

IQeye Alliance-mx Vandal-Resistant IP Camera

Installation and Operating Instructions





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1 Unpacking

Unpack carefully. This is an electromechanical device and should be handled carefully. Check to ensure the following items are included:

- > Alliance-mx Dome Camera Assembly
- > Torx T-20 Security Wrench
- > 3/4" NPT Plug (installed in the side NPT mount of the enclosure)
- Mounting Hardware
- > Lens Cover
- > IQtools CD-ROM

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

Alliance-mx dome cameras provide exceptional image quality in the most demanding indoor/outdoor environments. With support for up to 5MP resolution, the Alliance-mx 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 Alliance-mx camera features on-camera storage, built-in IR, WDR (1, 2 and 3MP models) and true day/night capabilities. Made from cast aluminum with a polycarbonate bubble the Alliance-mx is IP66 (NEMA 4) rated. The included varifocal lens offers flexibility so the Alliance-mx camera can be installed almost anywhere. There is a choice of manual or motorized varifocal lens.

4 Installation

NOTE: This manual describes how to install the Alliance-mx camera system, and details interior/exterior wall and ceiling surface mounting options. Installations should be performed by qualified service personnel only in accordance with local and national code(s).

5 Parts List

The following depicts the parts included (Figure 5.1):

- 1. Alliance-mx enclosure, camera, and lens assembly
- 2. Alliance dome cover and shroud assembly





Figure 5.1

6 Mounting Options

The Alliance-mx camera is designed to be used in one of the following configurations.

NOTE: If the Alliance-mx is to be installed on a hard surface that prohibits direct access to cabling, the optional IQM-BOX, which includes the IQA-CAB, must be used. If the surface allows running cables directly to the camera dome, such as a drop ceiling, the optional IQA-CAB only can be used for the audio in/out, I/O relay, and analog video output if needed.

- 1. Surface mounted to a durable ceiling surface.
- 2. Surface mounted to any interior durable wall surface.
- 3. Mounted to the optional interior/exterior wall mount adapter.
- 4. Mounted to the optional back box adapter.

NOTE: This guide covers installation of an Alliance-mx dome camera without the optional wall or pendant mount adapters (IQM-WM3 or IQM-PND). For guidance on mounting the Alliance-mx to the wall or pendant mount adapters, consult the appropriate accessory's manual.

WARNING: When installing the Alliance-mx dome camera outdoors, the camera should not be mounted directly to a wall surface. When mounting outdoors to a wall surface, the IQM-WM3 (Alliance Series Wall Mount) is required (Figure 6.1).





The Alliance-mx camera provide the following connection options (Figure 6.2).

- 1. Ethernet (Power-over-Ethernet) connector.
- 2. Micro SD card slot (Micro SD card not included)
- 3. Audio in/out, I/O relay and analog video output (requires optional IQA-CAB); see section 9 for connection details.



7 Removal of Dome Cover

- 1. Using the supplied Torx T-20 security wrench, loosen the three tamper-proof screws holding the dome cover to the enclosure assembly (Figure 7.1). These screws are captive (held to the dome cover) and should not be removed from the dome cover trim ring.
- 2. Lift the dome trim ring with shroud away from the camera assembly.





Figure7.1

8 Mounting the Enclosure, Camera, and Lens Assembly Mounting to masonry or other durable surface wall, ceiling or overhang with cables routing through the wall or ceiling.

- 1. Select an appropriate position for the camera and drill the mounting holes and cable pass through hole.
- 2. Route the network cable through the wall.
- 3. Gently push the Ethernet cable through the gasket installed in the enclosure. Pull enough cable through the gasket to attach an RJ-45 network connector, and to allow the network connector to plug into the Ethernet socket (Figure 8.1).

It may be necessary to pierce a hole in the gasket with an Awl tool (not supplied).

NOTE:

- Do not cut the gasket with a knife.
- Do not force the Ethernet cable with connector through the gasket.
- Only pass one cable through the supplied gasket.



Figure 8.1



Figure 8.2

- 4. To ensure the gasket is sealed gently pull back on the Ethernet cable before mounting the enclosure to the wall or ceiling.
- 5. Attach the enclosure to the wall or ceiling by tightening the four screws with sealing washers (Figure 8.4).

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NOTE: Be sure to use the supplied screws and sealing washers. Alternative washers will not seal the enclosure from moisture. Extra sealing washers are supplied.



Figure 8.4

Mounting to masonry or other durable surface wall, ceiling or overhang with cables routing along the wall or ceiling for side conduit installation.

- 1. Select an appropriate position for the camera and drill the mounting holes and cable pass through hole.
- 2. Remove the conduit plug from the enclosure. Install a 3/4" (19.1mm) NPT threaded conduit connector (not supplied) into the conduit hole on the enclosure.

NOTE: To ensure proper weatherization on the conduit entry, properly seal the conduit threads with silicon.

- 3. Pull the Ethernet cable through the conduit and then through the enclosure. Pull enough cable through the conduit to attach an RJ-45 network connector, and to allow the network connector to plug into the Ethernet socket.
- 4. Attach the enclosure to the wall or ceiling by tightening the four screws with sealing washers.

NOTE: Be sure to use the supplied screws and sealing washers. Alternative washers will not seal the enclosure from moisture. Extra sealing washers are supplied.

NOTE: When installing the Alliance-mx onto a ceiling tile, use hardware designed to secure the camera assembly to this surface, and ensure the ceiling tile material is secure.

In addition, follow local regulations and laws that may have specific requirements governing the installation of security equipment on a ceiling tile surface. Vicon also strongly recommends the use of a ceiling tile brace and other mounting hardware designed to secure the Alliance-mx to the ceiling frame infrastructure.

9 Connect Camera

in Figure 9.2.

- 1. Optional: Insert the Micro SD card in Micro SD card slot (not supplied).
- 2. Optional: Route and connect the IQA-CAB cable when using an external microphone and powered loudspeaker, I/O relay or analog to the Alliance-mx dome camera as shown in Figure 9.1 (cable and loudspeaker not supplied).

Route and connect the Power-over-Ethernet cable to the Ethernet connector port in the camera as shown







Figure 9.1



Cable Connections: Refer to Figure 9.3

Name	Function
Mic G/Mic	Microphone line in and ground. Externally powered microphone is recommended for optimal quality.
Line G/Line	Audio line out and ground. Powered speaker required.
Rly 2/Rly 1	Relay output. Relay acts as simple switch between Rly 1 and Rly 2.
Trg G/Trg	Trigger input (senses contact closure)
Vid/Vid G	Analog video output. Provides NTSC or PAL signal.



Figure 9.3

10 Camera Positioning, Field-of-View Set-up and Focus

- 1. Set the field-of-view using the 3-axis gimbal. Determine camera pan direction by gripping the camera assembly, and carefully pivot the camera to the viewing direction.
- 2. Remove the IR assembly by gently pulling the assembly forward as shown in Figure 10.1.
- 3. Adjust the tilt of the camera to the desired viewing angle.
- 4. On the manual varifocal lens, adjust the field-of-view and focus rings to achieve the desired focus as shown in Figure 10.2. When finished, tighten the thumbscrews on the lens. For the motorized varifocal lens, use the camera interface to set the field-of-view and focus.

NOTE: The manual lens on the Alliance-mx dome camera has a fixed iris and therefore no iris adjustment is needed.





11 Complete the Dome Camera Installation

- 1. Attach the tether from the dome trim ring to the tether mounting point in the enclosure as shown in Figure 11.1.
- 2. Rotate the black shroud inside the dome trim ring cover so it aligns with the camera position.
- 3. Place the supplied desiccant pack inside the dome as shown in Figure 11.2 to prevent fogging due to moisture that is present when installing the camera. Use the supplied cable tie to keep the desiccant from falling down into the dome bubble.
- 4. Attach the dome trim ring cover with shroud to the enclosure by tightening the three tamper-proof screws with the supplied Torx T-20 security wrench.



Figure 11.1



Figure 11.2

12 PC Configuration of Alliance-mx

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.

- Download and install IQfinder from the Vicon website. Launch and scan for camera on the newtork 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 12.1.
- 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 "Apply" button after making the desired changes (Figure 12.2).

NOTE: Changing between a static IP address and DHCP will require the camera to be rebooted.

- 3. To view a camera, double-click a camera entry or highlight a camera in the list and click the "Web Page" button (Figure 12.3). 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 (Figure 12.4).
- 4. To perform further configuration of the camera click on the "Setup" tab.

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

For additional information and technical documents, please visit www.vicon-security.com.



Figure 12.1

Туре:	IQ831N
HW Addr:	00.50:1a:07:22:43
 ○ Obtain an ④ Use the fit 	IP address automatically via DHCI blowing IP address
IP Address:	169.254.34.67
Subnet:	255.255.0.0
Gateway	0.0.0.0

Figure	1	2	.2
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Figure 12.4

13 Factory Reset

1. Press and hold the "Reset" button for 15 seconds as illustrated in Figure 13.1.



Figure 13.1

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 (U.K.) Ltd Brunel Way Fareham, P015 5TX 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.
- Alliance-Pro (IQA3xx): Five years if purchased between 3/2/2012 12/31/2014. Three years if the motorized lens (IQA3xx-A3) option.
- 4. Uninterruptible Power Supplies: Two years from date of original retail purchase.
- 5. VDR-700 Recorder Series: One year from date of original retail purchase.
- 6. V5616MUX: One year from date of original retail purchase.
- 7. Arecont Cameras: One year from date of original retail purchase.
- 8. FMC series fiber-optic media converters and associated accessories: Lifetime warranty.
- 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.
- 10. 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 February 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.

