

V1015 How to configure IQnightlight™

Applies to:

IQeye Sentinel Series, IQeye Alliance Series, and IQeye 7xx Series

Note: This example is to show how IQnightlight is used and configured.

Actual settings may change based on scene content

Note: You must have valid demo or full license of IQnightlight in order to use this technical tip.

Summary:

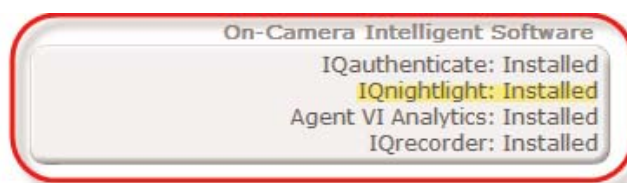
This tech tip will assist you in setting up and configuring IQnightlight parameters.

Contents:

- Confirming current licenses
- Setting up day parameters and writing the .cfg file
- Setting up night parameters and writing the .cfg file
- Setting a Day/Night threshold value
- Reconfiguring the .cfg files via. Notepad

Confirming current licenses

1. Browse to the cameras IP address using a browser
2. Click on the 'Setup' tab and login if prompted
3. Click on the 'Security' tab
 - a. In the bottom left section labeled 'Intelligent on-camera software', you will see what licenses are currently installed.
 - b. The status of IQnightlight must be "Installed" or "Demo".
 - c. If you see 'not installed' you must contact IQinVision for a full or demo version of the license.



Setting up Day parameters and writing the day.cfg file

1. Using the camera's 'Settings' tabs on the web interface, adjust the camera for the best possible images during the daytime.
2. Once satisfied with the image optimization, open up a telnet session to the camera.
 - a. Be sure you are logged in as a privileged user.
3. To write the current configuration to the cameras /Flash/ directory, issue the following command: config write day
 - a. This will write a IQDay.cfg file to the /Flash/ directory

Setting up Night Parameters and writing the IQNight.cfg file

1. Using the cameras 'Settings tabs on the web interface, adjust the camera for the best images during nighttime.
 - a. You will want to be sure to do this at night so you get the correct image optimization based on the nighttime scene content and lighting.
2. Once satisfied with the image optimization, open up a telnet session to the camera
 - a. Be sure you are logged in as a privileged user.
3. To write the current configuration to the cameras /Flash/ directory, issue the following command: config write night
 - a. This will write a IQNight.cfg file to the /Flash/ directory

Setting a Day/Night threshold value

The ambient light threshold of when the camera switches from Day to Night or Night to Day can be adjusted.

1. To adjust the threshold value, you must first know what the current light level is that the camera is seeing.
 - a. To check this, open a telnet session to the camera and issue the 'Show Image' command
 - b. Note the 'currently' value is the current light level in numerical representation.
 - 0 = complete white (very bright), 1 = complete black (very dark).

```

c:\ Telnet 10.120.4.4.
Type HELP at the 'Local_2>' prompt for assistance.
Username> root
Local_2> su
Password>
Local_2>> show image
JpegQuality: 70      Gamma: 0.45      LightGrabber: 4x
Downsample: 1       Sharpen: Medium Max FPS: 0
Mode: Color         AutoMono: Disabled
Led: Activity       Analog: NTSC

Gain: Auto/ 0.000    Currently: 0.714 (<40Hz, Gain 89/140)
Speed: 120Hz        Reference: None
HistogramMask:      HMCenter: 0.60  HMWidth: 0.60
DCoffset: Auto      Currently: 0.012
Min Speed: None     Max Chip Gain: 100%
Thresh: Disabled    Currently: Day
Day: 0.00           Night: 0.00

Flip: None

Sub Window: X: -580 Y: 110 Width: 1200 Height: 1600
             Left: 100 Top: 50 RawWidth: 1200 RawHeight: 1600
Gain Window: X: -510 Y: -136 Width: 560 Height: 752
             Left: 490 Top: 720 RawWidth: 560 RawHeight: 752
Max Window: Left: 100 Top: 50 RawWidth: 1200 RawHeight: 1600
User Window: Left: 100 Top: 50 RawWidth: 1200 RawHeight: 1600

Local_2>>
  
```

- c. This practice is best done around dusk, as you can then see the light level at which you want the camera to switch.
- d. Once you know what light level value you would like the camera to switch at, use the following commands to write the threshold values:
 - i. Set image gain threshold day 0.65
 - ii. Set image gain threshold night 0.75
 - iii. Set image gain threshold enable

Note: The previous threshold values are for example purposes only. Your settings will almost certainly be different than the example values. Also note that if the day and night threshold values are too close together, the camera may oscillate continually between day and night modes. If this happens, simply readjust your threshold values to eliminate the oscillation.

```

C:\ Telnet 10.120.4.4.
Local_2>> set image gain threshold day 0.65
Local_2>> set image gain threshold night 0.75
Local_2>> set image gain threshold enable
Local_2>> show image
JpegQuality: 70      Gamma: 0.45      LightGrabber: 4x
Downsample: 1      Sharpen: Medium  Max FPS: 0
Mode: Color        AutoMono: Disabled
Led: Activity      Analog: NTSC

Gain: Auto/ 0.000   Currently: 0.668 <40Hz, Gain 69/140>
Speed: 120Hz      Preference: Normal TargetFactor: 0.60
HistogramMask:     HMCenter: 0.60   HMWidth: 0.60
DCoffset: Auto     Currently: 0.012
Min Speed: None    Max Chip Gain: 100%
Thresh: Enabled    Currently: None
Day: 0.65         Night: 0.75

Flip: None

Sub Window: X: -580 Y: 110 Width: 1200 Height: 1600
Gain Window: Left: 100 Top: 50 RawWidth: 1200 RawHeight: 1600
Max Window: X: -510 Y: -136 Width: 560 Height: 752
User Window: Left: 490 Top: 720 RawWidth: 560 RawHeight: 752
Local_2>>
  
```

- e. Note the “show image” command shows the threshold is enabled and the current values.
- f. After confirming these values, they must be saved to the camera’s permanent memory by issuing the “save image” command.

```

C:\ Telnet 10.120.2.109
Password>
Local_2>> show image
JpegQuality: 60      Gamma: 0.45      LightGrabber: 4x
Downsample: 1      Sharpen: Xlow    Max FPS: 100.00
Mode: Color        AutoMono: Disabled
Led: Activity      Analog: NTSC     Density: 96 dpi

Gain: Auto/ 0.813   Currently: 0.848 <10.909Hz, Gain 111/152>
Speed: 120Hz      Preference: Normal TargetFactor: 0.60
HistogramMask:     HMCenter: 0.50   HMWidth: 1.00
DCoffset: Auto     Currently: 0.016
Min Speed: None    Max Chip Gain: 100%
Thresh: Disabled   Currently: None
Day: 0.00         Night: 0.00

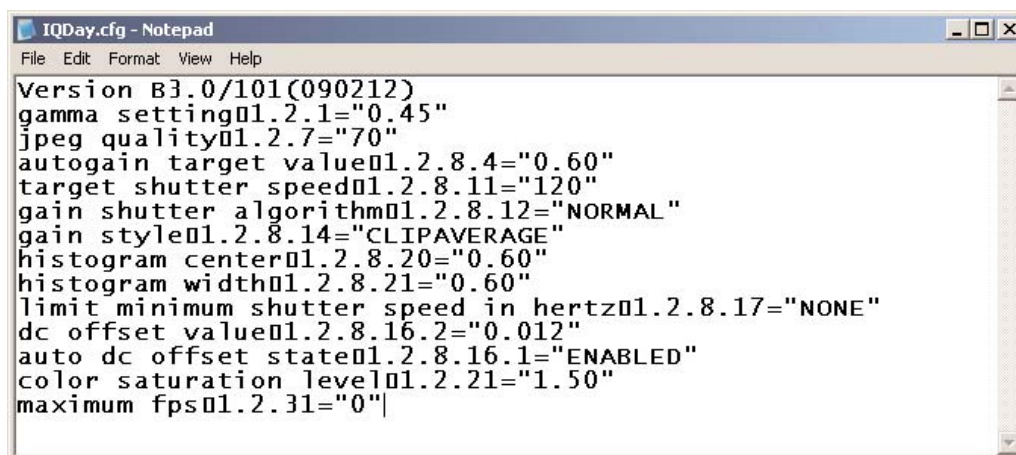
Flip: None

Sub Window: X: 0 Y: 0 Width: 2048 Height: 1536
Gain Window: Left: 0 Top: 0 RawWidth: 2048 RawHeight: 1536
Max Window: X: 0 Y: 0 RawWidth: 2048 RawHeight: 1536
User Window: Left: 0 Top: 0 RawWidth: 2048 RawHeight: 1536
Local_2>> save image
Local_2>>
  
```

2. The camera will now take over the associated parameters in the .cfg file when it switches to day or night mode.

Reconfiguring the .cfg files via. Notepad

1. You can copy the .cfg files to your computers hard drive to reconfigure them via. Notepad.
2. Do this by FTPing to the cameras /Flash/ directory and copying the file you want to reconfigure
3. Once you have the files opened in Notepad, you can reconfigure the settings, save them and reload the .cfg file into the cameras /Flash/ directory.
 - a. This is an example of the Notepad view of the .cfg files:



```
Version B3.0/101(090212)
gamma setting01.2.1="0.45"
jpeg quality01.2.7="70"
autogain target value01.2.8.4="0.60"
target shutter speed01.2.8.11="120"
gain shutter algorithm01.2.8.12="NORMAL "
gain style01.2.8.14="CLIPAVERAGE"
histogram center01.2.8.20="0.60"
histogram width01.2.8.21="0.60"
limit minimum shutter speed in hertz01.2.8.17="NONE"
dc offset value01.2.8.16.2="0.012"
auto dc offset state01.2.8.16.1="ENABLED"
color saturation level01.2.21="1.50"
maximum fps01.2.31="0"
```