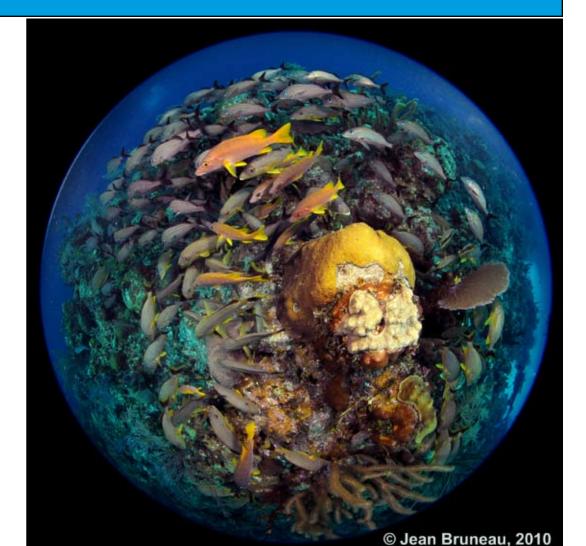
AQUATICA Digital

A field guide to bulkhead connectors for Aquatica digital camera housing:





This comprehensive guide is to help Aquatica users in selecting the proper strobe connectors for their housing it is divided in sections addressing the various generation and brand for which we have manufactured housing for over the years. Please make sure to visit our website www.aquatica.ca for updated version of this document.

Section 1: The classic Nikon type.

These are found in the following legacy Aquatica housings for these cameras;

Fuji S2 Pro Fuji S5 (same as Nikon D200) Nikon D2x Nikon D3 / D3x (not the D3s version) Nikon D40 / D40x / D60 Nikon D70 /D70s Nikon D80 Nikon D100 Nikon D200 Nikon D300 (not the D300s)

Section 2: The newer Nikon type.

These modular connectors have an internal switchboard and separate hot shoe and are found in the following new generation Aquatica housings for these cameras;

Nikon D3s (not the older D3/D3x version) Nikon D90 Nikon D300s Nikon D700

Section 3: The Classic Canon type.

These are found in the following legacy Aquatica housings for these cameras;

Canon 1Ds Mk III & 1D Mk IV Canon 5D (not 5D Mk II) Canon 30D Canon 40D / 50D Canon Digital Rebel / 300D

Section 4: The newer Canon type.

These modular connectors have an internal switchboard and separate hot shoe and are found in the following new generation Aquatica housings for these cameras;

Canon 5D Mk II (not the original 5D) Canon 7D Canon Digital Rebel T2i / 550D

Section 5: The optical type.

These optical connectors are triggered by the camera built in flash and can be setup to work alongside standard wired connectors as well they can be found in the following new generation Aquatica housings for these cameras.

Nikon D300s Canon 7D Canon Digital Rebel T2i / 550D

Section 6: Miscellaneous bulkhead and cable accessories



Section 1:

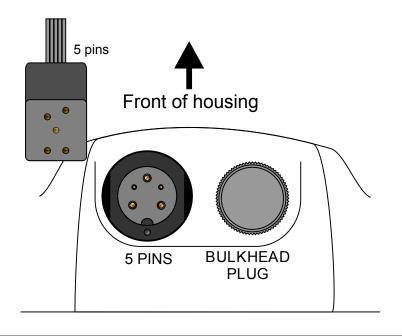
The classic Nikon type

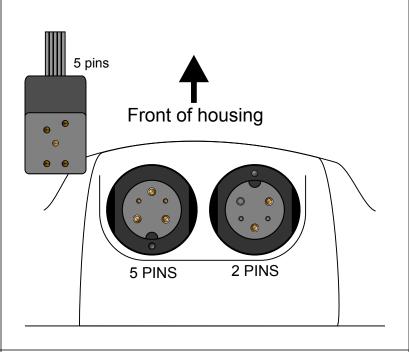
These strobes connectors have the hot shoe soldered directly to the bulkhead connector wiring harness itself (to the main if its a dual type connector assembly), they do not have an integrated switchboard like the newer modular version.

- 18732: This is a main 5 contacts active Nikonos type connector with a Nikon type hot shoe to be used in conjunction with a TTL converter and compatible underwater strobes or a single housed Nikon flash.
- 18735: This is a main 5 contacts (TTL) active Nikonos type connectors coupled to a 2 contacts (manual) secondary connector with a Nikon type hot shoe. A TTL converter with compatible strobes or a housed flash can be used on the main 5 contacts connector while the secondary 2 contacts is for manual strobe(s) only.
- 18736: This is a main 5 contacts active Nikonos type connectors coupled with a 3 contacts active secondary connector with Nikon type hot shoe. This version is for older film camera type that is only fully compatible with the Fuji S2 pro Digital camera, NOTE: if TTL is to be used on other Nikon type digital camera housing of the section 1, then connectors assembly (#18735) sould be used.
- 18812: This is single 2 contacts active Nikonos type connector with a Nikon type hot shoe to be used with manual single or double strobes (by using a "Y" dual strobe sync cord).
- 18813: This is a double 2 contacts active Nikonos type connector with a Nikon type hot shoe to be used with up to 2 strobes in manual only.
- 18906: This is a main 5 contacts active Ikelite type connector with a Nikon type hot shoe to be used in conjunction with the Ikelite # 4301 iTTL converter.
- 18927: This is a single 2 contacts active Ikelite type connector with a Nikon hot shoe to be used with manual single or double strobes (by using a "Y" dual strobe sync cord).

18732

This is a main 5 contacts active Nikonos type connector with a Nikon type hot shoe to be used in conjunction with a TTL converter and compatible underwater strobes or a single housed Nikon flash. This is a main 5 contacts (TTL) active Nikonos type connectors coupled to a 2 contacts (manual) secondary connector with a Nikon type hot shoe. A TTL converter with compatible strobes or a housed flash can be used on the main 5 contacts connector while the secondary 2 contacts is for manual strobe(s) only.



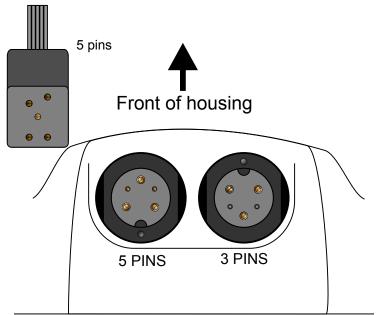


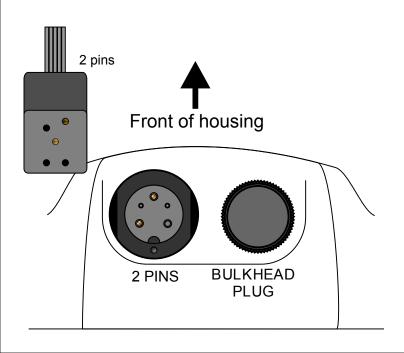
18736

This is a main 5 contacts active Nikonos type connectors coupled with a 3 contacts active secondary connector with Nikon type hot shoe. This version is for older film camera type that is only fully compatible with the Fuji S2 pro Digital camera, NOTE: if TTL is to be used on other Nikon type digital camera housing of the section 1, then connectors assembly (#18735) should be used.

18812

This is single 2 contacts active Nikonos type connector with a Nikon type hot shoe to be used with manual single or double strobes (by using a "Y" dual strobe sync cord).



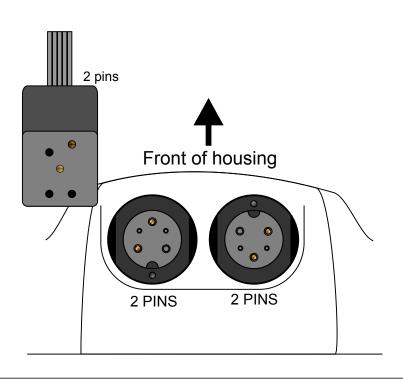


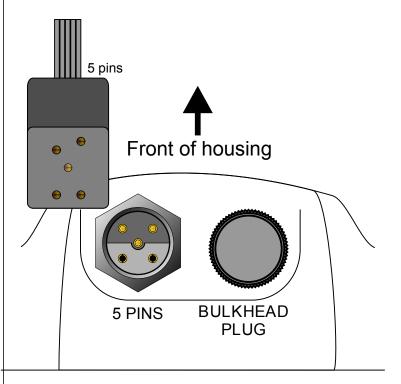
18735

18813

This is a double 2 pins active Nikonos type connectors with a Nikon type hot shoe to be used with up to 2 strobes in manual only.

This is a main 5 pins active Ikelite type connector with a Nikon type hot shoe to be used in conjunction with the Ikelite # 4301 TTL converter.





18927

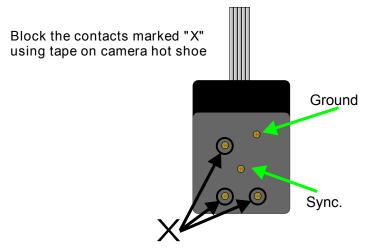


This is a single 2 contacts active Ikelite type connector with a Nikonhot shoe to be used with manual single or double strobe with a Ikelite sync cord (single or dual "Y" type)

2 pins Pront of housing Pront of housing DULKHEAD PLUG

Service department notice:

If your Aquatica Housing is provided with a main 5 pins and possibly a secondary 2 pins active Nikonos type connector, This will allow your Aquatica housing to benefit from the latest advance in TTL technology provided by third party manufacturer, you must first confirm that the underwater strobes and converter you project using are compatible with you camera model, if not using a TTL converter, then the strobe(s) and camera will need to be set in manual exposure mode, still in some rare instance it might be necessary depending on brand of strobes to mask some contact on the hot shoe (see diagram below) to prevent the camera from freezing and not triggering. This can be simply done using small pieces of tape





Section 2:

The newer Nikon type.

These are the strobes connector and components found in the newer housings. They are particular in the fact that they incorporate a detachable switchboard, please note that TTL is only available if using either a TTL converter or a housed compatible Nikon flash.

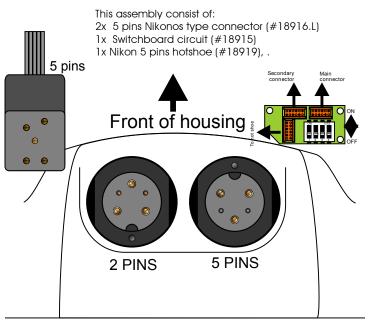
Assembly:

18910: This assembly consist of two 5 contacts Nikonos type connector (#18916), one switchboard circuit (#18915) and a Nikon 5 contacts hot shoe (#18919), the main connector is wired through a switchboard that allows the user to select between activating 5 contacts (TTL) or 2 contacts (Manual only), the secondary is wired for only 2 contacts for manual operation in order to avoid possible conflict with the camera's electronic circuit.

Switchboard Circuit:

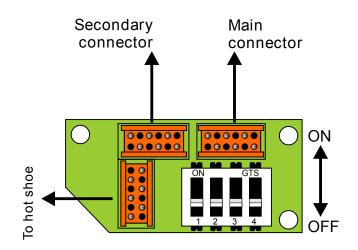
- 18915: This is a switchboard circuit used to select between TTL and manual strobe operation and does not include a hot shoe or connectors, there are three socket for accepting one hot shoe and two connectors (one for TTL/Manual, the other strictly for manual).
- **Connectors:** These connectors have a circuit connector plug at the end and need to be used in conjunction with switch board circuit 18915 and the appropriate hot shoe
 - 18916L: This is a Nikonos type connector with 5 contacts active, to be used with switchboard (#18915); this is supplied with a longer wiring harness.
 - 18917L: This is an Ikelite type connector with 5 contacts active, to be used with switchboard (#18915); this is supplied with a longer wiring harness.
- **Hot Shoe:** This hot shoe has a circuit connector plug at the end and need to be used with circuit 18915 and the proper strobe connector.
 - 18919: This is a Nikon Type hot shoe with 5 contacts active to be used with switch board (#18915) an appropriate strobe connectors.

This assembly consist of two 5 contacts Nikonos type connector (#18916), one switchboard circuit (#18915) and a Nikon 5 contacts hot shoe (#18919), the main connector is wired through a switch board that allows the user to select between activating 5 contacts (TTL) or 2 contacts (Manual only), the secondary is wired for only 2 contacts for manual operation in order to avoid possible conflict with the camera's electronic circuit.



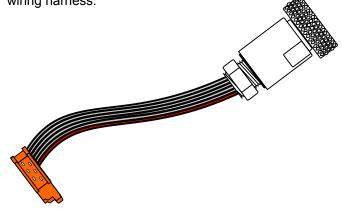
18915

This is a switchboard circuit used to select between TTL and manual strobe operation and does not include a hot shoe or connectors, there are three socket for accepting one hot shoe and two connectors (one for TTL/Manual, the other strictly for manual).



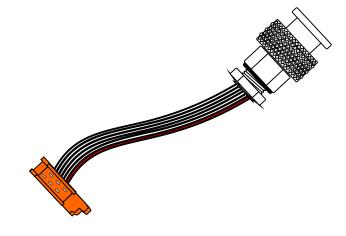
18916.L

This is a Nikonos type connector with 5 contacts active, to be used with switchboard (#18915); this is supplied with a longer wiring harness.



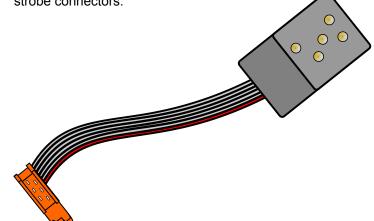
18917.L

This is an Ikelite type connector with 5 contacts active, to be used with switchboard (#18915); this is supplied with a longer wiring harness.



18919

This is a Nikon Type hot shoe with 5 contacts active to be used with switch board (#18915) an appropriate strobe connectors.





Section 3:

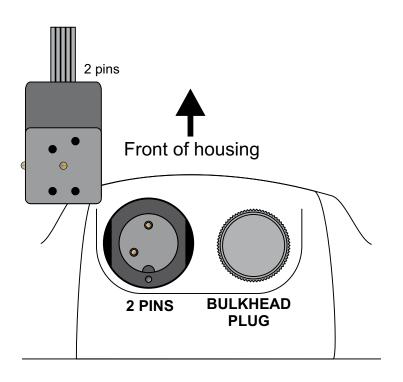
The Classic Canon type.

These strobes connectors have the hot shoe soldered directly to the bulkhead connector wiring harness itself (to the main if its a dual type connector assembly), they do not have an integrated switchboard like the newer modular version.

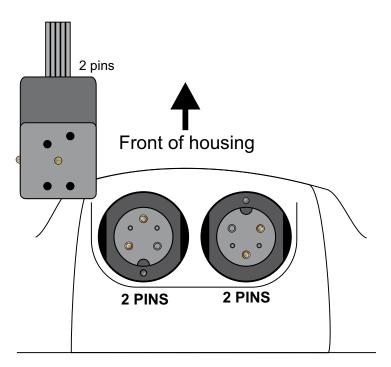
- 18814: This is a single 2 contacts active Nikonos type connector with a Canon Type hot shoe to be used with manual single or double strobes on a "Y" cord strobe.
- 18815: This is a double 2 contacts active Nikonos type connector with a Canon type hot shoe to be used with up to 2 strobes in manual only.
- 18928: This is a single 2 contacts active single Ikelite type connector with a Canon hot shoe to be used with manual single or double strobes (by using a "Y" dual strobe sync cord).

18815

This is a single 2 contacts active Nikonos type connector with a Canon Type hot shoe to be used with manual single or double strobes on a "Y" cord strobe.

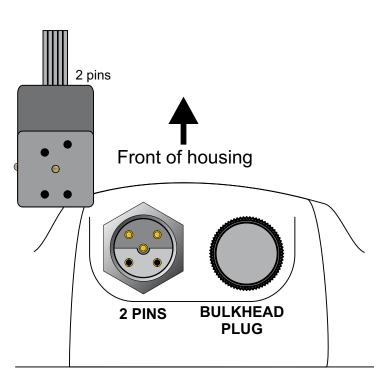


This is a double 2 contacts active Nikonos type connector with a Canon type hot shoe to be used with up to 2 strobes in manual only.



18928

This is a single 2 contacts active single Ikelite type connector with a Canon hot shoe to be used with manual single or double strobes (by using a "Y" dual strobe sync cord).







Section 4:	The newer Canon type.
Assembly:	
18911:	This assembly consist of two 5 contacts Nikonos type connector (#18916), one switchboard circuit (#18915) and a Canon 2 contacts hot shoe (#18920), the two connectors are ran through a switchboard, but manual operation only is available with this configuration
Switchboard:	
18915:	This is a switchboard circuit, there are three socket for accepting one hot shoe and two connectors.
Connectors:	These strobe connectors have a circuit connector plug at the end and need to be used in conjunction with circuit board 18915 and the appropriate hot shoe.
18916S:	This is a Nikonos type connector with 5 contacts active, to be used with switchboard (#18915) in manual; this is supplied with a short wiring harness.
18917S:	This is an Ikelite type connector with 5 contacts active, to be used with switchboard (#18915) in manual only; this is supplied with a short wiring harness.
18918S:	This is a S6 type connector to be used with the (# 18921) Canon type hot shoe for use of S6 connected strobes or housed Canon Flash. This is supplied with a short wiring harness.
18922:	Single type C 6 contacts Nikonos type connector to be used with (# 18921) Canon type hot shoe for operating with the Sea & Sea TTL converter and compatible strobes
	se hot shoes have a circuit connector at the end and need to be used with circuit 18915 and the er strobe connector.
18920:	This is a Canon Type hot shoe with 2 contacts active to be used with the appropriate connectors for manual flash exposure only.

18921: This is a Canon Type hot shoe with 6 contacts active to be used for ITTL exposure with appropriate strobes or a housed flash.

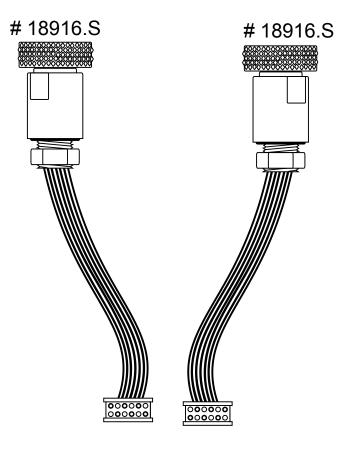


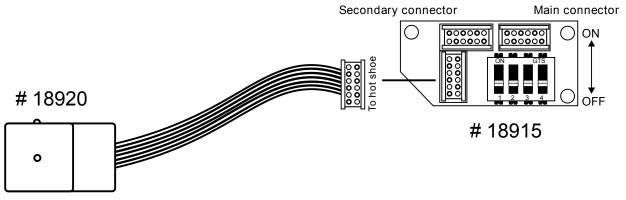
18911 Assembly for Canon includes:

1X 18915Switch board circuit2X 18916.SNikonos type connector1X 18919Canon 2 contacts hot shoe

Important notes:

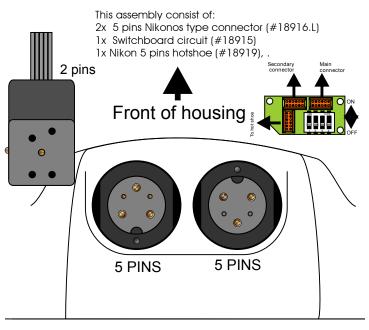
Main connector and secondary connector: have only two active contacts for manual flash operation.





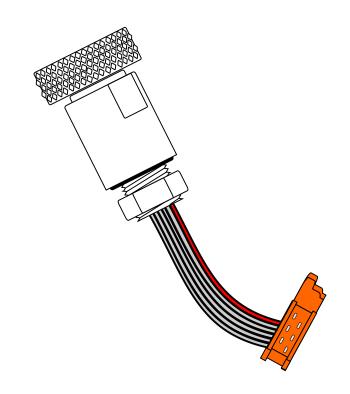


This assembly consist of two 5 contacts Nikonos type connector (#18916), one switchboard circuit (#18915) and a Nikon 5 contacts hot shoe (#18919), the main connector is wired through a switch board that allows the user to select between activating 5 contacts (TTL) or 2 contacts (Manual only), the secondary is wired for only 2 contacts for manual operation in order to avoid possible conflict with the camera's electronic circuit.



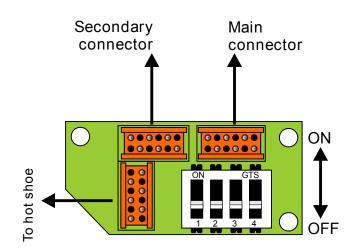
18916.S

This is a Nikonos type connector with 5 pins active to be used with switchboard (#18915), this has a shorter wiring harness



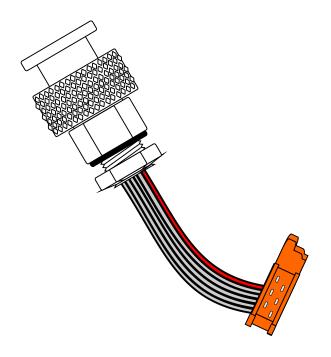
18915

This is a switchboard circuit used to select between TTL and manual strobe operation and does not include a hot shoe or connectors, there are three socket for accepting one hot shoe and two connectors (one for TTL/Manual, the other strictly for manual).

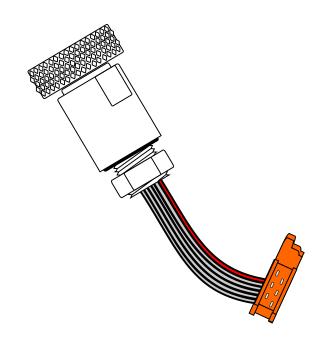


18917.S

This is a Ikelite type connector with 5 pins active to be used with switchboard (#18915), this has a shorter wiring harness

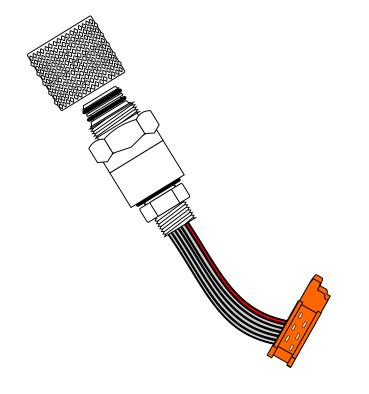


Single type C 6 contacts Nikonos type connector to be used with (# 18921) Canon type hot shoe for operating with the Sea & Sea TTL converter and compatible strobes



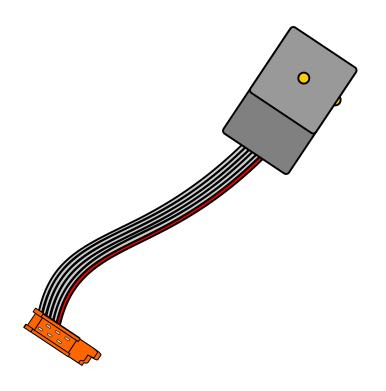
18918

This is a S6 type connector to be used with the (#18915) switchboard and (# 18921) Canon 6 pîns type hot shoe for use of S6 connected strobes or housed Canon Flash.



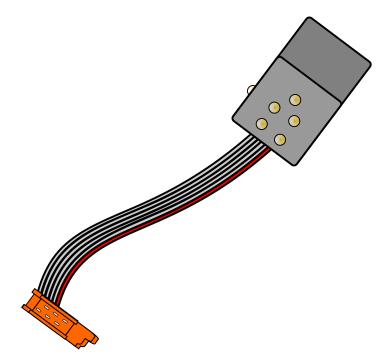
18920

This is a Canon type hot shoe with 2 pins active to be used with switchboard (#18915), this is for manual flash exposure.



18921

This is a Canon Type hot shoe with 6 contacts active to be used for ITTL exposure with appropriate strobes or a housed Canon flash.





Section 5:

The optical type

Assembly:

18935: This optical strobe connector will allow the users to access TTL with cameras having a Pop Up flashes in the open position, up to two independents strobes can be connected and triggering and exposure management is done via the camera internal flash, please note that this connectors is only available on camera that have a built in pop up flash and on specified housing that have room for the pop up flash to open. This optical connector includes a Sea & Sea type angled plug (# 18936) and a dual straight cord adapter (#18937) as used by Inon amongst other.

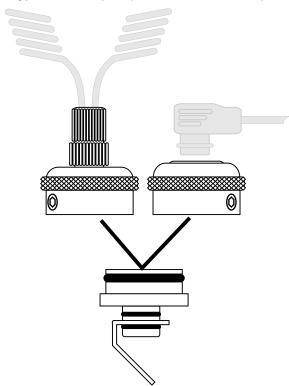
18936: This is a replacement cap for Sea & Sea angled type plug optical cable

18937: This is a replacement cap for Inon or other similar) straight type optical cable, it can accept two individual bare ended cable.

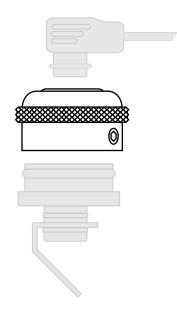
18935



This is an optical type connector and is supplied with one Sea & Sea type angled plug adapter, and one straight ended type cable adapter (Inon and other similar)

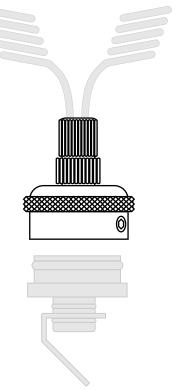


This is a replacement Sea & Sea ended type optical cable adapter



18937

This is a replacement straight ended type cable adapter (Inon and other similar cable)





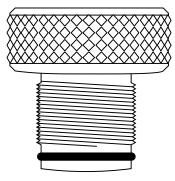


Section 6: Miscellaneous bulkhead and cable accessories:

- 18785: Replacement screw in cap for the Nikonos type bulkhead
- 19215: This is a package containing 15 small plastic clamps that can be used to hold sync cord in place by clamping them along the length of the strobe arms, useful for streamlining a system and preventing loose sync cord from ending up in the picture frame

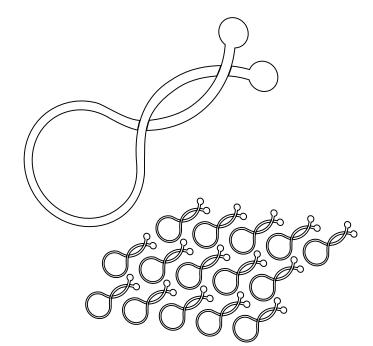
18785

This is a replacement Nikonos bulkhead connector cap



19215

This is a package containing 15 small plastic clamps that can be used to hold sync cord in place by clamping them along the length of the strobe arms, useful for streamlining a system and preventing loose sync cord from ending up in the picture frame





Notes



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