

040b73747265616d747970656481a203840163c48403737373810a0a810b0b815f5f84012584067f411b312d37OneVision-Image: Image Channels

472006_TMSImgChannel.tiff ↗ Image Channels

This tool is used for manipulating complete channels of an image. Seven functions are available.

341415_paste.tiff ↗

Figure: Functions available for manipulating channels

Each function changes the contents of the panel. The functions work as follows:

Copy

paste.tiff ↗

Figure: The panel for the function Copy

With this function you can copy the information of one channel into one or more other channels. In the example above, the R-channel is copied to each of the RGB channels. The result is a grayscale image replicating the R-plate of the original image.

Invert

783742_paste.tiff ↗

Figure: The panel for the Invert function

This function inverts the selected channels of an image. The result of the example above is a negative of the previous image.

Set Value

736160_paste.tiff ↗

Figure: The panel for the Set Value function

One or more channels can be filled with the value, entered in the <Value> field. The example above sets all three channels of an

RGB image to 100 Percent. The result is an all-white image.

Create Grayscale

636976_paste.tiff ↵

Figure: The panel for the Create Grayscale function

This function creates a new element for each selected channel. Each element contains a grayscale image calculated from the corresponding channel.

Import; ↵ Import

782570_paste.tiff ↵

Figure: The panel for the Import function

To use this function you need two images. First, connect the source image to the destination using the `<Connect>` command. To do this, select the image that will receive data, click `<Connect>`, and then select the image from which you want to import the image information. Then select one channel from the source image that you want to import to one or more channels of the destination image.

Two images are seldom exactly the same size, so several options are supplied to compensate for this:

Adjust

The source image's channels height and width will be scaled to fit those of destination image. The proportions of the source image are changed as necessary.

Adjust Height

The source image's channel will be scaled to match the height of the destination image's channels. The proportions of the source image will be maintained. Parts of the source image extending

beyond the borders of the destination image will be cropped.

Adjust Width

The source image's channel will be scaled to match the width of the destination image's channels. The proportions of the source image are maintained. Parts of the source image extending beyond the borders of the destination image will be cropped.

Keep Size

The source image's channel won't be scaled. The upper left corner of the source image is mapped to the upper left corner of the destination image. The proportions of the source image are maintained.

Keep Proportions

The source image is scaled to fit the destination image while maintaining the proportions.

Intersection

Only channel information from the part of the source image that overlaps the destination image is transferred. No adjustments are made to size, proportion, or position.

Swap

625245_paste.tiff ↵

Figure: The panel for the Swap function

Two channels within one image are swapped. Even the alpha channel ($^aA^o$), containing information about transparency and the image mask ($^aM^o$), can be swapped.

Channel Operations

This function works the same way as the import function in connecting images, but also allows the processing of image data by using mathematical formulas. A detailed description appears in the

next chapter.

Next: ;TMSImgChannelCompare.rtfd;; Channel Operations

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