



Scanning Like a Pro with the

DIGITALIZA+

DIGITALIZA MAX

It's totally simple to scan with either system using your smartphone or digital camera and you can scan your special formats as you would any regular negative. Read on to discover our tips for scanning like a pro with handy hints and examples for each.

The DigitalIZA+ and DigitalIZA Max allow you to scan any type of 35 mm, 120 or 127 negatives. We're talking standard frames as well as exposed sprocket holes or film borders, overlapping exposures, endless panoramas....the film world is yours to capture!

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Recommended Settings for Scanning Using Your Digital Camera

To create scans using your digital camera you will need:

- A macro lens.
- A tripod or copy stand.
- Spirit Level
(included in your DigitaLIZA+ and DigitaLIZA
Max Scanning Kits).
- Anti-static gloves (recommended).

How to prepare for scanning:

1. Load your film negative into the appropriate film holder, then place this on the backlight panel – make sure that the emulsion (matte) side of the film is facing the camera.
2. Set up your camera above the film holder and backlight panel on your tripod or copy stand and use the removable spirit level to ensure everything is level.
3. Turn on the backlight and get ready to scan.

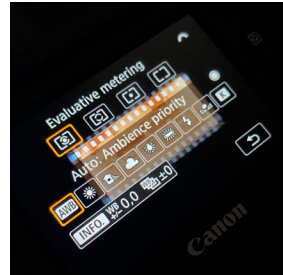
Please Note: *this guide is a recommendation based on our own setup for getting the sharpest scans. Depending on your camera, lens and lighting setup you will want to play around with your own camera settings to find the perfect balance that gives you the best scans.*

How to Scan with Your Digital Camera:

1. Ensure your camera is set to manual shooting mode.
2. To avoid camera shake and achieve the sharpest scans, use a remote shutter release such as a cable release thread or remote control.
 - *If you don't have one available, you can use your camera's self-timer mode.*
3. Shoot RAW images – this is an uncompressed and unedited image file.
4. For the best quality scan, we recommend that you set your aperture somewhere between f/5.6 and f/11 – the sweet spot will depend on which lens you are using. Using the correct aperture setting for your setup, you should achieve accurate focusing and sharpness across the whole frame.
5. Additionally, use the lowest standard ISO setting of your camera for the least digital noise possible.
 - *If you are not using a remote shutter release or are worried about the increased chance of motion blur when using a low ISO setting, then a higher ISO setting can still be used. You should then extend your exposure time to compensate for the low ISO and reduce the chance of blurred images.*
6. To make sure that you have an even exposure across the frame, use Matrix / Evaluative Metering (this should be the default metering mode for most DSLRs cameras) and have a look at the histogram.
 - *First, measure the image based on only the frame of the photo (without sprocket holes or film border exposed) and check that most of the data is spread evenly across the image, if it is then you can start your scan. You can use these same settings for regular scans and if you decide to include the sprocket holes or film border.*
 - *If the data is uneven, then you should adjust your shutter speed, ISO, and aperture settings accordingly to get the correct exposure.*
7. Make sure to set a custom white balance for your image – see the step by step tutorial in the next section.
8. To capture your scan, use either autofocus or manual focus with magnifying live view.
9. Scan away to your heart's content!

Setting Custom White Balance

1. Adjust your Shutter speed, ISO and Aperture settings for the desired exposure.
2. Set your White Balance to 'Automatic' and take a photo of the film on the light panel.
3. Go to 'Custom White Balance', select the photo that you just took of your film using the 'Automatic' White Balance setting and choose to use the White Balance data from that image for your Custom White Balance.
4. Make sure to then select 'Custom White Balance' before proceeding with scanning your film.
5. Scan your film.



Please note: these are the settings we used with a Canon 5D Mark 4 camera. Settings should be similar for most other dSLR cameras.

Results:

After (Custom White Balance):



Before (Automatic White Balance):



Scanning Different Types of Film

Standard Film Scans

Scan your color negatives, your black and white films, show off all the shades of your LomoChrome snaps or capture the ruby redscales and vibrant slide films. You name it...you scan it!

Color Negative 35 mm

Use the standard 35 mm Film Holder with the 36 × 24 mm Frame Mask (size of a standard 35 mm frame) to cover the film border and start scanning.

Before



After



Color Negative 120

Secure your film in the 120 Film Holder and scan your frame. You can crop your image in any way you like when you convert your negative post-scan.

Before



After



Scanning Different Types of Film

Black and White 35 mm

Use the standard 35 mm Film Holder with the 36 × 24 mm Frame Mask to cover the film border and scan.

Before



After



Black and White 120

Secure your film in the 120 Film Holder and scan your frame. You can crop your image in any way you like when you convert your negative post-scan.

Before



After



Scanning Different Types of Film

LomoChrome Film

LomoChrome films are our color negative emulsions with a twist. These films have a unique chemical formula to transform your world with crazy colors. To achieve this effect, all you have to do is shoot, develop and scan your LomoChrome film as you would any regular color negative film!

To scan, use the standard 35 mm Film Holder with the 36 × 24 mm Frame Mask to cover the film border or use the 120 Film Holder and scan as you would a regular color negative film. When scanning with your digital camera, we recommend setting a custom white balance on your camera to get the most accurate colors and avoid a purple or green tint on your images. The custom white balance can also be adjusted in post with some film scanning apps.

Before



After



Scanning Different Types of Film

Slide Film

Use the 35 mm Film Holder with the 36 × 24 mm Frame Mask and scan your frame.

Before



After



Scanning Different Types of Film

Special Format Film Scans

Film Borders and Exposed Sprocket Holes

When scanning 35 mm or 120 film with film borders included, use the standard 35 mm or 120 Film Holder.

Including the 35 mm film borders in your scans (exposed or unexposed) could result in false metering on the histogram due to the additional light passing through the sprocket holes and can produce an orange discoloration when inverting your final image.

To minimize this, we recommend you first meter very close to the frame and adjust your custom white balance settings based on the center of the image.

Once your setup is complete, you may focus on the whole frame again, including the film sprocket holes.

If you want to include exposed sprocket holes in your scans (such as photos taken with the Lomography Sprocket Rocket), you may also need to place the 35 mm Panoramic Diffuser over the backlight before placing the 35 mm Film Holder to spread the light evenly across the entire frame and avoid shadowed areas on the right and left sides.

Ensure you always shoot RAW images, then you should be able to restore the contrast and colors accordingly in post-editing. If you are inverting your negative image by adjusting curves, be careful to select the brightest and darkest points within the exposed image only. Selecting a point in the film borders would result in an incorrect color balance and a blue cast over your final image.

Scanning Different Types of Film

Exposed Sprocket Holes



35 mm Film Border



120 Film Border



Scanning Different Types of Film

Panoramas

To ensure that the full frame is evenly lit, you might want to place the 35 mm Panoramic Diffuser over the backlight before placing the 35 mm Film Holder. Then, you can load your film and scan as normal. If you want, you can crop out the film borders when you edit your image post-scan.

Before



After



Scanning Different Types of Film

Overlapping Exposures

Center your film where you would like to scan and secure it in the 120 or 35 mm Film Holder, then scan as normal. If you're scanning a 35 mm overlapping exposure, you may need to insert the 35 mm panoramic diffuser onto the backlight panel first to ensure that the whole frame is evenly lit.

Before



After



Recommended Apps and Plugins for Converting Your Film Scans

Once you've completed your film scans with your smartphone or digital camera, unless you really like the negative look...it's time to convert your negative images into positive images and make a few edits to see your final results in all their analogue glory!

There are a few different options for image conversion on a desktop or with apps for your smartphone and you will want to try a few to see which one works best for you and helps you to make your images look the way you want.

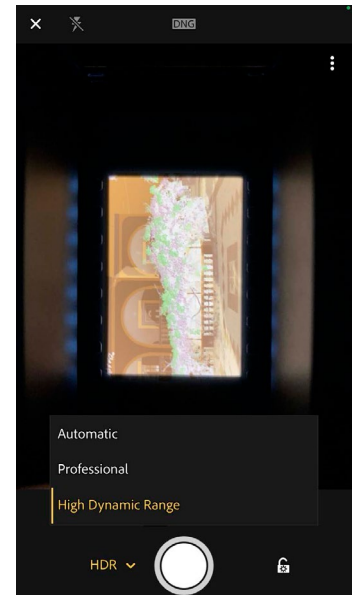
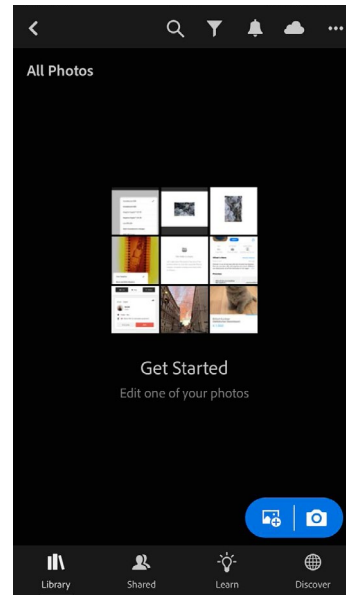
To help you out, we've put together a few quick how-to guides for converting your negatives using different smartphone and desktop apps.

Recommended Apps and Plugins for Converting Your Film Scans

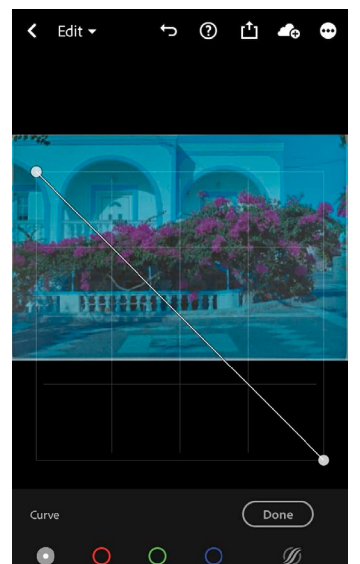
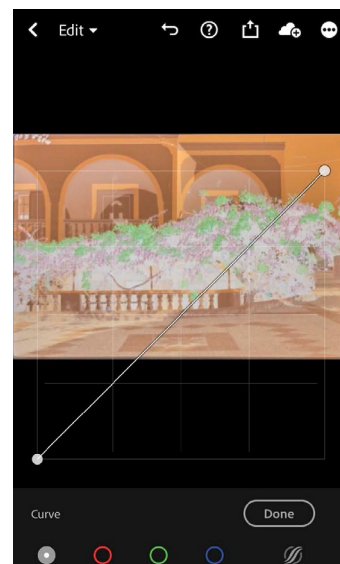
Adobe Lightroom (Desktop and Smartphone)

7-day Free Trial, then yearly or monthly subscription fee.

1. Upload your film negative scan (Desktop) or scan directly in the app.

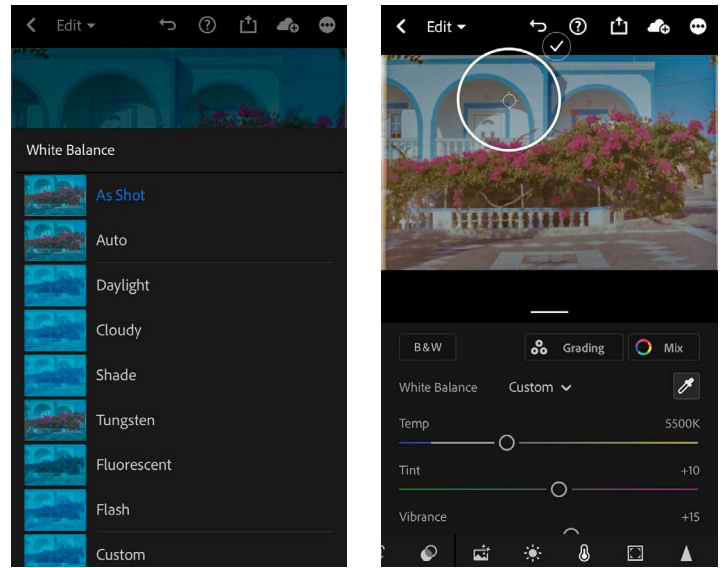


2. You now need to reverse the tone curve to invert your image. Go to 'light' in the toolbar then click 'curve'. A diagonal white line will appear on your image going from bottom left to top right. You need to reverse this line curve (slide the right slider from top to bottom and the left from bottom to top).

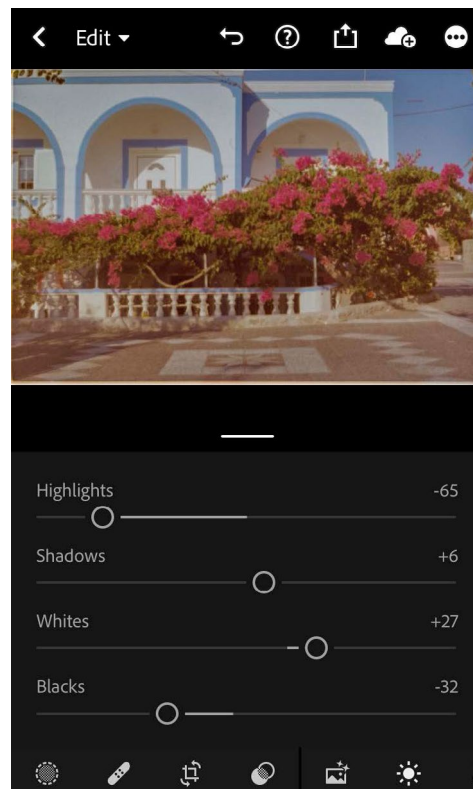


Recommended Apps and Plugins for Converting Your Film Scans

3. Now, you want to set a custom white balance which will help to remove the blue cast from your image. Go to 'color' in the toolbar, select 'custom' under light balance and click on the eyedropper tool next to the white balance. You can then select a part of your image for the custom white balance. This works best if you choose a bright (white if possible) area of the image.



4. Finally, you can edit your image using the light/color sliders according to your personal preference for the final result. Pay attention: the sliders will work in the opposite direction than expected after you have reversed the tone curve.



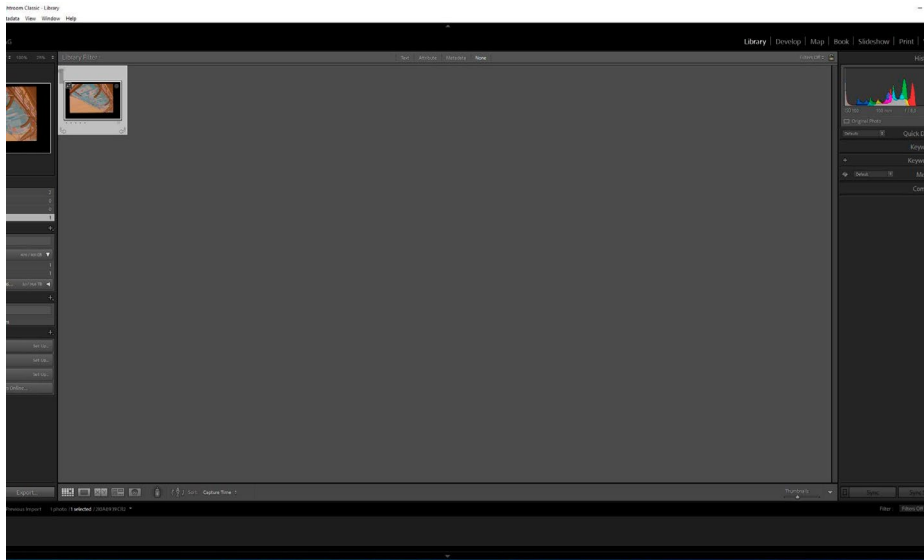
Recommended Apps and Plugins for Converting Your Film Scans

Negative Lab Pro Lightroom Plugin (Desktop)

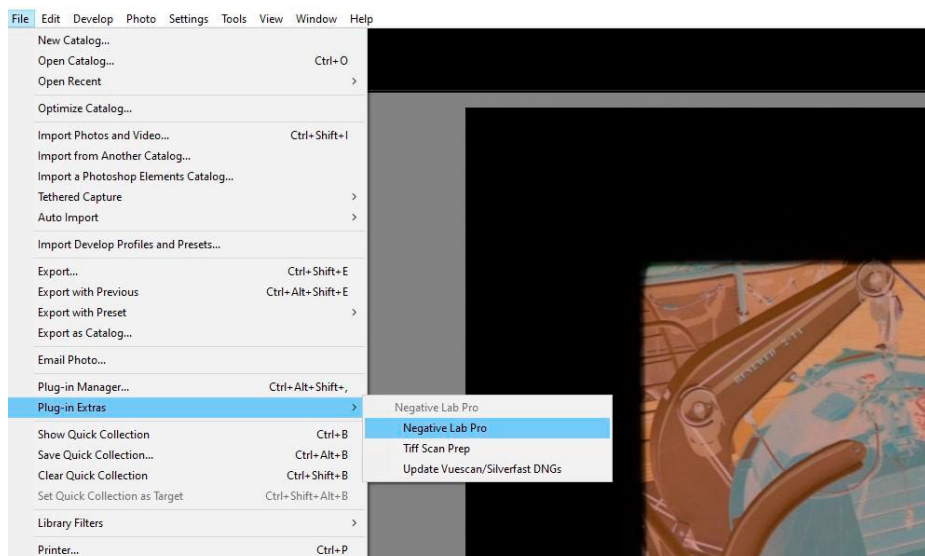
Free trial with unrestricted use for up to 12 negatives, then a one-time purchase price of 99USD.

N.B. requires Lightroom

1. Upload your film negative scan to Lightroom

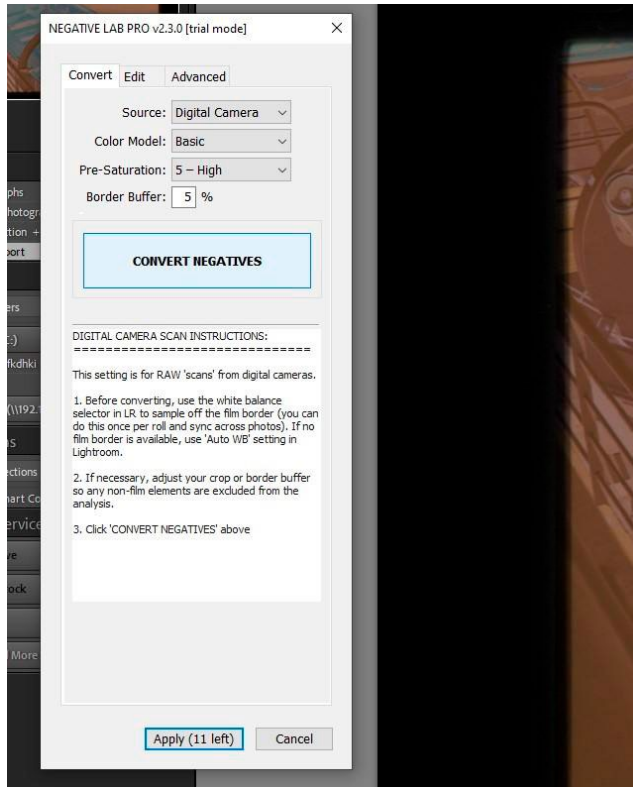


2. Select Negative Lab Pro Plugin

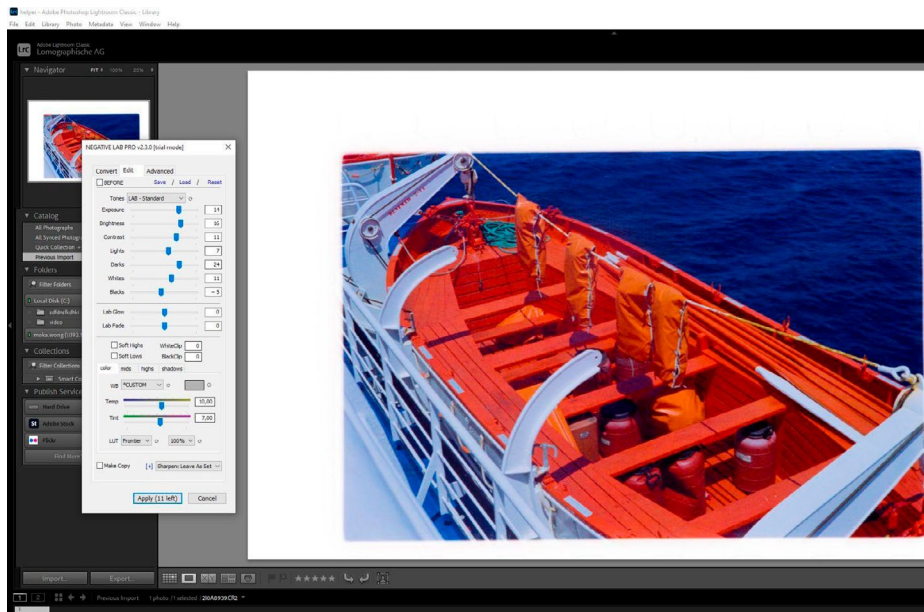


Recommended Apps and Plugins for Converting Your Film Scans

3. The tool will automatically invert your image and make the adjustments for you using custom image profiles.



4. You can then make any additional adjustments according to your preferences.

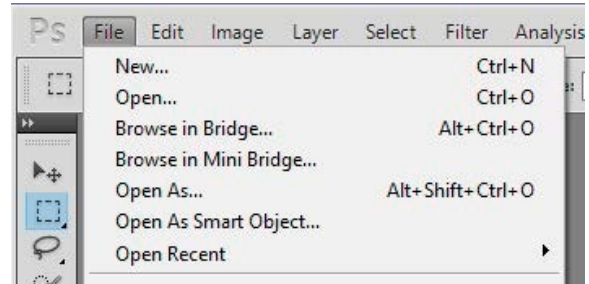


Recommended Apps and Plugins for Converting Your Film Scans

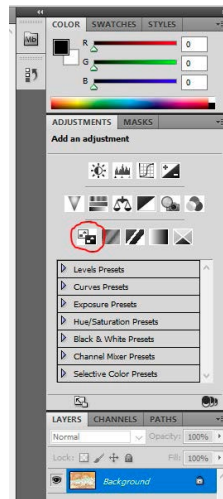
Photoshop (Desktop)

7-day Free Trial, then yearly or monthly subscription fee.

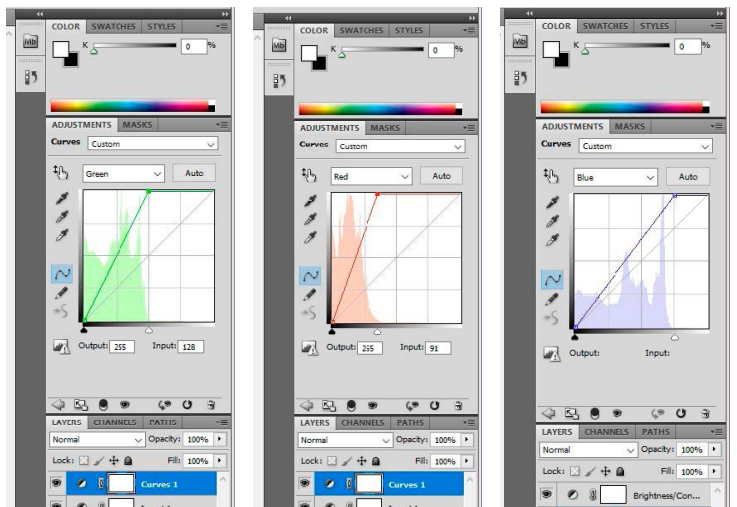
1. Upload your film negative scan



2. In the adjustments sidebar, add an 'invert' layer.

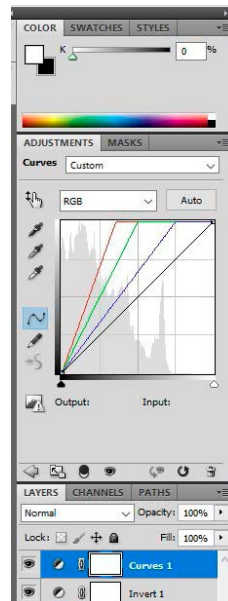


3. Now, you will see a blue cast over your image so you need to adjust your image curve to remove it. To do this, select 'curves' and then drag the output and input sliders to match the edges of the histogram for each color.

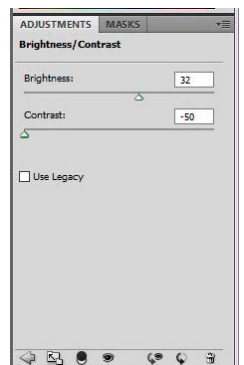
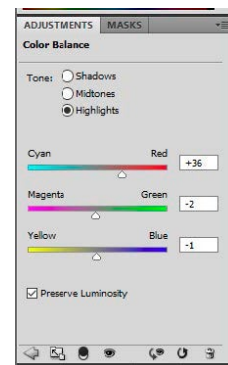
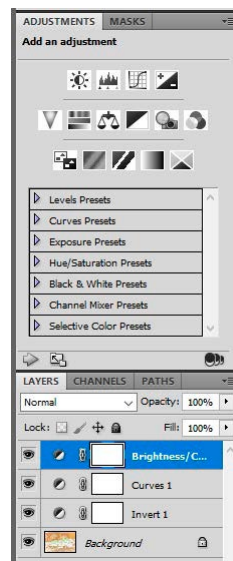


Recommended Apps and Plugins for Converting Your Film Scans

4. Your image should then be inverted and have the blue cast removed.



5. You can then continue to make any adjustments to your color/light settings for the final result depending on how you want your image to look.



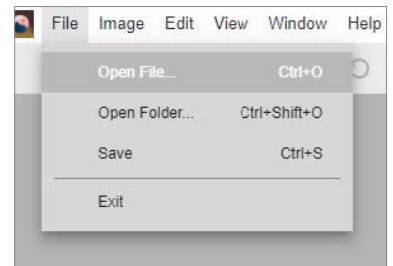
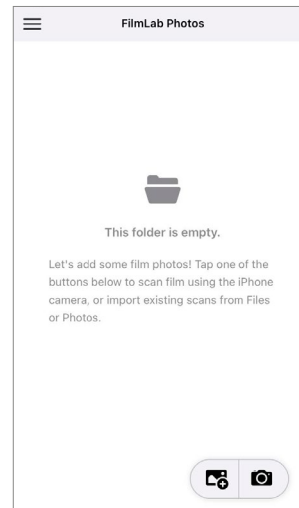
Recommended Apps and Plugins for Converting Your Film Scans

Film Lab

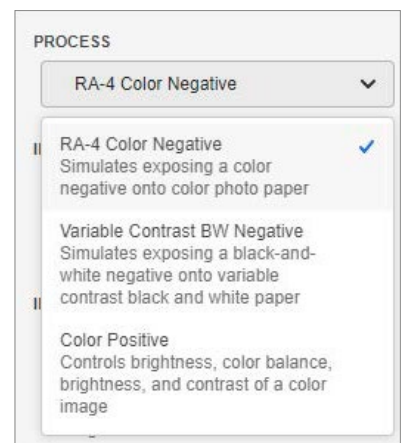
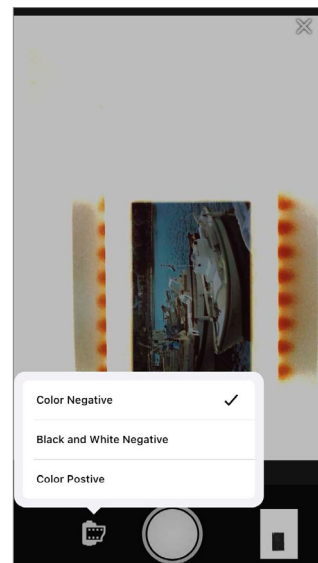
(Desktop and Smartphone)

The basic version is free but you can purchase a FilmLab Pro subscription for access to more features.

1. Open your image in the desktop app or capture a photo with the smartphone app. (FilmLab Pro users can upload images to the app from their own camera roll).

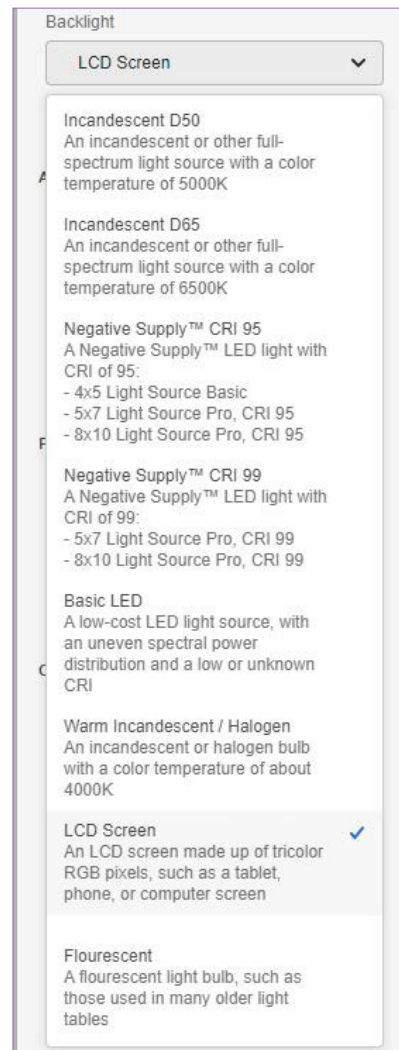
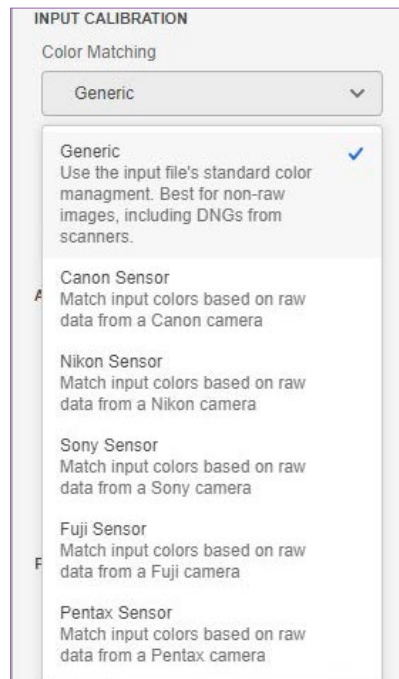
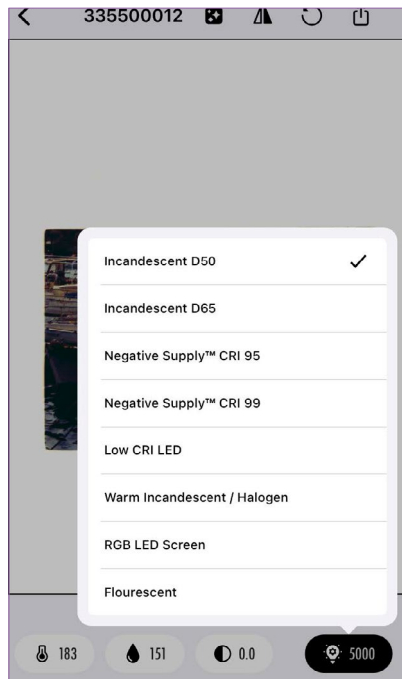


2. Ensure the correct image processing is selected (Color Negative or Black and White).



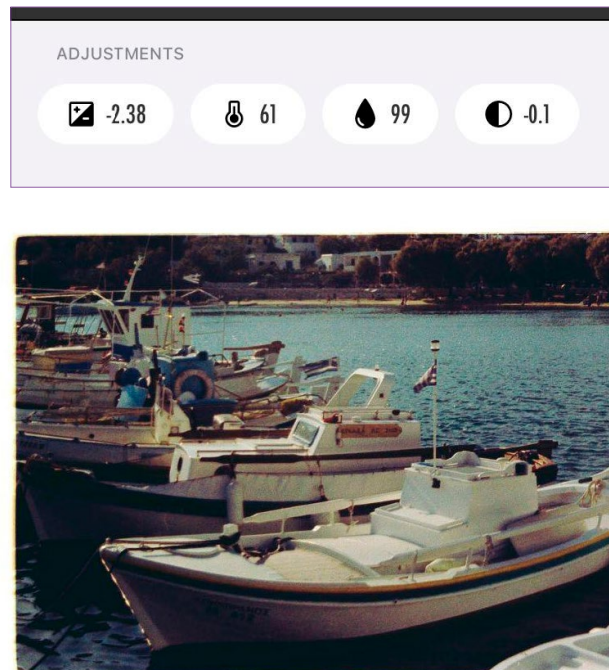
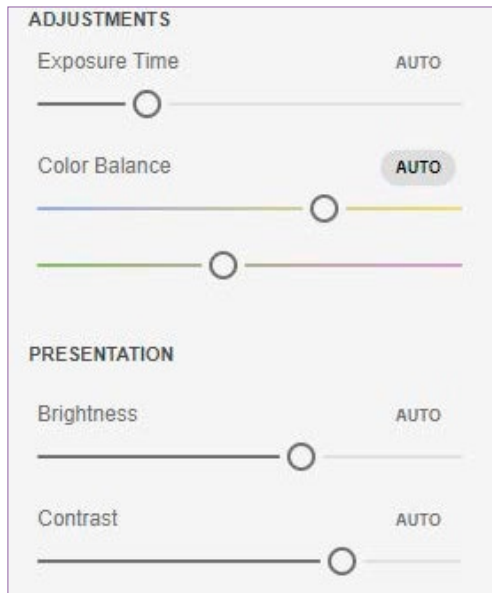
Recommended Apps and Plugins for Converting Your Film Scans

3. Select your input calibration and choose 'LCD Screen' for the Backlight setting on the desktop version. This option is not available on the smartphone app so you will need to select the best backlight option for your image.

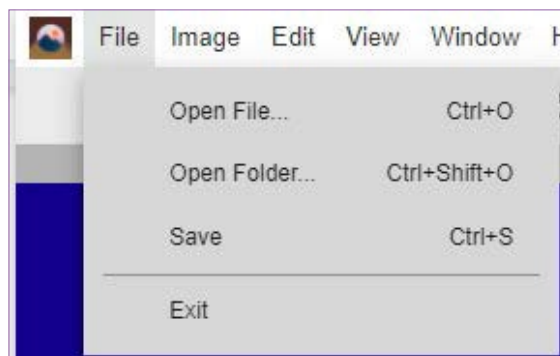
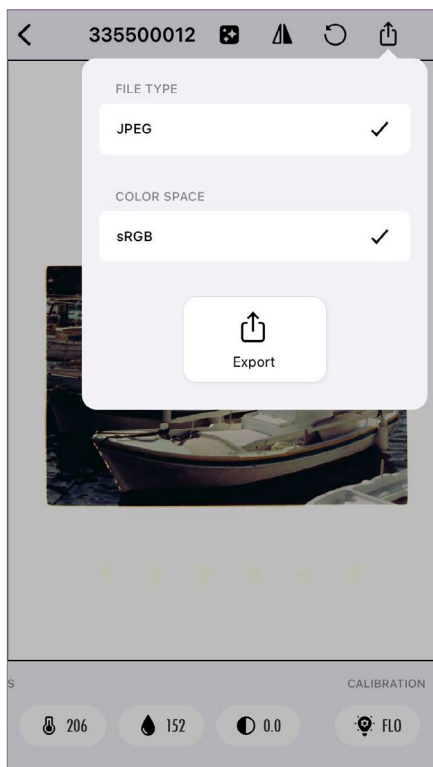


Recommended Apps and Plugins for Converting Your Film Scans

4. Use the sliders on the right (desktop) or below the image (smartphone) to edit the image according to your preferences for your final result.



5. Save and export your image.

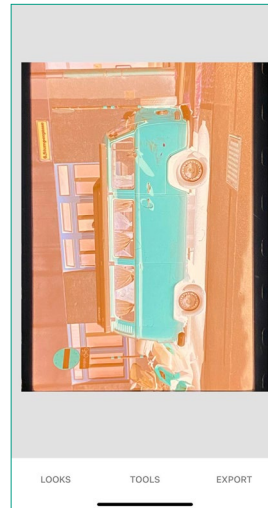


Recommended Apps and Plugins for Converting Your Film Scans

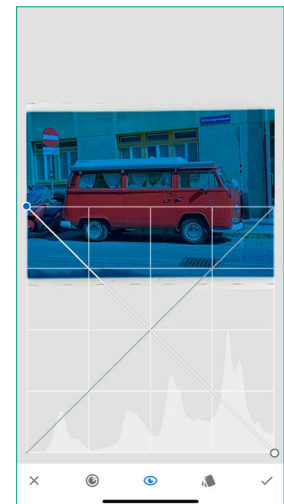
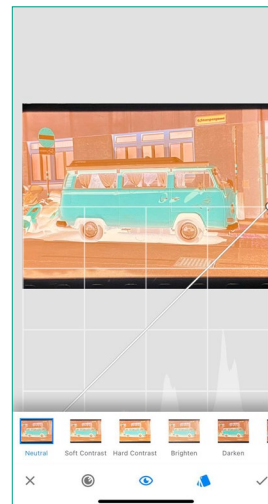
[Snapseed](#) (Desktop and Smartphone)

Free to download and use.

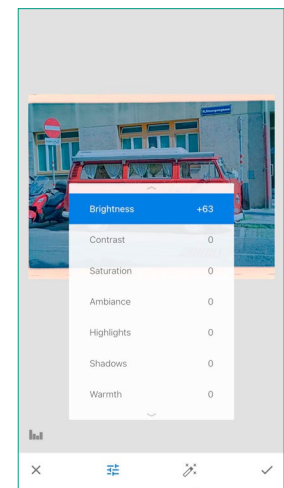
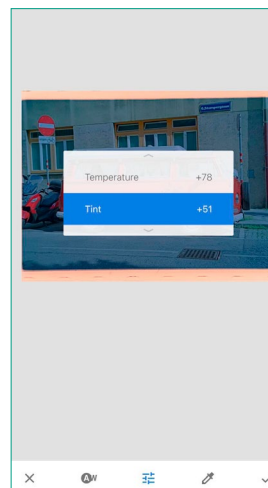
1. Open your image in the app.



2. Open the curve tool and select 'curve', then pull the two points to the complete opposite (up to down and down to up).



3. Make any additional adjustments to the image temperature or brightness according to your personal preference.



Recommended Apps and Plugins for Converting Your Film Scans

For Black and White Negatives

For black and white negatives, the process is a little bit simpler, as there are no color corrections necessary. You simply need to follow the same process as mentioned in any of the tools above to first invert the negative and then make adjustments to the brightness, contrast, shadows and highlights according to your personal preference.