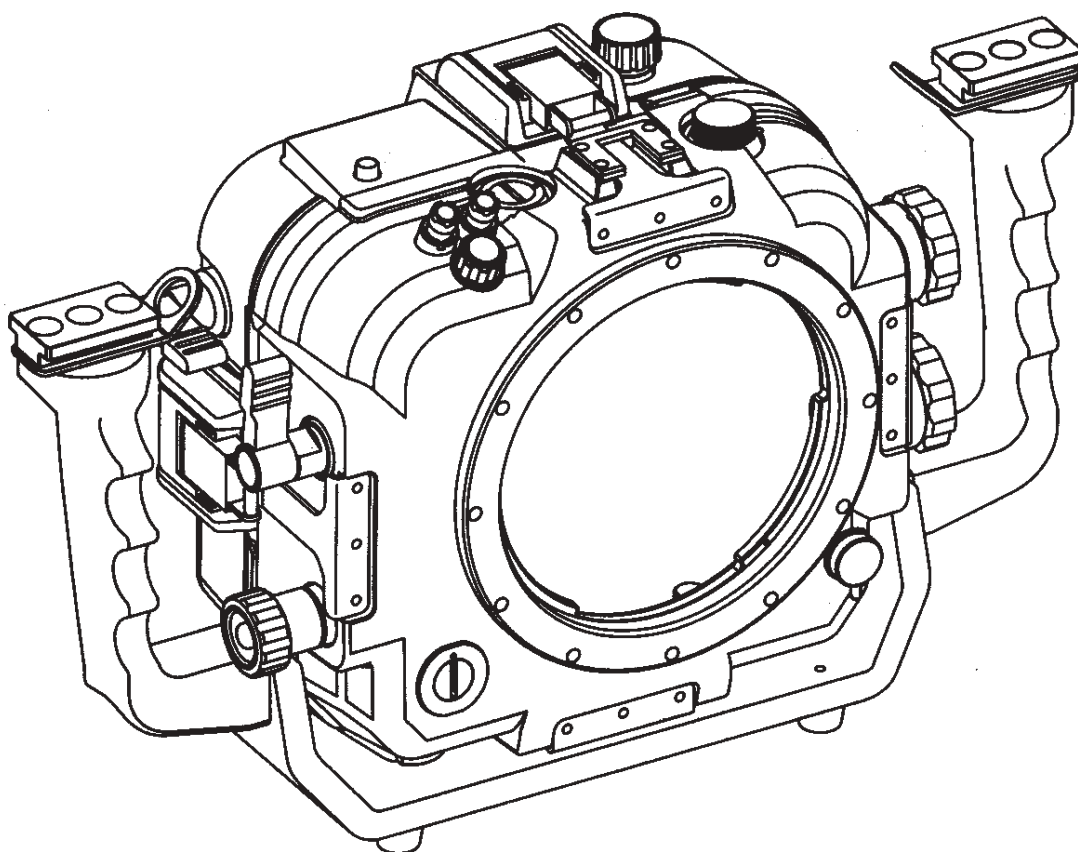


SEA&SEA

*Underwater Housing for
Nikon D100*

DX-D100

Instruction Manual



DX-D100

Underwater Housing for Nikon D100

Instruction

Thank you and congratulations on your purchase of Sea & Sea's DX-D100 underwater housing. The DX-D100 is designed exclusively for use with the Nikon D100 camera, and depth rated to 60m/200feet. Please read this manual before use and retain for your future reference.

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Safety Precautions

※ Misuses listed under the following precautions could lead to serious consequences. Please observe the precautions as they contain highly important information related to personal and product safety.

Precautions marked "CAUTION!" refer to those situations or conditions that could result in personal injury or property damage. Please read carefully.

■ General Precautions for the Housing

CAUTION!

- Always make sure that underwater lighting equipment and accessories are securely mounted to the housing to prevent them from falling off, getting lost, causing personal injury or equipment malfunction.
- Carry the housing carefully. Take care not to drop it. Violent impact can severely damage the housing.
- Do not open the housing or replace the port or lens in a wet or sandy environment. Protect the interior from moisture and debris.
- Do not alter or modify the housing. User modifications can result in flooding or malfunction. User modifications will void the warranty.
- If you detect smoke or an acrid odor, discontinue use immediately. Remove the camera from the housing and remove the batteries from the camera. Bring or send the housing to an authorized Sea & Sea dealer for evaluation and repair.
- In the event of flooding, turn the camera and strobe off and discontinue use. Beware of increased pressure inside the housing. Handle with extreme care when opening. Immediately remove all batteries. Bring or send the housing to an authorized Sea & Sea dealer for evaluation and repair.
- After use, rise with fresh water. To avoid flooding, make sure the housing is securely sealed with both locking latched and the port securely mounted.
 - ※ When rinsing without a strobe attached, make sure the strobe bulkhead is sealed with the provided cap.
- Take care not to scratch the port surface, viewfinder or LCD windows.
 - ※ Always dry the port surface and finder window with a soft cloth to prevent salt residue from marring the surfaces.
- Never use petroleum solvents, such as alcohol or paint thinner, to clean the housing; such products might mar or otherwise damage the port, view and LCD windows, or the housing's finish.
- When installing or removing the camera, the dials or gears may scratch the inside of the housing. Be careful not to scratch the O-ring sealing surface.

Other scratches will not cause a functional problem.

- This product has been constructed with an airtight seal. When packing this product for airplane travel, release the locking latches or remove the O-ring to alleviate pressure build up due to atmospheric changes.
- This product incorporates plastic parts. Do not subject the housing to extreme heat, such as on a car dashboard, or in direct sunlight. Plastic parts are prone to warping
- SEA & SEA Products Ltd. will not be responsible for unobtained pictures or costs related to the shooting of such pictures due to malfunction of the housing, camera, strobe or accessories.
- SEA & SEA Products Ltd. will not be responsible for any damages, repairs or replacements of the camera, lenses or accessories used with this housing due to flooding caused by user mishandling.

■ Precautions for Storage of the Housing



CAUTION!

- Do not store in a damp or humid environment.
- Do not store in a chemically laden environment. Naphthalene, camphor, or other harmful chemicals can cause mildew, corrosion and other damage to the metal and rubber parts in this product.

Handling and Maintenance of the O-ring

The O-ring on the front case of your DX-D100 Housing provides an airtight waterproof seal. Improper handling and maintenance of the O-ring can cause flooding. Please observe the following precautions carefully.



CAUTION!

A special silicone oil-impregnated blue O-ring is used in this product. For maintenance of this blue O-ring, use Sea & Sea silicone grease in a tube with BLUE cap and lettering. Never use Sea & Sea silicone grease in a tube with a BLACK cap or other manufacturers' brands. Incompatible silicone grease will cause the O-ring to lose its waterproofing ability. If you have applied incompatible grease on a blue O-ring, the O-ring must be replaced.

- **Always inspect the O-ring for scratches, cracks or cuts.**

If the O-ring is damaged, it must be replaced. Never remove the O-ring with a sharp tool. To avoid damaging the O-ring, use the O-Ring Remover, a tool especially made for O-ring removal.

● **Inspect for debris.**

Make sure that there are no foreign particles, such as dust, sand or hair on the O-ring, O-ring groove, or O-ring contact surface. Such contamination will breach the seal and cause flooding. If necessary, wash the O-ring thoroughly in fresh water and dry with a lint-free cloth. Use a cotton swab to clean the O-ring groove and contact surface.

● **Lubricate with silicone grease.**

Silicone grease protects the O-ring from drying and abrasion. Dab a small amount of grease onto your finger and draw the O-ring through your fingers until evenly coated. Use the silicone grease sparingly. Too much grease attracts debris.

● **Do not crimp the O-ring.**

Hold the O-ring straight and do not bend or twist it when fitting it into the O-ring groove.

● **O-ring storage.**

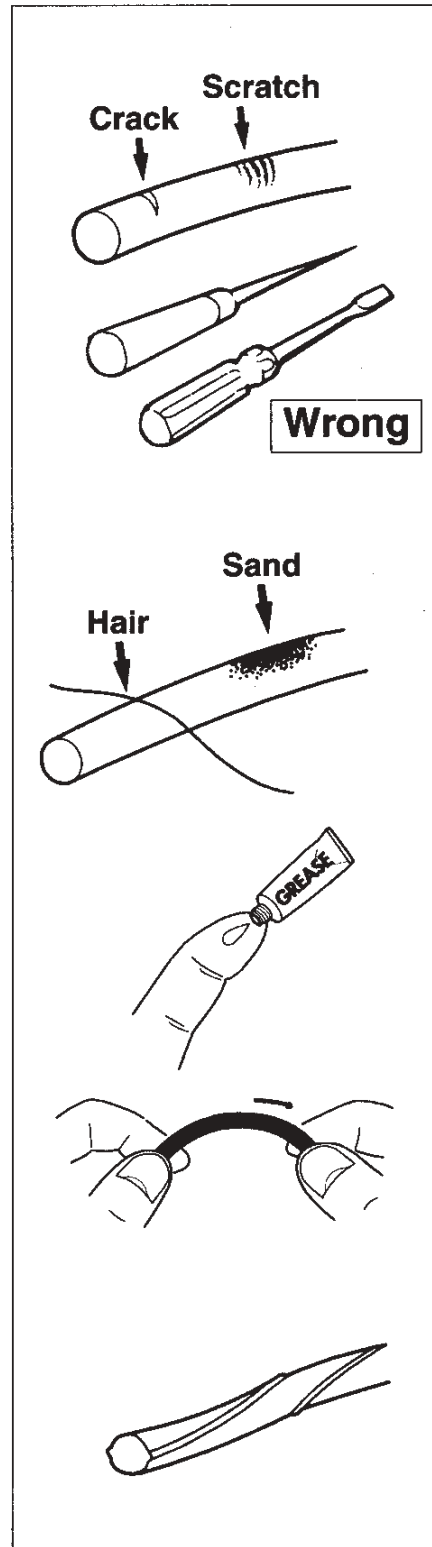
Always store your O-ring in an airtight container and in a cool environment. Keep out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

● **The O-ring's life is one year.**

The life of the O-ring depends on the diligence of your maintenance, frequency of use, and storing conditions, but on average, if you maintain your O-ring properly, it will retain its watertight integrity for one year.

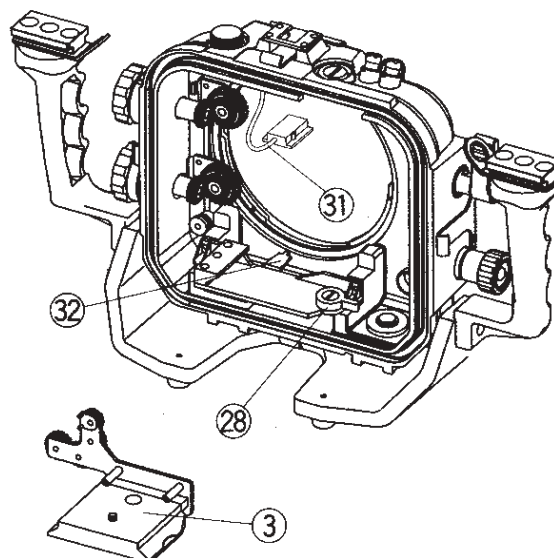
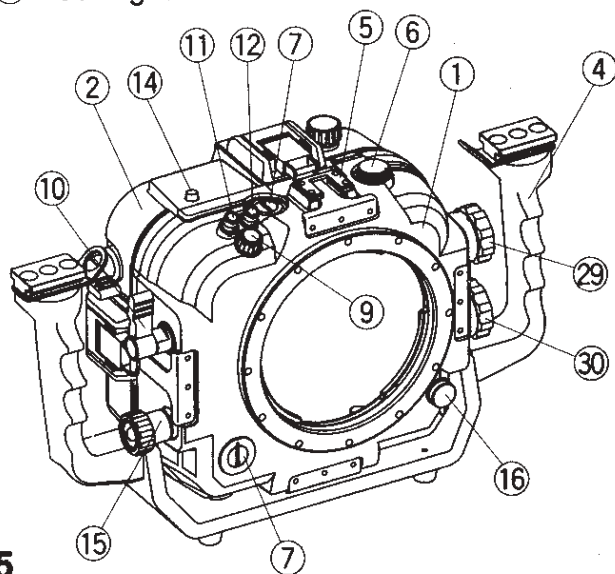
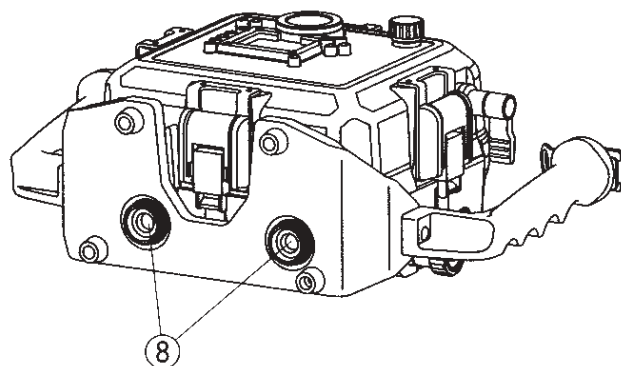
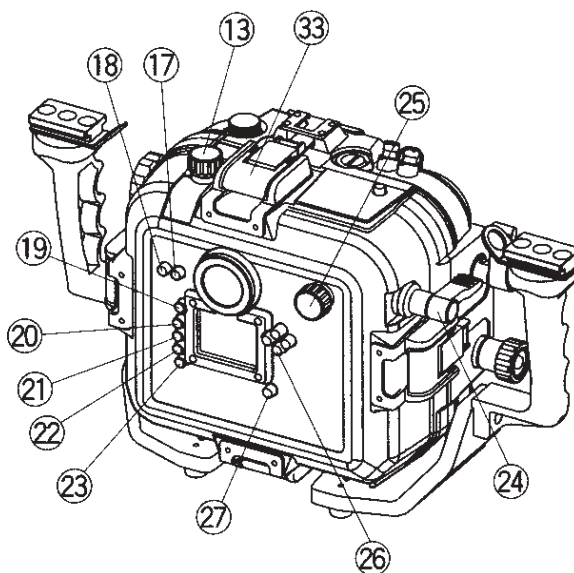
● **Remove the O-ring for inspection.**

Before use, remove the O-ring from its groove and carefully check the O-ring, the O-ring groove and the O-ring contact surface. A thorough examination of the O-ring and O-ring groove is not possible unless the O-ring has been removed.



Identification of Parts

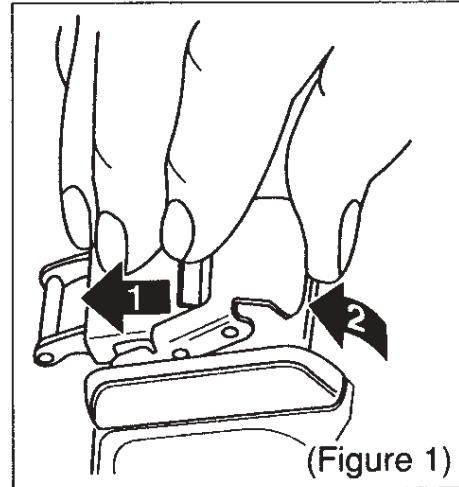
- ① Front case
- ② Rear case
- ③ Quick shoe
- ④ Grip
- ⑤ Accessory shoe
- ⑥ Strobe bulkhead
- ⑦ Accessory bulkhead
- ⑧ Grip fixing screw
- ⑨ Power switch
- ⑩ Shutter release lever
- ⑪ Exposure compensation button
- ⑫ Flash sync mode button
- ⑬ Function dial
- ⑭ Illuminator button
- ⑮ Sub-Command dial
- ⑯ Focus mode selector
- ⑰ Flash output level compensation button
- ⑱ Bracketing button
- ⑲ Monitor button
- ⑳ Menu button
- ㉑ Thumbnail button
- ㉒ Protect button
- ㉓ Enter button
- ㉔ AE-L/AF-L lever
- ㉕ Main-Command dial
- ㉖ Multi selector
- ㉗ Delete button
- ㉘ Quick lock
- ㉙ Focus knob
- ㉚ Aperture knob
- ㉛ Sync cord
- ㉜ Port lock
- ㉝ Locking latch



Opening and Closing the Housing

<OPENING THE LOCKING LATCH>

To release the locking latches, press down on the security lock, then push the latches forward (Figure 1). Removal of rear case will be easier by re-locking the latch while the latch is off the hook (Figure 2).

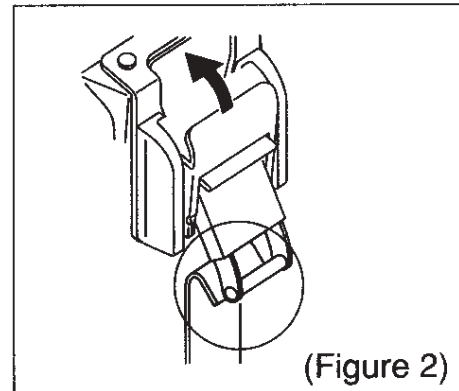


⚠ CAUTION!

- To prevent injury, lift the locking latch with the ball of your finger and not with your fingernail.

<CLOSING THE LOCKING LATCH>

Press the rear case against the front case and close the locking latches on the left and right sides simultaneously. Then close the top and bottom latches simultaneously.



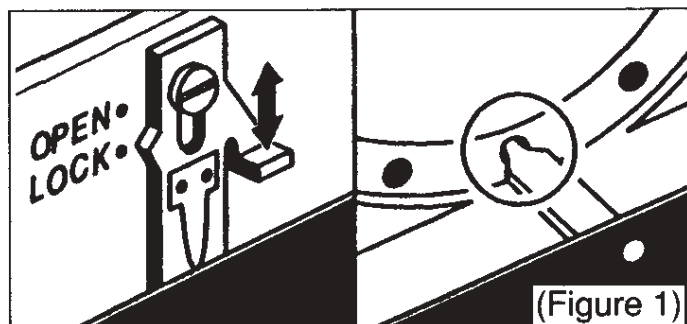
⚠ CAUTION!

- Examine the O-ring and O-ring channel. Make sure they are not scratched or contaminated with sand, hair, dust, etc.
- Snap down the latches until you hear a clicking sound. This indicates that the latches are securely closed.

Attaching and Detaching the Port

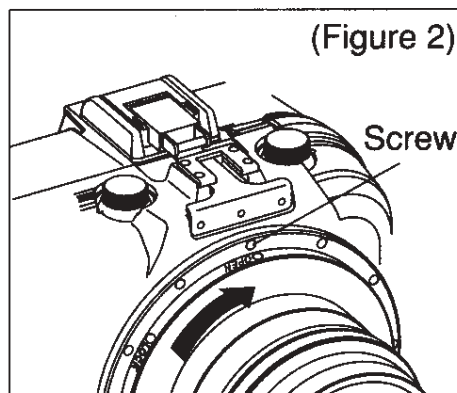
<Attaching the Port >

1. Pull the port at the bottom of the Quick Shoe Base in the front case to the OPEN position.
2. Align the OPEN mark on the port with the index screw on the housing indicated in Figure 1. Insert the



port into the front case of the housing and turn the port clockwise until it stops.

3. Make sure that the position of the index screw on the housing shown in Figure 2 is now aligned to the LOCK mark on the port.
4. Push the port lock to the LOCK position until you hear a click, making sure that the port lock pin is fully engaged with one of the port notches.



Detaching the port

1. Pull the port lock to the OPEN position
2. Hold the front case firmly and turn the port counter-clockwise.

⚠ CAUTION!

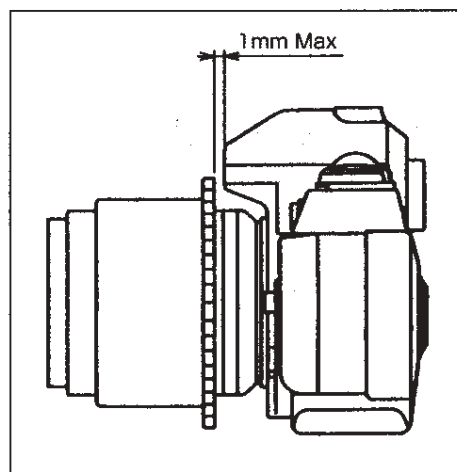
- Never attempt to remove the port with the port lock at LOCK position. It may damage the camera base.
- Ports for NX-90PRO are compatible with the DX-D100 but the bayonet mount must be modified. For details, please contact Sea & Sea or a Sea & Sea authorized dealer. (Ports with black bayonet and 4-digit part number need to be modified. Ports with gray bayonet and 5-digit part number can be used with DX-D100 without modification.)

Mounting the Lens Gear

For lens gear with collar(focus and zoom gears): Mount the lens gear over the collar of the lens, then slide it down over the full length of the lens barrel to ensure proper meshing with the gears inside the housing.

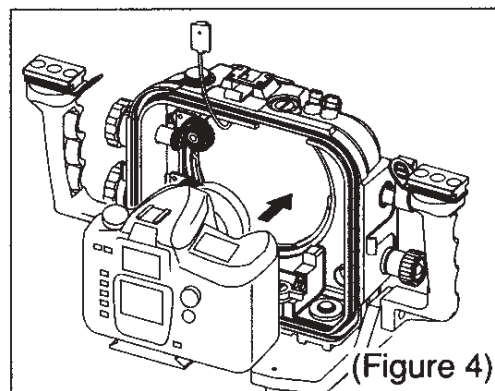
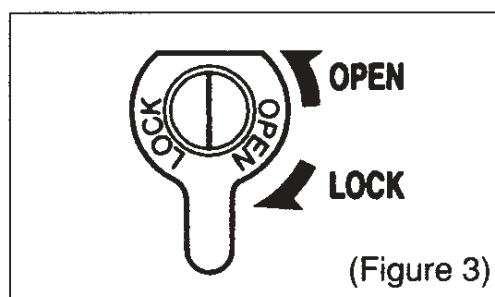
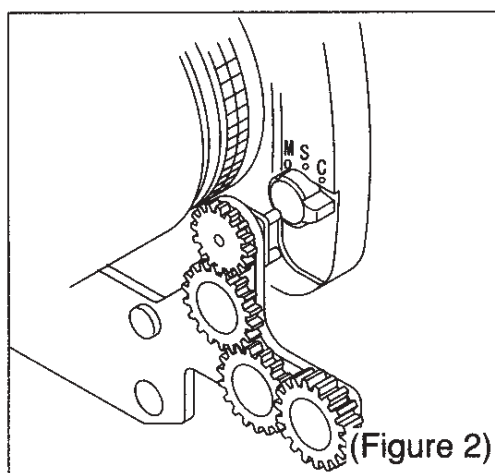
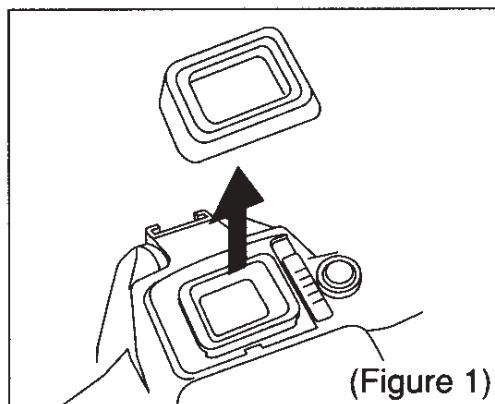
For lens gear without collar(except those that are controlled by the dial on the port side): Do not slide the gear all the way down the lens barrel. Leave a space of approximate 1mm Max between the camera and the gear.

※For specific instructions, please refer to the instruction manual packaged with your lens gear.



Mounting the Camera to the Housing

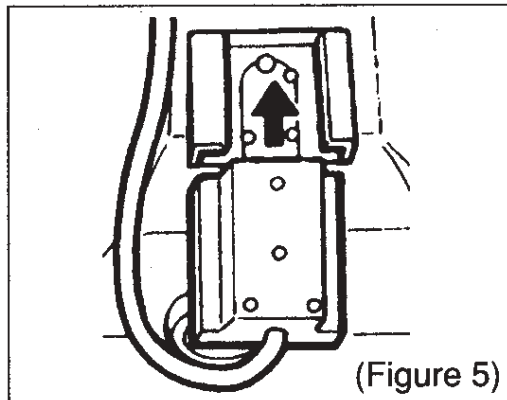
1. Remove the rubber eyepiece from the camera (Fig.1).
2. Slide the quick shoe onto the camera.
The focus mode selector must be positioned between the quick shoe pins.
Secure the quick shoe to the camera with the tripod screw. (Figure 2) Use a coin to tighten.
3. Turn the quick lock to the OPEN position as shown in Figure 3.
4. Make sure that the main switches of camera and housing are ON.
5. Slide the camera into the front case.
※ At this time, make sure that the sync cord is placed outside the front case.
Slide the camera into the housing while turning the focus knob to ensure that the camera and housing gears will mesh well with each other (Figure 4).
6. Turn the quick lock to the LOCK position to lock the camera into place.
7. Insert the sync cord into the accessory shoe of the camera.
8. Fit the rear case with the exposure mode dial extended onto the front case and close the locking latches simultaneously.



Connecting the Sync Cord

Insert sync cord as shown in the figure 5.
Push it in till it stops.

※ Before attaching the rear case, place the sync cord above the camera as shown in Figure 5. If the sync cord is hanging down, it may get jammed between front and rear cases.



⚠ CAUTION!

● When connecting and disconnecting the sync cord, hold the connector firmly between thumb and forefinger. Do not push, pull, twist, or bend the cord. Abusive handling can damage the cord.

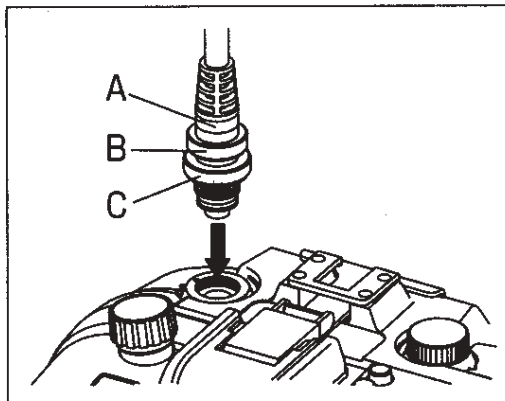
To Remove the Camera from the Housing:

1. Detach the sync cord from the camera.
2. Turn the quick lock to the OPEN position.
3. Pull out the camera from the front case.

Attaching the Strobe to the Strobe Connector

Use a Nikonos-type strobe, since this product is designed to accommodate a standard Nikonos five-pin connector.

1. Remove the bulkhead connector cap.
2. Make sure that the O-ring and the connector contact pins are clean.
3. Align the guide mark on the strobe's sync cord with the guide mark on the housing's bulkhead connector. Then push the sync cord into the bulkhead
4. Turn part ② until the connector is firmly fixed.
5. Turn part ③ until the connector is locked into place.
6. To remove the connector, loosen part ③, then part ②, and pull part ① straight out.



⚠ CAUTION!

- To remove the sync cord after use underwater, turn the housing upside down, and then pull out the sync cord. This will prevent water from dripping into the bulkhead connector. If it gets wet, dry it immediately
- Sea & Sea's strobes equipped with Nikonos-type connectors are the only recommended strobes for this housing. Use of other strobes may cause malfunction of the housing.

External Controls

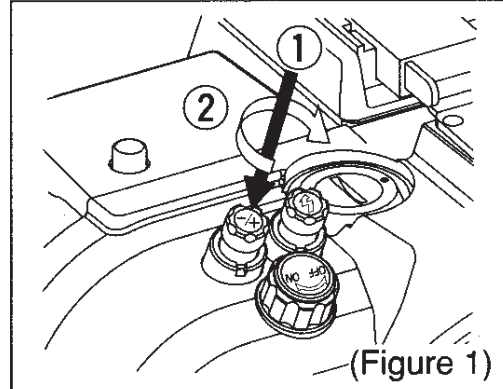
Power Switch

This switch provides ON/OFF control for main power and illuminator.

Exposure Compensation/Flash Sync Mode Buttons

Rotate the main command dial while pressing either button down.

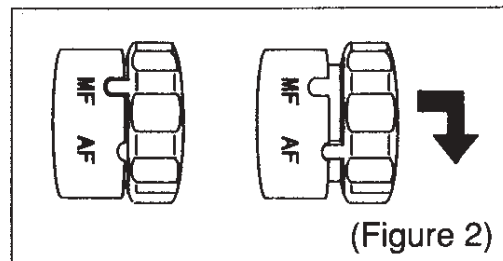
While holding it down, turn it till it stops; the button will remain in the down position. (Figure 1)



Focus Knob

Use this knob to control focus when focus mode is "M (manual)". Always set the knob to AF when taking photographs in autofocus mode. (Figure 2)

Note: The lens can be damaged if the knob is set at the MF position when shooting in autofocus mode.



※ Focus knob cannot be used unless the lens is equipped with a focus gear.

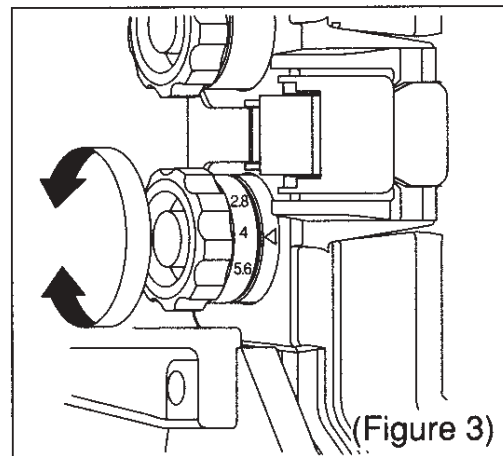
Focus Mode Selector

This operates the camera's focus mode selector. It enables you to switch between autofocus and manual focus modes. Select focus mode by turning this dial to MF ↔ AF-S ↔ AF-C as shown in Figure 3.



CAUTION!

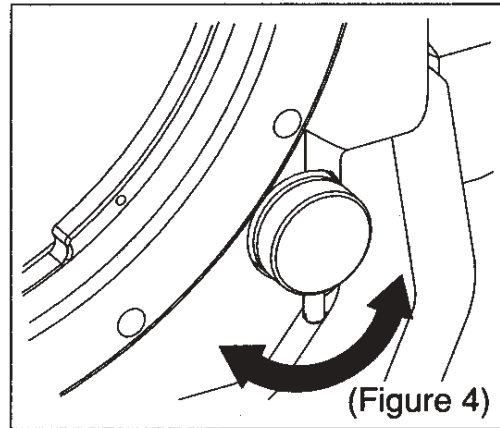
- This dial can be rotated only a one-quarter turn. Do not attempt to turn it beyond that, since it may cause camera function failure.



Aperture Knob

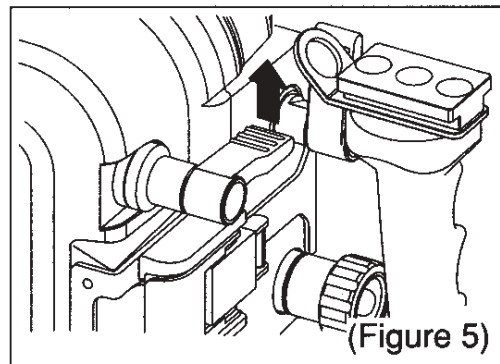
Aperture can be selected with sub-command dial without moving this knob.(Figure4)

Aperture knob cannot be used unless the lens is equipped with an aperture gear.



AE-L/AF-L Lever

- (1) Use this lever to lock the focusing during autofocus photography.
- (2) Auto focusing will be locked and shutter will be released when this lever is pushed upward and shutter release lever pulled towards you.(Figure 5).



※ For information regarding the controls of the Nikon D100 camera, please refer to the instruction manual packaged with the camera.

Specifications

Controls : Power switch, Shutter release, Exposure compensation button, Flash sync mode button, Illuminator button, Sub-Command dial, Function dial, Focus mode selector, Flash output level compensation button, Bracketing button, Monitor button, Menu button, Thumbnail button, Protect button, Enter button, AE-L/AF-L button, Main-command dial, Multi selector, Delete button

Construction: Front case: ABS resin (paint finish)
Rear case: polycarbonate

Dimensions: 363 x 220 x 135 mm/14.3 x 8.7 x 5.3 inches (W x H x D)
Weight 3800g/8.4 lbs (without camera)

Accessories: O-ring, silicon grease, camera quick shoe, hexagonal wrench,