isolate the Starting circuit from the House circuit, protect electronics from spikes and sags caused by engine cranking, and allow emergency cross-connecting between separate battery banks. E-Series full-sized and M-Series mini-switches simplify bat-

tery switch operation. The panels can be mounted in four different orientations, include main DC circuit breaker and 24-hour branch circuit protection. Single battery switch panels are designed for single engine/two battery bank applications, and panels with two switches for twin engine configurations with three batteries, two Starting and one House battery bank.

**Functions:** Battery switch, main breaker, circuit protection **Switch Type:** Rotary or mini-rotary battery switch, rocker breakers **Current Interrupt Mechanism:** 100A DC Main/15A branch breakers **Panel Material:** Urethane coated aluminum **Waterproof:** No **Labels:** Set of 30 common DC labels **Lighting:** LED indicators **Warranty:** Five years

Battery Switch	Cont. Amps	Cranking Amps	Inrush Amps	Panel Dimensions	Model	BLUES#	ShWt	Only
M-Series Dual Circuit Plus	300A	600A	1200A	4 1/2"W x 7 1/2"H	<b>7808728</b>	8686	1	<b>194.99</b>
E-Series Dual Circuit Plus	350A	700A	1500A	5 1/4"W x 9"H	<b>7808694</b>	8690	2.3	<b>214.99</b>
M-Series Dual Circuit Plus (2)	300A	600A	1200A	7 1/4"W x 8"H	<b>7808710</b>	8689	1.8	<b>334.99</b>
E-Series Dual Circuit Plus (2)	350A	700A	1500A	10"W x 9"H	<b>7808686</b>	8693	4.5	<b>439.99</b>

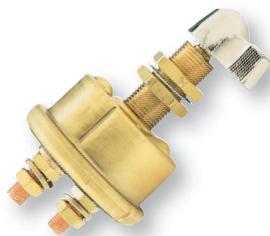
## High-Amperage Switches

Cole Hersee

### Lever-Operated Off/On Switch

175A continuous/800A intermittent rating. 3/8" brass terminals. Includes face plate which indicates position of the M284 switch. 2 1/2" dia.

**Model 542019** | COLE#M-284-09-BP | ShWt .7 | **54.99**



Hella

### Windlass Circuit On/Off Switch

Simple on/off switch rated for 500A for 10 seconds/100A continuous. Removable red key. 3/8" studs.

**Model 598375** | HELLA#002843011 | ShWt .4 | **29.99**

Replacement Key

**Model 192049** | HELLA#706729011 | ShWt .1 | **6.79**



## Perko Battery Switches

Perko

### Heavy-Duty Battery Switches

For high-amperage applications like diesel engine starters, large inverters and windlasses. Reinforced polycarbonate body, 1/2" dia. brass terminal connections and an alternator field disconnect.

**Alt. Field Disc.:** Yes **Switch Material:** Reinforced Polycarbonate **Terminal Material/Size:** Brass/ 1/2" dia. **Switch Dimensions:** 5 1/4"sq. x 3 3/8"D **Mounting Hardware:** Requires Four 1/4" RHMS (sold separately) **Approvals:** UL, CE **Warranty:** Five years

Style	Continuous Amps	Intermittent Amps	Model	PERKO#	ShWt	Only
Off/1/All/2	380	850	<b>371872</b>	8603DP	2.6	<b>132.99</b>
Off/On	450	1200	<b>191926</b>	9703DP	2.8	<b>142.99</b>



Perko

### Battery Switches

Rated for 250A continuous/360A intermittent, with copper contacts and brass terminals. We strongly recommend field disconnect battery switches (or fail safe diodes) to eliminate the chance of alternator damage due to inadvertent switching. Surface-mount. Marine UL-listed. Each ShWt 2

**Continuous Amps:** 250A **Max Momentary Rating:** 360A **Switch Material:** Polycarbonate **Terminal Material/Size:** Brass, 5/16" **Switch Dimensions:** 5 1/4" dia. x 2 5/8"D **Approvals:** UL Listed, CE **Warranty:** Five years

Style	Key Lock	# Batteries	Alt. Field Disc.	Model	PERKO#	Only
On/Off	No	1	No	<b>281501</b>	9601DP	<b>39.99</b>
Off/1/All/2	No	2	No	<b>281469</b>	8501DP	<b>39.99</b>
Off/1/All/2	No	2	Yes	<b>281477</b>	8503DP	<b>57.99</b>





6005 Removable Key



6006 Removable Knob

## m-Series Mini Battery Switches

Mini battery switches for outboard and small inboard systems are just 2 7/8" square but rated 300A continuous/500A intermittent/1500A cranking at up to 48V. Ignition-protected and safe for use aboard gasoline-powered boats. Long .870" one-piece, tinned copper studs accept multiple cables. Case design allows surface, front panel or rear panel mounting. Tactile textures on face let you know the knob position by feel. 6005 model has a removable key which remains positively retained. Snap-on isolator covers and label set are included.

**Alt. Field Disc.:** No **Continuous Amps:** 300A **Maximum Momentary Rating:** 1500A **Switch Material:** Reinforced Polycarbonate **Terminal Material and Size:** Tin-Plated Copper, 3/8" (10mm) **Switch Dimensions:** 2 7/8"L x 2 7/8"W x 3"H **Approvals:** UL Listed. Meets UL 1500, SAE J1171, CE **Warranty:** Five years

Style	Key Lock	Model	BLUES#	ShWt	Only
On/Off	Removable Key	7808827	6005	.6	28.99
On/Off	Removable Knob	7808835	6006	.7	28.99
Off/1/Both/2	Removable Knob	8646291	6007	1.2	37.99



4 Position Off/1/Both/2



2 Position Off/On

## e-Series 350A Compact Battery Switches

Rated 350A continuous/600A Intermittent/2000A cranking. Tin-plated copper terminals are 3/8" for better conductivity. Tactile indicators for safe operation in low light. Surface mount with four 1/4" fasteners on 3" centers or flush mount in a 3 5/8" hole. Fits in same hole pattern as other popular model battery switches

**Continuous Amps:** 350 **Max Momentary Rating:** 2000A **Switch Material:** Lexan Polycarbonate **Terminal Material/Size:** Tin-plated Copper; 3/8" **Switch Dimensions:** 3 7/8"L x 3 7/8"W x 3"H **Approvals:** UL 1500, SAE J1171, CE **Warranty:** Five years

Style	Positions	Alt. Field Disc.	Model	BLUES#	ShWt	Only
Off/1/Both/2	4	No	3831393	9001E	.3	44.99
Off/1/Both/2	4	Yes	3831401	9002E	1.1	52.99
Off/On	2	No	3831419	9003E	1	42.99
Off/On	2	Yes	3831443	9004E	1	57.99

Electrical



e-Series



m-Series

## e- & m-Series Dual Circuit Plus™ Battery Switches

These Dual Circuit Plus switches isolate your Start and House battery circuits, preventing accidental discharge of the Starting bank and protecting your electronics from engine starting sags and spikes. Ideal when combined with an Automatic Charging Relay, which will automate charging while the Dual Circuit Plus will simplify the switching. This switch allows you to combine two battery banks in the ON position using a simple three-position On—OFF—Combine Batteries switch. The Combine Batteries position allows you to cross-connect your battery banks in the event of a weak Start battery. Capable of 300 Amperes continuous rating per circuit, these switches have a total current-carrying capacity of 1000 Amperes. And, because they are UL Listed, you can be confident that they safely handle these high amperages. Ignition-protected, safe for use aboard gas-powered boats, and meet all ABYC battery switch standards. Long .870" studs accept up to 4/0 cables. Case design allows surface or rear panel mounting. The e-Series switch fits all Perko and Guest low amperage battery switch hole patterns. The m-Series mini switch is perfect for outboard and small inboard powered boats. Tactile textures on the face for knob position awareness by feel only.

**Number of Positions:** Three **Alt. Field Disc:** No **Max. Volts:** 32V **Continuous Amps:** 350A **Inrush Current:** 1200A **Switch Material:** Reinforced Polycarbonate **Terminal Material and Size:** Tin-plated copper, 3/8" (10mm) **Approvals:** UL Listed. Meets UL 1500, SAE J1171, CE **Warranty:** Five years

	Dimensions	Model	BLUES#	ShWt	Only
e-Series	3 7/8"L x 3 7/8"W x 3"H	7808801	5511e	.7	54.99
m-Series	2 7/8"L x 2 7/8"W x 3"H	8646309	6011	1.3	44.99



4 Position Off/1/Both/2



2 Position On/Off

## Heavy Duty-Series Battery Switches

These switches have a continuous amp rating substantially higher than standard switches for large diesel engines, high power output and low heat generation. Switches are ignition-protected and safe for use aboard gasoline-powered boats, and they meet all ABYC battery switch standards. Long .870" one-piece copper studs reduce the risk of overheating and accept four or more cable terminals, and up to 4/0 battery cable size. Case design allows surface or rear panel mounting. Fits all Perko and Guest low amperage battery switch hole patterns. Tactile textures on face let you know the knob position by feel. Rated for high inrush currents (10 repetitions for .25sec—Blue Sea Systems Engine Starting Standard).

**Alt. Field Disc:** No (available by special order) **Switch Material:** Lexan polycarbonate **Terminal Material and Size:** Tin-plated copper, 1/2" (12mm) **Switch Dimensions:** 3 7/8"L x 3 7/8"W x 3"H **Approvals:** UL Listed. Meets UL 1500, SAE J1171, CE **Warranty:** Five years

Style	Positions	Continuous		Cranking		Model	BLUES#	ShWt	Only
		Amps	Inrush Amps	Amps					
Off/1/Both/2	4	500	1750	1000		7808819	3002	.9	82.99
Off/On	2	600	2000	1200		6956114	3000	1.4	77.99

# Battery Switches & Voltage-Controlled Relays

BEP Marine

## 100A Single Engine/Two Bank Cluster w/Voltage Sensitive Relay

The 714-100A uses a dual sensing Voltage Sensitive Relay. Combined with the 701 selector switch, this combo ensures you will always have a fully charged reserve battery. When the switch is in position 1, it becomes the sensing battery for the VSR. Battery 2, which is in isolation, will be charged via the VSR when the engine is running ensuring it is always fully charged. When the switch is in battery 2 position, this becomes the sensing battery and battery 1 is charged via the VSR. The fact that there is always a fully charged battery in reserve is a huge safety factor. Battery switch control knob cannot be removed in the ON or OFF position, but can be removed by switching to a counter-clockwise 45° position. Interchangeable labelling system allowing a full range of applications. Meets ABYC requirements.

**Engines:** Single **Battery Banks:** Two **Battery Switch:** 701 On/Off and 710-125A-DS Voltage Sensing Relay **Voltage:** 48V DC **Continuous Amps:** 275A **Intermittent Amps:** 1250A Cranking, 455 Intermittent (On/Off), 1000A Cranking, 300A Intermittent (Selector) **Dimensions:** 5 3/8" L x 2 3/4" W x 3" H **Stud Size:** 3/8" (10mm) Tin plated copper studs and nuts

**Model 10065977** | BEP#714-100A | ShWt. 2 | **149.99**



Blue Sea Systems

## Starting Isolation (SI) Dual Sensing Automatic Charging Relay

- Automatically combines batteries during charging, isolates batteries during engine cranking and when not charging
- Senses charge source on either battery bank
- Under voltage lockout—won't close when the lower battery is below 10.8V@12V or 21.6V @24V operation

This device allows temporary isolation of house loads from the engine circuit during engine cranking to protect sensitive electronics. It automatically combines battery banks during the charging cycle and isolates them while discharging. 12/24 Volt auto ranging voltage input. Hermetically sealed contacts/vaporproof/ignition protected for use aboard gasoline powered boats. Remote LED output indicates relay state away from ACR; LED light indicates when batteries are combined. Supports high-output alternators up to 120A.

**Amps:** 120A continuous @12/24V; 210A for 2min.; 280A 5sec. surge **Volts:** 12/24V DC; Closing voltage 13.5V/27V; Opening voltage 12.7V/25.4V; 34 sec. delay **Dimensions:** 3 7/8" L x 3 1/2" W x 1 7/8" H **Approvals:** ISO 8846, CE, Meets SAE J1171 external ignition protection requirements **Waterproof:** Rated IP67-temporary immersion for 30 minutes **Warranty:** Five years

**Model 8646283** | BLUES#7610 | ShWt 1.5 | **99.99**



BEP Marine

## Twin Engine/Two Bank Battery Switch Cluster

For twin engines and two banks of batteries. The house loads can be switched between port and starboard battery. The selector switch can also be used to parallel the batteries when in both positions.

**Engines:** Twin **Battery Banks:** Two **Battery Switches:** Two 701 On/Off and One 701S 1/2/Both/Off **Voltage:** 48V DC **Continuous Amps:** 200A (Selector) 275A (On/Off) **Intermittent Amps:** 1250A Cranking, 455 Intermittent (On/Off), 1000A Cranking, 300A Intermittent (Selector) **Dimensions:** 8 3/16" L x 2 11/16" W x 3 3/4" H **Stud Size:** 3/8" (On/Off) 5/16" (Selector). Tin plated copper studs and nuts

**Model 10065985** | BEP#715-S | ShWt. 3 | **97.99**



Blue Sea Systems

## "Add-a-Battery" Dual Circuit System



Simplify switching and automate battery charging with this system that includes the 7610 Automatic Charging Relay (ACR) and 5511e Dual Circuit Plus battery switch. The ACR combines batteries for charging, automating battery charging. The Dual Circuit Plus switch isolates engine and house circuits, but lets you manually combine circuits for emergency starting.

**Model 8646275** | BLUES#7650 | ShWt 3.1 | **132.99**



ProMariner

## ProSoCharge Power Distribution System

new

Digitally controls alternator power distribution while protecting the integrity of the main engine start battery. Intelligently monitors, isolates and charges battery banks with zero voltage loss, provides priority charging to the battery bank that is under load by taking fully charged batteries offline. Compact and efficient digital design eliminates diodes or the need for multiple voltage sensitive relays to charge multiple battery banks, saving space and cost by significantly reducing installation times. Ignition-controlled Distributed On Demand™ battery bank management capability and advanced regulator ready with connections provided for alternators equipped with advanced regulators. Models available to manage up to three battery banks on single alternator, or up to four battery banks, on dual alternator-equipped boats.

**Functions:** Isolation and 12V charging of up to three battery banks from single alternator or four battery banks with dual alternator (Model 12039525) **Voltage:** 12V **Number of Outputs:** 2-4 (based on model) **Waterproof:** Yes to IP66 **Warranty:** Five years

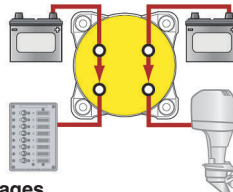
	Charging Alternator Output	Inputs	Battery Outputs	Dimensions	Model	PRMRN#	ShWt	Only
ProlSoCharge 120 1.2	120A	1	2-4 (based on model)	5 3/8" L x 5 7/8" W x 3 1/8" H	12039491	23121	2	159.99
ProlSoCharge 120 1.3	120A	1	3	6 1/8" L x 5 7/8" W x 3 1/8" H	12039509	23124	3	169.99
ProlSoCharge 250 1.3	250A	1	3	8 7/8" L x 5 7/8" W x 3 1/8" H	12039517	23126	6	249.99
ProlSoCharge 130 2.4	130A	2	4	12 3/64" L x 5 7/8" W x 3 1/8" H	12039525	23127	7	319.99



23121

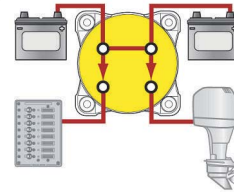
### Switch set to "ON"

Batteries isolated. Current can flow independently from both House and Start batteries.



### Switch set to "COMBINE"

Batteries combined. Current can flow from both House and Start together batteries—like one big battery



### Advantages

- 1) Simple ON/OFF switching in NORMAL operation (with an ACR or isolator installed).
- 2) Isolates Starting and House circuits to reduce the chance of fully discharging both batteries.
- 3) Isolates Starting and House circuits protecting electronics from voltage sags and spikes during engine starting.

Blue Sea Systems

## ML Series Automatic Charging Relay & Solenoid Switch

The ACR (automatic charging relay) combines large battery banks for high current charging and emergency cross connect, and isolates under discharge. 500 Ampere continuous rating is suitable for use with large battery banks, starters, alternators and inverter/chargers. Magnetic latch draws very small amount of current in ON or OFF state, and moderate amount of current for a short time when changing state. Silver alloy contacts provide high reliability. Can be remotely combined with included switch. 3/8" copper studs have superior one-piece design that handles 500A continuous rating and large cable connections. The solenoid provides high-current remote battery switching. Remote battery switch included. 12V; 24V models available by Special Order.

**Automatic Functions:** Combines battery banks when charging and isolates under discharge **User Selectable Functions:** Emergency battery cross-connect (with optional switch) **Status Indicators:** None **Volts:** 12V: 32V max. (7621 24V version available) **Draw:** Magnetic latch system for low current draw **Cranking Amps:** 2,500A **Intermittent Amps:** 500A **Continuous Amps:** 500A **Waterproof:** Yes, rated IP66 **Warranty:** Five years

	Model	BLUES#	ShWt	Only
Automatic Charging Relay	9369059	7620	.2	234.99
Solenoid Switch: non-auto switching	9369067	7700	.2	199.99
Parallel Link ML Series	11037504	9160	.1	15.99



9369059

9369067

# Voltage Sensitive Relays / Circuit Breakers



Lockout Slide Non-Lockout Slide

## Blue Sea Systems ML-Series Remote Control Contura Switches

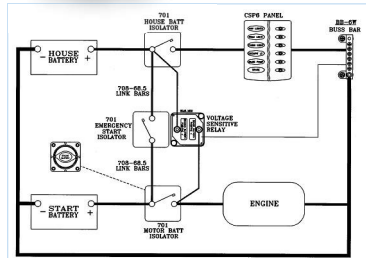
Provides remote management of ML-Series Remote Battery Switches, ML-Series Solenoid Switches, or ML-Series Automatic Charging Relays. Lockout slide in 2145 reduces the risk of accidental switching.

Lockout Protection	Switch Type	Model	BLUES#	ShWt	Only
Lockout Slide	SPDT (momentary)	<b>10093896</b>	2145	.1	<b>24.99</b>
None	SPDT	<b>10093904</b>	2146	.1	<b>22.99</b>



## BEP Marine Dual Sense 125A Voltage Sensitive Relay

Enjoy the benefits of fully charged engine starting batteries and deep cycle house batteries with one easy-to-install charging system. The Voltage Sensitive Relay (VSR) allows two batteries to be charged at the same time. When the engine is started and the start battery reaches 13.7 volts, the VSR engages, allowing two battery banks (start and house) to be charged simultaneously. When the voltage drops below 12.8 volts (engine is stopped), the VSR disengages, separating the batteries. This system eliminates the possibility of draining the start battery and protects sensitive electronics powered by the house battery from harmful engine start up spikes. Dual sensing allows the relay to sense the



voltage of both batteries, activating if either is receiving a charge. Designed for systems where a battery charger or second charging source is connected to the house battery.

**Amps:** 150A intermittent, 125A continuous **Engages:** 13.7V **Disengages:** 12.8V **Dimensions:** 2 3/4"H x 2 3/4"W x 2"D **Approvals:** Ignition protected: UL 1107 **Warranty:** One year

**Model 10065928** | BEP#710-125A-DS | ShWt .2 | **87.99**

## Circuit Breakers



Surface Mount Panel Mount

## Blue Sea Systems 187 Series Thermal Circuit Breakers

Switching and circuit protection in a single device. Single lever operation. Waterproof, with recessed mounting holes for a clean appearance. Self-trimming case eliminates the need for mounting panels or trim bezels and permits easy installation with a standard sized hole saw. Large clearance around 5/16" terminal studs accept heavy gauge wire lugs and allows high-torque connections. Ignition-protected—safe for installation aboard gasoline-powered boats. Interrupt rating: 5000A at 12V DC.

**Switch Type:** Toggle **Voltage Compatibility:** 48V DC **Safety Features:** Ignition protected; "Trip Free" design cannot be held open during fault **Housing Material:** Thermoset polyester **Housing Dimensions:** Surface Mount: 3 3/8"H x 2 5/16"W x 1 13/16"D; Panel Mount: 3 3/8"H x 2 5/16"W x 1 3/4"D. 2 1/8" cutout dia. **Terminal Type:** 5/16" terminal studs **Mounting Hardware:** #10 screws **Approvals:** Meets SAE J1171 external ignition protection requirements **Warranty:** Five years

Amperage Rating	Model	BLUES#	ShWt	Only
<b>Surface Mount</b>				
50	<b>8646374</b>	7139	.9	<b>82.99</b>
80	<b>8646382</b>	7142	.3	<b>82.99</b>
100	<b>8646390</b>	7144	.9	<b>82.99</b>
150	<b>8646408</b>	7148	1.1	<b>82.99</b>
200	<b>11975679</b>	7149	.5	<b>124.99</b>
<b>Panel Mount</b>				
50	<b>8646333</b>	7039	.8	<b>82.99</b>
80	<b>8646341</b>	7042	.8	<b>82.99</b>
100	<b>8646358</b>	7044	.1	<b>82.99</b>
150	<b>8646366</b>	7048	.8	<b>82.99</b>
200	<b>11975661</b>	7049	.5	<b>124.99</b>



Super-Duty Remote Single Pole Solenoid w/ ON-OFF Switch

## Blue Seas Systems SD Series Automatic Charging Relays and Solenoids

Bi-stable magnetic latching relays provide reliable remote switching for 12V starting batteries, control of both sides of high amperage circuits or charging between starting and house batteries.

Model 11975950 is a single pole solenoid and is ideal for the remote ON and OFF switching of high amperage loads. Model 11975943 is a double pole solenoid for remote ON and OFF switching of both the positive and negative lines of a high amperage circuit. Model 11975935 Dual ACR manages charging for three battery banks. Includes an ON-OFF-ON switch that allows bypassing of the ACR for starting an engine with a low battery, isolation of the battery banks entirely, or automatic operation that permits the ACR to determine whether batteries should be combined or isolated.

Switch Style	Cranking Amps	Intermittent Amps	Continuous Amps	Model	BLUES#	ShWt	Only
SD Remote Single Pole Solenoid	ON-OFF	10sec@ 2600A	5min @900A	600A	<b>11975950</b>	7810	4.8 <b>259.99</b>
SD Remote Dual Pole Solenoid	ON-OFF	10sec@ 1300A	5min@450A	300A	<b>11975943</b>	7811	4.8 <b>259.99</b>
SD Dual ACR	ON-OFF-ON	10sec@ 1300A	5min@450A	300A	<b>11975935</b>	7800	4.8 <b>259.99</b>



Surface Mount Panel Mount

## Blue Sea Systems 285 Series Thermal Circuit Breakers

Drop in replacement for 185 Series circuit breakers offers higher amperage range, up to 200A. Cost-effective, medium-duty protection where both switching and circuit protection are required. Visible reset lever shows circuit condition, cannot be held closed once tripped. Waterproof and ignition protected, meets both SAE J1171 standards for external ignition protection and IP67 for immersion up to 1 meter for 30 minutes. CE marked to indicate compliance with the relevant European Union product safety directives. Available in panel and surface mounts. Interrupt Rating: 3000A @ 12V. Maximum Operating voltage: 48V DC.

**Switch Type:** Push button **Voltage Compatibility:** 48V DC **Safety Features:** Ignition protected; "Trip Free" design cannot be held open during fault **Housing Material:** Plastic **Housing Dimensions:** 2 7/8"L x 1 7/8"W x 1 1/8"D **Terminal Material and Size:** 1/4" x 28 (M6) **Mounting Hardware:** Requires two 1/4" fasteners (sold separately) **Approvals:** SAE J1171; IP67; CE **Warranty:** Five years

Amperage Rating	Model	BLUES#	ShWt	Only
<b>Surface Mount</b>				
25A	<b>11975596</b>	7180	.5	<b>57.99</b>
30A	<b>11975604</b>	7181	.5	<b>57.99</b>
40A	<b>11975612</b>	7182	.5	<b>57.99</b>
50A	<b>11975620</b>	7183	.5	<b>57.99</b>
60A	<b>11975638</b>	7184	.5	<b>57.99</b>
70A	<b>11975646</b>	7185	.5	<b>57.99</b>
80A	<b>11975653</b>	7186	.5	<b>57.99</b>
100A	<b>11975554</b>	7187	.5	<b>57.99</b>
120A	<b>11975562</b>	7188	.5	<b>57.99</b>
150A	<b>11975570</b>	7189	.5	<b>57.99</b>
200A	<b>11975588</b>	7190	.5	<b>57.99</b>
<b>Panel Mount</b>				
25A	<b>11975489</b>	7080	.5	<b>57.99</b>
30A	<b>11975497</b>	7081	.5	<b>57.99</b>
40A	<b>11975505</b>	7082	.5	<b>57.99</b>
50A	<b>11975513</b>	7083	.5	<b>57.99</b>
60A	<b>11975521</b>	7084	.5	<b>57.99</b>
70A	<b>11975539</b>	7085	.5	<b>57.99</b>
80A	<b>11975547</b>	7086	.5	<b>57.99</b>
100A	<b>11975448</b>	7087	.5	<b>57.99</b>
120A	<b>11975455</b>	7088	.5	<b>57.99</b>
150A	<b>11975463</b>	7089	.5	<b>57.99</b>
200A	<b>11975471</b>	7090	.5	<b>57.99</b>



**CE World Circuit Breakers**

For use with either AC or DC current. Magnetic circuit breakers are temperature-stable. A false-trip free mechanism prevents breaker from being held with contacts closed during overload. CE marked to indicate compliance with the relevant European Union product safety directives.

**Switch Type:** Toggle **Voltage Compatibility:** 250VAC, 65VDC  
**Safety Features:** "Trip Free" design cannot be held open during fault **Housing Material:** Plastic **Housing Dimensions:** 2"H x 3/4"W x 1 5/8"D **Terminal Type:** Screw **Mounting Hardware:** Standard #10 pan head mounting screws included **Approvals:** ABYC, UL recog., VDE cert., CE, CSA **Warranty:** One year



Amps	White Toggle	BLUES#	Red Toggle	BLUES#	ShWt	Only
5	3826393	7202	3826385	7201	.1	24.99
8	10710606	7299	11707593	7347	.3	17.99
10	4782777	7206	4782959	7205	.2	24.99
15	2413698	7210	3826401	7209	.3	24.99
20	2413706	7214	4782967	7213	.3	24.99
25	3826443	7218	3826435	7217	.1	24.99
30	3826468	7222	3826450	7221	.2	24.99
40	3826492	7226	3826484	7225	.2	24.99
50	11975430	7230	4851085	7229	.2	24.99

**CE World Double Pole Circuit Breakers for 110V AC**

Combines switching and circuit protection for 110V AC main circuits in a single device. Interrupts both sides of one circuit or one side of two circuits. Unique "Trip Free" design cannot be held "ON" if fault is detected. Meets American Boat and Yacht Council ABYC standards, is UL recognized (UL 1077), TUV certified and CE marked to indicate compliance with the relevant European Union product safety directives.



**Switch Type:** Toggle **Voltage Compatibility:** 250V AC/65V DC **Safety Features:** "Trip Free" design cannot be held open during fault **Housing Material:** Plastic **Housing Dimensions:** 2"L x 1 1/2"W x 1 5/8"D **Terminal Type:** Screw **Mounting Hardware:** #8-32 fasteners **Approvals:** ABYC, UL recog., CE, CSA **Warranty:** One year

Amps	Model	BLUES#	ShWt	Only
20	2413797	7260	.2	59.99
30	2058881	7238	.4	59.99
50	3826575	7242	.3	59.99

**Bus Bars**

**Standard DualBus 100A**

Contains negative and positive circuits on one block. Two tin-plated copper bus bars with #8-32 terminal screws.



**Terminal Material and Size:** Stainless Steel, #8-32 **DC Rating:** 100A@48V **AC Rating:** 100A@300V **Base Material:** ABS **Insulating Cover Available:** Yes; sold separately **Warranty:** Five years

Circuits	Dimensions	Model	BLUES#	ShWt	Only
5 screw	3"L x 1 7/8"W	288050	2701	.2	16.99
10 screw	5"L x 1 7/8"W	288060	2702	.2	22.99
5-Circuit Cover for Model 288050		288227	2709	.1	9.99
10-Circuit Cover for Model 288060		288219	2710	.1	11.49

**DualBus Plus 150A**

Negative and positive circuits on one block with a snap-on Lexan insulating cover. Two tin-plated copper bus bars with five #10-32 terminal screws and two large stud terminals on each bus. Meets ABYC and USCG insulation requirements.



**Terminal Material and Size:** Stainless steel #10-32 **DC Rating:** 150A@48V **AC Rating:** 130A@300V **Base Material:** Lexan Polycarbonate **Dimensions:** 4 7/8"L x 2 5/8"W **Insulating Cover Available:** Included; snap-on **Warranty:** Five years

Circuits	Stud	Model	BLUES#	ShWt	Only
5 screw+	1/4-20	3831666	2722	.7	28.99
5 screw+	5/16-18	3831708	2723	.7	29.99

**Push Button Thermal Circuit Breakers**

Compact, ignition protected design allows high density DC circuit protection in tight quarters. Push-to-reset, "trip free" design cannot be held "ON" during fault conditions. Equipped with both 1/4" quick connect blade and #8 Screw terminals. CE marked to indicate compliance with the relevant European Union product safety directives. UL recognized (UL 1077 and UL 1500), TUV certified and meets ISO 8846 requirements. Optional waterproof boot provides additional circuit breaker protection in wet environments.



**Switch Type:** Push button **Voltage Compatibility:** DC **Safety Features:** "Trip Free" design cannot be held "ON" during fault **Housing Material:** Plastic **Housing Dimensions:** 1 3/8"L x 5/8"W x 2 3/8"D **Terminal Type:** #8 Screw or 1/4" Male Quick Connect Terminals **Mounting Hardware:** Mounts in a 3/8" hole **Approvals:** UL 1077 -UL cUL (USA and Canada), TUV certified, UL 1500 and ISO 8846, CE Marked **Warranty:** One year

Amps	Model	BLUES#	ShWt	Only
5	6557623	7052	1	12.99
10	6557649	7054	1	12.99
15	6557664	7056	1	12.99
20	6557672	7057	.1	12.99
White Boot	6557441	4136	1	8.79
Black Boot	11975422	4138	.1	8.79

**Mounting Panel**

For single toggle circuit magnetic breakers. 5052 aluminum alloy. 2 5/8" x 3 3/4"

**Model 335516** | BLUES#8072 | ShWt. 1 | **19.99**



Electrical

**MiniBus 100A**

Single small bus for consolidating positive or negative wires in tight spaces. Tin-plated copper bus with five #8-32 terminal screws and two #10-24 terminal studs.



**Terminal Material and Size:** Stainless steel, #8-32 **DC Rating:** 100A@48V **AC Rating:** 100A@300V **Base Material:** ABS **Insulating Cover Available:** Yes; sold separately **Warranty:** Five years

Circuits	Stud Size	Dimensions	Model	BLUES#	ShWt	Only
5 screw+	#10	4 3/16"L x 7/8"W	288201	2304	.2	12.99
Cover for 5 screw model			8646317	2713	.8	3.29

**BusBar 150A**

The standard marine busbar for consolidating positive or negative wires. Tin-plated copper bus bar with #8-32 terminal screws and two 1/4-20 terminal studs or with four 1/4-20 studs only.



**DC Rating:** 150A@48V **AC Rating:** 130A@300V **Base Material:** ABS **Insulating Cover Available:** Yes; sold separately **Warranty:** Five years

Circuits	Terminal Size	Dimensions	Model	BLUES#	ShWt	Only
10 screw+	#8-32	6"L x 1 1/4"W	410811	2301	.4	15.99
4 stud	1/4"	6"L x 1 1/4"W	192450	2303	.4	22.99
20 screw+	#8-32	9 1/4"L x 1 1/4"W	410803	2302	.1	24.99
Cover for 10 screw and 4 stud models			8646325	2715	.4	3.89

# Bus Bars, Connectors & Fuse Blocks



Blue Seas Systems

## PowerPost Plus 150A

Single large center stud accepts large battery cables. Tin-plated copper circular bus with eight 8-32 screws distributes power to smaller circuit wires. Red insulator boot included.

**Terminal Material:** Stainless Steel **DC Rating:** 150A@48V  
**AC Rating:** 150A @300V **Base Material:** Glass-reinforced nylon  
**Dimensions:** 1 3/4" x 3 5/16" **Mounting Hardware:** Two 1/4" RH screws (not included) **Insulating Cover Available:** Red insulator boot included **Warranty:** Five years

Circuits	Stud Size	Model	BLUES#	ShWt	Only
8 screw+	5/16"-18	540658	2102	.1	22.99
8 screw+	3/8"-16	540666	2103	.1	24.99



12 Screws

Blue Sea Systems

## MaxiBus 250A

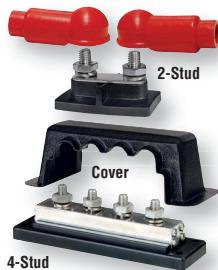
This heavy marine busbar is appropriate for use as a ship's main DC positive or negative bus. Tin-plated copper bus available with 12 #10-32 screw terminals and two 5/16" studs or with four 5/16" studs only.



4 Stud

**Stud:** 5/16" **DC Rating:** 250A@48V **AC Rating:** 250A@300V **Base Material:** Lexan Polycarbonate **Dimensions:** 8"L x 1 1/2"W **Insulating Cover Available:** Yes, #2711 available by Special Order **Warranty:** Five years

Circuits	Terminal Material and Size	Model	BLUES#	ShWt	Only
12 screw+	#10 Stainless Steel	335904	2105	.4	57.99
4 stud	5/16" Stainless Steel	335912	2106	.9	42.99



Blue Sea Systems

## PowerBar 600A

The highest amperage bus connector available! 3/8" studs on a tin-plated copper bus. Designed for use as a main DC negative or positive bus on larger boats.

**Terminal Material:** Stainless Steel **DC Rating:** 600A@48V  
**AC Rating:** 545A@300V **Base Material:** Lexan Polycarbonate **Mounting Hardware:** Four 1/4" RH screws (not included) **Insulating Cover Available:** Sold separately (4-stud) **Warranty:** Five years

Circuits	Stud Size	Dimensions	Model	BLUES#	ShWt	Only
2 stud	3/8"-16	2 3/4"L x 1 7/8"W	10093797	2019	.2	19.49
Same as 2019 above, without insulator			11037355	2020	.5	14.99
4 stud	3/8"-16	7"L x 2 1/4"H	192445	2104	1.9	94.99
8 stud	3/8"-16	11 1/4"L x 2"H	3733458	2107	2.8	127.99
Insulator for 4-stud model			288235	2708	.2	15.99

Blue Sea Systems

## Dual PowerPost Cable Connectors

New connectors provide a termination point for extending the length of outboard harnesses or other conductors. 2016/2017 are designed for connecting high amp conductors. 2018 is designed for outboard engine installation when factory cables need to be extended. Insulators included.

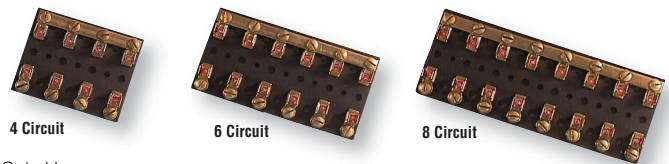
Stud Size	Model	BLUES#	ShWt	Only
5/16"	10093920	2016	.1	16.99
3/8"	10093912	2017	.2	16.99
5/16" & 3/8"	10093938	2018	.2	16.99

Blue Sea Systems

## Power Post Single Terminal Connectors

Single stainless steel stud connects up to three ring terminals—the maximum allowed by ABYC. These devices do not have a current rating as the electrical path is through the ring terminal stack and not the stud terminal. The supplied insulating boot goes on the last wire on the stack and provides a high degree of insulation for the connection.

Stud Size	Mount Hole Ctr.	Model	BLUES#	ShWt	Only
#10	1.063"	163183	2010	.1	7.49
1/4"	1.063"	163191	2011	.1	7.49
5/16"	2.5"	541870	2002	.1	12.49
3/8"	2.5"	489872	2003	.1	12.49



4 Circuit

6 Circuit

8 Circuit

Cole Hersee

## Common Hot Feed Fuse Blocks

Corrosion-resistant with nickel-plated phosphor bronze fuse clips, brass bus bar and brass terminals and terminal screws. Accept all AGC and slow-blow fuses 1/4" dia. x 1 1/4"L.

Circuits	Dimensions	Model	COLE#	ShWt	Only
4	2 3/4"L x 2 1/4"W x 5/8"H	256784	M-414-01-BP	.2	16.99
6	4 1/4"L x 2 1/4"W x 5/8"H	256792	M-641-01-BP	.2	23.99
8	5 3/4"L x 2 1/4"W x 5/8"H	114977	M-643-01-BP	.1	29.99



Blue Sea Systems

## Rib Insulator Independent Connectors

Closed back design insulates power from mounting surface. Ribs provide partial insulation to each circuit. Each screw pair is one isolated circuit. Optional jumpers allow creation of common circuits.

### 20A AC/DC, 300V, 7/8" Wide, #6 Screws

Circuits	Length	Model	BLUES#	ShWt	Only
2	1 3/16"	335920	2402	.1	3.69
4	1 3/8"	214959	2404	.1	4.99
6	2 3/16"	214983	2406	.2	6.49
8	2 7/8"	214991	2408	.1	6.49
10	3 11/16"	215006	2410	.1	8.99
5 Jumpers for 20A connector		288045	9218	.4	4.69

### 30A AC/DC, 600V, 1 5/16" Wide, #8 Screws

Circuits	Length	Model	BLUES#	ShWt	Only
2	2 13/16"	336050	2502	.1	4.99
4	3 3/16"	215014	2504	.1	6.49
6	4 5/16"	215020	2506	.2	7.79
8	5 1/2"	215030	2508	.3	8.99
10	6 5/8"	215048	2510	.3	8.99
12	7 1/2"	336290	2512	.1	12.99
5 Jumpers for 30A connector		288037	9217	.1	4.69

### 65A AC/DC, 600V, 1 13/16" Wide, #10 Screws

Circuits	Length	Model	BLUES#	ShWt	Only
2	2 1/2"	3825783	2602	.2	9.79
4	3 7/8"	192460	2604	.1	13.99
6	5 1/4"	192478	2606	.1	21.99
5 Jumpers for 65A connector		288029	9216	.1	4.29

Cole Hersee

## Combination Fuse and Terminal Block

Four circuits in brass with molded plastic base. Rated 20A@12-32V DC. For 1 1/4" x 1/4" fuses. 3 1/2" x 2 3/4" x 25/32".

**Model 211672** | COLE#M-674-BP | ShWt. 3 | **23.99**



Cole Hersee

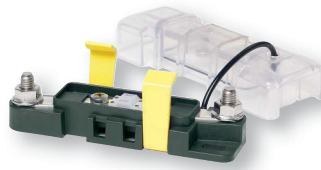
## ATO/ATC Fuse Block

Recessed fuse contacts, no cover required. Black thermoplastic. Uses ATO or ATC fuses. Fuses sold separately.

Circuits	Dimensions	Model	COLE#	ShWt	Only
6	2 1/2"L x 3 3/5"W x 13/16"H	487801	46377-6-BP	.2	22.99
8	3 1/8"L x 3 3/8"W x 13/16"H	1945401	46377-8	.4	26.99
10	3 3/4"L x 3 3/8"W x 13/16"H	4554002	46379-10-BP	.1	29.99

## Safety Fuse Block

Sealed cover protects fuses from the harshest marine environments, yet allows quick access when necessary. Cover breakouts allow wire access from any direction. Insulated cover satisfies ABYC and USCG requirements. Ignition protected for installation aboard both gasoline and diesel-powered boats. Fuses sold separately.



	Amperage Rating	Model	BLUES#	ShWt	Only
MIDI® or AMI® Fuse	200A maximum with 2/0 cable	<b>11975778</b>	7720	.2	<b>29.99</b>
MEGA® or AMG® Fuse	300A maximum with 2/0 cable	<b>11975786</b>	7721	.2	<b>29.99</b>

## Maxi Fuse Block for 30-80A Loads

Large, tab-type automotive fuses are inexpensive and ideal for branch circuits running to panels, small winches, electric downriggers, refrigeration circuits, etc. Insulating cover prevents accidental shorts and snaps in place. Accepts wires to 4AWG. Handles up to 32V DC/80A. 2" x 2 7/8". Fuses sold separately.

**Model 594343** | BLUES#5006 | ShWt .1 | **28.99**



## ANL Fuse Block

Approved for use aboard gas powered boats when used with Blue Sea Systems' ignition protected ANL fuses. 35A—300A rating is achieved with large heat-dissipating tin-plated copper mounting blocks. Clear Lexan cover and terminal boots (included) insulate all conductive parts, satisfying ABYC/USCG requirements. Fuses sold separately.

**Model 199997** | BLUES#5005 | ShWt .3 | **24.99**



## ANL Fuse Block for 35-750A Loads

Accepts a wide range of ANL fuse amperages (35-750A) with 5 16" (M8) ring terminals. Insulating cover (included) satisfies ABYC/USCG insulation requirements. Cover breakouts allow wire access in any direction. Stainless steel insert molded studs provide corrosion resistance and high torque for secure mounting and excellent electrical contact. Max. 32V DC, cable size: up to 4/0 AWG. Mounts with four 1/4" screws. Fuses sold separately.

**Model 10093821** | BLUES#5503 | ShWt .1 | **44.99**



## SEA Fuse Block for 100-300A Loads

Molded from glass-filled nylon to accept 100—300A fuses. Uses a one-piece inserted stainless steel stud for marine ring terminals. Small 1 1/4" x 4" footprint. Accepts cables entering from 180° of direction. Satisfies ABYC and USCG requirements. Fuses sold separately.

**Model 551887** | BLUES#5001 | ShWt .8 | **24.99**



## Class T Fuse Block

Allows use of Class T fuses for high speed circuit protection of electronic equipment. Stainless steel studs provide resistance to corrosion and high torque for excellent electrical contact. Accepts 3 8" (M10) ring terminals and wire up to 4/0 AWG. Insulating cover satisfies ABYC/USCG insulation requirements, with cover breakouts allow wire access in any direction. Max. 400A/160V DC. 7"L x 2"W x 2 5/16"H. Fuses sold separately.

**Model 10093813** | BLUES#5502 | ShWt .1 | **41.99**



## SafetyHub Fuse Blocks

Safely consolidates and protects up to ten circuits from 1A—200A, eliminating loose wires, and protecting fuses from explosive fumes. A full range of fuse configurations and wiring options, including integrated connector plugs, provides secure, waterproof connections. Ideal for vessels ranging from ski boats to off-shore fishing boats. Accomodate up to three 30A—200A MIDI fuses for high-amp circuits including panel feeds, windlasses or stereo amplifiers and up to six 1A—20A ATO/ATC fuses for circuits including bilge pumps, alarms, and clock memory.

Sealed cover protects fuses from the marine environment: IP66 rating—protected against powerful water jets. Ignition protected fusing meets Coast Guard and ABYC requirements for installation on gasoline or diesel powered boats. Fuses sold separately.

**SafetyHub250** adds a 240A battery switch controlled by included Contura switch and manual control knob.

Note: SafetyHub250 must be mounted in dry location.



**new**

	Fuse Configuration	Wiring Connection	Battery Switch	Model	BLUES#	ShWt	Only
SafetyHub 100	Three 30A—200A MIDI fuses with four 1A—30A ATO/ATC fuses	Single integrated harness	No	<b>11037470</b>	7725	1.1	<b>64.99</b>
SafetyHub 150	Four 30A—200A MIDI fuses with six 1A—30A ATO/ATC fuses	Screw terminals	No	<b>11975794</b>	7748	3.5	<b>124.99</b>
SafetyHub 250	Three* 30A—200A MIDI fuses with four 1A—30A ATO/ATC fuses	Dual integrated harness	Yes	<b>11037496</b>	7727	1.2	<b>199.99</b>

\* Two MIDI or AMI fuses when engine circuit link buss is used

## ST Blade Fuse Block

Cover insulates all conductive parts meeting ABYC/USCG requirements. Tin-plated copper buses and fuse clips give 30A per circuit. Accepts ATO and ATC fast acting blade type fuses and plug-in style circuit breakers. Max. 100A@32V DC. Write-on labels included. Fuses sold separately.

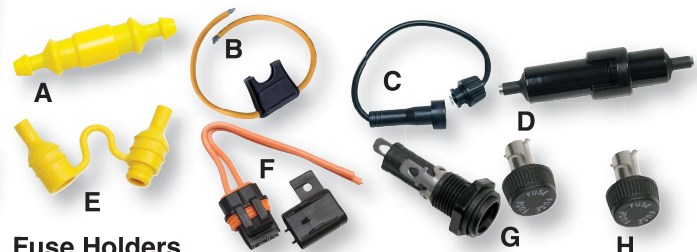
	Model	BLUES#	ShWt	Only
6 Position Fuse Block With Ground	<b>3733482</b>	5025	.6	<b>45.99</b>
12 Position Fuse Block With Ground	<b>3733490</b>	5026	.8	<b>54.99</b>



## AGC Fuse Block Systems

Glass-filled polycarbonate case holds six 30A circuits and ground. Clear insulating cover with label recesses for standard Blue Sea Systems labels (not included) protects all conductive parts and allows easy inspection of AGC or MDL fuses. Tin-plated components. Max. 100A@32V DC. Fuses sold separately.

	Model	BLUES#	ShWt	Only
6 Position fuse block with ground	<b>167747</b>	5015	.6	<b>37.99</b>
6 Position fuse block without ground	<b>1930700</b>	5018	.7	<b>31.99</b>



## Fuse Holders

Style	Fits	For Fuses	Rating	Model	BLUES#	ShWt	Only
<b>A.</b> Crimp-On	#12-18 wire	AGC, MDL	30A	<b>11975919</b>	5060	.1	<b>4.29</b>
<b>B.</b> In-Line	#12 wire	ATC, ATO	30A	<b>11975901</b>	5064	.1	<b>6.49</b>
<b>C.</b> In-Line, Heavy-Duty	#12 wire	AGC, MDL	30A	<b>11975893</b>	5063	.1	<b>4.49</b>
<b>D.</b> In-Line, Waterproof	#12 wire	AGC, MDL	20A	<b>11975877</b>	5062	.1	<b>19.99</b>
<b>E.</b> In-Line, Waterproof	#12-18 wire	AGC, MDL	30A	<b>11975885</b>	5061	.1	<b>8.49</b>
<b>F.</b> In-Line, Waterproof	#12 wire	ATO, ATC	30A	<b>11975869</b>	5065	.1	<b>10.99</b>
<b>G.</b> Panel-Mount	panels to 5/16"	AGC, MDL	15A	<b>10710663</b>	5021	.1	<b>4.29</b>
<b>H.</b> Replacement Cap for 11975927				<b>11975927</b>	5022	.1	<b>3.19</b>



# Low Voltage Connectors & Plugs

West Marine

## 12V Flush Mount Receptacles & Plugs

Each receptacle has a weatherproof cap to protect the contacts from corrosion. The plug features a built-in LED power status indicator and 10A fuse.



	Cutout Size	Model	WMELE#	ShWt	Only
Single Receptacle	1 1/8" dia. x 2 1/2"D	<b>6867923</b>	SC-3028-1P-B	.2	<b>12.99</b>
Double Receptacle	1 1/8"H x 2 7/8"W x 2 1/2"D	<b>6867915</b>	SC-3028-2P-B	.4	<b>17.99</b>
Triple Receptacle	1 1/8"H x 4 1/2"W x 2 1/2"D	<b>6867907</b>	SC-3028-3P-B	.4	<b>19.99</b>
Single Receptacle & Plug	1 1/8" dia. x 2 1/2"D	<b>6867931</b>	SC-3025-B	.3	<b>18.49</b>
Plug Only	—	<b>6867899</b>	SC-107LED	.1	<b>9.99</b>

West Marine

## Dual Outlet Receptacle

Add an extra 12V accessory receptacle and at the same time extend the reach of your 12V devices by 12". LED power status indicator and weather-proof seal on the plug.

**Model 6867857** | WMELE#SC-310-12 | ShWt. 4 | **19.49**



West Marine

## 12V Extension Cord

Extend the reach of a 12V power source. Coiled cords stretch to 6'. Includes LED status indicator on plug.

**Model 8821431** | WMELE#SC-310-106 | ShWt. 1 | **17.99**



Marinco

## Dual Outlet Receptacle

12V dual outlet adapter includes plug with an LED indicator light, moisture-proof sealing ring, strain relief and built-in 10A fuse. Heavy-duty cable/18-gauge wire.

**Model 2012490** | MARCO#12VAD | ShWt. 1 | **47.99**



Seafit

## Stainless Steel 12V Receptacle

Built to last for years in the marine environment.

**Model 371849** | SFLE#20200 | ShWt. 2 | **14.99**



Aqua Signal

## Waterproof Plug Connector

Five-pole plug connector is double-sealed with O-rings. Impact-resistant glass-reinforced polycarbonate. Horizontal mounting. Wire inlet size: 3/8". Handles 16A per conductor, maximum 250V.

**Model 315168** | AQSIG#80100-7 | ShWt. 4 | **47.99**



West Marine

## Multiple 12V Outlet Adapters

Convert a single 12V receptacle into a dual or triple outlet. Each unit features an LED power status indicator and internal fuse protection.

	Model	WMELE#	ShWt	Only
Dual	<b>6867949</b>	SC-3021-B	.3	<b>12.99</b>
Triple	<b>6867956</b>	SC-3032-B	.2	<b>19.99</b>



Marinco

## Premium 12V Receptacle and Plug

Designed to withstand the rigors of wet environments and constant motion. Receptacle has large contact surfaces and corrosion-resistant materials

to ensure a solid contact and low voltage drop. Plug has a sealing ring around the shaft to keep out spray and to make it seat firmly in the outlet. Ground contacts engage the receptacle so the plug can't be removed without turning it 90°. Both components are compatible with existing plugs and receptacles.

	Model	MARCO#	ShWt	Only
Receptacle	<b>343576</b>	12VRC	.1	<b>19.99</b>
Plug	<b>343568</b>	12VPG	.1	<b>12.99</b>
Plug & Receptacle	<b>343584</b>	12VPC	.2	<b>26.99</b>
Receptacle Mounting Bracket	<b>4731824</b>	12BKT	1	<b>12.99</b>



Marinco

## ConnectPro Trolling Motor Plug and Receptacle

Vibration-resistant, 12V trolling motor connectors incorporate a locking plug and waterproof "O" ring seal for a superior connection for 12V, 24V, 36V and combination systems. Five-year warranty.

	Model	MARCO#	ShWt	Only
Receptacle & Plug	<b>1422591</b>	12VCP	.4	<b>44.99</b>
Plug only	<b>2012573</b>	12VBP	.3	<b>24.99</b>
Adapter for 6-gauge wire	<b>1874056</b>	12VBRAD	.9	<b>23.99</b>



West Marine

## 12V Battery Clip Adapters

Clip these to your battery for an instant 12V receptacle when you need it. Weather-proof cap protects contacts from corrosion.

	Model	WMELE#	ShWt	Only
12" Cord	<b>9338054</b>	SC1-309-12	.1	<b>10.99</b>
60" Cord	<b>9338062</b>	SC1-309-60	.2	<b>19.99</b>



Cole Hersee

## Round Body Connectors

A convenient way to disconnect the leads to a 12V or 24V appliance. Polarized brass contacts assure correct mating of circuits. Rated for 10 amps and can accept up to a 12 gauge marine grade stranded wire. Corrosion-resistant terminals. Weather-resistant.



Poles	Model	COLE#	ShWt	Only
Two	<b>211946</b>	M-121-BP	.1	<b>17.99</b>
Four	<b>211904</b>	M-115-BP	.3	<b>19.99</b>

West Marine

## Electrical Connectors

Rated 3A max. Chrome-plated brass. Screw-on cap protects deck fitting. Stands 2 3/8" off deck.



Pins	Model	WMHAR#	ShWt	Only
Two	<b>181867</b>	6050CH	.8	<b>18.49</b>
Four	<b>184226</b>	6054CH	.3	<b>18.49</b>

Perko

## Watertight Deck Connections

Polarized double contacts rated for 15A @ 12, 24 and 32V.



	Model	PERKO#	ShWt	Only
Chromed Zinc	<b>281352</b>	1190DP0CHR	.2	<b>24.99</b>
Chromed Brass	<b>115008</b>	1189DP0CHR	.1	<b>48.99</b>
Repl. Plug/Cover	<b>115016</b>	1189DP099A	.1	<b>19.99</b>

Ancor

## DrySeal Connector

Seals remain intact under harsh conditions. One-piece molded body. Polarized against mismatches. Rated to 400V AC, 15A.

**Model 3881224** | ANCOR#249003 | ShWt. 1 | **29.99**



Cole Hersee

## Flat Wire Connectors

16-gauge 6"L wire. One male and female connector per package.



Conductors	Model	COLE#	ShWt	Only
2	<b>152942</b>	11172-BP	.4	<b>5.79</b>
3	<b>152959</b>	11173-BP	.1	<b>8.99</b>
4	<b>152967</b>	11134-BP	.2	<b>8.99</b>

Sunforce

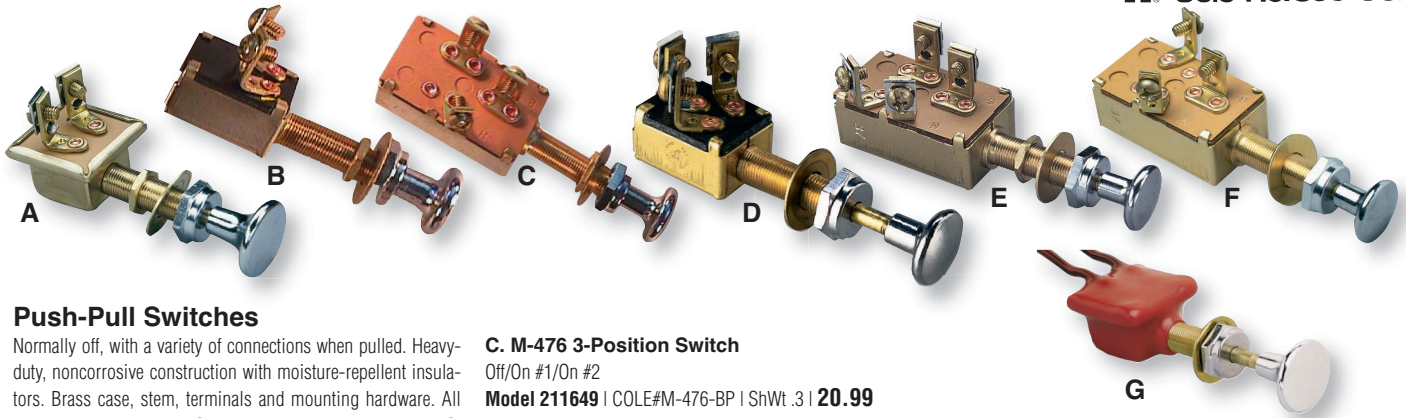
## AC/DC Power Converter new

Converts 110V AC power so 12V DC electronics and devices can be powered or charged on the road, at the office, or at home. Input 100-120V; Output 12V DC @5.8A. 4"L x 3 13/16"W x 9"H.

**Model 12036257** | SUNFO#55522 | ShWt 1.7 | **29.99**



# Push-Pull & Pushbutton Switches



## Push-Pull Switches

Normally off, with a variety of connections when pulled. Heavy-duty, noncorrosive construction with moisture-repellent insulators. Brass case, stem, terminals and mounting hardware. All knobs are screw-on type. Stems: 3/8" dia. x 1 1/4" L. 6–36V DC. Rated for 10A at 12V DC.

### A. M-482 Off/On Switch

Gasket-sealed case protects against dirt and moisture. Chrome-plated 7/8" dia. brass knob. Mounts in panels to 3/4" thick.  
**Model 211623** | COLE#M-482-BP | ShWt. 2 | **19.99**

### B. M-628 Off/On Switch

Same as above but without gasket seal.  
**Model 109381** | COLE#M-628-BP | ShWt. 1 | **17.99**

### C. M-476 3-Position Switch

Off/On #1/On #2  
**Model 211649** | COLE#M-476-BP | ShWt. 3 | **20.99**

### D. M-527 2 Circuit SPST Switch

Heavy-duty 10A OFF/ON switch controls two circuits. Brass case, 3/8" mounting shaft. For panels to 1" thick.  
**Model 565525** | COLE#M-527-BP | ShWt. 2 | **19.99**

### E. M-532 3-Position Switch

Three positions: Off/ On #1 & #2/On #1 & #3. Great for multiple lighting circuits such as cabin, anchor and running lights. Mounts in panels to 1" thick.  
**Model 379024** | COLE#M-532-BP | ShWt. 3 | **19.99**

### F. M-531 3-Position Switch

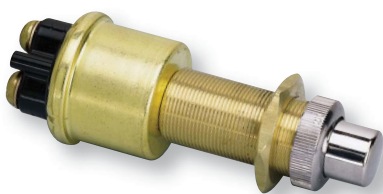
Three positions: Off/On#1/On #2. Permits operation of two circuits independently with one switch. Mounts in panels to 1" thick.  
**Model 270868** | COLE#M-531-BP | ShWt. 3 | **19.99**

### G. M-606 2-Position OFF/ON Switch

Plasticized body helps seal out moisture and dirt. Two 18-gauge wire leads 12" long. Mounts in panels to 5/8" thick  
**Model 211722** | COLE#M-606-BP | ShWt. 2 | **24.99**

Electrical

## Pushbutton Switches



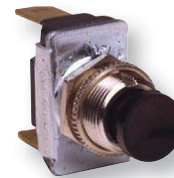
### M-490 Extra-Heavy-Duty Button

Corrosion-resistant brass with silver contacts. Molded plastic insulator with protective barrier between terminals. Fits panels up to 1" thick. Rated for up to 35A@12V DC  
**Model 109330** | COLE#M-490-BP | ShWt. 3 | **23.99**



### M-626 Extra-Heavy Duty Button

Same as M-490 but with black moisture-repellent cover which snaps over face nut. Fits panels up to 1" thick. Rated for up to 35A@12V DC  
**Model 270876** | COLE#M-626-BP | ShWt. 3 | **24.99**



### Momentary Contact Switches

Compact 10A pushbutton switches for horn, starter, and other momentary applications. Two male 1/4" blade terminals. ShWt. 1

	Model	COLE#	Only
Black	2679546	9187-BP	8.29
Red	2674752	9187-02-BP	8.29



### M-612 Recessed Button

Like M-490, but with recessed button and flanged face nut to prevent accidental activation. Rated for up to 35A@12V DC  
**Model 565533** | COLE#M-612-BP | ShWt. 7 | **25.99**



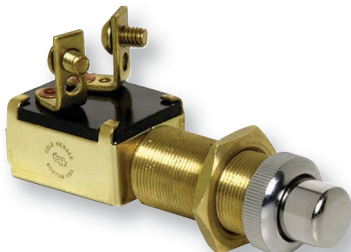
### M-485 Moisture Sealed

Gasket-sealed brass case protects against moisture and dirt. Fits panels up to 3/4" thick. Rated for up to 10A@12V DC.  
**Model 211656** | COLE#M-485-BP | ShWt. 3 | **22.99**



### Hatch/Door Jamb Switch in Boot SPST

Can be used in momentary applications where a small switch is required such as doors and hatches. Black rubber boot covers and protects the face of the switch. Dust-resistant. SPST normally closed—OFF with plunger depressed, spring return to On. 4A@12V DC lamp load. Two brass blade terminals, 2mm x 5mm.  
**Model 5369707** | COLE#9006-BP | ShWt. 1 | **9.99**



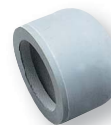
### M-492 Standard Switch

Similar to M-490 but with top-mounted terminals. Fits panels up to 1" thick. Rated for up to 10A@12V DC  
**Model 109357** | COLE#M-492-BP | ShWt. 2 | **18.49**



### M-608 Moisture Sealed

Plasticized body helps seal against moisture and dirt. Includes two 18-gauge wire leads 12"L. Fits panel up to 1/2" thick. Rated for up to 10A@12V DC  
**Model 270884** | COLE#M-608-BP | ShWt. 3 | **19.99**



### Rubber Button Covers

Protect switch mechanism from water and dirt with snap-on covers. Embossed with PUSH. Each ShWt. 3

	Model	COLE#	Only
Gray	109290	407-01-BP	2.39
Black	109308	407-03-BP	2.39

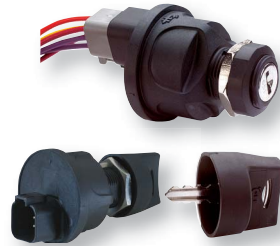


### Weather-Resistant Button Cap

Fits M-490, M-492, M-485 pushbutton switches.  
**Model 211730** | COLE#83280-03-BP | ShWt. 1 | **4.59**

**Sealed Ignition Switches**

Sealed keyed switches with integral Deutsch connectors feature fully sealed contact areas with O-rings and ultrasonic welding to IP67 waterproof rating. High-impact plastic for corrosion resistance and tested to SAE J259 for ignition switches. Contact rating: 10A@12V DC, 5A@24V DC. Panel thickness: 3/8". Includes two keys and molded key boot.



Positions	Functions	Model	COLE#	ShWt	Only
3	Off-Ignition-Start	<b>9369380</b>	95060-60-BP	.2	<b>57.99</b>
4	Accessory-Off-Ignition-Start	<b>9369372</b>	95060-50-BP	.2	<b>57.99</b>

**Rugged Plastic Ignition Switches**

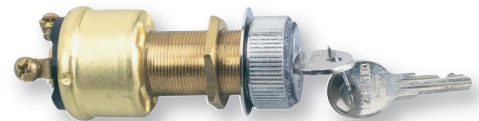
Impact and corrosion-resistant switches are available in two lengths for most panels. Fits standard 7/8" dia. hole and includes PVC boot for added weather protection. Each switch includes two keys and different key codes for added security. Nickel-silver screw terminals provide superior conductivity. 15A ignition, 20A start, 6-36V DC. M-832 is Off-Run-Start with Push-To-Choke (6 terminals) and fits panels up to 1 3/8". M-850 is Off-Run-Start (3 terminals) and fits panels up to 7/8".



Fits Panel	Functions	Model	COLE#	ShWt	Only
Up to 7/8"	Off-Run-Start-push to choke	<b>2679579</b>	M-832-BP	.3	<b>39.99</b>
Up to 1 3/8"	Off-Run-Start	<b>2679595</b>	M-850-BP	.3	<b>34.99</b>

**Ignition Switches**

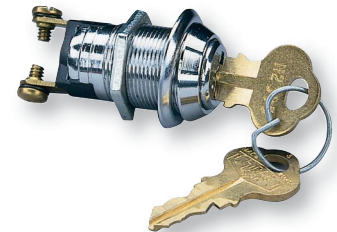
Two position switch is for engines with a separate starter pushbutton. Three position: Off/Ignition/Start. Four position: Accessory/Off/Ignition/Start or Off/Run/Push to Choke/Battery-Start (magneto switch). Brass construction, 2 keys supplied. 13/16" dia. mounting hole. Model 485799 has weather-resistant key slot and boot for additional water protection.



Positions	Functions	Model	COLE#	ShWt	Only
2	Off-On (ignition)	<b>379016</b>	M-489-BP	.1	<b>29.99</b>
3	Off-Ignition-Start	<b>211896</b>	M-550-BP	1	<b>35.99</b>
3	Off-Ignition-Start	<b>485799</b>	M-550-14-BP	.5	<b>39.99</b>
4	ACC-Off-On-Start	<b>109399</b>	M-712-BP	.5	<b>38.99</b>
4	Off-Run-Choke-Bat/Start	<b>7808306</b>	M-924-BP	.5	<b>72.99</b>

**Battery Ignition Switch**

Small, two-position Off/On key switch. Brass housing, chrome-plated integral bezel. Brass mounting stem is 3/4" dia. x 3/4"L, for panels up to 5/8" thick. Supplied with two brass keys. 5A. **Model 256248** | COLE#M-676-BP | ShWt. .1 | **34.99**



Electrical

**The West Advisor®**

**Ignition Switch Selection Chart**

Functions	Terminals	Housing	Max. Panel Thickness	Mounting Hole	Push-To-Choke	Boat Type	Waterproof	Model
<b>2 Position</b>								
Off-On (ignition)	2, Screw	Brass; Chrome plated face nut	1 1/8"	13/16"	No	—	—	<b>379016</b>
Off-On (ignition)	2, Screw	Brass; Chrome plated bezel	5/8"	3/4"	No	—	—	<b>256248</b>
<b>3 Position</b>								
Off-Ignition-Start	3, Screw	Brass; Chrome brass face nut	1 1/8"	13/16"	No	—	—	<b>211896</b>
Off-Ignition-Start	3, Screw	Brass; Chrome brass face nut; Rubber boot/mounting nut assembly	1 1/8"	13/16"	No	—	Water resistant	<b>485799</b>
Off-Ignition-Start	Deutsch DT06-6S	High-impact plastic; Molded key boot, black	3/8"	13/16"	No	—	IP67 rated	<b>9369380</b>
Off-Ignition-Start	3, Screw	Molded plastic w/PVC boot, black	7/8"	7/8"	No	Most Sea Ray	Water resistant	<b>2679595</b>
Off-Ignition-Start; Push-to-Choke	6, Screw	Molded plastic w/PVC boot, black	1 3/8"	7/8"	Yes	OMC	Water resistant	<b>2679579</b>
<b>4 Position</b>								
ACC-Off-Ignition-Start	4, Screw	Brass; Chrome brass face nut	1 1/8"	13/16"	No	—	—	<b>109399</b>
Accessory-Off-Ignition-Start	Deutsch DT06-6S	High-impact plastic; Molded key boot, black	3/8"	13/16"	No	—	IP67 rated	<b>9369372</b>
Off-Ignition; Push-to-Choke; Bat/Start	6, Screw	Brass; Chrome brass face nut	1 1/8"	13/16"	Yes	Mercury	—	<b>7808306</b>

**Emergency Cut-Off Switch**

Be prepared by using this switch that cuts off your engine, preventing a disastrous runaway situation. The switch can be turned on again manually, so that another boater can operate the boat to pick up the "man overboard". Easily installs into the ignition circuit of inboard or outboard engines. Includes plasticized switch, housing and lanyard.

**Model 1945740** | COLE#M-597-BP | ShWt. .3 | **31.99**

**Spare Lanyard**

**Model 1945799** | COLE#M-598-BP | ShWt. .1 | **13.99**

Kwik-Tek

**Boat Kill Switch Keys with Lanyard**

This lanyard with six keys will save the day if you ever lose or break your kill switch key and can't start your engine. Includes six keys that fit all Johnson, Evinrude, Mercury, Yamaha and Honda kill switches. Swivel snap hook prevents tangles.

**Model 1874635** | KWI#BKS-6 | ShWt. .2 | **14.99**



**The West Advisor®**

**Switch Types**

Switches are identified by the number of poles (circuits) they have and by the number of throws (ON/OFF/ON, for example). The most common combinations are:

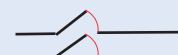
**SPST Single Pole, Single Throw:** turns a single circuit on and off.



**SPDT Single Pole, Double Throw:** turns one of two circuits on.



**DPST Double Pole, Single Throw:** turns on two circuits at the same time.



**DPDT Double Pole, Double Throw:** controls two functions on two circuits.





Black Cover

Gray Cover

## Contura Rocker Switches

Waterproof switches are rated to IP66 for use on ship decks and come with an LED light to indicate when the circuit is on. Several configurations are available for almost any application. Recommended for replacements in waterproof electrical panels with

rocker switches to ensure waterproof integrity. Includes both black and gray covers. Both switches and covers are interchangeable with similar switches used as original equipment on many common boat types.

**Activation Method:** Rocker **Draw:** 0.018A from lighting **Lighting:** LED **Mounting Hole Size:** 1 1/2" x 13/16" (36.83mm x 21.08mm) **Voltage Rating:** 20A @ 12V DC/ 15A @ 24V DC

Type	Positions	Common Applications	Model	COLE#	ShWt	Only
SPST	Off/M-On	Horn or windshield wipers	<b>7808207</b>	58332-20-BP	.1	<b>29.99</b>
SPDT	On/Off/On	Combining nav lights/anchor light with independent bulbs	<b>7808215</b>	58332-21-BP	.1	<b>22.99</b>
SPDT	M-On/Off/M-On	Trim tabs/independent operation each tab, dimmer switches	<b>7808223</b>	58332-22-BP	.1	<b>22.99</b>
SPDT	M-On/Off/On	Bilge pumps; momentary on, off and on for automatic	<b>7808231</b>	58332-23-BP	.1	<b>22.99</b>
SPDT	M-On/Off/M-On	Labeled "Dimmer"	<b>7808249</b>	58332-24-BP	.1	<b>29.99</b>
DPDT	M-On/Off/On	Dual Wipers	<b>7808256</b>	58332-25-BP	.1	<b>36.99</b>
DPDT	On/Off/On	Combining nav lights with anchor light with shared bulb	<b>7808264</b>	58332-26-BP	.1	<b>34.99</b>
DPDT	M-On/Off/M-On	Positioning is required, power operated hatches	<b>7808272</b>	58332-27-BP	.1	<b>28.99</b>
DPST	Off/M-On	Wipers, horn	<b>7808280</b>	58332-28-BP	.1	<b>29.99</b>
DPST	Off/On	Navigational Lights	<b>7808298</b>	58332-29-BP	.2	<b>29.99</b>

Electrical



On/Off

On/Off/On

Illuminated

Dual Illuminated

## Rocker Switches

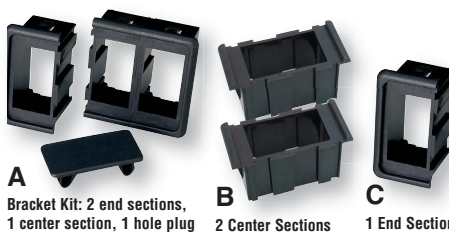
These rocker switches come in several different configurations for panel mounting. Available in illuminated and non-illuminated models, they feature non-glare black matte plastic housings, bezel

and actuator, brass screw or blade terminals, and gasket-sealed housings. Snap-in mounting in panels from .093" (2.36mm) to .187" (4.75mm) thick. Each ShWt .5

Type	Positions	Pilot Light	Terminals	Model	COLE#	Only
SPST	On/Off	No	2 screw	<b>192148</b>	56027-01-BP	<b>17.99</b>
SPST	M-On/Off	No	2 blade	<b>192189</b>	58027-02-BP	<b>17.99</b>
SPST	On/Off	Yes	3 screw	<b>192155</b>	56327-01-BP	<b>17.99</b>
SPST	On/Off	Yes	3 blade	<b>147921</b>	58327-01-BP	<b>17.99</b>
SPDT	On/Off/On	No	3 blade	<b>192163</b>	58027-03-BP	<b>17.99</b>
SPDT	M-On/Off/M-On	No	3 blade	<b>192197</b>	58027-04-BP	<b>17.99</b>
SPDT	On/Off	Yes(2)	4 blade	<b>192205</b>	58327-06-BP	<b>17.99</b>
DPDT	On/Off/On	No	6 blade	<b>147897</b>	58027-07-BP	<b>17.99</b>
DPDT	M-On/Off/M-On	No	6 blade	<b>147913</b>	58027-11-BP	<b>17.99</b>

**Faceted lenses: four color lenses in each kit for custom applications**

SPST	On/Off	Yes	3 blade	<b>147939</b>	58328-100-BP	<b>19.99</b>
SPST	On/Off	Yes(2)	4 blade	<b>147962</b>	58328-104-BP	<b>19.99</b>
SPDT	On/Off/On	Yes(2)	4 blade	<b>147954</b>	58328-103-BP	<b>19.99</b>



**A** Bracket Kit: 2 end sections, 1 center section, 1 hole plug

**B** 2 Center Sections

**C** 1 End Section

## Rocker Switch Modular Bracket Kit

Mount several rocker switches in a single cutout with these stacking brackets. For example, if you wanted a three-switch panel, it would require two ends and one middle. Single are 2 5/16"H x 1"W and doubles are 2 3/8"W.

**B.** Two center sections only.

**Model 1945708** | COLE#82159-03-BP | ShWt .1 | **4.59**

**C.** One end section

**Model 1945690** | COLE#82159-1-BP | ShWt .1 | **4.59**

**A.** Bracket Kit: Two end sections, one center section and a bracket hole plug

**Model 192171** | COLE#82159-02-BP | ShWt .1 | **12.99**

## Toggle Switches

All non-corroding construction with moisture-repellent insulators and silver contacts. M-ON denote momentary. Each. ShWt .5

**Rated 25A@12V. Fits panels to 1/8" thick, 15/32" dia. hole.**

Type	Positions	Terminal	Model	COLE#	Only
SPST	On/Off	2 screw	<b>379040</b>	54100-BP	<b>12.99</b>
SPDT	M-On/Off/M-On	3 screw	<b>143243</b>	54104-BP	<b>16.99</b>
SPDT	On/Off/On	3 screw	<b>211854</b>	54103-BP	<b>16.99</b>
DPDT	On/Off/On	6 blade	<b>109373</b>	54107-01-BP	<b>16.99</b>

\*Rated 20A@12V DCx



Toggle Switch

Lighted Toggle Switch

## Lighted Toggle Switches

White Off/Red On. Each. ShWt .1

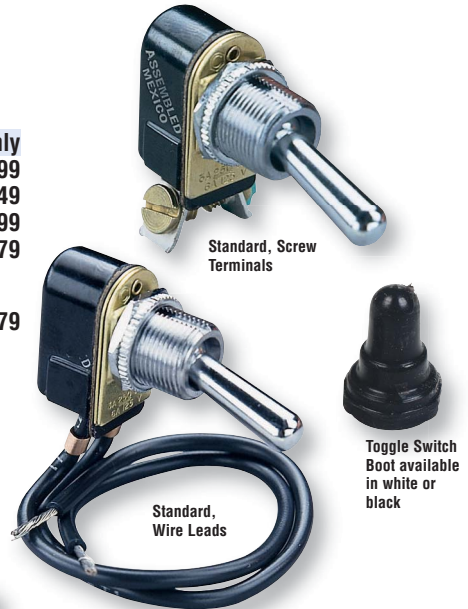
Type	Positions	Terminal	Model	COLE#	Only
SPST	On/Off	4 screw	<b>379008</b>	54109-BP	<b>22.99</b>
SPST	On/Off	4 blade	<b>487769</b>	M-54111-01-BP	<b>19.99</b>
SPDT	On/Off/On	5 blade	<b>192288</b>	M-54111-02-BP	<b>19.99</b>



**Chrome-Plated Toggle Switches**

Chrome-plated single pole switches, Off/On positions only. Max. 10A.

	Notes	Model	COLEH#	ShWt	Only
Standard, Screw Terminals	11/16" Handle	<b>211615</b>	M-484-BP	.1	<b>15.99</b>
Short Handle, Screw Terminals	3/8" Handle	<b>109365</b>	M-493-BP	.2	<b>11.49</b>
Standard, Wire Leads	6" 18-gauge leads	<b>211763</b>	M-584-BP	.1	<b>15.99</b>
Toggle Switch Boot	Black with Brass Mounting Nut	<b>211771</b>	81264-BP	.1	<b>8.79</b>
Tipless Switch Boot—constructed like above, but with open tip. (not shown)	Tipless, for protruding toggles of different lengths. Black.	<b>109415</b>	81255-BP	.1	<b>9.79</b>



**Water-Resistant Toggle Switch**

Chrome-plated On-Off SPST switch dipped in vinyl for waterproof integrity.

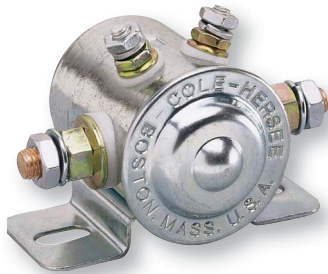
**Model 1945864** | COLE#5582-30-BP | ShWt .2 | **21.99**

Water-resistant Toggle Switch



**Solenoids**

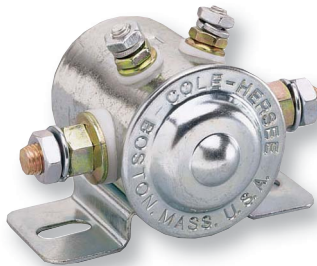
Electrical



**12V Solenoid**

Rated at 750A make/100A break, this solenoid is for intermittent use: 10 seconds ON, 30 minutes OFF. Insulated ground. Steel housing, brass hardware.

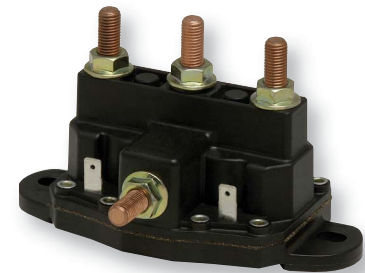
**Model 102020** | COLE#M-200-BP | ShWt 1 | **52.99**



**Continuous Duty, SPST Insulated Solenoid**

Continuous duty, 65A @ 12V DC. Intermittent rating 750A make, 100A break, 10 seconds On, 30 minutes Off. Copper 10-32 thread ignition and ground terminals. Copper 5/16"-24 thread contact terminals. Plated steel case, copper contacts. Hex nuts and washers included. Bracket mounting holes 5/16" x 19/32", 2 13/64" on centers. UL and CE approved.

**Model 4731774** | COLE#24059-08-BP | ShWt .9 | **29.99**



**Motor Reversing Solenoid**

Two solenoids in one saves money and simplifies wiring. Rated at 75A make and break at 12V. DPDT intermittent duty. Provides braking dynamic capability for permanent magnet motors when coils are not energized.

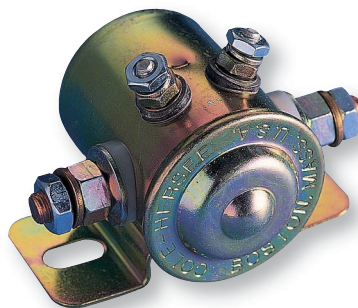
**Model 5369749** | COLE#24450 | ShWt 1.6 | **99.99**



**Continuous Duty Solenoid**

Rated at 85A make/85A break/65A continuous. Insulated ground. Plasticized steel housing, brass hardware. UL listed and CE certified.

**Model 201337** | COLE#24117-01-BP | ShWt 1 | **49.99**



**Continuous Duty Solenoid**

Rated at 750A make/100A break. Can be used with Electro-Scan MSDs and other high-amp circuits with remote operation. Insulated ground. Steel housing, brass hardware. UL listed and CE certified.

**Model 594242** | COLE#24059-BP | ShWt .9 | **29.99**



**Ultra-Reliable Electronic Solenoid**

85A solid-state solenoid designed for long life (rated to 1 million on-off cycles). For 12V and 24V systems, serving either continuous or intermittent duty. Designed for high-side or low-side switching applications and for high inrush demand circuits. Corrosion, vibration and shock resistant.

**Model 2674489** | COLE#48785 | ShWt .3 | **112.99**

# Marine Wire

Even the experts have to check occasionally on the correct gauge of wire for a given marine DC load. The simplest method we've found uses the charts below.

- **Select either the 10% or 3% voltage drop chart**, based on the type of load you are running.
- **Next, find the current consumption of the load** on the vertical axis of the chart.
- **Find the length of the circuit** on the horizontal axis of the chart, noting that the length is the "round trip" distance from the panel or battery to the load and back.
- **The color of the graph at the intersection denotes the gauge of wire to use.**

We've included copper wire specifications which comply with the AWG standards at the bottom.

Of particular interest is the equation:

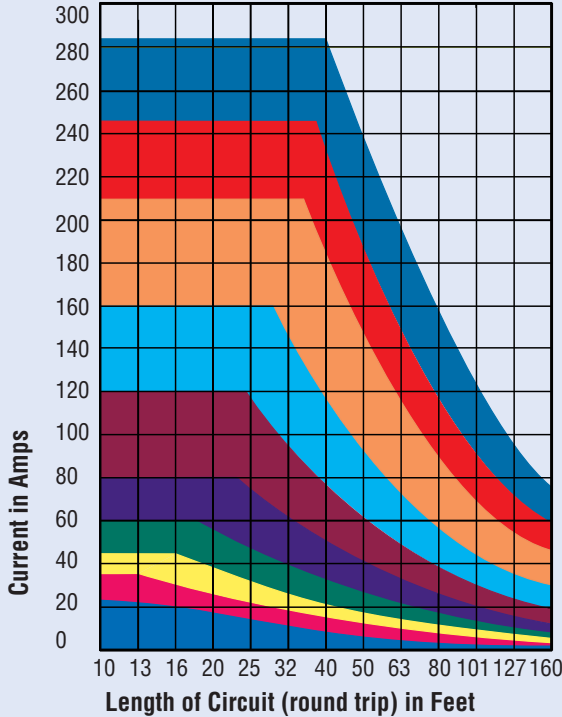
**Voltage Drop = Current x Length x Ohms per foot**

This simple equation allows you to calculate the voltage drop for a circuit of any length and any current flow, if you know the resistance of the wire.

Finally, note that the amp capacity of the wire curtails using very short lengths of wire for large current flows, as show by the "flat tops" of the 10% chart areas.

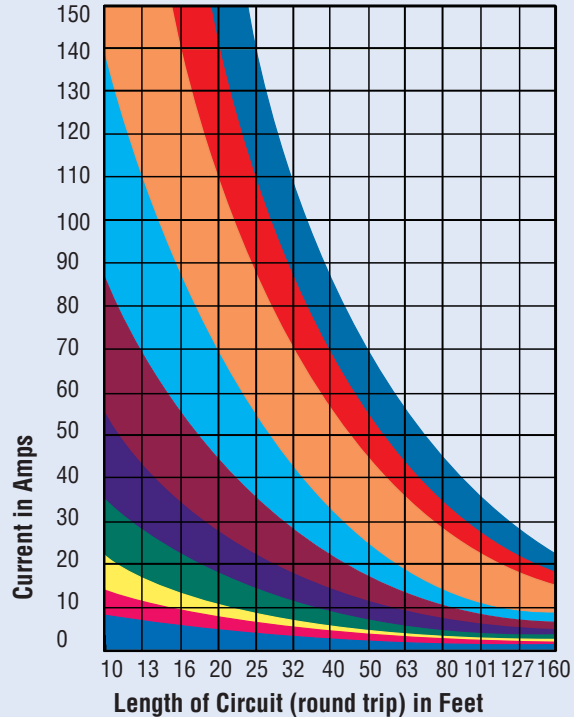
### 10% Voltage Drop, 12V DC Wiring

For circuits other than running lights, electronics and panel board feeds



### 3% Voltage Drop, 12V DC Wiring

For running lights, blowers, electronics and panel board feeds



#### Wire Gauge Color Code

Colors in above charts correspond to AWG wire sizes at right:



These simple, proprietary graphs assume:

#### 1. 105°C insulation rating

All Ancor wire uses 105°C insulation rating. Lower temperature insulation cannot handle as much current (the flat tops on the 10% graph would be lower than shown)

#### 2. AWG wire sizes, not SAE

All Ancor wire uses AWG wire sizes. SAE wire sizes are 6%-12% smaller, carry proportionally less current, and have greater resistance

#### 3. Wires are not run in engine spaces

Maximum current is 15% less in engine spaces, which are assumed to be 20°C hotter than non-engine spaces (50°C vs 30°C).

#### 4. Conductors are not bundled

If three conductors are bundled, reduce maximum amperage by 30%. If 4-6 conductors are bundled, reduce maximum amperage by 40%. If 7-24 conductors are bundled, reduce amperage by 50%.

### To Complete Your Project, Don't Forget:

- Heat Shrink Tubing
- Wire Strippers, cutters and crimpers
- Terminals: ring, spade or butt connectors

### AWG Wire Specs

Wire Size (AWG)	Nominal OD	Weight per 1000'	Cir. Mil Area	Square mm	Ohms per 1000'	Max. Amps
18	7/64"	12#	1,600	0.823	6.48	20
16	1/8"	16#	2,600	1.31	4.00	25
14	9/64"	23#	4,100	2.08	2.5	35
12	5/32"	31#	6,500	3.31	1.75	45
10	7/32"	44#	10,500	5.26	0.98	60
8	5/16"	86#	16,800	8.37	0.62	80
6	11/32"	18#	26,600	13.30	0.40	120
4	13/32"	178#	42,000	21.15	0.24	160
2	15/32"	277#	66,500	33.62	0.157	210
1	17/32"	350#	83,690	44.21	0.127	245
1/0	9/16"	437#	105,600	53.49	0.099	285
2/0	5/8"	549#	133,000	67.43	0.077	330
3/0	11/16"	675#	167,800	85.01	0.062	385
4/0	13/16"	837#	211,600	107.20	0.049	445

## Marine-Grade Wire

Sophisticated marine electronics and instruments only operate at peak potential when supplied with power at the right voltage, and that necessitates high-quality wire. Ordinary automotive-type wire can suffer a loss of conductivity, caused by corrosion and/or vibration, after a few months in the marine environment. Corrosion takes place when the wire's jacket and insulation are compromised by water intrusion, which rapidly corrodes the copper conductor. Ancor wire is rated for oily and wet environments because its jacket is impervious to those conditions. Each strand of Ancor wire has a tin coating

for extra corrosion resistance (note the "silver" look to Ancor wire when you strip it). Vibration is always present on a boat, and will quickly fatigue and crack coarsely-stranded wire. Ancor wire is Type 3 stranded, meaning that it has 5-10 times more copper strands than Type 2 wire, so it's more flexible and fatigue-resistant. Ancor wire is Marine UL-listed, and meets the highest ABYC standards for AC or DC use. Finally, Ancor wire is based on AWG (American Wire Gauge) wire sizes, which are 6-12% larger than SAE gauge wire, so you get more current-carrying ability than from similar SAE wire.



## Primary Wire by the Foot

Gauge	Color	Std. Pack	Model	ANCOR#	ShWt (#ft.)	Only/ft.
8	Black	100'	152876	111010	.1	2.49
8	Red	100'	152868	111510	.1	2.49
8	Green	100'	290866	111310	.1	2.99
8	Yellow	100'	1920123	111910	.1	2.99
8	White	100'	385518	111710	.1	2.99
10	Black	100'	227728	108010	.1	1.99
10	Red	100'	227710	108810	.1	1.99
10	Green	100'	290858	108310	.1	1.99
10	White	100'	385500	108910	.1	1.99
10	Blue	100'	102238	108110	.1	1.99
10	Orange	100'	102246	108510	.1	1.99
10	Yellow	100'	2612281	109010	.1	1.99
12	Black	400'	214031	106040	.1	.93
12	Red	400'	214023	106840	.1	.93
12	Green	400'	588442	106340	.1	.93
12	White	400'	588434	106940	.1	.93
12	Blue	100'	445124	106112	.1	.93
12	Yellow	100'	443178	107012	.2	.93
14	Black	500'	214056	104050	.1	.68
14	Red	500'	214049	104850	.1	.68
14	Green	500'	588467	104350	.1	.68
14	White	500'	588459	104950	.1	.68
14	Yellow	100'	448763	105012	.1	.68
16	Black	500'	214510	102050	.1	.36
16	Red	500'	214064	102850	.1	.36
16	Blue	100'	431868	102112	.1	.36
16	Green	100'	440125	102312	.1	.36
16	White	100'	435026	102912	.1	.36
16	Yellow	100'	442683	103011	.1	.36
18	Black	500'	102048	100050	.1	.34
18	Red	500'	102071	100850	.1	.34



## Battery Cable

Extra-fine Type 3 tinned copper strands for greater flexibility and corrosion resistance. Per foot.

Gauge	Color	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
4/0	Red	50'	146634	119505	.9	17.99
4/0	Black	50'	146659	119005	.8	17.99
4/0	Yellow	50'	3877198	119905	.9	17.99
3/0	Red	50'	146683	118505	.7	16.49
3/0	Black	50'	5070164	118005	.7	16.49
3/0	Yellow	50'	3877131	118905	.7	16.49
2/0	Red	50'	233684	117505	.6	14.99
2/0	Black	50'	214544	117005	.5	14.99
1/0	Red	50'	185504	116505	.4	11.99
1/0	Black	50'	179531	116005	.4	11.99
1	Red	50'	233692	115505	.4	7.99
1	Black	50'	233700	115005	.5	7.99
1	Yellow	100'	1920594	115910	.4	7.99
2	Red	50'	233718	114505	.1	6.59
2	Yellow	100'	1920529	114910	.3	6.59
2	Black	50'	233726	114005	.3	6.59
4	Red	100'	179523	113510	.2	5.69
4	Yellow	100'	1920297	113910	.1	5.69
4	Black	100'	214551	113010	.2	5.69
6	Yellow	100'	1920131	112910	.1	4.09
6	Red	100'	227736	112510	.1	4.09
6	Black	100'	227645	112010	.1	4.09
6	White	100'	102279	112710	.1	4.09
6	Green	100'	102261	112310	.1	4.09

## Battery Cable in 25' Spools

Gauge	Color	Std. Pack	Model	ANCOR#	ShWt	Only
2	Red	25'	434268	114502	7	119.99
2	Black	25'	445890	114002	7	119.99
4	Red	25'	438004	113502	3.8	99.99
4	Black	25'	443657	113002	5.4	99.99
6	Red	25'	444440	112502	3.2	92.99
6	Black	25'	456378	112002	3.6	92.99

## Primary Wire, Mini Spools



Gauge	Color	Qty.	Model	ANCOR#	ShWt	Only
10	Red	8'	290924	188803	2	18.99
10	Black	8'	290916	188003	.3	18.99
12	Red	12'	156620	186803	.4	18.99
12	Black	12'	156570	186003	2	18.99
14	Red	18'	106120	184803	2	18.99
14	Black	18'	106138	184003	2	18.99
14	White	18'	106104	184903	2	18.99
14	Green	18'	290932	184303	.4	18.99
14	Yellow	18'	385567	185003	.4	18.99
14	Blue	18'	385559	184103	.5	18.99
14	Orange	18'	102329	184503	.4	18.99
14	Purple	18'	102337	184703	2	18.99
16	Red	25'	106179	182803	.9	18.99
16	Black	25'	106187	182003	.5	18.99
16	White	25'	290908	182903	2	18.99
16	Green	25'	290940	182303	2	18.99
16	Yellow	25'	385542	183003	.4	18.99
16	Blue	25'	385534	182103	.4	18.99
16	Orange	25'	102311	182503	.3	18.99
18	Black	35'	588426	180003	2	18.99
18	Red	35'	593608	180803	.4	18.99
18	White	35'	102303	180903	2	18.99
18	Orange	35'	102287	180503	.3	18.99
18	Purple	35'	102295	180703	.4	18.99

Electrical

# Marine Wire



## Flat Safety Wire by the Foot

To reduce the chances of electrocution on board, we strongly recommend using Safety Wire in your DC system. The familiar red and black conductors are now red and yellow, to reduce the chance of incorrectly connecting the AC hot (black) with the DC ground (black).

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
6-2	50'	<b>328031</b>	123705	.3	<b>8.55</b>
8-2	100'	<b>297400</b>	123910	.2	<b>5.50</b>
10-2	400'	<b>297418</b>	124140	.1	<b>3.29</b>
12-2	500'	<b>297426</b>	124350	.1	<b>2.20</b>
14-2	500'	<b>297434</b>	124550	.1	<b>1.65</b>
16-2	500'	<b>297440</b>	124750	.1	<b>1.20</b>
18-2	500'	<b>297459</b>	124950	.1	<b>.96</b>

## Flat Safety Wire by the Spool

Size	Std. Pack	Model	ANCOR#	ShWt	Only
10-2	100'	<b>297467</b>	124110	8	<b>299.99</b>
12-2	100'	<b>297475</b>	124310	8.7	<b>169.99</b>
14-2	100'	<b>297483</b>	124510	5	<b>129.99</b>
16-2	100'	<b>297491</b>	124710	4.6	<b>99.99</b>
18-2	100'	<b>297509</b>	124910	3.5	<b>79.99</b>



## Triplex Wire by the Foot

For AC wiring. White jacket over black, white and green conductor.

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
10-3	100'	<b>214528</b>	131110	.2	<b>3.85</b>
12-3	100'	<b>179515</b>	131312	.1	<b>3.30</b>
14-3	100'	<b>179473</b>	131512	.1	<b>1.89</b>
16-3	500'	<b>290890</b>	131750	.1	<b>1.65</b>

## Triplex Wire by the Spool

For AC wiring. White jacket over black, white and green conductors.

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only
12-3	100'	<b>409391</b>	131310	13	<b>249.99</b>
14-3	100'	<b>409409</b>	131510	6	<b>149.99</b>
16-3	100'	<b>358465</b>	131710	7.1	<b>129.99</b>



## Fourplex Trailer Cable

Four brown, green, white and yellow 16 AWG wires in a flat package with a white jacket. Sold per foot.

Model **202994** | ANCOR#154030 | ShWt. 1 | **2.29**



## Duplex Wire by the Foot

White jacket over a black and a red conductor.

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
6-2	100'	<b>290882</b>	120710	.3	<b>9.99</b>
8-2	100'	<b>179465</b>	120910	.2	<b>5.49</b>
10-2	400'	<b>179457</b>	121140	.1	<b>3.29</b>
12-2	500'	<b>179440</b>	121350	.1	<b>2.20</b>
14-2	500'	<b>179432</b>	121550	.1	<b>1.65</b>
16-2	500'	<b>179499</b>	121750	.5	<b>1.20</b>
18-2	500'	<b>179507</b>	121950	.1	<b>.96</b>
20-2	500'	<b>290874</b>	122050	.1	<b>.75</b>

## Duplex Wire, 100' Spools

Gauge	Model	ANCOR#	ShWt	Only
10-2	<b>233734</b>	121110	8	<b>299.99</b>
12-2	<b>227611</b>	121310	8	<b>169.99</b>
14-2	<b>227603</b>	121510	6.8	<b>129.99</b>
16-2	<b>227629</b>	121710	5.1	<b>99.99</b>
18-2	<b>227637</b>	121910	3.9	<b>79.99</b>



## High Voltage Antenna Lead-in Wire

14 gauge antenna lead-in for HAM and SSB installations (not VHF or TV).

Length	Model	ANCOR#	ShWt	Only
per foot	<b>542274</b>	150110	.1	<b>1.15</b>
25' spool	<b>268300</b>	150102	3	<b>26.99</b>



## Twisted Pair Wire with Shield

Similar to Ancor duplex wire, except that the conductors are twisted and surrounded by a copper shield for extra protection against noise and electrical interference. Red/black conductors. Recommended by ABYC for DC wiring near compasses and other magnetically-sensitive devices. Sold per foot.

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
14-2	100'	<b>542266</b>	141410	.1	<b>3.49</b>



## Bilge Pump Wire

Black, brown and red conductors in a gray water-resistant jacket. Sold per foot.

Gauge	Std. Pack	Model	ANCOR#	ShWt	Only/ft.
14-3	250	<b>361280</b>	156425	.1	<b>2.39</b>
16-3	250	<b>361220</b>	156625	.1	<b>1.99</b>

Electrical

## The West Advisor®

# Primary Wire Color Standards

The ABYC (American Boat and Yacht Council) recommends the following color standards for marine wiring of boat engines and accessories. Select wire color from the list below.

COLOR	ITEM	APPLICATION
RED	DC Positive Conductor	Positive Mains
BLACK OR YELLOW	DC Negative Conductor Return,	Negative Mains
GREEN OR GREEN w/yellow stripe	DC Grounding Conductor	Bonding System Bonding Wires (if insulated)
LIGHT BLUE	Oil Pressure	Oil Pressure Sender to Gauge
DARK BLUE	Cabin & Instrument Lights	Fuse or Switch to Lights
GRAY	Navigation Lights Tachometer	Fuse or Switch to Lights Tachometer Sender to Gauge
ORANGE	Accessory Feed	Ammeter to Alternator or Generator Output and Accessory or Fuses Switches
	Common Feed	Distribution Panel to Accessory Switch
PINK	Fuel Gauge	Fuel Gauge Sender to Gauge
TAN	Water Temperature	Water Temperature Sender to Gauge
YELLOW w/red stripe	Starting Circuit	Starting Switch to Solenoid
BROWN	Generator Armature	Generator Armature to Regulator
	Alternator Charge Light	Generator/Terminal/Alternator
	Pumps	Fuse or Switch to Pumps
BROWN w/yellow stripe	Bilge Blowers	Fuse or Switch to Blower
PURPLE	Ignition	Ignition Switch to Coil & Instruments
	Instrument Feed	Distribution Panel to Instruments













# Electrical Tools



## Ankor Automatic Wire Stripper

Strips without damage or marking of conductors and features a slim jaw for easy access and steel side cutter. Automatically adjusts to different wire sizes.

**Functions:** Strips and Cuts Wire **Wire Gauges Handled:** 24 to 12-gauge wire **Length:** 7 1/4" **Tool Materials:** Reinforced polyimide **Polyimide Warranty:** One year

**Model 401661** | ANCOR#702030 | ShWt .3 | **48.99**



## Ankor Stainless Steel Wire Cutter, Stripper & Crimper

Stainless steel blade resists corrosion and nicking and the dual GRIP is easier on wrists. Overmolded ergonomic handles for comfort. Laser etched permanent markings. Precision ground plier nose. Looping holes.

**Functions:** Cuts and Strips **Wire Gauges Handled:** Crimps 10-22AWG insulated and non-insulated terminals and coaxial connectors; cuts and strips 8-22AWG solid and stranded wire; cuts and rethreads 4-40, 5-40, 6-32, 10-24, 10-32 screws **Length:** 8 1/4" **Tool Materials:** Stainless steel handles and jaws, neoprene over PVC grip **Warranty:** One year

**Model 5764568** | ANCOR#701009 | ShWt .4 | **26.99**



## Ankor Cut/Strip/Crimp Tool

This tool features a wide crimping range and precision-ground cutters and strippers.

**Functions:** Crimps, Cuts and Strips **Wire Gauges Handled:** Crimps: 10-22AWG insulated and non-insulated terminals and connectors Strips: insulation from 10-22AWG solid and stranded wires Cuts: 4-40, 6-32, 8-32, 10-32, 10-24 bolts **Length:** 8 1/4" **Tool Materials:** 9-gauge steel, PVC handle **Warranty:** One year

**Model 411084** | ANCOR#701007 | ShWt .1 | **52.99**



## Ankor Wire Stripper

Strips 10-18AWG stranded wire. Automatic wire stripper self-adjusts to strip wire. Crimps insulated terminals.

**Functions:** Crimps and Strips Wire **Wire Gauges Handled:** Strips 10-26AWG stranded wire; Crimps 10-22AWG terminals **Length:** 8 1/4" **Tool Materials:** 9-gauge steel, PVC handle **Warranty:** One year

**Model 1918713** | ANCOR#702033 | ShWt .1 | **26.99**



## Ankor Professional Wire Cutter

Cut stranded copper wire from 22AWG to 2/0AWG copper wire and cable (not for steel). Shears produce a very smooth cut without deforming the wire like diagonal cutters do.

**Functions:** Cuts Wire and Cable **Wire Gauges Handled:** 22AWG to 2/0AWG **Length:** 9" **Tool Materials:** 9-gauge steel, PVC handle **Warranty:** One year

**Model 401679** | ANCOR#702005 | ShWt .1 | **59.99**



## Seafit Stripper/Crimper

This inexpensive tool is forged in 9-gauge, heat-treated steel. Thick grips help prevent fatigue. Special wire cutter on nose reaches tough wiring spots.

**Functions:** Crimps and Strips Wire **Wire Gauges Handled:** 10-22 **Length:** 8 1/4" **Tool Materials:** 9-Gauge Steel, PVC handle **Warranty:** One year

**Model 5348883** | SFELE#5348883 | ShWt .6 | **11.99**



## Ankor Coax Stripper

Remove coax jacket without nicking the braid sheathing with this dual-blade cutter.

**Functions:** Strips Coax Cable **Wire Gauges Handled:** Strips RG58, RG59, RG8X, RG62 **Length:** 4 1/4" **Tool Materials:** Fiberglass Reinforced Polyamide **Warranty:** One year

**Model 541839** | ANCOR#702050 | ShWt 2 | **26.99**



## Ankor Battery Cable Stripper

Constructed with a swivel blade for circular and longitudinal cuts. Adjustable blade cutting height. Includes extra blades.

**Functions:** Crimps and Strips Wires **Wire Gauges Handled:** Strips 8AWG to 4/0AWG Battery Cable; Slits 18/2 to 6/2 AWG duplex and 16/3 to 6/3AWG triplex wire **Length:** 5 1/4" **L Tool Materials:** Plastic handle **Warranty:** One year

**Model 3253259** | ANCOR#702065 | ShWt .1 | **23.99**



## Ankor Heavy Cable Crimping Tool

Spring loaded pivot bar. Crimps #6 to #4/0 wire with the aid of a hammer or vise.

**Functions:** Crimps lugs and terminals onto wire **Wire Gauges Handled:** 6-4/0AWG **Length:** 6.25" **Tool Materials:** Steel with a hardened pivot pin **Warranty:** One year

**Model 214080** | ANCOR#701010 | ShWt .8 | **87.99**



## West Marine Multi-Die Ratcheting Crimper Kit

Five crimping tools in one! This crimper comes with five interchangeable dies for crimping all kinds of electrical connectors—coaxial, non-insulated, insulated,

open-barrel and insulated cord end terminals. Crimps in one motion, relieving hand strain and fatigue. Includes release lever. Housed in a rugged case.

**Functions:** Crimps most electrical connectors with five dies **Wire Gauges Handled:** 24-10AWG **Length:** 8 5/8" **Tool Materials:** Coated steel, PVC handle **Warranty:** One year

**Model 8956906** | WMELE#J6B-ABCDE | ShWt 2.1 | **82.99**



## Ankor Micro Therm Torch

Self-igniting, butane-fueled heat gun is ideal for heat shrink applications, stretching and bending vinyl, plastic and PVC. Flameless. 650°C. Compact unit fits easily in your toolkit. Butane not included.

**Model 1197037** | ANCOR#702027 | ShWt .1 | **21.99**



## Ankor Mini Pocket Torch

Super compact butane pocket torch with windproof flame and waterproof ignition is ideal for use in the marine environment. Produces a pinpoint flame of 2500°F (1300°C) to melt wax and glue, and

shrink heat shrink tubing, thaw locks and even solder. Electronic ignition system with safety locking switch. Refillable butane cartridge included (butane sold separately). 8 1/2"L x 4"W x 1 1/4"D.

**Model 3669181** | ANCOR#702024 | ShWt .4 | **27.99**



## Ankor 600-Piece Marine-Grade Nylon Insulated Connector Kit

Includes 150 assorted 22-10 butt connectors, 300 assorted 22-10 ring terminals, 25 each fully insulated 16-14 male and female disconnects, 25 each 16-

14 #8 and #10 flanged spade connectors, 25 female 16-14 female disconnects and 25 fully insulated 12-10 female disconnects.

**Model 1917913** | ANCOR#250001 | ShWt 6.2 | **199.99**



## Ankor 257-Piece Marine-Grade Heat Shrink Connector Kit with Crimper & Mini Torch

Includes 110 Assorted 22-10 Heat Shrink Butt Connectors, 145 Assorted 16-10 Ring Terminals, 1 Single crimp ratchet tool and 1 mini butane pocket torch (without butane).

**Model 1917996** | ANCOR#320001 | ShWt 5.4 | **299.99**

### Associate's Choice



## "Works every time" Ankor Wire Stripper

Many boaters agree with Associate Gerald Anderson of our Alameda, California store who calls wire stripping, "the bane of electrical work." But it doesn't have to be a problem when you own this tool. Gerald says, "It works every time."

**Gerald Anderson, Alameda, CA**

*Gerald has been a boater for 14 years, and spent 4 of those years as a full-time cruiser in Mexico. He owns a Hans Christian 33.*

# Connectors, Tapes, Circuit Testers & Multimeters

Ancor

## Coastal Marine-Grade Electrical Kit

Two expandable trays hold 12 compartments of Ancor marine-grade electrical equipment and three essential tools—a much better value than buying items individually. Kit includes approximately 100 butt, spade, and ring connectors, 50–60 cable ties, clamps, various lengths of heat shrink tubing, spare bulbs and fuses in assorted sizes, two fuse holders, two battery lugs, #12 and #16 boat cable, 16/2 duplex wire, a wire cutter, wire stripper and wire crimper. Packed in a durable plastic tool box.

**Model 191629** | ANCOR#220007 | ShWt 7 | **224.99**



Portasol

## Portable Butane Soldering Kit

This iron/heat tool kit is designed for soldering applications that require super precision. The soldering tool is cordless, refillable and operates up to 90 minutes on one tank of butane lighter fuel. It's soldering tip has an adjustable heat capacity of a 10-60W soldering iron for delicate and larger jobs. Includes a blow torch tip for 1300°C silver soldering, a 500°C hot blow tip for heat shrink tubing, a hot knife tip for cutting line and plastic, a safety stand and cleaning sponge.

**Model 355016** | WELLR#480020 | ShWt .5 | **87.99**

## Portable Butane Soldering Iron

Similar to the kit above, but only includes soldering tip.

**Model 281808** | WELLR#480038 | ShWt .1 | **43.99**

## Additional Butane - 3.04oz.

**Model 281816** | WELLR#99144 | ShWt .1 | **5.19**



West Marine

## Copper Alligator Clips

Copper-clad clips are large enough to fit marine battery terminals. One red and one black clip.

**Model 255671** | WMELE#SC-3029AB | ShWt .7 | **4.59**



3M

## Economy Vinyl Electrical Tape

An economical tape for use where durability is not a factor. 3/4" x 66'.

**Model 544262** | 3M#49656 | ShWt .2 | **1.39**



3M

## Premium Vinyl Plastic Electrical Tape

Excellent resistance to flame, abrasion, moisture, solvents, oil, and many acids. Gives full electrical and mechanical protection. 3/4" x 60'.

	Model	3M#	ShWt	Only
Black	<b>139303</b>	6132	.3	<b>7.49</b>
White	<b>227579</b>	10828	.2	<b>7.49</b>
Red	<b>129884</b>	10810	.3	<b>7.49</b>
Green	<b>129890</b>	10851	.5	<b>7.49</b>
Blue	<b>182743</b>	10836	.1	<b>7.49</b>



3M

## Multi-Color Electrical Tapes

For color coding wires and circuits, insulating splices and terminating connections. Resists abrasion, UV damage, weather, solvents, alkalies and many acids. Handy pack is easy to use and store. Includes five 1/2" x 20ft. rolls in blue, green, red, yellow and white.

**Model 1168137** | 3M#59073 | ShWt .3 | **7.49**



## Rescue Tape

Rescue Tape is a self-fusing silicone repair product with infinite uses. First used by the US Military, this is the most versatile and easy-to-use emergency repair product available. Repair leaks on plumbing and hoses in a flash, use to insulate electrical wiring or as shrink wrap, wrap tool handles, and much, much more. 950 PSI Tensile Strength. Insulates 8,000 volts per layer. Withstands 500°F of heat and remains flexible to -85°F. Sold in 1"W x 12'L rolls.



	Model	RESCU#	ShWt	Only
Black	<b>10975209</b>	RT1000201201USC	.4	<b>9.99</b>
Red	<b>10975217</b>	RT1000201202USC	.4	<b>9.99</b>
White	<b>10975225</b>	RT1000201203USC	.4	<b>9.99</b>
Clear	<b>10975233</b>	RT1000201204USC	.4	<b>9.99</b>
Yellow	<b>10975241</b>	RT1000201205USC	.4	<b>9.99</b>
Blue	<b>10975258</b>	RT1000201206USC	.4	<b>9.99</b>
Green	<b>10975266</b>	RT1000201207USC	.4	<b>9.99</b>
Orange	<b>10975274</b>	RT1000201208USC	.4	<b>9.99</b>

◊ <b>Symbol</b> Hazard Shipping	⚠	↑ <b>Symbol</b> Oversized Shipping	📦	‡ <b>Symbol</b> Truck Freight	🚚
<b>Extra shipping costs may apply on items bearing any of these identifying marks</b>					

## Circuit Testers & Multimeters

Sperry Instruments

## Continuity and Voltage Testers

Whether you're testing for simple continuity in non-energized components or across a charged circuit there is a Sperry electrical probe engineered specifically for the job. Model 12033114 provides a bright, 360° visual indication of the integrity of non-energized fuses, bulbs and wires. Model 12033122, features snap-in probes for "hands free" tests of both continuity and voltage on energized circuits between 80-480V. Both models are built to professional standards to ensure durability, accuracy and safety. Lifetime warranty.

Voltage	Wire Lead Length	Wire Terminal Type	Model	MARCO#	ShWt	Only
Only use on non-energized circuits	36"	Insulated alligator clip	<b>12033114</b>	CT6101	.9	<b>7.99</b>
80-480V	36"	Snap-in, spaced leads	<b>12033122</b>	ET6207	.1	<b>27.99</b>



Sperry Instruments

## Wire Tracker™ Wire Tracer

Increasingly sophisticated on-board voice, data and video installations make this an essential tool for the modern boat. Instantly provides both audible and visual identification of non-energized wiring and signal strength in coax, CAT 5, audio, HDTV, phone or any non-energized wire. Nested probe and adapter plugs for bare wire, RJ-45, RJ-11, coax, CAT 5, phone and automotive-style fuse blade connections are self-contained within the unit keeping all components together during transportation or storage. Adjustable sensitivity level positively identifies a single wire when multiple wires are routed in close proximity. Operates from (2) AAA batteries (transmitter) and (4) LR44 batteries (receiver). Auto-off function extends battery life in both transmitter and receiver. Convenient belt-clip. Lifetime Warranty.

**Model 12033130** | MARCO#ET64220 | ShWt .6 | **149.99**



Sperry Instruments

## Analog Multimeter 5 Function

Compact, lightweight design measures five functions in twelve ranges including AC/DC voltage, DC Milliamps, Resistance, Continuity and Transistor Gain. Ohms and needle zero point adjustment ensures accurate needle deflection and consistent response. Fuse-protected to 250V. Complete with removable, color-coded test leads, battery and instructions.

**Range Setting:** Manual **Display Type:** Analog **DC Voltage:** 300V **AC Voltage:** 300V **DC Current:** 250mA **DC Voltage:** 300V **Resistance:** 1M **Test Lead Length:** 36" **Batteries:** AA (1) **Length:** 3 5/8" **Width:** 2 3/8" **Depth:** 1 3/16" **Warranty:** Five years

**Model 12033148** | MARCO#HSP5 | ShWt .4 | **19.99**



Sperry Instruments

## 7-Function Digital Multimeter

Digital multimeters offer more than just large, easy-to-read displays. Digital technology provides functions that are simply not possible with analog meters. In addition to measurement of AC/DC voltage or resistance as well as diode and battery testing, this seven function model offers temperature measurement capability (-40°F–752°F) that extends the tool's usefulness to include both engine and HVAC diagnostics. Auto ranging feature calculates the appropriate resolution scale based upon the application and audible continuity signaling simplifies working in confined spaces or on unfamiliar equipment.

**Range Setting:** Auto **Display Type:** Digital **DC Voltage:** 600V **AC Voltage:** 500V **DC Current:** n/a **DC Voltage:** 600V **Resistance:** 200-20M **Test Lead Length:** 36" **Batteries:** AAA (2) **Length:** 5 3/8" **Width:** 2 3/4" **Depth:** 1 5/16" **Warranty:** Five years

**Model 12033155** | MARCO#DM6250 | ShWt .1 | **43.99**



## Multimeters / LED Lights



Sperry Instruments

### 9-Function Digital Multimeter

new

Oversize, 3 1/2" LCD backlit screen displays input icons for correct test lead placement. Relative Delta function captures and displays variances in readings helping to pinpoint discrepancies in waveforms. Functions include measurement of AC/DC voltage and amperage, resistance, frequency, continuity testing with audible signal plus diode and battery testing.

**Range Setting:** Auto **Display Type:** Digital **DC Voltage:** 1000V **AC Voltage:** 750V **DC Current:** 10A **DC Voltage:** 1000V **Resistance:** 400-40M **Test Lead Length:** 36" **Batteries:** 9 Volt (1) **Length:** 7" **Width:** 3 3/8" **Depth:** 1 1/2" **Warranty:** Five years

**Model 12033163** | MARCO#DM6450 | ShWt. 1.2 | **89.99**



Sperry Instruments

### 6 Function Digital Snap-Around

new

Combines the safety of non-contact current measurement with the versatility of a six-function multimeter. Provides easy, one-hand operation with data hold capability that maintains display reading and auto ranging technology that determines the correct range scale to apply. Calculates AC and DC voltage, current, resistance and continuity. Auto-power off prolongs life of (2) AAA batteries. Includes carrying case.

**Range Setting:** Auto **Display Type:** Digital **DC Voltage:** 600V **AC Voltage:** 600V **DC Current:** 400A **DC Voltage:** 600V **Resistance:** 4000-400M **Test Lead Length:** n/a **Batteries:** AAA (2) **Length:** 7 3/16" **Width:** 1 11/16" **Depth:** 1 1/8" **Warranty:** Limited Lifetime

**Model 12033171** | MARCO#DSA540A | ShWt. .8 | **149.99**



Blue Sea Systems

### Mini Clamp Multimeter with True RMS

The Mini Clamp Multimeter is a compact and practical tool, accurately reading voltage and current when its jaws are clamped around any current-carrying wire. Most DC clamp meters have only a high scale of 400A or 1000A, and do a poor job of resolving the currents drawn by smaller loads like a single lamp or small pump. This digital meter covers the typical ranges needed on a boat. The 40A scale offers a resolution of 10mA, so it can not only measure current through small loads, but also detect some unintentional leakage

currents that might appear because of faults in an AC or DC system. AC measurement is true RMS, a big plus compared to typical meters in this class that use simpler response systems, less accurate when measuring complex waveforms. This is important for marine applications, especially when measuring the output of an inverter.

**Range Setting:** Auto **Display Type:** Digital **Maximum DC Voltage:** 600V **DC Voltage Resolution:** 0.001V-1V **Maximum AC Voltage:** 600V (RMS) **AC Voltage Resolution:** 0.001V-1V **Max AC Frequency Response:** 50-400Hz **Max AC/DC Amps:** 400A **Max AC/DC Amps Resolution:** 0.01A-0.1A **Max Ohm Resolution:** .1-.01M **Max Ohm Resistance:** 400M **Included Test Leads:** Case and black/red test leads included **Battery:** Yes **Dimensions:** 7 1/2"H x 2 1/2"W x 1"D **Warranty:** Three years

**Model 8715146** | BLUES#8110 | ShWt. 2.1 | **172.99**

Electrical

## The West Advisor®

## LED Lighting Technology



Light Emitting Diodes, more commonly known as LEDs, operate at lower temperatures, use less energy, tolerate vibration better and last far longer than conventional incandescent bulbs. They also do not contain small amounts of toxic mercury, an environmental disposal hazard associated with fluorescent lights. LEDs cost a bit more, but are worth their premium price in the long run. Here's why:

### Incandescent bulbs waste energy

The light bulb, that marvel of technology created by Thomas Edison, operates by cramming a large volume of electrical current through a resistor encapsulated in a vacuum. This resistor, the tungsten filament, gets so hot that it glows white, and only the absence of oxygen prevents it from burning up in an instant. About 5% of the energy is released as light. The rest is mostly turned into heat, as we all know from burning our fingertips when we try to change a 60 watt bulb.

After more than a century, we're still depending on Edison's technology, but there are now cooler, more energy-efficient, and more "elegant" alternatives. In the very near future we'll be seeing a lot more of them, mainly because they will reduce energy use and the production of greenhouse gasses.

### Light emitting diodes

LEDs, are becoming increasingly common on both land and water. They first gained wide use as **indicator lights**, such as automobile and trailer tail lights, stop lights at intersections, and "ON" indicators on switches and electrical panels. LEDs for illumination, for lighting rooms, streets and boat cabins, for example, have not been as practical of an alternative until recently, because the light output (in lumens per watt of electricity) has not approached that of fluorescent lights or incandescents. That situation is gradually changing.

Early LEDs measured about .25mm across, and were low in light output. More recent designs are four times that size, and much brighter. **Single high-output LED lights**, like the Microstar and others, are emitting enough light to illuminate small areas. **Clusters of LEDs** connected together in combination with reflectors, diffusers and lenses, are approaching and will soon surpass the output of incandescent bulbs.

LEDs operate on a totally different principle than traditional incandescent style lights. Instead of using a brittle metal filament that is susceptible to shock and vibration, LEDs

are solid-state devices with no moving parts utilizing an electronic chip that is encapsulated in an epoxy substrate. This design provides increased durability and a protective seal against outside or foreign elements.

### How they work

LEDs are diodes, semiconductors that allow current to flow in only one direction. Two materials are placed very close together in what is called an "N-P junction". Run a current through the junction, and light energy is released.

LEDs emit light of one color only, and the color is determined by the chemistry of the device. There are two primary varieties: Blue, white, green and ultraviolet LEDs use indium gallium nitride (InGaN). Red, yellow and orange LEDs are built from aluminum gallium indium phosphide. Until recently it was difficult to produce a pure white LED, requiring the mixing of red, green and blue LEDs, blending the colors so the combined light was white (similar to how your television creates white light with red, green and blue dots). A more recent alternative (and a big step forward) uses a blue LED with a phosphor coating, which "yellows" the light so the blended color frequency is white.

LEDs require a self-contained power supply, called a "driver" to provide a current-regulated power output (constant current over the range of designed voltages). Drivers allow an LED to be dimmed using Pulse Width Modulation circuits. Unlike incandescent bulbs, LEDs don't change color as they are dimmed (with white becoming yellow) or wear out more rapidly.

**Efficiency:** LEDs are very energy efficient and consume less power, with up to 90% lower amperage draw than incandescent bulbs. Replacement of a few incandescent bulbs with LEDs reduces the load on your electrical system including your battery, alternator, and power converter.

**Cool operation:** LED lights are cool to the touch and can be left on for hours without incident, since they generate no waste heat.

**Longevity:** LEDs are rated for service lives of 50-100,000 hours compared to 3,000 hours for incandescent bulbs. Most incandescent bulbs need to be replaced within one year, but an LED light could last over 11 years before needing replacement. They don't suddenly burn out like incandescent bulbs either, but gradually become dimmer.

**Reduced wire gauge:** Due to the low energy draw of LEDs, the gauge of wire used can be reduced. Caution: Typical incandescent fusing requirements are too robust for LEDs, so fusing must be sized for the low LED circuit draw. Incorrect fuse sizing can cause damage to your electrical system.



Marine FX

## LED Oval Electropod Utility Lights

Light up your engine, cabin, walkways, deck or anywhere you can imagine. Connects to any 12V system and has super low energy draw from the battery. Can connect to an accessory switch. All cables and assembly instructions included. Water-resistant. One pod per package.

**Light Style:** Utility **Voltage/Draw:** 40mA **Fixture Material:** Gelyo **Fixture Dimensions:** 1" x 1 1/2" x 1" **Mounting Hardware Included/Required:** Includes two screws **Warranty:** One year

	Model	BUZTR#	ShWt	Only
Blue	9361148	1043413	.1	17.99
White	9361155	1043414	.1	17.99
Red	9361163	1043632	.1	17.99



Rite Lite

## Nine-LED Tri Accent Light with Motion Sensor

Nine-LED Tri light is great for the spots in your boat where you need extra light. This light has three light settings—on, dim and off. The three multi-directional light heads come with three LEDs in each head. Each light head rotates independently to direct light right where you need it. Includes motion sensor to operate the light automatically—turns ON when motion is detected, turns OFF automatically when no motion is detected for a period of time. Use it in and under cabinets and in closets. You can mount this light with hook and loop take or the screw mount bracket, both of which are included. Operates on three AA batteries (not included). Dimensions: 4"H x 4"W x 1.2"D.

**Model 10676195** | RITEL#LPL1060MW | ShWt .1 | **19.99**



Rite Lite™

## Wireless 6-LED Under Cabinet Light

Attach this light in kitchen, office, closets, on shelving or more. Six LEDs operate for about 60 hours on the three AAA batteries (not included). Swivel light head lets you point the beam where you want it. ON/OFF/DIMMER operation. For indoor use only.

**Light Style:** Wireless indoor utility **Battery Type:** Three AAA (not included) **Battery Life:** Up to 50 hours (depending on batteries) **Fixture Material:** Plastic **Lens Material/Description:** Clear plastic **Fixture Dimensions:** 8 3/4"L x 2 1/4"W x 1"D **Mounting Hardware Included/Required:** Screw mount bracket or hook and loop tape (included) **Warranty:** Two-year limited

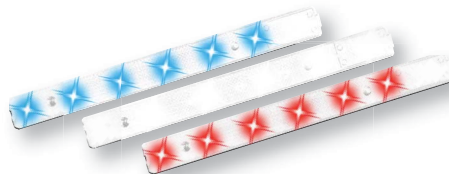
**Model 9364027** | RITEL#LPL640W | ShWt .1 | **14.99**

## Why switch to LED lights?

LED lights offer extremely low energy consumption, remain cool to the touch when operating, and provide consistent illumination through a range of voltages. They are not susceptible to blinking or flickering like incandescent or fluorescent bulbs are. LED's are rated by the manufacturers to operate under normal conditions for approximately 10-11 years or 100,000 hours of continuous use.

Here's why you should consider switching to LED lights:

- LEDs last longer—Never change a bulb!
- Ultra-low energy consumption
- Consistent and bright illumination
- No filament to burn out or break
- Shock and vibration resistant



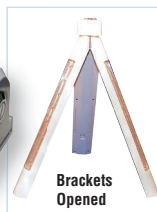
Marine FX

## LED Light Strips

Ultra-bright exterior LED accent lights are great for use aboard your boat or vehicle. Easily connect to any 12V battery and can be connected together in a series.

**Light Style:** Interior/exterior linear accent strips **Voltage/Draw:** 40mA **Fixture Dimensions:** 8"L x 3/4"W x 3/4"D **Fixture Material:** Gelyo **Mounting Hardware Included/Required:** Includes two screws **Wiring Hardware Included/Required:** Includes wiring harness with fuse **Warranty:** One year

	Model	BUZTR#	ShWt	Only
Blue	9361171	1043415	.5	23.99
White	9361189	1043416	.3	23.99
Red	9361197	1043631	.1	23.99



Rite Lite

## 2-in-1 LED Task Light

Multi-function, wireless LED can be used as a hand-held work light, hands-free tripod light, task light, under cabinet light, or wall-mounted light. Sixteen super bright, white LEDs provide up to 100,000 hours of operation. Unique EZ-Mount design can be positioned either horizontally or vertically and allows easy removal of the light from the bracket in seconds for hand-held or tripod use. EZ Mount bracket easy secures to most surfaces using screws (included). Requires six AA batteries. 3"L x 2 1/2"W x 14 3/4"H.

**Model 10676203** | RITEL#LPL930W | ShWt 1.6 | **24.99**



RiteLite™

## Wireless 6-LED Spot Light

Place this innovative light where you need it without the hassle of cords and plugs. Locate the spot-light under cabinets, on book shelves, in the garage or anywhere you need light. Dimensions: 3"L x 4"W x 5"H.

**Model 9614264** | RITEL#LPL720W | ShWt .1 | **14.99**



**Model 9614256** | RITEL#LPL700W | ShWt .3 | **14.99**



Marine FX

## LED Marker Lights

Create a constant glow to accent and protect your watercraft. Durable white plastic housing and six LEDs per Marker Light. Super slim profile. Great for any 12-volt vehicle. All cables and assembly instructions included. One marker light per package.

**Light Style:** Marker, accent, accessory **Voltage/Draw:** 40mA **Fixture Dimensions:** 4 1/4"L x 3/4"W x 3/16"D **Fixture Material:** Gelyo **Mounting Hardware Included/Required:** Adhesive backing included, no screws required **Wiring Hardware Included/Required:** Includes wire leads **Warranty:** One year

	Model	BUZTR#	ShWt	Only
Blue	9361205	1043417	.1	17.99
White	9361213	1043418	.1	17.99
Red	9361221	1043633	.1	17.99

Rite Lite™

## Wireless 5-LED Puck Light

Use these lights in virtually any indoor location. Light head swivels 360° and pivots 30° for optimal light positioning. Five super bright white LEDs provide bright light with one touch ON/OFF/Dimmer operation. Press once for full brightness. Press again for softer light. Press a third time to turn the light off. Each.

**Light Style:** Wireless indoor utility **Battery Type:** Three AAA (not included) **Battery Life:** Up to 50 hours depending on batteries **Fixture Material:** White Plastic **Lens Material/Description:** Frosted plastic **Fixture Dimensions:** 3 1/2" dia. x 1 1/2"H **Mounting Hardware Included:** Hook and loop tape (included) or screw mount bracket (included) **Warranty:** Two-year limited

**Model 9364001** | RITEL#LPL620W | ShWt .1 | **12.99**

Rite Lite™

## Wireless 10-LED Slim Light

This wireless 10-LED Slim Light is ultra slim and perfect for use in cabinets, closets, shelving or even as a desk lamp. Three AA Batteries (sold separately) give hours of light wherever you need it. Adjustable light head allows the LEDs to swivel for optimum light positioning. Dimensions: 12"L x 5"W x 1"H.

**Model 9614272** | RITEL#LPL696W | ShWt .2 | **14.99**



## Wireless 12-LED Under Cabinet Light

Innovative wireless 12 LED under cabinet light allows you to put light where you need it without the hassle of cords and plugs. Six AAA batteries provide hours of light wherever you need it! Place it in your galley, lockers, on shelving or anywhere you need extra light. Dimensions: 12"L x 2 1/2"W x 1 1/4"H.

# LED Interior & Exterior Lights



## West Marine LED Livewell Light

Illuminate your livewell or small utility area with this waterproof LED Light. Cool white single LED is long lasting and draws less than 10% of the power of incandescent bulbs and creates very little heat. Features through-wall mounting and is built from noncorrosive materials. LED board is completely potted in epoxy for total resistance to moisture. Shock-resistant.

**Light Style:** Livewell, submersible **Voltage/Draw:** 12V DC/0.02A@12V **Bulb Wattage:** 0.24W **Fixture Dimensions:** 1/8" H (flush), Flange: 15/16" W square, Stem: 3/4" D **Fixture Material:** ABS plastic **Lens Material/Description:** ABS plastic **Mounting Hardware Included/Required:** No, requires a 3/4" cutout and a max. panel thickness of 1/4" **Wiring Hardware Included/Required:** Pigtail wire connection **Warranty:** 30 days

**Model 9265877** | WMLIT#51114 | ShWt. 1 | **10.99**



## Suncor Microstar LED light

Smallest self-contained LED on the market. Consists of one Nichia white LED bulb with wire. Stainless steel body, totally submersible. Can be mounted on rails.

**Light Style:** LED courtesy, rail light **Voltage/Draw:** 9-15V DC/0.02A **Fixture Material:** Epoxy potted 316 Stainless **Fixture Dimensions:** 1/4" W x 7/8" L / rubber grommet 3/8" ID-1/2" OD **Wiring Provisions:** 2' 22ga. wire leads **Warranty:** Lifetime

**Model 1978139** | SUNCO#C0801-0000 | ShWt. 1 | **19.99**

## Utility & Courtesy Lights



## White West Marine LED Utility Strip Lights

Small utility lights are completely waterproof and feature six LEDs, white or red, for bright, focused light. Their low current consumption makes them perfect for lighting the decks, cabin, locker or bilge. Red model preserves night vision. With LED lights, you'll save money and time because there are no bulbs to replace! Low heat, low amp draw, non-corrosive and shock resistant.

**Light Style:** Indoor/outdoor utility strip **Voltage/Draw:** 12V DC/0.06A@12V **Bulb Wattage:** 0.7W **Fixture Dimensions:** 4" L x 3/4" W x 1" H **Fixture Material:** Rubber **Lens Material/Description:** Polycarbonate **Mounting Hardware Included/Required:** No, two holes for mounting, requires #6 screws **Wiring Hardware Included/Required:** Pigtail wire connection **Warranty:** 30 days

LED	Model	WMLIT#	ShWt	Only
White	9265851	51104	.1	12.99
Red	9265869	51106	.1	12.99



## White West Marine LED Dual-Mount Utility/Step Accent Lights

These mini utility lights use three LEDs to accent the cabin with soft light. They mount vertically or horizontally for low-profile placement on steps, companionways, under cabinets, compartments and more. Low heat, low amp draw, noncorrosive, shock-resistant and water-resistant.

**Light Style:** Dual-mount utility/step **Voltage/Draw:** 12V DC/0.02A@12V **Bulb Wattage:** 2.4W **Fixture Dimensions:** 2 1/8" L x 5/8" H x 1/2" W **Fixture Material:** Plastic **Mounting Hardware Included/Required:** Yes, includes two stainless steel screws **Wiring Hardware Included/Required:** Pigtail wire connection **Warranty:** 30 days

LED	Model	WMLIT#	ShWt	Only
White	9265901	51128	.1	8.99
Red	9265919	51130	.1	8.99



## White West Marine LED Companionway Light

Three LEDs light up your companionway efficiently within these compact 2 1/4" square flush-mount lights. They are noncorrosive and water-resistant and do not require bulb replacement! Low power draw—less than 10% of the power of incandescent bulbs and shock-resistant.

**Light Style:** Courtesy, companionway **Voltage/Draw:** 12V DC/0.02A@12V **Bulb Wattage:** 0.24W **Fixture Dimensions:** 2 1/4" x 2 1/4" **Fixture Material:** ABS plastic **Lens Material/Description:** ABS plastic **Mounting Hardware Included/Required:** Requires four #6 screws, not included **Wiring Hardware Included/Required:** Pigtail wire connection **Warranty:** 30 days

LED	Model	WMLIT#	ShWt	Only
White	9265885	51124	.1	9.99
Red	9265893	51126	.1	9.99

## Utility & Courtesy Lights



## Hella Slim Line Courtesy Lights

An attractive, energy-efficient, no-maintenance solution for a variety of interior and exterior lighting applications. They consume a fraction of the energy of traditional bulb lamps and run very cool due to their low current draw, providing safer installation and money savings. Advanced lens technology provides an even spread of soft light without glare or eyestrain. Feature four LEDs. Shock, impact and vibration-resistant for an ultra-long service life. Each lamp is completely sealed and waterproof (rated IP67).

**Light Style:** Courtesy light **Voltage/Draw:** 12V DC/4 milliamps **Bulb Wattage:** 0.5W **Fixture Material:** UV and impact-resistant plastic **Fixture Dimensions:** 3" dia. x .7/8" H x 2" dia. cutout **Mounting Hardware Included/Required:** Three stainless screws included. Recess mount. Surface mount spacers available. **Warranty:** Five years

	Model	HELLA#	ShWt	Only
<b>White Bezel</b>				
White	8659328	980500441	.1	29.99
Blue	8659344	980502641	.5	29.99
Red	8659385	980507341	.6	29.99
<b>Black Bezel</b>				
White	8659336	980500451	.2	29.99
Blue	8659351	980502651	1	29.99
Red	8659393	980507351	.6	29.99

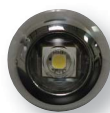


## Hella LED Step Lamp with Polished 316 Stainless Steel Rim

Stylish, compact and power saving LED step lamps are ideal for interior or exterior installations. Completely sealed and ultra durable, the lamps feature a 30° light down angle and include a polished 316 stainless steel cap. Multivolt circuit ensures consistent illumination across a range of input voltages from 10-33V DC for low power consumption and an ultra-long service life.

**Light Style:** Step/Courtesy Light **Bulb Wattage:** 0.5W **Voltage/Draw:** 10-33V DC/0.5W **Fixture Dimensions:** 3 3/16" L x 1 1/8" W x 7/8" D **Fixture Material:** UV and impact-resistant plastic, Polished 316 stainless steel rim **Lens Material/Description:** Plastic diffusion lens **Mounting Hardware Included/Required:** Stainless steel screws included **Warranty:** Five years

	Model	HELLA#	ShWt	Only
Blue	8659419	959680611	.7	27.99
Red	8659427	959680711	.8	27.99
White	8659435	959680811	.5	27.99
Green	8659443	959680911	.2	27.99



## Lumitec Exuma Courtesy/Accent Lights

**new**

Exuma lights are compact, attractive and surprisingly bright. Choose white, red, or blue light output to illuminate counters, stairs, companionways. Completely sealed and IP67 compliant, these lights are also suitable for cockpits, hardtops or illuminating helm stations.

**Light Style:** Courtesy/Accent **Voltage/Draw:** 10-16V DC; 30mA **Bulb Wattage:** 0.43W **Fixture Dimensions:** 15/16" dia. x 3/8" D **Fixture Material:** Stainless steel housing **Mounting Hardware:** #4 mounting screw (included) **Waterproof:** Yes **Warranty:** One year

Color	Model	LUMIT#	ShWt	Only
White	11242815	101049	.1	19.99
Blue	11242823	101050	.1	19.99
Red	11242831	101051	.2	19.99



## Lumitec Andros Indirect Courtesy/Accent Light

**new**

Andros accent/courtesy lights are compact, attractive and surprisingly bright. Great for illuminating counters, stairs or companionways. Completely sealed and IP67 compliant, these lights are also suitable for cockpits, hardtops or helm stations.

**Light Style:** Courtesy/Accent **Voltage/Draw:** 10/16V DC, 30mA **Bulb Wattage:** 0.43W **Fixture Dimensions:** 1" W x 1" H x 1/2" D **Fixture Material:** Cast stainless steel housing **Mounting Hardware:** One #4 mounting screw (included) **Waterproof:** Yes **Warranty:** One year

Color	Model	LUMIT#	ShWt	Only
White	11242781	101043	.1	19.99
Blue	11242799	101044	.2	19.99
Red	11242807	101045	.2	19.99

Dr. LED

## 3" High-Flux Waterproof LED Recessed Lights

These waterproof fixtures produce a warm white light with the latest high-flux LED technology to assure long life. Patented internal circuitry provides consistent brightness and makes them immune to life-shortening voltage fluctuations. They reduce energy consumption aboard with incredibly low-power draw (0.25A @12V). Spot is equivalent to a 60W incandescent beam, bright enough for reading. Flood is equivalent to a 30W incandescent beam, great for ambient light. White and chrome trim rings included. Optional brass and spare chrome trims available. 3" overall dia., requires 2" cutout, 0.8"D.



	Bulb Wattage	Model	DRLED#	ShWt	Only
Recessed Spot	60W	<b>9980137</b>	8001641	.1	<b>69.99</b>
Recessed Flood	30W	<b>9980145</b>	8001658	.1	<b>72.99</b>
Chrome Trim Ring	—	<b>9368713</b>	8001153	.2	<b>9.99</b>
Brass Trim Ring	—	<b>9368721</b>	8001160	.1	<b>9.99</b>

Dr. LED

## Recessed Red/White LED Chart and Reading Light



Switchable red to white LED spot lamp provides red light for easier eye adjustment after nighttime reading of charts or warm white light equivalent to a 40W incandescent bulb for cabin illumination. High-flux LED is immune to voltage fluctuations, has no filament to break and draws only .25A@12V. Recessed waterproof housing is 3" in diameter, 3-wire, requires 2" cutout, 13/16"D to mount.

**Model 12029641** | DRLED#8001788 | ShWt .3 | **69.99**



Hella

## LED Interior Spot Lights

Power saving, high-output LED spots feature unique 'non glare' optic technology for powerful light without discomfort to the eyes. The spot generates up to 450 candela for superior brightness and provides more than 75% power savings compared to a 10W halogen bulb. The lamps also feature an outer ring of red or blue LED light for additional ambient illumination. The ambient function consumes less than 0.5W and is switched on independently of the spot function. Completely sealed, shock and vibration-resistant, these LED lamps provide outstanding reliability, save power and are cool running, so will not cause damage to surrounding materials. Chrome bezel.



**Light Style:** LED interior recessed spot with ambient switch **Voltage/Draw:** 9-31V DC/Spot: less than 0.18A 0.04A @12V **Bulb Wattage:** White Spot Light: less than 2.5W; Ambient Light Ring: less than 0.5W **Fixture Dimensions:** 3" dia. x 5/16"D **Fixture Material:** UV and impact resistant plastic housing **Lens Material/Description:** Clear plastic **Mounting Hardware:** Not included; recess mount, requires 2" (50mm) dia. hole **Wiring Hardware Included/Required:** Pre-wired with 200mm of 3-core cable **Warranty:** Five years

Spot/Ambient ring	Model	HELLA#	ShWt	Only
White/Red	<b>9353749</b>	343980501	.1	<b>124.99</b>
White/Blue	<b>9353756</b>	343980511	.1	<b>124.99</b>

West Marine

## Recessed LED Accent/Task Lights

These bright white LED lights are extremely energy-efficient and can be recess-mounted inside or out with a fully potted LED array board for total moisture resistance. And because they don't use bulbs with filaments, you won't have the cost of replacing them. Includes a chrome-finish bezel for a styled look.



**Light Style:** Recessed accent **Voltage/Draw:** 12V DC/0.08A (16-LED: 0.15A) **Bulb Wattage:** 0.96W; 16-LED consumes 1.8W **Fixture Dimensions:** 3 5/8" dia. x 1 1/4"D **Fixture Material:** ABS with Chrome-finish bezel **Lens Material/Description:** Polycarbonate **Mounting Hardware:** Not included, requires four #6 screws **Wiring Hardware:** Pigtail wire leads **Warranty:** 30 days

No. of LEDs	Model	WMLIT#	ShWt	Only
8-LED White/Accent	<b>9265927</b>	51140	.1	<b>19.99</b>
16-LED White/Task	<b>9265935</b>	51144	.1	<b>25.99</b>

Hella

## EuroLED® Touch Dome Lights



Lighting control is simple with these touch-sensitive LED lamps. Touch the red pad for red light (blue pad for blue light model), the white pad for white light. Hold your finger on the pad for more than two seconds and the lamp will cycle through four dimming levels. Release your finger on the light level required. Can also be remotely operated from multiple points with any off-the-shelf momentary ON/OFF/ON switches. Light levels are "remembered" by lamp circuitry even after vessel's batteries have been turned off. Completely waterproof, impact and shock resistant.

**Light Style:** Surface-mount overhead LED **Bulb Wattage:** White: less than 3W, Red (or Blue): less than 1.5W **Voltage/Draw:** 9-33V DC **Fixture Dimensions:** 5 1/16" dia. x 1 1/16"H **Fixture Material:** UV and impact-resistant plastic **Lens Material/Description:** Acrylic **Mounting Hardware:** Includes mounting bushings; requires two 6mm dia. holes at 110mm centers, 5mm screws or bolts recommended **Wiring Hardware:** Prewired with 2.5m cable **Warranty:** Five years

	Model	HELLA#	ShWt	Only
Black Housing, White/Red LEDs	<b>8987786</b>	959950111	.9	<b>154.99</b>
White Housing, White/Red LEDs	<b>8987794</b>	959950121	.9	<b>154.99</b>
White Housing, White/Blue LEDs	<b>9353764</b>	959951121	1	<b>144.99</b>

West Marine

## LED Accent Light with Bezel

Upgrade your outdated incandescent lights with this LED accent light. Fixture covers up to 5 1/2" hole. Great for cabins, consoles, compartments and electronics boxes and can be mounted inside or out. 8 cool white LEDs. On-Off switch.



**Light Style:** Accent, utility **Voltage/Draw:** 12V DC/0.08A@12V **Bulb Wattage:** 0.96W **Fixture Dimensions:** 5 1/2" dia. x 1 1/2" **Fixture Material:** ABS plastic **Mounting Hardware Included/Required:** Includes stainless steel mounting hardware **Wiring Hardware Included/Required:** Pigtail wire leads **Warranty:** One year

**Model 9265976** | WMLIT#51154 | ShWt .2 | **25.99**

West Marine

## LED Surface Utility Eyeball Light

Add the functionality of multi-directional lighting to your cabin, walkway or console with these super bright 3.1W pivoting LED lights. Just move and aim the eyeball lens where you want to add task lighting. Can be mounted inside or out. LEDs draw less than 10% of the power of incandescent bulbs and create very little heat. Shock-resistant. Includes On/Off switch.



**Light Style:** Task, utility, cabin, companionway **Voltage/Draw:** 12V DC/2.6A@12V **Bulb Wattage:** 3.1W **Fixture Dimensions:** 3 1/2" dia. x 2 1/4" **Fixture Material:** ABS plastic **LED Material/Description:** Acrylic **Mounting Hardware Included/Required:** No, requires #6 screws **Wiring Hardware Included/Required:** Pigtail wire connection **Warranty:** 30 days

**Model 9265984** | WMLIT#51157 | ShWt .2 | **25.99**

West Marine

## Economy LED Dome Light

Great for cabin or compartment, this surface-mounted dome light features a three-position



rocker switch for white or red light to preserve night vision, WHITE/OFF/RED. Long-lasting LEDs have low amperage draw and are shock and vibration proof. Made for interior use.

**Light Style:** Surface-mount dome **Voltage/Draw:** 12V DC/0.04A@12V **Bulb Wattage:** 0.48W **Fixture Dimensions:** 5 1/2" dia. x 1 3/8"H **Fixture Material:** White polyethylene **Lens Material/Description:** White polyethylene **Mounting Hardware:** Not included, requires two screws **Wiring Hardware Included/Required:** Pigtail wire leads **Warranty:** One year

**Model 9268590** | WMLIT#83012-1 | ShWt .1 | **19.99**

Electrical

## LED Interior Lights



8-LED White



16-LED White



8-LED (4 White, 4-Red)



West Marine

### Surface Mount LED Dome Lights

This collection of surface-mounted domes offer brilliant light where space is minimal. LED's have low amp draw and last for up to 100,000 hours, drawing less than 10% of the power of conventional bulbs. White bezel with convenient rocker switches.

**Light Style:** Surface mount dome **Voltage/Draw:** 12V DC/0.08A (16-LED: 0.15A) **Bulb Wattage:** 0.96W; 16-LED consumes 1.8W **Fixture Dimensions:** 4" dia. x 1 1/4"H **Fixture Material:** ABS plastic **Lens Material/Description:** Polycarbonate **Mounting Hardware:** Not included, requires four #6 screws **Wiring Hardware:** Includes wire leads **Warranty:** One year

No. of LEDs	Switch Positions	Model	WMLIT#	ShWt	Only
8-LED White	OFF/ON	9265943	51146	.1	19.99
8-LED (4-White, 4-Red)	WHITE/OFF/RED	9265950	51150	.2	19.99
16-LED White Task Light	OFF/ON	9265968	51152	.1	25.99



Dr. LED

### Mars Dome Cabin Lights

General purpose, surface-mount light fixture produces a warm, dual-level white light, or red/white light for night use, with very low power draw (red: 1W, white 1W/3W). U.S.-made high-flux LED provides high lumen-per-watt light, outperforming other, similar sized LED lights. On/Off/On three-position switch. Ultra long 50,000-hour service life. 12 or 24V (operates between 8-30VDC). Impact and shock resistant.

**Light Style:** Surface Mount LED Dome **Bulb Wattage:** White/Red and Dual White Hi level: equivalent to 45W incandescent; Low level: equivalent to 33W incandescent (total power consumption: 3W / 1W depending on selection) **Voltage/Draw:** 8-30V DC (1W/3W) **Fixture Material:** Chrome-plated plastic **Lens Material/Description:** clear polycarbonate **Mounting Hardware Included/Required:** Yes/Three mounting holes **Warranty:** One year

Model	DRLED#	ShWt	Only	
<b>5 1/2" dia. Dome Lights with Three-Position Switch</b>				
Hi/Lo White	8975120	8001177	1.5	89.99
White/Red	8975138	8001184	1.5	84.99
<b>6 3/4" dia. Dome Lights with Three-Position Switch</b>				
Hi/Lo White	8975146	8001528	2	99.99
White/Red	8975153	8001504	1	99.99



Lumitec

### Anywhere Lights

Where can you use a light that is attractive, bright, small, completely sealed, withstands the elements yet blends with well appointed interiors? Well, anywhere. "Anywhere Light" is a high intensity surface-mount light that you don't have to hide. Quality aluminum housing with Type II anodizing for an appealing satin look that will stand up to the elements. Completely sealed, IP67 compliant.

**Light Style:** Utility Light **Voltage/Draw:** 90mA at 12VDC **Bulb Wattage:** 1.29W **Fixture Dimensions:** 1 3/4" dia. x 7/16"H **Fixture Material:** Brushed anodized aluminum **Mounting Hardware:** Three #6 mounting screws (included) **Waterproof:** Yes **Warranty:** One year

Color	Model	LUMIT#	ShWt	Only
White	11242757	101033	.2	34.99
Blue	11242765	101034	.2	34.99
Red	11242773	101035	.2	34.99



Futura Nickel



Euro Brass

Taylorbrite

### LED Traditional-Style Reading Lights

Bright white 3-LED reading lights in brass or nickel finish offer energy efficient lighting for your cabin or berth.

They have almost no heat output, are durable and shock-resistant and there are no bulbs to change!

**Light Style:** Berth reading LED **Voltage/Draw:** 8-32V DC/0.15A@12V DC **Fixture Dimensions:** 2 1/2" dia. x 6"H **Fixture Material:** Brass or Nickel Finish **Lens Material/Description:** Frosted **Mounting Hardware Included/Required:** Not included **Warranty:** Two years

Style	Finish	Model	TAYLB#	ShWt	Only
Euro	Brass	9386608	R3DM001B	1	104.99
Euro	Nickel	9386590	R3DM001N	1	104.99
Futura	Brass	9386624	R4DM001B	1	99.99
Futura	Nickel	9386616	R4DM001N	1	99.99



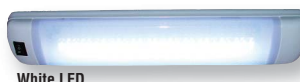
Aqua Signal

### Cairo LED Wall Lamp

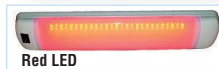
LED bulkhead light is an extremely bright light designed for engine rooms, storage lockers, lazarettes, and other areas on board where maximum light is needed.

**Light Style:** LED bulkhead utility light **Voltage/Draw:** 12V/0.50A **Fixture Material:** Plastic **Lens Material/Description:** Acrylic clear lens **Fixture Dimensions:** 5"W x 5"H x 2 1/2"D **Mounting Hardware:** Surface mount/wall type requires 4 mounting screws, purchase separately **Warranty:** One year

Model 11012804 | AQSIG#16510-7 | ShWt .6 | 29.99



White LED



Red LED

Aqua Signal

### Maputo LED Ceiling Lamp

New LED multipurpose light has rocker switch to control both red and white LED light. Overall length is 16" for a very bright output in engine rooms, storage lockers, and work spaces. Surface mount.

**Light Style:** Utility light **Voltage/Draw:** 12V/0.50A **Fixture Material:** Plastic **Lens Material/Description:** Clear plastic **Switch Type:** 3 position rocker switch—white/off/red **Fixture Dimensions:** 16"W x 4 1/2"H x 1"D **Mounting Hardware:** Four mounting screws required, purchase separately **Warranty:** One year

Model 11012812 | AQSIG#16530-7 | ShWt .5 | 82.99



White LED



Red LED

Aqua Signal

### Gaborone LED Chart Light

Flexible arm allows for wide range of motion throughout chart table spaces. Equipped with both white and red LED light to maintain night vision.

**Light Style:** LED chart light **Voltage/Draw:** 12V **Bulb Wattage:** 9W (white), 4W (red) **Fixture Material:** Flexible steel pipe with plastic mounting bracket **Fixture Dimensions:** 12" flexible arm **Mounting Hardware:** Wall or table mount requires 3 screws (included) **Switch Type:** Off/White/Red **Warranty:** One year

Model 10164549 | AQSIG#16500-7 | ShWt .9 | 41.99



Dr. LED

### Cobra™ Bi-Color High-Flux LED Chart and Reading Light

World's first and only bi-color (red/white) energy efficient high-flux LED chart and reading light with ultra-low current draw and European style. On/Off/On switch located at the base to select either warm white or red light output.

Highly shock and vibration resistant. Plated zinc alloy head and base, coated metal gooseneck, polycarbonate lens. Draws 0.15A at 12V DC. 1.24" dia head, 12.8"L gooseneck, 3" dia. base.

**Light Style:** Chart Light **Voltage/Draw:** 12V/0.15A **Bulb Wattage:** Less than 2W **Fixture Material:** Anodized aluminum head and base, coated steel gooseneck **Fixture Dimensions:** 1 3/16" dia. head, 3" oval base, 12 13/16" gooseneck **Mounting Hardware:** Screws included **Lens Material/Description:** Polycarbonate **Switch Type:** Toggle **Warranty:** One year

Model 9980152 | DRLED#8001665 | ShWt .1 | 99.99



Hella

### FlexiSpot™ LED Chart Table Lamps

Energy efficient chart light features LED lamps with an impressive white or red light output for their ultra-low current draw (0.16A@12V). An On/Off switch is built into the head for easy operation and a flexible stem lets you position the light where you need it. Multivolt™ electronics provide consistent illumination and circuit protection across a range of inputs. Highly shock and vibration resistant.

**Light Style:** Chart light **Voltage/Draw:** 9-31V DC / 0.16A@12V **Bulb Wattage:** Less than 2W **Fixture Material:** UV and impact-resistant plastic, steel arm **Fixture Dimensions:** 15 3/4"H (400mm); head: 4"L x 1 3/4" x 1 3/8"H **Mounting Hardware:** Includes mounting bushings, requires two 6mm dia. holes, 5mm dia. screws or bolts recommended **Lens Material/Description:** Acrylic **Switch Type:** Rocker **Warranty:** One year

Housing	Model	HELLA#	ShWt	Only
<b>White LED Light</b>				
White Housing	9353715	343720112	.4	119.99
Black Housing	9353707	343720122	1.1	124.99
<b>Red LED Light</b>				
White Housing	9353731	343720142	.4	124.99
Black Housing	9353723	343720152	.6	124.99



# Incandescent Dome & Bulkhead Lights

West Marine

## Interior Dome Lights

Quality dome lights are made for the marine environment with a finish that's guaranteed not to tarnish for the life of your boat! We've upgraded our halogen interior dome lights with a clean look, rocker switches and vented housings that prevent heat build-up. They're hard to beat for general illumination below decks. Patterned glass lenses create muted light. The White/Red models preserve night vision and have a double-throw bulb selection switch.



**Fixture Name:** Dome Lights **Light Style:** Overhead Light **Volts:** 12V DC **Bulb Wattage:** Two bulbs at 10W **Mounting Hardware Included/Required:** #6 RHMS included **Lens Material/Description:** Fresnel patterned glass **Switch Type:** Three-way rocker **Replacement Bulb:** Model 460388 Clear, Model 581969 Red **Warranty:** One year

### 5 1/2" Dome Lights with High/Off/Low

3 7/8" dia. lens. Includes two 10W Halogen bulbs. 12V DC. Each ShWt 2

	Bulbs	Model	WMLIT#	Only
White Aluminum	Clear	298168	421360	23.99
White Aluminum	Clear, Red	1471408	421160	29.99
Titanium Nitride-Coated Stainless Steel	Clear	3292828	420962	41.99
Stainless	Clear	151084	421377	31.99

### 7" Dome Lights with High/Off/Low

4 3/8" dia. lens. Includes two 10W Halogen bulbs. 12V DC. Each ShWt 2

	Bulbs	Model	WMLIT#	Only
White Aluminum	Clear	298150	420560	23.99
White Aluminum	Clear, Red	129439	420760	29.99
Titanium Nitride-Coated Stainless Steel	Clear	3292844	420162	41.99
Titanium Nitride-Coated Stainless Steel	Clear	3292851	420262	43.99
Stainless	Clear	540633	420577	36.99
Stainless	Clear, Red	540625	420777	39.99

### Replacement Parts for Dome Lights

Each ShWt .2

	Model	WMLIT#	Only
3 7/8" Lens Only for 5 1/2" Light	348342	420918	11.99
4 3/8" Lens Only for 7" Light	285387	420118	11.99
Spare On/Off Switch	243503	422201	4.39

West Marine

## Half-Round Brass Bulkhead Mount Light

Innovative light for mounting on the bulkhead is guaranteed not to tarnish for the life of your boat. Takes two 10W bulbs. Front lens slides for bulb replacement.



**Light Style:** Incandescent Bulkhead Light **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Material:** Brass **Fixture Dimensions:** 6"L x 2 1/2"W x 2 1/8"H **Mounting Hardware Included/Required:** #6 RHMS (included) **Lens Material/Description:** White plastic **Switch Type:** Toggle **Replacement Bulb:** Model 8646820 **Warranty:** One year

**Model 1855832** | WMLIT#430062 | ShWt. 1 | **57.99**

Gator Lights

## Opal Bulkhead Lights

Contemporary style bulkhead lights feature composite bases, low-profile rocker switches and frosted glass shades. The rotating base provides easier access to mounting screws. 12V with 10W Xenon "J" bulb included. Each ShWt .6



**Light Style:** Incandescent Reading Light **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Dimensions:** 2 5/8" base dia. x 5 3/8" x 6 1/4" maximum shade dia. **Mounting Hardware Included/Required:** Not included **Lens Material/Description:** Frosted Glass **Switch Type:** Rocker **Replacement Bulb:** Model 460388 **Warranty:** One year

Color	Model	GATOR#	Only
White	2662971	8000-WH	36.99
Chrome	2662955	8000-CR	36.99
Brass	2662948	8000-BR	36.99

Perko

## Exterior Dome Light

White powdercoat over chrome-plated zinc, with a black vinyl mounting gasket. Double-contact bayonet socket and push switch with water-resistant boot.



**Fixture Name:** Incandescent Dome Light **Light Style:** Exterior Overhead Light **Volts:** 12V DC **Fixture Material:** White powdercoat over chrome-plated zinc **Mounting Hardware Included/Required:** #10 RHMS (Model 488460), #12 RHMS Model 488478 **Lens Material/Description:** Fresnel Plastic **Switch Type:** Push Button **Replacement Bulb:** Model 288910 **Warranty:** Five years

Dia. Globe	Bulb Wattage	Base Dia.	Model	PERKO#	ShWt	Only
4"	11W	5"	488460	1253DP1WHT	1	45.99
5"	17W	6"	488478	1253DP2WHT	1.5	49.99

Gator Lights

## Nova Lights

With modern styling and compact design, these high-quality lights are some of our most popular. Made from high-impact plastic with frosted glass lens. 12V 10W Xenon "J" bulb included. All Nova lights require a 2 1/2" cutout 3/4" deep for installation. Each ShWt 0.2



**Light Style:** Incandescent Overhead Light **Volts:** 12V **Bulb Wattage:** 10W **Fixture Material:** High-Impact Plastic **Mounting Hardware Included/Required:** Included **Lens Material/Description:** Frosted Glass **Switch Type:** Toggle **Replacement Bulb:** Model 460388 **Warranty:** One year

Color	Dimensions	Model	GATOR#	Only
White	3" Round	2663300	8777-WH	19.99
Chrome	3" Round	2663284	8777-CR	19.99
Brass	3" Round	2663268	8777-BR	19.99
<b>Nova Lights with Switch</b>				
White	3" Round	2663292	8777-WH/S	25.99
Chrome	3" Round	2663276	8777-CR/S	23.99

West Marine

West Marine

## Brass Berth Light

Highly-polished Titanium Nitride-coated brass lamp with knurled adjustment knobs that's guaranteed not to tarnish for the life of your boat. Bright white interior reflective surface creates even illumination. 10W Halogen bulb included. Extends 4 1/2" from wall.



**Light Style:** Incandescent Berth Light **Volts:** 12V DC **Fixture Material:** Titanium Nitride-coated brass **Mounting Hardware Included/Required:** #6 RHMS (included) **Switch Type:** Toggle **Replacement Bulb:** Model 460388 **Warranty:** One year

**Model 2660900** | WMLIT#410262 | ShWt. 2 | **72.99**

West Marine

## Brass Halogen Reading Light

Universal joint lets you aim the light wherever you need it. Guaranteed not to tarnish for the life of your boat and includes a bright 10W Halogen bulb. Extends: 3 1/4" from wall.



**Light Style:** Incandescent Berth/Reading **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Material:** Titanium Nitride-coated stainless steel **Fixture Dimensions:** Base: 1 1/4" x 1 1/4", Shade: 2" dia. **Mounting Hardware Included/Required:** #6 RHMS (included) **Lens Material/Description:** Clear glass **Switch Type:** Toggle **Replacement Bulb:** Model 309120 **Warranty:** One year

**Model 2660744** | WMLIT#410062 | ShWt. 4 | **87.99**

# Incandescent Bulkhead Lights



West Marine

## Halogen Cabin Light

White powdercoat aluminum light complements many interiors. 10W MR16 projector bulb used for bright focused light. Rocker switch and socket for double-contact bulb. 10W Halogen bulb included.

**Light Style:** Incandescent Cabin Light **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Material:** Aluminum **Fixture Dimensions:** 5" H x 2" shade, base dia. 2" **Mounting Hardware Included/Required:** #6 RHMS (included) **Switch Type:** Rocker **Replacement Bulb:** Model 309120 **Warranty:** One year

**Model 129421** | WMLIT#421460 | ShWt .4 | **34.99**



West Marine

## Flexible Stainless Steel Berth Light

Guaranteed not to tarnish for the life of your boat. Features round base with switch. Max length: 15 7/8". Includes 10W white Halogen bulb.

**Light Style:** Incandescent Berth Light **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Material:** Titanium Nitride-coated stainless steel **Fixture Dimensions:** Shade: 3" Dia. Base: 3 5/8" Dia. **Mounting Hardware Included/Required:** #6 RHMS (included) **Switch Type:** Toggle **Replacement Bulb:** Model 460388 **Warranty:** One year

**Model 2660918** | WMLIT#410362 | ShWt 1 | **94.99**



Gator Lights

## Color Ring Reading Lights

Modern reading lights are accented with a unique colored lens ring that allows you to coordinate your lighting with your decor. Three additional color rings are included. 12V with 10W Xenon "J" bulb.

**Light Style:** Incandescent Reading lights **Bulb Wattage:** 10W **Volts:** 12V **Lens Material/Description:** Plastic **Fixture Dimensions:** 3 1/4" H x 2 5/8" W x 3" D **Mounting Hardware Included/Required:** Not included **Switch Type:** Low-profile rocker **Warranty:** One year

Color	Model	GATOR#	ShWt	Only
White	2663078	8006-W	.2	36.99
Chrome	2663060	8006-CR	.2	36.99



West Marine

## Flexible Stainless Steel Halogen Chart Light

This 10W Halogen light provides plenty of light for nighttime navigation and features a 7 1/2" flexible neck so you can focus light anywhere you need it.

**Light Style:** Incandescent Chart Light **Volts:** 12V DC **Bulb Wattage:** 10W **Fixture Material:** Titanium Nitride-coated stainless steel **Fixture Dimensions:** Base: 1" x 2", Shade 1 7/16" dia. **Mounting Hardware Included/Required:** #6 RHMS (included) **Lens Material/Description:** Clear glass **Switch Type:** Toggle **Replacement Bulb:** Model 309120 **Warranty:** One year

**Model 194410** | WMLIT#400062 | ShWt .4 | **64.99**



West Marine

## Traditional Bulkhead Light Fixtures

Boats built in the 1930s and later were equipped with fixtures like these, which can be wired for 12V, 24V, or 32V. Use household-type screw-base lamps (not included). 7" H x 4 1/2" W x 4" D with shade, Model 384313, sold below.

Finish	Model	WMLIT#	ShWt	Only
Titanium Nitride-Coated Brass	212159	431310	.2	28.99
Chromed Brass	123901	431311	.4	29.99



West Marine

## Shade for Bulkhead Fixtures

Simple clip-on design half-shade dresses up bare bulbs. White plastic.

**Model 384313** | WMELE#431210 | ShWt .2 | **12.99**



Hella

## Flexible Stalk Halogen Map Lights

Ideal for the nav station or galley, these handy lights aim their beams wherever you point them. Tough, fiber-reinforced plastic base and housing, with clear focused lens. Mounting base measures 1 1/2" square, and wire connections are made from the back. Produces a bright white light using less than .5A. On/Off switch at the lamphead. Includes a red lens to preserve night vision.

**Light Style:** Incandescent Chart Light **Voltage/Draw:** 12V DC/0.5A **Bulb Wattage:** 6W **Fixture Material:** Fiber-Reinforced Plastic **Fixture Dimensions:** 2" W x 1 3/4" H housing **Mounting Hardware Included/Required:** Not included **Switch Type:** Button **Warranty:** One year

Length	Model	HELLA#	ShWt	Only
10 1/2"	548115	004532171	.4	49.99
23 1/2"	192064	004532161	.1	54.99



Aqua Signal

## Halogen Mini-Spot

Bright, concentrated illumination. The head rotates on two axis and has a built-in slide switch. Frame and lens are molded polycarbonate. 5W halogen bulb.

**Light Style:** Bulkhead Light **Voltage/Draw:** 12V DC/0.42A **Bulb Wattage:** 5W **Fixture Material:** Molded Polycarbonate **Fixture Dimensions:** 3 5/16" H x 2 1/2" dia. **Mounting Hardware Included/Required:** Included **Lens Material/Description:** Molded Polycarbonate **Switch Type:** Slide **Replacement Bulb:** Model 365510 **Warranty:** One year

Color	Model	AQUSIG#	ShWt	Only
Black	217943	15064-7	.3	84.99
White	381913	15061-7	.3	84.99



Aqua Signal

## Chart & Reading Light

Directional beam adjusts from white to a night vision-saving blue. Lamp clips into one of the two bases supplied. Large controls are easy to use in the dark. 5W halogen bulb included. 3 1/2" H x 2 1/8" D. 12" spiral cord stretches to 4'.

**Fixture Name:** Toronto **Light Style:** Incandescent reading and chart table light **Bulb Wattage:** 5W **Voltage/Draw:** 12V/ 0.41A **Fixture Material:** Polycarbonate **Lens Material/Description:** Polycarbonate with white/blue intensity control **Fixture Dimensions:** 3 1/2" H x 3 11/16" L x 2 1/4" W **Switch Type:** Rotary knob **Replacement Bulb:** Model 365510 **Warranty:** One year

**Model 174482** | AQSIG#15404-7 | ShWt 2 | **149.99**

Gator Lights

**Targa Waterproof Courtesy Lights**

Rugged and stylish lights are built to last in the marine environment. O-ring seals ensure the light is protected from water and safe to use in wet areas. Hooded Targa focuses light down to the deck reducing the effects of night blindness from courtesy lighting. All Targa Lights require a 2.56" cutout 1.21" deep for installation. 12V with 10W Xenon "J" bulb included.



**Light Style:** Incandescent Waterproof Courtesy Light **Volts:** 12V **Bulb Wattage:** 10W **Fixture Material:** Plastic **Fixture Dimensions:** 3 5/8" Dia. **Mounting Hardware Included/Required:** Not included **Lens Material/Description:** Textured plastic **Switch Type:** None **Replacement Bulb:** Model 460388 **Warranty:** One year

	Model	GATOR#	ShWt	Only
White	2663342	8990-WH	.5	25.99
Chrome	2663326	8990-CR	.1	25.99

Perko

**Fixed Courtesy Lights**

Compact lights that shine light down to illuminate passageways, cockpits or cabins. Molded plastic fixed shade conceals the installation hardware. Includes 3W bulb and 7" wire leads. 2 1/4"x 2 1/4". Cutout: 1 3/4" dia. 12V DC.



**Light Style:** Incandescent Courtesy light **Bulb Wattage:** 3W **Voltage/Draw:** 12V/0.25A **Fixture Dimensions:** 2 1/4"W x 2 1/4"H x 15/16"D **Fixture Material:** Molded plastic **Lens Material/Description:** White plastic diffusion lens **Mounting Hardware Included/Required:** #6 screws (not included) **Replacement Bulb:** Model 8646796 **Warranty:** Five years

**Model 199580** | PERKO#1044DP2WHT | ShWt. 2 | **8.99**

Attwood

**Courtesy Lamp**

Small light with a transparent polycarbonate lens casts a modest amount of light downward, where it can illuminate passageways, cabin soles or other dark spaces. 3.8W automotive-type bulb included. 3 7/16"W x 1 13/16"H x 1 1/16"D. Requires two #8 screws (not included) for surface mounting. 12V DC. White.



**Light Style:** Surface mount, incandescent, courtesy **Voltage/Draw:** 2A@12VDC **Fixture Material:** Plastic, with polycarbonate lens **Fixture Dimensions:** 3 7/16" x 1 13/16" x 1 1/16" **Mounting Hardware Included/Required:** 2 holes for #8 screws **Switch Type:** None **Wiring Provisions:** 5" leads **Warranty:** One year

**Model 568436** | ATTWO#6325-3 | ShWt. 1 | **19.99**

Perko

**Courtesy Light**

Molded white plastic courtesy light with diffusion lens. ShWt 0.8



**Light Style:** Courtesy/utility light **Voltage/Draw:** 12V/0.083A **Bulb Wattage:** 1W **Fixture Material:** Molded plastic **Fixture Dimensions:** 1 7/8"L x 9/16"W x 9/16"H **Mounting Hardware Included/Required:** #6 screws not included **Warranty:** Five years

**Model 281311** | PERKO#0140DPNPNY | ShWt. 1 | **12.49**

Gator Lights

**UniLight & Soft Light**

The compact UniLight fits into small spaces. High-impact plastic housing and frosted lens with a built-in switch. 12V, 10W Xenon bulb included. Similar to the UniLight, the Soft Light is also compact yet designed for areas which require more powerful light. Features a plastic surface decorative textured plastic lens and built-in switch. Two 12V, 5W Xenon "J" bulbs included. Each.



**Light Style:** Incandescent overhead light **Volts:** 12V **Bulb Wattage:** 10W **Mounting Hardware Included/Required:** Not included **Switch Type:** Rocker **Replacement Bulb:** Unilight: Model 460388; Soft Light: Model 460388 (pkg of 2) **Warranty:** One year

	Dimensions	Model	GATOR#	ShWt	Only
UniLight	6 3/8"L x 2"W	2663011	8005	.5	18.99
Soft Light	9 3/4"L x 2 1/2"W	5426713	8025WH	.9	34.99

Perko

**Dual Voltage Light**

Plenty of light from two 12V DC bulbs while at sea, or two 120V AC bulbs while connected to shore power. Bulbs are included. Integral junction box.



**Fixture Name:** Surface mount light **Light Style:** Overhead **Light Volts:** 12V or 120V DC **Bulb Wattage:** Two 12V 11W and two 120V, 15W bulbs **Fixture Material:** White powder coat zinc base with translucent white dome **Fixture Dimensions:** 9 3/4"L x 3 1/2"W x 1 7/8"D **Mounting Hardware Included/Required:** #10 Screws (not included) **Lens Material/Description:** White plastic **Switch Type:** Button switches **Replacement Bulbs:** Model 288910: 12V, 8646721: 120V **Warranty:** Five years

**Model 488486** | PERKO#0318DP | ShWt 1.9 | **137.99**

Taylorbrite

**Fluorescent Lights**

These fluorescent lights feature corrosion-resistant housings, low power draw, high light output and low cost. They run much cooler and are three times more efficient than halogen bulbs. Woodgrain lights help preserve the look of your boat as direct replacements for older lights. Standard fluorescent bulbs included. UL Approved and built to IEC 60945 marine conducted and radiated emission standards, so they won't interfere with on-board electronics.



Standard



Wood Grain

**Light Style:** Fluorescent overhead light **Volts:** 12V **Fixture Material:** Aluminum housing and acrylic lens **Mounting Hardware Included/Required:** Stainless fasteners included **Switch Type:** Rocker **Replacement Bulb:** 8W short bulb, Model 8646929; 15W long bulb, Model 8646937 **Warranty:** One year

Lens	Watts	Dimensions	Model	TAYLR#	ShWt	Only
<b>Standard</b>						
White	16	16"L x 5 1/2"W x 1"H	8699597	EF16WW	1.6	79.99
Red/White	16	16"L x 5 1/2"W x 1"H	8699605	EF16RW	1.6	92.99
White	30	22"L x 6"W x 1 1/2"H	8699613	EF30WW	2.2	87.99
Red/White	30	22"L x 6"W x 1 1/2"H	8699621	EF30RW	2.5	99.99
<b>Wood Grain</b>						
White	16	16"L x 5 1/2"W x 1"H	8699647	WEF16WW	1.6	82.99
White	30	22"L x 6"W x 1 1/2"H	8699662	WEF30WW	2.2	87.99

Balmar

**Multi-Lite**

"Ship-style" switched light can be used on deck, in bilges, passageways, work areas—even in your shower! It's made of corrosion-proof plastic, and the heavy glass fresnel lens is O-ring sealed and protected by a high-impact plastic cage. Uses standard-base 12V DC, 32V DC, 110V AC or 220V AC bulbs up to 25W (bulbs not included). Not for explosive, fumed areas. 4 1/2"H x 5"W x 7"L.



**Fixture Name:** Multi-Lite **Light Style:** Utility light **Bulb Wattage:** Standard base bulb (15-25W recommended) not included **Voltage/Draw:** Either 12-32V DC or 115/230V AC **Switch Type:** Rotary **Fixture Dimensions:** 7"L x 4 1/2"W x 4"H **Fixture Material:** Corrosion-proof high-impact plastic **Lens Material/Description:** Heavy glass fresnel lens **Replacement Bulb:** 12V/25W Model 360944 **Warranty:** One year

**Model 350611** | BALMA#458-S | ShWt 3 | **52.99**

**Dimmer Switches**

Cole Hersee

**Electronic Dimmer Switch**

Controls lighting intensity from dim to bright. Fits panels to 29/32" thick. Rated at 4A three wire (load, battery and ground). Packard connector. 1 9/16" dia. x 1 25/32"L.

**Model 147988** | COLE#74600-02-BP | ShWt. 1 | **64.99**

Cole Hersee

**Electronic Dimmer Switch**

Switch provides lighting control on 12V negative ground systems. Sealed diecast metal case with O-ring in the shaft. Black plastic knob with metal inserts and set screw. 7/16"-28 thread mounting stem. 1 9/16" dia. x 1 25/32"L. 7A capacity. Terminations: two wire leads (load and battery).

**Model 5369673** | COLE#74601-01-BP | ShWt. 3 | **64.99**



# Dimmer Switches / Underwater Lights



## Blue Sea Systems **DeckHand Dimmers** **new**

Provides full range dimmer and momentary on/off/on control of multiple 12V incandescent or non-regulated LED lights from single weather-resistant Contura switch (included). Memory function retains last setting. Illuminated exit with adjustable time delay. Offset mounting tabs and trim 3 1/2"H x 3 1/4"W allows multiple dimmers to be mounted in close quarters.

Amp Rating	Model	BLUES#	ShWt	Only
6A	<b>11975703</b>	7506	.3	<b>52.99</b>
12A	<b>11975687</b>	7507	.3	<b>62.99</b>
25A	<b>11975695</b>	7508	.3	<b>72.99</b>



## Flexcharge **Programmable Timer**

This convenient real-time-clock controller turns single AC and DC loads ON and OFF. Use for any light or appliance you wish to turn ON or OFF at a specific time, including cabin lights (to fool possible intruders!) nav. lights, fans, blowers or bilge pumps. Programmable memory is capable of eight independent ON/OFF events. Example: Use one ON event to have a light come on at 7PM every day, then use seven different OFF events to turn it OFF at a different time every day. 12V DC. Manual ON/OFF override. Easy-to-use terminal blocks for simple installation. Controls inductive loads to 8A and resistive loads to 16A. 4"W x 3 3/4"H x 1 7/8"D.

**Model 6839658** | SEELY#PRGTMR12V | ShWt. 1 | **99.99**



## Flexcharge **Night Watchman Automatic Switch**

The Night Watchman makes sure you never forget to turn your lights off during the day, saving valuable energy, or on at night when you need them to protect your boat. 1"sq. waterproof photosensitive switch turns lights on and off as ambient light dictates. Use for running lights, spreader lights, anchor lights, instrument panel lights and more. Low power draw in standby mode (.00015A), yet is capable of supplying up to 10A of load current. One sensor handles multiple loads.

**Model 377830** | SEELY#NIGHTWATCHMAN | ShWt. 1 | **54.99**

Electrical

## Underwater Lights



## Aqua Lights™ **Underwater Lights**

Sturdy and powerful Aqua Lights™ underwater lights are constructed with the highest quality materials—heavy-duty naval bronze housings made with extremely thick walls and borosilicate glass lenses—for decades of performance. See West Advisor below for more about underwater lights.

Aqua Lights™ completely machines, designs and builds all their lights here in the United States in state-of-the-art facilities, with years of research in the combining of materials and construction for marine applications.

The Mega Blaster delivers a dazzling 180000 lumens from its huge 600 watt Metal

Halide bulb, protected by 1/2"-thick lens. It can reach as far as 300', while drawing only 1.5A of 120V AC power (you'll need an inverter).

Metal Halide bulbs are rated for a 6000 hour operating lifespan. Halogen and Xenon bulbs operate for 600 to 900 hours. Bulbs can be replaced from inside the boat while in the water. Aqua Lights™ also offers smaller, less expensive, halogen lights such as the AL50H—a 50-watt halogen light—with the option to upgrade later to lights such as the AL50X xenon. Lights with aluminum or stainless steel housings are available by Special Order.

BulbType	Watts	Volts	Lumens	Beam Penetration	Hole Cutout Dia.	Max. Hull Thickness	Bezel Flange Dia.	Model	ShWt	AQUAL#	Only
Metal Halide	175W	110/220V AC	27000	120'	4 1/2"	5"	6"	<b>8351165</b>	32	AL175MH	<b>1699.00</b>
Xenon	50W	12V DC	5400	70'	2 3/16"	4"	4"	<b>8351199</b>	6	AL50X	<b>979.00</b>
Xenon	35W	12V DC	3600	45'	2 3/16"	4"	4"	<b>8351207</b>	5.8	AL35X	<b>699.00</b>
Halogen	75W	12/24V DC	900	30'	2 3/16"	4"	4"	<b>8351215</b>	5.5	AL75H	<b>364.99</b>
Halogen	35W	12V DC	550	10'	1 1/2"	3 1/4"	2 1/2"	<b>8705949</b>	14	AL35H	<b>142.99</b>
<b>Spare bulbs</b>											
Xenon ( 5000°K)	35W							<b>8351371</b>	.5	AP50BZ	<b>147.99</b>

## The West Advisor®

## Selecting Underwater Lights

Lights that illuminate the underwater world, mounted on outrigger spreaders, on the transom or under the hull, have aided anglers for decades in powering-up nighttime fishing, calling up baits and the fish that forage on them. The new generation of underwater lights, aimed straight down or horizontally and located between 12" and 48" below the surface, are more reliable and electrically efficient. They add action to a nighttime trolling spread with the flip of a switch. They also look really cool when fired up at your dock.

### What to look for

#### Brightness and light penetration

Penetration depends on the clarity of the water, brightness of the bulb and orientation. A 50 watt xenon model should extend its beam 50 to 70' astern, and slightly farther straight down.

#### Metal-to-metal compatibility

Our selection of lights from Aqua Light and Perko include housings made from naval bronze. These are compatible (and do not create galvanic corrosion problems) with hulls of fiberglass, other composites or wood. Aqua Light can build the same models in aluminum, for aluminum-hulled vessels, or in stainless steel, for steel boats. Contact 1-800-BOATING for help in special ordering in these other alloys.

#### Bulb type

**Halogen:** affordably priced halogen lights are a good entry-level selection. A 50 watt model produces 900 lumens and penetrates to a depth of 30'. Halogen bulbs last about 600 to 800 hours, due to their more fragile and highly-energized filaments, as they are more easily damaged by vibration. They also draw more amperage than other types (a 50 watt model draws about 7 amps at 12V).

**LED:** the lowest current draw and the highest durability. Light output has jumped in recent years, making LEDs much more competitive as a high-intensity light source (a few years ago the best LEDs emitted about 30 lumens per watt, and that number has now increased to 120 lumens per watt). LED underwater lights are original equipment on some Sea Ranger boats.

**Xenon:** among the best at providing lots of light, xenon bulbs are more durable, lasting about 5000 to 6000 operating hours with more modest current draw (a 50 watt xenon model draws 10A at 12V for 25 seconds when starting up, then draws 5.5A).

**Metal Halide:** larger in size but similar to Xenon, metal halide bulbs require AC power (and draw just a couple amps at 120V) but deliver the most dazzling level of light output. At the entry level is a 175 watt model that puts out 27000 lumens. The 600 watt Mega Blaster, Aqua Light's most powerful unit, delivers 180000 lumens. Metal halide lights last about 3000 hours. 240V AC models and three-phase 280V AC models are available for the professional system.

Dr. LED

## Dave™ LED Surface Mount Underwater/Spreader Light

Low profile surface mounted high-flux LED puck light is equally at home under water or on the bottom of a spreader. Latest high-flux LED technology provides high lumen-per-watt light, outperforming other underwater LED lights. Aluminum housing provides ample heat sinking to the LEDs to ensure long life operation. 1M long lead provided. Ultra-long life. Highly shock and vibration resistant. 4" dia. (100mm) x 1.22"H (31mm). Draws approx. 1A @12V DC; .5A @24V DC. Requires four #6FH screws. One-year warranty.



Color of Light	Model	DRLED#	ShWt	Only
White	<b>9980178</b>	8001672	.1	<b>167.99</b>
Blue	<b>10926426</b>	8000036	1.5	<b>189.99</b>
Green	<b>10926434</b>	8000050	1.4	<b>189.99</b>

Dr. LED

## Neptune Thru-Hull Underwater LED Light

The 500+ lumen Neptune Light outperforms any other LED light in the same category in terms of price and light output. Three US-made high-flux LEDs provide the highest lumen-per-watt (Three total watts) underwater light. Aerospace-grade anodized aluminum composite body. No anodes required. Multi-voltage 12/24V DC. Can be operated out of water, and is serviceable from inside the boat, if needed. Requires a 68mm (2 11/16") diameter hole.



Color of Light	Model	DRLED#	ShWt	Only
White	<b>10317824</b>	8001597	3	<b>599.00</b>
Blue	<b>10926392</b>	8001603	4	<b>659.00</b>
Green	<b>10926400</b>	8001689	4	<b>659.00</b>

Attwood

## 6" LED Underwater Lights

Compared to its 50-watt halogen competition, the Attwood underwater lighting draws only a fraction of the power (less than 1A) while producing a significantly brighter output. Attwood's underwater light is unmatched in ease of installation, and doesn't require a large thru-hull cutout below the water line. With only a small hole for wiring, and two 8FHSS screws on 4" center (not included) for attachment, Attwood's LED surface mount design makes installation quick and effortless. Ten-year LED warranty. 5 11/16"L x 1 11/16"W x 11/16"H.



	Model	ATTWO#	ShWt	Only
White	<b>9766452</b>	6510SS4	.1	<b>249.99</b>
Blue	<b>9766460</b>	6511SS4	.6	<b>234.99</b>
Green	<b>9766478</b>	6512SS4	.3	<b>234.99</b>

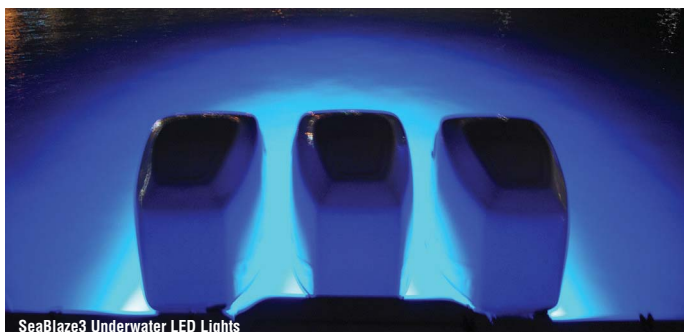
Attwood

## Two-Pack 3" Underwater LED Lights

Today's underwater lighting products are extremely heavy, require a large thru-hull cut below the water line and involve several additional steps for installation. With only a small hole for wiring and two #8 screws for attachment, Attwood's 3" LED surface mount design makes installation as quick and effortless as possible. Compared to its 50-watt halogen competition, the Attwood underwater lighting draws only a fraction of the power while producing a significantly brighter output. Package of two lights.



Model **9766437** | ATTWO#6343SSPR4 | ShWt .1 | **99.99**



Lumitec

## SeaBlaze3 Underwater LED Lights



Whether you prefer green, white or blue light, or even if you want to be able to switch from one to the other, the SeaBlaze3 Series achieves output equal to that of many more expensive lights at a fraction of the cost. Intelligent micro-processor driven circuitry on model 11242559 allows for simultaneous 2 color, white and blue operation. Single color models also available in your choice of white, blue or green light output. All models feature an eight element LED array that draws only 2.5A and operates on all voltages between 10-30VDC. Internal drive circuit reduces thru-hull connections, requires only a 1/2" access hole for wiring. Housed in a compact, 3 7/8" diameter, low-profile, 13/16" height, aluminum housing with counter-sunk holes.

**Bulb Type:** LED **Depth:** Diameter: 13/16" (above hull) 1 5/8" (overall) **Draw:** 2.5A **Fixture Material:** Aluminum **Mounting:** Surface **Power Requirements:** 10-30VDC **Mounting Fasteners Required:** Three #10 stainless steel (included) **Warranty:** One year

Color of Light	Model	LUMIT#	ShWt	Only
Blue/White	<b>11242559</b>	101058	1.2	<b>299.99</b>
White	<b>11242526</b>	101055	1.2	<b>299.99</b>
Blue	<b>11242534</b>	101056	1.2	<b>299.99</b>
Green	<b>11242542</b>	101057	1.2	<b>299.99</b>

Hella

## Bronze Surface Mount LED Underwater Lights



High-performance and ultra durable, these surface mount 12V LED lights provide an output of 400+ lumens with exceptionally low power draw. Convex Borofloat® glass lens offers outstanding durability and clarity when exposed to high-pressure cleaning, scraping, scrubbing and antifouling coatings. Compact 2.95" diameter, low profile marine bronze housing extends only 1.14" from hull. Pre-wired with 2.0m of two-wire marine cable. Two-year warranty.

**Bulb Type:** LED **Depth:** 1 1/8" **Diameter:** 3" **Draw:** 5W **Fixture Material:** Marine bronze **Mounting:** Surface **Power Requirements:** 12V **Warranty:** Two years

Color of Light	Model	HELLA#	ShWt	Only
Blue	<b>12039806</b>	980750001	2	<b>409.99</b>
White	<b>12039814</b>	980750101	2	<b>409.99</b>

Hella

## Bronze Thru-Hull LED Underwater Lights



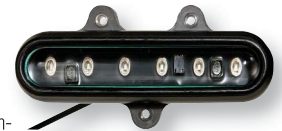
Integrated, LED technology produces 400+ lumens with exceptionally low power draw and long life. Marine bronze housing requires only a 3/4" thru-hull mounting hole yet presents a generous 2 3/8" diameter marine bronze bezel with Borofloat glass lens for outstanding durability and clarity. Shaft length of 6 5/8", complete with locking nut and sealing gland, is suitable for virtually all hull materials. Pre-wired with 2.0m of two-conductor marine wire. Two-year warranty.

**Bulb Type:** LED **Depth:** 6 5/8" **Diameter:** 2 3/8" (surface); 075" (thru-hull) **Draw:** 5W **Fixture Material:** Bronze **Mounting:** Thru-hull **Power Requirements:** 12V **Warranty:** Two years

Color of Light	Model	HELLA#	ShWt	Only
Blue	<b>12039822</b>	980751001	2	<b>409.99</b>
White	<b>12039830</b>	980751101	2	<b>409.99</b>

Hella

## Nylon Surface-Mount LED Underwater Lamps with Glass Lens



See farther and deeper than ever before with these super-compact, six-element lamps that produce 1000+ lumens. Unique design combines corrosion-proof thermoplastic housing with super-tough Borofloat® glass lens. Nylon housing easily mounts to a wide variety of hull surfaces. Glass lens resists scratching and clouding, retains clarity even when exposed to harsh cleaning agents, antifouling coatings or repeated high-pressure washing. Pre-wired with 2.0m of two-conductor marine wire. Two-year warranty.

**Bulb Type:** LED **Length:** 7 13/16" **Width:** 1 11/16" **Depth:** 1 1/8" **Draw:** 18W **Fixture Material:** Nylon **Mounting:** Surface **Power Requirements:** 10-28V DC **Warranty:** Two years

Color of Light	Model	HELLA#	ShWt	Only
Blue	<b>12039848</b>	980754001	2.5	<b>699.00</b>
White	<b>12039855</b>	980754101	2.5	<b>699.00</b>

Electrical

# Remote-Controlled Spotlights & Searchlights



ACR  
**RCL-100D**  
**Motor Driven Dual Beam**  
**Remote-Controlled**  
**Searchlight**

Waterproof 200,000 candlepower searchlight features ACR's new XRCiz™ technology which automatically turns on and rotates the light every 30 days to ensure its internal mechanisms are freely

running and ready even if your boat's been sitting at the dock for months. Searchlight uses internal elevation mechanism that tilts the lens assembly without tilting the enclosure, resulting in a clean look and weatherproof construction. 55W halogen bulbs use parabolic reflectors to produce an intense, white spotlight beam. The housing rotates through 360° to illuminate items ahead or astern. Includes dash-mount point pad control and master controller. Weight: 7.2 lb. Optional 24V lamps are available through Special Order.

**Beam Strength:** 200,000cp **Case Material:** 518 Aluminum **Case Dimensions:** 8"H x 9"W x 8"D **Mounting Hardware:** Requires four 3/8" Pan Head screws or bolts (sold separately) **Range of Motion Side to Side:** 360° **Continuous rotation Range of Motion Up/Down:** 17° down/ 9° up **Waterproof:** Salt water resistant **Control Functions:** On, Off, XRCiz, Speed rotation **Control Type:** Surface or flush-mount Point Pad **Power Source:** External 12V **Volts:** 12V (24V model available by Special Order) **Draw:** 10A **Wiring Provisions:** Includes 15' wiring harness **Replacement Bulb:** Model 194698 **Warranty:** One year

Model 3732211 | ACR#1930.3 | ShWt 15 | **1079.00**



ACR  
**RCL-75 Spotlight**

This 180,000 candlepower remote-controlled searchlight is easy to operate and install. Ocular design provides 18° up and 45° down pitch for enhanced visibility. Dual lamp design provides redundancy for safety. Includes Point Pad style remote control with flush and surface mount. Electronics located in the water-resistant light head for protection.

**Beam Strength:** 180,000cp **Case Material:** UV ASA plastic **Case Dimensions:** 7 1/2" x 8 3/4" x 7 1/2" **Mounting Hardware:** Requires four 1/4" 20 Pan Head screws or bolts (sold separately) **Range of Motion Side to Side:** 361° **Range of Motion Up/Down:** 45° **Waterproof:** Water-resistant **Control Functions:** Up, down, Rotation **Control Type:** Surface or flush-mount Point Pad **Power Source:** External 12V **Volts:** 12V **Draw:** 10A **Wiring Provisions:** Includes 17' wiring harness **Replacement Bulb:** Model 3532967 **Warranty:** One year

Model 2671154 | ACR#1946 | ShWt 6.7 | **229.99**

**Replacement Bulbs for RCL Spot/Search Lights**

	Model	ACR#	ShWt	Only
Replacement 55W Bulb for RCL-50	194706	6002	.3	<b>28.99</b>
Replacement 55W Bulb for RCL-75	3532967	9403	.1	<b>32.99</b>
Replacement 55W Bulb for RCL-100	194698	6001	.1	<b>54.99</b>



Golight  
**Permanent Remote Control**  
**Spotlights**

These low profile, compact and powerful lights can be operated from virtually anywhere on your boat—for ultimate versatility. Available in dashmount, wireless remote control or combination models. All wireless remote controls include a fast/slow speed rotation option. Golight's CR5 Pentabeam technology produces 400,000cp with a focused all-purpose beam pattern.

**Peak Beam Intensity:** 400,000cp **Lens Diameter:** 3 5/8"H x 5 7/8"W **Case Material:** UV stabilized ASA **Case Dimensions:** 7" x 7" x 6 1/2" **Range of Motion Side to Side:** 370° **Range of Motion Up/Down:** 135° **Waterproof:** Water-resistant **Control Functions:** Toggle direction control/ on-off/ programmable **Power Source:** External 12V wire **Volts:** 12V **Draw:** 5.5A @12V DC **Replacement Bulb:** Model 3401528 **Warranty:** Three years

Spotlight Style	Model	GOLIG#	ShWt	Only
Wireless Remote	1568948	2000	7	<b>239.99</b>
<b>Remote Control Spotlight with Dashmount Remote</b>	1568898	2020	7	<b>189.99</b>
Dashmount Remote & Wireless Remote combo	1568989	2067	7	<b>319.99</b>
400,000CP Replacement Bulb	3401528	49000	.3	<b>22.99</b>



Golight  
**Portable**  
**Remote-Controlled Spotlights**

These portable, universal all-purpose lights are a great solution when a permanent mount light is just not feasible. Installation is simple. Use the suction cup for instant, temporary mounting on your boat, RV or trailer. Or, for added security, mount it with the included permanent shoe. Direction and On/Off are controlled with wireless or wired remote so you can operate it from virtually anywhere on your boat. Each ShWt 6

**Peak Beam Intensity:** 400,000cp **Lens Diameter:** 3 5/8"H x 5 7/8"W **Case Material:** UV stabilized ASA **Case Dimensions:** 7" x 7" x 7 1/2" **Mounting Hardware:** Suction cup and permanent mount shoe included **Range of Motion Side to Side:** 370° **Range of Motion Up/Down:** 135° **Waterproof:** Water-resistant **Control Functions:** Toggle direction control/on-off/Programmable **Power Source:** 15' cord with cigarette lighter plug **Volts:** 12V **Draw:** 5.5A @12V DC **Replacement Bulb:** Model 3401528 **Warranty:** Three years

Remote	Model	GOLIG#	Only
Wired	370356	5167	<b>149.99</b>
Wireless	370364	7900	<b>279.99</b>



Golight  
**Stryker Wireless Spotlight**

Features a 500,000 candlepower focused beam and a stylish, tough ASA chrome-plated or white case. Includes a wireless dash-mount remote, optional wireless handheld remote, and a new mounting system that utilizes a stainless steel mounting plate which under-locks to the light for quick, simple installation.

The controls feature two-speed operation, and will turn the light on/off, and rotate the light 370° horizontally and 135° vertically. Five-year warranty.

**Peak Beam Intensity:** 500,000cp **Lens Diameter:** 6" **Case Material:** ASA Plastic **Case Dimensions:** 6 1/2"H x 7"W x 7"D **Mounting Hardware:** Included **Range of Motion Side to Side:** To 370° **Range of Motion Up/Down:** To 135° **Waterproof:** Water-tight **Control Functions:** Remote **Power Source:** 12VDC, convertible to 24VDC operation **Draw:** 5.5A **Wiring Provisions:** 14" leads **Replacement Bulb:** Golight 39000 **Warranty:** Five years

	Model	GOLIG#	ShWt	Only
Chrome	6826523	3106	5.4	<b>344.99</b>
White	6917108	3100	5.4	<b>299.99</b>
Wireless Handheld Remote	6917116	30100	.2	<b>54.99</b>
Replacement Bulb	9362096	39000	.1	<b>18.99</b>



Jabsco  
**233SL Dual Beam Searchlight**

The 233SL Dual Beam Searchlight sports a clean, modern look with a multitude of new features never seen before in a searchlight of this size and price range.

**Auto Sweep:** With the light on in either fast or slow mode, pushing this button will continuously sweep the light 10° each side of the initial target spot in slow mode. If the light was in fast mode when hitting the sweep button the light will automatically place the unit into slow mode.

Simply press the auto sweep button again to finish the cycle. The light will return to its initial starting point and the directional controls will become available for use again.

**Speed:** The 233SL has the option to run the light in all motion axis's in FAST or SLOW mode. For fast simply hit the Hare button, and for slow hit the Tortoise Button.

**Spot/Flood:** The spot and flood buttons allow you to change the beam configuration from a spot to a flood, and allow you to choose any beam configuration you desire between these two extreme limits. Simply hold one of the buttons down until you reach your desired beam configuration. For full spot or flood simply hold the spot or flood button down until it comes to a hard stop.

**Beam Strength:** 200,000cp **Bulb Wattage:** 55W **Case Material:** Anodized and painted aluminum housing **Case Dimensions:** 8"H x 9 3/8"W x 9 5/8"D **Range of Motion Side to Side:** 360° **Continuous (26°/10 seconds) Range of Motion Up/Down:** 9°/18° (7.5°/second) **Control Type:** 8-Way Controller **Warranty:** One year

Volts	Amps	Model	JABSC#	ShWt	Only
24V	5	11042736	60233-0012	14	<b>1199.00</b>
12V	10	11042744	60233-0024	14	<b>1199.00</b>

# Remote-Controlled Spotlights & Searchlights

Jabscos

## 135SL

### Remote-Controlled Searchlight

Constructed from white, corrosion-resistant thermoplastic, this 100,000cp light operates from a remote panel supplied with 15' of cable. The eight-position joystick control allows easy and precise aiming. Sealed beam halogen bulb.



**Beam Strength:** 100,000cp **Lens Diameter:** 3" x 5" **Case Material:** Non-yellowing thermoplastic **Case Dimensions:** 7"D x 8"H x 7"W **Mounting Hardware:** Included **Range of Motion Side to Side:** 320° **Range of Motion Up/Down:** 75° **Waterproof:** No, water-resistant **Control Type:** Joystick, Manual, dash-mount **Volts:** 12V **Draw:** 3.6A **Wiring Provisions:** 15' cable with connectors **Replacement Bulb:** Model 410605 **Warranty:** One year

**Model 410605** | JABSC#60020-0000 | ShWt 4.4 | **187.99**

#### Replacement Lamp

**Model 425876** | JABSC#18753-0178 | ShWt 1.4 | **39.99**

Jabscos

## 146SL

### Remote-Controlled Searchlights

When lighting objects from a distance, you want maximum lux. This light produces 15 lux at 100m, 50% more than competitive spots. The sealed beam halogen bulb produces 175,000cp. The light assembly rotates 360° and tilts 60°. Includes two-speed dash-mount control and 15' wiring cable.



**Beam Strength:** 175,000cp **Lens Diameter:** 4" x 6" **Case Material:** Thermoplastic **Case Dimensions:** 8 1/2"W x 10 1/8"L x 8 15/16"H **Mounting Hardware:** Four 1/4"-20 bolts and washers included **Range of Motion Side to Side:** 360° **Range of Motion Up/Down:** 30° up/30° down **Waterproof:** Water-resistant **Control Functions:** 8-way joystick **Control Type:** Manual; dash-mount **Wiring Provisions:** 15' cable with connectors **Replacement Bulb:** 12V: Model 4632287; 24V: 18753-0456 **Warranty:** One year

Volts	Draw	Model	JABSC#	ShWt	Only
12	4A @ 12V DC	<b>597088</b>	60080-0012	9.1	<b>379.99</b>
24	2A @ 24V DC	<b>269910</b>	60080-0024	8.9	<b>519.00</b>

Jabscos

## 6" Remote-Controlled Searchlight

Motor-driven light can be controlled from the helm position. Sealed spot/flood two beam function. Light will flash an "SOS" signal with a touch of the control. Two speeds for accurate light positioning. "Auto sweep" feature sweeps light side-to-side automatically. Includes light, control with power leads and 15' cable from control to light.



**Beam Strength:** 200,000/50,000cp **Lens Diameter:** 6" **Case Material:** Brass with a polished chrome-plated zinc finish **Case Dimensions:** 10"D x 11 3/4"H x 6"W **Mounting Hardware:** Included **Range of Motion Side to Side:** 360° **Range of Motion Up/Down:** 70° **Waterproof:** Water-resistant **Control Functions:** Spot/flood, fast/slow, S.O.S., 20° auto sweep, 8-way joystick **Control Type:** Electronic touch pad; dash mount **Volts:** 12/24V **Draw:** 8A@12V DC **Wiring Provisions:** 15' cable with connectors **Replacement Bulb:** Model 6618672 (Jabscos #64046-0006) **Warranty:** One year

**Model 1896810** | JABSC#63022-0012 | ShWt 9 | **619.00**

Optronics

## Nightblaster® Motion Pro 1000 Remote Controlled Spotlight

Multi-directional remote control spotlight delivers 500,000cp for long range illumination. Cold Cathode area light draws less than 1/4A for all night use. UV protected, weather-resistant housing features stainless-steel components and tinned wire to prevent corrosion. Corded remote rotates the light horizontally and vertically at the touch of a button. Includes suction-cup mount with a 15' power cord and 9' control cord.



**Beam Strength:** 500,000cp **Lens Diameter:** 4" **Case Material:** Polypropylene **Case Dimensions:** 7" x 6" x 9" **Mounting Hardware:** Suction Cup Mount **Range of Motion Side to Side:** 340° **Range of Motion Up/Down:** 270° **Waterproof:** Yes **Control Functions:** Vertical/Horizontal **Control Type:** 10' control cable, push button switch **Power Source:** 10' power cord with 12V plug **Volts:** 12V **Draw:** 4.8A **Replacement Bulb:** BH-700 **Warranty:** Three years

**Model 5320445** | OPTRO#RC 550M | ShWt 3.9 | **87.99**

Guest

## Remote-Controlled Spotlight/Floodlight

A traditional-looking, long-lasting 5" combination spot-light/floodlight. The powerful 72,000cp spot and 30,000cp flood features a sleek stainless steel body and a smooth electrical aiming mechanism that rotates 350° and tilts 70° so you can aim it almost anywhere. Can be aimed manually without damaging motor or gears. Includes a joystick remote control and 15' wiring harness. The optional Dual Station Control lets you operate the spot/flood from the flybridge or any other second station. Base: 5 1/2" x 3 1/2".



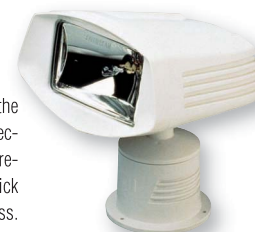
**Beam Strength:** 72,000cp **Lens Diameter:** 5" **Case Material:** Stainless Steel **Case Dimensions:** 9 1/2"H x 4 1/2"W x 7 1/2"L **Range of Motion Side to Side:** 350° **Range of Motion Up/Down:** 70° **Waterproof:** Water-resistant **Control Functions:** Remote **Control Type:** Joy Stick **Power Source:** External 12V **Volts:** 12V **Draw:** 7A@12V DC **Wiring Provisions:** Includes 15' wiring harness, optional 25; for dual station control **Replacement Bulb:** Model 432310 **Warranty:** One year

**Model 381006** | GUEST#22040A | ShWt 8.5 | **409.99**

Guest

## M-100 Remote-Controlled Halogen Spotlight

An attractive and affordable halogen sealed beam spotlight, the M-100 produces an intense 100,000cp beam through its rectangular lamp. Durable white ABS enclosure is corrosion-resistant and will retain its good looks for years. Includes joystick control for easy, precise aiming and a 15' wiring harness. Weight: 4 1/4 lb. Fits over the footprint of the 5" 22040A spotlight, below. An optional 22219A Dual Station Control (available through Special Order) lets you operate the spot/flood from the flybridge or any other second station.



**Beam Strength:** 100,000cp **Case Material:** ABS **Case Dimensions:** 9 3/16"H x 8 5/8"W x 8 11/16"D **Range of Motion Side to Side:** 355° **Range of Motion Up/Down:** 80° **Waterproof:** No, corrosion-proof **Control Functions:** Remote **Control Type:** Wireless **Power Source:** 12V Plug **Volts:** 12V **Draw:** 4A@12V DC **Wiring Provisions:** 15' wiring harness **Replacement Bulb:** Guest 22230P **Warranty:** One year

**Model 380214** | GUEST#22200 | ShWt 6 | **264.99**

Guest

## Beamer Remote-Controlled Searchlights

Redesigned with a new contemporary case design, these lights are nearly twice as bright as other lights that claim one million candlepower. The Beamer's 100W halogen bulb sends a piercing light through haze and rain, illuminating buoys up to a mile away. The combination Spot/Flood provides long distance illumination, plus the wider, shorter uniform brilliance of a 55W floodlight for closeup work. The floodlight is shielded to prevent light from spilling downward, which improves visibility. The wireless remote can turn the light on, off, swivel it through 355°, tilt it 75° from up to 150° away. All Beamers and console controls are water-resistant, easy to install and mount in any position. Base dimensions: 5 3/4" x 6 1/4". Wired Remotes include a 15', 7-wire harness with 22AWG control wires attached to a console control panel.



**Beam Strength:** 3,000,000cp **Case Material:** UV-Stabilized Lexan **Case Dimensions:** 10 3/8"H x 7 3/8"W x 9 1/4"D **Range of Motion Side to Side:** 355° **Range of Motion Up/Down:** 75° **Waterproof:** Water-resistant **Control Functions:** Up, down, left, right, spot, flood **Control Type:** Push button console control panel mounts on the surface with 1/4" wiring outlet **Power Source:** External **Volts:** 12V **Draw:** 10A **Wiring Provisions:** 7-wire console control **Replacement Bulb:** Guest part #729493 (Special order) **Warranty:** One year

#### Beamer Spotlight with Push Button Remote

Cannot be upgraded to wireless operation.

**Model 9454158** | GUEST#502A | ShWt 5.9 | **379.99**

#### Beamer Spot/Flood with Wired Console Control

100W Spotlight with 55W floodlight. Cannot be upgraded to wireless operation. A secondary station, Guest #297C, is available through Special Order

**Model 9454166** | GUEST#503A | ShWt 5.6 | **419.99**

Electrical

# Flood & Docking Lights



Perko  
**Adjustable Spreader Light**

Chrome-plated brass light is 4 5/8" dia. 35W sealed beam light. Bracket: 5 3/8" x 3/4". Draw: 3A@12V DC.

	Model	PERKO#	ShWt	Only
12V	<b>199804</b>	0280DP112V	1.4	<b>92.99</b>
24V	<b>2364008</b>	0280DP224V	1.4	<b>169.99</b>
Spare 12V Bulb	<b>276586</b>	043200112V	.9	<b>45.99</b>
Spare 24V Bulb	<b>6589196</b>	043200224V	1	<b>67.99</b>



Seafit  
**Stainless Spreader Lights**

55W sealed beam lamps. Draw: 4.6A@12V DC.

	Dimensions	Model	SFLIT#	ShWt	Only
Fixed Light	4 3/4"L x 5 1/2"W x 2 3/4"H	<b>151050</b>	00804-WB	.2	<b>38.99</b>
Swivel Light	4 3/4"L x 4 3/4"W x 4 1/2"H	<b>151043</b>	00803-WB	1.3	<b>59.99</b>
Spare Bulb	—	<b>429886</b>	P00803-01	.6	<b>19.99</b>



Hella  
**Series 6361 Deck Floodlight**

Free-form reflector for close-range homogeneous illumination. White fiber-reinforced plastic housing is UV and impact-resistant, with sealed rear cable-gland entry, prewired with 12' cable. Includes 55W halogen H-3 12V bulb. Glass lens is bonded to reflector, sealed for dust/moisture protection. Suitable for high-vibration environments. Can be rotated through 180°. Upright or pendant mounting. Stainless bracket, bolts and screws. Dimensions: 6.4"W x 5.16"H x 3.84"D.

**Model 8659401** | HELLA#996361131 | ShWt 1 | **67.99**



NightBlaster  
**Halogen Deck Floodlight Kit**

Complete kit includes a pair of high-intensity 55W halogen floodlights, stainless steel mounting hardware, bracket, wiring harness and lighted switch. 2 1/2 bolt spacing. Lamps: 5 3/4"W x 3 1/8"H x 2 1/2"D. 12V DC. Each ShWt 2.3

	Model	OPTR0#	Only
White	<b>420051</b>	DL-16WC	<b>29.99</b>
Black	<b>423204</b>	DL-16CC	<b>29.99</b>



Jabco  
**Tungsten Halogen Floodlights**

Unique trapezoidal light beam provides excellent and even floodlight coverage. Tungsten halogen 50W bulbs produce 9,900cp. The totally weatherproof housing is high-impact polypropylene with stainless steel fittings. Mounting bracket included. Average bulb life: 450 hours. Draw: 4A@12V DC. White.

	Model	JABSC#	ShWt	Only
3" x 5"	<b>110124</b>	45900-1000	.2	<b>57.99</b>
4" x 6"	<b>289413</b>	45900-0000	1.7	<b>99.99</b>
Replacement Bulb 3" x 5"	<b>438848</b>	45903-0002	.7	<b>41.99</b>
Replacement Bulb 4" x 6"	<b>427734</b>	45903-0000	.9	<b>84.99</b>



Dr. LED  
**Kevin™ High-Flux LED Spreader/Deck Light**

High-flux LED spot/spreader light. US-made high-flux LED provides high lumen-per-watt light, outperforming other LED lights. Designed to be mounted up to 20' above deck. Low current draw 12V @ ~1.2A or at 24V @ ~.6A. Diecast aluminum housing provides ample heat sinking to the LEDs to ensure long life operation. Marine-grade white powdercoated finish. Highly shock and vibration resistant. 5 7/8"W x 1 5/8"H x 2 3/8"D.

**Model 9980160** | DRLED#8001344 | ShWt 1 | **169.99**



Hella  
**Module 70 LED Floodlight**

Powerful lighting in a small package that consumes only 15% of the energy required by a 55W H3 halogen floodlight. Produces 600 lumens of light output, yet consumes a mere

15W of power. Unaffected by vibration, resistant to current fluctuations, LED lamps provide full illumination at input voltages from 9-30V DC. Sealed, diecast aluminum body, UV and impact resistant front housing with clear glass lens. Pre-wired with 6' of marine cable. 3 1/4" diameter x 3" deep.

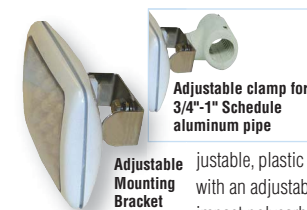
Color	Model	HELLA#	ShWt	Only
Black	<b>12039566</b>	996176722	2	<b>209.99</b>
White	<b>12039558</b>	996176731	2	<b>209.99</b>



Hella  
**Mega Beam GEN2 LED Exterior Flood Lamp**

Compact LED lamp employs advanced optics and 4-element LED to pump out 550 lumens using only 15% of the energy required by a typical 55W H3 halogen floodlight. LED design, with no fragile filaments to break, withstands vibration, impacts and shock loads. Provides full illumination at input voltages from 9-30C DC. Low 15W power consumption allows extended operation with minimal battery drain. Sealed, diecast aluminum body, UV and impact resistant front housing with clear glass lens. Stainless steel mounting hardware. Pre-wired with 6" of marine cable. 4 11/16"H x 4 5/16"W x 5 5/8"D.

**Model 10704468** | HELLA#996136221 | ShWt .4 | **199.99**



TACO  
**LED Deck Light**

30 LEDs provide high output, low glare light while drawing only .25amps. Low profile, 4/8" width, water-resistant design. Your choice of either ad-

justable, plastic clamp-on mount for 3/4"-1" schedule aluminum pipe or with an adjustable, stainless steel bracket for thru-bolt mounting. High-impact polycarbonate lens, white, UV & impact-resistant housing.

	Model	TACO#	ShWt	Only
LED Deck Light with Stainless Steel Mounting Bracket	<b>11047016</b>	F38-3500WHA-1	1.1	<b>64.99</b>
LED Deck Light with Clamp for 3/4"- 1" IPS pipe	<b>11047024</b>	F38-3521WHA-1	.9	<b>79.99</b>



TACO  
**LUMA LED Tube Light**

The Tube Light is great for use in engine rooms, T-tops and arches. Universal design for use as is, or replacement light for existing standard T-top light housings. 108 LEDs provide high output, low glare light and draw only .25 amps. Switch from white light to red light for chart-reading with the addition of a toggle switch. Impact-resistant Polycarbonate lens. Light tube and connection sealed for water resistance. Mounting clips included for easy installations. 20 1/2"L.

**Model 11047008** | TACO#F38-2060-1 | ShWt 1 | **59.99**



TACO  
**T-Top LED Light**

Polished, anodized aluminum, 21" housing features 108 LEDs to provide high-output, low-glare lighting. Switches instantly from white to red light for nighttime chart reading. Impact-resistant polycarbonate lens. Pre-drilled housing with 18' of cable for easy installation on most tops and bridges. Highly efficient, 12V lamp draws less than 1.4A, provides over 100,000 hours of operation.

**Model 12036786** | TACO#F38-2050-1 | ShWt 2.5 | **114.99**



**new**

West Marine

## Solar Dock Lights

A full range of solar solutions to illuminate docks, decks, walkways and landings without the expense and maintenance of wiring. Highly efficient solar powered LED lights provide up to 10 hours of illumination after exposure to only 4-5 hours of sunlight. Fully automatic, on-at-dusk operation. Each design offers unique features for post, pier or dock mounting to enhance both visibility and safety. All are fully weatherproof, built to withstand harsh marine conditions and will provide years of reliable service.



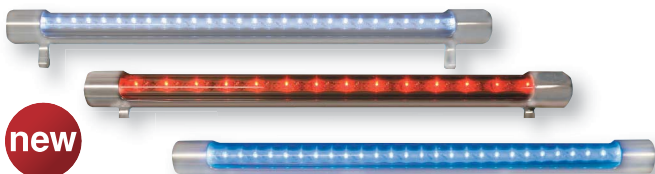
Puck Style

Round Solar Lights

Square Solar Lights

Post-Mounted Square Solar Lights

Mounting Style	Color of Light	Dimensions	Battery Size/Type	Model	WMLIT#	ShWt	Only
Puck-Style Solar Dock Lights	White	4 1/4"L x 4"W x 3/4"H	AA	<b>11974672</b>	96-260-W	3.2	<b>77.99</b>
Multi-Color Solar Lights for Round Posts	Switchable; Red, Yellow, Orange, Blue, Green, White	3 1/4"H (6 1/4" w/base) x 3 5/8"D	AAA	<b>11974664</b>	96-258-W	2.1	<b>67.99</b>
Solar Lights for 4 x 4 Square Posts	White	6"L x 6"W x 5"H	AA	<b>11974680</b>	96-256-W	1.8	<b>69.99</b>
Post-Mounted Solar Light	White	35"H x 9 1/2" x 9 1/2" @ base	AA	<b>11974656</b>	96-252-W	7	<b>114.99</b>



**new**

Tigress

## Aluminum Clamp-On LED Light Fixtures

High efficiency LED lights are housed in an aluminum housing and are water-resistant (not to be submerged). They offer low power consumption, low glare and long life. Bright-finished aluminum Clamp-On Cover sized for 1" Aluminum Schedule Pipe. 20" models feature 30 LEDs; draw only 2.4-4.8A @ 12V. 12" models feature 18 LEDs; draw only 1.4-2.8A @12V.

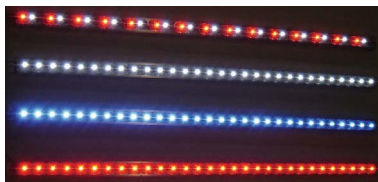
Color of Light	Model	TIGRE#	ShWt	Only
<b>12"</b>				
Bright White	<b>10913176</b>	88995	.5	<b>49.99</b>
Night Vision Red	<b>10913184</b>	88995-1	.4	<b>49.99</b>
Blue/White	<b>12035622</b>	88991-3	2	<b>149.99</b>
Blue	<b>12035572</b>	88991-2	2	<b>129.99</b>
<b>20"</b>				
Bright White	<b>9491044</b>	88980	.9	<b>149.99</b>
Night Vision Red	<b>9491051</b>	88981	.9	<b>149.99</b>
Blue/White	<b>12035614</b>	88982-2	2	<b>209.99</b>
Blue	<b>10913192</b>	88982-1	1.9	<b>149.99</b>
Red/White	<b>9491069</b>	88982	1	<b>169.99</b>

Tigress

## 12" and 20" LED Light Strips

With their low heat and energy consumption LED light strips can be placed just about anywhere on board where you want low glare lighting that is water-resistant and energy efficient. 18 LED, 12" length units draw 1.4A; 30 LED, 20" length model draws 2.4A @12V.

**new**



Color of Light	Length	Model	TIGRE#	ShWt	Only
Blue	12"	<b>12035580</b>	88995-2	1	<b>59.99</b>
Blue/White	12"	<b>12035598</b>	88995-3	1	<b>79.99</b>
Blue	20"	<b>10913150</b>	88996-2	.7	<b>79.99</b>
Bright White	20"	<b>10913135</b>	88996	.1	<b>79.99</b>
Blue/White	20"	<b>12035606</b>	88996-4	1	<b>109.99</b>
Night Vision Red	20"	<b>10913143</b>	88996-1	.6	<b>79.99</b>
Dual Red/White	20"	<b>10913168</b>	88996-3	.6	<b>89.99</b>

**new**

Tigress

## In-Line Aluminum LED Lights

Add the look of integrated lighting to your T-Top or Tuna Tower with these polished aluminum LED units. Designed to replace non-structural sections of standard, schedule 40 (1", 1.315"), pipe. Easily installed overhead, on side rails, or wherever you want to enhance your boat with the long life, energy efficiency and low glare of LED lighting. Simply measure and cut a 12" or 20" section out of your existing assembly, run 12V power, slip the lighting units in and secure with the provided couplers.

Length	Color of Light	Model	TIGRE#	ShWt	Only
<b>12"</b>	Blue	<b>12035705</b>	88985-6	2	<b>229.99</b>
	Dual Blue/White	<b>12035713</b>	88985-8	2	<b>249.99</b>
	Night Vision Red	<b>12035697</b>	88985-5	2	<b>229.99</b>
	Day Light White	<b>12035689</b>	88985-4	2	<b>229.99</b>
<b>20"</b>	Blue	<b>12035663</b>	88985-3	2	<b>289.99</b>
	Dual Blue/White	<b>12035671</b>	88985-7	2	<b>309.99</b>
	Night Vision Red	<b>12035648</b>	88985-1	2	<b>289.99</b>
	Dual Red/White	<b>12035655</b>	88985-2	2	<b>309.99</b>
	Day Light White	<b>12035630</b>	88985	2	<b>289.99</b>

SolLight™

## RailLight Premium™ Solar-Powered Light

The RailLight Premium™ is brighter, tougher, and more flexible. It has four LEDs for twice the light and a waterproof switch with two brightness settings. The FastSolar™ technology quickly charges in various lighting conditions for up to eight hours of light on a full charge. Marine-grade stainless, UV-proof lens, and sealed electronics mean the RailLight Premium™ is built to last. Three Quick-Mount™ attachment options mount the light to any railing, coaming, bulkhead, stanchion, step, ladder, piling or dock box. Single 1800mAh rechargeable and replaceable NiMH battery included. 12"H. One-year warranty.

**Model 8699860 | SPLY#5201 | ShWt 1.6 | 39.99**



SolLight™

## RailLight Mini™

Like the RailLight Premium™, it's solar-powered so you never have batteries to replace. A built-in sensor turns it on at dusk and two white LEDs deliver up to eight hours of light on an eight-hour charge of sunlight. Included is the Quick-Mount™ rail clamp so you can quickly attach or detach it from any railing up to 1 1/4" in diameter. Built to last with marine-grade stainless, UV-proof lens, and sealed electronics. Single 1400mAh rechargeable and replaceable NiMH battery included. 8"H. One-year warranty.

**Model 11046893 | SPLY#5301 | ShWt 1.1 | 29.99**



Electrical

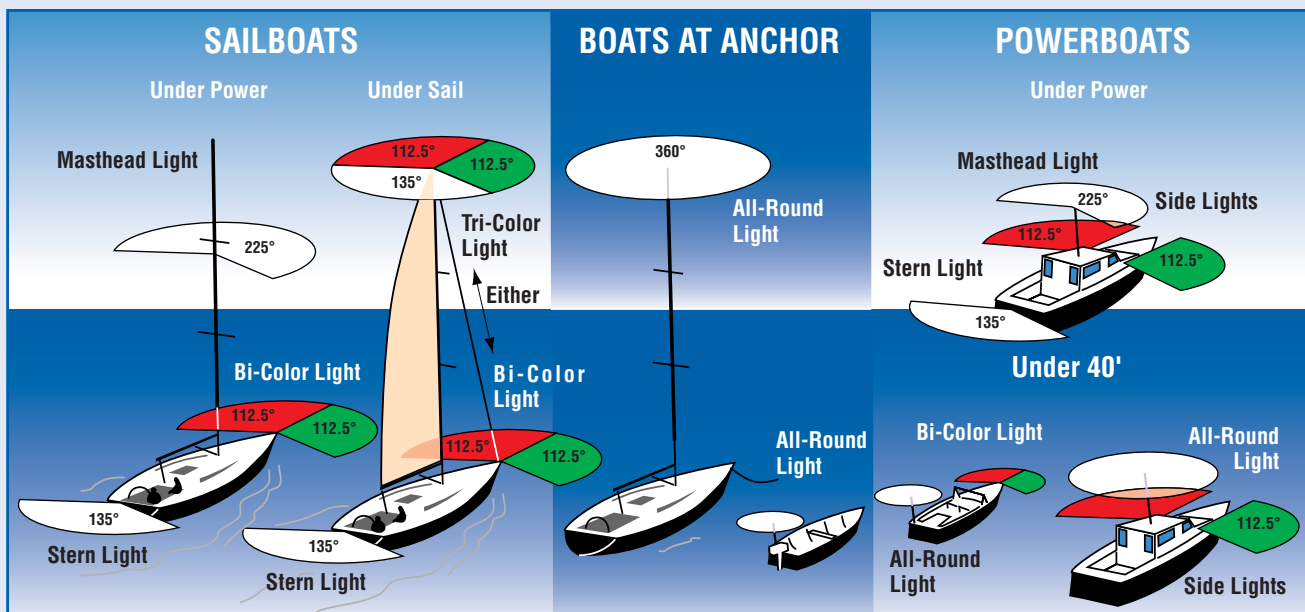
## Navigation Light Rules

Recreational boats operating at night are required to display navigation lights between sunset and sunrise. Recent changes to the Inland Navigation Rules make them nearly identical to the International Rules, so we will describe the International Rules to simplify the choices.

**Basic rules:**

1. Sidelights are red (port) and green (starboard) and shine from dead ahead to 112.5° aft on either side.
2. Stern lights are white and shine aft and 67.5° forward on each side. (Thus, the sidelights and stern light create a full circle of light.)
3. All-round lights are white and shine through 360°.
4. Masthead lights are white and shine from 112.5° on the port side through dead ahead to 112.5° on the starboard side. They must be above the sidelights.
5. Sailboats under power are considered powerboats.
6. Sidelights may be combined into a single "bicolor" light.

7. Powerboats less than 20m (65.5') in length need to show sidelights, a stern light and a masthead light. Power vessels less than 12m may show a single all-round light in lieu of the separate masthead and stern lights.
8. Sailing vessels less than 20m in length need to show sidelights and a stern light. These may be combined into a bicolor light and stern light, or a single tricolor light at the top of the mast. Sailing vessels under 7m must have an electric torch or lantern available for collision avoidance.
9. Oar-driven vessels can show either the sailboat lights, or use the electric torch/lantern option.
10. When anchored outside a special anchorage, power and sail vessels under 20m must display an all-round light. Vessels under 7m are exempt, unless anchored in a narrow channel or anchorage, or where other vessels usually navigate.
11. Sailboats with sails up during the day, but which are also under power, must fly a black "steaming cone," with its point downward, where it can be seen. When under power they must follow the rules of the road for powerboats.



### U.S. Coast Guard / Transport Canada Requirements

Boat Length:	>16' (4.88M)	39.4' (12M)	65.5' (20M)	165' (50M)
<b>Under Power</b>	Sidelights, Stern Light, & Masthead <sup>1,2</sup>			
<b>Under Sail</b>	Sidelights & Stern Light <sup>1,3</sup>			
<b>Rowing</b>	Same as "Under Sail"			
<b>At Anchor</b>	All-Round Light (night) or Black Anchor Ball (day) when outside a designated anchorage <sup>4</sup>			
<b>Visibility Range</b>	1nm Sidelights, 2nm All Others	3nm Masthead, 2nm All Others	5nm Masthead, 2nm All Others	

**NOTES**

- <sup>1</sup> Boats under power under 40' can substitute a single all-round light for separate stern and masthead lights
- <sup>2</sup> Boats under 65' can substitute a single bi-color light for sidelights
- <sup>3</sup> Sailboats under sail under 65' can substitute a tri-color light for separate sidelights and stern light.
- <sup>4</sup> See our anchor ball Model 217559

**DEFINITIONS**

**All-Round Light:** White (32pt/ 360°)  
**Masthead Light:** White (20pt/ 225°)  
**Sidelights:** Red (10pt/ 112.5°) & Green (10pt/ 112.5°)  
**Stern Light:** White (12pt/ 135°)

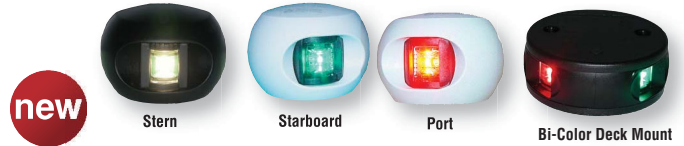


## Series 33 LED Navigation Lights

An aluminum heat sink for reduced weight, a slimmer profile and an extended service life of up to 20,000 hours highlight the features of this new series that is a direct replacement for the 12V Series 31. USCG (A16) certified for two mile visibility for Power & Sail vessels up to 65'. Completely sealed and waterproof. Tested and certified for electromagnetic interference.

**Case Material:** Polycarbonate **Dimensions:** 2 3/4"W x 2"H x 1 5/8"D **Volts:** 12V **Draw:** 0.18A **Wiring:** 7" insulated wire leads **Warranty:** Three years

	Model	AQSIG#	ShWt	Only
<b>Black Housing</b>				
Starboard Side Mount	<b>11508462</b>	33202-7	.1	<b>49.99</b>
Port Side Mount	<b>11508470</b>	33302-7	.2	<b>49.99</b>
Stern	<b>11508504</b>	33502-7	.5	<b>59.99</b>
Bi-Color Deck Mount	<b>12035531</b>	33100-7	.5	<b>64.99</b>
<b>White Housing</b>				
Starboard Side Mount	<b>11508488</b>	33203-7	.5	<b>49.99</b>
Port Side Mount	<b>11508496</b>	33303-7	.2	<b>49.99</b>
Stern	<b>11508512</b>	33503-7	.5	<b>59.99</b>
Bi-Color Deck Mount	<b>12035549</b>	33101-7	.5	<b>64.99</b>



## Series 34 LED Navigation Lights

A direct replacement for the 12-24V Series 32, these LED lamps feature a slimmer profile and an extended service life of up to 20,000 hours. USCG (A16) certified for two mile visibility for Power & Sail vessels up to 65'. Completely sealed and waterproof. Tested and certified for electromagnetic interference.

**Case Material:** Polycarbonate **Dimensions:** 2 3/4"W x 2"H x 1 5/8"D **Volts:** 12-24V **Draw:** 0.18A **Wiring:** 39" insulated leads **Warranty:** Three years

	Model	AQSIG#	ShWt	Only
<b>Black Housing</b>				
Starboard Side Mount	<b>11508520</b>	34202-7	.3	<b>74.99</b>
Port Side Mount	<b>11508538</b>	34302-7	.3	<b>74.99</b>
Stern	<b>11508561</b>	34502-7	.3	<b>84.99</b>
Bi-Color Deck Mount	<b>12035556</b>	34100-7	.5	<b>89.99</b>
<b>White Housing</b>				
Starboard Side Mount	<b>11508546</b>	34203-7	.3	<b>74.99</b>
Port Side Mount	<b>11508553</b>	34303-7	.3	<b>74.99</b>
Stern	<b>11508579</b>	34503-7	.3	<b>84.99</b>
Bi-Color Deck Mount	<b>12035564</b>	34101-7	.5	<b>89.99</b>

## Series 32 LED Navigation Lights

Use on power or sail vessels up to 65' (20m). Two nautical mile visibility. Patented prism lens technology provides the highest quality LED illumination in the industry. Energy-efficient LED technology significantly reduces power draw compared to incandescent lights. ABYC, USCG, IMO, CE and RINA certified.

**Case Material:** Polycarbonate **Mounting Hardware:** Sold separately **Volts:** Operates on 12V or 24V with no modification needed **Draw:** 0.04-0.25A **Warranty:** Three years

	Dimensions	Model	AQSIG#	ShWt	Only
<b>Black Housing</b>					
All Round White	2 3/4" dia. x 2 1/4"H	<b>8633109</b>	32000-7	1	<b>214.99</b>
All Round Green	2 3/4" dia. x 2 1/4"H	<b>8633125</b>	32002-7	.4	<b>209.99</b>
All Round Red	2 3/4" dia. x 2 1/4"H	<b>8633141</b>	32004-7	.1	<b>214.99</b>
Bi-Color Deck Mount	3 1/2"L x 2 3/4"W x 1 1/2"H	<b>8633166</b>	32100-7	.9	<b>99.99</b>
Masthead White 225°	4" dia. x 4"H	<b>8633265</b>	32400-7	1.7	<b>399.99</b>
Masthead/Anchor	4" dia. x 6"H	<b>8633281</b>	32410-7	2	<b>659.00</b>
Stern 135°	2 3/4"L x 2"W x 2"H	<b>8633307</b>	32502-7	.8	<b>59.99</b>
Tri-Color	4" dia. x 4"H	<b>8633323</b>	32606-7	1.8	<b>469.99</b>
Tri-Color/Anchor	4" dia. x 6"H	<b>8633349</b>	32706-7	2	<b>659.00</b>
<b>White Housing</b>					
All Round White	2 3/4" dia. x 2 1/4"H	<b>8633117</b>	32001-7	.9	<b>214.99</b>
All Round Green	2 3/4" dia. x 2 1/4"H	<b>8633133</b>	32003-7	.4	<b>209.99</b>
All Round Red	2 3/4" dia. x 2 1/4"H	<b>8633158</b>	32005-7	.4	<b>209.99</b>
Bi-Color Deck Mount	3 1/2"L x 2 3/4"W x 1 1/2"H	<b>8633174</b>	32101-7	.9	<b>99.99</b>
Masthead White 225°	4" dia. x 4"H	<b>8633273</b>	32401-7	.8	<b>399.99</b>
Masthead/Anchor	4" dia. x 6"H	<b>8633299</b>	32411-7	.1	<b>659.00</b>
Tri-Color	4" dia. x 4"H	<b>8633331</b>	32607-7	.8	<b>464.99</b>
Tri-Color/Anchor	4" dia. x 6"H	<b>8633356</b>	32707-7	.5	<b>659.00</b>



## Series 43 LED Navigation Lights

These new LED navigation lights are a direct replacement for Aqua Signal series 40 & 41 direct mount lights. They feature a modern design and are an optimal size for sport boats and yachts up to 164' (50m). IP67 certified. Each light contains two state-of-the-art LEDs with patented prism technology for increased brightness and additional safety. Rated at 50,000 hours run time.

**Case Material:** Polycarbonate **Dimensions:** 4 1/8"H x 4"W x 2 1/2"D **Mounting Hardware:** Not Included **Volts:** 12V or 24V **Draw:** 0.12A @ 12V, 0.06A @ 24V **Warranty:** Three years

	Model	AQSIG#	ShWt	Only
<b>Black Housing</b>				
Masthead - <b>New!</b>	<b>12035515</b>	43400-7	.9	<b>219.99</b>
Starboard Side Mount	<b>9354077</b>	43200-7	.7	<b>224.99</b>
Port Side Mount	<b>9354085</b>	43300-7	.2	<b>224.99</b>
Stern 135°	<b>9354093</b>	43500-7	.1	<b>224.99</b>
Bicolor	<b>11012788</b>	43100-7	.8	<b>299.99</b>
<b>White Housing</b>				
Masthead - <b>New!</b>	<b>12035523</b>	43401-7	.9	<b>219.99</b>
Starboard Side Mount	<b>9354044</b>	43201-7	.7	<b>224.99</b>
Port Side Mount	<b>9354051</b>	43301-7	.6	<b>224.99</b>
Stern 135°	<b>9354069</b>	43501-7	.5	<b>224.99</b>
Bicolor	<b>11012796</b>	43101-7	.8	<b>299.99</b>



# LED Navigation Lights



## NaviLED® Pro Navigation Lights

**new**

Ultra low current draw and maintenance-free, NaviLED lamps use less than 10% of the power needed by incandescent lamps. Port, starboard and stern lamps consume less than 3.2 watts combined, saving on-board batteries while providing 2nm of color-correct visibility. Multivolt™ circuitry assures full illumination under severe voltage fluctuations and low battery voltages. Completely sealed, multiple-element LED arrays have no filaments to break, withstand vibration, impact and harsh marine environments far better than incandescent lamps. Compact, 3 1/2" L x 3 3/8" W x 2 3/16" D, high impact acrylic housing is completely sealed for superior durability and corrosion resistance. IP67 Certified. Satisfies requirements of IMO, COL REG 72, USCG and RINA.

**Fixture Material:** High-impact Polyamide **Volts:** 9-33V DC **Draw:** 2W **Wiring:** 2.5m Marine Cable **Warranty:** Three years

	Color of Light	Fixture Color	Model	HELLA#	ShWt	Only
Port Side Mount	Red	Black	<b>12039707</b>	959900001	1	<b>149.99</b>
Starboard Side Mount	Green	Black	<b>12039715</b>	959908001	1	<b>149.99</b>
Stern	White	Black	<b>12039723</b>	959909001	1	<b>149.99</b>
Port Side Mount	Red	White	<b>12039731</b>	959900011	1	<b>149.99</b>
Starboard Side Mount	Green	White	<b>12039749</b>	959908011	1	<b>149.99</b>
Stern	White	White	<b>12039756</b>	959909011	1	<b>149.99</b>



## NaviLED® All-Round Lamp

**new**

Advanced Multivolt™ circuitry ensures consistent illumination under severe voltage fluctuations and low battery voltages. Energy-efficient, single LED lamp provides 2nm visibility range at voltages from 9-33V with less than 2 watts of power consumption. Anodized aluminum lamp base and folding pole with UV-resistant, high impact acrylic lens. Lamp assembly measures 1 13/16" H x 2" W. Satisfies requirements of IMO, COL REG 72, USCG and RINA.

**Fixture Material:** Anodized aluminum **Lens Diameter:** 50mm (lens) **Volts:** 9-33V DC **Draw:** 2W@12 **Warranty:** Three years

Length	Fixture Color	Model	HELLA#	ShWt	Only
12" (pole)	Black	<b>12039764</b>	959910621	1	<b>179.99</b>
12" (pole)	White	<b>12039772</b>	959910721	1	<b>179.99</b>
24" (pole)	Black	<b>12039780</b>	959910631	1.5	<b>179.99</b>
24" (pole)	White	<b>12039798</b>	959910731	1.5	<b>179.99</b>

Electrical



## LED Navigation Lights

Industry experts and avid boaters alike have chosen Orca Green Marine's innovative, energy-efficient LED lights for their rugged construction and reliability. All lights are USCG Certified for 2 nautical miles and meet COLREGS '72 standard for boats up to 50 meters (165') for running lights, and sailboats up to 20 meters (65') for Anchor and TriAnchor lights. Each light is individually tested underwater to assure waterproof performance. Integrated DC-DC power supply maintains consistent brightness over a wide

operating voltage range. Anchor lights with photodiode automatically turn on at night and off in the morning. TriAnchor lights have Marine QuickFit Disconnect wiring for easy installation, winterizing or storage. The LXAAGREEN and LXAARED are for larger vessels that require all-around lights separated by three meters. The LXAARED is also used for commercial fishing vessels and for diving vessels. Mounting brackets sold separately. LEDs are rated to 50,000 hours.

**Case Material:** Cast acrylic, anodized aluminum **Mounting Hardware:** 6-32 screw inserts in base. Optional L-shaped or Top Mount stainless steel mounting bracket **Volts:** 12V-24V **Wiring Provisions:** Marine grade QuickFit Disconnect wiring for easy installation **Warranty:** Two years (lights), One year (accessories)

	12V Draw	Voltage Range	Dimensions	Model	OGM#	ShWt	Only
<b>Navigation Lights</b>							
Anchor	0.2A	10-28V	2 11/16"H x 2 11/16"Dia	<b>9385329</b>	LXA	.5	<b>214.99</b>
Anchor With Photodiode	0.2A	10-28V	2 11/16"H x 2 11/16"Dia	<b>9385337</b>	LXAP	.5	<b>229.99</b>
TriAnchor	0.5A	10-16V	2 11/16"H x 2 11/16"Dia	<b>9385279</b>	LXTA	.1	<b>464.99</b>
TriAnchor with Photodiode	0.5A	10-16V	2 11/16"H x 2 11/16"Dia	<b>9385261</b>	LXTA-P	.1	<b>479.99</b>
TriAnchor Light with Strobe	0.5A	10-16V	2 11/16"H x 2 11/16"Dia	<b>8700569</b>	LXTA-S	1	<b>439.99</b>
TriAnchor Light with Strobe and Photodiode	0.5A	10-16V	2 11/16"H x 2 11/16"Dia	<b>8700577</b>	LXTA-SP	1	<b>449.99</b>
Amber Towing Light	0.17A	10-28V	3 5/16"L x 2 3/4"W x 3/4"D	<b>8700585</b>	LX2TW	.7	<b>214.99</b>
Stern Light	0.17A	10-28V	3 5/16"L x 2 3/4"W x 3/4"D	<b>8700593</b>	LX2ST	.7	<b>214.99</b>
Port Running Light (Red)	0.17A	10-28V	3 5/16"L x 2 3/4"W x 3/4"D	<b>8700601</b>	LX2PT	1.3	<b>214.99</b>
Starboard Running Light (Green)	0.17A	10-28V	3 5/16"L x 2 3/4"W x 3/4"D	<b>8700619</b>	LX2SB	1.3	<b>214.99</b>
<b>All-Around Navigation Lights</b>							
Starboard Running Light	0.2A	10-28V	2 3/4"W x 2 11/16"D	<b>9385295</b>	LXAAGREEN	.7	<b>464.99</b>
Port Running Light	0.2A	10-28V	2 3/4"W x 2 11/16"D	<b>9385287</b>	LXAARED	.7	<b>464.99</b>
<b>Lighting Accessories</b>							
Side Mounting Bracket			5 1/4"H x 2 1/2"W x 3 1/4"D	<b>8700627</b>	LXBRKT-01	.3	<b>35.99</b>
Top Mounting Bracket			1"H x 4 3/4"W x 2 1/2"D	<b>8700635</b>	LXBRKT-02	.3	<b>35.99</b>
Selector Switch for TriAnchor Light			-	<b>8700643</b>	Switch-Sel	.2	<b>43.99</b>
Master Switch Module			-	<b>9385345</b>	SWITCH-MM	.1	<b>69.99</b>
Reversing Switch			-	<b>9385311</b>	SWITCH-REV	.1	<b>35.99</b>

## LED Masthead/Steaming Light

Three nautical mile visibility, compatible with 12V or 24V DC or AC electrical systems. Two-LED light draws a remarkably low .3A and is guaranteed for 50,000 hours at full brightness.

**Case Material:** Anodized aluminum, acrylic lens **Volts:** 12V or 24V AC or DC Systems **Wiring Provisions:** 2-conductor 20-gauge marine grade (4ft cable supplied) **Warranty:** Two years

**Model 9385303** | OGM#LX3MH | ShWt .2 | **589.00**

**602 Series LED Side Lights**

Pair of high-visibility LED side lights is certified for use on powerboats up to 20m (or 65.6') with 12V electrical systems. Lights feature long lasting 12V LED bulbs rated at 100,000 hours and use

1/10 of the energy draw of standard lights. 2nm visibility range. Water resistant. Meet USCG and ABYC standards. Sold in pairs.

**Case Material:** Chrome-plated bronze **Case Dimensions:** 3 1/2"L x 2"W x 1 1/8"H **Mounting Hardware:** #8 FHMS **Volts:** 12V **Draw:** 0.10A **Warranty:** Five years

**Model 2099091** | PERKO#0602DP1CHR | ShWt 1.4 | **144.99**



602 Series

**LED All-Round Light**

12V LED white light provides 100,000 hours of light with low energy draw and eliminates the need for bulb replacement. Certified for power boats up to 20m (or 65.6'), this water-resistant light is designed to reduce glare by focusing the light beam above the op-

erator's line of sight. 2-mile visibility. White plastic top and base with clear fluted reduced glare globe. Lamp height: 7 1/8" Mounting base: 1"W x 2 5/8"L. Meet USCG and ABYC standards.

**Case Material:** Plastic **Mounting Hardware:** #8 mounting screws (sold separately) **Volts:** 12V **Draw:** 0.25A **Pole Material:** Plastic **Pole Mounting Style:** Fixed surface mount base **Warranty:** Five years

**Model 2674901** | PERKO#1345DP1WHT | ShWt .6 | **99.99**



All-Round Light



**3500 Series LED Navigation Lights**

Proprietary optical design draws only 2.4 watts at 12VDC—that's extremely low power draw for today's market! These lights are completely sealed and are watertight, designed to resist corrosion in even the most extreme saltwater environments. LED technology

keeps lights cool to the touch and is rated for 50,000+ hours of use. 1nm lights are for use on boats up to 39.4'L. 2nm lights are for use on boats up to 65.6'L.

**Case Material:** Electro-polished stainless steel **Dimensions:** 3"L x 2 5/16"W x 1 5/16"H **Volts:** 12V DC **Draw:** 0.2A (2.4W@12V) **Warranty:** 10 years

	Model	ATTWD#	ShWt	Only
<b>1 Nautical Mile Lights (Boats to 39'4"/12m Length)</b>				
Bi Color	9034463	3520-7	.4	55.99
Starboard Deck Mount	9034471	3530G7	.4	48.99
Port Deck Mount	9034489	3530R7	.4	48.99
<b>2 Nautical Mile Lights (Boats 39'4" to 65'6"/12m to 20m Length)</b>				
Bi Color	9034497	3540-7	.4	69.99
Starboard Deck Mount	9034505	3550G7	.4	49.99
Port Deck Mount	9034513	3550R7	.4	52.99



3500 Series

Bi-Color

Port

Starboard

**5500 Series LED All-Around Navigation Lights**

All-around pole lights feature articulating heads that adjust from 15° fore to 15° aft to fit all base angles and typical deck installations. Two-pin locking collar is removable to allow use in almost any base. Energy-saving LEDs and the proprietary optical design

draws only 1.8 watts at 12V DC— one of the lowest power draws of any two-mile All-Round light on the market today! Rated for 50,000+ hours of use. Two-mile, 360° visibility for boats up to 39.4'.

**Type:** Universal replacement white all-around light **Case Material:** Black plastic **Mounting Hardware:** Not included **Pole Diameter:** 3/4" **Pole Material:** Anodized aluminum **Draw:** 0.15A (1.8W@12V DC) **Volts:** 12V DC **Warranty:** 10 years

Length	Model	ATTWD#	ShWt	Only
<b>Straight Pole</b>				
24"	9034521	5530-24-7	.7	72.99
36"	9034539	5530-36-7	.7	77.99
42"	9034547	5530-42-7	1	79.99
48"	9034554	5530-48-7	1	67.99
54"	9034562	5530-54-7	1	79.99
60"	9034570	5530-60-7	1	84.99
<b>Folding Pole</b>				
54"	9034588	5540-54-7	1.3	94.99



5500 Series

Articulating Head adjusts from 15° forward to 15° aft to fit all base angles and typical deck installations

# Navigation Lights

## Three Mile LED Lights



### Three Mile LED Lights

Energy-efficient three-mile 12" pole anchor/masthead and transom lights. Solid stainless hardware for corrosion resistance and unsurpassed polished appearance. Pole light is direct replacement for Perko 1181DPO CHR used on most Sea Ray boats.

**Case Material:** Black plastic **Mounting Hardware:** Not included **Pole Diameter:** 3/4" **Pole Material:** Anodized aluminum  
**Draw:** 0.15A (1.8W@12V DC) **Volts:** 12V DC **Warranty:** 10 years

	Bulb Wattage	Model	ATTWO#	ShWt	Only
12" All-Round	4.5W	<b>10043297</b>	7812-7	.3	<b>127.99</b>
Stern	1.5W	<b>10043305</b>	6556-7	.1	<b>74.99</b>

Electrical

## Series 20



### Series 20 Navigation Lights

For powerboats to 12m. Computer-designed fresnel lenses are focused to eliminate glare. Efficient 5W lamp consumes just 0.42A @ 12V DC. 8" masthead with 15° aft incline.

**Case Material:** Glass-reinforced polycarbonate **Mounting Hardware:** Self-adhesive gasket and special dowel included **Volts:** 12V **Draw:** 0.42A@12V DC **Replacement Bulb:** Model 365510 **Warranty:** One year

Type	Color	Description	Model	AQSIG#	ShWt	Only
Starboard	Green	3" x 2 1/8" x 1 1/2" 10pt Side Mount	<b>237248</b>	20202-7	.3	<b>25.99</b>
Port	Red	3" x 2 1/8" x 1 1/2" 10pt. Side Mount	<b>237255</b>	20302-7	.3	<b>25.99</b>
Bi-Color	Red/green	2 1/2" x 2" x 1 7/8" 10pt each side	<b>237263</b>	20100-7	.3	<b>29.99</b>
Stern	White	1 1/2" x 2 1/2" x 2 7/8" 12pt aft	<b>106163</b>	20502-7	.2	<b>25.99</b>
Masthead/Anchor	White	2 3/8" x 20/32 pt on 8" pedestal	<b>410597</b>	20410-7	.1	<b>65.99</b>

## Series 22



### Series 22 Navigation Lights

Standard 10W festoon bulbs provide illumination. 5" hardware leads. For powerboats to 12m.

**Case Material:** Glass-reinforced polycarbonate **Mounting Hardware:** Two screws and gasket included **Volts:** 12V **Draw:** .83A **Replacement Bulb:** Model 297376 **Replacement Lens:** Not available **Warranty:** One year

Type	Color	Description	Model	AQSIG#	ShWt	Only
Bi-Color Side	Red/Green	2 1/4" x 2 1/8" Deck Mount	<b>141718</b>	22100-7	.2	<b>18.49</b>
Deck Mount	Green	2 1/4" x 2 1/8" Deck Mount	<b>141742</b>	22200-7	.2	<b>18.49</b>
Deck Mount	Red	2 1/4" x 2 1/8" Deck Mount	<b>141759</b>	22300-7	.2	<b>18.49</b>
All-Round	Low-Glare, Clear	4" Pedestal Light	<b>141692</b>	22040-7	.3	<b>19.49</b>
Bi-Color/Task Light	Bicolor	12" Plug-in Pole Light	<b>11012820</b>	22110-7	.6	<b>32.99</b>
Bi-Color	Bicolor	12" Plug-in Pole Light	<b>11012838</b>	22112-7	.6	<b>28.99</b>

## Series 24 Tell Tale



### Series 24 Tell Tale Navigation Lights

Stainless-steel navigational lights with 12V DC/10W bulbs for powerboats up to 12m. Each light contains Aqua Signal's "Tell Tale" feature—a small indicator light located on the back of the light which lets you know the light is on and functioning correctly without having to view it from the front. Each light includes 8" leads and two #6 fasteners.

**Case Material:** Stainless Steel **Mounting Hardware:** Includes two #6 fasteners **Volts:** 12V **Draw:** .83A **Replacement Bulb:** Model 297376 **Replacement Lens:** Not available **Warranty:** One year

Type	Color	Description	Model	AQSIG#	ShWt	Only
Oval Bi-Color	Red/Green	2 1/2" x 2 1/8" Deck Mount	<b>2658243</b>	24105-7	.4	<b>39.99</b>
Side Mount (2) Port/Starboard	Red/Green	2 1/8" x 1 7/8" Side Mount	<b>2658276</b>	24228-7	.4	<b>49.99</b>
Round Deck Mount (2) Port/Starboard	Red/Green	2 1/4"D Deck Mount	<b>2658334</b>	24227-7	.5	<b>48.99</b>

Series 40



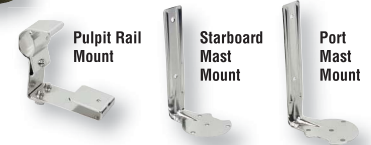
## Series 40 Navigation Lights

For powerboats and sailboats to 65'7" (20m). Screens are brushed stainless steel. Lights with Q-fit base can be removed without tools for easy servicing.

**Case Material:** Glass-reinforced polycarbonate **Mounting Hardware:** 2-3 screws (sold separately) **Volts:** 12V **Draw:** 10W - 0.84A, 25W - 2A **Wiring Provisions:** 5" wire pigtail **Replacement Bulb:** 10W 12V - Model 8646697; 25W 12V - Model 2412278 **Warranty:** One year

Type, Color	Dimensions	Model	AQSIG#	ShWt	Only
Tri-Color	4 7/8"H x 3 1/2" dia.	<b>174318</b>	40600-7	3	<b>114.99</b>
Tri-Color, Anchor	8 3/4"H x 3 1/2" dia.	<b>370734</b>	40700-7	3	<b>159.99</b>
Tri-Color, Anchor <sup>1,3</sup>	10 1/4"H x 3 1/2" dia.	<b>106155</b>	40706-7	3	<b>169.99</b>
Tri-Color, Anchor, Strobe <sup>1,2</sup>	8 3/4"H x 3 1/2" dia.	<b>174300</b>	40806-7	6	<b>449.99</b>
Pedestal Anchor Light	6 3/8"H x 3 1/2" dia.	<b>327041</b>	40000-7	2	<b>72.99</b>
Port, 10pt Red	5 1/8"H x 3 1/2"W x 3 1/8"D	<b>195701</b>	40300-7	3	<b>89.99</b>
Starboard, 10pt Green	5 1/8"H x 3 1/2"W x 3 1/8"D	<b>195719</b>	40200-7	3	<b>89.99</b>
Bi-Color	5 1/8"H x 3 1/2"W x 3 1/8"D	<b>195693</b>	40100-7	3	<b>97.99</b>
Stern, 12pt White	5 1/8"H x 3 1/2"W x 3 1/8"D	<b>195685</b>	40500-7	3	<b>89.99</b>
Masthead, 20pt White	5 1/8"H x 3 1/2"W x 3 1/8"D	<b>216978</b>	40400-7	1.1	<b>89.99</b>

<sup>1</sup> Tri-Color lights are for boats under sail only.  
<sup>2</sup> Strobes are considered distress signals in inland waters, and are illegal in offshore waters.  
<sup>3</sup> Entire assembly can be removed without tools for trailering or storage.



## Mounts for Series 40 Navigation Lights

Model	AQSIG#	ShWt	Only
Mount, Series 40 Pulpit Rail	<b>195727</b>	40901-1	.4 <b>64.99</b>
Mount, Series 40 Starboard Mast	<b>195735</b>	40922-1	.4 <b>29.99</b>
Mount, Series 40 Port Mast	<b>195743</b>	40923-1	.4 <b>29.99</b>
Replacement Bulb Socket, Series 40	<b>381905</b>	90127-1	.1 <b>13.49</b>

Electrical

## Series 41 Navigation Lights

For powerboats and sailboats to 65'7" (20m). Black polycarbonate cases, similar to Series 40, but without the stainless steel screen. 25W bulb included.

**Case Material:** Glass-reinforced polycarbonate **Mounting Hardware:** Two #6 RH screws (sold separately) **Volts:** 12V **Draw:** 2A **Wiring Provisions:** 5" Wire pigtail **Replacement Bulb:** Model 2412278 **Warranty:** One year

Type	Dimensions	Model	AQSIG#	ShWt	Only
Port	4 1/8"H x 3 5/8"W x 3 3/16"D	<b>327066</b>	41300-7	4	<b>57.99</b>
Starboard	4 1/8"H x 3 5/8"W x 3 3/16"D	<b>327058</b>	41200-7	4	<b>57.99</b>



Series 41

## Series 25 Classic Navigation Lights

For powerboats and sailboats to 12m. Molded from fiberglass reinforced polycarbonate for strength and corrosion resistance. 10W lamps have 1nm. visibility through colored lenses and 2nm. through white lenses. Mounting screws sold separately.

**Case Material:** Fiberglass reinforced polycarbonate **Case Dimensions:** Bi-color/Stbd/Port/Stern 2 1/2"W x 2 7/8"H x 2 5/16"D - Masthead/Anchor 3"H x 2 3/8" dia. **Mounting Hardware:** Sold separately **Volts:** 12V **Draw:** 0.84A @ 12V DC **Replacement Bulb:** Model 175203 **Warranty:** One year

Mount # (from chart below)	Color	Angle	Model	AQSIG#	ShWt	Only
Bi-Color	1, 3 Green/Red	10/10pt	<b>174367</b>	25100-7	2	<b>24.99</b>
Starboard	1, 3 Green	10pt.	<b>179275</b>	25200-7	2	<b>24.99</b>
Port	1, 3 Red	10pt.	<b>179283</b>	25300-7	2	<b>26.99</b>
Stern	1, 3 White	12pt.	<b>174375</b>	25500-7	.5	<b>26.99</b>
Masthead	2 White	20pt.	<b>174391</b>	25400-7	2	<b>26.99</b>
Anchor	None White	32pt.	<b>225714</b>	25000-7	.3	<b>23.99</b>



Series 25 Mounts

## Mounts for Series 25 Navigation Lights

Mount #	Description	Model	AQSIG#	ShWt	Only
1. Deck Mount	For Sidelights or Stern Light	<b>176347</b>	25902-1	.2	<b>19.99</b>
2. Mast Mount	For Masthead only	<b>176354</b>	25903-1	.2	<b>19.99</b>
3. Rail Bracket	For all except Masthead	<b>203844</b>	25900-1	.1	<b>54.99</b>



# Navigation Lights



## #3562 Navigation Lights



Bi-Color

Masthead

Starboard

Port

### #3562 Navigation Lights for Boats to 39'4" (12 meters)

Compact navigation lights with modern styling. Completely waterproof, yet vented. Break-resistant polycarbonate housing snaps together without screws. Bulb snaps into a holder supported above condensing surfaces. Acrylic lens. 10W bulbs in colored lenses are visible 1nm.; stern light is visible 2nm. Masthead light is visible 2nm.



Stern

Flush Mount Stern

**Case Material:** Polycarbonate **Case Dimensions:** 3"H x 2 1/2"W x 2"L **Mounting Hardware:** Screws included **Draw:** 0.83A **Wiring Provisions:** Two flat plug connectors, 6.3mm **Replacement Bulb:** Model 365520 **Warranty:** One year

Type	Visibility	Lens Color	Angle	Model	HELLA#	ShWt	Only
Masthead	2nm	White	20pt	<b>598441</b>	003562005	.1	<b>33.99</b>
Bi-Color	1nm	Green/Red	10/10pt	<b>598409</b>	003562045	.1	<b>33.99</b>
Stern	2nm	White	12pt	<b>598433</b>	003562015	.3	<b>33.99</b>
Flush Mount Stern*	2nm	White	10pt	<b>255713</b>	995004011	.1	<b>33.99</b>
Starboard	1nm	Green	10pt	<b>598425</b>	003562025	.1	<b>33.99</b>
Port	1nm	Red	10pt	<b>598417</b>	003562035	.1	<b>33.99</b>

\*White plastic enclosure flush-mounts into a 1.6" hole

Electrical

## #2984 Navigation Lights



Bi-Color

Stern

Starboard

Port

### #2984 Navigation Lights for Boats to 65'7" (20 meters)

Very similar to #3562 lights, with larger lamps and size for greater visibility. Bulb hangs to reduce corrosion on socket. For power or sailboats to 65'7". Acrylic lens. 25W bulbs in colored lenses produce 2nm visibility, stern light has 2nm visibility, while masthead light has 3nm visibility. Black housing.



Masthead

**Case Material:** Polycarbonate **Case Dimensions:** 4 1/4"H x 4 1/4"W x 3 1/2"L **Mounting Hardware:** Screws included **Volts:** 12V **Draw:** 10W - 0.83A; 25W - 2.08A **Wiring Provisions:** Two flat plug connectors, 6.3mm **Replacement Bulb:** 10W - Model 8646697; 25W - Model 2412278 **Warranty:** One year

Type	Lens Color	Model	HELLA#	ShWt	Only
Masthead	White	<b>598524</b>	002984305	.9	<b>72.99</b>
Bi-color	Green/Red	<b>598482</b>	002984315	1	<b>72.99</b>
Stern	White	<b>598516</b>	002984325	.2	<b>72.99</b>
Port	Red	<b>598490</b>	002984335	1.1	<b>74.99</b>
Starboard	Green	<b>598508</b>	002984345	.1	<b>74.99</b>



All-Round

### All-Round Light for Boats to 39'4" (12 meters)

White light mounts on any flat surface for powerboats and sailboats to 12m. Single 10W bulb. Gasketed lens prevents water penetration in rough conditions. For mounting; suspension from a halyard not recommended. 2nm visibility. Black base.

**Type:** All-Around **Case Material:** Polycarbonate **Case Dimensions:** 2 5/16" dia. x 2 5/8"H **Mounting Hardware:** Two RHMS (sold separately) **Volts:** 12V **Draw:** 0.83A **Wiring Provisions:** 2 flat plug connectors, 6.3mm **Replacement Bulb:** Model 288904 **Replacement Lens:** 63100 **Warranty:** One year

**Model 598458** | HELLA#002492201 | ShWt 2 | **28.99**

## Series 170



### 170 Series Vertical-Mount Side Navigation Lights

European style Series 170 side navigational lights are certified for electrical systems. Red or green lenses with 12V bulbs included. use on powerboats and sailboats up to 20m (or 65.6') with 12V 2nm visibility range.

**Case Material:** Chrome-plated brass tops with black plastic bases **Mounting Hardware:** #10 FHMS (sold separately) **Volts:** 12V **Draw:** 0.97A **Replacement Bulb:** Model 8646853 **Warranty:** Five years

Type	Dimensions	Model	PERKO#	ShWt	Only
Port Side Red	3 5/8"H x 4 1/8"W	<b>2363323</b>	0170MPDP1	.5	<b>69.99</b>
Starboard Side Green	3 5/8"H x 4 1/8"W	<b>2363380</b>	0170MSDDP1	.5	<b>69.99</b>



**Vertical-Mount Sidelights**

Sidelights with 1nm visibility intended for vertical cabin sides. 39.4". Sold in pairs. Chrome-plated zinc. For sail or power boats less than 12m or

**Case Material:** Chrome-plated brass **Mounting Hardware:** #4 FHMS (Model 281147), #8 FHMS (Model 268518) **Volts:** 12V **Draw:** 0.7A **Replacement Bulb:** Model 297376 **Warranty:** Five years

Type	Case Material	Dimensions	Model	PERKO#	ShWt	Only
Vertical-Mount Sidelights	Chrome-plated brass	4 1/4" x 2 3/8" x 1 3/4"	<b>281147</b>	0955DPOCHR	.6	<b>99.99</b>
Vertical (pair)	Chrome-plated zinc	5 1/2" x 3 1/8 x 1 3/4"	<b>268518</b>	1264DPOCHR	1.4	<b>97.99</b>



Vertical-Mount Sidelights

Vertical (Pair)



**Quasar Bi-Color Deck Mount Lights**

Smoothly-contoured, lights are designed for use on boats to 20m or 65.6'. A single locking screw connects the cap and base for easy installation and service. Resin lenses are tuned for maximum visibility. Includes 8W festoon bulb.

**Case Material:** Plastic resin **Case Dimensions:** 3"L x 2 1/4"W x 1 3/8"H **Mounting Hardware:** Three #10 screws (not included) or mount to optional 3300 series snap-on base **Volts:** 12V **Draw:** 0.66A **Wiring Provisions:** 7" wire leads **Replacement Bulb:** Model 6704779 **Replacement Lens:** 912392B **Warranty:** One year

	Model	ATTWO#	ShWt	Only
Black Bi-Color	<b>143086</b>	3120-7	.3	<b>23.99</b>
White Bi-Color	<b>143094</b>	3121-7	.3	<b>24.99</b>
Chrome Bi-Color	<b>143102</b>	3123-7	.4	<b>33.99</b>
Chrome, Red (Port)	<b>2832558</b>	3153R7	.2	<b>33.99</b>
Chrome, Green (Starboard)	<b>4516902</b>	3153G7	.2	<b>33.99</b>



Quasar Bi-Color

Black Bi-Color

White Bi-Color

Chrome Port

Chrome Bi-Color

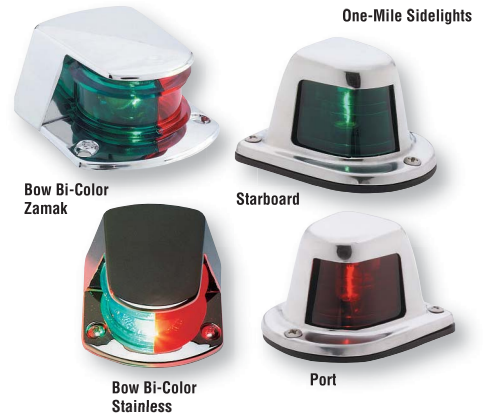
Chrome Starboard

**One-Mile Sidelights**

Designed to mount on the foredeck or any flat surface of powerboats to 12m. Lights have 1nm visibility. Polycarbonate lenses. Accept #90 (7.5W) lamps. Stainless model uses an 8W lamp. Bases are predrilled with two countersunk holes. Die-cast Zamak model has a Perma-Plate chrome finish.

**Volts:** 12V **Draw:** 0.62A **Wiring Provisions:** 7" wire leads **Replacement Bulb:** Model 288797 **Replacement Lens:** Model 5515101 **Warranty:** One year

Type	Material	Length	Width	Height	Fastener Size	Model	ATTWO#	ShWt	Only
Bow Bi-Color	Zamak	2 3/4"	2 1/2"	1 3/8"	#8	<b>406363</b>	6375D6	.5	<b>29.99</b>
Bow Bi-Color	Stainless	2 1/2"	2 1/4"	1 1/2"	#6	<b>568469</b>	66318-7	.4	<b>27.99</b>
Port	Stainless	2 1/2"	2 1/4"	1 1/2"	#6	<b>1967496</b>	66319R7	.3	<b>36.99</b>
Starboard	Stainless	2 1/2"	2 1/4"	1 1/2"	#6	<b>1967520</b>	66319G7	.3	<b>36.99</b>



One-Mile Sidelights

Bow Bi-Color Zamak

Starboard

Bow Bi-Color Stainless

Port

**Round Flush-Mount Stern Light**

Waterproof 304 stainless steel 12 pt. white light for vertical transoms. 2-mile, 135° light provides visibility for craft up to 164' (50m). Light body is translucent, so it shines on both sides of bulkhead. Can also be used to light an interior compartment or as a courtesy light. Includes 7.5W bulb.

**Case Material:** 304 Stainless steel with plastic body and watertight lamp socket **Case Dimensions:** 3" dia. **Mounting Hardware:** Two #10 stainless steel screws (included) **Volts:** 12V **Draw:** .63A **Wiring Provisions:** 6" wire leads **Replacement Bulb:** Model 4885919 **Replacement Lens:** Model 523300 **Warranty:** One year

**Model 593434** | ATTWO#6356D7 | ShWt .3 | **24.99**

**Rectangular Flush-Mount Stern Light**

Waterproof 304 stainless steel 12pt white light for vertical transoms. 2-mile, 135° light provides visibility for craft up to 164' (50m). Includes 7.5W bulb. Meets Coast Guard requirements for boats built before Nov. 2003.

**Case Material:** 304 Stainless steel, plastic body **Case Dimensions:** 4 11/16"L x 2 11/16"H x 2"D **Mounting Hardware:** Two #10 screws (included) **Volts:** 12V **Draw:** 0.62A **Wiring Provisions:** 6" wire leads **Replacement Bulb:** Model 4885919 **Replacement Lens:** Model 4229670 **Warranty:** One year

**Model 593426** | ATTWO#66382-7 | ShWt .4 | **33.99**



Stern Lights

Round Flush Mount

Rectangular Flush Mount

# Navigation Lights



## Chrome Bi-Color & Sidelights



Horizontal Mount Sidelights (pair)

Horizontal Bi-Color

## Chrome Bi-Color and Sidelights

For powerboats less than 20m or 65.6'. Chrome-plated zinc top welded lenses resist moisture. 2nm. visibility. Side lights are sold with black plastic base and snap-in lamp stand. Ultrasonically in pairs (with one green and one red).

**Case Material:** Chrome-plated zinc top with plastic base **Case Dimensions:** 3 1/4"L x 2 1/4"W x 5/8"H **Mounting Hardware:** #8 FHMS (sold separately) **Volts:** 12V **Draw:** 0.7A **Replacement Bulb:** Model 297376 **Warranty:** Five years

Type	Model	PERKO#	ShWt	Only
Horizontal Mount Sidelights (pr)	<b>148218</b>	0228DPOCHR	.8	<b>97.99</b>
Horizontal Bi-color (ea)	<b>148192</b>	0227DPOCHR	.4	<b>59.99</b>

## Masthead Lights



Horizontal Chrome/Brass

Vertical Chrome/Zinc

## Masthead Lights

For powerboats and sailboats. Chrome-plated brass or chrome-plated zinc.

**Mounting Hardware:** #4 FHMS **Volts:** 12V **Draw:** 0.7A **Replacement Bulb:** Model 297376 **Warranty:** Five years

Type	Boat Size	Dimensions	Model	PERKO#	ShWt	Only
Vertical Chrome/Zinc	To 20m (65'7")	3 3/4"H x 1 1/2"W	<b>123505</b>	1331DPOCHR	.4	<b>59.99</b>
Horizontal Chrome/Brass	To 12m (39'4")	2 3/8" dia x 7/8"H	<b>281212</b>	0964DPOCHR	.3	<b>47.99</b>

Electrical

## Stern Lights



Horizontal Mount

Vertical Flush Mount Model 192361

Vertical Mount

Vertical Flush Mount Model 192379

Vertical Mount Model 257006

## Stern Lights

For powerboats and sailboats less than 20m or 65.6'.

**Case Material:** Chrome-plated brass (except where noted) **Mounting Hardware:** #4 or #8 FHMS **Volts:** 12V **Draw:** 0.7A **Replacement Bulb:** Model 297376, Model 8646804 (for Models 192379, 192361) **Warranty:** Five years

Type	Dimensions	Model	PERKO#	ShWt	Only
Vertical Mount	2 3/8" dia. x 5/8"D	<b>257006</b>	0945DPOCHR	2	<b>54.99</b>
Horizontal Mount Stern Light	2 3/8" dia. x 1 5/8"H	<b>257162</b>	0965DPOCHR	2	<b>47.99</b>
Vertical Mount*	3 3/4"H x 1 1/2"W	<b>123513</b>	1332DPOCHR	2	<b>59.99</b>
Vert. Flush Mount	3" dia. x 1"D	<b>192379</b>	0946DP112V	.2	<b>54.99</b>
Vert. Flush Mount	5 3/16"L x 3 3/8"W x 1 1/2"D	<b>192361</b>	0939DP112V	.6	<b>122.99</b>

\*Chrome-plated zinc



Horizontal Bi-Color with Flagstaff Base Model 199663

Horizontal Sidelights Model 257139 (pair)

Horizontal Sidelights Model 268724 (pair)

## Traditional Chrome



Bi-Color Horizontal Model 281113

Horizontal Bi-Color Model 281097

## Traditional Chrome Bi-Color and Sidelights

For powerboats and sailboats less than 12m or 39.4'. Chrome-plated brass (except where noted). 1nm visibility. Horizontal and vertical sidelights are sold in pairs. Bi-colors sold individually.

**Case Material:** Chrome-plated brass or zinc (as noted) **Mounting Hardware:** #4 FH (Models 281113, 257139, 268724), #8 FH (Models 281097, 199663, sold separately) **Volts:** 12V **Draw:** 0.80A **Replacement Bulb:** Model 297376 **Warranty:** Five years

Type	Base	Height	Model	PERKO#	ShWt	Only
Traditional Chrome Bi-Color Horizontal Light	2 3/8" dia.	1 5/8"	<b>281113</b>	0972DPOCHR	.3	<b>36.99</b>
Bi-color (ea) <sup>1</sup>	4" x 3 1/8"	1 7/8"	<b>281097</b>	1310DPOCHR	.5	<b>49.99</b>
Bi-color (ea) <sup>1,2</sup>	6 3/4" x 3 7/8"	1 5/8"	<b>199663</b>	1218DPOCHR	1.2	<b>52.99</b>
Traditional Chrome Sidelights	2 3/8" dia.	1 5/8"	<b>257139</b>	0963DPOCHR	.5	<b>92.99</b>
Sidelight (pair)	4 1/4" x 2 3/8"	1 7/8"	<b>268724</b>	0915DPOCHR	.4	<b>152.99</b>

1 Chrome-plated zinc 2 Built-in flag staff socket

## Bi-Color and Sidelights

For powerboats and sailboats less than 20m or 65.6'. Plastic frames with ultrasonically welded lenses and gasketed plastic bases. 2nm visibility. Per pair, except bi-color.

**Case Material:** Plastic **Case Dimensions:** 3 1/2"L x 2 1/4"W x 13/16"H **Mounting Hardware:** #8 FHMS (sold separately) **Volts:** 12V **Draw:** 0.7A **Replacement Bulb:** Model 297376 **Warranty:** Five years

Horizontal Sidelights Model 148317



Horizontal Sidelights Model 393670

Vertical Sidelights Model 391250

Bi-Color Model 394080

Style	Color	Model	PERKO#	ShWt	Only
Horizontal	Black	<b>393670</b>	0253B00DP1	.2	<b>59.99</b>
Horizontal	White	<b>148317</b>	0253W00DP1	.5	<b>59.99</b>
Vertical	Black	<b>391250</b>	0254B00DP1	.5	<b>59.99</b>
Vertical	White	<b>148333</b>	0254W00DP1	.5	<b>59.99</b>
Bi-color (each)	Black	<b>394080</b>	0252B00DP1	.3	<b>33.99</b>
Bi-color (each)	White	<b>148309</b>	0252W00DP1	.3	<b>33.99</b>

Perko

## Removable Bi-Color Utility Lights

These 12" plug-in bi-color pole lights feature a deck illuminating built-in utility light that's controlled by a switch located on the light's top cover. Model 8582520 and 8582504 are USCG certified for use on power or sail boats under 12m (39.4') in length. Model 8582512 is certified for powerboats only under 20m (65.6') in length. Bases sold separately (next page). Model 8582512 uses a 3 contact, 5° angle base. Models 8582520 and 8582504 use a 3 contact, 0° base. Bases sold separately, see page 452.

**Case Material:** Black Plastic **Tops Mounting Hardware:** #8 FHMS **Volts:** 12V **Draw:** 0.8A **Pole Material:** Anodized aluminum **Pole Length/Diameter:** 12 1/2"L, 3/4"Dia. **Pole Mounting Style:** Removable deck socket mount **Replacement Bulb:** Model 297376 **Warranty:** Five years

	Model	PERKO#	ShWt	Only
Bi-Color Light, 5° Rake	<b>8582512</b>	1212DP2CHR	.8	<b>54.99</b>
Bi-Color Light, 0° Rake	<b>8582520</b>	1421DP2CHR	.6	<b>39.99</b>
Bi-Color Light, 0° Rake	<b>8582504</b>	1612DP2BLK	.8	<b>45.99</b>

## Replacement Lenses

Fits Perko Lights	Lenses Included	Model	PERKO#	ShWt	Only
945	Lens for stern light	<b>429003</b>	0074DPOWHT	.1	<b>9.79</b>
955	1 red/1 green	<b>430496</b>	0260DPOLNS	.1	<b>18.99</b>
253	1 green	<b>518340</b>	0273DPGLNS	.2	<b>18.99</b>
254	1 red	<b>506388</b>	0273DPRLNS	.1	<b>18.99</b>
254	1 green	<b>479180</b>	0277DPGLNS	.1	<b>18.99</b>
915/963	1 red/1 green	<b>430504</b>	0281DPALNS	.2	<b>18.99</b>
1310	Bi-color lens	<b>454779</b>	0283DPALNS	.2	<b>15.49</b>
265/939	1 lens with gasket	<b>411801</b>	0284DPOCLR	.1	<b>12.49</b>
963/915	1 red/1 green	<b>2363562</b>	0295DPOLNS	.1	<b>15.49</b>
965/964	1 closed top lens	<b>2363612</b>	0295DPOWHT	.1	<b>6.79</b>
904	Bi-color lens	<b>430512</b>	0296DPOLNS	.2	<b>15.49</b>
946	1 lens with gasket	<b>445934</b>	0946DPO99A	.1	<b>11.49</b>
1264	1 red/1 green	<b>453100</b>	1264DPOLNS	.2	<b>24.99</b>
Coastal Series	3 globe set	<b>2674877</b>	0030DPO001	.3	<b>24.99</b>



Perko

## Fresnel All-Round Light with Base

For use on powerboats under 20m. 2nm visibility white light. Removable 3/4" dia. anodized tube. Base: 2 1/4"W x 3 3/8"L x 21 7/8"H. Includes caps for when mast is removed. 16° rake. Includes base Model 224878.

**Case Material:** Clear plastic fresnel globe, chrome-plated brass top and base **Mounting Hardware:** Requires # 8 screws (sold separately) **Volts:** 12V **Draw:** 0.58A **Pole Material:** Aluminum **Pole Length/Diameter:** 21 7/8"L x 3/4" dia. **Pole Mounting Style:** Plug-in base **Replacement Bulb:** Model 288910 **Replacement Lens:** Globe - 248 DP CLR, Model 281329 **Warranty:** Five years

**Model 199655** | PERKO#1209DP2CHR | ShWt 3 | **54.99**



Perko

## Fresnel All-Round Lights with Base

Clear fresnel lens with 2nm visibility. For use on power vessels under 20m or 65.6'. Base: 3 1/4" x 1 5/8". 16° rake. Bulb included.

**Case Material:** Black plastic top, chrome over zinc bases **Mounting Hardware:** #8 screws (sold separately) **Volts:** 12V **Draw:** 0.58A **Pole Material:** Aluminum **Pole Diameter:** 3/4"Dia. **Pole Mounting Style:** Plug in base **Replacement Bulb:** Model 394728 **Replacement Lens:** 248 DP CLR, Model 281329 **Warranty:** Five years

Style	Height	Model	PERKO#	ShWt	Only
Telescoping	20 1/2"	<b>255984</b>	1311DP2CHR	.4	<b>39.99</b>
Removable	20 1/2"	<b>115057</b>	1330DP2CHR	2	<b>64.99</b>
Removable	26 5/8"	<b>281170</b>	1330DP3CHR	1.4	<b>64.99</b>
Spare Globe - Fits all	—	<b>281329</b>	0248DPOCLR	.3	<b>18.99</b>



Attwood

## LED Waketower All-Round Light

Compact size designed for installation of wakeboard tower, radar arch, hard top, poling platform, tuna tower or other fixed structure. Direct LED replacement for Attwood's 5940 Series incandescent light. 2 3/8" dia. x 1 3/4"H. Two-Mile USCG 360° visibility rating. Fully sealed electronics.

**Case Material:** Polycarbonate **Mounting Hardware:** #10 fasteners **Draw:** 1.8W **Volts:** 12V **Warranty:** Ten years

**Model 10043339** | ATTWO#5580-7 | ShWt .1 | **69.99**



Perko

## All-Round Light

For powerboats and sailboats less than 20m or 65.6'. Horizontal surface-mount.

**Case Material:** Black plastic **Case Dimensions:** 4 7/8"H x 3 5/16" dia. **Mounting Hardware:** #10 RHMS **Volts:** 12V **Draw:** 0.83A **Replacement Bulb:** Model 4810826 **Replacement Lens:** 200 SWBLNS **Warranty:** Five years

**Model 268575** | PERKO#0200SWBDP1 | ShWt .8 | **112.99**



## Fresnel Fixed-Mount All-Round Light

For use on powerboats under 20m or 65.6'. Visibility: 2nm.

**Case Material:** Fresnel globe, plastic base **Mounting Hardware:** #8 FHMS **Volts:** 12V **Draw:** 0.58A **Pole Material:** plastic **Pole Length/Diameter:** 4 1/2"H x 2 1/8" base dia. **Pole Mounting Style:** Permanent **Replacement Bulb:** Model 288797 **Replacement Lens:** 248 DPCLR **Warranty:** Five years

**Model 192353** | PERKO#0455DP1CHR | ShWt 2 | **52.99**





Perko

## Delta Series Universal Fit Pole Lights

The "universal fit" design allows these lights to fit all popular base angles from 0° to 20° rake. Each light includes a reduced glare globe which preserves night vision while underway and a full output globe offering cockpit illumination while still meeting navigation light requirements. These lights also come with locking and large threaded collars and two pole screw positions to allow use with most pole light bases on the market. All electrical contacts are gold plated to assure long life in the marine environment. USCG and European CE approved for use on powerboats under 20m (65.6'). 2-mile range. Models 6795389 and 6795397 fold in half for compact storage when not in use. Bases sold separately (below). Uses 2 pin bases, 0° to 20° rake.

**Case Material:** Black plastic **Volts:** 12V **Draw:** 0.69A **Pole Material:** Anodized Aluminum **Pole Length/Diameter:** Length: varies; Dia: 3/4" **Pole Mounting Style:** Fits Attwood and most other bases on market **Replacement Bulb:** Model 2412211 **Replacement Lens:** Model 2099059 **Warranty:** Five years

Length	Model	PERKO#	ShWt	Only
<b>Non Folding</b>				
36"	6795348	1470DP4CHR	1	43.99
42"	6795355	1470DP5CHR	1.3	46.99
48"	6795363	1470DP6CHR	1	54.99
54"	6795371	1470DP7CHR	1.1	67.99
<b>Fold in Half</b>				
48"	6795389	1451DP6CHR	1.3	84.99
60"	6795397	1451DP8CHR	1.5	89.99



Perko

## Universal Replacement Pole 1400 Series All-Round Lights

Fits many styles of plug-in bases. White translucent plastic lens. Black plastic top. 3/4" aluminum pole. For sail or powerboats under 20m. 2nm visibility. Bases sold separately below. Select a 2 pin base with a rake angle from 0° to 16°.

**Type:** Universal replacement white all-round light **Case Material:** Plastic **Mounting Hardware:** Requires base (not included) **Pole Diameter:** 3/4" dia. **Pole Material:** Anodized aluminum **Replacement Bulb:** Model 288910 **Replacement Lens:** Model 282012 **Draw:** 0.94A **Volts:** 12V **Warranty:** Five years

Height	Model	PERKO#	ShWt	Only
24"	281550	1400DP2CHR	2	33.99
36"	281576	1400DP4CHR	.7	37.99

### Spare Globe

Model 282012 | PERKO#0201DP0WHT | ShWt .2 | 9.29



Perko

## Pole Light Bases

Bases for Perko Pole Lights are now sold separately to give you more choices for customizing lights for your specific needs. Bases are selected to match the designed rake angle of the pole light and the number of pins (electrical contacts) necessary. Rake angle of 0 and 5 degrees are common on later production boats, 16 degrees are often found on pre-1980 year boats. All-round

pole lights use 2 pins, and removable combination masthead and some plug-in bi-color pole lights with an accessory light require bases with 3 pin contacts. Collars secure the pole light into the base. Collar types available include an eccentric cam design and large threaded versions.

Base Degree	Electrical Contacts	Accepts Collar	Base Shape	Base Material	Base Dimensions	Model	PERKO#	ShWt	Only
0°	2	CAM	Round	Chromed Brass, Plastic	2 1/4"OD	268385	1045P00DP	.2	29.99
0°	2	CAM	Rectangular	Chromed Brass, Plastic	3 1/2" x 1 1/2"	420713	1047P00DP	.4	34.99
5°	2	CAM	Rectangular	Chromed Brass, Plastic	3 1/2" x 1 1/2"	412314	1046P00DP	.2	34.99
5°	2	CAM	Rectangular	Chromed Zinc, Plastic	3 3/4" x 1 3/4"	268419	1060PB0DP	.5	28.99
5°	2	Large Threaded	Tear Drop	Chromed Brass, Plastic	3 1/2" x 2"	2363729	1048P00DP	.3	34.99
16°	2	CAM	Rectangular	Chromed Zinc, Plastic	3 3/4" x 1 5/8"	268401	1059P00DP	.6	26.99
0°	3	CAM	Round	Chromed Brass, Plastic	2 1/4"OD	2363703	1045300DP	.4	29.99
5°	3	CAM	Rectangular	Chromed Zinc, Plastic	3 3/4" x 1 3/4"	6589840	10603B0DP	.1	34.99

Perko

## Fold-Down Pole Light

Fold-down, adjustable angle. Horizontal mount with 3/4" dia. anodized aluminum tube, white translucent globe and black plastic base. Includes plastic adapters for flat or "V" type mounting.

**Case Material:** Plastic **Volts:** 12V **Draw:** 0.94A **Pole Material:** Anodized Aluminum **Pole Length/Diameter:** 13 5/8"H x 3/4" dia. **Replacement Bulb:** Model 288910 **Replacement Lens:** Model 282012 **Warranty:** Five years

Model 255570 | PERKO#1134DP0CHR | ShWt 3 | 48.99

## Mounting Base for Fold-Down All-Round Lights

Fold-down, adjustable base. Fits Perko 1137 DP CHR. Includes knob and end plug. 2 1/4"L x 5/8"W.

Model 268393 | PERKO#1054DP0CHR0CH | ShWt 3 | 25.99



Spare Globe

2-Contact Base

**Case Material:** Translucent plastic globe and top, chrome-plated base **Mounting Hardware:** Base sold separately. Base requires #8 fasteners (sold separately) **Volts:** 12V **Draw:** 0.94A **Pole Material:** Anodized Aluminum **Pole Length/Diameter:** 36"L x 3/4"Dia. **Pole Mounting Style:** Plug-in base **Replacement Bulb:** Model 288910 **Warranty:** Five years

Style	Model	PERKO#	ShWt	Only
All-Round Light	281576	1400DP4CHR	.7	37.99
2-Contact Base	268419	1060PB0DP	.5	28.99
Spare Globe	282012	0201DP0WHT	.2	9.29



Clear Plastic Globe

Black Plastic & Chrome plated Zinc Top

Vertical Mount

Horizontal Mount

Perko

## All Round Pole Lights

For powerboats and sailboats under 20m. Three nautical mile visibility, white light. Clear plastic globes, black plastic and chrome plated zinc tops, and black plastic bases. 3/4" dia. aluminum tube. Mounts are notched for thru-base wiring.

**Case Material:** Plastic **Mounting Hardware:** Requires #8 screws **Volts:** 12V **Draw:** 0.94A **Pole Material:** Anodized Aluminum **Replacement Bulb:** Model 288910 **Replacement Lens:** Model 282012 **Warranty:** Five years

Mount Style	Height	Base Dimensions	Model	PERKO#	ShWt	Only
Vertical	14"	2 1/4" x 5/8"	255588	1137DP0CHR	3	45.99
Vertical	12 13/16"	2 1/4" x 5/8"	192403	1184DP0CHR	3	64.99
Horizontal	12 13/16"	2" x 1 1/2"	192395	1181DP0CHR	.9	72.99

# Portable Navigation/Masthead Combo Lights

Attwood

## Stowaway 24" All-Round Light

Attwood All-Round light provides 2-mile, 360° light visibility for boats up to 39.4' (20m). Light features universal-fit locking collars that allow light to fit a variety of different Attwood and some Perko bases. 3/4" diameter aluminum pole. Includes 9-watt bulb.

**Case Material:** Plastic **Mounting Hardware:** Fits most Attwood angled & straight 2- & 3-pin locking collar bases **Volts:** 12V **Draw:** 0.66A **Pole Material:** Anodized aluminum **Pole Length/Diameter:** 24"L x 3/4" dia. **Pole Mounting Style:** Removable deck socket mount (not included) **Replacement Bulb:** Model 6704811 (ATWO# 9235-7) **Warranty:** One year

	Model	ATTWD#	ShWt	Only
Stowaway Pole Light	2677599	5110-24-7	.6	22.99
Replacement Globe	544460	91017B7	.1	8.99

Attwood

## Pole Light Storage Clips

Use these clips to store and protect plug-in pole lights when mounted in engine wells or lockers. Rubber clips hold standard 3/4" dia. poles. Installs with one #8 screw. Sold in pairs.

**Model 568428** | ATTWO#7571L7 | ShWt .1 | **7.29**

Aqua Signal

## Series 20 All-Round White Lights

32pt lights for powerboats to 12m or 39.36'. Black, coated fiber-glass shaft resists breakage. Each ShWt .4

**Case Material:** Polycarbonate **Case Dimensions:** 2 5/8"H x 2 3/8" dia. **Mounting Hardware:** Two screws (sold separately) **Volts:** 12V **Draw:** 0.41A **Replacement Bulb:** Model 8646648 **Replacement Lens:** Model 145297 **Warranty:** One year

Mast type	Height	Model	AQSIG#	Only
Pedestal	4"	315150	20040-7	25.99
Fold-down	18"	237305	20180-7	139.99

Perko

## Fixed-Mount Combination Masthead/All-Round Lights

Twin bulb fixture can be used as a masthead light (20pt white) or all-round light (32pt white). For use on sailboats and powerboats less than 20m. Visibility: 3nm.

**Case Material:** Plastic and chrome-plated zinc **Mounting Hardware:** #8 FHMS **Volts:** 12V **Draw:** 1.6A **Pole Material:** Anodized Aluminum **Pole Diameter:** 3/4" Dia. **Pole Mounting Style:** Permanent surface mount (except Model 199620 -- removable socket) **Replacement Bulb:** Model 297376 **Replacement Lens:** Model 381962 **Warranty:** Five years

Mount	Height	Model	PERKO#	ShWt	Only
Fixed Base	3 1/4"	123497	1183DP0CHR	.5	52.99
Fixed Base	5 1/4"	192429	1196DP1CHR	2	52.99
Fixed Base	11 1/4"	199614	1196DP2CHR	2	72.99
None	3 1/4"	199620	1197DP0CHR	.5	45.99
Spare Lens		381962	0278DPOWHT	.2	14.49

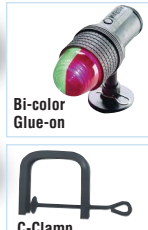
Attwood

## Portable Camouflage Navigation Lights

Perfect for nighttime operation of small boats without 12V electrical systems. These lights are not intended to meet CG regulations and are not for use on boats which exceed speeds of 7 knots. Attached easily with C-clamp brackets. Requires two "D" cell batteries (sold separately).

**Case Material:** Plastic resin **Case Dimensions:** 8 1/8"L **Mounting Hardware:** "C" type clamp **Volts:** Uses two "D" size batteries **Draw:** N/A **Wiring Provisions:** N/A **Replacement Bulb:** None **Replacement Lens:** None **Warranty:** One year

	Model	ATTW#	ShWt	Only
Bi-Color	1908193	14276-6	.7	28.99
Stern	1908110	14274-6	1.4	26.99



Aqua Signal

## Series 23 Portable LED Navigation Lights

For boats under 23' length without electrical systems, these battery-powered navigation lights offer the advantages of LED brightness and extreme reliability. Series 23 navigation lights are rated for speeds up to 7 knots, and are watertight and buoyant, in case they are knocked loose. Powered by four AA batteries (sold separately), with ON-OFF pushbutton switch. Mounts are suction cup, glue-on PVC inflatable mount (with the light removable using a quick-pin) or C-clamp (either horizontal or vertical orientation). Light housings are 2 1/2" dia. x 6 1/2" L.

Type	Mount	Model	AQSIG#	ShWt	Only
Bi-Color	Suction/C-Clamp	8633380	23400-7	1.3	36.99
Bi-Color	Glue-on (Inflatable)	8633398	23402-7	.7	35.99
All-Round White	Glue-on (Inflatable)	8633364	23410-7	.9	35.99
All-Round White	24" Pole/C-Clamp	8633406	23440-7	1.5	36.99
All-Round White	Suction Cup	8633372	23490-7	1.3	35.99

## Combo Masthead/Deck Lights

Hella

### Combination Masthead/Deck Spreader Light

A dependable source of bright illumination for the cockpit or the fore deck. Doubles as a bright, USCG-approved masthead light for nighttime boating. Vertical surface mount for sailboats and powerboats. USCG 2nm lamp good for boats up to 12m (39.4'). 7 1/2"L x 5 1/4"W x 2 7/8"D.

**Model 1938695** | HELLA#998505001 | ShWt .2 | **67.99**



Aqua Signal

### Series 25 Combo Deck And Masthead Light

Molded from strong, corrosion-resistant fiberglass reinforced polycarbonate. 10W masthead bulb offers 2nm visibility. Bright 20W bulb provides ample illumination for foredeck chores. Includes universal mast mount (screws sold separately). For powerboats and sailboats to 12m (39.4') long.

**Model 174409** | AQSIG#25404-7 | ShWt 3 | **77.99**



Aqua Signal

### Combination Masthead/Foredeck Light

Flexible flaps allow fast-and-easy attachment to common mast profiles. Functions are controlled separately. The masthead light is an easy-to-change, long-life, 25W vertical-filament tungsten bulb. The deck light is a watertight, sealed-beam 50W halogen bulb. For powerboats and sailboats to 20m (65'6"). 8 1/4"H x 3 3/4"W. Extends 6" from mast. Three-wire cable required.

**Model 192130** | AQSIG#41404-1 | ShWt 5 | **199.99**



Forespar

### Combination Deck/Masthead Light

Masthead light light meets USCG requirements for boats to 65'. Mounts on the forward part of the mast. Features separate switching. 10W bow light draws 0.8A and is easily replaceable. Includes 6" triple-lead wire. Molded black housing. 5 3/4"H. Weight: 7oz.

**Model 111534** | FORSP#132000 | ShWt .1 | **79.99**



Replacement Bulb for Masthead (Upper) Light

**Model 429522** | FORSP#132025 | ShWt .1 | **4.99**

Replacement Bulb for Deck Light

**Model 8646630** | ANCOR#521125 | ShWt .3 | **6.99**

# LED Replacement Bulbs



Dr. LED

## Polar Star 40 LED Replacement Bulbs

2nm navigation light LED replacement bulbs. Specially designed to reduce energy consumption aboard. Satisfies all USCG requirements for brightness, 2nm distance and arc for vessels less than 50m (165') in length. as direct replacements for most of the incandescent navigation lights available including Aqua Signal (series 40, 41, 42, 50, 55), Attwood, Hella, Perko and more. Consumes only 1W. A great way

**Application:** Replacement bulbs for most 2nm nav. lights **Amps:** 0.1A **Watts:** 1W **Volts:** 11-15V DC

Light Style/Color	Application	Replaces	Model	DRLED#	ShWt	Only
White	Anchor, steaming, stern	Replaces Aqua Signal #90005, Hella #78290, Perko #037512V10W; Fits Aqua Signal Series 40 41 42 50, Perko 200, Hella 2984; Wht/Clr lens only	<b>9353384</b>	8001757	.1	<b>49.99</b>
Red	Port (red) lights	Replaces Aqua Signal #90002, Perko #037512V25W; Red/Clr lens only	<b>9353392</b>	8001764	.2	<b>52.99</b>
Green	Starboard (green) lights	Replaces Aqua Signal #90002, Perko #037512V25W; Green/Clr lens only	<b>9353400</b>	8001771	.1	<b>52.99</b>
White 40 NI™	Anchor, steaming, stern	Replaces Perko #374-001 CLR; Not for Aqua Signal; Wht/Clr lens only	<b>9353442</b>	8001078	.1	<b>52.99</b>
White	Anchor, steaming, stern	Replaces Perko bulb #0337, 2nm; Removable reflector and clear lens	<b>10317816</b>	8001627	.1	<b>52.99</b>
Bi-Color	Aqua Signal Series 40 bi-color (red/green) lights	Replaces bottom-mounted Aqua Signal #90002	<b>9353418</b>	8001634	.1	<b>52.99</b>
Tri-color	Aqua Signal tri-color lights	Replaces Aqua Signal #90002; for tri-color stacks	<b>9353434</b>	8001450	.2	<b>59.99</b>
24V Tri-color	24V Aqua Signal tri-color lights	Replaces Aqua Signal #90003 (24V) for tri-color stacks	<b>9353467</b>	8001436	.1	<b>59.99</b>

Electrical



Dr. LED

## Polar Star 25™ LED Replacement Bulbs

Aqua Signal series 25 navigation lights LED replacement bulbs. 2nm brightness. Red/Green color for port, starboard and bi-color navigation lights

**Base Type:** Dimpled festoon **Bulb Type:** Replaces Aqua Signal #90200 **Amps:** 0.09A **Watts:** 1W **Volts:** 12V DC

**Model 9353483** | DRLED#8001122 | ShWt .1 | **54.99**



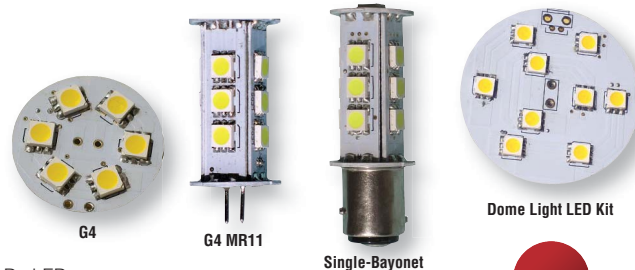
Dr. LED

## G4 MR11 MR16 Bayonet LED Replacement Bulbs

Because they produce only a small amount of heat, these high-flux bulbs make ideal replacements for most "third degree burn" halogen reading, map and cockpit lights with bi-pin and bayonet-style bases. Light is soothing and warm with cutting edge internal circuitry and high-quality U.S.-made components for long service life and shock resistance. Power consumption is just 1W (less than 0.08A!) except for three-watt Model 9980111. For forward pointing reading fixtures only.

**Application:** Works with most MR11 fixtures **Amps:** 0.08A (Model 9980111 draws 0.12A) **Watts:** 1W (Model 9980111 is 3W) **Volts:** 12V

Style	Base Type	Model	DRLED#	ShWt	Only
G4 MR11	Bi-Pin	<b>9368739</b>	8001238	.1	<b>29.99</b>
Bayonet	Single Contact	<b>9368747</b>	8001245	.1	<b>29.99</b>
Bayonet	Double Contact Index	<b>9368754</b>	8001252	.1	<b>28.99</b>
Bayonet	Double Contact Non-Index	<b>9368762</b>	8001269	.1	<b>29.99</b>
MR16	Bi-Pin (1 Watt)	<b>9368788</b>	8001290	.3	<b>29.99</b>
MR16 MKII	Bi-Pin	<b>9980111</b>	8001399	.1	<b>39.99</b>



Dr. LED

## Surface Mount LED Replacement Bulbs

Gain all the advantages of LED technology—outstanding durability, cool running temperature, low current demand and incredible service life—by replacing your original 12V incandescent lamps with these highly efficient surface mount LEDs. Available in a wide variety of commonly found mounting styles including G4, single or double contact bayonet and ready-to-wire for dome light conversion as well as Windex Indicator light replacement.

	Bulb Wattage	Bulb Type	Color of Light	Draw	Model	DRLED#	ShWt	Only
White G4 LED	18W	G4 MR11	Warm White	0.1A	<b>12029666</b>	9000081	.1	<b>19.99</b>
Red G4 LED	12W	G4 MR11	Red	0.1A	<b>12029674</b>	9000098	.1	<b>18.99</b>
G4 Axial ED	39W	G4 MR11	Warm White	0.2A	<b>12029682</b>	9000104	.1	<b>34.99</b>
Single Contact Bayonet LED	39W	1C BA15S	Warm White	0.2A	<b>12029690</b>	9000111	.1	<b>34.99</b>
Double Contact Bayonet LED	39W	2C NI BA15D	Warm White	0.2A	<b>12029708</b>	9000128	.1	<b>34.99</b>
Red Double Contact Bayonet LED	39W	2C NI BA15D	Red	0.2A	<b>12029716</b>	9000135	.1	<b>34.99</b>
Double Contact Indexed Bayonet LED	39W	2C I 15D	Warm White	0.2A	<b>12029724</b>	9000142	.1	<b>34.99</b>
Dome Light LED Kit	27W	G4 MR11	Warm White	0.2A	<b>12029732</b>	9000159	.1	<b>29.99</b>
Windex LED Bulb	1W	Edison 10mm	White	0.2A	<b>12029740</b>	9000166	.1	<b>11.99</b>



Dr. LED

## Festoon Star™ Navigation Light LED Replacement Bulbs

Replace 31mm to 44mm (1.2"-1.75") point and dimple incandescent festoon bulbs for most single color nav lights such as AquaSignal Series 25, Hella 3562, Lalizas and some Perko. Model 12029658 replaces most Perko bulbs in many combination masthead and anchor lights. High-flux LED bulbs are ultra rugged, shockproof and vibration proof. 2nm visibility 12V/24V.

**Base Type:** Festoon **Amps:** 0.1A **Watts:** 1W **Volts:** 12V DC

Color of Light	Replaces Festoon Bulb	Model	DRLED#	ShWt	Only
White	31mm with White lens	<b>12029658</b>	9000173	.1	<b>29.99</b>
White	39mm to 44mm with White/Clear lens	<b>9368804</b>	8001566	.2	<b>49.99</b>
Red	39mm to 44mm with Red lens	<b>9368812</b>	8001573	.2	<b>52.99</b>
Green	39mm to 44mm with Green lens	<b>9368820</b>	8001580	.2	<b>52.99</b>

Dr. LED

## LED Replacement Bulbs 100-240VAC



Elite LB60 A19 Elite PAR30

As soon as you replace incandescent lamps with energy-efficient LED technology you'll begin to save money on electricity. But the real savings gained from installing LED lamps is the result of their durability and incredibly long service life. With no filament to break and a service life many times greater than any incandescent bulb, LEDs are ideal for critical, often difficult-to-reach, locations like dock lights or shore-powered work areas. Wasting no energy on heat, they remain cool to the touch, yet emit a warm, white light similar to that of an incandescent bulb. Standard E26/E27 medium screw base. 110-240VAC.

Bulb Wattage	Style	Model	DRLED#	ShWt	Only
60W	Elite LB60 A19	<b>12029757</b>	9000180	.4	<b>39.99</b>
120W	Elite PAR30	<b>12029765</b>	9000197	.8	<b>69.99</b>

Dr. LED

## 12V Edison LED MKII Replacement Bulbs with Screw Base

Medium screw-base (Edison E26/E27) LED bulbs offer an energy-saving solution to incandescent lighting. Soothing warm white light. Offer low power draw and ultra-long service life: 50,000 hours. Impact and shock resistant. 8-18V DC. U.S. made high flux LED.



**Base Type:** Screw-base (Edison E26/E27) **Amps:** 0.12A **Watts:** 1W **Volts:** 8-18V DC

Power Draw	Incandescent Equivalent	Model	DRLED#	ShWt	Only
1W	30W	<b>9368770</b>	8001276	.9	<b>29.99</b>
3W	60W	<b>9368796</b>	8001283	.1	<b>39.99</b>

Dr. LED

## Edison SideKick™

The 12V 3W Edison SideKick produces a side-emitting beam and is best used for lights with a lampshade. Removable top sphere. Fits "household" style socket. US-made, high-flux LED.



**Model 9980129** | DRLED#8001351 | ShWt .1 | **44.99**



LED Wedge Bayonet Base Bulb



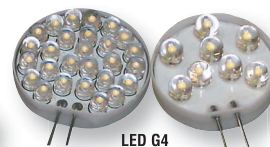
LED Festoon (Double Dimple)



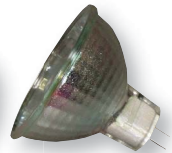
LED Festoon



LED 360° Bayonet Base Bulb



LED G4



LED MR16 Bulb

Ancor

## LED Replacement Bulbs

Base Type	# of LEDs	Draw @12V	Candlepower Brightness	Volts	Equivalent Incandescent Wattage	Model	ANCOR#	ShWt	Only
Wedge Base	1	15mA	400MCD	12V DC	5	<b>9353889</b>	529410	.1	<b>6.99</b>
Wedge Base	2	30mA	600MCD	12V DC	12	<b>9353897</b>	529411	.3	<b>9.99</b>
Double Bayonet 360°	20	100mA	2200MCD	12V DC	20	<b>9353905</b>	529412	.1	<b>34.99</b>
Double Bayonet 360°	36	180mA	2200MCD	12V DC	36	<b>9353913</b>	529413	.1	<b>34.99</b>
Single Bayonet 360°	16	100mA	2200MCD	12V DC	16	<b>9353921</b>	529414	.1	<b>34.99</b>
Double Indexed 360°	24	210mA	2200MCD	30V DC	24	<b>9353939</b>	529416	.4	<b>34.99</b>
Festoon	8	50mA	2000MCD	12V DC	8	<b>9353947</b>	529417	.2	<b>14.99</b>
Festoon Dbl Dimple T1044	8	50mA	2000MCD	12V DC	8	<b>9353962</b>	529419	.1	<b>17.99</b>
Double Indexed 360°	36	180mA	2500MCD	30V DC	36	<b>9353970</b>	529420	.1	<b>34.99</b>
G4 90°	8	30mA	2500MCD	12V DC	8	<b>9353988</b>	529421	.1	<b>17.99</b>
G4 Axial Lead 90°	12	40mA	2500MCD	12V DC	12	<b>9353996</b>	529422	.1	<b>21.99</b>
G4 Axial Lead 90°	27	90mA	2500MCD	12V DC	24	<b>9354002</b>	529423	.1	<b>21.99</b>
MR16 18°	20	140mA	2500MCD	12V DC	20	<b>9354010</b>	529424	.1	<b>21.99</b>

Ancor

## LED Cluster Lamps

Bright diodes draw a miniscule 60mA. Single or double-contact bayonet sockets. 12V DC. Cord not included.

**Base Type:** Single or double contact bayonet **Amps:** 0.060A **Watts:** Up to 1W **Volts:** 12V DC **Fixture Dimensions:** 7/8" Dia. x 1 5/8" L

Color	Configuration	Model	ANCOR#	ShWt	Only
Red	Double	<b>9530379</b>	529425	.1	<b>24.99</b>
Red	Single	<b>9530387</b>	529426	.1	<b>24.99</b>
White	Single	<b>9530395</b>	529427	.1	<b>25.99</b>
White	Double	<b>9530411</b>	529429	.3	<b>25.99</b>



Perko

## Replacement Double-Contact Socket

Double-contact bayonet socket with black plastic body, 3/4" dia. with 10" wires **Model 123521** | PERKO#0024DP1 | ShWt .1 | **10.49**



Ancor

## Halogen Socket Converter

Convert your existing light fixtures for use with 5W and 10W halogen lamps. Double-contact bayonet base.

**Model 307449** | ANCOR#529381 | ShWt .1 | **6.99**



Cole Hersee

## Double Contact Bayonet Bulb Sockets

For 12V miniature lamps with Bayonet bases. Spring-loaded brass contacts. Sold individually.

Leads	Model	COLE#	ShWt	Only
8" L	<b>211607</b>	26100-BP	.7	<b>10.99</b>
None*	<b>109324</b>	M-432-BP	.1	<b>13.99</b>

\*Has two small screw terminals



Feit

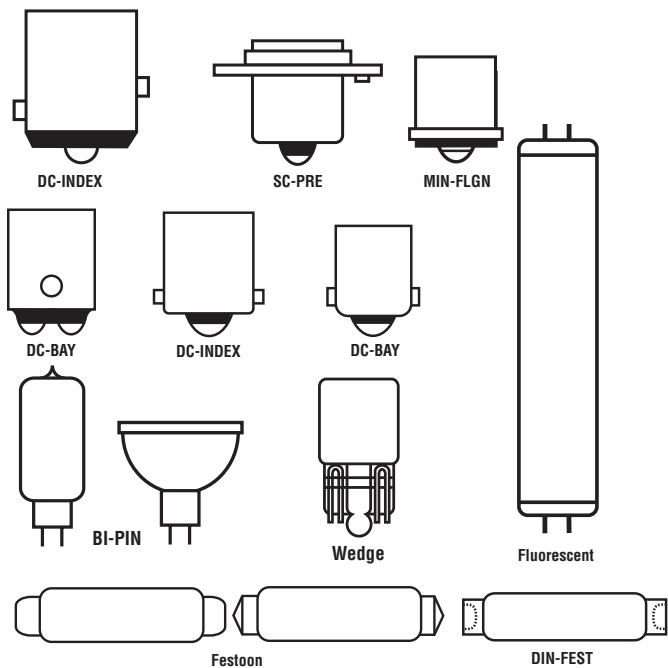
## 12V Fluorescent Screw-Base Bulbs

Reduce battery drain with these bright fluorescents that last 10 times longer than incandescents. Designed for marine use, they feature a non-corroding base, and a compact size that delivers the light of a 60W bulb while using only 13W.

**Model 2675106** | WMELE#BPESL13T/MAR12 | ShWt .1 | **19.72**



## Replacement Lamps



Electrical

### Mini Lamps

Heavy-duty glass envelopes resist breakage. Nickel-plated brass bases resist corrosion. Note: The last four digits of the Ancor serial# represent the standard (GE) bulb number. Sold in pairs.

Model	ANCOR#	Trade No	Base Type	Volts	Watts	Amps	CP	Notes	Only
288730	520053	53	MINI-BAY	14.4	1.7	0.12	1	-	3.19
288748	520057	57	MINI-BAY	14.0	3.4	0.24	2	-	3.39
288763	520067	67	SC-BAY	13.5	8	0.59	4	-	3.39
288771	520068	68	DC-BAY	13.5	8	0.59	4	-	3.39
288789	520082	82	DC-BAY	6.5	6.6	1.02	6	-	3.19
288797	520090	90	DC-BAY	13.0	7.5	0.58	6	-	3.19
288805	520093	93	SC-BAY	12.8	13.3	1.04	15	-	3.99
288813	520094	94	DC-BAY	12.8	13.3	1.04	15	-	3.39
288821	520097	97	SC-BAY	13.5	9.3	0.69	4	-	3.99
288839	520194	194	WEDGE	14	3.8	0.27	2	-	3.19
288860	520257	257	MINI-BAY	14.0	3.8	0.27	1.6	Flasher	3.39
288904	521003	1003	SC-BAY	12.8	12	0.94	15	-	3.19
288910	521004	1004	DC-BAY	12.8	12	0.94	15	-	3.29
288920	521034	1034	DC-INDEX	12.8	23/8.2	1.8/59	32/3	Dual filament	3.39
288938	521076	1076	DC-BAY	12.8	23	1.80	32	-	3.39
288946	521140	1142R	DC-BAY	12.8	18.4	1.44	21	RED	6.99
309189	521141	1141	SC-BAY	12.8	18	1.44	21	-	3.39
288953	521142	1142	DC-BAY	12.8	18.4	1.44	21	-	3.99
288961	521156	1156	SC-BAY	12.8	26.9	2.10	32	-	3.39
297200	521157	-	DC-INDEX	12.8	27/8	2.1/59	32/3	-	3.39
297210	521176	1176	DC-BAY	12.8	17.2	1.34	21/6	-	3.39
297228	521224	1224	DC-BAY	34.0	5.1	0.16	3.8	-	6.99
297269	521383	1383	SC-BAY	13.0	20	1.54	20	-	4.49
297277	521416	1416	MINI-BAY	12.8	10.2	0.80	8	-	6.99
297327	521816	1816	MINI-BAY	13.0	4.3	0.33	3	-	3.39
297335	522112	2112	FESTOON	12.0	15	0.97	12	-	3.99
297343	522122	2122	FESTOON	13.5	10	0.74	6	-	3.99
297350	529095	-	FESTOON	13.5	10	0.50	8	T10X44	4.49
297368	529096	-	FESTOON	13.5	6	0.50	2	T11X36	8.99
297376	529102	-	FESTOON	13.5	10	0.83	8	T10X31	3.99
365520	529104	-	FESTOON	13.5	10	0.83	8	T11X41	4.49
297384	529200	-	FESTOON	13.5	10	0.83	8	T10X31	6.99
175104	520912	912	WEDGE	12.8	15	1.2	12	-	3.39
175161	529300	-	DC-BAY	12	30	2.5	26	-	17.99
175203	529333	-	DIM-FEST	13.5	10	0.83	8	T11X44	9.99
360936	531015	-	STD-HSLD	13.5	15	1.25	-	-	8.99

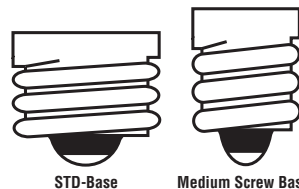
Ancor

### 12V Halogen Replacement Lamps

Part#	Model	Base Type	Volts	Watts	Amps	CP	Notes	Only
<b>Halogen</b>								
529361	581985	G4 BI-PIN	12	5	0.42	5	-	6.99
529355	365510	MINI-BAY	12	5	0.42	5	-	11.99
529362	460388	G4 BI-PIN	12	10	0.83	11	-	6.99
529368	305438	G4 BI-PIN	24	20	0.83	20	-	6.99
529338	2001576	G4 BI-PIN	24	10	0.42	11	-	6.99
521204	2412229	DC-BAY	28	19.9	0.71	21	-	11.49
529337	2412252	MINI-BAY	12	20	1.67	20	-	11.99
529367	298190	G4 BI-PIN	12	20	1.67	20	2pk	11.99
529340	2412278	DC-INDEX	12	25	2.08	24	-	17.99
529341	2412286	DC-INDEX	24	25	1.04	24	-	21.99
521125	8646630	MR-16	13.5	20	1.67	-	XENON	6.99
521126	8646648	MINI-BAY	14	5	0.41	3	-	4.49
521158	8646697	DC-INDEX	12	10	0.83	12	-	12.99
521159	8646705	DC-BAY	12.8	20	2.08	30	-	11.99
521160	8646713	DC-BAY	34	15	0.45	15	-	12.99
521161	8646721	DC-BAY	120	15	8	9.1	-	17.99
521162	8646739	DC-INDEX	24	10	0.42	12	-	12.99
521163	8646747	DC-INDEX	120	25	0.21	20	-	12.99
521164	8646754	DC-BAY	120	30	0.25	20	-	12.99
521166	8646770	SC-PRE	28	40	1.67	28	-	13.49
521167	8646788	DC-BAY	32	30	0.93	-	-	12.99
522124	8646796	FESTOON	12	3	0.45	2	T6X31	6.99
522126	8646804	FESTOON	13.5	10	0.83	8	T11X41	3.99
522127	8646812	FESTOON	13.5	10	0.83	8	T11X41	4.59
522128	8646820	FESTOON	12	10	0.83	-	-	6.99
522129	8646838	FESTOON	27	10	0.42	8	T11X31	4.49
522130	8646846	FESTOON	32	13	0.41	12	T11X44	4.49
522131	8646853	FESTOON	13.5	15	1.25	8	T15X41	4.59
521128	8646663	MINI-FLNG	4.8	3.36	0.7	4.06	KRYPTON	6.99
529168	8646861	SPEC-BULB	12	55	4.58	225	HALOGEN	9.99
529307	8646887	SC-PRE	120	60	0.5	40	-	21.99
529386	8646895	SPEC-BULB	12	100	10	1,000,000	HALOGEN	9.99
529387	8646911	SPEC-BULB	6	55	9.18	500,000	HALOGEN	8.99

### Fluorescent Bulbs

529405	8646929	FLRSCNT	12	8	.66	-	-	9.99
529406	8646937	FLRSCNT	15	15	1.25	-	-	12.99
529408	8646945	FLRSCNT	12	13	1.08	-	-	14.99
529407	9230590	FLRSCNT	12	13	1.08	-	-	12.99



Ancor

### Standard Screw Base Lamps

Sold in pairs. Each ShWt .1

Volts	Watts	Amps	Model	ANCOR#	Only/Pr
*13.5	15	1.25	229666	511016	6.99
13.5	25	2.08	360944	531025	8.99
13.5	50	4.17	360985	531050	8.99
13.5	75	6.25	360990	531075	8.99
13.5	100	8.33	361009	531100	8.99
27	50	2.08	361017	532050	9.99
32	15	0.44	361041	533015	8.99
32	25	0.74	361058	533025	8.99
32	50	1.47	361074	533050	8.99
32	75	2.21	361090	533075	8.99

\* Medium screw base; sold individually





West Marine

**LED Flashlights**

These water-resistant anodized aluminum LED flashlights have GlowGrip all weather non-slip grips that glow in the dark and are soft enough to hold in your teeth. Powered by three AAA batteries (sold separately). One-year warranty.

	Beam Strength	Continuous Use	Model	WMELE#	ShWt	Only
1W-LED Flashlight	60 Lumens	4-6 hours	<b>11042678</b>	DFL1018C-GBL	.5	<b>14.99</b>
3W-LED Flashlight	120 Lumens	4-6 hours	<b>11042686</b>	DFL1330-GBL	.7	<b>19.99</b>
9-LED Flashlight	20 Lumens	Over 24 hours	<b>11042660</b>	DFL9351GBL	.2	<b>9.99</b>

Princeton Tec®

**Rage Flashlight**

The ultimate in micro xenon power. For those who need a bigger, longer blast of light, the Rage is the answer. Four AAA batteries help the Rage throw 41 lumens either topside or under water, as deep as 500', for as much as an hour of total run time. It's the perfect waterproof light for around the house or for recreational activities.

**Model 8806416** | PRINC#RGE-2-BK | ShWt .3 | **10.99**



Princeton Tec®

**Attitude™ LED Flashlight**

Produces a beam of smooth, intense light, using three ultra-bright 5mm Nichia LEDs. Long-life, high-quality LEDs mean you won't have to replace the bulb! Runs on four AAA alkaline batteries (included) for about 150 hours and produces 30 lumens. Rated waterproof (equal to IPX8 submersible). Its compact size and concentrated light output place it in a class by itself, with the performance of standard flashlights in a smaller, lighter package. Made in the U.S.A.

**Model 8806432** | PRINC#LED-4AAA-BL | ShWt .3 | **19.99**



Princeton Tec®

**Tec 40™ Waterproof Flashlight**

Tec 40™ provides the highest power-to-weight ratio of any light in its class. Its elastomer handle gives improved grip and durability, so you can securely hold the light even in rough seas or while diving at 100 meters. One halogen bulb beams out 4 watts/45 lumens, and burns for 5 hours, powered by 4 AA alkaline batteries (included). Made in U.S.A.

**Model 8806424** | PRINC#T40-OM-NY | ShWt .8 | **24.99**



West Marine

**LED SuperSpot Rechargeable Searchlight**

At the forefront of LED searchlight design, LED SuperSpot incorporates technologies derived from the aerospace and marine electronics industries.

Developed in partnership between West Marine and Dr. LED, a recognized leader in the field of LED lighting products, LED SuperSpot uses only the highest quality materials, including domestic LEDs. Ultra efficient energy regulation plus superior shock resistance ensure optimized performance and extra life. The lightweight design features a rugged polycarbonate body with anodized aluminum heat sink, rubber-armored head bezel and grip, five-mile strobe light and red laser pointer for calling out landmarks or emergency use. Powered by a rechargeable AC/DC, NiMH battery, LED SuperSpot includes state-of-charge indicator and "Low" and "High" power settings. "High" produces an impressive 500 lumen 300' shaft of light for 90 minutes while "Low" produces a 270 lumen, 200' beam for 240 minutes. Includes universal AC wall charger and 12V DC charger. Weighs 21oz. One-year warranty.

**Model 10926442** | WMELE#8001702 | ShWt 1.9 | **119.99**



Princeton Tec®

**Impact XL Waterproof LED Flashlight**

Weighing only 6.3oz. (181 grams) with waterproof integrity to 100 meters, this rugged flashlight achieves more light output (45 lumens) than xenon lights with its Maxbright LED. Producing a truer, whiter light, it offers more than 50 hours of burn time on four AA alkaline batteries (included). The innovative rubber over-molded grip ensures you'll have a secure grip even under demanding conditions. Made in the U.S.A.

**Model 8806440** | PRINC#IMPXL-RD | ShWt 1 | **39.99**



Princeton Tec®

**Torrent LED Flashlight**

This LED flashlight is small enough for looking into tiny crevices, is waterproof to 100 meters and emits a powerful white light to bring out the true colors of all your underwater adventures. Excellent for local diving or for putting in your travel gear bag. Durable Maxbright LED bulb produces 95 lumens and has a life of approximately 10,000 hours. Runs on 8AA alkaline batteries and works with lithium, NiCad or NiMH batteries. Use of lithium batteries offers improved cold weather performance and lighter weight. Max. beam distance: 71 meters (230'). Includes wrist lanyard. Made in USA.

**Model 8806457** | PRINC#TORR-NY | ShWt 1.3 | **59.99**



Princeton Tec®

**Shockwave LED Spotlight**

Shockwave LED features Princeton Tec's proprietary optics, three Maxbright LEDs, two light levels and LED heat regulation. Three Maxbright LEDs pump out 400 lumens of pure brute power with two modes of illumination, high for super bright and low for extended battery life. The light output is calibrated for both close-range tasks or for spotting at a distance. Impact-resistant and waterproof to 100 meters.

Runs on eight C-size alkaline batteries (included) for up to 20 hours. Made in U.S.A.

**Model 8806481** | PRINC#TEC-8LR-NY | ShWt .4 | **119.99**



# Flashlights & Searchlights



## Streamlight 4AA ProPolymer® LED Flashlight

A matrix of seven ultra-bright LEDs provides a focused beam of white light (rated at 67 lumens) for deck work or emergency situations. Housing is molded thermoplastic—fully waterproof, non-conductive and very rugged. This reliable flashlight will run for 155 hours on the same four Alkaline AA batteries, which are included. Up to Class 1, Division 1 specs. Weighs 6.3oz. and is 7 3/8" long. Made in the U.S.A.

**Model 6795298** | STREA#68202 | ShWt. 8 | **35.99**



## West Marine Solar Hybrid Flashlight

The Hybrid Solar Flashlite has a photovoltaic solar panel that captures both sunlight and room light,

converting it directly to electrical energy powering the Hybrid Solar Flashlite's 1 watt LED bulb. With an eight hours charge, the Hybrid Solar Flashlite can provide up to 16 hours of super bright light. Since the Hybrid Solar Flashlite is not reliant on batteries, it can be charged over and over again without ever having to purchase another battery. Lithium backup battery provides up to 50 hours of operating time to ensure that you will never run out of light. It floats and is waterproof up to 80' deep.

**Model 10081289** | WMELE#1397 | ShWt. 6 | **19.99**



## West Marine LED Solar Hybrid Lantern

LED solar hybrid design uses rechargeable solar battery plus non-rechargeable battery backup (three AA batteries, sold separately). With Battery Assist Technology, it provides ten hours of continuous operation in Solar-Only mode. With the battery fully charged, using either the included AC Adapter or 12 Volt Adapter, you get thirty hours of solar powered, battery-boosted continuous operating time. Comes with fully charged solar battery, which holds its charge for three years. It even floats! 200 Lumens light output.

**Model 11067683** | WMELE#001465 | ShWt 1.6 | **29.99**

## Rechargeable Searchlights



Pistol Grip Position



Docking Station Charger

## Golight® Profiler™ II Military Grade Searchlight

This Lithium-polymer rechargeable hand-held searchlight with Docking Station charging system has been designed and manufactured to military specifications and is currently used worldwide during nighttime special operations. Features dual light sources: searchlight and convenience LED. The searchlight combines a revolutionary deep parabolic reflector with an H-7 axial filament Blue Vision bulb. Together with Golight Exclusive NxT BlueFusion Technology, this generates an extremely bright, virtually perfect 1.3 million candlepower beam of light that reaches a distance of up to one mile. Removable and rechargeable lithium-ion battery pack has a 60 minute run-time in searchlight mode with a quick 2-hour recharge time and a 50+ hour run-time in convenience mode. Squeeze button, locking trigger switch. Precision balanced and lightweight—only 3.5lb. Includes searchlight, Lithium-ion battery pack, Docking Station charger, AC charger, Direct Run 12V power cord, heavy-duty nylon shoulder strap. One-year limited warranty.

**Model 9362088** | GOLIG#8130 | ShWt 11 | **374.99**

## Associate's Choice



"Really long-lasting light."

## Streamlight ProPolymer LED Flashlight

The trouble with most flashlights, especially those kept on a boat, is that they're usually out of juice when you need them. But LED lights like this use so little power that they'll work even when the batteries are weak. Jeffrey Andrews of our North Palm Beach store uses his daily on the boat and for walking his dogs. He likes the fact that 4 AA batteries can last over 150 hours.

**Jeffrey Andrews, N. Palm Beach, FL**

*A boater for more than 35 years, Jeffrey has captained vessels up to 90' on all three U.S. coasts, Mexico, the Bahamas and the BVIs. His current boat is a Mainship Pilot 30.*



Streamlight

## Waypoint LED Spotlight

Pistol grip searchlight with deep-dish parabolic reflector combines a targeted high-beam range of 678 meters with the safety and convenience of an integrated stand for hands-free lighting of cockpit, cabin or work areas. Three modes: 210 lumens high, 20 lumens low and strobe controlled by convenient thumb-operated rotary switch. Locking, trigger-style on/off switch. C4® LED technology is shock-proof, with a 50,000 hour lifetime and average runtimes (using alkaline batteries) of 8 1/2 hours on high, 120 hours on low or strobe. Unlimited runtime using included 12V DC power cord. High-impact polycarbonate housing with removable lanyard is impact drop tested to three feet and IPX4 rated for water resistant operation.

**Beam Strength:** 115,000 (high); 10,000 (low) **Power Source:** 4 "C" batteries or 12V DC **LED**  
**Diameter:** 3 1/2" **Length:** 6 3/4" **Width:** 3 1/2" **Height:** 7 1/8" **Case Material:** Polycarbonate  
**Waterproof:** IPX4 water resistant **Warranty:** Limited lifetime

**Model 11835634** | STREA#44900 | ShWt 2 | **89.99**



Brinkmann®

## Q-Beam LED Rechargeable Spotlight

Powerful Cree XPE 3-LED design produces more than 600 lumens (with a five-hours run time) on Max Power mode and 300 lumens (10-hours run time) on Max Runtime mode. First of its kind red LED array for the ultimate night vision system producing up to 60 lumens. First of its kind internal rechargeable alkaline battery system with UL AC listed adaptor; LED charging indicator—holds charges longer than lead acid equivalents. Constructed from durable ABS plastic with rubber accents for sure grip. Tri-mode switch on back with locking mechanism. Reduced

weight (2.61 pounds) and design makes this a great LED spotlight.

**Model 11158250** | BRINK#800-5000-1 | ShWt 4 | **69.99**

Brinkmann®

## Blue Max Marine 3 Million Candlepower 12V Spotlight

Blue trimmed glass lens is glare free and tempered heat resistant. Beam cuts through glass and fog. Sturdy white ABS housing. Retractable stainless steel hook on top of unit. Operates using 8 foot DC cord. Large parabolic reflector produces maximum brightness. All screws are made of stainless steel. 100W halogen bulb produces 2,900 lumens.

**Model 11158235** | BRINK#800-1630-0 | ShWt 2.5 | **29.99**



Carry Case

NightBlaster

## Blue-Eye Beam 400,000 Candlepower 12V Glare-Free Spotlight

Intense, fog-penetrating beam with minimal back splatter. Includes a deck-mounted socket for hands-free use, or simply pick it up for handheld operation. Water-resistant switch. 10' heavy-duty coiled cord has alligator clips for attaching to a 12V battery.

**Beam Strength:** 400,000cp **Power Source:** 10' coil cord with alligator clips for attaching to 12V battery **Lens Diameter:** 5" **Case Material:** Polypropylene **Switch Type:** Push button **Waterproof:** Yes **Replacement Bulb:** Model 501213 **Warranty:** Three years

**Model 328494** | OPTRO#XB-4001 | ShWt 3 | **54.99**



Brinkmann®

## Blue Max Marine 2 Million Candlepower Rechargeable Spotlight

Blue trimmed glass lens is glare free and tempered heat resistant. Beam cuts through glass, fog, rain and over white boat docks. Large parabolic reflector produces maximum brightness. High intensity 75W halogen bulb. Operates and charges using 8 foot coil DC cord (included). Produces 2,000 lumens with 25 minute run time.

**Model 11158243** | BRINK#800-1620-0 | ShWt 5.8 | **39.99**



NightBlaster

## Blue-Eye 400,000 Candlepower 12V Glare-Free Spotlight

Intense beam cuts through smoke, rain, fog, haze and windshields, thanks to its patented scatter-reducing lens, which suppresses reflected glare. Designed to withstand saltwater environments, with a polypropylene housing, brass, anodized and stainless steel hardware and a weather-proof switch. 10' heavy-duty coiled cord with 12V plug.

**Beam Strength:** 400,000cp **Power Source:** Includes 10' heavy-duty coil cord with 12V plug **Lens Diameter:** 5" **Case Material:** Polypropylene **Switch Type:** Push button **Waterproof:** Yes **Replacement Bulb:** Model 501213 **Warranty:** Three years

**Model 501189** | OPTRO#KB-4001 | ShWt 2.2 | **36.99**



Electrical

## Headlamps

Princeton Tec

### Byte Headlamp



Smaller and lighter than the Quad or Remix headlamps, the Byte weighs in at a mere 64 grams but packs the punch of a 35 lumen Maxbright white LED.

When the task requires maintaining your night vision, a red Ultrabright LED provides faster eye adaptation for reading of charts or locating positions of the stars. Provides up to 146 hours of operation from 2 AAA batteries. Shares all the features, including an asymmetrical single arm bracket, easily accessible battery door and large push button switch of the larger, more powerful Princeton Tec headlamps at an affordable price.

**Model 12033247** | PRINC#BYT-BK | ShWt .2 | **19.99**



Princeton Tec

### EOS Headlamp

The combination of a Maxbright LED with 50 lumens and an optimized lens/collimator reflector that maximizes the beam by balancing long throw with flood light make the EOS optimal for both localized needs and spotting at a distance. Adjusts to three brightness levels depending on your needs, with a blinking Emergency/Signaling mode. Regulated LEDs ensure that the light will remain at constant brightness as long as the batteries have sufficient voltage. Three AAA alkaline batteries are included, which offer the longest burn time in normal conditions. Sophisticated circuitry also allows use of lithium batteries for reduced weight and enhanced performance in ultra-cold conditions. 3.7oz.

**Model 8806408** | PRINC#EOSR-AS | ShWt .4 | **39.99**



Princeton Tec

### Quad Headlamp

Four Ultrabright LEDs power you through the darkest conditions with 45 lumens of brightness at distances to 29 meters (high), 18 meters (medium), 12 meters (low) and four lighting modes. The LEDs are safe forever inside a tough waterproof housing designed to survive severe impacts and water submersions up to one meter. The wide beam of the Quad is perfect for tasks around the deck or in the cabin and bright enough to check the rigging. "Intelligent" regulated circuitry also allows the use of lithium batteries which reduce the Quad's weight to 2.8oz and provide enhanced performance in extremely cold conditions. With LEDs that maintain constant brightness and a battery power meter, this light just might be smarter than you are! Runs on three AAA batteries.

**Model 8806390** | PRINC#QUAD-BL | ShWt .3 | **29.99**



Princeton Tec

### Remix Headlamp

The Remix is equipped with an asymmetrical single arm bracket, easily accessible battery door enclosure, and large push button switch. Combine these features with a simple and lightweight design and you have a headlamp built to perform in any environment. Whether your requirements call for long distance spotting, or close range area light, the Remix is up to the task with a combination of a single Maxbright white LED and 3 Ultrabright red LEDs for better night vision and chart reading. The end result; true versatility in a compact, water resistant, and self-contained package. Light output: 70 Lumens; Batteries: 3 AAA; Run Time: 200 hours; Weight 2.9oz. Made in the USA.

**Model 10704518** | PRINC#hyb3-bk | ShWt .1 | **44.99**

