

# How to Use the Scanners

## Selecting a Scanner:

There are two scanners:



Epson Perfection V700

- Maximum Resolution:  
6400 DPI for transparencies/  
negatives  
4800 DPI for flatbed scanning
- Use if scanning negatives



Epson Expression 10000

- Maximum Resolution:  
2400 DPI for all scanning

## How to Scan Images in VueScan:

1. Make sure VueScan is set to Advanced mode (There should only be three buttons at the bottom left: Preview, Scan, and Less).
2. Input Tab --> Mode --> Flatbed
3. Input Tab --> Media --> Select the appropriate choice based on what you are scanning.
4. Input Tab --> Descreen DPI --> If scanning from a book, magazine, or newspaper (any kind of offset printing) set the Descreen DPI to half of your scanning resolution.
5. Input Tab --> Bits per Pixel --> 16 Bit Gray (if black and white) or 24 bit RGB (if color). Make sure that this matches the TIFF file type in the Output tab
6. Input Tab --> Scan Resolution --> Select desired resolution. 300 DPI is print resolution and results in a same size reproduction.
7. Press the Preview button at bottom left
8. Drag the cursor over the preview layout to select the part that you want to scan.
9. Color Tab --> Color Balance --> None
10. Output Tab --> Default Folder --> Select desired output location (such as the desktop or pictures folder).
11. Output Tab --> Select TIFF file
12. Output Tab --> TIFF File Type --> Make sure this matches the option you selected for Bits Per Pixel in Step 5.
13. Output Tab --> TIFF Compression --> Auto
14. Output Tab --> TIFF File Name --> The default option (@) names the TIFF file with today's date and the scan number. You can type in the name as you would normally, but there are also special characters if you want sequential names.
15. Press the Scan button at bottom left.

## Setting Up the Scanner for Transparencies:

V700:

1. Remove the backing on the top half of the scanner.
2. Place the negative carrier on the bottom half of the scanner, with the two pegs in their respective slots (match the white triangles).
3. Make sure that the negatives are placed in a wrong-reading direction with the emulsion side (matte side) facing up.

Expression 10000:

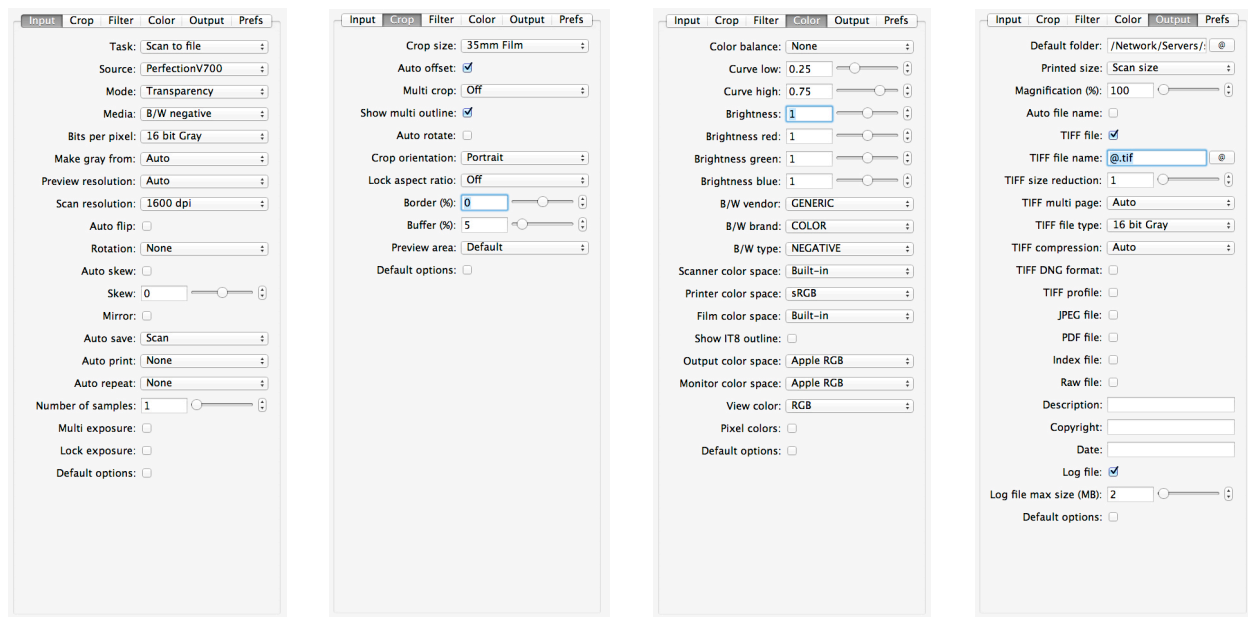
1. Remove the backing on the top half of the scanner.
2. Place the gray plastic transparency guide on the back end of the bottom half, with the small notch on the left aligned with the ridge at the left end of the glass.
3. Place the negative carrier carefully in front of the guide and make sure everything is straight and aligned.

## How to Scan Film Negatives in VueScan:

1. Make sure VueScan is set to Advanced mode.
2. Input Tab --> Mode --> Transparency
  - a. Transparency assumes that the media being scanned is raised (such as negatives in a negative carrier) while the Transparency 8x10 option assumes the media is directly on the glass. Choose accordingly.
3. Input Tab --> Media --> Either B/W Negative or Color Negative
4. Input Tab --> Scan Resolution --> Select desired resolution. 300 DPI is print resolution and results in a same size reproduction (which is probably not what you want when scanning negatives).
5. Input Tab --> Bits Per Pixel --> 16 Bit Gray (if black and white) or 24 Bit RGB (if color)
  - a. If you plan on doing extensive editing in Photoshop or are scanning for archival purposes, you may want to select higher options.
  - b. Make sure that the TIFF file type in the Output Tab matches your selection.
6. Press the Preview button at bottom left.
7. Crop Tab --> Crop Size --> Select Desired crop size, either by choosing an existing setting (e.g. 35mm Film) or by dragging over the area you want to scan.
8. Color Tab --> Color Balance --> None
  - a. VueScan has some preset options for films that in theory automatically color correct negatives, but these do not work well. You can also manually attempt to adjust the color balance, but more often it is far better (and easier) to select "None" (and all generic film options) and manually color correct in Photoshop after scanning.
9. Output Tab --> Select desired output location (such as the desktop or pictures folder)
10. Output Tab --> Select TIFF File (as well as others if you want)
11. Output Tab --> TIFF File Type --> Make sure this matches the option you selected in Step 5.
12. Press the Scan button on bottom left.

## How to Scan Multiple Negatives Simultaneously in VueScan:

1. Make sure VueScan is set to Advanced mode.
2. Input Tab --> Mode --> Transparency
3. Input Tab --> Media --> Either B/W Negative or Color Negative
4. Input Tab --> Scan Resolution --> Select Desired Resolution
  - a. 300 DPI is print resolution and results in a same size reproduction (which is probably not what you want when scanning negatives).
5. Input Tab --> Bits Per Pixel --> 16 Bit Gray (if black and white) or 24 bit RGB (if color)
  - a. If you plan on doing extensive editing in Photoshop or are scanning for archival purposes, you can select higher options.
  - b. Make sure that the TIFF file type in the Output tab matches your selection.
6. Press the Preview button at bottom left.
7. Crop Tab --> Crop Size --> Auto (or manually override)
8. Crop Tab --> Multi Crop --> Auto (or manually override)
9. Input Tab --> Batch Scan --> Choose Auto (for every frame) or List (for specific frames, and then note which images in the Batch List entry).
10. Color Tab --> Select frame by clicking on the preview layout --> Use Color Control options to modify individual images.
  - a. VueScan has some preset options for films that in theory automatically color correct negatives, but these do not work well. You can also manually attempt to adjust the color balance, but more often it is far better (and easier) to select “None” (and all generic film options) and manually color correct in Photoshop after scanning.
11. Output Tab --> Select desired output location (such as the desktop or pictures folder)
12. Output Tab --> Select TIFF File (as well as other if you want)
13. Output Tab --> TIFF File Type --> Make sure this matches the option you selected in Step 5.
14. Press Scan at bottom left.



Sample Views of the VueScan Tabs for Scanning B/W Negatives

## Film Types, Scan Resolutions, and Output Dimensions:

35mm Film (1.4" x 1"):

Scan Resolution (dpi)	Pixels	Output Dimensions (in.)	File Size
300	420 x 300	1.4 x 1	370 KB
400	560 x 400	1.9 x 1.3	656 KB
600	840 x 600	2.8 x 2	1.44 MB
800	1120 x 800	3.7 x 2.7	2.56 MB
1600	2240 x 1600	7.5 x 5.3	10.3 MB
3200	4480 x 3200	14.9 x 10.7	41 MB
6400	8960 x 6400	29.9 x 21.3	161.1 MB

6x6 Medium Format Film (2.4" x 2.4"):

Scan Resolution (dpi)	Pixels	Output Dimensions (in.)	File Size
300	720 x 720	2.4 x 2.4	1.48 MB
400	960 x 960	3.2 x 3.2	2.64 MB
600	1440 x 1440	4.8 x 4.8	5.93 MB
800	1920 x 1920	6.4 x 6.4	10.5 MB
1600	3840 x 3840	12.8 x 12.8	42.2 MB
3200	7680 x 7680	25.6 x 25.6	168.8 MB
6400	15360 x 15360	51.2 x 51.2	675 MB

4x5 Large Format Film (4" x 5"):

Scan Resolution (dpi)	Pixels	Output Dimensions (in.)	File Size
300	1200 x 1500	4 x 5	5.15 MB
400	1600 x 2000	5.3 x 6.7	9.16 MB
600	2400 x 3000	8 x 10	20.6 MB
800	3200 x 4000	10.7 x 13.3	76.6 MB
1600	6400 x 8000	21.3 x 26.7	146.5 MB
3200	12800 x 16000	42.6 x 53.4	585.9 MB
6400	25600 x 32000	85.2 x 106.8	2.29 GB