

IQeye 9 Series

Megapixel Indoor IP Camera

Quick Install Guide





Important Safeguards



CAUTION

RISK OF ELECTRIC
SHOCK. DO NOT OPENI



CAUTION: BEWARE OF RISK OF ELECTRICAL SHOCK.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Due to product size and space limitations, this label may not appear on all products.



The lightning flash with an arrowhead symbol within an equilateral triangle is intended to all the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS TO RAIN OR MOISTURE.



Attention: Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.



THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The firmware in this device contains open source software licensed under various open source licenses. For complete license information please open the URL: http://<camera_ip>/thirdpartysoftwarelicenses.txt

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1 Unpacking

Unpack carefully. This is an electromechanical device and should be handled carefully. Be sure to go to our website www.vicon-security.com to assure you have the most current documentation and utility tools.

2 Service

If the unit needs repair service or parts, the customer should contact Vicon Industries for authorization to return, as well as shipping instructions. Refer to Shipping Instructions at the end of this manual.

3 Description

The IQeye 9 camera series provides exceptional image quality. Using the latest micro-processing chip technology, these cameras include the increased processing power needed to run analytics or VMS applications at the edge. With support for up to 5MP resolution, the camera uses Main profile H.264 to deliver exceptional high-definition clarity at up to 30 frames-per-second. Simultaneous H.264 and MJPEG video streaming offers flexibility to optimize live viewing and recording while providing access to video for other applications.

The 9 series cameras feature on-camera storage, true WDR (1 and 2 MP models) and true day/night capabilities. There are three versions available. The version with a CS-mount ships without a lens for flexibility and provides autoiris capability; two versions have a varifocal lens included, offering a choice of fixed or motorized P-iris varifocal lens. An IR illuminator option, model IQB9-IR, is available for models with a factory-installed lens.

Note: The diagrams shown are examples and your camera will be the same or similar. Please read these instructions through carefully before starting installation.

4 Installation

The camera is delivered fully assembled. To access connectors, the back cover and front cap must be removed.

Pull off the back cover to access connections for Ethernet, AUX power, Alarm, Audio and Video Out. To remove the back cover, gently pull out on the tabs holding the back cover in place.



Figure 1

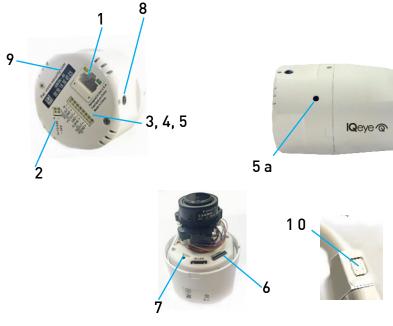
Remove the front cap to access the lens, SD slot and reset button. To remove the front cap, loosen the screw securing it and then, while holding the cap from the front, push the front cap down to completely release the cap.



Figure 2

All cable connections should be completed before the covers are reinstalled. The back cover is replaced by aligning the tabs on the cover with the indentations on the camera body and sliding it onto the camera body. The cover will snap into place. Replace the front cover by aligning the screw hole and pushing the front cap down until it snaps in place. Secure the screw previously loosened.

5 Camera Connection Overview



- Figure 3
- 1. **Network Connector** RJ-45 Power-over-Ethernet connector.
- AUX Power Connector Captive 2-pin push-in terminal for 12-24 VDC or 24 VAC power source.
- 3. Alarm In/Alarm Out Push-in terminal connections for alarm in, alarm (relay control) out and alarm ground.
- Video Out Push-in terminal connection for video output for NTSC or PAL video systems.
- 5. Audio In/Out Push-in terminal connections for external audio in, audio out and audio ground. Camera has an internal microphone (5a).
- Micro SD Card Slot An Micro SD card (not included) can be used for oncamera recording.
- 7. Reset Button Used to set the camera back to factory default settings.
- **8. 1/4 20 Mounting Hole** Provided on both the top and bottom of the camera for mounting to a camera mount.
- 9. MAC Label Used to identify the product and provide MAC address.
- **10.** Lens DC Iris Connection 4-pin DIN jack used on the model without an integral lens.

6 Mounting Options

The camera has two standard 1/4-20 mounting holes, on top and bottom, to attach the camera onto any appropriate mount.

7 Connections

Refer to the previous Connection Overview as needed when making camera connections.

Power

- 1. Plug the IQeye camera into the network.
- 2. Power the camera using either Power-over-Ethernet or direct power.

Power-over-Ethernet: Input from an IEEE 802.3af Power-over-Ethernet (PoE) power injector or switch as show in Figure 4.



Figure 4

Direct Power: Connect either a 12-24 VDC or 24 VAC power source to the camera. Wire polarity is not important, therefore + or - connections can be connected to either terminal as shown in Figure 5.



Figure 5

NOTE: Using a power source with specifications other than those defined will damage the camera and will void the product warranty.

Alarm, Audio and Video Out

A push-in terminal is provided for connections for I/O Alarms, Audio In and Out and Video Out. A 1.5 mm screwdriver is provided with the camera to push down on the tabs while inserting wires. Refer to Figure 6.

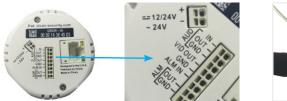




Figure 6

Alarm

External devices can be used to signal the camera to react upon events. There are push-in terminal connections for Alarm In, Alarm Out (Relay control for external relay box) and Alarm Ground. Connect these devices to the Alarm In and Alarm Out connectors. Be sure to connect the ground side of the alarm input/output to the ALM GND connector. Refer to Figure 7.

Note: Alarm In should only be connected with a mechanical switch or open collector device.

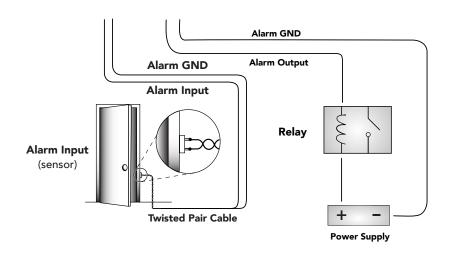


Figure 7

Audio

The camera provides an internal microphone. Additionally, there are push-in terminal connections for Audio In, Audio Out and Audio Ground for external devices. Note: These are line level signals and are not intended for direct microphone input. Use an external MIC to line amplifier if Audio In is to be used for microphone applications. Connect wires from external microphone to Audio In and from speakers to Audio Out. Be sure to connect both to the AUDIO GND. The Audio settings are available from the Advanced Setup screen, where the mic can be set to internal, external or disabled.

Video Out

There is a push-in terminal connection for an Analog video output that can be used as a service monitor to aid in setup or for analog display. There is also a Ground connection.

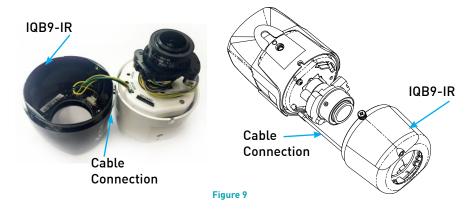
DC Lens

When the model with no lens is used, there is a connector for a DC lens iris. Insert the connector from the customer supplied lens into the 4-pin DIN connector on the camera rim. Refer to Figure 8.



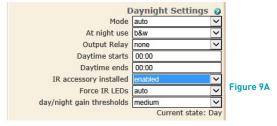
Installing the IR Illuminator Accessory

If the IQB9-IR accessory cap is being used, it must be installed onto the camera. If not already done, remove the front cap of the camera. The IQB9-IR is a replacement front cap that includes the IR illuminators. There is a four [4] pin connector with wires in the accessory cap. Insert this connector into the connector labelled IR LED on the camera (it will only insert with correct orientation). Refer to Figure 9. Follow the instructions for reinstalling the front cover. Take care not to pinch the wires when securing the cap. Now go into the camera web interface to enable the IR accessory; setup procedure follows.



Enable the IR Capability

From the camera web interface, select the Setup tab and then select Advanced. Under Daynight Settings, in the IR accessory installed field, select enabled from the dropdown. Refer to Figure 9A.



8 Field-of-View and Focus Adjustments

The 9 series camera position, field-of-view and focus adjustment can be performed using an analog monitor or by using a browser to view the camera image. Position the camera on selected mount and adjust position according to the directions for the mount.

For the fixed varifocal lens, loosen the thumbscrew and adjust the field-of-view and focus rings to achieve the desired focus and view on monitor; tighten the thumbscrews.

For the motorized varifocal lens, use the camera interface to set the focus and iris.

From the Setup tab, select Lens. Refer to Figure 10.

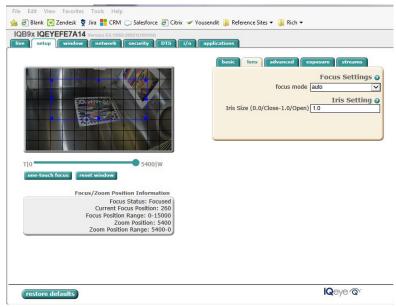


Figure 10

9 PC Configuration of 9 Series

NOTE: The default user name for all IQeye devices is "root" and the default password is "system". IQeye cameras are configured for DHCP and will have an IP address assigned if a DHCP server is on the network. If a DHCP server is not available, the camera will self-assign an IP address using Automatic Private IP addressing. A static IP address can be configured using either IQfinder or IQmanager.

1. Download and install IQfinder from the Vicon website. Launch and scan for cameras on the network by clicking the refresh button. The detected cameras will be displayed in the IQfinder window. Select a camera from the list and click "Assign IP" to edit the selected camera's network settings. Refer to Figure 11.



Figure 11

2. The "Assign IP" window allows the IP address, Subnet, and Gateway of the camera to be changed and alternatively the camera to be configured for DHCP operation. Click the "Submit" button after making the desired changes (Figure 12).

NOTE: Changing between a static IP address and DHCP will cause the camera to reboot.



Figure 12

- 3. To view a camera, double-click a camera entry (refer to Figure 10). The "Live" page will be displayed through the default browser (IE recommended). It is also possible to open Internet Explorer and enter the IP address of the IQeye camera in the address field of the browser. If prompted, install the Active X control.
- 4. To perform further configuration of the camera click on the "Setup" tab. There is a Help symbol ② next to each configuration feature; click it to open a Help dialog box with an explanation of that feature.

NOTE: The default username is "root" and the default password is "system".

5. To prepare the camera to serve the H.264 stream, select "H.264" from the drop-down menu (Figure 13; IE browser only). To view the H.264 stream in full screen mode (without 'Live' page controls), double click on the video window. Double-click on the video window again to return back to the 'Live' page.



Figure 13

10 Factory Reset

Press and hold the "Reset" button for 15 seconds as illustrated in Figure 14.



Figure 14

11 Reassembly

After all cable connections and adjustments are completed, replace back cover by aligning the tabs on the cover with the indentations on the camera body and slide onto the camera body. The cover will snap into place. Replace the front cover by aligning the screw hole and pushing the front cap down until it snaps in place. Secure the screw previously removed

Shipping Instructions

Use the following procedure when returning a unit to the factory:

1. Call or write Vicon for a Return Authorization (R.A.) at one of the locations listed below. Record the name of the Vicon employee who issued the R.A.

Vicon Industries Inc. 135 Fell Court Hauppauge, NY 11788

Phone: 631-952-2288; Toll-Free: 1-800-645-9116; Fax: 631-951-2288

For service or returns from countries in Europe, contact:

Vicon Industries Ltd Unit 4, Nelson Industrial Park, Hedge End, Southampton S030 2JH, United Kingdom

Phone: +44 (0)1489/566300; Fax: +44 (0)1489/566322

- 2. Attach a sheet of paper to the unit with the following information:
 - a. Name and address of the company returning the unit
 - b. Name of the Vicon employee who issued the R.A.
 - c. R. A. number
 - d. Brief description of the installation
 - e. Complete description of the problem and circumstances under which it occurs
 - f. Unit's original date of purchase, if still under warranty
- 3. Pack the unit carefully. Use the original shipping carton or its equivalent for maximum protection.
- 4. Mark the R.A. number on the outside of the carton on the shipping label.

Vicon Standard Equipment Warranty

Vicon Industries Inc. (the "Company") warrants your equipment to be free from defects in material and workmanship under Normal Use from the date of original retail purchase for a period of three years, with the following exceptions:

- 1. All IQEYE Cameras: Two years if purchased before 1/1/2011.
- 2. Alliance-mini (IQD3xx), Alliance-mx (IQMxxx) and 3 Series (IQ03xx): Five years if purchased between 1/2/2011 12/31/2014.
- 3. Alliance-Pro (IQA3xx): Five years if purchased between 3/2/2012 12/31/2014. Three years if the motorized lens (IQA3xx-A3) option.
- 4. Access Control System Components: Two year from date of original retail purchase.
- Uninterruptible Power Supplies: Two years from date of original retail purchase.
- 6. VDR-700 Recorder Series: One year from date of original retail purchase.
- 7. V5616MUX: One year from date of original retail purchase.
- 8. Arecont Cameras: One year from date of original retail purchase.
- FMC series fiber-optic media converters and associated accessories: Lifetime warranty.
- 10. For PTZ cameras, "Normal Use" excludes prolonged use of lens and panand-tilt motors, gear heads, and gears due to continuous use of "autopan" or "tour" modes of operation. Such continuous operation is outside the scope of this warranty.
- 11. Any product sold as "special" or not listed in Vicon's commercial price list: One year from date of original retail purchase.

NOTE:

- If the product is to be used outdoors or in dusty, humid, or other hostile environments, it must be suitably protected.
- Camera products must be protected, whether in use or not, from exposure
 to direct sunlight or halogen light as the light may damage the camera image
 sensor. This applies to both indoor and outdoor use of the cameras.
- For camera products supplied without a lens, extreme care should be used when mounting a lens on these products. Damage to the product due to incorrectly mounted lenses will invalidate this limited hardware warranty.
- Failure to comply with any of the aforementioned requirements will invalidate this Limited Hardware Warranty.

Date of retail purchase is the date original end-user takes possession of the equipment, or, at the sole discretion of the Company, the date the equipment first becomes operational by the original end-user.

The sole remedy under this Warranty is that defective equipment be repaired or (at the Company's option) replaced, at Company repair centers, provided the equipment has been authorized for return by the Company, and the return shipment is prepaid in accordance with policy. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer. When a product or part is exchanged the replacement hardware becomes the property of the original purchaser and all hardware or part thereof that is replaced shall become the property of Vicon.

The sole remedy under this Warranty is that defective equipment be repaired or (at the Company's option) replaced, at Company repair centers, provided the equipment has been authorized for return by the Company, and the return shipment is prepaid in accordance with policy. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer. When a product or part is exchanged the replacement hardware becomes the property of the original purchaser and all hardware or part thereof that is replaced shall become the property of Vicon.

The warranty does not apply (a) to faulty and improper installation, maintenance, service, repair and/or alteration in any way that is not contemplated in the documentation for the product or carried out with Vicon consent in writing, operation adjustments covered in the operating manual for the product or normal maintenance, (b) to cosmetic damages, (c) if the product is modified or tampered with, (d) if the product is damaged by acts of God, misuse, abuse, negligence, accident, normal wear and tear and deterioration, improper environmental conditions (including, but not limited to, electrical surges, water damage, chemical exposure, an/or heat/cold exposure) or lack of responsible care, (e) if the product has had the model or serial number altered, defaced or removed, (f) to consumables (such as storage media or batteries) (g) to products that have been purchased "as is" and Vicon the seller or the liquidator expressly disclaim their warranty obligation pertaining to the product, (h) to any non-Vicon hardware product or any software (irrespective of packaged or sold with Vicon hardware product) and Vicon products purchased from an unauthorized distributor/reseller, (i) to damage that occurs in shipment or (j) to damages by any other causes not related to defective design, workmanship and/or materials.

The warranty for the products shall run from Vicon to End User customers only (including product purchased through authorized partners and resellers). Vicon is not obligated under any circumstances to honor warranties on product(s) purchases from internet auction sites including eBay, uBid or from any other unauthorized resellers. Except as explicitly provided herein, Vicon disclaims all other warranties, including the implied warranties of fitness for a particular purpose and merchantability.

Software supplied either separately or in hardware is furnished on an "As Is" basis. Vicon does not warrant that such software shall be error (bug) free. Software support via telephone, if provided at no cost, may be discontinued at any time without notice at Vicon's sole discretion. Vicon reserves the right to make changes to its software in any of its products at any time and without notice.

The Warranty and remedies provided above are exclusive and in lieu of all other express or implied warranties including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. Certain jurisdictions do not allow the exclusion of implied warranties. If laws under such jurisdictions apply, then all express and implied warranties are limited to the warranty period identified above. Unless provided herein, any statements or representations made by any other person or firm are void. Except as provided in this written warranty and to the extent permitted by law, neither Vicon nor any affiliated shall be liable for any loss, (including loss of data and information), inconvenience, or damage, including, but not limited to, direct, special, incidental or consequential damages, resulting from the use or inability to use the Vicon product, whether resulting from breach of warranty or any other legal theory. Notwithstanding the foregoing, Vicon total liability for all claims under this warranty shall not exceed the price paid for the product. These limitations on potential liabilities have been an essential condition in setting the product.

No one is authorized to assume any liability on behalf of the Company, or impose any obligations on it in connection with the sale of any Goods, other than that which is specified above. In no event will the Company be liable for indirect, special, incidental, consequential, or other damages, whether arising from interrupted equipment operation, loss of data, replacement of equipment or software, costs or repairs undertaken by the Purchaser, or other causes.

This warranty applies to all sales made by the Company or its dealers and shall be governed by the laws of New York State without regard to its conflict of laws principles. This Warranty shall be enforceable against the Company only in the courts located in the State of New York.

The form of this Warranty is effective August 1, 2015.

THE TERMS OF THIS WARRANTY APPLY ONLY TO SALES MADE WHILE THIS WARRANTY IS IN EFFECT. THIS WARRANTY SHALL BE OF NO EFFECT IF AT THE TIME OF SALE A DIFFERENT WARRANTY IS POSTED ON THE COMPANY'S WEBSITE, WWW.VICON-SECURITY.COM. IN THAT EVENT, THE TERMS OF THE POSTED WARRANTY SHALL APPLY EXCLUSIVELY.

