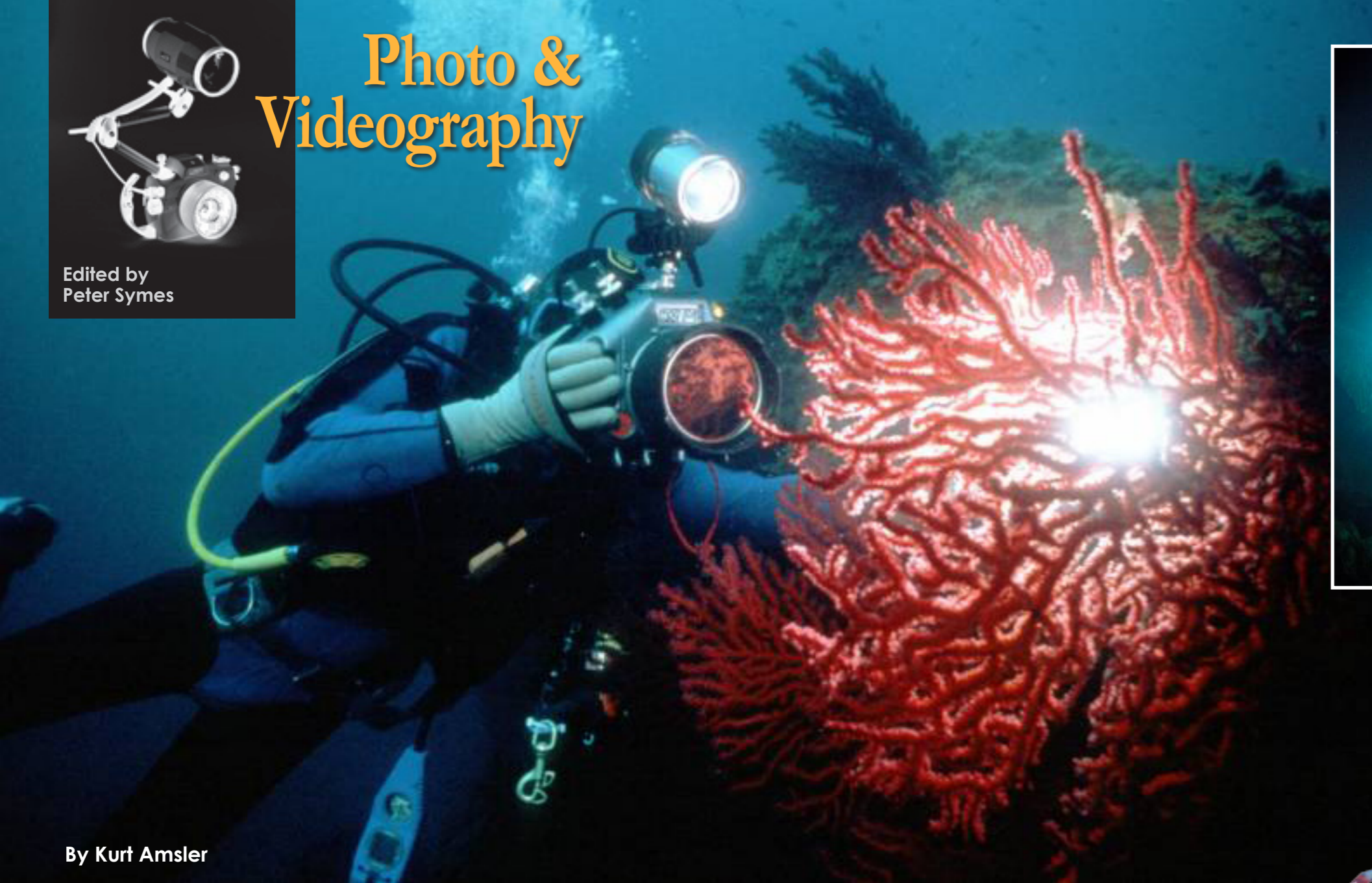




Photo & Videography

Edited by Peter Symes



By Kurt Amsler

Getting an underwater camera is really only half the solution. Without a proper light source the possibilities will be very limited. Having one or more strobes are essential, but how to chose the right unit?

In order to make the most of your strobes underwater, there are a few important issues to consider:

First of all, the strobes—or flash units—need to be both neutrally buoyant and in balance. It is no good if one end is positively buoyant and the other negative. A neutral and bal-

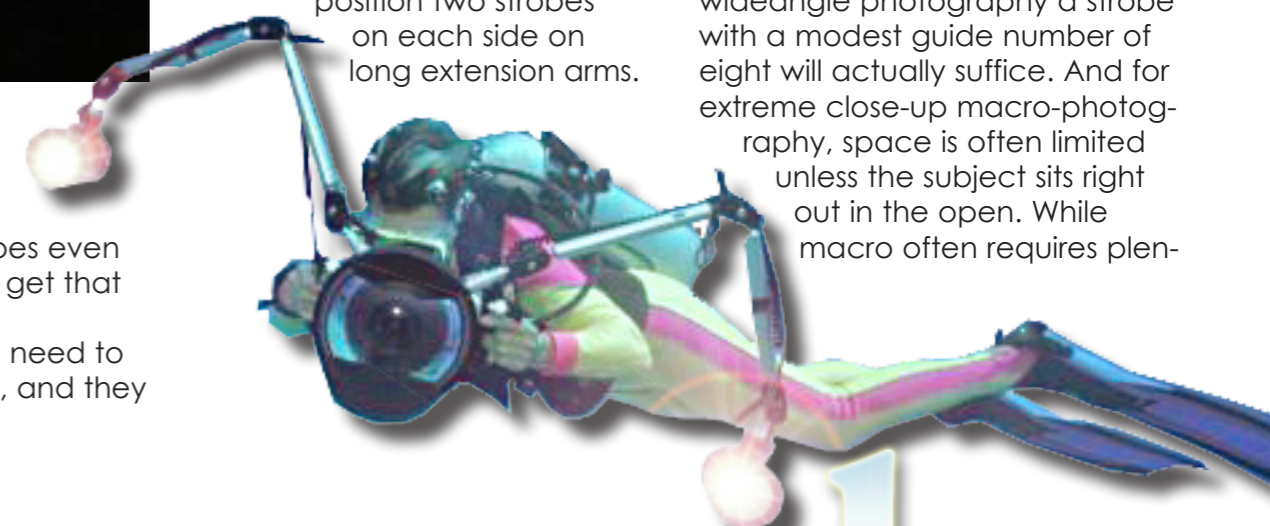
anced strobe ensures that the photographer can work in any position or situation and not get exhausted from supporting or directing the strobes even after the typical ten minute hover to get that elusive shot.

Needless to say, the cameras, too, need to be perfectly buoyant and balanced, and they

usually are. But it is to no avail if fitting the strobe to the camera doesn't balance either.

Another feature to consider is the size of the unit. Yes, size does matter but here the rule is: The smaller, the better. When shooting wide-angle, it is customary to position two strobes on each side on long extension arms.

Carrying bulky units in this position can cause a lot of drag pushing them through the water and any current will soon enough turn a swim with that setup into a fitness exercise. Many divers put too much emphasis on power and output (as defined by a guide number). But with mixed-light wideangle photography a strobe with a modest guide number of eight will actually suffice. And for extreme close-up macro-photography, space is often limited unless the subject sits right out in the open. While macro often requires plen-



Strobe Photography



Photo & Videography

ty of power, this can be achieved with two smaller units—it actually enables you to obtain a better colour reproduction.

TTL or manual exposure?

It would be silly not to use automatic strobe exposure control (TTL) for macro, close-up or with lenses covering angles up to 60°. For wider angles, especially

with super wide-angle lenses, strobe exposure is influenced by a number of factors, and TTL exposure would not be appropriate. This is easily understood when looking at the way automatic strobe exposure control works. Light emitted by the strobe is reflected by the subject and measured either in volume or speed, depending on the TTL system built into the camera electronics. This enables the camera to control the strobe for accurately exposure. This works well when our subject is well defined in space and distance as is usually the case when working at close to medium range. However, when working with a wide-angle lens, we have a different situation. Other than our main subject, there will be



*“Amsler’s Formula”:
AS + EA
(aperture as per strobe + exposure time as per available light)*

a heck of a lot of other stuff in the frame. The exposure program can’t tell whether the light it measures is being reflected off what’s important or off a part in the frame that’s unimportant but closer to the camera. Also, most the time, an open water backdrop surrounds our subjects as well. So, if the subject does not fill more than 70 percent of the frame, there will not be sufficient reflection for proper metering. Exposure errors are quite common when not bearing this in mind. For wide-angle photography, it is therefore advisable to use manual exposure taking into consideration existing light.

Mixed light photography

Often photographers forget that—thanks to the great big diving light in the sky—

Verly slightly underexposure the background to saturate the colour and give depth

The strobe dictates the aperture. To find the matching shutterspeed, measure the background light by pointing your meter upward at an angle of about 30 degrees

they have daylight at their disposal as well. We use it to show more in our pictures than the strobe can illuminate. For optimum effect, we mix the two sources of light highlighting elements in the foreground and emphasizing their colours by flash, while ambient light generates depth in the background where the strobe light can’t reach.

Amsler’s Formula

To achieve consistent results apply “Amsler’s Formula”: AS + EA (aperture as per strobe + exposure time as per available light). Any strobe, whether of the dry or wet variety, dictates a specific

aperture setting. With the aperture given, we are then left to control exposure of the background by varying shutter speed. Consequently, the photographer has to measure the ambient light first to find out which shutter speed matches the aperture setting dictated by the strobe unit for a correct exposure of the background. This is easy using the camera's built-in light meter. Some cameras and housings even allow the photographer to switch from spot metering to integral or matrix metering! Spot metering

often gives you better information and an impression of the lighting conditions simply by pointing the measuring spot around and taking measurements. To enhance colour contrast, we are aiming at having our backgrounds reproduced slightly on the dark side. So, we don't point the camera directly at the main subject while we measure the light. Instead, we aim high—approximately in a 30° angle up towards the surface. This metering might, just for as an example, indicate that a shutter speed of 1/30

will match the set aperture of f8 (as dictated by the strobe) so that is where you put the camera's setting. The slow shutter speed will allow for sufficient available light to expose parts of the film representing the background and gives us the rich, dark, blue water background we are after. The strobe that illuminates the foreground



isn't affected by the shutter speed as the flash goes off much faster—it is only controlled by the aperture.

After some practice with a light meter, the photographer will soon develop the ability to "read" the ambient light. (S)he is then capable of working out the correct mixed light exposure time from experience for any depth or situation.

10 Tips

1. Most important, the strobe needs to be buoyant and perfectly balanced so you are able to work in any position. A buoyant strobe can be easily aimed at the subject because it can be moved in any direction without releasing the joints of the strobe arms.
2. Remember that in wide-angle photography the position of the strobe is very important to avoid backscatter and to gain an uniform illumination of the subject. You have to



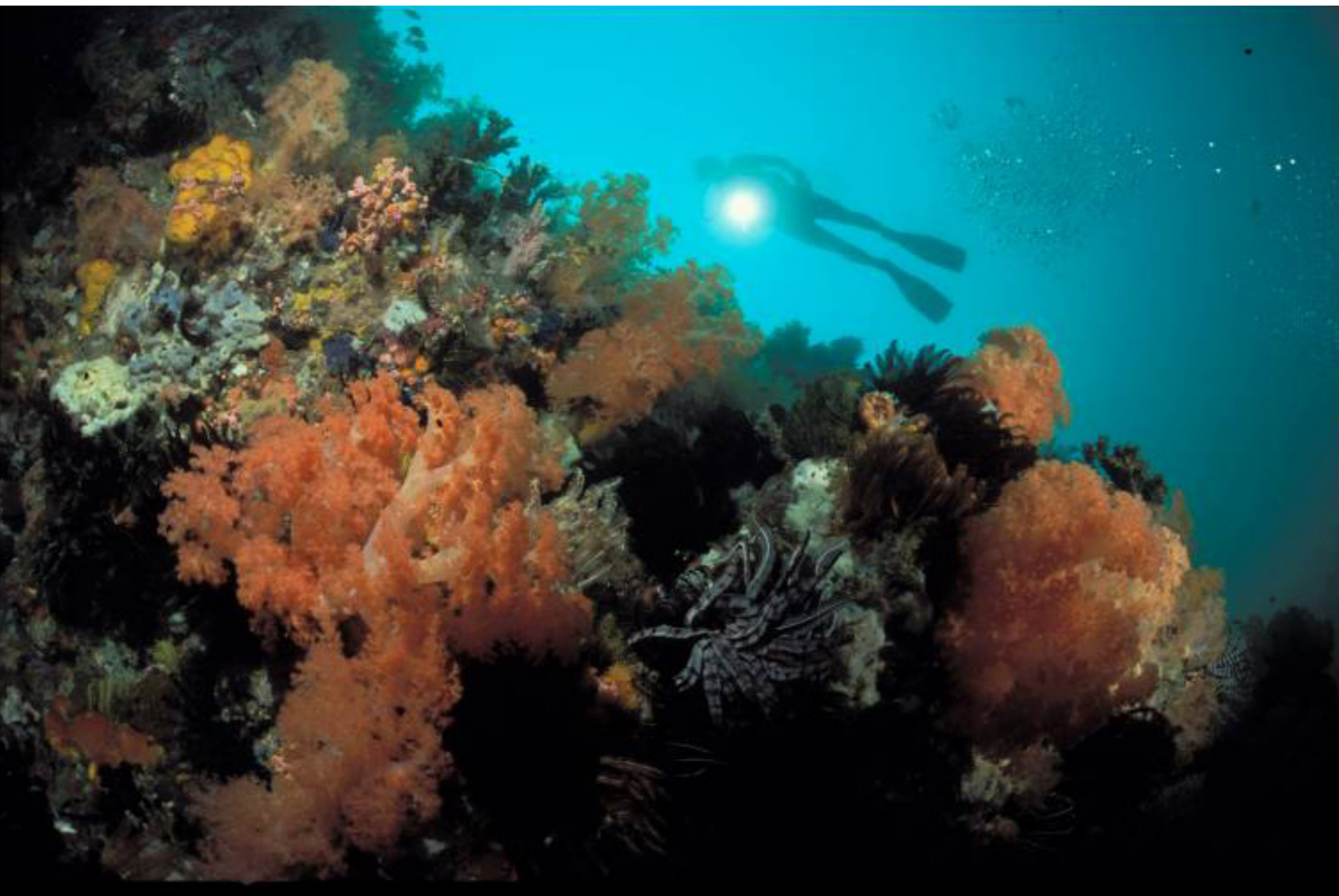
Touché See how beautiful a perfectly balanced exposure can render the motif



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photography news

Stobes can also be used remotely

take into account that the larger the picture angle, the further the stobes have to be positioned away from the lens!

- 3 Analogue , I-TTL or E-TTL are great inventions, but you have to know how to use them. In macro and close-up photography, problems rarely occur. Using TTL in wide-angle photography, on the other hand, is often tricky, any foreground or a incorrect strobe position can result in under or over-exposed pictures. I recommend using manual flash mode for wide-angle.
- 4. Due to refraction, all subjects underwater appears to be closer than they really are. Consequently never aim your strobe at the apparent distance in which case too much light will hit the foreground and illuminate the water between camera and subjects. The results are diffuse pictures, overexposed foregrounds and backscatter. Aim the strobe always over the subject, or next to it, if using two stobes. The best option is to have a focusing light inbuilt or fixed on each strobe.
- 5. Take good care of your strobe connectors. Unplug them after a day of diving and clean the tiny O-rings. Be



Invest in a spare sync cable



careful when you unplug them so no saltwater or grease get in contact with the pins. Clean the pins regularly with alcohol.

- 6. Going on diving holidays... always bring a spare sync-cable with you. Modern stobes are powered with regular batteries. I recommend using rechargeable batteries of 1500 ma as they recharge the strobe capacitor much faster. As a back-up, in case of electrical problems on a dive boat or other unforeseen events, always bring a pack of regular batteries with you.
- 7. Using full power strobe in murky water has the same effect as using long



Use rechargeable batteries (left) but bring normal batteries (right) as backup

lights when driving in a fog. You just illuminate particles. Serious photographers, therefore, power the strobe power down in response to reduced visibility—the murkier, the less power.

Reducing power is only possible in manual mode, by switching to ½ or ¼ power.

- 8. Perhaps you were wondering about the white diffuser cap most manufactures deliver with the strobe unit. It has the effect of making the light softer, warmer and reduces the light output by one f-stop. Use it in murky water to gain less backscatter and also if you take pictures of people in indoor pools



or at close distances in general. It renders skin tones warmer, and therefore, more appealing in the picture.

- 9. Never forget to consider the ambient light besides that of your strobe! Mixing the two light sources will change the "common" black background in macro as a matter of choice, but it is a must in wide-angle to show more in the pictures as the strobe can illuminate. Use "Amsler's Formula": AS + EA as it is explained in the main text.
- 10. Due to the distance the light has to travel through water, the colour temperature of the strobe plays a big role if your subject will appear in their original colours in the picture. Macro stobes have 5600° Kelvin and cannot be used for wide-angle because the light is too cold (blue tint). Wide-angle stobes have 4900° to 5200° Kelvin and are therefore too warm (reddish) for macro. To modify your wide-angle strobe for macro photography, you can add a light blue foil on the strobe. It is a compromise, but better than having yellow anemones reproduced as orange. ■

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10 megapixel from Sea & Sea: The DX-1G

A few key features: Depth rating of 55m / 180ft; Macro mode that enables you to bring the lens as close as 1cm / 0.4 inches to the subject; 10 million effective pixels, which offers superior resolution and the ability to vividly record every detail of your precious moments (the maximum recordable number of pixels is 3648x2736); CCD shift-method vibration correction function, which is exceptionally effective in stabilizing images when the shutter is pressed; 2.5-inch, 230,000-pixel LCD monitor. ■

From the Rumour Factory: New dSLRs

Rumors are running rampant about a forthcoming high-end DSLR from **Nikon, the D3**, allegedly with 18.7-megapixels, a nearly full frame sensor and excellent abilities to cope with low-light conditions.

It also looks like the much rumoured and long-awaited **Canon 40D** DSLR camera, successor to the popular EOS 30D model may finally be arriving. Camera & Imaging Products Association (CIPA), which Canon is a member of, has listed the Canon 40D but with no specs or pictures.

On the other hand pictures of a new, **yet un-named, Sony Alpha** DSLR has been released (right). According to PhotoClub-Alpha.com, a range of new Sony lenses will be full-frame, leading to the belief that Sony will release a full-frame DSLR sometime in 2008. ■



34th World Festival of Underwater Pictures to be held at Marineland in Antibes

The 34th World Festival of Underwater Pictures will be held in Antibes, France, at the marine mammal park MARINELAND from October 24-28. All festival-goers and participants can attend the shows offered by Marineland As 2007 is also Aqua Lung's 60th birthday. The 34th edition of the Festival will take part in the celebration of this jubilee.

The opening-ceremony will be held round the orcas' basin with more than 4.000 seats. This evening will include an Orca show and the screening of a film chosen among the films in competition. A cocktail will close the evening.


In the new spaces placed at our disposal by the marine theme park MARINELAND, the Festival will spread over another dimension.

During the Festival, the competitors' films, slides and slideshow will be screened into two rooms (1.000 and 300 seats). Three restaurants will receive the festival participants inside the MARINELAND Park. Last but not least, we will have a dedicated space at our disposal for our festive evenings.

The prize ceremony will be held round the Orcas' basin. During the ceremony, all the Festival participants will be able to attend the showing of the awarded films in the two viewing rooms. ■

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Via Press Release (edited)

PADI Asia Pacific Partners With Olympus

Olympus and PADI has announced that they have partnered in support of the PADI Digital Underwater Photographer Specialty Course in Asia Pacific, including Singapore, Malaysia, Thailand and Indonesia.

During the course, participants learn to use the PADI SEA (Shoot, Examine and Adjust) method, which takes full advantage of digital technology to achieve good underwater photos faster. They not only learn the three primary principles on how to take good photos underwater, but also how to edit and share them with their friends via email or printing, optimizing their work

with their computer, storage and more. They are also taught how to choose and use modern digital cameras and underwater housings.

To sign up for the course, participants must be PADI Open Water Divers or Junior Open Water Divers (or have a qualifying certification from another training organisation).



"We welcome the opportunity to partner Olympus in growing this exciting segment of the dive market—Underwater Photography—one which is growing at a rapid rate. Olympus' brand recognition, market position, reach within Asia Pacific and reputation for providing a consistent quality of service is the reason why we have selected Olympus as our partner. We strongly believe there are multiple synergies in this partnership for both parties. We are already working with Olympus in Europe and as such, it was only natural for us to expand the partnership to the Asia Pacific region," said Mr Shahram Saber, Marketing Manager of PADI Asia Pacific. ■

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The Coolest Corrections

We all know of how wide-angle lenses can give bulging reproductions and barrel distortions. And high contrast images like those taken against a big light source can produce very murky shadows. Enter the the powerful image processing software from DxO Optics PRO, and hey, presto, miracles are almost per-

formed in resurrecting deadish images back to to life.

Noise reduction, exposure and colour correction, coupled with the ability to set a contrast ratio, that makes exposures perfect for print or reproduction, all add up to a package that will soon be indispensable.

Check out the demonstrations here:

www.alphadigitalservices.co.uk

Affordable Monitor Color Correction

Take a picture, any picture. It might be perfectly exposed, but you don't know because your computer monitor might be a little off, and have colour tint itself. So, you make those little adjustments to your image to make it look great on screen and you then print it, you might get something like purple instead of the red you see on your screen.

Pantone has an inexpensive solution: Consider the hueyPRO or its bigger sibling the ColorVision Spyder to calibrate your monitors. If you do this for a living and print on art stock or use custom inks, investigate the ColorVision solution.

The hueyPRO colorimeter distinguishes itself with the following features:

* It's quite small (the size of a marker) and weighs almost nothing so you can easily travel with it—and unlike other devices—you might want to.

* It detects changes in ambient light, adjusting the monitor at regular intervals (which is why you might want to travel with it)

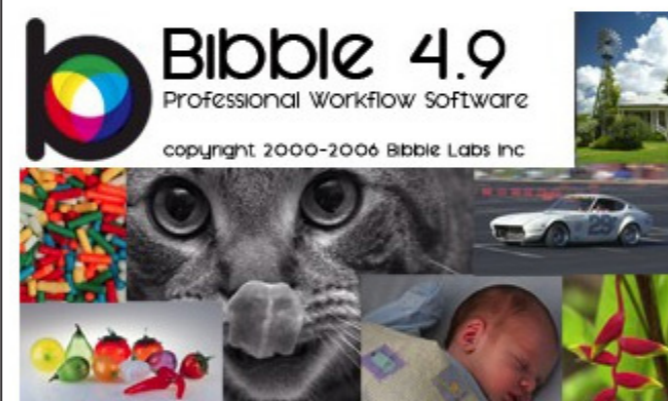
* It can calibrate multiple monitors connected to the same computer ■

Read a fuller review [here](#)



DxO FilmPack is a plug-in for Adobe Photoshop and DxO Optics PRO. It is also available as a stand-alone application.

DxO FilmPack gives digital images the style of the most celebrated conventional films: the colors—and the grain!—of over 20 film types including Kodachrome, Tri-X, Velvia have been analysed and reproduced so they can be applied to all your images with just one click. DxO FilmPack digitally simulates the vibrant colours of Kodachrome 64, the soft grain of Tri-X, or the gentle fleshtones of Astia.



Bibble Pro Version 4.9.8 Adds New Features and Cameras, Including Full Support for the Canon 1D Mark III and Fuji S5 Pro and processing of Fujifilm's Wide Dynamic Range and Canon's new sRAW format

New cameras added in this release include Canon 1D Mark III, Fujifilm S5 Pro, Nikon D40x, Olympus E-510, E-410, and SP500 UZ and Panasonic FZ8. Like its preceding eleven major and minor releases, this latest update is free for all current Bibble 4 customers.

Bibble Pro is the most comprehensive cross-platform RAW Workflow application available today, the Bibble Pro plug-in for Adobe Photoshop supports CS2, CS and version 7, providing native access to the latest camera formats otherwise inaccessible in these older versions of Photoshop. ■

34^e FESTIVAL MONDIAL

DE L'IMAGE SOUS-MARINE



Christine Oana, 18 ans, Roumanie.



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MARINELAND – Antibes – France

24 au 28 octobre 2007



SOUS LE PATRONAGE DE
JEAN LÉONETTI, DÉPUTÉ-MAIRE D'ANTIBES
ET DE CHRISTIAN ESTROSI,
PRÉSIDENT DU CONSEIL GÉNÉRAL DES ALPES-MARITIMES