



NAVIGATOR F/P

► FLEXO. PACKAGING. PROVEN.

CALIBRATION GUIDE



XITRON, LLC
4880 VENTURE DRIVE
SUITE 500
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CALIBRATION FOR FLEXOGRAPHIC PLATEMAKING IN A XITRON NAVIGATOR RIP.

1. To change the input values of the Xitron Navigator RIP's Calibration Manager there are some edits that must be made.

Below is an example of the standard input values of the Xitron Navigator RIP's Calibration Manager.

C100	C95	C90	C85	C80	C70	C60	C50	C40	C30	C20	C15
100.00	95.00	90.00	85.00	80.00	70.00	60.00	50.00	40.00	30.00	20.00	15.00
C10	C8	C6	C4	C2	C0						
10.00	8.00	6.00	4.00	2.00	0.00						

The input values are 100,95,90,85,80,70,60,50,40,30,20,15,10,8,6,4,2 and 0.

Below is an example of the EDITED input values of the Xitron Navigator RIP's Calibration Manager.

C100	C95	C90	C85	C80	C70	C60	C50	C40	C30	C20	C15
100.00	95.00	90.00	85.00	80.00	70.00	60.00	50.00	40.00	30.00	20.00	15.00
C10	C8	C6	C4	C2	C0						
10.00	8.00	2.00	4.00	2.00	0.00						

The EDITED input values are 100,95,90,85,80,70,60,50,40,30,20,15,10,8,6,2,1 and 0.

The reason for editing the input values is in Flexographic printing the minimum dot is hard to control. The min dot needs to be controlled at the 1 and 2 percent values.

2. Editing the input values of the Xitron Navigator RIP's Calibration Manager is easy to do. First locate the DeviceCMYK file that is located in the Navigator folder\SW\Config\Targets. Make a copy of this file and save it somewhere outside of the Navigator folder\SW\Config\Targets. Name the copy DeviceCMYK-FactoryDefault. Once that is done open the DeviceCMYK file that is located in the Navigator folder\SW\Config\Targets in a text editing program. The result of opening this file is many lines of Postscript code. There are areas that need to have changes made to them. These areas are:

/PatchName

/PatchColor

/TextString

Name	In Folder	Size	Type	Date Modified
DeviceCMYK	C:\Navigator 8.0r8\SW\colorspaces		File Folder	12/6/2011 10:58 AM
DeviceCMYK	C:\Navigator 8.0r8\SW\Config\Targets	15 KB	File	10/9/2008 11:14 PM
DeviceCMYK	C:\Navigator 8.0r8\SW\Config\Factory Settings\Targets	15 KB	File	10/9/2008 11:14 PM
DeviceCMYK	C:\Navigator 8.0r8\SW\Config\Devices\DevHMS\None	2 KB	File	5/22/2008 1:55 PM

3.) The next page identifies these three areas and the changes are indicated in Orange. Make these changes and only these changes. Save the file, close the file, relaunch the Xitron Navigator RIP and open the Calibration Manager - the input values should now have a 1 and 2 percent entry.



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/PatchName [
(C100) (C95) (C90) (C85) (C80) (C70) (C60) (C50) (C40) (C30) (C20) (C15) (C10) (C8) (C6) (C2) (C1) (C0)
(M100) (M95) (M90) (M85) (M80) (M70) (M60) (M50) (M40) (M30) (M20) (M15) (M10) (M8) (M6) (M2) (M1) (M0)
(Y100) (Y95) (Y90) (Y85) (Y80) (Y70) (Y60) (Y50) (Y40) (Y30) (Y20) (Y15) (Y10) (Y8) (Y6) (Y2) (Y1) (Y0)
(K100) (K95) (K90) (K85) (K80) (K70) (K60) (K50) (K40) (K30) (K20) (K15) (K10) (K8) (K6) (K2) (K1) (K0)
(100) (95) (90) (85) (80) (70) (60) (50) (40) (30) (20) (15) (10) (8) (6) (2) (1) (0)
(100) (95) (90) (85) (80) (70) (60) (50) (40) (30) (20) (15) (10) (8) (6) (2) (1) (0)
(100) (95) (90) (85) (80) (70) (60) (50) (40) (30) (20) (15) (10) (8) (6) (2) (1) (0)
/PatchColor [
% Cyan
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Magenta
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Yellow
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Black
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Spot1
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Spot2
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
% Spot3
1.00 0.95 0.90 0.85 0.80 0.70 0.60 0.50 0.40 0.30
0.20 0.15 0.10 0.08 0.06 0.02 0.01 0.00
]

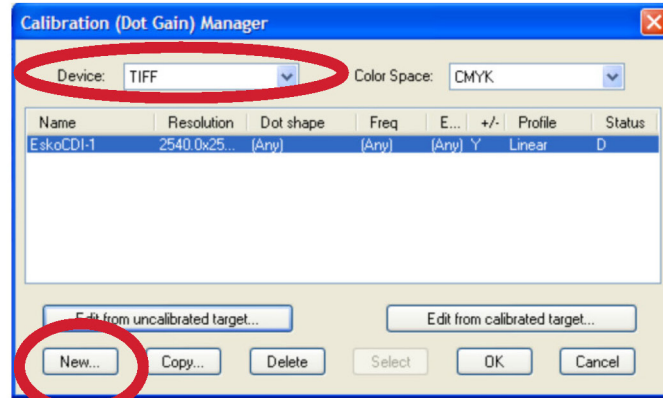
/TextString [
(0) (1) (2) (6) (8) (10) (15) (20) (30) (40)
(50) (60) (70) (80) (85) (90) (95) (100)

(Reference Number: \$TARGETID\$)

(0) (1) (2) (6) (8) (10) (15) (20) (30) (40)
(50) (60) (70) (80) (85) (90) (95) (100)

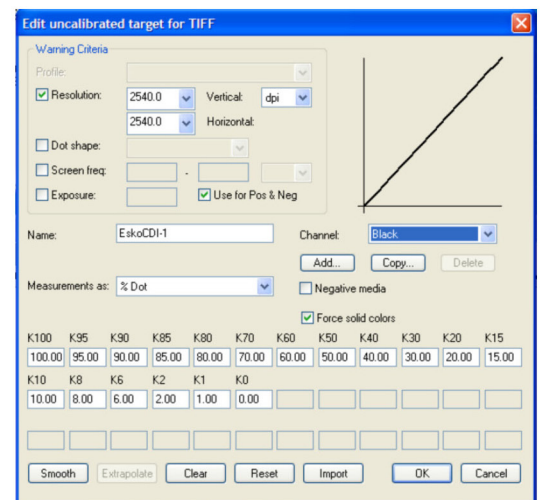
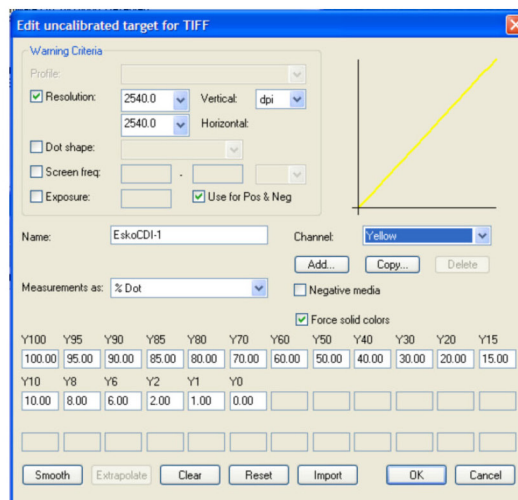
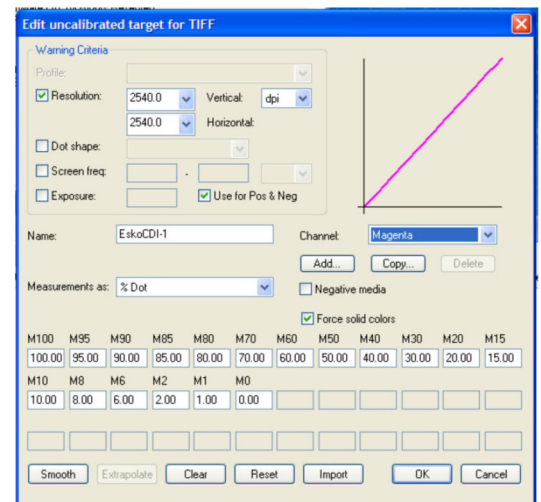
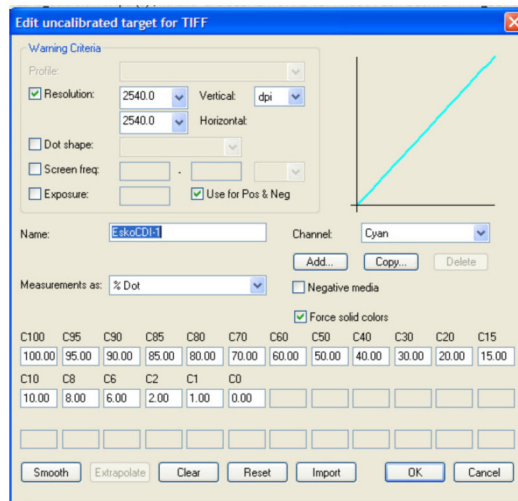
CALIBRATION FOR FLEXOGRAPHIC PLATEMAKING IN A XITRON NAVIGATOR RIP.

4.) Proceed to enter the values for a Linear plate calibration. This MUST be for a TIFF device!!!!



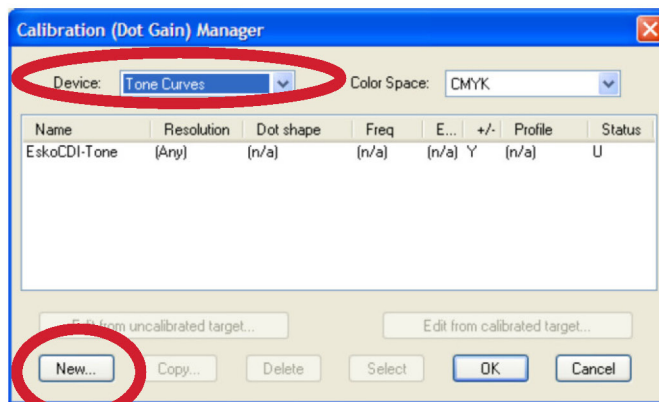
5.) Click the New button.

6.) Select the Resolution, name the curve and make each separation LINEAR. See Example below: Save the file. This will be the Calibration in the Page Setup.



CALIBRATION FOR FLEXOGRAPHIC PLATEMAKING IN A XITRON NAVIGATOR RIP.

7.) Open the Calibration Manager in the Xitron Navigator, proceed to enter the values for a Tone Curve plate calibration. The Device MUST be Tone Curves!!!!



8.) Click the New button.

9.) Select the Resolution, name the curve and enter the Tone Curve values for each separation.
See Example below:
Save the file. This will be the Tone Curves in the Page Setup.

Edit uncalibrated target for Tone Curves

Warning Criteria

Profile: Vertical: Horizontal:

☐ Resolution: ☐ Dot shape: ☐ Screen freq: ☐ Exposure: ☒ Use for Pos & Neg

Name: EskoCDI-Tone Channel: Cyan

Measurements as: % Dot

Force solid colors

C100	C95	C90	C85	C80	C70	C60	C50	C40	C30	C20	C15
100.00	95.17	90.33	85.50	80.67	71.00	60.00	49.00	40.25	31.50	22.75	18.37
C10	C8	C6	C2	C1	C0						
14.00	12.25	10.50	7.00	5.00	0.00						

Buttons: Smooth Extrapolate Clear Reset Import OK Cancel

Edit uncalibrated target for Tone Curves

Warning Criteria

Profile: Vertical: Horizontal:

☐ Resolution: ☐ Dot shape: ☐ Screen freq: ☐ Exposure: ☒ Use for Pos & Neg

Name: EskoCDI-Tone Channel: Magenta

Measurements as: % Dot

Force solid colors

M100	M95	M90	M85	M80	M70	M60	M50	M40	M30	M20	M15
100.00	95.50	91.00	86.50	82.00	73.00	62.50	52.00	42.63	33.25	23.87	19.19
M10	M8	M6	M2	M1	M0						
14.50	12.62	10.75	7.00	5.00	0.00						

Buttons: Smooth Extrapolate Clear Reset Import OK Cancel

Edit uncalibrated target for Tone Curves

Warning Criteria

Profile: Vertical: Horizontal:

☐ Resolution: ☐ Dot shape: ☐ Screen freq: ☐ Exposure: ☒ Use for Pos & Neg

Name: EskoCDI-Tone Channel: Yellow

Measurements as: % Dot

Force solid colors

Y100	Y95	Y90	Y85	Y80	Y70	Y60	Y50	Y40	Y30	Y20	Y15
100.00	95.50	91.00	86.50	82.00	73.00	62.50	52.00	42.63	33.25	23.87	19.19
Y10	Y8	Y6	Y2	Y1	Y0						
14.50	12.62	10.75	7.00	5.00	0.00						

Buttons: Smooth Extrapolate Clear Reset Import OK Cancel

Edit uncalibrated target for Tone Curves

Warning Criteria

Profile: Vertical: Horizontal:

☐ Resolution: ☐ Dot shape: ☐ Screen freq: ☐ Exposure: ☒ Use for Pos & Neg

Name: EskoCDI-Tone Channel: Black

Measurements as: % Dot

Force solid colors

K100	K95	K90	K85	K80	K70	K60	K50	K40	K30	K20	K15
100.00	94.67	89.33	84.00	78.67	68.00	58.00	48.00	39.46	30.92	22.38	18.10
K10	K8	K6	K2	K1	K0						
13.83	12.12	10.42	7.00	5.00	0.00						

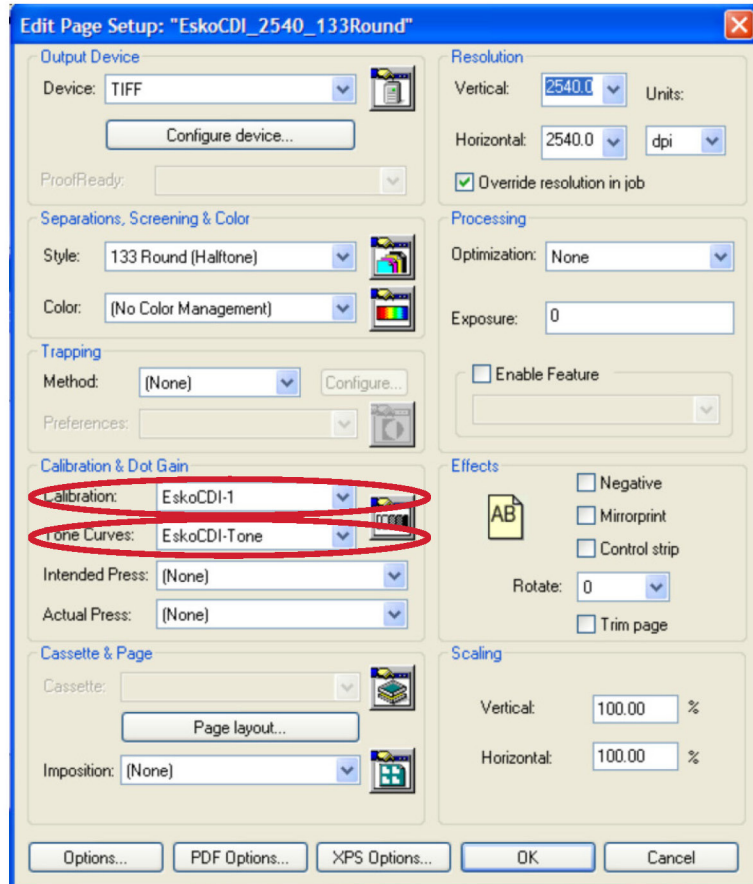
Buttons: Smooth Extrapolate Clear Reset Import OK Cancel



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10.) Make certain in Page Setup that BOTH the Linear Curve and the Tone Curves are selected.



11.) This is an example of a Calibrated Bitmap in Esko Bitmap Viewer.

