

What's included

- Kigamo Scanback which fits in your view camera in place of conventional film.
- SCSI Cable to connect your Scanback to the host computer. A 3-meter SCSI cable is standard. Kigamo also has a 5-meter cable available separately.
- Power Supply, which supplies the power to your Kigamo Scanback.
- Power Cable to connect the Power Supply to an electrical outlet.
- Infrared filter 100x100mm that must be mounted whenever you use the Kigamo Scanback.
- If you do not use the filter you will not achieve color-balanced images due to the interfering infrared light that reaches the CCD.
According to our information obtained from the lens manufacturers Rodenstock and Schneider, the filter should be mounted in front of the lens to obtain the best optical quality.
- CD with the Software which contains the newest version of the Kigamo Scanback Software. Updates are available on our Web Site at:

<http://www.kigamo.com>
- User's Manual that you're currently reading.
- Guarantee Card that we invite you to return at your earliest convenience to Kigamo.
- Packing List that lists all items included.

System Requirements

Mac:

- Mac OS 8.1 or greater
- 40 MB RAM for the Software plus the largest file size you wish to scan.
- Virtual memory deactivated
- SCSI controller such as an Adaptec 2906
- The Kigamo Scanback SCSI ID is set to 6. No other device can share this SCSI ID number.

PC:

- Windows NT 4.0 or Windows 98 (do not use Windows 95)
- 40MB RAM for the Software plus the largest file size you wish to scan.
- Adaptec 2940 or 2906 SCSI controller. We do not support other SCSI controllers.
- The Kigamo Scanback SCSI ID is set to 6. No other device can share this SCSI ID number.
- **The ASPI driver must be installed on your PC. We have provided a copy in the kigamo folder in a folder called support.**

Setting Up for the first image

Setting up your camera

- Mount the Infrared filter included with your Kigamo Scanback.
- Set up your shot as you normally would and keep in mind that your Kigamo Scanback captures an area of 72 x 102.5mm

Connecting the Kigamo Scanback

- Turn off your computer and connect the SCSI cable between the Scanback and the computer.
- Connect the power supply cable to the Scanback and plug the power supply into an outlet.

Installing the Software

- To install the Software you will need the CD that came with your Kigamo Scanback.
- Double Click on the installer icon.



- Follow the instructions on the screen.

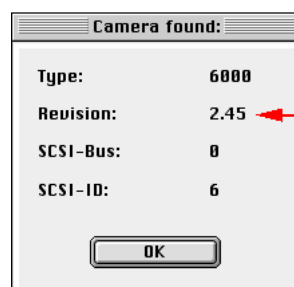
Opening the Software

- When the software is installed simply open the software by double clicking on the Kigamo Icon.



kigscan 4.0

- A message will appear, verifying that the Kigamo is correctly installed and will display its SCSI ID number.



Firmware Version
this is updated occasionally
and you should be sure that
it is the current version.

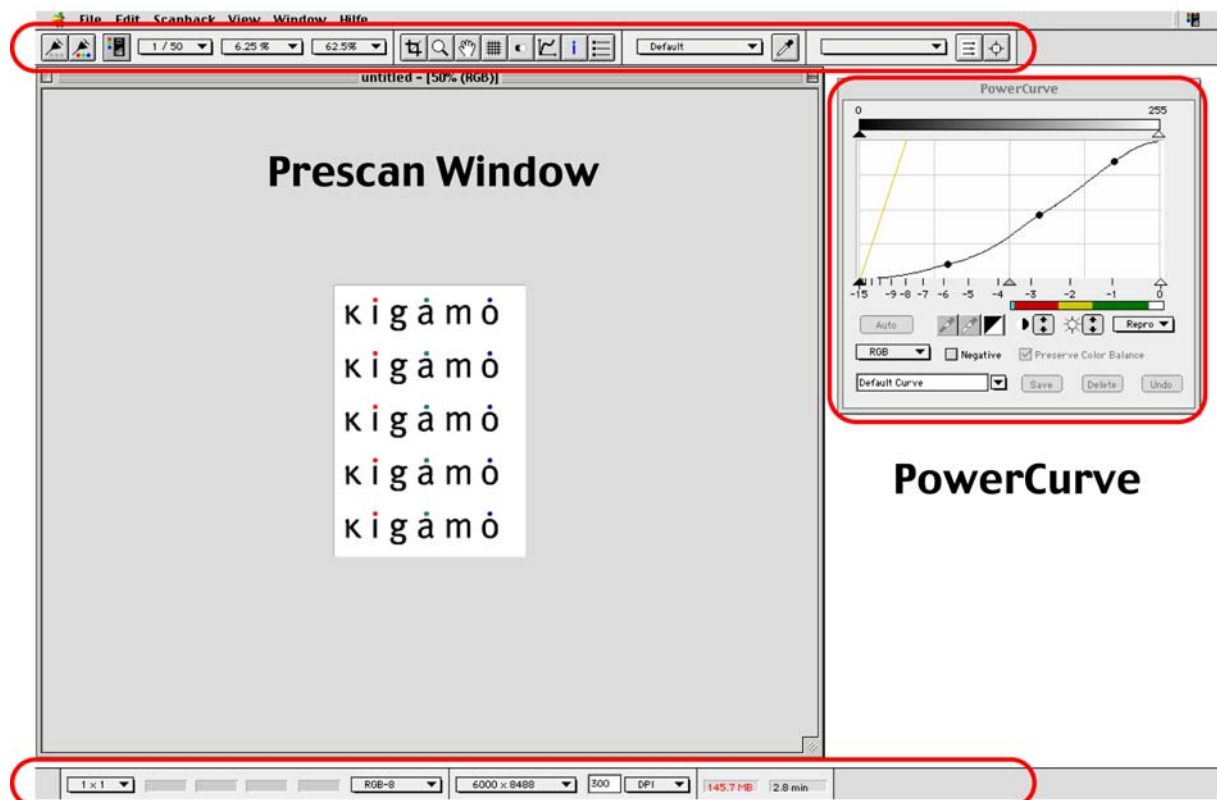
- If you get a different message, please take a look in the Appendix on troubleshooting and follow the instructions indicated there.

Software Overview

Below you will find some screen shots to help you familiarize yourself with the Kigamo KigScan Software before proceeding.

The toolbars at the top are for adjusting the scan, the PowerCurve is where you will do most of the adjustments needed, the prescan Window is where the prescan is displayed, the toolbars at the bottom are for general information.

Tools to adjust the scan



Information

Below you will find a short description of each of the icons in the top toolbars.



Prescan is always taken as a 16-bit Image . You also have the possibility of cropping the prescan by activating the crop tool and selecting a desired area to speed things up even more.



Scan



Rotation

1 / 25 ▼

Line Time

1 / 50 ▼

Line Time when preview active

6.25 % ▼

The prescan size is selecteable between 3, 6 and 12%

Size	Scanback 6000 & 6000+			Scanback 8000 & 8000+				
12,5%	750	x	1061	2,3MB	1000	x	1415	4,0 MB
6%	375	x	531	0,6 MB	500	x	708	1,0 MB
3%	188	x	265	0,1 MB	250	x	354	0,3 MB

62.5% ▼

Resolution



Crop



Zoom



Hand



Grid



Unsharp Mask



Unsharp Mask when active



PowerCurve



Image Information



Preferences

Preferences [Default]

Tools:

Gray Reference

Preview Linetime Changes

Options:

Low Memory Scan: will not rotate image.

Beep after scan

Show Curve changes immediately

Show Scan Progressbar: may influences speed depending on line time & computer.

Light Frequency:

Language:

General:

ICC Profile:

Use symbol for images:

Open image with:

Grid Lines:

Horizontal:


Vertical:


Width:


Sensitivity settings:

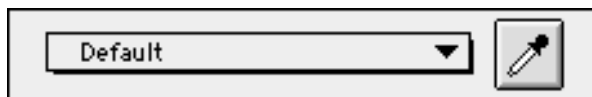
Sensitivity:	max. Resolution:	max. (8-Bit):	max. (16-Bit):
<input checked="" type="radio"/> normal	100.0 %	145.7 MB	291.4 MB
<input type="radio"/> push 1/2 f-stop	75.0 %	72.9 MB	145.7 MB
<input type="radio"/> push 1 f-stop	50.0 %	36.4 MB	72.9 MB
<input type="radio"/> push 2 f-stops	25.0 %	9.1 MB	18.2 MB
<input type="radio"/> push 3 f-stops	12.5 %	2.3 MB	4.6 MB

Tone Range Colors:

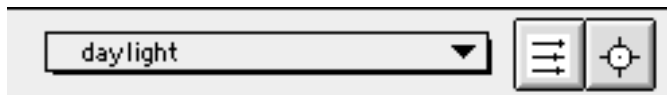
Shadows: 

Midtones/Grid: 

Highlights: 



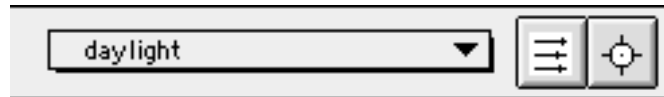
Gray Balance Tool



Lighting Tool

Taking your first prescan and calibrating your system

Before starting any serious work with your Kigamo Scanback, you need to calibrate it to work with the light you will be using. The tool we use to do this is called the “Lighting Tool”.



The “Lighting Tool” contains a pulldown bar of all the lighting files you save and two icons: the lighting table icon and the auto balance lighting icon.

The „Lighting Tool“ controls the sensitivity of red, green and blue channels of the by amplifying the individual signals in the hardware of the Scanback, which of course mean the changes will only be visible **after** making a new prescan.

This is a one time setting for a certain light source.

Calibrating your system

In order to balance your camera for your particular lighting, you must make an image using your standard lighting and include a neutral gray card in the shot.

Step 1: Prescan

- Set up a shot that includes a gray card in it
- Select the rotation of the scanback (you can also do this after the prescan if you forget)



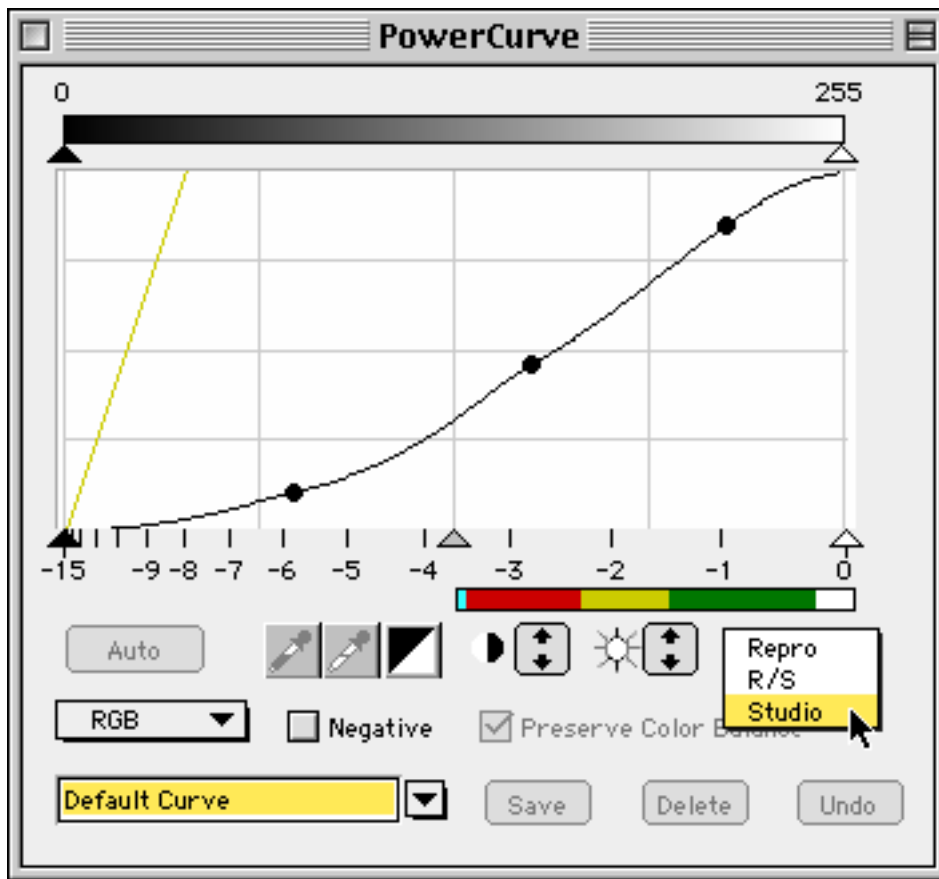
- Select the line time (similar to shutter speed) in the toolbar.



- Select the prescan size you would like.



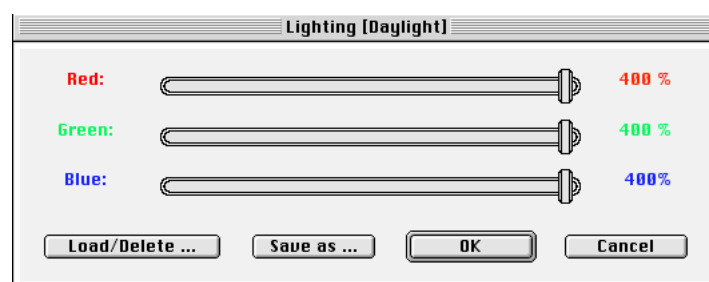
- Notice the “Repro” setting below the exposure meter in the PowerCurve? If you are mainly doing commercial photography, then you will probably want to select the “Studio” setting. This will give you another two f-stops of sensitivity and your Scanback will react much more similar to film.



- Then click on the lighting table icon



- Set all the sliders to 400 as shown below and then click “Save as...” and name the file with an appropriate name such as “tungsten” or “daylight”



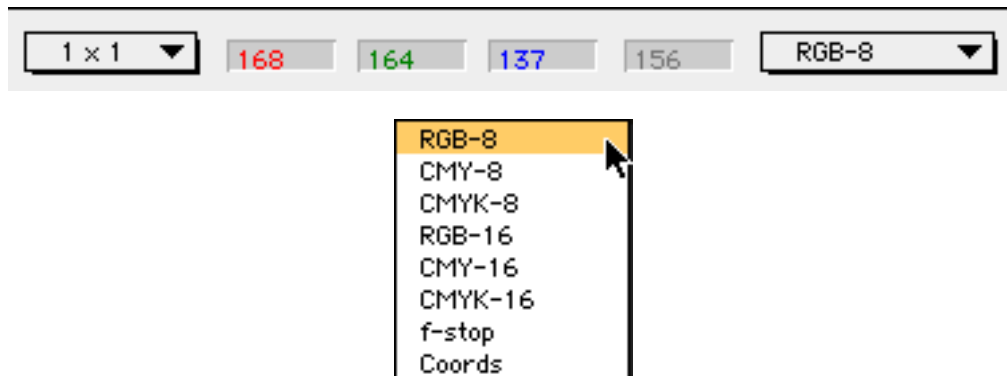
- Make a prescan by clicking on the prescan icon



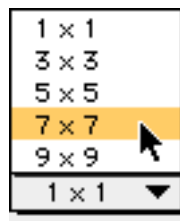
- After the prescan is finished it will appear in the prescan window. Remember, we are calibrating the system so don't worry about the colors.

Step 2: adjusting Lighting Table Values

- Make sure that you have selected RGB-8, which shows you the 8-bit pro channel RGB values.



- Select a spotmeter size of 5 x 5 or 7 x 7.



- Now move your cursor over the gray card in the prescan and control the exposure by making sure the gray card has a value of about 100-160. If it isn't, adjust the line time until it does and take another prescan.
- Next select the balance lighting icon by clicking on it.



- Now click on the gray card in your image and the software will automatically adjust the sliders in the lighting table.

Step 3: Verifying the results

- Take another prescan to view the results with the new settings.
- Now move your cursor over the gray card in the prescan and confirm that the values shown in the info toolbar at the bottom of the screen are roughly the same.
- If the difference between the individual RGB values are higher than +/- 10, select the balance lighting tool again, click on the gray card again and take another prescan.
- The remaining differences will be taken care of later with a different tool that is available.

Evaluating your prescan

Exposure

Now that we have gotten the system calibrated in the last step, lets move on to the adjusting image itself.

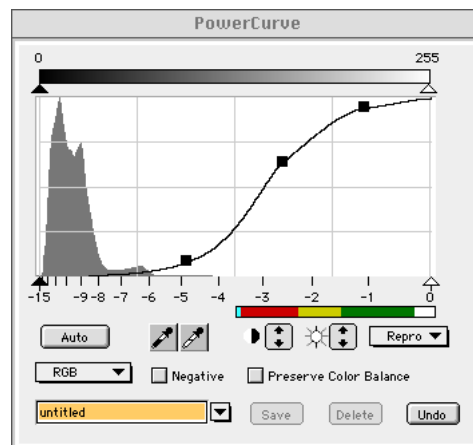
- Lets start by cropping the part of the image that you want because it will affect how the histogram will look and will influence the exposure indicator.
- Activate the crop tool by clicking the crop tool icon and then crop the image by clicking and dragging the mouse over the part of the image you want.



- Open the PowerCurve window by clicking the PowerCurve button in the toolbar.

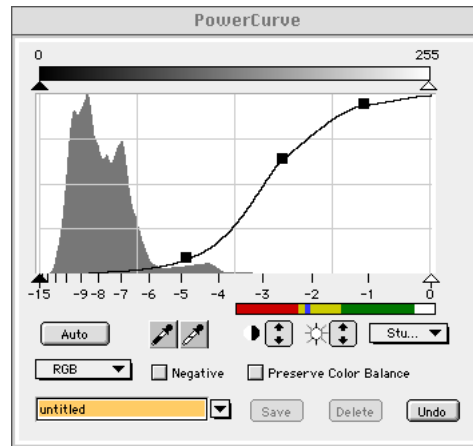


- Now let's take a look how the exposure is.
- The histogram shown below is a perfect example of an underexposed image, but there are a few things we should do before even thinking of doing another prescan.

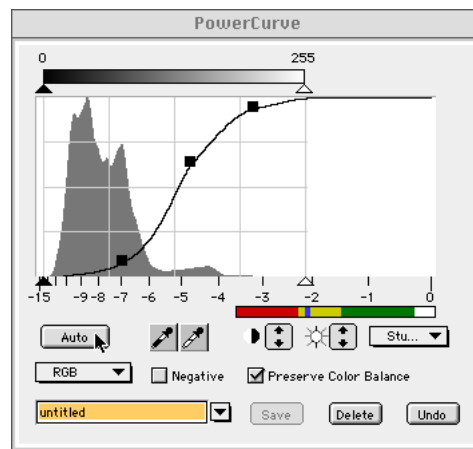


- Notice the “Repro” setting below the exposure meter in the image above? If you are mainly doing commercial photography, then you will probably want to select the “Studio” setting. As in the image below. This will give you another two f-stops of sensitivity and your Scanback will react much more similar to film.

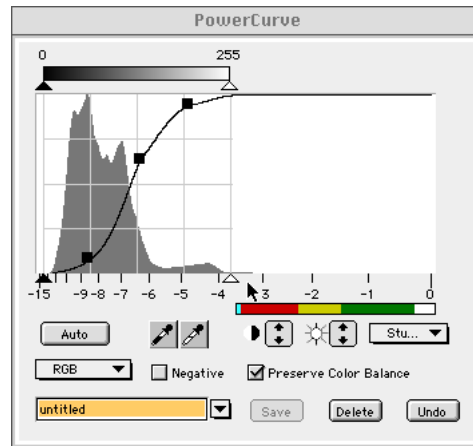




- Take a good look at the histogram in the two images above. Notice how the histogram in the bottom image is much wider than the previous image and the indicator in the exposure meter has moved from the red area to the yellow area.
- Now let's adjust the level sliders for our image by using the automatic button. This will not change the histogram, but it will have a big impact on the image and of course all the changes are immediately visible. In the example below we have selected the preserve color balance to avoid changing the individual color channels initially.



- Now we want to refine the Level sliders a bit because the Auto function kept all the information in the highlights that we don't feel is important.

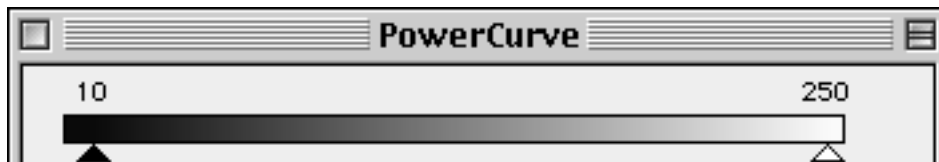


- Now we can see that the white level slider is at about $-3 \frac{2}{3}$ and we would like it to be at about 1, so we are $2 \frac{2}{3}$ stops underexposed. Open the f-stop this amount or change the line time by this amount (the line times are in $\frac{1}{3}$ stop increments) and we are ready to do another prescan.

If you change the line time, you will see a preview of what the changes will look like immediately when you have the preview line time changes activated in the preferences. The line time is yellow when this feature is active.



- When the exposure is correct, then you should adjust the output sliders **if** desired as this will have an effect on how the image appears.



- Now adjust the curve to control the contrast, brightness and distribution of the middle values as needed by clicking and dragging on the points in the curve window.
- You can take points off the curve by clicking and dragging the point out of the histogram area or add them by clicking on a part of the curve that doesn't have a point on it..

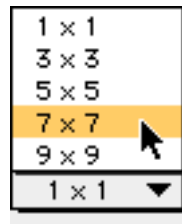
Color

If the color isn't exactly what you wanted, meaning the gray isn't gray, etc and you have already done the calibration using the "Lighting Tool" then lets do the final adjustment with the "Gray Balance Tool"

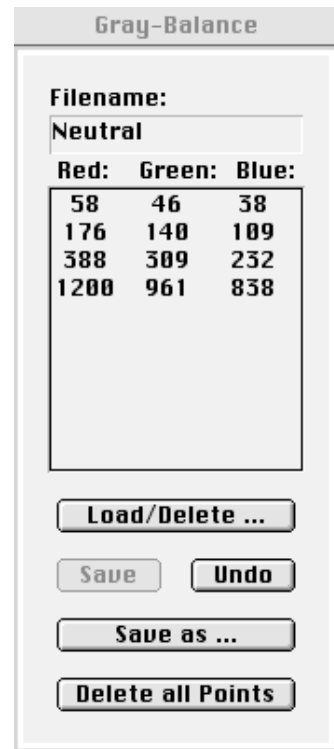
The „Gray Balance Tool“ modifies the translation of the 16-bit to 8-bit to adjust any slight color imbalances. Any changes made here will be immediately visible and is a good tool for modifying images that may need a slight adjustment



1. Select a spotmeter size of 5 x 5 or 7 x 7.

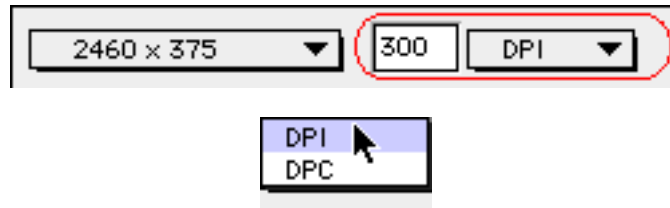


2. Click on the Gray Balance tool and the following Dialog Box will appear.
3. By clicking on various points that should be “neutral”, neutral meaning that they should have equal values in each of the channels (RGB), in your image. The image will change immediately and the points will be indicated in the dialog box.
4. If you find the points you have selected do not work well, click on „Delete All“ or “Undo” and start again.
5. After you have selected the points that work well click on the save button.
6. Enter the name you wish to give this gray balance and click on the OK button.
7. The gray balance settings have now been saved and are available for selection in the future from the pull down menu in the gray balance tool.



Taking a Scan

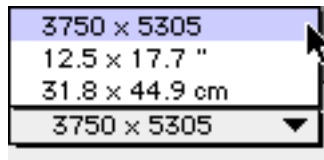
1. Set the DPI or Dots per CM we want in the Info Toolbar.



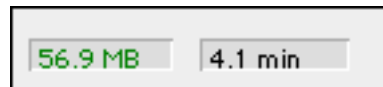
2. Select the resolution in the toolbar.



3. You can see how big the image will be in pixels, inches or centimeters in the Info Bar.



4. The Size of the file will be shown in MB and will be green if you have enough RAM to take the shot. If the numbers are red, then you need to select “low memory” scan in the general preferences.



5. Click the Scan button in the toolbar.



6. Now you will be asked where you want to save the image and which name it should have.

7. Add screen shot of save dialog

Checking the final scan

After the final scan is done, you should take a look and confirm that everything came out as you wanted.

Select the menu command File > Tiff Viewer and then select the image you just made. You can set up the software to open the image automatically in the general preferences

Speeding things up

This is a quick overview of the tools available that will influence the speed of your system:

Preferences:

Preview Line Time Changes

Sensitivity Settings

PowerCurve:

Repro or Repro/Studio or Studio

Adjusting the brightness button

Position of the Level Sliders

Toolbars:

Line time

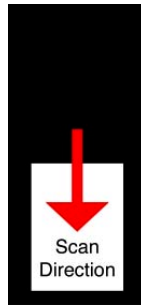
Prescan Resolution

Resolution

Dust and cleaning the CCD

At some time, probably sooner than later, you will experience dust on the CCD.

This will cause multicolored stripes in scan direction (if you are shooting a vertical image this means from top to bottom).



The menu item: Scanback > Clean CCD will drive the CCD to the middle of the opening, allowing you to clean.

Important: the CCD is very fragile and you should avoid touching it with your fingers or anything hard.

Use lens tissue and cleaning fluid. Never apply the lens cleaning fluid directly to the CCD. Always apply the lens cleaning fluid to the lens tissue, then clean the CCD with the moistened lens tissue. Wipe the tissue along the length of the CCD in smooth movements. Do not press hard on the CCD or rub repeatedly on one spot.

We recommend using the Kigamo Cleaning fluid for this purpose. We have found that many cleaning fluids cause streaks and smears on the glass. Contact your dealer for more information.

Make sure you clean out the body of your Kigamo Scanback as well!

Keep your Scanback in a dust free place when you are not using it. Try the Kigamo Scanback holder, it is a convenient place to store you Scanback when you are not using it.