SRDx
Dust and Scratch Removal

Professional Scanner Software

SilverFast

Brilliant Images with SilverFast

LSI

LaserSoft Imaging®

SRDx – Dust and Scratch Removal

Photos, slides and negatives are naturally afflicted with defects because it is impossible to completely avoid contact with dust particles, also small scratches are not uncommon. The SilverFast dust and scratch removal is a correction tool to eliminate these defects.

What exactly is SRDx?

SilverFast SRDx is a feature available in every SilverFast scanner and HDR software. SRDx features entirely new algorithms to detect and accurately remove defects like dust particles and scratches on color film, negatives and now, for the first time, black and white film, and photographs as well. Scanners which do not support the infrared channel can take advantage of this new technology.

2x SilverFast Dust and Scratch Removal:

• *SRDx: software based feature.*

• *iSRD: infrared based feature, not available for every scanner.*

SRDx – The Controls

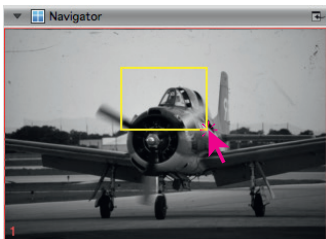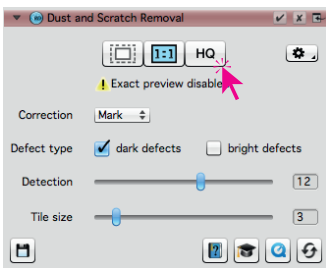To activate SRDx click on the SRDx button located in the vertical toolbar. The corresponding dialog window will open in the tool dock on the left.
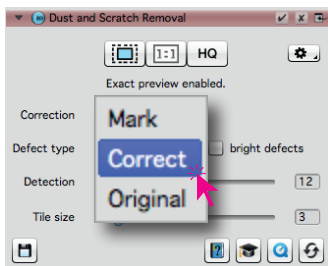
The SRDx Dialog

In the SRDx dialog you adjust the settings for the software-based dust and scratch removal. You will find the following control mechanisms:

• Preview Mode: The three adjacent buttons at the top of the dialog determine which preview mode is currently active:

• Normal Preview: SilverFast shows the entire preview scan in the overview window. SRDx correction effects are not displayed in this mode.

• 1:1 Preview: In order to accurately assess the effects of SRDX a high-resolution preview scan is made. In addition, the Navigator window will open. The displayed part of the image will be marked with a yellow frame, which can be moved through the Navigator window to change the displayed image section. SRDx is calculated only for the current image section. Moving the yellow frame always requires a recalculation of the SRDx effects.

• HQ Preview: A high-resolution preview scan of the entire image is performed at first. Then, SRDx effects are calculated for the entire HQ preview. The displayed image section can be changed by moving the yellow frame in the Navigator window without requiring new SRDx calculations. Thus, the effect of SRDx can be quickly controlled in different areas of the image.

- **Correction:** This menu defines the SRDx display mode:

  •**Mark:** In marking mode, all found defects are marked in red color.

  •**Correct:** In correction mode, the effects for the selected SRDx settings are calculated into the preview image.

  •**Original:** In original mode, the image displayed unaffected by SRDx, also defects are not marked. The SRDx effects are not show, however, they will apply when starting the scanning/ processing.

- **Defect type:** Here you specify what kind of defects you want to correct. On positive material dust and scratches are usually seen as dark artifacts, on film negatives they rather appear as bright errors. Put a check mark at the type of defects you want to remove. You can also correct bright and dark defects simultaneously.

- **Detection:** With this slider you determine how intense SRDx is searching for defects. If you find scratches not yet recognized as such, move the slider to the right. If image details get erroneously detected as defects, move the slider slightly to the left. Also experiment with the slider "Tile size".

- **Tile size:** This slider control specifies the size of the environment around found defects that are included for the correction. Move the slider to the right to achieve a more generous correction.

The effects of the SRDx correction are only visible in 1:1 and HQ preview. The normal overview preview does not show the effects.

The Expert Mode

(available SilverFast Ai Studio and HDR Studio)

The expert mode offers additional functionality, which help to mark the defects to be corrected. Open the expert mode by clicking on the "doctoral cap" button at the bottom of the SRDx dialog. The dialog will be extended and offers two additional tool areas:

Defect Marking

Here you will find two easy to handle tools to manually adjust the intensity of defect detection in small image areas or to exclude individual image areas from defect detection at all.

- **Marker Tool:** Adjust the intensity of defect detection directly on the image using your mouse. Click into the image and drag the mouse over areas that you want to change. You can do this several times on the same area in order to enhance the effect.

  •**Radius:** This slider specifies the size of the mouse cursor you are using to make your manual adjustment.

  •**Intensity:** This slider sets the strength by which the intensity of defect detection should be changed. Select a positive value to increase the intensity and a negative to decrease it.
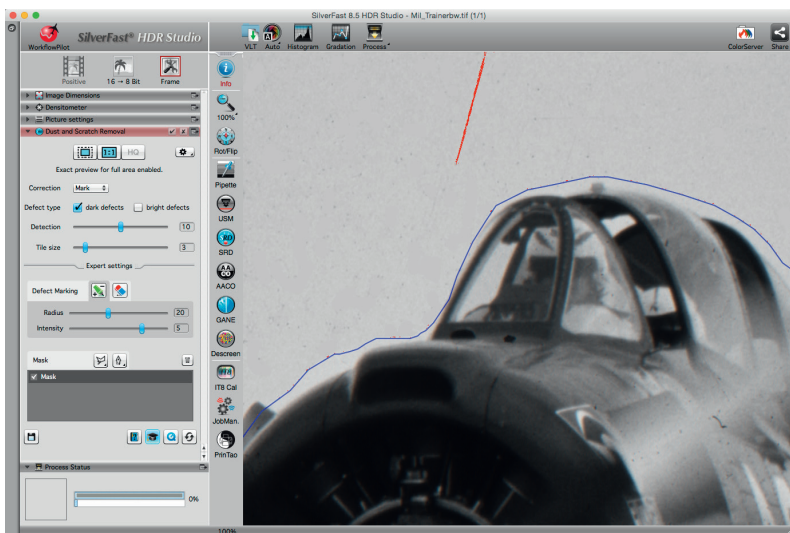
• **Eraser Tool:** The eraser tool is used to completely exclude individual image areas from the SRDx effects. This is a good way to protect image details. Click into the image and drag your mouse over the area you want to exclude from correction.

•**Radius:** This slider specifies the size of the mouse area in which you make your manual adjustment.

Mask Tool

Using a mask offers another possibility to limit SRDx correction effects to specific image areas.

• **Polygon Mask:** Click into the image and draw your mouse along the contour of your desired mask.

• **Path Mask:** Draw the outline of your mask by setting points with your mouse. Points will be connected by straight lines. Using the lever tools, you can transform straight connections to curves.

By using a mask the details on the plane are protected, while the defects in the sky are reliably removed.