

DIGITAL NEGATIVES for HAND APPLIED EMULSION

Hand applied emulsion prints are made as contact print from negatives that are the same size as the final print. Sunlight is typically used as the light source because the 'sensitizers' are sensitive to ultraviolet light. Special light boxes fitted with black light tubes can also be employed, however. Full size negatives can be printed onto sheet film and processed just as normal film, or negatives can be made digitally. This recipe details how to make digital negatives in 9 simple steps.

WORKFLOW

- create a greyscale version of the photograph
 - layer sharpen
 - properly adjust the levels
 - apply a contrast curve
- flip horizontal
- invert to negative
- colorize
- set output levels for the specific emulsion
- print onto transparency film

SET UP the DIGITAL PICTURE and make all tonal adjustments.

start _____ with film or digital, a negative or print, black & white or color
bring _____ the source image into the computer
_____ see any of several available scanning documents, if necessary
open _____ the file in Photoshop
 set _____ the image size resolution to 300 ppi
 set _____ an appropriate picture size in inches
convert _____ any color image into GREYSCALE
 _____ see the "Greyscale Conversion" pages on how to use the Channel Mixer
sharpen _____ using layer sharpen
 _____ see the "Layer Sharpen" page for more details
adjust _____ the tonality to the desired appearance
 set _____ LEVELS with an ADJUSTMENT LAYER
 adjust _____ the endpoints top remove any empty tonal space
 set _____ CURVES with an ADJUSTMENT LAYER
 add _____ more contrast than for a normal print

FLIP the PICTURE because the negative is turned face down to print emulsion to emulsion

flip horizontal _____ using IMAGE> ROTATE> FLIP HORIZONTAL

INVERT the TONALITY to make the picture negative

select _____ the background layer
invert the tonality _____ using IMAGE> ADJUST> INVERT [CMD] I

COLORIZE to create a Spectral Density Negative for better masking capability. Use the same color for all emulsions because this is the color that best blocks Ultraviolet light.

add _____ a FILL LAYER, using a SOLID color
use _____ an orange mask color (that stops more UV light than black)
 open _____ a new solid color fill layer
 use _____ the LAYER> NEW FILL LAYER> SOLID...

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the NEW LAYER dialog box will open

name _____ the layer 'colorize'
set _____ MODE to COLOR
leave _____ OPACITY at 100% (default)
hit _____ okay

the COLOR PICKER window will open

set _____ Cyan to 0
set _____ Magenta to 71
set _____ Yellow to 71
set _____ Black (K) to 0
hit _____ okay

APPLY an OUTPUT LEVEL ADJUSTMENT for reduced tonal range for each emulsion

There can be several Output Adjustment Layers, one for each emulsion, and these can be turned on and off separately as needed.

These should be the top-most layers in the stack, because the colorize layer will subtly alter the tonal density of the picture.

open _____ the INFO palette before you start this process

set _____ PALETTE OPTIONS to show GREYSCALE in the first readout

locate _____ the brightest point and the darkest point in the picture

use _____ the THRESHOLD tool if necessary

add _____ a new ADJUSTMENT LAYER> LEVELS

name _____ the layer with the emulsion name

set _____ the output sliders to new initial values

new cyanotype: (initial values)

set _____ the shadow output value to 60

set _____ the highlight output value to 215

van dyke brown: (initial values)

set _____ the shadow output value to 50

set _____ the highlight output value to 225

The output levels now have to be adjusted so the actual tonal range of the picture is correct.

adjust _____ density with the Levels dialog box still open

new cyanotype: (target densities)

shadows = 10 highlights = 90

van dyke brown: (target densities)

shadows = 15 highlights = 85

move _____ the cursor over the darkest shadow

look _____ at the K value in the INFO palette

compare it _____ to the target shadow density

adjust _____ the shadow output value up or down if necessary

move _____ the cursor over the brightest highlight

look _____ at the K value in the INFO palette

compare it _____ to the target highlight density

adjust _____ the highlight output value up or down if necessary

These values may have to be adjusted differently for each individual picture!

PRINTING DIGITAL NEGATIVES for HAND APPLIED EMULSION

PRINT the PICTURE onto Transparency Film

use _____ only PictoRico OHP Overhead Transparency Film
15 sheets of 8.5 x 11" costs \$16.95

print _____ onto textured side of transparent film
place _____ the cut corner into the upper right corner

PRINTER SETTINGS for Digital Negatives

use these attributes as a guide, not all drivers are the same

Media Type : Photo Quality InkJet

Mode : Custom

Ink : Color

Click on the ADVANCED button

Print Quality : Photo – 1440

High Speed : Off

Edge Smoothing : On

Color Management : No Color Adjustment