



## Nettuno MegaPX

To enter the NetMegaPX setup open internet Explore, type [http://“yourIPAddress”/setup/](http://yourIPAddress/setup/) enter UserID and password (default is “admin” without password).

Choose Server and Sensor setup to set the sensor parameters.

The screenshot shows the 'Sensor setup' page in the NetMegaPX web interface. The sidebar on the left contains navigation buttons for 'Main', 'Network', 'Server', 'Sensor setup', 'Encoder 1', 'CIEFFE server', 'UDP streaming', 'RTSP streaming', 'Dome/serial', and 'SD/MMC Recorder'. The 'Sensor setup' section is active and displays the following configuration options:

- Video format:**
  - Standard: UXGA (1600x1200)
  - Rotate camera:  yes
  - Indoor light: 50 hz
- Luminance:**
  - Brightness: 100 %
  - Gamma correction: 0.45
  - Contrast: Noise reduction
  - Low light choice: Auto
- Sharpness:**
  - Amplification: 1 x

### Video format

- Standard, it's the video standard (resolution and frame rate) of *the sensor* (not the resolution of the encoders, which are an integer divisor of this).
  - PAL, 25 IPS max
  - NTSC, 30 IPS max
  - SVGA (800x600), 30 IPS max
  - XGA (1024x768), 30 IPS max
  - SXGA (1280x960), 25 IPS max
  - UXGA (1600x1200), 15 IPS max
- Rotate camera, rotate the image in the camera (useful if you've to mount it upside).
  - yes / no
- Indoor light, try to change this if you see flickering on the video stream (even if it already correspond to your power line frequency if you are using neon lights).
  - 50 Hz / 60 Hz

## Luminance

- Brightness, the target level of brightness in the image. This parameter alter the exposure time (also know as shutter width or shutter time) of the sensor, if you want to reduce the shutter reduce this parameter.
  - 0 % - 200 % (step 10%)
- Gamma correction, it modify the brightness of the image in a non linear way, without modifying the exposure time. Lower values of gamma gives a brighter image, higher values a darker one.
  - None 0.90 0.80 0.70 0.60 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 0.05
- Contrast, image contrast.
  - None
  - Low
  - Normal
  - High
  - Noise reduction
- Low light choice: the sensor can drop IPS to gain more light in low light conditions, with this parameter you choose what to do in such conditions.
  - Auto: the sensor drop IPS to gain more light in two steps, in the first one it reach the overexposure time setup in the "Low light" panel, then if the target brightness is not reached it switch in black and white (or green shade) mode and drop IPS until it reach the overexposure time setup in the "Extreme low light" panel.
  - Disable all low light: the sensor never drop IPS to gain more light.
  - Disable low light: like auto, but only using the "Extreme low light" step.
  - Disable extreme low light: like auto, but only using the "Low light" step, so the image will never switch to black and white (or green shade) mode.

Please note that if the overexposure setting of "Low light" panel is greater than the one setup in the "Extreme low light" panel the sensor will never reach the "Extreme low light" configuration, so the image will never switch to black and white (or green shade) mode and the "Extreme low light" filtering setting will never be applied.

**Shutter trick:** if you want a lower shutter time you can decrease the *Brightness* (e.g. 80% or 70%) and slightly decrease the gamma (e.g. 0,40 or 0,35).

## Sharpness

- Amplification, amount of high frequency details in the image.
  - None x1 x2 x3 x4 x5 x6 x7 x8
- Threshold, minimum amount of light required to do sharpness amplification in each pixel.
  - %0 %1 %2 %4 %8 %12 %16 %20 %30 %40 %50 %60 %70 %80 %90 %95

## Color

- Saturation, amplification of all the color component in the image
  - %0 %10 %20 %30 %40 %50 %60 %70 %80 %90 %100 %110 %120 %130 %140 %150 %160 %170 %180 %190 %200
- Red gain, amplification of the red component in the image

- %0 %10 %20 %30 %40 %50 %60 %70 %80 %90 %100 %110 %120 %130 %140 %150 %160 %170 %180 %190 %200
- Blue gain, amplification of the blue component in the image
  - %0 %10 %20 %30 %40 %50 %60 %70 %80 %90 %100 %110 %120 %130 %140 %150 %160 %170 %180 %190 %200

### **Low light**

- Overexposure, maximum overexposure level usable by the sensor to reach the target brightness (it can drop IPS, the amount of IPS dropped depend according to the actual brightness of the scene and the video standard used by the sensor).
  - None
  - Low
  - Medium
  - High
  - Very high
- Filtering, reduce the noise in low light condition
  - None
  - Reduce saturation: reduce the color components
  - Reduce sharpness and saturation: reduce also the sharpness
  - Luma filter, reduce sharpness and saturation: blur the luma component

### **Extreme low light**

- Overexposure, maximum overexposure level usable by the sensor to reach the target brightness (it can drop IPS, the amount of IPS dropped depend according to the actual brightness of the scene and the video standard used by the sensor)
  - None
  - Low
  - Medium
  - High
  - Very high
- Filtering, reduce the noise in extreme low light condition
  - None
  - Reduce saturation: reduce the color components
  - Reduce sharpness and saturation: reduce also the sharpness
  - Luma filter, reduce sharpness and saturation: blur the luma component
- Night vision
  - Black and white: show the video in black and white
  - Emerald green: show the video in bright green shades
  - Washed green: show the video in green shades

After having set the sensor select Encoder1 to set the encoder parameters.

### **Mpeg4 Encoder 1 setup**

- Name
- Bitrate regulation
  - Average
  - Variable
- Quality

- Lowest
  - Low
  - Average
  - High
  - Highest
- IPS (depending no the sensor setting)
  - 25 12 8 6 5 4 3 2 1
  - or
  - 15 8 5 4 3 2 1
  - Allow variable IPS:
- Resolution (depending no the sensor setting)
  - QSVGA (400x300)
  - UXGA (1600x1200)
- Allow send motion