



Miscellaneous

Barrier Floats

Features:

- Super Tough Orange Polyethylene Shell
- Shatterproof - Will Not Crack Chip Peel, or Rust
- Unsinkable - Completely Urethane Foam Filled
- One Piece Construction

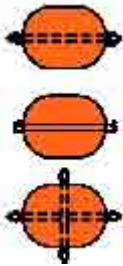
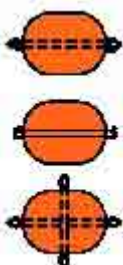
There are two types of each barrier to choose from:

A-Type - Steel Rod Thru Float Swivel Eye Nuts Both Ends

B-Type - Plastic or Steel Pipe Thru Float (Available w/ Larger I.D. Pipe Thru Center)

Available in solid international orange or all white. Yellow is available on a special order basis.

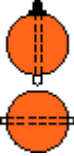
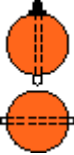
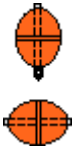
Reflective bands & symbols available on models 3018-B, 3624-B, and 3011-B

Model No.	Barrier Float Style	Dia. and Length	Description-Standard colors are international orange and white-plain solid color	Sub. Buoyancy	Net Wt.
3624AW-B 3624AO-B 3624BW-B 3624BO-B 3624CW-B 3624CO-B		24" Dia. X 36" Length	A-3/4" dia. steel rod thru float. Galvanized swivel eye nuts on both ends. B-1" Sch. 40 galvanized steel pipe thru float. C-3/4" dia. steel rods thru float and also Dia. at center. Eye nut swivels on both ends of float. Top eye for buoy pick-up only. Not for mooring.	400 lbs.	55 lbs. 55 lbs. 58 lbs.
3018AW-B 3018AO-B 3018BW-B 3018BO-B 3018CW-B 3018CO-B		18" Dia. X 30" Length	A-5/8" dia. steel rod thru float. Galvanized swivel eye nuts on both ends. B-1" sch. 40 galvanized steel pipe thru float. C-5/8" dia. steel rods thru float and also across dia. in center. Eye nut swivels on both ends of float. Top eye for buoy pick-up only. Not for mooring.	200 lbs.	25 lbs. 25 lbs. 25 lbs.



Miscellaneous

Barrier Floats

Model No.	Barrier Float Style	Dia. and Length	Description-Standard colors are international orange and white-plain solid color	Sub. Buoyancy	Net Wt.
ORANGE ONLY 0016AO-B 0016BO-B		16" Sphere	A- 1/2" dia. steel rod thru float. Galvanized swivel eye nuts on both ends. B-1/2" sch. 40 PVC pipe thru float.	70 lbs.	8 lbs.
ORANGE ONLY 0014AO-B 0014BO-B		14" Sphere	A- 3/8" dia. galvanized steel rod with 3" dia. attachment hoop one side only. B-1/2" sch. 40 PVC pipe thru float.	50 lbs.	6 lbs.
3011AW-B 3011AO-B 3011BW-B 3011BO-B		12" x 13"	A- 3/8" dia. galvanized steel rod with 3" dia. attachment hoop one side only. B-1/2" sch. 40 PVC pipe thru float.	33 lbs.	4 lbs.

Lock-On Rope Barrier



- Tough Polyethylene Shell with Ultraviolet Inhibitor
- Self Lock on Rope Without Fasteners
- Available in Two Sizes
- Orange & White Shell
- 1/2" Hole Through Float
- Use for Swim Area

Model No.	Description
503LO-B	3" x 5" Float
905LO-B	5" x 9" Float
913R-B	1/2" Orange and White Twisted Rope



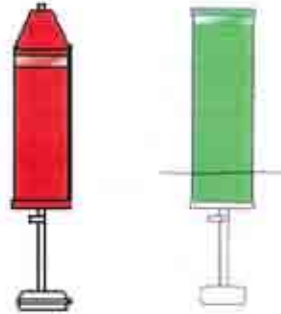
Miscellaneous

Can Buoys

Standard Can/Nun



- Used by the U.S. Army Corps of Engineers
- Concrete Ballast Encased ABS
- Ballast Attached by a Galvanized Steel Pipe
- 3" Silver Reflective Band at Top



Options

Feature

- ABS Exterior, Completely Urethane Foam Filled and Ultraviolet Inhibited
- Self-Righting Without Tackle
- Standard Bands, Symbols, and Messages Included
- 3" Reflective Band at Top
- Reconditioning of Weather-Worn Buoys Available

- Internal Radar Reflectors
- Pickup Eye Built on Top (Except 2814FW-B)
- Non-Standard Messages
- Agency & Name Identification
- 1 1/2" Schedule 40 Galvanized Through Buoy
- Red or Green Channel Markers with Nun Tops
- Solar Lights
- Swivel Eyes or Pipe Thru Flat Collar Application

MODEL	5112-B	5213-B	5214-B	4524-B	6024UL-B
Dia. X Height	12" x 51"	13" x 52"	14" x 52"	24" x 45"	24" x 60"
Overall Height	73 1/2"	76"	86"	97"	116"
Daymark w/36" exposure	3.0 Sq. Ft.	3.3 Sq. Ft.	3.5 Sq. Ft.	6.0 Sq. Ft.	
Exposure w/o Tackle	38"	40"	40"	38"	
Mooring Tackle Allowable for 36" Exposure	7 lbs.	18 lbs.	22 lbs.	18 lbs.	
Draft	36"	35"	44"	57"	59"
Submerged buoyancy	155 lbs.	190 lbs.	220 lbs.	624 lbs.	780 lbs.
Net Weight	71 lbs.	79 lbs.	90 lbs.	138 lbs.	240 lbs.



Miscellaneous

**SW-B**For Shallow,
Deep, or Still
Water**FW-B**

For Barrier Systems

**UL-B &
PRM-B**Excellent Stability
in Wind & Current

Float Collar Cans ABS for Heavy-Duty Applications:			
Model No.	2814SW-B*	2814FW-B*	2814UL-B*
Can Dia. & Height	14" x 30"	14" x 30"	14" x 30"
Float Collar Dia &	28" x 12"	28" x 12"	28" x 12"
Overall Height	49"	49"	89"
Daymark w/ 36"	4.1 Sq. Ft.	4.1 Sq. Ft.	4.1 Sq. Ft.
Mooring Tackle	29 lbs.	40 lbs.	49 lbs.
Draft	UNDER 9"	UNDER 6"	51"
Submerged Buoy- ancy	320 lbs.	340 lbs.	350 lbs.
Net Weight	105 lbs.	93 lbs.	120 lbs.
Can Buoys Coast Guard type ABS:			
Model No.	6 CPRM-B** 1/2 Mile	5 CPRM-B** 1 Mile	5 CPRFW-B 5 CPRSW-B
Can Dia. & Height	12" x 21"	19" x 33"	19" x 33"
Float Collar Dia.	28" x 12"	38" x 13"	38" x 13"
Overall Height	56.3"	84.5"	50"
Daymark w/ 36"	3.5 Sq. Ft.	7.4 Sq. Ft.	
Mooring Tackle	22.2 lbs.	41 lbs.	39 lbs.
Draft	24"	39"	9"
Submerged Buoy- ancy	287 lbs.	815 lbs.	700 lbs.
Net Weight	90 lbs.	40 lbs.	209 lbs.

All buoys are available as red or green channel markers with nun tops.

* 3" orange reflective band at top available

** 2" orange reflective top for model 6 CPRM-B 7' 3" for 5 CPRM-B



Miscellaneous

Super-Tough Can Buoys

Model	1234UL-B
Can Dia. & Height	13" x 30"
Collar Dia. & Height	24" x 10"
Overall Height	75"
Exposure w/o Tackle	36"
Submerged Buoyancy	240 lbs.
Net Weight	116 lbs.

Features:

- White LLDPE shell w/ ultraviolet Inhibitors
- Urethane foam filled - Unsinkable
- Self-righting w/o tackle
- Replaceable whit vinyl wrapper
- Standard bands, symbols, and messages included
- 1 1/2" Sch. 40 Galv. Through pipe Buoy
- 10" dia. Galv. Steel plate at top
- Solar Light (Available Option)

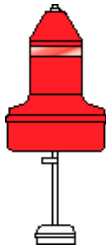


Channel Markers Red and Green Channel Markers

Options:

- All above can buoys are available as green or red channel markers.
- Options (all nuns): Pickup eyes
- Internal radar reflectors
- White numerical markings
- Agency or name identification upon request

Features:

- Super-tough white LLDPE shell w/ultra violet inhibitors
- Urethane foam filled
- Self-righting without tackle
- Easily replaceable white vinyl wrapper
- Standard bands symbols messages included
- 1 1/2" sch. ro galvanized pipe through buoy
- 10" galvanized steel plate at top (can)
- 3 3/4" dia. galvanized washer at top (nun)
- Optional solar light available
- Lighted buoys and channel markers av

		
Float Collar Nuns	Float Collar Nuns	Standard Nuns
2814ULN-B - 14" dia.	2814NSW-B - 14" dia. Ideal for shallow, deep or still waters.	5213N-B - 13" dia. 5214N-B - 14" dia. 4524N-B - 24" dia.



Miscellaneous

Regulatory Buoys

Approved and universally used by local, state and federal agencies. Ideal for private use.

4711R-B

(9" diameter x 61" height - submerged buoyancy 84 lbs. - net weight 49 lbs.)

Includes choice of standard symbols and messages

Features:

- 9" diameter, white, seamless, tough ABS plastic exterior with ultraviolet inhibitor
- Completely urethane foam filled
- 3" wide silver reflective band at top provides excellent night time visibility
- Self-righting without tackle
- Recessed cap allows buoy to stand upright
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast
- Symbols and messages are impregnated into buoy surface



Available Options:

- Internal radar reflectors
- Pickup eye built in top
- Stainless steel anchoring eye for salt water applications
- Agency name or identification
- Cone cap top
- Special non-standard messages
- 1/2" PVC pipe thru float line applications
- Optional colors: red, green, Red & white striped, and black & white striped

619R-B Extra Heavy Duty

(9" diameter x 61" height - submerged buoyancy 84 lbs. - net weight 49 lbs.) Includes choice of standard symbols and messages

Features:

- 9" diameter white super tough HDPE shell with ultraviolet inhibitor
- Shatter-proof - will not crack, chip, peel or rust
- Completely urethane foam filled
- 3" wide orange reflective band at top provides excellent night visibility
- Self-righting without tackle
- Recessed cap allows buoy to stand upright
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast



Available Options:

- Internal radar reflectors
- Pickup eye built in top
- Stainless steel anchoring eye for salt water applications
- Agency name or identification
- Special non-standard messages
- Optional colors: red, green, Red & white striped, and black & white striped



Miscellaneous

Spar Buoys

Lightweight, east to handle - Minimum anchor weight allows easy removal.

765S-B - (5" diameter x 76" height - submerged buoyancy 30 lbs. - net weight 24 lbs.)
Standard symbols and messages included in price

Features:

- 5" diameter, white, seamless, tough ABS plastic exterior
- Ultraviolet inhibitor, will not rust, chip or peel
- Urethane foam filled
- 3" wide orange reflective band at top provides excellent night visibility
- Self-righting without tackle
- Recessed cap allows buoy to stand upright
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast
- Minimum anchor weight allows easy removal



Available Options:

- Internal radar reflectors
- Stainless steel anchoring eye for salt water applications
- Agency name or identification
- Special non-standard messages
- Optional colors: red, green, Red & white striped, and black & white striped



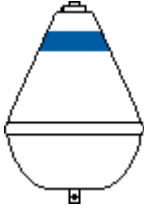

Mooring Buoy

4011-B Light duty	Submerged buoyancy	30 lbs.	
	Net weight	3 lbs.	
	Shipped weight	4 lbs.	
	Recessed 1" blue band		
	White Polyethylene Shell		
	12" x 13" dia., 16" overall		
	Supports 15" tackle 1/2 submerged		
4511-B Medium duty	Submerged buoyancy	80 lbs.	
	Net weight	9 lbs.	
	Shipping weight	13 lbs.	
	3" blue band		
	White Polyethylene Shell		
	Tapered to 16" dia., 28" overall		
	Supports 24 lbs. tackle 1/3 submerged		



Miscellaneous

Mooring Buoy

1800-B Heavy duty	18" Sphere		
	Net weight	12 lbs.	
	Submerged buoyancy	100 lbs.	
	Shipping weight	16 lbs.	
	2" reflective band		
	White polyethylene shell		
	1-1/2" PVC pipe thru buoy		
2400-B Heavy duty	24" Sphere		
	Net weight	22 lbs.	
	Submerged buoyancy	240 lbs.	
	Shipping weight	30 lbs.	
	Recessed 2" blue reflective band		
	White polyethylene shell		
	1-1/2" PVC pipe thru buoy		
4611MB-B Heavy duty	Submerged buoyancy	225 lbs.	
	Net weight	28 lbs.	
	Shipping weight	36 lbs.	
	Recessed 4" blue reflective band		
	Tapered to 24" dia., 37" overall		
	1 1/2" dia. steel pipe through buoy allowing a 1/2" chain to run through		
	Supports 100 lbs. tackle 1/3 submerged		
3018MB-B Extra heavy duty	Working load - 12,000 lbs. max.		
	Submerged buoyancy	200 lbs.	
	Net weight	28 lbs.	
	Shipping weight	32 lbs.	
	18" dia., 30" overall		
	2-1/2" I.D. top attachment hoop hot dipped galvanized		
	3/4" dia. rod thru buoy # 3/4 lower eye nut		
	3" blue reflective band		
	2 1/2" ID Top attachment hoop is hot-dipped galvanized		
	3/4" dia. rod through buoy & 3/4" hot-dipped galvanized lower eye nut		
	White polyethylene shell		



LIGHTHOUSE POWER PEDESTAL

One of our most popular units, the all-purpose Lighthouse pedestal has a wide range of features. With units in service around the world, this stylish power pedestal is recognized for its practicality and exceptional durability.



Standard Features

- Photocell Controlled 13 Watt Fluorescent Light (Clear Lens or Amber Lens for Bug Reduction)
- Lockable Weatherproof Doors which Protect Breakers and Receptacles while in use (a requirement of N.F.P.A. 303 and NEC Art. 555)
- Hose and Cable Brackets
- Heavy Polycarbonate Housing with a Two-Part Polyurethane Coating for a UV Resistant, Long Lasting Finish
- Single or Dual Phone and/or Cable TV Connections
- Copper Bus Bar with Ratings from 250 to 500 Amps
- Hinged Base Providing Easy Access for both Installation and Maintenance
- Single or Dual Steel 1/4 Turn Ball Valves with 3/4" Hose Bibs and Stainless Steel Handles
- Backlit Faceplate for Easy Receptacle Plug-in at Night

Available Options

- Digital Electronic Metering (One, Two or Three Element Meters Available)
 - Built in Meter Socket
 - 20A /125V GFI Receptacle (Max of 2 GFI Receptacles per Pedestal)*
 - High-Speed Internet Connections
 - Radio Transmission of Meter Output
- * 20 Amp GFI receptacles are not to be used for shore power.

Dimensions

	IN	MM
Height:	44	1117.6
Width:	13.75	349.25
Depth:	13.75	349.25

For available receptacle configurations see page 87

Cable & Internet Connections



Bus Bar



Hinged Base



Optional Meter Socket





LIGHTHOUSE - SS POWER PEDESTAL

For the longest lasting marine power pedestals, nothing is better or will last longer in the marine environment than our new stainless steel housing. We have worked more than two years to design a stainless steel pedestal that would meet all the codes and marine requirements, yet be easy to install and most importantly be maintenance free and user friendly.



Standard Features

- Photocell Controlled 13 Watt Fluorescent Light (Clear Lens or Amber Lens for Bug Reduction)
- Available with Lockable Weatherproof Doors
- Hose and Cable Brackets
- Long-Lasting Maintenance Free Stainless Steel Housing with Lifetime Warranty
- Single or Dual Phone and/or Cable TV Connections
- Copper Bus Bar with Ratings from 250 to 500 Amps
- Single or Dual 3/4" Hose Bibs with Stainless Steel Handles
- Large Removable Access Panel for Easy Maintenance and Installation
- Backlit Faceplate for Easy Receptacle Plug-in at Night

Available Options

- Digital Electronic Metering (One, Two, or Three Element Meters Available)
- 20A /125V GFI Receptacle (Max of 2 GFI Receptacles per Pedestal)*
- High-Speed Internet Connection
- Radio Transmission of Meter Output

* 20 Amp GFI receptacles are not to be used for shore power.

Dimensions

	IN.	MM
Height:	40	1016
Width:	9.875	250.825
Depth:	9.875	250.825

For available receptacle configurations see page 87

Bus Bar



New Door



Backlit Faceplate





HATTERAS LIGHT POWER PEDESTAL

The Hatteras Light is an elegant and low cost alternative to the Lighthouse. It utilizes the same 360 degree light assembly as the Lighthouse, yet is only 30 inches tall. Thousands of these attractive pedestals are found not only in marinas, but also around pools, deck areas, boardwalks and landscape areas. The housing will never rust or corrode and comes with a limited lifetime warranty. This unit is popular for smaller slips at marinas with the Lighthouse and for private docks.



Standard Features

- Photocell Controlled 13 Watt Fluorescent Light (Clear Lens or Amber Lens for Bug Reduction)
- Circuit Breakers
- Heavy Resin Housing with a Two-Part Polyurethane Coating for a UV Resistant, Long Lasting Finish
- Copper Bus Bar with a Maximum Rating of 140 Amps

Available Options

- 20A / 125V GFI Receptacle (Max of 2 GFI Receptacles per Pedestal)*
- Digital Electronic Metering (One or Two Element Meter Available)
- Single or Dual Phone, Cable TV, High-Speed Internet Connections
- Single or Dual 1/2" or 3/4" Silcock with Stainless Steel Handles

Dimensions

	IN.	MM.
Height:	30	762
Width:	7.5	190.5
Depth:	7.5	190.5

* 20 Amp GFI receptacles are not to be used for shore power.

For available receptacle configurations see page 87

Faceplate



Bus Bar



GFI Receptacle





NEWPORT HARBOR MATE POWER PEDESTAL

Five years of development and thirty prototype models have yielded this unit, the most innovative mini-power center available. Host to a variety of electrical services, contained in a compact yet strong housing, the Newport Harbor Mate is packed with features.



Standard Features

- Tough and Durable Resin Housing with UV Inhibitor for Lasting Finish
- Photocell Controlled 7Watt Fluorescent Light (Clear Lens or Amber Lens for Bug Reduction)
- Designed to Mount on a Dock Box, Piling, or Stainless Steel Stand
- Copper Bus Bar with a Maximum Rating of 140 Amps

Available Options

- Available with Single, Dual, or Combo of 30A or 50A Receptacles
- 20A / 125V GFI Receptacle (Max of 2 GFI Receptacles per Pedestal)*
- Single or Dual Phone, Cable TV, High-Speed Internet Connections
- Electronic Metering (One or Two Element Meters Available)
- Stainless Steel Stand

* 20 Amp GFI receptacles are not to be used for shore power.

Dimensions

	NEWPORT HARBOR MATE		NEWPORT HARBOR MATE ON STAND	
	IN.	MM	IN.	MM
Height:	14.5	368.3	36	914.4
Width:	10.5	266.7	10.5	266.7
Depth:	9.5	241.3	10.5	266.7

For available receptacle configurations see page 87

Mounting Option



Backlite Faceplate





FIREHOUSE

Created as a complete solution for fire and rescue needs, this pedestal features fire extinguisher storage and a mounted alarm strobe light and siren, as well as an optional life ring. This unit is well equipped for any marina emergency. The alarm strobe light and siren can be automatically activated when the door is open or optional life ring is removed.



Standard Features

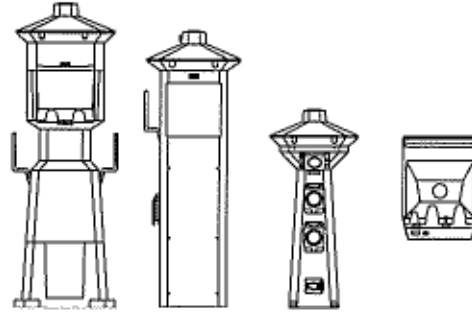
- Alarm Strobe Light & Siren: Automatically Activated when Door is Open or Optional Life Ring is Removed
- Photocell Controlled 13 Watt Fluorescent Light (Clear Lens or Amber Lens for Bug Reduction)
- 10 lb. ABC Type Fire Extinguisher
- Stainless Steel Polyester Powder Coated Housing
- Polycarbonate Top Assembly

Available Options

- 24" Life Ring
- 20 lb. ABC Type Fire Extinguisher Available

Dimensions

	IN.	MM
Height:	43.5	1104.9
Width:	9.875	250.6
Depth:	9.875	250.6

**RECEPTACLE CONFIGURATION CHART****Shore Power Receptacles**

Side One Power Outlets	Side Two Power Outlets	Phase	Lighthouse Max. GFI*	Lighthouse SS Max. GFI*	Hatteras Light Max. GFI*	Newport Harbor Mate Max. GFI*
30	00	1	2	2	3	3
30	30	1	2	2	2	2
30-30	30	1	2	2	1	1
30-30	30-30	1	2	2	•	•
30	50	1	2	2	•	•
30-30	50	1	2	2	0	1
30-30	30-50	1	2	2	•	•
30-30	50-50	1	2	2	•	•
30-50	30-50	1	2	2	•	•
30-50	50-50	1	2	2	•	•
50	NONE	1	2	2	1	2
50	50	1	2	2	•	•
50-50	50	1	2	2	•	•
50-50	50-50	1	2	2	•	•
100	NONE	1	2	2	•	•
100	50	1	2	2	•	•
100	50-50	1	2	2	•	•
100	100	1	2	2	•	•
100	NONE	3	2	2	•	•
100	50-50	3	2	2	•	•
100	100	3	2	2	•	•

• Receptacle Configuration is not available for this power pedestal.

* 20 Amp GFI receptacles are not to be used for shore power



Miscellaneous



CARMANAH® MODEL 501... UP TO 1 NAUTICAL MILES (1.15 MILES OR 1.8 KM)



Features and Benefits
• Visible up to 1 nautical mile ²
• Available with red, green, amber, white and blue LED-out
• Six standard IALA flash codes or "steady on"
• Completely self-contained and watertight. Operates reliably in harshest of conditions
• Polycarbonate/polymer construction is vandal resistant and virtually indestructible
• Provides up to five years of operation with no maintenance or servicing
• Up to 300 hours of operating capacity from a full charge... will charge under nearly all weather conditions
• Installs in minutes, minimal technical expertise required
• Manufactured to ISO 9001 Standards
• Three year warranty

The Carmanah Model 501 is the world's most advanced, fully-integrated, solar powered LED, 1-nautical mile navigation and hazard marking light. It installs in minutes and requires no maintenance or servicing for up to five years. (Complies with US Coast Guard 33 CFR, Part 66)

Typical Applications

The Model 501 is a multi-use solar powered LED marine light suitable for virtually any navigation, hazard-marking or dock lighting application requiring visibility up to 1NM mile in range. Actual distance depends on flash pattern, intensity level and LED color.

Available with green, red, amber, white and blue LEDs and any of 7 standard IALA flash patterns, this model has been used for lighting applications as diverse as marking mooring buoys, research buoys, dredging lines, private and commercial docks, sailboat masts, breakwaters, swim platforms and aquaculture farm perimeters.

The Technology

Using an innovative combination of solar power and LED technology, the 501 charges during the day, even under cloudy skies, and turns on automatically at night.

The 501 is rugged, reliable and virtually indestructible; it is designed to operate for up to 5 years with no maintenance or servicing.

No external wiring, no battery/bulb replacement, no maintenance, no worries...



Model 501 Specifications

Light Output	Flashing ¹	Steady	Construction
Effective Intensity (in all directions) (candela)	~ 1.2 Candela	~ 2 Candela	Solar Panels: Mono-Crystalline, Potted with UV-protected polyurethane and domed for high efficiency
Nominal Night Range (consistent method) Green, Red, Amber, White, Blue	~ 1.1 NM	~ 0.5 NM	Battery Type: Sealed pure lead-in thin plate with starved electrolyte
Vertical Divergence:	7° at 50% intensity		Nominal Voltage: 2 volts
Horizontal Output:	360°		Lens Material: Polycarbonate
Operation			Battery Venting: One-way vent at the bottom of light
Minimum Autonomy:	300 Hours		Sealing: Self-contained unit, potted in polyurethane
Minimum Peak Sun Hours to Maintain Minimum Autonomy:	1.5 Hours		Weight: 2.45 lbs (1.1kg)
Latitude Range:	55° S to 55° N		Dimensions: 5.1" tall, base width is 6.05", space between mounting holes is 5.83"
On/Off Level:	350/250 LUX		Environmental
Illumination Technology:	4 Ultra-bright LEDs		Temperature Range ³ : -40° to 176° F (-40° to +80° C)
Lifespan of LEDs:	Up to 100,000 Hours		Waterproof: Per IP67 (NEMA 6)
Chromaticity of Color Output:	Meets IALA Specifications		CE Approval: Per EN 60945:1997
Available Standard Flash Patterns:	7 including "steady on"		Notes: 1) Actual range depends on flash pattern, intensity & LED color. 2) Flashing specifications based on 100% intensity setting at 12.5% duty cycle. 3) Consistent ambient temp above 77°F may affect battery life. Temperatures above 140°F may affect output.



Miscellaneous



CARMANAH® MODEL M601... UP TO 2.7 NAUTICAL MILES (3.7KM)



Features and Benefits

- Visible up to 2 nautical miles¹
- Available with red, green, amber, and white LEDs
- 256 IALA flash codes or "steady on"
- Provides up to five years of operation with no maintenance or servicing
- Up to 300 hours of operating capacity from a full charge... will charge under nearly all weather conditions
- Manufactured to ISO 9001:2000 Standards
- Three year warranty

The Model 601 is the world's most advanced, fully-integrated, solar LED, 2-nautical mile (3.7km) navigation and hazard marking light. It installs in minutes and requires no maintenance or servicing for up to five years. (Complies with US Coast Guard 33 CFR, Part 66)

Typical Applications

The Model 601 is a solar-powered marine LED light suitable for virtually any navigation or hazard-marking application requiring up to a 2-nautical mile visibility range. Actual distance depends on flash pattern, intensity level and LED color.

The 601 has been used around the world for all types of marine, industrial, and commercial applications, including marking navigation, research and mooring buoys, channel and hazard markers, as well as all types of marine infrastructures and docks.

The 601 charges during the day, even under cloudy conditions, and turns on automatically at night. Its sophisticated microprocessor intelligence enables advanced light output control and battery management, and controlled flash rates.



No external wiring, no battery or bulb replacement, no maintenance, no worries...

Model 601 Specifications

Light Output	Flashing ²	Steady	Construction	
Effective Intensity (0.74 transmissivity constant) Green Red Amber White	~ 11 Candela ~ 7 Candela ~ 6 Candela ~ 9 Candela	All ~ 2 Candela	Solar Panels	Mono-Crystalline, Potted with UV-protected polyurethane and domed for high efficiency
Nominal Night Range ¹ Green Red Amber White	~ 2.7 NM ~ 2.7 NM ~ 2.7 NM ~ 2.7 NM	All ~ 1.5 NM	Battery	Sealed pure lead-tin recyclable
Vertical Divergence	7°		Lens Material	Polycarbonate
Horizontal Output	360°		Battery Venting	One-way vent at the bottom of light
Operation	Flashing	Steady	Sealing	Self-contained, potted with polyurethane
Minimum Autonomy ³	300 Hours	150 Hours	Weight	4.85 lbs (2.2kg)
Minimum Peak Sun Hours to Maintain	1.5 Hours	3 Hours	Dimensions	5.51" tall, base diameter is 6.87"
Latitude Range	55° S to 55° N		Environmental	
On/Off Level	70/100 LUX		Temperature	-40° to 176° F (-40° to +80° C)
Illumination Technology	16 Light Emitting Diodes		Waterproof	Per IP67 (NEMA 6)
Lifespan of LEDs	Up to 100,000 Hours		CE Approval	Per EN 60945:1997
Chromaticity of Color Output	Meets IALA Specifications		Notes: 1) Actual range depends on flash pattern, intensity & LED color. 2) Flashing specifications based on 100% intensity setting at 12.5% duty cycle. 3) Actual figures for autonomy depend on intensity setting. 4) Consistent ambient temp above 77°F may affect battery life. Temperatures above 140°F may affect output.	
Available Standard Flash Patterns	256 including "steady on"			



Miscellaneous



CARMANAH® M700 SERIES... UP TO 4 NAUTICAL MILES

Durable polycarbonate lens
Optional bird deterrent available

Uses an array of high intensity LEDs... No bulbs to replace ever

Ready to go right out of the box!
Features 3, 4 or 5-bolt mounting patterns



Automatically turns on at dusk and off at dawn

Microprocessor offers enhanced performance and power management features

Fully unitized construction. No external wiring. No servicing or maintenance for up to 5 years

The M700 Series is the world's most advanced, fully-integrated, solar LED, 3 and 4 nautical mile navigation and hazard marking light. It installs in minutes and requires no maintenance or servicing for up to 5 years. (Complies with US Coast Guard 33 CFR, Part 66)

Features and Benefits

- Visible up to 4 nautical miles¹. Replaces traditional 155mm 0.25 amp or .5 amp lights
- Available with red, green, amber, white and blue LEDs
- 208 IALA flash codes or "steady on"
- Completely self-contained and watertight. Operates reliably in harshest of conditions
- Polycarbonate/polymer construction is vandal resistant and virtually indestructible
- Provides up to five years of operation with no maintenance or servicing. Replaceable battery packs available
- Up to 600 hours of operating capacity from a full charge... will charge under nearly all weather conditions
- Installs in minutes, minimal technical expertise required
- Three year warranty

Typical Applications

Originally designed and built under contract with the US Coast Guard, the 700 series are the first solar-powered LED lights used in the U.S. Navigational Aid System.

The Model 701-5 is designed for locations with plenty of sunshine and no long periods of poor weather or long winter nights. The Model 702-5 is best for certain applications and locations that require additional battery storage capacity and larger solar panels. The 702-5 GPS adds the capability of GPS time flash synchronization of any number of similar lights.

The 700 series has been used around the world for all types of marine, industrial, and commercial applications, including marking navigation buoys, port and harbor entrances, and breakwaters.

The Technology

Using an array of ultra-bright LEDs (light emitting diodes), the 700 can produce light output in five colors that meet international chromaticity requirements for green, red, amber, white and blue. It can also produce over 208 IALA standard flash patterns. Other than replacing the battery pack every 5 years, the 700 series is designed to operate without maintenance or servicing.



The 700 series charges during the day, even under cloudy conditions, and automatically turns on at night. It also features sophisticated microprocessor intelligence that enables advanced light output control and power man-

M700 Series Specifications

Light Output	Flashing ²	Construction
Effective Intensity (0.74 transmissivity constant) Green, Red, Amber, White	- 22, 16, 11 and 20 Candela, respectively for 701/702 ; and -36 for 4-mile 704-5	Solar Panels Mono-Crystalline, Potted with UV-protected polyurethane and domed for high efficiency (four side panels and one dome panel)
Nominal Night Range ³ (Schmidt-Clausen method) Green, Red, Amber, White	- 4, 3.4, 3.1, 2.7 & 3.3 NM, respectively (by color)	Battery Pure-lead thin plate with starved-electrolyte
Vertical Divergence	7°	Lens Material Polycarbonate
Horizontal Output	360°	Battery Venting One-way vent at the bottom of light
Operation		Sealing Self-contained unit, sealed with gaskets
Minimum Autonomy ²	(701)150 Hrs; (702) 300 Hrs (704) 600 Hrs	Weight (701/702) 11.5 lbs (5.21kg) (704-5) 26 lbs (11.75 kg)
Minimum Peak Sun Hours to Maintain Minimum Autonomy	3 Hours 6 Hours	Dimensions (701) 9 7/16" tall, base diameter is 9 1/4" (702) 13 3/8" tall, base diameter 9 1/4"
Latitude Range	55° S to 55° N	Environmental
On/Off Level	70/100 LUX	Temperature -40° to 176° F (-40° to +80° C)
Illumination Technology	24 Ultra-bright LEDs	Waterproof Per IP67 (NEMA 6)
Lifespan of LEDs	Up to 100,000 Hours	CE Approval Per EN 60945:1997
Chromaticity of Color Output	Meets IALA Specifications	Notes: 1) Actual range depends on flash pattern, intensity & LED color; 2) Flashing specifications based on 100% intensity setting at 12.5% duty cycle; 3) Actual figures for autonomy depend on intensity setting; 4) Consistent ambient temp above 77°F may affect battery life. Temperatures above 140°F may affect output.
Available Standard Flash Patterns	208 including "steady on"	



Miscellaneous



DOCK WHEELS

Specifications

Outside Diameter: 24"

Tread Surface Width: 8"

Hub Size: 4" diameter x 7 3/4" long

Shaft Size: 1.98" diameter (for 1 1/2" galvanized)

Water Inlet/Drain Holes: Not Standard

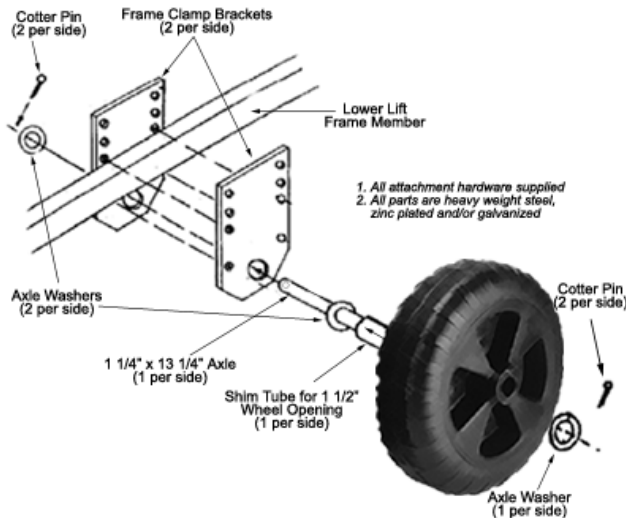
(A number of 1/2" Holes can be drilled in wheel if needed)

Color: Black

Structural Strength: 1000 lb capacity per wheel

IWP-66 Lift Mounting Kit

(Wheels sold separately or as a kit with mounting hardware) Includes 2 ea. 1 1/4" schedule 40 x 13 3/8" long pipe Axle, 2 ea. 7 3/8" long Axle Shims (for 1 1/2" Wheel Hub), with 4 ea. Steel Zinc plated Mounting Plates and Fasteners, for boat lift frames up to 3" wide x 5" high.



WD-55 Axle Mount for Docks

(Wheels sold separately)

Dock kit WD-55 provides the attachment hardware and bracing to attach a pair of PMT24 wheels to a wood frame dock using 1 1/2" galvanized pipe as an axle and down support pipes.

(see illustration). *Note: 1 1/2" galvanized pipe is not supplied as part of the kit.*

