

# Updating a Harmony print curve

If you wish to update an imported a Harmony curve used for print calibration, you first convert it to a ColorFlow Print Transfer Curve. You can then edit the curve properties and shape.

1. Click the **Print Curves** tab.
2. In the **Harmony Curves** table, find and click the curve to select it.
3. If there are Harmony spot color curves that you like to include as channels of the new print transfer curve, add those curves to your selection. See also [Grouping CMYK and Spot Harmony curves](#).
4. Click **Copy to Transfer Curve**.
5. A new curve appears in the **Transfer Curves** table, with the same name as the copied Harmony Curve, and is selected.
6. To make the curve visible for selection in Prinergy, select the **Show in Prinergy** check box

**Note:** If the Harmony Curve you copied to a Calibration Curve had **Show in Prinergy Print Curves** selected, then that check box becomes cleared and **Show in Prinergy** becomes selected for the new Print Transfer Curve. If the Harmony Curve name is selected in the **Print Curves** list of a Prinergy output process template, the new Print Transfer curve will be delivered for output jobs instead of the Harmony Curve.

7. You may edit the name of the Print Transfer Curve by double-clicking its **Name** field. This will not affect its selection for output in a Prinergy process template, except that the new name will appear in the **Print Curves** list control. See [About Curve Names and Selection in Prinergy](#).
8. (Optional) In the right panel, select the device condition properties that you wish to use this curve for and click **Apply**.
9. To adjust the shape of curve channels, click **Adjust** below the right panel.
10. If you are not satisfied with the color output in one channel only, select and adjust that color channel. For example, you notice that there is an overall magenta cast across all tones, adjust the M channel.

Below the **Curve Change** graph, there are several sliders that represent different points in the tonal range:

Slider	Tint In Range (non-flexo)		Tint In Range (flexo)	
	Most affected	Affects	Most affected	Affects
Mindot	Does not appear	Do not appear	Mindot Tint In	Mindot to 25%
Highlights	10%	0 to 25%	10% to 15%	Mindot to 25%
Quartertones	25%	0 to 50%	25%	Mindot to 50%
Midtones	50%	0 to 100%	50%	Mindot to 100%
3/4-tones	75%	50 to 100%	75%	50 to 100%
Shadows	90%	75 to 100%	90%	75 to 100%

The value in the box under each slider is a change percentage. The graph appears flat until you make an adjustment. Move the appropriate slider to adjust the corresponding tonal range or enter the tint out change percentage in the box under the slider.

11. To adjust a spot color channel, click **Spot** and then choose the desired channel in the **Spot Ink:** list control.
12. If you want the color output to be lighter or darker in a certain range but you want to maintain the overall color, or if you want to correct a color cast in a certain range of gray, adjust the CMY channels.
  - a. Click **CMY**.
  - b. Select the tonality range (Highlight, Quartertone, Midtone, or 3/4-tone) in which you want to adjust the neutral balance.
  - c. The displayed color patch demonstrates the effect of your adjustments.

The color produced before your adjustment is shown on the left. Your adjustment is shown on the right.




- i. To display the color patch in a larger view for easier color comparison, click anywhere in the color patch.
- ii. Adjust **color cast**, lightness, or both by the following:



- Use the lightness ( $L^*$ ) slider to make the color darker or lighter. You can also enter the  $L^*$  value directly in the **Color Change** columns.



- Use the cast ( $a^*b^*$ ) selector to adjust the color cast. You can also enter the  $a^*$ ,  $b^*$  values directly in the **Color Change** columns.

- d. The color patch displays the output color. If the displayed color does not visually align to the color on your proof or press sheet, you can adjust the displayed color in the color patch:
  - i. Select the **Adjust Displayed Colors** check box.
  - ii. Use the lightness ( $L^*$ ) slider and the cast ( $a^*b^*$ ) selector to change the displayed color to align to the color on your proof or press sheet. This color change does not affect any curves or color control elements. You are only adjusting the displayed color of the patches.
  - iii. To reset the display to the default displayed color, click the **Reset** icon .
  - iv. When you achieve the correct color, clear the **Adjust Displayed Colors** check box.

13. To view curve channels as you adjusting them, click **View**.
14. For finer control of curve adjustments, click **View**, select the **Enable Editing** check box, and:
  - a. Select the curve channel you wish to adjust. For a spot color channel, click **Spot** and then choose the desired channel in the **Spot Ink:** list control.
  - b. Click the part of the curve that you want to adjust, or type the curve value in the Tint in box.
  - c. An adjustment point appears on the curve.
  - d. Drag the adjustment point up to darken the output or drag it down to lighten the output. You can also type a value in the Tint Out box.
  - e. Click elsewhere on the curve to add another adjustment point. When you drag a point up or down, the adjustment range is limited to adjacent adjustment points.
15. Click **Apply** to save adjustments and continue, or click **OK** to complete adjustments.
16. You can:
  - [View the effect of your adjustments on an image](#) before you apply your changes
  - [Undo or redo your previous adjustments](#)