

Color-Logic Process Metallic Color System™

User Manual



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Color-Logic Process Metallic Color System™

Installation Guide

To counteract the possibility of fraud, all Color-Logic discs are protected by password security and must be registered on-line before use.

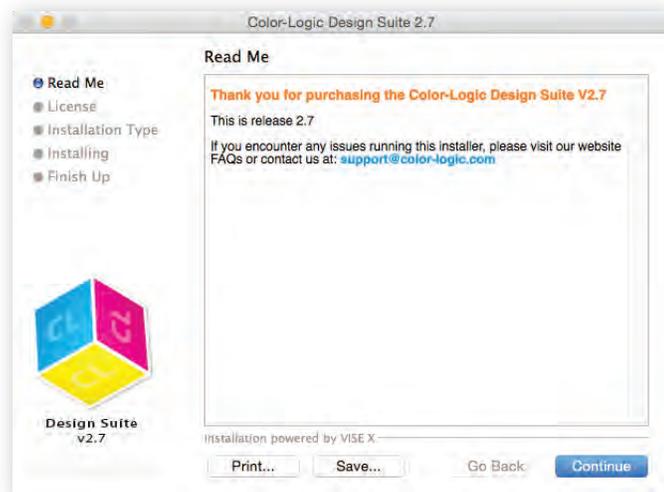
Registering your Color-Logic System and password activation

Step 1: Locate the *Color-Logic Installer* and double click to begin the installation

IMPORTANT: You will need to have access to the internet to register your Design Suite.

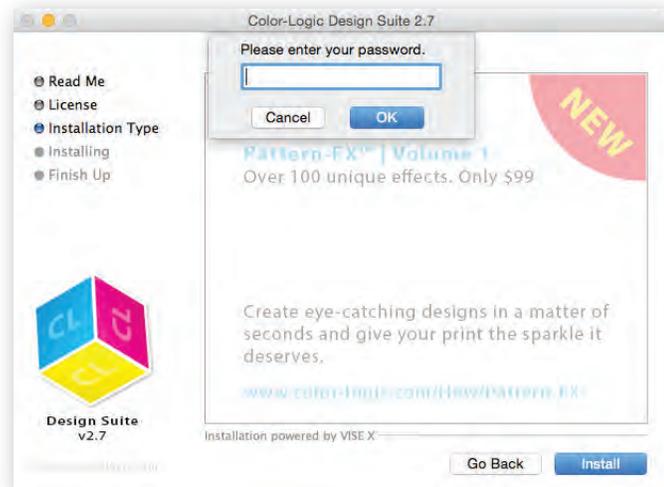


Step 2 Please follow all on-screen prompts.



Step 3 Type the Password you received by email into the space provided.

If you do not know your password, please contact support@color-logic.com



For help and support with your installation, please contact the Color-Logic support team at support@color-logic.com

Color-Logic Process Metallic Color System™

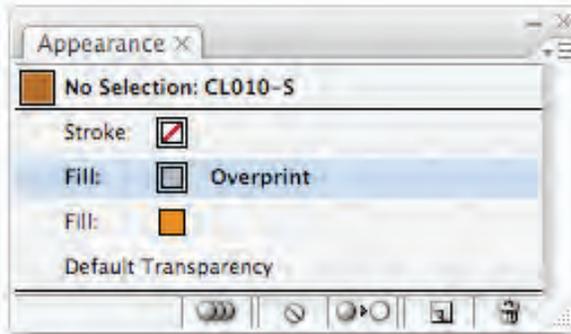
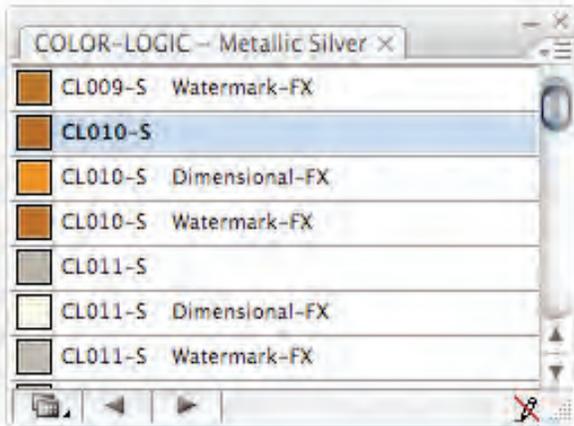
Adobe Illustrator®

Graphic Style Libraries

There are two ways to design in metallic using Adobe Illustrator® – the first and easiest method is to take advantage of the pre-built Color-Logic Graphic Style Library. These graphic styles contain each Color-Logic color pre-specified with the CMYK color percentages, and with an overprint of the CL 4713 SILVER ink built in, this means that you don't need to worry about making duplications and setting overprints for the silver separation. Simply click on your vector element and select the effect from the Graphic Style Library.

Each special effect has also been pre-created within these graphic styles (see creating Dimensional-FX & Watermark-FX section for more details)

It is important to remember that Graphic Style libraries can only be used on vector graphics, so if you have type that you want to make metallic, you will either have to outline your text, or use the second method "manual overprinting" shown below.



In the Appearance tab you can see how a Color-Logic metallic color is created. The bottom fill is the CMYK color, and the overprint fill is the metallic silver!

Color-Logic Graphic Style Library

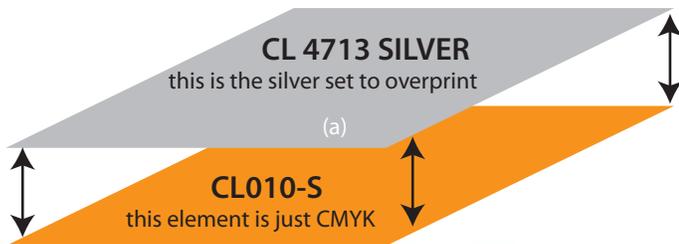
NOTE: Please ensure you have your "overprint preview" switched on from the view menu to see the correct effect. If you do not have this switched on, you will only see the silver channel

Manual Overprinting

For more complex designs it might be necessary to create the overprinting silver channel manually. For example, if you have type that you wish to keep as a font (and not outlined), this would require you to manually put the silver over the text - you cannot use a graphic style unless the text has been outlined. Other examples of manual overprinting would be for elements such as gradients and strokes (see gradients and strokes section)

To see a video of how this effect was created, please visit: www.color-logic.com/vault

To manually make something metallic there are three steps required:



Step 1

Create your design in CMYK using the Color-Logic Swatches (Swatch Libraries/Color-Logic CMYK Swatches), in this image we chose an orange color: CL010-S

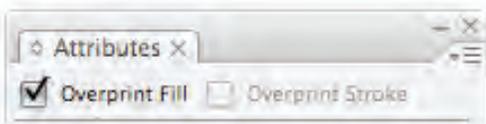
Step 2

Next, duplicate the colored up element from step 1 with a zero/zero offset (**MAC:** COMMAND+SHIFT+M **PC:** CONTROL+SHIFT+M)

Step 3

With the duplicated element selected, change the color to CL 4713 SILVER and click on the check box for OVERPRINT FILL from the Attributes window

TIP: To speed things up, we created an Action to do these steps for you. Simply run the action on any individual element! You will find the action set stored in: Applications/Illustrator/Presets/Action Sets



Notice the darker colored area (a) in the center of the above image, this is the silver overprinting the design! When you have completed the three steps, the graphic would look like the image to the right



Gradation-FX™: Creating basic metallic gradients

It is possible to vignette your metallic colors from one into another. Unlike using spot metallic inks which are opaque, which means you cannot vignette one into another, the Color-Logic system uses CMYK inks to create the metallic colors and as such you can be as creative as you like. We call this technique, Gradation-FX. To make a gradient from one metallic color into another follow these simple steps:

To see a video of how this effect was created, please visit: www.color-logic.com/vault



CL0190-S vignetting into CL110-S

Because we are using the CMYK inks to vignette from one color into another, all you need to do is put a solid silver over the top and make it overprint!

When you have completed the three steps, the graphic would look like the image to the right with metallic magenta vignetting into a metallic blue - in between you get subtle shades of purple!

Step 1

Create your design in CMYK using the Color-Logic Swatches (Swatch Libraries/Color-Logic CMYK Swatches), in this image we chose to vignette a magenta (CL0190-S) into a blue (CL110-S)

Step 2

Next, duplicate the gradient design with a zero/zero offset (MAC: COMMAND+SHIFT+M PC: CONTROL+SHIFT+M)

Step 3

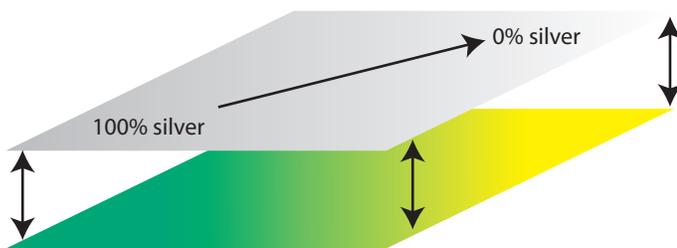
With the duplicated element selected, change the color to CL 4713 SILVER and click on the check box for OVERPRINT FILL from the *Attributes* window



Gradation-FX™: Creating advanced metallic gradients

Now that we have mastered the basics of making gradients metallic, we can now go one step further and vignette CMYK colors into metallic. The theory is exactly the same as above - we make our gradient between two colors, but one of the colors will have metallic and one will stay as CMYK:

To see a video of how this effect was created, please visit: www.color-logic.com/vault



CL0080-S vignetting into CL030-S

Because we want to make one part of this design metallic and one part CMYK, we cannot just put solid silver over the design, we need to also have a gradient. So we duplicate the design and put silver where the green was and set this to overprint, we also need to put silver where the yellow is, but this needs to be ZERO% silver so that it becomes transparent!

The final design will be metallic green vignetting into process yellow.

Step 1

Create your design in CMYK using the Color-Logic Swatches (Swatch Libraries/Color-Logic CMYK Swatches), in this image we chose to vignette a green (CL0080-S) into a yellow (CL030-S) for the purpose of this demonstration we are going to make the green metallic and leave the yellow as CMYK.

Step 2

Next, duplicate the gradient design with a zero/zero offset (MAC: COMMAND+SHIFT+M PC: CONTROL+SHIFT+M)

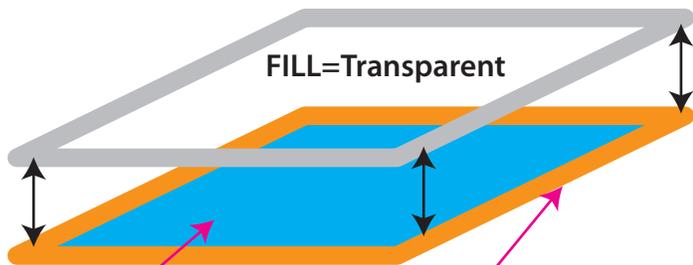
Step 3

With the duplicated element selected, put 100% SILVER where the green color is, and 0% silver where the yellow is, and click on the check box for OVERPRINT FILL from the *Attributes* window



Creating strokes in metallic

To make a stroke metallic, we use the same principle of duplication, however, extra care should be taken to make sure that the stroke overprint is created correctly. The safest method is explained below:



FILL = CL0110-S STROKE = CL010-S

Step 1

Create your design in CMYK using the Color-Logic Swatches (Swatch Libraries/Color-Logic CMYK Swatches), in this image we chose a blue fill (CL0110-S) and an orange stroke (CL010-S)

Step 2

Next, duplicate the element with a zero/zero offset (MAC: COMMAND+SHIFT+M PC: CONTROL+SHIFT+M)

Step 3

With the duplicated element selected, change the fill to NONE and the stroke to CL 4713 SILVER and then click on the check box for OVERPRINT STROKE from the Attributes window

When you make a stroke metallic, you need to ensure that you change the fill of that element to NONE (transparent). This ensures that the correct overprinting is applied. See below for examples of incorrect and correct stroke overprint being applied



X Incorrect overprint stroke applied



✓ Correct overprint stroke applied

When the box above was duplicated, the stroke was changed to silver and set to overprint... however, the FILL of the box was not made transparent and still retains the blue fill from the bottom graphic - when the stroke is changed to silver and set to overprint, this creates a choke, and splits the frame between the orange outer color and the blue fill.

Simply changing the fill to NONE resolves this issue, the overprint stroke now appears correctly and no choke is created.

Creating Dimensional-FX™

Dimensional-FX™ is when we put a CMYK pattern/type/design within a metallic area. When light shines on the metallic area it becomes very bright and the CMYK pattern in the middle looks darker - when there is no light shining on the metallic, the CMYK pattern looks much brighter. It is this switch and change between the light reflecting off the metallic that creates the effect. The best Dimensional-FX™ patterns are created using the same colors from the Color-Logic palette or graphic style.

To see a video of how this effect was created, please visit: www.color-logic.com/vault

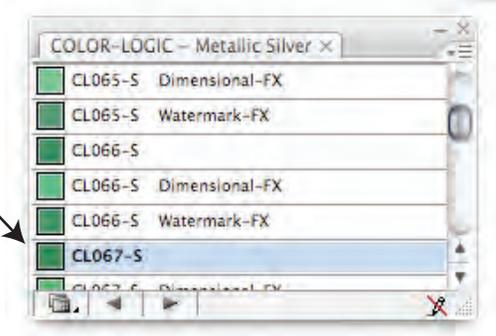
Creating Dimensional-FX™ using the Color-Logic Graphic Styles

Step 1

Create your design using the Color-Logic Graphic Styles - for the rectangle below we chose CL067-S from the Graphic Style Library (window/graphic style library).



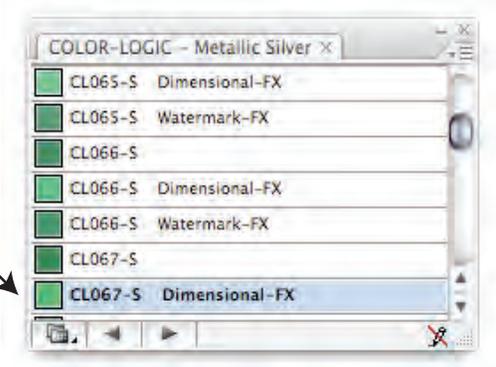
CL067-S



Step 2

Next, make your pattern/type/graphic - in this instance we created some text and converted it to outlines. We then selected the individual letters and colored them up as CL067-S Dimensional-FX from the graphic style library.

Dimensiona FX



Step 3

Move the type created in Step 2 and place this above the metallic green rectangle that we created in Step 1. The background rectangle is metallic green and the text is the same CMYK color green, but it does not have any metallic in it.

When light reflects off this green panel, the type will appear to turn lighter and darker in hue as the printed material is moved. This effect is excellent for adding in some extra dimension to your print.



CL067-S

CL067-S Dimensional-FX



TIP: When using graphic styles, we recommend that you use the "Direct Selection Tool" and select each element individually. By selecting individual elements you reduce the risk of accidentally coloring up grouped elements.

Creating Watermark-FX™

Watermark-FX™ is the ability to make an element within the design seem to visually appear and disappear as the print is moved. This effect is created by controlling the amount of silver within a given area. We will demonstrate this effect using the same colors as we used in the previous training for Dimensional-FX™.

To see a video of how this effect was created, please visit: www.color-logic.com/vault

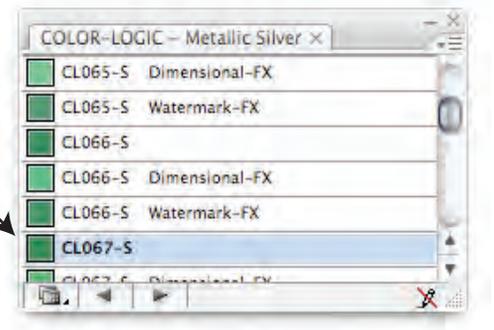
Creating Watermark-FX™ using the Color-Logic Graphic Styles

Step 1

Create your design using the Color-Logic Graphic Styles - for the rectangle below we chose CL067-S from the Graphic Style Library (window/graphic style library).



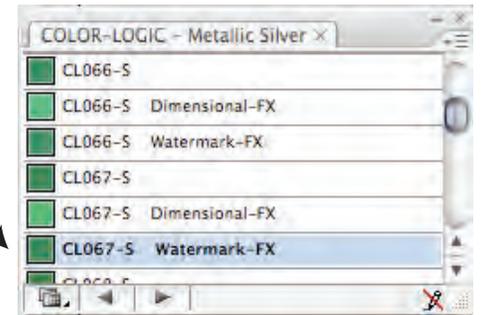
CL067-S



Step 2

Next, make your pattern/type/graphic - in this instance we created some text and converted it to outlines. We then selected the individual letters and colored them up as CL067-S Watermark-FX from the graphic style library.

Watermark-FX



Step 3

Move the type created in Step 2 and place this above the metallic green rectangle that we created in Step 1. The background rectangle is metallic green with 100% silver and the text is the same CMYK color green but with only 80% silver in it.

When light reflects off this green panel, the type will visually appear and disappear as the printed material is moved. This effect is excellent for adding in some subliminal effects to your print.



CL067-S

CL067-S Watermark-FX



TIP: When using graphic styles, we recommend that you use the "Direct Selection Tool" and select each element individually. By selecting individual elements you reduce the risk of accidentally coloring up grouped elements.

Creating Watermark-FX™ Plus

Add subliminal patterns, wording, even complex guilloches to artwork using the new Watermark-FX Plus technique. This works particularly well on foil substrates or for areas in your design where you want a subtle metallic effect.



Step 1
Create a CMYK design.

Step 2
Create some type/pattern/design for your Watermark-FX Plus area and color it up as 30% of CL 4713 SILVER and set it to "overprint" from your attributes window (Window/Attributes)

Step 3
Place your Watermark-FX Plus pattern over the top of your CMYK design.

To see a video of how this effect was created, please visit: www.color-logic.com/vault

Color-Logic Process Metallic Color System™

Adobe InDesign®

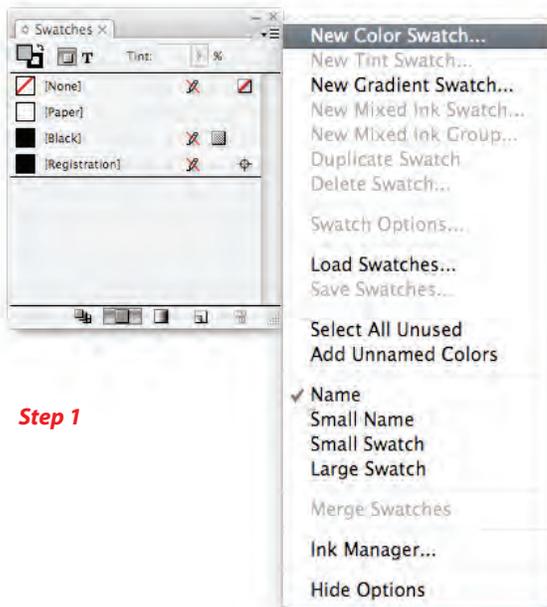
Mixed ink Color Palettes

All Color-Logic metallic colors and special effects are pre-created using Mixed Ink Color Palette technology. This method of creating the colors allows us to pre-mix the silver with the CMYK inks so that the user does not need to do any form of overprinting or knockouts - this is very different to Designing within Illustrator!

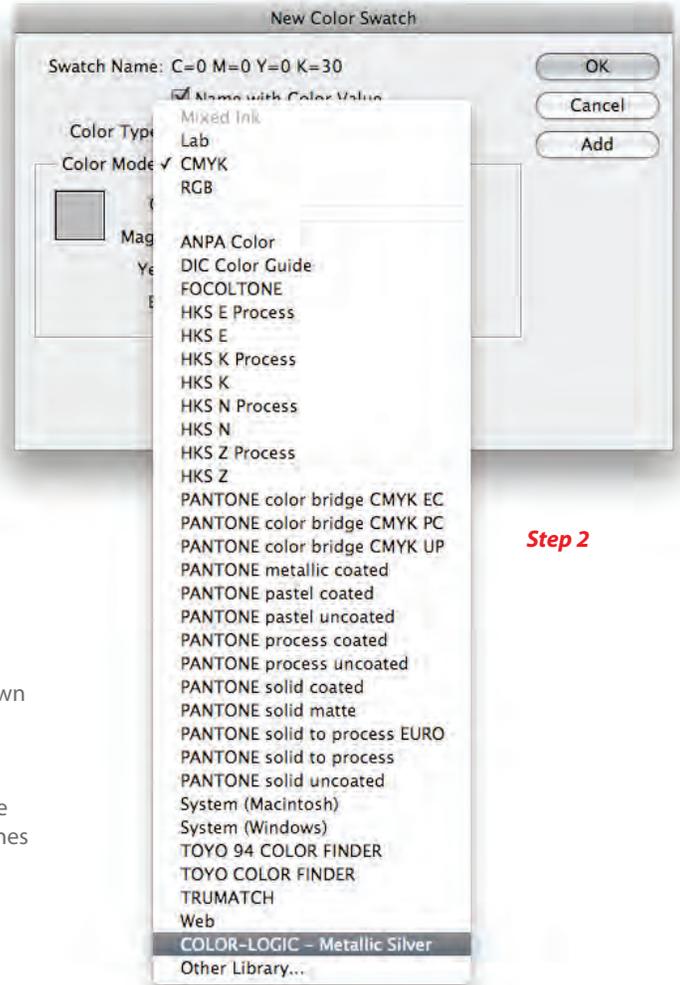
Using these mixed ink color palettes allows the designer to produce stunning designs with a simple “click & color” approach.

Adding colors to your InDesign artwork:

Step 1 - From the Swatches window, create a New Color Swatch



Step 1

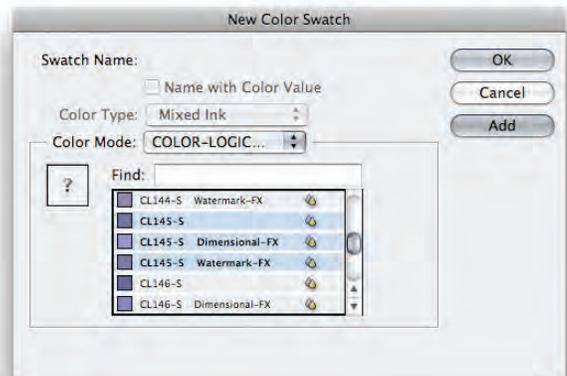


Step 2

Step 2 - From the New Color Swatch window, click on “Color Mode” and scroll down to the COLOR-LOGIC - Metallic Silver palette.

NOTE: If you cannot see the Color-Logic palette in the list, scroll right down to the bottom of the list and click on “Other Library...” this should take you to the Swatches folder within Adobe InDesign where you should be able to see the Color-Logic Metallic Silver palette. If for any reason you are not taken to the Swatches folder automatically, you can find the palette in the following location: *Applications / Adobe InDesign / Presets / Swatch Libraries*

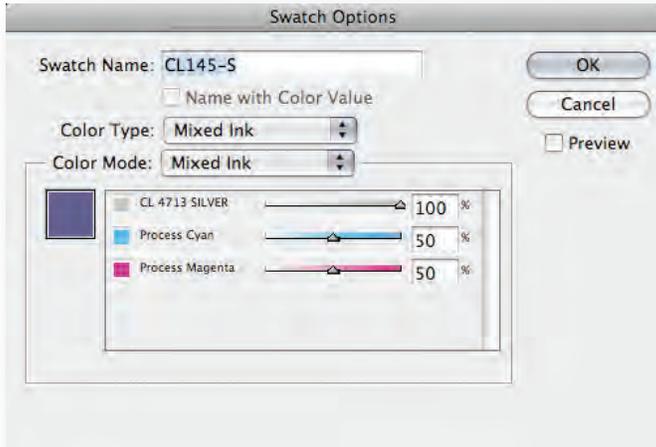
Step 3 - From the master list of Colors, select the colors and effects that you wish to use. You can add more than one color at a time simply by holding down the Command (PC:Control) key or by shift clicking a range of colors.



Step 3

Mixed ink Color Palettes

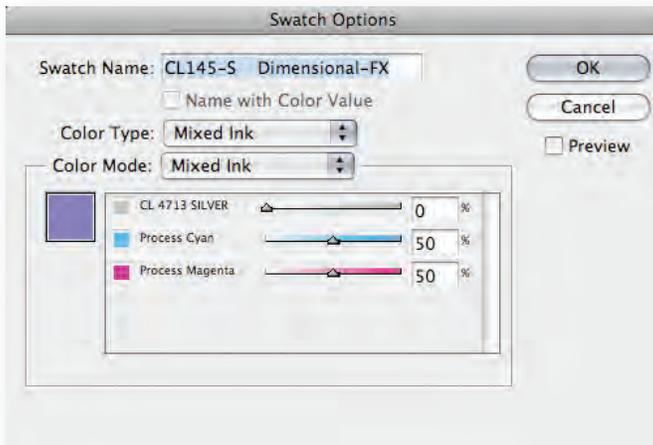
Each of the colors that you add to your artwork will have a pre-assigned amount of silver and CMYK. Double clicking on each of the colors will show you the percentages for each effect. These palettes are designed to do all the work for you, you do not need to edit or change any of these settings, but we have explained them below so that you may learn about how we create our systems.



Basic Metallic Colors

The basic metallic color will always have a solid silver mixed with the CMYK, this is the standard color that can be found on all Color-Logic Process Metallic Color Charts™. When printed on press, this silver ink is printed first and the CMYK inks which are transparent will print over the top.

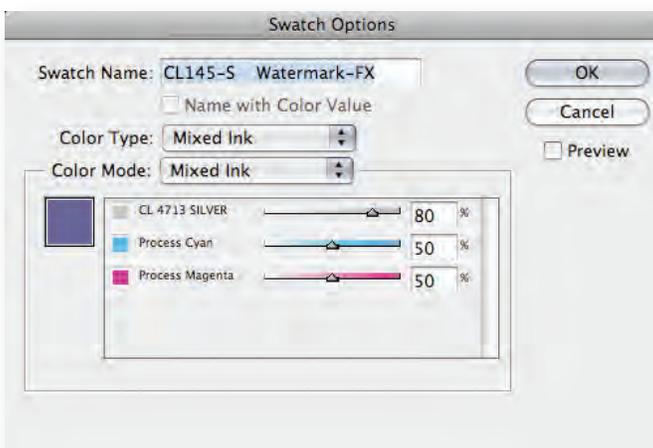
NOTE: Do not change any of the percentage within these colors or you will not match the color guides.



Dimensional-FX™

Each basic color is also accompanied with a Dimensional-FX™ color. This will be explained on the following pages.

Each Dimensional-FX™ color has ZERO silver. This effect is designed so that light will reflect from the metallic areas in a design and not on the Dimensional-FX™ areas - this creates contrast within the design and gives movement to an otherwise static printed media.



Watermark-FX™

Each basic color is also accompanied with a Watermark-FX™ color. This will also be explained on the following pages.

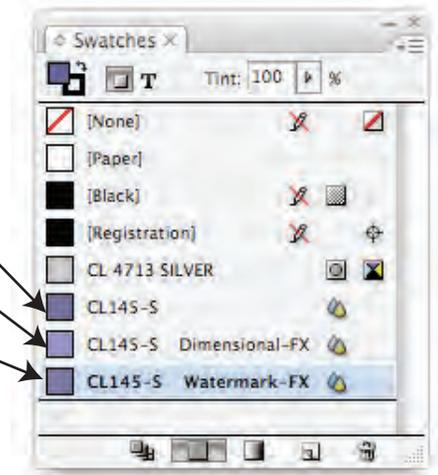
Each Watermark-FX™ color has 80% silver. This effect is designed so that light will reflect at different amounts depending on the angle that the design is viewed - under certain angles, the Watermark-FX™ pattern or design will seem to visually appear and disappear as the print is rotated.

NOTE: In each instance, the CMYK percentages always remain the same - it is through the controlling of the silver percentage that allows us to create the effects.

Creating Dimensional-FX™ and Watermark-FX™

In order to create the special effects, it is important to understand that they only work within a metallic area. For example, if you were to make some text and specify it as CL145-S Watermark-FX and just left this on a white background, that text would not visually appear and disappear - these effects can only happen if the pattern/design is placed within a metallic background. The best use of these effects is created when you use the same color schemes as shown below:

To see a video of how this effect was created, please visit: www.color-logic.com/vault



To create the above graphic

- Step 1**
Create a rectangle and give this a fill of CL145-S (This color is the basic metallic color and contains 100% silver mixed with the CMYK)
- Step 2**
Create some type/pattern/design to place within the rectangle. For the purpose of this explanation we used a type face.
- Step 3**
Color up each element with the special effect from the swatch palette. In this instance we colored up the words "Dimensional-FX™" with CL145-S Dimensional-FX and for the "Watermark-FX™" we chose CL145-S Watermark-FX

Watermark-FX™ Plus

Add subliminal patterns, wording, even complex guilloches to artwork using the new Watermark-FX Plus technique. This works particularly well on foil substrates or for areas in your design where you want a subtle metallic effect.



- Step 1**
Create a CMYK design.
- Step 2**
Create some type/pattern/design for your Watermark-FX Plus area and color it up as 30% of CL 4713 SILVER and set it to "overprint" from your attributes window (Window/Output/Attributes)
- Step 3**
Place your Watermark-FX Plus pattern over the top of your CMYK design.

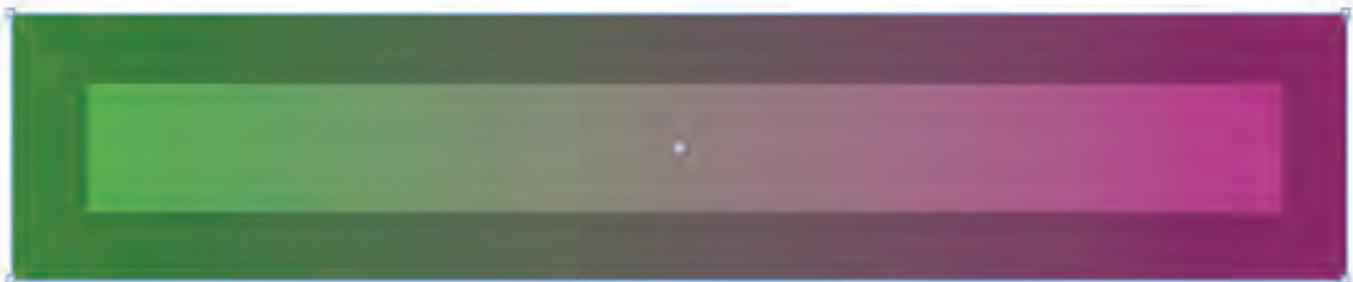
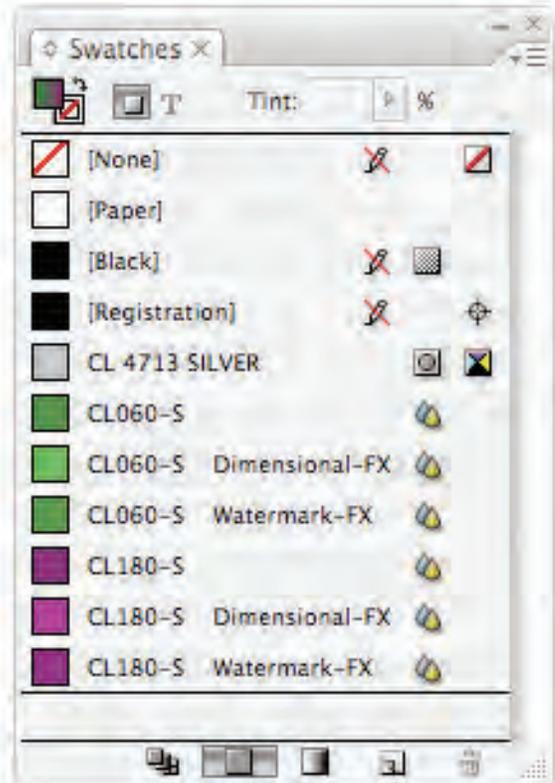
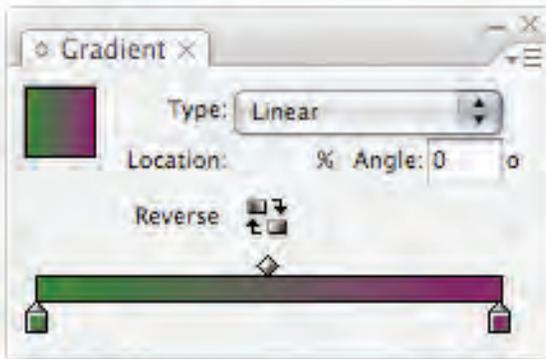
To see a video of how this effect was created, please visit: www.color-logic.com/vault

Top Tip: To view the separations within InDesign, open the Separation Preview window "SHIFT+F6" – The Separation window will allow you to see the individual separations which you can then turn on and off.

Gradation-FX™: Creating gradients

Because all InDesign Colors are pre-created for you, it is possible to be as creative as you like through simply designing and coloring up your artwork. Each swatch will take care of the silver separation for you. When designing with gradients, all you need to do is add your chosen colors to your swatch list, and specify a start and finish color to your gradient.

In the rectangle below, we added two sets of colors, a magenta (CL180-S) and a green (CL060-S). When this gradient is sent to print, it will have the silver separation already created as it is embedded within the color swatches.



A ← Drag the vignette start and finish points for the inner rectangle from here to here so that it matches the larger outer rectangle → B

To see a video of how this effect was created, please visit: www.color-logic.com/vault

Gradation-FX™: Adding a special effect to a gradient

If you want to be a little bit more creative, you can add one of the special effects to the metallic gradient. To make the graphic above we used Dimensional-FX™:

Step 1

Create your gradient and specify your start and finish colors (CL060-S on the left, CL180-S on the right).

Step 2

Create a smaller rectangle and make a gradient using the Dimensional-FX™ colors (CL060-S Dimensional-FX on the left, CL180-S Dimensional-FX on the right).

Step 3

With the inner rectangle still selected, click on the Gradient Tool from the tool bar, and click and drag the direction of the gradient so that it starts from the outer edge of the larger rectangle (point A) right across to the far edge of the large rectangle (point B) - this will ensure that you get the same start and finish gradient in both boxes.

Color-Logic Process Metallic Color System™

Adobe Photoshop®

Image-FX: Converting an Image into metallic

Using the Process Metallic Color System™ you can integrate metallic inks into your photographs - we call this process, Image-FX. Image conversion is a fully automated process that will analyze your image and calculate how much metallic ink is required for all areas within the image. Using advanced image separation algorithms, the Color-Logic Action Set creates the spot metallic channel for you, carefully ensuring that your highlights stay bright and white and your shadows don't over saturate with ink - shadows are non metallic, so we don't put silver into any of our shadow areas. This ensures you never print more ink than is required and avoids ink saturation limits on press.

To convert an image into a Color-Logic metallic image follows these simple steps:

Step 1 - Choosing your image

Image choice is very important when considering designing with metallic. If your image is too dark, very little metallic will be placed into the image. Remember that dark and shadowy images would not normally be metallic so the scripts employed in our image conversion tools do not make them metallic. Also remember that if you have lots of ink printing over a metallic, the ink starts to become opaque and as such the silver would not show through. Likewise, very pale images do not convert particularly well. For example, very pale pastel colors. A good choice of image is one that is well balanced with a nice midrange colors to work from, such as this lizard in the image to the right.

Note: We recommend designing in metallic with a 40/60% ratio of metallic to CMYK. In this image we shall convert the lizard into metallic and leave the background as CMYK. However, we could also make the background metallic and leave the lizard as CMYK which would make it seem more vibrant as the metallic background will make it seem visually brighter!



Step 2 - Load the Color-Logic Plugin

Window/Extensions/Color-Logic

To see a video of how this effect was created, please visit: www.color-logic.com/vault

Step 3 - Converting your image into metallic

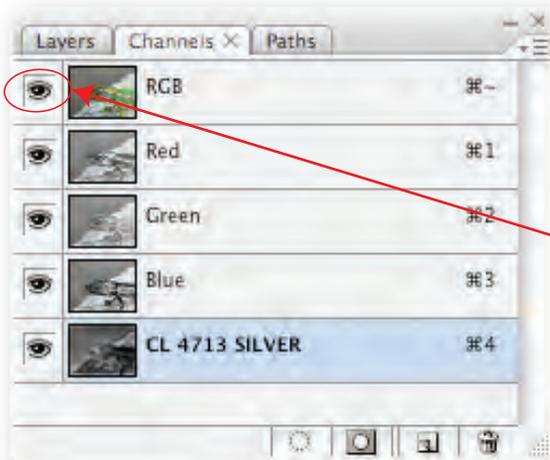
With your plugin now loaded, we can begin the generation of the metallic printing plate.

Click the button for your country, to process the image.

Note: The speed of the conversion will depend on the size of your image. Larger images may take longer to convert.



IMPORTANT: If you are using an image that you have currently been working on, we recommend that you save the file before converting your image. During the image conversion process, the Color-Logic Action Set will convert your file and then revert the image back to it's original format before finalizing the metallic printing plate. This ensures that if you have been working on an image with multiple layers, that the image is flattened before conversion so that the script can analyze all image data.



Step 4 - Viewing your new metallic channel

Once the conversion process has finished, you will find a new spot channel separation below your current color channels (Window / Channels)

The new spot channel is called CL 4713 SILVER - this is the Color-Logic metallic silver separation that will be used to print the metallic ink.

Click the "eye" icon to the left of the color channels so you can see just the metallic channel that has been created.

NOTE: The channels shown to the left indicates that this image is an RGB file - as this image was originally an RGB image when it was converted, it was returned to it's original saved format before completing the metallic separation. This is particularly important for users that work using an RGB color work flow so that your images are always reverted to saved.



Color image separations

The computer is not able to decide what content you would like making metallic, so the conversion process converts the entire image into metallic, allowing you to later remove unwanted areas



CL 4713 SILVER separation

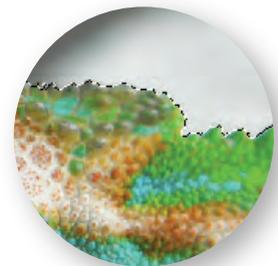
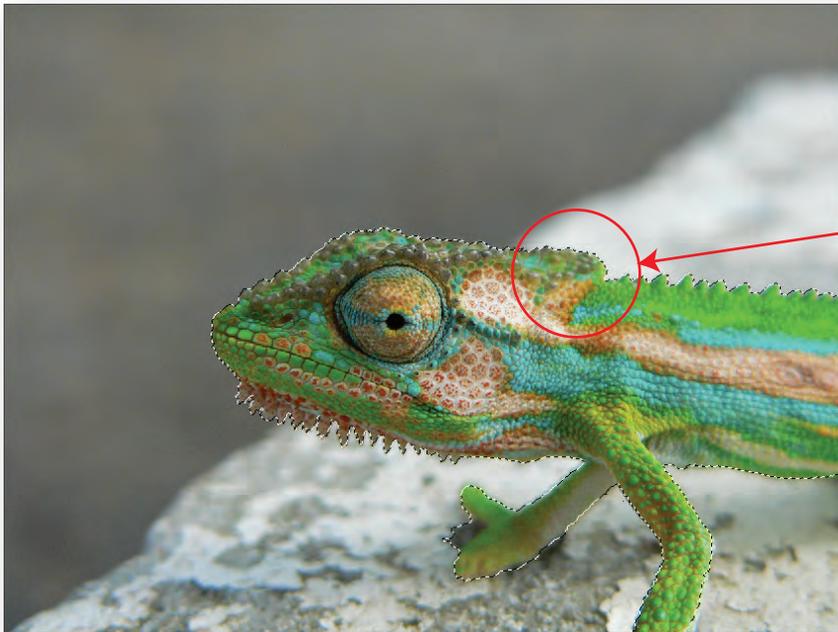
Notice that the dark shadow and very light colors on the image have very little silver in them... this script applies silver only to larger color areas depending on the ink saturation.

Step 5 - Masking your image

Your image has now been converted, but the entire image was made metallic - this is because the computer cannot make the decision for you as to where you would like to put the metallic ink and what you would like to be left as process. That is why the conversion process makes the entire image metallic so that you can then remove areas off the spot silver separation, leaving only the areas that you wish to appear as metallic.

Masks can be created in many ways, from using the magic wand through to the pen tool. The mask we made below was created using the magic wand tool to speed the area selection process up, but you can use your own tried and tested method.

If you have used the magic wand tool, you will have an active selection already visible around your selected areas. The active selection is identifiable by the dotted line that surrounds the selected area as can be seen in this image below. If you have made a mask using alpha channels or pen tools, please make a selection of your path/channel to make an active selection. (Command + Click the path or channel) (PC:CONTROL + Click)

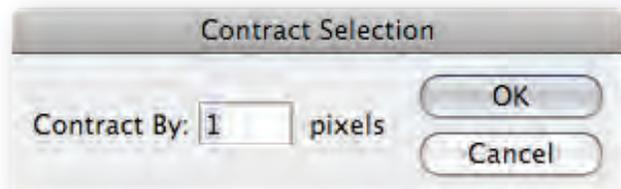


An active path/selection will show a dotted line around your masked area

Step 6 - Contract your selection

With the mask made active, from the SELECT menu, scroll down to MODIFY / CONTRACT... contract the selection by 1 pixel. Click OK.

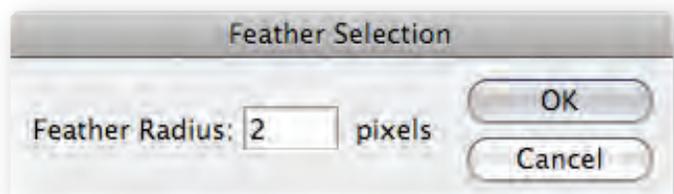
This will reduce the mask fractionally in size. We do this because we want to create a more natural edge to the mask - at the moment it has a sharp edge which will create a very definite edge to the metallic areas.



Step 7 - Feather your selection

With the mask still active, from the SELECT menu, scroll down to MODIFY / FEATHER.... feather the selection by 2 pixels. Click OK.

Feathering the selection will change the hard sharp edge of the mask into a softer gradation of silver to white. This creates a more natural look to the image. Depending on the size of the image, you might need to increase the feathering. 2 pixels will be sufficient for images of about 6 x 4 inch in size.



Step 8 - Removing the unwanted metallic areas

With the mask still active:

- i) From the SELECT menu, scroll down to INVERSE. The mask has now been transposed so that you are now selecting the areas outside of your mask, these are the areas that we do not want in metallic.
- ii) Turn off the color channels, (RGB or CMYK channels) so that you can now only see the metallic channel
- iii) Click on the metallic channel to make it active

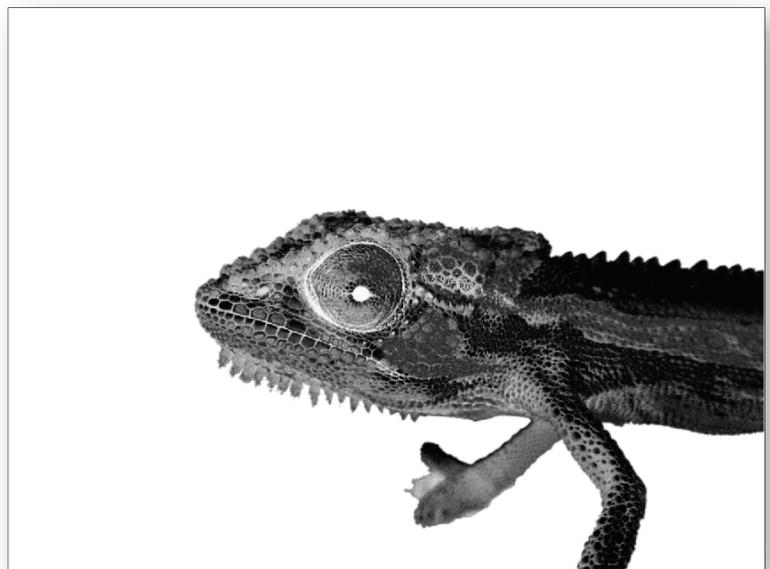


Metallic channel showing the inverted mask selection



- iv) Ensure that the foreground / background color of your color picker is reset to Black / White, with the white being the background color

- v) Press the delete key - your background image area will now be deleted and replaced with white - the silver printing ink will now only print in the lizard where the gray/black tones are



Metallic channel showing the final metallic channel

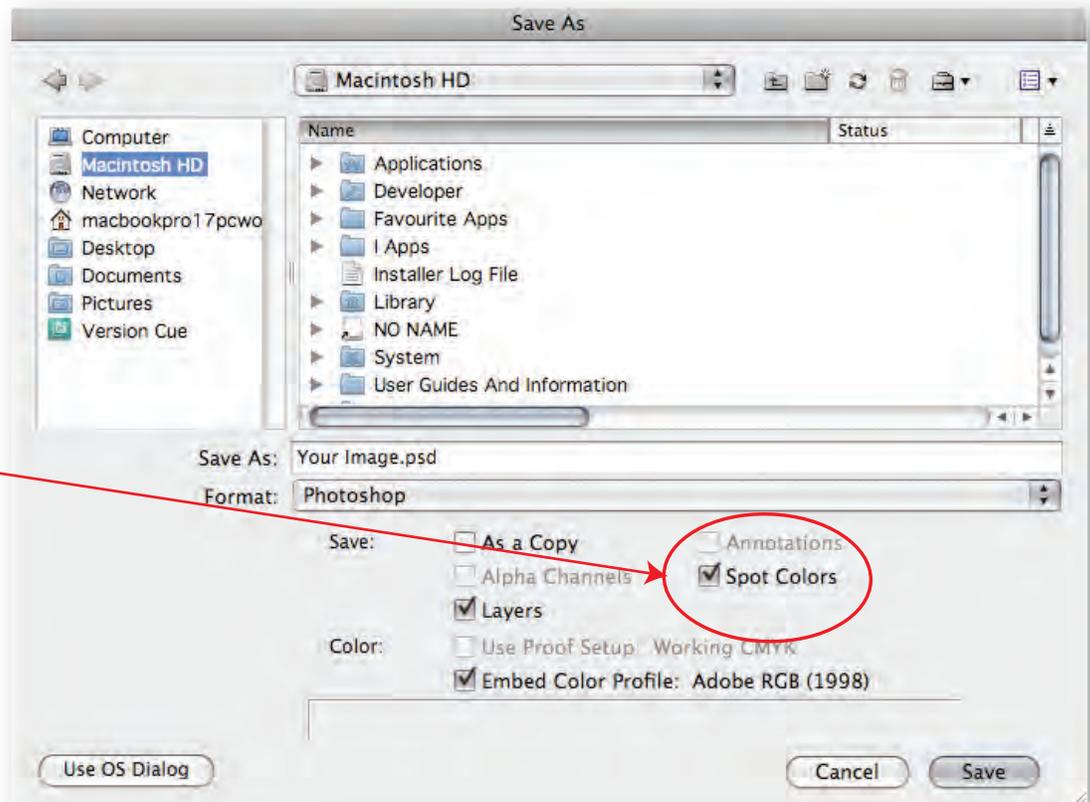
Step 9 - Saving your file

Your image is now complete and ready for saving. Save your image as either TIFF, PSD, PDF or DCS2.0 in order to save your file with the spot channel.



Metallic channel showing the inverted mask selection

When saving your image, ensure that you have the SPOT COLORS option checked - this will allow you to import the image into your page layout along with the spot metallic channel.



Using the Color-Logic color palette

When designing other elements from scratch within Photoshop, such as text or other vector styled graphics, it is possible to use the Color-Logic palette from the Color Picker. All Color-Logic colors have been designed into an easy to use color book stored within Photoshop. These colors are CMYK, so you will need to make these areas metallic by generating a metallic printing plate. To do this please follow these simple steps:

To see a video of how this effect was created, please visit: www.color-logic.com/vault



Step 1 - Opening the palette

From the Foreground/Background tool at the bottom of your tool bar, click on the foreground color box. This will take you into the window you see to the left - this is the Color Picker which you will all be familiar with.

To access the Color-Logic color library, click on the COLOR LIBRARIES button.

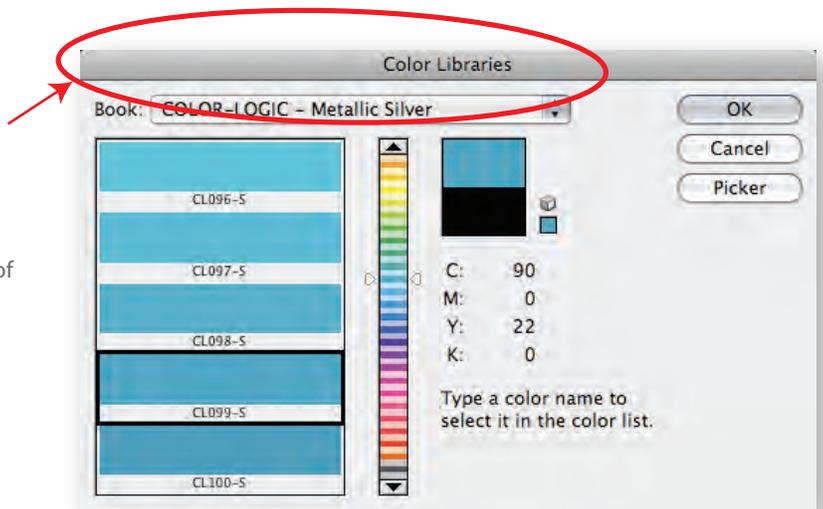
Step 2 - Choosing your color

From the Color Libraries window, click on the BOOK drop down menu and locate the COLOR-LOGIC - Metallic Silver palette. This palette contains all 250 Color-Logic colors.

To select a color to use in your design, either scroll through the list which is in numerical order, or type in the first five (5) digits of the color you wish to use, for example, type in CL099. This will take you directly to CL099-S.

Choose your color and click on OK.

You will now be taken back to your document and the color you chose will now be your foreground color.



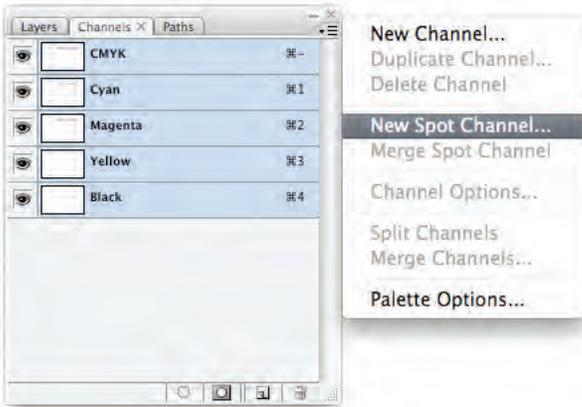
Step 3 - Create your design element

For the purpose of this explanation we have created a line of type and colored this up as CL157-S from the Color-Logic palette.

This type is still only CMYK, we need to make this metallic by creating the metallic printing plate that will print underneath this colored text.

Make me metallic

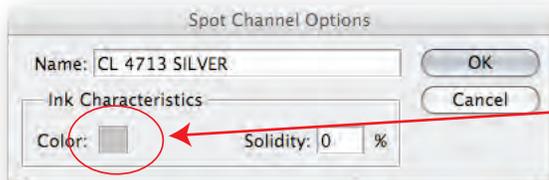
Make me metallic



Step 4 - Making the spot channel (metallic)

From your CHANNELS window, create a "New Spot Channel"

If you have the CL 4713 SILVER channel already created, you may skip this section and move on to STEP 6.



Step 5 - How to setup the spot channel

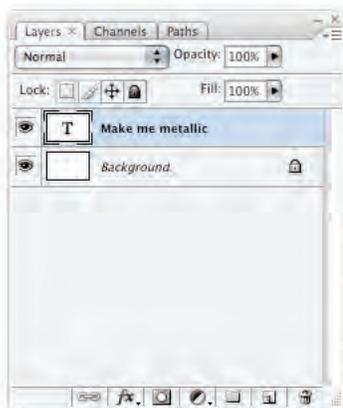
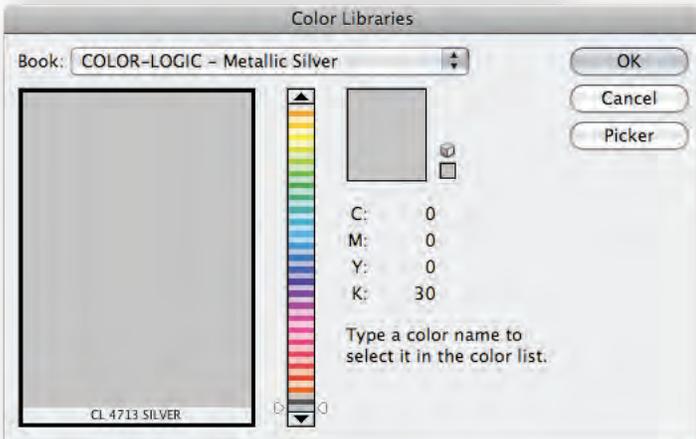
From the Spot Channel Options dialogue window that opens, click on the COLOR box - this will open up the Color Picker

Click on the BOOK drop down menu to locate the Color-Logic - Metallic Silver palette and scroll down to the very bottom of the list. there you will find the spot channel "CL 4713 SILVER"

Click on the CL 4713 SILVER color to select it and click on OK.

It is advised to set the SOLIDITY to 0%. Solidity is a visual guide so that you can see where your spot channel is within the document. This setting will not effect the final separations and is used only for visual appearance on screen. Try setting this to 50% and then 100% and you will see how this looks on your screen.

Your spot channel has now been given the correct name and Color.



Make me metallic

Step 6 - Make a selection of your design elements

To make the text metallic that we created in step 3, locate your LAYERS and then using the COMMAND key (PC: CONTROL) click on the TYPE layer. This will make a selection of that text.

If you have multiple areas that you wish to select, holding down the SHIFT + COMMAND + CLICK (PC: CONTROL + COMMAND + CLICK) will add to your selection.

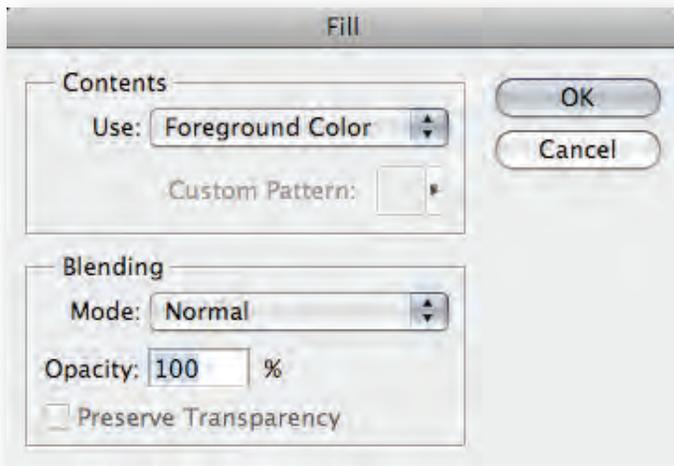
You can also use this technique with layers!



Step 7 - Reset your Foreground / Background color

Click on the metallic channel (CL 4713 SILVER) and then reset your Foreground/Background color to black and white as shown here.

It is important to ensure that you have the black as the foreground color as we will be using this to fill the selection in the next step



Step 8 - Filling your selection

With your selection still active from the previous steps, FILL the active area on your spot channel with 100% foreground color.

This will put 100% black into the masked areas.. Where ever 100% black is on this channel, 100% silver will be printed.

If you were to fill this with 50% black, 50% silver would print in that area!

Step 9 - Viewing your metallic separation

You have now completed making your elements metallic. On your spot channel, you should see black and white content, such as the text below - the solid black areas (which will be where the silver prints) should always go under any color that you choose from the Color-Logic library. You have to put solid silver underneath these colors to make them work otherwise they will not come out metallic. The easiest way to check to see if you have done this correctly is to view the metallic channel.



This is what you will see on your metallic channel. Where ever you see solid, you get solid silver, where ever you see a tone, you will get a tone of silver.

Special Effects

Using the Color-Logic Process Metallic Color System™ you can add dimension and movement to your metallic photographs using either Dimensional-FX™ or Watermark-FX™. Both techniques are explained below.

Creating Dimensional-FX™

To create Dimensional-FX™ within an image we need to remove the metallic content from within a metallic area on the photograph. The example given below shows how we can add a dimensional pattern along the hood of the car, almost like a decal graphic. This area of non metallic next to metallic will make the Dimensional-FX™ area visually change hue from light to dark giving depth and contrast.

To see a video of how this effect was created, please visit: www.color-logic.com/vault



Step 1

Convert your image into metallic and perform the necessary steps to make your metallic channel - for example, remove unwanted areas from the metallic channel - in this example we removed metallic from the windows, headlights, front grill and wheels.

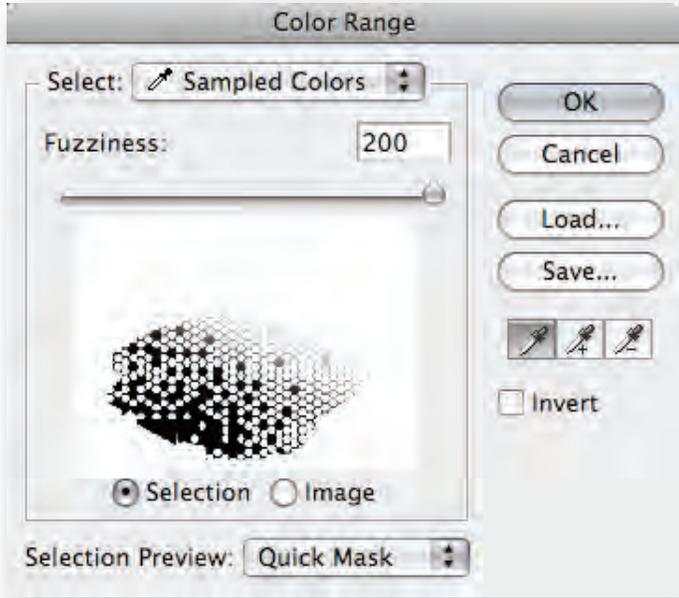


Step 2

Next, create a new layer on your image and create a pattern/type/design that you wish to be the Dimensional-FX™ area. For this demonstration we have created a honeycomb effect in Black and White. We have used a gradient so that the front part of the pattern is solid and the far end on the right is white. The pattern we have created was designed to fit the area of the car.

Turn off your BACKGROUND layer (and any other layers that you might have on your image) so that you are only seeing the new layer you created for the Dimensional-FX™. Making sure this new layer is active (click on the layer) as we now need to make a selection of this pattern...





Step 3

Make a selection of the black areas within your Dimensional-FX™ pattern you created. To do this we used the Color Range tool - SELECT MENU / COLOR RANGE. Click on the darkest area and then move your FUZZINESS slider up to select a greater range. We moved the slider all the way up to 200 to ensure that we selected the entire gray range as can be seen in the image below showing the Quick Mask.

Click on OK.



Step 4

With your selection now active, click on the spot metallic channel (turn off the CMYK so that you can see the channel clearly).

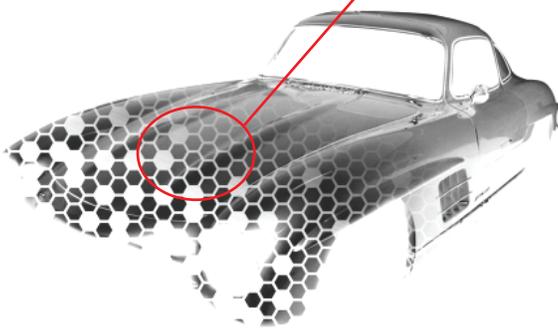
Make sure that your Foreground /Background has been reset to Black and White, with the White being the background color.

Next, press delete - this will delete the pattern from the metallic channel. The areas that show in white will have no silver. The areas in black/gray will print in metallic.

NOTE: You no longer need the original pattern that you made for the Dimensional-FX™, so that layer can now be deleted.



Original metallic channel before removing the Dimensional-FX™ areas



Metallic channel after deleting the Dimensional-FX™ patterns



Final metallic image with the Dimensional-FX™ pattern showing

Creating Watermark-FX™

To create Watermark-FX™ within an image we need to reduce the amount of metallic content from within a metallic area on the photograph. The example given below shows how we can add a watermark type effect that when moved in the light, the pattern and/or text visually appears and disappears as the print is moved. This is an excellent way to place company logos and subliminal text into designs so that they do not overpower the main design yet grab the attention of the viewer with their visual effects.

To see a video of how this effect was created, please visit: www.color-logic.com/vault



Step 1

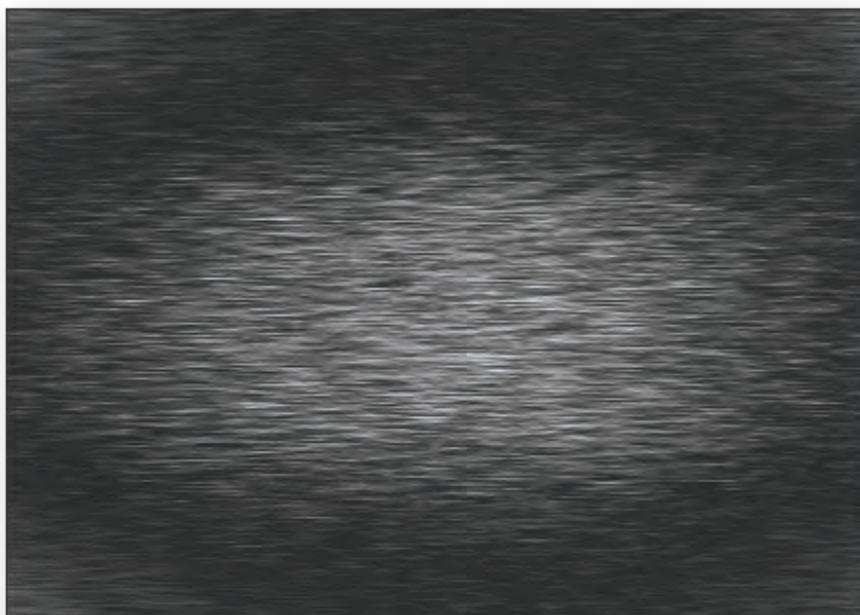
Open your image and convert it into metallic using the Color-Logic Action Set. This will generate a metallic printing plate for you to begin working with.

Remember, if you do not want your entire image metallic, you will need to remove the metallic areas off the spot channel. In the image to the left, the entire image will be metallic to show a brushed metal effect.

Step 2

Once Photoshop has finished generating the spot channel, go to your channels window and switch off the CMYK channels so that you are only seeing the metallic plate. The easiest way to do this is to just click the spot channel and it will automatically turn off the CMYK inks.

Notice the metallic channel created has highlight areas - these are the natural highlights within the brushed steel image.



Step 3

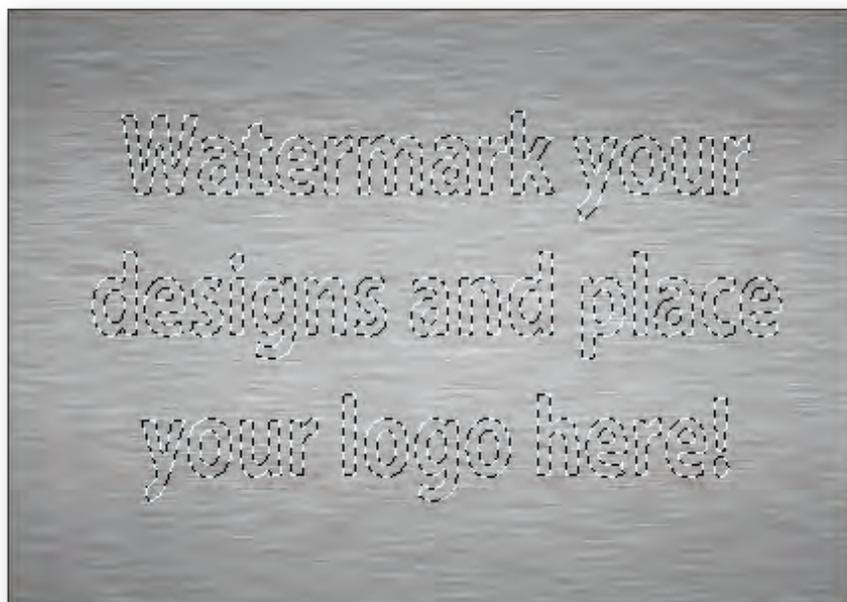
On a NEW layer, create your Watermark-FX™ design - in this instance we have chosen to create some subliminal type, but you could create anything, such as company logos or a pattern.



Step 4

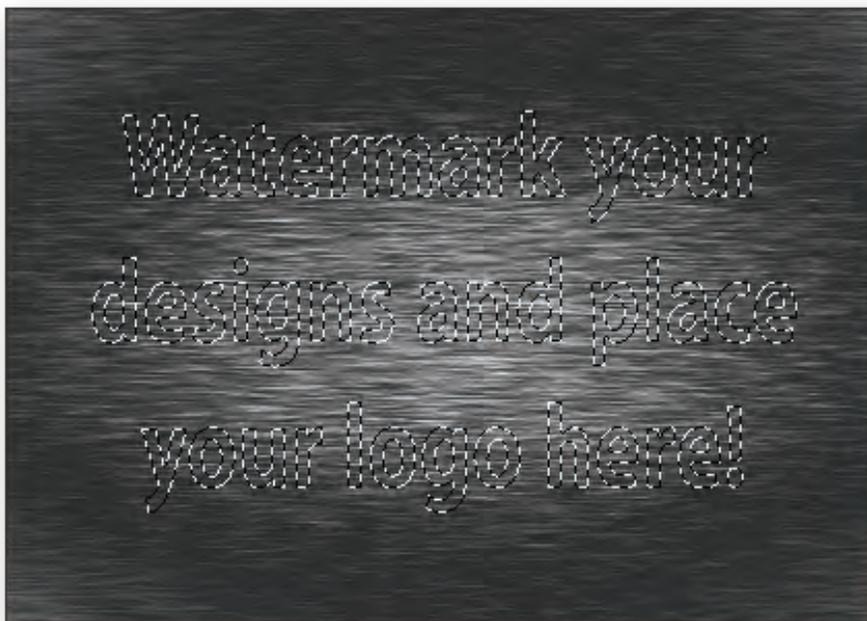
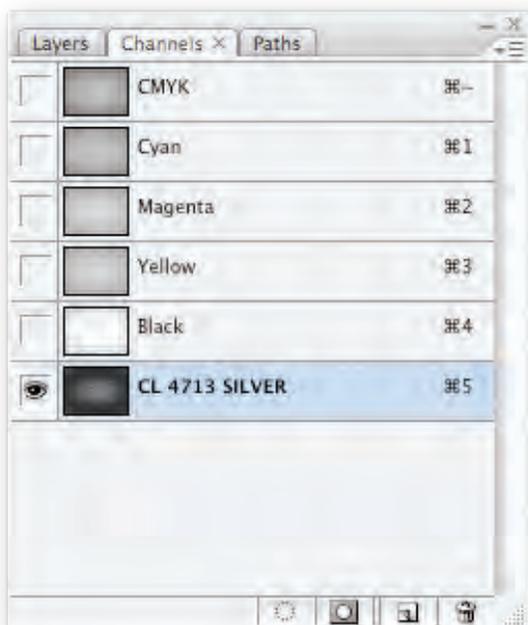
Make a selection from your Watermark-FX™ layer. Holding down the COMMAND (Apple Key) (PC:CONTROL) whilst clicking the icon of that layer will make a selection for you.

Next, switch off your Watermark-FX™ layer, we no longer need this - but do not throw it away, just in case you need it for something else! The Watermark-FX™ pattern that you created is only required for making a selection from, we do not actually use this layer.



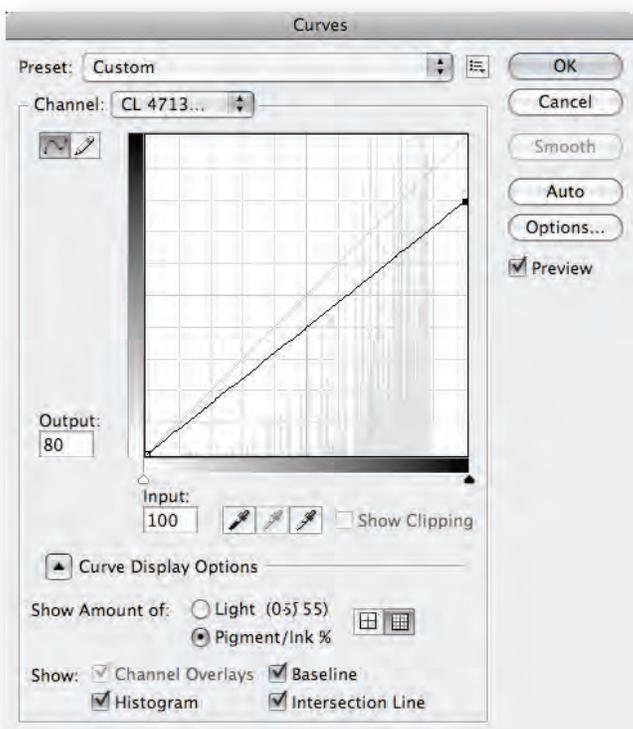
Step 5

Go to your channels window and switch off the CMYK channels so that you are only seeing the metallic plate. DO NOT deselect your selection as we need this to create the Watermark-FX™. Make sure you are selecting just the metallic channel.



Step 6

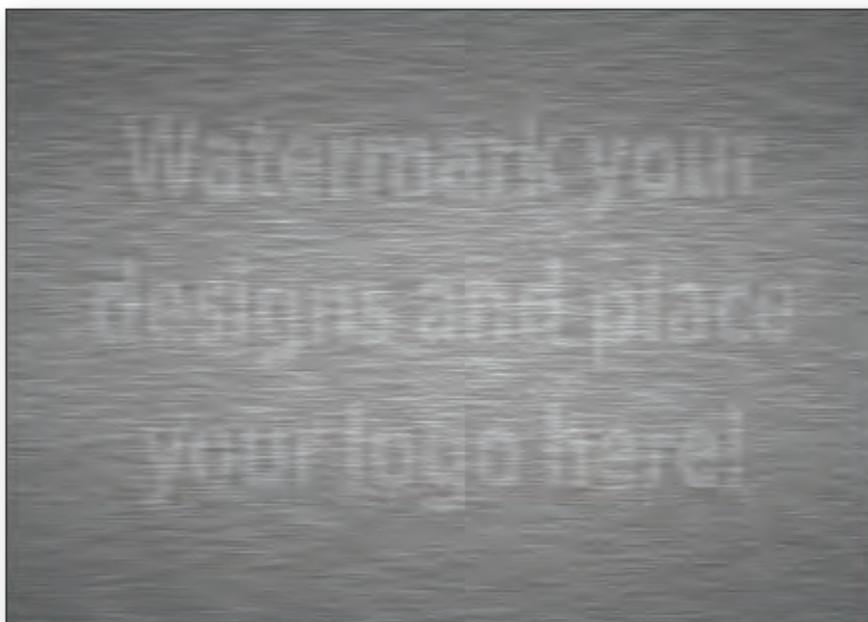
With your selection active, open up CURVES (CMD+M /PC: CTRL+M). In your OUTPUT box, set this amount to 80 and the INPUT should remain as 100. This will reduce your solid areas and all sub values down in a linear manner by 20%. So for example, what was 100% silver will now be 80% silver. The subtle difference between these values creates the effect and the pattern will visually disappear at certain angles. Press OK to confirm your settings



NOTE: It is important to use curves for this effect so that all tones are reduced by 20% - where there are highlight areas there would be no silver, so it is important to consider when and where you would use this effect. An image with a heavy metallic content like the image above is recommended.

Step 7

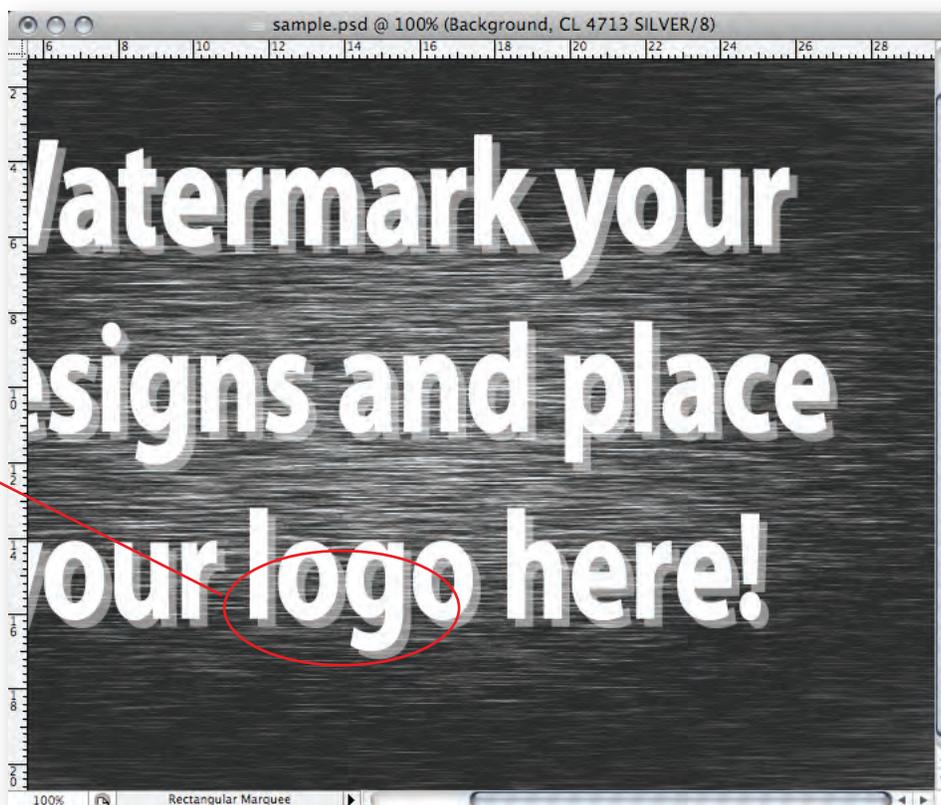
Switch back on your CMYK channels and you will now see the final effect. Save your file and you're done!



Combining effects

It is possible to create multiple effects using the Color-Logic system, below we are showing the metallic channel we just created in the steps above, but after we applied our curves, we moved our selection off to the left slightly. We then deleted the area in the selection to white. This now gives us a Dimensional-FX™ pattern with a Watermark-FX™ drop shadow!

NOTE: Feathering your selection will create a softer edge to the effects and have a more subtle appearance.



Creating Watermark-FX™ Plus

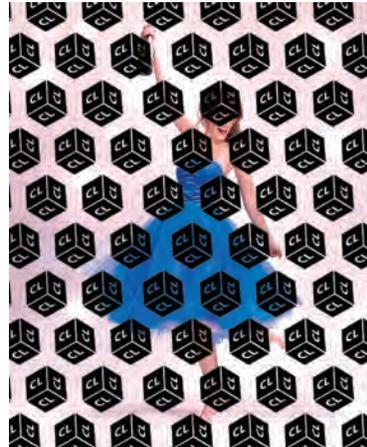
Add subliminal patterns, wording, even complex guilloches to artwork using the new Watermark-FX Plus technique. This works particularly well on foil substrates or for areas in your design where you want a subtle metallic effect.

To see a video of how this effect was created, please visit: www.color-logic.com/vault



Step 1

Open a CMYK image



Step 2

Create a new layer containing your type/pattern/design that you want to use for the Watermark-FX Plus areas.



Step 3

Create a new Color-Logic spot channel (see page 23)



Step 4

Make a selection of the Watermark-FX Plus elements you created in step 2.



Step 5

Click on your spot metallic channel and fill the selection area with 30% Black (this will be your Watermark-FX Plus area)



Step 6

You have now created Watermark-FX Plus ... your design will have 30% metallic printed underneath the CMYK image.

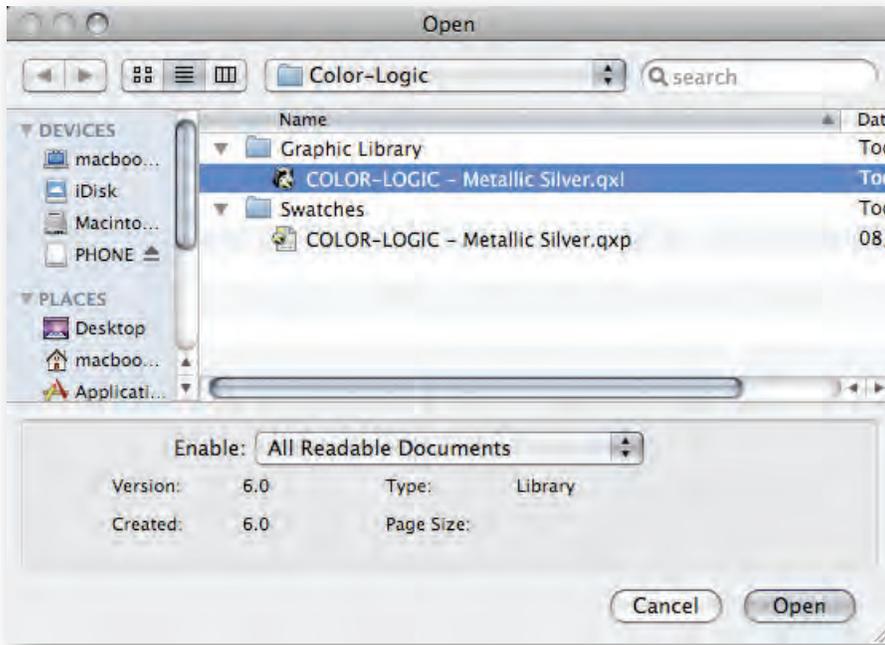
Color-Logic Process Metallic Color System™

QuarkXPress®

Graphic Library

To simplify the working of metallic colors within QuarkXPress® a pre-designed floating library palette has been created that contains all the Color-Logic process metallic colors and their associated special effects. All a designer is required to do is color up their designs in the normal manner as they would with any other color palette.

The Color-Logic Graphic Library acts as a visual aid to creating the special effects as well as working as a color palette.



How to open the Color-Logic Graphic Library for QuarkXPress

1. Open QuarkXPress
2. From the *FILE* menu scroll down to *OPEN* and then when the dialogue window opens, direct your computer to the following folder within QuarkXPress:
Applications / QuarkXPress / Color / Color-Logic / Graphic Library
3. Within this folder you will find the file called "Color-Logic - Metallic Silver.qxl" select this file and click on *OPEN*.
4. A new floating window will appear within QuarkXPress, this will remain open at all times unless you decide to close it, in which case you will need to repeat steps 1 to 3 to reopen it.



Using the Color-Logic Graphic Library

Listed within the floating Library are all of the Color-Logic metallic colors which are also shown with both of the special effects; Dimensional-FX™ and Watermark-FX™.

Simply "click & drag" your chosen color and/or effects to your documents drawing board area (somewhere outside your actual page design) - you will notice that this copies and creates a cube of the chosen metallic color on your drawing board. At the same time, this automatically adds the metallic color to your color swatches window.

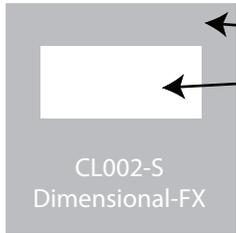
If you chose to drag across to your document one of the special effects, you will notice that the library file actually shows you how to create the effect. For example, if you drag CL002-5 Dimensional-FX into your document it will create a square with a background color of CL002-5 which is a solid metallic color, it will then create a small rectangle of color marked up as CL002-5 Dimensional-FX, it is this smaller rectangle that is the special effect, but you must have a background metallic surrounding it in order for it to work. These library files will act as a permanent reminder on how to create the effect.

Special Effect techniques

Listed within the floating library are the effects for each metallic color. As before, simply drag and drop the desired effect onto your document and it will automatically create a sample of the effect for you for reference, whilst also adding all the required colors to your Color Swatches.

Creating Dimensional-FX™

Step 1 - Drag & Drop your chosen metallic colors and/or effects from the graphic library into your Quark document. As an example, we have chosen CL002-S Dimensional-FX to create:



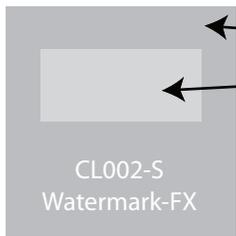
CL002-S
 CL002-S Dimensional-FX (this can be any pattern/design/type etc)

This effect is created by having a solid metallic background (CL002-S) - when light shines on this area it becomes very bright and makes the smaller rectangle design (the Dimensional-FX™ pattern) visually look darker in hue. When no light is shining on the metallic areas, the rectangle (Dimensional-FX™) looks visually brighter. It is this flip-flop effect of light bouncing off metallic and non metallic areas that creates the effect!

Step 2 - Using the pre-made sample as a guideline on how to produce the effect, you can now create your own metallic design and incorporate some Dimensional-FX™ patterns.

Creating Watermark-FX™

Step 1 - Drag & Drop your chosen metallic colors and/or effects from the graphic library into your Quark document. As an example, we have chosen CL002-S Watermark-FX to create:



CL002-S
 CL002-S Watermark-FX (this can be any pattern/design/type etc)

This effect is created by designing a solid metallic background (CL002-S) and a smaller rectangle within it colored up as CL002-S Watermark-FX. Although the pattern can be visually seen, at some angles when light shines on these areas the reflecting light from both parts in the design shines so brightly that the Watermark-FX™ areas will visually disappear. It is through this reflection of light combined with the percentage of silver in the Watermark-FX™ area that makes it work.

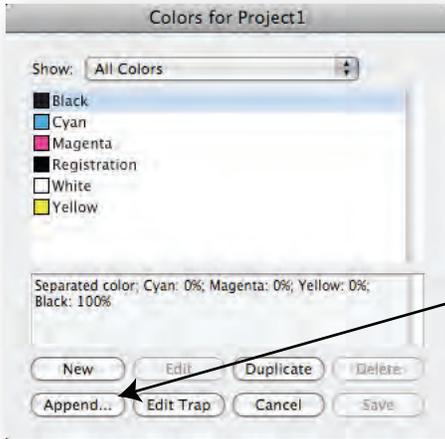
Step 2 - Using the pre-made sample as a guideline on how to produce the effect, you can now create your own metallic design and incorporate some Watermark-FX™ patterns.



The above stars have each been created using a combination of metallic, Dimensional-FX™ and Watermark-FX™. The outer star is a full spot metallic, the medium star is Watermark-FX™ which will visually appear and disappear as the print is moved, and the inner small star is Dimensional-FX™ which will have the flip-flop appearance of changing from light to dark.

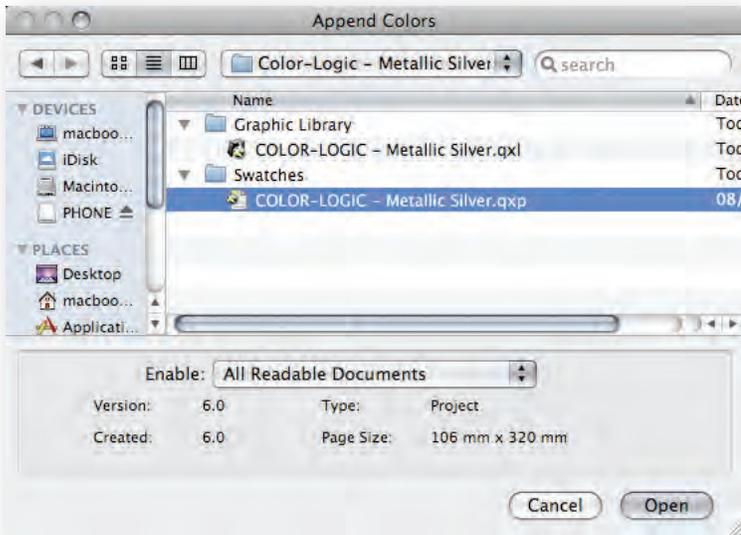
Appending Colors from the Color-Logic Swatch Palette

Also provided with the Color-Logic system is a QuarkXPress document that contains all the swatches and effects. Once you have mastered the use of the Color-Logic Graphic Library, if you wish, you can close this library and use the APPEND feature within QuarkXPress to add colors into your document.



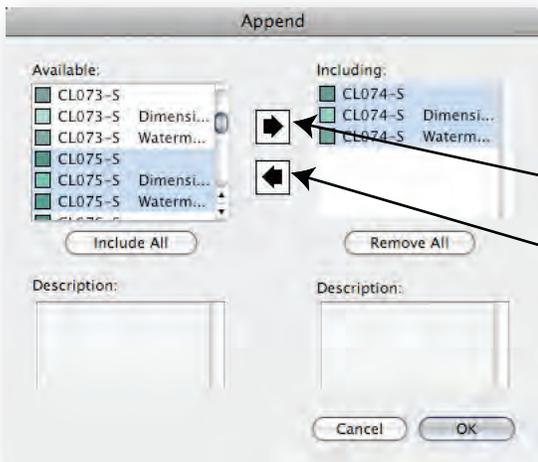
Step 1

1. Create a New QuarkXPress document
2. From the EDIT menu, scroll down to COLORS
3. From the dialogue window that appears, click on APPEND



Step 2

1. When the APPEND COLORS dialogue window opens, direct your computer to the Color-Logic - Metallic Silver.qxp file, you will find this file located in the following location:
Applications / QuarkXPress / Color / Color-Logic / Swatches
2. Select the file and click on OPEN



Step 3

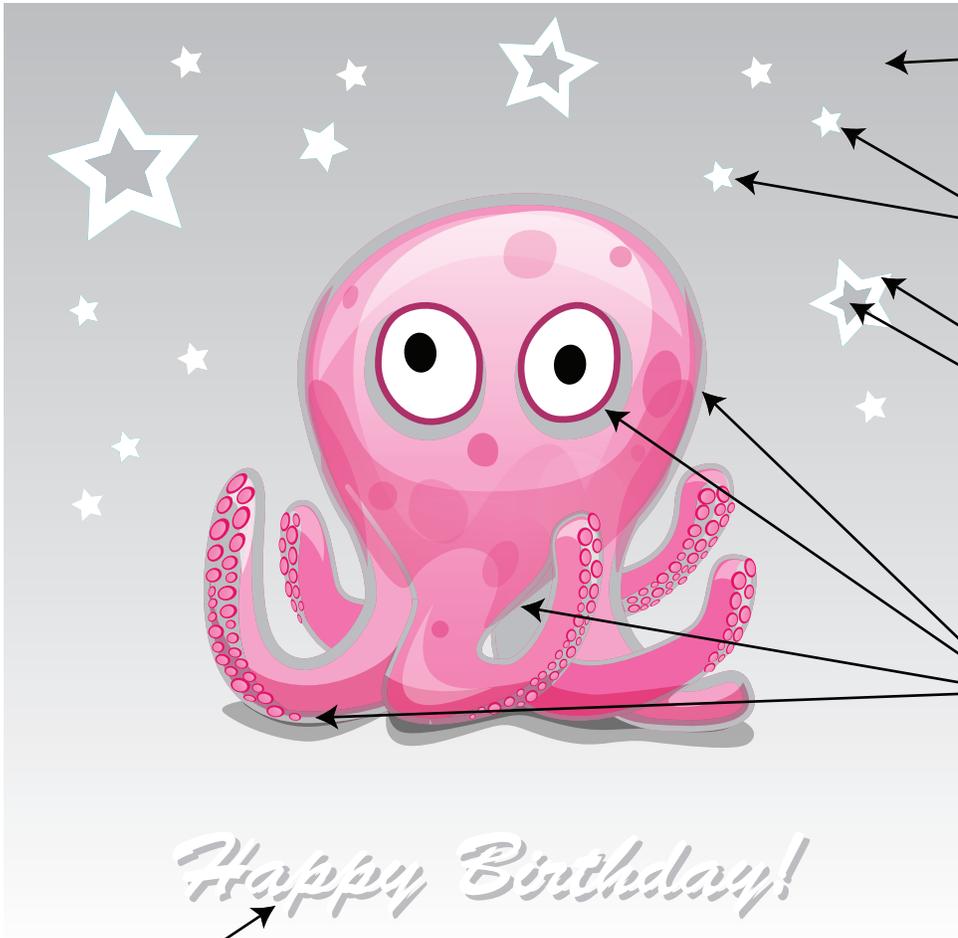
1. In the APPEND dialogue window, scroll through the colors and select the ones you wish to add to your document. In this instance we chose CL075-S, CL075-S Dimensional-FX and CL075-S Watermark-FX
2. To add them to your document, click on the right directional arrow.
3. If you make a mistake, click on the color in the right panel and then click the left directional arrow to remove it from your listing
4. When you have finished choosing your colors, click on OK. The colors will then be added to your currently open document.

Color-Logic Process Metallic Color System™

Using metallics in a real job!

Creating a real live job!

Below we give an example of how the Process Metallic Color System™ could be used in a real life scenario. We have taken the greeting card industry as our target industry and created a range of four cards. Each card has multiple metallics and special effects. Because all of these cards can be printed on the same sheet at the same time, you will only need to pay for a five color print job in total, no matter how many metallics you use! Also, if you were to print these cards using the Color-Logic BEST offset silver, you would be able to aqueous coat or UV varnish the job to protect them!



CL100-S

Background designed as 100% metallic CL100-S at the top, vignetting down to CMYK at the bottom.

CL100-S Dimensional-FX

Small Dimensional-FX™ stars

CL100-S Dimensional-FX

CL100-S

Large star is created as Dimensional-FX™, the smaller inner star is created as CL100-S. This kind of technique of applying metallic next to non metallic and then next to metallic again, will create even greater movement and dimension on the page

CL189-S

The main darker frame areas on this octopus have been created with metallic content, all the lighter pink areas have been left as CMYK to give some vibrancy to the design. Too much metallic will look flat, ideally using a 40/60% ratio of metallic to process ink coverage is advised, also, leaving the subject as CMYK and having the background as metallic will make it pop.

CL100-S

A metallic drop shadow has been created behind the white "happy Birthday" text.



Adding more than one metallic!

Why not add more than one metallic to your designs? The cards above have all been designed with the main stars being different metallic colors. Typically each card uses four different metallic colors on each design + CMYK.

Color-Logic Process Metallic Color System™

Outputting for White Ink Printing

Process Metallic Color System[®] for white ink printing

“Invert on the RIP for White Ink Output”

Creating a file for printing with white ink

1. A design is created using the Process Metallic Color System to create a five color file – CMYK + CL 4713 SILVER (this is the effect printing plate which you would print with either silver or white ink).
2. The 5 color file is sent to the RIP for processing.
3. The user will now have the option to do one of two things:
 - a) Print the file using a silver ink + CMYK.
 - b) Print the file using a white ink on metallized substrates or a clear film (the clear film would be for laminating onto a metallized substrate).

Based on the choice from above (metallic ink or white ink) the user will have a couple of options;

1. If printing on a machine that prints a metallic silver ink on a substrate, which could be either offset, inkjet, flexo etc, the RIP will process the file by mapping the silver channel in our PDFs to the silver ink on the machine and/or plate. However, as these print methods can also print metallized or clear substrates with white inks, the RIP can also use the same PDF data and print a white ink. To do this the RIP should be able to invert the silver channel so that you get a negative separation/plate, and then map/print that to the white ink. This allows the user to use the same RIP'd data to print onto a multitude of substrates without the need to change the artwork – one system, multiple outputs.
2. The second option is for using the RIP with proofing devices like the Epson WT7900 proofer. This machine has an opaque white ink and can be used to print onto metallized substrates and clear film for proofing applications. So, when the user prints a Color-Logic file to this device, the RIP will use the same process of inverting the silver channel to make the right reading negative plate, and then map that to the Epson white ink.

Most high end RIPs, such as EFI, Caldera, Onyx, ColorGATE, Compose, GMG etc, can all do the invert, however if the invert option is not available, the user can do the invert using a tone curve. To do this, when you RIP and then print a file, apply an individual plate curves to the silver separation, transposing the shadow and highlight points so that 0% becomes 100% and 100% becomes 0%.

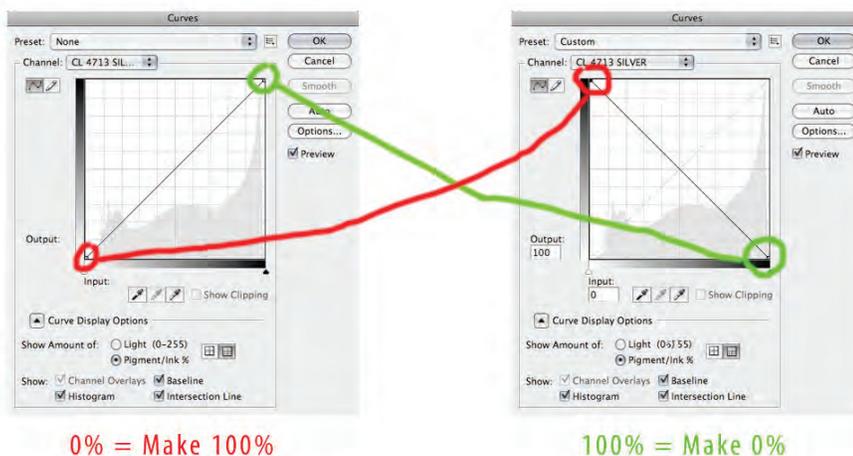


Image to the left shows a visual explanation of using a plate curve to invert the silver channel to make a white ink plate. (this was done in Photoshop as a visual explanation only).

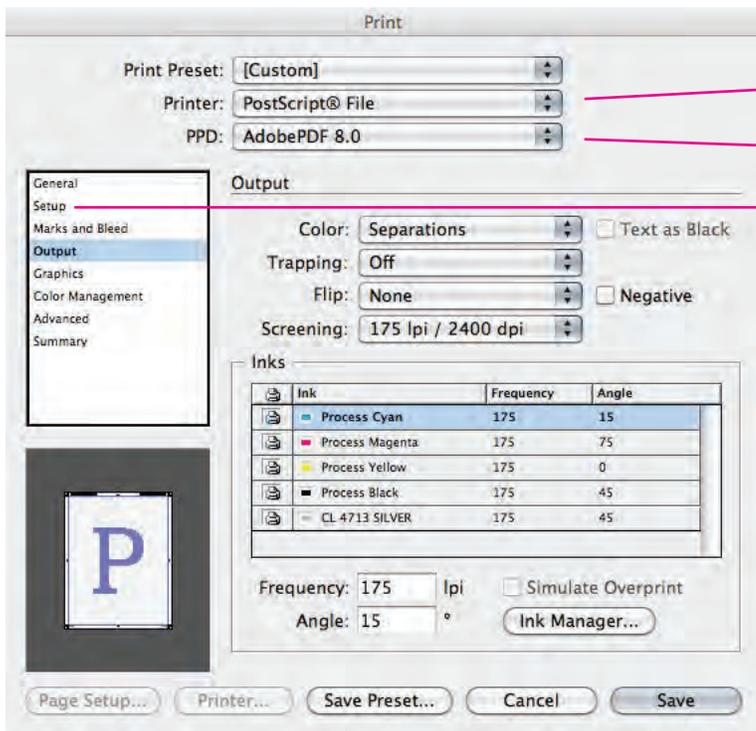


Process Metallic Color System[®] for white ink printing

“Rasterizing for White Ink Output”

This methodology should only be used when there’s no INVERT option on the RIP or plate output device to automatically invert the Color-Logic effect printing plate (CL 4713 SILVER). Normally, the RIP would invert the CL 4713 SILVER channel, which would enable you to print that separation with a white ink. For any RIP that cannot do this invert, the user should use the following method to rasterize their file and manually do the invert within Adobe Photoshop:

1. Create a pre-separated Postscript file to your computer desktop for the CMYK and CL 4713 SILVER channels. The following screen shot shows how you can generate this file, which is possible from all major software applications.



Choose **Postscript** from the Printer menu

Choose **AdobePDF 8.0** from the PPD menu

In the **OUTPUT** options section, change the color mode to **SEPARATIONS**.

NOTE: You may also wish to add Marks and Bleed depending on the document.

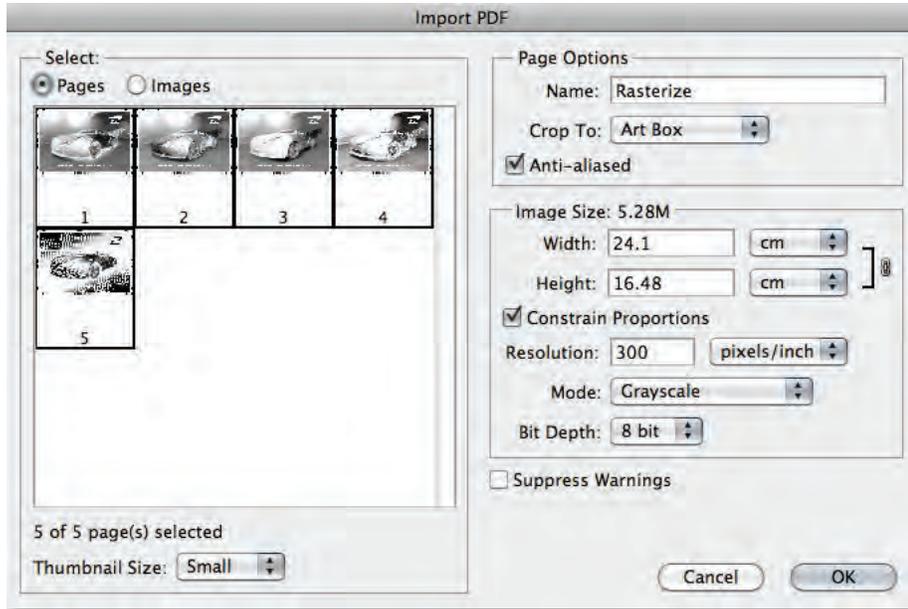
Once you have your settings complete, click on the **SETUP** option and change the paper size to CUSTOM - this will automatically create the correct page size attributes based on the document dimensions and any marks and bleed you have specified.

2. Open Acrobat Distiller and convert the pre-separated Postscript file into a PDF file. You will now have a pre-separated PDF file (five grayscale channels) which we can now open up and rasterize in Adobe Photoshop[®].

Your pre-separated PDF file should look like this (CMYK plus CL 4713 SILVER):



3. Open your pre-separated PDF in Photoshop and choose to open all the pages as Grayscale images:



To open all separations Shift Click each thumbnail.

Choose **ART BOX** from the Crop To menu

DO NOT change the image size, this will automatically be the correct size based on your file.

Choose **GRAYSCALE** as the MODE

Click **OK**

4. Photoshop opens each page of your PDF as a separate file. Cycle through each image and choose **Layer > Flatten Image**.

5. Next, using any one of the images that are open, choose **Merge Channels** from the **Channels** panel. (If this feature is grayed out, you probably either forgot to flatten or didn't open them in Grayscale mode.) When presented, choose **Multichannel** as your mode. You should see "5" Channels highlighted if you have done the above steps correctly.



6. Click **OK**

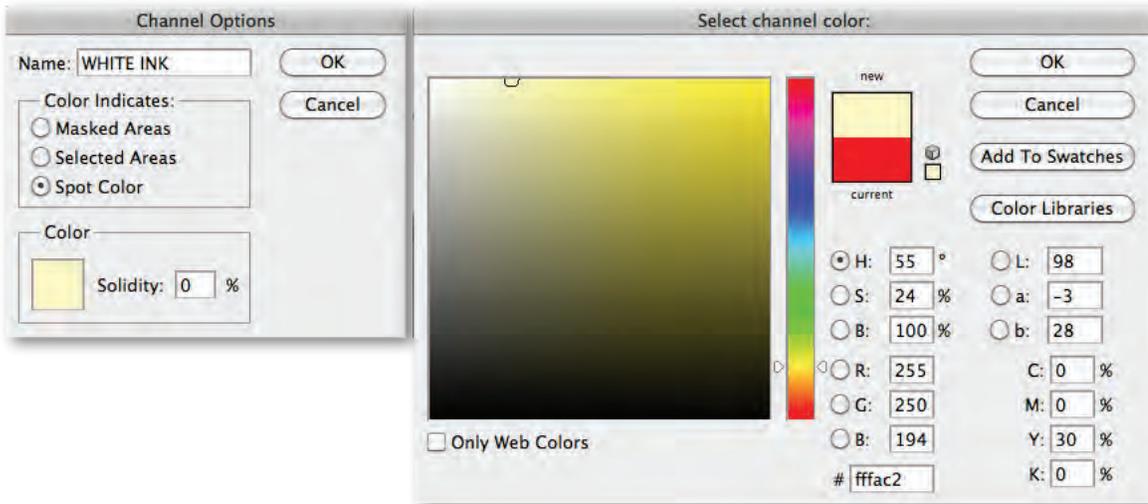
7. Assigning the order of the Multichannel file - this is very easy, simply assign Channel 1 to image No.1 in the list, Channel 2 to Image No.2 in the list and so on, clicking **NEXT** between each channel mapping. Below are pictorial images to show this:



With that complete, you'll end up with a single file containing five "Alpha" channels. The next stage will be to colorize these Alpha channels into CMYK plus White Ink.

8. Go to the **IMAGE / MODE / CMYK Color**. This will change the first four Alpha Channels into CMYK automatically, leaving one remaining channel to colorize (this will be the effect printing plate).

9. Turn the remaining alpha channel into a spot color by double-clicking the thumbnail (or select the channel and choose Channel Options from the panel menu).



Give the spot channel a name - this will depend on your workflow and RIP, or you can give it an entirely new name. In this instance we are going to call the separation **WHITE INK** and give the channel a color by clicking on the small colored square in your Channel Options. The color is not important, it is only an "on screen" visual so that you can see the channel.

Click **OK**.

10. The Spot Channel has now been rasterized and given its name, however, because we are rasterizing this file so that we can print it with a white ink, you will need to invert the spot channel - remember, we invert the CL 4713 SILVER channel so that we can print it with a white ink - the white ink is used to knock out unwanted areas on the metallic substrate.

To do the invert, simply select the spot channel, and from the image menu select - **IMAGE / ADJUSTMENTS / INVERT**.



CL 4713 SILVER channel before inverting



CL 4713 SILVER channel after inverting

Switch on all your channels to see the completed file and then **SAVE** the file using your preferred file format, (PSD or Tiff etc) ensuring that the Spot Channel option box is checked/selected.

Your rasterized image is now complete!



Support

Color-Logic continues to develop an extensive set of tools for educating our customers. We have developed a series of training demonstrations which are available to our licensed printers and designers. We hold live webinars* (and have recorded ones) for current and potential clients. We cover the entire design and printing process and actually demonstrate how we create a printed image for print.

If you visit our web site you will find a Frequently Asked Question (FAQ) section or you can submit a question.

*Custom webinars can be scheduled at a nominal fee.



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