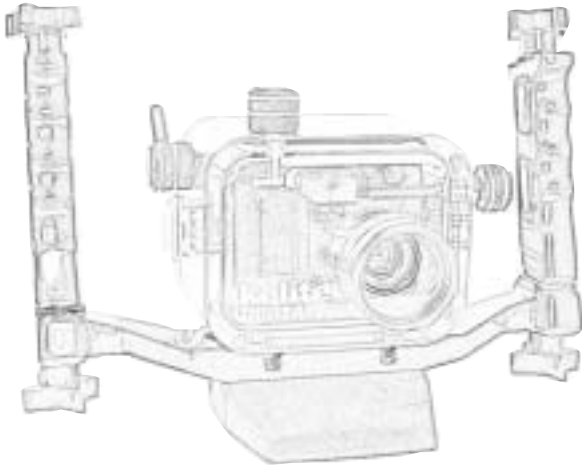


# Ikelite Digital Housing

i n s t r u c t i o n   m a n u a l

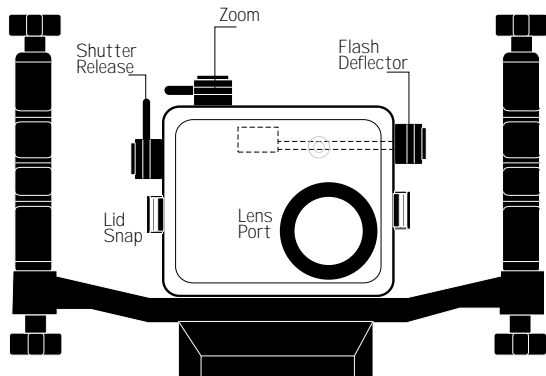
#6130 for Olympus 2000, 2020, 2040, 3000, 3030, 3040



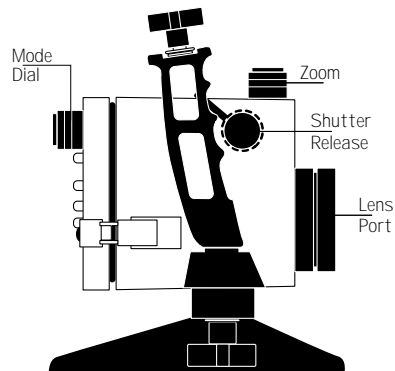
Congratulations on your purchase of an Ikelite Digital Camera Housing. Ikelite has over 30 years of experience in the underwater photographic and lighting market. Our products are designed and built in the USA by Ikelite for both the professional and amateur photographer.

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.

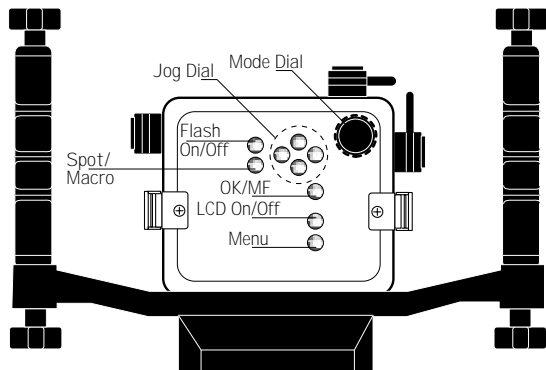
Ikelite Digital Housings are slightly negative in salt water for stability. This housing has been water pressure tested at the factory. Housing is pressure tested to 200' (60m).



FRONT VIEW



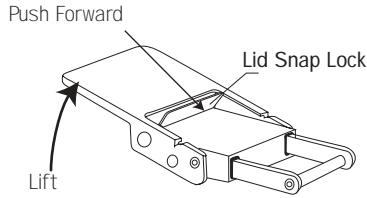
SIDE VIEW



BACK VIEW

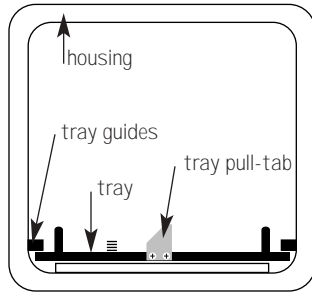
## Opening the Housing

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

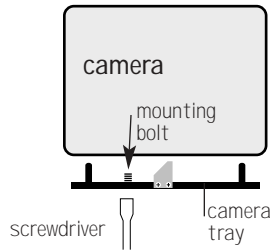
1. Remove camera tray from the housing. Place the camera tray on the bottom of the camera and secure with the mounting bolt.



### CAUTION:

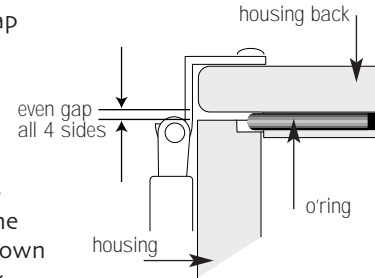
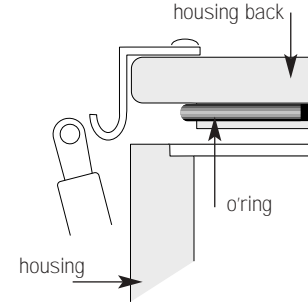
*Some camera tripod socket threads are plastic. The mounting tray bolt is metal. Do not cross thread or over tighten as you may damage the camera tripod socket threads.*

2. Pull out on each housing control until it stops. This will get the controls out of the way for installing the camera.
3. Slide camera into housing. Make sure the mounting tray slides under the guides on each side of the housing.



## 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.

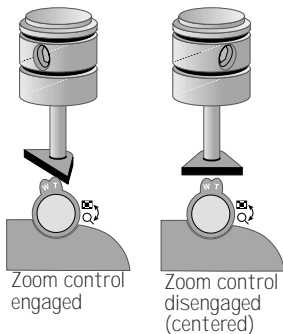
Look through the clear plastic back at the o'ring. You should see a darkened area where the o'ring is compressed against the housing back. If you do not see an even black compression seal all the way around the back, open the lid snaps, reset the housing back and close the lid snaps. Visually check the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

## 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.*



### Flash Deflector

The flash deflector control moves the deflector in and out of the camera's flash path.

### Using Camera Flash Only

If you are using the camera's internal flash rotate the deflector so it does not block the camera's flash.

### Using External Flash

If you are using an external strobe such as the Ikelite DS50 or DS125 the deflector should be rotated in front of the camera's flash to deflect the light to the DS Sensor.

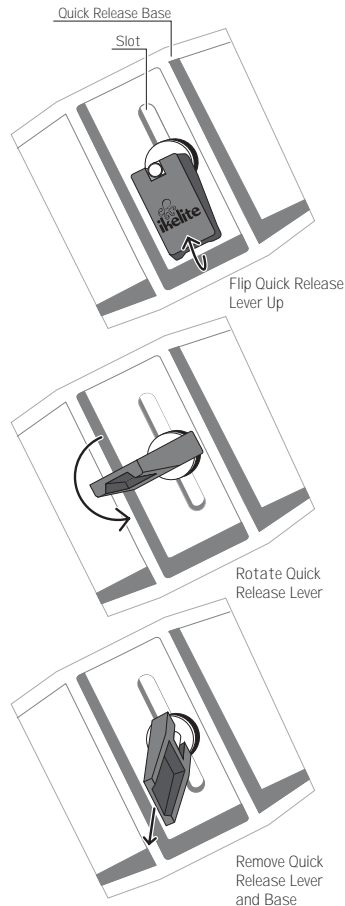
### Turn Camera On

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.

## 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 Handles and Tray are aluminum. Their weight helps to offset the buoyancy of the housing. The complete assembly is slightly negative underwater for better control. The Handles can be removed from the Tray for travel if desired. The Tray can also be removed from the housing. 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 thru the housing.*

## 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.*

## Lubricants

1. 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.
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.***

## UR/Pro Color Filter

An external UR/Pro filter is included with the housing. The filter comes with a lanyard to secure it to the housing. To install the filter simply press the rubber filter ring over the lens port. If the filter is over the lens port when you enter the water, it is recommended that you remove the filter underwater, wipe away any bubbles on it or the face of the lens port, and then reinstall the filter.

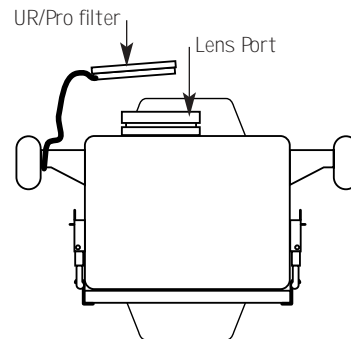
## Usage

The UR/Pro underwater color correcting filter is designed to restore some of the warmer colors that are filtered out by the water. For best results use the filter in sunlight and between 25 feet (7.5m) and 80 feet (24m). It is best if your subject has sunlight on it.

The filter can also be used with the optional Video-Lite for subjects 3 feet (1m) and beyond. *Do Not Use the UR/Pro filter above water, at night or with flash.*

## Cleaning

The UR/Pro filter is protected with a scratch resistant coating; however, since you are photographing thru the filter you should treat it as you would a camera lens. After use, rinse and dry to avoid water spots. To clean, use a mild soap solution. Minor scratches will usually fill with water and not affect the picture quality.



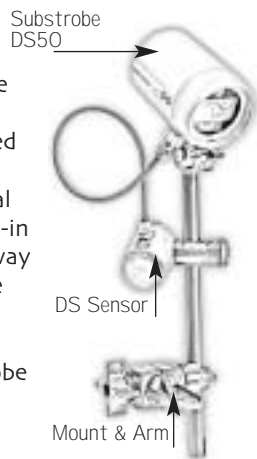
## Optional /Accessories

### Back O'ring #0109

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

### Substrobe DS50 Package #3944.40

The Substrobe DS50 package includes the Substrobe DS50, the DS Sensor and mounting arm. This package was designed to work with digital cameras that use preflash. An external strobe offers 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. A second external strobe can be added to fill the shadows and produce more realistic photographs.



### Video Lites

Ikelite offers 2 video lites that can be used with Digital Still Housings.

#### Pro Video-Lite II

The Pro Video-Lite II offers 100° coverage with either 100W or 50W primary light and a built-in 20 watt modeling light. The 100W version runs 25 minutes; 50W runs 55 minutes per charge.

#### Modular Video-Lite 45

Features a 50W primary light with 100° coverage and a built-in 6W modeling light. Ni-cad pack powers the light for 30 minutes per charge. (*Charger NOT included*)

## 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.

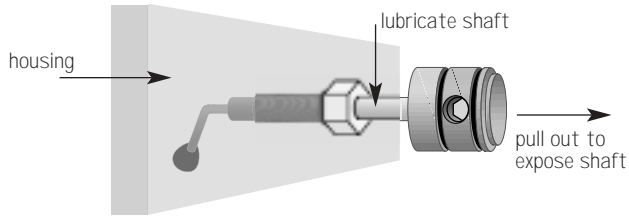
### CAUTION

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

## Control Maintenance

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

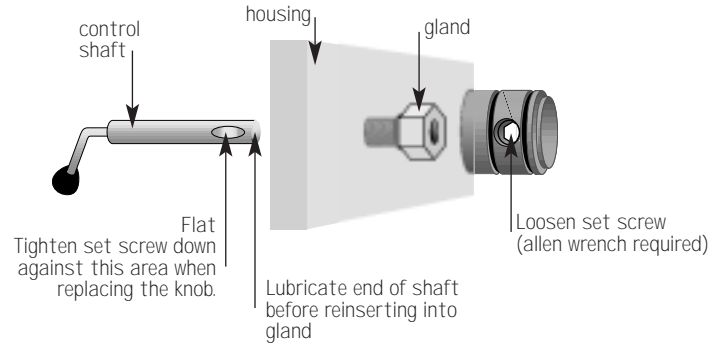
1. Push button controls require no maintenance other than rinsing in fresh water after saltwater use. If a push button control becomes difficult to push or if it sticks when depressed, soak the housing in luke warm fresh water. After a few minutes operate the push button. If this does not correct the 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.

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.



## 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. Some cameras reset their flash to AUTO when the camera is turned on. If you prefer another setting be sure to select it.
3. As soon as you enter the water, take a moment and check the housing to see that it is properly sealed.
4. 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.
5. If you use the housing 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 6)

### NOTE

6. If you are shooting with the camera's built-in flash at approximately 2 feet (0.6 m) or less, zoom the lens to maximum telephoto. The lens port on the housing blocks a portion of the light from the camera's built-in flash when shooting close up. If you do not zoom to maximum telephoto, a shadow may appear in the lower left corner of close-up photographs. (*You can test this above water*)

To shoot wide angle photographs closer than 2 feet (0.6m), you need to use a preflash compatible external strobe such as the DS50. With an external strobe you can position it so nothing blocks the light path between the strobe and the subject.

## Photo Tips

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.



## **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)**