

Ikelite Canon EOS 100D review

by Phil Rudin

Making its debut at DEMA 2013 the newly released Ikelite housing for the Canon EOS 100D SL1 has to be the smallest DSLR housing package I have ever seen. Smaller than many mirrorless camera systems this combination ticks all the boxes for the traveling photographer. The system is small, light weight and easy to pack in just about any airline carry-on bag. I had a chance to test drive this new system while teaching the Underwater Digital Fiesta 2014 Workshop at Casa Del Mar in Cozumel Mexico during April. Jorge Gonzalez is the owner and organizer of Underwater Digital Fiesta now in its fourth year and the publisher of MEXICANDIVER.com. Jorge was able to bring this housing along with several others for our workshop members to test-dive and I heard nothing but positive feedback regarding this exciting new housing system.

THE CAMERA

The housing is designed around the very tiny Canon EOS 100D Rebel also branded in many countries as the SL1 Rebel. The 100D/SL1 Rebel is the entry level camera in the Rebel line with the Canon EOS T5i Rebel currently sitting at the high end of the Rebel line. These are DSLR cameras with an optical viewfinder not mirrorless cameras. The 100D has an 18.0 megapixel APS-C sensor for still



photography and full HD video over an impressive ISO range from 100 to 12800 with quite usable image quality above 6400 ISO. The camera ships as a “kit” with the Canon EF-S 18 to 55mm f/3.5-5.6 STM lens. The new STM lenses are designed to provide noticeably improved live view and full HD video shooting over past Canon “kit” lenses. The auto focus is reasonably fast but not as fast as the latest crop of mirrorless cameras from Panasonic and Olympus. The Canon 18 to 55mm STM zoom covers a wide range of underwater subjects and will make an excellent all purpose lens for the entry level shooter.

While the 100D is quite small the same can not be said for the 18 to 55 zoom, this is a simple matter of physics. The larger APS-C sensor requires larger lenses compared to lenses for smaller sensor cameras. Ikelite has negated this shortcoming with a custom dome port for this lens which has the zoom control dial built into the port. This is ideal for reducing the overall size of the system. Unlike port offerings for many kit lenses this is a dome not a flat



port. The dome port allows a wider angle of view at the 18mm end of the lens and increases AOV at the 55mm end of the lens as well. The on/off switch has three settings off, on and a video icon. When the camera is turned on a display of your shooting information appears on the LCD display. It includes the mode you are shooting in like manual and information related to that shooting mode. In manual mode shutter speed, F/stop, ISO, exposure compensation, white balance, battery power, AF points, one shot or multi shot RAW capture, number of exposures and more all appear.

To make a change like moving the ISO setting all you need to do is press the OK button, scroll to ISO using the four way arrows press OK then scroll to a higher ISO and press OK. You can use the main command dial to change functions like shutter speed and F/stop settings. Move the switch to the video icon and you hear the mirror lock-up and the video framer appears on the LCD for video shooting. Press the OK button and now your video shooting information screen appears on the LCD. Press the

four way arrows and you can make changes to things like movie recording formats (like 1920/24), white balance, AF modes and more.

In still mode push the control button to the right of the viewfinder and you will hear the mirror lock-up, you are now in live view mode and the image will appear on the LCD rather than in the viewfinder. In live view the speed of the auto focus is reduced noticeably compared to the AF speed when using the optical viewfinder. In low light this issue is even more noticeable.

In video mode you push the same button that is to the right of the viewfinder to begin recording and to stop recording. A red dot appears on the LCD to remind you that the camera is recording. Using auto focus works well as you move the camera from subject to subject while shooting video. Once you have finished recording you can push the blue review arrow and the left/right arrows to find the clip you wish to review, then push the up arrow and OK to play. When the camera is turned off a sensor cleaning icon appears on the LCD to let you know the sensor is being cleaned.

THE HOUSING AND PORT

Ikelite is a U.S. company which has been making underwater photography equipment for over fifty years. The company has an outstanding reputation for customer service both with new equipment and aging equipment, offering upgrades and fast service turnarounds to their many loyal customers. Ikelite's housings are made with a high grade polycarbonate blend which is extremely strong yet remains clear and lightweight. These clear polycarbonate housings provide an excellent view of all of the camera controls and O-rings after the housing is sealed. The Canon 100D housing has



(Above) Coney fish, Canon EOS 100D 18-55mm kit lens, at 55mm, ISO-200, F/18, 1/200th, one Ikelite DS161 set to TTL.

(Right) Diver, Canon EOS 100D 18-55mm kit lens, at 18mm, ISO-200, F/8, 1/200th, one Ikelite DS161 set to TTL.

four main components, the front "box" where the camera sits, a flat rear door, the removable front port and the camera tray which attaches to the tripod mounting point on the bottom of the camera. The front part of the housing where the camera sits has a track at the bottom that the camera tray slides into. Once the camera is aligned in the housing the hotshot for strobe connection is mounted on top of the camera and the housing is ready close. The rear door of the housing is then secured by facing the housing down and making sure that the rear door O-ring has properly seated in the front half of the housing. The two heavy duty lid snaps are then secured by pushing down, you should hear the lid snaps click into the locked position and you should not be able to lift the snaps without pushing in the



snap locking device. I like to use equal pressure on both lid snaps so that they lock simultaneously.

Once the camera is secured inside the housing you can see the controls on the camera and align them with the housing controls. The right hand side of the housing has the shutter release, the left side has the lens release control which allows you to change lenses by removing the port and not the camera from the housing. The bottom of the housing



Two divers, Canon EOS 100D 18-55mm kit lens, at 18mm, ISO-200, F/14, 1/200th, one Ikelite DS161 set to TTL.



Trunk Fish, Canon EOS 100D 18-55mm kit lens, at 27mm, ISO-200, F/11, 1/200th, one Ikelite DS161 set to TTL.

has two mounting screws for mounting a tray to the housing and the top of the housing has the sync port for the strobe cord, controls for on/off/video, ISO settings and the main control wheel. Also on top is a nifty mounting device for your Go Pro so that you can shoot stills with the housing while running Go Pro video at the same time (Go Pro not included).

The rear door for the housing has controls for menu, info, live view/video start/stop, mode dial, AF point/magnify button, AE/AF lock button, AV aperture/exp. comp. button, up/down/left/right arrows, set/OK button, playback button and erase button. The rear door also has an optical pickup finder included which helps your view into the rather small viewfinder on this camera.

The most common negative feedback among those students using this housing was that the viewfinder was a bit small. This is a common issue with many of the smaller sensor DSLR cameras. Our housing shipped with the acrylic dome port for the KIT lens with sun shade and left hand zoom control. This port never needs to be removed unless you are installing the flat port for the Canon EF-S 60mm macro lens. The flat port has 67mm threads

for close-up lenses and flip adapters. The housing also ships with a neoprene cover to protect the dome port, waterproof bulkhead cap when not using the strobe port, a main door spare O-ring, extra port screws, one year manufacturer warranty and a quick release tray and handle which allows an Ikelite strobe and strobe arm to be easily mounted to the housing.

THE STROBE

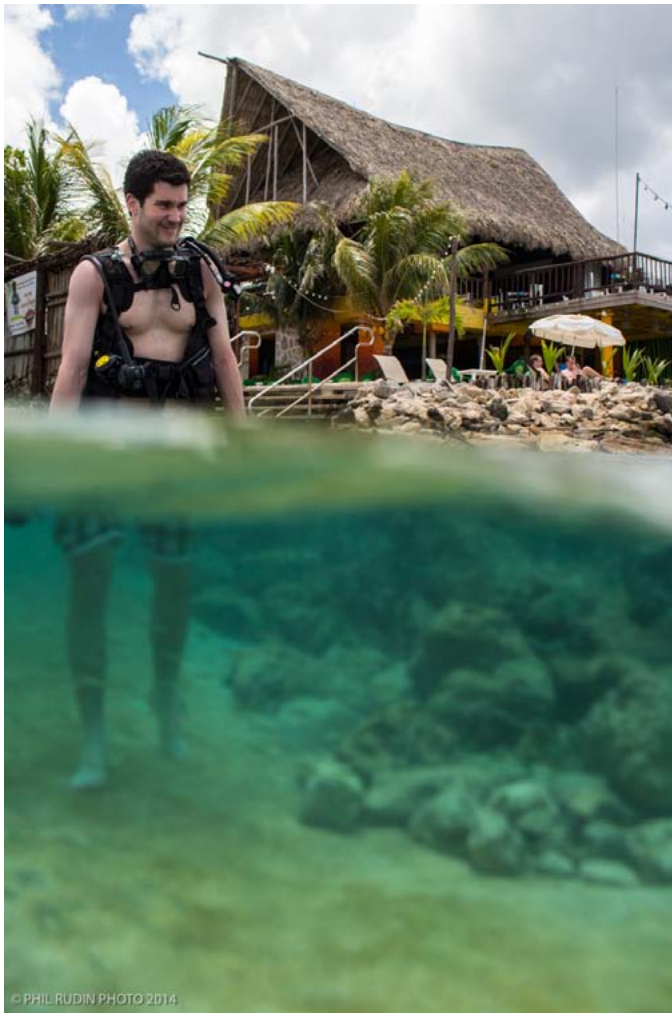
Ikelite included an optional DS161 strobe and Ikelite strobe arm with our test housing and tray. This housing is compatible with a variety of optional Ikelite strobes including the DS50 (above serial# 70,000), DS51, DS125 (above serial#5000), DS160, DS161, and DS200. Several non-Ikelite strobes can also be used with this housing system when fired in manual exposure mode. Ikelite's Manta strobe will also fire as a slave off of a primary strobe with this housing. Our test strobe,

the Ikelite DS161 also doubles as a video light for use with the 100D or if the Go Pro is mounted to the housing. The strobe connects through the strobe bulkhead on the housing and provides rich well balanced TTL exposures. The strobe can also be used as a flashing signaling light if needed. A diffusing cap is included as well. This strobe is very well respected in the underwater photography community and is well worth a review on its own.

FIELD TESTING

In the field the housing with the camera kit lens and tray will be a bit positive in salt water. This worked well for me while shooting shallow A/V light images and over/under shots. I was able to get some decent split images with the standard dome port and kit lens at the 18mm setting.

The internet is already a buzz over this new housing with talk of what other lenses might do well behind the standard dome port. The answer to one



Split image, Canon EOS 100D 18-55mm kit lens, at 18mm, ISO-400, F/7.1, 1/2000th A/V light.

such post is that yes the popular Tokina 10-17mm fisheye zoom can be used in the port with minimal vignetting in the 10-12mm range. Regarding lenses, the older non-STM Rebel lenses will be slower to auto focus than the new 18-55 kit lens that comes with the 100D camera.



I shot at or near the surface with the camera set to aperture priority and got some very richly colored images in the clear blue waters around Cozumel. With the single DS161 strobe I was shooting with all manual settings while firing the strobe set on TTL, this combination resulted in excellent exposures within the TTL range. The system is extremely easy to dive and snorkel with, being every bit as streamlined as many of the small mirrorless housings I have tested in the past.

This is an excellent little housing system for travel, those entering underwater photography looking for a moderately priced system and for those die hard Canon fans looking for a backup system.

The housing system with port and tray retails for \$1100.00, Ikelite also sells a housing package with the camera and kit lens included for \$1850.00. Ikelite strobes range in price from around \$400.00

to around \$1100.00 for the DS161. You can contact your local authorized Ikelite dealer for pricing in your area.

I would like to thank Ikelite for their support both for Underwater Digital Fiesta 2014 at Casa Del Mar in Cozumel, Mexico and for the test equipment used for this review.

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