MediaWorkStation
Technical Information
TI-005-028

Title:

Configuring the color space of an HD video source

Question:

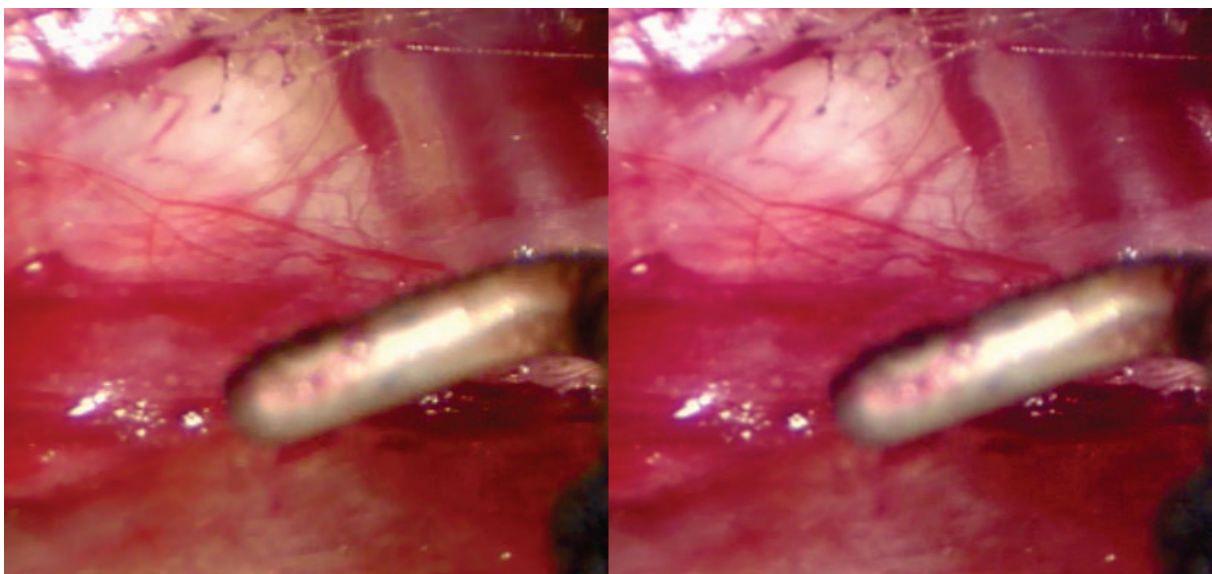|	
Problem	How to configure the color space for a video source?
Category	Camera
Product	MediaWorkStation Basic Edition / MediaWorkStation Classic Edition
Version	MWS-BE 2.9 / MWS-CE 2.8 (both from edition 1-2018)
Module	Video
Date	2018-06-01

Answer:

HD video sources, which provides YUV pictures, use in standard the color space according BT.709. For HD video sources, providing images in BT.601 color space, it has to be configures explicitly, in order to ensure an optimal color presentation in the MWS. For some video sources this configuration will be done automatically, see table 2.
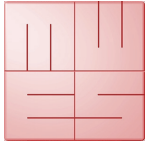
1   How a wrong color space setting affects the image?

Following table describes the effect of the combination of different color space interpretations:

Color space source	Color space applied	Result
BT.601	BT.601	Correct color presentation
BT.709	BT.601	Red tones tend to violet
BT.601	BT.709	Red tones tend to orange
BT.709	BT.709	Correct color presentation

Table 1: Combination of different YUV color space interpretations

Samples: left side correct interpretation, right side BT.601 interpretation of BT.709 source

2   Configuring color space

A modification of color space interpretation can be done as followes:

1. Close MediaWorkStation
2. Open file C:\MWS\System\MM.ini
3. Change parameter SE_TREAT_HD_AS_BT601 according table below
4. Save and close file MM.ini

Parameter	Value	Description
SE_TREAT_HD_AS_BT601	0	HD video sources will always be interprated as BT.709
	1	HD video sources will always be interprated as BT.601
	2 [default]	Auto mode: BT.601 for - PtGrey Chameleon - Toshiba TELI BT.709 otherwise

Table 2: Settings for color space interpretation