

SilverFast - Pioneer & Expert in Digital Imaging



SilverFast 8 First Steps

Professional Scanner and
Image Processing Software
by LaserSoft Imaging



ENGLISH



SilverFast - First Steps

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These instructions are intended to help you, the user, to take the first steps along the path from analog to digital images. It is intended as a practical guideline for the initial uses of the application. Particular emphasis is therefore given to explaining the steps that will simplify your introduction to the software.

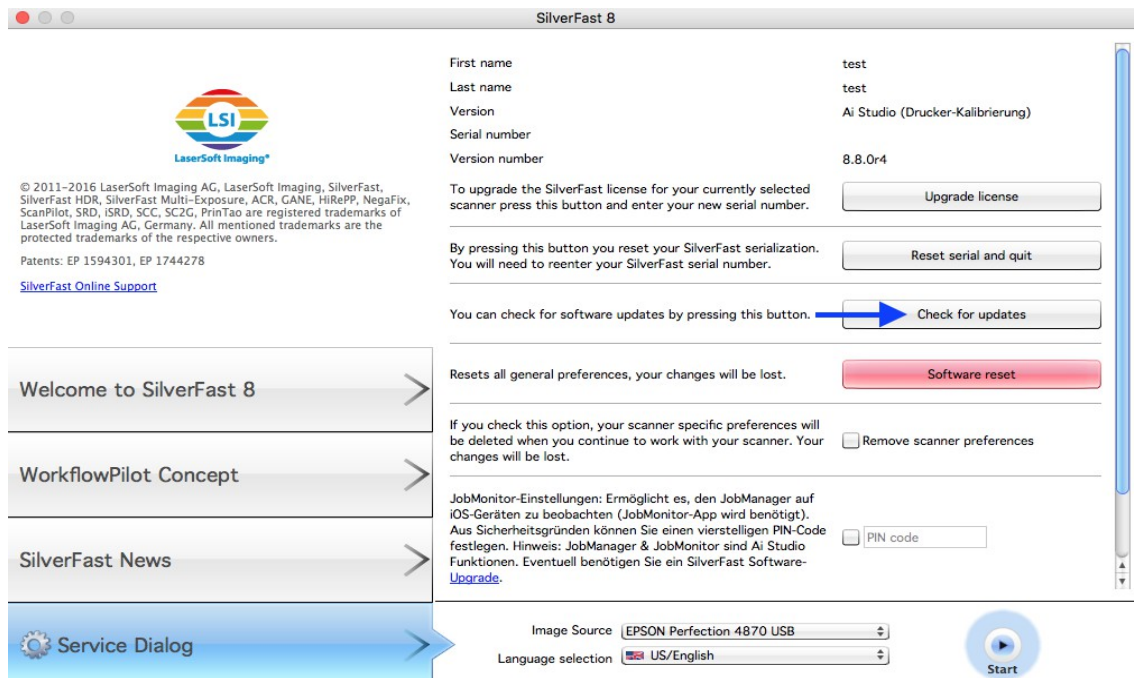
The example pictures are taken from the Ai Studio version. Lower versions offer a smaller scope of settings so that description may differ from what you see on your screen in some points.

1 Connecting the scanner and setting up the software

Connect your scanner to your computer. We recommend a direct connection to your computer - using a short cable, without an extension or USB/FireWire splitter.

Now install SilverFast. If you have received SilverFast on DVD or a USB stick, you can install it from there. If you have bought SilverFast online, you will receive a download link via e-mail. The same applies to both: Using your **registered** e-mail address, you can at any time download from our web site the latest (full) version of SilverFast for your product generation.

Particularly if you have received SilverFast on DVD or a USB stick, we recommend that you use the download link provided later on in these instructions to install the **current version** before you start. As soon as you have installed the update, you also have the possibility of manually searching for updates with the aid of the service dialog via the Welcome screen. In current versions however, the program will automatically search for updates at regular intervals.



Registration

You can register your e-mail address using the following link:

www.silverfast.com/reg/en.html

After you have registered on our web site, you will receive an e-mail with a confirmation link. Click on this link to confirm and to complete the registration process.

Download / update

You can find the SilverFast download at:

www.silverfast.com/show/downloads-start/en.html

The updates are full versions and do not require previous version to be installed, but you need to install SilverFast from separate installers for each scanner if you have two or more software licences for scanners from different manufacturers. These installations will behave as modules to the main program and they will add your scanner as additional image source to the Welcome Screen.

If you decide to buy the software, after already having installed a demo version, you can activate the software as full version without having to re-install, as described in the next chapter.

If you have received SilverFast on DVD but your computer lacks a DVD-drive, be sure to register your e-mail address in the Support section of our web site via the provided link and download the software as described above. As a second step you can request a new serial number which can be activated without the DVD:

After registering, a new serial number can be requested via the following link:
www.silverfast.com/bundle

Always switch on your scanner before starting SilverFast. Only in this way can SilverFast recognize your scanner when you start up the software. Start SilverFast 8 via the shortcut on your desktop (Windows) or in your dock (OSX). The SilverFast Welcome screen is opened. It provides access to the Service dialog with functions for administering the software, along with a menu for selecting the image source.



If you have several supported scanners and licenses, you can select the desired device under "Image source". Click on "Start" to start the software.

2 Activating and registering SilverFast

The serialization dialog appears when a SilverFast version that has not yet been enabled is started up for the first time. There you enter your first name, last name, your company name (if applicable) and your serial number. The "Enable" button is activated as soon as you have entered your data.

If you have purchased SilverFast online, make sure that you enter your first and last names in exactly the same way as confirmed via e-mail, for example without umlauts.



The screenshot shows a window titled "Serialization" with a light gray background. At the top, it says "Please enter your SilverFast serial number:". Below this are four input fields: "First name" (with a blue border), "Last name", "Company", and "Serial number" (which is a six-digit field with hyphens between digits). To the right of the "Last name" and "Company" fields is a circular logo with a blue center and a rainbow-colored outer ring. At the bottom of the window are three buttons: "Get demo license", "Unlock", and "Exit".

If you have received SilverFast on DVD, place the DVD into your drive while you unlock the program.

The "Demo license" button allows you to request a demo serial number to test the software for 30 days without obligation. Only use this option if you don't have a serial number for SilverFast and want to try out the software.

The registration window is loaded after activation. If your SilverFast version is not yet registered, you now have the opportunity to do so. The serial number is automatically registered when purchased online. The registration not only enables you to download updates from our download section but also ensures that your serial number is saved to our database. If you lose your serial number at any time, we can send it to your registered e-mail address via the following link: www.silverfast.com/lostserial

Note:

If you return or exchange your device, or if you give it away or sell it privately, please remember to have your SilverFast registration cancelled via the following link: www.silverfast.com/support-form

3 Quick start

Tired of reading and want to get straight to the action? The following quick-start instructions provide a general overview of the key points and the course of action.

1. Start and activate SilverFast
2. Select Transparent / Reflective
3. Select Positive /Kodachrome / Negative
4. Change the color depth if necessary
5. Set the resolution
6. Start preview scan
7. Activate tools (iSRD, Multi-Exposure)
8. Select Frame > Frame search > Film holder type
9. Start Automatic image
10. Accept settings for all frames if necessary
11. Start scan (long click for batch scan)

4 Basic settings

SilverFast has a series of settings that you should define before launching the preview scan. These instructions refer to Manual mode in SilverFast, which you can recognize by the red icon of the WorkflowPilot. If you see the blue WorkflowPilot symbol after start-up, click on it to change to Manual mode (red icon).



A **flat-bed scanner** with a transparency unit gives you a choice between transparency and reflective scans. In this case, "Reflective" refers to the scanning of photos on paper. Select "Transparency" for scanning slide positives, Kodachrome images and negatives, either framed or on film strips. For transparency scans on a flat-bed scanner, it is important to remove the cover of the transparency

unit.

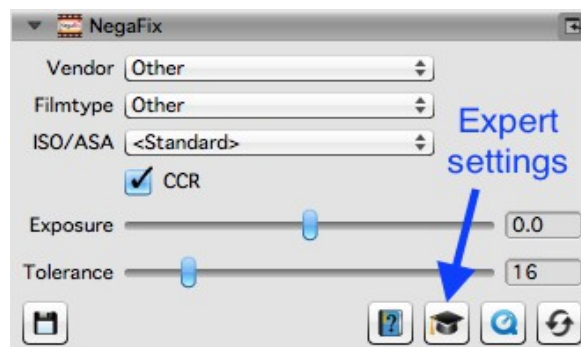
On a pure **film scanner**, it is only possible to scan transparent material, and the reflective mode is not available. On some film scanners, the film holder type can be selected in the software instead.

Next, select either positive, negative, or, Kodachrome; the "Kodachrome" setting being reserved for the SE Plus and Ai Studio versions.

"Positive" is the setting used for normal positive slides. Select "Kodachrome" for the special slide film from Kodak – often identified by the “card frame”. The selection automatically loads a special color profile which prevents the usual blueness that Kodachrome images would otherwise acquire when scanned without this special feature.

If you have selected the "Negative" setting to scan your negatives, the NegaFix dialog will have opened simultaneously as an additional tool. In the NegaFix dialog you can choose a film from a wide selection of manufacturers and different film types with different ISO values. This ensures that the orange mask of your film strip is correctly removed during its transformation from negative to positive. When using our HDR and HDRi raw data formats, this information is saved for later processing. If your film type is not listed, select a similar film type or use the standard profile:

Manufacturer: other, film type: other, ISO/ASA: Standard. In the Expert section of the dialog in Ai Studio, you can also edit the profiles or create your own profiles. Open the dialog's Expert section by clicking on the mortarboard. Manufacturer: other, film type: other, ISO/ASA: Standard. In the Expert section of the dialog in Ai Studio, it is possible to both edit or create your own profiles. Open the dialog's Expert section by clicking on the mortarboard.



Select the color depth as the final step before the preview scan. The color depth describes the number of bits per color channel. Color images are comprised of the three color channels **R**(ed), **G**(reen) and **B**(lue), each with 8-bit data or 16-bit data. Black-and-white images are managed with one channel with 8-bit or 16-bit data. This delivers the different color depths that can be set in SilverFast. The greater the color depth the larger the resulting file.

SilverFast internally always uses the greatest possible color depth offered by the scanner. Depending on the SilverFast version, an output is with 16 bits per channel or with 8 bits per channel is possible. The SE version and the SE Plus version offer 16-bits for raw data. Ai Studio, on the other hand, allows 16-bit for both raw data and edited images.

16-bit data provides a higher range of color gradations (65536 per color channel) in comparison to 8-bit data (256 per color channel). SilverFast therefore handles your images with 16 bits per channel. If you wish to continue editing your images after scanning, select 48-bit color depth for 16

bits per color channel so that you can also still access the full range of color gradations later on. Once the settings are to your satisfaction, output the images with a 24-bit color depth for an 8 bits per color channel. For digital images that are not going to be edited further, 24-bits is the most common color depth.

An example:

48>24bit is the standard setting in SilverFast. This setting reflects that SilverFast fetches the maximum data (48 bits total, 16 bits per color channel) from the scanner, processes it in 48-bit and then outputs the image with a total of 24 bits (8 bits for each of the three color channels **Red**, **Green** and **Blue**).

The 16 bits per channel **output** from the Ai Studio version is available for the file formats that support 16 bits: TIFF, PSD and JP2. Please note that not every image editing program can process 48-bit images.

For **color images**, select the 48-bit option in order to obtain 16 bits per color channel. Select 48>24 bits for images with an 8 bits per color channel, which all image editing programs can read as standard.

For your **black-and-white images**, select 16 bits accordingly for the maximum output, select 16 bits accordingly for the maximum output data and 16>8 bits for data with maximum compatibility.

SilverFast offers the 16>1 bit option for **line art**.

The SE Plus version and the Ai Studio version of SilverFast also offer HDR and HDRi raw data formats. If you select one of these raw data formats for the output, your image is saved with the full 48-bit data volume without loss of quality. No optimizations are performed for this, and all functions for editing your images are deactivated for the scan. Your images reach your computer as unchanged and as original as possible. This means that negatives are saved as negatives without being converted and slides look much too dark in basic image viewing programs. These HDR and HDRi images are intended for later processing in SilverFast HDR (Studio), which is able to access the full data volume of these raw data images. Furthermore, this original data remains unchanged by the HDR (Studio) software during editing: The HDR (Studio) software saves the settings you have made for each image in addition to the image data, without affecting the actual original data. This workflow can therefore be described as "non-destructive" or lossless.

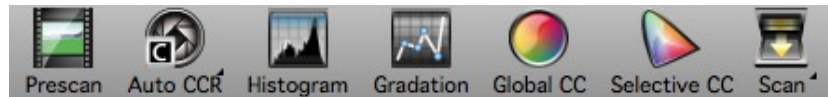
In comparison to the HDR format, files in HDRi format contain additional data from the hardware-based infrared channel that the HDR (Studio) software can use to remove dust and scratches with precision. This allows complete image processing to be performed on another device, at a later time and irrespective of the scanner. The full 16-bit data is always used for the raw data format: 64-bit HDRi for raw data of **color images** including the data from the infrared channel or 48-bit HDR for raw data without infrared channel. 32-bit HDRi is used for **black-and-white images** with infrared channel and 16-bit HDR is used for raw data without infrared channel.

This lossless raw data format can be accessed via the WorkflowPilot by choosing the archive workflow. Accordingly, the combination of the Ai Studio software and the HDR Studio software is known as "**Archive Suite**". There is a smaller package that offers the archive workflow with a narrower scope of functions; the "**Archive Suite SE**" version which is a combination of the SE Plus

software and the HDR software.

Some of the basic settings have now been made, and the preview can be launched.

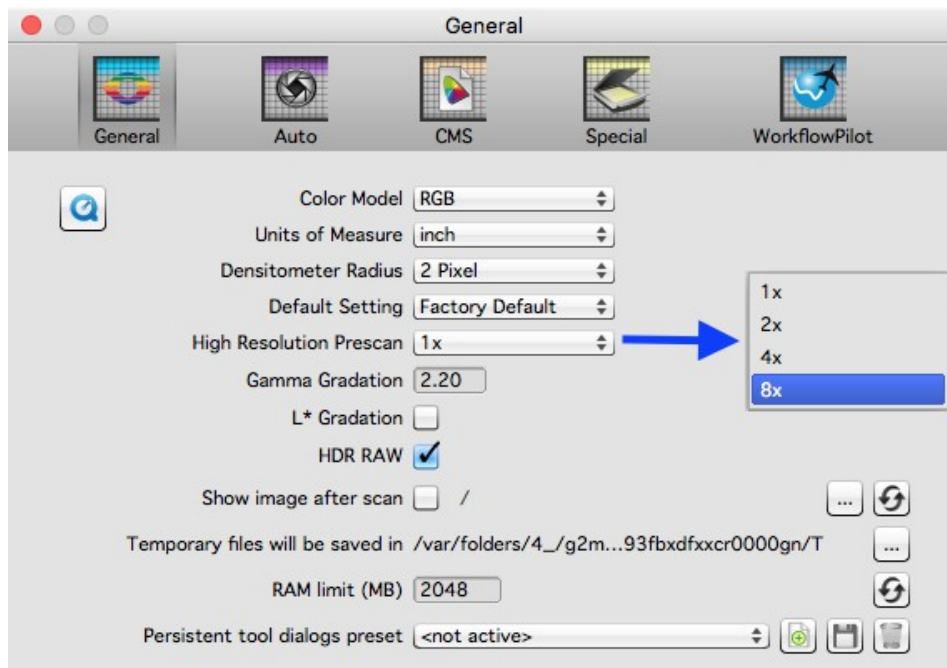
5 Preview and high-resolution preview



The way in which you can work with the preview differs slightly, depending on whether you use a flat-bed scanner or a film scanner without automatic feed or a film scanner with automatic feed.

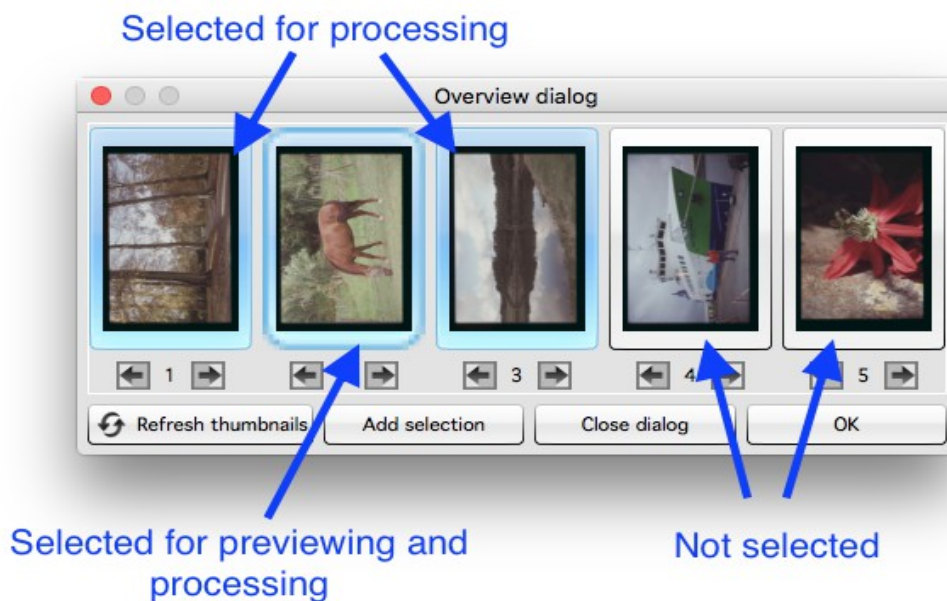
In the case of a **flat-bed scanner**, you call up the preview via the Preview Scan button in the bar above the preview. For the preview, the entire flat-bed is scanned in low resolution and is shown in the preview window.

In Ai Studio, a high-resolution preview can be activated for flat-bed scanners under OSX via the menu SilverFast 8 > Settings > General and under Windows via the menu Image > Settings > General. This is then performed with a multiple of the selected resolution. This takes slightly longer initially, but subsequently saves a great deal of time. Without getting too far ahead of ourselves, it is important to point out that both the automatic image optimization and the frame search IFF+ (Intelligent Frame Finding) work all the more precisely the more data is available. If you want to use the high-resolution preview, you must define the scan resolution before the preview scan. See Chapter 7 for more about resolution.



In the case of a **flat-bed scanner without automatic feed** also, you call up the preview via the Preview Scan button in the bar above the preview. The current image is then scanned for the preview.

For **film scanners with automatic feed** there is an additional function: the overview. The button for the overview scan is in the vertical tool bar, on the left next to the preview image. The overview scan creates an overview of the images in the inserted holder in an additional window. In this overview you can mark the images that you want to select for the final scan.



In addition to the markings, there is also a frame which you can use to select the image for the preview. The overview dialog is therefore also the tool for switching between the previews of the inserted images.

In SilverFast Ai Studio, there is also the possibility of transferring a selection of images directly into the JobManager ("Add selection" button), where you can then edit each image with individual optimizations before starting the batch processing.

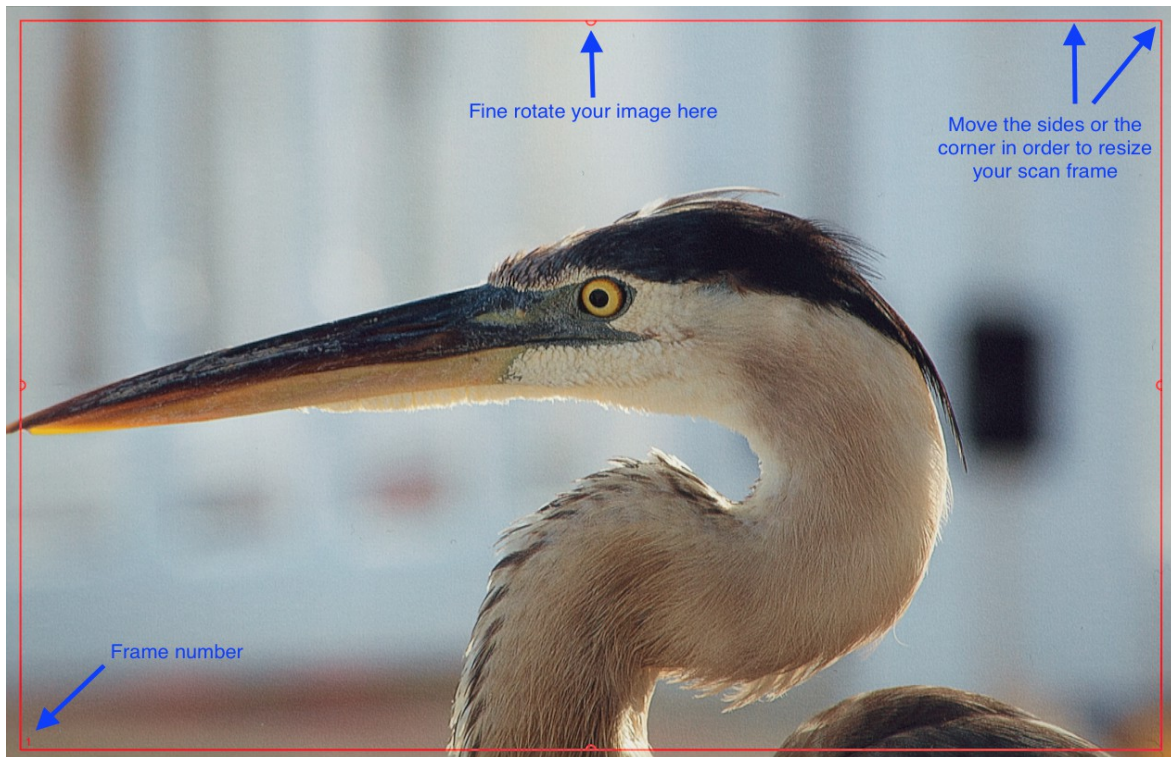
Note:

Nikon 35mm scanner with SF-200 and SF-210 holder: No overview dialog is available for this holder, because the holder can transport the images in one direction only.

In the case of the Reflecta DigitDia 5000 and 6000, the overview dialog also offers configurations to set up the slide tray. With this device, the overview scan is not automatically started because this would take considerable time - depending on the slide tray used. The automatic overview scan can be activated and deactivated again via Settings > Special if you want to make use of it.

6 Frame

A red frame is always visible in the preview. This frame marks the area that is being scanned and the frame on which you are currently working. The red frame is therefore equivalent to the image being scanned.



You can move a frame with the mouse, or you can shrink or enlarge it by clicking on and dragging one of the four sides of the frame. If you click on and drag the frame's corners with the mouse, you can change two sides at the same time. You can rotate the frame by clicking on and rotating the semicircles at the halfway points of the sides.

You can change the frame in the preview and in the zoomed preview, whereas in the 1:1 and HQ preview it is fixed and cannot be adapted. The fine rotation is not available if you have selected one of the HDR or HDRi formats. Go ahead and adapt the red frame to your image.

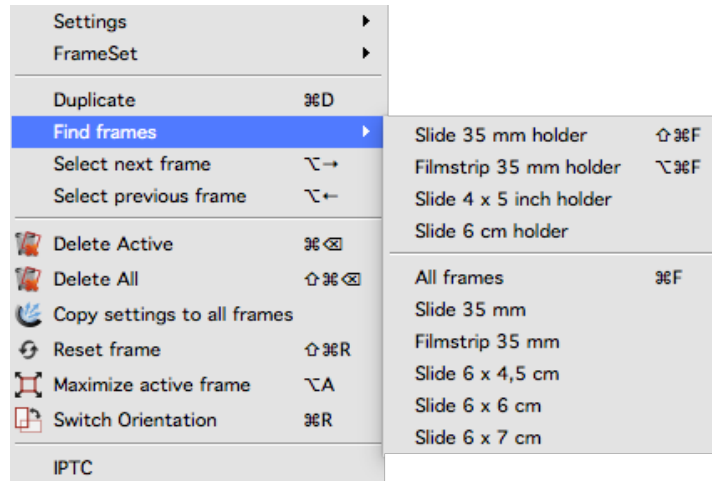
For negatives in particular, it is important to set up the frame precisely because all information in the red frame is taken into account for the conversion. In the case of a negative, a black edge around the actual image would make the converted image brighter than it actually is.

With a **film scanner**, you only have one image per preview in most cases. The holder is moved to the corresponding position for the next image.

The situation is different with a **flat-bed scanner**, on which the film holders can in most cases accommodate several slides or film strips. In this case, you can use the frame search IFF+ for the corresponding holder in the software. The frame search creates a frame for you for each image recognized. In particular, the frame search IFF+ saves a lot of time when a flat-bed scanner is used. Here too, the red frame is always the active frame for which you set changes. In a batch scan of

course, all frames are scanned including the non-active ones.

For the frame search, click on "Frame" and then on "Find frame". Now select the matching holder that you have inserted. If you are using the 35mm slide holder, select "Slide holder 35mm". The frame search now creates all the necessary frames for you itself.

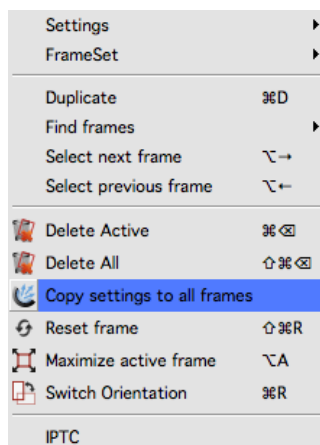


As explained in the section about the preview, in Ai Studio you can activate the high-resolution preview before you perform a preview scan. This provides more exact data for the most precise detection of frames possible.

Tip:

When you configure the active frame and only then start the frame search, the frames are created with the configuration of the first frame. This means that the same settings do not have to be made for each frame over and over again. There are some tools that work automatically and that are optimally suited to be copied. See Chapter 8 for more details.

If you have first used the frame search, you can also accept the active frame's settings for all frames in the frame menu. Both of these require you to be in the unzoomed view for the entire flat-bed.



On most scanners, you can create new frames manually in addition to the frame search.

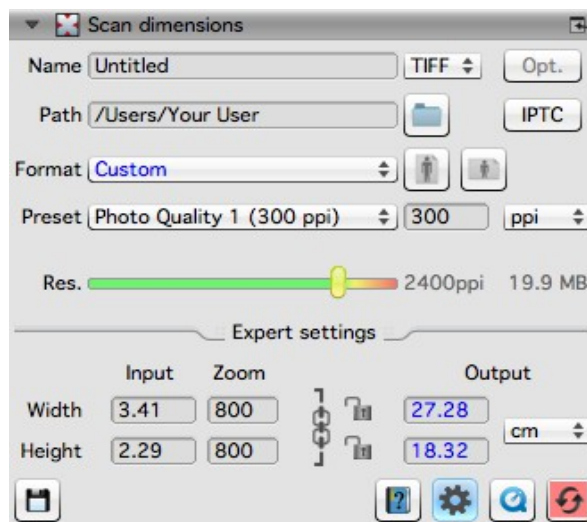
Draw frame: To do this, click with the mouse in an area of the preview without a frame, and draw

a new frame while keeping the mouse button pressed. Release the mouse button to create the new frame.

Copy frame: However, you can also move an already existing frame while keeping the ALT key on your keyboard pressed. When you release the frame, a copy of the frame is created at the new position. The new frame takes over the settings that were made for the original frame.

7 Scan size and resolution

You can find a very important dialog for configuring your scan in the very first place in your tool dock:



In this dialog, enter the name for your image along with the file path, select the file format and define the resolution for the scan. "Format" defines the dimensions for the output. If you select "user-defined", the output format conforms to the format of the red frame in the preview.

The **resolution** is influenced by several factors:

The preset: The preset indicates the desired output resolution, particularly for printing later on. A conventional home printer is capable of up to 300 ppi, and this value is therefore set as standard.

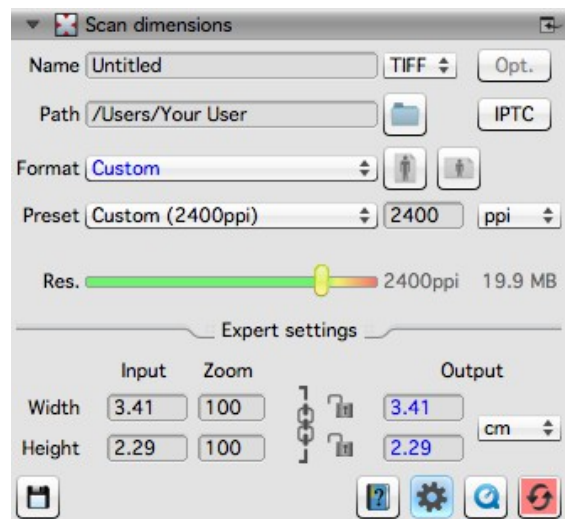
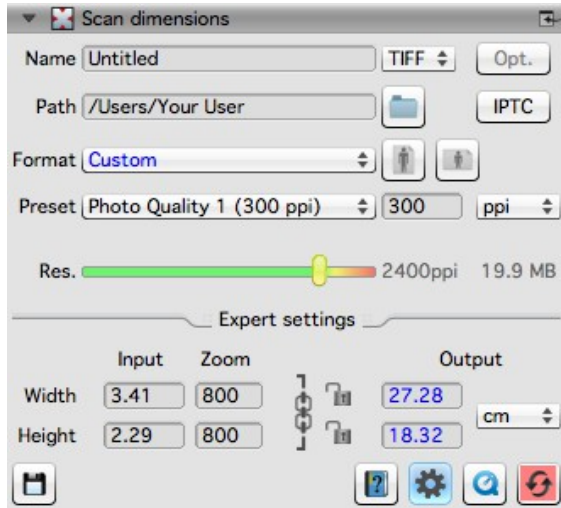
The resolution slider: The resolution slider addresses the resolutions supported by the scanner so that you can work without interpolation. The very last resolution offered is an interpolated one.

Next to the resolution slider, you can see the resolution actually used for the scan.

One **example** of how these factors work together: you want to scan a slide and print it out enlarged. You have a good home printer that can print 300 ppi.

You select your slide in the preview and set 300 ppi as the output preset. You click on the cog wheel right at the bottom of the dialog to display the extended options. Now move the resolution controller to the right to see the output size in Expert mode. The output size is the value up to which you can print out your image with 300 ppi without loss of quality. You now move the resolution slider further until the desired image size is reached. The output size and the resolution are linked, and SilverFast automatically adapts the other value respectively when you change the resolution or the output size.

However, it is recommended to enter the desired resolution manually in the box next to the Preset menu if you already know the resolution that you want to work with. To do this, leave the resolution slider at 300 ppi and the zoom at 100%. If you now enter a value manually, this is displayed as a user-defined value in the Preset menu. The value given as the preset is also the one that is displayed when you open your image with another program following the scan.



If you work with the preset and the resolution slider (left screen), SilverFast saves the set print resolution for this in the file's metadata so that programs with which the image is later opened display the selected print resolution and output size. If you enter the value for the resolution manually (right screen), this value is stored in the metadata and is displayed later as the resolution when the images are opened.

Both variants create an image file of the same quality and with the same number of pixels for which scanning is performed at the same resolution.

8 Automatic optimizations

SilverFast provides a series of automatic optimizations that can already perform part of the image optimization for you.

Automatic image adjustment:

The automatic image adjustment function is located in the bar of the color-modifying tools next to the preview scan button above the preview. There are two general optimizations, "Auto" and "Auto CCR" (Color Cast Removal) as well as various automatic functions that are adapted for typical and frequent scenarios. A long click on the button for automatic image adjustment opens the menu in which you select the appropriate optimization for your image. You can also reset the automatic image optimization in this selection menu.



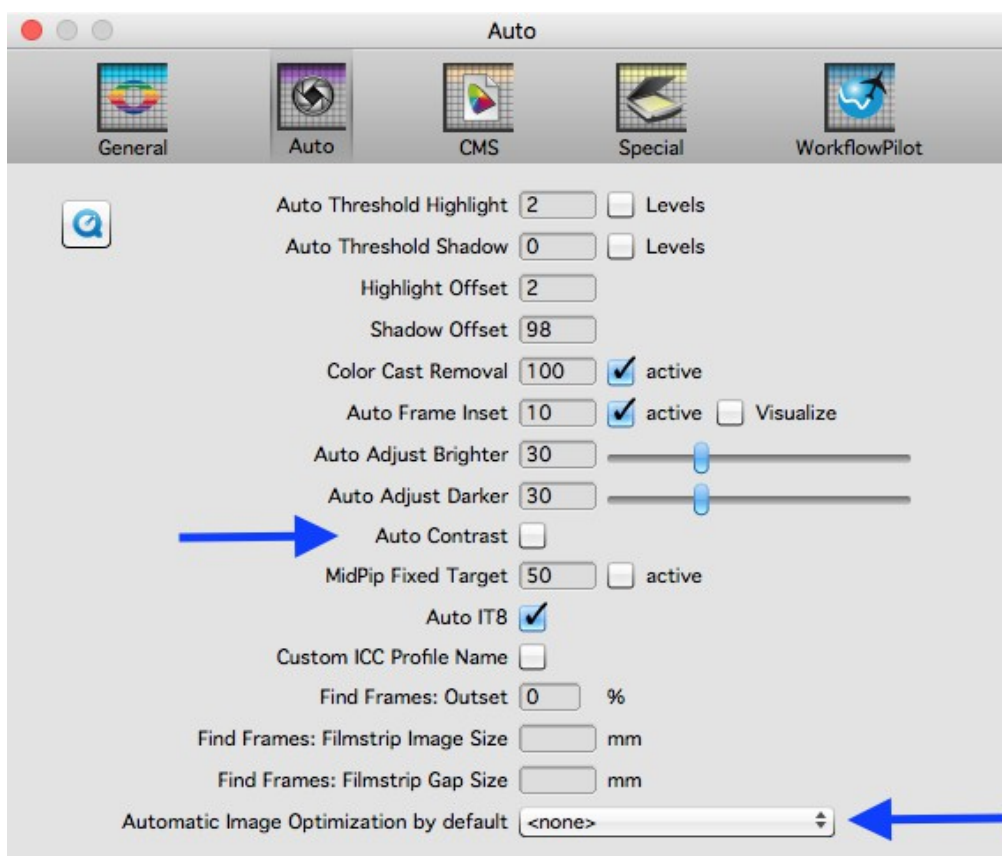
The triangle shows additional options that become visible with a long click on the icon.



The red dot indicates that the tool has been activated and is being used for the editing.

The automatic image adjustment makes changes to the histogram and gradation so that these tools are opened and, by way of a red dot in the icon, indicate that they are active.

The automatic image optimization by default doesn't optimize the contrast. If the automatic optimization is also supposed to adapt the contrast, simply activate this option in Preferences > Auto. The human eye perceives contrast as sharpness. If you have the impression that your images are too flat or blurred, try using some contrast.



Also under Preferences > Auto, you can define an automatic image adjustment that is automatically performed on every image individually in every frame search. This is particularly important for batch scans in which not every image is individually adapted via the JobManager (in Ai Studio).

Dust and scratch removal with iSRD:

Thanks to an additional infrared lamp installed in the scanner, the infrared-based dust and scratch

removal function "iSRD" (**i**nfrared **S**mart **R**emoval of **D**efects) allows very precise recognition and removal of dust and scratches. It is not available in Reflective mode or on scanners without an infrared channel. This function works automatically, but can of course also be adapted manually.

Activate this function by clicking once on the "iSRD" button in the vertical toolbar. The red dot in the center of the button indicates that the tool is switched on and is being used.

Note:

You should not use the infrared-based dust and scratch removal function if you want to scan black-and-white negatives, and you should use it only with caution when scanning Kodachrome images. The silver halide in the film material can reflect the scanner's infrared light and cause artefacts in the image. An adjusted correction is already performed for Kodachrome images. It is however nevertheless advisable to work with low defect detection.

Multi-Exposure

Multi-Exposure combines an under-exposed scan of your image with a normally-exposed one. Most slides, negatives or Kodachrome images have a very high dynamic range (also called density range), and only an increase in your scanner's dynamic range via Multi-Exposure enables the full dynamic range of the original to be obtained. This picks up more details in the dark and light ranges and reduces image noise. With Multi-Exposure, the scanner picks up far more different color gradations that SilverFast can utilize for image optimization, even if they cannot be perceived by the naked eye. This makes Multi-Exposure one of the most important digitizing tools, particularly in the case of extreme dense film types such as Kodachrome films.

Activate the "ME" button in the vertical tool bar. The red button indicates that Multi-Exposure is active. On some devices, the Multi-Exposure scan and the normal scan are performed in one pass.

Multi-Exposure is available in the SE Plus and Ai Studio version. Multi-Exposure is available only for transparency scans and is hidden when you use Reflective mode. Multi-Exposure is also available for our raw data formats HDR and HDRi and, together with the 48-bit data, offers the greatest possible data volume.

9 Zoom and 1:1 or HQ preview

You can now use the magnifying glass symbol to zoom in and out in the individual frames. You can also press the button for slightly longer in order to select zoom functions from the menu. Here too, the small triangle next to the icon shows that additional options are available.

In the zoomed preview, sufficient data is available to adapt your image manually with a very high degree of precision and to optimize it with the automatic image function.

If you have activated the high-resolution preview beforehand, you can now call up this enlarged preview of your images without scanning again. In the Navigator, you can change between the frames in the preview without having to exit the Zoom view every time.

The 1:1 preview and the HQ preview

The 1:1 preview and the HQ (High Quality) preview both start a Zoom preview with a 100% view.

This means that a preview scan is performed with the set scan resolution. In the preview, you now see a section of the image (in its original size at the set resolution) that you can move via the yellow frame in the Navigator, or by pressing the space bar while simultaneously moving the preview with the left mouse button pressed.

The effect of most tools is best assessed at the resolution that you will also scan with. Sharpening using the unsharp masking for example depends greatly on the resolution used. The 1:1 and HQ preview provide reliable and predictable results. Since the image can be directly saved after a 1:1 or HQ preview for which all the required data has been collected from the scanner, this function requires no additional time.

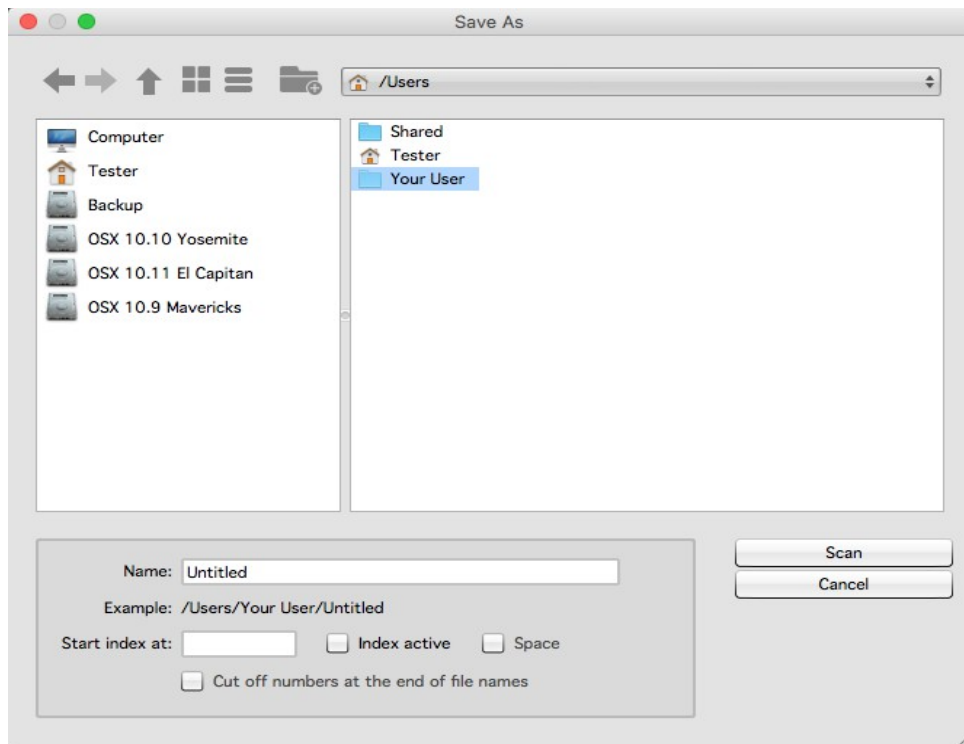
The 1:1 preview and the HQ preview both allow precise adaptation of your image. They differ in the fact that for the 1:1 preview, the selected tools are initially calculated only for the area that you have currently got selected with the yellow frame in the Navigator. The HQ preview on the other hand immediately calculates the tools for the entire image, so that the yellow frame can be moved back and forth without a renewed filter calculation.

10 Scan and batch scan

After having made your most important settings, you are ready to commence with the actual scan.

The horizontal bar above the preview contains the Scan button that performs two functions: If your scanner can perform batch scans, a long click opens a menu for selecting Scan mode. From this menu, you then choose between an individual scan or a batch scan. The button always shows the last activated scan mode and a brief click on the button starts the displayed scan mode.

If you start a batch scan, the automatic numbering dialog opens before the scan is performed. Here you can define a memory path for the batch and names for the files. If you leave these entries blank, the names and paths that you defined for the individual frames are maintained.



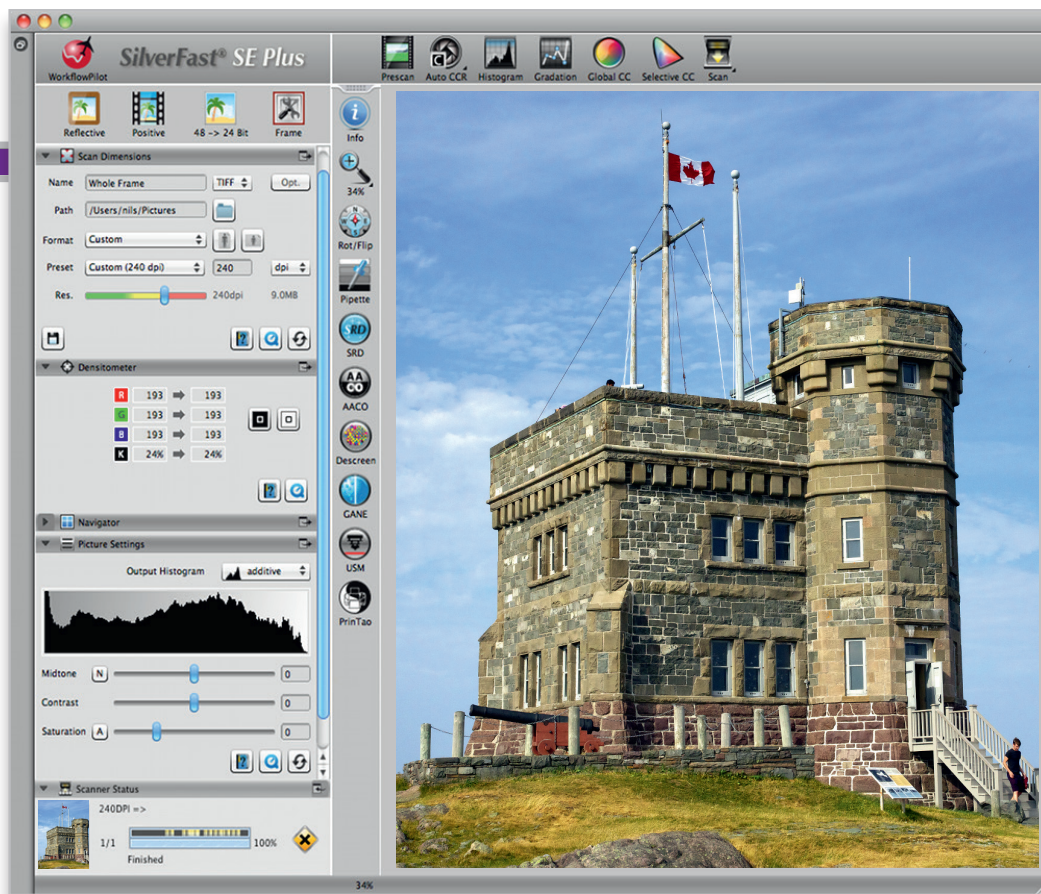
To adapt the file name, you can activate an index that is appended to the file name with or without spaces. Your images are then numbered automatically.

If you want to continue an existing numbering system, you can enter a number at which the numbering should be continued.

You can also cut off existing digits at the end of a file name to prevent a file being given two numbers.

One click on "Scan" then starts the batch scan.

We hope that these brief instructions have helped you to familiarize yourself with our software, and we hope that you enjoy trying out all of the many functions that now await you!




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Systemanforderungen:

- SilverFast ab 8.8:
- Apple® Mac OS X ab 10.7
 - Microsoft® Windows 10, 8,7 oder Vista (64 Bit)
 - Prozessor: Minimum 2 GHz
 - 4 GB RAM (8 GB RAM empfohlen)
 - 20 GB freier Festplattenspeicher
 - 1024 x 768 Bildschirmauflösung
 - DVD-ROM-Laufwerk oder Internet-Verbindung
 - QuickTime®-Player, PDF-Reader

System Requirements:

- SilverFast from 8.8:
- Apple® Mac OS X from 10.7
 - Microsoft® Windows 10, 8,7 or Vista (64 Bit)
 - Processor: Minimum 2 GHz
 - 4 GB of RAM (8 GB of RAM recommended)
 - 20 GB of available hard-disk space
 - 1024 x 768 display resolution
 - DVD-ROM drive or internet connection
 - QuickTime® Player, PDF Reader

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