



# Guide to Ultralight Parts and Assembly

Congratulations on your recent Ultralight purchase. Now you have a pile of awesome parts and probably have no idea what goes with what and where. We're here to help. Below you'll find the most common ULCS parts and explanations of how they go together. If you have any further questions, please just give us a call at (310) 633-5052, or shoot us an email at [sales@bluewaterphotostore.com](mailto:sales@bluewaterphotostore.com).

## Trays

**ULCS TR-DM** *is the standard tray that goes out with most orders. It fits most compact and mirrorless housings with two screw attachment points.*



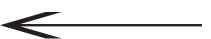
This small hole fits the TR-DHB handle.



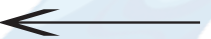
This larger slot fits the adjustable AC-H handle.



This hole is usually not used, but can be used to attach an accessory to the underside of the tray.



This long thin slot is where you will attach the camera. Use the black "t-bolt" screw and white washer for most camera housings. The silver philips head screw is for Ikelite housings only (do not use the washer with Ikelite housings).



These two holes allow for the attachments of a tray extender (TR-DUP) to add a second handle.

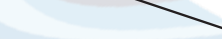


When attaching the housing to the tray, the washer goes underneath the tray, not between the tray and housing.

**ULCS TR-D** *is a tray for compact camera housings with only one screw attachment. The ridge in the back of the tray keeps the housing secure on the tray so it does not spin around.*



This small hole fits the TR-DHB handle.



This larger hole fits the AC-H handle.



The larger shape allows for the adjustable screw to fit a variety of compact housings securely. Slide your housing so that it fits snugly against the rear ridge before fully tightening down the screw, this will keep the housing from moving while on the tray.



These two holes allow for the attachments of a tray extender (TR-DUP) to add a second handle.



## Tray Extender - TR-DUP

This is the piece that you will use to add a second handle to your Ultralight tray set up. It can be used with both the TR-DM and the TR-D trays.



Attach the TR-DHB Handle to either small hole, however I feel like the inside hole is most secure as the handle does not extend off the tray. →



Attach the AC-H handle in the larger hole. →



← The black block included with the kit is just a spacer block. You do not have to use it, but it is available incase you need it.

Short screws are used with NO spacer block, make sure your tray has the ULCS logo facing up, so that you can screw the two small screws from the top down with the tray extender beneath the tray. →



← Long screws are used with the spacer block.



## GoPro Trays



**TR-GP** This is the single handle GoPro tray. Attach the handle going up or down depending on how you prefer to hold it. Has holes for both TR-DHB and AC-H handle styles. (includes GoPro Triopd mount) ←



↗ **TR-GPD** - The dual handle GoPro Tray, this allows for adding two handles for a double light set up. Great for serious GoPro video. Two holes for the TR-DHB handles, there is one hole for the AC-H handle, but we recommend using the TR-DHB.

# Arms

The Ultralight arms come in a variety of sizes (3", 5", 8", 12" and 16"). The most commonly used sizes are the 5" and 8" arms. Each arm has a ball on the ends to be connected together or to other accessories through the ULCS Clamps.



# Clamps

There are a variety of clamps to fit your needs. These clamps combine arms, handles, basically any accessory with a ball mount.



This is where you position a ball, if you look closely at your clamp you'll notice two of the three pieces are the same. Those two pieces hold the ball, the third is the tightening mechanism.

This is the "handle" of the clamp, the piece you turn to loosen and tighten the clamp. For quick reference make sure the white washer is outside the area you place the ball joints.

AC-CSF  
Standard Clamp



AC-TCS - Triple Clamp

This clamp allows you to attach three ball attachments.



AC-CSL - Long Clamp

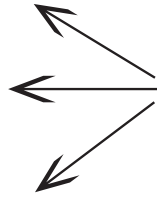
This clamp adds extra length between ball attachments.

# Handles:

The handles attach to the tray to allow for a comfortable and secure grip on your set up. The included ball mount allows for the attachment of arms and other accessories.



**ULCS AC-H**  
Adjustable Handle



These are the screws that come with the AC-H handle. When assembling your system make sure that you keep them in the proper order. First the bolt, then the locking washer, then the regular washer. These are all stacked underneath the tray, and screwed into the handle, which sits directly on top of the tray.  
\*\*Tip: use plumber's tape on the screw to help prevent the screw from locking into place.

This handle is not adjustable and screws directly into the small hole on the rounded edge of the tray. Screw the handle into the tray and tighten it as much as possible, then screw on the acorn nut from the underside and use a wrench to tighten. You can also secure the nut on the threads with "Loctite" for a permanent attachment.



**ULCS TR-DHB**  
Standard Handle

# Strobe Adapters:

Every strobe manufacturer has their own style of attachment and Ultralight makes an adapter to cover each of these. Here are the most common strobe adapters. These adapters will attach to your strobe so that you can then use Ultralight ball and clamp arms.



**ULCS AD-SS**  
Sea & Sea Strobe Adapter

Note: The YS-D1 strobe includes both the YS mount and a ball mount adapter, so the AD-SS adapter is not needed with that strobe. It can be used with the YS Mount for one extra point of articulation.



**ULCS AD-125**  
Ikelite Strobe Adapter



**ULCS AD-IN**  
Inon Strobe Adapter

Note: Do not remove the o-ring on the strobe that sits between the strobe and adapter. This can allow the adapter to be tightened too much and cause damage to the strobe.



# *dSLR Handle Accessories*



**BA-TP & BA-TG** - This style adapter is great for Sea & Sea or Aquatica Housings, you need the T Plate (BA-TP) which screws onto your housing handle, then the Ball Mount (BA-TG) slides over top so you can attach your arms and clamps. This system makes it easy to remove your whole arm with ease.

## **BA-DB, BA-DT & BA-AD**

This style adapter also works on Sea & Sea and Aquatica housings, and offers a slightly smaller ball adapter with a quick release. The plate (BA-DB) screws onto the housing handle, then either the BA-DT (straight) or BA-AD (angled) adapter slides into the plate.



**BA-AQW** - This simple ball adapter screws directly onto the top of your handles, works with Sea & Sea & Aquatica.

**BA-IK** - This adapter is designed for Ikelite dSLR housings with the new style quick release handles. Simple drop into the handle and it will click into place when the handle release button is depressed.



# Other Accessories:



**AD-HS** - This adapter slides into the cold shoe mount on your housing. It is great for attaching a focus or video light, but can be used for any accessory you like. Simply slide into the cold shoe mount, then tighten down the round thumb screw to keep it securely in place. Always make sure to check that it is fully tightened down before beginning your dive!  
**\*\*Note:** the black plate is not perfectly square, so if it does not fit into your cold shoe, try rotating it 90 degrees.

**AD-1420** - These ball adapters work with 1/4-20 sized holes. There are three different adapters to fit your need. Simply screw in until tight, the o-ring on the bottom holds it in place.

AD-1420 - ball adapter with threaded hole.

AD-1420-2 - ball adapter with stud

AD-1420-IK - ball adapter with longer stud for Ikelite Housings.



**AD-1420**



**AD-1420-2**



**AD-1420-IK**



**AD-GO** - GoPro ball adapter. Easily add a ball to the bottom of your GoPro housing so you can attach it to your ULCS set up.

**AC-NB** - The Neckball adapter adds an additional ball to your system off the handle. Position underneath the ball on your AC-H or TR-DHB handle and tighten down the screws. Use care to not over tighten screws or they can break.



## **AC-USL / USLm / USLxl** -

These are the Universal Spotting light adapter. They are available in three sizes (regular and mini are pictured). These adapters fit a variety of focus lights and allow you to attach a ball mount to a focus light with no mounting options. Simply place in the rounded tray and tighten the velcro strap around the light. The rubber pieces are used to keep the light from slipping out.



# ***The Finished Set Up***

Now you know all about each ULCS piece and how they fit together, once you set everything up, you should have a fantastic underwater camera system. Depending on what size arms, number of handles, type of camera, and other accessories, strobes, etc that you have your rig will look something like this.



***If you have any further questions, or need assistance please feel free to email us at [sales@bluewaterphotostore.com](mailto:sales@bluewaterphotostore.com) or call, 310-633-5052.***