

# Tech Tip V1032

## Focus Helper Information

### Source

Factory Certified Product (FCP) Interface Document

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**Name:** IQinVision Technical Support

**Model:** IQ03x, IQD3x, IQMx, IQA3xxx-B5, IQA3xxx-B6

**Version/Firmware:** Most recently available on [www.iqeye.com](http://www.iqeye.com)

**Required:** Computer must be able to connect to the cameras web interface. If camera needs addressing, please see technical video on addressing camera: <http://www.iqeye.com/support/technical-videos>

#### **Optional/Recommended Products or documents**

IQfinder – Windows utility used to discover cameras on a network

[Tech Tip V1030 How to Edit Object Identifiers Using IQmanager V1030](#)

#### **Web location for download of Proprietary files:**

<http://www.iqeye.com/support/technical-downloads/utility-programs>

**Brief Description of Integration:** An explanation of the IQinVision web page focus helper tool.

**Business Description of Product:** The web based focus helper tool helps integrators determine if the camera is focused as correctly as possible.

### Details on how the focus helper algorithm works

The intent of the focus helper was to improve the "out-of-box" focusing of the camera at initial installation time, and for it to automatically go away after a reasonable period of time. The Live web page focus helper tool is available at factory default for three minutes after the camera is powered on.

The number on the left on the focus helper is the maximum value seen of the number on the right in the last 40 frames of video. The length of time will depend upon the frame rate of the video stream. The length of time should be around one second, but it could be several seconds, depending upon the default frame rate of the camera (which varies by resolution, for example, 5MP is 10fps at most, so it would be 4 seconds in that case).

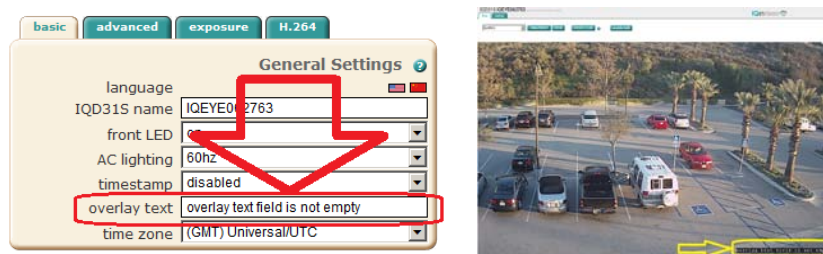
The focus tool only gives focus values for the center of the image, which is 1/2 the width and 1/2 the height of the total image. Best practice is to focus when there is minimal motion in the center of the image, the scene is brightly lit and the brightness isn't varying too much, because motion or brightness changes can cause the focus numbers to change even if the lens isn't being adjusted. The focus values will be less reliable in low light or when pointed at an empty wall. Some edges or other details are needed in the center of the image to provide meaningful focus values.

## Instructions

1. Numbers will appear in the lower right hand corner of live web pages. The focus is improving if the number on the right gets higher and both numbers are equal (keep turning the focus in that direction). The focus is getting worse if the number on the right is going down and the number on the left isn't (reverse the focus direction if necessary). After a few seconds, the number on the left will always match the number on the right, so the video overlay must be viewed while changing the focus of the lens.



2. If there is a value in the text overlay field in the camera's setup | basic tab, this text string will override the focus helper numbers.



3. The focus helper will automatically stop appearing after the 10th reboot.
4. There are two ways to re-enable focus helper again after the 10th reboot:
  - a. Factory default the camera (using IQmanager, Telnet commands or manually factory defaulting on the camera's hardware).
  - b. Edit the associated OID values:
    - i. Set the focus helper OID 1.2.35 to "enabled"
    - ii. Set the overlay 2 text OID 1.2.9.1.9.2 to a blank field (or log into the camera and erase the text in the setup | basic text overlay field).
5. Additional suggestion: With dome cameras such as IQD3x, IQM3x and some IQA3x models, hold the dome in front of the lens while focusing (focus through the dome), since the focus might change slightly after the dome is installed.

## End of Tech Tip V1032

### Focus Helper Information