



**Digital Housing**  
i n s t r u c t i o n   m a n u a l

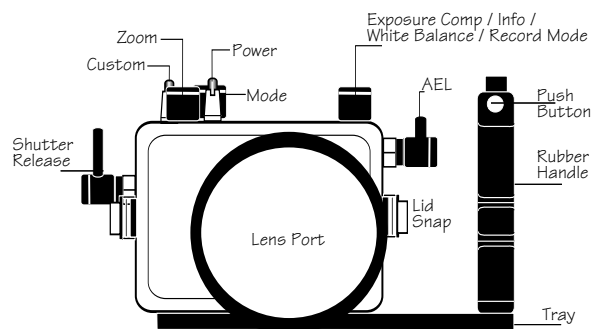
for  
**Olympus**  
**C-8080**

Housing  
**#6130.80**

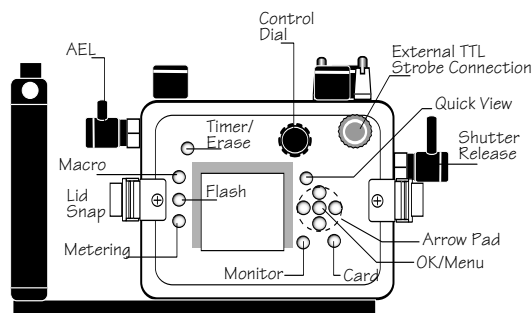
# Ikelite Digital Housing

instruction manual

#6130.80 for Olympus C-8080WZ



FRONT VIEW



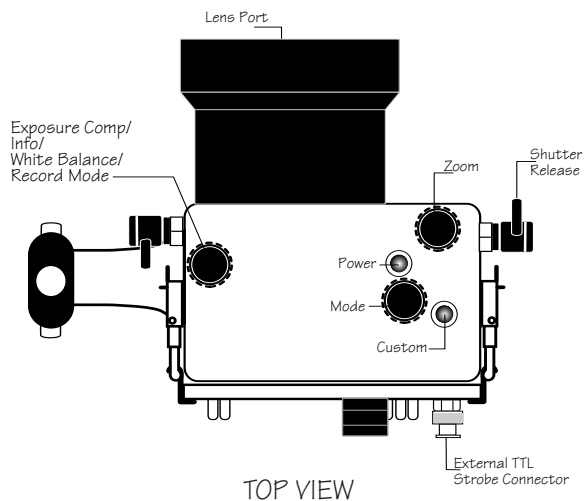
BACK VIEW

2

Thank you for your purchase of an Ikelite Digital Camera Housing. Ikelite products have been designed and built in the USA for over 30 years 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).



TOP VIEW

## Note:

One control is used to access the White Balance, Exposure Compensation, Record Mode and Info buttons.

## Exposure Comp/Record Mode/Info

In the normal down position rotate the housings control clockwise to depress the Record Mode/Info button and counter-clockwise to depress the Exposure Compensation button.

## White Balance Control

To access the camera's WB button, pull up on the housing control until it stops, rotate the control clockwise to depress the camera's White Balance button.

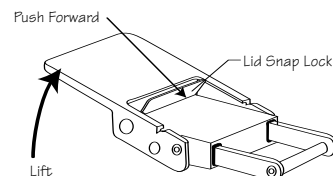
3

## Opening the Housing

1. Lid Snaps have a **Lock**.

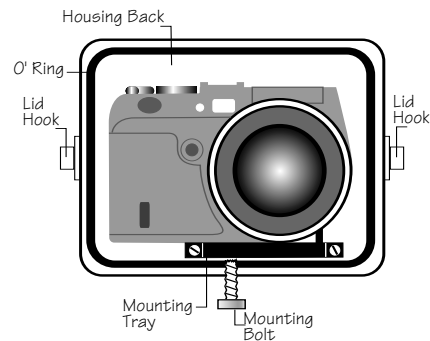
To open, push Lid Snap Lock forward and lift as shown. Keep pressure on the Lid Snap so it does not fly open quickly.

*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

1. 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.
2. Pull out on each housing control until it stops. This will get the controls out of the way for installing the camera.



## Caution

**Remove any accessory lens attachments such as filters before installing the camera into the housing.** Any attachment that adds length to the lens will restrict the zoom and may scratch the inside of the housings port.

4

## Using Flash

The camera's built-in flash cannot be used. To use flash an external flash must be connected to the housing.

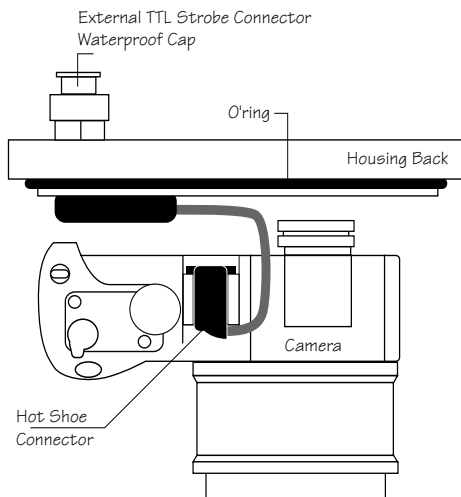
## Flash Connection for External Strobes

When using an external strobe connect the housings Hot Shoe Connector, slide the connector into the hot shoe of the camera as shown. Slide the connector forward until it stops. This can be done after the camera is secured with the mounting bolt.

**NOTE:** Even if you are not using an external strobe it is recommended that you slide the housings Hot Shoe Connector into the camera's hot shoe. In this position it is less likely to interfere with the o'ring seal.

### Caution:

Do not remove the External Strobe Connector's waterproof cap unless an external sync cord is going to be plugged in.

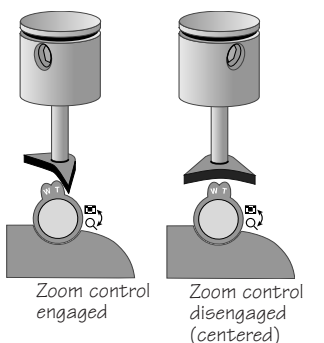


## Checking Controls

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

### Zoom Control

(NOTE:) After you have used the housing's zoom control it must be returned to the center position to disengage. If the housing zoom control is pushing the camera zoom lever in either direction you cannot take a picture or access any other function as the camera is receiving a signal from the engaged zoom control.



## 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.

## Lens Port

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.

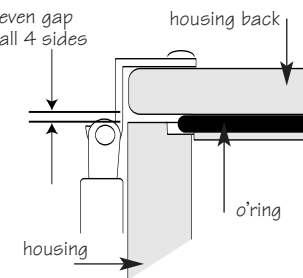
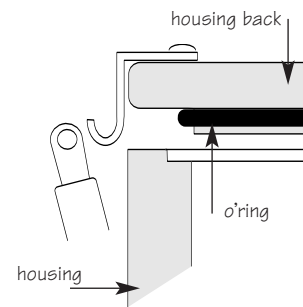
### Caution

When the camera is in the housing and the lens is fully extended the lens almost touches the inside of the housing's port.

**Remove any accessory lens attachments such as filters before installing the camera into the housing.** Any attachment that adds length to the lens will restrict the zoom and may scratch the inside of the housings port.

## Closing the Housing

1. Place housing face down.
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. Some control shafts can be slid out, making camera installation easier. Gently pull out on a control until it stops.
4. 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.
5. Lift the lid snaps so they are extended and place the lid snap into the hook on the housing back.
6. 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.

## Optional Accessories

### External Substrobes

External strobes offer several advantages over using the camera's built-in flash. External strobes move the flash away from the camera lens which helps reduce backscatter. They also expand lighting options to achieve the best lighting for different subjects and lenses. A strobe such as the DS51 is ideal for use with macro and most standard camera lenses up to 28mm. When an optional wide angle lens is added a strobe such as the DS125 is needed as it has a greater angle-of-coverage. A second external strobe can be added to fill the shadows and produce more realistic photographs.

### TTL Exposure Mode

Ikelite DS Substrobes are fully TTL functional and provide real Olympus TTL control with this housing. For TTL exposure you must use an Ikelite DS Substrobe and the Ikelite #4103.51 sync cord or #4103.52 dual sync cord for dual strobes.

**NOTE:** Refer to camera manual for camera flash settings when using an external strobe.

### Manual Exposure Mode

This camera can be used with the Ikelite Substrobe, DS51, 100A, DS125, or 200 in the manual mode. A #4103.51 sync cord is required to connect the Substrobe to the housing.

### Manual Exposure Mode 2

Use the Ikelite EV-Controller with a DS Substrobe for more control over manual exposure. The EV Controller provides 10 manual power settings in 1/2 stop increments. For housings with an external sync cord connection it is recommended to connect the EV-Controller to the housing with a #4103.51 sync cord.

## Optional Accessories cont.

### DS51 Substrobe

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.

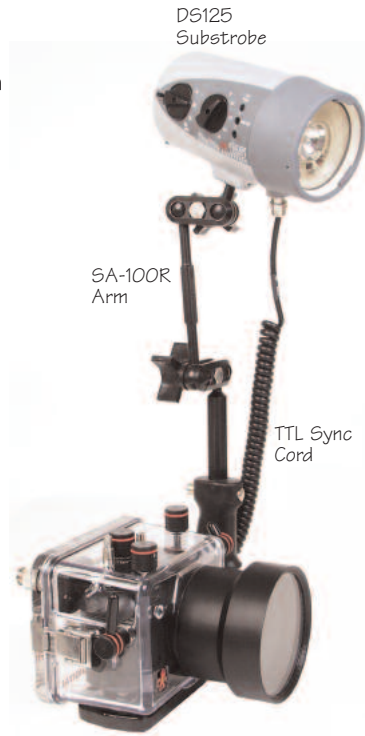
### DS125 Substrobe

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

### Optional Strobe Packages

#3944.51 includes  
DS51 Substrobe  
Ikelite TTL Sync Cord  
SA-100R Arm

#3944.75 includes  
DS125 Substrobe  
1.5 hr. Smart Charger  
Ikelite TTL Sync Cord  
SA-100R Arm



9

## 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

## Optional Accessories cont.

### Back O'ring #0110

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

### Dual Handle Tray #9523.12

A Dual Handle Tray is available. The Dual Handle Tray provides a second access point for mounting a second strobe.

## Lubricants

1. Ikelite provides silicone lubricant with the housing. We recommend that you use only Ikelite lubricant as some other brands may cause the o-ring to swell and not seal properly.
2. 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

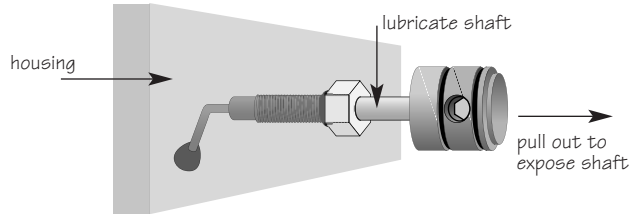
*Never use spray lubricants as the propellant ingredient can cause the plastic housing to crack.*

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.

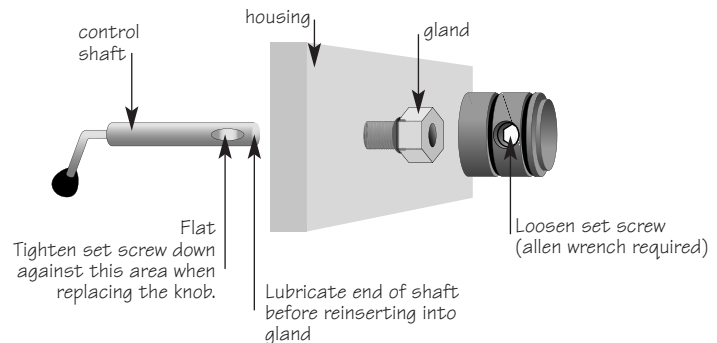
12

## General Tips

1. 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.
2. Just before entering the water check the housing for a proper seal. As soon as you enter the water, take a moment and check the housing again to see that it is properly sealed.
3. 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.
4. If you use the housing's Zoom control, make sure to move it back to the center position. If the housing Zoom control is pushing the camera zoom lever to either side the camera will not function. (See page 7)

14

3. 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

1. The number one rule in underwater photography is eliminate as much water between the camera and subject as possible. Get as close as you can to the subject, then use the zoom. Even with flash, subjects beyond 6 feet (1.8m) will not have much color.
2. Some 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.
3. 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.
4. Underwater flash is used to restore the warmer colors filtered out by the water as well as to illuminate the subject. When photographing underwater with flash, use flash even in shallow water as color is effected even at shallow depths. Also if the sun is behind the subject the subject is shaded (dark) and needs flash for a good exposure.

15

## **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.

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

**317-923-4523**

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

**Digital 6130.80-01-0404**