

Glowdive Light Dome

By Phil Rudin

Light diffusing devices have been around about as long as photographers have been exposing images and underwater photographers have been using diffusers for many years as well.

Recently dome shaped strobe diffusers like the Light Dome have begun to gain traction in the underwater photo community replacing the much more common flat diffusers which have been used for decades.

We have used the position of the sun to create interesting lighting effects, a verity of flat diffusers to widen and soften strobe lighting and now the Glowdive Light Dome has added another approach for getting softer light onto your subject.

Single and Multiple strobes have been used for years in underwater photography to control shadows, highlights, contrast, color and depth. The many techniques used to position strobes, while helpful won't totally eliminate the effects of hard lighting from wide angle or macro images.

Hard Lighting creates hard shadows and high contrast while soft lighting tends to wrap around the subject and fills in harsh shadows

creating a lower contrast within the images. Studio photographers have used umbrellas, soft boxes, diffused window light, parabolic reflectors, bounced lighting and more to soften light for years.

The rule of thumb for all light diffusing devices is that bigger is better so the larger the surface of the devise the softer the light. Since it would be impractical to swim around with a pair of forty inch soft boxes underwater photographer and product designer Carols Villoch has developed the Light Dome which takes a page straight from the studio photographers manual.

The Glowdive Light Dome has a large surface area of around 315 cm² (about 49 square inches) while standard flat diffusers for strobes like Sea & Sea YS-D2 and Inon Z-240 have a total surface area of around 55 cm² (about 8.5 square inches).

Willans Chromodoris Sea Slug, Sony A6300, Sony 90mm macro, Ikelite housing and port, ISO-200, F/10, 1/160th, two Inon Z-240 strobes with Light Domes.



The shape of the Light Dome, the much larger total surface area and the materials used in constructing Light Dome all combine to produce extremely soft edge lighting. The result is a much less noticeable transition from strobe to ambient lighting in an image.

Another upside to Light Dome is that you are able to get closer to your subject even in turbid conditions with less backscatter.

Light Dome diffusers work well for wide angle photography, macro photography and are ideal for those using single strobe lighting. Softer lighting allows you to get closer to the main subject without blowing out highlights while reducing backscatter even in murky water.

Unlike top side strobes incorporating large soft boxes or bounced off of walls and ceilings our underwater strobes tend to produce powerful bursts of light from a small source which is often directed forward. This results in increased backscatter and harsh shadow areas. Light Dome also greatly reduces the over exposed reflections associated with shooting schooling fish like Barracuda and Jacks.

With Light Dome loss of light at the center of the beam is about two-thirds of an f/stop compared to a standard diffuser, but the gain at the edges offsets the center loss allowing



Diver over Anemone, Sony A7R II, Zeiss 18mm F/2.8, ISO-640, F/8, 1/200th, Nauticam NA-A7II housing, Zen Underwater 200mm optical glass dome port, two Inon Z-240 strobes with Light Domes.

you to move closer to your subject.

I used two Light Domes with Inon Z-240 strobes, Sony A7R II camera, Nauticam NA-A7II housing, Nauticam float arms and a verity of lens and dome configurations.

When you enter the water with your housing you get an explosion of bubbles exiting the domes as they fill



Reef Scene, Verde Island Philippines, Sony A7R II, Canon 8-15mm Fisheye at 8mm, ISO-400, F/13, 1/250th, Nauticam housing, Zen 100mm optical glass dome port, Metabones IV adapter, two Inon Z-240 strobes with Light Domes.

with water which at first tends to be concerning. once you realize it is not your housing flooding it is easy to just

point the strobes down until the air escapes.

While the light domes just push

onto the front of the strobes I never had them fall off in over fifty dives.

I found that I needed to get the domes a little closer to the subject to compensate for the added light loss or bump up the ISO a bit. For all uses I kept the domes well behind the port because of the very wide angle of the light beam.

These domes work, they reduced harsh blown-out highlights, overly exposed skin tones in models, reduced noticeable backscatter and produced an very even and pleasing soft light. I have now added a pair to my travel kit .

Light Dome is specifically designed to fit a wide verity of popular strobes including Epoque 230, Ikelite 125, 160, 161, Inon S-2000, D-2000, Z-240, Sea & Sea D1, D2, YS01, YS02, YS03, 110, 110a, YS250 pro and are custom made for a verity of video lights.

The Light Dome can be purchased through the glowdive.com web page for 80€ (around \$90.00USD) for one or 150€ (around \$169.00USD) for a pair plus shipping anywhere world wide.

You can also consult the Lightdome.works web page for further information and a list of the growing network of Light Dome dealers world wide.

Thanks to Alex Tattersall from Underwater Visions the UK Glowdive



Giant Frogfish, Sony A7R II, Canon 8-15mm Fisheye at 15mm, ISO-200, F/7.1, 1/250th, Nauticam NA-A7II housing, Zen Underwater 100mm optical glass dome port, Metabones IV adapter, two Inon Z-240 strobes with Light Domes.

Light Dome dealer for providing the two Inon Z-240 Light Domes used for this review. Alex can be reached at uwvisions.com.

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