• Miniature Video and Lighting System
• 400 Meter Depth Rated
• Scratch-Resistant Sapphire Port
• Extremely Durable
• Crisp, Wide-Angle Image
GENERAL NOTES AND WARNINGS

• You may run your SS Series camera in air. As the light heats up you will notice that the output will diminish. This is normal, and the light will return to full brightness once it is submerged and allowed to cool.
• !DANGER! When the SS Series camera is operated in air the body may reach temperatures in excess of 65° C. These temperatures may be enough to cause burns if the light is handled without protective clothing.
• Do not tamper with the split retaining ring that holds the front window. The front window requires a press to install the split retaining ring, and it is very hard to reinstall. Tampering with the lighthead in any way may damage the light and void your warranty.
• !DANGER! Do not operate any high voltage electrical equipment in or around water without using a Ground Fault Interrupt circuit (GFI) and an isolation transformer, especially when divers are in the water.

PRE & POST DIVE INSPECTION

• Rinse your LED Multi-SeaLite® in fresh water after use in saltwater.
• Always check to make sure that the rear bulkhead connector assembly is secure before deployment.
• Before and after each deployment, check the following areas for damage, wear or corrosion: Rear bulkhead connector assembly, power cable, front window, retaining cowl.
• !DANGER! 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 make sure that the power is disconnected. See the Flooded Light Repair procedure for more information.

WARRANTY INFORMATION

Full warranty information can be found at www.deepsea.com. For warranty and non-warranty repairs please contact DeepSea Power & Light for a RMA number prior to returning your item. Please have your light model number, serial number and any other pertinent information along with a description of the problem, at hand when you call, or include them in a fax or email. When shipping your item, be sure that the freight is pre-paid (CODs will not be accepted) and that the RMA number is clearly printed on the outside of the box.

RMA contact information:
Phone: 858-576-1261 ext. 324
Fax: 858-576-0219
Email: RMA@deepsea.com

All shipments should be sent to the address below marked:
Attn: RMA ####
**Flooded Light Repair**

If the light stops working while underwater, you should assume that it has been flooded. When working on a potentially flooded light, it is important to use appropriate personal protective equipment to include, at a minimum, eye and hand protection.

1. Place the light face down on a table making sure that the connector side is facing up.
2. Slowly unscrew the connector/socket assembly to allow any internal pressure to be equalized over the water.
3. Once it is determined that the light is not internally pressurized, it is recommended that the light be returned to DeepSea Power & Light (DSPL) for evaluation and repair using the RMA Procedure.
4. In case of emergency, you may attempt to repair the flooded light by following the steps listed in the Disassembly, Inspection, and Assembly procedures. Any parts that were exposed to saltwater should be cleaned with de-ionized water to remove any salt residue before reassembly. Make sure that all parts are completely dry before reassembly by baking them in an oven at 140°F for 30 minutes.

**Troubleshooting**

1. If the light stops working while underwater assume that it has been flooded. See Flooded Light Repair procedure.
2. Once it has been determined that the light is not flooded, or if it does not turn on during pre-deployment checks, troubleshoot in the following sequence:
   a. Check the power cable/inline connector to make sure that correct voltage and current are being supplied, and that the correct sockets are being used. See the back of this manual for electrical specs and connector pinouts.
   b. Remove the connector/socket assembly (see step 1 in the Disassembly procedure). Inspect the assembly for visual signs of wear. Using a multi-meter check for continuity or shorts in the connector. Try a spare connector/socket assembly if available.
   c. Disassemble the rest of the light using the Disassembly procedure (steps 2 through 7).
   d. Check the wires that go from the driver board to the lamp base for wear. If they appear worn, replace the driver board.
   e. Check to make sure that the driver board is securely attached to the lighthead. If it is loose, check for damage on the board. If there appears to be no damage, reattach the driver to the lighthead (see step 3 in the Assembly procedure). Try using a spare driver board if available.
   f. If the light still does not work, return it to DSPL using the RMA Procedure.
PARTS LIST
The SS Series camera line is designed to withstand the rigors of day-to-day inspection in tight areas where environmental and mechanical shock are unavoidable. The cameras have applications in pipe and borehole inspection, fixed-mount monitoring, tank and void inspection, in fisheries and aquaculture, or just about any confined space. They are also ideal for inspection of machinery and engineering spaces both on land and aboard ship.

The SS-30C is the smallest of the three SS Series cameras at 3.00 cm (1.18 in) in diameter and contains six white LED’s. The SS-35B is the Black & White SS Series camera with three built in red LED’s and has a diameter of 3.47 cm (1.37 in). The SS-35C color video camera contains six ultra bright LED’s and has the same dimensions as the SS-35B. The LED lighting provides powerful illumination with thousands of hours of use. The SS Series housing is constructed from Stainless Steel for maximum durability and will not wear in contact with tough materials such as cast iron. Along with the tough housing each SS Series camera lens is fitted with a scratch resistant Sapphire Crystal port. Each SS Series camera is factory pressured-tested and rated to 400 meters.

### SS Series Specifications

#### SS-30C
- **MECHANICAL**
  - Housing: 17-4 Stainless Steel*  
  - Port: Sapphire  
  - Outer Diameter: 3.00 cm (1.18 in)  
  - Weight in Air: 96.39 g (3.4 oz.)

#### SS-35B/BT
- **MECHANICAL**
  - Housing: 17-4 Stainless Steel*, Titanium 6-4  
  - Port: Sapphire  
  - Outer Diameter: 3.47 cm (1.365 in.)  
  - Weight in Air: 119.07 g (4.35 oz.)

#### SS-35C
- **MECHANICAL**
  - Housing: 17-4 Stainless Steel*  
  - Port: Sapphire  
  - Outer Diameter: 3.47 cm (1.365 in.)  
  - Weight in Air: 119.07 g (4.35 oz.)

#### ENVIRONMENTAL
- **Rated Depth**: 400 Meters (1312 feet)
- **Operating Temperature**: -10 deg. C to +80 deg. C (14 deg F to 180 deg F)
- **Storage Temperature**: -10 deg. C to +80 deg. C (14 deg F to 180 deg F)

#### OPTICAL
- **Lens**: 2 mm, f3.5
- **Focus**: Fixed focus, Factory Set
- **Depth of Field**: 1/2-inch
- **Field of View in Air**: 83 deg. (H) x 60 deg. (V) x 95 deg. (D)
- **Field of View in Water**: 59 deg. (H) x 44 deg. (V) x 68 deg. (D)

#### VIDEO
- **Image Sensor**: 1/3-inch interline transfer CCD
- **Number of Pixels**: NTSC: 768 (H) x 494 (V)
- **Resolution**: 400 (H) x 350 (V)
- **Scene Illumination**: 0.5 Lux
- **Shutter**: Electronic, automatic
- **Video Output**: 1.0 volt peak-to-peak into 75 ohm
- **Video Format**: NTSC or PAL
- **Lighting**: 6 Luxeon white LED’s

#### ELECTRICAL
- **Power**: 8-13 Volts DC
- **Current**: 160 mA (camera), ~500mA with LED’s

### Specifications subject to change without notice.

* Note: 17-4 Stainless Steel not recommended for long term immersion in sea water.