The Digital Coach"

Easy-to-understand training in Digital Imaging & Color Management



FlexColor 3F Format Tutorial

One of the most exciting features of FlexColor software is the 3F format or .fff. Not a part of the original software, 3F is the first implementation of raw capture. Before there was Adobe Camera Raw, there was FlexColor 3F.

So just what is 3F? To understand, lets first look at how standard FlexColor goes about it's work. When in the standard mode, the scanner makes a preview scan and displays a low resolution preview of the image. The working file is a 16 bit tiff file.

All digital capture devices are actually analog devices. The resultant analog capture is then converted to a digital image via the Analog to Digital Converter. In the case of digital cameras that converter is built into the camera. With scanners it can be in the scanner firmware.

With cameras a common way data is converted is by capturing to a .jpg file. In this case, the parameters are sometimes hard wired in the camera algorithms. More advanced cameras allow the user to set some of the parameters.

With the advent of RAW capture in cameras all the data captured by the chip is passed to the software to be post processed. Most pros and advanced amateurs now use that format.

Getting back to our scanners, in standard mode, when the data is captured it is converted analog to digital by the parameters stored in the film "Setup" and the low resolution result with those parameters applied is presented on screen. At this point we have many tools available to further adjust the image. All these adjustments take place on the full 16 bit data.

After we have the image adjusted to our liking, we save it out in whatever format we want and at whatever bit depth, size and file type we want. Then and only then the 16 bit data is converted.

One of the beauties of FlexColor is that we can cre-

ate custom Setups with all the parameters we choose, those are then applied in the analog to digital conversion. See the separate tutorial for how to create custom Setups.

The only disadvantage with this workflow is if we are going to use this image for different purposes we may wind up having to make multiple scans or else convert the original scan in an imaging processing software and save all the separate files.

With the invention of the 3F format the workflow is different. Making a 3F scan, the scanner will make a full resolution, raw scan and save it to a folder you specify. In the process it will apply certain settings according to the choices you make in the 3F control panel.

This file can then be opened in FlexColor either at the time of scanning or at a later date or even on a different computer. You may apply whatever processing you want to do, size it, select file type etc. and save a version.

The big difference is the original scan remains unchanged. A proxy file of the changes is created and saved. You can then save out that version To make another version you reopen the original file, make your changes, save it out and repeat for as many versions as you need.

Be aware, the process was invented under Flex-Color 4.0. With FlexColor 4.5 additional features were added. I would advise reading the Users Manual for both versions for how to implement on your computer. Copies of the manuals are available on the "Manuals" page of this website.

3F is a great workflow for creating a digital archive of your work. Of course you can make an achieve with the standard process as well. You can make a scan as high a resolution as you want to keep. However you have to save additional files for any changes. 3F saves the master and keeps a record of any changes you make.

Both methods can be used for batch scans. That's another topic for another discussion.



Here is the 3F scan window as presented in the FlexColor 4.0 Users Manual. Note: the window in the 4.04 Version of the software is different. The way it works is different also.

Here is the FlexColor version 4.04, 3F scan window.

00	Scan 3f
	Frame 60x60
	Crop Full Size
	Film Type Color Negative
	Setup 🛛 Kodak Porta 160 VC GY 🔷 🗘
	Auto levels
	Auto focus
Destination	Scratchpad 🔷
▼ Scan Size	
	Percentage of Maximum Resolution 10 %
	Maximum 16-bit Size 300 MB
IPTC Info	
	Scan

Now we have the option of specifying a specific Setup. That means we can choose any of our custom Setup's and have FlexColor apply all of our parameters to the 3F file.

But isn't it a raw file? How is it raw if our adjustments are applied? The raw file is analog. It has to be converted from analog to digital and that requires some computer instructions. So these are either hard wired factory instructions or some instructions we choose, or both.

The beauty of this is we can start with a file that gives us an image that is as close to what we want it to be as if we had spent a hour adjusting it. Think of the time savings possible. Yet this image can be reworked as many times as we want and our original master is still intact.

If we had scanned a bunch of images and later determined a different setup produced a look we like better, we do not have to go back and rescan the original.

All we need to do is modify the original. We do this by selecting the image in the Thumbnails window and click on Modify. We can modify all the images, only the Approved ones or just the selected one.

Now we can Add a Setup, Add a default Setup or Change the default Setup.

Here is that window.

Modify
Modify Selection Only 🛟 1 image
▶ 🗹 Update Default Setup 🛟 Negative RGB 🛟
▶ 🗆 Rename
E Change IPTC info
Neutralize captures using: Shown Image
Unprocess Captures
Cancel Modify

All of these instructions are from FlexColor 4.04. However, 4.8.13 works the same way with the addition of some more file setting and storing options which are covered in the manuals.

Both versions of FlexColor offers some additional controls for File Size, Scan Size and Resolution which are covered pretty well in the manuals.

Rather you scan conventional of 3F remember the importance of a Custom Setup.

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