

Printing Halftone Films Without A RIP

For those without a RIP for their inkjet printer or not using a postscript laser printer, most likely you have requested the separation to be converted halftones.

Prior to the following instructions on how to print the separations to film, there's a few things that need to be known about color separations that have been converted to halftones.

Make sure the artwork is uploaded to us at the exact final dimensions intending to print with.

Do not attempt to resize the color separation as it will result in poor output quality.

The separation is a multichannel bitmap file with an integrated screen angle, LPI and dot shape applied to all channels. Do not attempt to set any screen angles or LPI settings prior to output. Just print out each channel to film using default settings.

The color channels can not be adjusted (darkened - lightened) once converted to halftones.

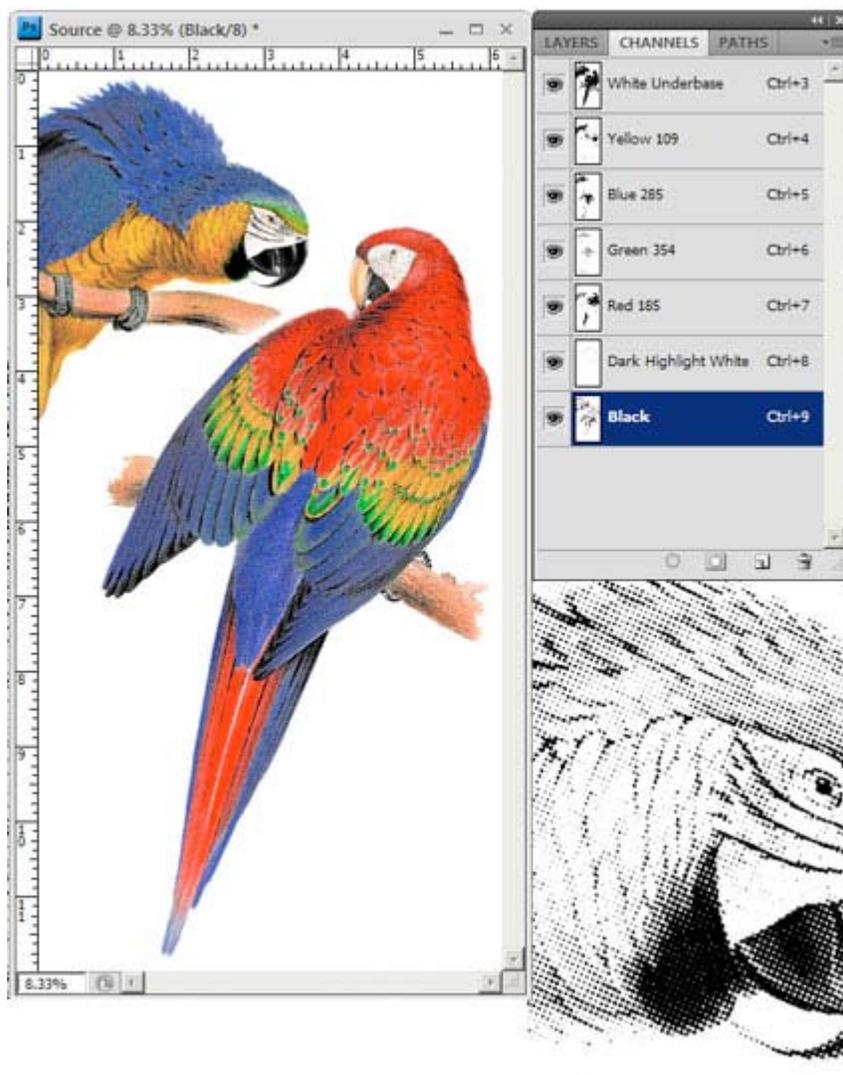
The only changes that can be made to the converted separation is changing the color and name of a channel.

To get an idea of how the image will actually print, zoom "out" on screen with all channels visible (make it smaller) to the first magnification level that appears normal.

Overall, the art will print much better than it appears on screen. This reason why is that Photoshop simply can't render a bitmap channel as smoothly as a normal grayscale channel.

All files that have been converted to halftones are easily printed to film directly from Photoshop. No other external application is needed.

We also include the traditional separation with your download that has not been converted to halftones.



The sample here is how the converted separation will appear in Photoshop.

Notice there are no RGB channels as they are not required or wanted when printing the separation directly from Photoshop.

Magnified portion of Black Channel to reveal halftone conversion.

The converted separation above is a multichannel file with color information and channel color names intact.

Its worth repeating that since each channel is now a bitmap, any adjustments such as Curves or Levels have no effect. And since its a bitmap with embedded attributes such as line screen, angle, etc., it can not be resized. The resolution has also been increased to 600 dpi.

Using the above converted 50 LPI halftone as an example, we zoomed "out" to 8.33% or 12.5% to get an idea how the file will perform on press.

Higher magnification previews, 25%, 50%, etc., will render a preview that's far too light due to many reasons. In fact, zooming in will lead most to believe there's not enough ink within the channels and that dots are going to print exactly on top of other dots when this is simply not the case.

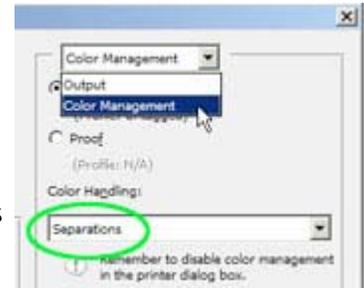
Printing A Separation Converted To Halftones Using Photoshop Older Photoshop Versions • CS1-CS2-CS3-CS4-CS5

When outputting to film, do not attempt to specify a frequency, screen angle or dot shape as that information is already embedded within the file. Just output as you would line artwork at default printer resolution.

When printing the separations from Photoshop, make sure all channels are turned on with the “Eye” visible next to each.

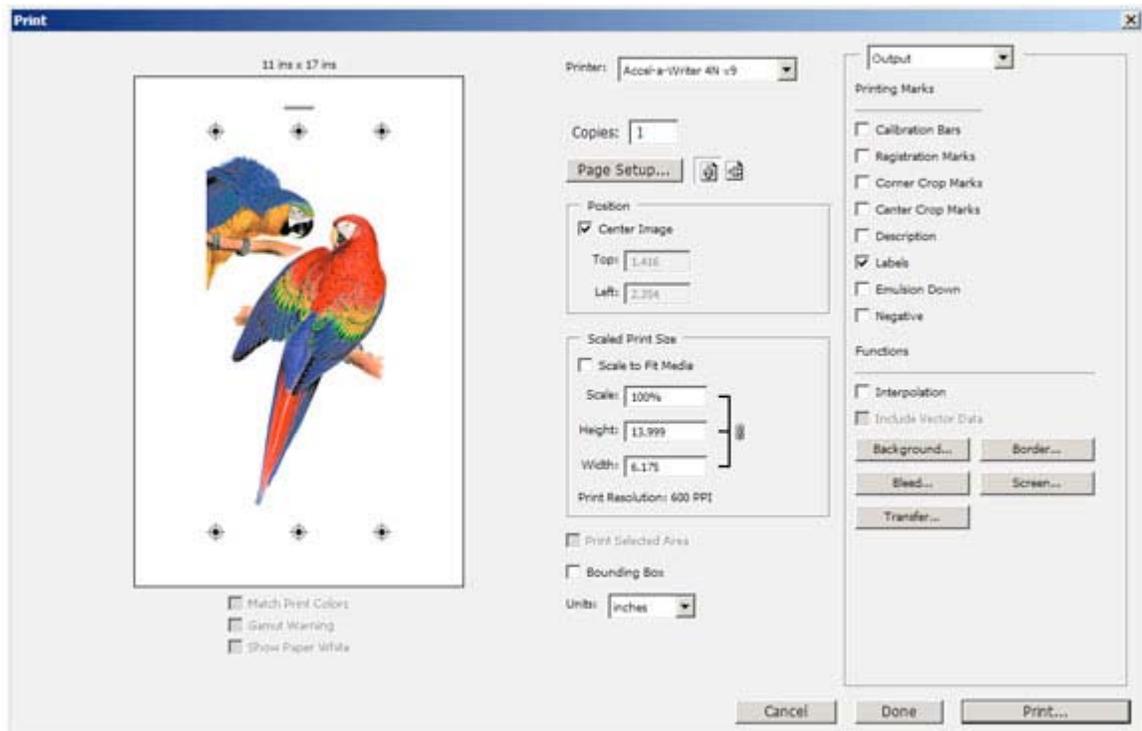
Next choose Print
(or in Photoshop versions CS1-CS2 “Print With Preview”).

Select Color Management and make certain “Separations” is selected.

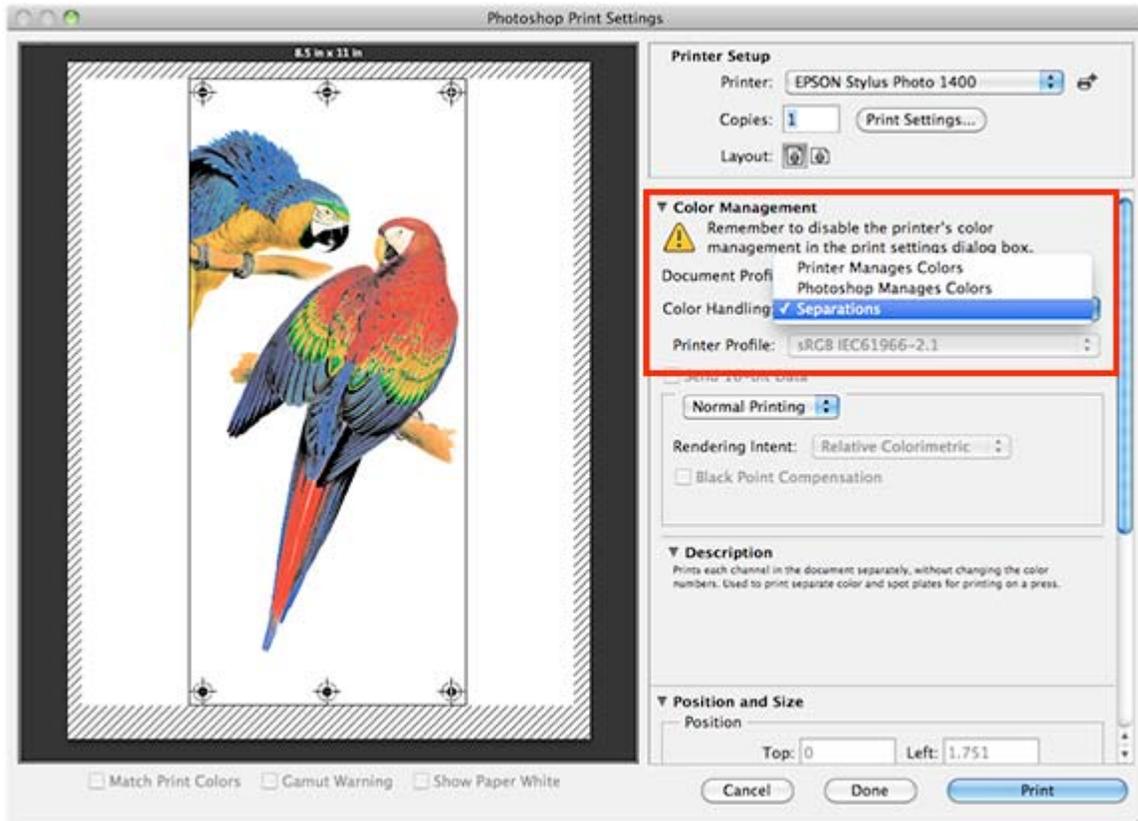


If Separations is not selected, the films will not print.

Next select Output within the print dialog box and check “Labels” so each film is marked with the appropriate ink color name and verify the correct printer and page size is selected. At this point there’s no other settings or adjustments to make, just click Print and each channel will image to film.



Printing A Separation Converted To Halftones Using Photoshop Newer Photoshop Versions • CS6 - Creative Cloud



Above is a screen shot of the CS6 print window.

Printing a separation converted to halftones using Photoshop CS6 or higher is the same as with older versions although Adobe has changed the appearance of the Print screen. The primary thing that must be done is to select "Separations" within Color Management.

So after selecting your designated printer, page size, etc., the Color Management section is directly under it. Make sure to select Separations.

Scrolling further down within the Print window is where you'll find other print options such as Labels, Register Marks, etc.

Once satisfied with the settings, just click Print and each channel will image to film.