

Edited by Kurt Amsler Peter Symes and Scott Bennett

No Flash



Text and photos by Kurt Amsler Translation by Arnold Weisz

Taking photos underwater without a flash is not common, but it actually is easier than using a flash. I have a few tips and advice for getting good results.

Underwater photography can be challenging. It is not easy. On dry land, you don't encounter to

many obstacles, but under water, vou have to 'fight' for every single ray of light. Not only is light diffused by the water but also absorbed by particles and scattered everywhere. These are reasons good enough to invest and bring your own sunshine with you,

in the form of a strobe. However, a good strobe often costs much more than a digital camera. On the other hand, if you have clear water and adequate natural light, you can produce nice images as well.

Subjects

Natural light photography

can be divided in two cat-

egories. The first category

affects the motive, in which

colour is subordinate - for

example when you shoot

wrecks and backlit images.

The second category affects

shooting in shallow water

(less than 3 metres depth).

Natural light photography can be divided into two categories. The first category affects the subject in which colour is subordinate—for example, when you shoot wrecks and backlit images. The second category affects shooting in shallow water (less than three metres depth). Ideal models are marine mammals and all animals that usu-

> ally hang around just below the surface. In addition, good subjects can also be offered by coral landscapes, reflections, snorklers and freedivers.

Techniques

Natural light photography is much less complicated than flash photography. For the best results, select

the aperture priority auto mode. Shutter speed priority you can use when you know the speed of the subject.

Be careful photographing dark subjects. If the subject doesn't fill at least 60 percent of the image,

Even at 20 meters depth, images taken with a "magic filter" and no flash can turn out great

77 X-RAY MAG: 27: 2008

EDITORIAL FEATURES TRAVEL NEWS EQUIPMENT BOOKS SCIENCE & ECOLOGY

EDUCATION



THIS PAGE: Ideal conditions for working in shallow water (below) or with wrecks (right), are good sunlight and clear water

the brighter parts will influence the aperture, and the subject will appear even darker. In those situations you should overexpose.

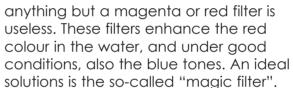
The better cameras usually give you the possibility for exposure correction. Set your camera on +1/3 or +2/3. In your manual this is sometimes referred to as exposure compensation. If you don't have this option, there is a little

trick that will achieve the same effect. Lower the sensitivity setting—the ISO setting—from 100 to, for example, 85 or 65. Analogue photographers should always make several exposures with different settings.

Filters

On land, you can use UV-filters, skylight or a polarizing filter, but underwater





The principles for filters are the changing the colour temperatures and smoothing out the colours. The magic filter is not meant for balancing the absorption of colours under water, but for compensating for the missing colours. However, be aware that the filter works only on digital cameras and can not be used together with strobes.

White balance

To get good results at any depth, it is essential to get your white balance right. You have to change your white balance whenever you are changing depth or angle relative to the sun. Filters work best in clear water and by strong sunlight. For the best contrast between the subject and the background, try to capture the subject in open water. If you keep this in mind, you will be able to make colour-saturated images





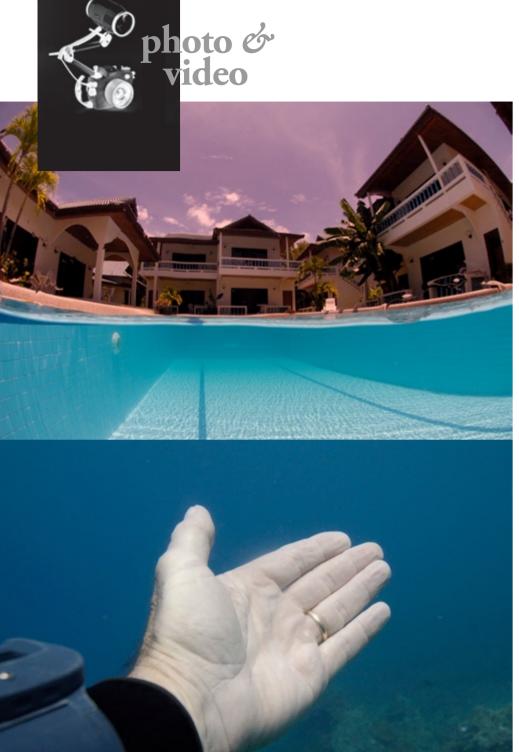
www.seacam.com





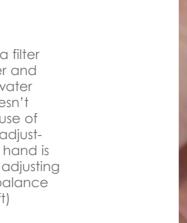
X-RAY MAG: 27: 2008

EDUCATION



down to 15 meters. This seems to contradict the laws of known physics, but it works. You can get filters for most fisheye and wide angel lenses (www.magic**filters.com**) and for most compact digital cameras as well. Images done with the magic filter don't need to be processes afterwards, if you remembered to get the white balance and the exposure right. The only disadvantage with filters are that they only work with digital cameras.

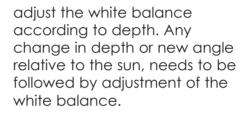
LEFT: Using a filter for half over and half underwater images doesn't work because of the colour adjustment. Your hand is perfect for adjusting the white balance (bottom left)



Tips

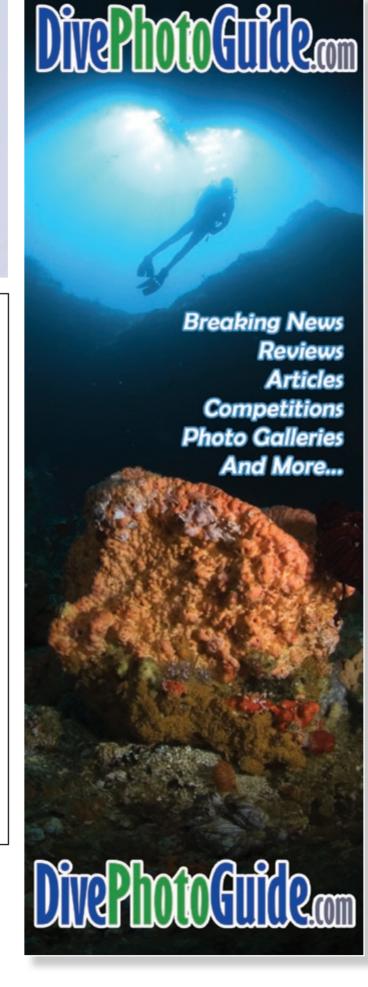
- Visibility and light conditions are the most important aspects of natural light photography. On cloudy days, it's better to use strobes to get sufficient illumination for contrast and colours in your images.
- With the exception of backlight photography, you should always have the sun in the back or slightly in from the side.
- When diving in water that is full of particles, direct sunlight will also expose these particles just as a strobe would.
- In natural light photography, it is important to get a good contrast between the subject and the background. The farther the background is from the subject, the better the contrast and the focus of the subject.
- For optimum results, always

Depending on your subject, you either attach the filter in front of the lens (right), or you trim it to fit to slide in behind the lens (top)



- Bring a white plastic slate to adjust the white balance. Keep it handy on at the end of a retractor line.
- It is also possible to use the palm of your hand for adjusting the white balance. Just remember, in order to get the correct readings, you need to fill at least 60 percent of the viewfinder.
- To avoid blurred subjects due to movements, set your shutter speed accordingly. For moving subjects, you should use minimum 1/125 or quicker. For stationary subjects you can use 1/60 or slower.
- For natural light photography, keep your shutter on auto.
- If you use a "magic filter", you don't need to process the images afterwards if you used the correct white balance and exposure. If you still need to make any adjustments, do it in the RAW format or format the images from jpeg to tiff.











Bluefin

Light & Motion's Bluefin SR12 housing is a compact, enthusiast level, 1920 x 1080 high-definition video package built around Sony's new solid-state, hard-disk drive (HDD) equipped camcorders. With features like one-touch white balance and tele-macro, the Bluefin SR12 housing is well positioned to take advantage of all of the features that make the Sony HDR-SR12 the camera to have. www.uwimaging.com

Remora

Fantasea Line is pleased to announce the addition of a new flash, that has been especially designed for compact digital housings. The new Fantasea Remora Flash features four different pre-flash settings, to cover the needs of all compact digital cameras in the market, including Nikon, Canon, Sony, Olympus, Fuji, Kodak, Panasonic and more. It

features a guide number of
20, and therefore is compatible for both macro
and wide angle shots. The power output can be manually adjusted to provide the most accurate amount of
light in all conditions and a short recycle time ensures quick
responsiveness even when using the maximum power output.
The Fantasea Remora Flash also features a built-in Y-S Mount
for attaching a focus light on top of the flash, sparing the need
for an additional arm. www.fantasea.com

HugyCheck

Text by Scott Bennett

Hugyfot's new HugyCheck system that enables underwater photographers to check whether their housing has been closed properly and whether the o-rings are in good condition prior to a dive. The inside pressure is reduced to 0.8 bar by means of an electrical vacuum pump and a one way valve, which fits inside a standard Nikonos bulkhead. A pressure sensor inside the housing along with a red and green LED on the camera's hot-shoe measures and displays the actual pressure inside the housing. When a vacuum is present, the green LED lights up or in case of a pressure loss (housing not closed properly) the red LED takes over. When used approximately 30 minutes prior to



a dive, the system should eliminate most problems.

An additional benefit is the fact that the vacuum squeezes the o-rings in the best possible sealing position prior to entering the water. As an o-ring needs pressure to seal off properly, this is only achieved at a depth of 6 metres when the water pressure squeezes the o-rings into position. With the HugyCheck system, the housing the o-rings are already in place on land. This revolutionary system offers divers the peace of mind to take their expensive equipment underwater without worry of flooding.



D3X has landed

Nikon has announced the D3X, its latest high-resultion professional DSLR. Sporting an imaging sensor with double the number of photosites of the popular D3, the 24.5 megapixel D3x includes similar features such as a 3.0", 920,000 dot LCD monitor with Live View, 51-point autofocus, EXPEED image processing and HDMI output. To keep up with the demands of stock photography the camera produces 50MB 14-bit RAW files that can be processed to produce 140MB TIFFs. It also supports Nikon's wireless system and is compatible with Nikon's new GP-1 GPS unit.

www.europe-nikon.com



REMORA



Olympus and PADI team up

The partnership provides the more than 175,000 PADI Diving Society members with direct access via events to Olympus cameras for learning underwater photography skills and earning a PADI Digital Underwater Photographer Specialty certification. It also enables Olympus and PADI to co-brand their underwater photography offerings at PADI Diving Society events around the world, including the recent PADI Photo Safari hosted in Bonaire as well as the 10th Annual Total Submersion Dive Festival and the Tahiti Dive Festival scheduled for 2009. Additional details are available at www.olympusamerica. com/underwater and www.padi.com

Head mounted video

The ScubaCam system features a bullet camera encased in a custom built watertight housing that is small enough to be mounted to the user's wrist or face mask. There is a 3ft (1 meter) cable running from the camera to a canister that houses the recording device and battery. The system records. www.edgecameras.com



