ikelite

Fiber Optic Converter Mark II
4401.1 Instruction Manual

Included in Box

IKELITE #0184.1
Silicone Lube

Connector Protector

Fiber Optic Converter
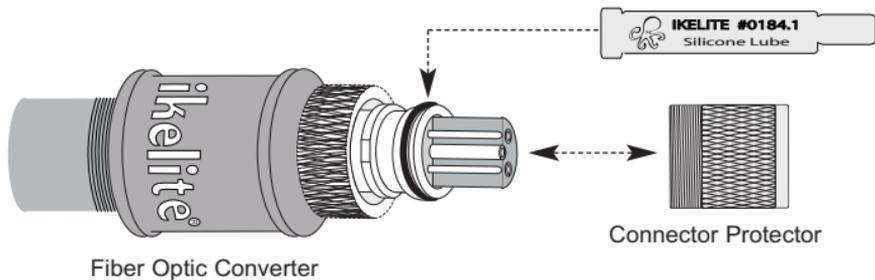
Congratulations on your purchase of the Ikelite Fiber Optic Converter. Ikelite has decades of experience in the underwater photographic, video, and lighting market. Our products are designed and built in the USA by Ikelite for both the professional and amateur. Please read this instruction manual completely before using this product.

Information

- The 4401.1 Fiber Optic Converter is compatible with both pre-flash and non pre-flash camera systems in a housing which supports use of the camera's built-in flash. Like its predecessor, the Fiber Optic Adapter (4401), the Fiber Optic Converter Mark II converts the electrical bulkhead of any Ikelite DS-series strobe into a fiber optic receiver. The internal electronics have been redesigned for heightened sensitivity to be used with newer LED fiber optic flash triggers from SEA&SEA and Nauticam. The Fiber Optic Converter Mark II provides automatic pre-flash recognition and manual exposure settings.
- The Converter is a "manual" Converter and not TTL. Flash intensity must be determined by using manual power settings on your DS-series Strobe. A strobe set to "TTL" will result in a very weak flash and could underexpose your subject.
- Converter is only compatible with Ikelite DS-series Strobes.
- Converter does not contain batteries.
- Converter does not contain user-serviceable parts and should never be disassembled.
- When using dual strobes, a Converter is needed for each strobe.

Attachment

1. Using Ikelite lube, lightly lubricate the Converter o-ring. Apply just enough lubricant to make the o-ring wet. Do not over lubricate.

2. Attach Converter to strobe bulkhead and hand tighten Plug Lock Retainer, see diagram A, page 4.

3. Attach fiber optic cable (not supplied) to the Converter. For a list of compatible cables, see the "Fiber Optic Cable Compatibility Section" on page 3.

4. Attach opposite end of fiber optic cable to your housing or housing deflector, so the cable end is pointed directly at the camera flash.

Usage

1. Turn on camera and strobe.
2. Set camera to a "force flash" setting. Use of an "auto" or "red-eye reduction" setting may result in intermittent flash operation. Refer to your camera instruction manual for more information.
3. With the strobe on and the fiber optic cable in place, take one picture with flash to configure the Converter. The first picture may be dark if your camera does not fire a pre-flash; this is normal. The Converter must be configured by taking one picture each time the strobe is turned off or back on. The adapter does not need to be configured if the camera turns off or enters a power-saving mode.
   Canon users: Some Canon cameras (G series and S series) cancel the pre-flash when used in manual mode. When switching these cameras from an automatic mode to manual mode or back, the strobe will need to be turned off and back on again to reconfigure the adapter.
4. Adjust strobe exposure using the manual power settings on your DS Strobe. Do not use "TTL" mode on the strobe. The 4401.1 Fiber Optic Converter does not provide TTL operation.

Fiber Optic Cable Compatibility

A compatible fiber optic cable is required to use the Fiber Optic Converter. Ikelite Fiber Optic Coiled Cord 4501 is available through any Ikelite dealer. The Fiber Optic Converter is compatible with the following cables:

- IKELITE Fiber Optic Coiled Cord 4501
- SEA&SEA Fiber Optic Cable (L-type) Product No. 50107
- Olympus UW Fiber Optic Cable PTCB-E02
- INON Optical D Cable "Non-wireless type" L-Connector *
- Nauticam Optical Fiber Cable No. 26211 Nauticam to INON
- Nauticam Optical Fiber Cable No. 26212 Nauticam to SEA&SEA
- * INON Optical D Cable "Wireless type" L-Connectors may be converted to "Non-wireless type." Contact INON for details. Components needed for modification are provided by INON and not available through Ikelite.

Diagram A

Ikelite DS-series Strobe

Strobe Bulkhead

O-ring, O-ring Sealing Groove

Plug Lock Retainer

4401.1 Fiber Optic Converter

Threaded Attachment Point for INON-type cables

Plug Attachment Point for SEA&SEA-type and Olympus cables
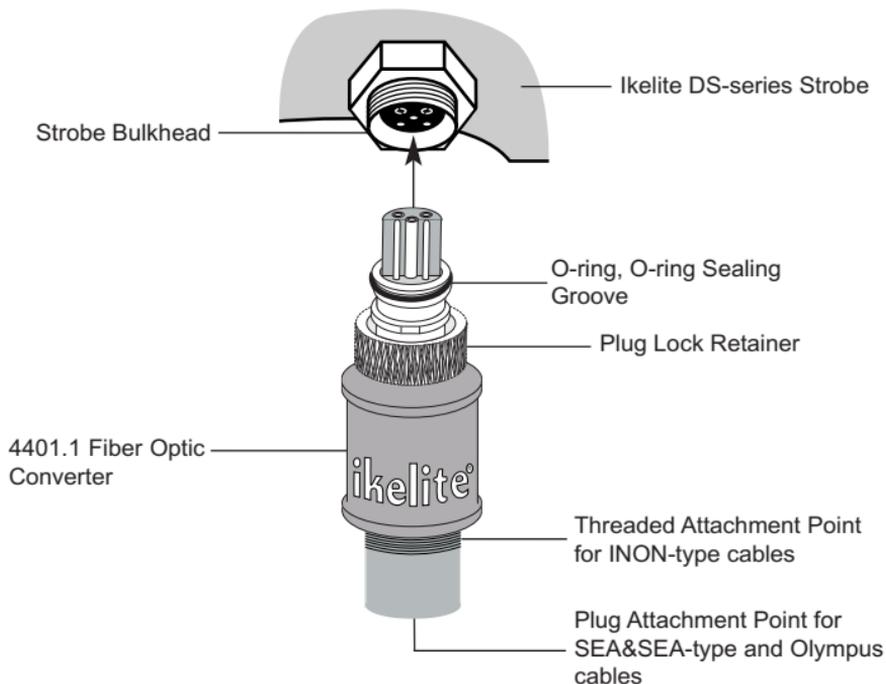
Lubricants

- We recommend you use **only** Ikelite lubricant (included with Converter) on Ikelite products. Some other brands may cause the o-rings to swell and not seal properly.
- Use only enough lubricant to lightly cover the adapter o-ring. Wipe off any excess lubricant with a clean, lint-free cloth. Lubricant is used to reduce friction; it is not a sealant. Excessive lubricant can collect sand and dirt which may interfere with proper sealing.

CAUTION: Never use spray lubricants. The propellant ingredient in spray lubricants can cause cracking of plastic and swelling of o-rings.

Maintenance and Tips

- Before using the Converter, always check tightness of the plug lock retainer that secures the Converter to your Ikelite DS-series Strobe.
- Keep the Converter o-ring clean and lightly lubricated. Apply only enough lubricant to make the o-ring feel slick. The light coating of lubricant will help to keep the o-ring from drying out and will help Converter insertion into the strobe bulkhead. It is not necessary to remove the o-ring from the o-ring sealing groove unless debris is present in the groove. Be careful not to gouge the o-ring or the o-ring groove during removal. The o-ring should only be removed with a toothpick or other non-metallic item. Always keep the o-ring groove and the sealing surface of the strobe bulkhead clean.
- BEFORE disconnecting the Converter from the strobe, rinse the Converter exterior and strobe thoroughly in freshwater after each saltwater use. Dry with a soft cloth. Remove Converter from strobe, replace the connector protector, and store safely.
- DO NOT immerse the Converter in water unless it is properly connected to a DS-series Strobe.
- Loosen the Connector Protector during long periods of storage.
- The Connector Protector is not a waterproof cap. The Converter should not be submerged with the Connector Protector in place. Do not submerge the Converter unless connected to a DS-series Strobe.

Specifications

Length without Connector Protector	2.5 in (6.3 cm)
Maximum Diameter	1.1 in (2.8 cm)
Weight	1.8 oz (51 g)
Depth Rating	300 ft. (90 m)

Troubleshooting

Problem	Solution
Strobe does not fire	- Check to see that the strobe is turned on and the battery is charged. - Check to see that the camera flash is firing. - Double check connections between the strobe, connector, and cable. - Make sure the fiber optic cable is not damaged or broken and is pointed directly at the camera flash. Some fiber optic cables are very fragile. Too sharp of a bend can result in a break inside the cable. - Contact Ikelite Customer Support, see page 7.

Problem	Solution
Strobe fires at the wrong time or intermittently	- Converter is configured improperly. Turn strobe off and back on, and take a flash photo to re-configure the Converter. The first flash may be timed improperly as the Converter configures itself. Subsequent strobe flashes should be timed correctly. - Check connection points. - Make sure one end of the fiber optic cable is pointed directly at the camera's flash. - Check camera flash settings. Do not use "auto" or "red-eye reduction" flash modes. - Contact Ikelite Customer Support, see page 7.

Troubleshooting (continued)

Problem	Solution
Image is over- or underexposed	- Check that strobe is turned on and battery is charged. - Check connection points. Switch to higher or lower manual power setting on strobe (if available). - Change camera shutter speed or aperture. - Move closer to or further away from the subject. - Strobe is in the "TTL" setting. Switch to a manual power setting.

Replacement and Spare Parts
- 5020 Lube (contains 4 - 1cc tubes)
- 0301.12 Connector Protector
- 0136.13 O-ring

Ikelite Limited Warranty
This product is warranted against any manufacturing defects for a period of one year from the original date of purchase. Defective products should be returned prepaid to Ikelite. Ikelite will, at its discretion, repair or replace such products, and will return to customer prepaid. All other claims of any nature are not covered. Except as mentioned above, no other warranty expressed or implied, applies to this Ikelite product.

Ikelite Customer Support
Email: ikelite@ikelite.com
Phone: 317-923-4523
Fax: 317-924-7988

Returning Products for Service

Please refer to the Troubleshooting section (pages 6-7) before returning the Fiber Optic Converter for service. Ikelite products may be returned directly to the factory for service. No advance notice or return authorization is required to obtain service. All shipments must include a brief cover letter stating your name, shipping address, email address, telephone phone number, and brief description of the work request. Please also include a copy of the original purchase receipt to obtain warranty service.

Send postage pre-paid to:

Ikelite Underwater Systems
Attn: Service Department
50 West 33 Street
Indianapolis, IN 46208 USA

No reimbursements for return freight will be issued.

Returning Products for Service (outside the United States)

For the separate international customs documentation form that you complete to accompany the shipment, please state or designate that the enclosed products were originally manufactured in the USA and are being returned to the manufacturer for repair service. Value of the equipment listed for customs purposes should be zero.

Ikelite Underwater Systems
50 West 33rd Street
Indianapolis, IN 46208 USA