

POLAROID EMULATION

The Polaroid SX-70 Camera was a sensational tool. It took photographs in real time. But just the color balance of the film and the way it developed had a unique look. Here are some possible ways to emulate the look of that film.

You could take this further and add an SX-70 frame, but if you do so you should, know the real dimensions of the frame. The image size is 3 x 3.125". The overall frame is 3.5 x 4.25". The top border is slightly larger than the sides at 1/8" (0.125")

Some of the characteristics of a Polaroid style photograph are:

- [Increased Saturation & Contrast](#)
- [Extra Warmth / Color Shift](#)
- [Chromic Aberration](#)
- [Edge Vignette](#)
- [Softened / Blurred](#)
- [Film Grain](#)

INCREASED CONTRAST, SATURATION & CLARITY

Three of the main adjustments that are performed on many photographs can be pushed a little harder to make stunning changes. These are easily achieved with curves adjustment layers.

Increase the Contrast >

The contrast is raised for most shots straight out of the camera. This is typically accompanied by a lowering of the gamma, the middle gray point, to darken and enrich the photograph.

add _____ a **CURVES** adjustment layer with a typical typical **S CURVE**,
pull _____ the **HIGHLIGHTS** up
pull _____ the **SHADOWS** down
lower _____ the midpoint **GAMMA** as desired

Increase the Saturation or Vibrance >

The difference between Saturation and Vibrance is that Vibrance does not affect caucasian skin tones, i.e. the pink to orange to yellow range.

add _____ a **VIBRANCE** adjustment layer
pull _____ the **SATURATION** up
use _____ **VIBRANCE** instead if there are skin tones in the photograph

Increase the Clarity >

Clarity is midtone sharpness. The Layer Sharpen recipe, made famous years ago by David Blatner, author of 15 books including 'Real World Photoshop', is used and then restricted with the Blend If option in Layer Styles.

select _____ the image layer
duplicate _____ the layer [CMD] J
convert _____ for **SMART FILTERS** FILTERS> CONVERT FOR SMART FILTERS
set _____ **BLENDING MODE** to **OVERLAY** [SOFT LIGHT for less, HARD LIGHT for more]
run _____ **HIGH PASS** filter FILTERS> OTHER> HIGH PASS...
open _____ **LAYER STYLES** by double-clicking on the layer name
adjust _____ **BLEND IF** so only the midtones are affected

WARMING

Polaroid photos have an overall warmth and creaminess. This is partially caused by color shifts and enhanced by a slightly soft focus.

Warming with a Solid Color Layers >

- add a **SOLID COLOR** adjustment layer
 - select a light beige in the color picker
 - set the **BLENDING MODE** to **MULTIPLY** (to darken and warm the highlights)
 - adjust the opacity down if needed
- add a **SOLID COLOR** adjustment layer
 - select a deep red-brown in the color picker
 - set the **BLENDING MODE** to **SCREEN** (to lighten the shadows)
 - adjust the **OPACITY** down if needed

Warming with a Gradient Mask >

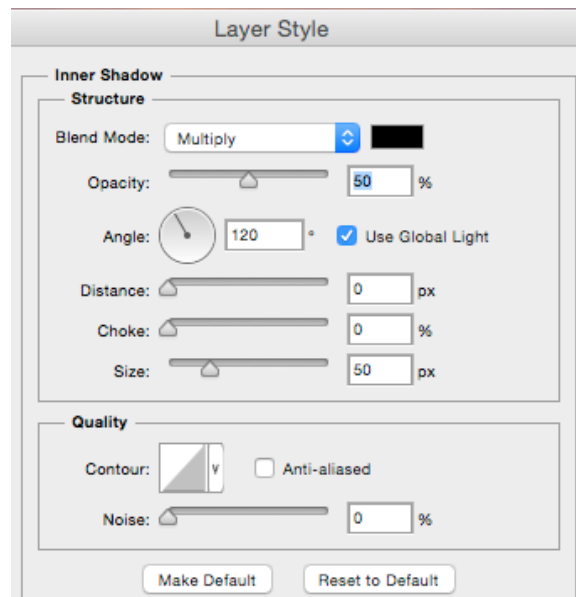
- set the **FOREGROUND COLOR** to a light beige
- set the **BACKGROUND COLOR** to violet
- add a **GRADIENT MASK** adjustment layer
 - the **FOREGROUND** and **BACKGROUND** colors will be the end points
 - it will look negative until you set the blending mode
 - set the **BLENDING MODE** to **SOFT LIGHT**
 - adjust the **OPACITY** down if needed

EDGE VIGNETTE

Polaroid prints tend to be darker around the edges of the frame. This is different from the typical circular lens vignette. The **INNER SHADOW LAYER STYLE** will achieve this easily.

Apply Layer Style for Edge Vignette >

- add an **INNER SHADOW LAYER STYLE** to the image layer
- keep **BLEND MODE** on **MULTIPLY**
- select the **OPACITY** low ~ 40-50%
- set the **DISTANCE** and **CHOKES** to **0**
- set the size to about 50, or whatever looks best



CHROMATIC ABERRATION

The addition of some chromatic aberration can be used to intensify the color appearance of the print.

Apply Lens Correction/ Chromatic Aberration >

convert the image layer for SMART FILTERS

add a LENS CORRECTION filter to the image layer

select the CUSTOM tab

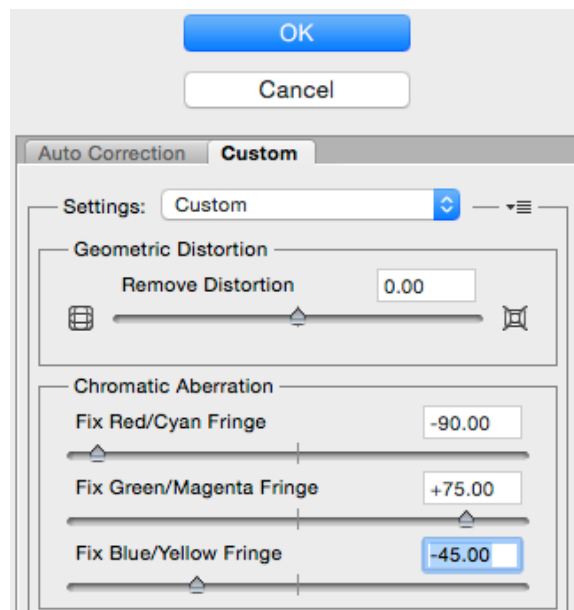
inside the CHROMATIC ABERRATION section

pull the RED correction to very minus, e.g. ~ -90

pull the GREEN correction to very plus, e.g. $\sim +75$

pull the BLUE correction to middle minus, e.g. ~ -45

click [OK] or hit [RETURN]



SELECTIVE BLUR

Blurring of photographs at the edges is typically a result of plastic lens. These lenses are not consistent so an irregularly shaped blur area is appropriate. The process employs a sharpened image layer on the bottom and a blurred image layer on top, the center of which is removed with a mask.

Blur a duplicate image layer >

duplicate _____ the image layer [CMD] J
rename it _____ 'blur'
make sure it has *not* been converted into a smart filter layer

select _____ the bottom image layer
convert _____ the bottom image layer to accept SMART FILTERS
use _____ FILTER> CONVERT FOR SMART FILTERS
this allows adjustments later
sharpen _____ the image layer FILTER> SHARPEN> UNSHARP MASK
set _____ Amount = 95
set _____ Radius = 5
set _____ Threshold = 0
or use HighPassFilter sharpen trick

Reveal the sharp image layer below >

select _____ the top image layer, 'blur'
apply _____ LENS BLUR with FILTER> BLUR> LENS BLUR
set _____ Radius = ~25
or to the maximum amount of blur desired
add _____ a MASK by clicking on the MASK tool icon (bottom of palette)
select _____ PAINT BRUSH, large size hit B
set _____ to a large size (500 px), minimum hardness (0)
reduce _____ OPACITY and FLOW to 50%
set _____ BLACK as the foreground color, WHITE as the background color
hit _____ D then X
paint out _____ the center with BLACK (to erase mask/ reveal sharp layer below)
touch up _____ with WHITE if desired...

GRAIN & NOISE

Both Black & White and Color Film is made of small crystals of silver. Each type of film has a different texture, depending on the speed and type of film used (conventional vs. tabular grain) and how the film is developed. Digital sensors have no such texture. There are several ways to add such a texture. The first is to use digital noise as described in the first section below. Another is to shoot at a very high ISO (Canon cameras have more noise than Nikons). Another method, also described here, is to scan film and make an overlay of that image.

Using Digital Noise >

add _____ a new **SOLID COLOR** layer
set color _____ to Middle grey
rename _____ the layer 'Noise'
set _____ the **BLENDING MODE** to **OVERLAY**
run _____ **FILTER> NOISE FILTER> ADD NOISE**
 set _____ to low ~15 depending on what type of film to be emulated
 (pulled 400 vs. 100 vs. tab, etc.)
 use _____ the uniform / monochromatic settings
reduce _____ the effect with **OPACITY** as desired...

Overlay a Scan of Film >

A better way to emulate film grain is to actually use a scan of a real piece of film.

scan _____ a piece of real film that is a picture of a flat even gray surface.
 this can be done with a range of different film types...
 e.g. Color 100 & 400, Tri-x (straight & pushed), TMax, Agfa 100,
 or even Fuji NeoPan 1600 developed in Gamma Plus (if you can find either!)
open _____ the scanned film image
copy _____ onto target image
 make sure the pixel dimensions are similar!
adjust _____ opacity to low