



# TTL Converter for Nikon DSLR with Nikonos N5 Connector (Version 2)

Product Number 4302.3

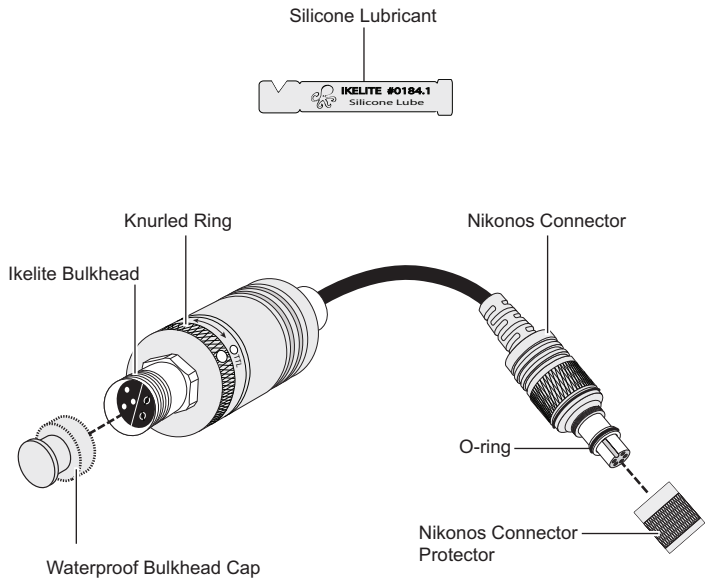
## **I n s t r u c t i o n   M a n u a l**

Thank you for your purchase of Ikelite equipment. Please read this instruction manual completely before attempting to operate or dive with this product.

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## Included in the Box



## General Information

The TTL Converter is equipped with a simple rotating switch that allows toggling between TTL and manual exposure.

Exposure compensation is NOT provided through the Adapter, but may be accessed through a camera button or the camera's built-in menu. Proper operation and TTL exposure requires use of a current-model Ikelite DS strobe - see Strobe Compatibility, **Page 5**.

Use of this TTL Converter requires a Nikonos N5-style electrical bulkhead strobe connector and TTL hotshoe. If you are unsure whether your housing meets these requirements, please contact the housing manufacturer. Wiring diagrams for our Ikelite and Nikonos-style connectors can be found at [ikelite.com](http://ikelite.com).

One or two strobes may be connected to the Converter using an Ikelite-to-Ikelite single or dual sync cord. Use of two strobes requires a dual sync cord. Two strobes cannot be controlled by individual Converters even if the housing is equipped with two bulkhead connectors.

TTL Converters are not usable with non-Ikelite strobes or non-DS series Ikelite strobes.

Due to hardware changes and risk of cord damage, we are unable to modify existing 4301, 4301.2, 4302, or 4302.2 Converters to the newest TTL protocol.

Please also note that strobe serial number requirements differ from the original Nikon TTL Converter - see Strobe Compatibility, **Page 5**.

The Ikelite TTL Adapter is **NOT** compatible with the following Nikon Cameras; D-100, D-1X, D-2H.


## Strobe Compatibility

AF35 .....	no
DS50 .....	above serial number 75510 with update
DS51 .....	above serial number 78700
DS160, DS161 .....	all
Non-Ikelite .....	no

## Connecting the Adapter - reference Diagram A, Page 6

Use Adapter with Ikelite DS Strobes ONLY. If using an older DS50 or DS125 strobe, see Strobe Compatibility above.

1. Make sure all components are dry.
2. Remove Waterproof Bulkhead Cap and Connector Protector, **Page 3**.
3. Clean and lightly lubricate the threads and o-ring on the male Nikonos connector. Use ONLY Ikelite lube. Other brand lubricants can cause the o-ring to swell and not seat properly. Check o-ring for cracks or nicks.
4. Note the positioning of the receptacles and pins. Properly align the Adapter's male Nikonos Connector and insert it into the housing's Nikonos-style bulkhead; hand-tighten Knurled Ring.
5. Connect your Ikelite Sync Cord to the Adapter Bulkhead. Hand tighten the Knurled Ring on the Sync Cord until there is no in-out movement between the Ikelite Sync Cord Connector and Adapter bulkhead.  
**Hold the adapter's knurled ring when tightening the sync cord.**

 CAUTION: Do not use tools on, or over-tighten Knurled Rings.

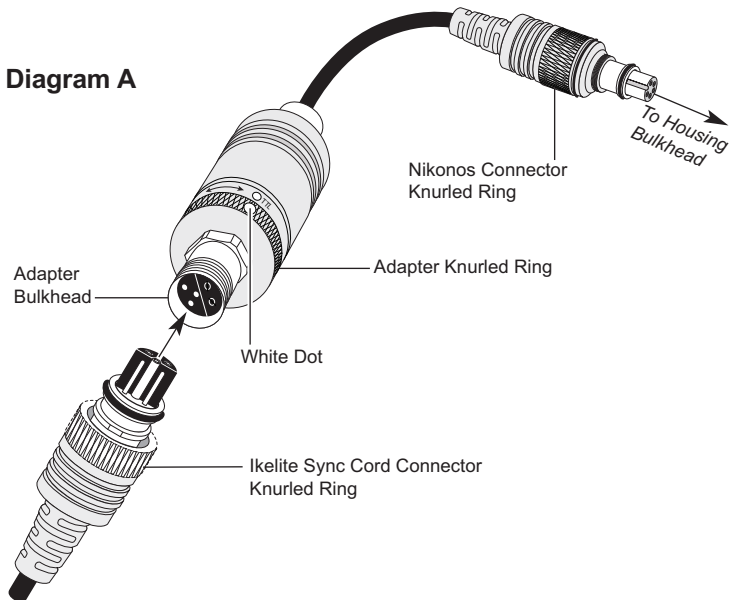
*Single or Dual Ikelite sync cords can be attached.*

*Dual strobe use requires dual sync cord.*

*Two strobes cannot be operated by independent adapters.*

## Connecting the Adapter - continued

Diagram A



## Switching between TTL and Manual

The Knurled Ring on the TTL Adapter's black delrin pod has a White Dot, **Diagram A**.

The Knurled Ring can be rotated clockwise or counterclockwise to align the White Dots for TTL or Manual operation.

**The DS Strobe must be set to TTL mode for the Adapter to provide TTL operation.**

## Camera Compatibility

- Nikon D2X, D3, D4
- Nikon D40, D50, D60, D70, D70s, D80, D90
- Nikon D200, D300, D300s
- Nikon D600, D610, D700, D750
- Nikon D800, D810
- Nikon D5000, D5100, D5200, D5300
- Nikon D7000, D7100, D7200
- Fuji S5 Pro

## Housing Bulkhead Compatibility

Over the years various housing manufacturers have introduced a variety of "Nikonos-style" bulkheads with variations on the original contact design. The plug end on this TTL Adapter has been designed to prevent damage by some European housings with rigid contacts in place of the traditional spring-loaded style.

This design may exhibit intermittency with some more traditional Nikonos-style bulkheads. Two gold plated pins have been provided to eliminate this intermittency. These pins should only be used in conjunction with bulkheads featuring two spring-loaded contacts.

To see if your housing has spring-loaded contacts, use an open-ended paper clip to gently push down on the contacts, **Diagram B, Page 8**.

Very little pressure is needed to check the contacts. If the contacts ARE spring-loaded, proceed to the "Troubleshooting/Inserting Pins" section on **page 8** for inserting the included gold plated pins. These pins are specifically recommended for use with the Nikonos-style bulkhead featured on Nauticam housings.

**⚠ CAUTION:** If your housing does NOT feature spring-loaded contacts, DO NOT insert the included pins into your plug end. Doing so may cause damage to your plug and/or bulkhead.

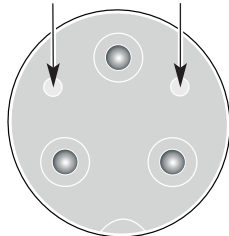
## Troubleshooting/Inserting Pins

- If intermittent or loss of TTL operation occurs, insert the 2 gold plated pins into the Nikonos Connector End corresponding receptacles as shown below, **Diagrams C & D**. With the Index Recess at the bottom, the pins should be at the 10 and 2 o'clock positions. Once the pins are installed they cannot be removed.
- Connect the Adapter to the housing bulkhead, **Diagram A, Page 6**.

### Diagram B

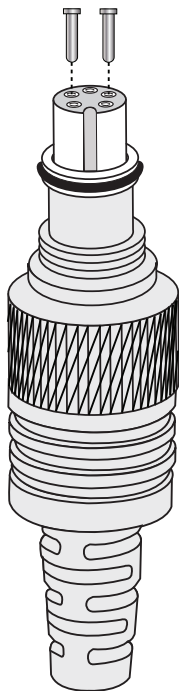
#### Nikonos Housing Bulkhead

Spring-loaded Contacts



### Diagram C

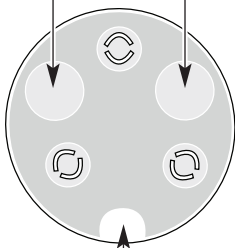
Gold Plated Pins



### Diagram D

#### Nikonos Connector End

Gold Plated Pins properly inserted in Receptacles



Index Recess



## Spare Parts

- 0301.14 .....Connector protector for Nikonos plug
- 9104.5 .....Waterproof bulkhead cap
- 0118 .....O-ring
- 0184.2 .....Silicone lubricant 2cc recloseable tube

## Customer Support

**Ikelite Underwater Systems  
Service Department  
50 West 33rd St.  
Indianapolis, IN 46208 USA**

Email: [ikelite@ikelite.com](mailto:ikelite@ikelite.com)

Phone: 317-923-4523

## Returning Products for Service

Ikelite is most interested in performing any service to ensure that all products perform as intended. Evidence of purchase date must be provided to obtain warranty service.

No prior authorization is required. You may return directly to us or through your dealer. Please include a brief description of the problem, any relevant email correspondence, and/or instructions on what you want us to do. Always include name, shipping address, email address, and phone number inside of the package. Send postage paid to:

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

*No reimbursements for postage paid will be issued.*

*You may also want to insure the package.*

## 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.

## Limited Warranty

This Ikelite product is warranted against any manufacturing defects for a period of one (1) year from the original date of purchase. Defective products should be returned to Ikelite postage paid. Ikelite will, at its sole discretion, repair or replace such products, and will return to customer postage paid. All other claims of any nature are not covered. Except as mentioned above, no other warranty expressed or implied applies to this Ikelite product.



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