Digital Negative Process Outline

Kerik Kouklis & Bill Schwab Workshop May 2022

Yosemite National Park - The Ansel Adams Gallery

Required Software (Mac Only)

QCDN (Richard Boutwell) - www.bwmastery.com

QuadToneRIP (Roy Harrison) - www.quadtonerip.com

QTR Step Wedge Tool (Harrington) - www.quadtonerip.com

VueScan - www.hamrick.com

Photoshop - Lord Adobe

Step 1 - Determining "Maximum Black" Printing Time

Make "maximum black" strip - to determine minimum exposure time to reach maximum black

-Use a strip of coated paper w/strip of Pictorico

-mask under the glass, not above

-use relatively small increments; 1 or 2 seconds. May need to do an iteration or two.

-use this time as **Standard Printing Time** for all prints using that paper

Step 2 - Printing the Blocking Density Curve

From QCDN Resources folder...drag **QCDN-Blocking Density Curve-8-ink.quad** into xx00 folder (for your printer)

-(.quad files are the curve files)

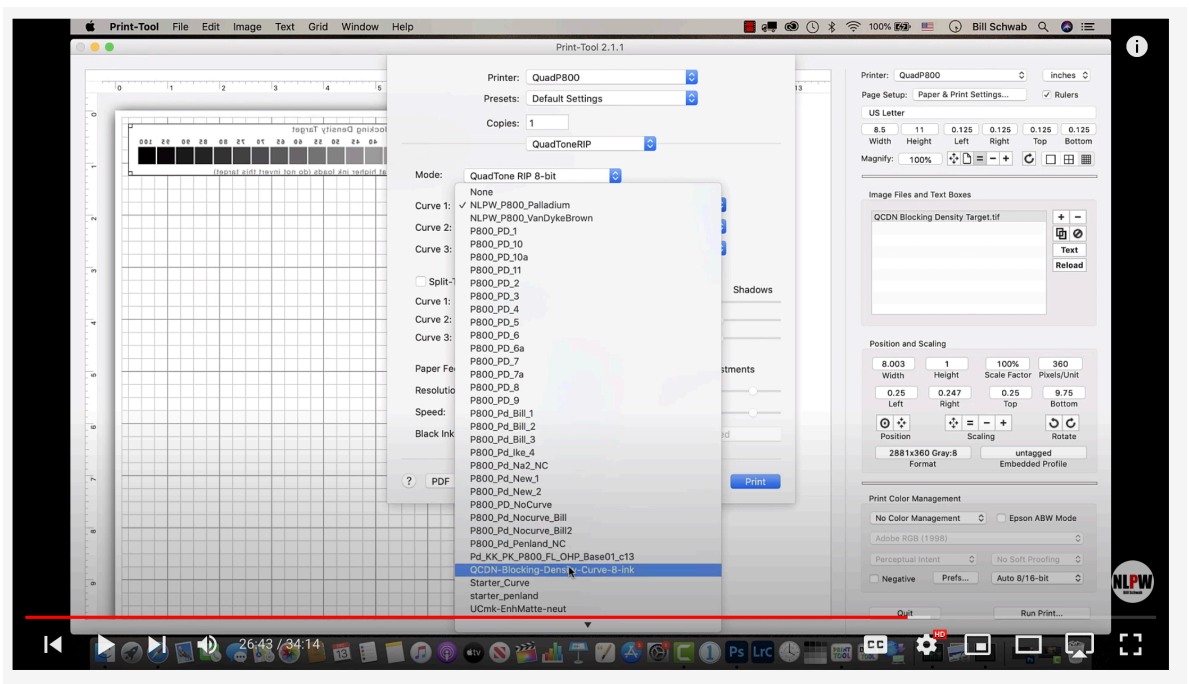
-Run the **install.command** file

Print the Blocking Density Target onto sheet of Pictorico:

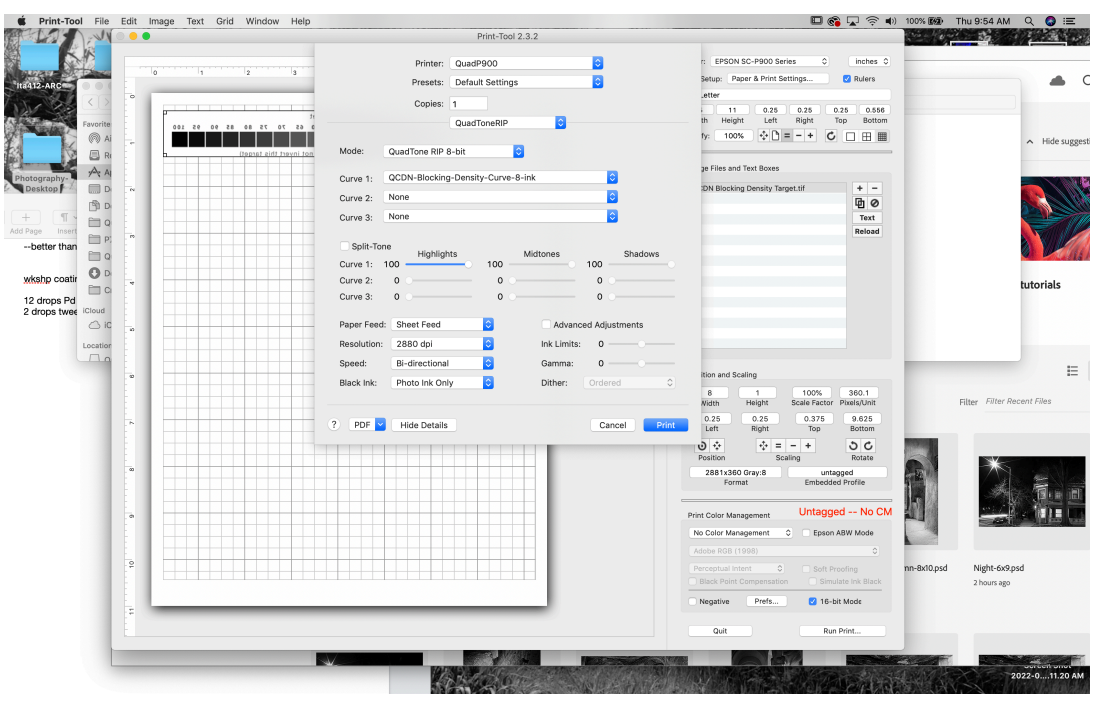
-Open **Print Tool**

-Place file **QCDN Blocking Density Target.tif** onto the Print Tool grid (click “+” button to add a file)

-(this file is in QCDN Resources folder)



Print this on Pictorico thru the QuadTone RIP driver using the **Blocking Density Curve** just added



Expose this strip on a test strip coated w/Pd, using Standard Print Time from Step 1

-After thoroughly drying the test strip find the clearest white, then go 1 step up from that. This **Maximum Blocking Density** number number will be used in the curve that is developed in QCDN.

Step 3. Setting up a Starter Curve

In the QuadToneRIP folder, create 3 new sub-folders:

/Scans
/Data Files
/Curves

Open **QCDN** program

-Set the "Main Blocking Density" slider to the number determined in previous step

-Select printer (*xx*00)

-Select "starter curve”. Save this initial starter curve in "curves" sub-folder

-Copy this curve into the QuadToneRIP profile folder for your printer. Then run **install.command** again

Step 4 - Printing the Initial Starter Curve

Download **QTR StepWedge Tool.jsx** https://www.quadtonerip.com

-Place in **/Applications/Adobe Photoshop 2022/Presets/Scripts**

Open Print Tool and place **21-step wedge.tif** file on grid

-This file is in **QCDN-Resources** folder

-Print onto Pictorico

-Print the 21 Step Wedge in Pd

Step 5 - Adjusting the Starter Curve - new process (5-18-22)

-Scan the step wedge Pd print using VueScan

Vue Scan Settings

Input tab:

-Scan at 150 dpi

Color tab:

-**None**

Output tab:

-**tif**

-Check destination folder

-Name "**StarterCurve.tif**" and place in "**Scans**" sub-folder

Open this scan in Photoshop

-Flip to horizontal with lightest square on the left - convert to Grayscale

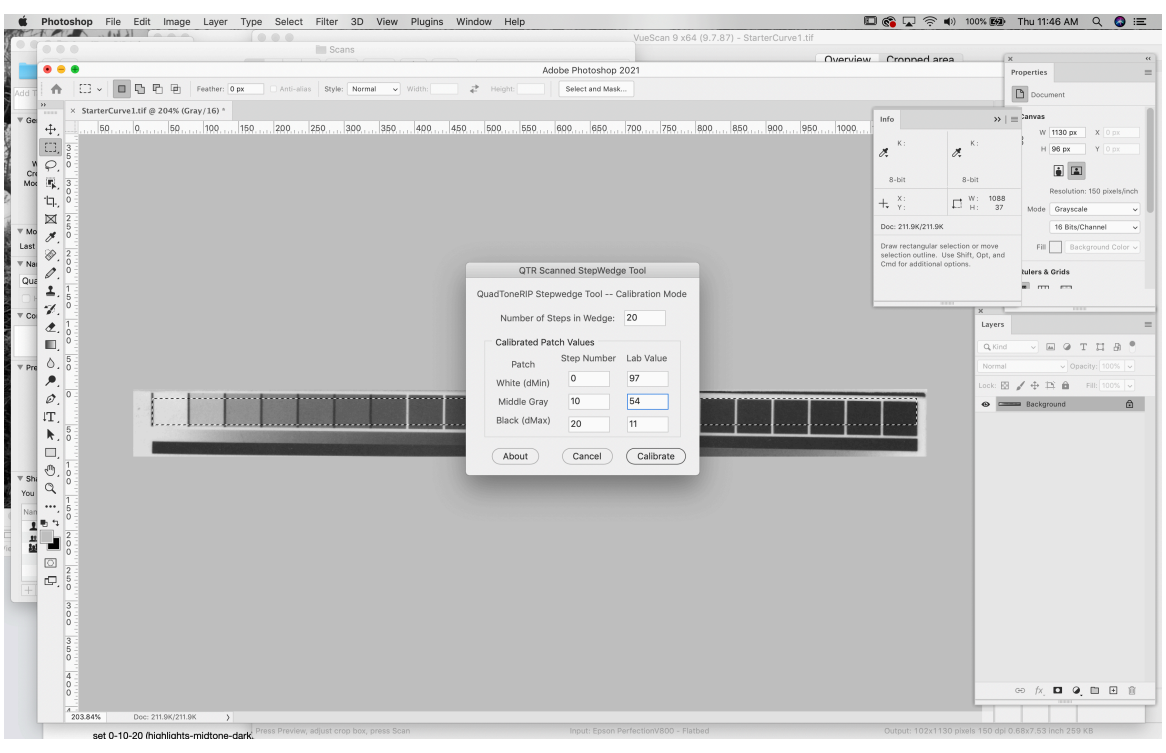
-Select all squares w/rectangular selection tool

File --> Scripts run **QTR step wedge Tool** - to run script (QTR Stepwedge Tool .jsx)

-Change # of steps to 21

-Set 0-10-20 (highlights-midtone-dark)

-91-54-11



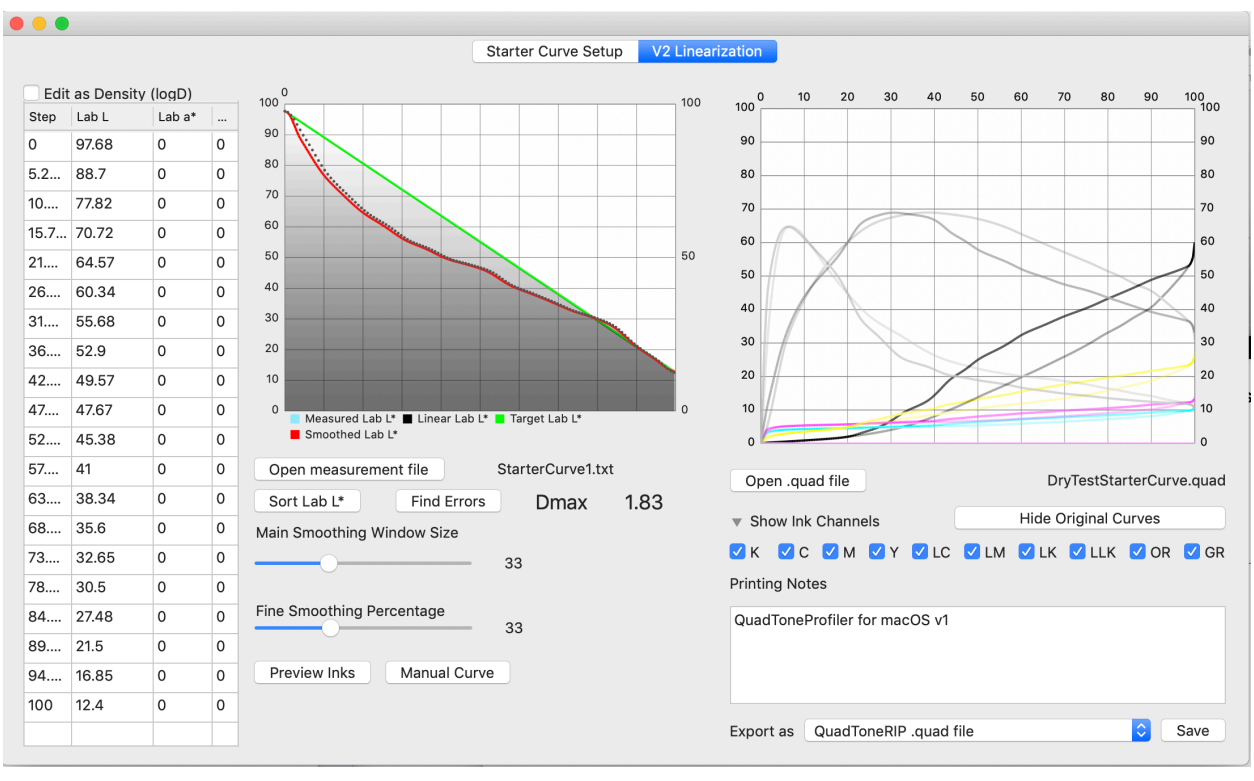
-Run "Calibrate"

-Save this **data text file** (this is the **correction text file**)

-Save in "Data Files" sub-folder created in Quad Tone RIP folder

[note: this process replaces the manual work Bill outlined in 2021 video series]

-Go to **QCDN - Linearization tab**



-Load measurement data (click on "**Open measurement file**")
(load the data file created in previous step)

-Click tab: *Open .quad file* Choose the "**starter curve.quad**" file created earlier

-This quad file (**starter curve)** is used to make adjustments to the curve

-Save as a new quad file (use underscore - no spaces)

-Save in "Curves" sub-folder

-Copy this new curve into your printer profile folder

-Re-run **install.command** file

Step 6 - Adjusting the New Version of the Starter Curve

Repeat previous steps with each new iteration of the correction curves

Open Print Tool

-Place 21-Step Wedge strip on Pictorico

-Print another step wedge in Pd with the new curve

-Scan this strip and open in Photoshop

-Select all steps - re-run the script

-Save this new data file

Back to QCDN

-Open new data file

-Open .quad file you are correcting (last one printed)

-Run the corrections

-Save and run install again

-Print test strip w/this new corrected curve

-Dry, Scan, Evaluate

DRINK.

THE END.