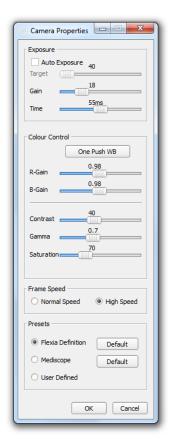


## Installation instructions for Optilia 2.0MP Camera

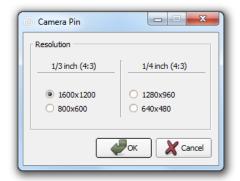
**Important:** Do not connect the camera to your PC before installing the drivers. If you have previous version of Optilia 2.0MP Camera, uninstall the old drivers first.

- 1. Run "Optilia 2.0MP Camera xxx.exe" on your installation CD. Follow on-screen instructions.
- Connect the device to the computer. Camera shall be detected by computer and its driver will be installed.
- 3. Install image Viewing & Capture software OptiPix. Start OptiPix. Refer to instructions manual of OptiPix for how to install and activate the software.
- 4. On OptiPix, select *Input "Device/Optilia 2.0MP Camera"*. Live image of the camera shall be visible now.
- 5. On OptiPix, select "Device/Device Properties" for adjusting camera settings (picture below). Select "Device/Device Resolution" for changing image resolution and optical size of the image sensor.

  Refer to section "e" next page for more info about Image Resolution and Optical Size



I) Device properties



II) Device Resolution



## **About properties and resolution of the Camera:**

- a) For maximum frame rate at 1600x1200 resolution, select "High Speed" as Frame Speed. However, some computers don't allow streaming of picture at high frame speed due to limited capacity of the USB serial bus. Set Frame Speed to "Normal" in that case!
- b) If Automatic exposure is not selected, set the Exposure Time to approximately 60ms in order to get maximum frame rate.
- c) If you need very high frame rate (~ 20-30 fps), set the device resolution to 800x600 or 640x480.
- d) White Balance of the camera (e. g. colour of the image) is calibrated each time you push "Set White Balance". For **True Colour** reproduction, you need to "Set White Balance" while imaging the "Colour Calibration Chart" provided by Optilia. Image the chart with your camera lens and its built-in Ringlight. Give the camera a few seconds to set the exposure time to a stable level. Select *Video Capture Filter* and "Set White Balance". Red- and Blue-gain of the sensor will be adjusted automatically for true colour.



Colour Calibration Chart

- e) Image Resolution and active Optical Size of the image sensor can be set following values:
  - 1. 1600x1200 and 800x600 formats utilize full optical size of sensor e. g. 1/3" (inch) diagonal.
  - 2. 1280x960 and 640x480 formats utilize partial optical size of the image sensor e. g. 1/4" diagonal.

This means image "Field of View" is approximately 25% larger at 1600x1200 and 800x600 formats compared to 1280x960 and 640x480.

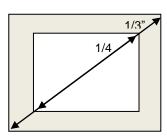


Image sensor

1600x1200 and 800x600 formats are available at Full Optical Size e. g. 1/3" 1280x960 and 640x480 formats are achieved by reducing sensor size to 1/4"