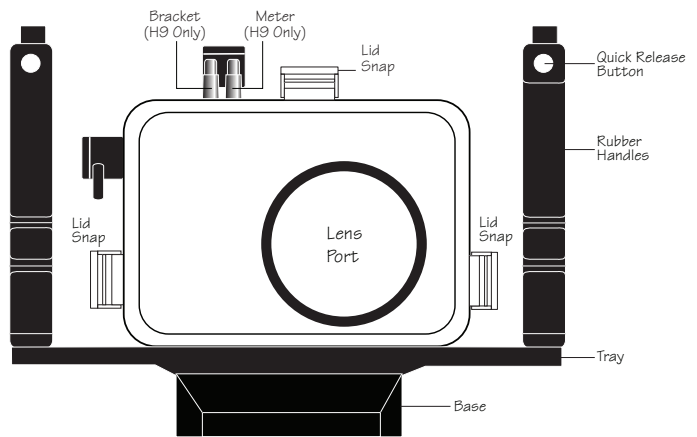


# Ikelite Digital Housing

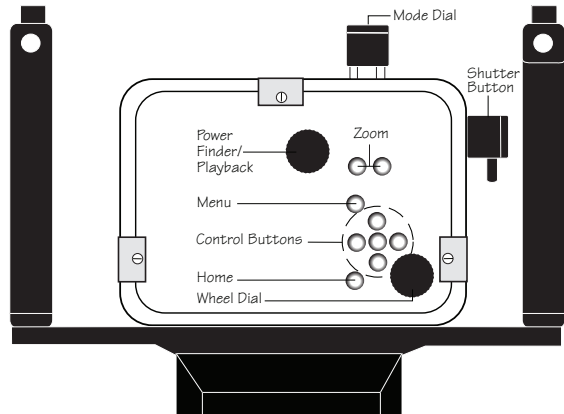
instruction manual

#6111.7 for Sony DSC-H7

#6111.9 for Sony DSC-H9



Front View



Back View

2

Congratulations on your purchase of an Ikelite Digital Camera Housing. Ikelite has over 30 years of experience in the underwater photographic and lighting market. Our products are designed and built in the USA by Ikelite for both the professional and amateur photographer.

The clear housing permits instant visual inspection of the camera and all sealing surfaces as well as complete monitoring of controls and camera LCD screens.

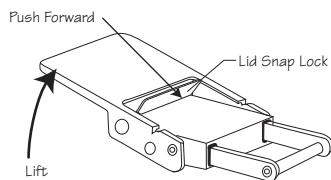
Ikelite Digital Housings are slightly negative in salt water for stability. This housing has been water pressure tested at the factory. Housing is pressure tested to 200' (60m).

## Opening the Housing

Lid Snaps have a **Lock**.

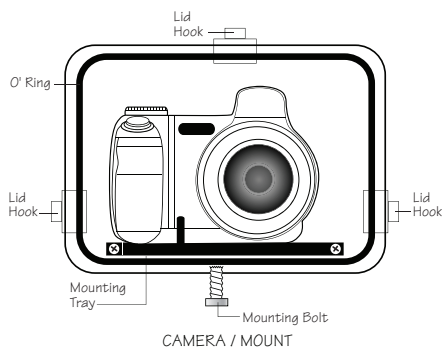
To open, push Lid Snap Lock forward and lift as shown. Keep pressure on the Lid Snap so it does not fly open quickly.

*Some lid snaps have a lot of spring tension once they go over center, have a firm grip on the lid snap. Lid Snaps may be opened one at a time.*



## Installing the Camera

Remove the back from the housing. The mounting tray for the camera is secured to the housing back. Position the camera on the tray and secure it with the mounting bolt which threads into the camera's tripod socket. **Use a coin or flat bladed screwdriver to tighten the mounting bolt so the camera is flat against the tray.**



## Pop-up Flash

The Pop-up Flash does not have to be in the open position before closing the housing.

## CAUTION:

*Some camera tripod socket threads are plastic. The mounting tray bolt is metal. Do not cross thread or over tighten as you may damage the camera tripod socket threads.*

## Using the Camera's Built-in Flash.

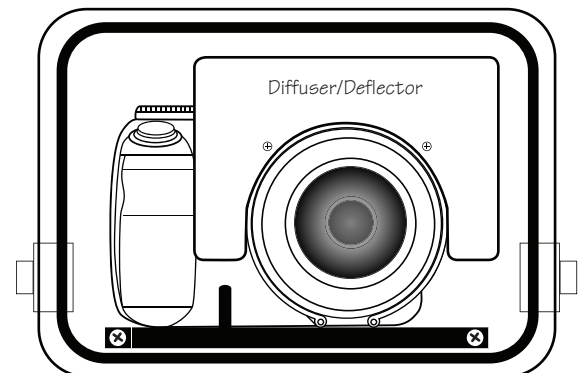
If you do not have an External flash the camera's built-in flash can be used. See Diffuser Instructions.

## Diffuser and Deflector Installation

Diffuser or Deflector should be installed before inserting the camera into the housing.

A diffuser and deflector are included with the housing. The diffuser is white transparent plastic and should be installed when the camera's built-in flash will be used. The deflector is also white but is not transparent and should be installed when an external Strobe and EV Controller will be used.

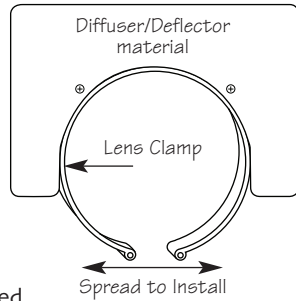
To install the diffuser or deflector spread the lens clamp and slide over the camera lens. The white plastic should be placed in front of the camera flash. The lens clamp should be pushed back against the camera.



## Diffuser and Deflector Continued

### Diffuser

If you do not have an external flash it is recommended that the flash diffuser be installed on the camera each time the camera is installed in the housing. The camera's flash can be turned ON and OFF by the camera's flash control. If the camera's flash is set to ON, the flash will pop-up when the shutter release is depressed. If the camera's flash is popped up, the flash can still be turned OFF by setting the camera's flash control to OFF. (See camera instructions for flash control.)



Due to the location of the camera's built-in flash the housing's port blocks a portion of the flash. The diffuser will aid in distributing the light but the bottom portion of the picture may receive less light (shadow) when the camera lens is set at it's widest angle, the amount of shadow will depend on the camera to subject distance. To eliminate the shadow, zoom the lens toward telephoto. The amount of zooming required to eliminate the shadow will depend on camera to subject distance. (You can test this above water)

### Deflector

The deflector should be installed on the camera when using an external strobe such as the DS51 or DS125 Substrobe and EV Controller. The deflector material is non-transparent, it will block any light from going forward which will help to eliminate backscatter and it will redirect the camera's flash to the EV Controller which controls the external strobe(s) output. (See page 9)

5

### Lens Port

The Lens Port is factory sealed, do not remove. Treat the glass in the lens port as a camera lens. After use, rinse and gently dry the lens port to avoid water spotting. To clean use a mild soap solution or lens cleaner.

*Do not use alcohol or window cleaner on the Lens Port.*

### Checking Controls

Once the housing has been closed, push the controls back into place. Make sure they line up with the camera's controls.

### Turn Camera On

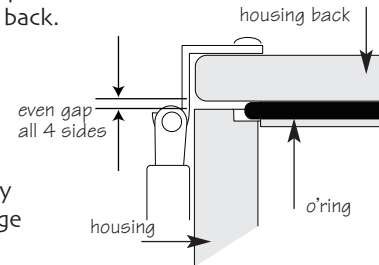
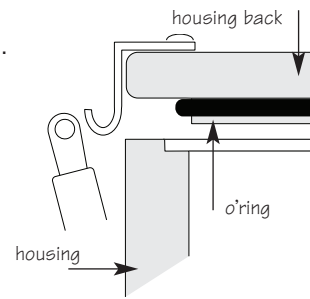
Turn the camera on and operate each of the housing controls to get a feel for using the camera in the housing. Take a few pictures above water with the camera in the housing.

Due to the location of the camera's built-in flash the housing's port blocks a portion of the flash. The diffuser will aid in distributing the light but the bottom portion of the picture may receive less light (shadow) when the camera lens is set at it's widest angle, the amount of shadow will depend on the camera to subject distance. To eliminate the shadow, zoom the lens toward telephoto. The amount of zooming required to eliminate the shadow will depend on camera to subject distance. (You can test this above water)

7

## Closing the Housing

1. Place housing face down in your lap.
2. Check to see that there is an o'ring on the housing back and that it is clean and in its proper location.
3. Guide the back onto the housing. The o'ring should touch the housing all the way around. There should be an even gap all the way around between the housing and the housing back.
4. Lift the lid snaps so they are extended and place the lid snap into the hook on the housing back.
5. To close the housing push down on the lid snaps until they snap into place. Lid snaps on opposite sides of the housing should be closed at the same time. Be sure they are down far enough to engage the lock.



**Double check** - Once the housing is closed, check the o'ring seal. Check the gap between the housing back and the housing, it should be even all the way around.

Look through the clear plastic back at the o'ring. You should see a darkened area where the o'ring is compressed against the housing back. If you do not see an even black compression seal all the way around the back, open the lid snaps, reseal the housing back and close the lid snaps. Visually check the seal again.

6

## Optional Accessories

### Back O'ring #0132.59

O'rings last for several years if properly maintained. (See maintenance) Always carry a spare.

### Using a DS Substrobe & EV-Controller

To use a external DS Substrobe requires the EV-Controller. The EV-Controller has a built-in slave sensor that is triggered by the camera's built-in flash which fires the external DS Substrobe. The EV-Controller provides 10 manual power settings in 1/2 stop increments for precision lighting.

### Substrobe Packages available

Ikelite Ball Arm Systems are provided with these packages  
#3944.47 SubStrobe DS51 with EV Controller  
#3944.54 SubStrobe DS51 with EV Controller  
#3944.77 SubStrobe DS125 with EV Controller

**No color filters or wide-angle lenses are available for the Sony DSC-H7 or the DSC-H9 housing.**

8

## Optional Accessories Continued



### Substrobe DS51

The Substrobe DS51 covers the equivalent of a 28mm lens. It is the ideal choice when using only the camera lens or the camera lens with a macro accessory lens.

9

### Substrobe DS125

The Substrobe DS125 covers the equivalent of a 18mm lens, 100 degrees. It is the ideal choice when using accessory wide angle lenses greater than 28mm.

## Maintenance

The Ikelite Digital Housing should be given the same care and attention as your other photographic equipment. In addition to normal maintenance we recommend that the housing be returned to Ikelite periodically to be checked and pressure tested.

1. **Do Not** leave the camera and housing in direct sunlight for prolonged periods. Heat may damage the camera.
2. **Do Not** ship the camera in the housing.
3. Before using the housing, always check the tightness of the **set screw** in each control knob.  
Check each **control gland** penetrating the housing to make sure they are tight. There is a slight chance that either could vibrate loose during travel.
4. Keep the back o'ring clean and lightly lubricated. To lubricate remove the o'ring from the back. Put a small amount of Ikelite lubricant on your fingers. Draw the o'ring through your fingers to apply a light coating of lubricant. Only apply enough lubricant to make the o'ring feel slick. **Do Not stretch the o'ring.** This light coating of lubricant will help to keep the o'ring from drying out and will help to show a dark sealing line when the housing back is properly sealed.
5. Keep the area where the o'ring fits and the sealing surface of the housing clean.
6. Rinse the housing exterior thoroughly in fresh water after each salt water use. Dry with a soft cloth. Dry lens port to eliminate water spotting.  
After several uses in salt water soak the housing in a mild soap solution, rinse and dry before storage. When storing the housing, remove the back o'ring, lightly lubricate and place in a plastic bag. Place the plastic bag with o'ring inside the housing for safe keeping.

## CAUTION

**Never use spray lubricants as the propellant ingredient can cause the plastic housing to crack.**

11

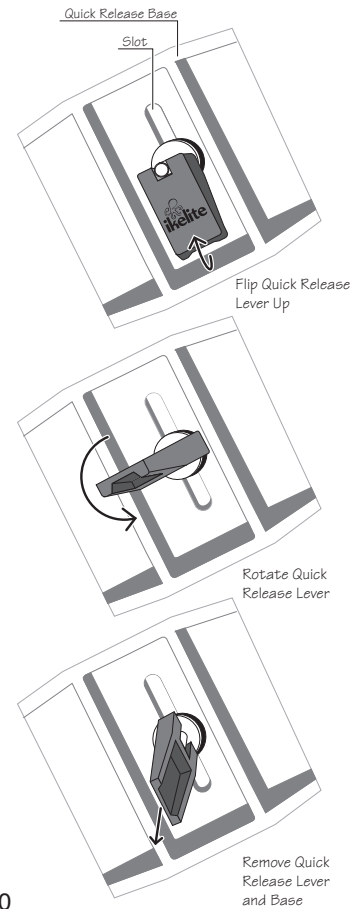
## Quick-Release Base, Handles and Tray

### Quick-Release Base

The Quick-Release Base is plastic. A toggle lever located underneath the base allows the base to be easily removed from the Tray. Turn the housing upside down, pull out on the toggle lever. Rotate the lever 90° to remove the base.

### Handles and Tray

The housing handles are rubber and the tray is aluminum. Their weight helps to offset the buoyancy of the housing. The complete assembly is slightly negative underwater for better control. The handles have a push button release for easily attaching and removing strobe arms. The tray and handles can be removed from the housing. To remove the tray, the base must be removed to gain access to the nuts holding the tray on the housing. Remove the 2 nuts, washers and rubber spacers. **DO NOT remove the bolts protruding through the housing.**

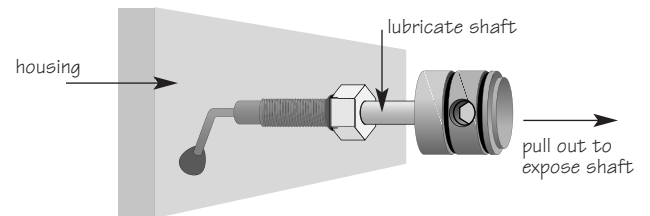


10

## Control Maintenance

Ikelite controls are designed to provide years of reliable service with minimal maintenance.

1. Push button controls require no maintenance other than rinsing in fresh water after saltwater use. If a push button control becomes difficult to push or if it sticks when depressed, soak the housing in luke warm fresh water. After a few minutes operate the push button. If this does not correct the problem, return the housing to Ikelite for maintenance.
2. Some of the controls have long shafts. These controls can be

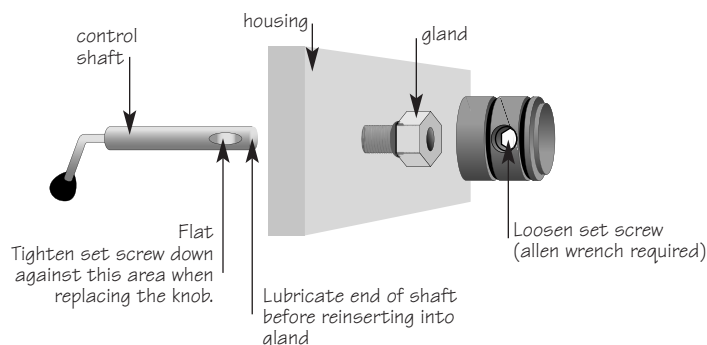


pulled out, exposing the shaft (see drawing).

To lubricate the control, gently pull on the knob until the stainless steel shaft is exposed. Lightly lubricate the shaft, then move the shaft in and out several times. This will lubricate the x'ring in the Ikelite control gland. This should be done before using the housing after a prolonged storage period, or once a week when the housing is in use.

12

- Some of the controls have a short shaft and cannot be pulled out exposing the shaft for lubrication. In the unlikely event one of these controls sticks or becomes difficult to operate you can remove the control from the housing and lubricate it, or return the housing to Ikelite for maintenance. To remove the control, loosen the set screw in the knob (allen wrench required); remove the knob. If there is salt or dirt build-up on the exposed control shaft, clean the shaft. Open the housing and gently slide the control shaft out of the control gland. Clean and lightly lubricate the shaft, including the end of the shaft. Slide the shaft back into the control gland and gently slide it back and forth a few times without fully removing the shaft from the gland. Replace the knob, NOTE the flat area on the shaft, the set screw in the knob should tighten down against the flat area on the control so the knob does not turn on the shaft.



13

## Photo Tips

- The number one rule in underwater photography is eliminate as much water between camera and subject as possible. Get as close as you can to the subject, then use the zoom. If you are using flash, subjects beyond 6 feet (1.8m) will not have much color.
- The camera's built-in flash is very close to the camera lens. The flash will light up any suspended particles in the water and they will be recorded in your picture. This effect is called backscatter. To eliminate as much backscatter as possible, photograph close. Photograph in clear water; do not stir up the sand or silty bottom. If backscatter becomes a problem in the environment you are photographing, an external flash will help eliminate much of the backscatter.
- Digital cameras have a slight lag time between when you press the shutter release button and the camera actually takes the picture. Hold the camera steady a second or two after pressing the shutter release button.
- Do not shoot down on subjects as they will quite often blend into the background and be difficult to see in the photograph. Shoot subjects straight on or shoot up at a slight angle using the blue water as a contrasting background.
- Underwater flash is used to restore the warmer colors filtered out by the water as well as to illuminate the subject. When photographing underwater, set the camera to use flash on every shot. If the camera's flash is set to AUTO and the sun is behind your subject, the camera may see enough light that it does not fire the flash. With the sun behind the subject the subject is shaded (dark) and needs flash for a good exposure.

15

## General Tips

- Due to the power required to operate the camera, flash, and LCD screen it is a good idea to start each dive with a fresh set of batteries.
- Some cameras reset their flash to AUTO when the camera is turned on. If you prefer another setting be sure to select it.
- As soon as you enter the water, take a moment and check the housing to see that it is properly sealed.
- Next, check to see if there are any bubbles on the face of the lens port. If there are, take your finger and remove them. If there are bubbles on the lens port they can produce soft focus spots in your photographs.

## Lubricants

- Ikelite provides silicone lubricant with the housing. We recommend that you use only Ikelite lubricant on Ikelite products as some other brands may cause the o'ring to swell and not seal properly.
- Use only enough lubricant to lightly cover control shafts and o'rings. Wipe off any excess lubricant with a clean cloth. Lubricant is not a sealant, it is used to reduce friction. Excessive lubricant can collect sand and dirt which may interfere with proper sealing.

## CAUTION

**Never use spray lubricants as the propellant ingredient can cause the plastic housing to crack.**

14

## Ikelite Limited Warranty

All Ikelite products are warranted against any manufacturing defects for a period of one (1) year from the 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, including but not limited to bulb failure are not covered. Except as mentioned above, no other warranty expressed or implied, applies to this Ikelite product.

## Returning Products for Service

Ikelite is most interested in performing any service to assure that all products perform as intended. For repair or service, return the product to the address below with your name, address, phone number and a brief description of the problem. Evidence of purchase date must be provided to obtain warranty service.

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**Indianapolis, IN 46208 USA**

**317-923-4523**

**email: [ikelite@ikelite.com](mailto:ikelite@ikelite.com)**  
**[www.ikelite.com](http://www.ikelite.com)**

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