

# PASSPORT



## Software Bulletin

7/10/2006

Bulletin No: RVW Spot Color Replace\_1.pdf

Model: VersaWorks

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## Roland VersaWorks Special Color / Named Color Functions

### Overview

The purpose of this document is to explain the new Spot Color Replacement features in Roland Versaworks. These features were added to Versaworks to give the user more control and accuracy when printing solid vector colors.

The features are broken down into two general categories, Named Colors and Special Colors, both of which allows the user to define custom input and output data to certain elements within the file that is being printed. The user also has the ability to interface with a spectrophotometer to obtain the spectral data from a supplied sample.

### Index of Topics:

- Setting general preferences
  
- Creating custom libraries
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  - Special color settings
  
- Using the libraries
  - Queue setup
  - Job Properties



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### General Preferences

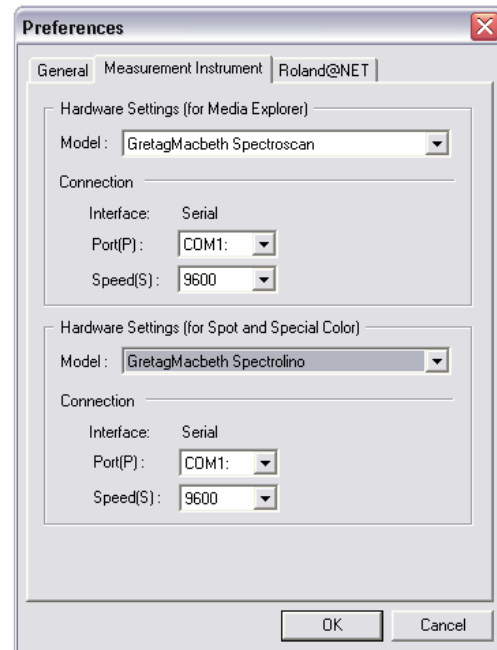
If you will be using a color reading device, you will first need to setup the preferences for that device.

These preferences can be accessed by navigating to the **Edit** menu and selecting **Preferences**. Select the **Measurement Instrument** tab. In the Hardware Settings (for Spot and Special Color), select the device you wish to use.

#### Supported devices

- GretagMacbeth Spectrolino (When using this device, you will need to select the correct port and speed.)
- GretagMacbeth EyeOne
- X-Rite DTP20

When you are finished setting up your device; select the **OK** button to save the settings.



### Creating Custom Libraries

These features in Roland VersaWorks are broken down into two separate categories, **Named Colors** and **Special Colors**.

#### Named Colors

These colors are often referred to as Spot Colors. When designing vector graphics, if you choose spot colors in the design application, the name of that color is saved within the file. Roland VersaWorks will recognize that name and look to see if there is a like name in the custom libraries. It will then map that color according to what you have selected.

#### Special Colors

Unlike Named Colors, Special Colors are comprised of either CMYK or RGB data. This feature works on a simple In/Out level where you can tell Roland VersaWorks to look for a specific vector element that contains a specific CMYK or RGB value. Then have the software change that input value or assign a special output value.



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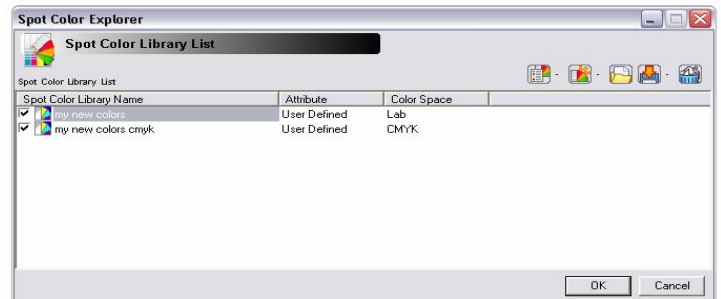
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### Named Color Settings

To begin using the **Named Color** features in Roland VersaWorks, you first need to establish a custom library.

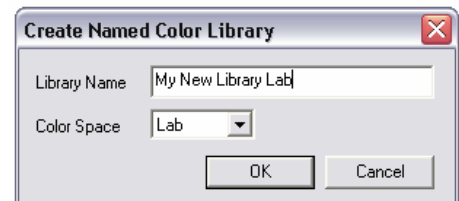
Navigate to the **Edit** menu and select **Named Color Settings**. This will open the window shown on the right.



### Create New Library



Selecting the Create New Library button in the upper right hand corner of this window (second button from the left), will open a new window where you can name your library and select a color space. The color spaces that can be used are **LAB** and **CMYK**. Selecting OK will bring you back to the Spot Color Explorer window where your new library will appear in the list.



### Library Settings

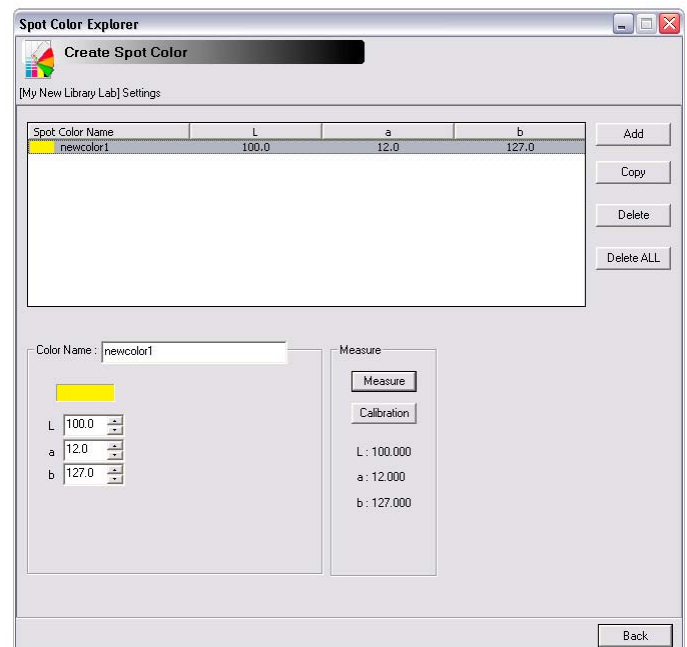


If you highlight a library, and then select **Library Settings** will open up a new window where you can add your custom spot colors.

To add a custom color, select the **Add** button. This will add a new color to the list and you can edit the name of the color and the values associated with it.

When using **LAB** as a color space, you also have the option to directly interface with a color reading device. Select the **Calibrate** button to calibrate the device, then **Measure** to read the color. The LAB values will automatically be inserted into the correct fields.

When using **CMYK** as a color space, you can not interface with a color reading device. Only CMYK data can be used.



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### Named Color Settings Cont.

#### Back Button

When you are finished adding all of your spot colors, selecting the **Back** button saves the data you entered and brings you back to the library list.

#### Save To File



When back in the Spot Color Library List, you can highlight one of the libraries and select **Save to File**. This will open a save as window where you can save these settings to either share, or for backup purposes.

#### Load from File



This allows you to load previously saved libraries.

#### Delete Library



Selecting this will delete only the selected library in the list.

### Activating / Deactivating Libraries

When you create new libraries, by default that library is globally active, represented by a **check mark** to the left of name. By not checking this, you deactivate that library and the colors that are assigned within that library will not be handled by this feature.

### Saving the Changes

Once you are finished with all of library edits, selecting the **OK** button saves and activates all the data entered. If **Cancel** is selected, all changes will be lost.



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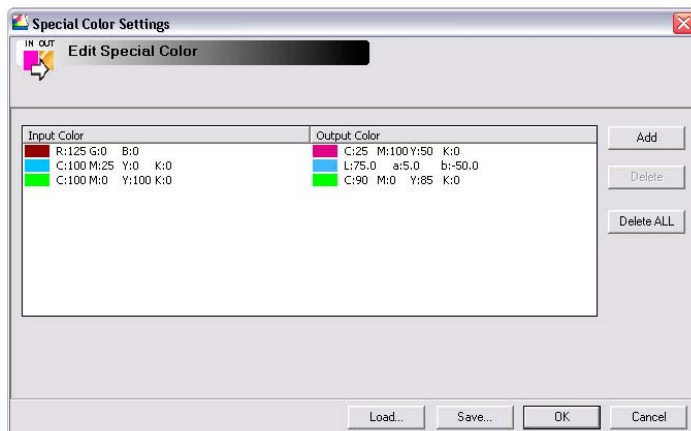
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### Special Color Settings

To begin using Special Colors, you first need to add these colors to the Special Color List.

Navigate to the **Edit** menu and select **Special Color Settings**. This will open the window shown on the right.



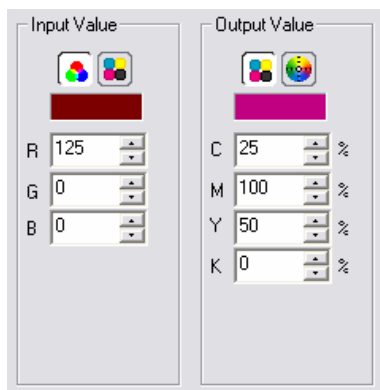
#### Add Button


Add


Select the Add Button to begin adding colors to the list. When a color is added, you will have different input and output options to choose from at the bottom of this window.

#### Input Value


This section allows you to define the input color space and value to be handled by this feature.



Select the **RGB button**  if the color you wish to be handled is RGB and enter its values below. Select the **CMYK button**

 if the color to be handled is CMYK.

#### Output Value

This is the area where you define what the output will be to the printer. By selecting the **CMYK button** , you can define a custom CMYK value to be used.

In this example; any vector element with a value of [125,0,0] will output a CMYK value of [25,100,50,0].







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Input Value	Output Value	Measure
 	 	<input type="button" value="Measure"/> <input type="button" value="Calibration"/>
R: 125 G: 0 B: 0	L: 43.6 a: 73.0 b: -18.6	L: 43.600 a: 73.000 b: -18.600

### Output Value Cont.

By selecting the **LAB button**  in the output value area opens another section where a color measuring device can be used to read the desired color.

Selecting the **Calibration button** will perform a calibration of the device you are using. The **Measure button** will measure the sample color and the LAB values will be automatically be placed into the Output Value.

In the example above; any vector element with a RGB value of [125,0,0] will be changed to a LAB value of [43.6,73,-18.6]. This new LAB value will be used and passed through the ICC profile for the media you have selected.

### Delete Button

Delete

This deletes only the selected color in the list.

### Delete All Button

Delete ALL

This will delete all the colors in the list.

### Save Button

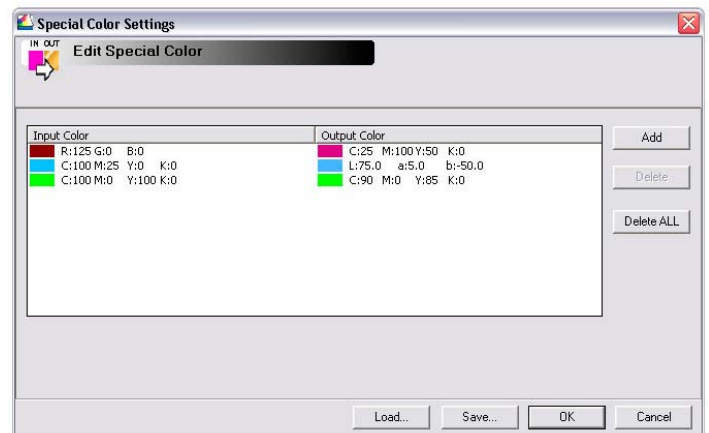
Save...

This allows you to save the entire list for sharing or backup purposes. When selected, a save as dialog box will open. Enter a name for the list and select a place where to save the file.

### Load Button

Load...

Selecting the Load button opens an open window where you can find previously saved lists and load then into the program.



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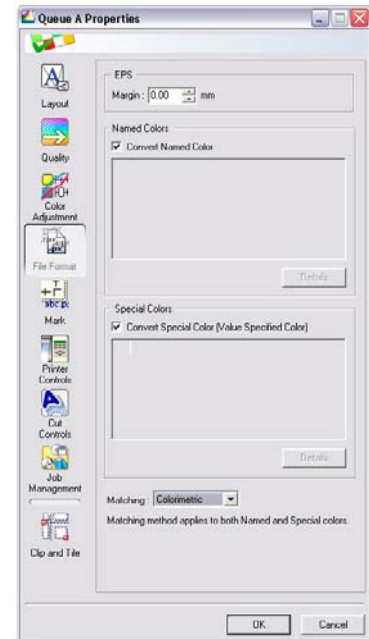
### Queue Setup

To start using the Named and Special colors you have defined, you first need to tell the Queue to look for these colors.

Navigate to your Queue Properties by double clicking of the desired Queue folder or by selecting [Edit] – [Queue A Settings] or [Queue B Settings].

Once the Queue settings are open, select the **File Formats** button. Check the box beside **Convert Named Color** and/or **Convert Special Color**.

On the bottom of this window, you can select the desired **Matching Method**. This is often referred to as *rendering intent*. This Matching method will be used for any Named Color and Special Color where a LAB value was entered as an output value.

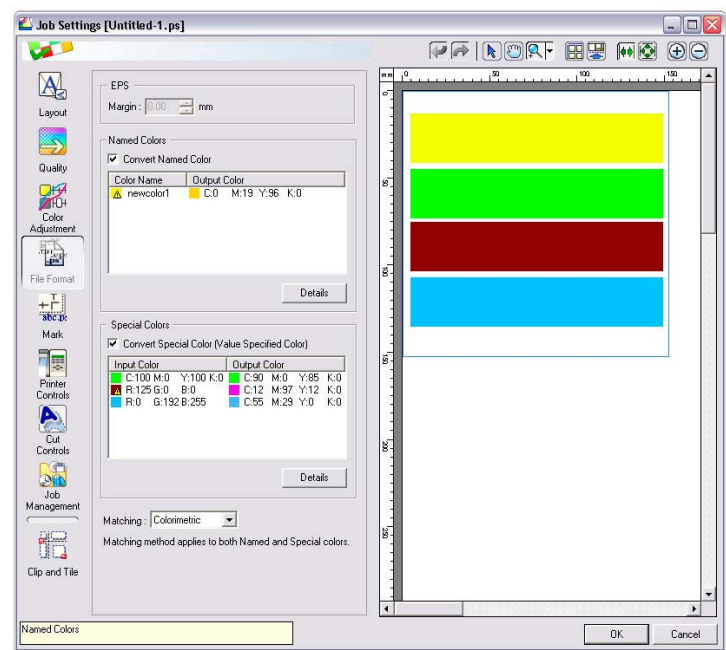


### Job Properties

When a job is loaded into VersaWorks that contains colors properly assigned in your design application, you will see those colors in the File Format section of the Job Properties.

Here you can see the Named Colors and Special Colors that are being used in this design and the CMYK output value for those colors.

In the Job Properties you also have the ability to change the Matching Method from what you assigned in the Queue Properties.



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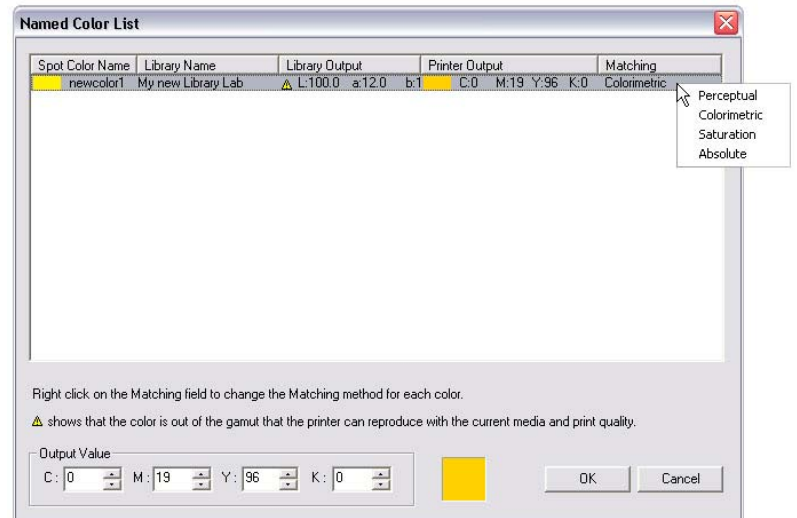
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### Covert Named Color Details

Clicking on the Details button under the Covert Named Color section of the job properties open a details window of all the named colors being used in the job.

Here you can edit the output CMYK value of each color. Select the color you wish to edit and change the values in the lower left hand section of this window.

You can also change the Matching Method for each individual color. To do this, right click on the Matching Method for the color you wish to change and select a new method from the list.



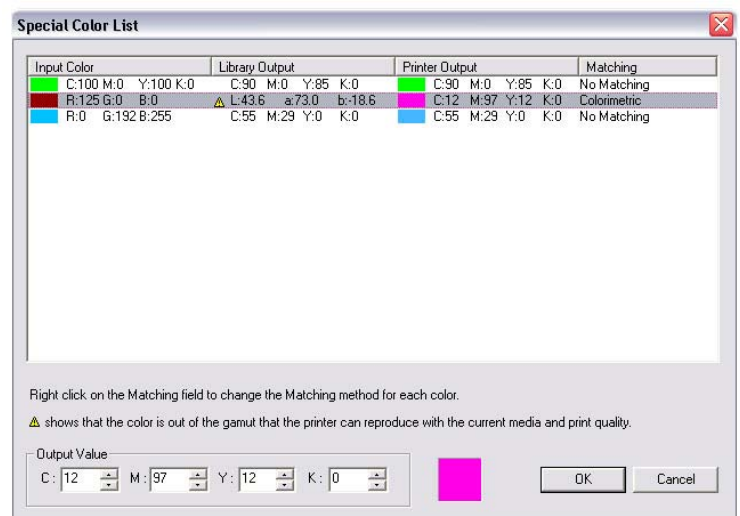
**NOTE:** This icon tells you that the LAB color you are trying to simulate is out of gamut

### Special Colors Details

Clicking the Details button under the Special Colors section opens a window very similar to the Named colors.

Here you have the same out of gamut warnings and are able to change the output values of each color and their matching method.

Colors that have been defined with CMYK output values in the main Special Colors Settings will not have Matching Methods associated with them.



Once you have made all of your edits, you can select OK to save the changes and proceed to process the job.

**NOTE:** Edits made in the Job Properties are only saved for that specific job and are not dynamic to the Named Color or Special Color lists.

