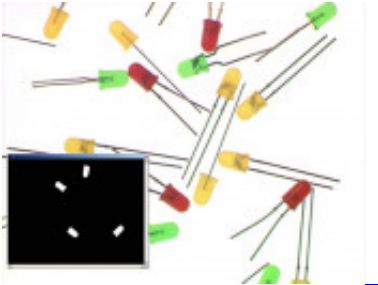


## mvIMPACT Color



Color imaging is specially attractive due to the increased richness of information at the pixel level. Multiple channels of light intensity at different wavelengths create more opportunities to exploit the contrast between objects. Color analysis allows classifying features impossible to discriminate on a gray scale image.

This module includes also color transformation from RGB images into other color spaces like HSI, CMY, HSL, HSV or self-defined ones by a color twist matrix. That is useful for analyzing which color space has the best representation for an object classification.

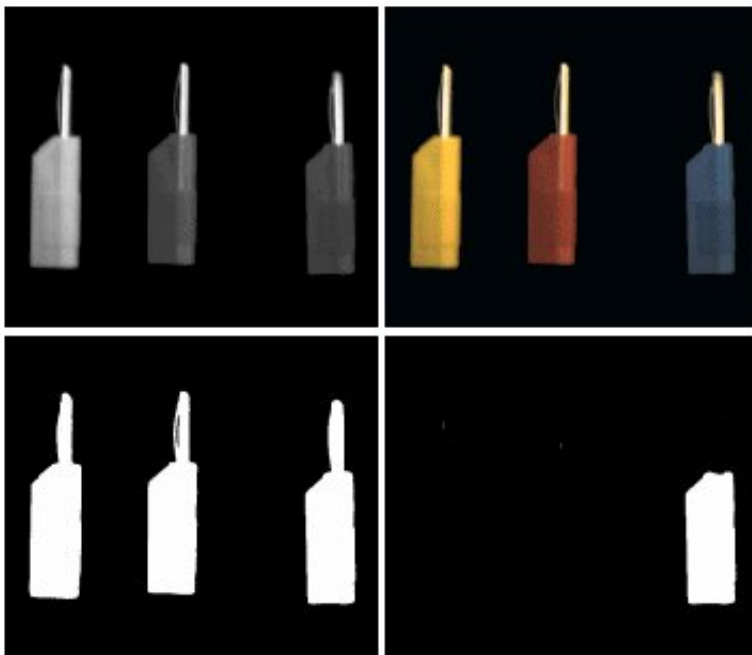
/\* \*/

- Details
- Downloads

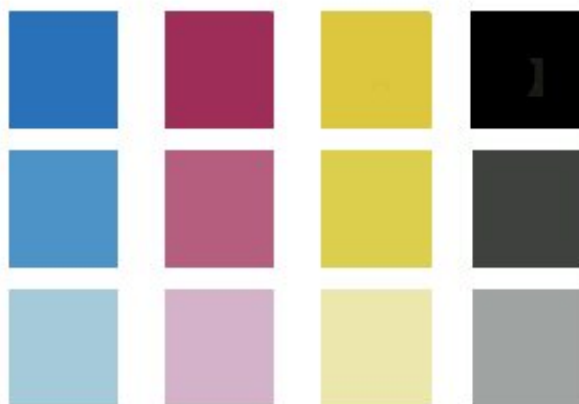
Color imaging is specially attractive due to the increased richness of information at the pixel level. Multiple channels of light intensity at different wavelengths create more opportunities to exploit the contrast between objects. Color analysis allows classifying features impossible to discriminate on a gray scale image.

In the standard RGB representation, color components are strongly correlated. Other color systems have been designed to take advantage of this redundancy, so that the true color of surfaces can be determined irrespective of the illumination conditions. This leads to more robust ways to identify areas of interest.

The additional possibilities offered by color imaging must be supported by appropriate mechanisms to ensure color stability, to switch between colorimetric systems and turn color scales to gray values for further processing using standard techniques



Thresholding in the color space



Color proofing

## Alternative color spaces

The Color module supports conversions between a number of standards, among which: B&W, CMY, RGB mainly used for display purposes, YUV, YIQ, YCC from the broadcast industry, HLS, HSV for de-correlation and XYZ variants for device independent representation.

## Color fidelity

Arbitrary linear transforms can be applied to color components. This allows, among others, implementing color calibration by comparison to reference color samples.

## Quantitative color description

Perception of color is an essentially subjective characteristic of the human eye. Color systems such as HLS allow expressing colors by means of intuitive parameters such as intensity, purity and tint. The CIE XYZ is a universally accepted standard to describe colors in a portable way, not relying on a particular imaging device.

## Color segmentation

Robust binarization of images, i.e. telling object from background pixels, can be achieved in the color space. By combining acceptance ranges for the color components with suitable color space transforms, innumerable segmentation problems can be addressed.

## Datasheets

 [mvIMPACT 3D Display](#) | 46.8 kB

Datenblatt / Datasheet mvIMPACT 3D Display

 [mvIMPACT Barcode](#) | 101.8 kB

Datenblatt / Datasheet mvIMPACT Barcode

 [mvIMPACT Base](#) | 277.5 kB

Datenblatt / Datasheet mvIMPACT Base

 [mvIMPACT Blob](#) | 103.9 kB

Datenblatt / Datasheet mvIMPACT Blob

 [mvIMPACT Color](#) | 75.6 kB

Datenblatt / Datasheet mvIMPACT Color

 [mvIMPACT Data Matrix](#) | 56.2 kB

Datenblatt / Datasheet mvIMPACT Data Matrix

 [mvIMPACT Focus](#) | 126.4 kB

Datenblatt / Datasheet mvIMPACT Focus

 [mvIMPACT GMM](#) | 85.5 kB

Datenblatt / Datasheet mvIMPACT Geometric Model Matcher

 [mvIMPACT Match](#) | 145.9 kB

Datenblatt / Datasheet mvIMPACT Match

 [mvIMPACT Measure](#) | 60.5 kB

Datenblatt / Datasheet mvIMPACT Measure

 [mvIMPACT OCR](#) | 93.2 kB

Datenblatt / Datasheet mvIMPACT OCR

 [mvIMPACT e 2012-04 MR](#) | 509.7 kB

Datenblatt / Datasheet mvIMPACT

Manuals

To be able to watch or download the manuals, you have to be [registered](#) or [logged in](#).

mvIMPACT Release / Beta for Windows XP, Vista, 7

You can evaluate mvIMPACT SDK for 30 days free of charge once. Afterwards, you will need a licence! If you are using a dongle for licensing mvIMPACT, you have to use the latest USB dongle in combination with the 64bit version!

 [mvIMPACT-6.8.461.6555-19823-x64](#) | 136,196.0 kB


mvIMPACT SDK 64 Bit **Release** Windows (XP, Vista, 7 / .NET 4.0 compliant, MSI, SDK Version 6.8.461.6555)

 [mvIMPACT-6.8.461.6555-19823-x86](#) | 131,760.0 kB


mvIMPACT SDK 32 Bit **Release** Windows (XP, Vista, 7 / .NET 4.0 compliant, MSI, SDK Version 6.8.461.6555)

mvIMPACT Nightly Builds for Windows XP, Vista, 7

Nightly builds are tested exemplarily and should be tested by oneself before use!


 [mvIMPACT-6.8.1148.7242-20516-x64](#) | 125,276.0 kB

mvIMPACT SDK **Nightly Build** (64 Bit, Build , Windows XP, Vista, 7)

 [mvIMPACT-6.8.1148.7242-20516-x86](#) | 121,328.0 kB

mvIMPACT SDK **Nightly Build** (32 Bit, Build , Windows XP, Vista, 7)

mvIMPACT packages for mvBlueLYNX-X

 [mvIMPACT-6.8.461.6555-19823-armv7a.tgz](#) | 24,012.6 kB

mvIMPACT (SDK Version 6.8.461.6555)

 [mvIMPACT Release Notes](#) | 52.8 kB



Stable feed:

- <http://beta.matrix-vision.com/mvblx-feed/stable/ipk/glibc/armv7a/base/>

mvIMPACT IPK packages for mvBlueLYNX

- [http://beta.matrix-vision.com/nightly\\_builds/](http://beta.matrix-vision.com/nightly_builds/)
- [Description of the packages](#)

USB dongle driver for Windows XP, Vista, 7

- [HASP driver](#) ([new dongle](#); external link)
- [Hardlock driver](#) ([old dongle](#); external link)

Subject to change without notice, Date 11/2011