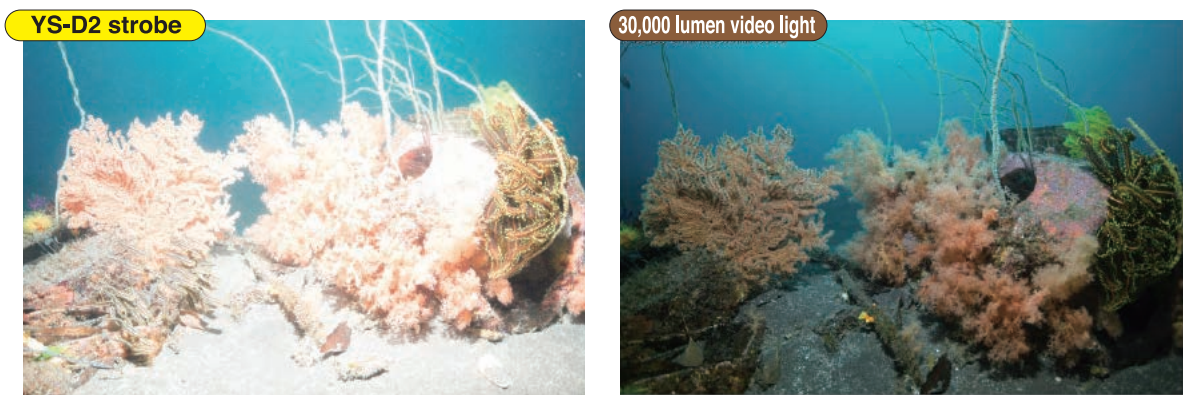
Benefits of Using Strobes vs. Constant Video Lights

■Differences between strobes and video lights: Light Intensity

▼The images below were taken under the same conditions (shutter speed: 1/90, aperture F4) using the YS-D2 strobe and a 30,000 lumen video light at full power.

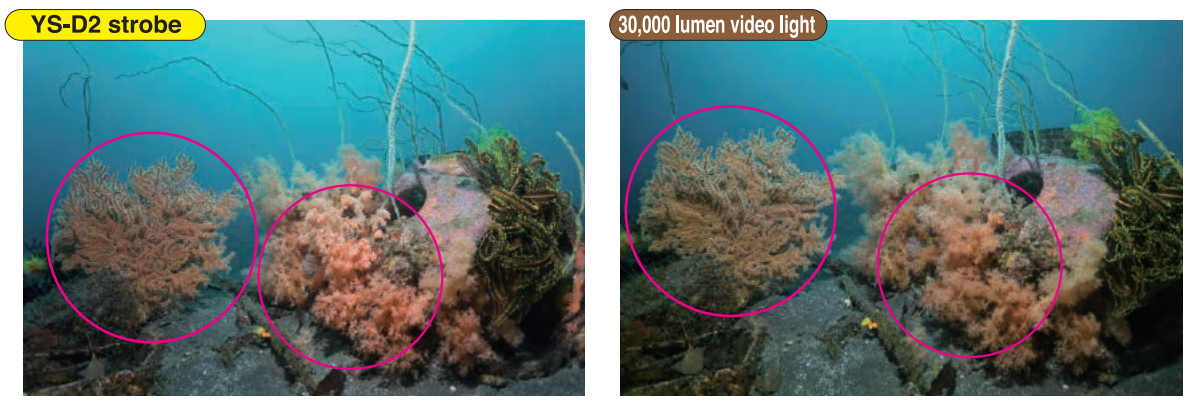


Light intensity is measured as a Guide Number for strobes but as a lumen value for video lights. Because these units of measurement are different, it is difficult to compare which is more powerful. When the measurements are converted however, the YS-D2 gives an equivalence of 509,600 lumens which makes it easy to understand that even a 30,000 lumen video light cannot illuminate the scene like a strobe can.

Also; strobes deliver their high intensity flash for an extremely short period of time which supports using faster shutter speeds. Using faster shutter speeds with a video light means less light can reach the camera's image sensor.

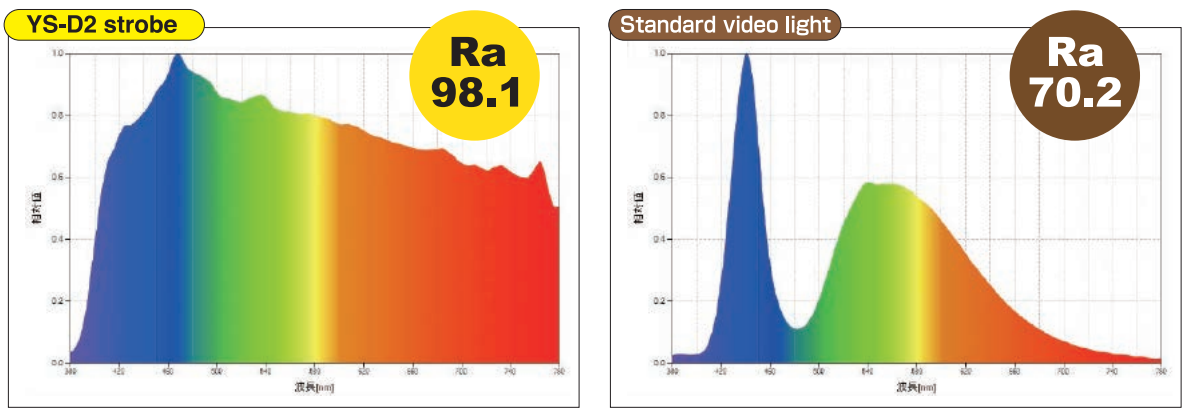
■Differences between strobes and video lights: Colour-Rendering Properties

▼The images below were taken to have the same brightness (Identical camera settings).



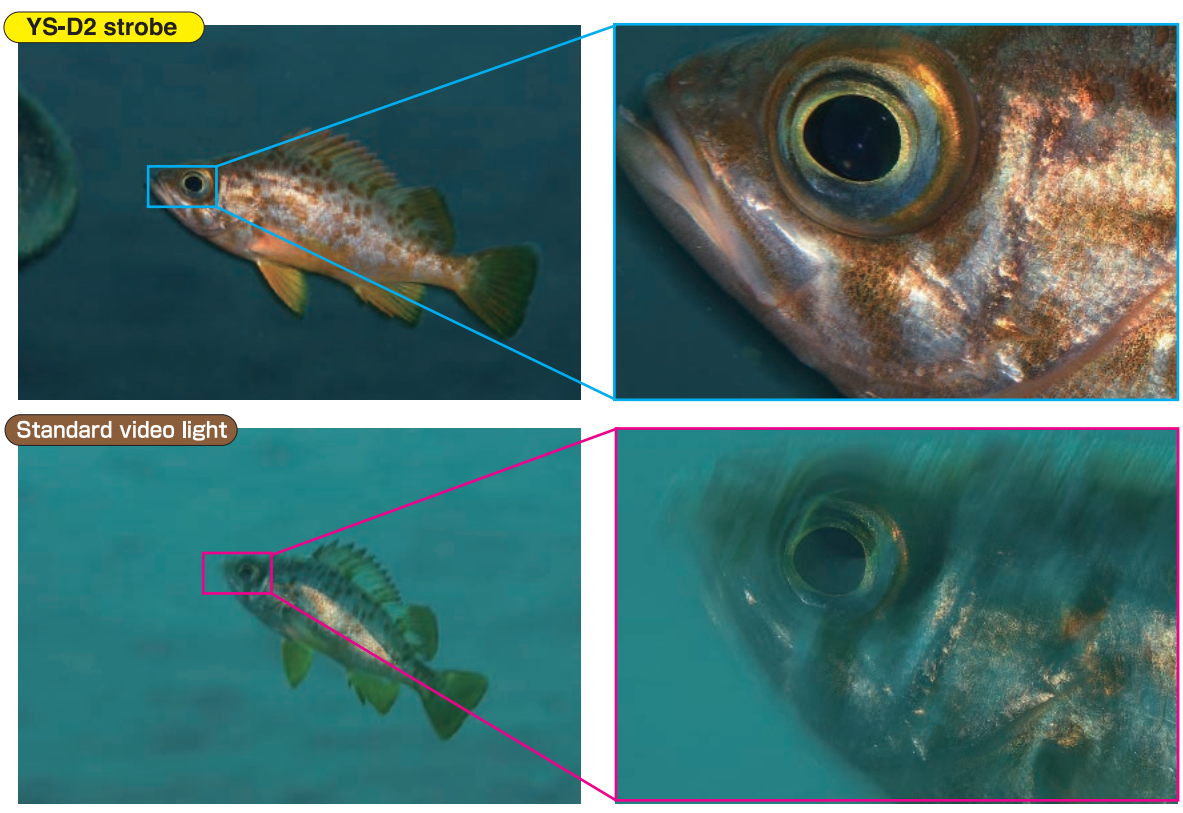
Strobes fire by releasing high voltage electricity across an arc (or xenon) tube. The light produced by a xenon tube is very similar to natural sunlight which means strobes have more natural and superior colour-rendering properties.
Rendering Index Average (Ra) is the quantitative measure of the ability of a light source to reproduce colours faithfully and naturally. The strobes Ra is similar to 100 (the highest Ra value) whereas a standard LED video lights Ra value is around 70. As a result, warm colours such as red are not reproduced faithfully and naturally by video lights.

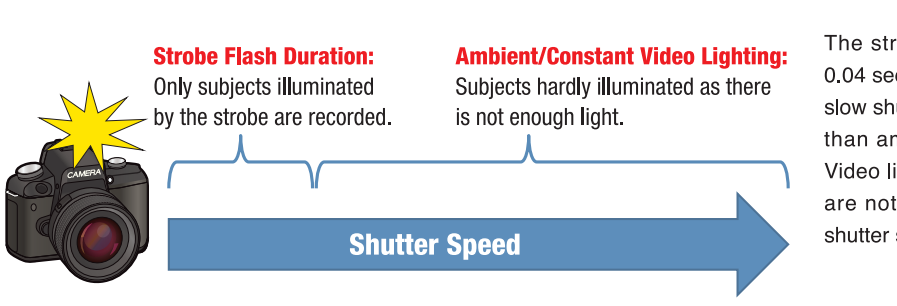
▼Strobe light vs. Video light: Spectrum Comparison.



■Strobe light 'freezes' moving subjects.

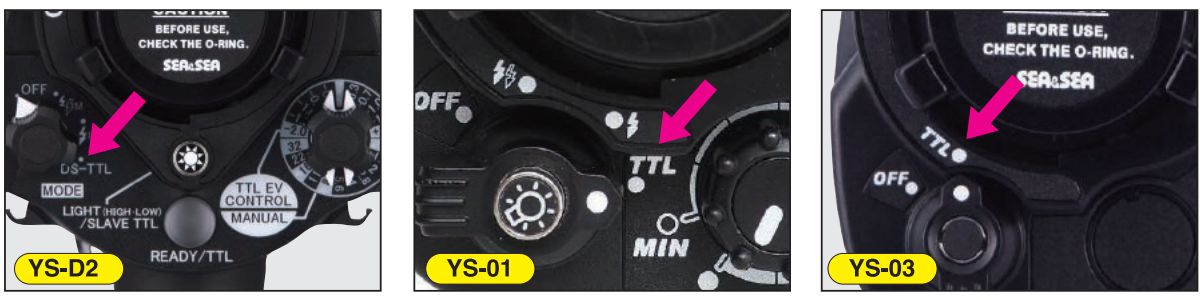
▼The images below were taken at a 1/10 sec. shutter speed.





The strobes flash duration is between 0.0001 to 0.04 sec. (1/10000 to 1/250 sec.) Therefore, even at slow shutter speeds, when strobe lighting is stronger than ambient light, moving subjects are 'frozen'. Video lights do not freeze moving subjects as they are not powerful enough to allow the use of fast shutter speeds.

■Strobes with TTL automatic exposure are easy to use.



Strobes are the best means of taking beautiful underwater photos because of the automatic exposure system known as TTL (Through-The-Lens). TTL automatically gives you just the right amount of light for correct exposure and all the images on the front page of this brochure were taken with SEA&SEA strobes in TTL Mode.

All SEA&SEA strobes are easy to use with minimal controls. By simply setting the mode dial to the TTL or DS-TTL position (as shown above), the strobes calculate the right amount of light needed. Subtle adjustment is also possible using either the cameras' or the strobes' exposure compensation function.

Tips

- *Set the cameras built-in flash to 'forced flash' mode.*
- *Set the cameras ISO sensitivity between 100 and 400.*