



SeaSource2 User Manual



DeepSea Power & Light, Inc.

3855 Ruffin Rd., San Diego, CA 92123

PHONE: (858) 576-1261 FAX: (858) 576-0219

E-mail info@deepsea.com, Web Page <http://www.deepsea.com>

SEASOURCE2 SUMMARY: The SeaSource2 is a compact underwater battery pack designed for diver operation. The SeaSource2 consists of a 12 volt, 6.5 amp-hour "absorbed electrolyte" lead-acid battery packaged in a rugged neoprene boot and covered with a Cordura holster. The glove-like fit of the rubber boot enables the SeaSource2 to have the smallest possible housing. The rubber pressure relieving housing eliminates the possibility of explosive failures. Incorporated into the clear top of the SeaSource2 are an on/off switch, charging port, charge status indicator lights, and a fuse inspection area. A bulkhead connector provides reliable electrical connections that are underwater pluggable. Strap mounting to a camera or other housing is made easy by using two nylon loops on the holster.

The SeaSource2 coupled with one of DeepSea's underwater lights makes a totally portable underwater/harsh environment lighting system.

At the core of the SeaSource2 is a 12V, 6.5A/hr. sealed lead acid battery. Surrounding the battery is a tough rubber boot, which is enclosed in a durable Cordura holster with a 2 inch belt loop for easy mounting. Under the lid is a circuit board, which contains the switch, fuse, and charging jack. On top of the lid is the charging port plug, a switch, and a bulkhead connector.

BATTERY USE: The SeaSource2 battery has no memory problems and can be put on charge after any length of discharge. For best performance and convenience it is best to leave the battery charging when not in use. The supplied charger is intended for such use. There is no risk of overcharging.

IMPORTANT: Do not leave a battery for an extended length of time uncharged. Doing so will damage the battery. Simply remember to always put the battery on charge after diving, and the battery should give you years of trouble free use.

CHARGING: To charge the SeaSource2 simply unscrew the charging port, insert the battery charger plug into the jack, and plug in the charger. There is no danger of overcharging. The battery can be left charging until you are ready to use it. If this is not possible be sure to completely charge the battery after each use and at least every 2 months. When reseating the charging port plug, be certain that the charging plug is centered or the port plug will not seat properly.

SEASOURCE2 PRE- AND POST-DEPLOYMENT CHECKLIST: Each SeaSource2 is shipped ready for immediate use. To ensure that the battery will perform reliably, please observe the following maintenance guidelines:

1. Rinse the battery with fresh water after use in salt water.
2. Always check to make sure that the connector assembly is secure and undamaged before deployment.
3. After each deployment, examine the power cable and connector for damage.

WARNING: Only use chargers supplied by DeepSea Power & Light. The chargers that are sold with the SeaSource2 are specifically designed to charge the SeaSource2. Use of other chargers

can be extremely dangerous. The battery may become overcharged, or charged too rapidly resulting in both damage to the battery and potential fire hazard.

LED POWER INDICATOR: Each SeaSource2 is delivered with a colored LED power indicator. As the LED lights go out there is a corresponding drop in burn time remaining. The indicator must be adjusted with a small flat head screwdriver for the wattage that is used. The adjuster slot is beside the charging jack underneath the charging port plug. Your SeaSource2 is factory set for 50 watts. To readjust the indicator:

1. Fully charge the battery.
2. Insert the lamp you will be using.
3. Turn the slot slightly counter clockwise just until the LED is fully lit.
4. on the light.
5. Turn the white adjuster slot counter clockwise until the LED is fully lit.
6. Turn the slot clockwise until the next to last light just goes out.

CAUTION: The LED is just a rough indicator of burn time remaining and should not in any way be used as a timing device for bottom time and the like.

REPLACING FUSE: In the event the fuse appears to have been blown we recommend contacting DSP&L to arrange to have the battery returned to the factory for evaluation and repair if required.

UNDERWATER PLUGGABLE CONNECTORS: To install the connector simply slide the connector into the battery so that the two contacts and the guide pin are lined up. Then tighten down the locking sleeve. Do not overtighten, a snug fit is all that is required. The connector can be mated and unmated while underwater, but the battery must be turned off. Plugging and unplugging the connector while the power is on will promote degradation of the connector and result in the flooding of the battery.

FLOODING: Your SeaSource2 battery has been fully pressure tested at the factory and should not flood under normal use. If flooding does occur, please follow these instructions, as failing to do so will void your warranty?

1. If the battery floods, turn off the battery and end the dive as soon as is safely possible.
2. If the battery has flooded it will likely be bulging slightly. This is hydrogen gas that has accumulated inside the battery housing due to rapid discharge. It is important to vent the gas as soon as possible by unscrewing the charging port. The bulging of the battery is a safety feature designed to alert the user of a problem with the battery.
3. When out of the water remove the connector from the battery and open the charging port and drain all water from the battery. Flush the battery with fresh water if the battery flooded in saltwater.

WARNING: Do not flush the battery with alcohol, acetone, or other combustible solvents. Flammable solvents in conjunction with energy potential of the battery will create a severe fire hazard. Flush battery only with fresh or distilled water.

MAINTENANCE: Your SeaSource2 requires very little maintenance. It is recommended that the boot and connector be lubricated periodically with silicone spray or grease. Additionally, the charging port o-ring should be inspected for damage, cleaned and lubricated as well.

SeaSource2 Specifications

MECHANICAL

Size: 7.4 cm x 10.4 cm x 18.3 cm
(2.9 in. x 4.1 in. x 7.2 in.)
Weight in Air: 3.3 kg (7.2 lbs.)
Weight in Water: 1.4 kg (3.0 lbs.)

ELECTRICAL

Voltage: 12 volts
Capacity: 6.5 amp hours
Burn Time: 70 min at 50 watts; 30 min at 100 watts
Charger: 15 hour, two-stage automatic type
Bulkhead Connector: RC-2-MP (S2-BH)
Mating Connector: RC-2-FS (S2-IL, in-line)

ENVIRONMENTAL

Depth: 46 meters (150 feet)

Ordering Information

Model Number (Part Number)	Connector	Volts/ Amps	Other
SS2-12/6.5 (730-004-001)	RC-2-MP (S2-BH)	12V/6.5A	Includes charger and RC-2-FS in-line mating connector on 3-foot (1m) 18/2 S/O cable

Options

Model Number	Description
-x (cable length in feet)	Use only if cable length is different from standard. This length is total length—not in addition to standard length. The first 3 feet are included in the price of the SeaSource2. Add -x to the SeaSource2 model number to indicate the total length in feet.
SS-YCBL-P	Y-cable with 3 RC-2-FS connectors on 18 inches of 18/2 SO cable in parallel
SS-YCBL-S	Y-cable with 3 RC-2-FS connectors on 18 inches of 18/2 SO cable in series

Spare Parts

Model Number	Part Number	Description
RC-2FS (S2-IL)	705-00060 (with 705-00018 locking sleeve)	S2-BH in-line mating connector with locking sleeve on 18" (0.5m) whip
SS2-CHG	100-00154	12V SeaSource2 charger