

## getting started in u/w photography

TEXT AND PHOTOGRAPHY BY JACK AND SUE DRAFAHL



The Sea & Sea Motor Marine II-EX with YS-60 strobe (shown below) is perfect for photos of subjects such as this Blackside Hawkfish.

# The Basics of Strobe Photography Using the Right Tool

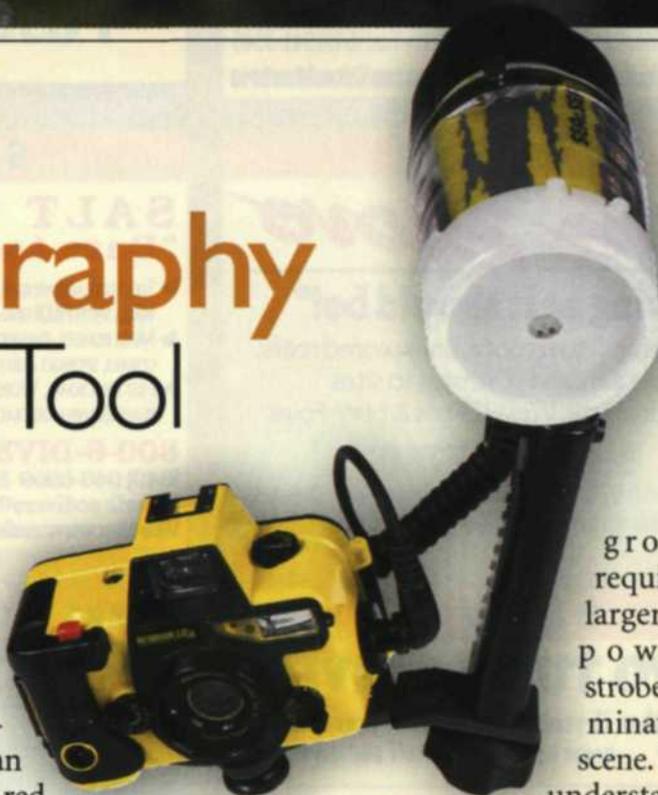
One of the most important tools available to the underwater photographer is the electronic flash or strobe. Used correctly, this auxiliary light source can make the difference between capturing a memory on film or having only a fading memory. Over the years a great deal of research and development have gone into strobe manufacturing. Technicians constantly strive to make them smaller and more powerful, with added features and expanded flexibility.

Fortunately, Sea & Sea Products, Ltd., offers four different strobes to fit almost any situation. The YS-30TTL Duo, YS-60TTL, YS-120 Duo and the YS-300TTL will work with the Motor Marine II-EX underwater camera, most underwater camera housings and the Nikonos via five

pin strobe cords.

As light penetrates the water, some of it is absorbed but not evenly across the color spectrum. The red end of the spectrum is absorbed faster than the blue end, so by 30 feet red objects no longer look red. So, what do you do? Add auxiliary light to illuminate the scene; an underwater strobe puts color back into the picture.

The key to great underwater pictures is matching the right strobe to a specific camera setup and diving situation. The size of the subject is the first consideration. A small macro subject normally needs a compact, low powered strobe. Large subjects, such as divers, turtles or



groupers, require a larger, more powerful strobe to illuminate the scene. To better understand the

use of strobes, we will take you through several situations we have encountered while on location for *Skin Diver*.

A macro lens reduces the subject to lens distance, which allows crisp, razor-sharp images of tiny critters. When we use a 1:2 or 1:3 macro lens, we like to have the strobe close to the top of the camera. This reduces the shadow falling under the subject and illuminates the fine detail that makes macro images so

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impressive. We use either the YS-30 or YS-60 on a short, flexible strobe arm or with the hot shoe arm. The TTL exposure function works great because the subject almost always fills the frame and

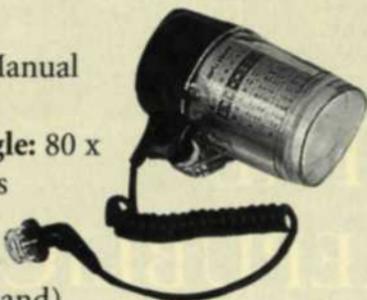
For close-up photography we switch to the close-up lens inside the Motor Marine II-EX body.

Our strobe selection would lean more to the YS-60 and YS-120 to ensure adequate f/stops at increased subject distances. If we want to stay compact, we use only one strobe. When we desire the best lighting possible, we place a YS-60 on one side and a YS-120 on the other, using the

## underwater strobes

### SEA & SEA YS-30TTL DUO

**Modes:** Manual and TTL  
**Beam angle:** 80 x 55 degrees  
**Guide #:** 66 (ft., ISO 100, land)  
**Recycle time:** 4 seconds (nickel-cadmium), 5 seconds (alkaline)  
**Number of flashes (on full):** 140 (nickel-cadmium), 250 (alkaline)  
**Color temperature:** 5900°K  
**Power source:** 2 AA batteries  
**Function indicators (LED):** Flash ready lamp (red), TTL confirmation (green)  
**Built-in TTL slave**  
**Retail Price:** \$395



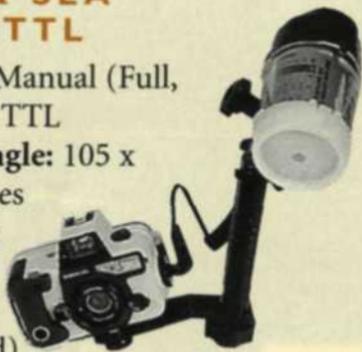
### SEA & SEA YS-300TTL

**Modes:** Manual (Full, 1/2, 1/4) and TTL  
**Beam angle:** 100 x 100 degrees  
**Guide #:** 98 (ft., ISO 100, land)  
**Recycle time:** 4 seconds (full)  
**Number of flashes (on full):** 120  
**Color temperature:** 5500°K  
**Function indicators (LED & audible):** Flash ready lamp (orange) and TTL confirmation lamp (green)  
**Power source:** 7.2 volt nickel-cadmium battery  
**Built-in slave**  
**Built-in modeling light**  
**Retail Price:** \$1,025 (includes battery and charger)



### SEA & SEA YS-60TTL

**Modes:** Manual (Full, 1/2) and TTL  
**Beam angle:** 105 x 95 degrees  
**Guide #:** 72 (ft., ISO 100, land)  
**Recycle time (on full):** 4 seconds (nickel-cadmium), 6.5 seconds (alkaline)  
**Number of flashes (on full):** 200 (alkaline), 120 (nickel-cadmium)  
**Color temperature:** 5400°K  
**Power source:** 4 AA batteries  
**Function indicators (LED):** Flash ready lamp (red), TTL confirmation lamp (green)  
**Retail Price:** \$559



### SEA & SEA YS-120 DUO

**Modes:** Manual (Full, 1/2) and TTL  
**Beam angle:** 105 x 105 degrees  
**Guide #:** 72 (ft., ISO 100, land)  
**Recycle time (on full):** 2 to 3 seconds (nickel-cadmium), 3 to 4 seconds (alkaline), 5 seconds (lithium)  
**Number of flashes (on full):** 140 (nickel-cadmium), 280 (alkaline), 600 (lithium)  
**Color temperature:** 5100°K, 4800°K with diffuser  
**Function indicators (LED & audible):** Flash ready lamp (orange), TTL confirmation lamp (green)  
**Power source:** 8 AA batteries  
**Retail Price:** \$803



provides accurate feedback. If there is particulate in the water that might cause backscatter, we move the strobe above the framer or off to the side to reduce lighting the particulate.

special Sea & Sea dual cord adapter.

Angle of coverage is also very important when selecting your strobe. If the angle of coverage is less than the lens, (Continued on Page 66)

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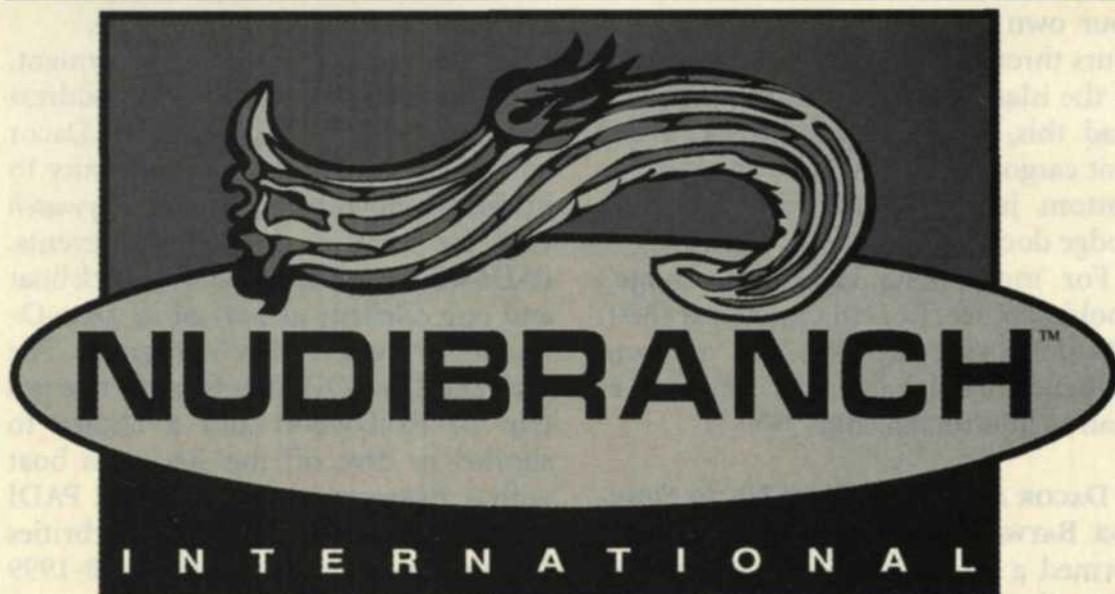
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(Continued from Page 22)

you will get light fall-off—merely add a second strobe to expand the coverage. A strobe on either side of the camera gives you a better lighting ratio on the subject but you give up compactness.

Strobe selection for wide-angle photography also depends on film speed, density of the water, light level and subject distance. When we dive in colder waters, we lean toward the YS-120 and YS-300 to compensate for the loss of light owing to water density. In warmer, tropical waters, we use the YS-120 and YS-60 together and separately in our wide angle setups. If the light level drops owing to time of day or depth, we can increase film speed, strobe size or use wider apertures. Many of the new ISO 400 films are high quality and do several things for our wide angle images. If we use the YS-300, the increased film speed allows us to shoot a more distant subject with a smaller f/stop. On the flip side, we can use the increased film speed to utilize one or two of the smaller YS-60 or YS-120 strobes and still have good working f/stops.

Since the Motor Marine II-EX allows the flexibility of changing lenses underwater, we have to plan our strobe use. We prefer the YS-60 or YS-120 strobe on a long arm and the YS-30 on a short arm or tucked away in a BC pocket (it can be used as a cordless TTL slave). Together, the two strobes cover just about any photo situation we could encounter.

We realize new underwater photographers can't go out and buy all four strobes. So where do you start? We feel the best starting point is with the YS-60. Sea & Sea feels the same way, this is the strobe included in the Motor Marine II-EX Kit. As you expand your photographic skills, you can purchase different lenses and additional strobes to match.

For more information, contact Sea & Sea Underwater Photography USA, 1938 Kellogg Avenue, Carlsbad, CA 92008; (760) 929-1909, fax (760) 929-0098. 🐟

## skin diver

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