Multi SeaLite® P/N 710-040-601
User Manual, Rev. 08/27/18

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GENERAL NOTES AND WARNINGS

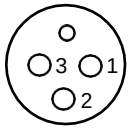
- Do not burn a Multi SeaLite® out of water for more than about 20 seconds.
- Do not operate any high voltage electrical equipment without using a Ground Fault Circuit Interrupter (GFCI) for safety, especially when divers are in the water!
- Do not operate a lamp at higher than recommended voltage. The lamp filament will melt with severe over-voltage, and slight over-voltage drastically reduces lamp life.
- Be sure that any fingerprints are cleaned off the lamp with Isopropyl alcohol before use. (Use reagent grade alcohol if possible, contaminated alcohol will damage the lamp – ensure that all alcohol has evaporated before reassembling the lamp).

MULTI SEALITE® PRE- AND POST-DEPLOYMENT CHECKLIST: Each Multi SeaLite® is shipped ready for immediate use. To ensure that the light will perform reliably, please observe the following maintenance guidelines:

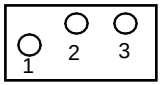
1. Rinse the light with fresh water after use in salt water.
2. Always check to make sure that the rear bulkhead connector assembly is secure before deployment.
3. Check for condensation inside the glass dome, especially after changing lamps. If any condensation is evident, unscrew the connector/socket assembly from the body and remove the lamp. Place the connector/socket assembly and lamp inside a warm oven (at least 100 C or 212 deg F) for at least 30 minutes to bake out any moisture that may present. If possible, purge with dry nitrogen while reassembling the light.
4. After each deployment, examine the power cable and rear connector for damage.

Warning: After each deployment, carefully check to make sure the light has not flooded. It is possible for the light to partially flood and then reseal itself while underwater. Upon surfacing, the light can become internally pressurized, which may be potentially dangerous. Additionally, if the power remains on when the light has partially flooded, it is possible for electrolytic generation of an explosive mixture of hydrogen and oxygen gases. **If a light appears flooded upon removal from the water, it should be treated as potentially dangerous. Point the light away from persons and valuable equipment and verify whether or not it is internally pressurized. Make sure that the power is disconnected as soon as a flooded condition is suspected.**

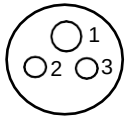
CONNECTOR OPTIONS: Four different industry standard underwater connectors can be used with the Multi SeaLite®: BH3MP, LPBH3MP, XSG3BCL, and 1503. The standard connector pin-outs are illustrated below.



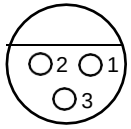
BH3MP
1 = Hot
2 = Neutral
3 = Ground to shell



LPBH3MP
1 = Hot
2 = Neutral
3 = Ground to shell



XSG3BCL
1 = Ground to shell
2 = Neutral
3 = Hot



1503
1 = Hot
2 = Neutral
3 = Ground to shell

ELECTRICAL AND THERMAL WARNINGS: A GFCI should be used whenever high voltage lights are being utilized; when divers are in the water this is especially critical! **Do not operate AC- powered lights without a GFCI!** Additionally, all high voltage lights should be case grounded for safety. It is also important not to burn the Multi SeaLite® in air for more than 20 seconds, as it relies on the surrounding water to provide cooling. When an underwater light is burned in air, the resulting heat buildup can pose a fire hazard. If the light is operated for testing purposes in air, be sure to let it cool down for a couple of minutes before immersing it in water. It is also a good idea to turn the light off a few seconds prior to removing it from the water.

LAMPS (LOW VOLTAGE BI-PIN LAMPS AND HIGH VOLTAGE MINI-CAN SCREW BASE):

Model Number	Part Number	Volts	Watts	Hours	Color Temp	Lumens
BP-12/20*	460-00016	12	20	2000	2850K	350
BP-12/50*	460-00019	12	50	2000	3000K	950
BP-12/100*	460-00027	12	100	1000	3100K	2,200
BP-24/100*	460-00032	24	100	2000	3000K	1,800
BP-24/150*	460-00035	24	150	70	3400K	5,000
BP-24/250*	460-00038	24	250	300	3400K	8,100
BP-24/300*	460-00041	24	300	50	3100K	9,900
MC-120/100	460-00053	120	100	1500	2700K	1,600
MC-120/150	460-00055	120	150	750	2850K	2,400
MC-120/250	460-00059	120	250	2000	2900K	4,750
MC-120/325	460-00061	120	325	500	3100K	7,800
MC-120/500	460-00064	120	500	2000	2950K	9,930
MC-LV-LA**	714-001-001	Mini-Can low voltage lamp base adapter				

* Replace old style mini-can low voltage lamps but require the low voltage lamp base adapter.
** Required for use with low voltage lamps.

MULTI SEALITE® SPECIFICATIONS

MECHANICAL

Housing Material: Anodized aluminum, electro-polished stainless steel, or titanium
Diameter: 79 mm (3.1 inches)
Length: 155 mm (6.1 inches) (with BH3MP connector)
Lens: Clear tempered borosilicate
Reflectors: Proprietary design spot, medium flood or wide flood
Depth Rating: 1,000 meters (3,280 feet) of seawater
Air Weight-- Aluminum: 519 g (18 oz.)
Stainless Steel: 952 g (34 oz.)
Water weight--Aluminum: 170 g (6 oz.)
Stainless Steel: 624 g (22 oz.)

OPTICAL

Beam patterns (full angle measured to half power point using 120 volt/250 watt lamps):
Wide Flood (WFL): 59 degrees conical
Medium Flood (MFL): 40 degrees conical
Spot (SP): 16 degrees conical

TROUBLESHOOTING:

PROBLEM	POSSIBLE CAUSE	RECOMMENDED ACTION
Light doesn't turn on.	Not plugged in.	Secure all connections.
	GFI tripped.	Reset GFI.
	Lamp burned out.	Change lamp.
	Cable defective.	Check continuity from one end to the other. Meg test if possible.
	Insufficient voltage	Make sure battery is fully charged. Verify power supply is adequate.
Light flooded.	Connector loose.	Tighten. If still leaking, replace.
	Damaged O-ring.	Replace as required.
	Glass cracked or chipped.	Return to DeepSea.

FLOODED LIGHT REPAIR

If the light is leaking, first suspect that there is a damaged O-ring, or that the glass envelope is cracked or has a chipped edge.

When looking for the source of a leak, first check if the rear connector is loose. If the connector is secure, check for a sliced or otherwise damaged O-ring; make sure the O-ring sealing surfaces are clean. If there is no apparently damaged O-ring, remove the glass dome and inspect the edge of the glass. If the edge is chipped, this is probably the source of the leak, and the dome should be replaced.

If a light is flooded and/or damaged, we recommend that the light be returned to DeepSea Power & Light for repair or replacement; DeepSea Power & Light cannot be responsible for any damage incurred during emergency field repairs. Such repairs should be undertaken only as a last resort and by qualified personnel. Spares kits are available from DeepSea Power & Light.

MULTI SEALITE® EMERGENCY FIELD REPAIR PROCEDURE

Before any field replacement of a Multi SeaLite® component is initiated, the work area must be made as clean as possible. The surface used to work on should be dirt and lint free. Once a suitable work space has been established, use the following procedure:

1) Remove the plastic cowl, and die-cut retaining ring.
2) Once the cowl has been removed, the dome is readily accessed Remove the existing dome from the Multi SeaLite® body.
3) Clean out any broken glass and debris from the body and cowl before installing the new dome. A very small piece of debris between the dome and body can cause the glass dome to crack when pressurized.
4) Inspect the O-ring under the dome. Check very closely for slices, tears, cracks, or rough spots. It is recommended to replace the O-ring with a new one, however the old O-ring may be reused if it is still in good condition.
5) Make sure the inside of the dome is clean before reassembling the cowl onto the body of the light.
6) With a fresh O-ring in place, carefully place the new dome into position on the front of the cowl.
7) When the dome is fully seated on the body, put the cowl and die-cut retaining ring in place and screw it onto the body.

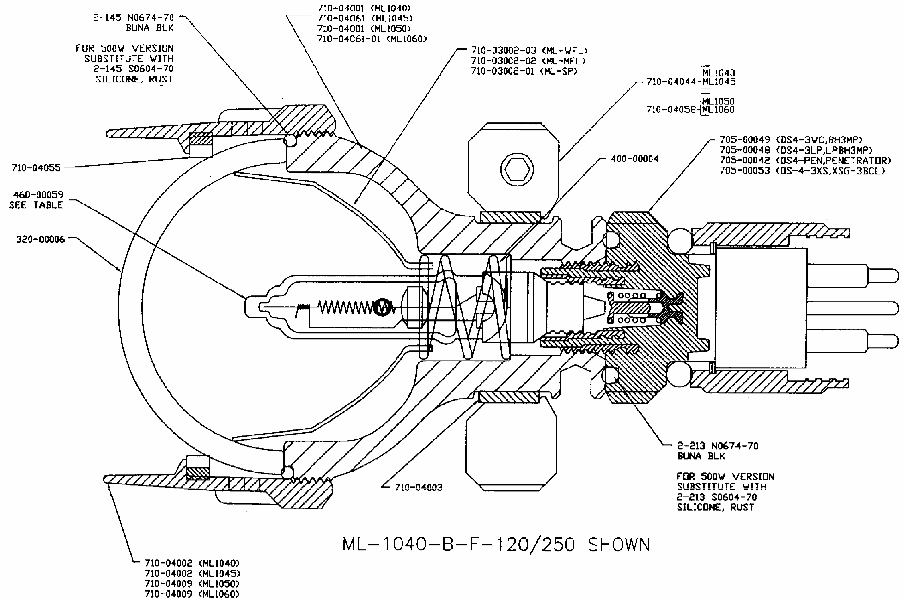
LAMP CHANGING PROCEDURE: To change the lamp, first disconnect the cable by unscrewing the plastic locking sleeves and pulling the connector halves apart. Unscrew the socket/connector assembly from the light body and remove the old lamp by twisting counter-clockwise. When installing the new lamp, be sure not to get any fingerprints on the surface of the lamp. Use a piece of tissue or other clean paper to hold the lamp while installing it. Fingerprints can be cleaned from the surface of the lamp with isopropyl (rubbing) alcohol.

OPTIONS

Model Number	Part Number	Description
IL3FS	706-000-022	BH3MP mating connector with male locking sleeve on 18” (0.5m) whip
LPIL3FS	140-00094	LPBH3MP mating connector on 18” (0.5m) whip
RMG3FS	706-005-003	XSG3BCL mating connector with female locking sleeve on 18” (0.5m) whip
UHMB	774-00011	Universal helmet mounting bracket (works with YMB), (formerly ML-HMB)
YMB-NEW	774-000-604-0A	Yoke mounting bracket. Used with new 2-piece mounting bracket.
YMB-OLD	774-000-016	Yoke mounting bracket (formerly ML-YMB)

SPARE PARTS

Model Number	Part Number	Description
ML-BOD-A	710-04001	Aluminum body
ML-BOD-S	710-04061-01	Stainless steel body
ML-BOD-T	710-04061-02	Titanium body
ML-CWL	710-040-076	Ultem plastic cowl
ML-CWL-S	710-04009	Stainless steel cowl
ML-CWL-S-RR	450-00059	Stainless steel cowl retaining ring
ML-OR	710-04096	O-ring kit for 325W light or less
ML-OR-500	710-04097	O-ring kit for 500W light
ML-GD	772-002-054	Glass dome
ML-FGD	772-002-053	Frosted glass dome
ML-SP	710-03002-01	Spot reflector
ML-MFL	710-03002-02	Medium flood reflector
ML-WFL	710-03002-03	Wide flood reflector
ML-RS	400-00004	Reflector spring
DS4-3WC	705-00014	BH3MP connector/socket assembly with locking sleeve
DS4-3XS	705-00053	XSG3BCL connector/socket assembly
DS4-3LP	705-00048	LPBH3M connector/socket assembly
DS4-1503	705-00069	Burton 1503 connector/socket assembly
DS4-PEN	705-00042	Penetrator/socket assembly
ML-FLS	140-00031	Female Delrin locking sleeve for bulkhead connector
ML-MLS	140-00032	Male Delrin locking sleeve for mating connector
ML-DMC	710-040-019	Delrin plastic mounting collar
ML-AMC	710-04058	Aluminum mounting collar
ML-SG	710-04062	Spring guide for titanium housing



ML-1040-B-F-120/250 SHOWN