

Index Section J

AIDS TO NAVIGATION

<u>product</u>	<u>pages</u>
Airhorns	
Buell	794,796
Kahlenberg	792,794
Signal Controller	797
Fog Bells	790,791
Lights	
Bulbs/ Lamps	705-711
Halogen	711
Navigation	727-742
Singal Lens	731, 733
Double Lens	732, 734
Light Panels	782-789
Platform & Barge	773-780
Solar Powered	773-780
Utility	772
Underwater	767-771
Searchlights	
Carlisle & Finch	
Xenon	718-726
Incandescent	703-717
Controls Components	704,705,711,716,722,724
Perko	
Xenon	744-746
Incandescent	748-765
Bulbs	743,747,750
Parts	743,747

URBAN LEGENDS

Urban legends are stories that are not true or unverified.

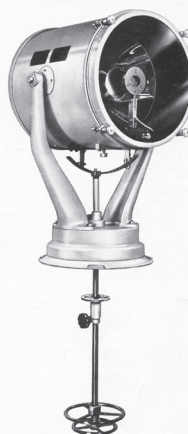
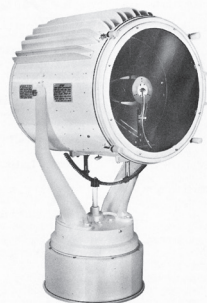
December 1999, Michigan

A man bought himself a new \$30,000 Jeep Grand Cherokee for Christmas. He and four friends decided to take his new vehicle on a duck hunting trip. They loaded up the Jeep with a dog, guns, decoys, and beer. They then headed out to a nearby lake. The lake was frozen, so they needed to make a hole in the ice to make a natural landing area for the ducks and decoys. It is common practice in Michigan to drive your vehicle out onto the frozen lake, and it is also common (if slightly illegal) to make a hole in the ice using dynamite. The stick of dynamite they used has a short 20-second fuse. They decided to throw the dynamite out where they wanted the hole in the ice. There was a bit of contention over who had the best throwing arm. Eventually the owner of the Jeep won the honor. His friend lit the fuse and he hurled it across the ice at a great velocity and ran in the other direction. Unfortunately the dog saw his master throw the dynamite and ran to retrieve it. The five frantic men began yelling at the dog, trying to get him to stop. Before you know it, the dog was headed back to his owner, proudly carrying the stick of dynamite. In a desperate act, his master grabbed his shotgun and fired at his own dog. The gun was loaded with duck shot, and it didn't kill the dog. Bewildered, the dog ran for cover under the brand-new Jeep Grand Cherokee. Boom! The dog and the Jeep were blown to bits, and sank to the bottom of the lake, leaving a large hole in the ice in their wake. The owner of the Jeep was left to explain to his insurance company what happened. Needless to say, the insurance company determined that sinking a vehicle in a lake by illegle use of explosives is not covered under their policy, and the owner is still making \$400 monthly payments.



Lever-Gear
Control
1KW

Distant Electric Control
2.5KW

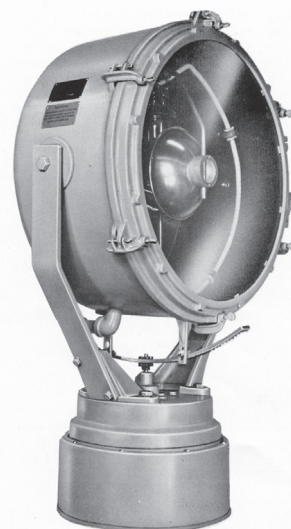
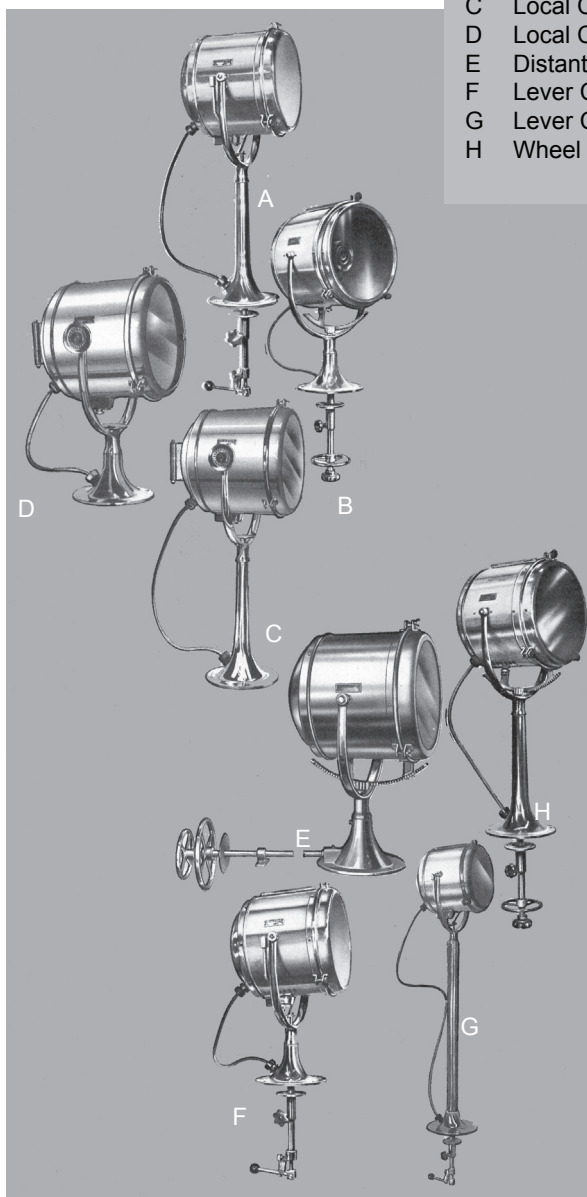


Wheel Control
1KW

- 10/12/15 - Inch Distant Electric Control
- 19 Inch Incandescent Searchlights
- 24 Inch Searchlights
- Xenon Search lights
- Carbon Arc Searchlights
- Searchlight Power Supplies
- Signaling Searchlights
- Marine Floodlights
- Navy Searchlights/Navigation Lights
- Lighthouse Beacons

Key to Photographs

- A Lever Control / High Ease
- B Wheel Control / Standard Base
- C Local Control / High Base
- D Local Control / Standard Base
- E Distant Mechanical Control
- F Lever Control / Standard Base
- G Lever Control / Pedestal Base
- H Wheel Control / High Base



24 - Inch Searchlight



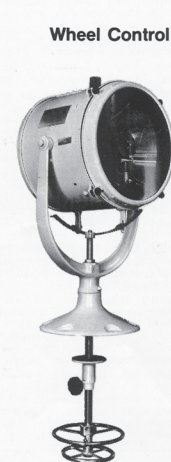
19 - Inch Searchlight



Lever-Gear
Control



Distant Electric Control



Wheel Control



A. Available in Three Beautiful External Finishes: white enamel, polished brass, or polished chrome. Interior finished with heat resistant flat black paint.

B. Vented Drum Available for 12" and 15" searchlights allowing use of 1000 watt lamps.

C. Many Lamp Types accommodated. See listing on page 3.

D. Metal Louvers eliminate front spill light.

E. High Quality Silvered Glass Reflector efficiently concentrates light into a powerful beam.

F. Choice of Lampholders

	10"	12"	15"
1 Medium Screw	Yes	Yes	Yes
2 Medium Prefocus	*Yes	*Yes	*Yes
3 Mogul Screw	No	Yes	Yes
4 Mogul Bipost	No	No	Yes
5 2-Pin Prefocus	Yes	Yes	Yes

*Supplied as standard if lampholder not specified.

G. External Focus Control permits changing beam from spot to flood with lamp operating, without the use of tools.

H. Heat-Tempered Cover Glass and tight sealing door gasket provide maximum protection for drum interior.

I. Double seals around control shaft prevent leakage to pilot house. Lubricated for life.

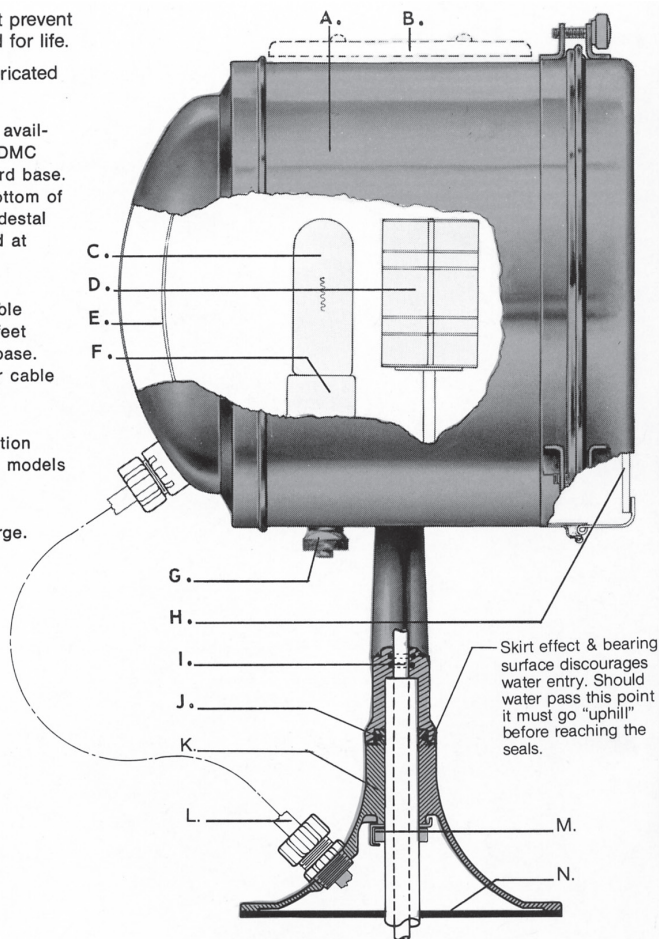
J. Seal between base and yoke. Lubricated for life.

K. Standard, High, or Pedestal Bases available with any control type except DMC which is available only with standard base. Special heights (measured from bottom of base to centerline of beam) for pedestal base searchlights may be specified at extra charge.

L. Heavy Duty Three-Conductor Flexible Cable extends approximately two feet below water-tight stuffing tube in base. Third conductor grounded. Longer cable can be supplied at extra charge.

M. Sliding Stop allows horizontal rotation in excess of 360°. Supplied on all models except Local Control and DMC.

N. Base Gasket optional at extra charge.

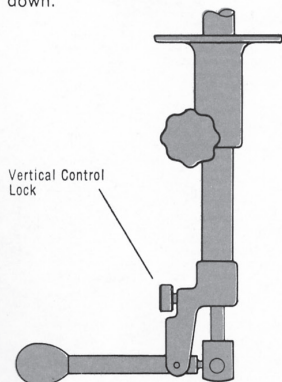


These searchlights are ruggedly constructed entirely of brass and are designed for heavy duty marine service.

Six Basic Control Types

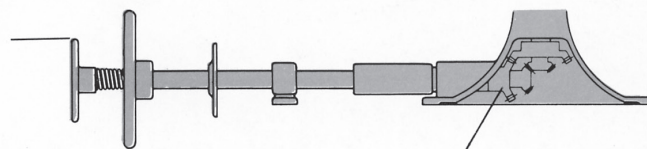
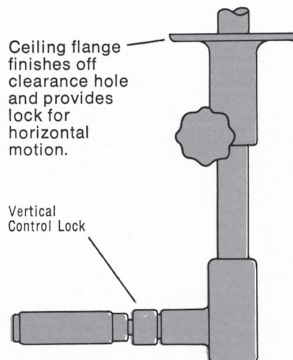
Lever Control:

Single lever controls all motions. Horizontal movement by pointing lever, vertical by moving knob on lever up or down.



Lever-Gear Control:

Operates conveniently with one hand. Horizontal movements by pointing lever. Vertical by twisting handle.

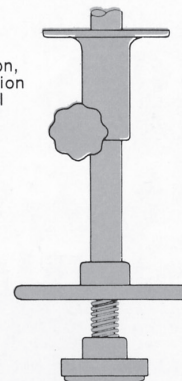


Distant Mechanical Control (DMC):

Similar to wheel control except that control shafts are at right angle to searchlight base.

Wheel Control:

Upper wheel controls horizontal motion, lower wheel the vertical motion. Friction brake holds searchlight in any vertical position.

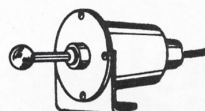


Local Control

(see Figs. 1, 2, 3, on page 5): Searchlight has training handle on back dome and hand clamps for clamping in any position.

Distant Electric Control (DEC):

See latest revision of bulletin D116 for these same size searchlights controlled from one or more electric remote control stations.



Searchlight Lamp Data

Lamp Data									Peak Beam Candlepower		
Ref.	Code	Watts	Volts	Bulb Size	Base	Description	Filament	*Average Hrs. Life	10" Scht.	12" Scht.	15" Scht.
21.5	FDT	100	12	T4	2-Pin Prefocus	Tungsten Halogen	C6	50	765,000	1,170,000	1,750,000
22	CPR	108	6	T10	Medium Prefocus	Projection	C8	50	350,000	563,000	-----
23.01	FDS	150	24	T4	2-Pin Prefocus	Tungsten Halogen	C6	500	935,000	1,380,000	2,030,000
46.5	BTM	500	120	T6	Medium Prefocus	Tungsten Halogen	C13D	100	950,000	1,160,000	2,080,000
47	CZX	500	120	T10	Medium Prefocus	Projection	C13D	25	900,000	1,170,000	-----
51	DMX	500	120	T20	Medium Prefocus	Projection	C13	50	475,000	780,000	-----
53.8	DYS	600	120	G7	2-Pin Prefocus	Tungsten Halogen	CC6	75	**781,000	1,130,000	1,840,000
54.5	BTP	750	120	T6	Medium Prefocus	Tungsten Halogen	C13D	200	not used	1,520,000	2,280,000

LAMPS BELOW TO BE USED IN VENTED DRUMS ONLY

68.05	BTR	1000	120	T7	Medium Prefocus	Tungsten Halogen	C13D	200	not used	2,820,000	2,282,000
70	DRS	1000	120	T20	Medium Prefocus	Projection	C13D	25	not used	1,650,000	3,280,000
71	DRC	1000	120	T20	Medium Prefocus	Projection	C13	50	not used	800,000	1,760,000

* These lamp manufacturer's figures are relative only. Individual lamps may vary considerably.

**Intermittent duty only (one hour or less).

NEW!!

Medium Prefocus Lampholders on 12 and 15-inch searchlights have unique Shock Absorbing Base Design, which helps prevent lamp filament damage due to excess vibration and shock impact.

Accessories & Parts

Description	Part No. For Size Scht.		
	10"	12"	15"
Cover, Protective	SL3322A	SL3322A	SL3322B
Cover Glass	SL62	SL102	SL1085
Gasket, Base, DMC	SL3318B	SL3318B	SL3318B
Gasket, Base, High	SL3318B	SL3318B	SL3318B
Gasket, Base, Pedestal	SL3318C	SL3318C	SL3318C
Gasket, Base, Standard	SL3318A	SL3318B	SL3318B
Lampholder, Med. Pref.	SL1250C	SL1250C	SL1250C
Lampholder, Med. Screw	SL1087-1	SL1087-1	SL1087-1
Lampholder, Mogul Bip.	—	—	FE132X
Lampholder, Mogul Screw	—	SL96	SL96
Lampholder, 2-Pin Pref.	8704	8704	8704
Reflector	SL1083A	SL107	SL1084

How to Order Searchlights

Specify size searchlight, type control, type base, type drum, type finish, type lampholder, and give code word or catalog number. Give ordering code and volts of lamp. Specify length of control (measured from bottom of base to centerline of lever or upper wheel) if other than the standard dimensions shown on the dimension drawings. Specify pedestal height (measured from bottom of base to centerline of drum) if different from the standard 48 inches.

Example: 12" searchlight, lever control, standard base, vented drum, enamel finish, medium prefocus lampholder, code RECITE-E2. Special length control 22" base to centerline lever. Two lamps code BTR 120 volts.

To designate the specific lampholder desired add one of the following suffixes to the code word or catalog number:

Medium Screw Lampholder	—1	Mogul Screw Lampholder	—3
Medium Prefocus Lampholder	—2	Mogul Bipost Lampholder	—4
		2-Pin Prefocus Lampholder	—5

BRAINTEASER

A man married 48 women. None of them died, he was never divorced, and he was one of the most admired men in town. How come?

He's the town minister.

ANSWER

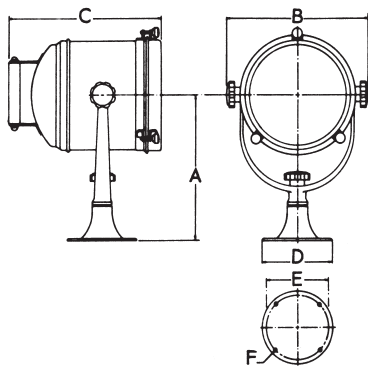
Searchlight Selection Table

10 inch

12 inch

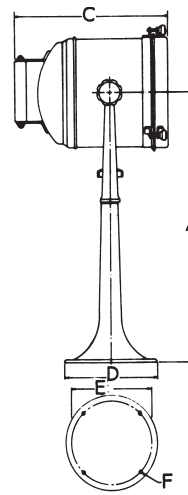
15 inch

Type Control	Type Base		Type Drum	Searchlight Code Word or Catalog No.			Net Wt. Lbs.	Shipping Wt. Lbs.
				Enamel Finish	Polished Finish	Chromium Finish		
Local	Standard	(Fig. 1)	Non Vented	RAIN-E	RAIN	CRAIN	15	21
	High	(Fig. 2)	Non Vented	ROSE-E	ROSE	CROSE	22	28
	Pedestal	(Fig. 3)	Non Vented	RAJAH-E	RAJAH	CRAJAH	29	59
Lever	Standard	(Figs. 4 & 7)	Non Vented	REDAN-E	REDAN	CREDAN	19	25
	High	(Figs. 5 & 7)	Non Vented	REFORM-E	REFORM	CREFORM	27	33
	Pedestal	(Figs. 6 & 7)	Non Vented	10SL1624XE	10SL1624X	10SL1624XC	34	55
Lever-Gear	Standard	(Figs. 4 & 8)	Non Vented	10SL8425E	10SL8425P	10SL8425C	22	28
	High	(Figs. 5 & 8)	Non Vented	10SL8426E	10SL8426P	10SL8426C	30	36
	Pedestal	(Figs. 6 & 8)	Non Vented	10SL8427E	10SL8427P	10SL8427C	37	58
Wheel	Standard	(Figs. 4 & 9)	Non Vented	RANK-E	RANK	CRANK	19	25
	High	(Figs. 5 & 9)	Non Vented	ROPE-E	ROPE	CROPE	27	33
	Pedestal	(Figs. 6 & 9)	Non Vented	10SL1620XE	10SL1620X	10SL1620XC	37	55
DMC	Standard	(Fig. 10)	Non Vented	10SL200E	10SL200P	10SL200C	32	53
Local	Standard	(Fig. 1)	Non Vented	RAKE-E	RAKE	CRAKE	22	31
			Vented	RATE-E	RATE	CRATE	22	31
	High	(Fig. 2)	Non Vented	ROME-E	ROME	CROME	27	36
			Vented	RUN-E	RUN	CRUN	27	36
	Pedestal	(Fig. 3)	Non Vented	RETARD-E	RETARD	CRETARD	34	64
			Vented	12SL1648XE	12SL1648X	12SL1648XC	34	64
Lever	Standard	(Figs. 4 & 7)	Non Vented	REDEEM-E	REDEEM	CREDEEM	26	35
			Vented	RECITE-E	RECITE	CRECITE	26	35
	High	(Figs. 5 & 7)	Non Vented	REFUGE-E	REFUGE	CREFUGE	32	41
			Vented	RESIN-E	RESIN	CRESIN	32	41
	Pedestal	(Figs. 6 & 7)	Non Vented	12SL1625XE	12SL1625X	12SL1625XC	39	60
			Vented	12SL1650XE	12SL1650X	12SL1650XC	39	60
Lever-Gear	Standard	(Figs. 4 & 8)	Non Vented	12SL8186E	12SL8186P	12SL8186C	29	38
			Vented	12SL8186VE	12SL8186VP	12SL8186VC	29	38
	High	(Figs. 5 & 8)	Non Vented	12SL8410E	12SL8410P	12SL8410C	35	44
			Vented	12SL8410VE	12SL8410VP	12SL8410VC	35	44
	Pedestal	(Figs. 6 & 8)	Non Vented	12SL8428E	12SL8428P	12SL8428C	42	63
			Vented	12SL8428VE	12SL8428VP	12SL8428VC	42	63
Wheel	Standard	(Figs. 4 & 9)	Non Vented	RASP-E	RASP	CRASP	26	35
			Vented	REAR-E	REAR	CREAR	26	35
	High	(Figs. 5 & 9)	Non Vented	RUSE-E	RUSE	CRUSE	32	41
			Vented	RIPE-E	RIPE	CRIFE	32	41
	Pedestal	(Figs. 6 & 9)	Non Vented	12SL1621XE	12SL1621X	12SL1621XC	39	60
			Vented	12SL1649XE	12SL1649X	12SL1649XC	39	60
DMC	Standard	(Fig. 10)	Non Vented	12SL201E	12SL201P	12SL201C	37	58
			Vented	12SL203E	12SL203P	12SL203C	37	58
Local	Standard	(Fig. 1)	Non Vented	REDGUM-E	REDGUM	CREDGUM	39	51
			Vented	REDGUM-VE	REDGUM-V	CREDGUM-V	39	51
	High	(Fig. 2)	Non Vented	REEL-E	REEL	CREEL	44	56
			Vented	REEL-VE	REEL-V	CREEL-V	44	56
	Pedestal	(Fig. 3)	Non Vented	RONTY-E	RONTY	CRONTY	50	80
			Vented	RONTY-VE	RONTY-V	CRONTY-V	50	80
Lever	Standard	(Figs. 4 & 7)	Non Vented	RADIAL-E	RADIAL	CRADIAL	43	55
			Vented	RADIAL-VE	RADIAL-V	CRADIAL-V	43	55
	High	(Figs. 5 & 7)	Non Vented	RAINBOW-E	RAINBOW	CRAINBOW	49	61
			Vented	RAINBOW-VE	RAINBOW-V	CRAINBOW-V	49	61
	Pedestal	(Figs. 6 & 7)	Non Vented	15SL1626XE	15SL1626X	15SL1626XC	56	77
			Vented	15SL1626XVE	15SL1626XV	15SL1626XVC	56	77
Lever-Gear	Standard	(Figs. 4 & 8)	Non Vented	15SL8184E	15SL8184P	15SL8184C	46	58
			Vented	15SL8184VE	15SL8184VP	15SL8184VC	46	58
	High	(Figs. 5 & 8)	Non Vented	15SL8408E	15SL8408P	15SL8408C	52	64
			Vented	15SL8408VE	15SL8408VP	15SL8408VC	52	64
	Pedestal	(Figs. 6 & 8)	Non Vented	15SL8429E	15SL8429P	15SL8429C	59	80
			Vented	15SL8429VE	15SL8429VP	15SL8429VC	59	80
Wheel	Standard	(Figs. 4 & 9)	Non Vented	RACKET-E	RACKET	CRACKET	43	55
			Vented	RACKET-VE	RACKET-V	CRACKET-V	43	55
	High	(Figs. 5 & 9)	Non Vented	RABBIT-E	RABBIT	CRABBIT	49	61
			Vented	RABBIT-VE	RABBIT-V	CRABBIT-V	49	61
	Pedestal	(Figs. 6 & 9)	Non Vented	15SL1622XE	15SL1622X	15SL1622XC	56	77
			Vented	15SL1622XVE	15SL1622XV	15SL1622XVC	56	77
DMC	Standard	(Fig. 10)	Non Vented	15SL202E	15SL202	15SL202C	54	75
			Vented	15SL202VE	15SL202V	15SL202VC	54	75



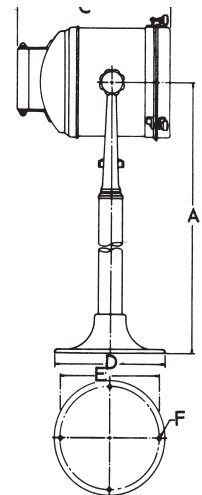
**FIG. 1 LOCAL CONTROL
STANDARD BASE**

SIZE	A	B	C	D	E	F
10"	12 $\frac{3}{4}$	13 $\frac{1}{8}$	12	6 $\frac{3}{8}$	5 $\frac{5}{8}$	1 $\frac{1}{32}$
12"	15 $\frac{1}{16}$	15 $\frac{3}{8}$	15 $\frac{1}{2}$	8 $\frac{1}{4}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
15"	19 $\frac{3}{8}$	18 $\frac{3}{8}$	16 $\frac{3}{8}$	8 $\frac{1}{4}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$



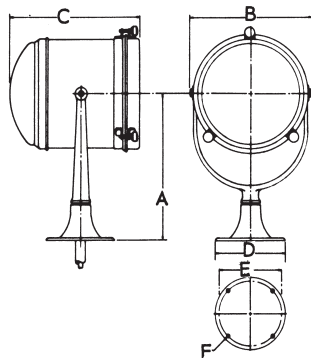
**FIG. 2 LOCAL CONTROL
HIGH BASE**

SIZE	A	C	D	E	F
10"	23 $\frac{5}{8}$	12	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
12"	25 $\frac{5}{8}$	15 $\frac{1}{2}$	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
15"	29 $\frac{1}{2}$	16 $\frac{3}{8}$	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$



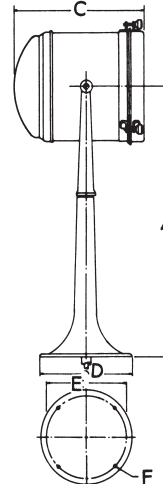
**FIG. 3 LOCAL CONTROL
PEDESTAL BASE**

SIZE	A	C	D	E	F
10"	48	12	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$
12"	48	15 $\frac{1}{2}$	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$
15"	48	16 $\frac{3}{8}$	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$



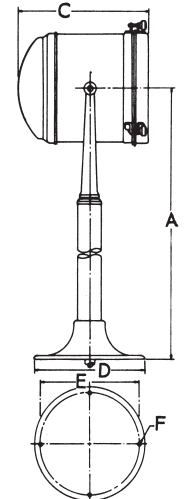
**FIG. 4 STANDARD BASE
MANUAL CONTROLS BELOW**

SIZE	A	B	C	D	E	F
10"	12 $\frac{3}{4}$	11	10	6 $\frac{3}{8}$	5 $\frac{5}{8}$	1 $\frac{1}{32}$
12"	15 $\frac{1}{16}$	13 $\frac{1}{2}$	13 $\frac{1}{4}$	8 $\frac{1}{4}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
15"	19 $\frac{3}{8}$	16 $\frac{3}{4}$	14 $\frac{7}{8}$	8 $\frac{1}{4}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$



**FIG. 5 HIGH BASE
MANUAL CONTROLS
BELOW**

SIZE	A	C	D	E	F
10"	23 $\frac{5}{8}$	10	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
12"	25 $\frac{5}{8}$	13 $\frac{1}{4}$	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$
15"	29 $\frac{1}{2}$	14 $\frac{7}{8}$	8 $\frac{3}{8}$	7 $\frac{3}{8}$	1 $\frac{13}{32}$



**FIG. 6 PEDESTAL BASE
MANUAL CONTROLS
BELOW**

SIZE	A	C	D	E	F
10"	48	10	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$
12"	48	13 $\frac{1}{4}$	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$
15"	48	14 $\frac{7}{8}$	10	8 $\frac{7}{8}$	1 $\frac{13}{32}$

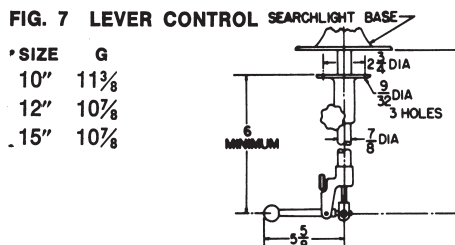


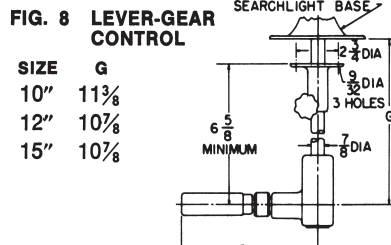
FIG. 7 LEVER CONTROL SEARCHLIGHT BASE

SIZE G

10" 11 $\frac{3}{8}$

12" 10 $\frac{7}{8}$

15" 10 $\frac{7}{8}$



**FIG. 8 LEVER-GEAR
CONTROL**

SIZE	G
10"	11 $\frac{3}{8}$
12"	10 $\frac{7}{8}$
15"	10 $\frac{7}{8}$

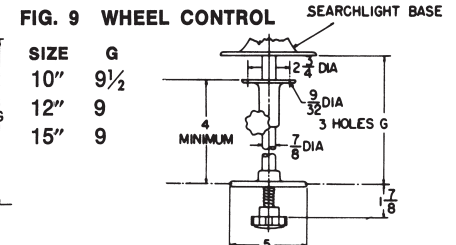
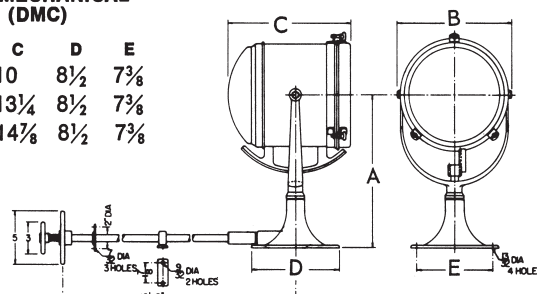


FIG. 9 WHEEL CONTROL

SIZE	G
10"	9 $\frac{1}{2}$
12"	9
15"	9

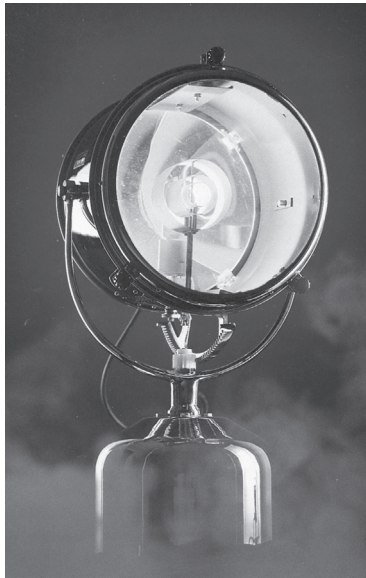
**FIG. 10 DISTANT MECHANICAL
CONTROL (DMC)**

SIZE	A	B	C	D	E
10"	14 $\frac{3}{8}$	11	10	8 $\frac{1}{2}$	7 $\frac{3}{8}$
12"	16 $\frac{3}{8}$	13 $\frac{1}{2}$	13 $\frac{1}{4}$	8 $\frac{1}{2}$	7 $\frac{3}{8}$
15"	20 $\frac{1}{8}$	16 $\frac{3}{4}$	14 $\frac{3}{8}$	8 $\frac{1}{2}$	7 $\frac{3}{8}$



NOTE: The specifications and details described by drawings or text in this literature are subject to change without notice.

10 / 12 / 15 - INCH SEARCHLIGHTS DISTANT ELECTRIC CONTROL (DEC)



- Powerful motors in weatherproof base direct the penetrating beam with finger-tip ease from any distance.
- Automatic brakes provide instant start and instant stop with no overtravel.
- Complete flexibility in mounting. Searchlight can be controlled from many separate locations.
- Motors operate on 110-125 volts, 50-60 hz (cycles).

Rugged construction. Drum, door, and yoke, etc., constructed of solid brass - same as the searchlights described in bulletin A110. Base is marine aluminum or brass as specified. Refer to bulletin A110 for information pertaining to lamps, lamp-holders, reflectors, cover glasses, beam candlepower, etc.

Finish. Drum/door, and yoke white enamel, polished, or chrome as specified.

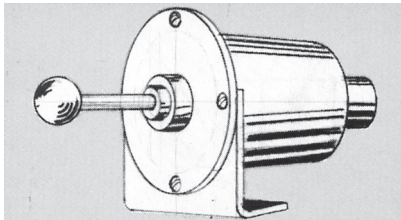
Rugged drive unit is housed in watertight corrosion resistant marine aluminum or brass base as specified. Slip clutches allow manual override at all times, a convenience when relamping. A small heater on drive unit keeps temperature in base housing above ambient to minimize condensation on and in motors.

Catalog listings, dimensions, and ordering information on next page.

Aluminum base always white enamel.

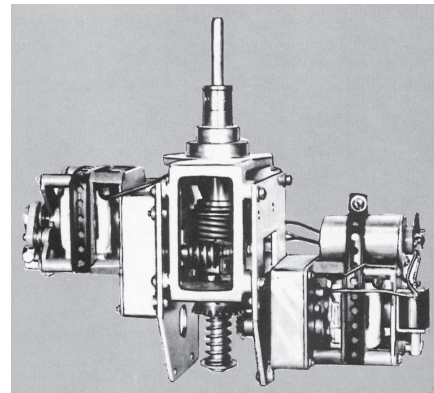
Brass base white enamel, polished, or chrome as specified.

Rugged Joystick Switch controls both motions. No limit to distance between searchlight and joystick. Second, third, fourth, or more joysticks can be added at any time. Just five control conductors and a ground conductor required between searchlight and joystick. Either way, one standard unit is used. No interlocks required. Corrosion resistant and oiltight. the joystick can be mounted almost anywhere.



Joy Stick Controller mounted in an enclosure for surface mounting. Also available for flush mounting in console.

Completely self-contained drive unit may be easily removed from base for bench testing if desired.



SEARCHLIGHT SELECTION TABLE

The complete catalog number must include a suffix for the lampholder desired. Add one of the following suffixes to the basic catalog number: medium screw lampholder, -1; medium prefocus, -2; mogul screw, -3; mogul bipost, -4; 2-pin prefocus, -5.

Size	Drum	Base	SEARCHLIGHT CATALOG NUMBER			Weight lb (kg)	
			Enamel Finish	Polished Finish	Chrome Finish	Net	Ship
10-Inch	Non-Vented	Aluminum	105AE	105AP	105AC	30(14)	40(18)
		Brass	105BE	105BP	105BC	35(16)	45(20)
12-Inch	Non-Vented	Aluminum	125AE	125AP	125AC	35(16)	46(21)
		Brass	125BE	125BP	125BC	40(18)	51(23)
	Vented	Aluminum	125AEV	125APV	125ACV	35(16)	46(21)
		Brass	125BEV	125BPV	125BCV	40(18)	51(23)
15-Inch	Non-Vented	Aluminum	155AE	155AP	155AC	51(23)	65(29)
		Brass	155BE	155BP	155BC	56(25)	70(32)
	Vented	Aluminum	155AEV	155APV	155ACV	51(23)	65(29)
		Brass	155BEV	155BPV	155BCV	56(25)	70(32)



19" INCANDESCENT SEARCHLIGHT



Pedestal Base
Lever Twist-
Lock Control
Model 19SL1174DX



Standard Prison/Security
Turntable Base
Lever Twist-Lock Control
Model 19SL1597DX



Pedestal Prison/Security
Turntable Base
Lever Twist-Lock Control
Model 19SL1599DX



Standard Base
Wheel Control
Model Redcoat-D



Standard Base
Lever-Gear
Control
Model 19SL3794DX



Pedestal Base
Local Control
Model 19SL1299DX



Standard Base
Distant Mechanical
Control
(Consult Factory)

Other Products. 10/12/15-inch Incandescent searchlights, 24-inch Incandescent searchlights, Xenon searchlights, Searchlight Power Supplies, Signalling Searchlights, Marine Floodlights, Navy Searchlights/Navigation Lights, Lighthouse Beacons, and special Marine Lighting Equipment.

Manufacturers of high quality lighting fixtures for over 100 years.



These searchlights are designed in conformance with IEEE recommendations for rugged marine use and high security outdoor lighting applications.

Bases

Four base options are made out of high strength corrosion resistant marine grade aluminum:

1. **Standard Marine Base.** Contains sliding stop allowing horizontal rotation in excess of 360 degrees without damaging cables. Three conductor heavy-duty flexible weatherproof cable enter base and drum through stuffing tubes and extends approximately two feet below the base. See Figure 1.

2. **Pedestal Marine Base.** Same as Standard Marine Base except taller. Any custom height can be specified. See Figure 3.

3. **Standard Prison/Security Turntable Base.** Slip rings and brushes provide unlimited continuous rotation guaranteeing that the searchlight will never come to a mechanical stop. Unrestricted movement is necessary when emergency conditions occur in high security applications. Three single conductor heavy-duty weatherproof cables extend approximately two feet below the base. See Figure 2.

4. **Pedestal Prison/Security Turntable Base.** Same as Standard Turntable Base except taller. See Figure 4. Consult factory for any custom height.

Drums

Constructed of high strength corrosion resistant marine grade aluminum, the drum has a hinged door fastened by four clamps and houses a high quality silvered glass reflector. Louver assembly mounted in front of lamp eliminates front spill light. Heat-tempered cover glass and gaskets make drum weatherproof. Interior finished with heat-resistant flat black paint, exterior surfaces white enamel.

Lampholders

Several different types accommodate many lamps. See lamp listings and beam candlepower on page 3.

1. Mogul Bipost
2. Mogul Prefocus
3. Mogul Screw
4. 2-Pin Prefocus
5. Medium Prefocus (accommodates largest variety of lamps)

Vibration/Shock Mount. All Medium Prefocus Lampholders are mounted on a special shock absorbing base which helps prevent lamp breakage due to excess vibration.

Focus fore and aft can be accomplished quickly and simply by turning knob beneath searchlight drum.

Controls

Five styles of manual controls are constructed of all brass. O-ring seals prevent leakage around control shafts.

1. **Local Control.** No pilot house controls. Searchlight has training handle on drum and hand clamps to lock searchlight in any position. See Figs. 1/ 2, 3, and 4.

2. **Lever-Gear Control.** Operates conveniently with one hand. Horizontal movement controlled by pointing lever, vertical by twisting lever. Vertical lock conveniently located on control handle. Ceiling lock clamps horizontal movements. See Figs. 5, 9A, and 9B.

3. **Wheel Control.** Upper wheel controls horizontal movements, lower wheel vertical movements. Friction brake holds searchlight in any vertical position. Ceiling lock clamps horizontal movements. See Fig. 6.

4. **Lever Twist-Lock Control.** Single lever controls all movements. Spring loaded friction brake holds searchlight in any vertical position which can be easily and quickly locked by twisting control handle. Ceiling lock clamps horizontal movements. See Fig. 7.

5. **Distant Mechanical Control.** Similar to items 2 and 3. See Figs. 10A and 10B.

Distant Electric Control (DEC). See Bulletin SL123 for these searchlights controlled from one or more control stations.

Special Features

Searchlight can be tailored to suit your exact needs by specifying these features at time of order.

A. **Special control length.** Longer or shorter than standard.

B. **Special pedestal height.** Higher or lower than standard.

C. **Special length electrical cable.** Longer than standard.

D. **All Brass and Stainless Steel.** Instead of Marine Grade Aluminum. Consult Factory.

E. **Vibration/Shock Mount.** Specify Medium Prefocus Lampholder.

F. **Special Prison/Security Base.** Specify any Turntable Base.

G. **Remote Electric Beam-Size Focus.** Allows beam to be widened (short range) and narrowed (long range) from a remote electric switch. Add "-RF" to searchlight catalog number and specify control station number C2-5.

Searchlight Lamp Data

Lamp Code	Watts	Volts	Base	Type	*Rated Life (Hrs.)	**Candlepower
BTM	500	120	Medium Prefocus	Tungsten Halogen	100	2,971,000
CZX	500	120	Medium Prefocus	Incandescent	25	2,200,000
BTP	750	120	Medium Prefocus	Tungsten Halogen	200	3,981,000
DPJ	750	120	Medium Prefocus	Incandescent	25	4,260,000
BVA	900	120	2-Pin Prefocus	Tungsten Halogen	75	4,600,000
BTR	1000	120	Medium Prefocus	Tungsten Halogen	250	4,300,000
DRS	1000	120	Medium Prefocus	Incandescent	25	4,410,000
DWK	1000	230	Medium Prefocus	Incandescent	50	1,600,000
FKN	1000	230	Medium Prefocus	Tungsten Halogen	200	1,800,000
BVV	1000	120	Mogul Prefocus	Tungsten Halogen	250	4,300,000
DRW	1000	120	Mogul Screw	Incandescent	25	4,410,000
IM/T20BP	1000	120	Mogul Bipost	Aero	500	2,381,000
CWZ	1500	120	Mogul Prefocus	Tungsten Halogen	325	3,614,000
CXZ	1500	120	Mogul Bipost	Tungsten Halogen	325	3,614,000
***BVW	2000	120	Mogul Prefocus	Tungsten Halogen	300	3,000,000

* These lamp manufacturer's figures are relative only. Individual lamps may vary considerably.

** These figures provided to aid in lamp selection.

*** Intermittent use only.

Accessories & Parts

Description	Part No.	Description	Part No.	Description	Part No.
Brush, with pigtail	EF176	Gasket, Standard		Lampholder, Mogul Bipost ..	FE132X
Cover, Protective	SL3322C	Turntable Base	4093B	Lampholder, Mogul Prefocus .	SL978
Cover Glass	EF239	Gasket, Pedestal		Lampholder, Mogul Screw	SL96
Gasket, Standard		Turntable Base	4093C	Lampholder, 2-Pin Prefocus	8704
and Ped Base	SL3356	Lampholder, Medium Prefocus with		Louver Assy.	9656X
		Special Shock Mount	7540X	Reflector	EF240

How to Order Searchlights

Specify 19-inch incandescent searchlight with a. Base, b. Controls, c. Lampholder, d. Catalog Number and describe Special Features e.

a. Bases

Standard
Standard Turntable
Pedestal
Pedestal Turntable

b. Controls

Local
Lever-Gear
Wheel
Lever Twist-Lock
Distant Mechanical Wheel
Distant Mechanical Lever-Gear

c. Lampholder

Mogul Bipost
Mogul Prefocus
Mogul Screw
Medium Prefocus
2-Pin Prefocus

d. Code or Cat. No.

Choose from Selection Table

e. Special features available at extra charge when specified on order.

Special control lengths. Longer or shorter than standard. Give dimension from bottom of base to center line of lever or large wheel. Order parts to anchor lower end of extra long lever-gear controls (Figs. 9A & 9B) by part no. and name and give dimensions A and B.

Special pedestal height. Higher or lower than standard. Specify height from bottom of base to center line of drum.

Special length electrical cable. Specify length from bottom of base to end of cable.

All Brass and Stainless Steel. Instead of Marine Aluminum.

Example. 19-inch Searchlight with Standard Base, Lever-Gear Control, Medium Prefocus Lampholder with Shock Mount Design, Catalog Number 19SL3794DX. Special control 32 inches from base to centerline of lever (see Figure 5, Page 5). Two lamps Code BTR.

Searchlight Selection Table

Base	Control	Searchlight Model or Catalog No.					2-Pin Prefocus		Approx. Lbs.	
		Mogul Bipost	Mogul Prefocus	Mogul Screw	Med. Prefocus	Prefocus			Net	Ship
Standard Base Horizontal rotation in excess of 360° but limited by positive mechanical stops to prevent mechanical damage to cable by excessive rotation. (Fig. 1)	Local (Fig. 1)	REDUNDANT	REDUNDANT-A	REDUNDANT-B	REDUNDANT-D	REDUNDANT-E			51	76
	Lever-Gear (Fig. 5)	19SL3794X	19SL3794AX	19SL3794BX	19SL3794DX	19SL3794EX			65	90
	Wheel (Fig. 6)	REDCOAT	REDCOAT-A	REDCOAT-B	REDCOAT-D	REDCOAT-E			65	90
	Lever Twist-Lock (Fig. 7)	RIOT	RIOT-A	RIOT-B	RIOT-D	RIOT-E			65	90
	Distant Mechanical Lever-Gear (Fig. 10B)	19SL4590-LG	19SL4590A-LG	19SL4590B-LG	19SL4590D-LG	19SL4590E-LG			85	115
	Distant Mechanical Lever-Gear (Fig. 10A)	19SL4590-W	19SL4590A-W	19SL4590B-W	19SL4590D-W	19SL4590E-W			85	115
Standard Prison/Security Turntable Base Slip rings and brushes in base allow continuous unrestricted horizontal rotation. (Fig. 2)	Local (Fig. 2)	19SL1593X	19SL1593AX	19SL1593BX	19SL1593DX	19SL1593EX			76	101
	Lever-Gear (Fig. 5)	19SL3784X	19SL3784AX	19SL3784BX	19SL3784DX	19SL3784EX			90	115
	Wheel (Fig. 6)	19SL1605X	19SL1605AX	19SL1605BX	19SL1605DX	19SL1605EX			90	115
	Lever Twist-Lock (Fig. 7)	19SL1597X	19SL1597AX	19SL1597BX	19SL1597DX	19SL1597EX			90	115
Pedestal Base Horizontal rotation in excess of 360° but limited by positive mechanical stops to prevent mechanical damage to cable by excessive rotation. (Fig. 3)	Local (Fig. 3)	19SL1299X	19SL1299AX	19SL1299BX	19SL1299DX	19SL1299EX			68	97
	Lever-Gear (Fig. 5)	19SL3798X	19SL3798AX	19SL3798BX	19SL3798DX	19SL3798EX			83	112
	Wheel (Fig. 6)	19SL1302X	19SL1302AX	19SL1302BX	19SL1302DX	19SL1302EX			83	112
	Lever Twist-Lock (Fig. 7)	19SL1174X	19SL1174AX	19SL1174BX	19SL1174DX	19SL1174EX			83	112
Pedestal Prison/Security Turntable Base Slip rings and brushes in base allow continuous unrestricted horizontal rotation. (Fig. 4)	Local (Fig. 4)	19SL1595X	19SL1595AX	19SL1595BX	19SL1595DX	19SL1595EX			88	117
	Lever-Gear (Fig. 5)	19SL3804X	19SL3804AX	19SL3804BX	19SL3804DX	19SL3804EX			103	132
	Wheel (Fig. 6)	19SL1607X	19SL1607AX	19SL1607BX	19SL1607DX	19SL1607EX			103	132
	Lever Twist-Lock (Fig. 7)	19SL1599X	19SL1599AX	19SL1599BX	19SL1599DX	19SL1599EX			103	132

Dimension Drawings

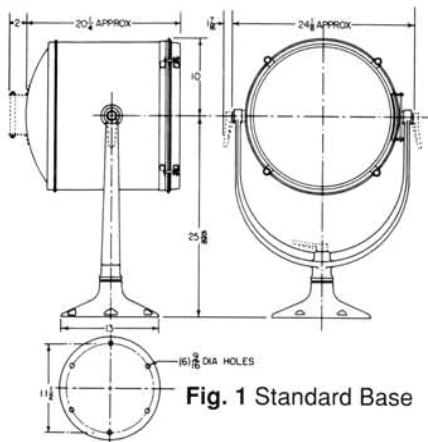


Fig. 1 Standard Base

Combine base and control figures for complete searchlight.

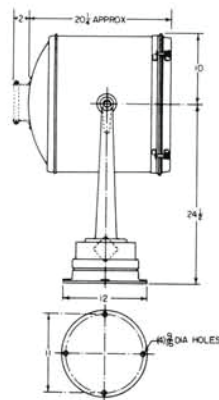


Fig. 2 Standard Turntable Base

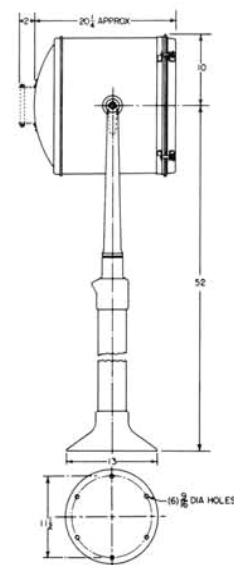


Fig. 3 Pedestal Base

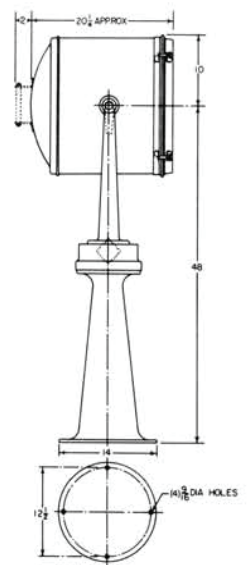


Fig. 4 Pedestal Turntable Base

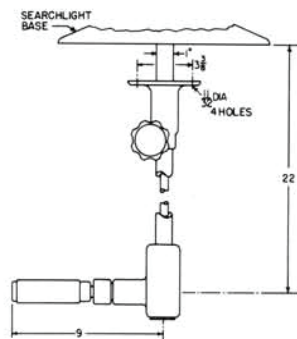


Fig. 5 Lever-Gear Control

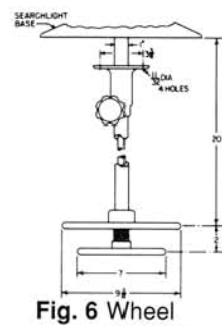


Fig. 6 Wheel Control

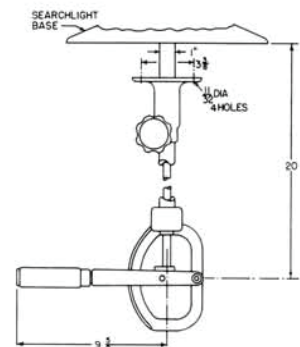


Fig. 7 Lever Twist-Lock Control

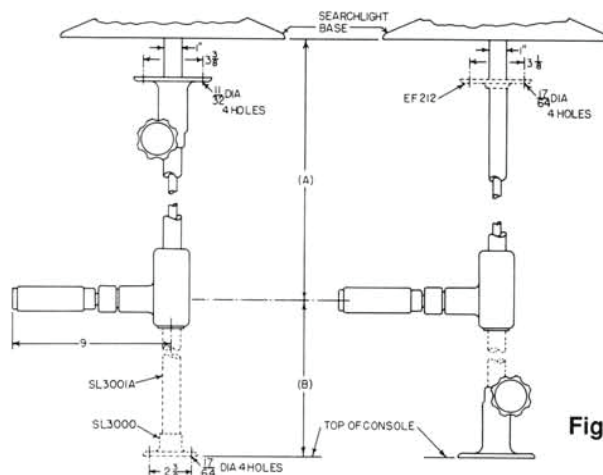


Fig. 9A
Alternate arrangements for lever-gear control with extra long control shafts. Parts shown as dashed lines priced separately.

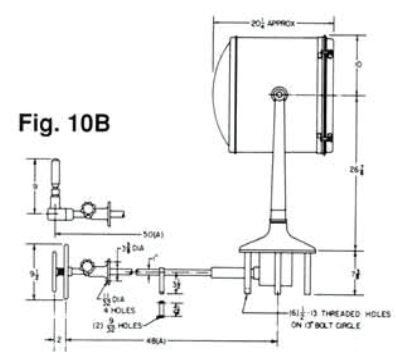
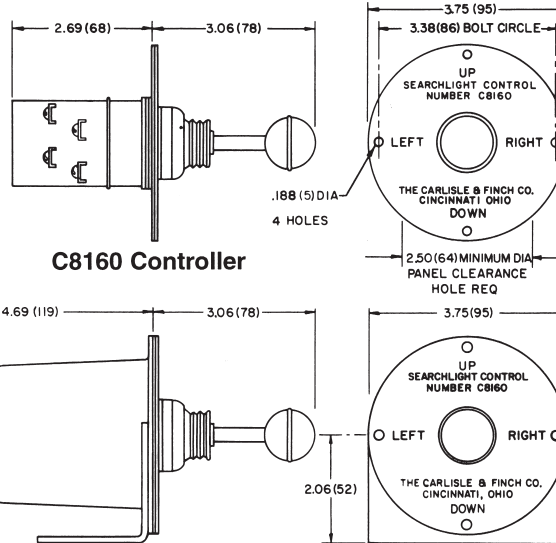
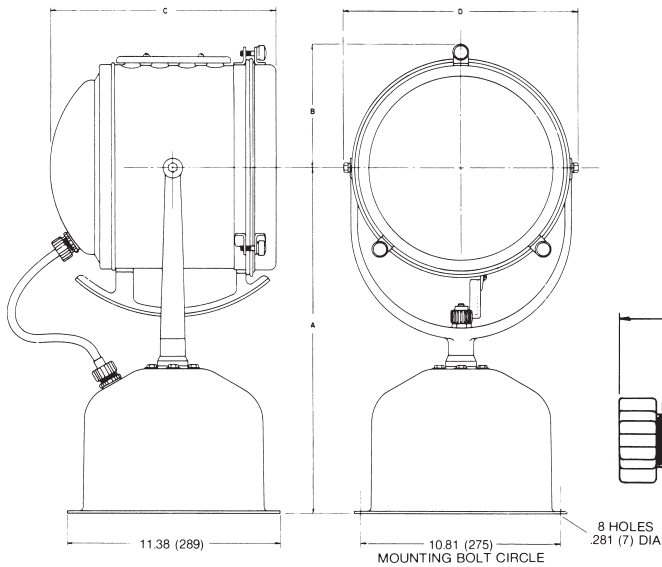
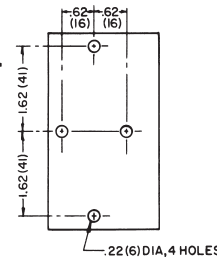


Fig. 10A Distant Mechanical Control (DMC)

NOTE: The specifications and details described by drawings and or text in this literature are subject to change without notice.



SIZE	A	B	C	D
10-Inch	18.18(462)	6.00(152)	10.00(254)	11.00(279)
12-Inch	20.12(511)	7.12(181)	13.25(337)	13.75(349)
15-Inch	24.06(611)	8.00(203)	15.00(381)	16.75(425)



8171X Enclosure and Bracket Assembly (with controller installed).
Polished chrome finish over brass.

*** NOTE ***

220 VOLTS and 24 VOLTS OFFERED.
CONSULT FACTORY

HOW TO ORDER SEARCHLIGHT SYSTEMS

Specify quantity Distant Electric Control (DEC) Searchlight, size, drum, base material, finish, and lampholder desired. Give searchlight catalog number from table and add suffix for lampholder type. Specify quantity controller C8160, with or without Enclosure and Bracket Assembly 8171X. Specify quantity lamps and give volts, watts, and ordering code from lamp list.

Order Example:

2 DEC Searchlight, 12", vented, aluminum base, enamel finish, medium prefocus lampholder, catalog no. 125AE-2.

4 Controller C8160

4 Enclosure and Bracket Assembly 8171 X

4 Lamp, 120V, 1000W, code BTR

The 10 Smartest Things Ever Said About Money

- 1 "Annual income, twenty pounds ,annual expenditure, nineteen pounds; result, happiness. Annual income, twenty pounds; annual expenditure, twentyone pounds; result, misery." -Charles Dickens'
- 2 "Beware of little expenses. A small leak will sink a great ship." -Benjamin Franklin
- 3 "October is one of the singularly worst months to speculate in stocks, Others are November, December, January, February, March, April, June, July, August and September." -Mark Twain How did he know this 35 years before the Great Crash of October 1929?And almost 100 years before the Nearly as Dramatic Crash of October 1987?
- 4 "Your average Wall Streeter, faced with nothing profitable to do, does nothing for only a brief time. Then, suddenly and hysterically, he does something which turns out to be extremely unprofitable. He is not a lazy man." -Fred Schwed, in the book Where Are the Customers' Yachts?
- 5 "The people who sustain the worst losses are usually the ones who overreach, and it's not necessary! Steady, moderate gains will get you where you want to go." John Train, investment counselor

Specifications

General. These searchlights are designed for heavy duty marine service on commercial vessels. Motors in the searchlight base control both horizontal and vertical beam movements so that the searchlight can be located any distance from the pilot house. Dynamic braking stops beam movement instantly upon controller release. Page three shows control stations for both single-station and multiple-station systems. These components are priced separately.

Drum. Contains the optical system. 19-inch searchlight drum is constructed of formed brass and stainless steel. 24-inch drum all corrosion resistant aluminum. All doors are hinged and clamped to drum by captive fasteners.

Base and Arms. Constructed of high strength corrosion resistant marine aluminum. Base assembly is weatherproof and contains motors, slip clutches, ball bearing, and sliding stop which permits horizontal rotation more than 360 degrees while providing positive mechanical stops to prevent damage to the electric cables due to excessive rotation. **Collector/Slip-Rings** and brushes can be specified to permit searchlight to turn continuously through 360 degrees (optional feature - CR). Brass construction is an optional feature (-B).

Lamp Wattages Acceptable. 19-inch searchlight up to 1500W continuous, 2000W intermittent (approx. one hour or less). 24-inch up to 2000W-continuous, 3000W intermittent.

Beam Characteristics. See table below.

Unique "Lamp Shock-Mount Design". Medium Prefocus Lampholder is mounted on a Special Shock-Absorbing Base, which helps prevent Lamp Filament Damage, due to excess Vessel Vibration and Shock.

Reflector. High quality parabolic silvered glass reflector efficiently concentrates light into a powerful beam. Circular louvers cut off unwanted front spill light.

Cover Glass. One piece heat-tempered clear glass.

Finish. Drum Interior heat resistant, flat black paint. Exterior surfaces high quality, Scratch and Salt-Resistant Powder Coat.

Anti-icing. Searchlight with sliding-stop type base can be equipped with heaters to prevent icing between rotating and fixed base, between rack and pinion, and between trunnions and drum (optional feature -H). Bases with collector rings and brushes can have heaters only between rotating gear and fixed base (optional feature -CRH).

Wiring. Multi-conductor flexible power cable extends from drum and is clamped to the rotating base. Sufficient length is supplied to terminate in a junction box (not supplied) near the searchlight without causing mechanical stress when searchlight is moved throughout its entire horizontal travel. Two single conductor power cables extend out bottom of base when collector rings and brushes are specified. Terminal block provided in base for motor and anti-icing heater wiring.

Optional Features

Searchlight can be tailored to your exact needs by specifying these features at extra charge.

Brass base and arms instead of marine aluminum. Add -B* to searchlight catalog no.

Collector/Slip-Ring Base. Provides totally uninterrupted and continuous horizontal rotation, with No End Points. Increases Safety for Marine Vessels where both Fore and Aft Illumination is important, and is critical for all Prison and Security Applications. Add -CR* to searchlight catalog number.

Anti-icing heaters. Add -H* to searchlight catalog no.

*When more than one options are selected list them alphabetically (same order as listed above) after a single hyphen. Example 19" searchlight with brass base and arms, collector rings, and anti-icing heaters is 19SL8660D-BCRH.

Selected Searchlight Lamp Data

LAMP REF. CODE	WATTS	VOLTS	BASE	19-INCH SEARCHLIGHT				24-INCH SEARCHLIGHT			
				*LIFE HRS.	** CANDLEPOWER	BEAM HOR.°	SPREAD VERT.°	** CANDLEPOWER	BEAM HOR.°	SPREAD VERT.°	
54.5 BTP	750	120	MED. PREF.	200	3,700,000	2.6	3.7	4,287,500	2.1	2.9	
68.05 BTR	1000	120	MED. PREF.	200	4,300,000	4.1	4.4	7,350,000	3.2	3.5	
73 1M/T2OBP	1000	120	MOG. BIP.	500	2,381,500	4.9	5.2	2,450,000	3.9	4.1	
FKN	1000	230	MED. PREF.	200	1,800,000	5.6	5.9	N/A	N/A	N/A	
83.7 CWZ	1500	120	MOG. PREF.	325	3,614,000	3.4	5.1	6,431,000	2.6	4.0	
85.5 CYX	2000	120	MOG. BIP.	300	NOT USED	6.6	5.1	5,512,500	5.2	4.1	

* THESE LAMP MANUFACTURER'S FIGURES ARE RELATIVE ONLY. INDIVIDUAL LAMPS MAY VARY CONSIDERABLY.

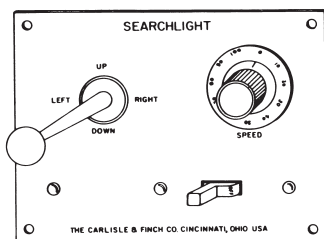
** THESE FIGURES PROVIDED TO AID IN LAMP SELECTION.

Searchlight Selection Table

Size	Searchlight Catalog No. for Lampholder Types:					Weight	lb. (kg)
Searchlight	Mog. Blp.	Mog. Pref.	Mog. Scr.	Mog. Blp. 3KW	Med. Pref.	Net*	Ship*
19-Inch	19SL8660	19SL8660A	19SL8660B	N/A	19SL8660D	131(59)	190(86)
24-Inch	24SL8659	24SL8659A	24SL8659B	24SL8659D	24SL8659E	218(99)	338(153)

* Searchlight only. Does not include control components.

Control Components

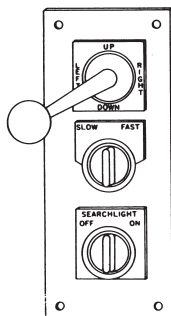


Control Station C5777-S

For distant electric control (DEC) searchlights controlled from a single remote location. See 8779X-S and 8973XS-1 for multi-station control. Single joystick controls all beam movements. Also contains power off-on switch and a device allowing operator to adjust speed of beam movement.

Mounted on bright stainless steel plate 6.00 x 8.00" (152 x 203mm). Depth clearance 3.50" (89mm). Fits enclosure 5402. Net weight 4.5 lb. (2.0 kg.).

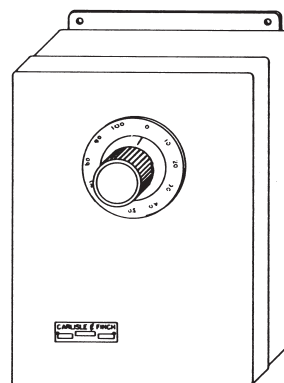
Note: Specify C5777-S-230 for 230 VAC Applications.



Control Station 8779X-S

Used when DEC searchlight is to be controlled from multiple locations. Contains searchlight off-on switch, single joystick for beam direction, and slow-fast switch to select speed of beam movements. As many stations as desired can be used with one 8973XS Control Assembly to control one DEC searchlight. Cannot be used without 8973XS.

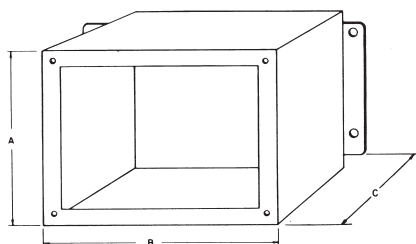
Mounted on bright stainless steel plate 3.25 x 8.00" (83 x 203mm). Depth clearance 2.75" (70mm). Fits enclosure 5079G. Net weight 1.8 lb. (0.8 kg.).



Control Assembly 8973XS-1

Used when DEC searchlights are controlled from more than one remote location. Only one required per searchlight regardless of quantity of 8779X-S control stations used with the searchlight. Steel oiltight enclosure contains circuit breaker, contactor, rectifier, relays, fuses, and external adjustment to preset the slow speed.

Enclosure size 20.00 x 16.00 x 6.62" (508 x 406 x 168 mm). Net weight 45 lb. (20 kg.).



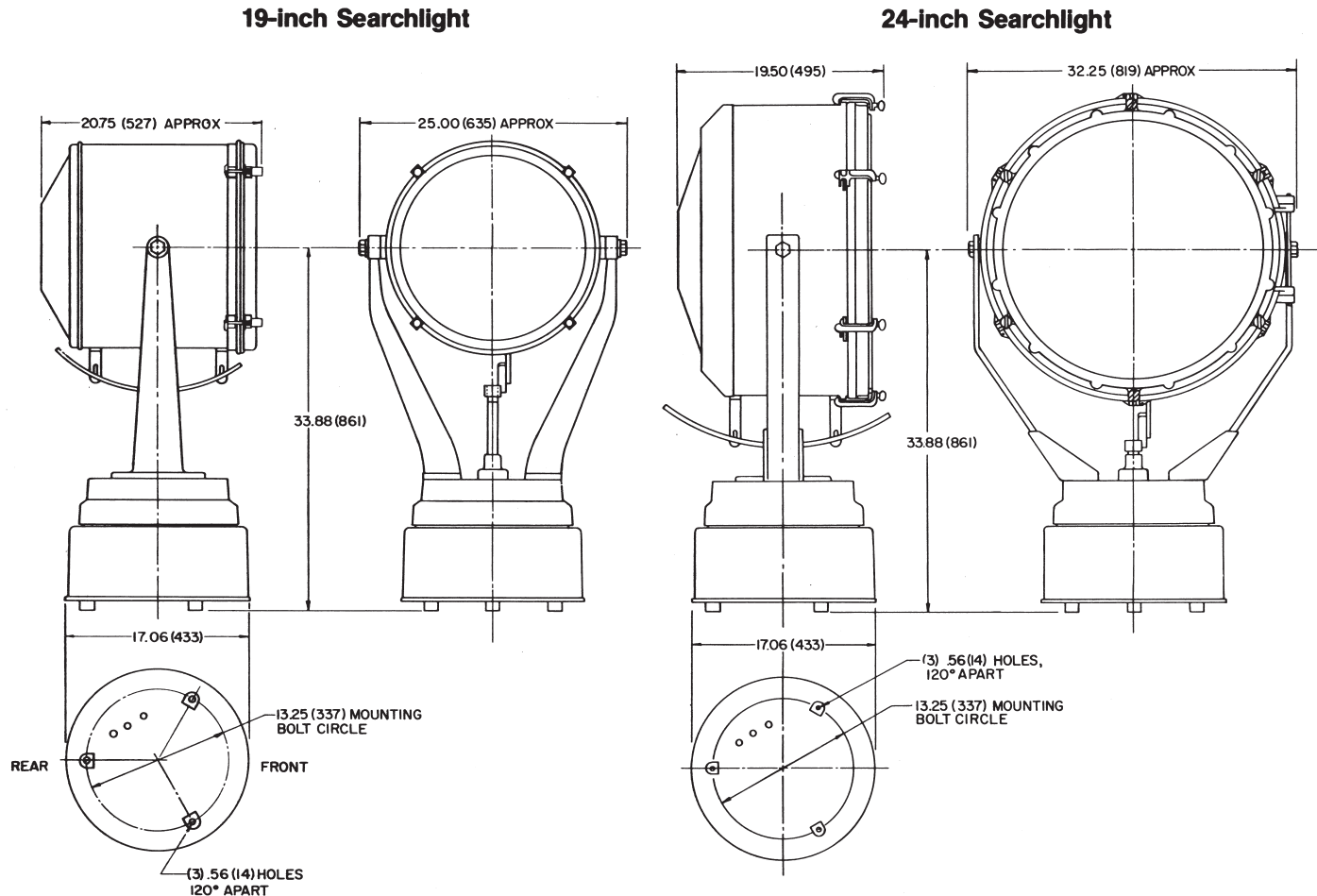
Cat. No.	Used For	Dimensions Inch (mm)			Weight	
		A	B	C	lb.	(kg)
5402	C5777-S	6.00 (152)	8.00 (203)	3.50 (89)	3.7	(1.7)
5079G	8779X-S	3.25 (83)	8.00 (203)	2.75 (70)	2.6	(1.2)

Other Accessories & Parts

Description (size searchlight)	Part No.	Description (size searchlight)	Part No.
Cover Glass (19")	EF239	Lampholder, Mog. Pref. (19/24")	SL978
Cover Glass (24")	SL547	Lampholder, Mog. Scr. (19/24")	1988
Reflector (19")	EF240	Lampholder, Med. Pref. (19/24")	SL1250C
Reflector (24")	347M	Motor, Drive (19/24")	K2315A
Lampholder, Mog. Bip. (19/24")	FE132X		

"I'll Tread Water As Long As
You Think You Can Make It Rain."
-actual country song

Searchlight Dimension Drawings inch (mm)



How to Order Searchlight Systems

Step 1: Specify Searchlight... 19 or 24-inch (See Searchlight Selection Table, page 2), with Standard or Collector/Slip-Ring Base (add "-CR" to model number for Slip-Ring Base), and select Lampholder (Medium Prefocus with Special Shock-Mount Design is recommended), and add desired Optional Features (see page 2...add suffixes to Cat. No.)

Step 2: Specify Lamp... compatible with Lampholder and Voltage (see Lamp Table, page 2).

Step 3: Specify Controls... Cat. No. C5777-S Joystick Control Station (if only one control station per searchlight is required) or Cat. No. 8973XS-1 Relay Box plus 2 or more Cat. No. 8779X-S Joystick Control Stations (if more than one control station per searchlight is required).

Sample Order of System controlled from only Single location:

19-inch with Slip-Ring Base, Medium Prefocus Lampholder: **Cat. No. 19SL8660D-CR**

Lamp, 1000 Watt, 120 VAC, Medium Prefocus: **Cat. No. BTR**

Joystick Control Station: **Cat. No. C5777-S**

Sample Order of System controlled from Multiple locations:

19-inch Searchlight with Collector/Slip-Ring Base, Anti-icing Heaters, Medium Prefocus Lampholder: **Cat. No. 19SL8660D-CRH**

Lamp, 1000 Watt, 120 VAC, Medium Prefocus: **Cat. No. BTR**

Relay Box: **Cat. No. 8973XS-1**

Joystick Control Stations (2 or more): **Cat. No. 8779X-S**

"Thank God and Greyhound You're Gone."
-actual country song

These Searchlights are designed for heavy duty marine service on commercial vessels.

Specifications

Searchlight Intensity. The beam of light is produced by a xenon arc lamp with a color temperature of 6000 degrees Kelvin and is rated at 30 Million Candle Power.

Lamp. Xenon-arc, 1500 hour average life, warranted for 1500 hours. Warranted hourly lamp cost is considerably less than non-warranted hourly carbon cost and non-warranted hourly cost of many incandescent lamps.

Adjustable Beam Size. The horizontally mounted lamp combined with the deep parabolic metal reflector gives the capability of changing from the lamp than do most concentrated intense beam for long reaches to a much larger beam for lighting large areas at closer range. Beam size can be adjusted manually at the searchlight or electrically from a remote control station as an optional feature.

Reflector. Precision, parabolic, constructed of virtually indestructible nickel with corrosion resistant rhodium finish.

Short focal length deep parabola captures a higher percentage of total light from the lamp than do most conventional reflectors thus producing a remarkably intense beam.

Cover Glass. Extremely strong impact and thermal shock resistant heat tempered clear glass.

Starter. Simple, reliable, and compact. Produces the high voltage necessary to start the lamp instantly. It is readily accessible and replaceable as a single unit.

Bases. Standard and pedestal for manual control. Motorized base for distant electric control (DEC) can be controlled from one or more remote stations. All are constructed of high strength corrosion resistant aluminum and contain a sliding stop allowing horizontal rotation in excess of 360 degrees without damaging the electric cables.

Drum. Constructed of marine grade corrosion resistant material with a hinged front door for easy lamp replacement. Rear dome is removable for ease in servicing.

Finish. Drum interior finished with heat resistant flat black paint. Exterior surfaces are white enamel and mechanical control shafts inside pilot house are polished brass. The control parts that are normally polished can be chrome plated (see optional features).

Wiring. Three conductor (one ground) power cable and multiconductor control cables extend through watertight stuffing tubes in drum and are clamped to rotating base. Sufficient length is supplied to terminate in a junction box (not supplied) near the searchlight without causing mechanical stress when searchlight is moved through its entire horizontal and vertical travel.

Electrical. A power supply to produce the required ballasted DC for the searchlight, control station, and DEC components are described on pages 3 and 4. Other DC sources with appropriate ballasts and controls may also be used—especially cost-efficient when replacing or converting existing carbon arc searchlights. Consult factory.

Controls

Please refer to page 3 for descriptions of manual control options listed below (see page 4 for electric controls).

Local Control. Fig. 1 and 2. No pilot house controls. Searchlight has training handle on drum and hand clamps to lock searchlight in any position.

Lever-Gear Control. Fig. 4, 5A and 5B. Operates conveniently with one hand. Horizontal movement controlled by pointing lever, vertical by twisting lever. Vertical lock conveniently located on control handle. Ceiling lock clamps horizontal movement.

Wheel Control. Fig. 6. Upper wheel controls horizontal movements, lower wheel vertical movements. Friction brake holds searchlight in any vertical position.

Distant Electric Control (DEC). Fig. 3. Motors in searchlight base control horizontal and vertical beam movements so that searchlight can be located any distance from pilot house. Dynamic braking stops beam movement instantly upon controller release. Page 4 shows controllers and control stations for both single-station and multiple-station systems. These components priced separately.

Distant Mechanical Control (DMC). Fig. 7A and 7B. Similar to lever-gear or wheel except that control shafts are at right angle to searchlight base.

Optional Features

Searchlight can be tailored to your exact needs by specifying these features at time of order at extra charge.

Special control length longer or shorter than standard. Specify length from bottom of base (vertical centerline of base if DM) to centerline of lever handle or large wheel.

Special pedestal height higher or lower than standard. Specify height from bottom of base to centerline of beam.

Brass base and yoke instead of marine aluminum. Add -B to searchlight cat. no.

Remote focus. Add -RF to searchlight cat. no.

Chromium plated pilot house controls. Add -CC to cat. no.

Anti-icing heaters. Supplied on DEC searchlights only. Add -H to cat. no.

See "How to Order" on page 4.

Searchlight Selection Table

Control	Base	Searchlight Catalog No.*	Weight lb. (kg)	
			*Net	*Ship
Local	Standard (fig. 1)	X4197	65 (29)	90 (41)
	Pedestal (fig. 2)	X4790	80 (36)	105 (48)
Lever-Gear (fig. 4 or 5)	Standard (fig. 1)	X9396LG	80 (36)	105 (48)
	Pedestal (fig. 2)	X4785LG	95 (43)	125 (57)
Wheel (fig. 6)	Standard (fig. 1)	X9396W	80 (36)	105 (48)
	Pedestal (fig. 2)	X4785W	95 (43)	125 (57)
Distant Mechanical Lever-Gear Wheel	DM (fig. 7B)	X9397LG	100 (45)	130 (59)
	DM (fig. 7A)	X9397W	100 (45)	130 (59)
Distant Electric	DE (fig. 3)	X9398	131 (59)	200 (91)

*Searchlight only. Does not include power supply or accessories.

Dimension Drawings Inch (mm)

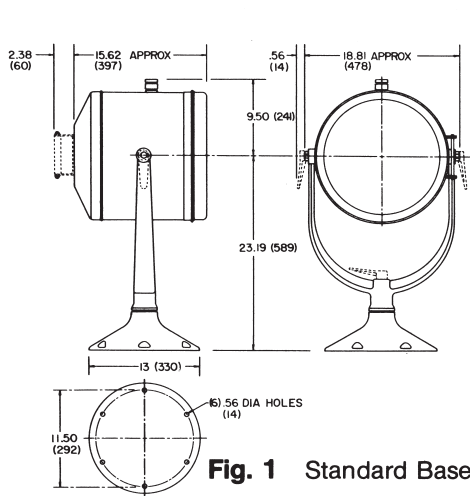


Fig. 1 Standard Base

Combine base and control figures for complete searchlight. (except DEC)

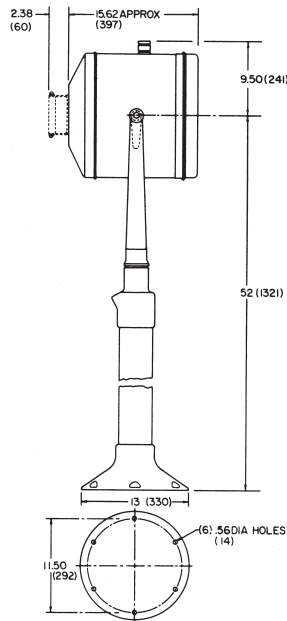


Fig. 2 Pedestal Base

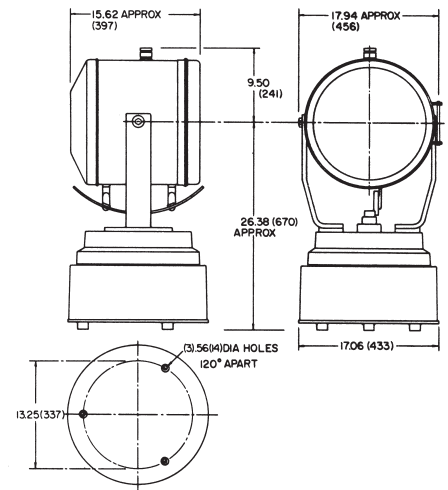


Fig. 3 Distant Electric Control (DEC)

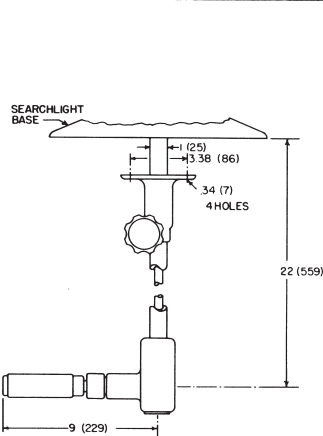


Fig. 4 Lever-Gear Control

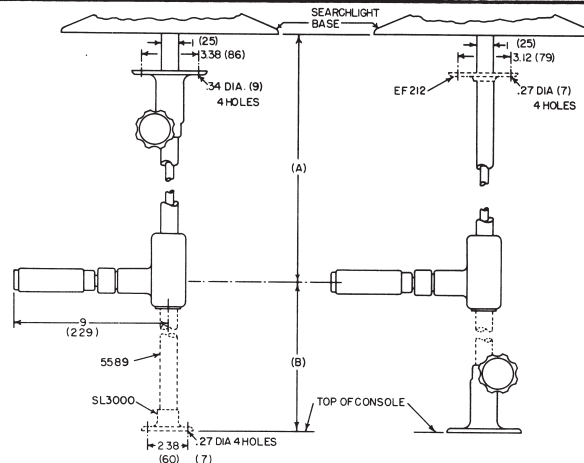


Fig. 5A

Fig. 5B

Alternate arrangements for lever-gear control with extra long control shafts. Parts shown as dashed lines priced separately.

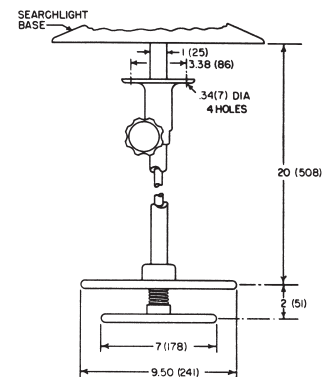


Fig. 6 Wheel Control

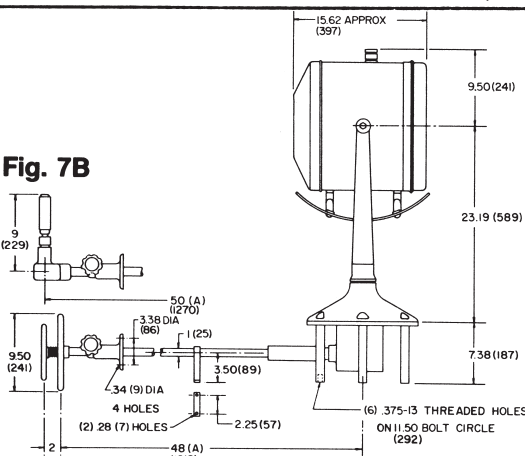


Fig. 7B

Fig. 7A Distant Mechanical Control (DMC)

Power Supply 4198PS

Operates on AC 120/1/50-60 to provide ballasted DC power to the searchlight. Also contains fused disconnect switch, contactor, DC ammeter, and time meter.

Net weight 99 lb (50 kg), shipping 131 lb (59 kg).

Optional Deck Stand Kit 6810X.

Available at extra charge to permit power supply to be mounted on deck instead of bulkhead. Shown in fig. 8.

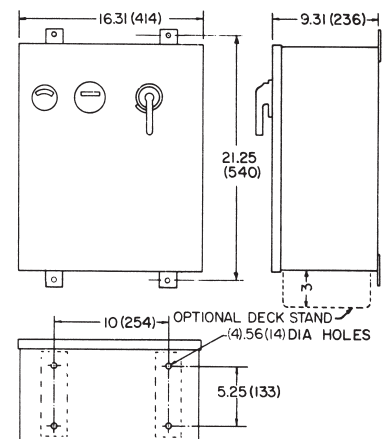


Fig. 8 Power Supply

Control Components

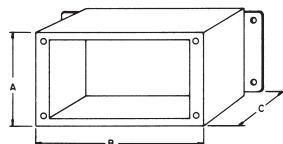


Control Station

4441X (without remote focus)
4441X-RF (with remote focus)

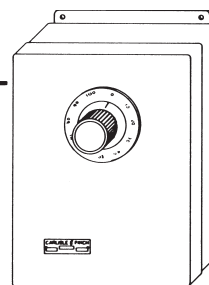
For manual control searchlights. Contains searchlight off-start switch, standby switch, and remote focus switch (if specified). Mounted on bright stainless steel plate 3.12" x 5.62" (79 x 143). Depth clearance 2.5" (64).

Net weight 1.00 lb (0.40 kg).



Optional Enclosures for Control Stations

Cat. No.	Used for	Dimensions inch (mm)		
		A	B	C
5079A	4441X,-	3.25(83)	5.75(146)	2.75(70)
5288	C5388,-	6.00(152)	8.00(203)	3.50(89)
9824	4799X,-	6.00(152)	6.00(152)	4.00(102)

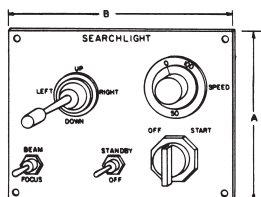


8672X (without speed control)
8672XS (with speed control)

Used when DEC searchlights are controlled from more than one remote location. Only one required per searchlight regardless of quantity of 4799X type control stations used. Steel oiltight enclosure contains rectifier, relays, fuses, etc. In addition 8672XS contains beam speed control devices with external adjustment to preset the slow speed.

Enclosure size 12 x 10 x 5" (305 x 254 x 127 mm). Net weight 19.4 lb (8.80 kg).

Distant Electric Control Stations



Two types: 1) when searchlight is controlled from one location only and 2) when searchlight is controlled from more than one location. In each the basic station is a compact unit incorporating OFF-ON switch, UP-DOWN-LEFT-RIGHT joystick controller, and STANDBY-OFF switch. Operator can change searchlight aim with beam off when switch is on "Standby."

Optional controls are: 1) Remote Focus to change beam size and 2) Speed Control to change speed of beam travel. Remote focus requires searchlight also to be equipped with remote focus option. Speed control requires no additional feature in searchlight.

TABLE I SINGLE-STATION CONTROLS

Cat. No.	Options		Dimensions		Depth	Weight
	Remote Focus	Speed Control	Inch (mm) A	Inch (mm) B		
C5388	No	No	6(152)	8(152)	3.5(89)	4.8(2.18)
C5388-RF	Yes	No	6(152)	8(152)	3.5(89)	4.8(2.18)
C5388-RFS	Yes	Yes	6(152)	8(152)	3.5(89)	7.3(3.31)

TABLE II MULTI-STATION CONTROLS

Cat. No.	Options	Dimensions		Depth	Weight
		Inch (mm) A	Inch (mm) B		
4799X	8672X	6(152)	6(152)	3.12(79)	2.5(1.14)
4799X-RF	8672X	6(152)	6(152)	3.12(79)	2.5(1.14)
4799X-RFS	8672XS	6(152)	6(152)	3.12(79)	5.0(2.27)

Other Accessories & Parts

Description	Part No.	Description	Part No.	Description	Part No.
Capacitor (starter)	2896	Cover Glass	SL1085	Lamp	1000TRC
Capacitor (power)	4404X	Fan	4434X	Reflector	9719X
Capacitor (power)	4405	Gasket (std & ped base)	SL3356	Starter Assembly	4636X

How to Order Searchlight Systems

A minimum of 3 components must be specified separately to order a complete searchlight system: 1) searchlight from table on page 2 (including suffix for optional feature(s)), 2) power supply described on page 3, and at least one operator's control station from those described on page 4. Distant electric control searchlights to be controlled from more than one remote location also require one 8672X type control assembly (described on page 4) to consolidate signals from the multiple control stations.

Example of manual control searchlight order:

- 2 X9396LG-CCRF 500W xenon searchlight, standard base, with remote focus and chrome plated lever-gear controls 46 inches longer than standard, arranged per dimension fig. 5A, complete with 5589 stem and SL3000 bearing.
- 2 4198PS 500W xenon power supply.
- 2 4441X-RF control station with remote focus.

Example of order for DEC system:

- 2 X9398-HRF 500W xenon searchlight, DEC, with anti-ice heaters and remote focus.
- 2 4198PS 500W xenon power supply.
- 2 8672XS control assembly with speed control.
- 4 4799X-RFS control station for multiple control of DEC xenon searchlight with remote focus and speed control.

1000 Watt Xenon Electric Control Searchlight

80 Million Candlepower... with “Proportional-Speed Joystick”

Features

- **80 Million Beam Candlepower...** Powerful Beam services a distance of approx. 5 Miles on a clear night!
- **Remote Electric Beam-Size Focus...** Beam can be instantly narrowed or widened, with remote electric switch, throughout a continuous spectrum, on demand.
- **Advanced Proportional-Speed Joystick...** Beam-Speed and Beam-Direction are controlled simultaneously with one hand, while operator uses free hand to steer vessel or hold binoculars... “move the Joystick to the first position and it will move slowly... move it further and it speeds up!”
- **Fast Searching Capability...** Beam-speed is a approximately 30 degrees per second, providing a quick and accurate search.
- **Manual Focus Back-up Knob ...** External Knob changes changes the Beam-Size with no tools, if Focus Motor Fails.
- **Beyond Full Circle of Rotation...** Unique Sliding-Stop Design allows 385 Degrees horizontal motion.
- **Anti-corrosive Design...** Marine Grade Aluminum and Stainless Steel with High Quality Salt-Resistant Powder Coat Finish
- **Optional Azimuth Indication...** LCD Display provides digital read out in Degrees for Horizontal Motion.



United States Coast Guard Approved
Searchlight for Marine Applications

Powerful Searchlight for Marine Applications

This “USCG-Approved Fixture”, with assigned “U.S. Military National Stock Number” (NSN: 6220-01-331-5923), is a Powerful, Rugged Design, composed of Marine Grade Aluminum and Stainless Steel, with a High Quality Salt and Scratch-Resistant Powder Coat Finish. The Indestructible, Nickel Reflector produces a precision 1-Degree Beam at a Powerful 80 Million Beam Candlepower. The Advanced Joystick changes the Beam-Speed and Beam-Direction simultaneously, requiring only one hand of operation (this technology eliminates a separate speed dial which requires two hands of operation!). The Searchlight Focus has Safety Back-up, with no tools required (if the Focus Motor fails, the Beam-Size can be adjusted quickly and easily, with an external focus knob). The Searchlight is mounted on a rugged base, which includes ball bearings held captive within stainless steel races, producing greater than 385 Degrees of Horizontal Rotation with unique sliding stop. Top Beam-speed is a rapid 30 Degrees per second. Each control station will provide Remote Electric Beam-Size Focus, Beam-ON/OFF Control, Beam-ON Indication Light and the Advanced Joystick which controls Beam-Speed and Beam-Direction concurrently, using only one hand of operation!

“Proportional-Speed Joystick”

Beam-Speed and Aiming Control are built into Joystick... providing Single-hand Control



The Carlisle & Finch Company has developed a Sleek “Proportional-Speed” Joystick Control Station. The Beam-Speed and Beam-Direction functions are built into the Joystick (move the Joystick to the first position, and the Beam moves slowly... move it further, and the Beam speeds up!). This capability eliminates the need for a separate Speed Dial or Fast/Slow switch, which requires two hands of operation (i.e. one hand on Joystick and one hand one on Speed Dial). Now the operator can now use his/her free hand to steer the vessel, hold binoculars or hold a firearm. Additional functions are: Beam-ON, Beam-OFF, Electric Beam-size Focus, Advanced Joystick (described above), and a Beam-On Indicator light offered on control stations mounted inside, out of the weather.

1 KW & 2.5KW Xenon Searchlight Systems

These Searchlights are designed for heavy duty marine service on oceangoing vessels.

Specifications

The xenon arc lamp and precision deep parabolic reflector combine to produce a range of 5 miles or more on a clear dark night. The 1 KW searchlight lamp produces in excess of 65 million candela and the 2.5KW over 130 million. These very intense beams, with a color approaching that of sunlight, are particularly effective in areas of dense fog. They are also excellent for searching out ice floes in polar regions.

Lamp. 1000 watt or 2500 watt xenon arc depending upon searchlight selected, over 1500 hours average life, warranted for 1500 hours.

Adjustable Beam Size. The horizontally mounted lamp combined with the deep parabolic metal reflector gives the capability of changing from the most concentrated intense beam for long reaches to a much larger less intense beam for lighting large areas at closer range. Beam size can be adjusted manually at the searchlight or electrically from the operator's control station(s) as an optional feature (optional feature - RF).

Reflector. Precision, parabolic, constructed of virtually indestructible nickel with corrosion resistant rhodium finish. Short focal length deep parabola captures a higher percentage of total light from lamp than do most conventional reflectors thus producing a remarkably intense beam.

Cover Glass. Extremely strong impact and thermal shock resistant heat-tempered glass mounted in a spring loaded front door which relieves drum internal pressure in the rare event of lamp failure.

Starter. Simple, reliable, and compact. Produces the high voltage necessary to start the lamp instantly. It is readily accessible and replaceable as a single unit.

Bases and Arms. Rotating base supported on ball bearings for easy movement. Sliding stop permits horizontal rotation in excess of 360 degrees but limits motion to prevent cable damage by excessive windup. Standard construction is heavy section cast aluminum. Cast brass can be specified at extra charge (optional feature - B).

Drum. Corrosion resistant aluminum with hinged front door for easy lamp replacement. Rear cover removable for ease in servicing the starter, fan, and focus assembly.

Finish. Drum interior finished with heat-resistant flat-black paint. Exterior surfaces are white enamel. Manual beam direction controls inside pilot house are polished brass. They can be chrome plated at extra charge (optional feature - CC).

Wiring. Single conductor lamp cables, ground conductor, and multi-conductor control cables extend through watertight stuffing tubes in drum and are clamped to rotating base. Sufficient length is supplied to permit full horizontal and vertical searchlight movement without causing mechanical stress to cables terminated in junction box (not supplied) near searchlight.

Anti-icing. Can be equipped with heaters to prevent icing between rotating and fixed base, between rack and pinion, and between trunnions and drum (optional feature - H).

Electrical. Xenon lamps require ballasted direct current. The power supplies described on page 5 operate on 3-phase input of various voltages to produce proper lamp current, reduced control voltage, and (when specified) heater power. Operator control stations and related components are described on page 4.

Controls

Manual control parts ruggedly constructed of brass. See page 4 for electrical control stations for both manual and distant electrical controlled searchlights.

Local Control. Fig. 1. No pilot house controls. Searchlight can be clamped in any position. Handle is provided for aiming the searchlight.

Wheel Control. Fig. 2. Upper wheel controls horizontal movement, lower wheel controls vertical movement. Friction brake holds searchlight in any vertical position. Horizontal movement locked by conveniently located clamp.

Lever-Gear Control. Fig. 3, 4A and 4B. Operates conveniently with one hand. Horizontal movements controlled by pointing lever. Vertical movements controlled by twisting lever. Vertical lock conveniently located on control handle. Horizontal movement locked by conveniently located clamp.

Distant Mechanical Control. Fig. 5A and 5B. Control shafts 90° to searchlight vertical centerline. Wheel type or lever-gear control can be selected. Additional 90° gear box can be supplied at extra charge (Fig. 6A, 6B).

Distant Electric Control. Fig. 7. Motors in searchlight base control horizontal and vertical beam movements so that searchlight can be located any distance from control location. Dynamic braking stops beam movement instantly upon release of controller. See page 4 for control stations which are priced separately. Systems are available to control searchlight from more than one remote station. Some stations incorporate speed control—fast beam movement for long swings and slow for pin-pointing targets at long range.

Optional Features

Searchlight can be tailored to your exact needs by specifying these features at time of order at extra charge.

Special manual control length longer or shorter than standard. Specify length from bottom of base (vertical centerline of base if distant mechanical control) to centerline of lever handle or large wheel.

Vibration/Shock Kit. Helps prevent lamp breakage due to excess vibration and shock. Add kit number V244IX.

Beam Speed Control. See control stations, page 4.

Chromium plated pilothouse controls. Add - CC* to searchlight cat. no.

Advertising Effects. Searchlight beam sweeps back and forth across sky drawing attention to vessel and making evening more festive for passengers. Add -E* to searchlight cat. no. and include kit no. 10961X.

Anti-icing heaters. Add - H* to searchlight cat. no.

Pointer to indicate horizontal aim of distant electric control searchlights. Add - P* to searchlight cat. no.

Remote focus to change beam size from operator's control station(s). Add - RF* to searchlight cat. no.

*When more than one option are selected list them alphabetically (same order as listed above) after a single hyphen (-) in the cat. no. suffix. Example: Cat. No. for 2.5KW searchlight with chrome lever-gear controls and remote focus is XE5203LG-CCRF.

Searchlight Selection Table

Control		1KW Searchlight			2.5KW Searchlight		
		Cat. No.	Weight lb (kg)		Cat. No.	Weight lb (kg)	
			Net*	Shipping*		Net*	Shipping*
Local	Fig. 1	XE9663	115(52)	185(84)	XE5202	145(66)	215(98)
Wheel	Fig. 2	XE9664W	130(59)	200(91)	XE5203W	160(73)	230(104)
Lever-Gear	Fig. 3	XE9664LG	130(59)	200(91)	XE5203LG	160(73)	230(104)
Distant Mechanical							
Wheel	Fig. 5A	XE9665W	175(79)	250(114)	XE5204W	205(93)	280(127)
Lever-Gear	Fig. 5B	XE9665LG	175(79)	250(114)	XE5204LG	205(93)	280(127)
Distant Electric (DEC)	Fig. 7	XE9666	155(70)	230(104)	XE5205	185(84)	260(118)

*Searchlight only. Does not include power supply or other accessories.

Searchlight Dimension Drawings inch(mm)

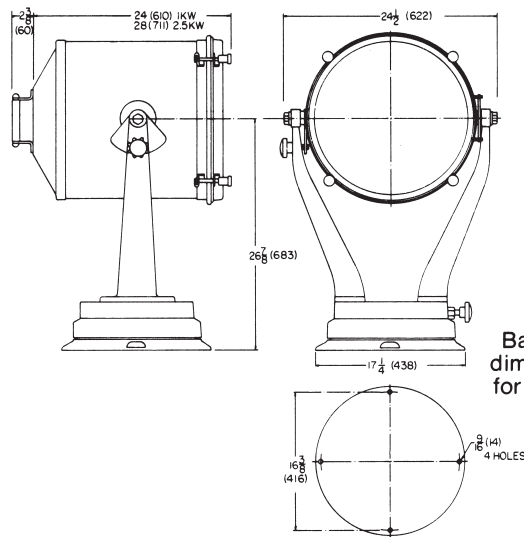


Fig. 1 Local Control

Base mounting dimensions same for Fig. 1, 2, & 3.

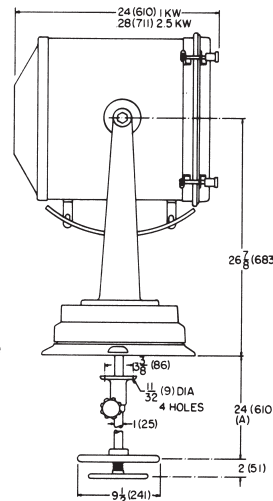


Fig. 2 Wheel Control

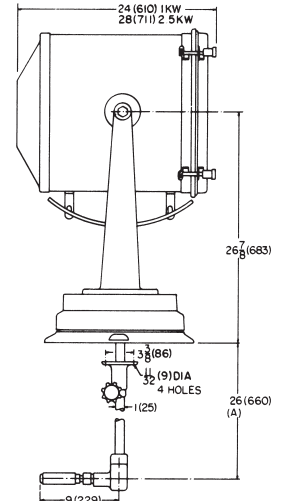


Fig. 3 Lever-Gear Control

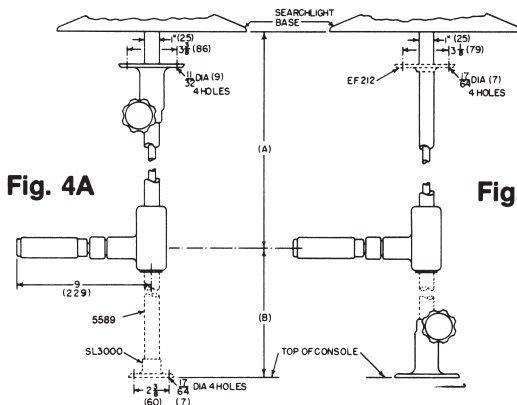


Fig. 4A

Fig. 4B

Alternate arrangements for lever-gear control with extra long control shafts. Parts shown as dashed lines priced separately.

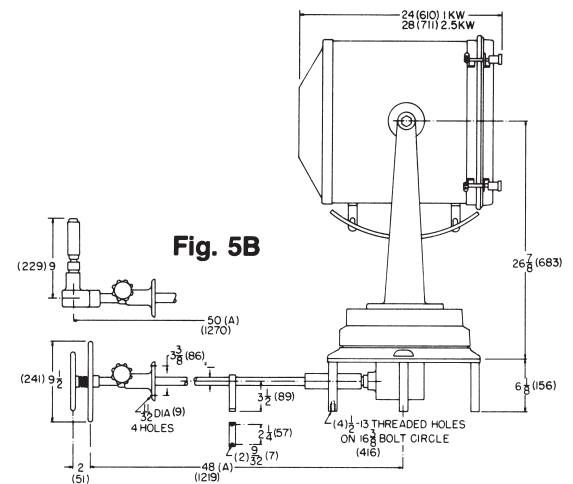


Fig. 5A Distant Mechanical Control (DMC)

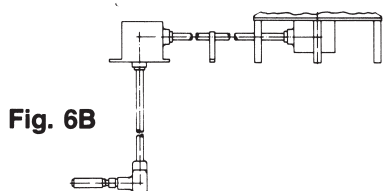


Fig. 6B

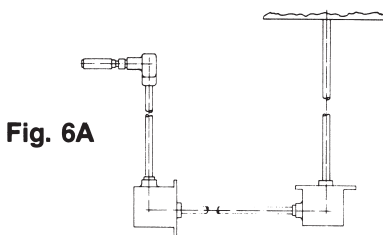


Fig. 6A

Alternate distant mechanical control arrangements. Others possible consult factory.

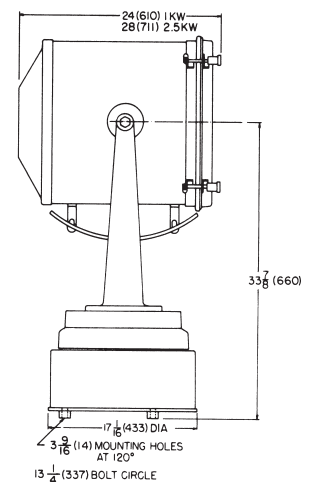


Fig. 7 Distant Electric Control (DEC)

Control Components

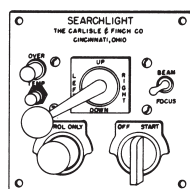


Control Station

9754X (without remote focus control)
9754X-RF (with remote focus control)

For manual control searchlights. Contains selector switch, light to indicate if searchlight or power supply is too hot, indicator light test switch, switch for remote focus control (if specified).

Mounted on bright stainless steel plate 3-1/8 x 5-5/8" (79 x 143 mm). Depth clearance 2-1/2" (64 mm). Fits enclosure 5079A. Net weight 1.00 lb (0.45 kg).



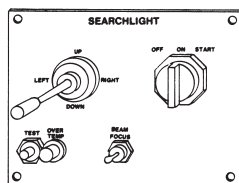
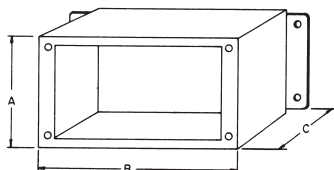
Control Station

9815X (without remote focus control)
9815X-RF (with remote focus control)

Used when DEC searchlight is to be controlled from multiple locations. Contains searchlight off-start switch single joystick for beam direction, over-temp light and test switch, switch to allow searchlight positioning with beam off, and remote focus control switch (if specified). As many stations as desired can be used with one 8672X Control Assembly to control one DEC searchlight.

Mounted on bright stainless steel plate 6 x 6" (152 x 152 mm). Depth clearance 3-1/8" (79 mm). Fits enclosure 9824. Net weight 2.5 lb (1.14 kg).

Optional Enclosures for Control Stations

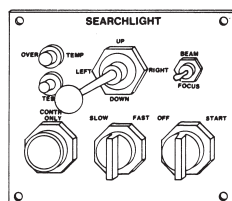


Control Station

C5268 (without remote focus control)
C5268-RF (with remote focus control)

For distant electric control (DEC) searchlights using only a single control station. See 9815X type stations and 8672X type control assembly for multi-station control. Single joystick controls all beam movements. Also contains off-on-start switch, over-temp indicator light and test switch, and remote focus control switch (if specified).

Mounted on bright stainless steel plate 6 x 8" (152 x 203 mm). Depth clearance 3-1/2" (89 mm). Fits enclosure 5288. Net weight 4.8 lb (2.18 kg).

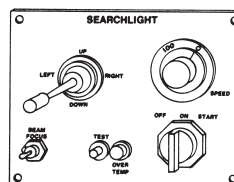


Control Station, Speed Control

9815X-RFS (with remote focus control)

Same as 9815X/9815X-RF except with addition of slow-fast switch to select speed of beam movements. As many stations as desired can be used with one 8672XS Control Assembly to control one DEC searchlight.

Mounted on bright stainless steel plate 6-1/4 x 7-1/4" (159 x 184 mm). Depth clearance 3" (76 mm). Fits enclosure 5079H. Net weight 5.0 lb (2.27 kg).

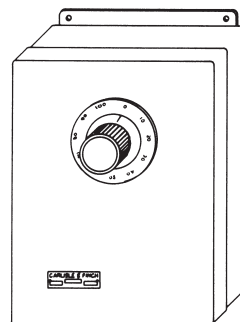


Control Station, Speed Control

C5268-RFS (with remote focus control)

For DEC searchlights using only a single control station. See 9815X type stations and 8672X type control assembly for multi-station control. Similar to C5268/C5268-RF except with addition of a device allowing operator to adjust speed of beam movements.

Mounted on bright stainless steel plate 6 x 8" (152 x 203 mm). Depth clearance 3-1/2" (89 mm). Fits enclosure 5288. Net weight 4.8 lb (2.18 kg).



Control Assembly

8672X (without speed control)
8672XS (with speed control)

Used when DEC searchlights are controlled from more than one remote location. Only one required per searchlight regardless of quantity of 9815X type stations used with the searchlight. Steel oiltight enclosure contains rectifier, relays, fuses, etc. In addition 8672XS contains beam speed control devices with external adjustment to preset the slow speed.

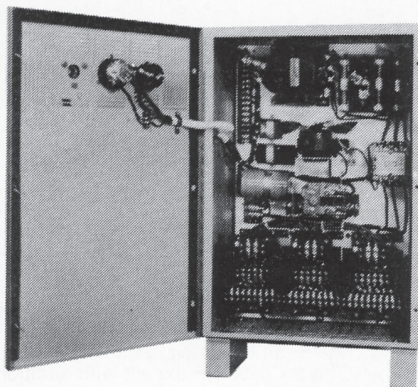
Enclosure size 12 x 10 x 5" (305 x 254 x 127 mm). Net weight 19.4 lb (8.80 kg).

Cat. No.	Used for	Dimensions inch (mm)			Weight	
		A	B	C	lb.	(kg)
5079A	9754X,-RF	3-1/4 (83)	5-3/4 (146)	2-3/4 (70)	2.4	(1.09)
5079H	9815X,-RFS,-S	6-1/4 (159)	7-1/4 (184)	3 (76)	4.6	(2.09)
5288	C5268,-RF,-RFS,-S	6 (152)	8 (203)	3-1/2 (89)	5.4	(2.45)
9824	9815X,-RF	6 (152)	6 (152)	4 (102)	3.8	(1.73)

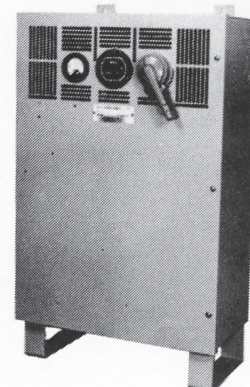
Other Accessories & Parts

Description	Catalog No.		Description	Catalog No.	
	1KW	2.5KW		1KW	2.5KW
Cover Glass	EF239	EF239	Reflector	9719X	5377X
Fan Assy (SL)	9615X	9615X			
Fan Motor (PS)	8036	8036			
Lamp, Xenon	1000TRC	7500	Starter Assy	9748X	9748X

Xenon Power Supplies



Power Supply
on optional deck stand



Completely self-contained compact units provide all necessary equipment to supply and control xenon searchlights from 3-phase AC input.

Designed for bulkhead or deck mounting (optional) with these important features:

Fused Disconnect Switch interlocked with door secures equipment when not in use and for safe maintenance.

AC Magnetic Contactor with separately fused reduced voltage 3-wire control is provided to switch searchlight on and off. Off-on controls not part of power supply. See control stations on page 4.

DC Ammeter continuously indicates lamp current.

Coarse and Fine Current Adjustments conveniently made on terminal boards provide proper lamp current for input voltages ranging above and below nominal AC supply.

Air Flow Monitor signals insufficient air flow.

Line Current Monitor signals overloaded transformer.

Reactance Ballasting provided by special transformers eliminates need for inefficient heat-producing resistance ballast.

3-Phase Silicon Rectifier capable of withstanding high voltage transients sometimes associated with ignition.

Elapsed Time Meter automatically records xenon lamp usage to indicate when lamp should be replaced and help substantiate claims for xenon lamps under warranty.

Terminals provided for all external connections to AC input, DC output, pilot controls and ground.

Ease of Maintenance. Full sized hinged front door swings clear to allow easy removal of individual components front-mounted on panel.

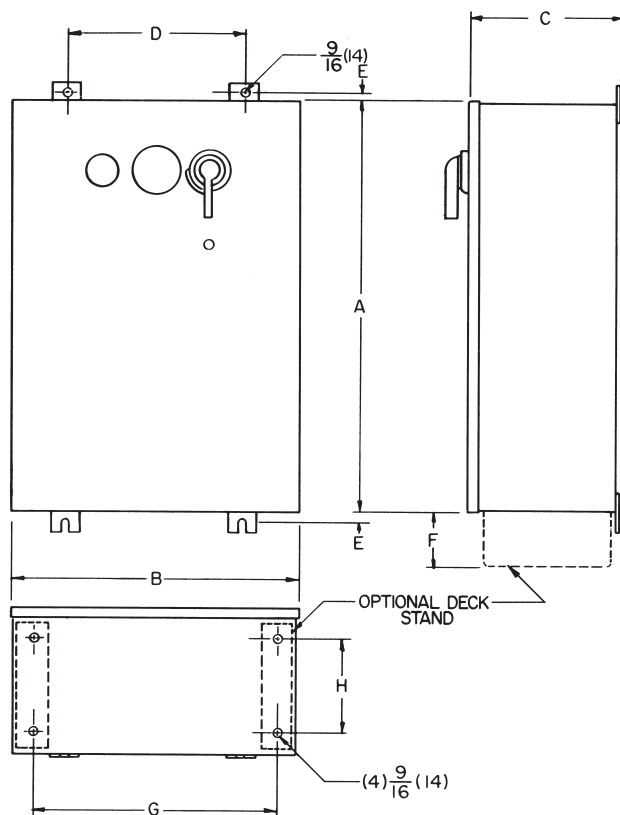
Optional Heater Supply available at extra charge. Larger capacity transformer producing 120 VAC wired to switch, indicator light, and terminals for connection to anti-ice heaters in searchlight. Specify by adding suffix -H to catalog numbers in selection table.

Optional Deck Stand Kit, cat. no. 5287X, available at extra charge to permit power supply to be mounted on deck instead of bulkhead.

Power Supply Selection Table

Nominal AC Supply	1KW Power Supply			2.5KW Power Supply		
	Cat. No.	Weight lb (kg)		Cat. No.	Weight lb (kg)	
		Net	Shipping		Net	Shipping
230/3/60	5275PS2	195(88)	220(100)	5206PS2	255(116)	335(152)
380/3/50	5275PS3	195(88)	220(100)	5206PS3	255(116)	335(152)
460/3/60	5275PS4	195(88)	220(100)	5206PS4	255(116)	335(152)
575/3/60	5275PS5	195(88)	220(100)	5206PS5	255(116)	335(152)

Power Supply Dimensions



Dimensions inch (mm)

	1KW	2.5KW
A	29-1/2 (749)	33-1/2 (851)
B	20-5/16 (516)	22-5/16 (567)
C	10-7/16 (265)	10-7/16 (265)
D	12-1/2 (318)	16 (406)
E	3/4 (19)	3/4 (19)
F	4 (102)	4 (102)
G	17-1/4 (438)	19-1/4 (489)
H	6-5/8	6-5/8

How to Order Searchlight Systems

A minimum of 3 components must be specified separately to order a complete searchlight system: (1) A searchlight from the selection table on page 2 (including suffix for optional feature(s)), (2) power supply from the selection table on page 5 with suffix -H if heater supply is desired and (3) at least one operator's control station from those described on page 4. Distant electric control searchlights to be controlled from more than one remote location also require one 8672X type control assembly (described on page 4) to consolidate signals from the multiple control stations. Although each required component can be specified by a unique catalog number, it is recommended that, to avoid mistakes, a brief description of the equipment wanted be given in addition to the quantity desired and its catalog number.

Example of manual control searchlight order:

- 2 XE9664LG-CCRF 1KW xenon searchlight with remote focus and chrome plated lever-gear controls 46 inches longer than standard, arranged per Dimension fig. 4A, complete with 5589 stem and SL3000 bearing.
- 2 5275PS4 1KW xenon power supply to operate from 460/3/60 input.
- 2 9754X-RF Control station with remote focus.

Example of order for DEC system:

- 2 XE5205-BHRF 2.5KW xenon searchlight, DEC with brass bases and arms, anti-ice heaters and remote focus.
- 2 5206PS2-H 2.5KW xenon power supply with heater circuit to operate from 230/3/60.
- 2 8672XS control assembly with speed control.
- 4 9815X-RFS control station for multiple control of DEC xenon searchlight with remote focus and speed control.

For Navigation Lights on Vessels Over 20 Meters (65.6 ft.) in Length

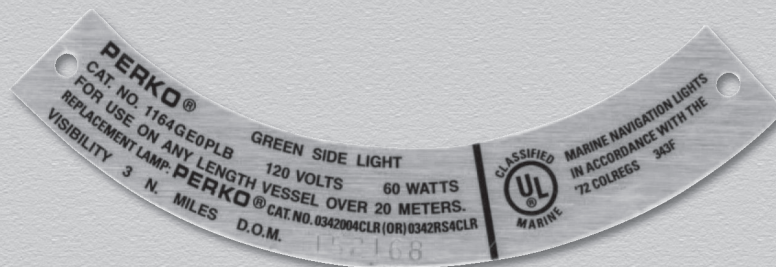
On March 31, 1977, the U.S. Coast Guard published, in the Federal Register, an amendment to the navigation and navigable water regulations which added a new subchapter DD, (33 CFR 87). This subchapter contains rules implementing and interpreting the International Regulations for Preventing Collisions at Sea, 1972 ('72 COLREGS). The International Regulations for Preventing Collisions at Sea, 1960, were replaced by the '72 COLREGS at 1200 hours, zone time on July 15, 1977. Therefore, all vessels on the high seas must comply with the '72 COLREGS at this time. In addition, with the enactment of the U.S. Inland Navigation Rules Act of 1980, the Inland Rules, Western Rules, and Great Lakes Rules were unified into a single set of requirements. The effective date for this legislation was December 24, 1981 (March 1, 1983 for Great Lakes). Therefore, all vessels must comply with these rules at this time.

Rules 21 and 22 of the '72 COLREGS and the U.S. Inland Navigation Rules give the color and range requirements for various navigation lights. Annex 1 to the '72 COLREGS and the U.S. Inland Navigation Rules gives positioning and technical details for these lights.

U.S. Coast Guard Acceptance of Navigation Lights

All U.S. Registered vessels are subject to either the '72 COLREGS or the U.S. Inland Rules. The U.S. Coast Guard is accepting lights that have passed the UL tests (UL Standard 1104) as meeting the '72 COLREGS and the U.S. Inland Rules for vessels over 20 meters (65.6 ft.) in length. U.S. requirements for smaller vessels are less strict. As the first domestic manufacturer to pass UL 1104, PERKO's lights can be installed on vessels over 20 meters (65.6 ft.) in length. Some models are designed for use on vessels over 20 meters (65.6 ft.) in length, while others are designed for use on vessels 20 meters (65.6 ft.) to 50 meters (164.0 ft.) in length.

A brass tag is permanently affixed to the light indicating the type of light, catalog number, voltage and bulb type to install to meet the visibility requirements. It also states that the light is classified by UL in accordance with the '72 COLREGS. This is the only documentation needed by a vessel for navigation lights to certify light construction compliance with the '72 COLREGS and the Inland Navigation Rules, and eliminates the former "Certificate of Compliance".

**Each Light Has Its Own Serial Number For Identification.**

The lights indicated for use on vessels over 20 meters (65.6 ft.) in length have passed UL 1104. The facsimile of the tag shown above is used on our cast bronze lights. Similar rectangular tags are used on other style lights.

Please note that any changes made to PERKO navigation lights, including substitution of bulbs other than those shown in our catalog, instruction sheets, or metal tags (affixed to some lights) will void all certifications and U.S. Coast Guard acceptance.

For the present, the U.S. Coast Guard will not publish a list of UL classified lights. However, field offices have been notified. For more detailed information, consult the complete '72 COLREGS, the U.S. Inland Navigation Rules, and your local U.S. Coast Guard office.

Special Purpose Lights

Other lights (not shown) for use where the vessel is subject to special local requirements are available. Contact PERKO for further information.

NAVIGATION LIGHT SELECTION CHART

FOR COMMERCIAL POWER DRIVEN VESSELS OVER 20 METERS (65.6 Ft.) IN LENGTH.

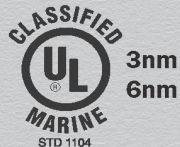
This Chart is Provided as a guide for Light Selection, Not Positioning. Refer to the "72 COLREGS and the U.S. Inland Navigation Rules for positioning Details. Depending Upon the Activity of the Vessel, It May be Required to Carry a Combination of Several of the Types of Lights Listed Below. Consult your Local U.S. Coast Guard Office for Specific Vessel Requirements. Refer to Product Listings for Specific Visibility Arc and Range Requirements.

VESSEL ACTIVITY AND SIZE		LIGHTING CODES
Power driven, underway and making way.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length.	SL, SN, M
Power driven, underway and making way.	Vessels over 50 Meters (164.00 ft.) in length.	SL, SN, M, MR
Towing by pushing ahead (COLREGS)	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, SN, 2M SL, SN, 2M, MR SL
Towing by pushing ahead (Inland) Note: Tug and Barge rigidly connected in a composite unit. Same as power driven vessel above	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, 2T, 2M SL, 2T, 2M, MR SL
Towing Alongside (COLREGS)	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, SN, 2M SL, SN, 2M, MR SL, SN
Towing Alongside (Inland)	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, 2T, 2M SL, 2T, 2M, MR SL, SN, SF
Towing Astern, tow length less than 200 meters (656.0 ft.) in length.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, T, 2M SL, T, 2M, MR SL, SN
Towing Astern, tow length over 200 meters (656.0 ft.) in length.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length. Barges	SL, T, 3M SL, T, 3M, MR SL, SN
Fishing, engaged, underway and making way with nets or lines astern.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length.	SL, SN, RW SL, SN, 3M, RW
Fishing, engaged, underway and making way "trawling" dragging a dredge net.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length.	SL, SN, GW SL, SN, 3M, GW
Fishing, engaged, underway and making way with an obstruction over the side more than 150 meters (492.0 ft.).	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length.	SL, SN, RW, W SL, SN, MR, RW, W
Fishing, engaged, not making way or at anchor.	Vessels of any length.	RW
Restricted in maneuverability making way.	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length.	SL, SN, M, RWR SL, SN, MR, RWR
Restricted in maneuverability not making way.	Vessels of any length.	RWR
Restricted in maneuverability not making way with an obstruction over the side.	Vessels of any length. Obstruction such as a pipeline.	RWR, 2R, 2G Y (See COLREGS for Details)
Restricted in maneuverability and towing.	See "towing" above for running and towing light requirements.	RWR
At Anchor	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels 50 Meters (164.00 ft.) to 100 Meters (328.0 ft.) in length. Vessels over 100 Meters (328.0 ft.) in length.	W W, W/A W, W/A, WL
Not under command and making way.	Vessels of any length.	SL, SN, 2R
Not under command and not making way.	Vessels of any length.	2R
Aground	Vessels 20 Meters (65.6 ft.) to 50 Meters (164.00 ft.) in length. Vessels over 50 Meters (164.00 ft.) in length.	W, 2R W, W/A, 2R
Pilot vessel engaged in pilotage duty.	Vessels of any length.	SL, SN, WR
Pilot vessel at anchor.	Vessels of any length.	W, WR

KEY TO LIGHTING CODES

SL - Side Lights (Red & Green).	T - Towing Light mounted vertically above a Stern light.	W - White All-Round Light.
SN - Stern Light.	2T - 2 Towing Lights mounted in a vertical line.	W/A - White All-Round Light forward and above anchor light astern.
M - Masthead Light.	GW - Green All-Round Light mounted vertically above a White All-Round Light.	WR - White All-Round Light mounted vertically above a Red All-Round Light.
MR - Masthead "Range" Light.	RW - Red All-Round Light mounted vertically above a White All-Round Light.	SF - Special Flashing Yellow Barge Light.
2M - 2 Masthead Lights mounted in a vertical line.	RWR - 3 All-Round Lights mounted vertically, the highest and lowest being red and the middle being white.	YA - Yellow All-Round Light.
3M - 3 Masthead Lights mounted in a vertical line.		WL - Working lights that illuminate the deck.
2R - 2 Red All-Round Lights mounted in a vertical line.		
2G - 2 Green All-Round Lights mounted in a vertical line.		

DOUBLE LENS L.E.D. NAVIGATION LIGHTS



Figs. 1384 - 1388 Series Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Lightweight, Durable Fiber-Filled Polycarbonate Black Polymer
- Includes Two 3 Foot Lengths of 16/3-SO Cable Through Watertight Terminal Tubes
- Watertight Access Cap for Rebulbing and Cleaning

Upper Lens Section - For "Back-Up" Use

- Removable Incandescent Bulb
- Pre-Wired Medium Prefocus Socket
- 24, 120 & 220 Volt Options, Bulb Not Included
- Rough Service Bulbs Available

Lower Lens Section - Permanently Sealed L.E.D. Chamber

- Long Life, Maintenance Free L.E.D. (120 VAC Only)

ORDERING INFO

Description	Visibility Arc	Visibility Miles	Cat. No. Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	3	1384RE0BLK	10.5
Green Side Light	112-1/2°	3	1384GE0BLK	10.5
White Masthead Light	225°	6	1385E00BLK	11.2
White Stern Light**	135°	3	1386E00BLK	10.0
Yellow Towing Light	135°	3	1386ME0BLK	10.0
White All-Round Light**	360°	3	1387E00BLK	10.0
White All-Round Light***	360°	6	1387HE0BLK	10.0
Red All-Round Light	360°	3	1388RE0BLK	10.0
Green All-Round Light	360°	3	1388GE0BLK	10.0
Yellow All-Round Light	360°	3	1388ME0BLK	10.0

TECH INFO

Bulb Upper: 24, 120 or 220 Volt (Not Included)

Lower: 120 VAC L.E.D.

Mounting Bolt Size: 3/8"

Height Overall: 18-3/8"
(Masthead 20-1/4")

Height Lens: 6-3/4"

Special lights to meet local requirements are available upon request.

**These lights are supplied with a Gray Tinted Lens (upper section only)

***For Great Lakes use



Close-up of Sealed L.E.D. Chamber



Fig. 1384
Green Side Light



Fig. 1385
White Masthead



Fig. 1386
Yellow Towing



Fig. 1386
White Stern



Fig. 1384
Red Side Light

IMPORTANT INCANDESCENT BULB DATA- TOP LENS SECTION

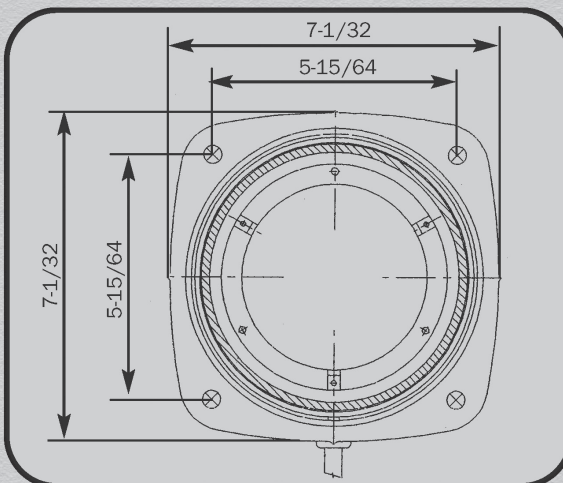
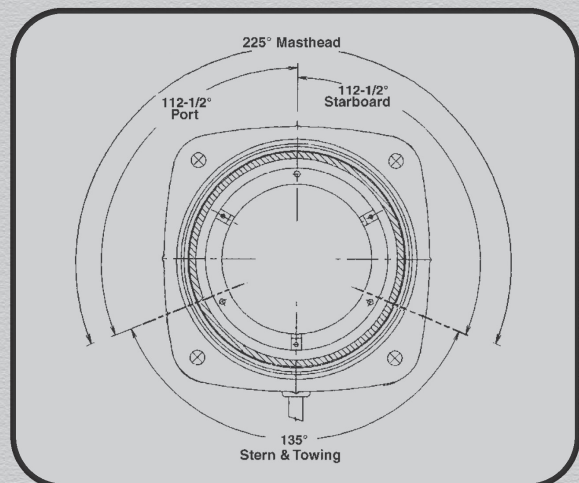
To comply with the UL Standard 1104, the lights listed on this page must be used with the Following:

For 24 Volt Use: Cat. No. 0342024CLR,

For 120 Volt Use: Cat. No. 0342004CLR or For "Rough Service" Use Cat. No. 0342RS4CLR

For 220 Volt Use: Cat. No. 0342220CLR

DOUBLE LENS L.E.D. NAVIGATION LIGHTS TECHNICAL INFORMATION



**4 - Mounting Holes, for 3/8 inch bolts
Spaced 5-15/64 apart on Center**

18-3/8 Inches

Figs. 1384, 1386, 1387 & 1388 Series Lights

SPARE PARTS ORDERING INFORMATION

- 1) Access Cap Assembly Including Top Socket
Cat. No. 1363DBLBLK
- 2) Medium Prefocus Socket
Cat. No. 0367
- 3) Bulb Information
24V = 0342024CLR
120V = 0342004CLR & 0342RS4CLR
220V = 0342220CLR

Note: L.E.D. Chamber Permanently Sealed

20-1/4 Inches

Fig. 1385 Masthead Light

SPARE PARTS ORDERING INFORMATION

- 1) Access Cap Assembly Including Top Socket
Cat. No. 1363DBLBLK
- 2) Medium Prefocus Socket
Cat. No. 0367
- 3) Bulb Information
24V = 0342024CLR
120V= 0342004CLR & 0342RS4CLR
220V= 0342220CLR

Note: L.E.D. Chamber Permanently Sealed

SINGLE LENS NAVIGATION LIGHTS



Figs. 1369 - 1374 Series Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Lightweight But Durable Fiber-Filled Polycarbonate Black Polymer
 - Pre-Wired Medium Prefocus Socket
 - Includes One 3 Foot Length of 16/3-SO Cable Through Watertight Terminal Tubes
- Watertight Access Cap for Rebulbing and Cleaning
 - Rough Service Bulbs are Available

ORDERING INFO				TECH INFO	
Description	Visibility Arc	Visibility Miles	Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.	
Red Side Light	112-1/2°	3	1372RE0BLK	4.4	Bulb: 24, 120 or 220 Volt (Not Included, see below) Mounting Bolt Size: 3/8" Height Overall: 9-1/4" Height Lens: 6-3/4"
Green Side Light	112-1/2°	3	1372GE0BLK	4.4	
White Masthead Light	225°	6	1373E00BLK	4.3	
White Stern Light*	135°	3	1374E00BLK	4.4	
Yellow Towing Light	135°	3	1374ME0BLK	4.4	
White All-Round Light*	360°	3	1369E00BLK	4.1	
White All-Round Light**	360°	6	1369HE0BLK	4.1	
Red All-Round Light	360°	3	1370RE0BLK	4.1	
Green All-Round Light	360°	3	1370GE0BLK	4.1	
Yellow All-Round Light	360°	3	1370ME0BLK	4.1	

Special lights to meet local requirements are available upon request.

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use

Fig. 1372
Green Side Light



Fig. 1370
Green All-Round



Fig. 1370
Red All-Round



Fig. 1372
Red Side Light



Fig. 1373
White Masthead



Fig. 1370
Yellow All-Round



Fig. 1374
White Stern



Important Bulb Data

To comply with UL Standard 1104, the lights listed on this page must be used with the following PERKO bulbs:

24 Volt Use Cat. No. 0342024CLR

120 Volt Use Cat. No. 0342004CLR or 0342RS4CLR when a "Rough Service" bulb is required.

220 Volt Use Cat. No. 0342220CLR.

SPARE PARTS ORDERING INFORMATION

Access Cap Assembly: 1363SGLBLK

Medium Prefocus Socket: 0367

Bulb Information:

24V = 0342024CLR

120V= 0342004CLR or 0342RS4CLR

220V= 0342220CLR

DOUBLE LENS NAVIGATION LIGHTS

Figs. 1364 - 1368 Series Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length



CONSTRUCTION:

- Lightweight But Durable Fiber-Filled Polycarbonate Black Polymer
- Pre-Wired Medium Prefocus Socket
- Includes Two 3 Foot Lengths of 16/3-SO Cable Through Watertight Terminal Tubes
- Watertight Access Cap for Rebulbing and Cleaning
- Rough Service Bulbs are Available

ORDERING INFO

Description	Visibility Arc	Visibility Miles	Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	3	1364RE0BLK	7.0
Green Side Light	112-1/2°	3	1364GE0BLK	7.0
White Masthead Light	225°	6	1365E00BLK	6.9
White Stern Light*	135°	3	1366E00BLK	6.9
Yellow Towing Light	135°	3	1366ME0BLK	6.9
White All-Round Light*	360°	3	1367E00BLK	6.3
White All-Round Light**	360°	6	1367HE0BLK	6.3
Red All-Round Light	360°	3	1368RE0BLK	6.3
Green All-Round Light	360°	3	1368GE0BLK	6.3
Yellow All-Round Light	360°	3	1368ME0BLK	6.3

TECH INFO

Bulb: 24, 120 or 220 Volt
(Not Included)
Mounting Bolt Size: 3/8"
Height Overall: 17-1/4"
Height Lens: 6-3/4"

Special lights to meet local requirements are available upon request

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use



Fig. 1364
Green Side Light



Fig. 1368
Red All-Round



Fig. 1366
Yellow Towing



Fig. 1367
White All-Round

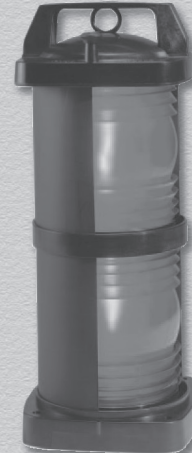


Fig. 1364
Red Side Light

Important Bulb Data

To comply with UL Standard 1104, the lights listed on this page must be used with the following PERKO bulbs:

24 Volt Use Cat. No. 0342024CLR

120 Volt Use Cat. No. 0342004CLR or 0342RS4CLR when a "Rough Service" bulb is required.

220 Volt Use Cat. No. 0342220CLR.

SPARE PARTS ORDERING INFORMATION

Access Cap Assembly Including

Top Socket: 1363DBLBLK

Medium Prefocus Socket: 0367

Bulb Information:

24V = 0342024CLR

120V= 0342004CLR or 0342RS4CLR

220V= 0342220CLR

SINGLE LENS NAVIGATION LIGHTS



Figs. 1169 - 1174 Series Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Heavy Duty Cast Bronze
- Pre-Wired Medium Prefocus Socket
- 3 Feet of 16/3-SO Cable Through a Watertight Terminal Tube
 - Watertight Access Cap for Rebulbing and Cleaning
 - 120 Volt Only, Bulb Not Included
 - Rough Service Bulbs are Available

ORDERING INFO				TECH INFO
Description	Visibility Arc	Visibility Miles	Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	3	1172RE0PLB	12.4
Green Side Light	112-1/2°	3	1172GE0PLB	12.4
White Masthead Light	225°	6	1173E00PLB	12.4
White Stern Light*	135°	3	1174E00PLB	12.4
Yellow Towing Light	135°	3	1174ME0PLB	12.6
White All-Round Light*	360°	3	1169E00PLB	11.2
White All-Round Light**	360°	6	1169HE0PLB	11.2
Red All-Round Light	360°	3	1170RE0PLB	11.2
Green All-Round Light	360°	3	1170GE0PLB	11.2
Yellow All-Round Light	360°	3	1170ME0PLB	11.2

Special lights to meet local requirements are available upon request

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use

Fig. 1172
Green Side Light



Fig. 1170
Green All-Round



Fig. 1170
Red All-Round



Fig. 1172
Red Side Light



Fig. 1173
White Masthead



Fig. 1170
Yellow All-Round



Fig. 1174
White Stern



IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed on this page must use a PERKO Cat. No. 0342004CLR bulb or 0342RS4CLR bulb when a "Rough Service" bulb is required.

Spare Parts Ordering Information

Spare Lenses:

Red: 0261001RED
Green: 0261001GRN
White: 0261001CLR
Gray: 0261001GRY
Yellow: 0261001YLW

Lens Gasket: 1143
O-Ring for Cap: 1119
Medium Prefocus Socket: 0367
Lens Retaining Clip with Bolt: 1133
Access Cap, O-Ring and Retainer: 1105000BLK

DOUBLE LENS NAVIGATION LIGHTS

Figs. 1164 - 1168 Series Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Heavy Duty Cast Bronze
- Pre-Wired Medium Prefocus Socket in Each Compartment
- Two 3 Foot Lengths of 16/3-SO Cable Through a Watertight Terminal Tube
- Watertight Access Cap for Rebulbing and Cleaning
- 120 Volt Only, Bulb Not Included
- Rough Service Bulbs are Available



ORDERING INFO

TECH INFO

Description	Visibility Arc	Visibility Miles	Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	3	1164RE0PLB	22.5
Green Side Light	112-1/2°	3	1164GE0PLB	22.5
White Masthead Light	225°	6	1165E00PLB	21.5
White Stern Light*	135°	3	1166E00PLB	22.3
Yellow Towing Light	135°	3	1166ME0PLB	22.4
White All-Round Light*	360°	3	1167E00PLB	20.0
White All-Round Light**	360°	6	1167HE0PLB	20.0
Red All-Round Light	360°	3	1168RE0PLB	20.0
Green All-Round Light	360°	3	1168GE0PLB	20.0
Yellow All-Round Light	360°	3	1168ME0PLB	20.0

Bulb: 120 Volt
(Not Included)

Mounting Bolt Size: 3/8"

Height Overall: 17-1/4"

Height Lens: 6-3/4"

Special lights to meet local requirements are available upon request

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use



Fig. 1164
Green Side Light

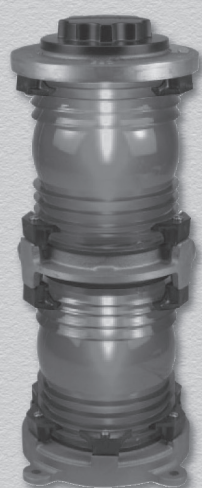


Fig. 1168
Red All-Round

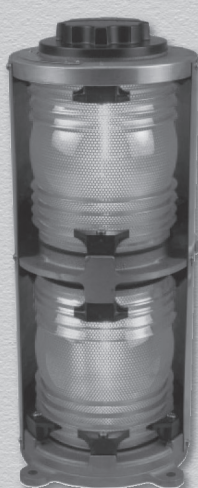


Fig. 1166
Yellow Towing

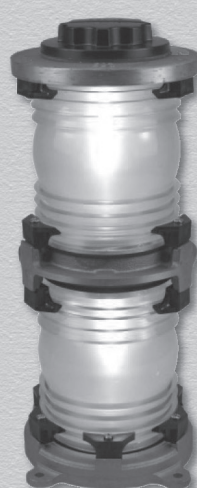


Fig. 1167
White All-Round



Fig. 1164
Red Side Light

IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed on this page must use a PERKO Cat. No. 0342004CLR bulb or 0342RS4CLR bulb when a "Rough Service" bulb is required.

Spare Parts Ordering Information

Spare Lenses:

Red: 0261001RED
Green: 0261001GRN
White: 0261001CLR
Gray: 0261001GRY
Yellow: 0261001YLW

Lens Gasket: 1143
O-Ring for Cap: 1119
Dual Medium Prefocus Socket Assembly: 0303
Lens Retaining Clip with Bolt: 1133
Access Cap, O-Ring and Retainer: 1105000BLK

L.E.D. NAVIGATION LIGHTS - BLACK

USCG USCG



See Below



**NEW
Item**

Available by
Dec. 2010

Figs. 1377 - 1380 Series L.E.D. Navigation Lights

Certified For Use on Vessels 20 Meters (65.6 ft.)
to 50 Meters (164.0 ft.) in Length

CONSTRUCTION:

- Black Polymer
- Pre-Wired with 3 Feet of 16/3-SO Cable
- Sealed Cap
- No User Serviceable Parts Inside

ORDERING INFO

Description	Visibility Arc	Visibility Miles	Black Polymer Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	2	1377RA0BLK	3.2
Green Side Light	112-1/2°	2	1377GA0BLK	3.2
White Masthead Light	225°	5	1378A00BLK	3.1
White Stern Light	135°	2	1379A00BLK	3.2
Yellow Towing Light	135°	2	1379MA0BLK	3.2
White All-Round Light	360°	2	1380A00BLK	3.0
White All-Round Light**	360°	5	1380HA0BLK	3.0
Red All-Round Light	360°	2	1380RA0BLK	3.0
Green All-Round Light	360°	2	1380GA0BLK	3.0
Yellow All-Round Light	360°	2	1380MA0BLK	3.0

TECH INFO

- L.E.D.: Operates on 12 or 24 Volt D.C. System
- Screw Size: 1/4"
- Height Overall: 7-1/2"
- Height Lens: 4-1/2"

Special lights to meet local requirements are available upon request

**For Great Lakes use



Fig. 1377
Red & Green Side Lights



Fig. 1378
Masthead Light



Fig. 1379
Stern Light



Fig. 1380
All-Round Light

L.E.D. NAVIGATION LIGHTS - WHITE

Figs. 1377 - 1380 Series L.E.D. Navigation Lights

Certified For Use on Vessels 20 Meters (65.6 ft.)
to 50 Meters (164.0 ft.) in Length

CONSTRUCTION:

- White Polymer
- Pre-Wired with 3 Feet of 16/3-S0 Cable
- Sealed Cap
- No User Serviceable Parts Inside



See Below



ORDERING INFO

Description	Visibility Arc	Visibility Miles	White Polymer Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	2	1377RA0WHT	3.2
Green Side Light	112-1/2°	2	1377GA0WHT	3.2
White Masthead Light	225°	5	1378A00WHT	3.1
White Stern Light	135°	2	1379A00WHT	3.2
Yellow Towing Light	135°	2	1379MA0WHT	3.2
White All-Round Light	360°	2	1380A00WHT	3.0
White All-Round Light**	360°	5	1380HA0WHT	3.0
Red All-Round Light	360°	2	1380RA0WHT	3.0
Green All-Round Light	360°	2	1380GA0WHT	3.0
Yellow All-Round Light	360°	2	1380MA0WHT	3.0

TECH INFO

- L.E.D.: Operates on 12 or 24 Volt D.C. System
- Screw Size: 1/4"
- Height Overall: 7-1/2"
- Height Lens: 4-1/2"

Special lights to meet local requirements are available upon request

**For Great Lakes use



Fig. 1377
Red & Green Side Lights



Fig. 1378
Masthead Light

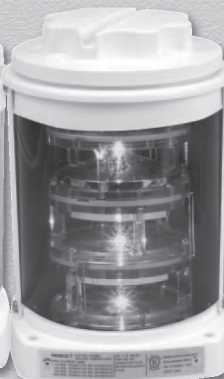


Fig. 1379
Towing Light



Fig. 1379
Stern Light



Fig. 1380
Yellow All-Round Light

NAVIGATION LIGHTS - BLACK



See Below



Figs. 1127 - 1130 Series Navigation Lights
 Certified For Use on Vessels 20 Meters (65.6 ft.)
 to 50 Meters (164.0 ft.) in Length

CONSTRUCTION:

- Black Polymer
- Pre-Wired Double Contact Socket and 3 Feet of 16/3-SO Cable
- Watertight Access Cap for Rebulbing and Cleaning

ORDERING INFO

Description	Visibility Arc	Visibility Miles	Black Polymer Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	2	1127RA0BLK	2.7
Green Side Light	112-1/2°	2	1127GA0BLK	2.7
White Masthead Light	225°	5	1128A00BLK	2.6
White Stern Light*	135°	2	1129A00BLK	2.7
Yellow Towing Light	135°	2	1129MA0BLK	2.7
White All-Round Light*	360°	2	1130A00BLK	2.5
White All-Round Light**	360°	5	1130HA0BLK	2.5
Red All-Round Light	360°	2	1130RA0BLK	2.5
Green All-Round Light	360°	2	1130GA0BLK	2.5
Yellow All-Round Light	360°	2	1130MA0BLK	2.5

TECH INFO

Bulb: 12, 24, 32 or 120 Volt (Not Included)

Screw Size: 1/4"
 Height Overall: 7-1/2"
 Height Lens: 4-1/2"

Special lights to meet local requirements are available upon request

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use



Fig. 1127
Red & Green Side Lights



Fig. 1128
Masthead Light



Fig. 1129
Stern Light



Fig. 1130
All-Round Light

IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed on this page must use a PERKO Cat. No. 0374 bulb.

SPARE PARTS ORDERING INFORMATION

Lens Assemblies:

Red: 0249000RED
 Green: 0249000GRN
 White: 0249000CLR
 Gray: 0249000GRY
 Yellow: 0249000YLW

Required Bulbs:

12 Volt: 0374001CLR
 24 Volt: 0374002CLR
 32 Volt: 0374003CLR
 120 Volt: 0374004CLR

Other Parts:

O-Ring for Cap: 1119
 Double Contact Socket: 0134
 Access Cap, O-Ring and Retainer: 1105000BLK

PERKO® NAVIGATION LIGHTS - WHITE

Figs. 1127 - 1130 Series Navigation Lights

Certified For Use on Vessels 20 Meters (65.6 ft.)
to 50 Meters (164.0 ft.) in Length

CONSTRUCTION:

- White Polymer
- Pre-Wired Double Contact Socket and 3 Feet of 16/3-SO Cable
- Watertight Access Cap for Rebulbing and Cleaning



See Below



ORDERING INFO

Description	Visibility Arc	Visibility Miles	White Polymer Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.
Red Side Light	112-1/2°	2	1127RAOWHT	2.7
Green Side Light	112-1/2°	2	1127GAOWHT	2.7
White Masthead Light	225°	5	1128A0OWHT	2.6
White Stern Light*	135°	2	1129A0OWHT	2.7
Yellow Towing Light	135°	2	1129MAOWHT	2.7
White All-Round Light*	360°	2	1130A0OWHT	2.5
White All-Round Light**	360°	5	1130HAOWHT	2.5
Red All-Round Light	360°	2	1130RAOWHT	2.5
Green All-Round Light	360°	2	1130GAOWHT	2.5
Yellow All-Round Light	360°	2	1130MAOWHT	2.5

TECH INFO

Bulb: 12, 24, 32 or
120 Volt (Not Included)

Screw Size: 1/4"
Height Overall: 7-1/2"
Height Lens: 4-1/2"

Special lights to meet local requirements are available upon request

*These lights are supplied with a Gray Tinted Lens

**For Great Lakes use



Fig. 1127
Red & Green Side Lights



Fig. 1128
Masthead Light



Fig. 1129
Towing Light



Fig. 1129
Stern Light



Fig. 1130
Yellow All-Round Light

IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed
on this page must use a PERKO Cat. No. 0374 bulb.

SPARE PARTS ORDERING INFORMATION

Lens Assemblies:

Red: 0249000RED
Green: 0249000GRN
White: 0249000CLR
Gray: 0249000GRY
Yellow: 0249000YLW

Required Bulbs:

12 Volt: 0374001CLR
24 Volt: 0374002CLR
32 Volt: 0374003CLR
120 Volt: 0374004CLR

Other Parts:

O-Ring for Cap: 1119
Double Contact Socket: 0134
Access Cap, O-Ring and
Retainer: 1105000WHT



NAVIGATION LIGHTS



Figs. 1150 - 1154 Series Lights

Certified For Use on Vessel Lengths as Specified Below

CONSTRUCTION:

- Sheet Metal, Preprimed Galvanized Steel
- Medium Prefocus Socket
- Watertight Terminal Tube for 16/3-SO Cable
- Watertight Access Cap for Rebulbing and Cleaning

ORDERING INFO

Certified For Use on Vessels 20 Meters (65.6 ft.) to 50 Meters (164.0 ft.) in Length

Description	Standard Pkg. 1 Pc.	Visibility Arc	Visibility Miles	Required Bulb	Ship Wt. Carton Lbs. Std. Pkg.
Red Side Light	1150RE1GAL	112-1/2°	2	0342002CLR	6.1
Green Side Light	1150GE1GAL	112-1/2°	2	0342002CLR	6.1
White Masthead Light	1151E01GAL	225°	5	0342003CLR	6.3
White Stern Light	1152E01GAL	135°	2	0342000CLR	6.1
Yellow Towing Light	1152ME1GAL	135°	2	0342000CLR	6.1
White All-Round Light	1153E01GAL	360°	2	0342001CLR	6.5
Red All-Round Light	1154RE1GAL	360°	2	0342004CLR*	6.7
Green All-Round Light	1154GE1GAL	360°	2	0342003CLR	6.7
Yellow All-Round Light	1154ME1GAL	360°	2	0342002CLR	6.7

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

Red Side Light	1150RE2GAL	112-1/2°	3	0342004CLR*	10.9
Green Side Light	1150GE2GAL	112-1/2°	3	0342004CLR*	10.9
White Masthead Light	1151E02GAL	225°	6	0342004CLR*	10.0
White Stern Light	1152E02GAL	135°	3	0342002CLR	9.5
White All-Round Light	1153E02GAL	360°	3	0342003CLR	10.6

*0342RS4CLR bulbs can be substituted for 0342004CLR where "Rough Service" bulbs are required

Bulb: 120 Volt
(Not Included)

Screw Size: 1/4"

Size No. 1

Height Overall: 11-1/2"

Height Lens: 6-3/4"

Size No. 2

Height Overall: 13-1/2"

Height Lens: 7-1/2"



FIG. 1150

FIG. 1151

FIG. 1152

FIG. 1153

FIG. 1154

IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed as specified above on this page must use a PERKO Cat. No. 0342 bulb, as specified above.

SPARE PARTS ORDERING INFORMATION

Lenses:

112-1/2° 0259 No. 1 or 2, Specify RED or GRN.

135° 0269 No. 1 or 2, Specify YLW or WHT.

225° 0256 No. 1 or 2, WHT.

360° 0261F No. 1 or 2, Specify RED, GRN, YLW or WHT.

Medium Prefocus Socket: 0347A00.

Access Cap, O-Ring and Retainer: 1105000BLK.

O-Ring for Cap: 1119.

Socket Supports: 0341001PLB or 034101APLB.

Figs. 0004D, 0005D & 0007D Lights

Certified For Use on Vessels 20 Meters (65.6 ft.) to 50 Meters (164.0 ft.) in Length



CONSTRUCTION:

- Sheet Metal, Preprimed Galvanized Steel, Polished or Chrome Plated Brass
- Bottom Opening, Complete with Mounting Bracket
- Single Contact Prefocus Socket



Fig. 0004G



Fig. 0004R



Fig. 0005



Fig. 0007



Fig. 0007M

ORDERING INFO

Description	Galvanized Steel	Polished Brass	Chrome Plated Brass	Visibility Arc	Visibility Miles	Required Bulb	Ship Wt. Carton Lbs. Std. Pkg. 1 Pc.
Red Side Light	0004RD3GAL	0004RD3POL	0004RD3CHR	112-1/2°	2	0373003CLR	2.7
Green Side Light	0004GD3GAL	0004GD3POL	0004GD3CHR	112-1/2°	2	0373002CLR	2.7
White Masthead Light	0005D03GAL	0005D03POL	0005D03CHR	225°	5	0373005CLR	2.9
White Stern Light	0007D03GAL	0007D03POL	0007D03CHR	135°	2	0373001CLR	2.8
Yellow Towing Light	0007MD3GAL	0007MD3POL	0007MD3CHR	135°	2	0373002CLR	2.8

TECH INFO

Bulb: 12 Volt
(Not Included)

Height Overall: 8-1/2"
Height Lens: 5-3/16"

IMPORTANT BULB DATA

To comply with UL Standard 1104, the lights listed on this page must use a PERKO Cat. No. 0373 bulb, as specified above.

SPARE PARTS ORDERING INFORMATION

Lenses:

112-1/2° Red: 0259CL3RED.
112-1/2° Green: 0259CL3GRN.
135° White: 0269CL3WHT.
135° Yellow: 0269CL3YLW.
225° Gray: 0256CL3WHT.

Mounting Bracket: 0131000GAL or 0131000PLB.
Single Contact Prefocus Socket Assembly, Complete with Stand, Bottom Plate and Gasket: 0294003PLB.

SPECIAL PURPOSE LIGHTS



Fig. 1111

Fig. 1111 - Flashing Yellow Light

For Use on Vessels of Any Length

CONSTRUCTION:

- Sheet Metal, Preprimed Galvanized Steel
 - Medium Prefocus Socket
- Watertight Terminal Tube for 16/3-SO Cable
 - Sealed Flasher Unit
- Watertight Access Cap for Rebulbing and Cleaning

Designed to meet Federal Requirements for Flashing yellow 180° - 225° light for barges, canal boats, etc., that are being pushed ahead or towed along side of a tug boat. For use on 120 volt A.C. only. Federal Requirements for this light are applicable for: inland waters, the Atlantic, Pacific and Gulf coasts, intercoastal waterways and western rivers. Refer to the U.S. Inland Navigation Rules for application, configuration and technical details.

ORDERING INFO

Standard Pkg. 1 Pc.	Visibility Miles	Visibility Arc	Flashes Per Minute	Ship Wt. Carton Lbs. Std. Pkg.
1111ME1GAL	2	225°	50-70	6.4

TECH INFO

Bulb: 120 Volt
(Not Included)
Height Overall: 11-1/2"
Height Lens: 6-3/4"

IMPORTANT BULB DATA

To comply with Federal Requirements this light must use a PERKO Cat. No. 0342004CLR bulb or 0342RS4CLR bulb when "Rough Service" bulbs are required.

SPARE PARTS ORDERING INFORMATION

Flasher: 0133. Medium Prefocus Socket: 0347A00.
O-Ring for Cap: 1119. Access Cap, O-Ring and Retainer: 1105000BLK.
Lens: 0256001YLW.



Fig. 0112A

Figs. 0112 & 0309 - "A" Series All Round Lights

Certified For Use on Vessels 20 Meters (65.6 ft.) to 50 Meters (164.0 ft.) in Length

CONSTRUCTION:

- Cast Bronze, Plain or Chrome Plated
- Complete with Double Contact Electrical Socket

ORDERING INFO

Description	Plain Bronze	Chrome Plated Bronze	Ship Wt. Carton Lbs. Std. Pkg. 1 Pc.
White All-Round	0112A00PLB	0112A00CHR	2.4
Red All-Round	0112RA0PLB	0112RA0CHR	2.4
Green All-Round	0112GA0PLB	0112GA0CHR	2.4
Yellow All-Round	0112MA0PLB	0112MA0CHR	2.4

TECH INFO

Bulb: 12, 24, 32 or 120 Volt (Not Included)
Visibility: 2 Miles
Height Overall: 8-3/4"
Dia. Base: 3-1/8"

ORDERING INFO

Description	Plain Bronze	Chrome Plated Bronze	Ship Wt. Carton Lbs. Std. Pkg. 1 Pc.
White All-Round	0309A00PLB	0309A00CHR	1.8
Red All-Round	0309RA0PLB	0309RA0CHR	1.8
Green All-Round	0309GA0PLB	0309GA0CHR	1.8
Yellow All-Round	0309MA0PLB	0309MA0CHR	1.8

TECH INFO

Bulb: 12, 24, 32 or 120 Volt (Not Included)
Visibility: 2 Miles
Height Overall: 6-1/2"
Tapped Pipe Size: 1/2"



Fig. 0309A

IMPORTANT BULB DATA

To comply with UL Standard 1104, these lights must use a PERKO Cat. No. 0374 bulb.

SPARE PARTS ORDERING INFORMATION

Lenses:
Red: 0106000RED.
Green: 0106000GRN.
White: 0106000WHT.
Yellow: 0106000YLW.
Double Contact Bayonet Socket: 0276002.

Required Bulbs:
12 Volt: 0374001CLR.
24 Volt: 0374002CLR.
32 Volt: 0374003CLR.
120 Volt: 0374004CLR.

Figs. 0403 & 0412 - Specialty All-Round Lights

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Cast Bronze
- White, Red, Green or Yellow Lens
- Medium Prefocus Socket

Fig. 0403 - Pipe Mount

Fig. 0412 - Hanging Mount



Fig. 0403
Tapped For
Pipe Mount



Fig. 0403



Fig. 0412

TECH INFO - 120 VOLT ONLY (BULB NOT INCLUDED)

Fig. No.	Ht. Overall Inches	Ht. Lens Inches	Tapped Pipe Size Inches	Visibility Miles
0403	11-1/2	6-3/4	1	3
0412	14	6-3/4	*	3

ORDERING INFO

White	Red	Green	Yellow	Ship Wt. Carton Lbs. Std. Pkg. 1 Pc.
0403E03PLB**	0403RE3PLB	0403GE3PLB	0403ME3PLB	8.6
0412E00PLB**	0412RE0PLB	0412GE0PLB	0412ME0PLB	9.1

*Supplied with watertight terminal tube for 16/3-SO cable.

**These lights are supplied with gray tinted lenses.

IMPORTANT BULB DATA

To comply with UL Standard 1104, these lights must use a PERKO Cat. No. 0342004CLR bulb or 0342RS4CLR bulb when a "Rough Service" bulb is required

SPARE PARTS ORDERING INFORMATION

Gray Lens: 0261001GRY. Yellow Lens: 0261001YLW. Gasket for lens: 1143.
Red Lens: 0261001RED. Green Lens: 0261001GRN. Medium Prefocus Socket: 0367.

Fig. 1129 - Panama Canal Blue Steering Light

For Use on Vessels of Any Length

CONSTRUCTION:

- Black Polymer
- Pre-Wired Double Contact Socket with 3 Feet of 16/3-SJO Cable

ORDERING INFO

Std. Pkg. - 1 Pc.	Visibility Arc	Ship Wt. Carton Lbs. Standard Pkg.
1129BA0BLK	135°	2.7

IMPORTANT BULB DATA

To comply with Panama Canal Requirements this light must use a PERKO Fig. No. 0374 bulb.

SPARE PARTS ORDERING INFORMATION

Bulbs
12 Volt: 0374001CLR. Lens: 0249000BLU.
24 Volt: 0374002CLR. O-Ring for Cap: 1119.
32 Volt: 0374003CLR. Double Contact Socket: 0134.
120 Volt: 0374004CLR. Polymer Access Cap, O-Ring and Retainer: 1105000BLK.

TECH INFO

Bulb: 12, 24, 32 or
120 Volt
(Not Included)
Height Overall: 7-1/2"
Height Lens: 4-1/4"



Fig. 1129

Fig. 0454 - Pipe Mount All-Round White Whistle Light

Certified For Use on Vessels Over 20 Meters (65.6 ft.) in Length

CONSTRUCTION:

- Cast Bronze
- Medium Prefocus Socket



Fig. 0454E
Tapped For
Pipe Mount



Fig. 0454

ORDERING INFO

Std. Pkg. - 1 Pc.	Ship Wt. Carton Lbs. Standard Pkg.	Visibility Miles
0454E00PLB	8.6	5

SPARE PARTS ORDERING INFORMATION

Bulb: 0342004CLR. Lens or Cover Gasket: 1143.
Lens: 0261001CLR. Medium Prefocus Socket: 0367.

TECH INFO

Bulb: 120 Volt
(Not Included)
Height Overall: 11-1/2"
Height Lens: 6-3/4"
Tapped Pipe Size: 1"

BULBS & PARTS FOR NAVIGATION LIGHTS

For Navigation Lights on Vessels Over 20 Meters (65.6 ft.) in Length

DUAL MEDIUM PREFOCUS SOCKET ASSEMBLY



Phenolic - 250 Volts - 1000 Watts
Plug In Type - Prewired with two medium
prefocus sockets. For use in double lens lights.

Std. Pkg. 1 Pc.	Ht Overall Inches	Width Overall Inches	Weight Ounces
0303	3-7/8	3-7/8	11

Male Plug Only Cat. No. 0303A00. Female Socket Only Cat. No. 0303B00.

MEDIUM PREFOCUS SOCKETS



Phenolic - 250 Volts - 1000 Watts

5 Pcs.	Height Overall Inches	Diameter Overall Inches	Std. Pkg.	Weight Per Pkg. Ounces
0367	1-7/8	1-1/2	1	12.5
0347A00*	1-7/8	1-1/2	5	22.7

* Cat. No. 0347A00 (pictured) supplied with metal mounting cap tapped for 3/8 Inch I.P.S.

SINGLE CONTACT PREFOCUS SOCKET ASSEMBLY WITH STAND, BOTTOM PLATE AND GASKET



Std. Pkg. 1 Pc.	Ht Overall Inches	Dia. Overall Inches	Weight Ounces
0294003PLB	3	3-3/4	6

DOUBLE CONTACT SOCKET



Std. Pkg. 1 Pc.	Height Overall Inches	Diameter Overall Inches	Weight Ounces
0134	7/8	1-3/4	1-1/4

112-1/2° LENSES



Color	Ht. Inches	Width Inches	Std. Pkg. 1 Pc.	Weight Ounces
Red	4-1/4	3-1/16	0259CL2RED	5
Green	4-1/4	3-1/16	0259CL2GRN	5
Red	5-1/16	3-11/16	0259CL3RED	10
Green	5-1/16	3-11/16	0259CL3GRN	10



Color	Ht. Overall Inches	Dia. Opening Inches	Std. Pkg. 1 Pc.	Weight Ounces
Red	6-3/4	6-1/8	0259001RED	16
Green	6-3/4	6-1/8	0259001GRN	16
Red	7-1/2	9-1/4	0259002RED	30
Green	7-1/2	9-1/4	0259002GRN	30

135° LENSES



Color	Height Inches	I.D. Inches	Std. Pkg. 1 Pc.	Weight Lbs.
White	4-1/4	3-1/2	0269CL2WHT	0.4
White	5-1/8	3-5/8	0269CL3WHT	0.6
Yellow	4-1/4	3-1/2	0269CL2YLW	0.4
Yellow	5-1/8	3-5/8	0269CL3YLW	0.6

Color	Height Overall Inches	Dia. Opening Inches	Std. Pkg. 1 Pc.	Weight Lbs.
White	6-3/4	5-1/8	0269001WHT	1.1
Red	6-3/4	5-1/8	0269001RED	1.1
Yellow	6-3/4	5-1/8	0269001YLW	1.1
White	7-1/2	7-1/4	0269002WHT	1.6
Red	7-1/2	7-1/4	0269002RED	1.6

360° LENSES



Color	Height Overall Inches	Diameter Opening Inches	Clear Std. Pkg. 1 Pc.	Frosted Std. Pkg. 1 Pc.
White	6-3/4	5-1/8	0261001CLR	0261001FRD
Red	6-3/4	5-1/8	0261001RED	0261RF1FRD
Green	6-3/4	5-1/8	0261001GRN	0261GF1FRD
Yellow	6-3/4	5-1/8	0261001YLW	0261MF1FRD
Gray	6-3/4	5-1/8	0261001GRY	—
White	7-1/2	7-3/8	0261002CLR	0261002FRD
Red	7-1/2	7-3/8	0261002RED	0261RF2FRD
Green	7-1/2	7-3/8	0261002GRN	0261GF2FRD

Weight Size 1, 2.2 Lbs. - Weight Size 2, 3.2 Lbs.

225° LENSES



Color	Ht. Inches	I.D. Inches	Std. Pkg. 1 Pc.	Weight Lbs.
White	4-1/4	3-3/8	0256CL2WHT	0.5
White	5-1/8	3-1/4	0256CL3WHT	0.8

Color	Ht. Overall Inches	Dia. Opening Inches	Std. Pkg. 1 Pc.	Weight Lbs.
White	6-3/4	4-1/2	0256001WHT	1.4
Yellow	6-3/4	4-1/2	0256001YLW	1.4
White	7-1/2	6-5/8	0256002WHT	2.3

360° LENSES



Color	Height Inches	I.D. Inches	O.D. Inches	Std. Pkg. 1 Pc.
Red	5	2-7/8	3-1/4	0106000RED
Green	5	2-7/8	3-1/4	0106000GRN
White	5	2-7/8	3-1/4	0106000WHT
Yellow	5	2-7/8	3-1/4	0106000YLW
Gray	5	2-7/8	3-1/4	0106000GRY

Weight 12 oz.

360° LENSES With Top Assembly



Color	Ht. Overall Inches	Dia. Opening Inches	Std. Pkg. 1 Pc.
White	5-3/4	5-1/2	0249000CLR
Red	5-3/4	5-1/2	0249000RED
Green	5-3/4	5-1/2	0249000GRN
Yellow	5-3/4	5-1/2	0249000YLW
Gray	5-3/4	5-1/2	0249000GRY

Weight 1.6 Lbs.

SINGLE CONTACT PREFOCUS BULBS



Std. Pkg. 1 Pc.	C-8 Filament Clear - 12 Volts	Amperage	Mfg. No.
0373001CLR	.25	25A/S8	
0373002CLR	.55	55A/S8	
0373003CLR	.77	77A/S8	
0373004CLR	1.15	1.15A/S8	
0373005CLR	2.03	2.03A/S8SCP	

Weight 1 oz.

DOUBLE CONTACT BAYONET BULBS



Std. Pkg. 1 Pc.	Clear Type T-8, C-8, Filament - 1-3/8 Inch L.C.L.	Voltage	Wattage	Candella
0374001CLR	12	30	24	
0374002CLR	24	30	24	
0374003CLR	32	30	24	
0374004CLR	120	30	24	

Weight 1 oz.

CLEAR MEDIUM PREFOCUS BULBS



Cat. No.	Volts	Wattage
0342000CLR	120	7.5
0342001CLR*	120	15
0342002CLR*	120	25
0342003CLR*	120	40
0342024CLR	24	55
0342004CLR*	120	60
0342RS4CLR**	120	60
0342220CLR	220	65

Standard Pkg. - 1 pc. - *OEM - 25 pcs available.
Weight 1 Pc.: 0.1 lbs. - Weight 25 pk: 3.5 lbs
**Designed for rough service.

Note: Bulbs MUST BE ORDERED in Standard or Dealer Package Quantities Only!
Bulbs for Navigation Lights Under 20 Meters (65.6 ft.)

XR SERIES XENON SEARCHLIGHTS

15 Inch Housing - Fig. 9304 (500 Watt), 110 or 220 VAC Power Supply 19 Inch Housing - Fig. 9854 (1600 Watt), 220 or 440 VAC Power Supply

XR Series Xenon Searchlights are designed and manufactured to meet the demanding needs of commercial marine applications. The short arc Xenon filled lamps produce an extremely bright and very white light which can be focused in the pilothouse into a narrow long range beam. The heavy duty head of the 1,600 watt light is a marine grade aluminum casting with integral cooling fins to assure cool operation at high output levels. The cast marine aluminum yoke & base are equally rugged. High quality Timkin bearings provide for smooth 380° rotation.

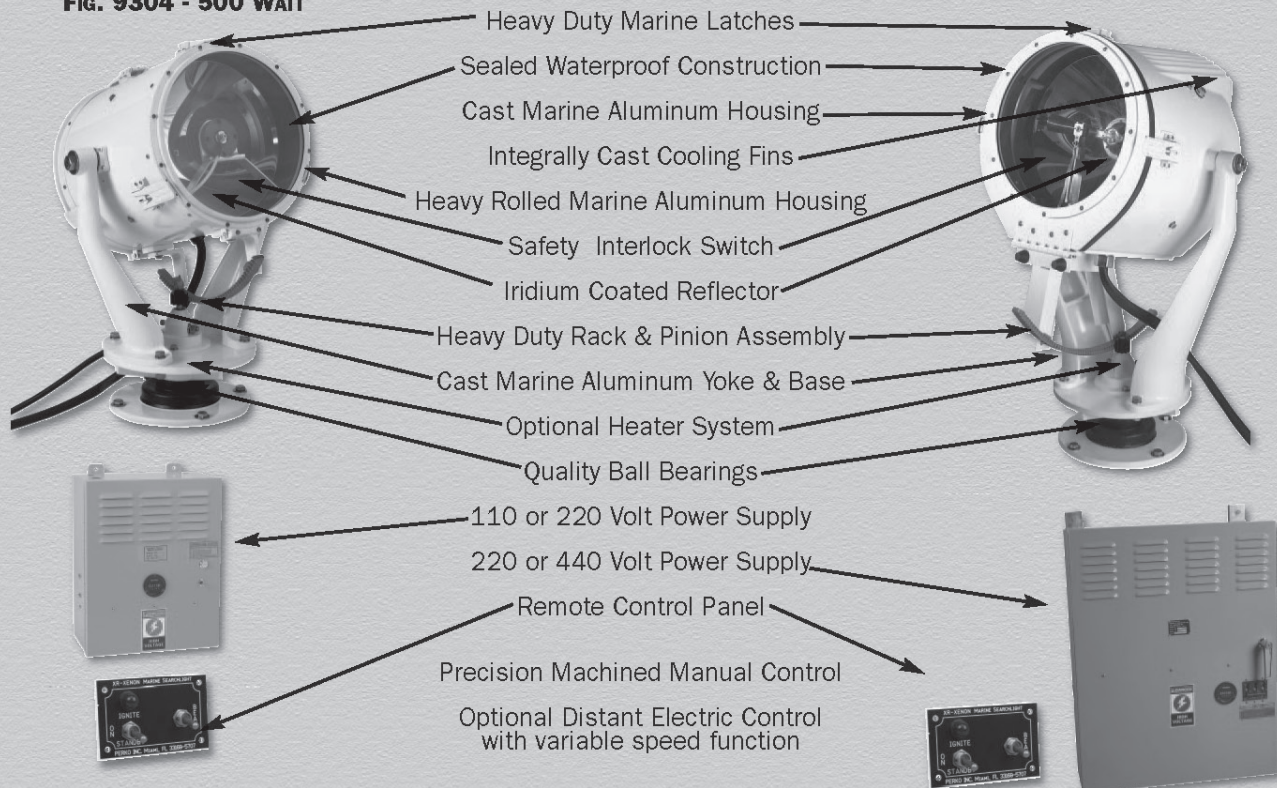
The XR Series model 9854 is available manually controlled with a traditional lever gear control system or remotely controlled with a distant electric control system. In addition, an optional heating capability is available to assure trouble free operation in areas of the world prone to icing conditions. The XR Series model 9854 searchlight can be operated continuously at 1,600 watts for maximum brightness providing in excess of 100,000,000 candlepower and up to 5.5 mile (IES Handbook) range.

The XR Series model 9304 searchlight can be operated continuously at 500 watts for a maximum brightness of 35,000,000 candlepower and over 3 mile (IES Handbook) range. An iridium coated precision reflector provides for maximum light output and sharp focus. The remote control panel controls lamp ignition (start-up) and focus from the pilothouse. Superior cooling is provided by a heavy duty cooling fan which blows air across the lamp inside the sealed housing.

Both XR Series Searchlights include a single Xenon lamp. Perko offers a choice of several replacement lamps (1,000 and 1,600 watt) which will operate for the 9854 series searchlight when the proper amperage settings have been chosen. For the 9304 series, a 500 watt Xenon lamp is the only available option.

Fig. 9304 - 500 WATT

Fig. 9854 - 1600 WATT



FIGS. 9304 & 9854 CONTROL TYPES

LEVER GEAR

Aim handle for horizontal position. Twist handle for vertical position.

REMOTE ELECTRIC

Joystick type controller with variable speed function for both horizontal & vertical positioning

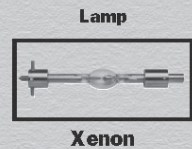
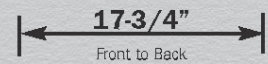
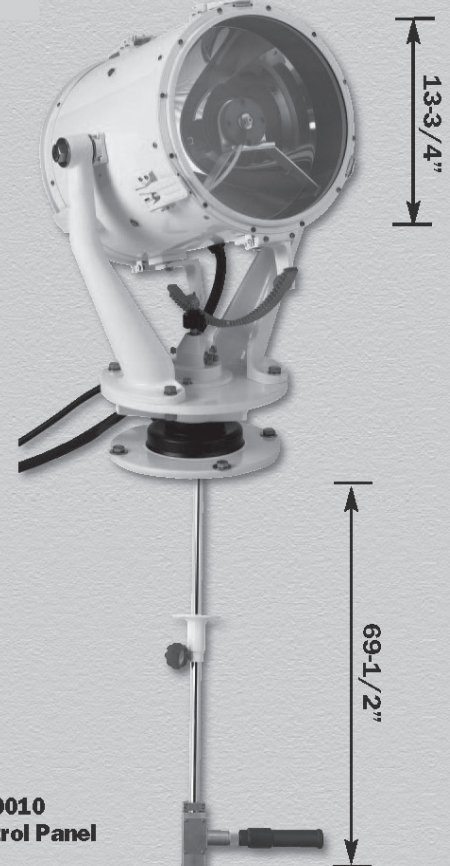
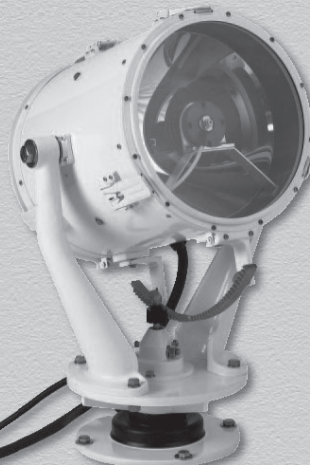


XR SERIES 15" XENON SEARCHLIGHT

FIG. 9304 (500 WATT) WITH 120 OR 220 VAC POWER SUPPLY

Remote Distant Electric
Control Base

TECH INFO		
Nominal Drum Diameter <u>Inches</u>	Nominal Searchlight Assembly Weight <u>Pounds</u>	<u>IP Rating</u>
13-3/4	71	65
Gross Shipping Weight		
<u>Including Crate</u>	<u>Pounds</u>	
Searchlight	185	
Power Supply	95	
Control Rod & Tube	11.5	
Base Diameter, 12 Inches.		

Lever/Gear
Control9551001
Remote Control PanelHead, Yoke and
Base AssemblyFig. 9511
500 Watt Power Supply9510010
Control PanelComplete
9304 XR Series Searchlights

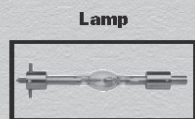
ORDERING INFO With Distant Electric Control Base			
Lamp Type & Lamp Size	Voltage	Catalog No. Without Heaters	Catalog No. With Heaters
500 Watt Xenon	120 VAC	9304E01WH5	9304EH1WH5
500 Watt Xenon	220 VAC	9304E02WH5*	9304EH2WH5*

ORDERING INFO With Lever/Gear Controls			
Lamp Type & Lamp Size	Voltage	Catalog No. Without Heaters	Catalog No. With Heaters
500 Watt Xenon	120 VAC	9304L01WH5	9304LH1WH5
500 Watt Xenon	220 VAC	9304L02WH5*	9304LH2WH5*

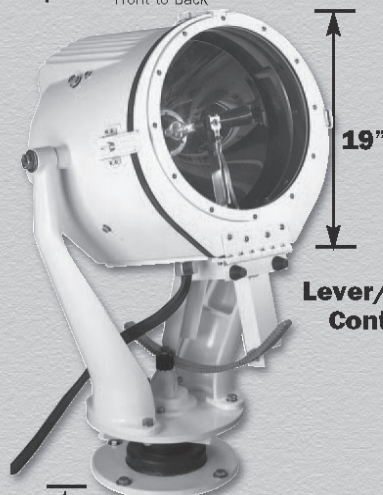
NOTE: Lamps are included with complete Searchlights.

* 500 Watt 220 Power Supply Ships 60hz unless 50hz is requested.

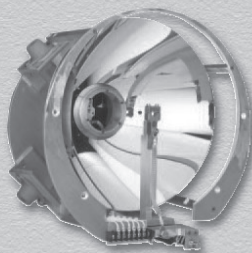
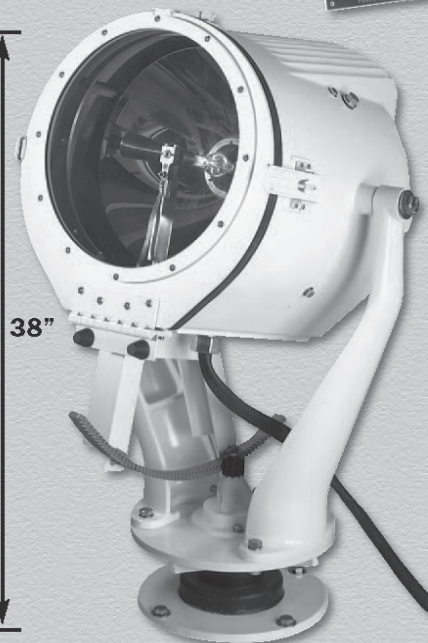
XR SERIES 19" XENON SEARCHLIGHT

FIG. 9854 (1600 WATT) WITH 220 & 440 (3Ø) VAC POWER SUPPLY

Xenon

19-1/2"
Front to Back


Lever/Gear Control
Head, Yoke and Base Assembly

69-1/2"


Fig. 9521000 Optical Assy.

Complete 9854 XR Series Searchlights
TECH INFO

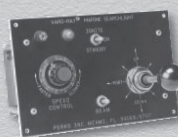
Nominal Drum Diameter Inches	Nominal Searchlight Assembly Weight Pounds	IP Rating
19	145	65

Gross Shipping Weight Including Crate

	Pounds
Searchlight	310
Power Supply	250
Control Rod & Tube	11.5

Base Diameter, 12 Inches.

Remote Distant Electric Control Base

9551001 Remote Control Panel

Figs. 9510/9512/9514 Power Supply

9510010 Control Panel
Ordering Info With Distant Electric Control Base

Lamp Type & Lamp Size	Voltage	Catalog No. Without Heaters	Catalog No. With Heaters
1000 Watt Xenon	220 VAC	9854E02WH0	9854EH2WH0
1600 Watt Xenon	220 VAC	9854E02WH6	9854EH2WH6
1000 Watt Xenon	440 VAC	9854E04WH0	9854EH4WH0
1600 Watt Xenon	440 VAC	9854E04WH6	9854EH4WH6

Ordering Info With Manual Lever Control

Lamp Type & Lamp Size	Voltage	Catalog No. Without Heaters	Catalog No. With Heaters
1000 Watt Xenon	220 VAC	9854L02WH0	9854LH2WH0
1600 Watt Xenon	220 VAC	9854L02WH6	9854LH2WH6
1000 Watt Xenon	440 VAC	9854L04WH0	9854LH4WH0
1600 Watt Xenon	440 VAC	9854L04WH6	9854LH4WH6

Lamps are included with complete searchlights.

XR SERIES XENON SEARCHLIGHTS BULBS & SPARE COMPONENTS

Major Component Ordering Information

Components used in the XR Series searchlights are available as spare parts. Detailed ordering information can be found in the operator's maintenance manual for each light. In addition, power supplies can be easily exchanged for factory-rebuilt models offering a low cost means of upgrading or repairing an older unit in the field.

A unique design feature of the 1600-watt light is the ease with which the optical assembly can be changed by removing a few bolts and easily accessible wires. With this feature, complete optical assemblies (both new and factory refurbished) are available to easily upgrade or refurbish an old unit in the field.

Replacement control components, manuals and tools to make adjustments and lamp changing easier are shown below.

Searchlight Head and Optical Components

Cat. No.	Description
9504000	Complete 15" Searchlight Head with Optical Assembly
9508000	15" Searchlight Yoke & Base Assy Only
9501000	Complete 19" Searchlight Head with Optical Assembly
9506000	19" Searchlight Yoke & Base Assy Only
9521000	Removable 1,600 Watt Optical Assembly

Power Supply Components

Cat. No.	Description
9511000110	500 Watt-110 Volt Power Supply
9511000220	500 Watt-220 Volt Power Supply
9510000220	1,000 Watt-220 Volt (3Ø) Power Supply
9510000440	1,000 Watt-440 Volt (3Ø) Power Supply
9512000	1,600 Watt-220 Volt (3Ø) Power Supply
9514000	1,600 Watt-440 Volt (3Ø) Power Supply

Meters, Gauges & Control Components

Cat. No.	Description
9530000	Std. Length Lever Gear Mechanical Controls for Fig. 9854
9551000	Remote Distant Electric Controls for Fig. 9854
9510009	Remote Ammeter
9510003	Hour Meter
9510010	Control Panel Assembly
9551001	Control Panel for Distant Electric Base and Slave Controller

Additional Components

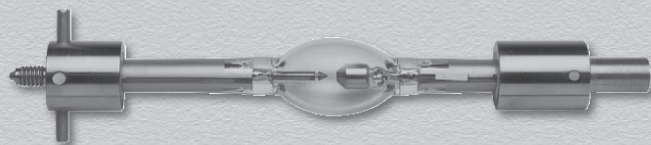
Cat. No.	Description
9510001	Accessory Transformer
9510013	Main Power Transformer
9521009	Excitation Transformer
9521017	Injection Transformer
9510011	Power Supply Fan
9521008	Optical Assembly Fan
9521003	Spark Gap Assembly
9510005	Ignite Toggle Switch
9510006	Beam Focus Switch

Searchlight Tools

Cat. No.	Description
9582001	9/64" Hex Lamp Changing Tool (1600 & 1000 Watt)
9582002	500 Watt Lamp Extractor Tool
9582003	1/4" x 10" Reflector Adjusting Wrench
9582005	Spare Emulator Kit for Fig. 9854 (See Manual Fig. 9581001 for item list)

Manuals

Cat. No.	Description
9581001	Installation Manual - For Fig. 9854 Complete Searchlights
9581002	Installation Manual - For Fig. 9551 Remote Distant Electric Control Unit
9581003	Installation Manual - For Figs. 9501 & 9521 Head and Optical Assemblies
9581004	Installation Manual - For Fig. 9304 Complete Searchlights



XR Series Xenon Lamps Ordering Info AMPERAGE RATINGS

WARNING!!
Xenon lamps are filled with Xenon Gas under high pressure. They may explode in either hot or cold state, especially if dropped or mishandled. **ALWAYS wear protective safety equipment** (a protective face mask with neck guard, chest protector, heavy clothing and leather gloves) **when handling a lamp.**

Xenon Lamp Size	Catalog Number	Current Range	Recommended Operation	Candle Power	Range Miles
300 Watt*	9563000	12A - 16A	15A @ 20V	20,000,000	3.1
500 Watt*	9565000	20A - 30A	30A @ 15V	35,000,000	3.8
1000 Watt	9560000	30A - 55A	50A @ 20V	80,000,000	5.1
1600 Watt	9566000	50A - 70A	65A @ 24V	100,000,000	5.5

* 300W and 500W lamps shown as replacements on earlier VARO 300W and 500W model searchlights only. Not used on 9854 series searchlights.

LAMP WARRANTIES REQUIRE COMPLETION OF WARRANTY REGISTRATION FORMS SHORTLY AFTER PURCHASE AND INSTALLATION

NOTE: PERKO offers a limited warranty on both the shelf and operating life of the XR series Xenon lamps. Please see the XR series "Limited Eighteen (18) Month Warranty" for all explicit terms and conditions of this warranty. All XR series Xenon lamps are supplied with an adapter sized to fit XR series searchlights. Adapters for other searchlights can be manufactured upon request. Contact customer service for details.

PERKO Purchase Notification Purchase Price _____ Date Completed _____ Date of Purchase _____ Authorized Dealer _____ Motor Vessel Name _____ PERKO Inc. Miami, FL. 33169	PERKO Warranty Registration Purchase Price _____ Hour Meter Reading _____ Date of Installation _____ Authorized Dealer _____ Motor Vessel Name _____ PERKO Inc. Miami, FL. 33169
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1900 Series

All Aluminum - White Perko•Kote Finish

32, 120 or 230 Volts

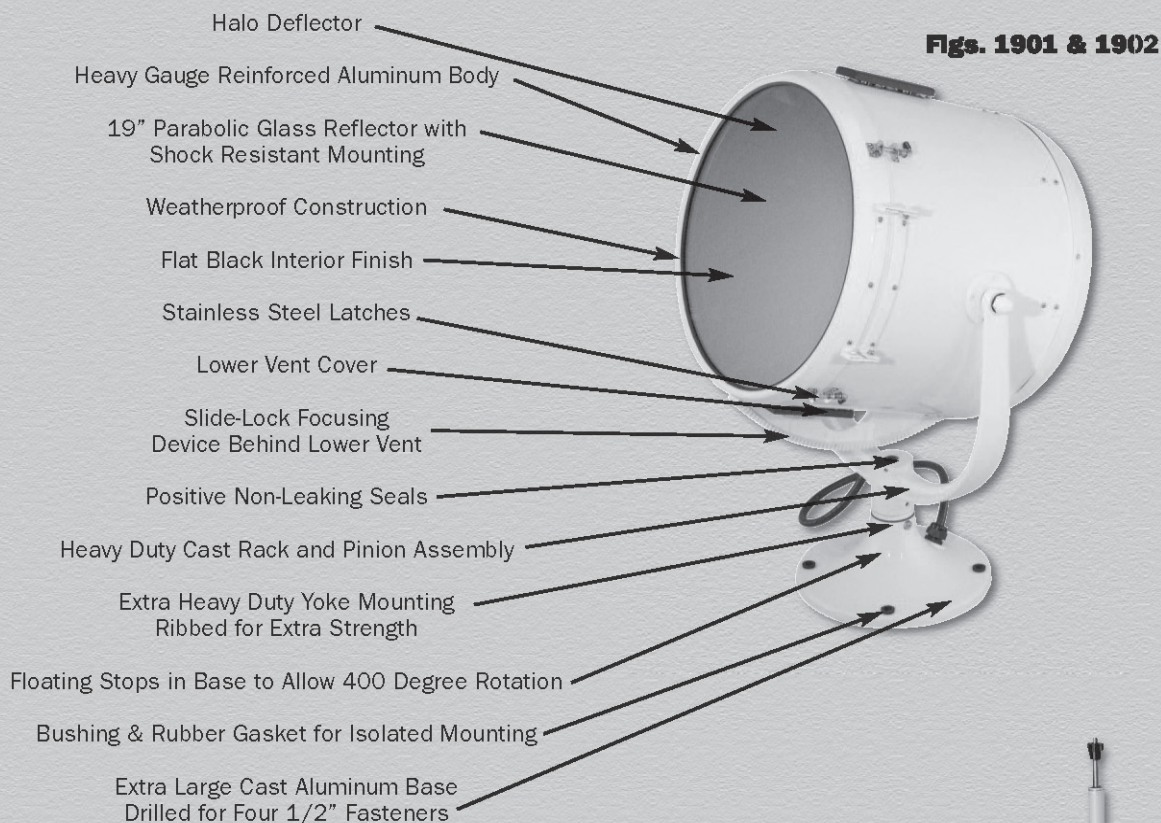


The 1900 Series - Solar-Ray® Searchlights are designed and built with the commercial user in mind where maximum size and brilliance count. These units are constructed of marine aluminum with heavy duty castings and heavy gauge reinforced bodies for extra durability. They are finished in our white PERKO•KOTE finish, an advanced process that eliminates the need for painting while providing a scratch resistant and chip-proof surface for painting when necessary to match the color of the vessel.

The 1900 Series is available with Deck, Wheel, Lever/Gear or Distant Electric Remote Controls. All models feature halo deflectors, parabolic glass mirror reflectors for maximum light output and ventilation covers for quick dissipation of heat to help prolong bulb life. Hinged front doors have quick release stainless steel latches to provide easy access for bulb replacement.

Bulbs are not included and must be ordered separately. PERKO offers a choice of the traditional incandescent or the brighter, more piercing quartz-halogen bulbs in a variety of voltages and wattages. For complete information on bulbs and candlepower output, see page 96.

"1900 Series" High Power Searchlight Features



DECK CONTROL

Equipped with handles on the rear cover for positioning.

WHEEL CONTROL

Turn upper wheel for horizontal position. Turn lower wheel for vertical position.



Fig. 1922

CONTROL TYPES

DISTANT ELECTRIC CONTROL

Joystick type controller with variable speed control for both horizontal and vertical positioning

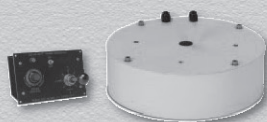


Fig. 1925

LEVER/GEAR CONTROL

Aim handle for horizontal position. Twist handle for vertical position.

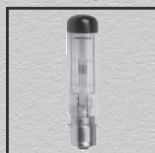


Fig. 1921

19 INCH SOLAR-RAY® SEARCHLIGHT & CONTROL ASSEMBLIES



Lamp



INCANDESCENT

TECH INFO

Nominal Drum
Diameter
Inches

19

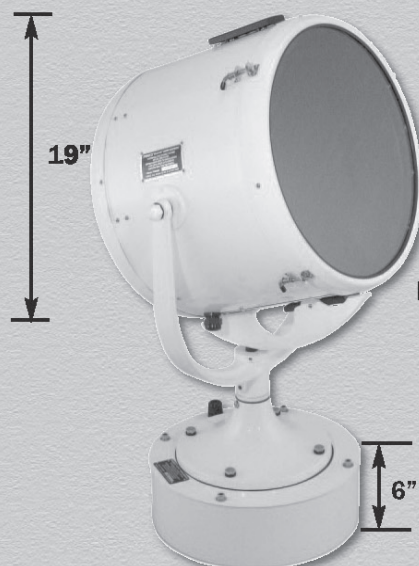
Base
Diameter

13



**Fig. 1902 Light
Shown With Fig. 1922
Wheel Control**

Distance Between Wheels,
2-1/2 Inches.



**Fig. 1902DE4
Light
Shown With
Fig. 1925
Distant
Electric
Control**



**Fig. 1901
Deck Control**



**Fig. 1902 Light
Shown With Fig. 1921
Lever/Gear Control**



**WATER-PROOF
SEAL FOR GEAR MECHANISM**

All Aluminum - White Perko•Kote Finish

ORDERING INFO

Description	Catalog No.	Weights
Deck Control Searchlight Head Assembly*	1901004WHT	76 lbs.
Wheel or Lever/Gear Control Searchlight Head Assembly (Requires Control Assembly Below)	1902004WHT	76 lbs.
Searchlight Head Assembly For Distant Electric Control Base	1902DE4WHT	103 lbs.
Wheel Control Assembly (For Above)	1922000WHT	10.3 lbs.
Lever/Gear Control Assembly (For Above)	1921000WHT	100 lbs.
Distant Electric Control Assembly (For Above)	1925000WHT	50 lbs.

*Cannot Be Fitted With Alternate Controls.

Custom Control Lengths and Pedestal Heights Are Available. Price Upon Application. Specify Measurements.

Bulbs Are Not Included in Lights

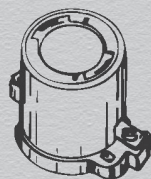
SPARE PARTS FOR 1900 SERIES SOLAR-RAY® SEARCHLIGHTS

Electric Socket and Support Stand Assemblies for 19 Inch Searchlights

Solar-Ray® Searchlights include a socket and support stand based on the bulb or socket information given when ordering. The following chart makes it possible to order and stock different assemblies for field conversion, to meet a large variety of voltage and candlepower requirements with a minimum of inventory.

ORDERING INFO			
Socket Type	Socket Code	Socket & Stand Catalog Number	Height Stand Inches
Medium Screw	B	0872004	5-3/4
Medium Prefocus	E	0873004	5-7/16
Mogul Prefocus (1500 Watt)	L	1930004	3-5/8
Mogul Prefocus (1000 & 2000 Watt)	M	1931004	3-1/8
2-Pin Prefocus (900 Watt)	K	0880004	7-5/16

Replacement Socket Ordering Info For 0800 Series and 1900 Series Solar-Ray® Searchlights



Mogul Prefocus Socket
(Codes "L & M")
Catalog No. 0893



Medium Screw Socket
(Code "B")
Catalog No. 0894

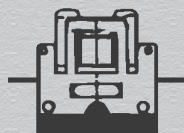


Medium Prefocus Socket
(Code "E")
Catalog No. 0895



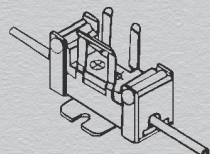
Mogul Screw Socket
(Code "D")
Catalog No. 0897

OLD SOCKET



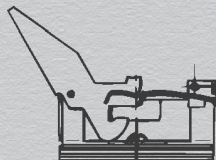
2-Pin Prefocus Socket
(Codes "F, G, H & I"*)
Catalog No. 0899

NEW SOCKET



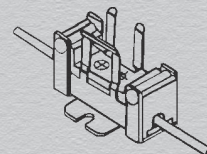
2-Pin Prefocus Socket
(Code "F, G, H, I & K"*)
Catalog No. 0899

OLD SOCKET



2-Pin Prefocus Socket
(Code "K"**)
Catalog No. 0866

NEW SOCKET



2-Pin Prefocus Socket
(Code "K"**)
Catalog No. 0899

*For Use In 10", 12" and 14" Searchlights Except When Catalog No. 0839, 900 Watt Bulb is Used.

**For Use In 12", 14" and 19" Searchlights Only When the Catalog No. 0839, 900 Watt Bulb is Used.

19 INCH SOLAR-RAY® SEARCHLIGHT BULB & SOCKET INFORMATION

Bulb Ordering Information For 19 Inch Searchlights

For best results, the bulb and reflector must be perfectly compatible; therefore be sure to specify the catalog number of the bulb desired. Peak candlepower is exceedingly sensitive to many factors, (i.e., a light source out of focus by 1/32 inch, under-voltage of only 4%, or differences between bulb manufacturers) which can cause a reduction of range of up to 20%. See below. For a more concentrated beam, longer range, brighter light and a longer life, we recommend the Quartz/Halogen bulbs.

Voltage	Approx. Range Miles*	Bulb Catalog Number	Bulb Type	Socket Type	Socket Code Letter	Wattage	Rated Life Hours**	Maximum Candlepower Output	Horizontal Beam Spread Degrees	Vertical Beam Spread Degrees	Mfg. Bulb Code
32	1-2/3	0806	Incandescent	Medium Screw	B	500	50	3,520,000	3.5	3.7	DLT
120	1-5/8	0807	Incandescent	Medium Prefocus	E	500	25	3,191,000	3.5	4.0	CZX
120	1-3/8	0837	Incandescent	Medium Prefocus	E	750	200	2,076,000	3.6	4.2	DDY
120	1-3/4	0809	Incandescent	Medium Prefocus	E	750	25	4,569,000	3.6	4.5	DDB
120	2	0810	Incandescent	Medium Prefocus	E	1000	25	5,622,000	3.6	4.2	DRS
120	1-3/4	0844	Quartz/Halogen	Medium Prefocus	E	500	500	3,861,000	3.0	5.4	BTL
120	1-5/8	0845	Quartz/Halogen	Medium Prefocus	E	750	200	2,871,000	3.6	5.4	BTP
120	2	0839	Quartz/Halogen	2-Pin Prefocus	K	900	75	5,769,000	5.9	5.4	BVA
120	1-2/3	0847	Quartz/Halogen	Mogul Prefocus	M	1000	200	3,659,000	4.5	5.4	BVV
120	1-7/8	0846	Quartz/Halogen	Medium Prefocus	E	1000	200	4,601,000	4.5	5.4	BTR
120	2	0848	Quartz/Halogen	Mogul Prefocus	L	1500	300	5,596,000	5.9	5.7	DTA
120	1-2/3	0859	Quartz/Halogen	Mogul Prefocus	M	2000	250	3,633,000	9.4	5.9	BVW
230	1-3/8	0860	Quartz/Halogen	Medium Prefocus	E	1000	950	2,162,000	7.9	6.5	FKD

*The approximate ranges listed above are based on photometric measurements of beam candlepower output under ideal conditions. Many factors such as atmospheric conditions, size and color of target, background, etc., may reduce effective range considerably; therefore, these figures are offered only as a guide to compare different bulb and voltage options.

Please Order Carefully, Bulbs Are Not Returnable.

****NOTE:** These are the "Rated Average Laboratory Life in Hours" of the Bulb Manufacturer obtained in closely controlled laboratory life testing of groups of lamps at their design voltage. It is not necessarily the same as the service life where conditions such as shock, vibration, voltage fluctuation and environment may result in a shorter average attained life.

Spare Parts Ordering Information For 19 Inch Searchlights

ORDERING INFO					
Fig. No.	Front Glass	Front Door with Glass	Rear Cover	Reflector*	Pinion Gear
1901	0889004CLR	1936000WHT	1932000WHT	0890004	---
1902	0889004CLR	1936000WHT	1933000WHT	0890004	0905

*Replacement Retaining Clips (Cat. No. 0911) for the Reflector Should Also Be Ordered When Ordering a Replacement Reflector to Assure a Proper Fit.

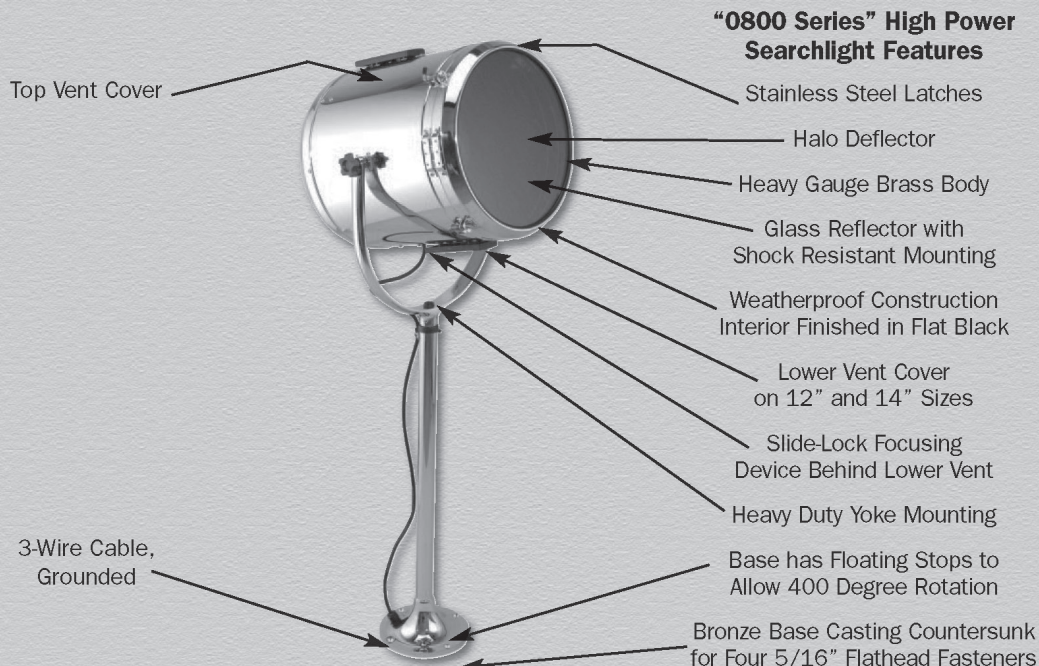
0800 Series 10", 12" or 14"

**Cast Bronze and Heavy Gauge Brass
Polished Chrome or White Perko•Kote Finish
12, 24, 32, 120 or 230 Volts**



The 0800 Series - Solar-Ray® Searchlights are available in 10", 12" and 14" sizes with your choice of Deck, Wheel, Lever/Gear Controls or DEC on 14 inch model. All models feature: halo deflectors, parabolic glass mirror reflectors for maximum light output and ventilation covers for quick dissipation of heat to help prolong bulb life. Hinged front doors have quick release stainless steel latches to provide easy access for bulb replacement. The 0800 Series models are also available in our white PERKO•KOTE finish, an advanced powder coating process that eliminates the need for painting while providing a scratch resistant and chip-proof surface for painting when necessary to match the color of the vessel.

Bulbs are not included and must be ordered separately. PERKO offers a choice of the traditional incandescent or the brighter, more piercing quartz-halogen bulbs in a variety of voltages and wattages to fit every need. For complete information on bulbs and candlepower output, see pages 106 & 107.



BULBS ARE NOT INCLUDED IN LIGHTS.

CONTROL TYPES

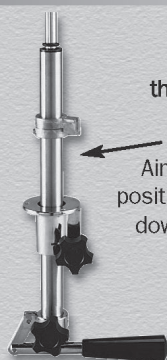


Fig. 0851

DECK CONTROL

Equipped with handles on the rear cover for positioning.

LEVER CONTROL

Aim handle for horizontal position. Move handle up and down for vertical position.



DISTANT ELECTRIC CONTROL
Joystick type controller for both horizontal & vertical positioning (Only Available on the 0887)

WHEEL CONTROL

Turn upper wheel for horizontal position. Turn lower wheel for vertical position.

LEVER/GEAR CONTROL

Aim handle for horizontal position. Twist handle for vertical position.



Fig. 0852

Fig. 0969

0883 Series Deck Control Solar-Ray® Searchlights

10", 12" or 14"



TECH INFO

"A" Nominal
Drum Diameter
Inches

10
12
14

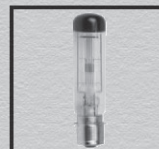
"C" Length
Drum
Inches

13
15
17

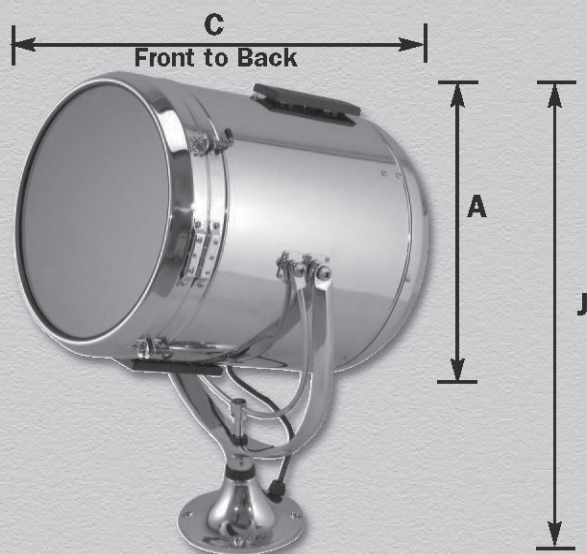
Approx. Ship
Weight
Pounds

28
38
45

Lamp



Incandescent



**Fig. 0883 - Standard Pedestal
Chrome**



**Fig. 0883 - Medium Pedestal
White**



**Fig. 0883 - High Pedestal
Chrome**

- A - Nominal drum diameter
- C - Drum length
- J - Overall height from mounting surface to top of searchlight

Bulbs Are Not Included in Lights

0883 Series Deck Control Solar-Ray® Searchlights**10", 12" or 14"****Ordering Info**

- NOTES: 1) These Searchlights Cannot Be Fitted With Controls.
2) Bulbs Must be Ordered Separately.

ORDERING INFO - STANDARD PEDESTAL

Nominal Reflector Size Inches	"J" Height Overall Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	20-1/8	08830P1CHR	08830P1WHT
12	22-1/8	08830P2CHR	08830P2WHT
14	25-1/8	08830P3CHR	08830P3WHT

Standard Pedestal Base Diameter, 7 Inches

ORDERING INFO - MEDIUM PEDESTAL

Nominal Reflector Size Inches	"J" Height Overall Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	27-1/2	0883MP1CHR	0883MP1WHT
12	29-1/2	0883MP2CHR	0883MP2WHT
14	32-1/2	0883MP3CHR	0883MP3WHT

Medium Pedestal Base Diameter, 8 Inches

ORDERING INFO - HIGH PEDESTAL

Nominal Reflector Size Inches	"J" Height Overall Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	44	0883HP1CHR	0883HP1WHT
12	46	0883HP2CHR	0883HP2WHT
14	49	0883HP3CHR	0883HP3WHT

High Pedestal Base Diameter, 8 Inches

NOTE: Custom Pedestal Heights are Available.
Price Upon Application.
Specify the "J" Dimension for Custom Pedestal Height.

High Pedestal White**Med. Pedestal White****Std. Pedestal White****Std. Pedestal Chrome****Med. Pedestal Chrome****High Pedestal Chrome**



0884 Series Lever Control Solar-Ray® Searchlights

10", 12" and 14"

TECH INFO

"A" Nominal Drum Diameter <u>Inches</u>	"C" Length Drum <u>Inches</u>	Approx. Ship Weight <u>Pounds</u>
10	13	28
12	15	38
14	17	45

Lamp



Incandescent

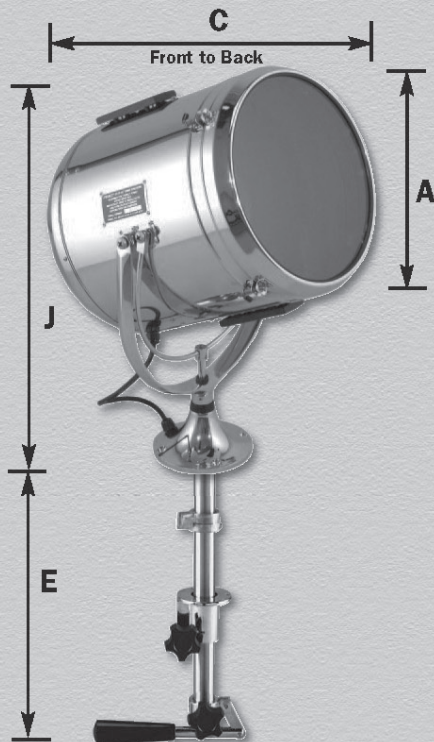


Fig. 0884
Standard Pedestal
Chrome

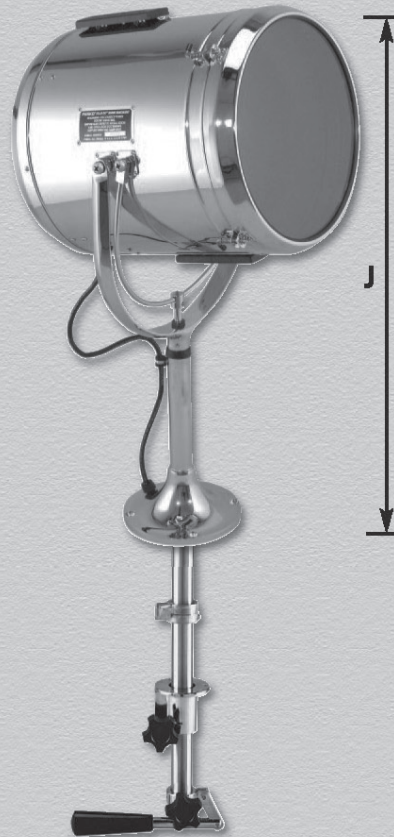


Fig. 0884
Medium Pedestal
Chrome

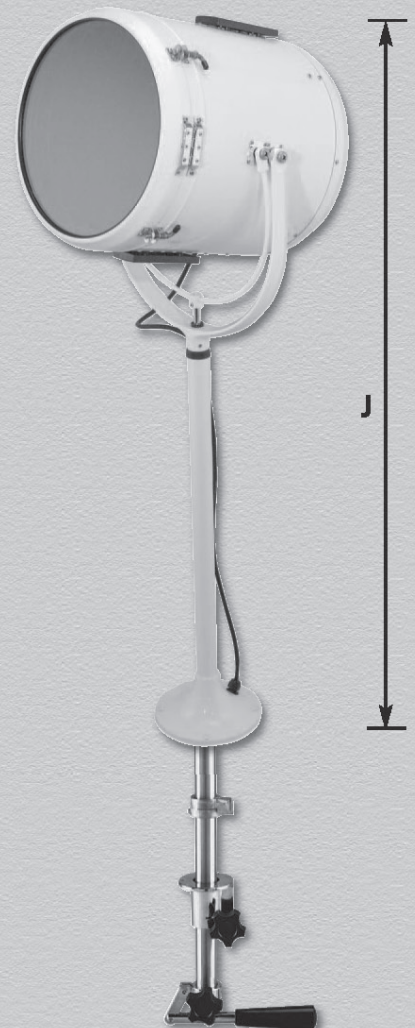


Fig. 0884
High Pedestal
White

- A - Nominal drum diameter
- C - Drum length
- J - Overall height from mounting surface to top of searchlight
- E - Control length

Bulbs Are Not Included in Lights

LEVER CONTROL SOLAR-RAY® SEARCHLIGHT HEAD ASSEMBLIES

0884 Series Lever Control Solar-Ray® Searchlights 10", 12" and 14" Ordering Info

Notes: 1) Bulbs Must be Ordered Separately

ORDERING INFO - STANDARD PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	20-1/8	08840P1CHR	08840P1WHT
12	22-1/8	08840P2CHR	08840P2WHT
14	25-1/8	08840P3CHR	08840P3WHT

Standard Pedestal Base Diameter, 7 Inches

ORDERING INFO - MEDIUM PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	28-1/4	0884MP1CHR	0884MP1WHT
12	30-1/4	0884MP2CHR	0884MP2WHT
14	33-1/4	0884MP3CHR	0884MP3WHT

Medium Pedestal Base Diameter, 8 Inches

ORDERING INFO - HIGH PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	44-3/4	0884HP1CHR	0884HP1WHT
12	46-3/4	0884HP2CHR	0884HP2WHT
14	49-3/4	0884HP3CHR	0884HP3WHT

High Pedestal Base Diameter, 8 Inches

High Pedestal White



Med. Pedestal White



Std. Pedestal White



Std. Pedestal Chrome



Med. Pedestal Chrome



High Pedestal Chrome



NOTE: Custom Pedestal Heights are Available. Price Upon Application.
Specify the "J" Dimension for Custom Pedestal Height.

Fig. 0851 - Lever Control Assemblies

Control assemblies of different lengths may be interchanged on Solar-Ray® searchlights (Fig. 0884) of the same pedestal height. The following chart makes it possible to order and stock different lengths of these assemblies separately to offer a large variety of Solar-Ray® searchlights with a minimum of inventory. Custom Control Lengths are Available. Price Upon Application. Specify the "E" Dimension for Custom Control Lengths.

ORDERING INFO

"E" Length Control Inches	0 For Standard Pedestal	M For Medium Pedestal	H For High Pedestal Cat. No.	Approx. Ship Weight Lbs. 0/M/H
8-1/2	0851000*	0851M00*	0851H00*	3.4/4.3/6.1
15-1/2	08510A0	0851MA0	0851HA0	4.1/4.9/6.3
22-1/2	08510B0	0851MB0	0851HB0	5.0/5.8/6.9
29-1/2	08510C0	0851MC0	0851HC0	5.8/6.6/8.5

* Maximum Ceiling Thickness, 4-1/2 Inches

WHEEL OR LEVER/GEAR CONTROL SOLAR-RAY® SEARCHLIGHTS

0885 Series Wheel or Lever/Gear Control Solar-Ray® Searchlights

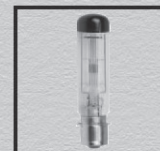
10", 12" and 14"



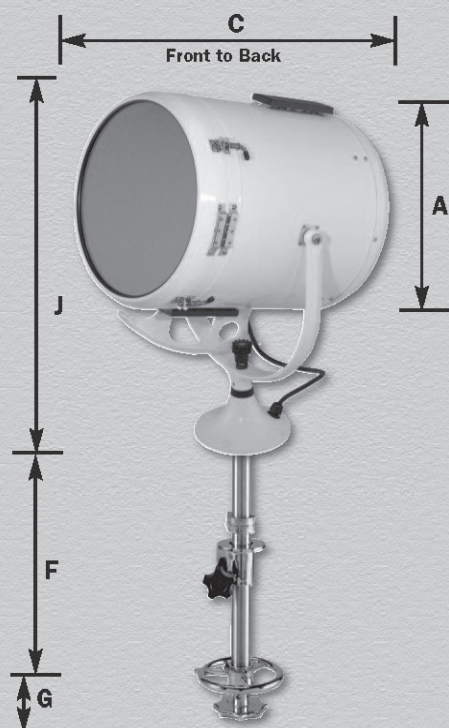
TECH INFO

"A" Nominal Drum Diameter <u>Inches</u>	"C" Length Drum <u>Inches</u>	Nominal Weight <u>Pounds</u>
10	13	28
12	15	38
14	17	45

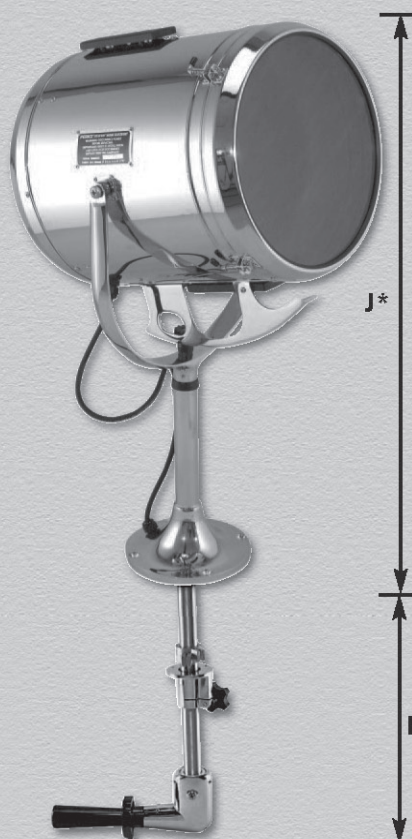
Lamp



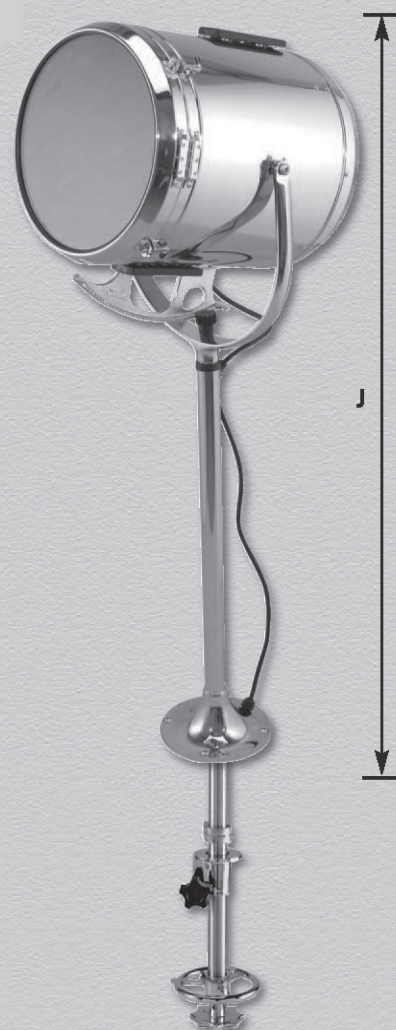
Incandescent



**Fig. 0885 White
Standard Pedestal
Shown With Wheel Control**



**Fig. 0885 Chrome
Medium Pedestal
Shown With
Lever/Gear Control**



**Fig. 0885 Chrome
High Pedestal
Shown With Wheel Control**

- A - Nominal drum diameter
- C - Drum length
- E - Control length (lever/gear control)
- F - Control length (wheel control)
- G - Distance between wheels, 2 inches.
- J - Overall height from mounting surface to top of searchlight

Bulbs Are Not Included in Lights

WHEEL OR LEVER/GEAR CONTROL SOLAR-RAY® SEARCHLIGHT HEAD ASSEMBLIES

0885 Series Wheel or Lever/Gear Control Solar-Ray® Searchlights 10", 12" and 14" Ordering Info

Notes: Bulbs Must be Ordered Separately,

ORDERING INFO - STANDARD PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	20-1/8	08850P1CHR	08850P1WHT
12	22-1/8	08850P2CHR	08850P2WHT
14	25-1/8	08850P3CHR	08850P3WHT

Standard Pedestal Base Diameter, 7 Inches

ORDERING INFO - MEDIUM PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	28-1/4	0885MP1CHR	0885MP1WHT
12	30-1/4	0885MP2CHR	0885MP2WHT
14	33-1/4	0885MP3CHR	0885MP3WHT

Medium Pedestal Base Diameter, 8 Inches

ORDERING INFO - HIGH PEDESTAL HEAD ASSEMBLIES

Nominal Reflector Size Inches	"J" Height Inches	Polished Chrome Catalog No.	White PERKO•KOTE Catalog No.
10	44-3/4	0885HP1CHR	0885HP1WHT
12	46-3/4	0885HP2CHR	0885HP2WHT
14	49-3/4	0885HP3CHR	0885HP3WHT

High Pedestal Base Diameter, 8 Inches

High
Pedestal
White



Med. Pedestal
White



Std. Pedestal
White



Std. Pedestal
Chrome



Med. Pedestal
Chrome



High
Pedestal
Chrome



NOTE: Custom Pedestal Heights are Available. Price Upon Application. Specify the "J" Dimension for Custom Pedestal Height.

Control Assemblies - Figs. 0852 & 0969

Control assemblies of different lengths may be interchanged on Solar-Ray® searchlights (Fig. 0885) of the same pedestal height. The following chart makes it possible to order and stock different lengths of these assemblies separately to offer a large variety of Solar-Ray® Searchlights with a minimum of inventory.

ORDERING INFO WHEEL CONTROL - FIG. 0852

"F" Length Control Inches	0 For Standard Pedestal	M For Medium Pedestal	H For High Pedestal	Nominal Wt. Lbs. 0/M/H
7-1/2	0852000*	0852M00*	0852H00*	4.1/5.0/7.0
14-1/2	08520A0	0852MA0	0852HA0	4.9/5.7/7.6
21-1/2	08520B0	0852MB0	0852HB0	5.8/6.5/8.5
28-1/2	08520C0	0852MC0	0852HC0	6.5/7.3/9.2

*Maximum Ceiling Thickness, 3 Inches

ORDERING INFO LEVER/GEAR CONTROL - FIG. 0969

"E" Length Control Inches	0 For Standard Pedestal	M For Medium Pedestal	H For High Pedestal	Nominal Wt. Lbs. 0/M/H
8-1/2	0969000*	0969M00*	0969H00*	5.2/6.1/7.8
15-1/2	09690A0	0969MA0	0969HA0	6.0/6.6/8.5
22-1/2	09690B0	0969MB0	0969HB0	6.9/7.6/9.4
29-1/2	09690C0	0969MC0	0969HC0	7.6/8.3/10.2

*Maximum Ceiling Thickness, 3-1/2 Inches

NOTE: Custom Control Lengths are Available. Price Upon Application. Specify the "E" or "F" Dimension for Custom Control Lengths.



0887 Series for 12, 24 & 120 Volt

TECH INFO

Nominal Drum Diameter <u>Inches</u>	Length Drum <u>Inches</u>	Gross Shipping Weight <u>Pounds</u>
14	17	68

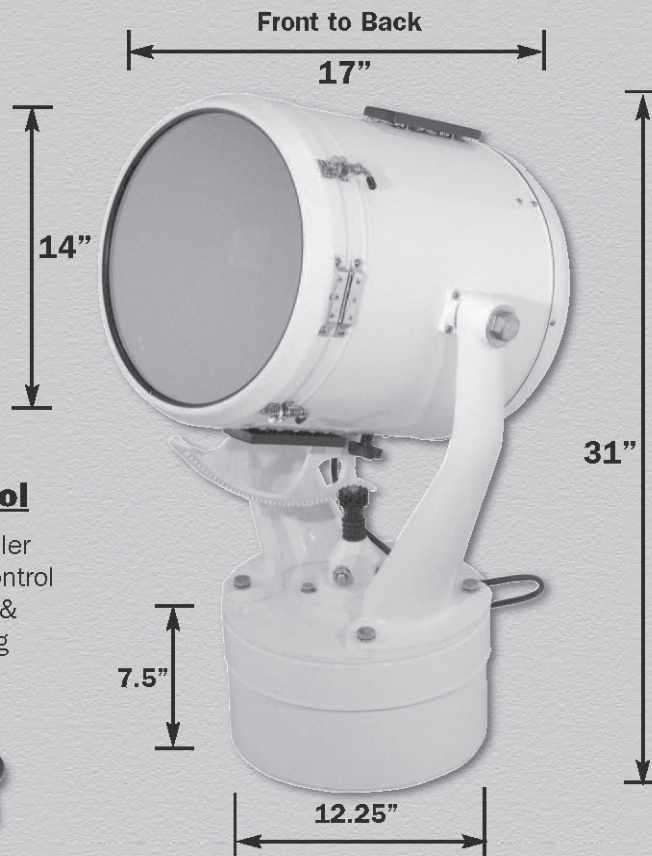
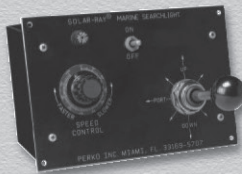
Lamp



Incandescent

Distant Electric Control

Joystick type controller
with variable speed control
for both horizontal &
vertical positioning



**Fig. 0887 - Standard Pedestal
With DEC Base**

All Aluminum - White Perko•Kote Finish

ORDERING INFO

Description	Catalog No.
Searchlight Head Assembly w/ Distant Electric Control Base - 12 Volt	0887EA3WHT
Searchlight Head Assembly w/ Distant Electric Control Base - 24 Volt	0887EB3WHT
Searchlight Head Assembly w/ Distant Electric Control Base - 120 Volt	0887EC3WHT

Bulbs Are Not Included in Lights

SOLAR-RAY® SEARCHLIGHT ORDERING WORKSHEET

0800 Series

1) **Head Assembly Type:** _____

a) For deck control - 0883
b) For lever control - 0884
c) For wheel and lever/gear control - 0885

2) **Pedestal (overall) Height (see catalog page for details):** _____

a) Standard - O
b) Medium - M
c) High - H
For custom pedestal height see no. 10 below.

3) **Reflector Size:** _____

a) 10 inch - 1
b) 12 inch - 2
c) 14 inch - 3

4) **Finish:** _____

a) PERKOPLATE (polished chrome) - CHR
b) PERKO•KOTE (white) - WHT

5) **Control Type:** _____

a) Lever control (For 0884 Head Assembly) - 0851
b) Wheel control (For 0885 Head Assembly) - 0852
c) Lever/Gear control (For 0885 Head Assembly) - 0969

6) **Control Length (when necessary):** _____

a) (8-1/2" for 0851 & 0969) or (7-1/2" for 0852) - O
b) (15-1/2" for 0851 & 0969) or (14-1/2" for 0852) - A
c) (22-1/2" for 0851 & 0969) or (21-1/2" for 0852) - B
d) (29-1/2" for 0851 & 0969) or (28-1/2" for 0852) - C

7) **Bulb Number (see pages 106 & 107 for details):** _____

8) **Socket Type:** _____ Code: _____

a) Medium Screw "B"
b) Medium Prefocus "E"
c) Mogul Screw "D" (Not for use with 10 inch reflector.)
d) 2-Pin Prefocus (12 volt) "F"
e) 2-Pin Prefocus (24 volt) "G"
f) 2-Pin Prefocus (32 volt) "H"
g) 2-Pin Prefocus (600 Watt) "I"
h) 2-Pin Prefocus (900 watt) "K"

9) **Custom control length:** _____
Specify control length desired as measured from pedestal base to lower end of control assembly ("E" or "F" dimension).

10) **Custom pedestal height:** _____
Specify overall height of searchlight desired as measured from the top of the searchlight head to the bottom of the pedestal base ("J" dimension).

Head Assembly Cat. No. _____ **P** _____

Control Assembly Cat. No. _____ **0** _____

Bulb Cat. No. _____

Socket Code _____

See
www.perko.com
for interactive
Searchlight
Ordering Guide

Spare Parts Ordering Info for 0800 Series Solar-Ray® Searchlights

Fig.	Size	Front Glass Cat. No.	Front Door with Glass Cat. No. *	Rear Cover Cat. No. *	Reflector** Cat. No.	Pinion Gear Cat. No.
0883	10"	0889001CLR	0891001CHR	0908001CHR	0890001	---
	12"	0889002CLR	0891002CHR	0908002CHR	0890002	---
	14"	0889003CLR	0891003CHR	0908003CHR	0890003	---
0884	10"	0889001CLR	0891001CHR	0902001CHR	0890001	---
	12"	0889002CLR	0891002CHR	0902002CHR	0890002	---
	14"	0889003CLR	0891003CHR	0902003CHR	0890003	---
0885	10"	0889001CLR	0891001CHR	0902001CHR	0890001	0905
	12"	0889002CLR	0891002CHR	0902002CHR	0890002	0905
	14"	0889003CLR	0891003CHR	0902003CHR	0890003	0905

* NOTE: The Spare Part catalog numbers listed above are for the polished chrome (CHR) finish.

To order white finish, replace the "CHR" in the catalog number with the "WHT" finish code.

**Replacement Retaining Clips (Cat. No. 0910) For The Reflector Should Also Be Ordered When Ordering a Replacement Reflector To Assure a Proper Fit.

BULB TECHNICAL DATA FOR SOLAR-RAY® SEARCHLIGHTS

0800 Series Bulbs

The Following Chart is Provided to Aid in Proper Bulb Selection:

Searchlight Size Inches	Voltage	Approximate Range Miles*	Bulb Catalog Number	Bulb Wattage	Rated Life Hours**	Maximum Candlepower Output	Horizontal Beam Spread Degrees	Vertical Beam Spread Degrees
10"	12	1	0816	100	50	1,168,000	1.7	1.4
	24	1	0836	150	50	891,000	2.6	1.5
	32	3/4	0817	200	200	571,000	2.6	1.7
	32	1	0806	500	50	943,000	3.4	3.9
	120	1	0820	600	75	908,000	4.4	2.2
	120	1-1/8	0807	500	25	1,332,000	3.5	2.8
	120	1-1/8	0844	500	500	1,260,000	3.1	3.4
12"	12	1-1/4	0816	100	50	1,617,000	1.5	1.2
	24	1-1/8	0836	150	50	1,349,000	2.2	1.5
	32	7/8	0817	200	200	865,000	2.4	1.6
	32	1-1/8	0806	500	50	1,496,000	3.4	3.5
	120	1	0837	750	200	977,000	4.1	3.7
	120	1	0845	750	200	1,185,000	3.7	5.2
	120	1-1/8	0820	600	75	1,410,000	4.3	1.9
	120	1-1/4	0809	750	25	1,792,000	3.6	3.4
	120	1-1/4	0844	500	500	1,641,000	3.2	3.4
	120	1-1/4	0807	500	25	1,799,000	3.3	3.1
	120	1-1/4	0811	1000	50	1,816,000	4.0	4.9
	120	1-3/8	0810	1000	25	1,894,000	4.0	3.8
	120	1-3/8	0846	1000	200	1,911,000	3.9	5.0
	120	1-1/2	0839	900	75	2,482,000	4.5	5.5
	230	7/8	0860	1000	950	865,000	6.9	5.9
14"	12	1-1/4	0816	100	50	1,756,000	1.5	1.0
	24	1-1/8	0836	150	50	1,367,000	2.3	1.2
	32	1	0817	200	200	943,000	2.2	1.5
	32	1-1/8	0806	500	50	1,591,000	4.0	3.7
	120	1-1/8	0837	750	200	1,254,000	3.9	4.5
	120	1-1/8	0845	750	200	1,531,000	3.6	5.1
	120	1-1/4	0820	600	75	1,626,000	4.5	1.9
	120	1-3/8	0844	500	500	1,840,000	2.9	3.2
	120	1-3/8	0811	1000	50	2,249,000	4.0	5.1
	120	1-1/2	0807	500	25	2,353,000	3.2	3.2
	120	1-1/2	0809	750	25	2,422,000	3.7	4.0
	120	1-1/2	0846	1000	200	2,586,000	3.8	5.0
	120	1-1/2	0810	1000	25	2,621,000	4.0	4.5
	120	1-5/8	0839	900	75	2,889,000	4.5	5.2
	230	1	0860	1000	950	1,021,000	7.7	6.2

*The approximate ranges listed above are based on photometric measurements of beam candlepower output under ideal conditions. Many factors such as atmospheric conditions, size and color of target, background, etc., may reduce effective range considerably; therefore, these figures are offered only as a guide to compare different bulb and voltage options.

**NOTE: These are the "Rated Average Laboratory Life in Hours" of the Bulb Manufacturer obtained in closely controlled laboratory life testing of groups of lamps at their design voltage. It is not necessarily the same as the service life where conditions such as shock, vibration, voltage fluctuation and environment may result in a shorter average attained life.



2-PIN PREFOCUS



MOGUL SCREW



MEDIUM PREFOCUS



MEDIUM SCREW

BULB AND SOCKET ORDERING INFORMATION FOR SOLAR-RAY® SEARCHLIGHTS

0800 Series Bulbs

Bulbs Are Not Included in Lights and Must Be Ordered Separately.

For best results, the bulb and reflector must be perfectly compatible; therefore, be sure to specify the catalog number of the bulb desired. Peak candlepower is exceedingly sensitive to many factors, (i.e., a light source out of focus by 1/32 inch, under-voltage of only 4%, or differences between bulb manufacturers) which can cause a variation in range of up to 20%.

INCANDESCENT BULB ORDERING INFO

Bulb Catalog Number	Voltage	Wattage	Socket Type	Socket Code Letter	For Searchlight Sizes Inches	Rated* Life Hours	Mfg. Bulb Code
0806	32	500	Medium Screw	B	10, 12, 14	50	DLT
0807	120	500	Medium Prefocus	E	10, 12, 14	25	CZX/DAB
0809	120	750	Medium Prefocus	E	12, 14	25	DDB
0837	120	750	Medium Prefocus	E	12, 14	200	DGH
0810	120	1000	Medium Prefocus	E	12, 14	25	DRS
0811	120	1000	Mogul Screw	D	12, 14	50	DPT

For a More Concentrated Beam, Longer Range, Brighter Light and a Longer Life, We Recommend the Following Bulbs:

"QUARTZ" TUNGSTEN-HALOGEN BULB ORDERING INFO

Bulb Catalog Number	Voltage	Wattage	Socket Type	Socket Code Letter	For Searchlight Sizes Inches	Rated* Life Hours	Mfg. Bulb Code
0816	12	100	2-Pin Prefocus	F	10, 12, 14	50	FDT
0836	24	150	2-Pin Prefocus	G	10, 12, 14	50	DZE-FDS
0817	32	200	2-Pin Prefocus	H	10, 12, 14	200	1945
0844	120	500	Medium Prefocus	E	10, 12, 14	500	BTL
0820	120	600	2-Pin Prefocus	I	10, 12, 14	75	DYS
0845	120	750	Medium Prefocus	E	12, 14	200	BTP
0839	120	900	2-Pin Prefocus	K	12, 14	75	BVA
0846	120	1000	Medium Prefocus	E	12, 14	200	BTR
0860	230	1000	Medium Prefocus	E	12, 14	950	FKD

Please Order Carefully, Bulbs are Not Returnable.

*NOTE: These are the "Rated Average Laboratory Life in Hours" of the Bulb Manufacturer obtained in closely controlled laboratory life testing groups of lamps at their design voltage. It is not necessarily the same as the service life where conditions such as shock, vibration, voltage fluctuation and environment may result in a shorter average attained life.

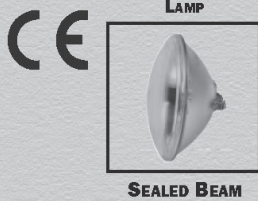
Electric Socket and Support Stand Assemblies

Solar-Ray® Searchlights include a socket and support stand assembly based on the bulb or socket information given when ordering. The following chart makes it possible to order and stock different socket and stand assemblies for field conversion to meet a large variety of voltage and candlepower requirements with a minimum of inventory.

ORDERING INFO

Socket Type (See Page 95 for Drawing)	Socket Code	For 10" Searchlights		For 12" Searchlights		For 14" Searchlights	
		Catalog Number	Height Stand Inches	Catalog Number	Height Stand Inches	Catalog Number	Height Stand Inches
Medium Screw	B	0872001	1-1/4	0872002	2-1/4	0872003	3-1/4
Medium Prefocus	E	0873001	1-5/16	0873002	1-15/16	0873003	2-15/16
Mogul Screw	D	----	---	0874002	7/16	0874003	1-1/4
2-Pin Prefocus (12 Volt)	F	0875001	3-1/2	0875002	4-1/2	0875003	5-1/2
2-Pin Prefocus (24 Volt)	G	0876001	3-1/4	0876002	4-1/4	0876003	5-1/4
2-Pin Prefocus (32 Volt)	H	0878001	3-1/4	0878002	4-1/4	0878003	5-1/4
2-Pin Prefocus (600 Watt)	I	0879001	3-1/8	0879002	4-1/8	0879003	5-1/8
2-Pin Prefocus (900 Watt)	K	----	---	0880002	3-13/16	0880003	4-13/16

PILOT HOUSE CONTROL SEALED BEAM SEARCHLIGHT®


Fig. 0314 - Pilot House Control Searchlight
CONSTRUCTION:

- Chrome Plated or White PERKO•KOTE Powder Coated Brass
 - Corrosion Resistant, Splash Proof Construction
 - 7 & 8 Inch Sealed Beam Units Included
 - Tin Plated Electrical Contacts and Wiring
 - Lever Action, Pilot House Control
 - 380° Horizontal Movement, 70° Vertical Movement
 - Lever Handle Controls both Horizontal and Vertical Movement
 - For Ceiling Thicknesses of up to 5"
 - For 12, 24 or 32 Volts


**Fig. 0314
Chrome**

**Fig. 0314
White**
ORDERING & TECH INFO

Overall Length	Voltage	Approx. Range Miles	Beam Candle Power	Wattage	Chrome Catalog Number	White Catalog Number	Ship Wt. Carton Lbs. Std. Pkg.
7 Inch Head							
24	12	5/8	250,000	100	0314C0712V	0314W0712V	13.1
24	24	3/4	470,000	450	0314C0724V	0314W0724V	13.1
24	32	5/8	260,000	200	0314C0732V	0314W0732V	13.1
8 Inch Head							
26	12	3/4	500,000	250	0314C0812V	0314W0812V	13.4
26	24	3/4	500,000	600	0314C0824V	0314W0824V	13.4
26	32	3/4	500,000	600	0314C0832V	0314W0832V	13.4

Replacement Sealed Beam Information
7 Inch Head

12 Volt: 043300312V

24 Volt: 043300324V

32 Volt: 043300332V

8 Inch Head

12 Volt: 043300412V

24 Volt: 043300424V

32 Volt: Order 24V Sealed Beam. If converting from another voltage, order Internal Dropping Resistor (0314R3299A) in addition to the bulb.

SOLAR-RAY® SEALED BEAM SEARCHLIGHTS

Figs. 0305 & 0313 Series

- Bronze Base, Brass Body
- Chrome Plated or White PERKO•KOTE Powder Coating
- For 12, 24 or 32 Volts

Dimensions (Inches)

A	B	C	D	G	H
8	8-1/2	10	7	2	2-1/8

TECH INFO

Voltage	Wattage	Approximate Candlepower	Sealed Beam Range Miles	Sealed Beam Catalog No.
12	100	250,000	5/8	043300312V
24	450	470,000	3/4	043300324V
32	200	260,000	5/8	043300332V

ORDERING INFO - FIGS. 0305 & 0313 SEARCHLIGHT HEADS

Voltage	Head Only Chrome Plated For Lever Control	Head Only White PERKO•KOTE For Lever Control	Head Only Chrome Plated For Wheel or Lever/Gear Control	Head Only White PERKO•KOTE For Wheel or Lever/Gear Control
12	0305H12CHR	0305H12WHT	0313H12CHR	0313H12WHT
24	0305H24CHR	0305H24WHT	0313H24CHR	0313H24WHT
32	0305H32CHR	0305H32WHT	0313H32CHR	0313H32WHT

Nominal Weight - 20 lbs.

Fig. 0354 Front Bezel with Glass for Figs. 0305 & 0313, Specify Chrome or White.

Fig. 0355 Rear Cover for Figs. 0305 & 0313, Specify Chrome or White.

Figs. 0851, 0852 & 0969 - Control Assemblies

- Stainless Steel Tubes with Chrome Plated Fittings
- Lever Control Fits Fig. 0305 Head Assemblies.
- Wheel and Lever/Gear Controls Fit Fig. 0313 Head Assemblies.

ORDERING & TECH INFO

Control Length Inches		"E" Lever Control For 0805	"E" Lever/Gear Control For 0313	"F" Wheel Control For 0313	Nominal Weight Pounds E/E/F
"E"	"F"				
8-1/2	7-1/2	0851000*	0969000**	0852000***	3.4/4.1/5.2
15-1/2	14-1/2	08510A0	09690A0	08520A0	4.1/4.9/6.0
22-1/2	21-1/2	08510B0	09690B0	08520B0	5.0/5.8/6.9
29-1/2	28-1/2	08510C0	09690C0	08520C0	5.8/6.5/7.6

Maximum Ceiling Thickness,

*0851: 4-1/2 Inches.

**0969: 3-1/2 Inches.

***0852: 3 Inches.

Custom Lengths Available by Special Order.

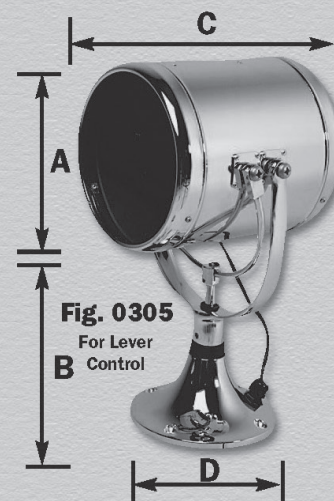
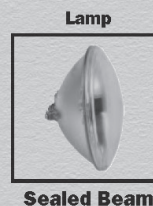


Fig. 0305
For Lever Control



Fig. 0313
For Wheel or
Lever/Gear Control



Fig. 0969
Lever/Gear Control
Fits 0313 Head

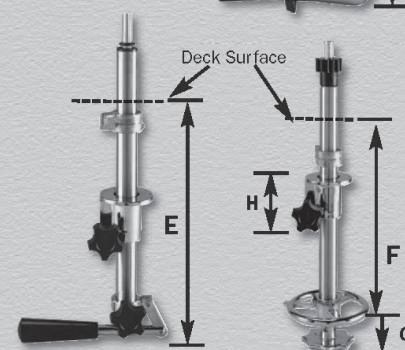


Fig. 0851
Lever Control
Fits 0305 Head

Fig. 0852
Wheel Control
Fits 0313 Head

SOLAR-RAY® SEALED BEAM SEARCHLIGHTS

CE



Fig. 0538



Sealed Beam Included



Fig. 0535



Fig. 0534

Figs. 0534, 0535 & 0538 - Searchlights

CONSTRUCTION:

- Chrome Plated Brass Head
 - For 12, 24 or 32 Volts
- Tungsten or Halogen Bulb
 - Switch in Head

Fig. 0534 - Deck Control

- Chrome Plated Bronze Base
- 7 Inch Sealed Beam Bulb Included

Fig. 0535 - Pilot House Control

- Chrome Plated Bronze Base
- 7 Inch Sealed Beam Bulb Included
- Lever Handle Controls both Horizontal and Vertical Movement
 - Control Length: 7-1/2 Inches
- Maximum Ceiling Thickness: 4-1/2 Inches

Fig. 0538 - Deck Control

- Chrome Plated Brass Base
- 4-1/2 Inch Sealed Beam Bulb Included

ORDERING & TECH INFO

Voltage	O.D. Bulb Inches	Approx. Range Miles	Beam Candlepower	Wattage	Height Overall Inches	Base Dimension Inches	Catalog Number	Ship Wt. Carton Lbs. Std Pkg.
12	7	5/8	250,000	100	12-1/2	4-7/8 x 3-1/8	053400312V	9.0
24	7	3/4	470,000	450	12-1/2	4-7/8 x 3-1/8	053400324V	9.0
32	7	5/8	260,000	200	12-1/2	4-7/8 x 3-1/8	053400332V	9.0
12	7	5/8	250,000	100	—	4-7/8 x 3-1/8	053500312V	9.0
24	7	3/4	470,000	450	—	4-7/8 x 3-1/8	053500324V	9.0
32	7	5/8	260,000	200	—	4-7/8 x 3-1/8	053500332V	9.0
12	4-1/2	1/4	50,000	30	7-1/2	3-1/2 O.D.	0538000CHR	1.5
12	4-1/2	1/3	100,000	50	7-1/2	3-1/2 O.D.	0538H00CHR*	1.5

*NOTE: "H" in the Catalog Number Designates a Halogen Bulb.

CE



Fig. 0440
No. 3
Shown



Sealed Beam Included

Fig. 0440 - Removable Hand Held Deck Control Searchlight

CONSTRUCTION:

- Chrome Plated Brass Head and Base
 - For 12 or 32 Volts
- 4-1/2 or 7 Inch Sealed Beam Bulb Included
- 8 Feet of Coiled Cord & Cigarette Lighter Plug
 - Watertight Deck Connection
 - Switch in Head

ORDERING & TECH INFO

Voltage	O.D. Bulb Inches	Approx. Range Miles	Beam Candlepower	Wattage	Height Overall Inches	Catalog Number	Ship Wt. Carton Lbs. Std Pkg.
12	4-1/2	1/4	50,000	30	7-1/2	044000112V	2.4
12	4-1/2	1/3	100,000	50	7-1/2	0440H0112V*	2.4
12	7	5/8	250,000	100	10	044000312V	5.5
32	7	5/8	260,000	200	10	044000332V	5.5

Base Diameter, 2-1/8 Inches.

*NOTE: "H" in the Catalog Number Designates a Halogen Bulb.

SPARE SEALED BEAM ORDERING INFORMATION

4-1/2 Inch Sealed Beam: 043300112V.
4-1/2 Inch Halogen Sealed Beam: 043500112V.

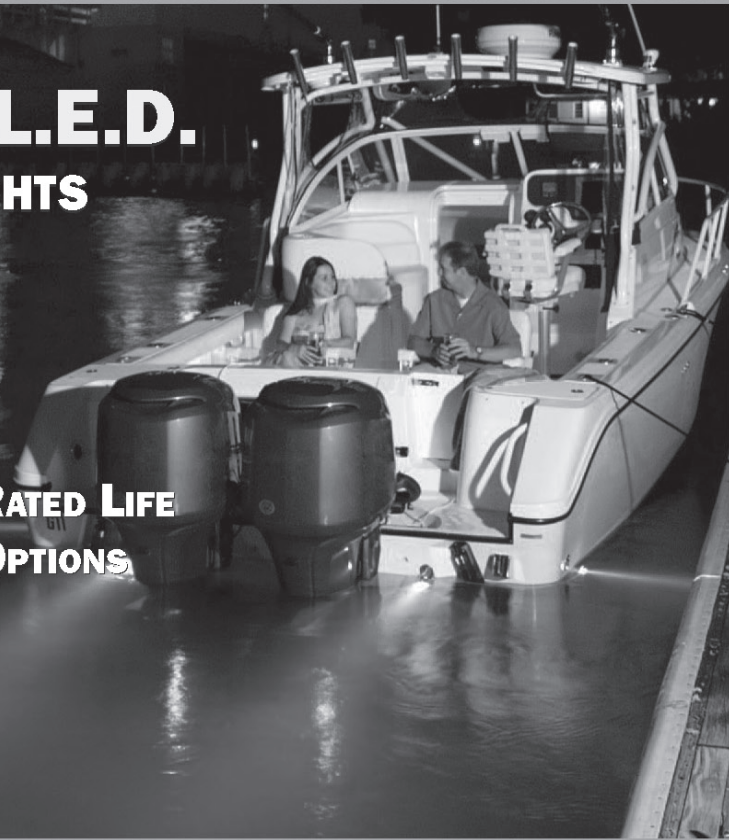
7 Inch Sealed Beam (12 Volt): 043300312V.
7 Inch Sealed Beam (24 Volt): 043300324V.
7 Inch Sealed Beam (32 Volt): 043300332V.

Replacement Base: 0494000CHR

SURFACE MOUNT L.E.D. UNDERWATER LIGHTS



- **EASY INSTALLATION**
- **50,000 HOUR. L.E.D. RATED LIFE**
- **BLUE OR WHITE L.E.D. OPTIONS**
- **SINGLE OR DOUBLE PACK**



TRADITIONAL THRU-HULL MOUNT UNDERWATER LIGHTS

- **CHROME OR PLAIN BRONZE**
- **INCANDESCENT OR L.E.D.**
- **LARGE LIGHTS FOR LARGE BOATS**
- **SMALL LIGHTS FOR SMALL BOATS**
- **CHANGEABLE BEAM & COLOR
OPTIONS**
- **IGNITION PROTECTED**



UNDERWATER LIGHTING - L.E.D. SURFACE MOUNT FOR TRIM TABS



Fig. 0178 - L.E.D. Surface Mount Trim Tab Underwater Light

CONSTRUCTION:

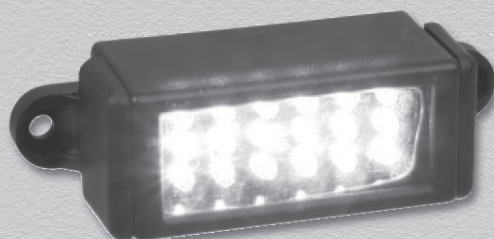
- Non-Corrosive Molded Black Polymer Housing
 - White or Blue L.E.D.'s
- 8 Feet of 18 AWG Marine Grade Electrical Cable
 - Removable brackets can be positioned for horizontal or vertical mounting applications
- Trim Tab mounting allows for adjustability of the beam as the tab moves up and down
 - Mounting riser included in DP Package for use with lipped trim tabs.
- L.E.D.'s provide Longer Life, Less Heat and Use 1/10th the Energy of Standard Lights

Fig. 0178

Mounted on Trim Tab
(Not Included)



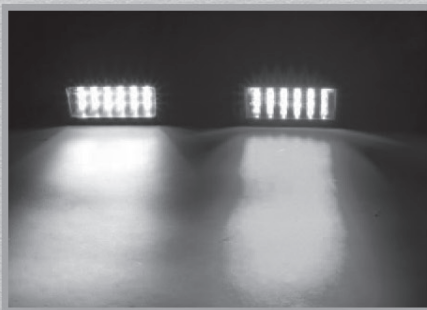
Horizontal Mount



Vertical Mount



**Shown with
Mounting Riser**



White or Blue L.E.D.'s



Shown on Trim Tab In the water



ORDERING INFO

Description	L.E.D. Color	Dealer Pkg. 1 Pkg.	Std. Pkg. - 1 Pc. OEM Bulk Pkg. 10 Pcs.	Ship Wt. Carton Lbs. DP/STD/OEM Bulk
Trim Tab Mount 1-Pk	White	0178DP1WHT	0178001WHT	0.7/0.7/5.0
Trim Tab Mount 2-Pk	White	0178DP2WHT	-----	1.8
Trim Tab Mount 1-Pk	Blue	0178DP1BLU	0178001BLU	0.7/0.7/5.0
Trim Tab Mount 2-Pk	Blue	0178DP2BLU	-----	1.8

Available for Retail Sale in Single or Double Pack

TECH INFO

- 12 Volt, 7.0W
- 75 Lumens, 324 C.P. - White
- 27 Lumens, 207 C.P. - Blue
 - L.E.D. Beam: 15°
 - Lab Rated L.E.D. Life: 50,000 Hrs.
 - Dimensions: 4-1/8" x 1-5/16" x 1-1/4"
 - Bolt Size: 8/32 P.H.

UNDERWATER LIGHTING - L.E.D. SURFACE MOUNT®

Fig. 0181 - Surface Mount L.E.D. Underwater Light

CONSTRUCTION:

- Lightweight Molded Polymer Body
- White or Blue L.E.D.s
- Affordable, Rugged & Reliable
- Low Draw, Long Life L.E.D.
- Installs Easily with 3 Screws



**50,000 Hr.
Rated
L.E.D. Life**



**Fig. 0181
Profile**



Available for Retail Sale in Single or Double Pack



Fig. 0181 White

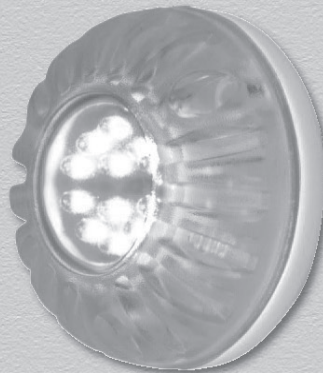


Fig. 0181 Blue



**Installs with just
3 Screws (Not Included)**

ORDERING INFO

Description	L.E.D. Color	Dealer Pkg. 5 Pkgs.	OEM Bulk Pkg. 10 Pcs.	Ship Wt. Carton Lbs. DP/OEM Bulk
Surface Mount 1-Pk	White	0181DP1WHT	0181001WHT	3.4/4.6
Surface Mount 2-Pk	White	0181DP2WHT	-----	5.7
Surface Mount 1-Pk	Blue	0181DP1BLU	0181001BLU	3.4/4.6
Surface Mount 2-Pk	Blue	0181DP2BLU	-----	5.7

TECH INFO

- 12 Volt, 4.5W
- 50 Lumens, 216 C.P. - White
- 18 Lumens, 138 C.P. - Blue
- L.E.D. Beam: 15°
- Lab Rated L.E.D. Life: 50,000 Hrs
- Projection: 1-1/4"
- Overall Dia.: 2-7/8"
- Screw Size: #8 R.H.

UNDERWATER LIGHTING - L.E.D. THRU-HULL MOUNT



Fig. 0176 - L.E.D. Thru-Hull Mount Underwater Light

CONSTRUCTION:

- Polished or Chrome Plated Bronze Body and Mounting Ring
- 10 Feet of 16/2 Electrical Cable
- Safety Seal Design Prevents Water Intrusion in the Event of Glass Breakage
 - Terminal for Bonding Wire
- L.E.D.'s provide Longer Life, Less Heat and Use 1/10th the Energy of Standard Lights
 - Ignition Protected



Fig. 0176



**Fig. 0078
L.E.D.**

ORDERING INFO			TECH INFO
Description	Dealer Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Dealer Pkg.	<ul style="list-style-type: none"> • 12 Volt, 5W, 0.4 Amps • Bulb 20° Beam • 85 Lumens • Lab Rated Bulb Life: 50,000 Hrs • Length Overall: 6-3/4" • Flange Dia.: 3-3/4" • Mounting Hole Dia.: 2-3/8"
Polished Bronze	0176DP3PLB	5.0	
Chrome Plated	0176DP3CHR	5.0	
Description	Std. Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Std. Pkg.	
Polished Bronze	0176003PLB	4.6	
Chrome Plated	0176003CHR	4.6	

SPARE PARTS ORDERING INFORMATION

Replacement 12V L.E.D.: 0078DP112V
 Replacement Lens Kit (includes O-Rings): 0174DP1LNS
 IGNITION PROTECTED Power Relay for use with up to 4 lights: (12 volt) 0061DP1RLY

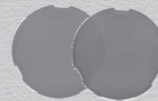
UNDERWATER LIGHTING - INCANDESCENT THRU-HULL MOUNT®

Fig. 0174 - Thru-Hull Mount Underwater Light

CONSTRUCTION:

- Polished or Chrome Plated Bronze Body and Mounting Ring
- Two Bulb Options:
 - 25° Beam Bulb (3000 CB Candle Power)
 - 40° Beam Bulb (1700 CB Candle Power)
- 10 Feet of 16/2 Electrical Cable
- Safety Seal Design Prevents Water Intrusion in the Event of Glass Breakage
- Terminal for Bonding Wire
- Includes Green & Blue Lens Filters
- Ignition Protected

Color Lens Filters



Included in Package

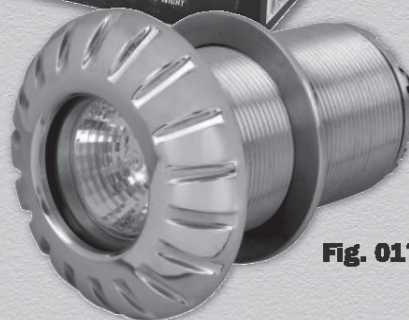
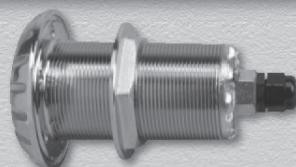


Fig. 0174



Easy Access for Bulb Changes



ORDERING INFO

Description	Bulb Beam	Dealer Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Dealer Pkg.
Polished Bronze	25° & 40°	0174DP3PLB*	5.1
Chrome Plated	25° & 40°	0174DP3CHR*	5.1

Description	Bulb Beam	Std. Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Std. Pkg.
Polished Bronze	25°	0174003PLB	4.6
Polished Bronze	40°	0174004PLB	4.6
Chrome Plated	25°	0174003CHR	4.6
Chrome Plated	40°	0174004CHR	4.6

TECH INFO

- 12 Volt, 50W, 4.1 Amps
 - 2 Bulb Options:
 - 25° & 40° Beam
 - 800 Lumens
 - Lab Rated Bulb Life: 5000 Hrs**
 - Length Overall: 6-3/4"
 - Flange Dia.: 3-3/4"
- Mounting Hole Dia.: 2-3/8"



**Fig. 0061
Ignition
Protected
Relay**



Fig. 0077 Halogen Bulbs
50 Watt - 25° Beam
50 Watt - 40° Beam

SPARE PARTS ORDERING INFORMATION

12 Volt, 50 Watt, 25° Beam Bulb: 0077DP112V

12 Volt, 50 Watt, 40° Beam Bulb: 0077DP212V

24 Volt Bulb Options Available

Blue & Green Lens Filter Kit & 2 O-Rings: 0174DP099A

Replacement Lens Kit (includes O-Ring): 0174DP1LNS

IGNITION PROTECTED Power Relay for use with up to 4 lights:
(12 volt) 0061DP1RLY or (24 volt) 0061DP2RLY

* Dealer Package includes both bulbs

** In Accordance with ANSI Standards

UNDERWATER LIGHTING - INCANDESCENT SPACE SAVER THRU-HULL MOUNT



Color Lens Filters



Included in Package

Smaller Space Saver Version

Fig. 0175 - Space Saver Thru-Hull Mount Underwater Light

CONSTRUCTION:

- Polished or Chrome Plated Bronze Body and Mounting Ring
- 10 Feet of 18/2 Electrical Cable
- Safety Seal Design Prevents Water Intrusion in the Event of Glass Breakage
 - Terminal for Bonding Wire
- Includes Green & Blue Lens Filters
 - Ignition Protected



Fig. 0175

Proportional Relationship between Figs. 0174 & 0175

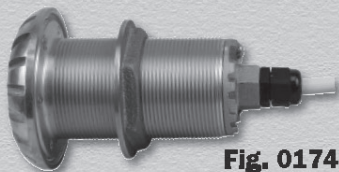


Fig. 0174

Mounting Hole Dia.: 2-3/8"

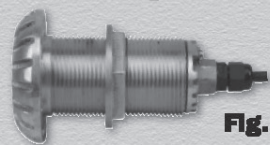


Fig. 0175

Mounting Hole Dia.: 1-3/4"

ORDERING INFO

Description	Dealer Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Dealer Pkg.
Polished Bronze	0175DP3PLB	2.3
Chrome Plated	0175DP3CHR	2.3
Description	Std. Pkg. 1 Pc. per Box	Ship Wt. Carton Lbs. Std. Pkg.
Polished Bronze	0175003PLB	2.1
Chrome Plated	0175003CHR	2.1

TECH INFO

- 12 Volt, 35W, 2.9 Amps
 - Bulb 30° Beam
 - 550 Lumens
- Lab Rated Bulb Life: 3500 Hrs.*
- Length Overall: 5-1/4"
 - Flange Dia.: 2-7/8"
- Mounting Hole Dia.: 1-3/4"

SPARE PARTS ORDERING INFORMATION

12 Volt, 35 Watt, 30° Beam Bulb: 0080DP112V
24 Volt Bulb Options Available

Blue & Green Lens Filter Kit & 2 O-Rings: 0175DP099A
Replacement Lens Kit (includes O-Ring): 0175DP1LNS

IGNITION PROTECTED Power Relay for use with up to 4 lights:
(12 volt) 0061DP1RLY or (24 volt) 0061DP2RLY



Fig. 0080 Halogen Bulb
35 Watt - 30° Beam

* In Accordance with ANSI Standards

LED[®] L.E.D. DOCKING LIGHTS & UTILITY LIGHTS

Fig. 0202 - L.E.D. Straight Docking Light

Fig. 0203 - L.E.D. Angled Docking Light



CONSTRUCTION:

- Marinium Alloy or Chrome Plated Bronze
- Angled or Straight Light Direction
- Low Draw, Long Life L.E.D. Lighting
- 12 Volt L.E.D.



**Fig. 0203
Angled**

**Fig. 0202
Straight**



**Fig. 0203
Angled**



**Fig. 0202
Straight**

ORDERING INFO

Light Direction	Material	Projection Inches	Dealer Pkg. 1 Pair per Pkg.	OEM Bulk Pkg. 5 Pairs	Ship Wt. Carton Lbs. DP/OEM Bulk
Straight	Chr. Bronze	1/2	0202DPOCHR	0202000CHR	1.7/7.0
Straight	Marinium	1/2	0202DPOMAR	0202000MAR	1.2/5.5
Angled	Chr. Bronze	1/2	0203DPOCHR	0203000CHR	2.9/13.2
Angled	Marinium	1/2	0203DPOMAR	0203000MAR	1.4/8.0

TECH INFO

- 12 Volt, 4.5W
- L.E.D. Beam: 15°
- Lab Rated L.E.D. Life: 50,000 Hrs
- Screw Size: #6

Dimensions:

Angled: 4-1/8" x 3-3/8"
Straight: 3-1/8" O.D.

Fig. 0606 - White L.E.D. Utility Light

Fig. 0607 - White/Red L.E.D. Utility Light



CONSTRUCTION:

- Chrome Plated Brass Frame
- Low Draw, Long Life L.E.D. Lighting
- 12 Volt L.E.D.



**Fig. 0606
White**



**Fig. 0607
White/Red**

ORDERING INFO

L.E.D. Color	Dealer Pkg. 1 Card 1 Pc. per Card	OEM Bulk Pkg. 10 Pcs.	Screw Size	Ship Wt. Carton Lbs. DP/OEM Bulk
White	0606DPOCHR	0606000CHR	6	0.7/2.5
White/Red	0607DPOCHR	0607000CHR	6	0.7/2.6

TECH INFO

- L.E.D.: 12 Volt, 4W
- Lab Rated L.E.D. Life: 50,000 Hrs.

Base Dimensions:

7-1/4" x 1-1/2"



**McDermott Light
& Signal**

BGBZ-FLOOD



BGBZ-FLOOD-20.5

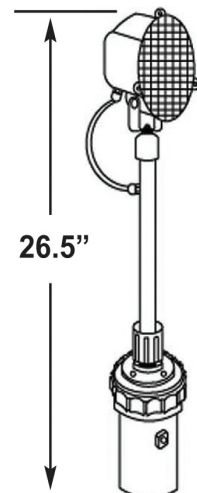
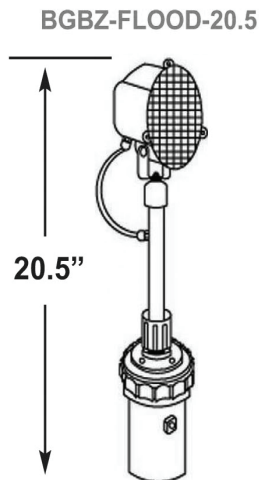
**Battery-powered portable LED floodlight
with 150 lb. magnetic pull base
and clevis head.**

**Ideal for welding or painting.
No more running an AC line cord for
floodlights or stopping to change burned
out light bulbs.**

OPTIONS:

Battery Life:	32 hours on standard alkaline
Light Output:	Over 400 candlepower
Lamp Life:	20,000 hours
Material:	High-impact polycarbonate
Power Options:	6 volt battery
Weight:	8 lbs.

BGBZ-FLOOD-26.5





BGLED888

LED Barge Navigation Lights

**Certified to meet
requirements for unmanned
barges per UL 1104**

**The market leader in
lightweight, rugged, certified barge
navigation lights.
Runs for 30 nights on one set
of standard alkaline batteries.**

Polycarbonate
handle

Polycarbonate
Case



BGLED888-FL

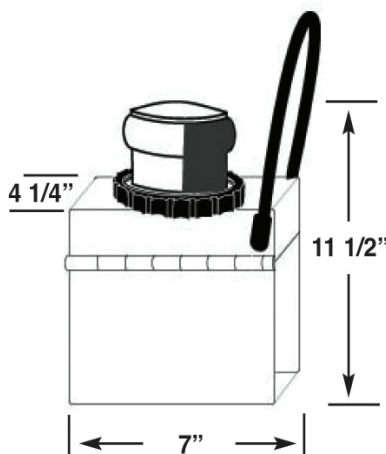
SPECIFICATIONS:

Range:	3 nautical miles
Mount:	Magnetic
Light Source:	LEDs rated up to 20,000 hrs
Material:	High-impact polycarbonate
Battery Life:	30 nights on standard alkaline
Weight:	7 lbs.
Dimensions:	11 1/2"h x 7"l x 4 1/4"w



BGLED888-PORT

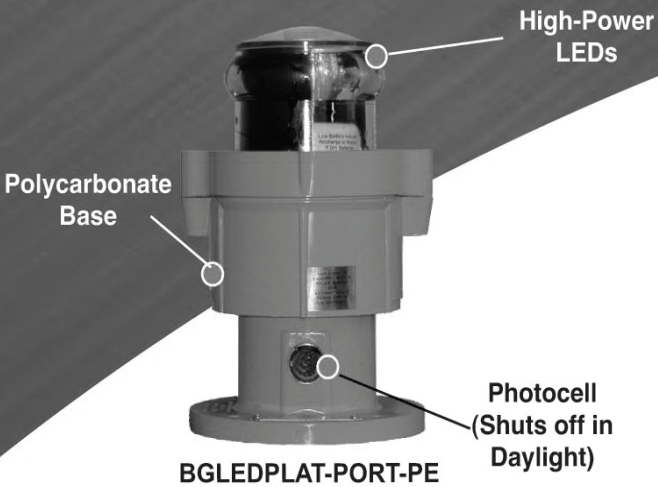
BGLED888



BGLED888-STAR

BGLEDPLAT

LED Barge Navigation Lights



**Certified to meet
applicable sections of UL 1104**

**Platform-mounted barge navigation
lights enable you to use your own
power source.**

**Get 18 months of light on one
12 volt air alkaline battery.**



BGLEDPLAT-STAR-PE



BGLEDPLAT-STERN-PE

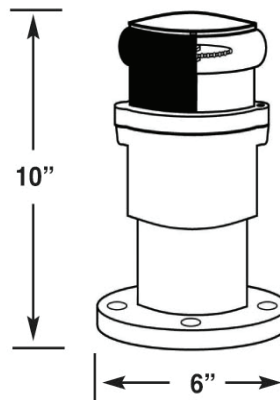


BGLEDPLAT-FL-PE

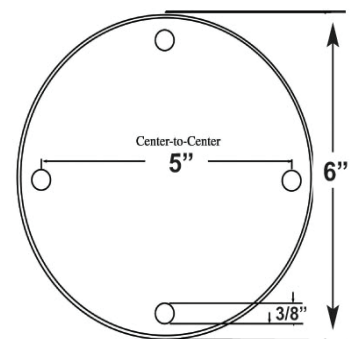
SPECIFICATIONS:

Range:	3 nautical miles
Mount:	Magnetic or Flat Mount
Light Source:	High-power LEDs
Material:	High-impact polycarbonate
Battery Life:	18 months on 12V air alkaline battery
Power Source:	12, 24 VDC; 120, 220 VAC
Weight:	5 lbs.
Dimensions:	10"h x 6" dia.

BGLEDPLAT



MOUNTING BASE



TB3/TB6

LED Navigation Lights



High-intensity
Xelogen Lamp

TB6-MAST-GL35

3 Mile Navigation Lights
Certified to meet applicable
sections of UL 1104

**Three miles for vessels greater
than 50 meters in length.**
**Three miles of LED light for
years of service and no bulb
maintenance.**



TB3-TOW



TB3-PORT



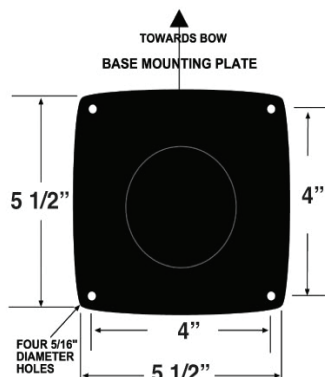
TB3-78-WHITE

TB6-MAST-GL35 SPECIFICATIONS:

Range:	5 or 6 nautical miles available
Mount:	5 1/2" x 5 1/2" Base; 4" x 4" holes on center
Light Source:	High-intensity Xelogen Lamps
Material:	High-impact polycarbonate
Visibility Arc:	225 degrees
Power Sources:	12, 24, 32 VDC; 120, 220 VAC
Weight:	6 lbs.
Dimensions:	6"h x 5 1/2"l x 5 1/2"w

TB3 SPECIFICATIONS:

Range:	3 nautical miles
Mount:	5 1/2" x 5 1/2" Base; 4" x 4" holes on center
Light Source:	High-power LEDs
Material:	High-impact polycarbonate
Visibility Arc:	112.5, 135, 360 degrees
Power Sources:	12, 24, 32 VDC; 120, 220 VAC
Weight:	2 lbs.
Dimensions:	6"h x 5 1/2"l x 5 1/2"w



BGLEDCase

Solar LED Barge Navigation Lights



High-Power
LEDs

Solar Powered

Magnetic mount

BGLEDCase-FL-4.5



Flat Mount

BGLEDCase-PORT-4.5



BGLEDCase-STERN-4.5



BGLEDCase-STAR-4.5

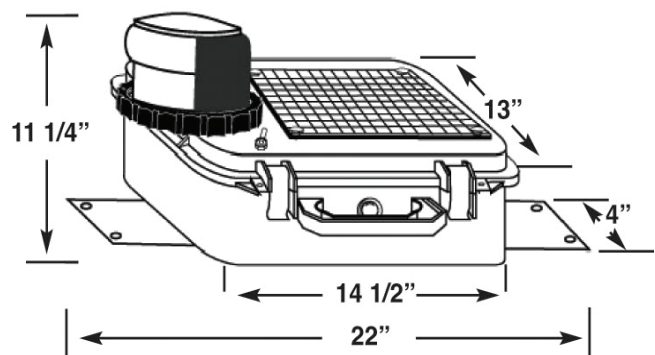
**Certified to meet
requirements for unmanned
barges per UL 1104**

**The most advanced solar barge
navigation light available.
Enjoy years of service with
no maintenance and get the
power of the sun.**

SPECIFICATIONS:

Range:	3 nautical miles
Mount:	Magnetic or Flat Mount
Light Source:	LEDs rated up to 20,000 hrs.
Material:	High-impact polycarbonate
Battery Life:	Rechargeable, 2 - 4 years
Autonomy:	25 sunless days
Weight:	22 lbs.
Dimensions:	11 1/4"h x 13"w x 14 1/2"l - Mag 11 1/4"h x 13"w x 22"l - Flat

BGLEDCase-4.5





TOPHAT

Solar LED Lights

Tophat Series Solar Lights

The most versatile, low-cost, solar solution for stand-alone locations. McDermott Tophats combine solar power with LED technology to provide years of maintenance-free operation.

SPECIFICATIONS:

Range:	1-3 miles available
Mount:	Magnetic, Flat or Pipe Mount
Lamp Source:	High-power LEDs
Material:	High-impact polycarbonate
Power Supply:	NI-MH
Autonomy:	10 nights with no sun
Flash Rates:	15, 24, 30, 60 flashes per minute
Weight:	2 lbs.
Dimensions:	5"h x 7" dia.

High-impact
Polycarbonate

High-Power
LEDs

TOPHAT-FLAT

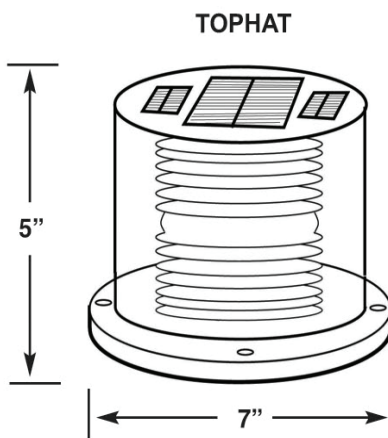
Mounting
Holes

High-performance
Solar Panel

TOPHATX

TOPHAT-BUNY

TOPHAT-PLAT





**McDermott Light
& Signal**

Solar Bilge Alarm

Don't let bilge water sink your ship!



**Get immediate notification of
emergency conditions:
High-Powered LED strobes.
High-Decibel audible sirens.
Emergency messages sent
directly to your cell phone.**

**Solar power provides complete
autonomy for remote moorings.**



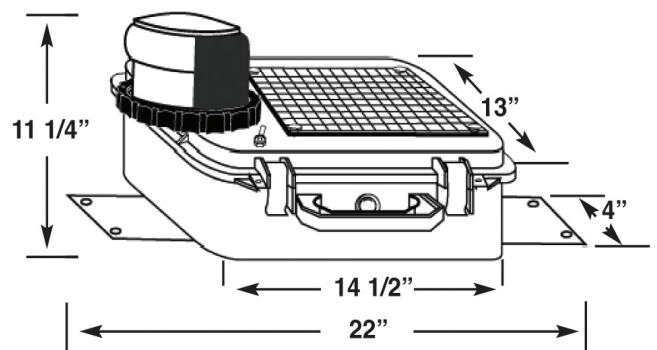
ALARM OPTIONS:

Visual Alarm:	High-Power LED Strobe Light
Audible Alarm:	High-Decibel Siren
Cell Phone Alarm:	Emergency Text Messages
Material:	High-Impact Polycarbonate
Power Options:	Solar-powered; Hardwired

Wiring: Can accept normally-open
or normally-closed circuits

Alarm supports remote text messaging

Weight: 22 lbs.





TB2/TB5

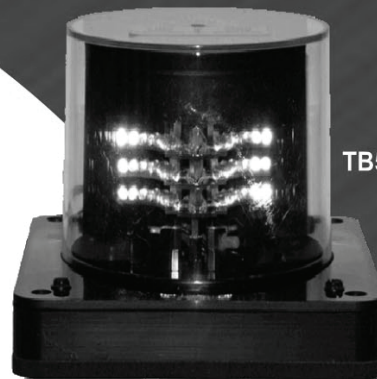
LED Navigation Lights

2 Mile Navigation Lights
Certified to meet applicable
sections of UL 1104

Switch to McDermott
LED Navigation Lights and stop
wasting money on light bulbs.
Our LED lights can be used with
most existing alarm panels making
them a perfect option for retrofits.

LED MASTHEAD LIGHT SPECIFICATIONS:

Range:	5 or 6 miles available
Mount:	7" x 7" Base; 6" x 6" holes on center
Lamp Source:	High-power LEDs
Material:	High-impact polycarbonate
Visibility Arc:	225 degrees
Power Sources:	12, 24, 32 VDC; 120, 220 VAC
Weight:	4 lbs.
Dimensions:	6"h x 7"l x 7"w



TB5-LED-MAST



TB2D-STERN



TB2D-PORT



TB2-266-TOW

TB2 SPECIFICATIONS:

Range:	2 nautical miles
Mount:	5 1/2" x 5 1/2" Base; 4" x 4" holes on center
Lamp Source:	High-power LEDs
Material:	High-impact polycarbonate
Visibility Arc:	112.5, 135, 360 degrees
Power Sources:	12, 24, 32 VDC; 120, 220 VAC
Weight:	3 lbs.
Dimensions:	5"h x 5 1/2"l x 5 1/2"w

World Class Products for World Class Customers

Aqua Signal is the worldwide leader in marine navigational lighting. Since 1868, Aqua Signal has been manufacturing "World Class Products for World Class Customers". With Aqua Signal, you are assured that your boat is safe. Our products comply with strict international rules and regulations with UL, USCG, ISO, ABYC, NMMA, and CE certifications.

Premium Commercial Halogen Floodlights IP 67 Protection Class



1000 Watt
PN 1069012 (120V)
PN 1069015 (220 V)



500 Watt
PN 1069040 (120V)



200 Watt
PN 1076060

Series 55 Navigational Light IP 56 Protection Class

USCG approved
For vessels > 20m - < 50m / > 65' - < 164'
Visibility 2 n.m. (masthead 5 n.m.)



PN 55200-1* (starboard)
PN 55300-1* (port)
PN 55400-1* (masthead)
PN 55500-1* (stern)
PN 55502-1* (stern yellow)
PN 55000-1* (all around white)
PN 55004-1* (all around red)
PN 55002-1* (all around green)
* bulb not included

Series 70 Navigational Lights for Large Vessels IP 56 Protection Class

USCG Approved
For vessels >= 20m / 65'
Visibility 3 n.m. (masthead 6 n.m.)



PN 70200-1* (starboard)
PN 70300-1* (port)
PN 70400-1* (masthead)
PN 70500-1* (stern white)
PN 70502-1* (stern yellow)
PN 70000-1* (all around white)
PN 70004-1* (all around red)
PN 70002-1* (all around green)
PN 70006-1* (all around yellow)
* bulb not included

Series 70M Combined Main/ Reserve Navigation Lights IP 56 Protection Class



USCG approved
For vessels >= 20m / 65'
Visibility 3 n.m. (masthead 6 n.m.)

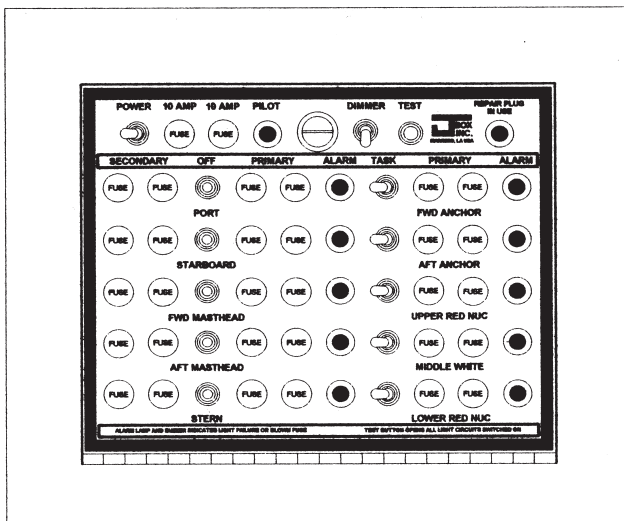
PN 3583109* (starboard)
PN 3584209* (port)
PN 3581009* (masthead)
PN 3582709* (stern)
PN 3582499* (stern yellow)
PN 3580009* (all around white)
PN 3580209* (all around red)
PN 3580109* (all around green)
PN 3580499* (all around yellow)
* bulb not included



NAVIGATION LIGHT PANELS

SUPERVISED SOLID STATE SEMI-AUTOMATIC ALARM PANELS

TYPICAL SHIP PANEL



STANDARD FEATURES

- VISUAL AND AUDIBLE ALARM OF LAMP FAILURE OR BLOWN FUSE
- SOLID STATE CURRENT SENSORS FOR TOTAL SHORT CIRCUIT PROTECTION
- PLUG-IN PRINTED CIRCUIT BOARD
- ANY WATTAGE LAMP IN ANY CIRCUIT
- AVAILABLE IN FLUSH OR SURFACE MOUNT
- SYSTEM TEST BUTTON
- EMERGENCY REPAIR PLUG STANDARD
- EACH PANEL LABELED TO OWNERS SPECS.
- LIFETIME WARRANTY OF PLUG-IN PC BOARD

COMPLIES WITH

- USCG SECTION 111.75-17
- * ABS SECTION 4/4A7.3.2, 4/5A7.3.2
- IEEE std. 45SECTION 34.2

OPTIONS AVAILABLE

- DP DUAL POWER SOURCES
- RA REMOTE ALARM
- MO MAN-OVERBOARD
- FL FLASHING LIGHT
- WL WHISTLE LIGHT
- F/A FWD / AFT MOTION SELECTOR
- AU AUTOMATIC ON AND OFF
- AD ALARM LAMP DIMMER
- RS ROTARY SWITCH FOR TASK LTS.
- OL OBSTRUCTION LIGHTS
- LD RUNNING LIGHT DIMMER CONT.
- AT AUTO POWER TRANSFER

- 120A 120 VAC INPUT POWER
- 220A 220 VAC INPUT POWER
- 12DC 12 VDC INPUT POWER
- 24DC 24 VDC INPUT POWER
- 32DC 32 VDC INPUT POWER

EXCLUSIVE "EMERGENCY REPAIR PLUG"

IF ANYTHING ON THE PLUG-IN PRINTED CIRCUIT BOARD SHOULD FAIL, THE BOARD MAY BE REMOVED FOR SERVICE AND REPLACED WITH THE "EMERGENCY REPAIR PLUG". THIS ALLOWS FOR NORMAL OPERATION OF ALL LIGHTS. A STATUS LAMP INDICATES WHEN THE "EMERGENCY REPAIR PLUG" IS IN USE.

- * NOTE: TO MEET ABS RULES YOU MUST SPECIFY "PFA" OUR POWER FAILURE ALARM MODULE AND HAVE TWO POWER SOURCES

DIMENSIONS

NOTE

- SURFACE MOUNT 12" H x 14" W x 4" D
10" H x 12" W x 4" D
- FLUSH MOUNT 18.5" H x 14.5" W x 4" D HOLE 16" x 12"
14.5" H x 12.5" W x 4" D HOLE 12" x 10"

THE DIMENSIONS SHOWN MAY VARY OR BE ROTATED 90 DEGREES DEPENDING ON THE NUMBER OF CIRCUITS

MODEL SHOWN: NLFM5D5SUG120A OPTIONS

NL FM 5D 5S UG 120A

FM FLUSH MOUNTING
SM SURFACE MOUNTING

5D NUMBER OF DUAL LAMP CIRCUITS

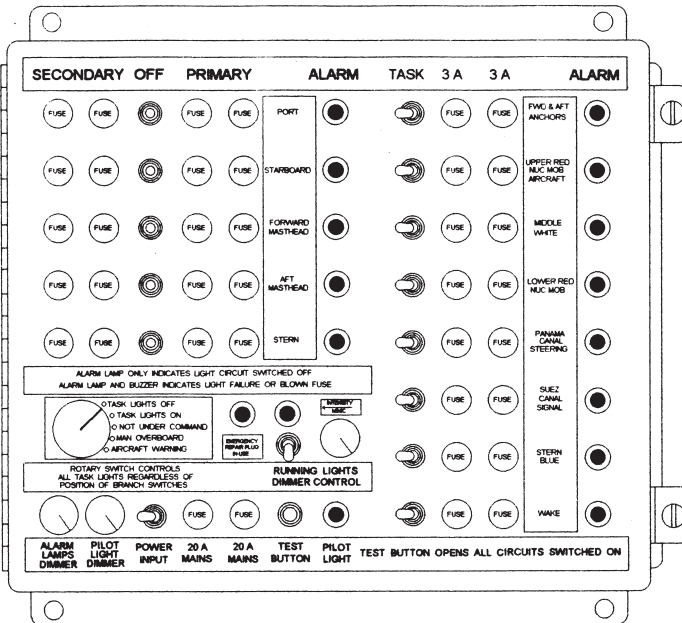
5S NUMBER OF SINGLE LAMP CIRCUITS

UG UNGROUNDED NEUTRAL MEANS BOTH SIDES OF EACH BRANCH CIRCUIT ARE SWITCHED AND FUSED
GN GROUNDED NEUTRAL MEANS ONLY THE HOT SIDE OF EACH BRANCH CIRCUIT IS SWITCHED AND FUSED

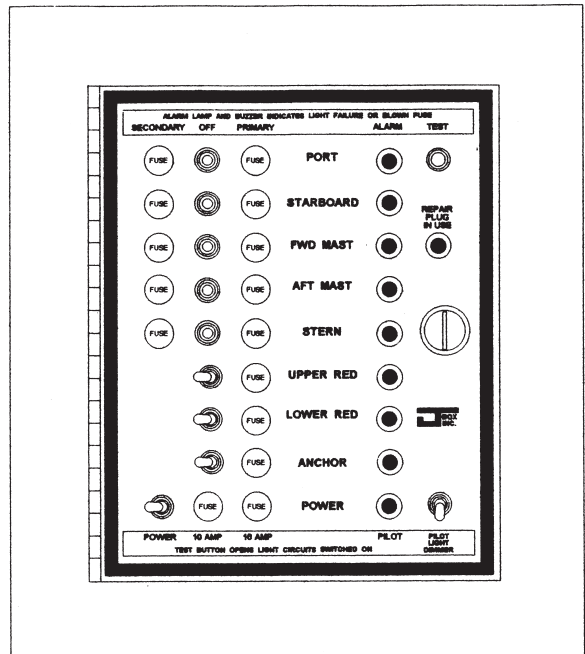
WHEN ORDERING BE SURE TO PROVIDE A LIST OF THE LIGHT NAMES

"I Borrowed the Shoes,
But the Holes are Mine."
-actual country song

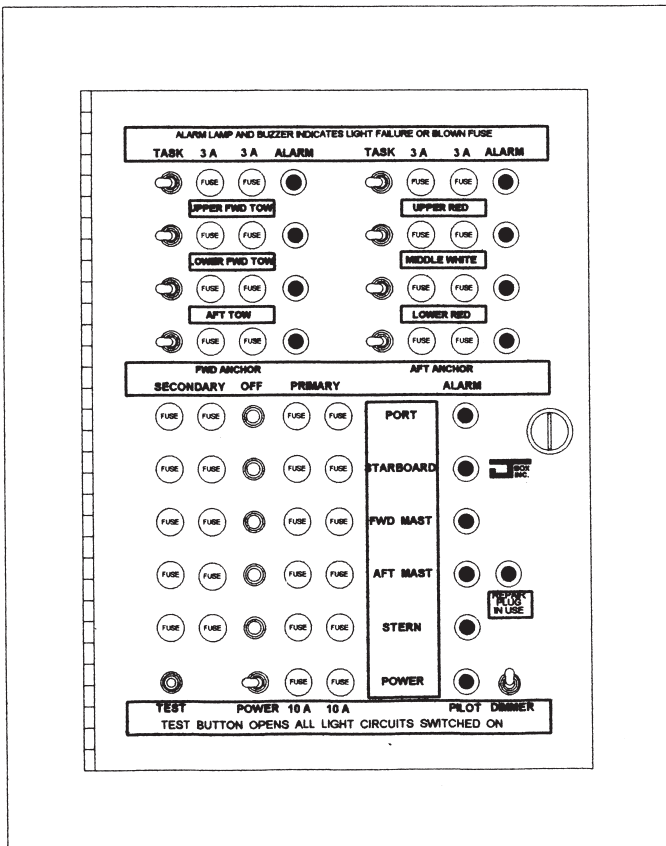
NAVIGATION LIGHT PANELS



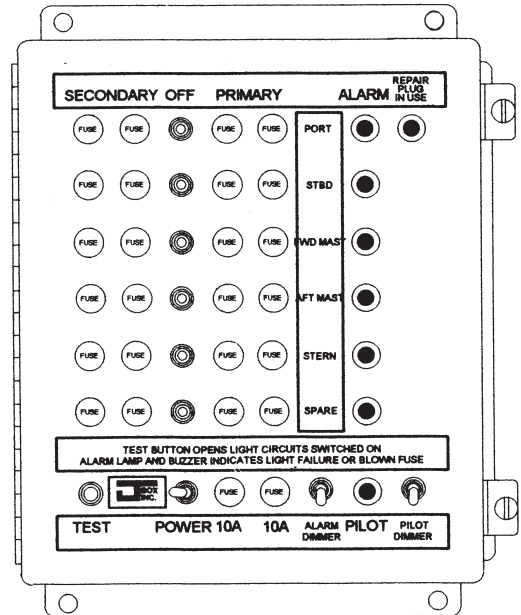
MODEL NO: NLSM5D8SUG120ARSMOLDAD
DIMENSIONS 14"W x 12"H x 4"D



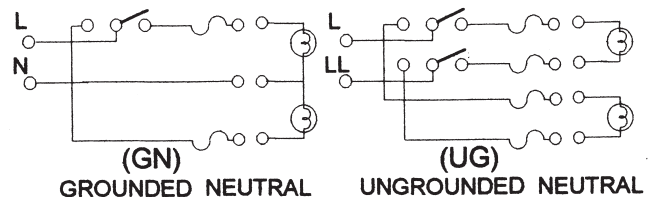
MODEL NO: NLFM5D3SGN120A
DIMENSIONS 12.5"W x 14.5"H x 4"D



MODEL NO: NLFM5D8SUG120A
DIMENSIONS 14.5"W x 18.5"H x 4"D



MODEL NO: NLSM6DUG120AAD
DIMENSIONS 10"W x 12"H x 4"D

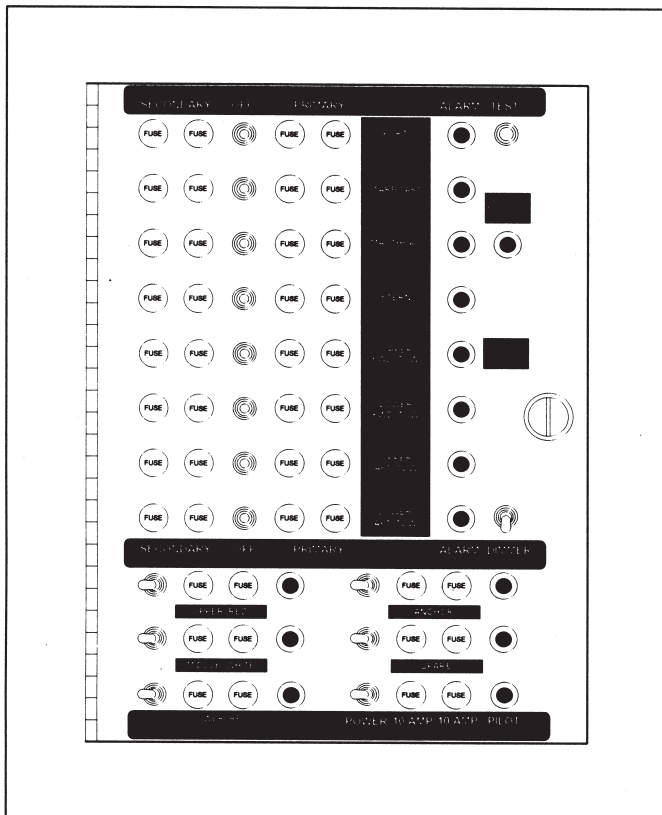


“I’m Either Living Too Fast
or Dying Too Slow!”
-actual country song

NAVIGATION LIGHT PANELS

SUPERVISED SOLID-STATE SEMI-AUTOMATIC & FULLY AUTOMATIC ALARM PANELS

ABS TYPE APPROVAL NO: 99 NO 29704-X



STANDARD FEATURES

- POWER FAILURE ALARM MODULE
- VISUAL AND AUDIBLE ALARM OF LAMP FAILURE OR BLOWN FUSE
- SOLID STATE CURRENT SENSORS FOR TOTAL SHORT CIRCUIT PROTECTION
- PLUG-IN PRINTED CIRCUIT BOARD ANY WATTAGE LAMP IN ANY CIRCUIT
- AVILABLE IN FLUSH OR SURFACE MOUNT
- SYSTEM TEST BUTTON
- EMERGENCY REPAIR PLUG STANDARD
- LIFETIME WARRANTY OF PLUG-IN PC BOARD
- EACH PANEL LABELED TO OWNERS SPECKS
- PFA - POWER FAILURE ALARM MODULE

COMPLIES WITH

ABS SECT. 4/4A7.3.1 & 4/4A7.3.2
4/5A7.3.1 & 4/5A7.3.2
IEEE std. 45 SECTION 34.2
USCG SECTION 111.75-17

OPTIONS AVAILABLE

- DP** DUAL POWER SOURCES
- RA** REMOTE ALARM
- MO** MAN-OVERBOARD
- FL** FLASHING LIGHT
- WL** WHISTLE LIGHT
- F/A** FWD / AFT MOTION SELECTOR
- AU** AUTOMATIC ON AND OFF
- AD** ALARM LAMP DIMMER
- RS** ROTARY SWITCH FOR TASK LTS.
- OL** OBSTRUCTION LIGHTS
- AT** AUTOMATIC POWER TRANSFER
- LD** RUNNING LIGHT DIMMER CONT. (MILITARY ONLY)

EXCLUSIVE "EMERGENCY REPAIR PLUG"

IF ANYTHING ON THE PLUG-IN PRINTED CIRCUIT BOARD SHOULD FAIL, THE BOARD MAY BE REMOVED FOR SERVICE AND REPLACED WITH THE "EMERGENCY REPAIR PLUG". THIS ALLOWS FOR NORMAL OPERATION OF ALL LIGHTS. A STATUS LAMP INDICATES WHEN THE "EMERGENCY REPAIR PLUG" IS IN USE.

MODEL SHOWN: NLFM8D5SUG120A

OPTIONS

NL **FM** **8D** **5S** **UG** **120A**

FM FLUSH MOUNTING
SM SURFACE MOUNTING

5D NUMBER OF DUAL LAMP CIRCUITS
5S NUMBER OF SINGLE LAMP CIRCUITS

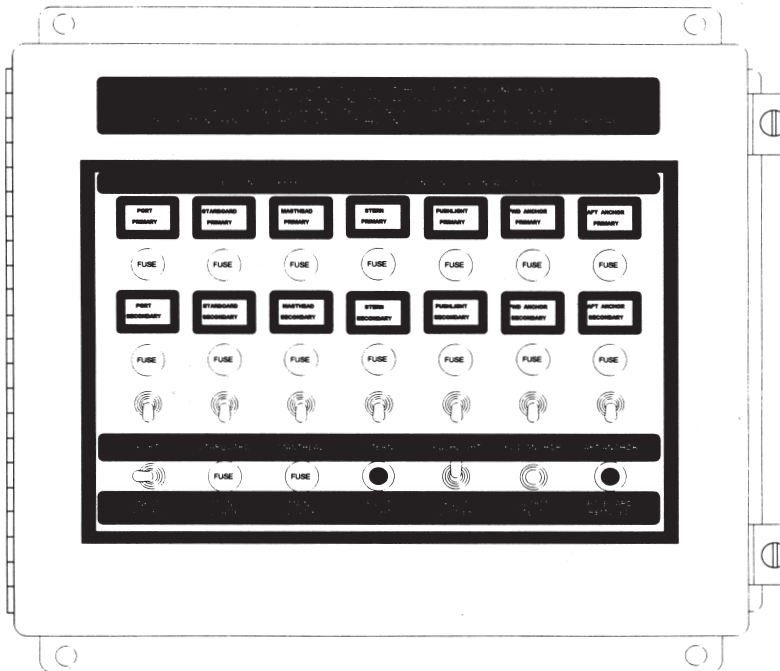
UG UNGROUNDED NEUTRAL MEANS BOTH SIDES OF EACH BRANCH CIRCUIT IS SWITCHED AND FUSED
GN GROUNDED NEUTRAL MEANS ONLY THE HOT SIDE OF EACH BRANCH CIRCUIT IS SWITCHED AND FUSED

120A 120 VAC INPUT POWER
220A 220 VAC INPUT POWER
12DC 12 VDC INPUT POWER
24DC 24 VDC INPUT POWER
32DC 32 VDC INPUT POWER

WHEN ORDERING BE SURE TO PROVIDE A LIST OF THE LIGHT NAMES

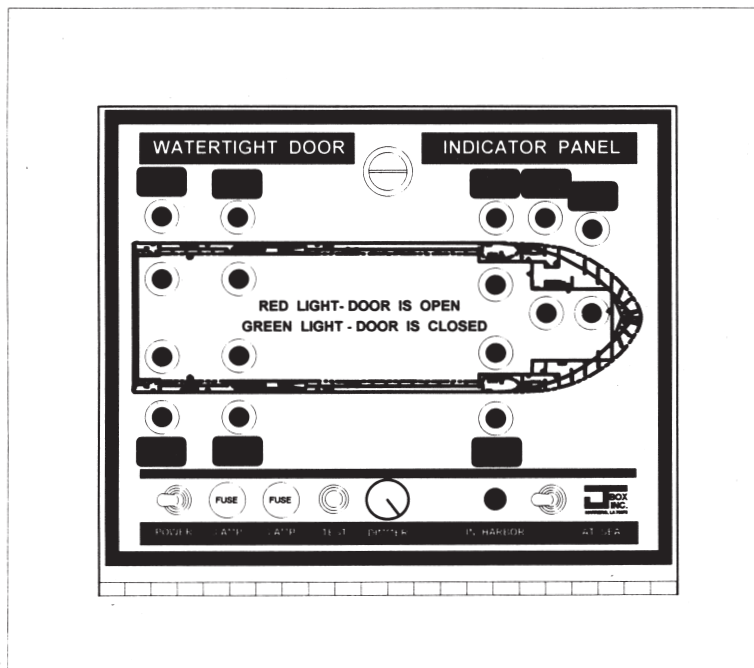
NAVIGATION LIGHT PANELS

FULLY AUTOMATIC



THE FULLY AUTOMATIC PANELS CONTAIN ALL THE FEATURES OF THE SIMI-AUTOMATIC PANELS, IN ADDITION, IF A PRIMARY LIGHT SHOULD FAIL, THE PANEL AUTOMATICALLY SWITCHES TO THE SECONDARY LIGHT. A FAIL LAMP INDICATES THE PRIMARY LIGHT FAILURE. IF THE SECONDARY LIGHT SHOULD FAIL BOTH A VISUAL AND AUDIBLE ALARM OPERATES. WHEN THE PRIMARY LIGHT IS REPLACED THE PANEL AUTOMATICALLY SWITCHES BACK TO THAT CIRCUIT.

WATERTIGHT DOOR ALARM PANELS



THE WATERTIGHT DOOR INDICATOR PANEL PROVIDES A GRAPHICAL REPRESENTATION OF THE MAIN DECK.

THE PANEL CONTAINS LED LAMPS, RED FOR OPEN AND GREEN FOR CLOSED. A DIMMER CONTROLS THE INTENSITY OF ALL LAMPS.

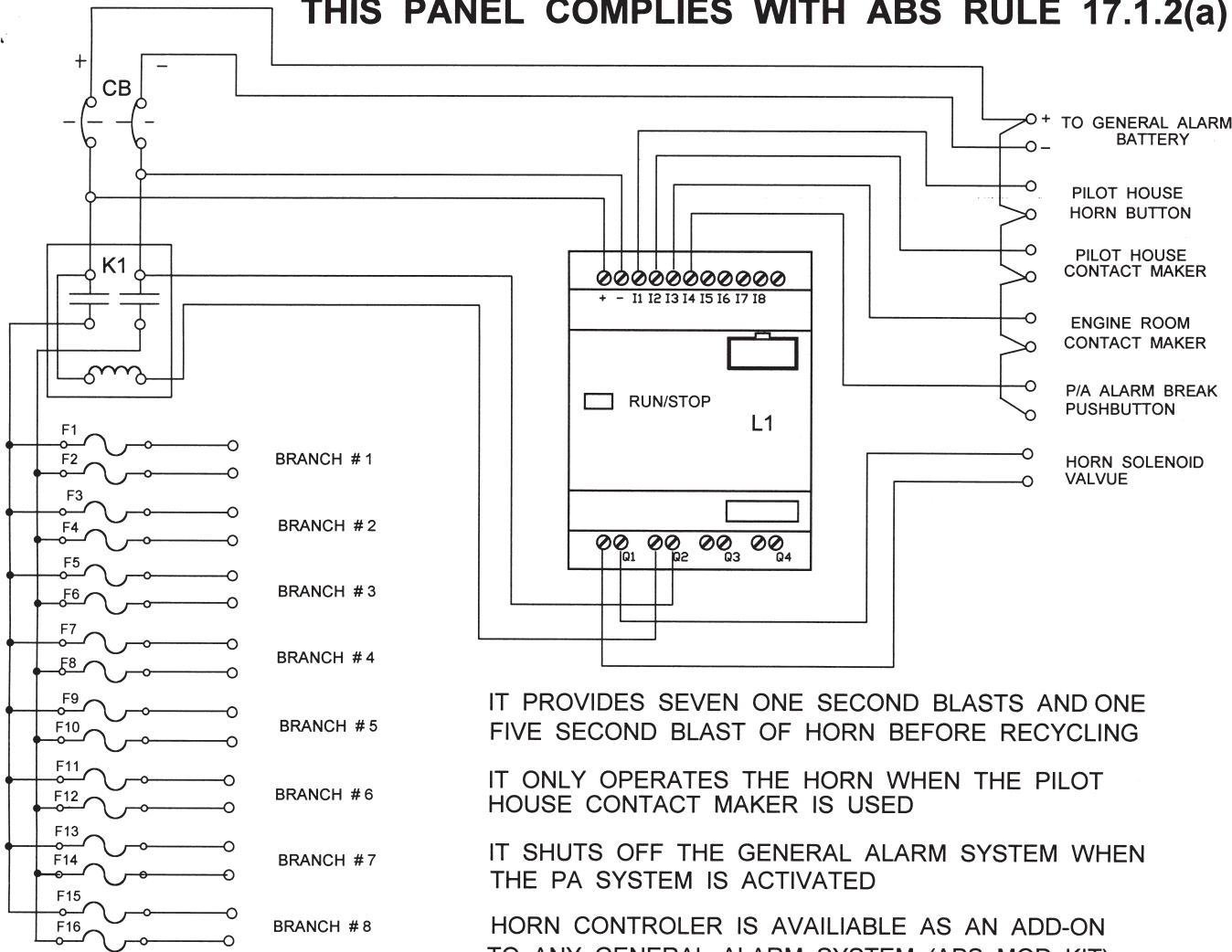
A BUZZER AND LED INDICATES WHEN A DOOR IS OPEN. A PUSHBUTTON TESTS ALL LAMPS AND BUZZER.

A SWITCH SELECTS "IN HARBOR" OR "AT SEA". IN THE HARBOR POSITION A FLASHING GREEN LED OPERATES INSTEAD OF THE BUZZER.

FLUSH OR SURFACE MOUNTED PANELS ARE AVAILABLE IN ANY OPERATING VOLTAGE.

"Her Teeth Were Stained,
But Her Heart Was Pure!"
-actual country song

THIS PANEL COMPLIES WITH ABS RULE 17.1.2(a)



IT PROVIDES SEVEN ONE SECOND BLASTS AND ONE FIVE SECOND BLAST OF HORN BEFORE RECYCLING

IT ONLY OPERATES THE HORN WHEN THE PILOT HOUSE CONTACT MAKER IS USED

IT SHUTS OFF THE GENERAL ALARM SYSTEM WHEN THE PA SYSTEM IS ACTIVATED

HORN CONTROLLER IS AVAILABLE AS AN ADD-ON TO ANY GENERAL ALARM SYSTEM (ABS MOD KIT)

PANEL CAN HAVE ANY NUMBER OF BRANCH CIRCUITS - SPECIFY

ie: JBGA6R-24-ABS FOR 6 CKT

BRANCH CIRCUITS LABELED AS PER DRAWINGS PROVIDED

BRANCH CIRCUIT FUSES ARE 3 AMPS UNLESS SPECIFIED

ALL TERMINALS WILL ACCEPT CABLES UP TO D16 UNLESS LARGER ONES ARE SPECIFIED

12 VDC PANELS ALSO AVAILABLE

PANEL AVAILABLE LESS RELAY

PARTS LIST				
ITEM	QTY	DESCRIPTION	PART NUMBER	MANUFACTURER
CB	1	20 AMP DP CKT. BKR. MAIN DISC.	AB2B0106202D1	CARLINGSWITCH
F1-F16	16	3 AMP FUSE 250 VAC	318-003	LITTLEFUSE
FH	16	SINGLE POLE FUSEHOLDER	351-001	LITTLEFUSE
ENC.	1	NEMA 4 ENCLOSURE STEEL	A-1412CHNF	HOFFMAN
K1	1	DPST 30 AMP 24 VDC COIL	PRD7DYO - 24 DC	POTTER BRUMFIELD
L1	1	SMART RELAY	FL1AB12RCE	IDEC CORP.

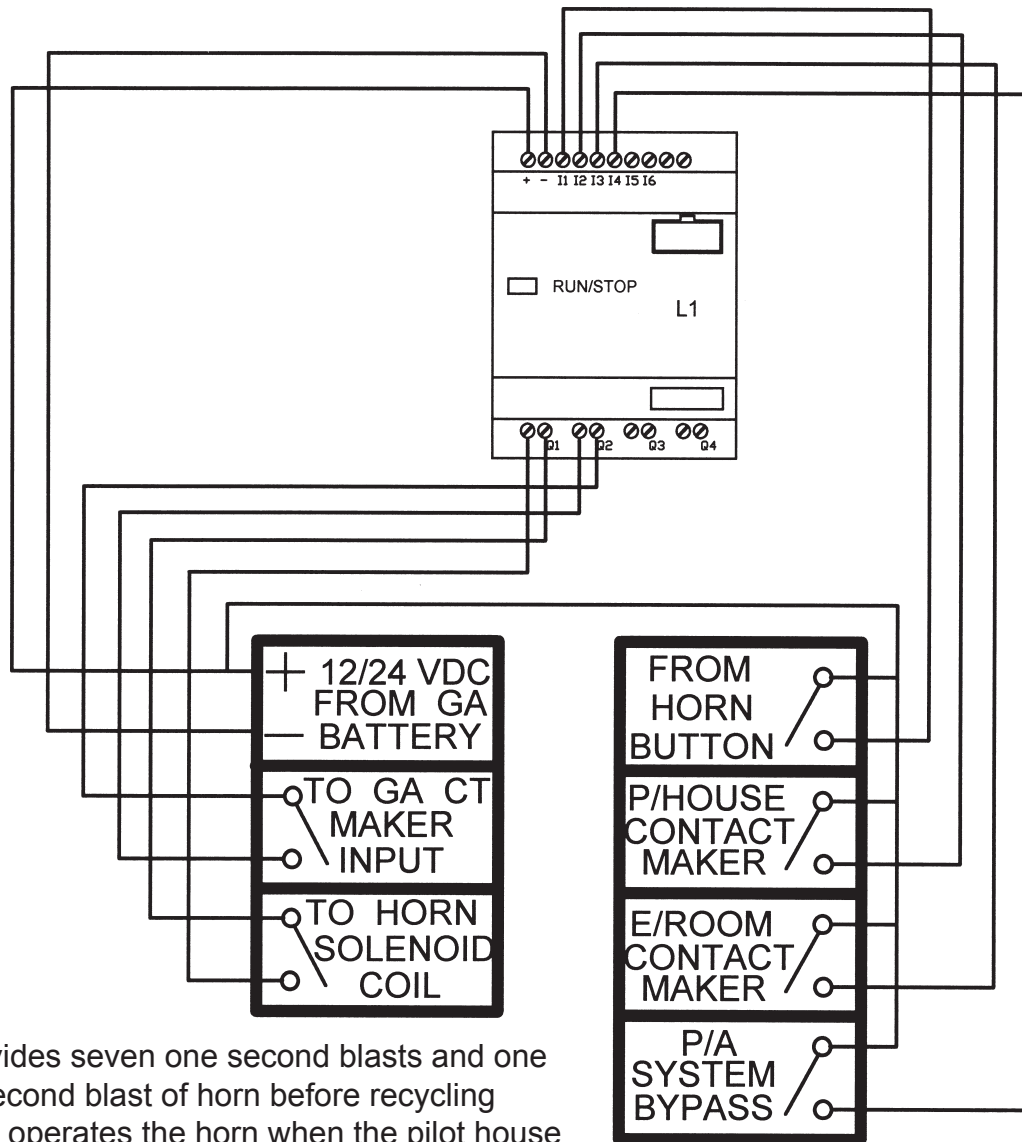
Urban Legend

Seattle, Washington

A man attempted to siphon gasoline from a motor home parked on the street. Police arrived at the scene to find an ill man curled up next to a motor home near spilled sewage. A police spokesman said that the man admitted to trying to steal gasoline and plugged his hose into the motor home's sewage tank by mistake. The owner of the vehicle declined to press charges, saying it was the best laugh he'd ever had.

ABS MOD KIT

THIS PANEL COMPLIES WITH ABS RULE 17.1.2(a)



- It provides seven one second blasts and one five second blast of horn before recycling
- It only operates the horn when the pilot house contact maker is used
- It shuts off the general alarm system when the PA system is activated
- Horn button does not have to be connected to this panel if already connected to horn solenoid

17.1.2 System Requirements

17.1.2(a) The general emergency alarm system is to be capable of sounding the general emergency alarm signal consisting of seven or more short blasts followed by one long blast on the ship's whistle or siren and additionally on an electrically operated bell or klaxon or other equivalent warning system, which is to be powered from the ship's main supply and the emergency source of electrical power required by 4-6-2/5. The system is to be capable of operation from the navigation bridge and, except for ship's whistle, also from other strategic points. The system is to be audible throughout all the accommodation and normal crew working spaces. The alarm is to continue to function after it has been triggered until it is manually turned off or is temporarily interrupted by a message on the public address system.

**GENERAL ALARM PANELS ARE REQUIRED ON MOST VESSELS OVER 100 GT.
A MAXIMUM OF FIVE BELLS ARE ALLOWED ON EACH BRANCH CIRCUIT**



**NEMA 4 ENCLOSURE
ENCLOSURE CAPABLE OF BEING LOCKED
MAIN DISCONNECT BUILT-IN
(30 AMP 2 POLE CIRCUIT BREAKER)
BRANCH FUSES ARE AGC 3 AMP
NON TYPE FUSES ARE OPTIONAL**

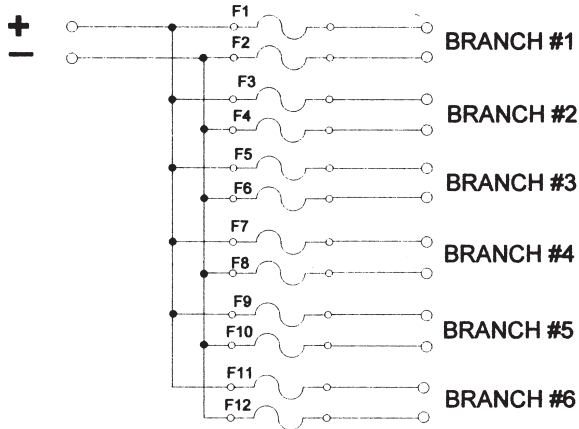
NUMBER OF BRANCH CIRCUITS
DC VOLTAGE - IF RELAY IS REQUIRED
CABLE SIZE IF LARGER THAN D16
BRANCH FUSE TYPE AND RATINGS
IF OTHER THAN AGC-3



J-788

DC DISTRIBUTION PANELS

DC DISTRIBUTION PANELS ARE AVAILABLE IN NEMA 1, NEMA 4, OR NEMA 12 ENCLOSURES
GENERAL ALARM BRANCH DISTRIBUTION PANELS ARE ALWAYS NEMA 4



STANDARD PANEL CONTAINS TERMINALS WITH TRAVELING PRESSURE PADS FOR WIRES UP TO D16

DC DISTRIBUTION PANELS ARE AVAILABLE WITH AGC OR NON FUSEHOLDERS

WHEN ORDERING SPECIFY:

NUMBER OF BRANCH CIRCUITS
TYPE OF ENCLOSURE: NEMA 1, 4, OR 12
TYPE OF FUSEHOLDERS: AGC OR NON
CABLE SIZE IF LARGER THAN D16

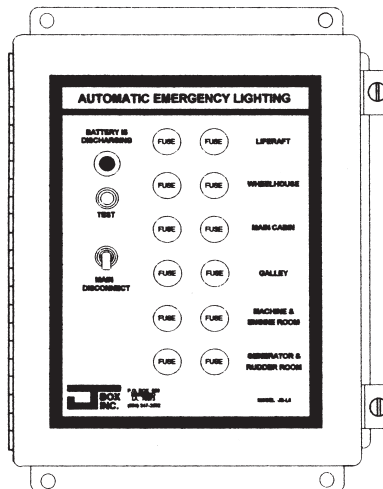
EXAMPLE: DP6N4AGC

FUSEHOLDERS MAY BE MOUNTED ON THE PANEL FRONT EXCEPT FOR GENERAL ALARM PANELS

MODEL NO: DP6N4AGC OR MODEL NO: DP6N4NON

TERMINALS ARE LABELED AS PER DRAWINGS PROVIDED

EMERGENCY LIGHTING PANEL



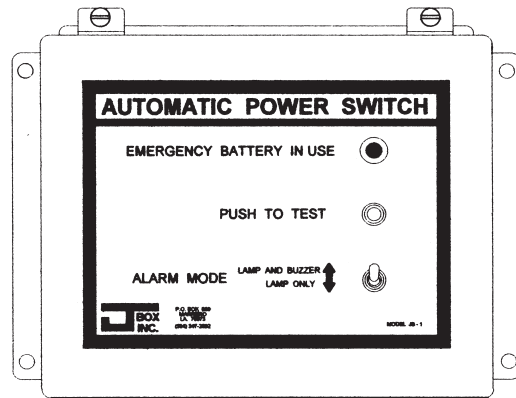
MODEL NO: JB-L6

FOR INTERIOR OR EXTERIOR LIGHTING

FEATURES:

MAIN DISCONNECT CIRCUIT BREAKER
TEST SWITCH
BATTERY DISCHARGE INDICATOR
RELAY CONTACTS RATED FOR 30 AMPS
DUAL FUSES FOR EACH BRANCH CIRCUIT
6 BRANCH CIRCUITS ARE STANDARD
ANY NUMBER OF CIRCUITS AVAILABLE

AUTOMATIC POWER SWITCH



MODEL NO: JB-1

AUTOMATICALLY SWITCHES ANY LOAD FROM POWER SUPPLY TO BATTERY IN THE EVENT OF GENERATOR OR POWER SUPPLY FAILURE
AUDIBLE AND VISUAL ALARM IN THE EVENT OF GENERATOR OR POWER SUPPLY FAILURE
ALARM SILENCE SWITCH AND TEST BUTTON

30 AMP CONTACTS
ENCLOSURE IS 10"W x 8"H x 4"D
AVAILABLE FOR 12, 24 VDC AND 120 VAC

ALSO AVAILABLE:

MODEL NO: JB-L
SIMILAR TO JB-L6 BUT WITH:
3 SWITCHED CIRCUITS FOR POINTS OF DEBARKATION
3 CONTINUOUS CIRCUITS FOR 12 VDC POWER SOURCE

According to Kirk Douglas, the slave army's cries of "I am Spartacus" were actually recorded using the crowd at a Michigan State (Spartans) v. Notre Dame football game.

FOG BELLS

The 8 and 12 Inch Bells Listed on This Page Have Been Reviewed by the U.S. Coast Guard and Comply with C.G. 169 Regulations for Sound Signal Appliances as Required by Annex III Paragraph 2 of the '72 Colregs. The 8 Inch Size is for Use on Vessels Under 20 Meters (65.6 ft.) in Length. The 12 Inch Size is for Use on Vessels of any Length.

Fig. 0420 - Fog Bell

Fig. 0420 Polished

**CONSTRUCTION:**

- Cast Bronze
- Chrome Plated or Polished
- Medium Weight
- Removable

ORDERING & TECH INFO

Bottom Diameter Inches	Height Overall Inches	Polished Bronze Std. Pkg. - 1 Pc.	Chrome Plated Bronze Std. Pkg. - 1 Pc.	Ship Wt. Carton Lbs.
6	5	0420006POL	0420006CHR	3.8
8	6-1/8	0420008POL	0420008CHR	8.7

Screw Size #8 F.H.

Fig. 0420 Chrome

Fig. 0150 - Fog Bell

**CONSTRUCTION:**

- Cast Bronze
- Chrome Plated, Plain or Polished
- Heavy Weight
- Removable

ORDERING & TECH INFO

Bottom Diameter Inches	Height Overall Inches	Plain Bronze Std. Pkg. 1 Pc.	Polished Bronze Std. Pkg. 1 Pc.	Chrome Plated Bronze Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs.
8	8	0150008PLB	0150008POL	0150008CHR	9.5
12	12	0150012PLB	0150012POL	0150012CHR	36.0

Screw Size 1/4" F.H.

SPARE PARTS ORDERING INFORMATION

For complete Spare Part No. Insert Finish Code: P or PLB, for Plain Bronze or Brass Finish (i.e. 0420P0699A or 0127000PLB). B or POL, for Polished Bronze or Brass Finish (i.e. 0420B0699A or 0127000POL). C or CHR, for Chrome Plated Finish (i.e. 0420C0699A or 0127000CHR).

	ARMS	WALL PLATES	CLAPPERS	EYE BOLTS	ACORN NUTS
Figure No.	Spare Part No.	Spare Part No.	Spare Part No.	Spare Part No.	Spare Part No.
0420-6"	0420_0699A	0127000_	0153008CHR	0113000CHR	0465004_
0420-8"	0171000_	0127000_	0144000_	0123000PLB	0465008_
0150-8"	0171000_	0127000_	0144000_	123000PLB	0465008_
0150-12"	0150_1299A	0150_1299B	0172000_*	0172000_*	0465009_
0158-12	0158_99A*	0158_0099A*	0172000_*	0172000_*	0465009_
0179	017900099A*	017900099A*	0144000_	017900099B	0465008_
0159-6"	0159_0099A	0166000_	0159C0699B	0113000CHR	0465004_
0159-8"	0159_0099A	0166000_	0153008_	0113000CHR	0465004_
	*Includes Wall Bracket	*Includes Arm	*Includes Eye Bolt	*Includes Clapper	

The 8 and 12 Inch Bells Listed on This Page Have Been Reviewed by the U.S. Coast Guard and Comply with C.G. 169 Regulations for Sound Signal Appliances as Required by Annex III Paragraph 2 of the '72 Colregs. The 8 Inch Size is for Use on Vessels Under 20 Meters (65.6 ft.) in Length. The 12 Inch Size is for Use on Vessels of any Length.

Fig. 0158 - Fog Bell

CONSTRUCTION:

- Cast Bronze
- Chrome Plated, Plain or Polished
- Heavy Weight
- Fixed Mounting



Fig. 0158 Polished

ORDERING & TECH INFO

Bottom Diameter Inches	Height Overall Inches	Plain Bronze Std. Pkg. 1 Pc.	Polished Bronze Std. Pkg. 1 Pc.	Chrome Plated Bronze Std. Pkg. 1 Pc.	Ship Wt. Carton Lbs.
12	12	0158012PLB	0158012POL	0158012CHR	37.0

Screw Size 1/4" R.H.

Fig. 0179 - Fog Bell

CONSTRUCTION:

- Wrought Brass
- Plain Brass Finish
- Light Weight
- Fixed Mounting



Fig. 0179

ORDERING & TECH INFO

Bottom Diameter Inches	Height Overall Inches	Standard Pkg. 1 Pc.	Ship Wt. Carton Lbs. Std. Pkg.
12	8	0179012PLB	7.3

Screw Size #12 R.H.

Fig. 0159 - Fog Bell

CONSTRUCTION:

- Stamped Brass
- Plain or Chrome Plated
- Light Weight
- Removable



Fig. 0159 Chrome



Fig. 0159 Plain

ORDERING & TECH INFO

Bottom Diameter Inches	Height Overall Inches	Chrome Plated Dealer Pkg. - 2 Pcs. 1 Pc. per Pkg.	Plain Brass Dealer Pkg. - 2 Pcs. 1 Pc. per Pkg.	Ship Wt. Carton Lbs.
6	4	0159DP6CHR	0159DP6PLB	3.4
8	5	0159DP8CHR*	0159DP8PLB*	6.0

Screw Size #4 F.H.

* 2 pc. bulk package available, Chrome Plated or Plain Brass

SINCE 1895

All Kahlenberg commercial horn models were developed to withstand the punishment of commercial and military service. Their durability has been demonstrated over decades of service on all sizes and types of ocean-going vessels ranging from shrimp boats to aircraft carriers. Military specifications have required extensive testing for many of these whistles and the accessories supplied with them, proving the exceptional qualities of Kahlenberg design and manufacturing.

All Kahlenberg Sound Signals are tested in an in-house anechoic testing chamber to ensure conformance to the standards established by the International Maritime Organization (IMO), ('72 COLREGS). U.S. Coast Guard Certificates of Conformance are included with every shipment. Certificates from numerous other approval bodies are also available.

Model KB-20 Electronic Horn

For vessels less than 75 Meters in length, the Model KB-20 Electronic Horn does not require air or steam piping and is entirely electronic. An electromagnet assembly drives the stainless steel diaphragm to produce over 130 dB (1/3 Octave Band) at 1 Meter. The KB-20 is available in both 24 Volt D.C. or 50 and 60 Hz A.C. models up to 220 Volts. The entire driver assembly is electrically heated to prevent condensation and freezing.



Model KB-20 Electronic Horn

Model "S" and "CHIMETONE" AIR Horn

For vessels less than 75 Meters in Length, these air horns are the most economical solution for signaling where compressed air is readily available. Several models are available utilizing multiple projectors or "trumpets" in their design. Most models are available with optional heating, combination solenoid/manual operating valves and maneuvering lights. Chrome or white powdercoat finishes are also available.



Model S-OA Air Horn



Model S-2 Air Horn

Chimetone Air Horns

Kahlenberg "Chimetone" models all utilize more than one projector or "trumpet" in their design. These projectors each produce a different fundamental frequency which combine to produce powerful, distinctive, musical chords. Owners, builders, and designers of the finest yachts world-wide insist on using Kahlenberg Air Horns because they realize that the sound of a vessel can be one of its most impressive aspects.

Never requiring tuning or adjustments of any kind, most Chimetone Air Horn models are also available with optional clear 360 degree maneuvering light. Made entirely of bronze and brass, all models are available with either chrome or white powdercoat finish.



Model D-2 Air Horn



Model T-3A Air Horn

Zero Series Air Horns

SINCE 1895

Kahlenberg ZERO SERIES AIRHORNS are the perfect choice for any vessel, whether designed for pleasure or commercial service. They meet or exceed the U.S. Coast Guard and International Maritime Organization Safety Regulations for vessels less than 20 meters in length. Since Kahlenberg Airhorns are very conservative with regard to air consumption, they can be operated with an extremely small compressor-tank kit.

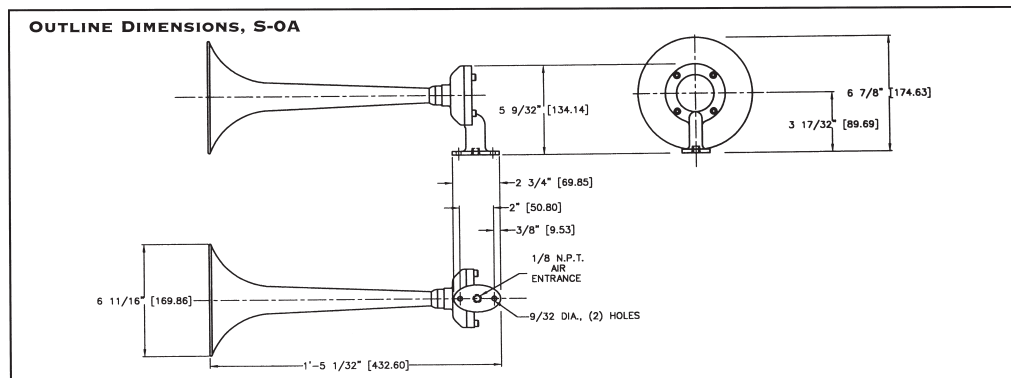
The distinctive sound of these airhorns is scientifically developed for volume, audibility, and richness of tone, based on musical instrument design. Kahlenberg Airhorns require little maintenance. They do not require tuning adjustments, and incorporate no moving parts other than the sound producing diaphragm. All horn castings are of accurately machined bronze, while horn projectors are spun brass. THREE FINISHES ARE NOW AVAILABLE INCLUDING BUFFED BRASS, CHROME PLATE, OR WHITE POWDER-COAT.

TECHNICAL DATA, S-OA

FREQUENCY:	322 HZ
SOUND PRESS:	LEVEL: 122.9 DB (1 /3 OCTAVE @ 1 M)
AIR CONSUMPTION:	7.5 C.F.M. @ 100 P.S.I.
AIR PRESSURE REQUIRED:	50 TO 200 P.S.I.
MATERIAL:	SPUN BRASS AND CAST BRONZE
NET WEIGHT:	4.75 LBS.
SHIPPING WEIGHT:	9 LBS.



Model S-OA Air Horn



TECHNICAL DATA, D-OA

FREQUENCY:	322 & 254 HZ
SOUND PRESS:	LEVEL: 122.5 DB (1 /3 OCTAVE @ 1 M)
AIR CONSUMPTION:	14 C.F.M. @ 100 P.S.I.
AIR PRESSURE REQUIRED:	50 TO 200 P.S.I.
MATERIAL:	SPUN BRASS AND CAST BRONZE
NET WEIGHT:	9 LBS.
SHIPPING WEIGHT:	14 LBS.



Model D-OA Horn

Kahlenberg Horns Model Selection Chart

Kahlenberg

SINCE 1895

Horn Model	Certified for Vessels	Dimensions L x W x H (inches)	Weight (LBS.)	Air Cons. C.F.M.*	Pressure Req'd P.S.I.	HEATED	Compressor	Valve
S-0A	Up to 20 Meters	17 x 6.88 x 6.88	4.75	9	50 to 200	NO	P449-3/P449-4	V-69-K
D-0A	Up to 20 Meters	22.68 x 11.59 x 7.25	9	17.6	50 to 200	NO	P449-3/P449-4	V-69-K
T-0A	Up to 20 Meters	22.68 x 14.53 x 9.31	16	21.5	50 to 200	NO	P449-9/P449-10	V-69-K
S-2	Up to 20 Meters	17.18 x 7.63 x 8.31	20	26.4	100 to 250	NO	CE-50A	V-150AL
S-2CHT	Up to 75 Meters	26.63 x 14.25 x 9.13	37	26.4	100 to 250	YES	CE-50A	INCLUDED
D-2	Up to 75 Meters	20.61 x 15.5 x 8.56	33	31.2	100 to 250	NO	TUE-52	V-150AL
T-1	Up to 75 Meters	18.31 x 13.03 x 13.66	23	36	100 to 250	NO	TUE-52	V-150AL
T-2	Up to 75 Meters	22.24 x 22.4 x 12.03	55	42	100 to 250	NO	CUE-1001A	V-150AL
T-3A	Up to 75 Meters	21.13 x 20.13 x 18.75	75	56.4	100 to 250	NO	CUE-200A	V-152L
Q-3A	Up to 75 Meters	24.38 x 16.31 x 20.13	100	70.8	100 to 250	NO	CUE-200A	V-152L
KB-20	Up to 75 Meters	37.38 X 11.5 X 21.31	49	NONE	ELECTRIC	YES	NONE	NONE
S-216C	75 to 200 Meters	20.41 x 12 x 16.16	45	46	100 to 250	NO	CUE-200A	INCLUDED
S-216CHT	75 to 200 Meters	30.14 X 13.25 X 13.56	75	46	100 to 250	YES	CUE-200A	INCLUDED
S-203C	Over 200 Meters	44.375 x 22 x 22	70	98	100 to 250	NO	CUE-200A	V-152L
S-203CHT	Over 200 Meters	47.5 X 22 X 22	110	98	100 to 250	YES	CUE-200A	INCLUDED
KPH-130	Over 75 Meters	39.3 x 13.31 x 33.25	220	NONE	ELECTRIC	YES	NONE	NONE

Air Consumption (C.F.M.) measured at 100 p.s.i. Air Pressure.
Additional models are available in addition to those referenced herein.
Complete Technical Data Sheets are available for all items.

Buell-Strombos Air Horns

No one ignores these horns. No one.

Rising above ambient noise of any sort, Buell-Strombos air horns adapt to any application where authoritative, unmistakable signals must be the norm. On emergency vehicles, on boats of all kinds, in industrial plants, these horns deliver the message at 50-150 psi.

They are constructed entirely of brass and bronze with hand-spun bells and a diaphragm of stainless steel. Their blazing chrome is thick and tough, able to resist both salt water and the daily onslaughts of heavy urban use.

No.	Nominal Bell Length	Freq.
1061	10" Buell-Strombos Horn	493
1062	12" Buell-Strombos Horn	392
1063	15" Buell-Strombos Horn	311
1064	18" Buell-Strombos Horn	246



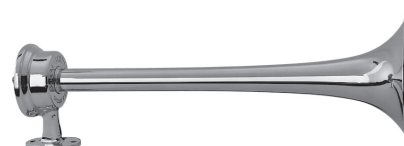
1061 Buell-Strombos - Ten



1062 Buell-Strombos - Twelve



1063 Buell-Strombos - Fifteen



1064 Buell-Strombos - Eighteen

A manual horn incorporating the quality and tone of larger models, the Buell selfpowered horn creates deep-toned signals from a 22-inch instrument bell. The handle adapts to remote control from cabin or cockpit. It's the perfect stand-by signal for power failures, and it too is heavy with brass and chrome.



Solenoid Valves

Designed for the remote control of air horns, these electric valves feature brass bodies with 1 / 8" inlet/ outlet ports and a molded coil. Rated for intermittent duty, these valves open against a maximum pressure of 150 psi.

12070 Series Solenoid Valve



Manual Valves

With rugged brass construction, these valves will serve for many years in the manual control and mechanical operation of all Buell air horns.

Air Tanks

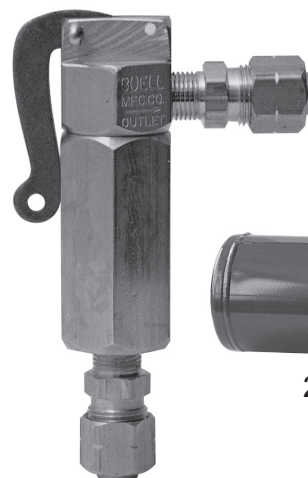
These tanks are tough, and therefore safe and durable. All-steel, welded construction lends extra strength. Fitted steel straps and brass tubing fittings make for easy mounting.

High Pressure Nylon Tubing

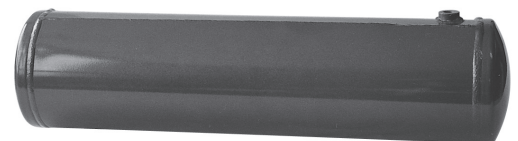
The preferred tubing for safe, trouble-free service in all signalling applications. It's available in three standard diameters.

No.	Product	Specs.
12076	Solenoid Valve	12 volt DC
12077	Solenoid Valve	24 volt DC
12078	Solenoid Valve	32 volt DC
12079	Solenoid Valve	115 volt AC
2040	Manual Valve	-
2242	Air Tank	6" x 25"
2243	Air Tank, legs, & platform	6" x 25"
5150	Air Tank	6" x 12"
2103	High Pressure Nylon tubing	³ / ₁₆ " O.D.
2105	High Pressure Nylon tubing	⁵ / ₁₆ " O.D.
2108	High Pressure Nylon tubing	³ / ₈ " O.D.

2040 Manual Valve



5150 6" x 12" Air Tank



2242 6" x 25" Air Tank

Functioning alone, Buell-Strombos air horns are commanding and powerful. Bracketed in pairs or groups, they become musical in their power and command.

A gleaming chrome finish highlights the brackets' all-bronze construction. The mounting kit contains gas-kets, stainless steel mounting screws, lockwashers, and a tube fitting in addition to the bracket in duplex, triplex, or quadruplex configuration.

Horns and brackets are sold separately.



1085 Duplex Bracket



Duplex Bracket and Horn Assembly



1086 Triplex Bracket



Triplex Bracket and Horn Assembly

No. Product

1085 Duplex Bracket

1086 Triplex Bracket

Horns and brackets sold separately

AFI ELECTRIC TRUMPET HORNS

Deluxe Single Trumpet Electric Horn

- 100% stainless steel exterior
- Type 304 stainless steel diaphragm
- Dimensions: 16-1/2" L x 4" W x 4-3/4" H
- Maximum amp draw: 5 Amps
- dB(A) rating: 116 at one meter
- Fundamental frequency: 390±15

11025



24 Volt Deluxe Single Trumpet Electric Horn

- Maximum amp draw: 2.5 Amps
- dB(A) rating: 116 at one meter
- Fundamental frequency: 390±15

11017

Deluxe Dual Trumpet Electric Horn

- 100% stainless steel exterior
- Type 304 stainless steel diaphragm
- Dimensions: 18-1/2" L x 8" W x 5" H
- Maximum amp draw: 10 Amps
- dB(A) rating: 122 at one meter
- Fundamental frequency: 390±15/330±15

11026



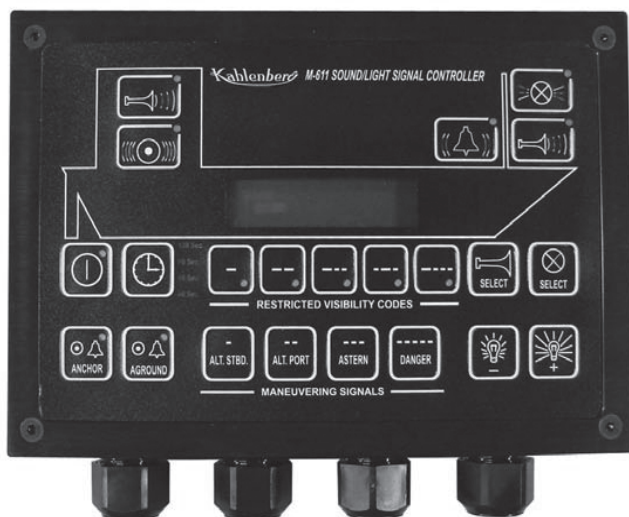
24 Volt Deluxe Dual Trumpet Electric Horn

- Maximum amp draw: 5 Amps
- dB(A) rating: 122 at one meter
- Fundamental frequency: 390±15/330±15

11018

For Automated Control of Navigational Whistles and Light

The new M-611 Sound and Light Control significantly improves safety by producing automatic sound and light signals required by IMO and SOLAS with a simpler, more user friendly control panel. Producing automated restricted visibility codes, maneuvering codes, general alarm, and abandon ship codes per IMO and SOLAS requirements, the M-611 controls multiple horns, morse light, ship's bell and gong, and can be configured for use with external alarm systems and sound surveillance systems to suit the needs of almost any arrangement of ship systems.



Power Source Required:	100-240 V.A.C. 50/60 Hz AND/OR 8-30 V.D.C., .5 AMP
Switching Capacity of Outputs:	A.C. or D.C., 2 Amps Maximum each
Operating Temperature:	-40°C to +85°C [-40°F to +176°F]
Enclosure and Bezel: Finish:	IP65, Aluminum Hardcoat black anodized

- Ruggedly constructed to withstand the harsh marine environment
- Generates IMO Navigation Rule 35 Automated Signals for Restricted Visibility (40, 60, 90, 120 second cycle times)
- Generates IMO Navigation Rule 34 Maneuvering Codes
- At-Will and Automatic Control of all connected devices (horns, bell, gong, morse light)
- Produces SOLAS General Emergency Alarm and Abandon Ship Codes with external push buttons
- Mute connection for external Sound Surveillance Systems
- Connects to any external device push buttons
- Integrates with External Alarm Systems
- Internal Log Function
- Multiple M-611 Units can be connected for control from multiple locations onboard
- Illuminated, Dimmable Display
- Red LED Indicator Lighting and LCD Display
- Easy to use graphical switch panel

REV.	BY	DATE	DESCRIPTION	APP'D
A	ZN	03/22/10	ADDED CAGE NUMBER	EMK
B	ZN	06/02/10	ADDED CUT OUT DIMENSIONS	EMK



**CUT OUT & DRILLING DIMENSIONS
FOR INSTALLATION.**

CAGE: 75214

PARTS LIST DRAWING 3-6542

Kahlenberg
KAHLENBERG BROS. CO. TWO RIVERS

2

MATERIALS & FINISHES

ENCLOSURE: 16 AWG ALUMINUM, HARDCOAT BLACK ANODIZED,
MIL SPEC 8625 TYPE 3 CLASS 2 BLACK

ELECTRICAL RATINGS

INPUT: 120/240 V.A.C. 50/60 Hz
24 V.D.C.
OUTPUT: 2 AMPS MAXIMUM

OUTLINE DIMENSIONS
M-611 WHISTLE CONTROL

DR.	DATE	CKD.	SCALE	DRWG. NO.	REV.
ZJN	09/29/09	EMK	N.T.S.	3-6540	B