



**Digital Information Ltd.**



**Preproofer 770/790/970/990**

**uEyeCamera Installation and  
Setup Guide**

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All the documentation in this manual is instructional and for the operation of Preproofer machine. Digital Information shall not be responsible for any damage or claims resulting from any errors or omissions in this manual.

Owing to our policy of continuous product development, specifications, terms and description of Preproofer 940/980 are subject to change without prior notice.

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# 1 uEye Camera Setup

## 1.1 Basic

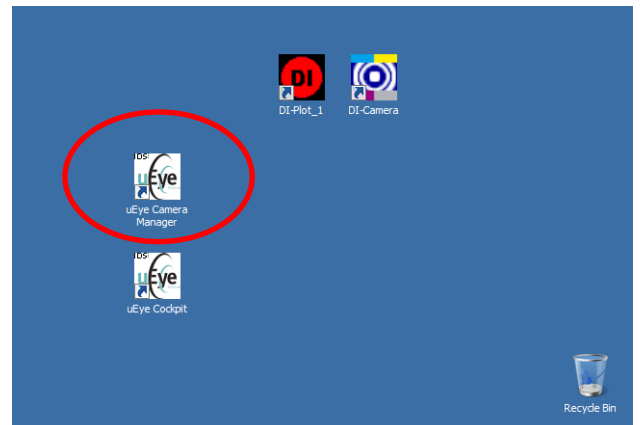
Beginnings with the installer DI-Pilot 2.0 build196, optimized camera configuration files are already installed.

Therefore the described configuration steps in chapter 1.3 are not necessary anymore.

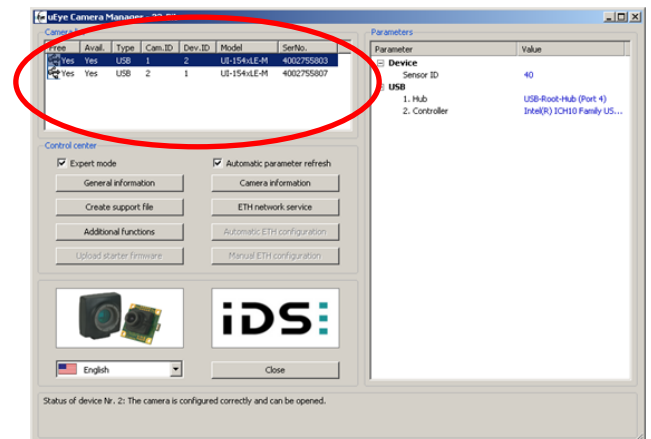
To activate these configuration files, open the DI-Camera application and select them. See chapter 2.2 "Configuration DI-Camera".

## 1.2 Set Camera IDs

After the software installation, the "uEye Camera Manager" icon is on the desktop.



Both Cameras are showing up the Camera ID list.

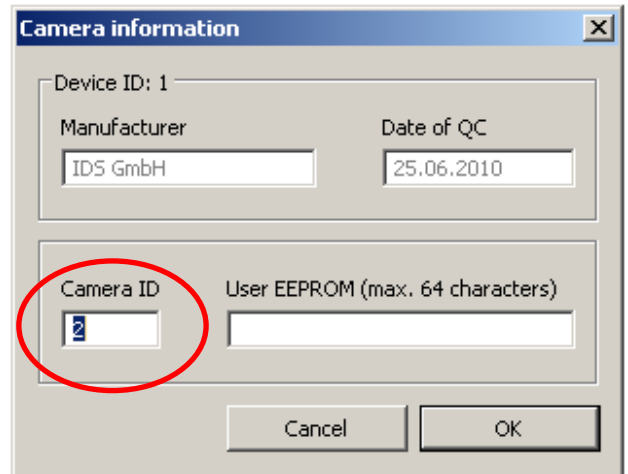


Select the Bottom Camera and set the Camera ID to the value 2.

The camera ID setup should be like:

TOP Camera = ID 1

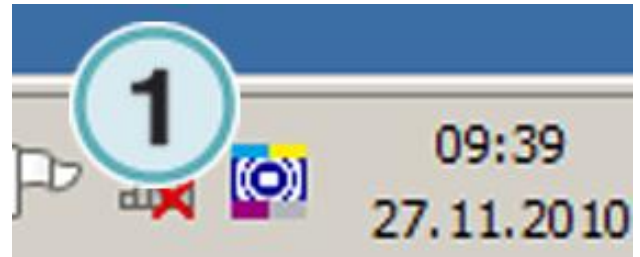
BOTTOM Camera = ID 2



## 2 Configure the DI-Camera Software

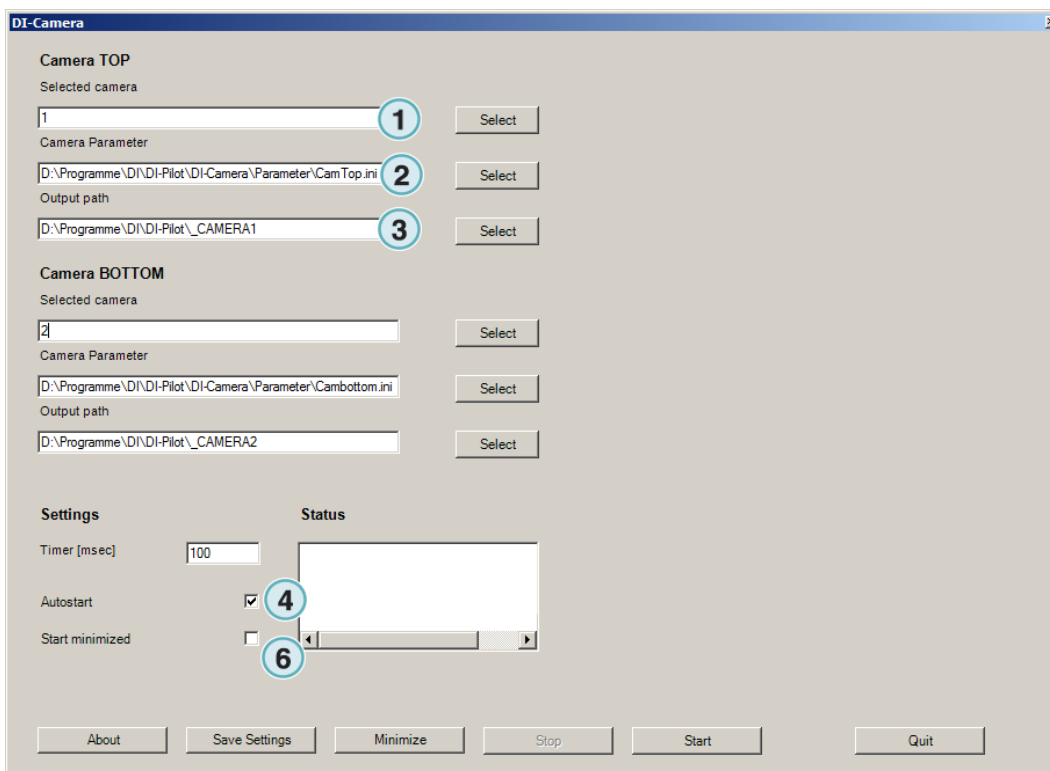
### 2.1 DI-Camera Access

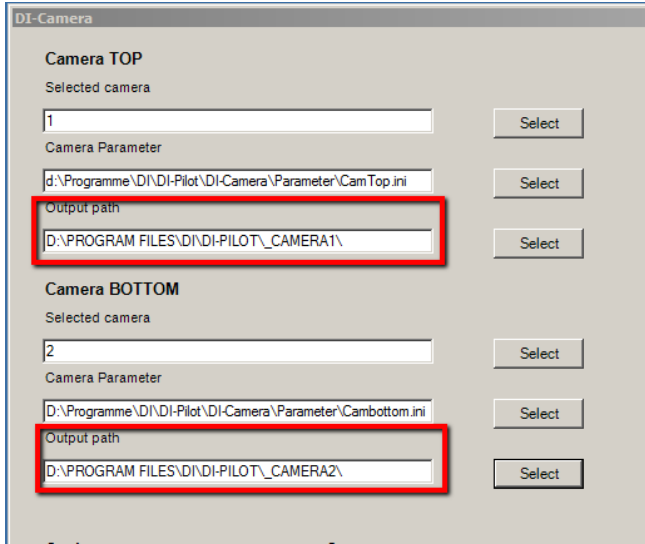
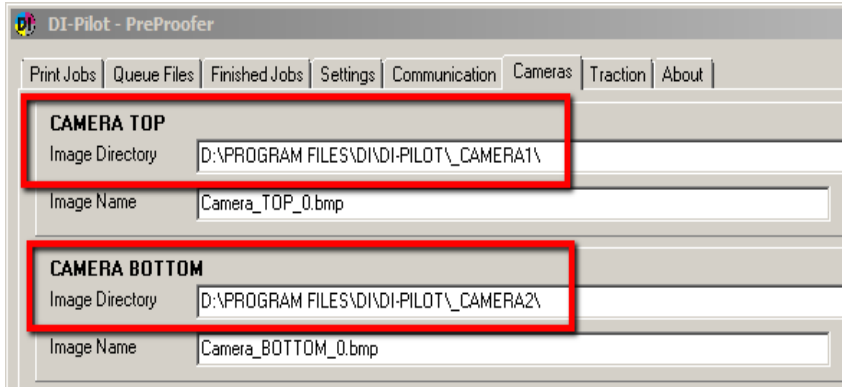
DI-Camera starts up with the DI-Pilot. Access the GUI through the icon in program tray area (1).



### 2.2 Configuration DI-Camera

GUI



Parameter name	Function
(1) Selected Camera	Choose 1 for the Top Camera, 2 for the Bottom Camera
(2) Camera Parameter	<p>Select the camera setup from the folder \di-camera\parameter.</p> <p>For the TOP camera, select : _:\Program Files\DI\DI-Pilot\DI-Camera\parameter\CamTop.ini</p> <p>For the BOTTOM camera, select : _:\Program Files\DI\DI-Pilot\DI-Camera\parameter\CamBottom.ini</p>
(3) Output Path	<p>DI-Camera creates every 100ms a new image from the control stip. The output path for this images are set equally to the Image Directory path in DI-Pilot:</p> <p>DI-Camera</p>  <p>DI-Pilot</p> 
(4) Autostart	Activate
(6) Start minimized	Activate

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### 3 uEye Cockpit

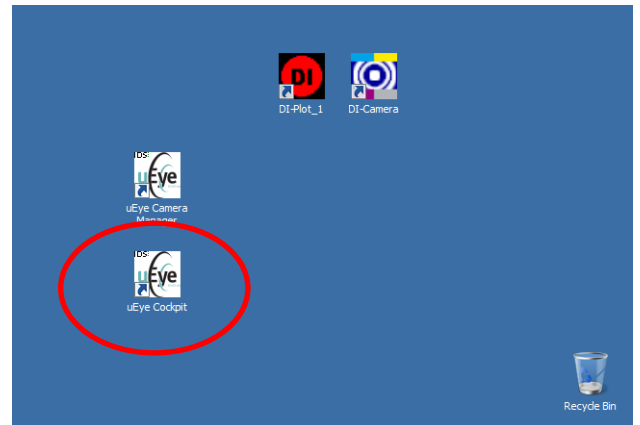
#### 3.1 Basic

Beginning with the installer DI-Pilot 2.0 build196, an optimized camera configuration set is. Therefore the steps mentioned under Chapter 3.2 are not necessary to do anymore.

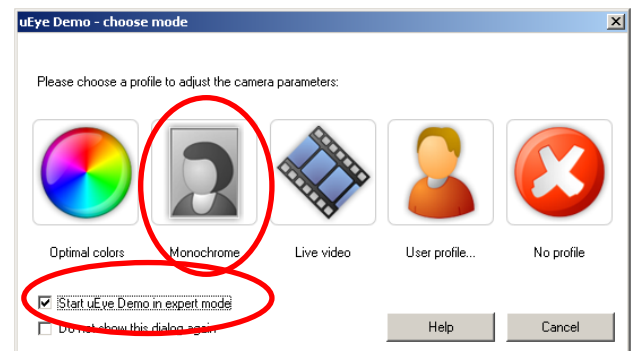
#### 3.2 Create an Individual Camera Configuration File

For both cameras do like:

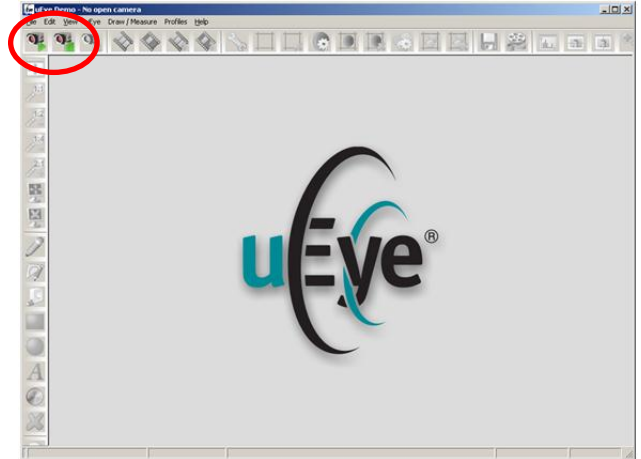
Start from the Desktop the “uEye Cockpit” program.



Set the Checkbox “Start uEye Cockpit” select “Monochrome” and Export Mode.

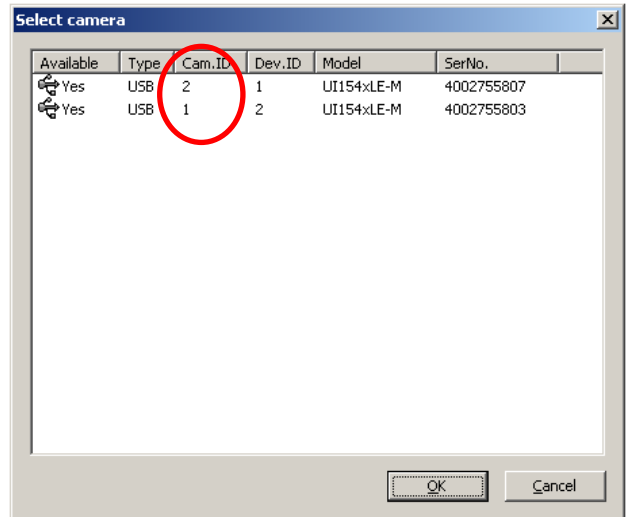


Connect to the camera with the button in the upper left corner.



Choose the camera:

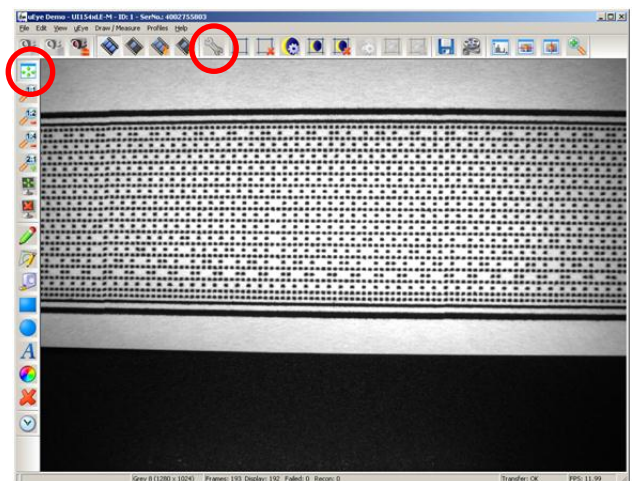
- Cam ID 1 = FRONT
- Cam ID 2 = BACK

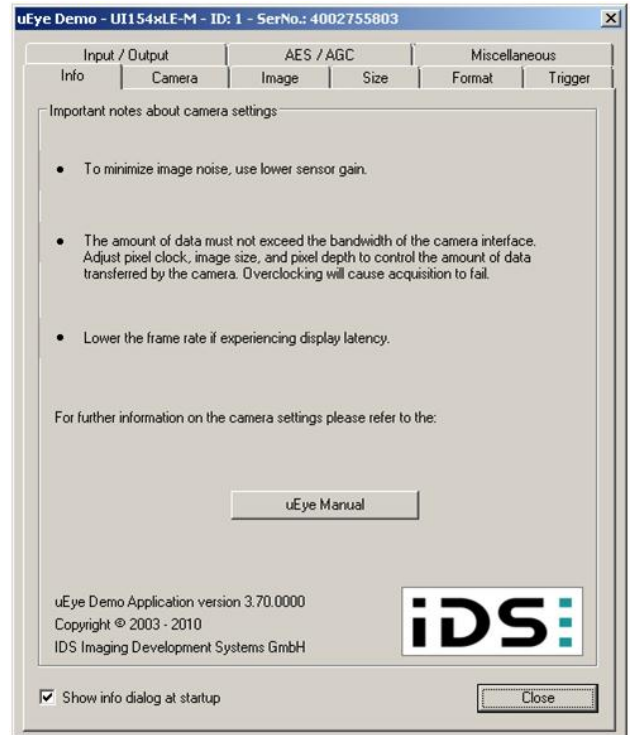


Live Camera image shows up.

With the button "Match image to window size", the full image is shown.

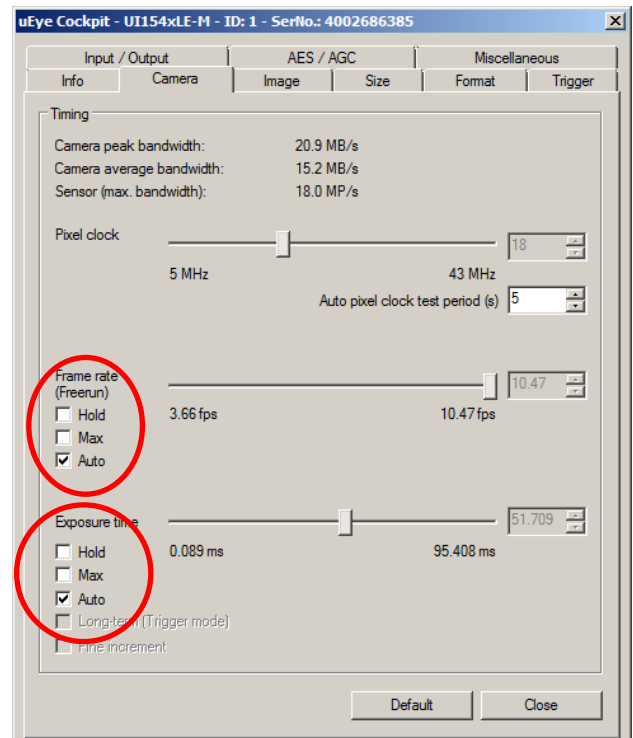
Select the parameter setup icon from the top list.





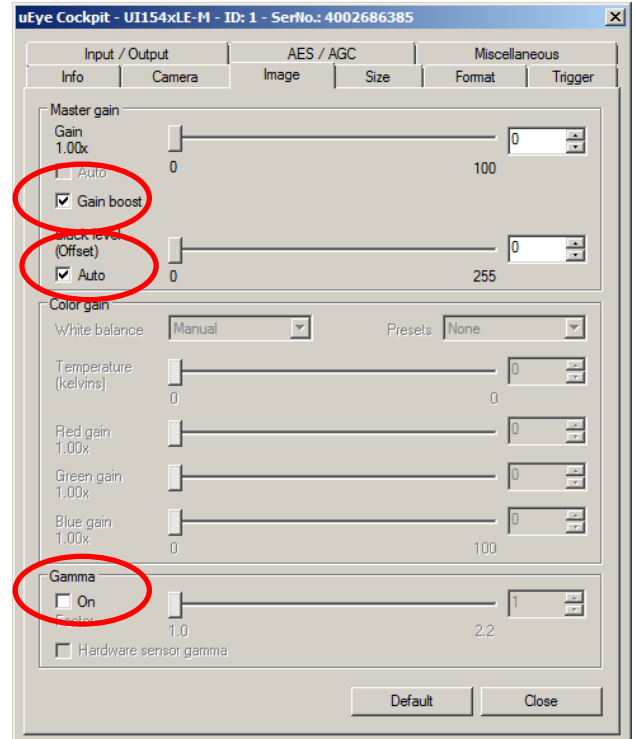
#### Settings in the Tab “Camera”:

- Activate “Frame rate Auto”
- Activate “Exposure time Auto”

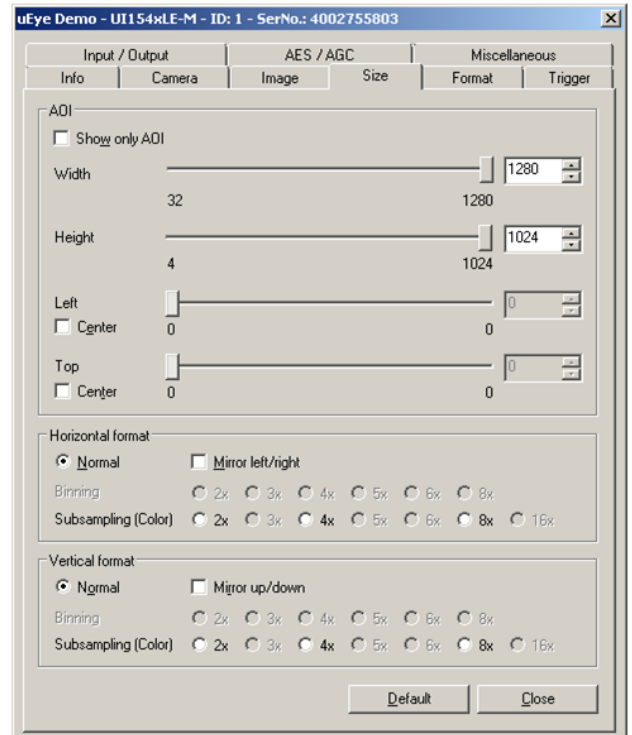


Settings in the Tab “Image”:

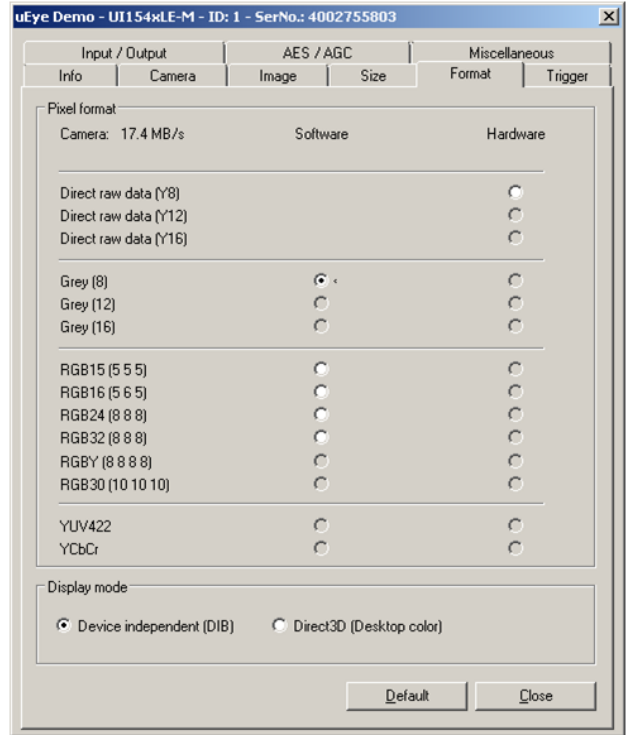
- Activate “Gain boost”
- Activate “Black level (Offset) Auto”
- Disable Gamma



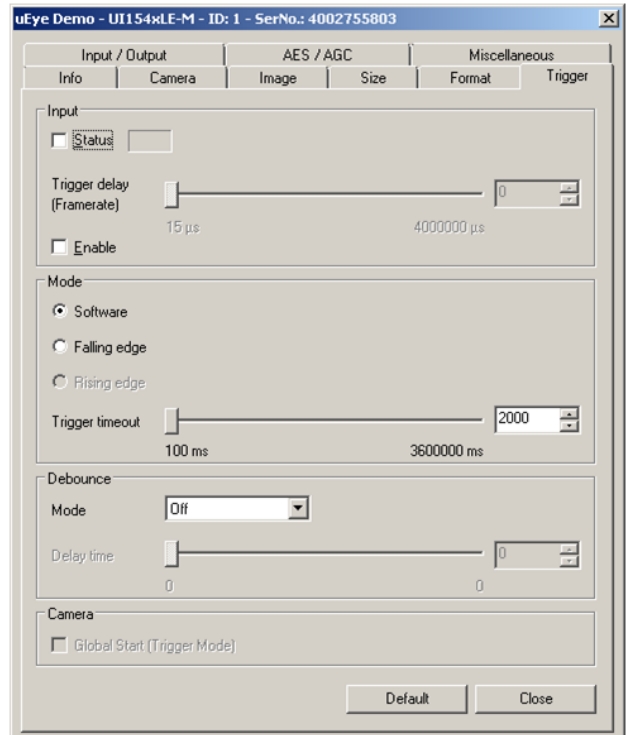
Use the default setting in the Tab “Size”.



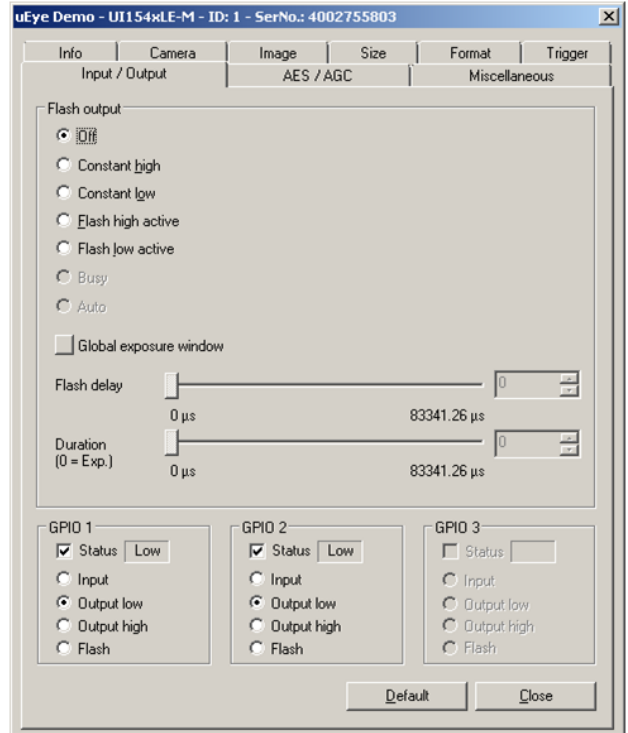
Use the default setting in the Tab “Format”.



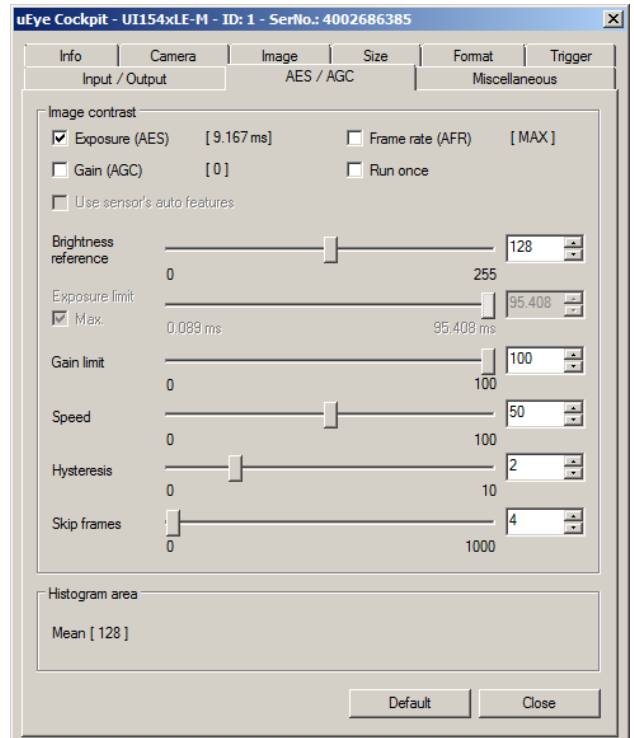
Use the default setting in the Tab “Trigger”.



Use the default setting in the Tab “Input / Output”.

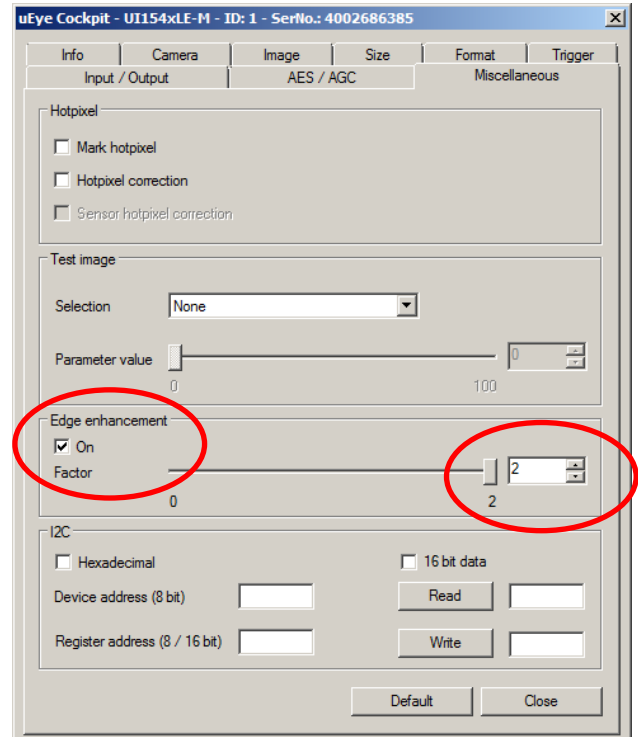


Use the default setting in the Tab “AES / AGC”.



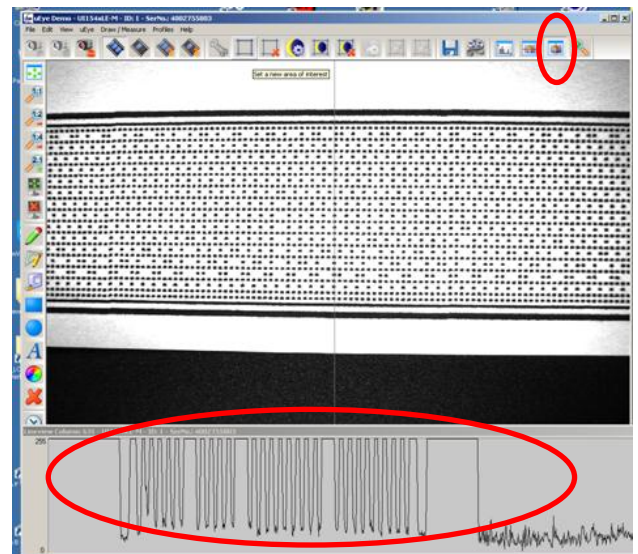
Settings in the Tab “Miscellaneous”:

- Activate the checkbox “Edge enhancement” and choose the factor value 2.

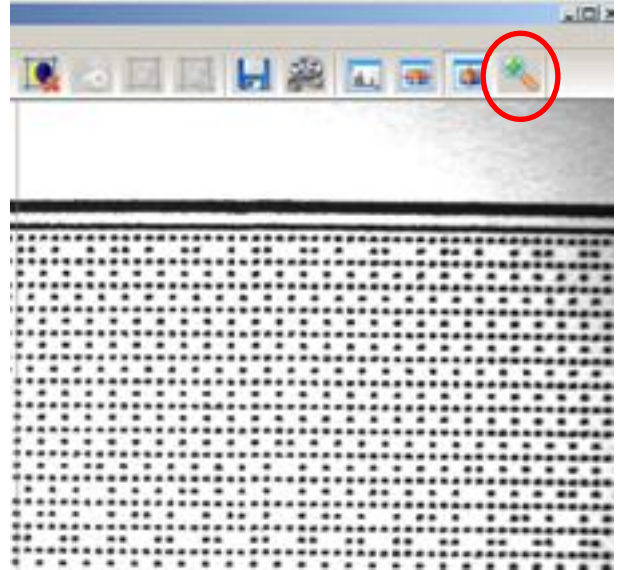


Check with the vertical LineView tool the black and white level of the image.

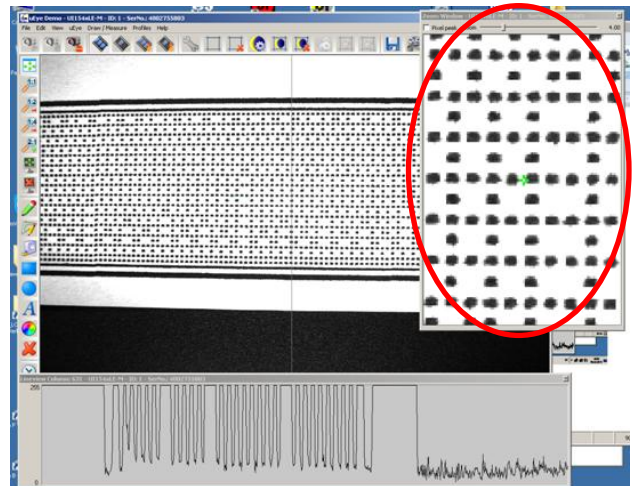
The diagram should show levels likes shown in the picture.



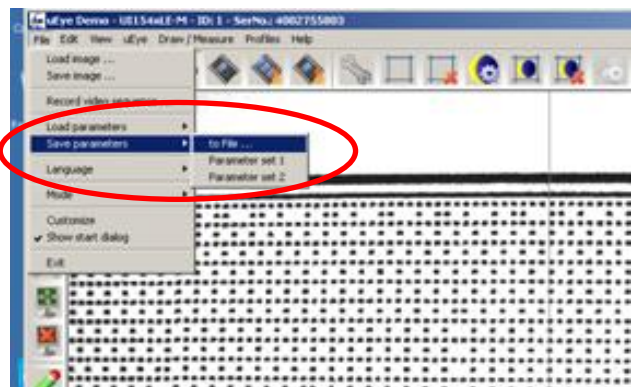
Use the magnify tool to check the quality of the dots from the printed code.



Dots should look like shown on the right.  
With “CTRL + ALT” + “right mouse click“ choose the area to magnify.



Go the menu “File” and select “Save parameter” “to File”.



Save the configuration into the parameter folder of DI-Camera.

Now the parameter is selectable with the DI-Camera application, see chapter 2.2 .

