



SeaArc2 HID Underwater Ballast User Manual



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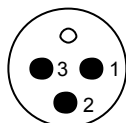
INTRODUCTION: Congratulations on your purchase of the DeepSea Power & Light SeaArc2 HID Underwater Ballast.

The ballast provides power to a 250 or 400 watt HID SeaArc2 lamp ballast output for underwater lighting. The ballast allows the lighthouse to be controlled remotely from the ballast over distances greater than 300 meters (depends on wire gage). The ballast comes in a durable polyurethane bladder mounted on an anodized aluminum mounting platform.

SEAARC2 HID UNDERWATER BALLAST PRE- AND POST-DEPLOYMENT CHECKLIST: Each SeaArc2 HID Underwater Ballast is shipped ready for immediate use. To ensure that the ballast will perform reliably, please observe the following maintenance guidelines:

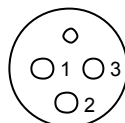
1. Try to rinse the ballast with fresh water after use in salt water.
2. Always check to make sure that the bulkhead connectors are secure before deployment.
3. Check for water inside the polyurethane diaphragm. If any water is evident, please contact DeepSea.
4. After each deployment, examine the power cable and rear connector for damage.

CONNECTORS: The standard underwater connectors used with the SeaArc2 HID Underwater Ballast are BH3MP and BH3FS. The standard connector pin-outs are illustrated below. If you have ordered a ballast with non-standard connectors and pin-outs, this information will be on your invoice.



BH3MP

1 = Hot
2 = Neutral
3 = Ground to shell



BH3FS

1 = Hot
2 = Neutral
3 = Ground to shell

ELECTRICAL AND THERMAL WARNINGS: A Ground Fault Interrupt 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 GFI!** Additionally, all high voltage lights should be case grounded for safety. It is also important not to burn the SeaArc2 HID Underwater Ballast in air for more than a few seconds, as it relies on the surrounding water to provide cooling. If the ballast 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 ballast off a few seconds prior to removing it from the water.

GENERAL NOTES AND WARNINGS

- Do not operate a ballast out of water for more than about 30 seconds.
- Do not operate any high voltage electrical equipment without using a Ground Fault Interrupt circuit for safety, especially when divers are in the water!
- Use a lighthouse rated at the same wattage as the ballast.

SPECIFICATIONS:

Mechanical

Width:	21.2 cm (8.375 in.) (mounting bracket width)
Length:	31.5 cm (12.4 in.) (including valve and connectors)
Height:	20.3 cm (8.0 in.)
Weight in Air:	9.1 kg (20.0 lbs.)
Weight in Water:	4.3 kg (9.5 lbs.)

Electrical

Input Power:	120 or 240 VAC (standard); 208 or 277 VAC (optional)
Lighthouse Wattages:	250W or 400W
Input Connector:	BH3MP
Input Pin-out (120 VAC):	1 = Hot 2 = Neutral 3 = Ground (Earth)
Output Connector:	BH3FS
Output Pin-out:	1 = Lamp (Hot) 2 = Lamp (Neutral) 3 = Ground (Earth)

Environmental

Depth Rating:	Pressure-compensated to full ocean depth
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OPTIONS

Model No.	Part No.	Description
IL3FS	140-00062	BH3MP mating connector with male locking sleeve on 18" (0.5m) whip
IL3MP	140-00063	BH3FS mating connector with female locking sleeve on 18" (0.5m) whip

Outline and Installation Drawing

