

DUOTONES

PHOTOGRAPHIC EMULSION

Conventional photographs are made of small pieces of metallic silver distributed on a piece of paper. The layer of silver is called the emulsion and the dots of silver are known as grain. The grain of modern photographs is a pure black but older photographs can be somewhat brownish. Many people prefer this softer tonality over the new perfected color. Many photographers process their prints with chemical toners to recreate that warmer look.

CHEMICAL TONERS

The most popular and highest quality chemical toner are sepia and selenium. Sepia replaces the color in the silver with a reddish brown color while selenium coats the silver, imparting a more violet cast. The amount of color shift depends on how long the prints are processed in these toners. Since sepia replaces the color after the print is bleached, it works from the highlights down. Selenium works from the shadows up. Partial toning means that photographs will fade from a black to another color, producing a two tone effect. This could be called a Duotone print. If desired, both toners can be used with a single photograph to create a picture with reddish brown highlights, grey midtones, and violet black shadows. This could be called a Tritone print. In the photographic world, however, they are simply referred to as toned silver prints.

OFFSET PRINTING

The terms Duotone, Tritone, and Quadtone come from the printing industry. These are all techniques used for the representation of toned photographs as they are printed on an offset press. The color of any printed material is determined by the color of the ink in the press. To make multi-toned prints of photographs, two or more colors must be used and the photograph must be separated into separate tonal ranges. For a duotone print, two negatives are made from a single print, one showing only the highlights and the other showing only the shadows. The print is put through the offset presses twice, each time with a different negative and a different color of ink. When the two impressions are overlaid, the duotone effect is achieved. A tritone is made with three negatives and three press runs. The color and placement of the tones depend on the color of the inks and which negatives receive which colors.

PHOTOSHOP DUOTONES

Adobe Photoshop greatly simplifies the process by eliminating the need for an optical separations made with a copy camera to produce negatives. With Photoshop it is all done in the computer. If the finished piece is to be printed on an offset press, the Photoshop picture file can be output to a high resolution Image-Setter to produce the separation negatives. Furthermore, Photoshop allows precise control of the tonal curves of each negative and allows experimentation with colors that are not available to photographers using chemical toners.

The following recipe is an outline of the general process. The creativity comes in selecting the colors and tweaking the curves. It is suggested that conventional duotones be created first using preset colors and tonal curves. Once you see how the process works, then you can get more radical.

MAKING DUOTONES

SETTING the MODE

run _____ **PHOTOSHOP**
open _____ a picture file
convert _____ **MODE to GREYSCALE** **IMAGE> MODE**
convert _____ **MODE to DUOTONE** **IMAGE> MODE**
in DUOTONE OPTIONS dialog box:
set _____ mode to DUOTONE in pull down menu

SELECTING the COLORS

select _____ a 2nd color
use _____ picker or custom
toggle _____ with [CUSTOM] / [PICKER] buttons
located below open/ cancel button

USING PRESETS

to see what works well
click on _____ [LOAD]
select _____ preset from file list

ALTERING COLORS

click on _____ color box
color picker will open
use _____ **PHOTOSHOP** picker to select any color
use _____ Custom picker to select pantone colors

to select **APPLE** picker rather than **PHOTOSHOP** picker
use _____ **GENERAL PREFS** [CMD] K
open _____ **COLOR PICKER** pull down menu
Apple / PhotoShop
use _____ **APPLE** picker...

name _____ the color
if pantone color is used, the name is automatically set

ADJUSTING CURVES

alter _____ setting by dragging end points of curve
highlights are on left
shadows are on right
more intensity is higher
less intensity is lower
add _____ a middle point by clicking anywhere on curve
middle points can add subtle changes
remove _____ middle points by clicking on number boxes and hitting [DELETE]

