



AcceleratedVision

DIVE Photo, Video

Instand conversion of
underwater photos or videos
into stunning images or videos
thanks to intelligent underwater corrections

SHARPEN Photo STYLE
HDR NEAT
DENOISE
FOCUS LUT
COLOR
ZOOM BLACK & WHITE
EMOTION DIVE
ANALOG
PANORAMA AI Filter

Guide to the special features of the programmes

DIVE

DIVE is an exceptional programme and, in its current form, is unique on the market for editing **underwater footage**.

On land or at the water's surface, all the colours of a photographed object or subject are reproduced exactly as we see them.

All underwater photographs depict the phenomenon of light absorption underwater and suffer from a blue cast.

The deeper a photographer dives, the more colours are absorbed or 'disappear' in a specific order: **first the reds**, as early as 3 to 5 metres deep, then the **greens**, and finally the **blues**, which remain visible the longest and give the impression that underwater shots taken whilst snorkelling still look almost natural; after that, the colours become increasingly green and, at greater depths, completely blue. From a depth of around 60 metres, everything becomes almost dark. In addition to this distance, which the light travels to reach the subjects being photographed, there is also the distance from the photographer to the subject – the subject distance.

The two **DIVE** programmes for photos and videos are excellent tools for tackling the challenge of '**recalculating**' **these light absorptions and the total distance travelled by the light, thereby simulating a shooting situation as if the photographed objects or subjects had been captured on land, allowing them to shine in their natural splendour**.

Using the core feature of the programmes, the **Underwater Correction** module, you can use the controls to continuously adjust the water depth to your desired setting (**up to 30 metres**) and the subject distance (**up to 20 metres**) or select a preset water depth from the available options.

With a wide range of additional photo editing options and the available presets that simulate a variety of shooting scenarios and subjects, such as a **coral garden**, you can transform your underwater photos into unique images or unforgettable videos with just a few clicks or adjustments to the sliders. The way this module is used is the same in both programmes.

Image and video sources: Special thanks go to Uwe Benecke, who provided all the sample images and videos used in this guide, unless otherwise stated.

Note: Cross-programme functions and modules, such as the RAW module and all other modules available, which can be accessed via the toolbar, can be found in the relevant guides, which you can access via the

Information/Homepage/Support menu <https://accelerated-vision.com/de/support>. You can also find them in the video tutorials under **Information/Homepage** or in the YouTube tutorials under **Information/YouTube Channel**.

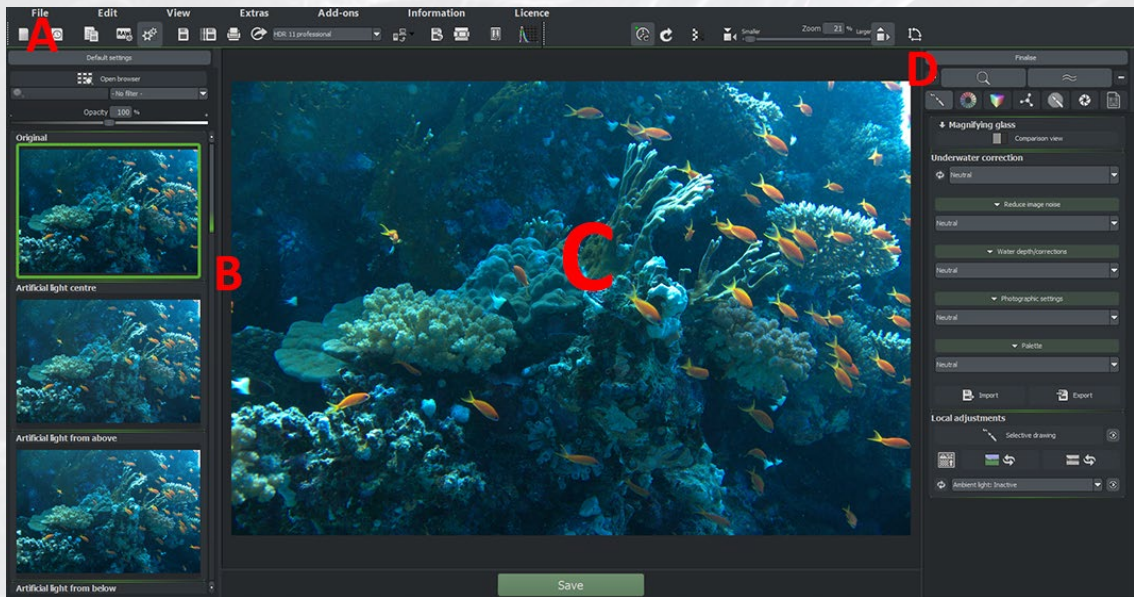
Table of contents

1. [Workspace in DIVE Photo, selected settings](#)
2. [Workspace in DIVE Video](#)
3. [Presets with different lighting scenarios](#)
4. [Underwater Correction Module - Overview](#)
5. [Water depth/corrections - detailed correction options](#)
6. [Reduce image noise](#)
7. [Photographic settings](#)
8. [Palette](#)
9. [Proposed workflow](#)
10. [Master presets – the quickest route to success](#)
11. [Use DIVE for “standard” above-water shots](#)
12. [Create exciting lighting effects with a depth map](#)
13. [Export/import functions](#)
14. [Proposed workflow for DIVE Video](#)

1. Workspace in DIVE Photo, selected settings

If you already own another Accelerated Vision programme, you won't need to adapt to the new system, despite the inclusion of the special underwater module. The layout and use of the menus, tools and modules available in the toolbar are identical, require no adjustment, and are described in detail in the [General functions](#) guide.

Note: The user interface is designed for **4K screens**. On **Full HD screens**, you will need to scroll down slightly to see all the options.



DIVE Photo is divided into four main areas:

A: Menu and toolbars.

B: Presets with different lighting scenarios.

C: Image area displaying the loaded image (in this example, a corrected image).

D: Toolbar in finalisation mode with selectable modules (see next page).

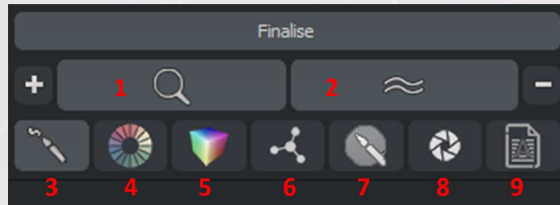
Differences from other programmes:

- In **DIVE**, once you have loaded an original image, you will immediately see the **Magnifying Glass**, **Underwater correction** and **Local adjustments** modules displayed on the right-hand side in **Finalise mode**, next to the toolbar. In the screenshot, the **Water depth/corrections** section has been collapsed for clarity.
- **Expert mode:** This mode, which is available in many other programmes alongside the **Finalise mode**, is not available in **DIVE**.

Note: If you **right-click on the image**, you can see a **comparison with the original** after every change you make or every time you select an alternative preset.

Exception: With the default **Original preset**, right-clicking on the image will naturally display the same image if nothing else has been changed.

Selectable modules in the toolbar

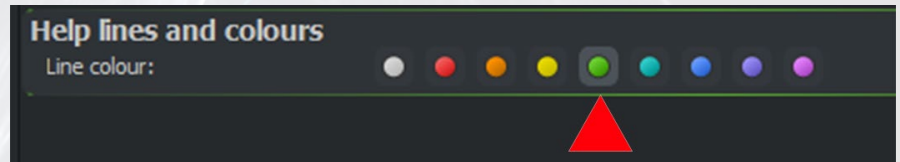
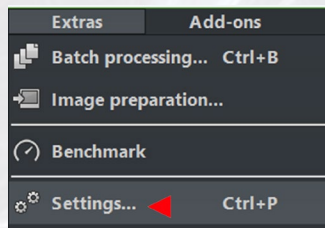


Clicking the **plus sign** displays all modules; clicking the **minus sign** hides them again.

Clicking a button, e.g. **Selective Drawing (3)**, opens only that module; clicking it again closes it. By default, all modules are displayed.

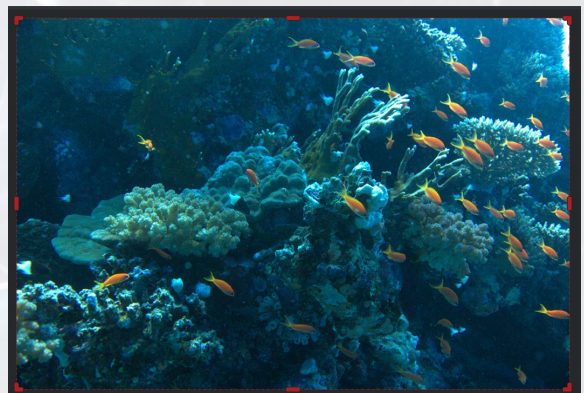
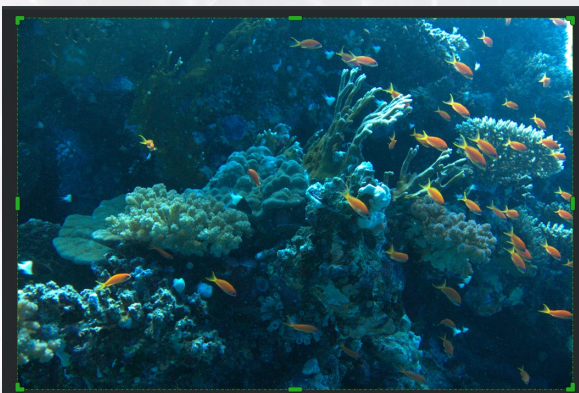
1. Magnifying glass/comparison view
2. Underwater area
3. Selective drawing
4. Colour module
5. LUT module
6. AI filter area
7. Sensor error correction
8. Focus peaking analysis area
9. Watermark area

Selected settings



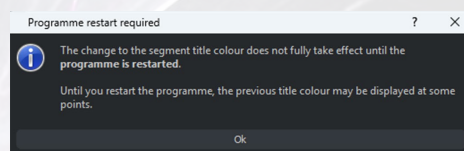
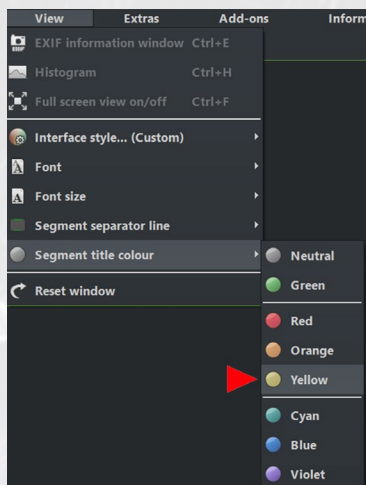
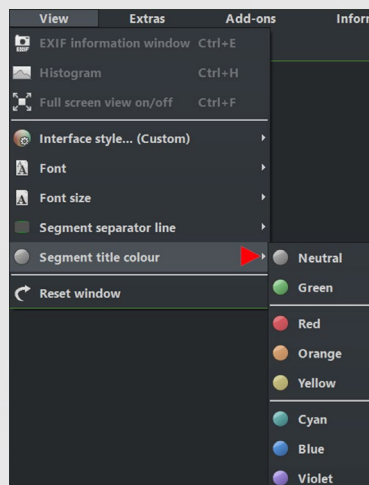
Change the colour of the Help lines

The help lines that appear, for example, when **cropping an image**, are **green** by default. In the **Extras/Settings** submenu ...



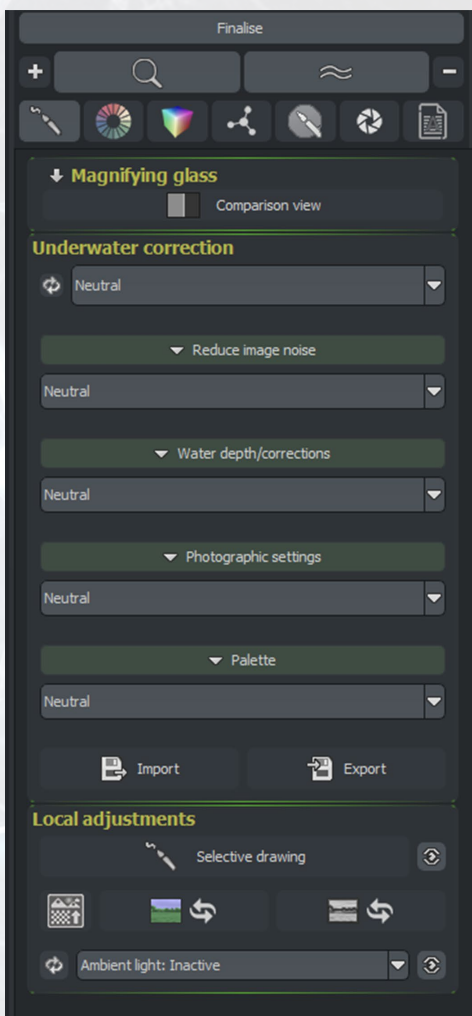
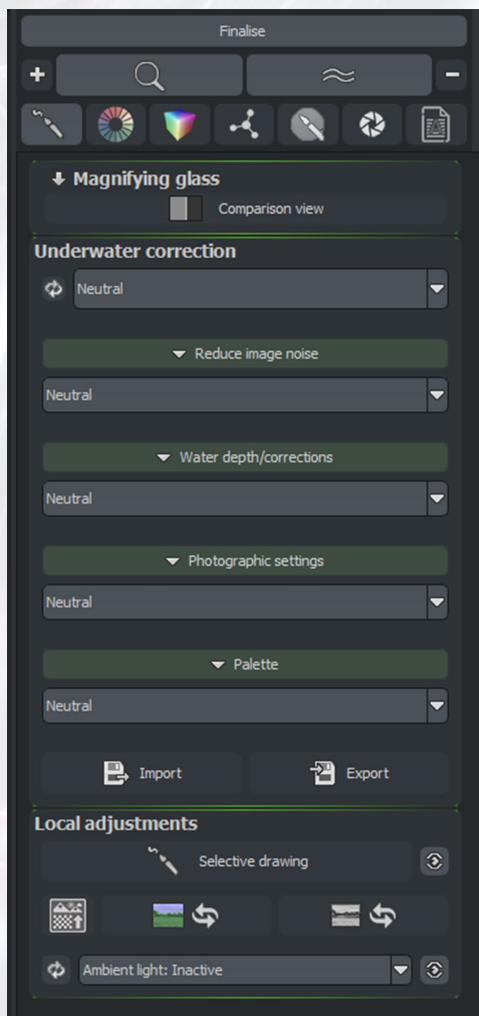
... the line colour can be changed as desired in the **Help lines and colours** section using any of the 8 colours available, e.g. to **red** as shown in the graphic on the right. Clicking **Apply** and then OK applies the new colour to all guides in the programme.

Change the colour of the headings



By default, the colour of all text is **neutral** (grey).

In the **View/Segment title colour** submenu, you can change the **title colour** or the colour of the headings. This change takes effect once the programme has been restarted (see image on the right).



For this guide, the colour of the help lines has been changed to **red** and the colour of the headings to **yellow**.

2. Workspace in DIVE Video, selected settings



The **DIVE Video** interface is divided into five main sections, and apart from the bottom bar containing information about the loaded video, the various settings options and the green **Render Video** button, you won't need to adjust to anything different compared to **DIVE Photo**.

The **Local Adjustments** module, which appears by default in **DIVE Photo**, has been replaced here by the **LUT Photo Style** module.

A: Menu and toolbars.

B: Presets with different lighting scenarios.

C: Image area displaying the loaded image (in this example, a corrected video).

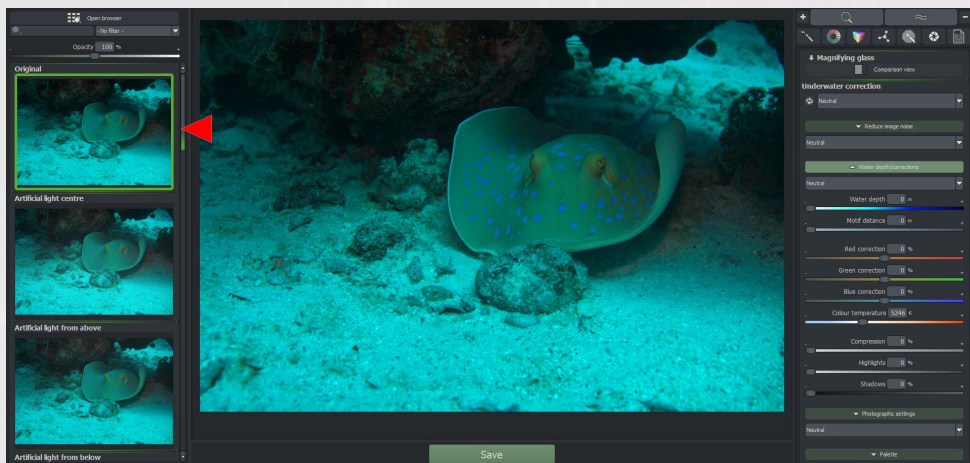
D: Toolbar in finalisation mode with selectable modules.

E: Video panel displaying information and settings for optimal video rendering following all corrections made. Clicking the **Render video** button initiates the new rendering process.

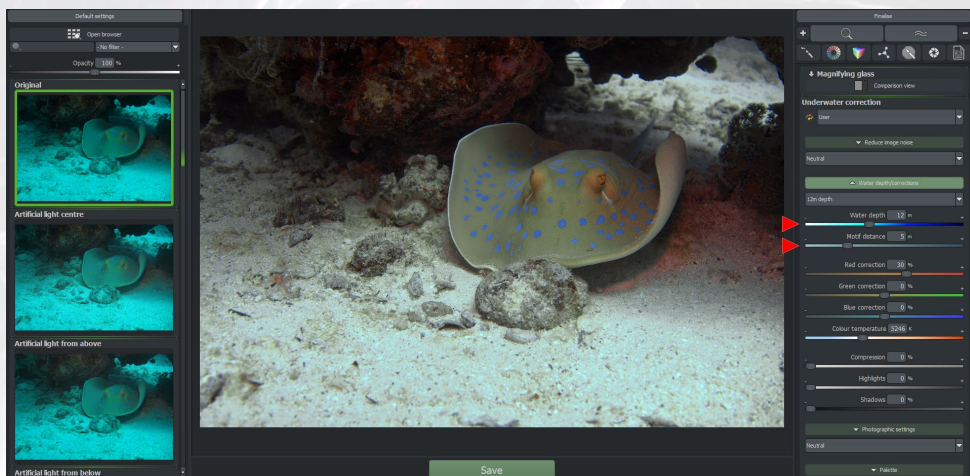
Notes:

- The **underwater module** is identical in **DIVE Photo** and **DIVE Video**.
- In **DIVE Video**, you can select fewer modules via the toolbar than in **DIVE Photo**, because not all modules work in the video programme.
- You can apply the same settings described in **DIVE Photo** here, such as changing **help lines** or **title colours**.
- If you need more information on how to use the video programme in general, you can find it, for example, under **Information/Homepage**. Choosing a video programme provides information on the user interface of a [SHARPEN Video](#) programme.

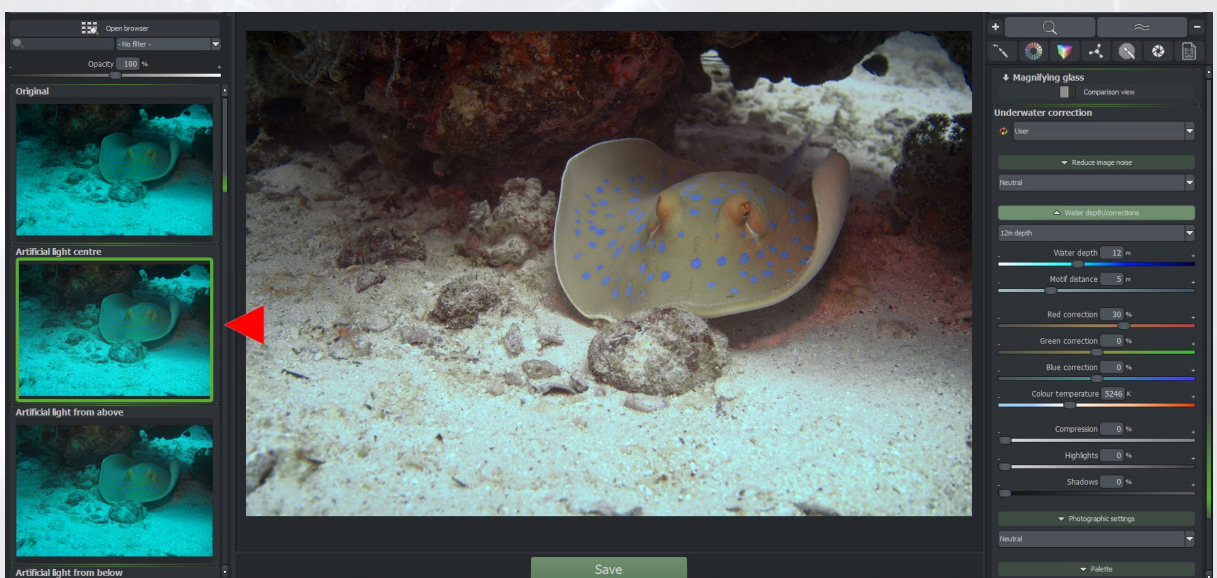
3. Presets with different lighting scenarios



The presets on the left simulate specific diving and **lighting** conditions.

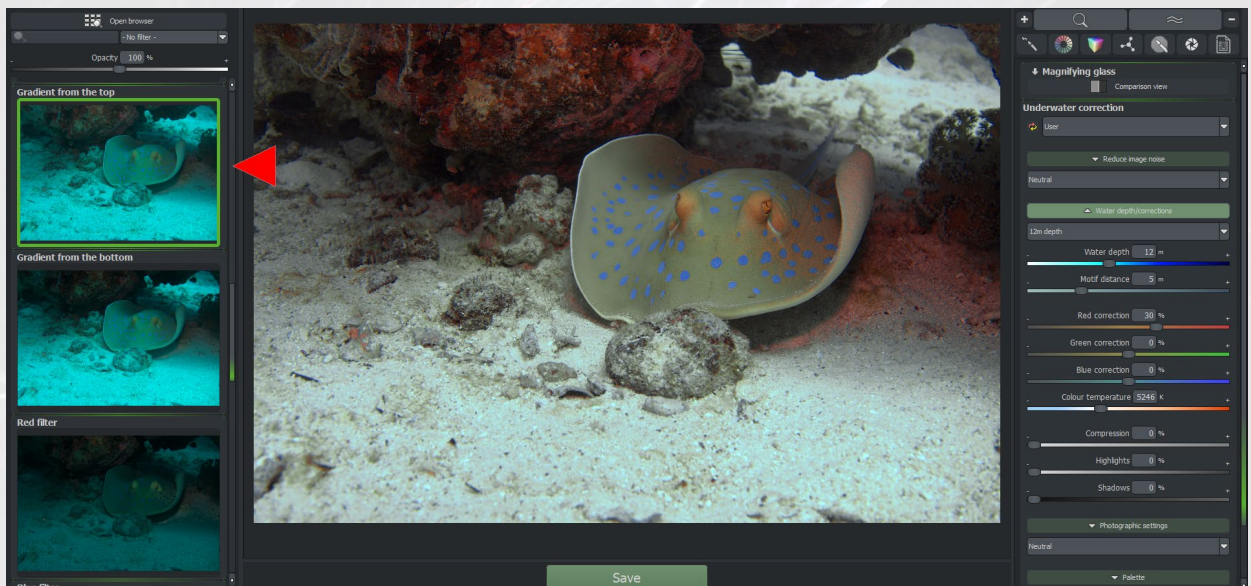


For the remaining sample images, the **"12 m water depth"** preset has been selected on the right-hand side of the **Water depth/corrections** module. Other settings, such as the subject distance of 5 m, are set automatically.

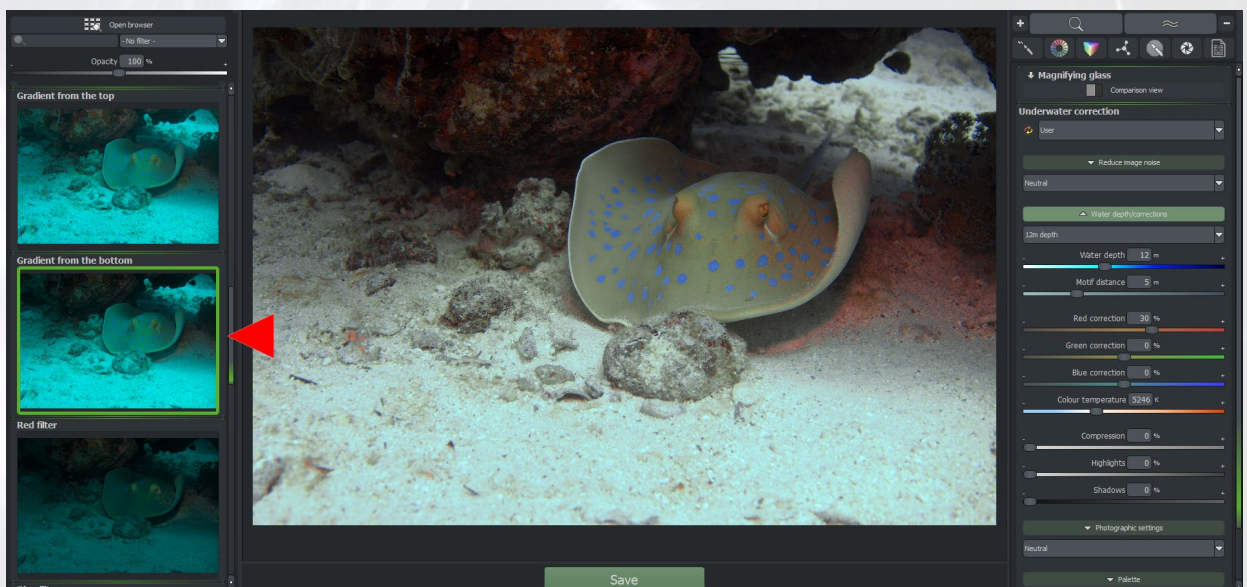


- **Artificial light centre** in the centre, creating the effect that the photographer has shone a torch into the scene.

- **Artificial light centre** in the centre, creating the effect that the photographer has shone a torch into the scene.
- **Artificial light from above**, simulating an external light source from above for example, during night dives.
- **Artificial light from below**, which is similar to a scenario where, for example, a second person is standing below the photographer and shining a light on the subject.
- **Dark peripheral light** simulates the familiar vignetting effect, with shadows extending outwards from the centre.
- **Bright peripheral light** illuminates the area around the edges.

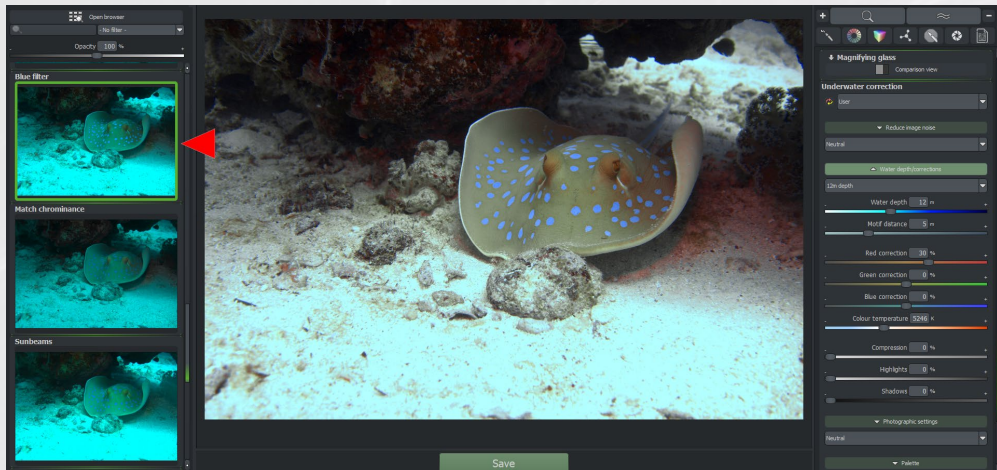


- **Gradient from the top** can be effective and interesting for many subjects, as sunlight usually falls from above, making the top brighter than the lower parts.



- **Gradient from the bottom** creates the opposite effect: the scene is lit from below, for example by spotlights.

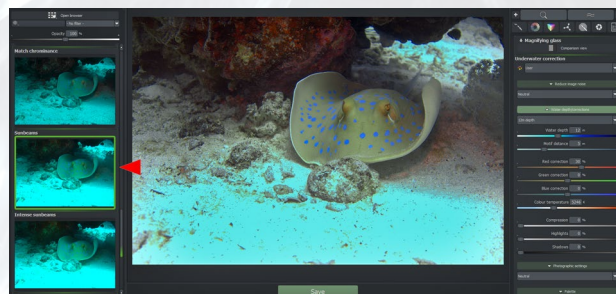
- The **colour filters** work in the same way as camera filters: for example, with a **red filter**, colours containing red tones are **brightened**, whilst the corresponding complementary colour, in this case blue, is darkened.



The **blue filter brightens blue colours** and darkens their complementary colours, red, then orange and yellow, even further.

These presets can therefore have a significant impact on the character of a subject, if desired.

- **Match chrominance** balances the colours.

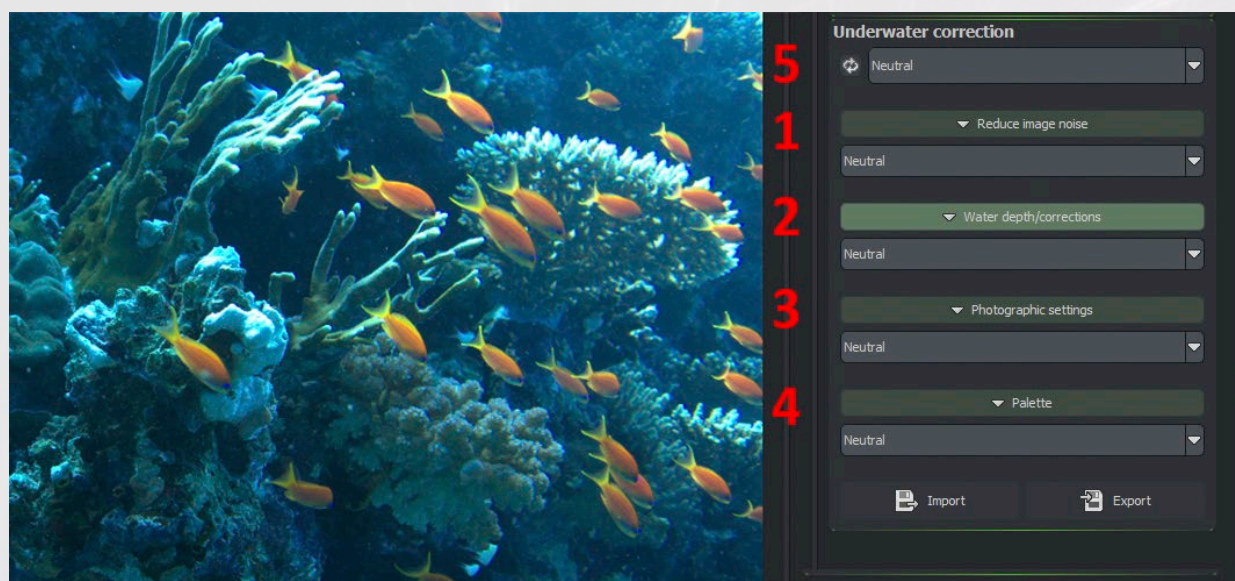


- **Sunbeams:** Here, artificial sunbeams or rays of light are 'calculated in' using a complex process in which the image is superimposed up to 6,000 times at different zoom levels. Therefore, selecting this preset may take a little longer to process.



With scenes like these, this preset naturally looks even more impressive.

4. Underwater Correction Module - Overview



In this section, you will complete various tasks across four modules.

1. **Reduce image noise** with manual parameter settings for customised noise reduction, or the option to select a preset with 'pure' noise settings or combinations that include chromatic aberration (CA) correction.
2. **Water depth/corrections:** the key module in both programmes, featuring manual parameter settings for water depth, subject distance, colour and other corrections.
3. **Photographic settings** with parameters for "classic" image editing, such as brightness, contrast, colour, detail and sharpness.
4. **Palette** that allows you to fine-tune the colour intensity of your chosen colours. The presets are also instantly effective, enabling you to quickly enhance or tone down warm or cool colours, for example.
5. **Overarching or 'global' presets:** These four modules are supplemented by selectable underwater scenarios such as **Ocean/Seas 16 m, Coral Garden** or **Wrecks**, which can be further refined with other parameters as required. Depending on the subject being photographed, these presets are ideal for a 'flash workflow' (see the chapter **The quickest route to success: using templates**).

All modules, along with their various features and settings, are described in the following chapters.

5. Water depth/corrections - detailed correction options

Compared to the vast number of photos and videos taken every day, underwater photography occupies a niche market.

They require very specialised, often expensive equipment and assume that the photographer has diving skills.

Moreover, sights such as coral reefs, unusual species of fish and old shipwrecks are rarely found in local waters and are often far removed from mass tourism.

Taken together, all these factors explain why this fascinating area of photography or videography is not widely used by the general public.

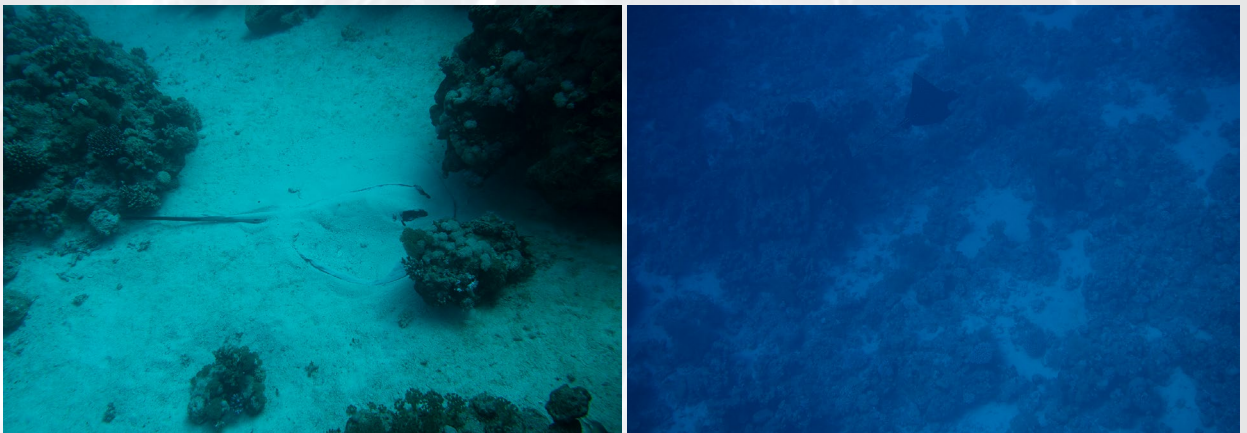
What's more, underwater photography is characterised by very specific, physically determined shooting conditions compared to photographs taken 'above water', and requires software for post-processing that transforms these unique photographic experiences into unforgettable images.

Special recording conditions, troubleshooting with DIVE

Whether on land or at the water's surface, all the colours of a photographed object or subject are reproduced as closely as the camera's technical capabilities allow, just as we see them.

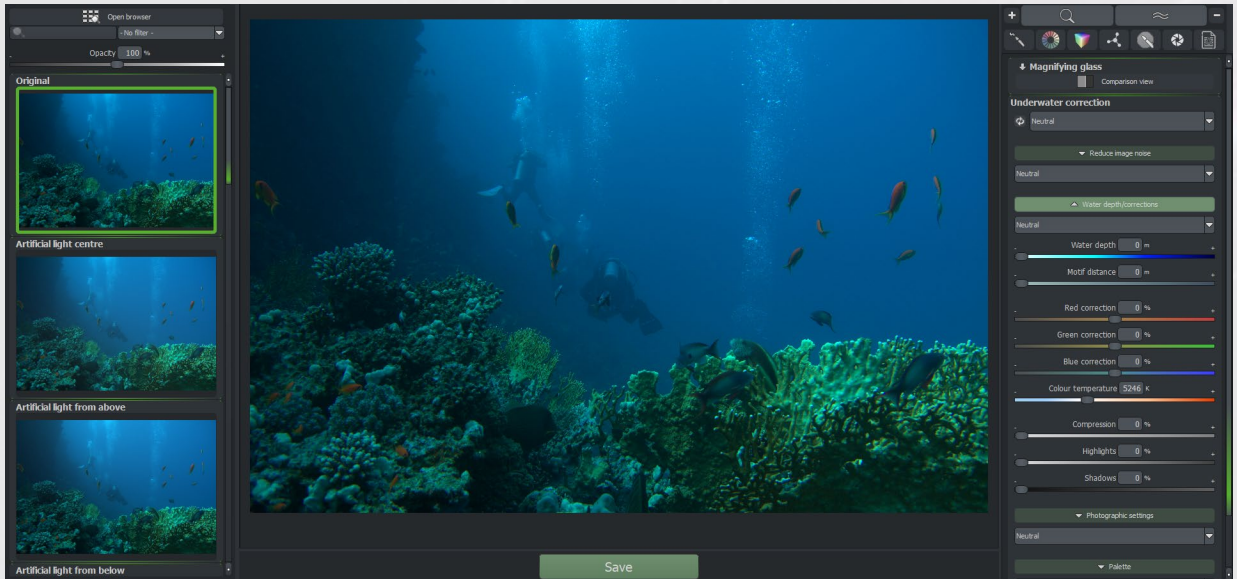
If the camera struggles in challenging shooting situations, one solution is to use the **HDR** programme.

All **underwater photographs** illustrate the phenomenon of **light absorption**, which means that as the water gets deeper, it causes colours and brightness (light waves) to 'disappear' or be 'absorbed'.

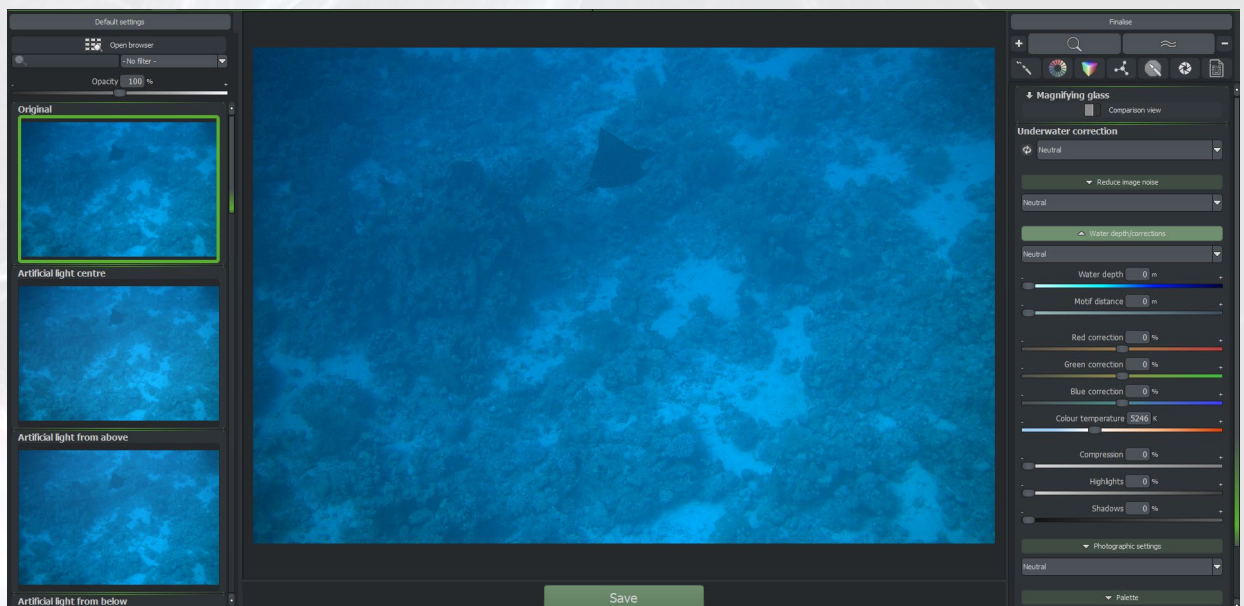


The result is a series of images that appear increasingly darker, paler (with reduced colour) and more **bluish**, but not uniformly so; rather, this change occurs selectively in a specific sequence, confirming the perception that underwater shots taken whilst snorkelling still look almost natural, becoming increasingly green as you descend, and turning completely blue at greater depths.

The **red** hues 'disappear' first, starting at depths of **3 to around 10 metres**, ...



... because water acts like a colour filter, absorbing long-wavelength, low-frequency light, such as the 'warm' red, orange and yellow tones, more quickly than short-wavelength, high-frequency light, such as the green and blue tones. If the red tones are missing from an image, the image appears bluish without an external light source, such as a powerful torch.

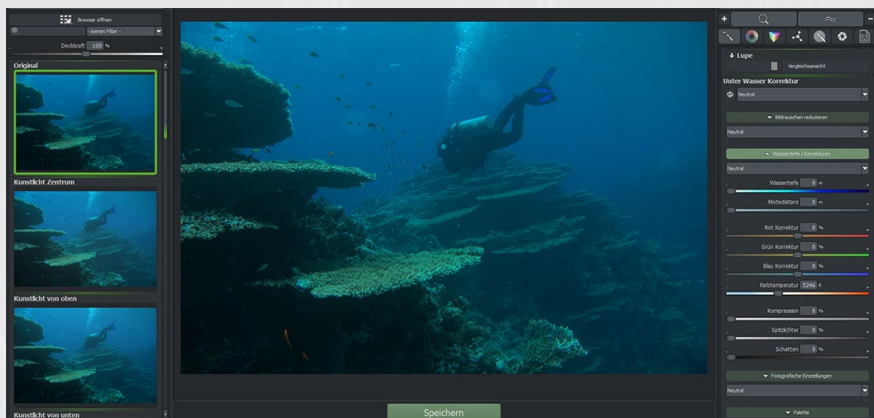


After the red wavelengths, the **green** wavelengths are absorbed; these remain visible up to a distance of around 25 metres. Finally, the **blue** wavelengths penetrate deepest into the water due to their short wavelength and remain visible for the longest time.

From a depth of around **60 metres**, the water absorbs most wavelengths of light, with the result that everything becomes almost completely dark to the human eye, as there is no longer any usable visual information available without the use of artificial light.

From around 200 metres, everything is almost black.

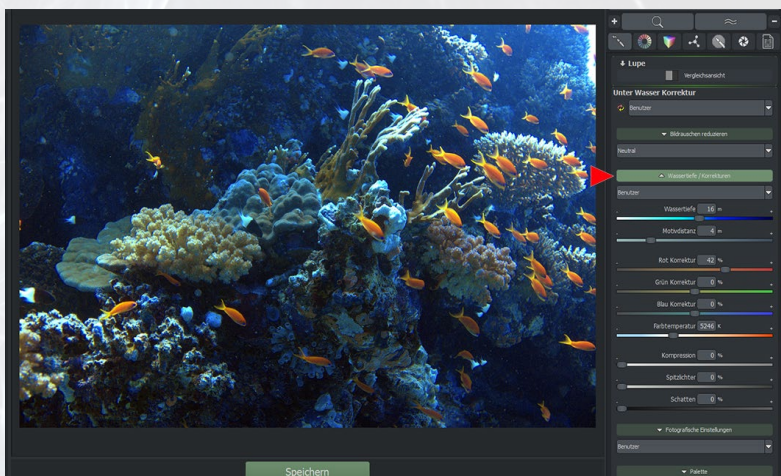
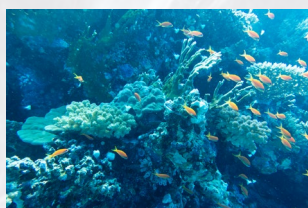
Motif distance



In addition to this distance, which the light travels to reach the subjects being photographed, there is also the distance from the photographer to the subject, in this example, the distance to the diver, known as the **motif distance**.

The Water depth/corrections Module: A Problem-Solving Tool

What makes **DIVE Photo** and **DIVE Video** so special and unique is that, thanks to the Water depth/corrections module, the heart of the programmes, they are able to reverse **colour absorption** and restore 'lost' colours as realistically as possible, in other words, to simulate what a photographed underwater scene might look like if the water were drained and the subject were photographed on land.



In this process, the total path length of the light, which is a **combination of the downward path of the light and the motif distance**, is 'calculated backwards' in this module using a simulation or a highly sophisticated estimation. These calculations are supported by complex procedures involving reference images, such as those of divers or illuminated subjects like corals or fish, whose colours have been matched or calibrated against sources such as specialist fish catalogues.

The other modules, such as those that allow you to produce an **impressive final image in a flash using selected presets, or to remove noise from the original images before applying corrections**, are designed to speed up image preparation or, for example, to help you fine-tune the image to your personal taste in the **Photographic Settings** section.

Water depth/corrections – Overview of setting options

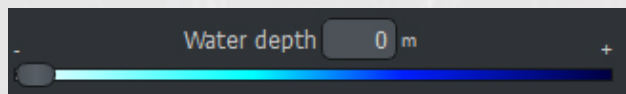


1. **Water depth:** Adjustable from 0 to 30 m.
2. **Motif distance:** Adjustable from 0 to 20 m. The total distance can therefore be adjusted from 0 to 50 m.
3. **Red correction** with adjustment of the red light component.
4. **Green correction** with adjustment of the green light component at greater depths.
5. **Blue correction** with correction of the blue light component at depths of up to approximately 60 metres.
6. **Colour temperature** with options to adjust it towards '**warm**' or '**cool**'.
7. **Compression** with the option to adjust the **tone compression**.
8. **Highlights**, to restore details lost in areas of the image that are too bright.
9. **Shadows**, to **brighten up details in areas that are too dark and make them visible again.**
10. **Presets with selectable water depths and combinations of water depths with various highlight or shadow scenarios.**

All parameters are set to the '**zero position**' by default. The only exception is the **colour temperature** control, which is set to **5,246 K** (Kelvin) by default, corresponding to the temperature of natural daylight.

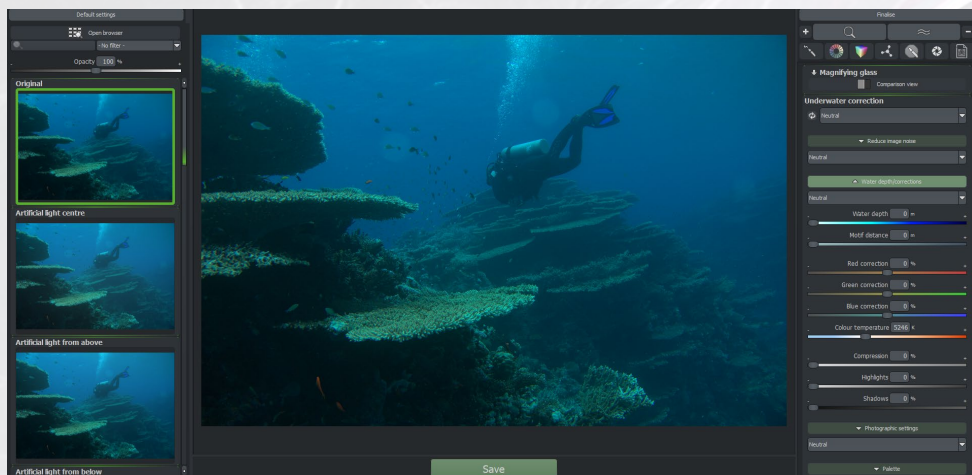
The parameters, along with their various settings and presets, are described on the following pages.

Water depth



The **Water Depth** parameter allows you to adjust the **intensity of the colour reconstruction**.

Estimating or precisely adjusting the water depth



Divers usually use a depth gauge that links the data to the photo.

In cameras that support GPS data, this information is written directly into the image file as EXIF metadata.

On video cameras, this data can be displayed as an 'overlay'.

In such cases, there is no need to estimate the water depth, it can be set precisely.

Otherwise, the water depth must be estimated using a few points of reference:

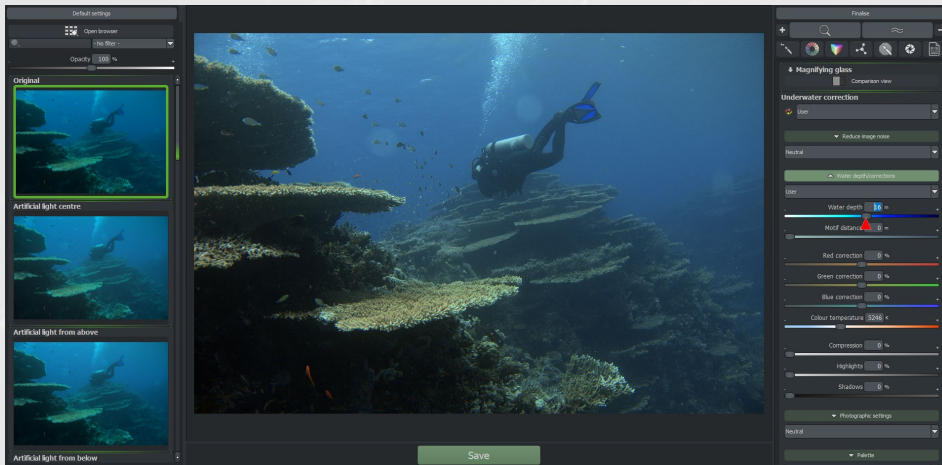
- At a water depth of around 15 metres, the red light is completely absorbed and the green light is absorbed by about half, as not much sunlight penetrates that far. If, for example, parts of the image show clearly recognisable red tones, the photograph must have been taken at a shallow depth.
- Many typical coral reefs are usually found at depths of between 5 and 15 metres, and less commonly at depths of up to 40 metres or deeper (deep-water reefs).

Values that are too high when setting the water depth are compensated for.

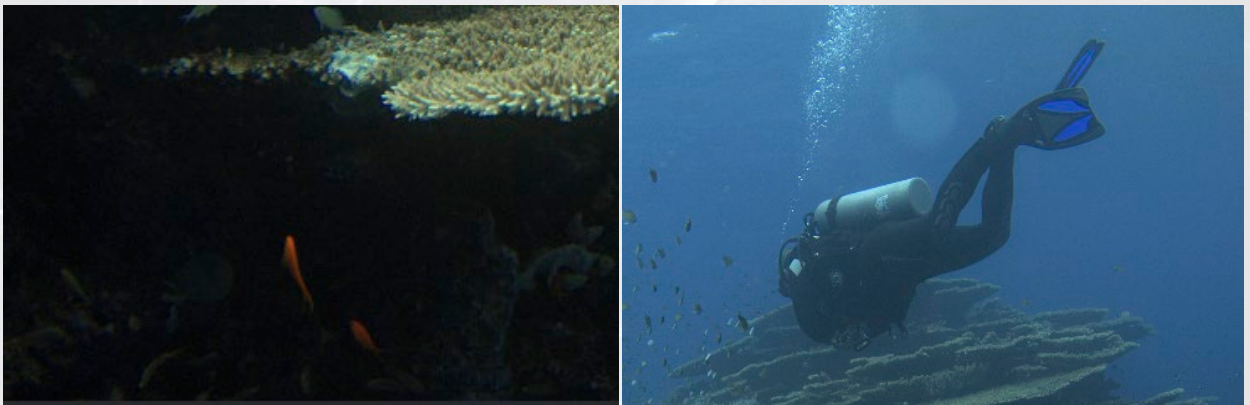
DIVE Photo and **DIVE Video** offer the great advantage that you cannot '**overestimate**' the water depth when setting it.

The programmes compensate for water depth settings that are slightly or significantly higher than the actual diving depth when taking a photograph. For example, if the actual depth is 15 metres and you set the estimated water depth to 25 metres, the image will not be 'over-corrected' thanks to the use of adaptive algorithms.

Example: Compensation

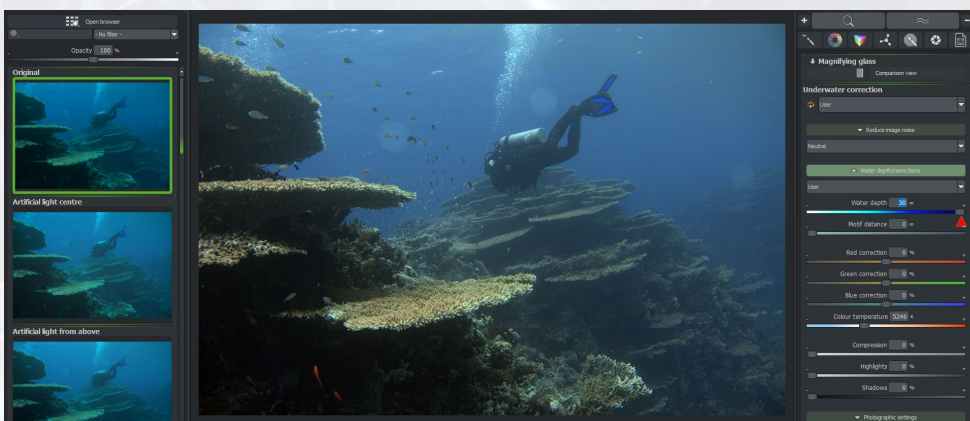


In the first graph, the dive depth has been estimated at **16 metres** and set using the control.



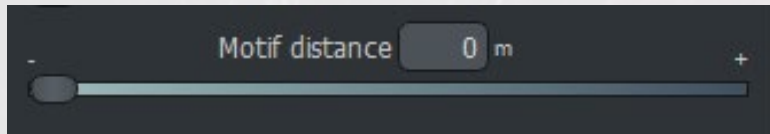
The fish, which were barely visible in the original, seem to emerge from the darkness and become visible, the diver and the scuba tank have been given a colour that looks realistic.

Note: In the same example, using the “Shadows” parameter brightens the depths even more effectively, making the fish even more visible.

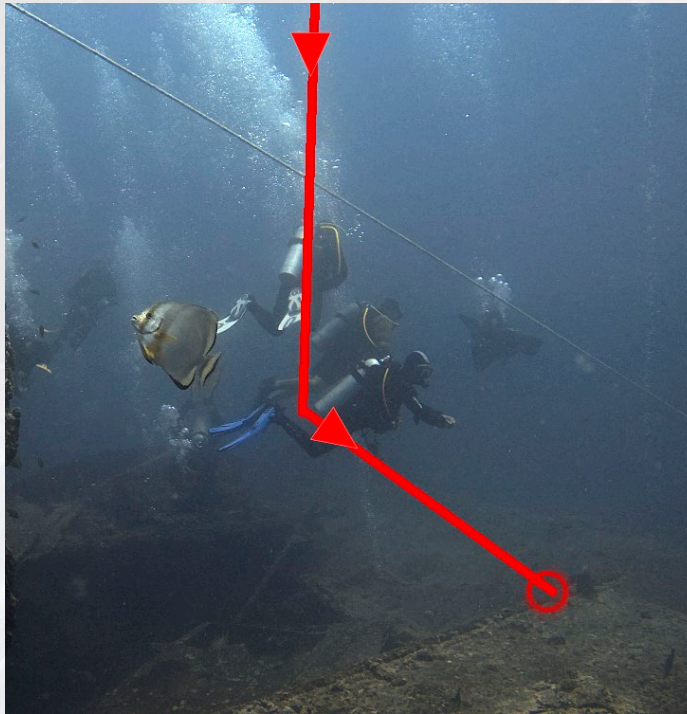


If you now move the slider all the way to the right to **30 m**, the difference compared to the result at a depth of **16 m** is barely noticeable, which makes it much easier to set the ‘correct’ water depth and virtually eliminates the risk of incorrect entries.

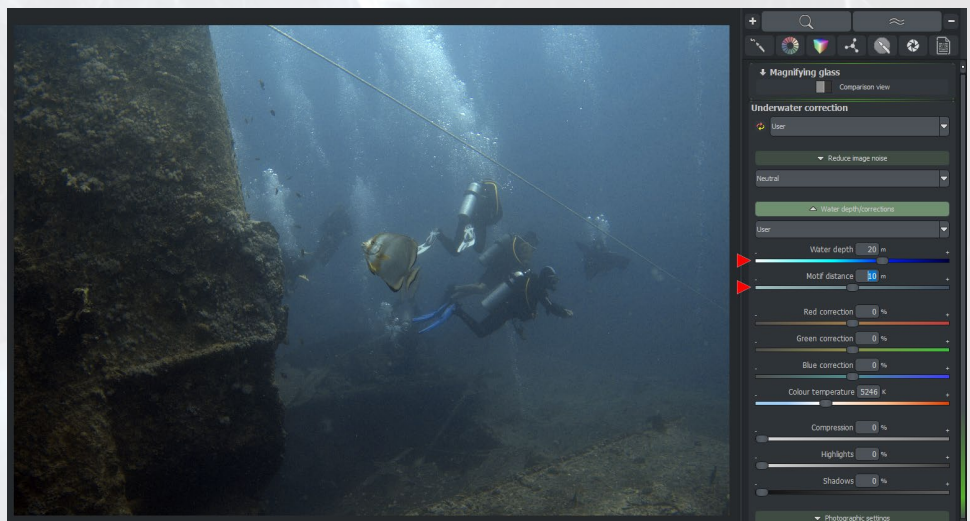
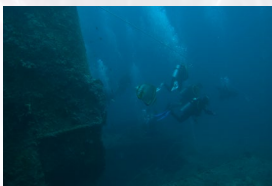
Motif distance



The **Motif distance control** complements the **water depth** parameter.

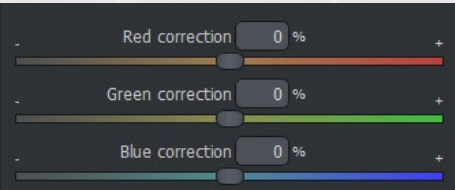


When light or colour is absorbed underwater, in order to calculate the total distance travelled, one must determine how far the light travels from the surface downwards, as well as the **distance from the subject to the photographer**. Use the **Motif Distance slider** to specify the exact or estimated distance between the subject and the photographer, this complements the water depth or diving depth input, and the **result is the total distance the light has travelled through the water**.



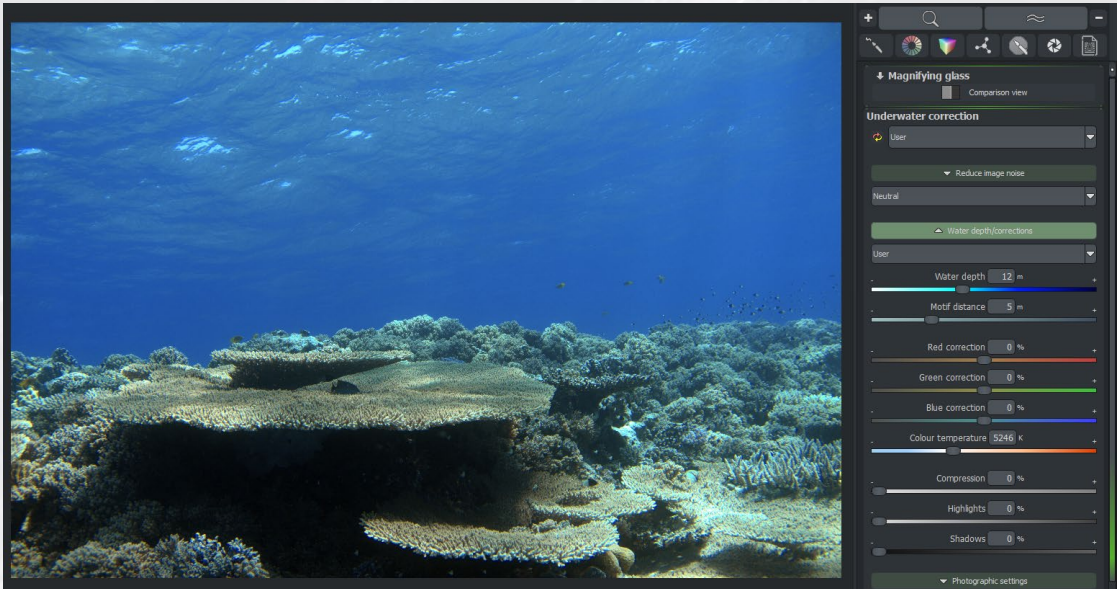
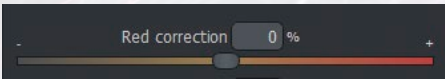
In the example, a **water depth of 20 metres** and a **motif distance of 10 metres** have been entered. The result is a very good, impressive image.

Control different colour channels

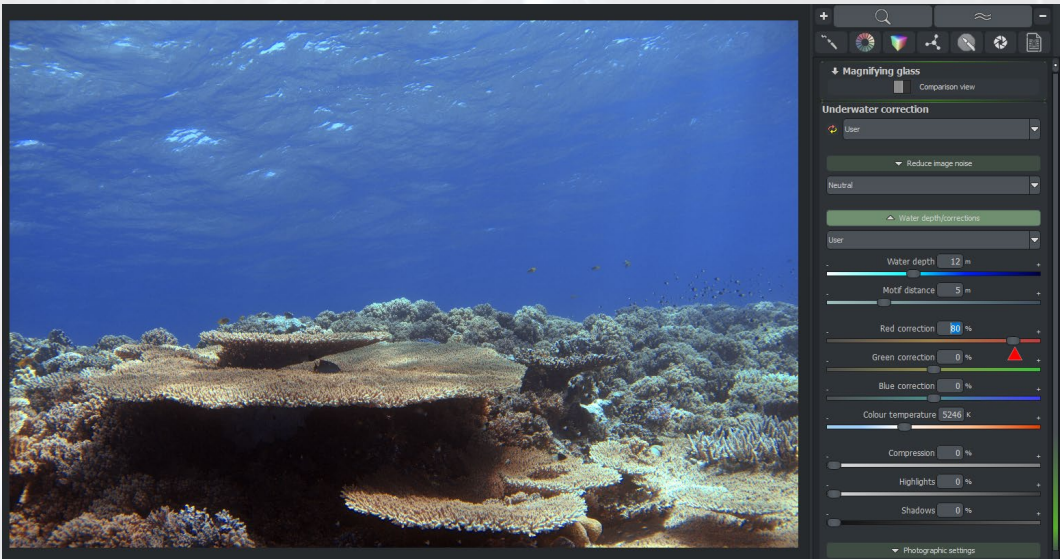


If you wish to adjust the absorption of red, green or blue light, you can control the three colour channels separately and make adjustments as required. The order is determined by the order of light and colour absorption.

Red correction



For this scene, the water **depth control** is set to **12 m** and the **motif distance control** to **5 m**. The **red balance control** is in its **default position**.

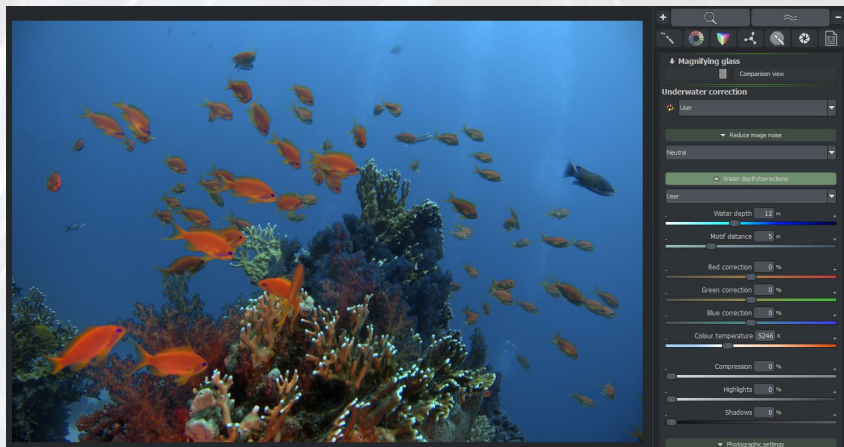


Now drag the slider all the way to the right until you are happy with the intensity of the red correction and the result, in this example **80 %**.

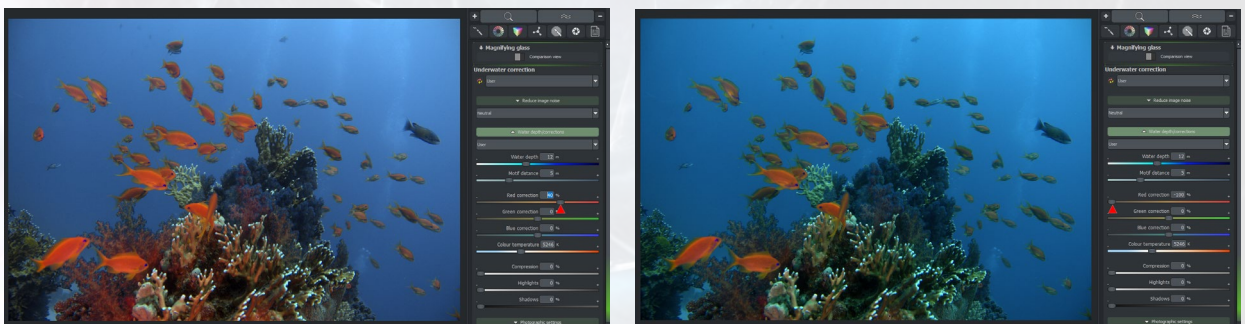
Negative red correction



You can see just how effective these colour channel sliders are and how they can influence the character of an image by dragging the slider in the same example image to **-100 %**. The red component is completely eliminated and the image has lost much of its appeal.



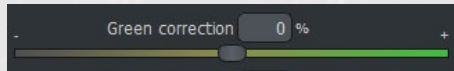
Similarly, in the second example image, using the same settings for **water depth** and **motif distance** ...



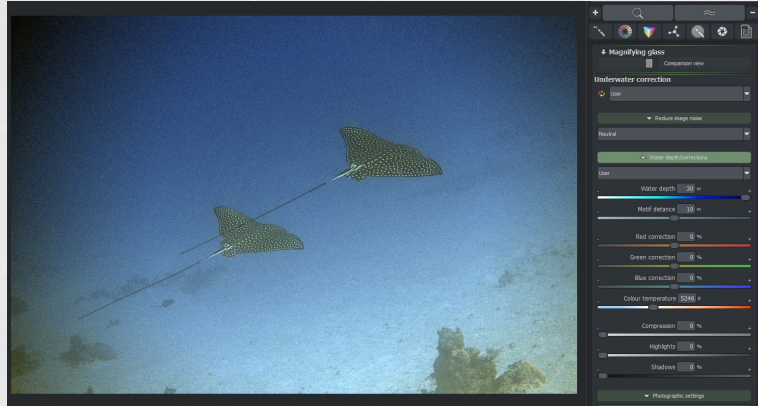
... the effects of the adjustments are clearly visible. In the graph on the left, the slider is set to **40 %**, in the graph on the right, it is set to **-100 %**.

Note: The red correction only works where at least a trace of red tones is still visible in the original image, i.e. at shallower depths. If there is no red component present at greater depths, the control has no effect.

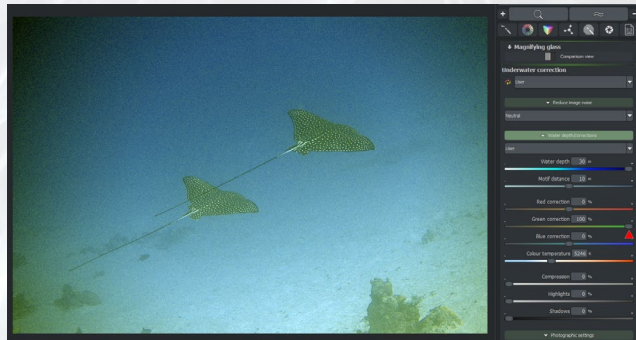
Green correction



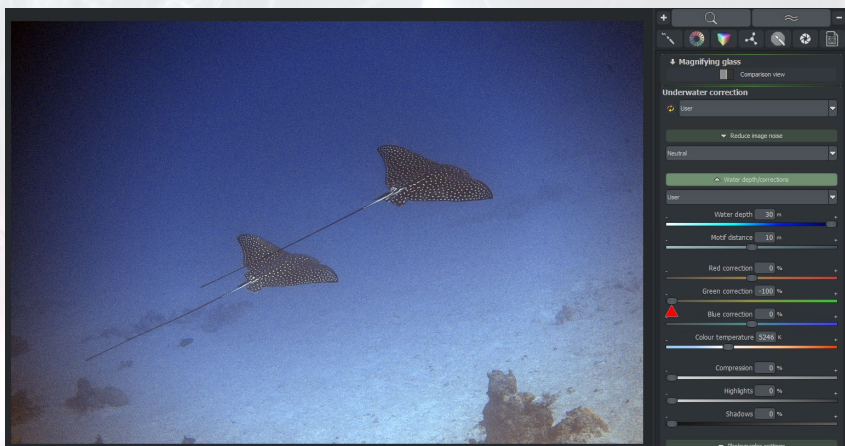
As the green light is only absorbed at greater depths, this control is only useful for shots where the subject or scene was photographed at greater depths.



For these scenes, which the diver was able to 'capture' at greater depths, the **green correction** control is initially set to its default position.



If you slowly move the slider to the right up to **100 %**, as shown in the example, the green balance will be adjusted so that **more** shades of green become visible in the image.



If you slowly move the slider from the zero position to the left, down to **-100 %** as shown in the diagram, the green tones are progressively eliminated or the green cast is **significantly reduced**, which improves the final image. These extreme settings are provided here for comparison purposes; in practice, more nuanced slider settings are generally more realistic.

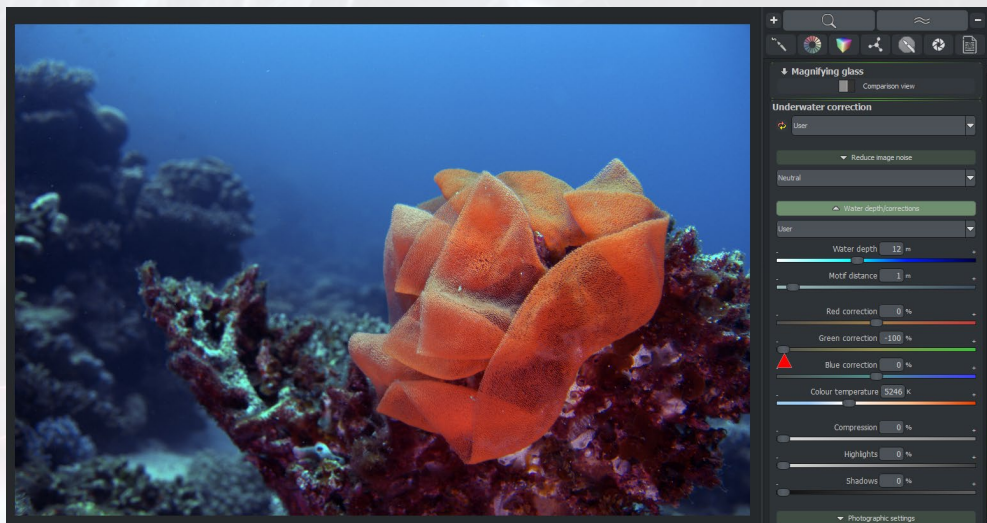
Example image 2



For this macro shot, a **water depth of 12 metres** and a **motif distance of 1 metre** were selected.

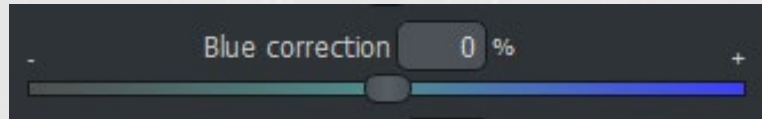


If you slowly move the slider to the **right to 100 %** in the example, the plant gradually turns a shade of yellow. The surrounding colours change accordingly, albeit not as intensely.

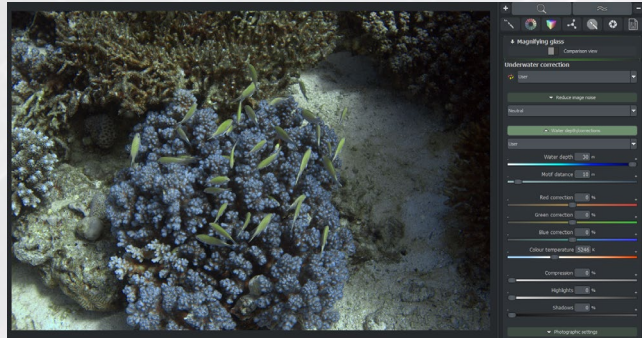


Slowly drag the slider to the **left until it reaches -100 %**, and you'll see the colours shift further towards a rich orange. Here, too, the surrounding colours change, and the blue of the water appears more intense.

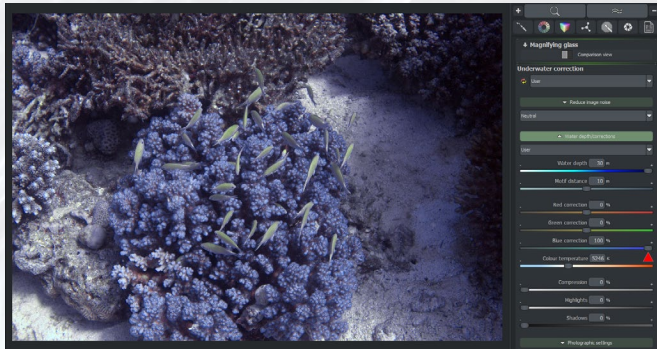
Blue correction



The blue light component is absorbed last in water, with the result that correcting this colour channel is the least dramatic of the three.



In this example, the control is initially back in the “neutral position”.

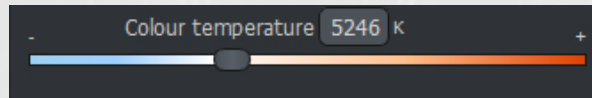


If you slowly move the slider to the right up to **100 %**, as shown in the example, the blue of the coral becomes significantly more intense, and the surroundings, including the sand, also appear slightly bluer.

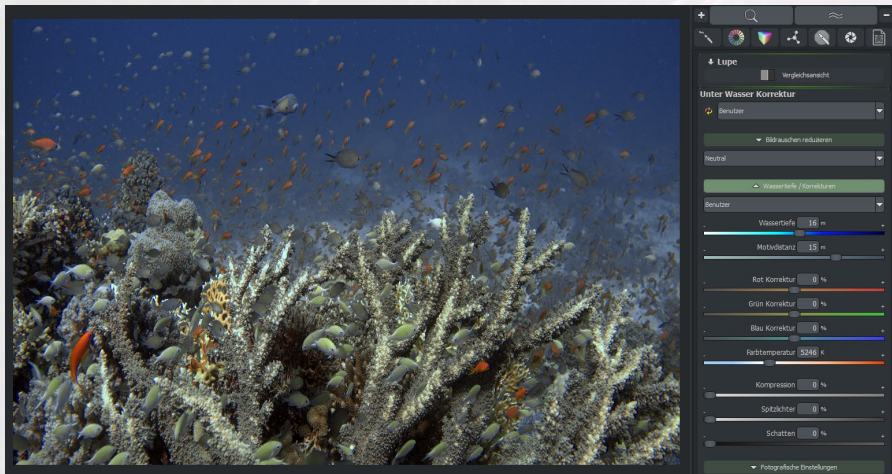


If you slowly move the slider from the zero position to the left towards **-100 %**, the blue tones in the area surrounding the coral will be desaturated, whilst the blue of the coral itself will remain almost identical to the default value of zero. You can decide whether you prefer the image with the standard blue correction or, for example, with a reduction as shown in the diagram.

Colour temperature



The default colour temperature of **5,246 K** (Kelvin) produces images that look as though they were taken in natural morning daylight, ...

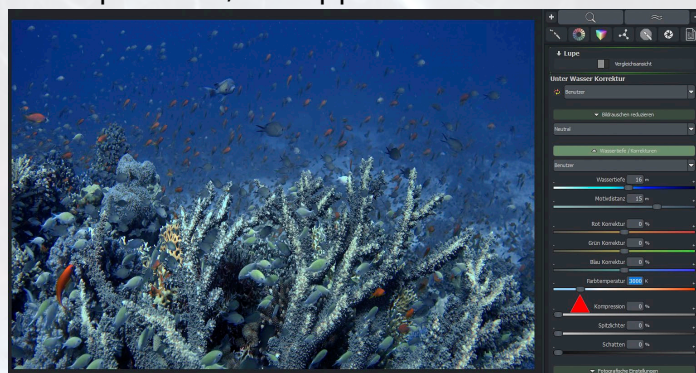


... which is roughly equivalent to true **neutral white**.

In this impressive shot, a **water depth of 16 metres** and a **motif distance of 15 metres** were selected.



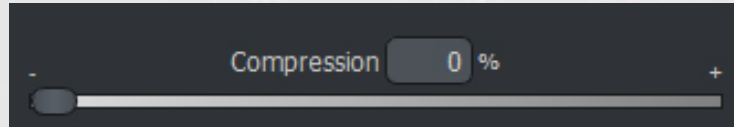
If you move the slider to the **right** to **7,500 K** in the example, all the colours, and therefore the overall impression, will appear '**warmer**'.



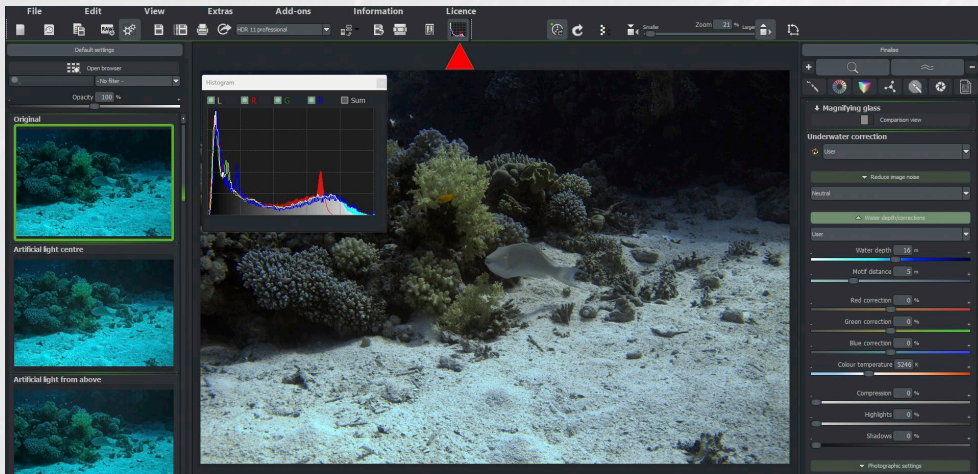
If you move the slider to the **left**, in the example, to **3,000 K**, the image will appear '**cooler**' or '**colder**'.

Here, too, it is a matter of personal preference whether you choose to use the default setting or adjust the colour temperature to better match your vision of the final image.

Compression

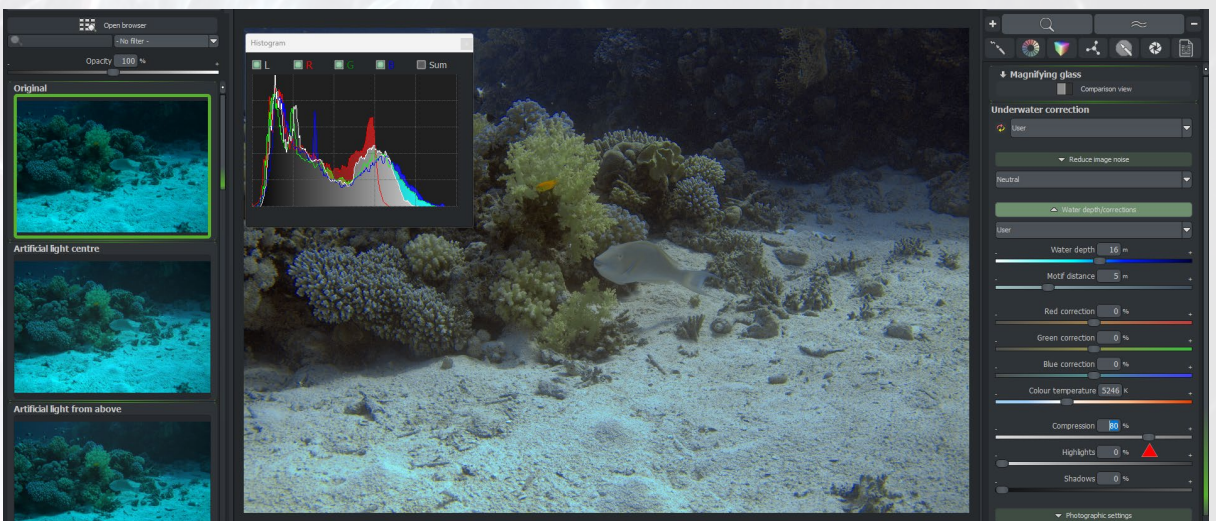


Compression refers to **tone compression** or **tone mapping**.



The typical use of **HDR images**, for example, to make the contrast range viewable on monitors with a lower dynamic range – does not apply here. In the example, a **water depth of 16 metres** and a **motif distance of 5 metres** have been selected.

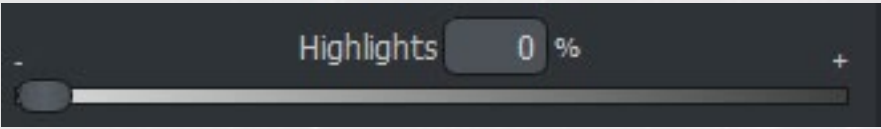
The on-screen histogram, which visualises the brightness distribution in the image from **black** (left) to **white** (right), spans the entire range from left to right, a fact confirmed when viewing the image: everything is well exposed, the image is sharp and has a pleasing level of contrast. It is normal for dark tones to dominate in many underwater shots.



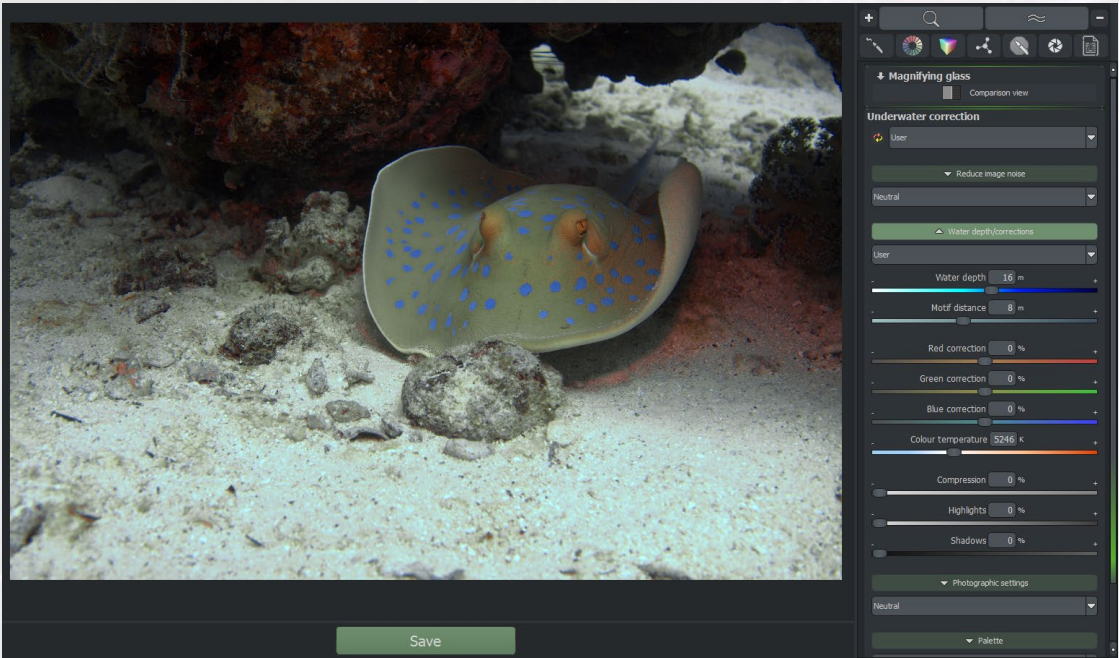
Now slowly drag the compression slider to the right, in this (extreme) example, to **80 %**, and the histogram will become increasingly compressed, the image will appear 'flatter', with less contrast and less sharpness.

For most images or videos, this adjustment is not necessary. However, for certain types of imagery, this tonal compression can produce a desired change in the image's character.

Highlights



With this powerful control, you can ‘**preserve**’ details, ...

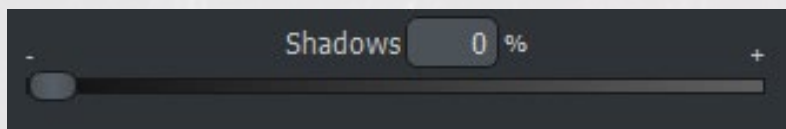


... which, for example, have been lost due to strong sunlight or overexposure, or which, for instance, make the sandy seabed appear too bright and featureless. The **water depth is set to 16 m** here and the **motif distance to 8 m**.

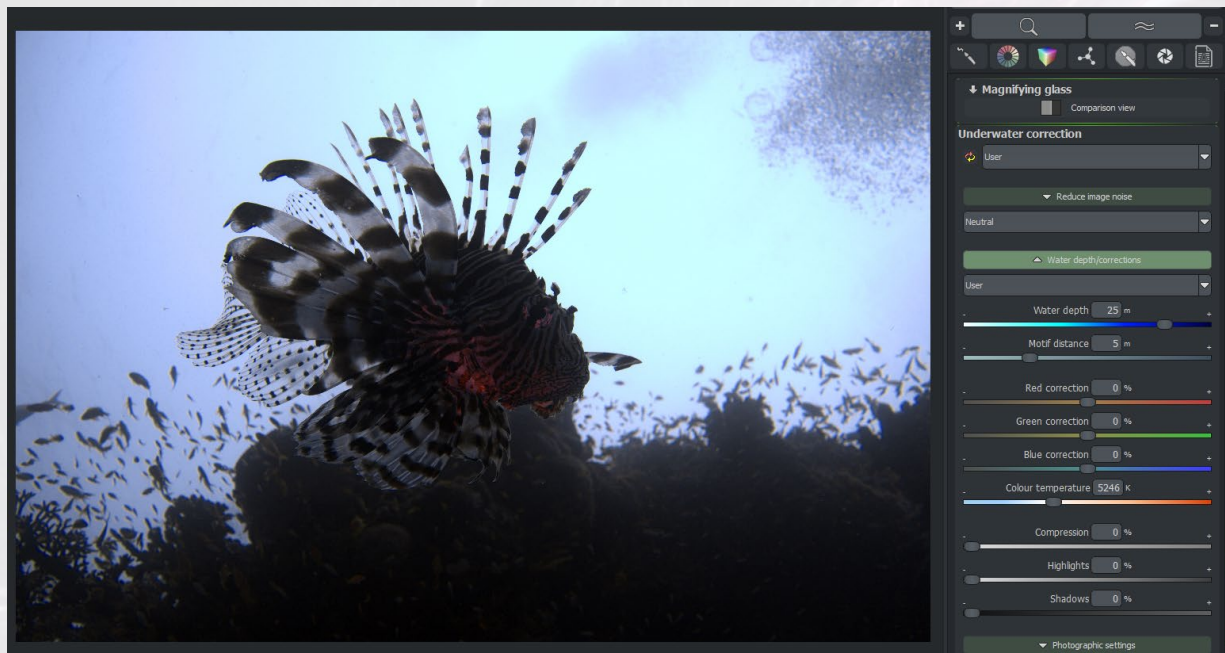


Slowly move the slider to the right until you are happy with the result, in this example **60 %**. If the main subject becomes too dark in the process, you can select the **Artificial Light Centre** preset, for example. You will then be able to see the sandy ground in all its texture and detail, with the main subject coming into focus as desired.

Shadows



When taking photographs, particularly at greater depths ...



... shadowed areas are often darkened to such an extent that many details become invisible and appear as nothing more than a uniform dark grey or black.



Slowly drag the slider to the right, in the example, set to **100 %**, until the shadow areas are brightened to your liking.

One drawback is that the image may appear slightly less contrasty.

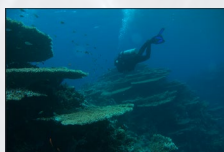
The interplay between the two parameters: **highlights** and **shadows**



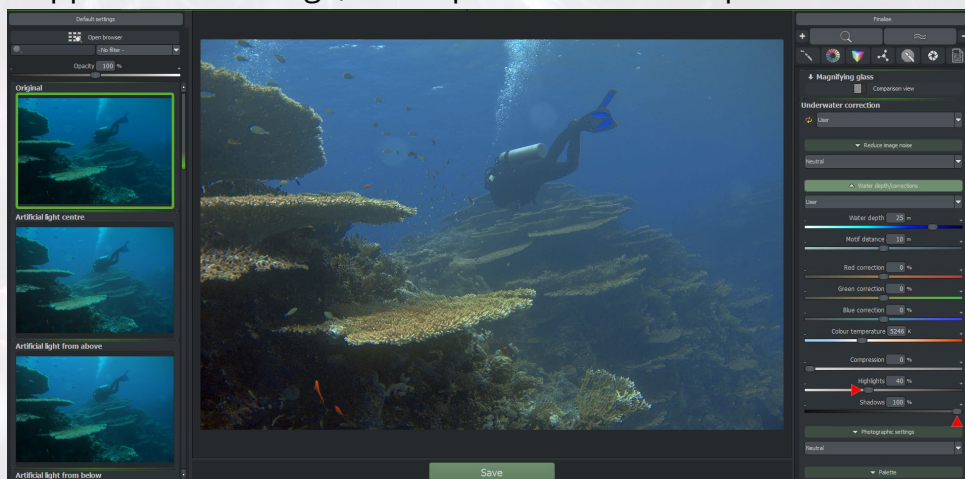
In many scenes like this, the **interplay between the two parameters, shadows and highlights**, produces the desired result. In this example, the **shadows** slider has been set to **100 %**, as on the previous page, and the **highlights** slider to **60 %**.

The result is impressive: the areas of the image that were previously too bright now have more texture, and the details, particularly in the main subject, are clearly visible. The shadow areas have been effectively brightened, and the image appears high-contrast and sharp.

Example 2

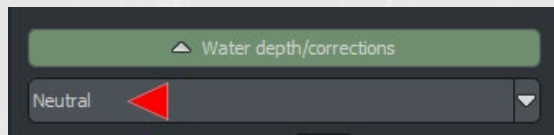


The same applies to this image, which presents a similar problem ...

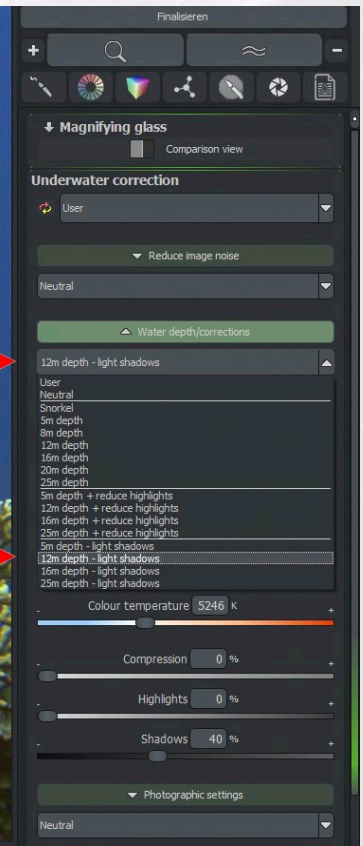
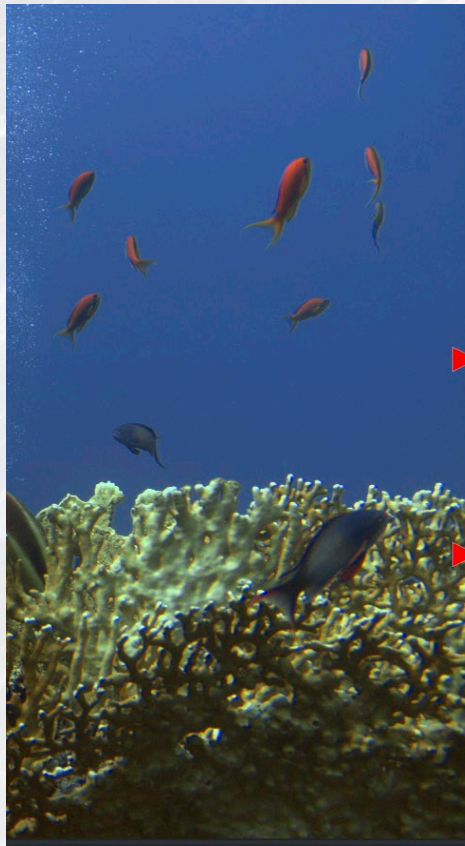
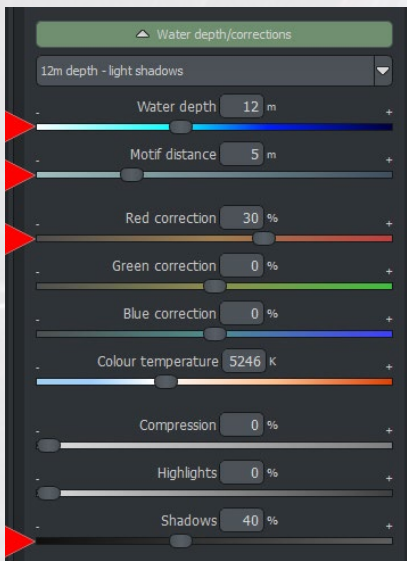
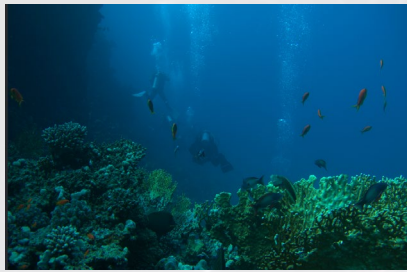


... the combination of the two parameters, **shadows (100 %)** and **highlights (40 %)**, produces an excellent result, with all visible details in the shadows and a pleasing level of contrast.

Templates/Presets



Click the **Neutral** button ...



... all the templates on offer

- for selected **water depths**,
- Combinations of **water depth with the reduction of highlights** or
- A combination of **water depth and the lightening of shadows** is shown (graph on the right).

One of the advantages of these selectable presets is that you can very quickly compare the resulting image (see next page) for different water depths or the available combinations, because **whenever you switch presets, selected parameters are automatically adjusted to optimise the resulting image** (see diagram on the left).

All default settings and other parameters can be adjusted to suit your personal preferences if required.

In the example using the **12 m depth - light shadows** preset, these are the parameters

- **Motif distance: 5 m** (estimated), which can be quickly adjusted to the actual distance between the photographer and the subject if necessary.
- **A 30 % red correction**, which makes the red colour of the fish appear even more vibrant.
- **Increase shadows by 40 %** to effectively brighten the details in the lower part of the image and make the previously dark details more visible.

Switching from one preset to another

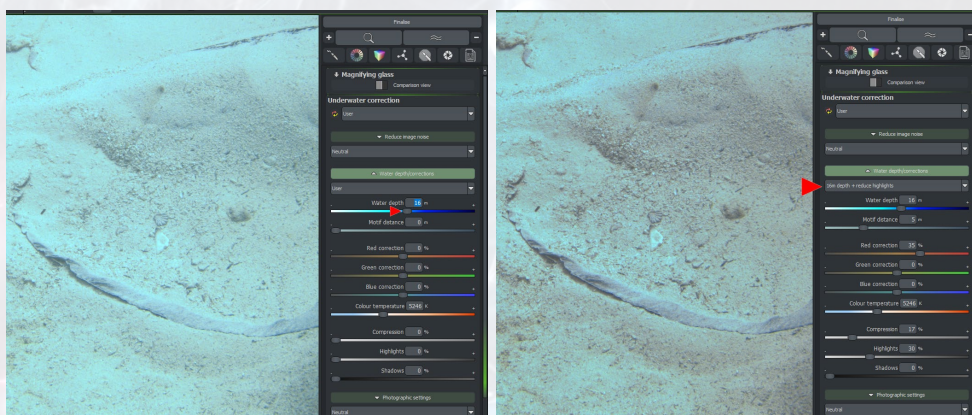


Switch from this preset to **12 m depth, light shadows**, for example ...



... when using a different scene for the **16 m Depth + Reduce Highlights** preset, the parameter settings for this preset adjust as follows:

- **Motif distance 5 m,**
- **Red correction 35 %,**
- **Compression 17 %,**
- **Highlights 30 %.**



When comparing the preset with a depth of **'just' 16 m** (left-hand image) and the combination of **16 m depth plus reduce highlights**, the difference is clearly visible: in the right-hand image, the sand regains significantly more texture, making the final image look more authentic.

The **Snorkelling preset** is ideal for taking photos just below the water's surface at depths of around 0.5 to 2 metres.

6. Reduce image noise



In addition to the 'main module' for **water depth/corrections**, the other modules serve to

- **Reduce image noise**
- **Photographic settings**
- **Palette**
- **Import/Export**

possible optimisations to image preparation, ways to influence the look of the image, or the option to export or import selected settings.

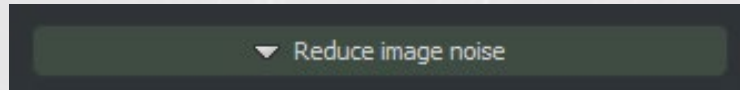
The better an image is prepared, the more effective the colour algorithms described for colour absorption correction and any photographic corrections will be.

Typical examples of useful image preparation include straightening an image in the RAW module, which is explained in detail in the [Guide RAW-Module](#) as described, or the **noise reduction**, which, like all the options in the **photographic settings** and **palette**, is also available in greater detail in the **RAW module**.

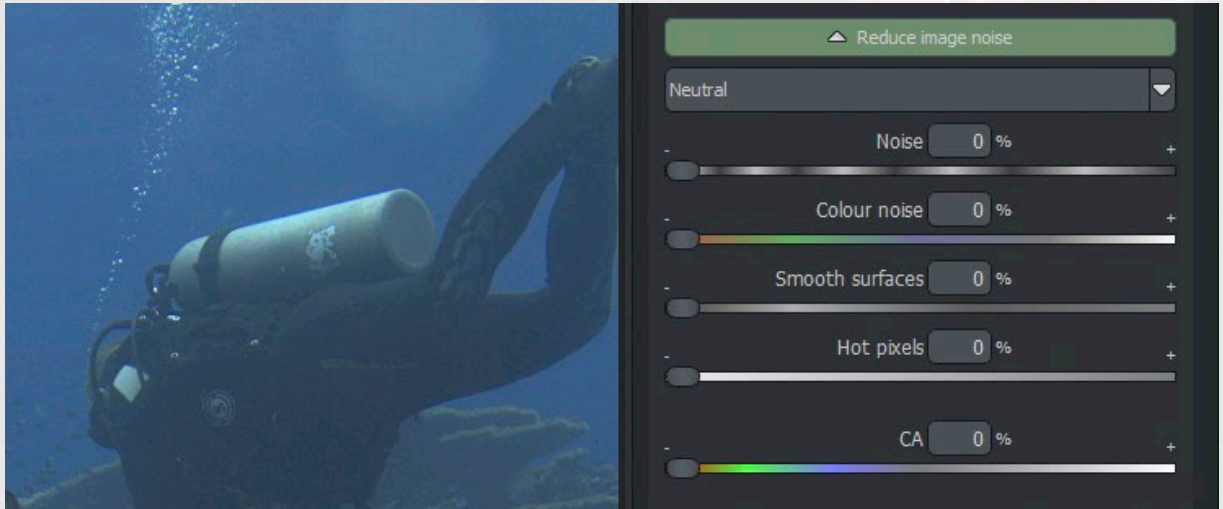
In **Finalise mode**, using the modules listed, you have quick access to the most important image-defining options, which in most cases will meet all your individual optimisation or image-look requirements.

Reducing image noise is the first step in the instructions because, depending on the subject and image quality, it is often advisable to apply the options provided there, after selecting the water depth and subject distance, **before** making any further adjustments. This allows you to better assess and, if necessary, correct aspects such as red balance, shadow brightening or other photographic adjustments.

Image processing to **reduce image noise**



Click the **Reduce image noise** button ...



... all the options in this module are displayed, which eliminate or significantly reduce various noise-related issues such as **artefacts**, **hot pixels**, **smooth surfaces**, **colour noise** or **chromatic aberration** (CA).

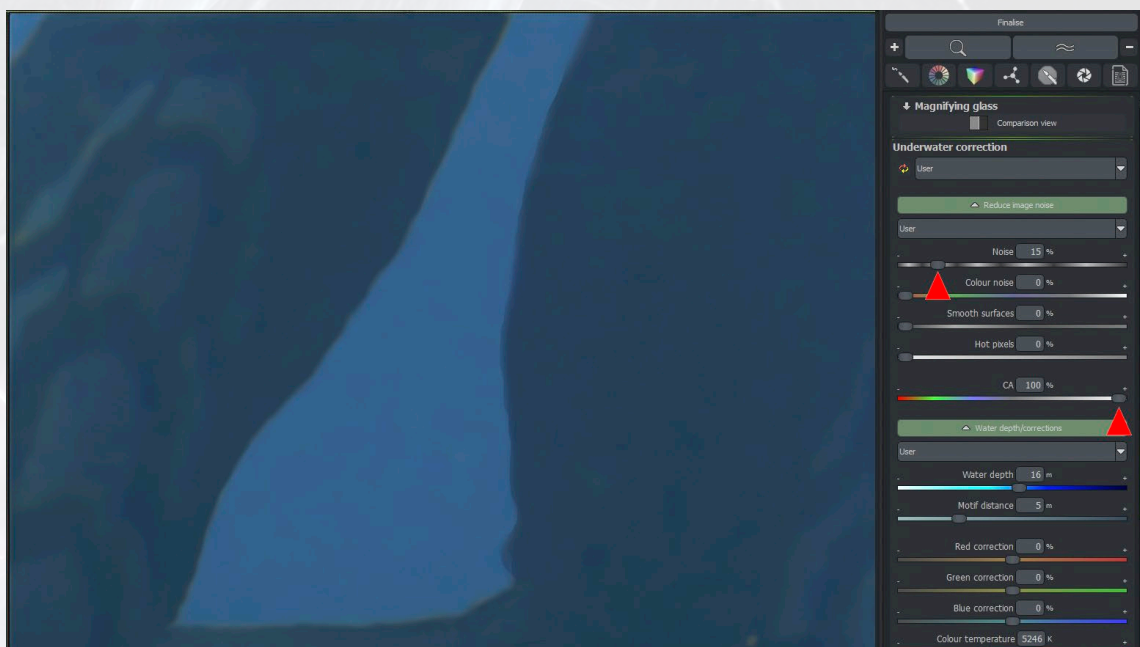
Whether you use one or more of these options depends on the original document you have loaded.

- **Noise:** Reduces “general” image noise.
- **Colour noise:** Reduces colour noise or chrominance noise, which appears as distracting coloured dots in the image, for example in low light conditions, in the dark, or on uniform surfaces.
- **Smooth surfaces:** Smooths out “rough” or noisy areas without destroying the existing details, unlike a blur filter.
- **Hot pixels:** Reduces any hot pixels that may be present. These are usually brightly coloured pixels on the camera sensor that can be caused, for example, by manufacturing tolerances or long exposures, and which appear as coloured dots in the image.
- **CA:** Reduces **chromatic aberration**. These unsightly colour fringes (often appearing as purple, blue or green) are most commonly visible (particularly at high magnification) along contours or edges of contrast, caused by the differing refraction of the different colours of light.

Two examples using sliders illustrate the various possible applications:



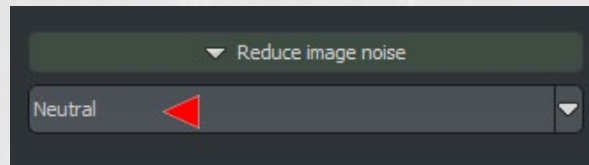
If you zoom in closely on this image, you will see some general noise in the water and blue and green fringing along the edges.



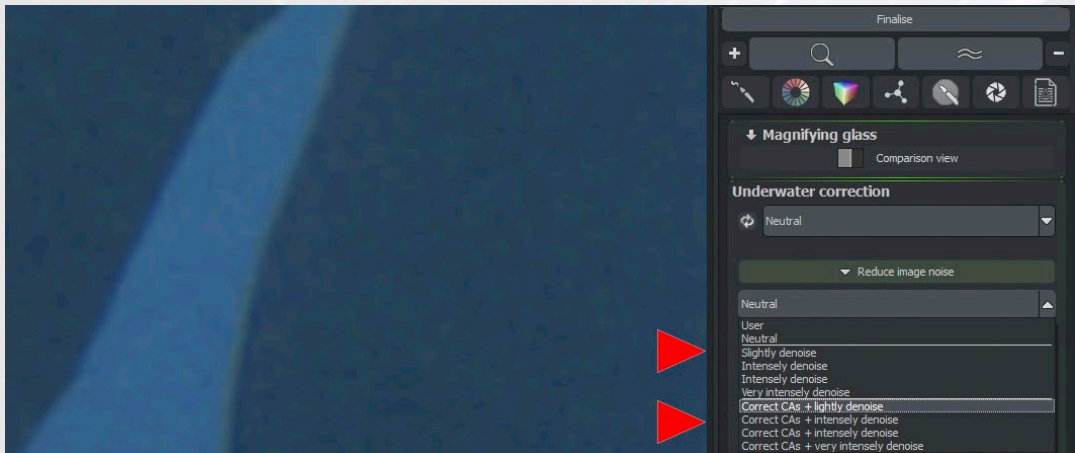
Now move both the **Noise** and **CA** sliders all the way to the right until you are happy with the result and as little detail as possible has been lost due to the noise reduction. In the example, the **Noise setting is set to 15 %** and the **CA setting to 100 %**.

These adjustments now also affect any further changes made, such as colour corrections.

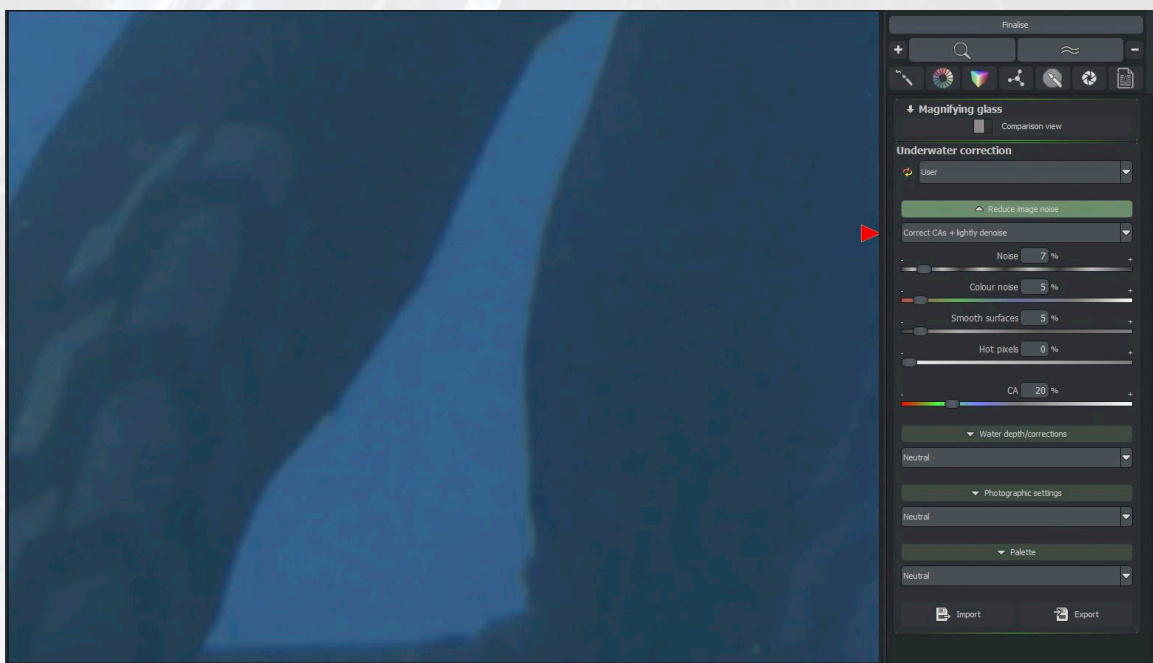
Presets



Click the **Neutral** button ...



... all automatically selectable presets for 'pure' noise reduction, or those below the white line for a **combination of chromatic aberration correction and various noise reduction levels**, are displayed.



If you select the **Correct CA + Light Noise Reduction** preset for the same image, the parameter settings will be displayed below. The result is impressive: with just one click, the difference compared to manual adjustment is barely noticeable, and disappears completely when you zoom out. It's definitely worth giving the presets a try.

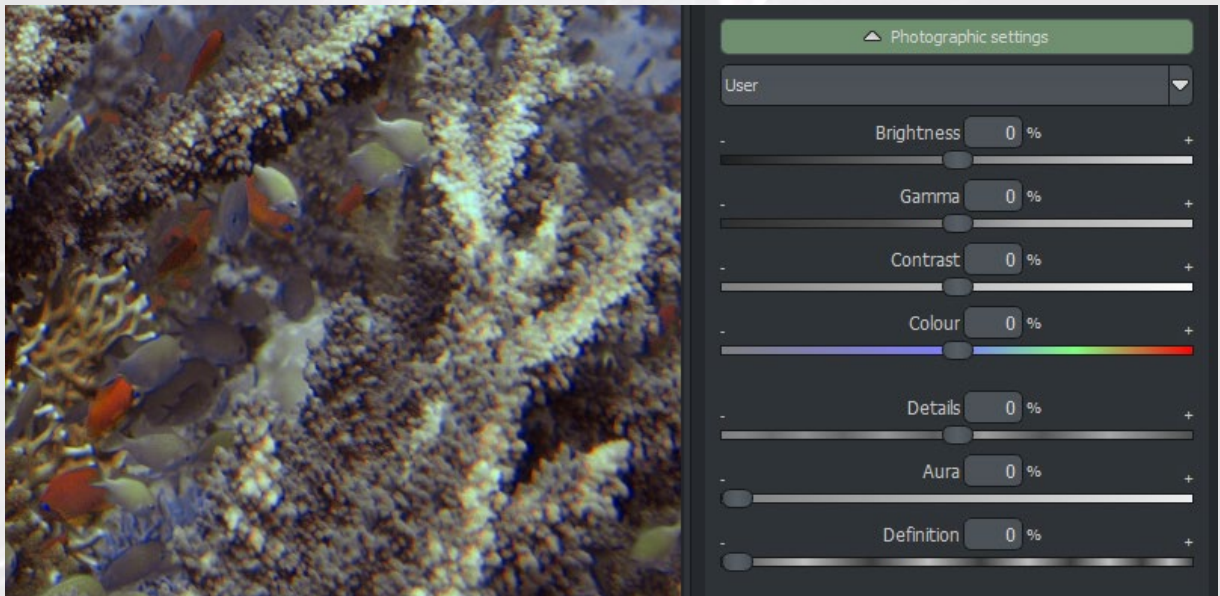
7. Photographic settings



This module provides all the tools needed for quick “traditional” image editing or image manipulation.

What makes the parameters in these programmes special is that they are adaptive; in other words, they do not simply apply a uniform effect to the entire image, but analyse the image content in order, for example, to selectively lighten shadows whilst largely leaving bright areas untouched, or to locally enhance or reduce contrast.

Click the **Photographic settings** button ...



... all adjustable parameters are displayed.

- **Brightness:** Adaptively (dynamically) adjusts the brightness of the subject.
- **Gamma:** Calculates and corrects a brightness adjustment with a focus on the mid-tones.
- **Contrast:** Increases or reduces the contrast of the subject.
- **Colour:** Increases or decreases the **colour saturation**.
- **Details:** Increases or reduces the level of detail in the loaded image.
- **Aura:** Adds a glowing aura to the image.
- **Definition:** Reduces blurring in the image or sharpens it as required.

By default, with two exceptions, all controls are set to **the centre (zero) position**, so that the desired effect can be increased (to the right) or reduced (to the left).

The exceptions are the two parameters **Aura** and **Definition** (Sharpness), for which only an enhancing effect is applied.

If changing **one** parameter does not produce the desired result, try combining two or more controls until the image looks the way you want it to.

Brightness

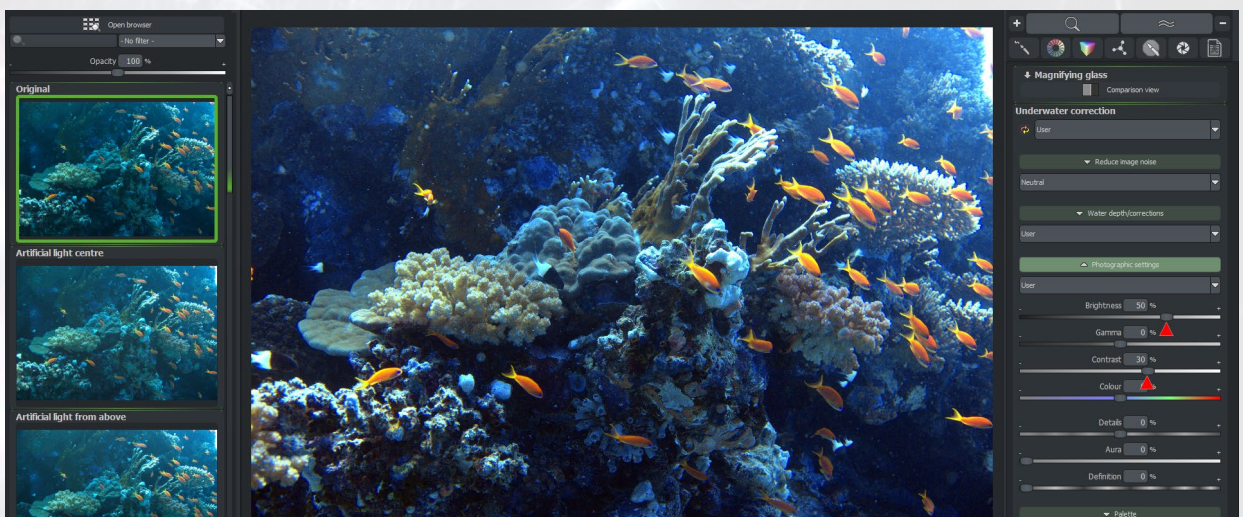


Like all the others, this control operates adaptively and, when set to a positive value, brightens the dark areas of the image more than the light ones.



If you drag the slider to the right here, in the example, to **50 %**, the dark areas in the scene will be brightened more significantly than the light areas, if you drag it to the left, the light areas will be darkened more significantly than the dark areas.

Combination of brightness and contrast



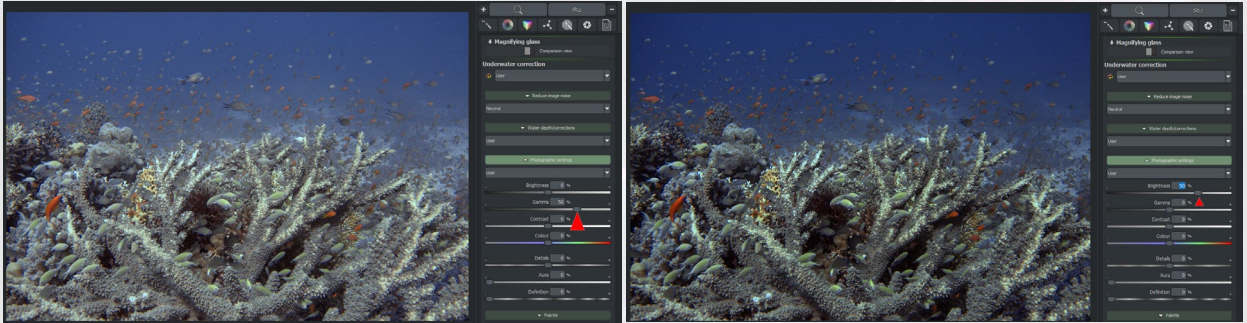
If the image has become a little too low in contrast as a result of the brightening, you can adjust this using the **contrast slider**.

In the example, this parameter has been set to **30 %**, producing a very impressive result.

Gamma

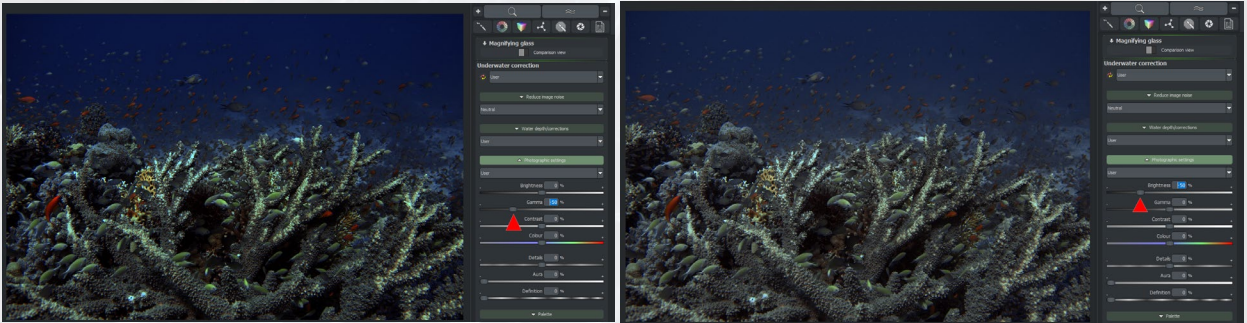
Gamma correction primarily affects the mid-tones, whilst the darker or lighter areas are less affected.

Lighten

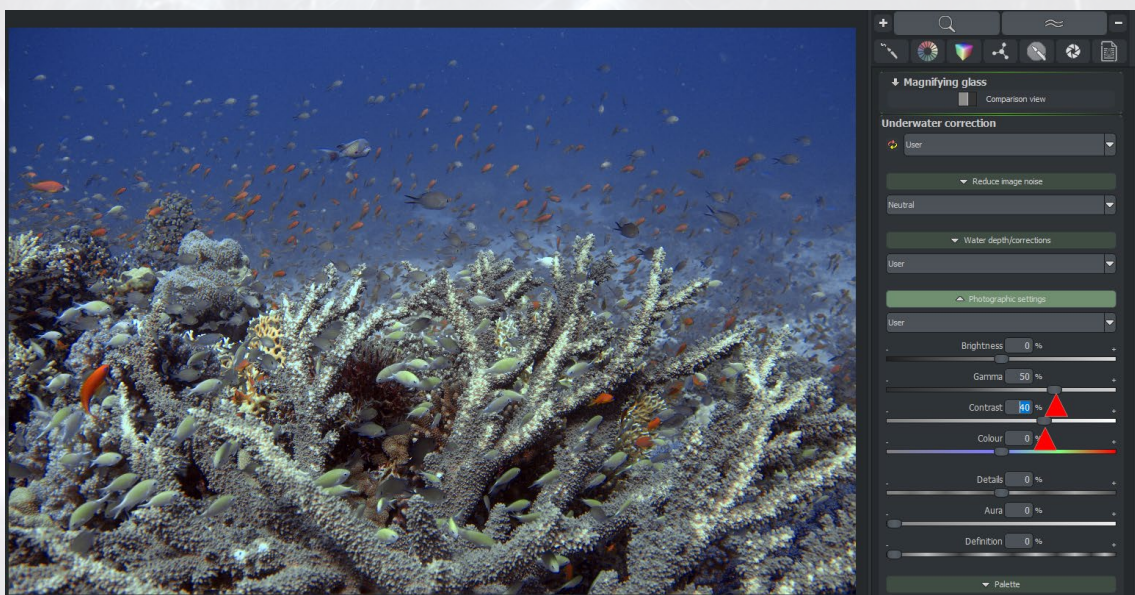


Move the slider to the **right** (left-hand image) in the example, setting it to the same value of **50 %** as before for **brightness** (right-hand image) makes more tones appear **lighter**.

Dimming



Move the slider to the **left** (see the image on the left) in the example, set to **-50 %**, more tones appear **darker**. The image on the right shows the same value for the **Brightness** parameter.



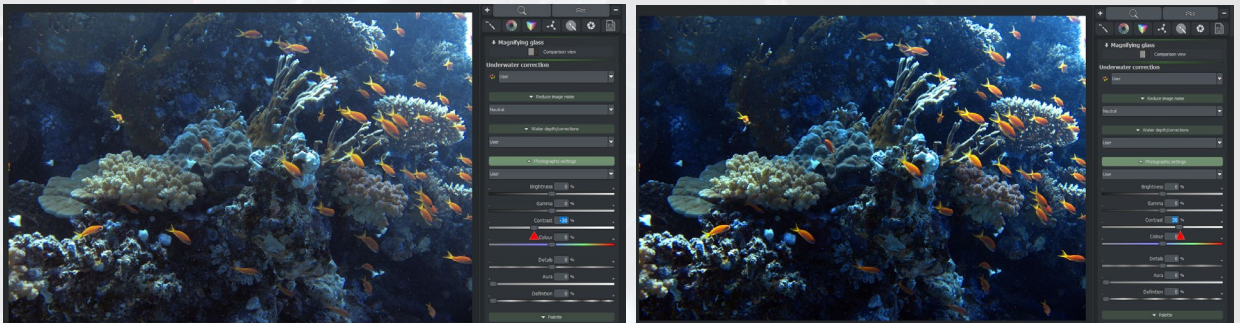
In this case, too, **combining this with contrast enhancement (+40 %)** can be a good choice.

Contrast

Contrast, the differences in brightness and/or colour, plays a key role in defining the look of an image and can steer the message it conveys in a very specific direction.



If, as in the example, an image contains all tonal values from very dark to very light, this light-dark contrast appears pleasantly rich. If the dark and light tonal values are missing and only the mid-tones dominate, the image appears rather 'flatter' and less contrasty.



If you drag the contrast slider to the **left**, in the example, to **-30 %** (see image on the left), the contrast in the image is **reduced**, which can be a deliberate stylistic choice for certain subjects.

If you move the slider to the **right**, to **+30 %** in the example, the light-dark contrast is **increased** and the colours appear more vivid.



Here, too, **combining this with the brightness parameter (+70 %)** produces the most convincing result.

Colour

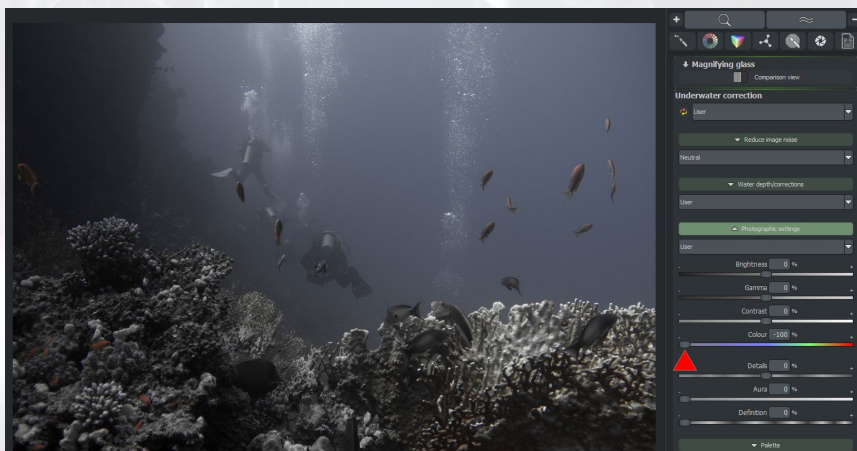
This parameter could also be called **colour saturation**, as it enhances or intensifies colour saturation when set to a positive value, and desaturates colours, depending on the subject, to the point of producing a greyscale image when set to a negative value.



For this design, slowly move the slider all the way to the **right**, ...



... in the example, set it to the (exaggerated) value of **100 %** until the image looks just right to you.



If you move the slider slowly to the left, the colours become increasingly desaturated. At a value of **-100 %** in the example, only very faint shades of red remain visible.

Details



This control analyses the details in the image based on the subject.



If you drag the slider to the left to **-70 %** in the example, the structures, textures or micro-contrasts in the image will be **reduced**.

The image may appear 'calmer' and smoother, but also 'flatter' and with less contrast, which may be the intended effect for certain subjects.



If the control is moved to the **right** from the centre position in this example to **+70 %**, the details in the image are effectively **enhanced** depending on the subject, which is often desirable for underwater photography.

Aura



This slider applies a glowing aura of the selected intensity to the imported image, creating an interesting, 'softer' look with beautiful colour gradients at the expense of sharpness and detail.



Slowly move the slider from the zero position (on the left) to the right, in this example to **50 %**, until you are happy with the result.

Combined with colour

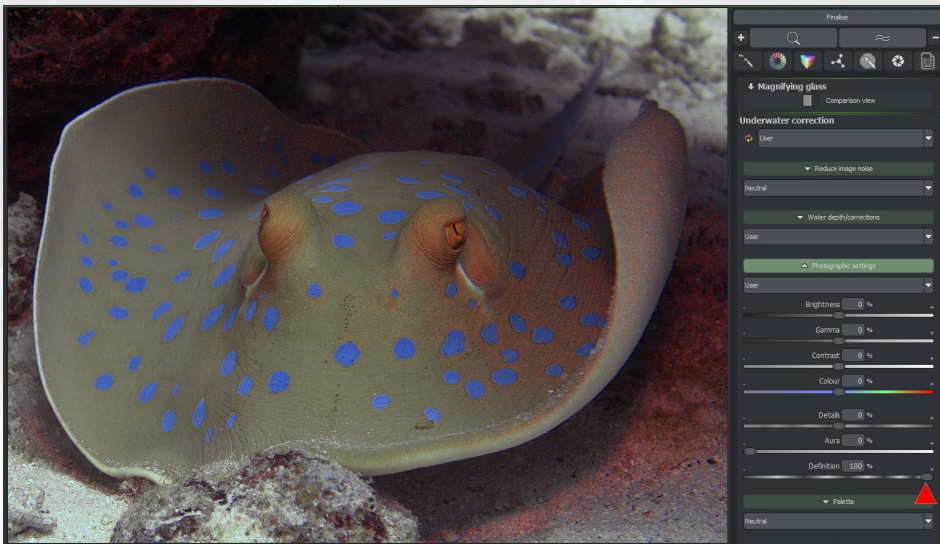


For example, if you want to emphasise the effect of the **colour gradients** more strongly, combine the Aura effect with the **Colour** parameter, using a strength of **50 %** in the example.

Definition



This parameter is unique: it does not control a 'standard' sharpening filter, but instead combines several sharpening algorithms from the **SHARPEN programme**, such as camera **shake correction**.



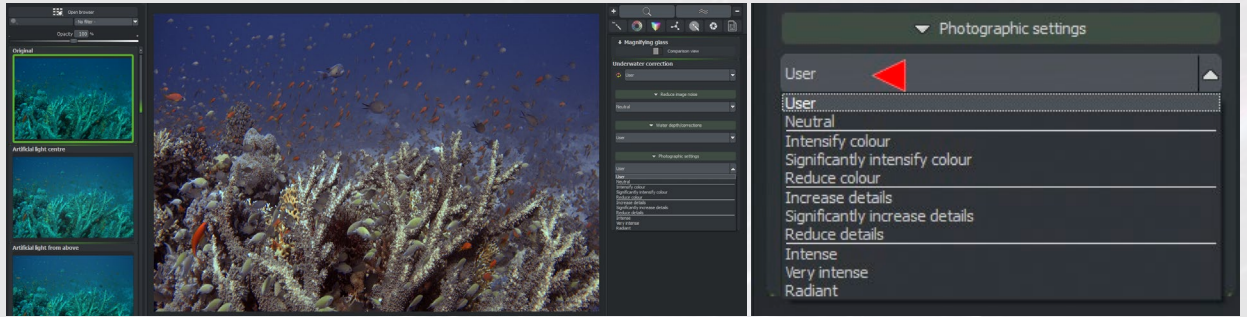
Although the slider in the example is set to **100 %**, the image does not appear oversharpened in this enlarged view, which is one of the strengths of this parameter.

Combination with brightness



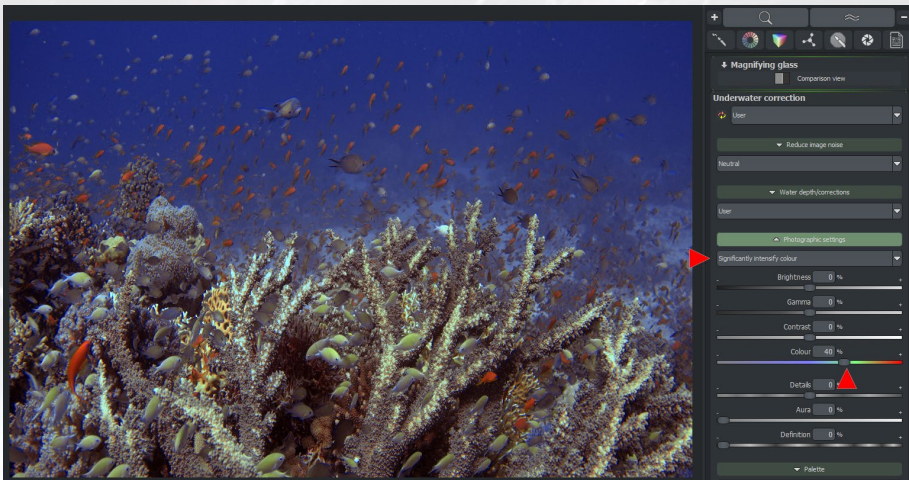
Of course, the sharpness parameter can also be combined effectively with other effects. In the example, the **sharpness slider is set to 80 %** and the **brightness to 50 %**.

Presets

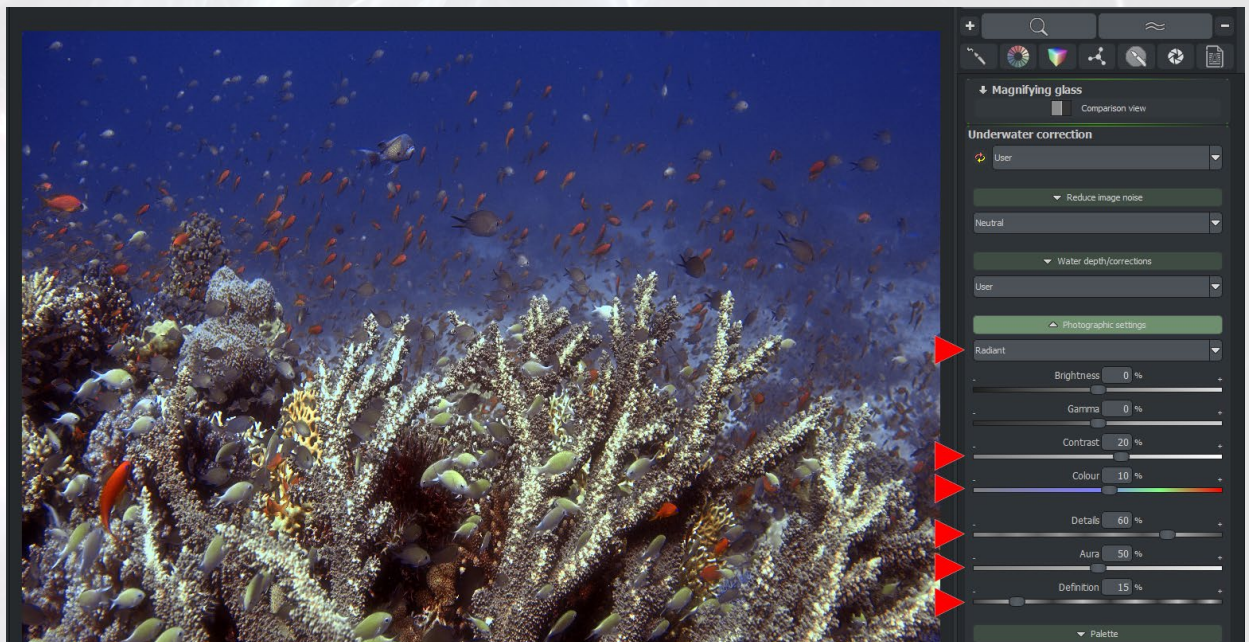


When it comes to **Photographic settings**, you can also choose between different presets and thus different image styles.

Clicking the **User** button displays all the default settings for this module.

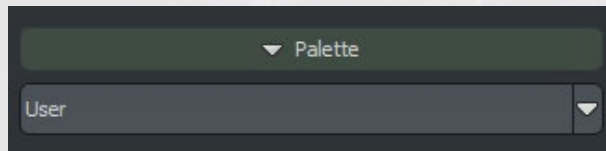


For example, if you select the **Significantly intensify colour** preset, all colours are immediately displayed more vividly and the “Colour” slider automatically “jumps” to **40 %**.



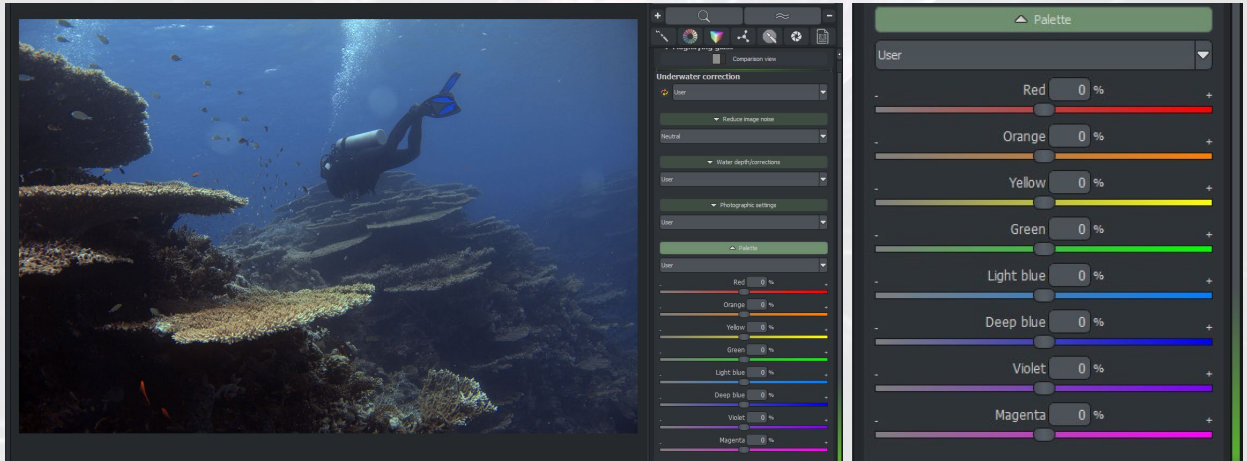
The second example is even more interesting: if you select **Radiant** here, **five sliders** with adjusted settings will shape this visual style with a single click.

8. Palette



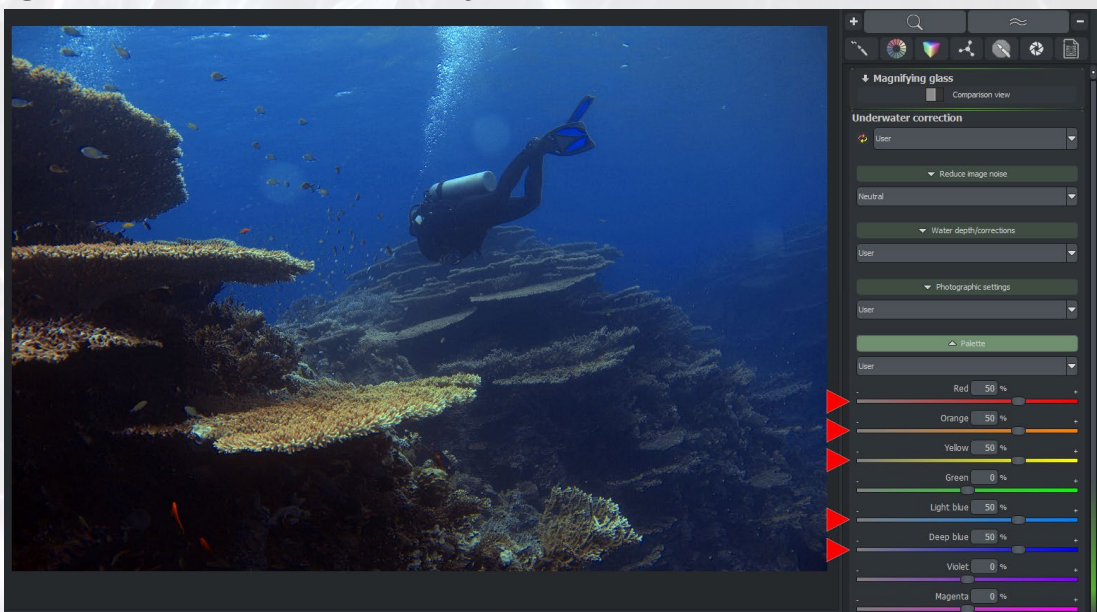
In this standalone module, which could also form part of the photographic settings, you **can adjust individual colours as required**.

Click the **Palette** button ...



... all colours of the RGB colour space, from red through green and blue to magenta are displayed. These can be individually adjusted to be **more vibrant** (to the right) or **desaturated** (to the left) as required, as all sliders are currently set to the centre position.

Change several colours selectively



If, in the example, you boost the colours **red, orange, yellow, light blue and deep blue** to the positive values of **50 %**, the image takes on a 'stronger' visual impact or a more colour-saturated look, which makes the image appear slightly more striking, though this naturally depends on personal taste.

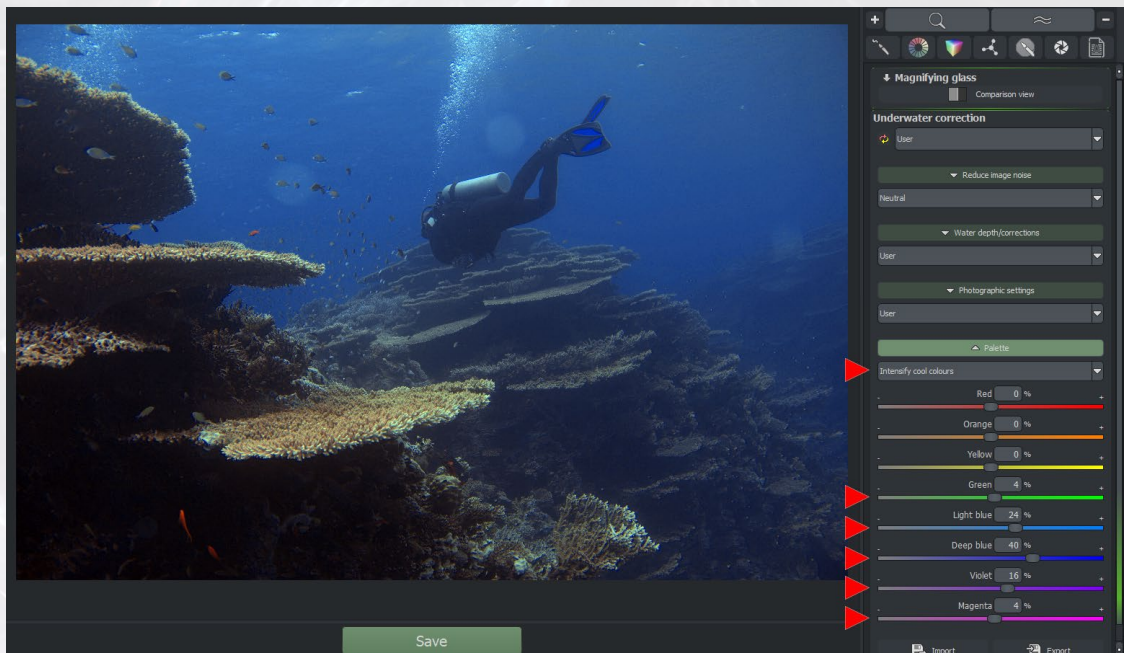
Presets

In this module, too, presets make it easier to choose specific image looks.



Clicking the "User" button displays all the available image looks, ranging from **Intensify warm colours** to **Significant weaken blue**.

Preset: **Intensify cool colours**



For example, if you select the **Intensify cool colours** preset, a single click applies an interesting and compelling look to the image using the corresponding parameter settings, confirming that achieving the same look manually would require much more time-consuming experimentation.

Here are the parameters

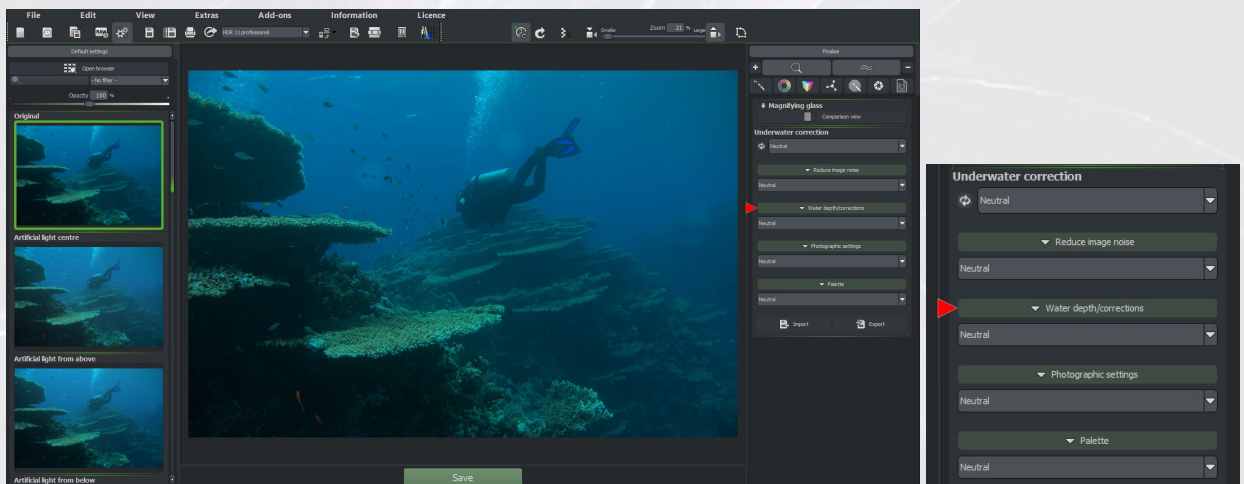
- **Green at 4 %,**
- **Light blue at 24 %,**
- **Deep blue at 40 %,**
- **Violet at 16 %,**
- **Magenta at 4 %.**

9. Proposed Workflow

There is no 'single' or 'correct' path from the imported image to the final image that can be saved or printed, because the source images naturally vary greatly and, accordingly, different parameter settings and/or presets are required to achieve the desired result.

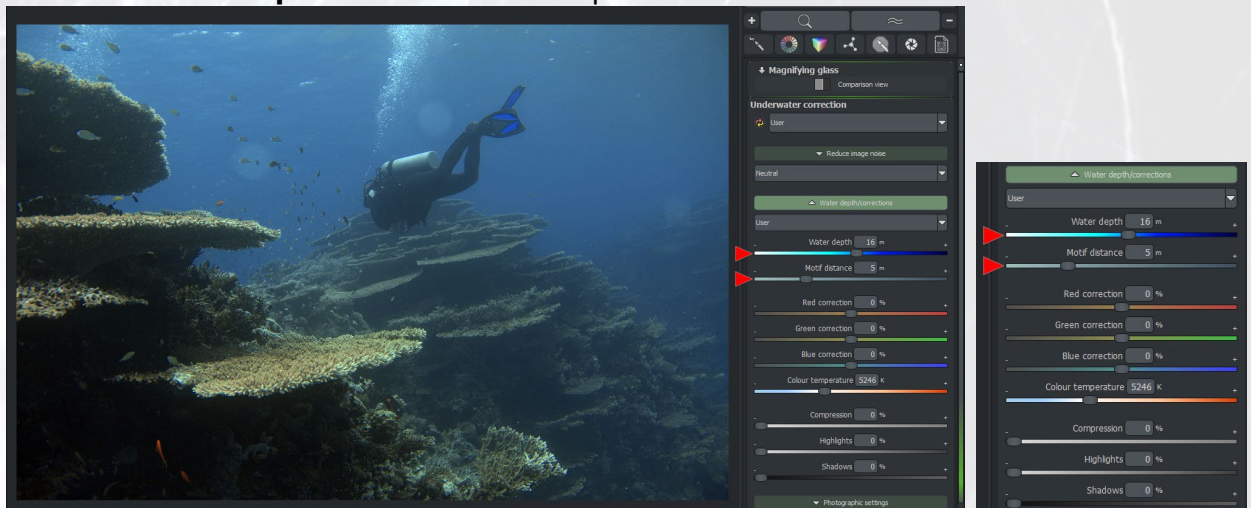
The following example outlines a useful approach to help you achieve excellent results quickly.

Note: The start of each workflow, loading an image file and the end, saving or printing the final image, are described in detail in the [General programme functions](#). Unless otherwise stated, the **Original** preset has always been used.



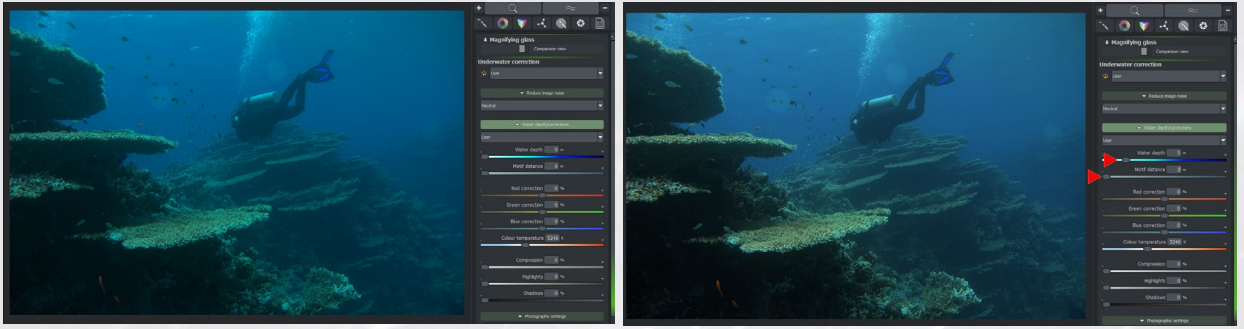
Step 1: Set the water depth and subject distance

Click on **Water depth/corrections** to open the module and ...



... set the **estimated** or **known** water depth, in this example, the **water depth** is **16 m** and the **motif distance** is **5 m**.

Gradually finding the “right” water depth



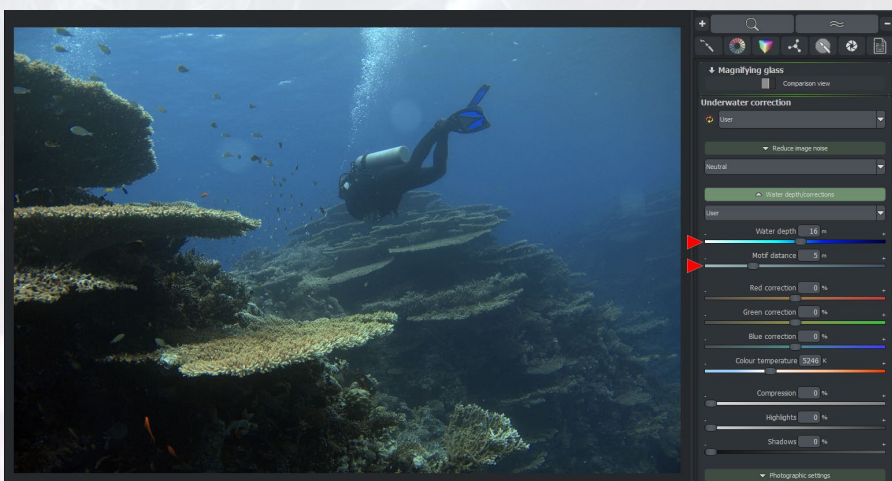
The values entered for **water depth (16 m)** and **subject distance (5 m)** are estimates, as the actual figures are not available.

If you have no idea at what depth the subject was photographed, you can experiment gradually to find the image that looks best to you.

First, in the example (image on the right), the **water depth has been set to 5 m** and the **motif distance to 2 m**, which already improves the initial image somewhat.



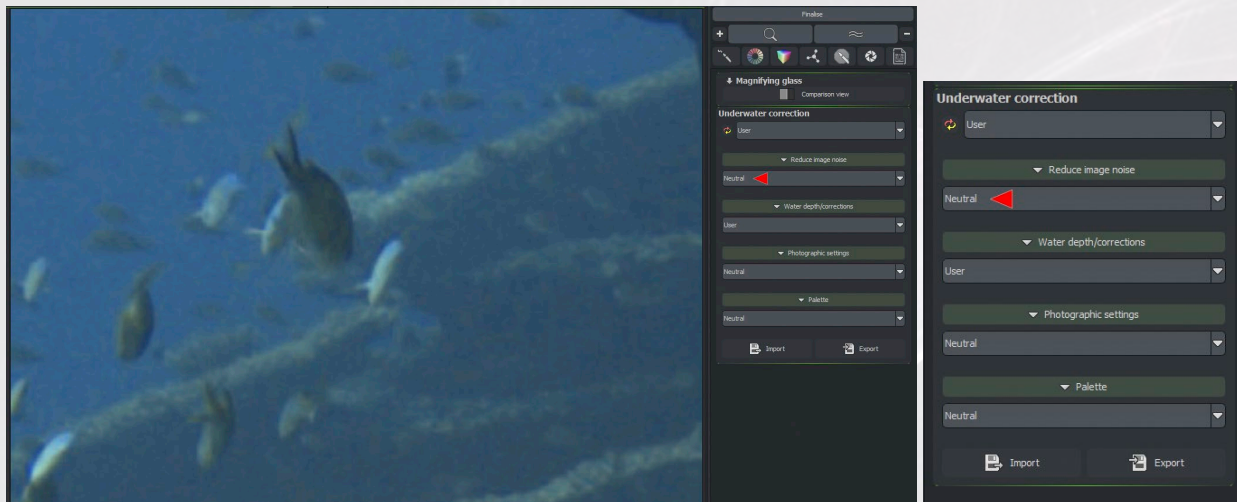
If the **water depth** and **motif distance** controls are now adjusted in increments to **10 m/3 m ...**



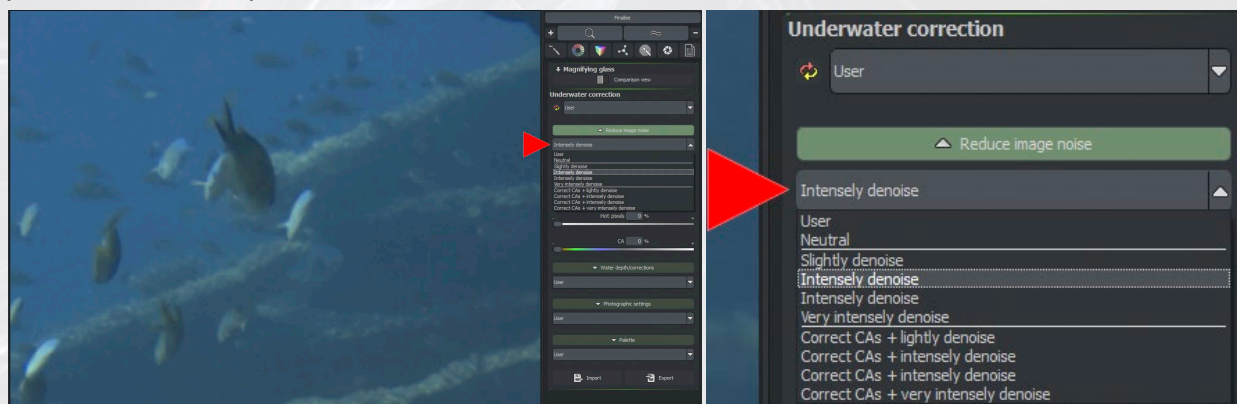
... and then, once you've moved up to **16 m/5 m**, the picture doesn't get any better if you increase the values any further.

Note: If in doubt, enter a slightly higher value for the water depth. The image cannot be 'over-corrected' because **DIVE** compensates for these inputs.

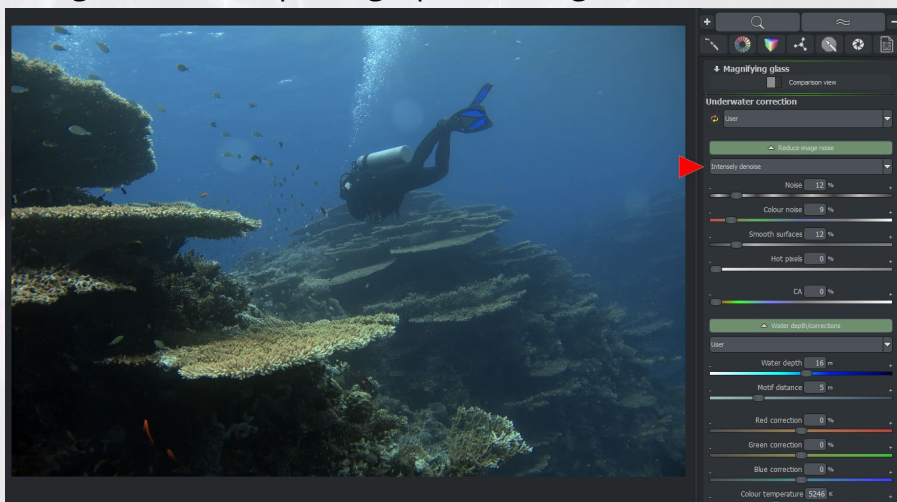
Step 2: Reduce any image noise if it is visible in the image.



If you notice noise ranging from faint to strong in the image, which is particularly visible when the image is greatly enlarged, either click the **Reduce Image Noise** button to manually reduce the noise using the available options, or click **Neutral** on the button below and select an automatic noise reduction preset from the presets...



... In the **Intensely denoise** example, this makes the image appear visibly "smoother" and more uniform. Another advantage is that any adjustments made to the colour algorithms and photographic settings are more effective.



This preset is also a great choice when viewed as a whole.

Step 3: Select the **Very intense** preset from the **photographic settings**



Once you've made the 'essential' adjustments and corrections that directly affect the quality of the image, it's often a good idea to apply a correction that alters the look of the image, making it appear 'fresher, more vivid and more powerful'.

You can quickly change the look of your image by selecting one of the **presets** available in the **Photographic Settings** module. In the example, after clicking the **Neutral** button, the **Very Intense** preset was selected.

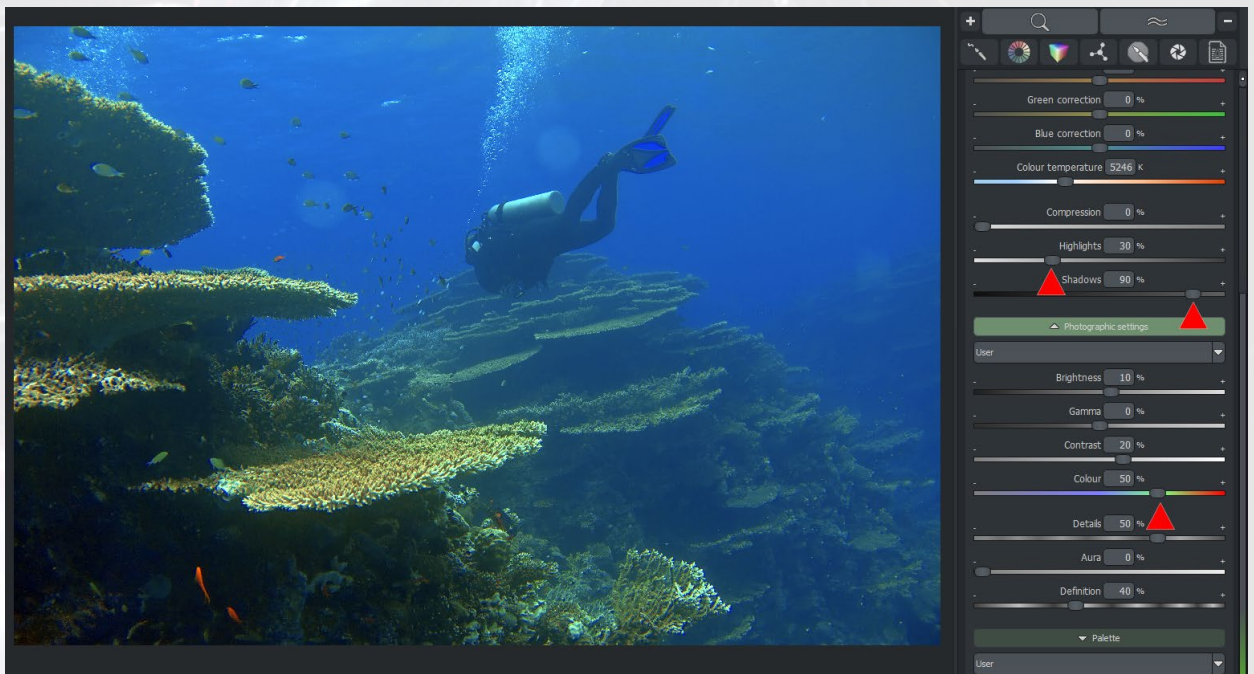


With just one click, the image, which was already impressive, has become an even more striking eye-catcher. The parameter settings used to achieve this effect are shown below.

Step 4: Fine-tuning or fine adjustment



This 'draft' could be saved as it is. Depending on the subject and your personal taste, you can add the final 'touches' to the image.



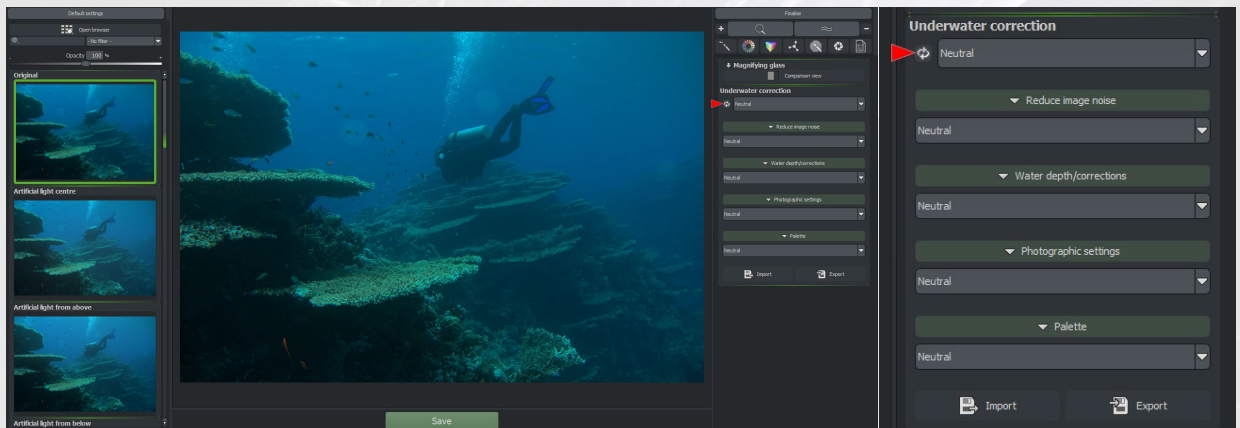
In the example, in the **Water Depth/corrections** module, the **Shadows slider has been set to 90 %** and the **Highlights slider to 30 %** so that the very dark area of the image at the bottom left, containing the fish, stands out more clearly. In the **Photographic Settings** module, the **Colour slider is now set to 50 %**.

Conclusion: With four adjustment or correction steps, a very good image with corrected colour and brightness has been produced, which can be saved or printed.

10. Master presets - the quickest route to success

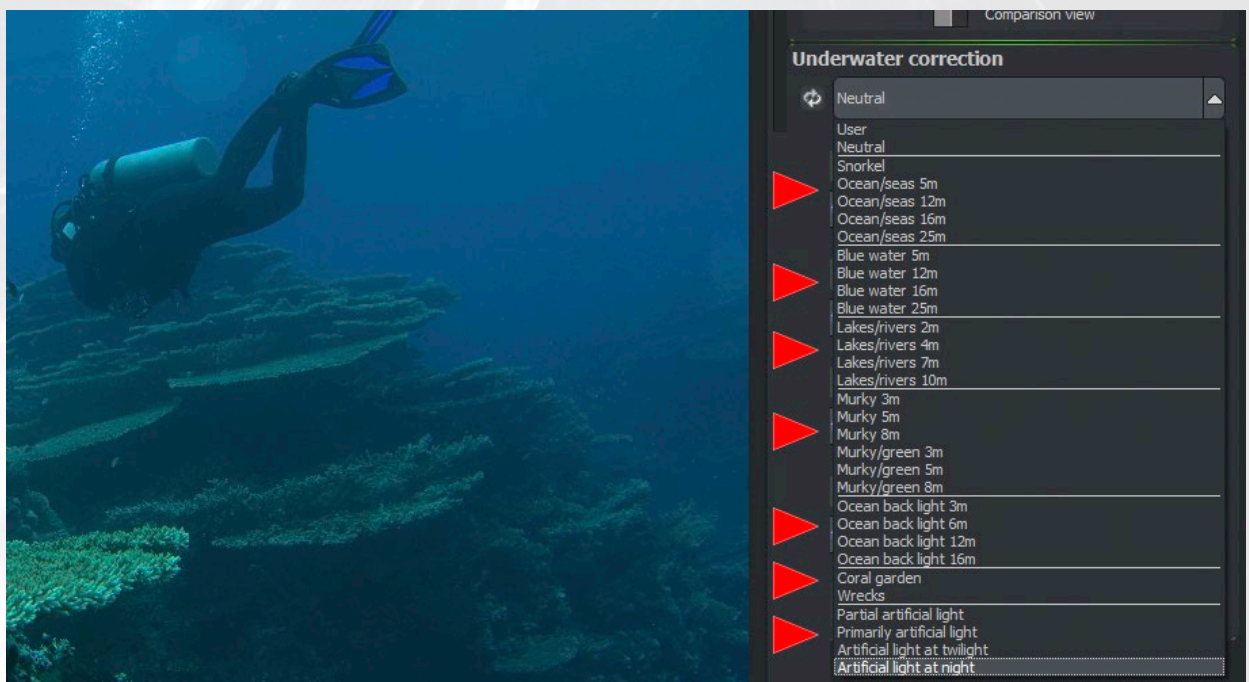
The 4 modules

- **Reduce Image noise**
- **Water depths/corrections**
- **Photographic settings**
- **Palette** ...



... are supplemented by **master presets** in the title bar.

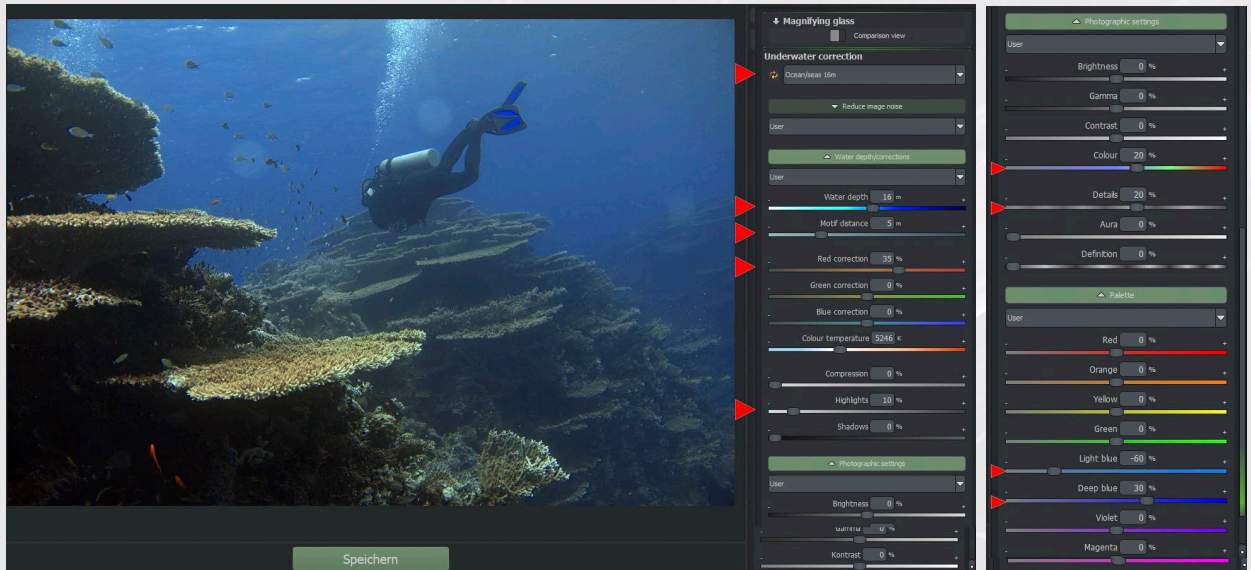
“Parent” or “global” means that these presets essentially draw from all four modules, and with a single click on the **Neutral** button ...



... select various scenarios across 7 categories, separated by a white line, as automatic presets.

If you like, this is the unbeatably **fast workflow**.

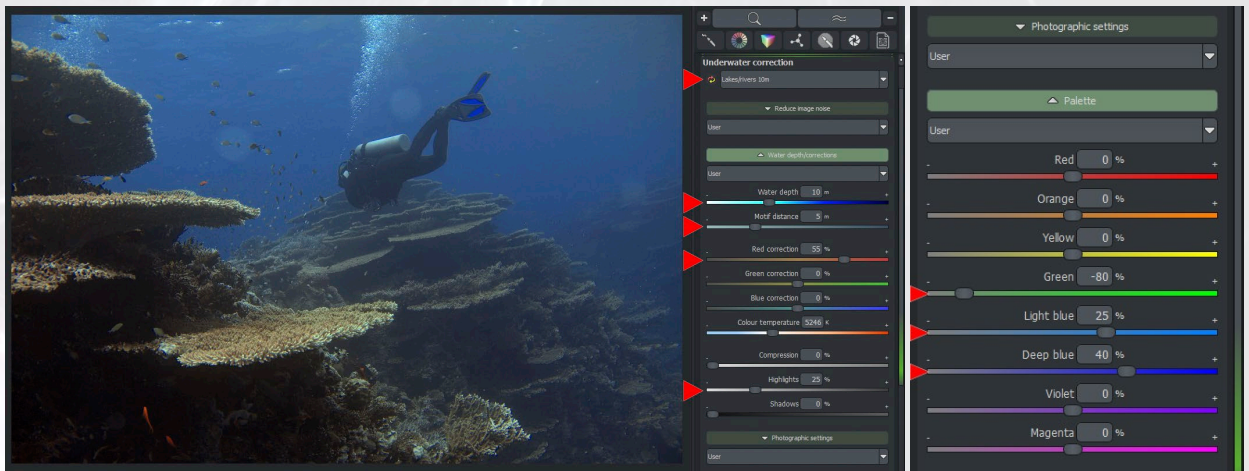
Example 1: Ocean/Seas preset 16 m



As shown in the first example here, if you select **Ocean/Seas 16 m**, DIVE applies the **Reduce image noise** setting to all modules, opens them and adjusts the image-defining parameters that, in the programme's view, show the loaded subject to its best advantage.

The modules for which no settings are adjusted remain closed.

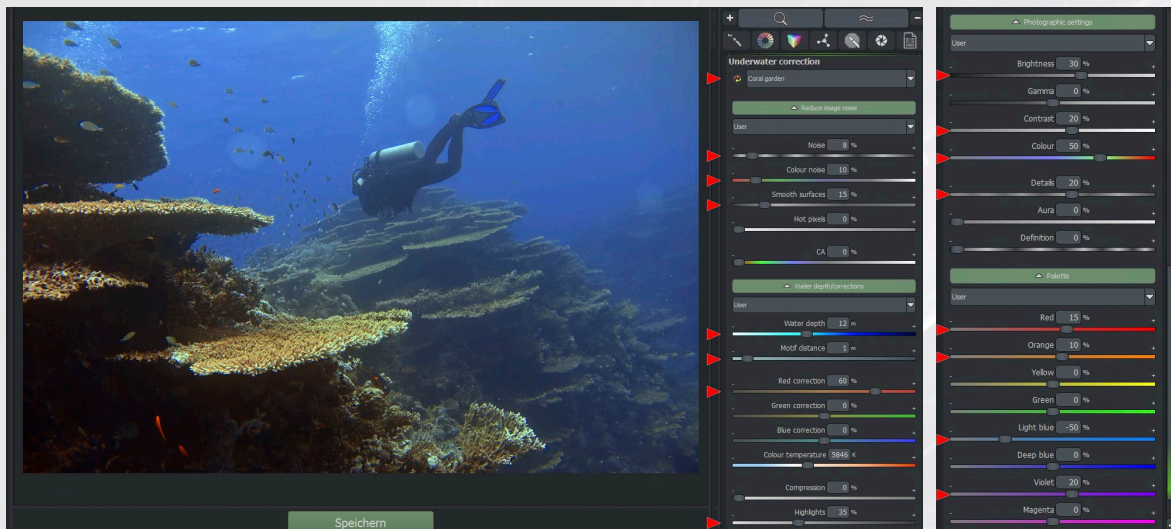
Example 2: Lakes/Rivers preset (10 m)



If you select this preset, the **Reduce Image Noise** and **Photographic Settings** modules will remain collapsed; changes will only be applied in the **Water Depth/Corrections** and **Palette** modules.

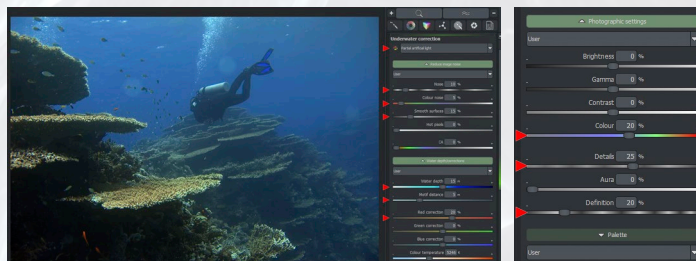
The water in lakes and rivers is different from that in the sea; it is often slightly dirtier, sometimes more brownish, and has different colour absorption properties, which requires a different, tailored correction or reversal of colour absorption.

Example 3: Coral Garden preset

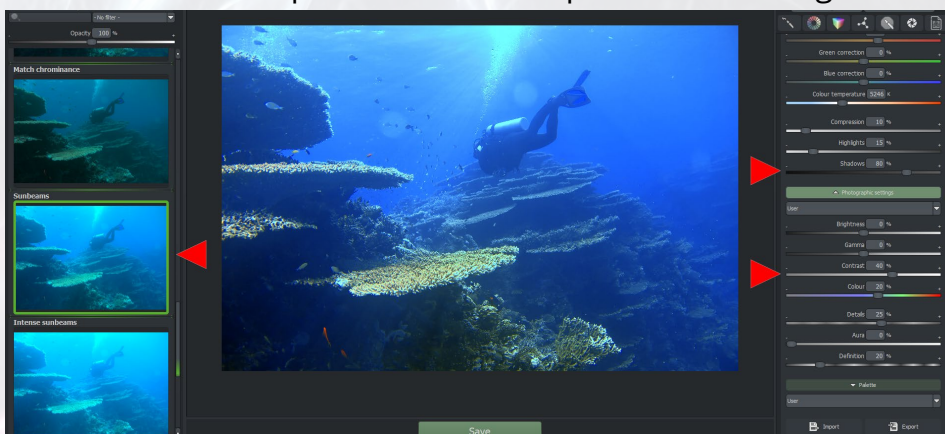


Select one of the most interesting and exciting **Coral Garden** presets, and the parameters in all modules will be adjusted to instantly create a stunning and impressive final image, a result that would be difficult and time - consuming to achieve through manual adjustments.

Example 4: partial artificial light (e.g. from a torch)



Once you have selected this preset with all the parameter settings ...



... is done manually

- the **Sunbeams** preset instead of the original (on the left),
- set the **Shadows** slider to **80 %**,
- the **Contrast** slider to **40 %**

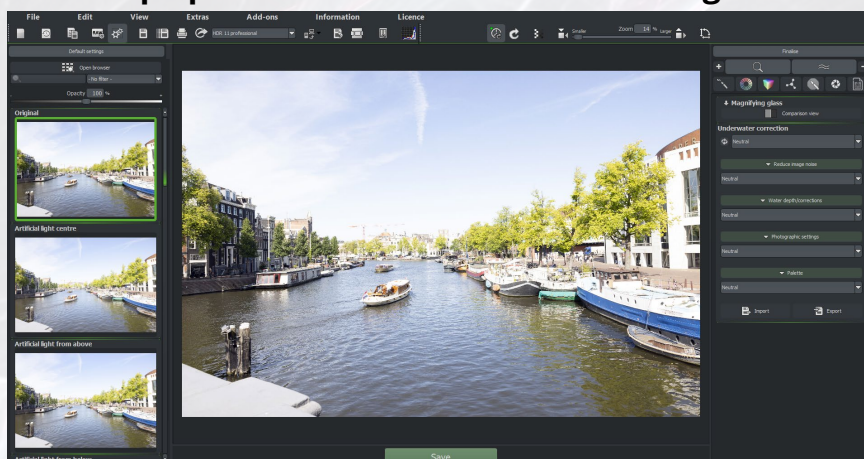
has been modified to show that, of course, individual adjustments can also be made based on a selected preset, allowing the image look to be tailored even further to personal taste if required.

11. Use DIVE for “standard” above-water shots

Of course, ‘standard’ images can also be imported into **DIVE** and edited, as **DIVE** provides all the tools required for ‘traditional’ image editing in the **Photographic Settings, Palette and RAW modules**, in addition to the **Water Depth/Corrections** module.

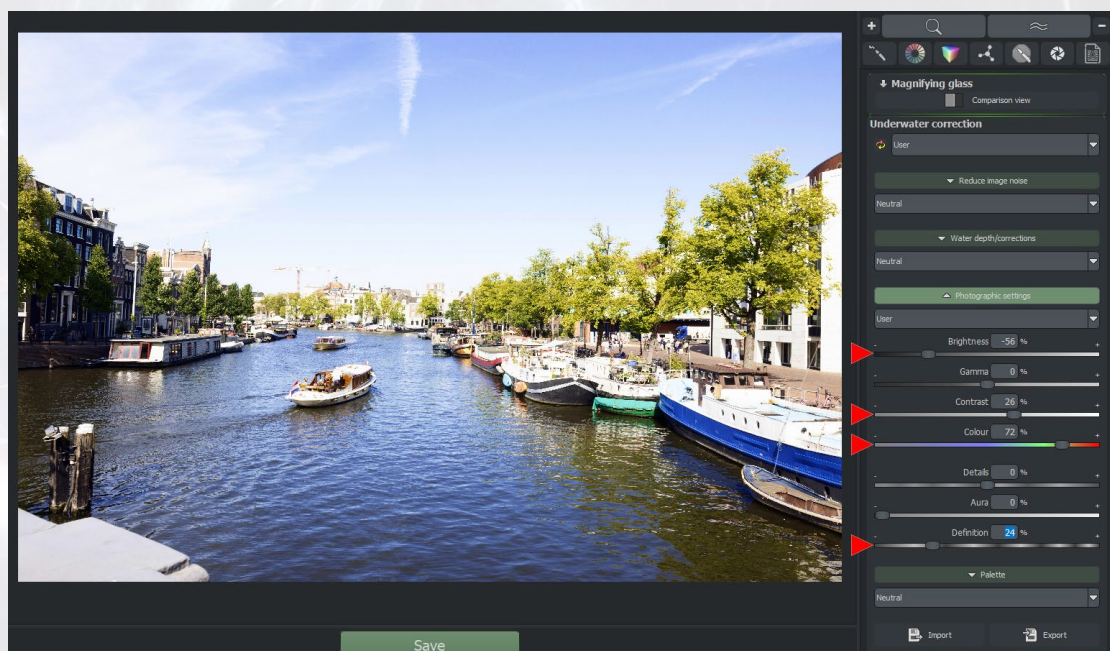
The following examples show selected scene scenarios (photographer: author) with different editing approaches, which are only hinted at here and not described in detail.

Example 1: Landscape photo in RAW and camera settings



In this somewhat “flawed” photo from Amsterdam, which is misaligned and overexposed, a few adjustments in two modules produce a good final image.

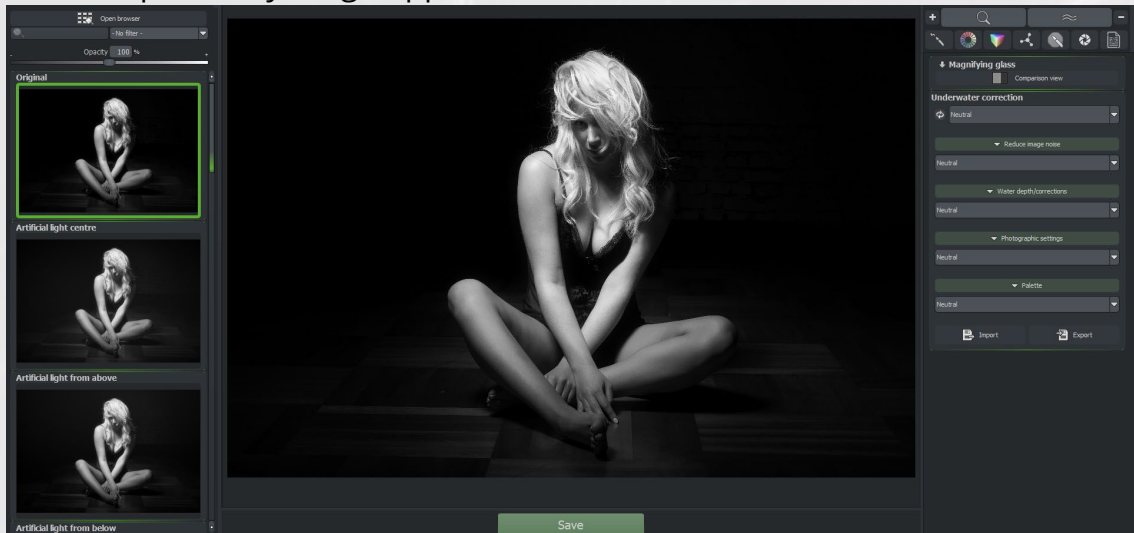
1. Switch to the **RAW module** and straighten the horizon line in the Distortion section.
2. Changes to parameters in the **Photographic Settings** module.



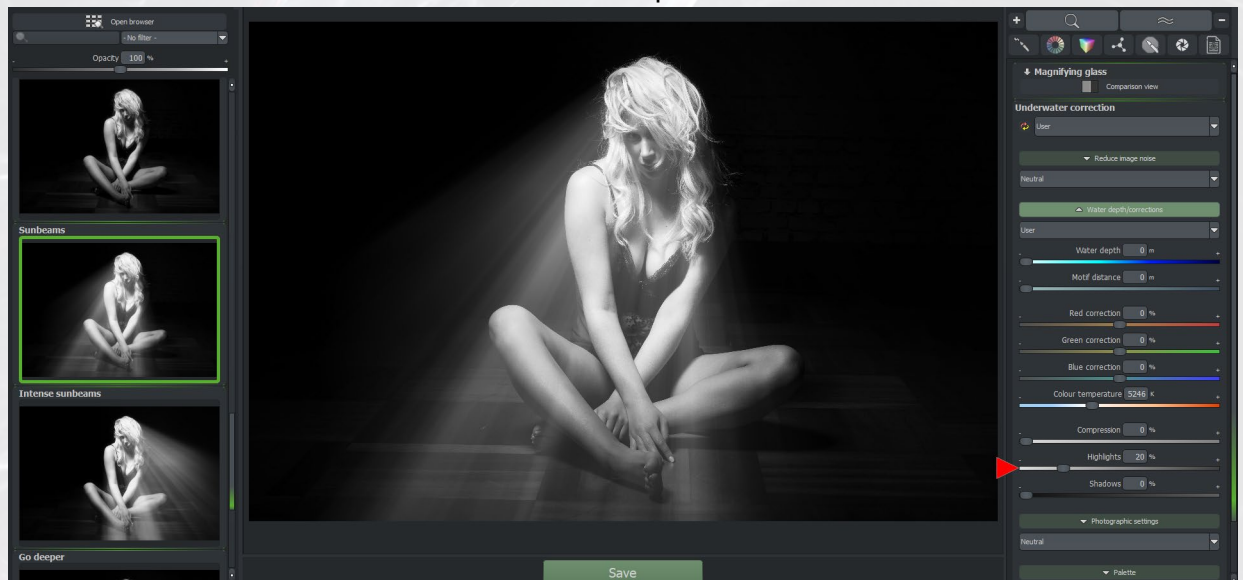
The image, which was processed quickly, looks great.

Example 2: Black-and-white portrait: Changing the image look with a preset

In this example, everything happens much faster.

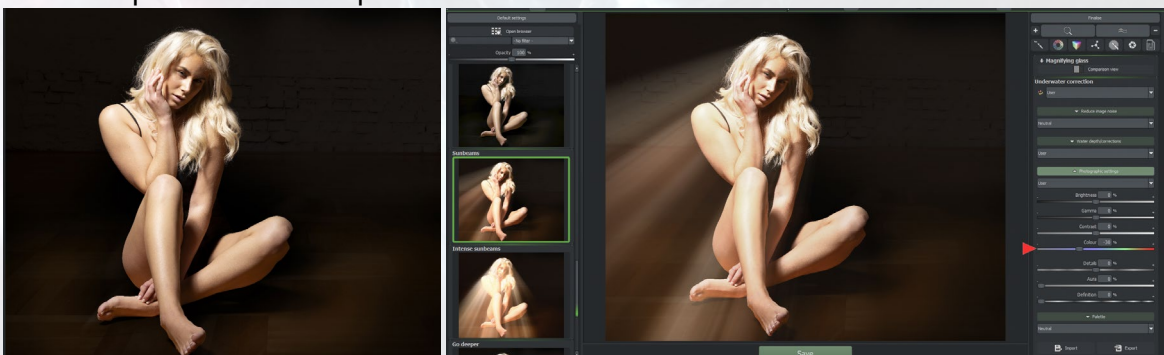


The transformation of this black-and-white portrait ...



... turns into an eye-catching feature in the blink of an eye:

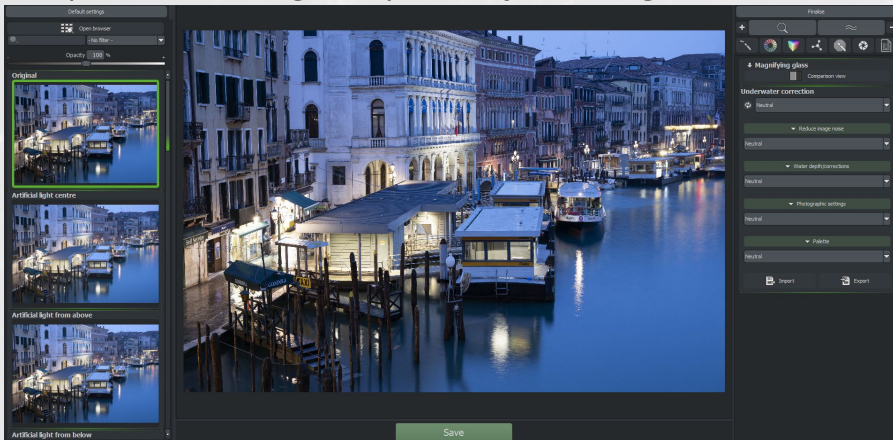
1. Select the **Sunbeams** preset.
2. Set the **Highlights** parameter in the **Water Depth/Corrections** module to **20 %** to prevent overexposure.



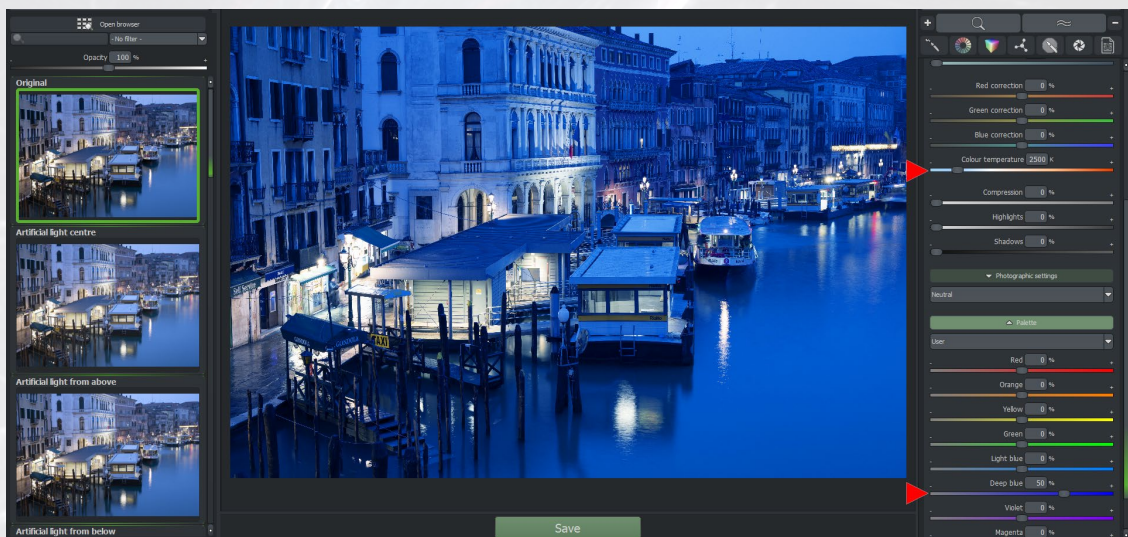
For the similar image in colour, the **Colour** slider in the photo settings has been set to **-30 %** for the same preset.

Example 3: Changing the mood with colour temperature

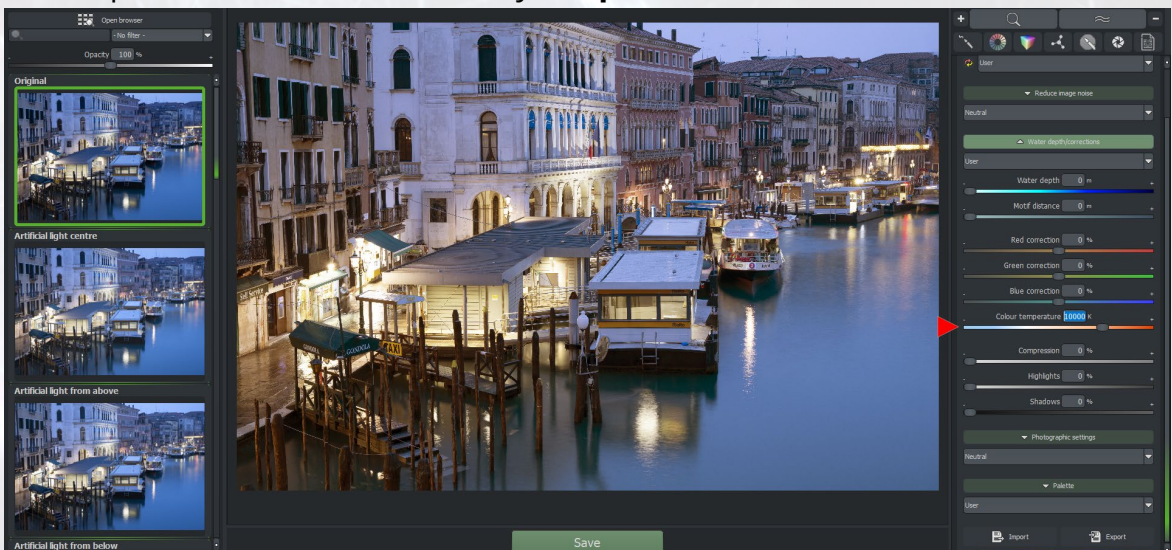
The colour temperature setting is a quick way to change the mood.



For example, this image (photo: Achim Mellor) ...

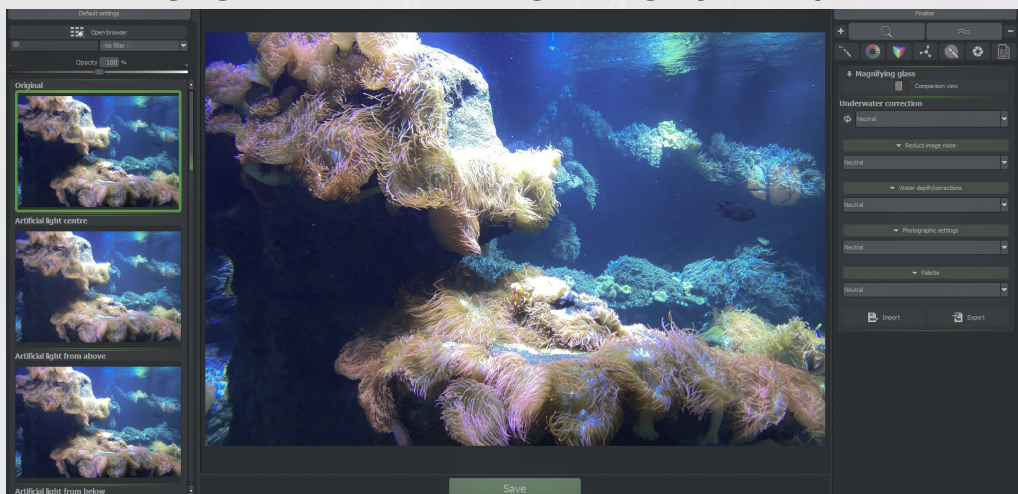


immediately creates a '**cool**' atmosphere when the slider is moved to the left – in the example, to **2,500 K**, enhanced by **deep blue** in the **Palette** module.

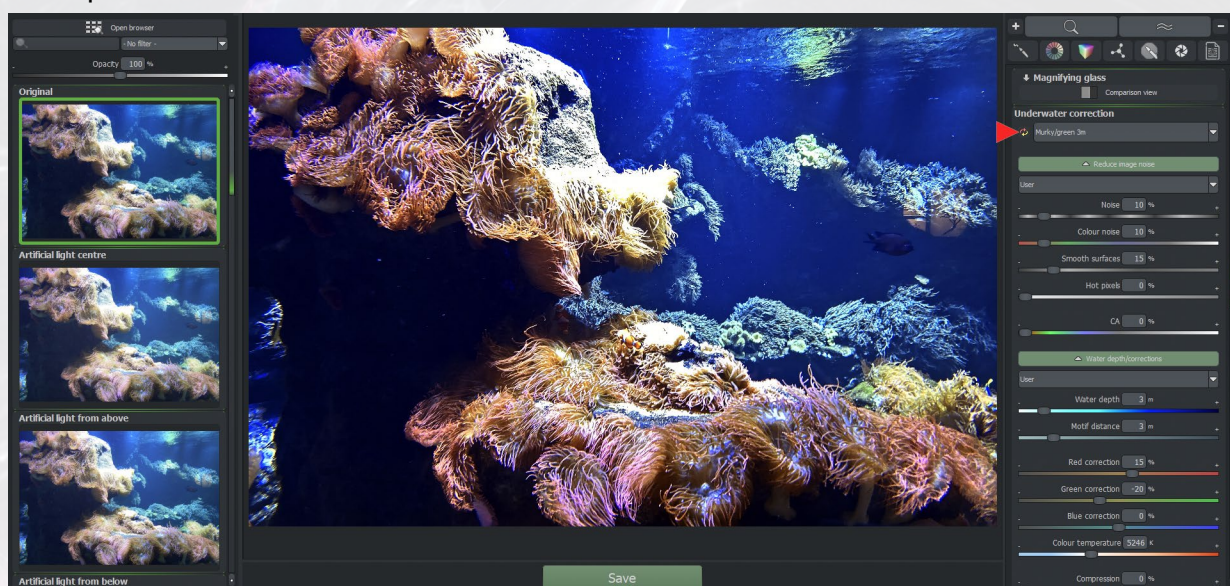


... or a '**warm**' tone when the control is turned to the right, in this example to **10,000 K**.

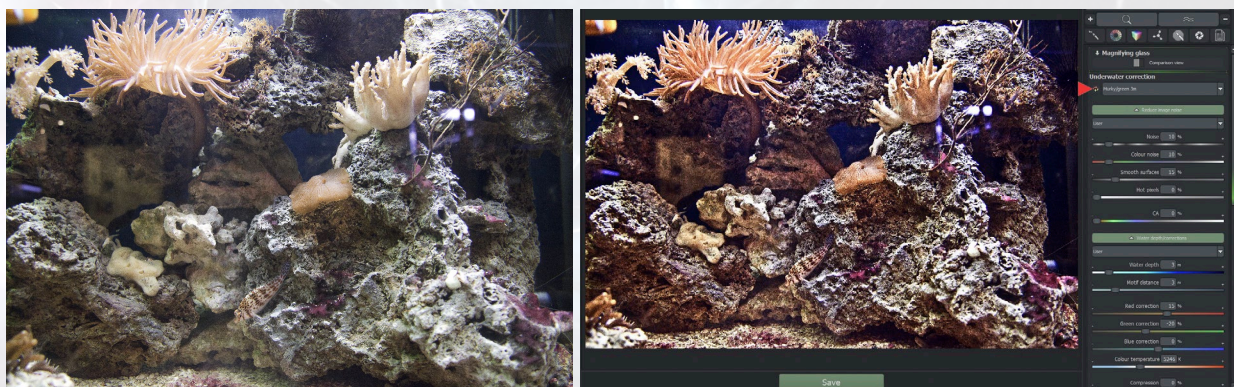
Example 4: Changing the look of an image using a parent preset



With this image, which was photographed in an aquarium, 'traditional' image editing techniques can be used to achieve the desired look, just as in the first examples.

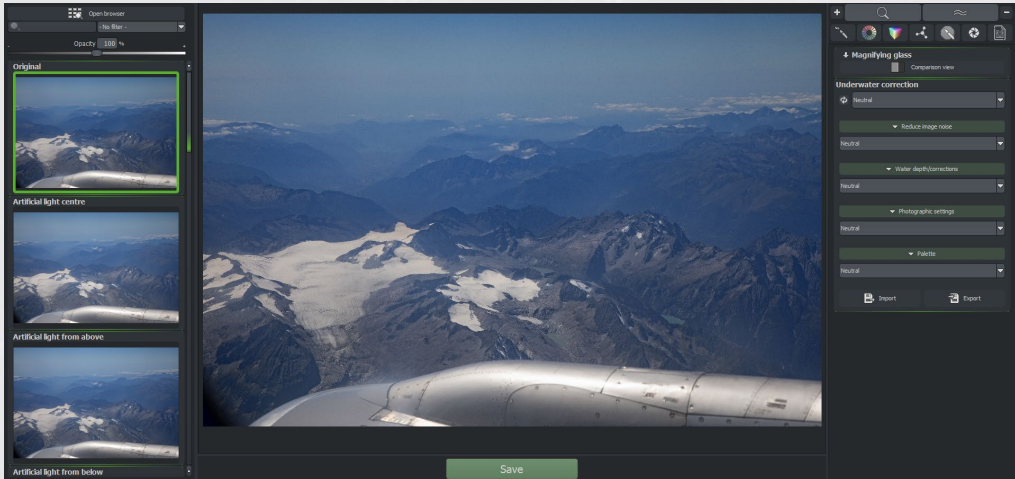


As this scene could well have been photographed underwater, the choice of the **Murky/Green 3 m** preset has resulted in this stunning display of colour.



Even with a similar subject, photographed in an aquarium, the image is colourful, high-contrast and sharp with just one click and the same preset.

Example 5: Mountain scenes



If you have photos or videos featuring scenes taken in the mountains such as the example shown here, taken from an aeroplane looking down at the mountain landscape below. The two **DIVE programmes** are also ideal for such scenes.

In photos like these, the background often appears bluer towards the back, an effect that is not always welcome. This is caused by the same factor as the increase in blue tones underwater.

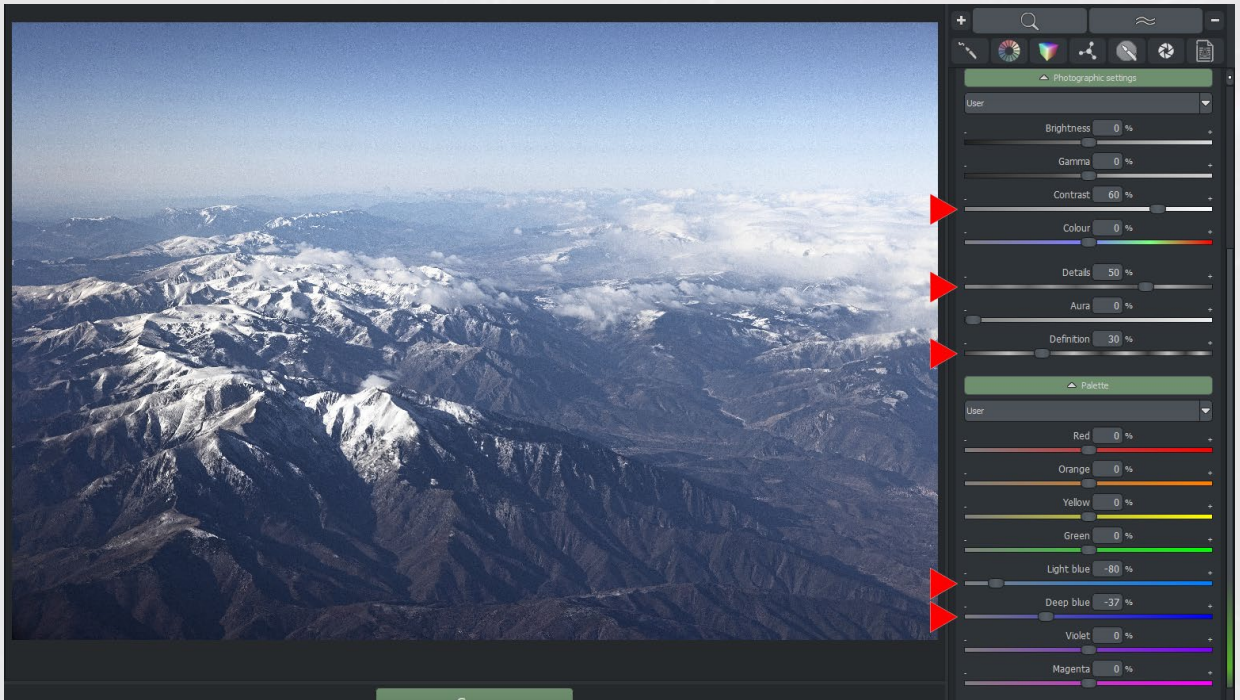
As there is also water in the air, for example, in the form of mist droplets, water vapour or raindrops, light absorption occurs in the same way in such shooting situations as it does underwater naturally, it is nowhere near as intense as underwater, but it is still visible.

Adjustment using the **5 m Depth preset + reduce highlights**



If you wish to **reduce the amount of blue** in this image, you can enter your desired water depth in the **Water Depth/Corrections** module. In the example, the **5 m Depth + reduce highlights** preset has been selected, achieving the desired result of reducing the amount of blue in the image.

Manual Image Editing



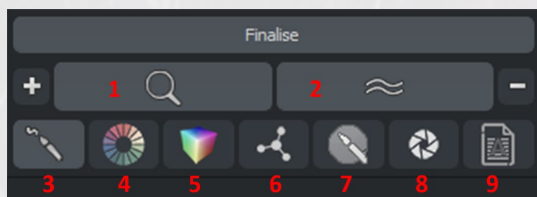
You have complete control by manually adjusting the image-defining parameters.

In the example, the **Light** and **Deep** blues were first reduced in the **Palette** module, which made the image appear significantly less contrasty, **contrast**, **detail** and **definition** were then increased in the **Photographic Settings** module, resulting in the desired final image.



In this similar scene, too, the desired look was achieved by adjusting the settings in the **Palette** and **Photographic Settings** modules.

12. Create exciting lighting effects with a depth map



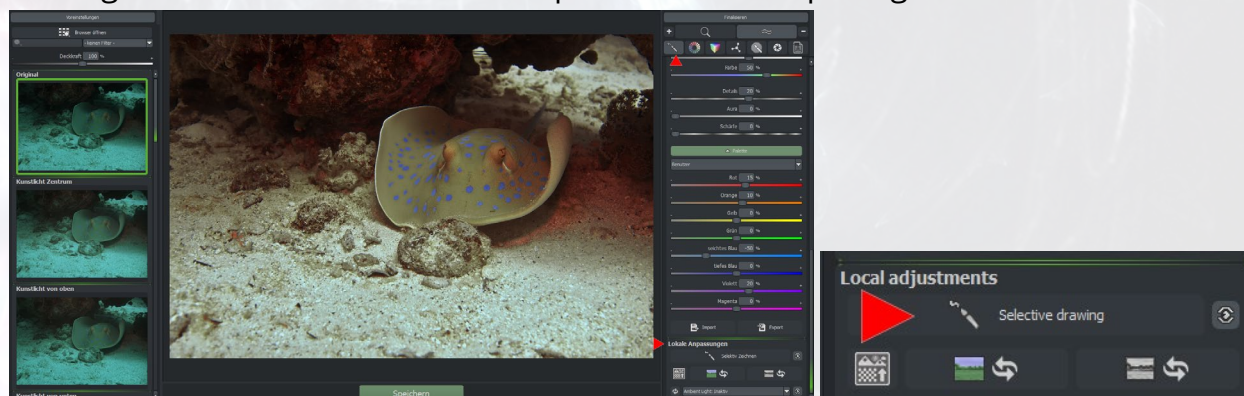
All other modules that you can display in addition to the **underwater area** described are covered in the various [guides](#), either under **Modules - further modules** or, for example, under **Selective drawing**, and can be used and tested on any original image or result image.

1. Magnifying glass/comparison view
2. Underwater area
3. Selective drawing
4. Colour module
5. LUT module
6. AI filter area
7. Sensor error correction
8. Focus peaking analysis area
9. Watermark area

In the pop-up **LUT module (5)** for example, if required, you can experiment with additional image styles using a custom **LUT style** on selected subjects, or selectively change or adjust colours in the **Colour module (4)**.

Determining image depth using AI in the Selective Drawing module

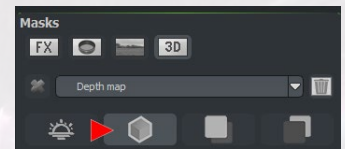
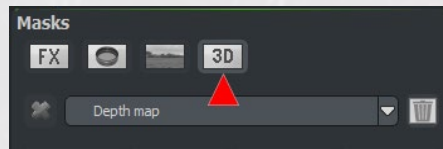
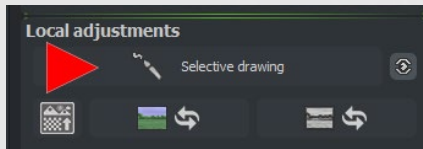
A prime example of the creative potential of other modules is **Selective Drawing (3)**, which is exclusive to **DIVE Photo** and offers the exciting option of using a **depth map to simulate three-dimensionality in the image**, potentially making the visual effect even more spectacular or surprising.



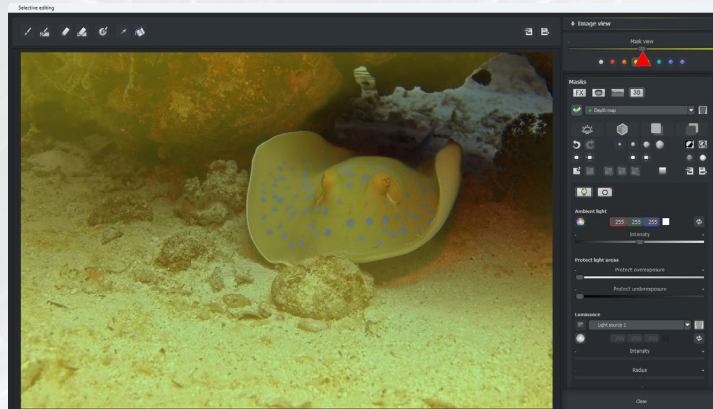
In this example, the parent preset **Coral Garden** determines the look of the imported image.

Clicking the **Selective Drawing button (3)** displays the **Local Adjustments/Selective Drawing module** at the bottom.

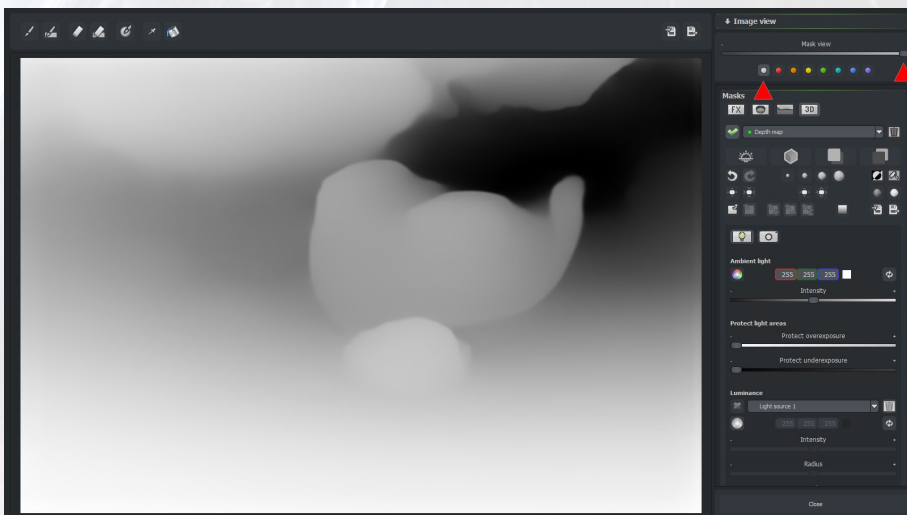
Switch to **Selective drawing**



Click the **Selective drawing** button, then click the 3D button in the mask area that appears, and finally click the button with the cube icon (see image on the right) ...



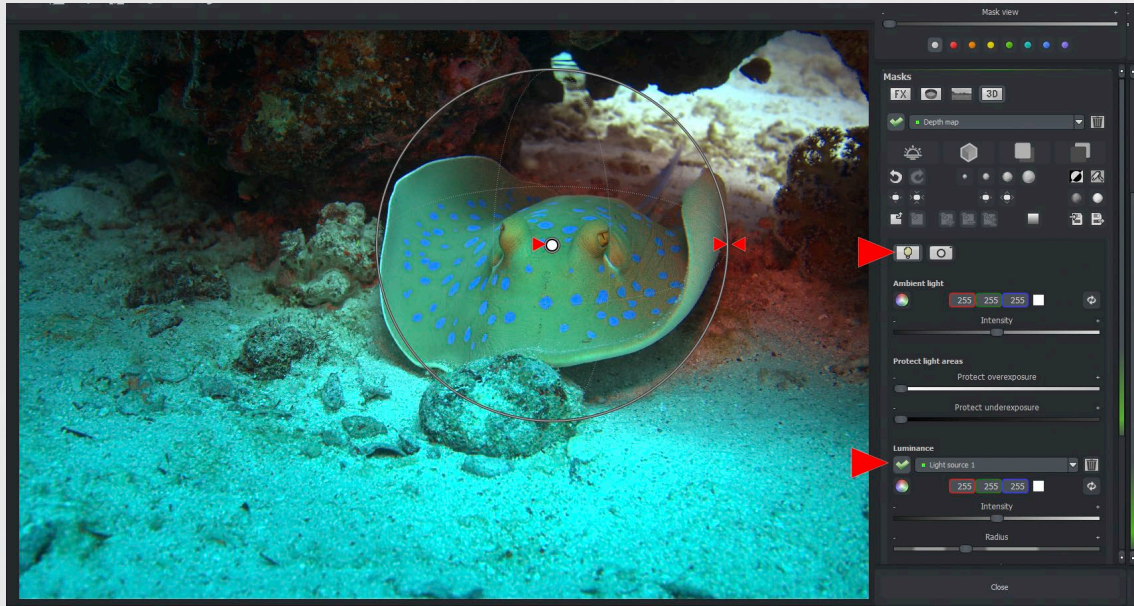
... a **depth map** based on the subject is automatically generated, which you will initially see as a semi-transparent mask in the **Selective editing** window. Semi-transparent, because the mask display slider is set to the middle by default. To the right, the mask is fully visible, to the left, it is hidden.



To make the depth map easier to see, the mask colour in this image has been changed from **yellow** (the default) to white, and the mask has been made **fully visible**.

Using this depth map, which is displayed as a **greyscale image** where the **light or white areas represent the foreground** and the **dark to black areas represent the background**, you can make selective adjustments and, for example, create a blurred background effect, apply different exposures, colour saturations or contrasts to the foreground or background, thereby quickly **transforming a 2D photo into a spatial 3D image**.

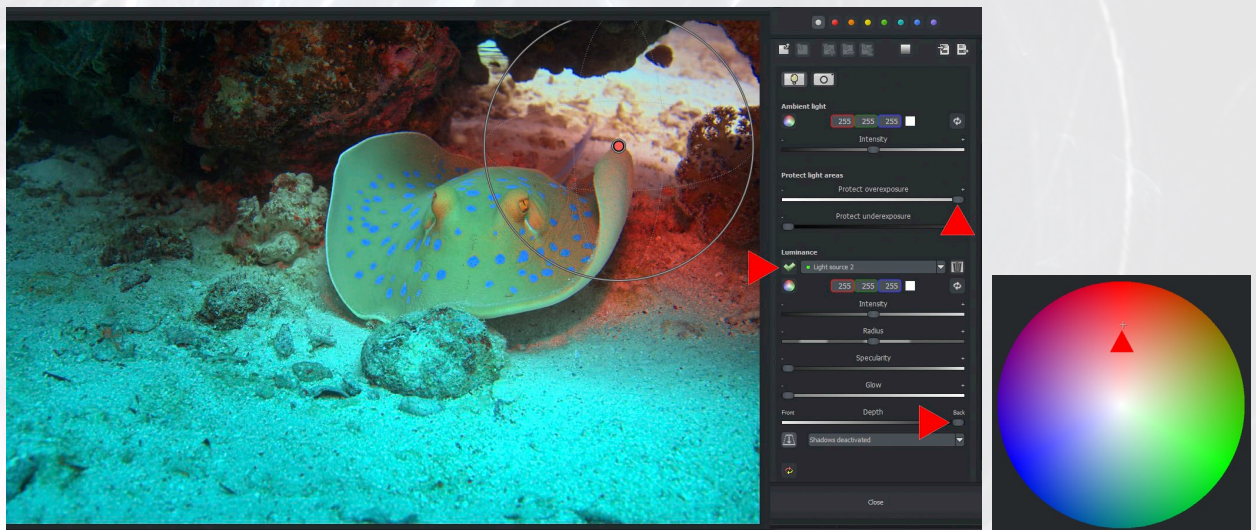
A range of lighting options



If you click on the **lamp icon** to activate the 3D luminance area and then click on the grey 'X' to activate **light source 1**, a round, white light source will appear in the centre of the image.

By clicking anywhere on the outer circle, you can enlarge or reduce the size of this light source; by clicking on the small circle in the centre, you can move it wherever you like, in this example, onto the main subject.

Using the parameters, you can adjust settings such as the **light intensity** or the **radius** as required, or click on the **colour wheel** button to select a different colour for the light source.

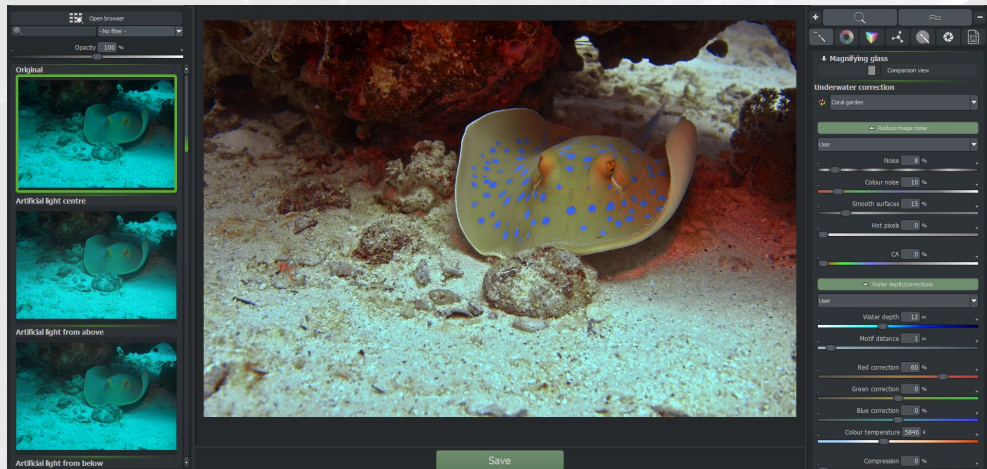


After activating the second light source, the cave was illuminated more effectively by shifting the circle's position and reducing its radius. To prevent the bright areas of the image from becoming overexposed, the **Protect against overexposure** slider was moved to the right, and the spatial depth of this light source was set further back by dragging the **Depth** slider. The reddish light was intensified by selecting a colour from the **colour wheel**.

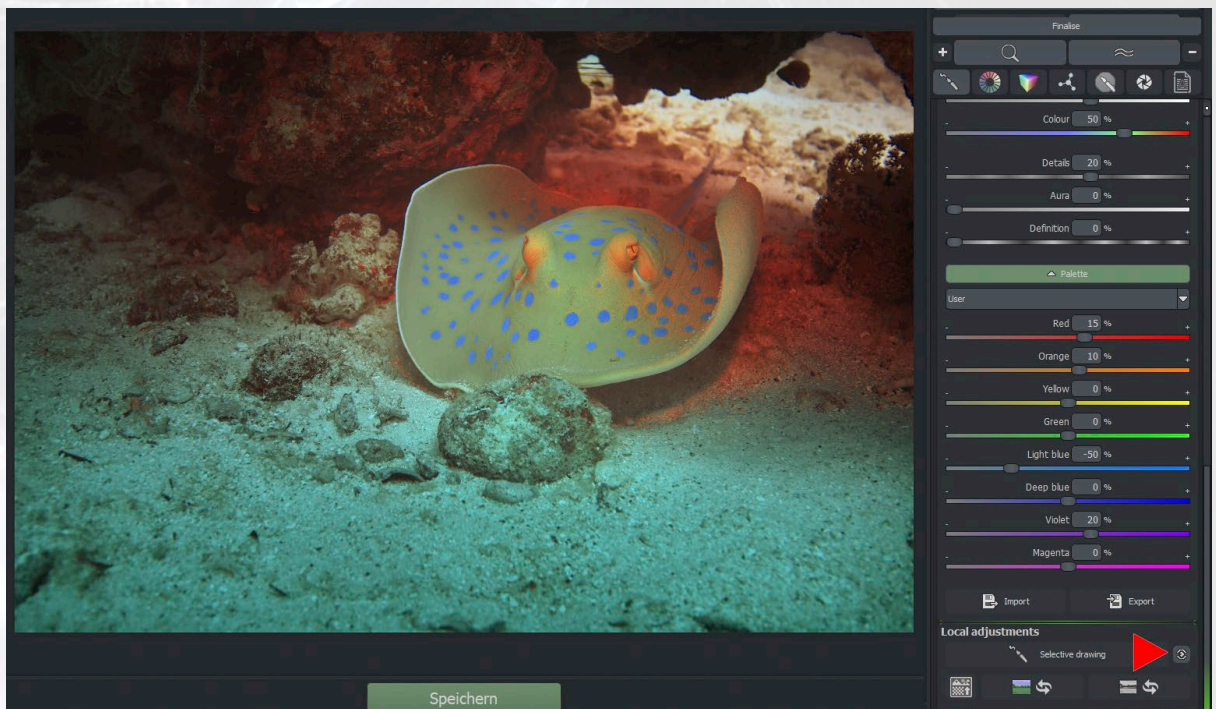
Comparison of 2D and 3D

This example shows that by using different light sources, you can adjust the look of the image in the desired direction with just a few clicks and slider adjustments. If you wish, you could also change the **colours**, adjust the **ambient light** to create a different mood, and so on.

Click **Close** to return to **Finalisation mode**.



A comparison between the image using 'just' the **Coral Garden** preset ...



... and the final image, after processing in the 3D mask within Selective Drawing, which you can **show** or **hide** by clicking on the **eye icon**, conveys a different visual message: The main subject, the ray, stands out more clearly against the darker-looking foreground; the brightening of the cave, combined with the intensification of the reddish lighting, enhances the sense of space and bathes everything in a somewhat mysterious atmosphere.

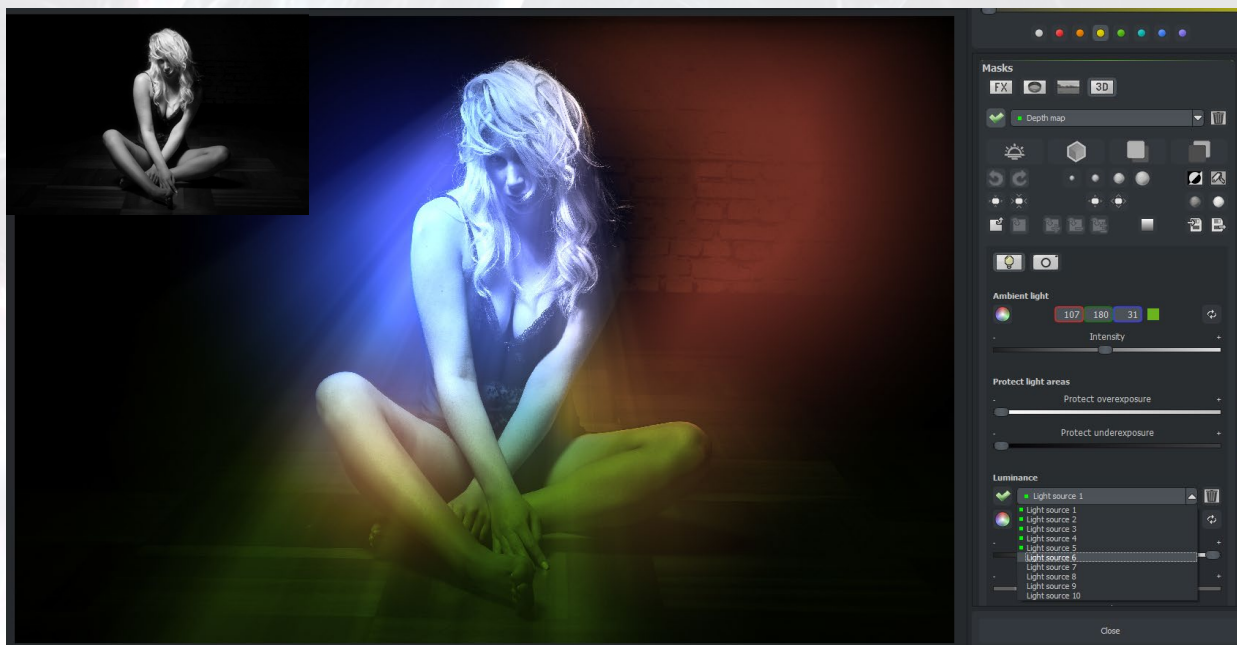
Of course, there's no such thing as 'better' or 'worse' here either: it's up to you to decide which look you prefer.

More quick and easy variations

There are no limits to your imagination when it comes to 'painting' with light or 'composing' a wide variety of lighting scenes.

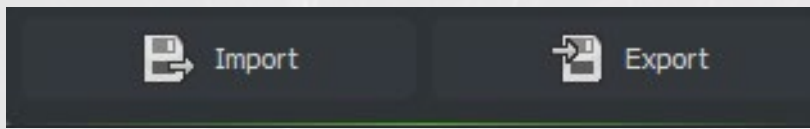


Here, in contrast to the first example of this motif, which used **two light sources**, a total of **six light sources** create an atmospheric setting for the stingray. In addition, the **ambient light** has been tinted slightly green and dimmed.

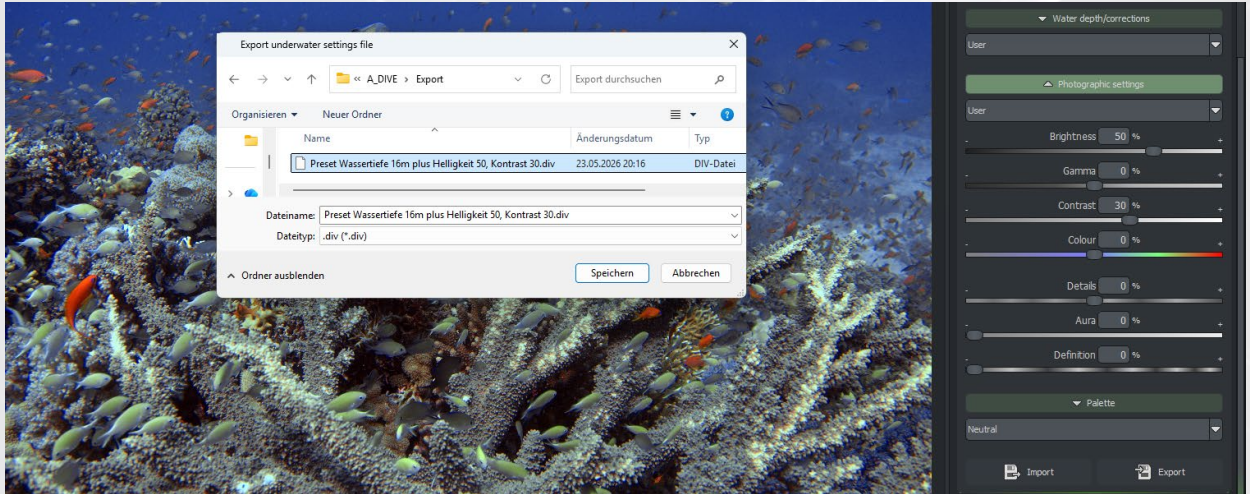


In this 'ordinary' black-and-white image, which has already been transformed into a striking visual style using the **Sunbeams** preset, **five light sources in different colours** quickly and intuitively create a compelling visual effect that would otherwise only be achievable through more time-consuming methods, such as colour gradients.

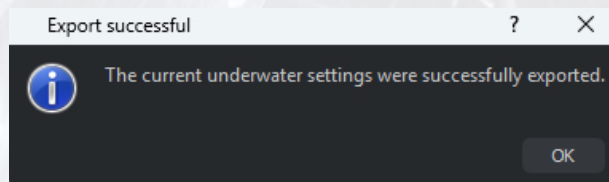
13. Export-/Import-functions



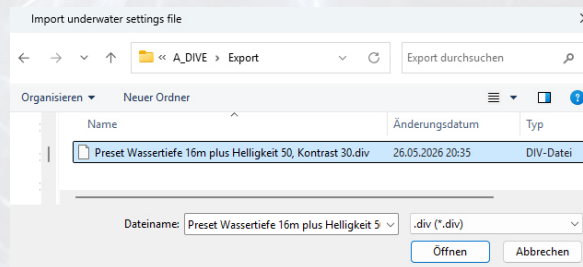
If, whilst trying out or experimenting with different parameter settings, you have found an image look that you particularly like, simply click the **Export** button ...



... the current settings are saved in a folder of your choice.



The pop-up window confirms that the export was successful, ensuring that you can later click on **Import** ...



... can apply all the selected settings exactly as they are to the same or a similar subject.

Note: If you save the current settings as a **project** via **File/Projects/Save Project as...**, all parameter settings will also be saved, with the added advantage that the loaded image file is saved along with them and will be reloaded with all settings when you select **Open Project**.

14. Proposed workflow for DIVE Video

The **Water depth/corrections** module is essentially identical in **DIVE Photo** and **DIVE Video**.

The difference, however, is that **DIVE Video** uses 'faster' algorithms in some cases. These are not quite as accurate as those in **DIVE Photo**, but they are much quicker to process.

Proposal for a 'quick' workflow in DIVE Video



- Upload the desired video via **File/Open Video**.

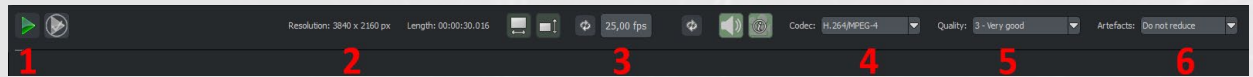


- Select a preset from the water depth section, in this example, a **depth of 16 metres**.

The advantage of this over the higher-level presets is that calculations are performed much more quickly here than there. If you prefer a preset from the higher-level category, such as **Coral garden** when photographing corals, the calculation takes longer, on average about twice as long, because many more of the associated parameters are adjusted and must be included in the calculation. Advantage: Depending on the video clip, you'll get the best result.

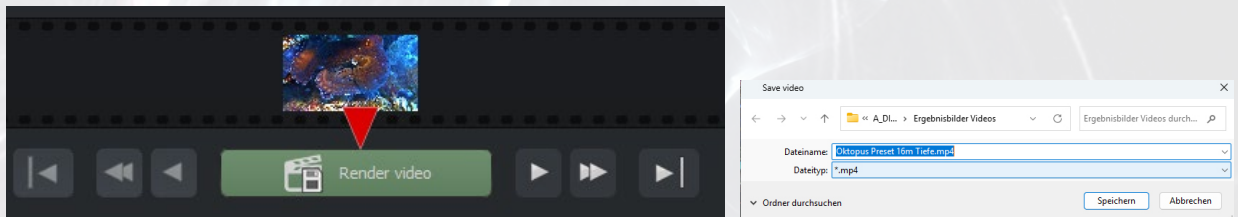
- Just click **Render video** to start the calculation – that's it!

Information bar - selected information or options

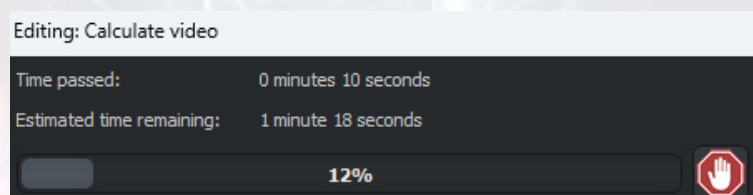


1. Play the **unedited** video using the default video player. Once the video has been rendered, you can play the **edited** video by clicking the button to the right of it, which will also be highlighted in green.
2. Displays the resolution of the loaded video; in the example, this is **3,840 x 2,160 px (4K UHD)**.
3. Displays the **frame rate** for the output video. In the example, this is **25 fps** (frames per second), which you could change to **30 fps**, for example, if required.
4. Displays the **video codec** for the saved video; in the example, this is **H.264 MPEG-4**, which you can change if necessary by clicking the small arrow, e.g. to **AV-1**.
5. Displays the **video quality** setting. In Example 3 - **very good**, you can **reduce** this if necessary by clicking the small arrow, or **increase** it to the highest level, **Maximum**. You do not usually need to change the default quality setting, higher settings consume significantly more processing time.
6. Here, if you wish or if necessary, you can click on the small arrow to select the level of artefact reduction, ranging from **light to intense**. The default setting is **Do not reduce**.

Render and save the video



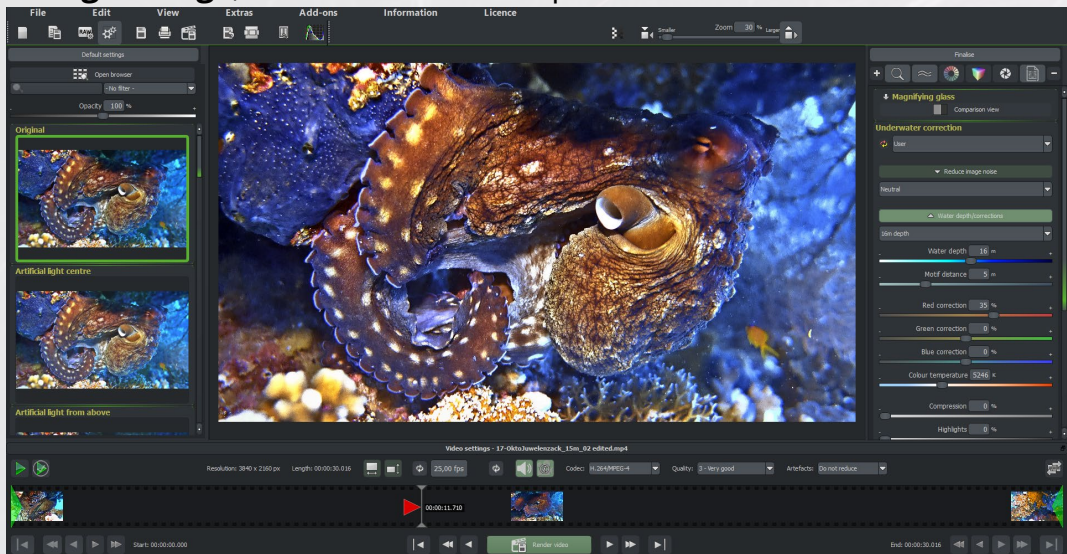
When you click the green **Render Video** button, in the window that opens, it is best to save the video in the selected folder using a descriptive file name, so that you can find it more easily later.



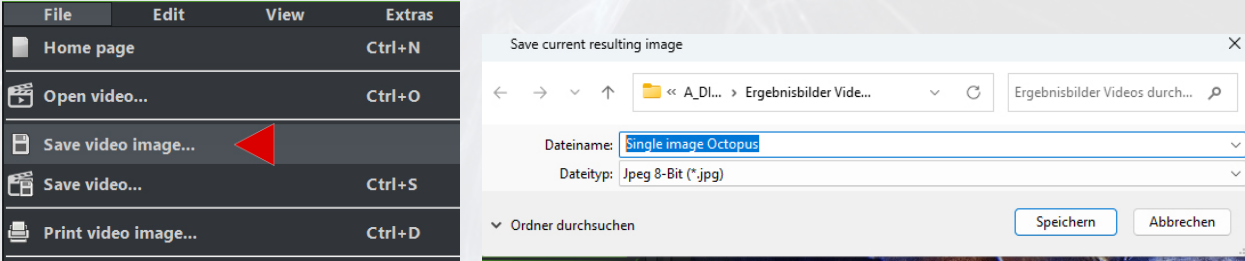
Click Save to start the rendering process.
The rendering progress, along with the estimated time remaining, is displayed in the information window.

One of the special features of **DIVE Video** is the option to **save or print individual frames**.

Save a single image, the most common option

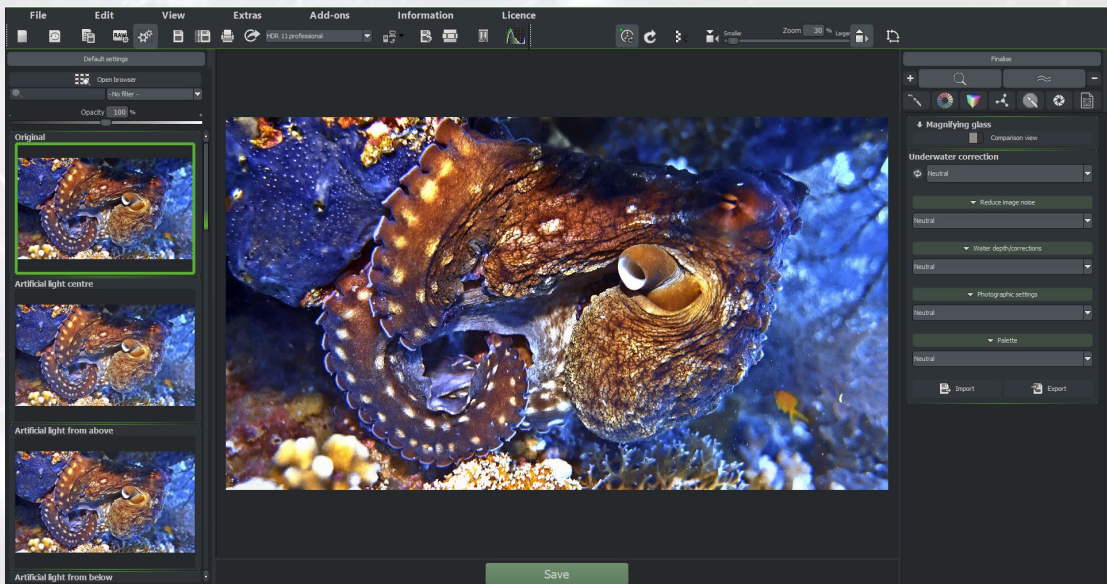


Use the slider to move the film to the point where the desired frame is located.



When you click on **File/Save Video image**, it is best to give the file a descriptive name in the selected folder so that you can find it quickly later on.

Load a saved image.



You can then import the saved image as usual, for example into **DIVE Photo** or another programme such as **COLOR**.