AcceleratedVision

Expert Mode

SHARPEN

HDR

NEAT

DENOISE

LUT

FOCUS

COLOR

ZOOM BLACK & WHITE

EMOTION

ANALOG DIVE

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Guide to the basic functions of all programmes

Expert mode

In expert mode, which is of course intended for all users and not just experts, you can virtually look over the developer's shoulder, see everything that characterises an image look in the current preset, i.e. its 'recipe', in the list of selected effects and change it individually if required. This allows you to manipulate everything to your liking and, if you wish, create your own templates and apply them to other image motifs.

Despite the extensive range of presets in the various categories, this makes sense because the image mood of a selected preset is orientated towards the average taste or the average viewing habits of people. It is therefore quite natural that many of the image looks offered meet the personal taste of a user and can be adopted and saved unchanged, while others may require minor or major changes.

You can do both easily and intuitively in expert mode: Understand which effects are image-determining for a selected preset and then influence them as required using the corresponding parameters, deselect an effect completely or slightly weaken or strengthen the overall effect using the opacity.

However, expert mode offers even more options: You can supplement the list of selected effects with others from the list of all available effects or create and save your own customised presets in an empty list.

If you move the mouse over an effect or parameter, its effect is displayed, which is a great help given the large number of effects, masks and parameters, not all of which are self-explanatory.

These incredibly diverse and varied application options invite you to experiment and allow you to quickly adapt to your personal visual taste, optimise images such as brightening or darkening critical areas of the image, change the mood of the image, which can, for example, transform a 'normal' landscape image into a winter or autumn mood, or even create spectacular distortions and implement unusual image ideas or image fantasies.

The interface is the same or similar in all programmes with an expert mode, the effects offered, the selected effects with the associated parameters are of course different and are tailored to the respective offers and programme-specific problem solutions.
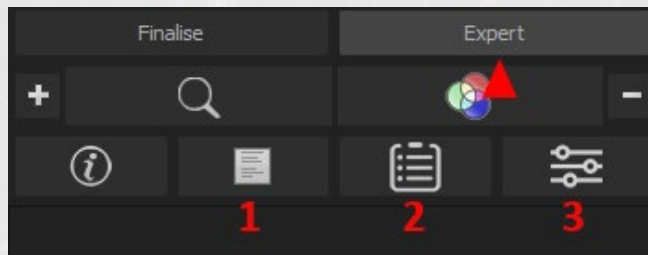
This mode is not available in the EMOTION, ZOOM and SHARPEN programmes.

The COLOR programme has been used as an example for this guide.

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1. Interface and modules in expert mode

Click on the **Expert** button to display the toolbar with the selectable modules. Click on a desired module to display it. Some modules are programme-specific, the **3 'main modules'** are available in all programmes and differ only in the effects and parameters offered.
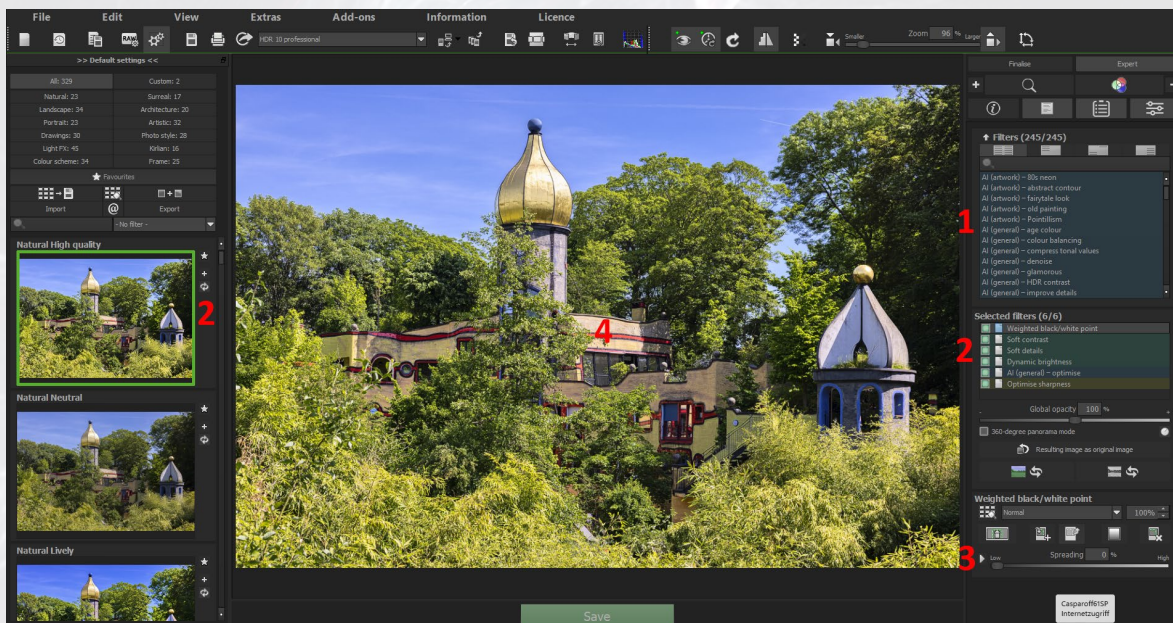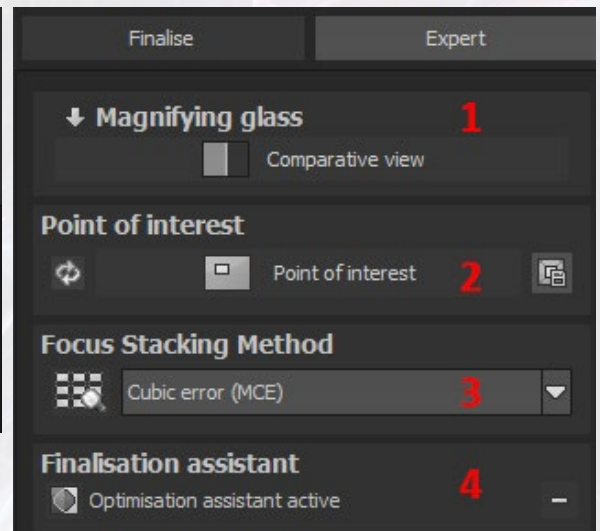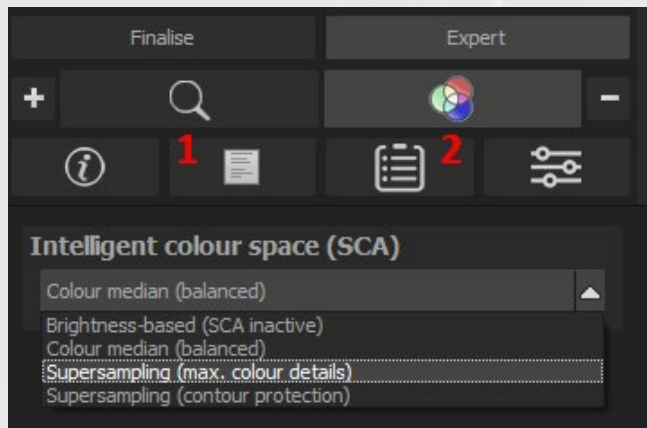

The user interface shows the 3 main modules on the right-hand side:

1. The list of **all available filters/effects**.

2. The list of **selected filters/effects** that belong to an **active preset** on the left-hand side, in the example **Naturally high quality**. Each time you change presets, the list of selected effects changes accordingly.

3. The parameters belonging to an active effect, in the example the 3 parameters belonging to the **Weighted black/white point** effect. These parameters only ever influence the active effect.

4. Image centre: The loaded **original file** whose image look is determined by the selected preset. Every change in the list of selected effects is immediately displayed live and makes it easy to make a judgement.
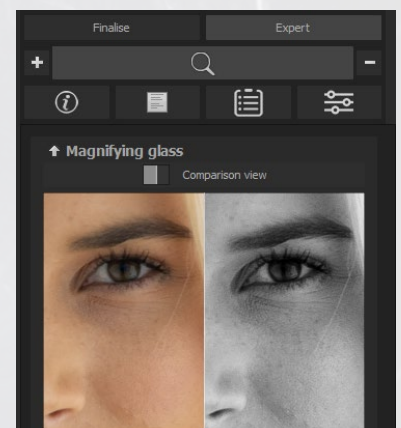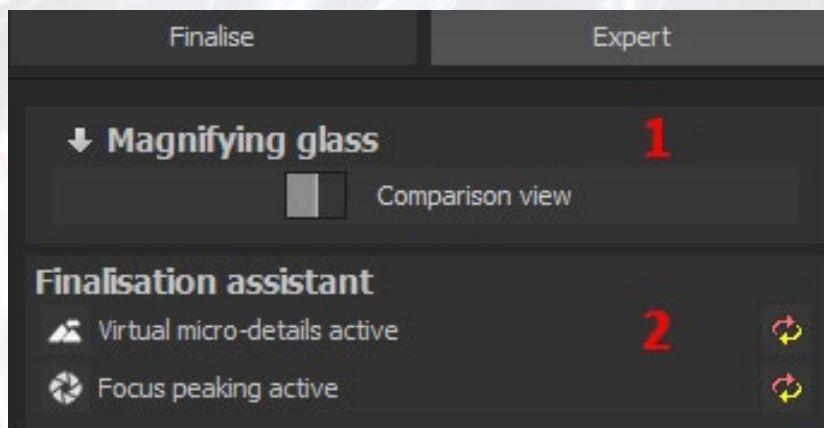
2. Programme-specific modules

The other modules in expert mode are tailored to the programme used in each case, but do not have the same influence as the 3 'main modules' presented.

Example 1: COLOR (graphic on the left): In addition to the **magnifying glass** with the comparison view (1), the **supersampling** process SCA), which produces better detailed structures in colours, can be switched on (2).

Example 2: **FOCUS** (graphic on the right): In addition to the **magnifying glass** (1) and the **point of interest** (2), select a **stacking method** other than the default cubic error (MCE) if required or switch on the **Finalisation assistant** (4) if you have made changes there that you would like to apply here, such as changes in the Finalisation assistant in the example.

Example 3: **DENOISE** (graphic on the left): In addition to the **magnifying glass** with the comparison view (1), you can activate the Finalisation assistant to activate the changes you have made in finalise mode.
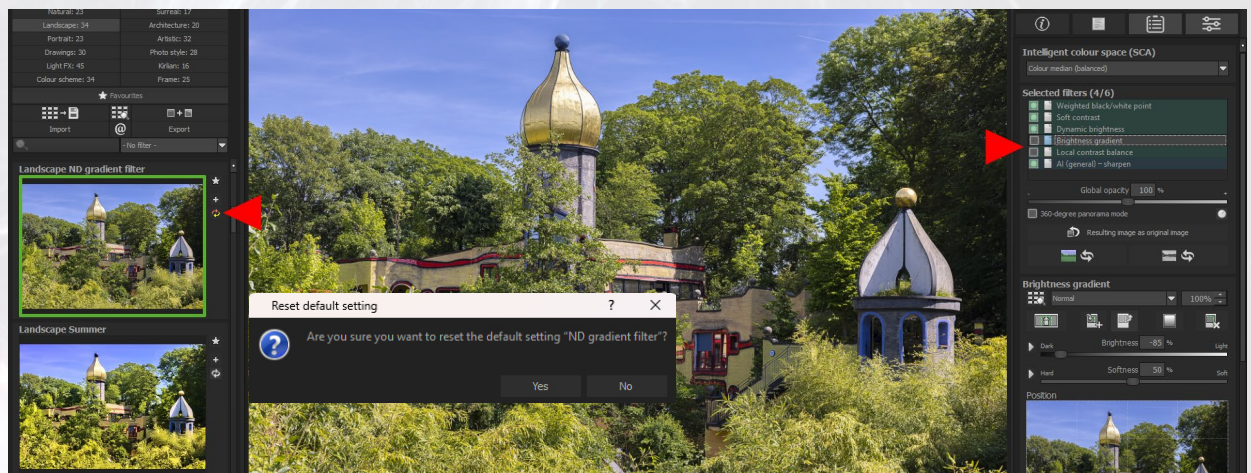
Example 4: **BLACK & WHITE** (graphic on the right): In this programme, only the **magnifying glass** with the large comparison view can be displayed.

3. Selected effects 'reading' and evaluating presets

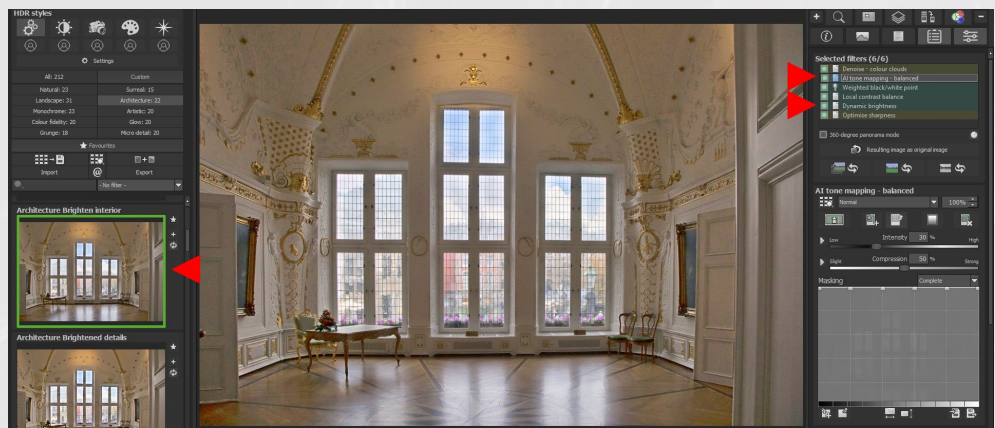**Image example 1: Landscape ND graduated filter in COLOR**

The preset landscape **ND graduated filter** selected in the example is determined by **6 effects**, which are listed in the **list of selected filters** and are all active, which is visualised once by the **green boxes** in front of the effects and confirmed by the heading **selected filters (6/6)**. For a better overview, the **list of all filters/effects** is hidden. If you want to see which effects are decisive for the image look of this preset in order to influence them if necessary, there are 2 simple options:


1. **Switching effects on and off**: Clicking in the green box deactivates the associated effect and thus makes it ineffective, which is visualised by the now grey box. Clicking in the box again reactivates the effect. This allows you to quickly identify the effects that characterise the image look. In the example, these are the two effects **Brightness gradient** and **Local contrast balance.**

    In the preset, the grey arrows are changed to coloured arrows, which are displayed each time the default settings are changed. Click on the arrows to display a prompt asking whether the preset should be reset. If you confirm this with OK, you will see the unchanged preset.

Image example 2: Brighten up an interior in HDR

In all categories of the various programmes, the image-determining effects are naturally very different. A second example illustrates this.
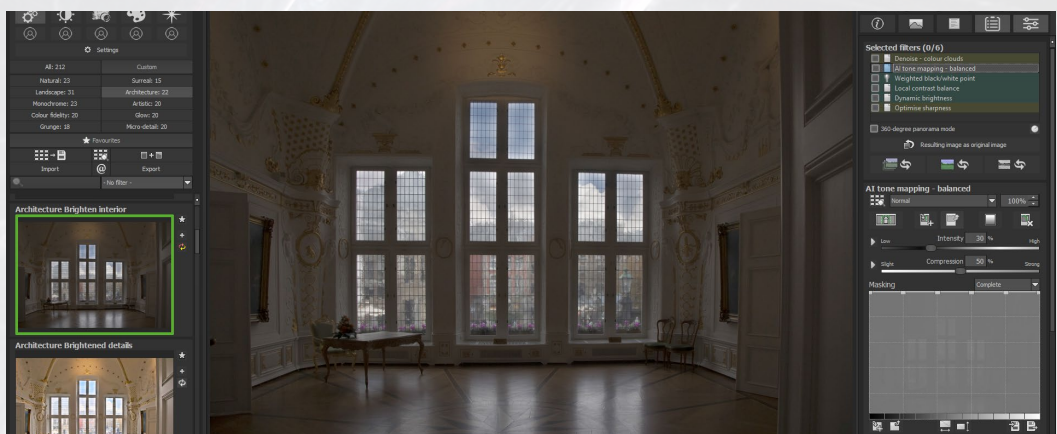

In **HDR**, the **tone mappings** with the tone value compression are responsible for the image look in many presets and for a problem solution in many image motifs, as in the image example, where the dark areas of the original must be significantly brightened and the background must remain almost unchanged. The graphic above shows the practically perfect solution to this problem.
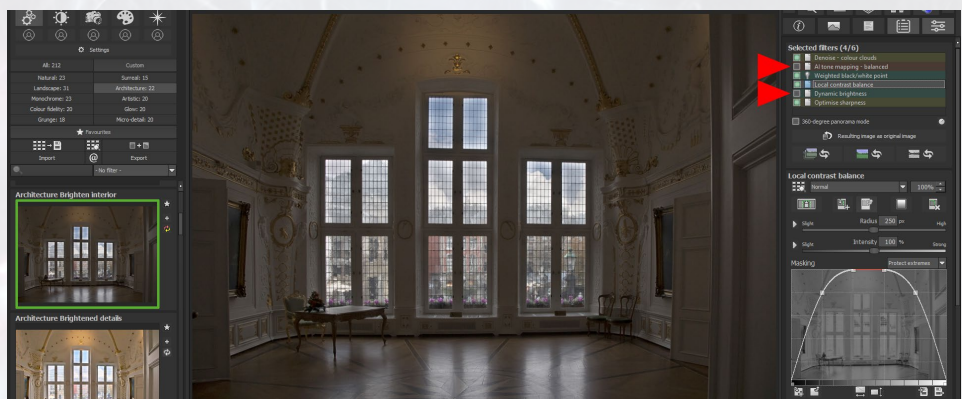
If you switch the **Tonemapping AI - Balanced** and **Dynamic brightness** effects off as shown in the graphic below and on again as shown in the graphic above, the image-determining effects are quickly identified and can be further optimised if required.

## 2. Hide all effects and show them again one after the other
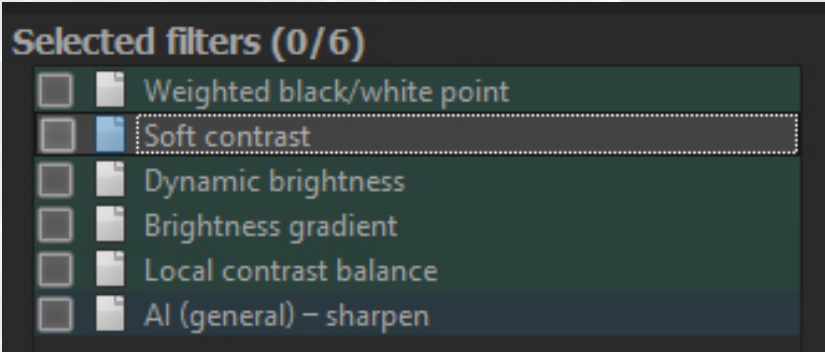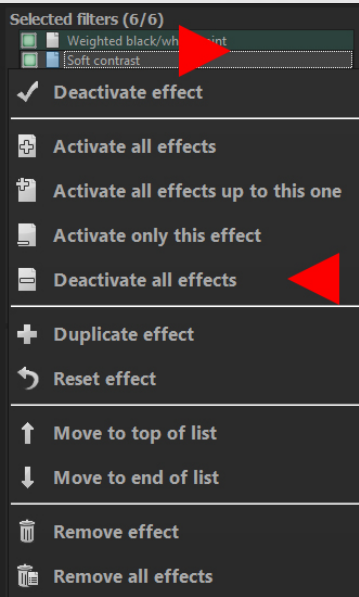
Right-click in the list of selected effects to open the context menu with many options: Here you can deactivate individual or all effects with a single click, move effects to the beginning or end of the list or remove them.

Now each effect can be activated individually, assessed and, once all effects have been activated, the effect can be evaluated in conjunction with all filters.

By clicking on **Duplicate effect**, an active effect is duplicated with its effect and 'lands' at the bottom of the list of all effects like any newly selected effect and can also be moved to a different position.

Remove effect from the list
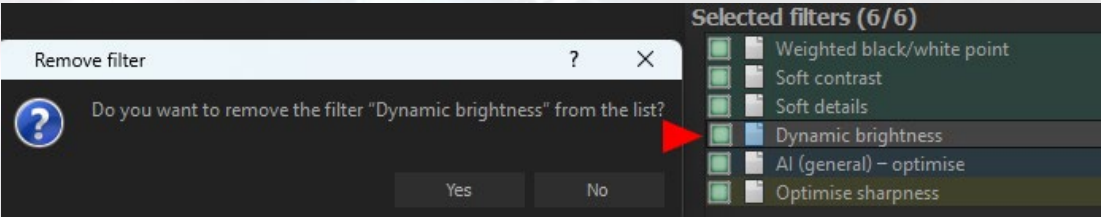
Click on **Remove effect** or double-click on an effect to confirm or cancel your decision in the dialogue window.

4. Save empty preset without effects

In the image example, clicking on **Deactivate all effects** in the context menu causes you to see an '**empty' preset without effects**, i.e. the loaded original image. This default setting can be your first choice, for example, if you want to create your own presets or switch to the Selective drawing module.
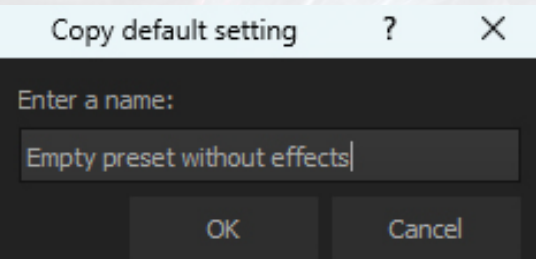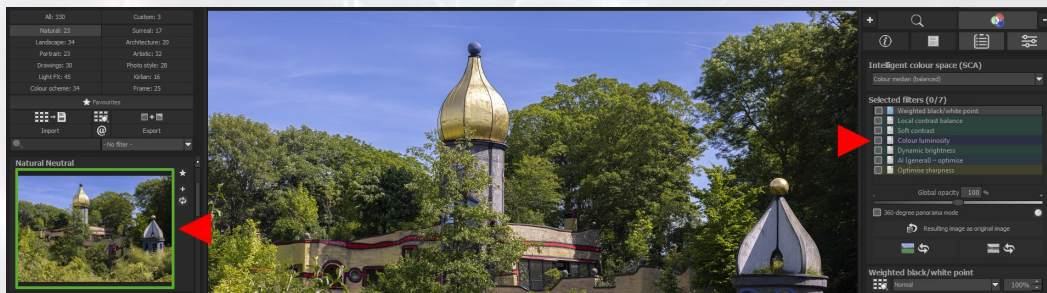

Click on the **plus sign** (graphic above) to confirm the suggested name in the dialogue window or assign your own 'speaking' name.

The preset is immediately stored at the bottom of the **Custom category** if there are already other own presets and can now be selected directly at any time like any other preset.

Save your own templates: Proceed in the same way if you have changed presets and want to use this look for other designs.
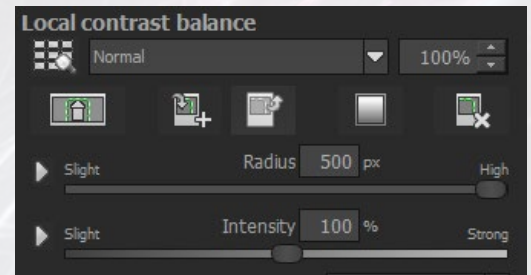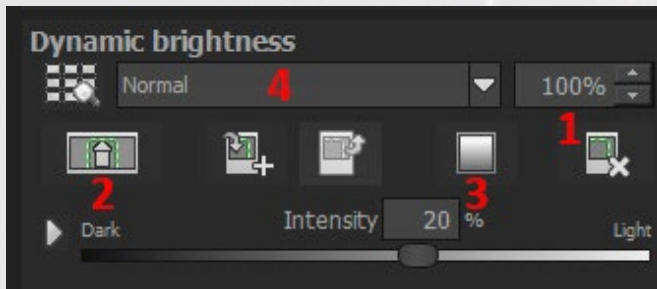
Naturally neutral as an **empty preset** with deactivated effects

In **COLOR** and **BLACK & WHITE**, you can select the **Natural Neutral** preset and quickly try out all deactivated effects by activating them.
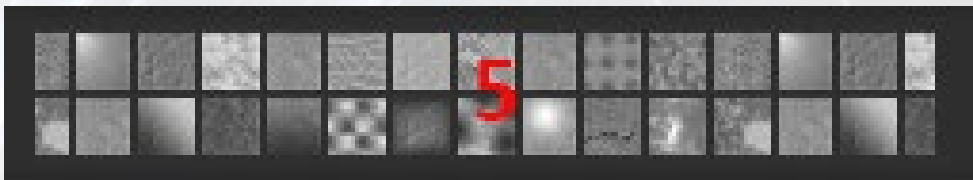
5. Parameters and other possible influences

An effect can be changed in expert mode using many options, the most important of which are shown here:
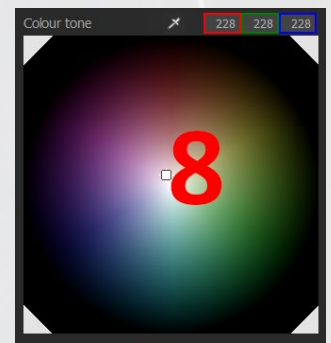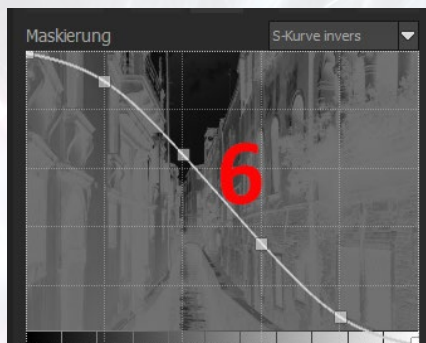

Each effect has one or more parameters, as in the examples **Dynamic brightness** with one parameter and **Local contrast balance** with two parameters.
There are also other options for exerting influence:

1. **Local Opacity**.
2. **Selective editing** to selectively limit an effect.
3. **Selective gradients** to show local effects.
4. **Calculation modes** that give effects a different effect.

5. Textures that can vary the textures set by default.

6. **Masks** that control the strength of an effect via a curve.

7. The **position** can be defined here as a **point** or **line** for various effects.

8. In the **colour wheel**, specify a colour other than the default colour.

These options for influencing one or more effects, which are described in the following chapters, make it possible to optimally adapt the effects and thus a selected preset to personal individual viewing habits.
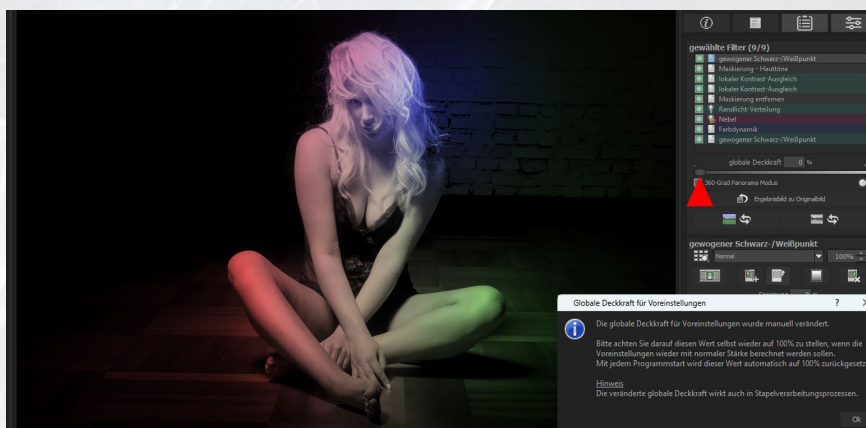
6. Parameters: Change global and local opacity

Switching an effect off and on again sets its effect to either 0 or 100%.
Global opacity: The global opacity changes the opacity for the entire preset, i.e. for **all effects**.

The **global opacity** is set to **100%** by default.

If you drag the slider to the **left to 0%,** the effect of the effects becomes less and less until the original is visible at 0%. The dialogue window that appears indicates that **each changed setting will also affect all other presets that you try out until you reset the opacity manually or the program is restarted**.


If you drag the opacity slider to the right up to the **maximum value of 200%,** all effects are evenly amplified up to the set value, which can lead to interesting image looks.

Local opacity: Local opacity changes the opacity for **a single effect**, the opacity of the other effects remains unaffected**.**

Example: Fog effect: When you activate an effect by clicking on it, the corresponding parameters are displayed below with the opacity of the effect. For most effects, the opacity is set to 100%, but it can also be set to a lower value by default.
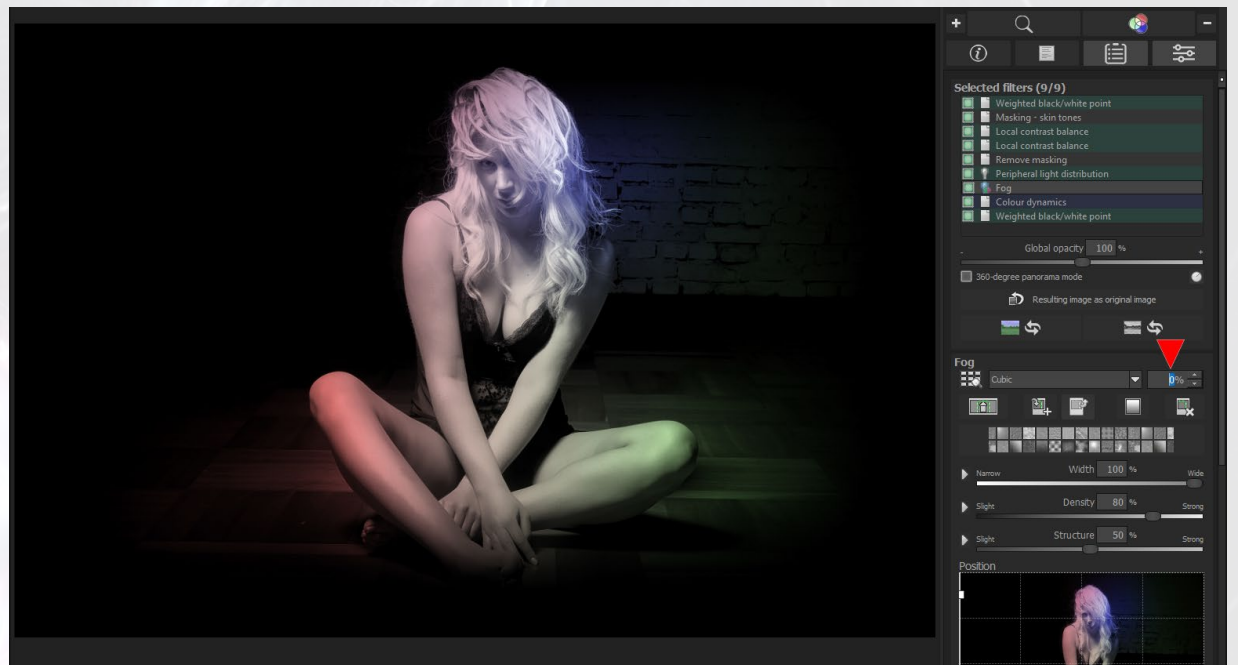
Clicking on the small arrows next to the opacity number reduces it in **increments of 10%** with each click, down to 0%, which is equivalent to turning off the effect. The same applies to **increasing the opacity to 100%**. Alternatively, after clicking on the button, you can use the up and down arrows to change the opacity in increments of 10. This allows you to adjust the effect to your personal preferences, as in the case of the fog, which can be slowly reduced to a light haze or completely dissolved.

7. Parameters using the example of dynamic brightness

In the image example, the **Dynamic brightness** effect is one of the effects that characterise the image look. If you activate it by clicking on it, the corresponding **Intensity parameter** is displayed. This slider distributes the light more **darkly** (left) or **brightly** (right) in the image and is set to + 35% as standard for this effect, i.e. slightly above the average value of 0%.
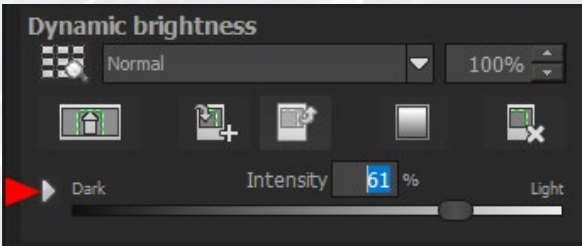

Animation: For most sliders, such as the intensity slider shown here, a small arrow indicates that this parameter can be **animated**. Clicking on this arrow starts the animation and runs through all possible controller settings from the current starting point. Use the **ESCAPE** button (ESC) to stop the animation at any desired point. This is a very practical aid for quickly seeing the full range of effects of a parameter.

If you move the slider all the way to the right to 100%, the sky is brightened less than the lower part of the image, which now looks good. However, the sky in the original looks even more convincing. The solution is a **gradient** (see next chapter).

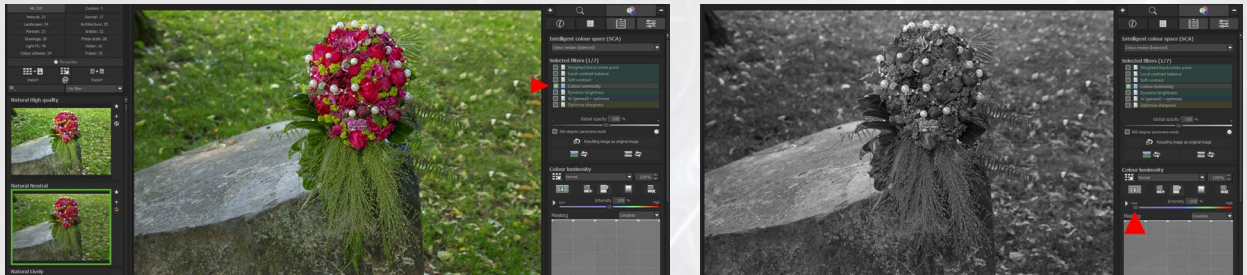# 8.   Parameter plus gradient/example of dynamic brightness
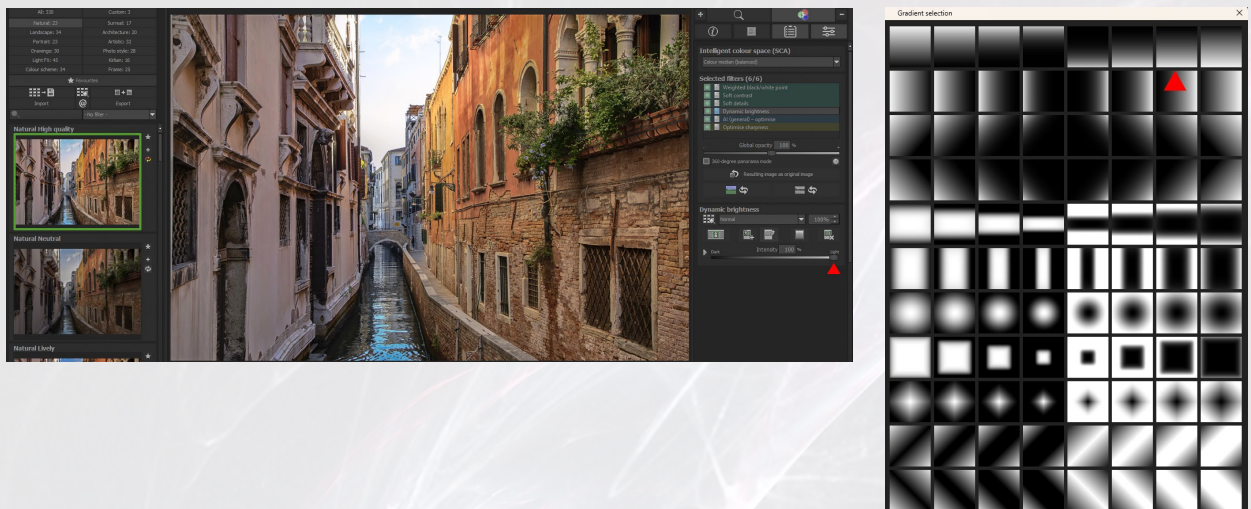
In the image example on the previous page, the Dynamic brightness effect provides a differentiated brightening of the subject, but the sky could be much more structured and return to the colour of the original. Gradients are ideal for solving problems of this or a similar kind because they smoothly fade effects in or out on the desired parts of the image. In addition to this problem solution, you can also use the gradients to quickly direct the focus as desired (vignette) with a gradient that emphasises the effect in the centre of the image, for example (white circle).

Clicking on the button with the **gradient symbol** opens the **Gradient selection**. If you select a gradient like the one in the graphic above right, the upper image area with the sky will be excluded from the effect and faded in softly towards the bottom, resulting in the desired image. Gradients cannot be combined with other gradients. Each newly selected gradient replaces the old one.
Click on the button to the right of the gradient symbol to delete all selective edits.

9. Parameters plus selective editing

If an effect is to be applied even more precisely to a desired part of the image or excluded from it than the gradients allow, use the equally simple solution of selective editing. The procedure is the same for all tasks.

In the example, the bouquet is to be selectively worked out as an eye-catcher.

Step 1: In the **Natural Neutral** preset, the Colour luminosity effect is activated and the parameter has been dragged to the left stop. The result is a greyscale image.
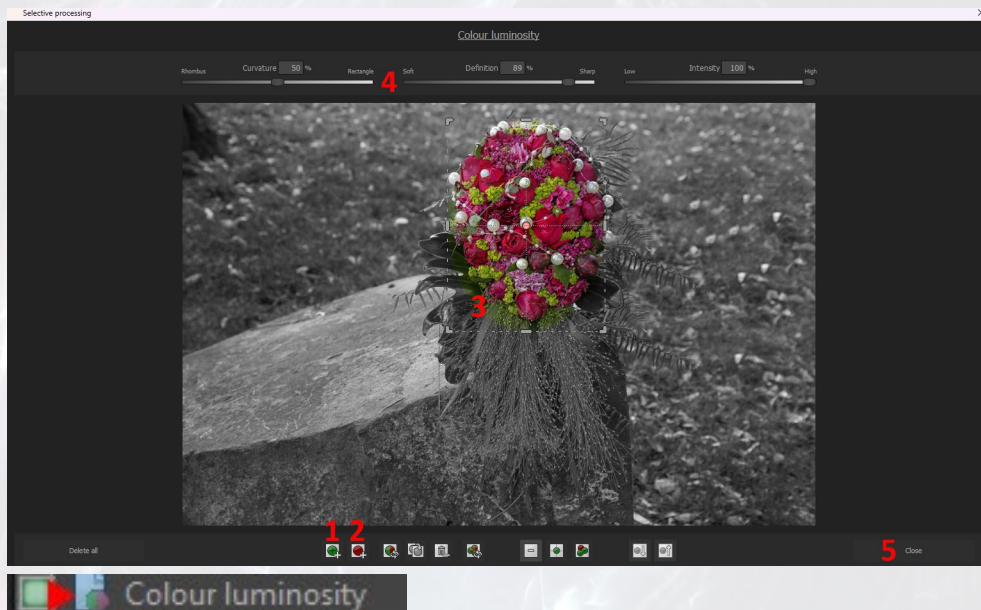
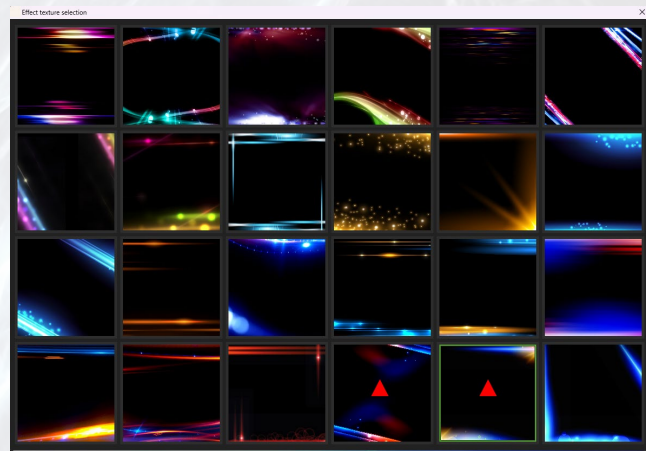**Step 2:** Click on the button (top right graphic) to open the **Selective editing** window.

Click on the **green** button (**1**) to add an effect, click on the **red** button (**2**) to exclude it, which is desired here to bring back the colour. The **rectangle** that appears (**3**) can be enlarged or reduced as required using the handles or moved as a whole by holding down the mouse button inside the rectangle
The parameters in the **upper section** (**4**) can be used to adjust the shape or vary the sharpness and strength. Click **Close** (**5**) to return.
Editing is indicated by the **circle with 2 colours**, and the selective editing is deleted again using the Delete all selective areas button.

10. Parameter plus texture selection

In many presets, one or more textures characterise the image look.

In the image example and the selected preset **Light frame 9**, this is the **Light frame** effect. Clicking on it activates it and displays the associated parameters, which can be varied and animated as usual.

Click on the button with the texture icons to open the window with the **Effect texture selection**. The current texture is outlined in **green**.
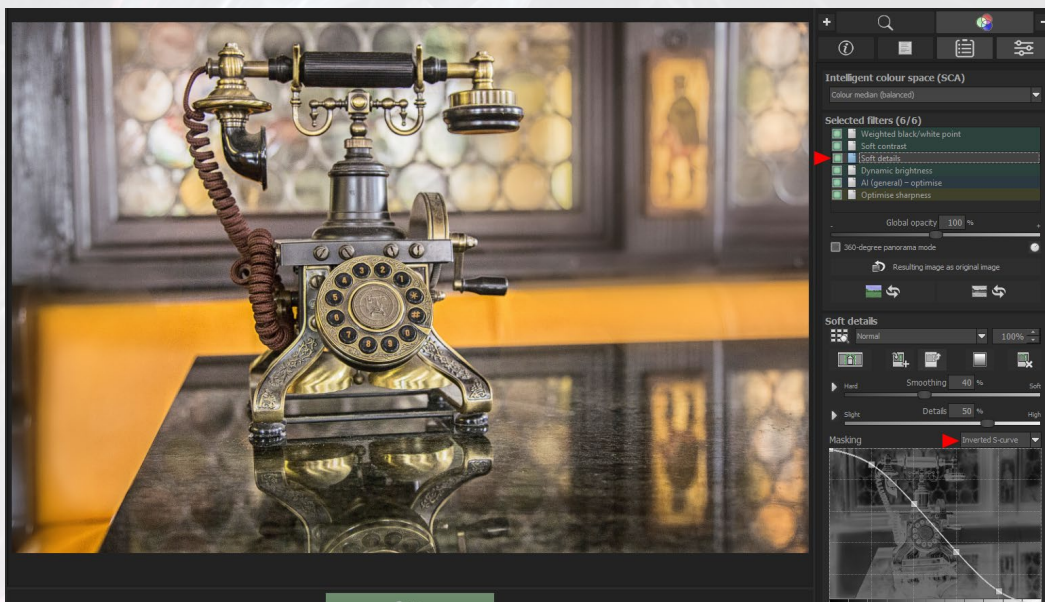

If you select any other texture by clicking on it, it is immediately applied to the image.

11. Parameters plus masks

Masks control the effect of an active effect. The masks below the parameters are brightness or gradation masks that are used, for example, to protect highlights or shadows from the effect of an effect.

For most effects and the associated parameters, the masking is set to Complete, as here for the Natural Vivid preset and the selected AI Optimise effect. In this case, the effect works at 100%, which is visualised by the greyed-out area below.


For the **Soft details** effect, the masking is set to **S-curve inverse** by default, the inverse of the 'normal' S-curve. The effect of the effect is now controlled via a 'brightness range mask' and visualises the set masking on the effect. The effect is fully effective for white areas, weaker for grey tones and not at all for black tones. Various presets can be selected via a selection list to adjust the mask. Or you can manipulate the curve or diagonal using the 6 handles. If you select the **Lights** preset, for example, the detail enhancements in the image example will have a preferential effect on the light-coloured parts of the image, while the darker parts will be largely omitted.

Note: As a rule, you do not need to change the default settings of the masks.

## 12. Parameter plus positioning of an effect

Selected effects can be controlled not only via parameters, but also via an exact punctual or area-limiting effect.
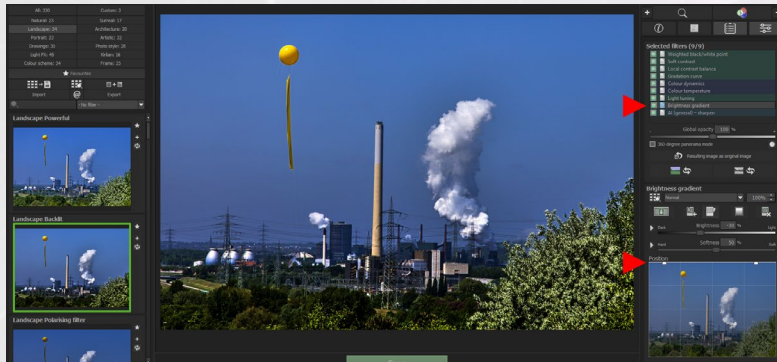
In the image example, the **straight line positioned at the top edge** of the active Brightness gradient effect ensures that the brightness of the original is visible in conjunction with the other effects in the upper part of the image and is faded in softly towards the preset value for the brightness parameter of **- 30.**
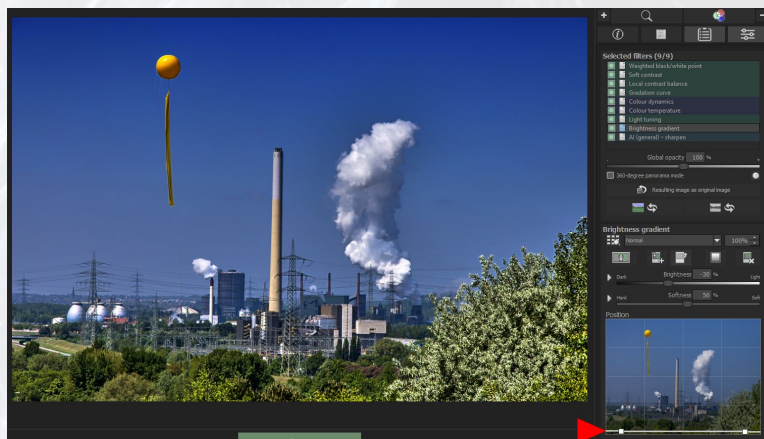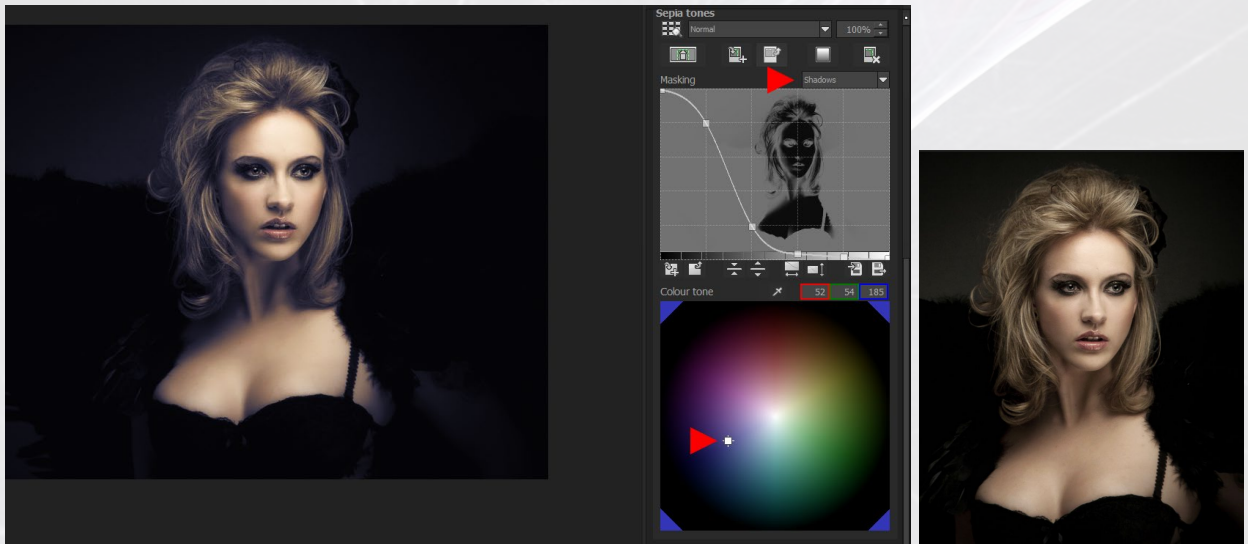

Using the handles, the line can be positioned as a diagonal or shifted downwards as required, as in the 2nd image example, with the result that the foreground is now light and the sky darkened.
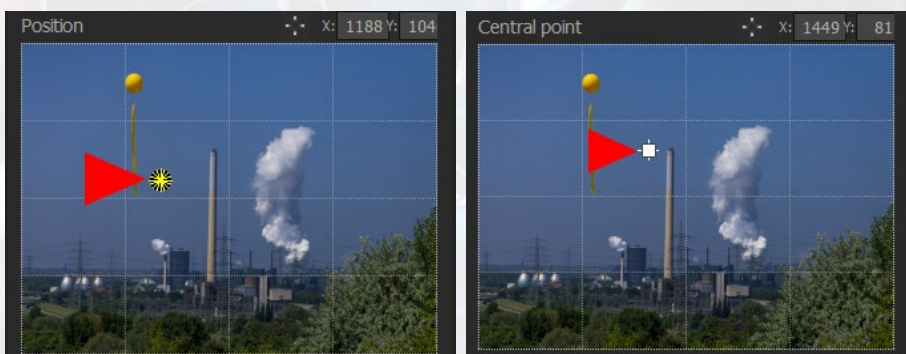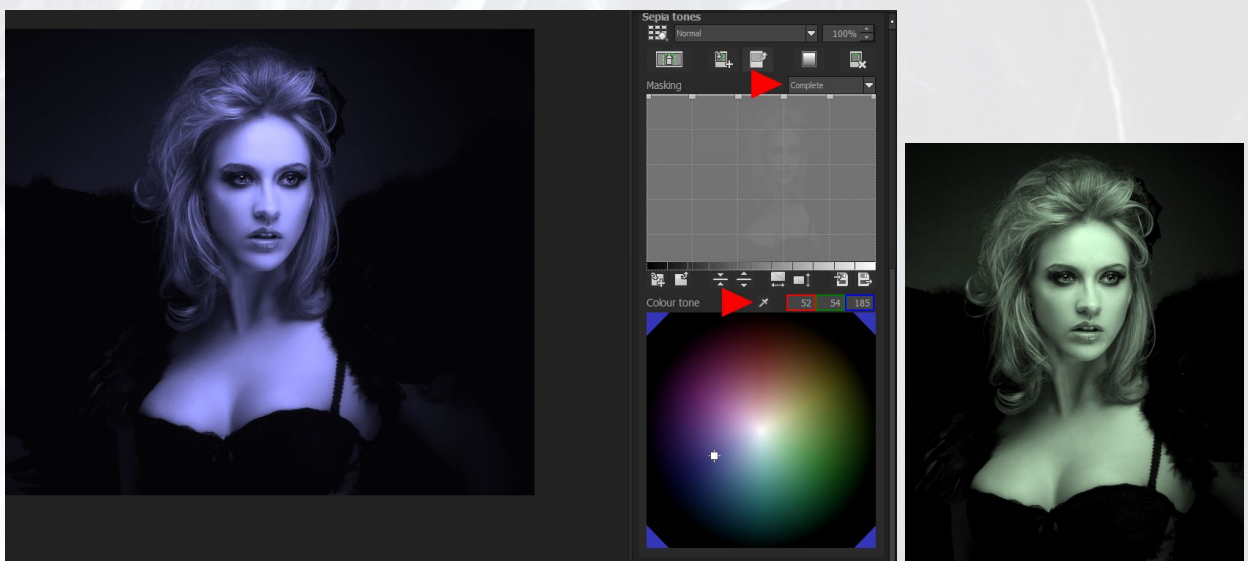

With other effects such as **Light tuning** (left) or **Warp** (right), the effect is defined with the mouse and focussed on parts that are important to the image.

13. Parameter plus colour selection of an effect

With all effects that offer a colour circle below the masking, a preset colour tone can be changed quickly and intuitively using either the mouse or eyedropper. Sepia tints, colour gradients and frames, for example, are popular effects for changing the mood of an image in a desired direction.
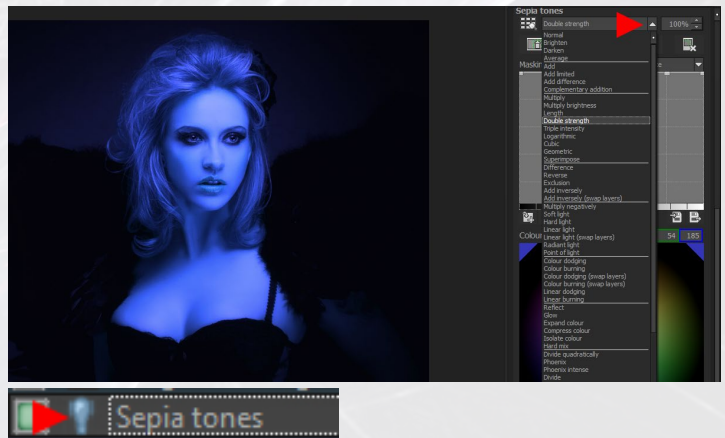

In the image example of the **Portrait Tone 1** preset, the preset tint, which can be recognised by the white dot in the colour circle, looks slightly different compared to the original (graphic on the right) because the masking is set to **shadow** and almost completely excludes the skin tones from the blue tint.

If the masking is changed to **Complete** and the masking is thus removed, the model is given a cool blue tint, which you can now change to any other colour on the colour wheel, e.g. **green**. If you want to pick up a **colour from the image**, e.g. to pick up a frame colour from a colour in the image, click on the pipette and select the desired colour.

14. The power of layer method

The power of the calculation modes is particularly impressive in the **Selective Drawing** module in the **composing masks**, where the original is offset against other image motifs or textures, leading to amazing results. But even in expert mode, effects can be quickly amplified, offset or completely alienated with a single click.


The calculation modes determine how an effect is calculated on the current image and are set to **Normal** by default in most effects. Click on the small arrow next to **Normal** to open the extensive selection list with the various calculation modes, the effects of which you can try out very quickly using the **up and down arrows**. In the image example, Double Strength mode has been selected for the **Portrait Tone 1** preset and the **Sepia tones**. This allows you to amplify effects at lightning speed and, if necessary, adjust the opacity even further to suit your requirements. The lamp symbol in front of the effect name visualises the calculation mode.

In the 2nd image example, only the **Soft details** effect is active in **the Portrait soft skin** preset for demonstration purposes and the **Details** parameter has been dragged all the way to the right. This exaggeration produces the desired effect for the eyes, lips and hair, but the excessively detailed skin is of course unacceptable. The problem is solved by selecting the Multiply brightness method, which can also be the first choice for exaggerated soft detail: eyes, lips and hair are well structured, the skin remains naturally beautiful.

15. Load effects from the list of all filter
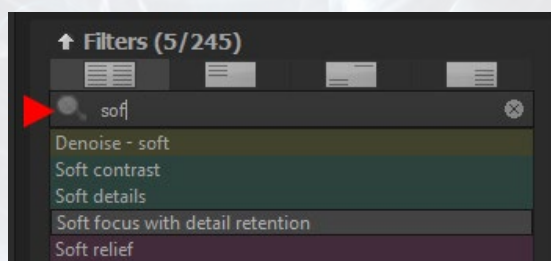
The list of all filters also includes effects that do not determine the image look in the various lists of selected effects.
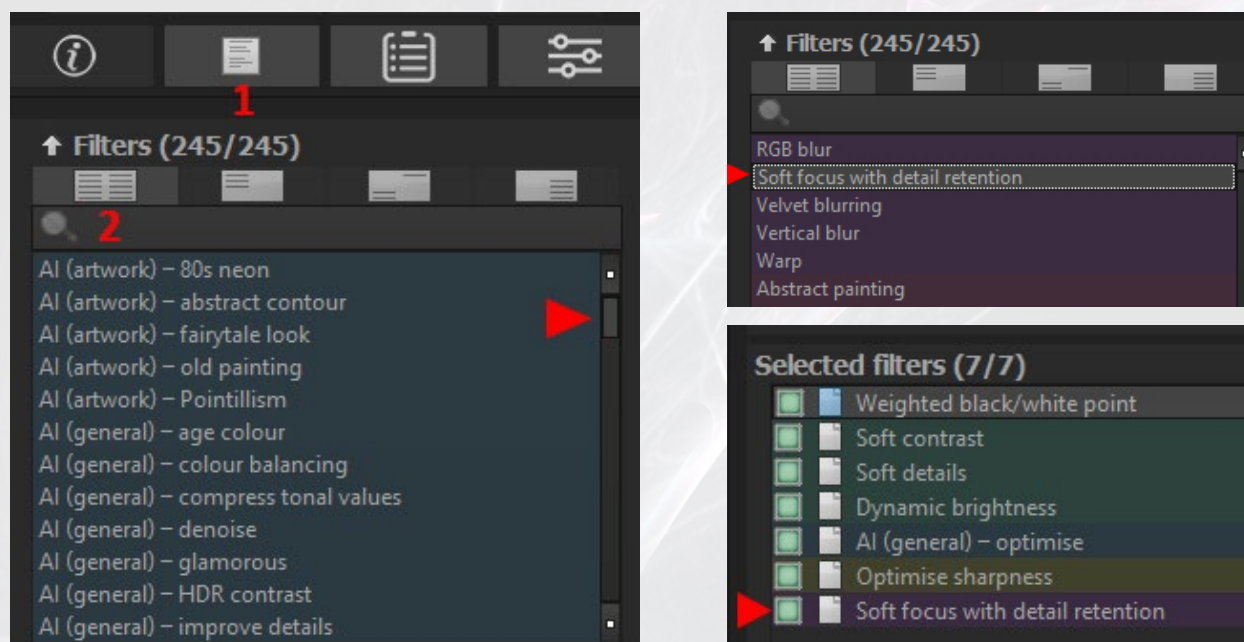
Click on the button (**1**) to display the list of all filters that are led by all AI filters. All effects are listed by default (**2**), which can be displayed one after the other using the mouse wheel or the scroll bar on the right and then selected.

The other buttons limit the filters to **basic effects**, effects for **further image processing** and **artistic effects**.

By **double-clicking** on a selected effect, such as **Soft focus with detail retention** in the graphic above right, it is immediately inserted at the bottom of the list of selected effects (graphic below right) and is active. Now you can judge the effect in conjunction with the other effects or if you have previously selected an 'empty' preset without effects, then only this effect or other loaded effects with which you can experiment will take effect.
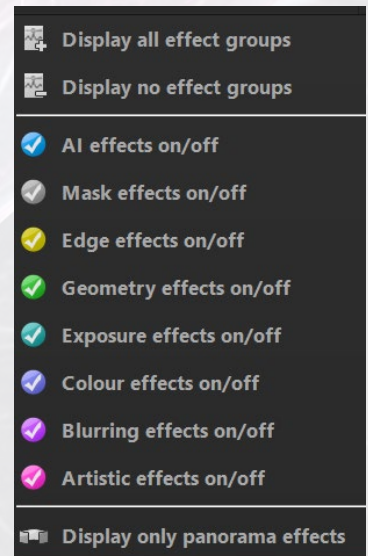

If you know exactly or approximately which filter you want to insert, enter the first letters of the effect, in the example Sof, or of the theme, e.g. Light, then all effects with these first letters will be listed immediately and the desired effect can be inserted into the list of selected effects again by double-clicking on it. As long as the entry is not deleted, you will only see this or the listed filters.

Extended filter limitation

Right-click in the list of all effects or on an effect to display a context menu with colour-coded groups that can be selected individually to narrow down the overview and select the desired effects in a more targeted or themed way.

This requires a 3-step procedure:

1. Click on Display **no effect groups**.

2. Right-click in the empty list.

3. Clicking on the selected group, e.g. **AI effects on/off**, only shows this group.

4. Right-click again in the selected group and click on **Display all effect groups** to list all effects again.
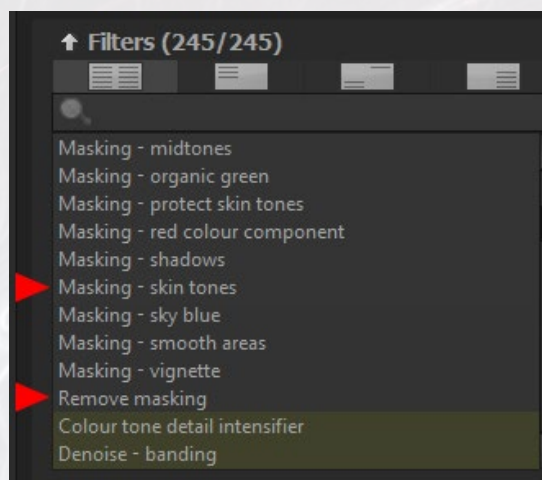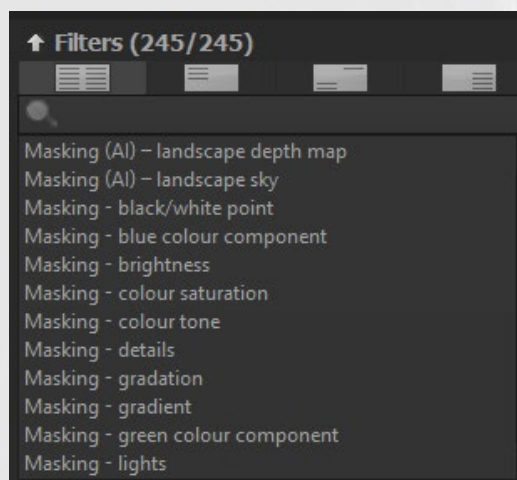

Change filter order

The order of the filters/effects can have a minimal or major impact on how all effects affect the resulting image. The decisive factor is the order of the effects in the **masks**, which is the subject of the next chapter. The filters in the list of selected filters are always processed from **top to bottom**.
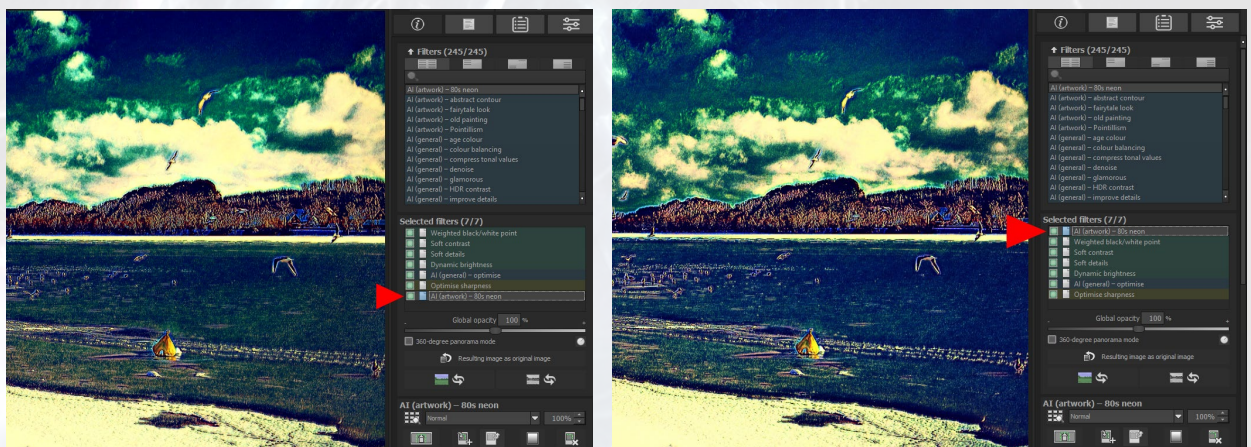

The newly loaded effects are always at the bottom of the list of selected effects, as in **the KI (Artwork) 80's Neon example**. The order can be changed simply by **drag & drop** while holding down the mouse button:
Hold the effect with the left mouse button, move it to the position where it is to be inserted in the list and release the left mouse button (image on the right). The difference is not spectacular, but it is visible: the structures in all colour areas are sharper, the image on the left with the effect position at the bottom looks softer. Of course, as always, personal taste is decisive as to whether the effect is moved or not.

## 16. Targeted use of filter masks

The masking filters are arranged below the AI filters. **Filter masks** are independent filters, very effective and more versatile than the masks that belong to the effects. Each filter creates a very special mask that can be adjusted individually.
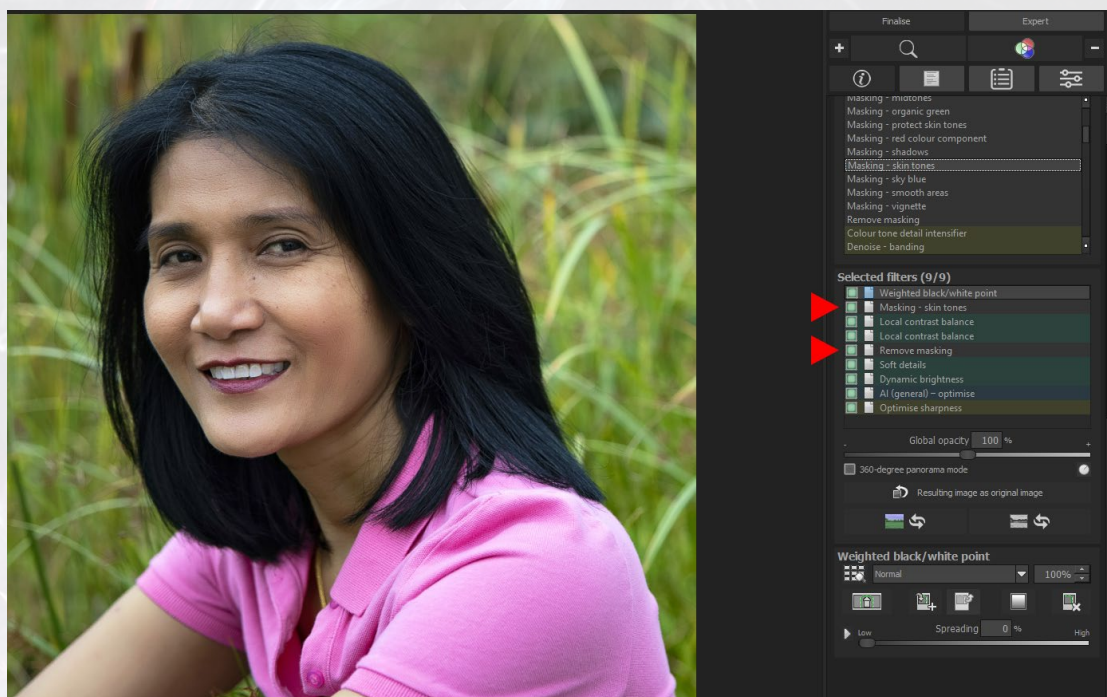
Masks affect all effects **that lie beneath them**, such as the **Skin Tones** mask in the **Portrait Soft Skin** preset in the image example. Therefore, an added mask effect must always be moved **above the effect** or effects in the list of selected effects. It is ineffective in the lowest position.

If the selected masking should not affect all underlying effects, the effect is limited by the **Remove masking** filter as in the image example, where it is located below the two **local contrast balance** effects, which ensure the blurring with the negative strength values.
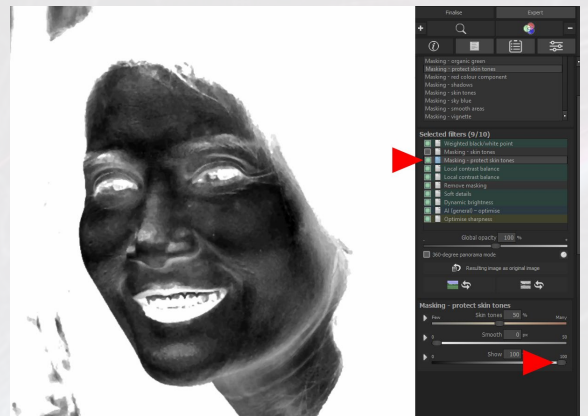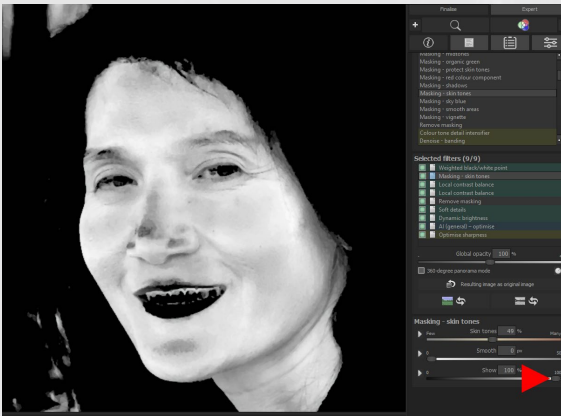
The names of the masks are 'meaningful', as the image examples show when the mask display is fully shown. The underlying effects work on all white and light areas until they are cancelled by **removing the mask** below the two **local contrast balance** effects. The effects are ineffective for all dark or black areas.

The **masking of skin tones** in the top left and bottom left graphics only affects the skin tones. Hair, eyes and lips are not taken into account.   In the graphics at the top and bottom right, the Masking - Protect skin tones filter has been positioned above the two local contrast equalisation effects, both of which have been set to positive strength values. Skin tones is inactive. The result is the exclusion of the contrast enhancement in the face and a contrast enhancement of the hair, eyes and lips.
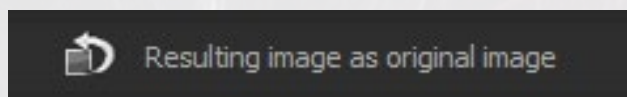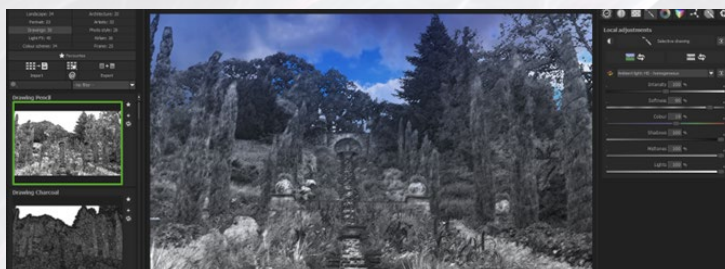

Parameter:
The parameters associated with a mask depend on the selected mask. For many masks, as in the **sky blue** example, it can also be reversed (inverted) or the effect can be further optimised using a line. As always, the effect of the individual parameters is displayed when hovering over them with the mouse, making it easier to make the desired setting.
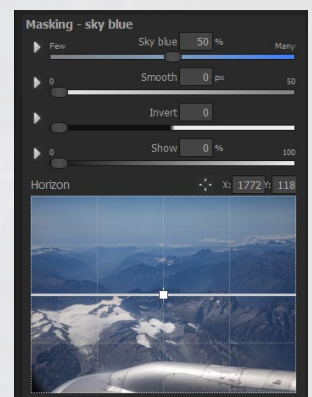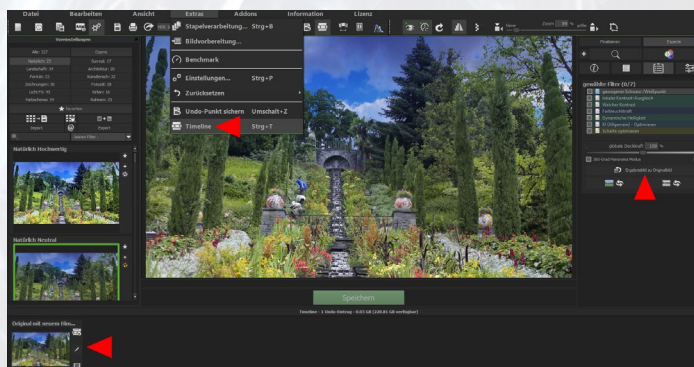
17. Resulting image as original image

With this function, the current resulting image becomes the **new original** after all the changes you have made in Finalise or Expert mode, which you can then use to try out other presets or make further changes as required. The following example shows a special case where this function is particularly useful or necessary.

If you switch back to Finalise mode in **Selective Drawing** after adding a new sky, for example, and want to try out a different preset, this can lead to confusion, as in the example image with the **Drawing Pencil** preset, because the original has been given the changed preset image look, but the sky has not. This is because the original always takes precedence over the edits in **Selective Drawing** for all selected presets. This peculiarity can be quickly solved with a small diversions:
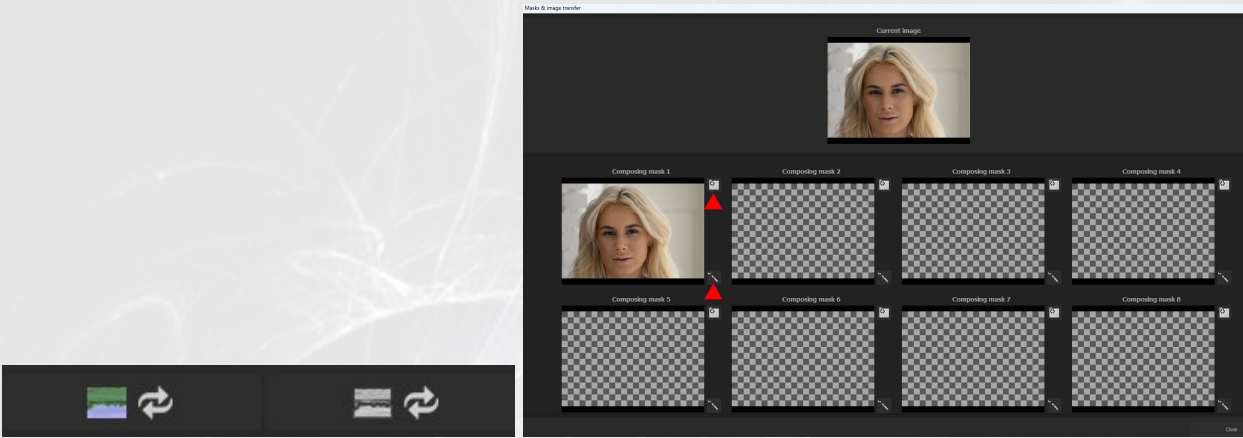

Click on the Result image to original image button and hide the undo point in the timeline, which is displayed by default, by clicking on Extras/Timeline.
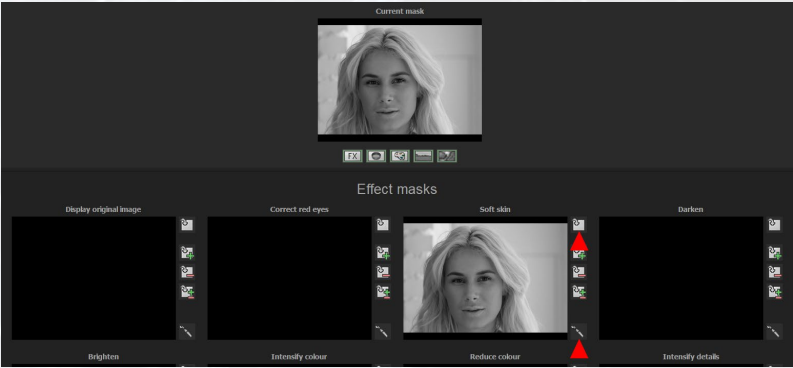

The image now displayed is virtually the **new original** and can be varied with any preset if required.

18. Transfer window

The transfer windows save time because they transfer the current **result images** or **masks** directly to **Selective Drawing**. Click on the left-hand button to switch to the **Masks & Image** Transfer window with an **image**, click on the arrow to select the desired **composing mask** and click on the brush symbol to switch immediately to the composing mask 1 selected here.

Click on the right button to switch to the same window with **a greyscale image as a mask**, click on the arrow to select a mask area, in the example **effect masks**, and decide on a selective processing of your choice, in this case **soft skin**.

Another click on the brush symbol automatically applies the effect to the mask and can be corrected as required using the intensity slider or the eraser.