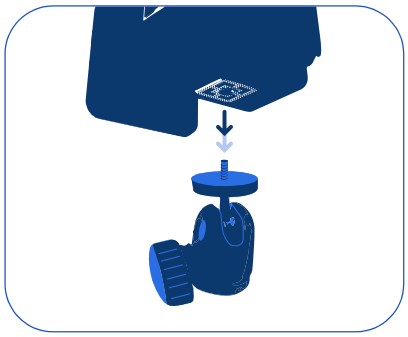
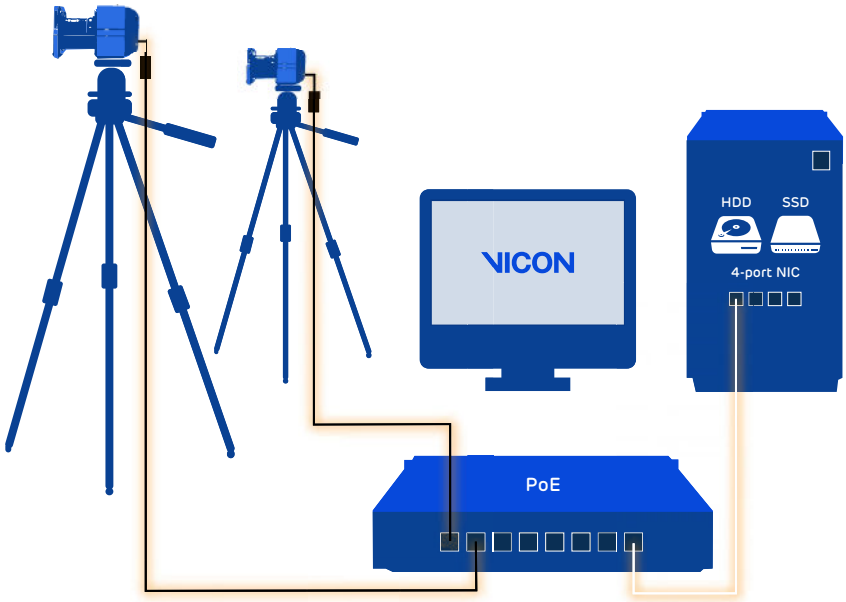
VICON VERO

Quick Start Guide

Hardware: Mount. Cables. Connect.

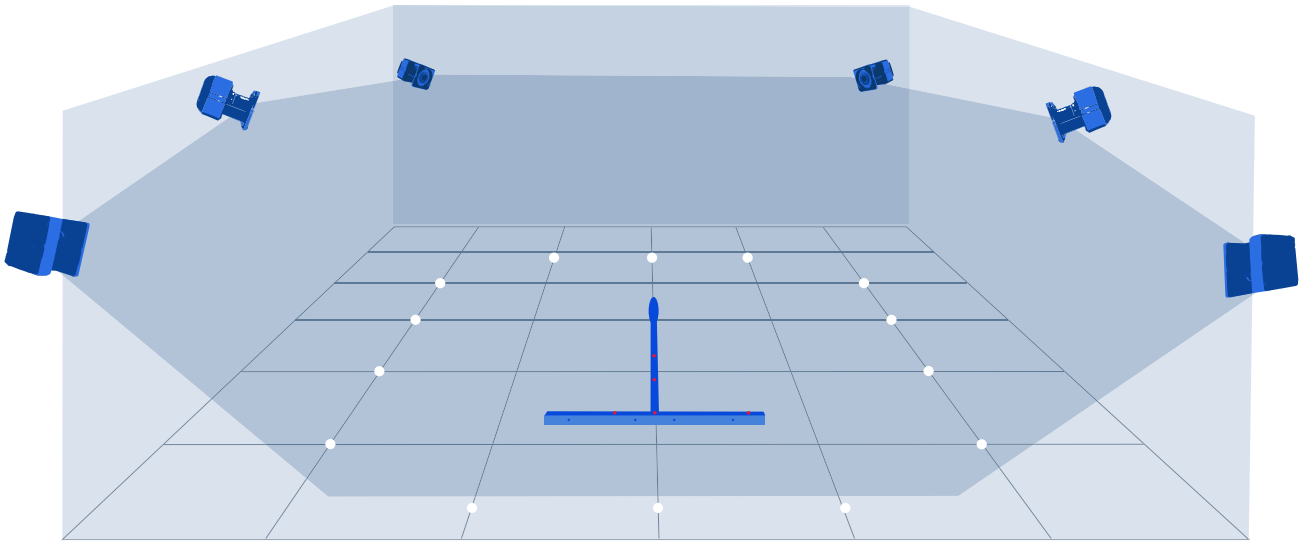




Volume: Visualize. Set up. Aim.

Lay out markers to define the desired volume.

Point the cameras to provide roughly the required coverage. You will be able to refine camera aiming later, using your Vicon software.



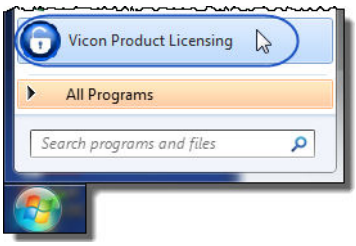
For easy system setup, use the Vicon Control app
See vicon.com/products/software/vicon-control.

Software: Download. Install. License.

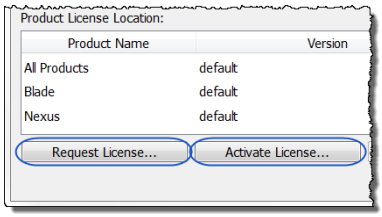
❶ www.vicon.com/downloads (supported software: Vicon Nexus 3.4, Vicon Tracker 3.3, Vicon Blade 3.4 or later)

❷ Run **SETUP.EXE**.

❸ Click **Start**, then **Vicon Product Licensing**.



❹ Request a license, save it to a suitable location and activate it.



For details on installing and licensing, see your Vicon software documentation.

System: Administrator. IP address. Adapter settings.

Important: Ensure you are logged on as Administrator.

❶ Open the **Network Connections** window.

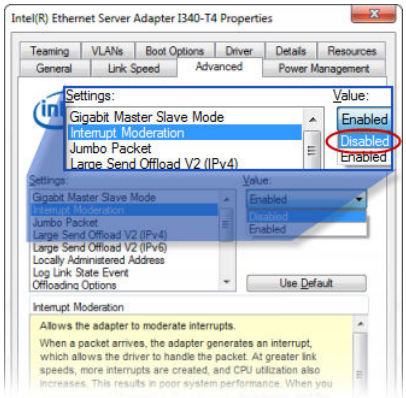
❷ Right-click on the network port that connects to the PoE switch and click **Properties**.

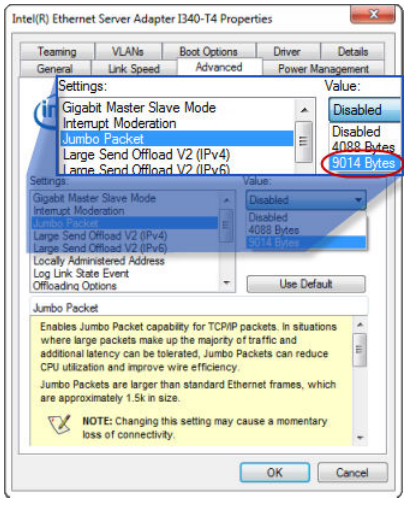
❸ In the **Properties** dialog box, click **Configure** and then the **Advanced** tab.

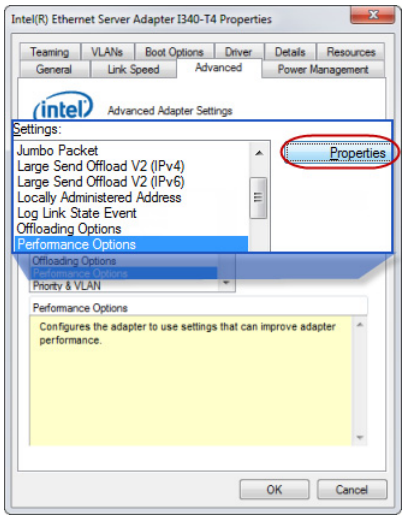
❹ In the **Settings** list, ensure the values shown (in the images on the right and the first two columns on page 3) are selected, then click OK to close the dialog box.

❺ Repeat step 2 to re-open the **Properties** dialog box.

❻ Ensure only **Internet Protocol Version 4** is checked (see page 3, last column) and click the **Properties** button.



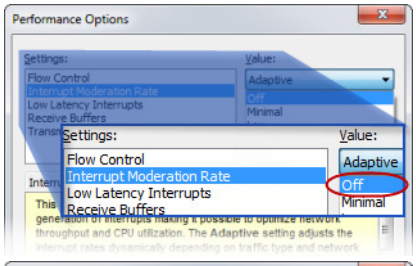


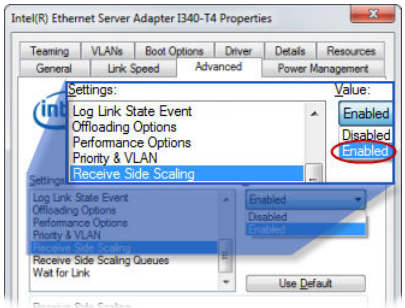


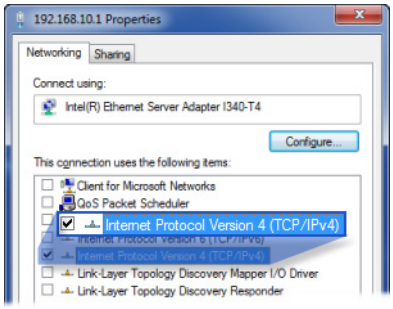
❼ Specify the IP address `192.168.10.1` and subnet mask `255.255.255.0` (see page 3, last column) and click OK.

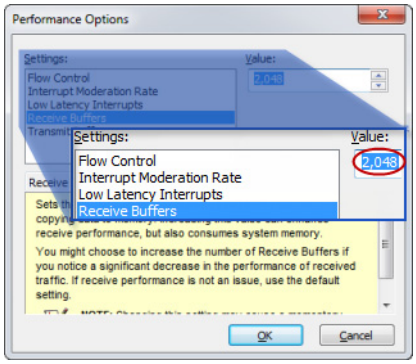
For detailed guidance on system setup, download the Vicon PDF, PC Setup for Vicon systems.

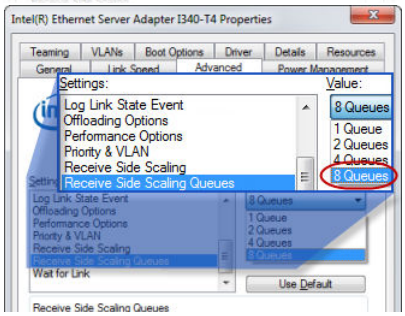
System (cont.): Administrator. IP address. Adapter settings.

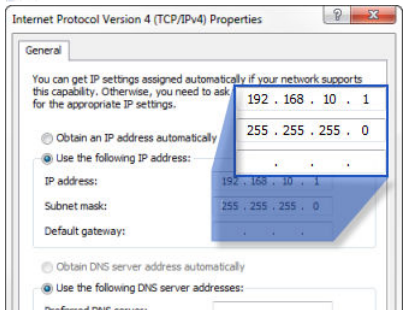






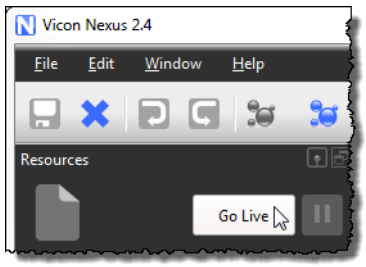


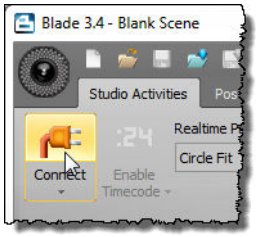


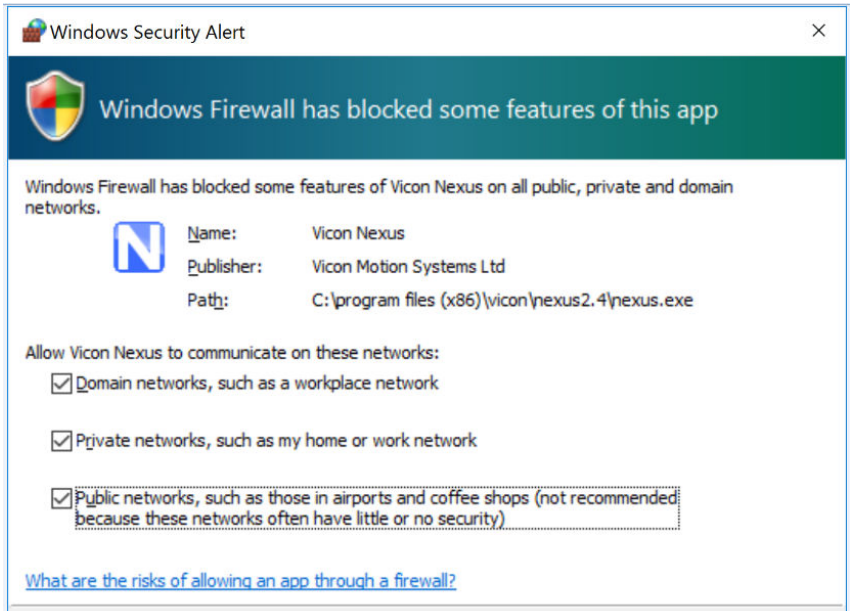


Run: Start software. Unblock firewall. Connect.

❶ After you start your Vicon software, ensure that it is not blocked by a firewall and that it shows the system is live.







❷ In the **System Resources** pane (in Blade, the **Selection** editor), Shift+click to select all the cameras. In the **Properties** pane (or **Attributes** editor), change **Grayscale Mode** to **All**.

❸ In the **System Resources** pane (or **Selection** editor), select a camera.

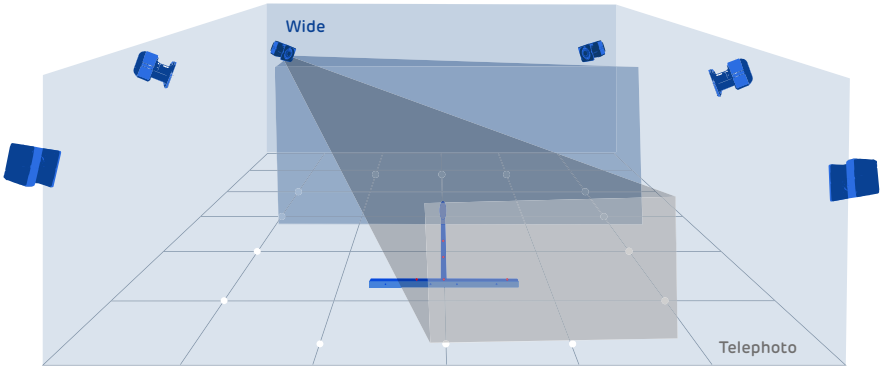
❹ Change the **View** pane to **Camera** view (or in Blade, click the **Camera Layout** button and ensure you are looking at a **Capture** view).

You can now set the camera focus and aperture.

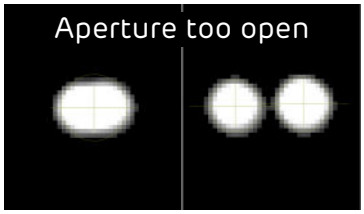
Adjust: Zoom. Grayscale. Focus.

Focal length W(ide)

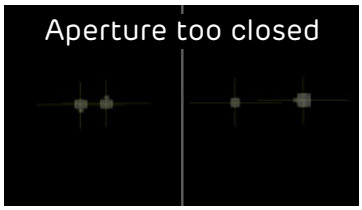
Focal length T(elephoto)



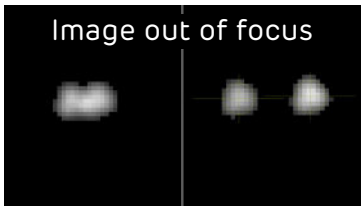
✗ Aperture too open



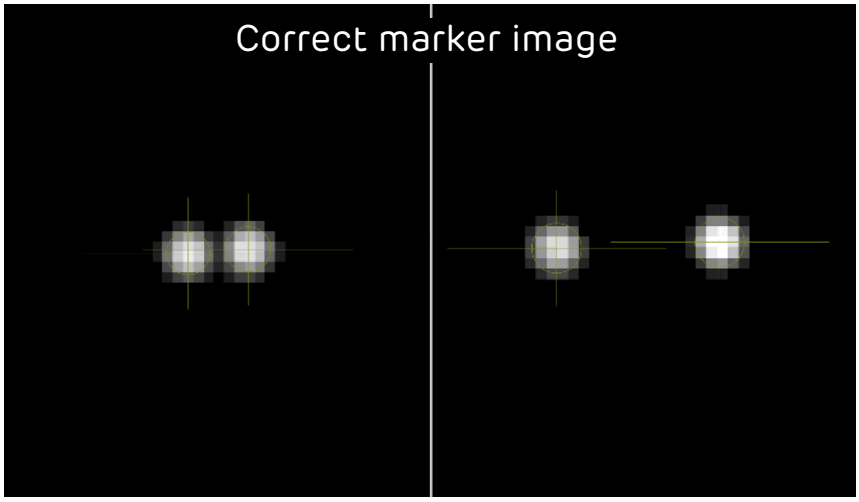
✗ Aperture too closed



✗ Image out of focus



Correct marker image



Markers touching | 10cm separation

✓ A correct marker image is shown above. The markers are not too small, with centers just off-white (not fully saturated) when viewed from the middle of the volume.

Important: Before you begin system calibration, select all cameras and change **Grayscale Mode** back to **Auto**. For more about calibration, see your Vicon software documentation.

Need more help?

Visit www.vicon.com/faqs.

Contact Vicon

youtube.com/vicon100
facebook.com/vicon
twitter.com/vicon
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VICON VERO

Regulatory information

Radio and television interference

The following topics contain information concerning compliance with regulations of radio and television interference:

- For United States of America customers
- For Canadian customers

For United States of America customers

Federal Communications Commission (FCC) Part 15 Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules (CFR 47:Part 15:B:2013). These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Vicon Motion Systems Ltd is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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.

For Canadian customers

Conformity to the Canadian Interference-Causing Equipment Regulations

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations ICES-003:2004.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada ICES-003:2004.

Environmental regulations (European Union customers)

This section lists the directives that apply to Vicon Vero systems.

Important

This information applies only to European Union member states.

Vicon meets these European Commission directives concerning waste electrical and electronic equipment:

- Directives 2002/95/EC and 2011/65/EU (for details, see Restriction of the use of certain hazardous substances in electrical and electronic equipment – RoHS and recast (RoHS 2)).
- REACH Declaration of Conformity
- Directive 2202/96/EC (for details, see Waste Electrical and Electronic Equipment (WEEE)).

Restriction of the use of certain hazardous substances in electrical and electronic equipment – RoHS and recast (RoHS 2)

This equipment is fully RoHS- and RoHS 2- compliant. RoHS Directive 2002/95/EC provides that new electrical and electronic equipment put on the market for the first time from 1 July 2006 should not contain lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB), or polybrominated diphenyl ethers (PBDE). The European Union Directive 2011/65/EU provides that new electrical and electronic equipment put on the market for the first time from 3rd January 2014 shall not contain more than permitted levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB), or polybrominated diphenyl ethers (PBDE; PentaBDE, OctaBDE; DecaBDE), Mercury (Hg).

REACH Declaration of Conformity

Vicon Motion Systems Ltd is a manufacturer of electronic hardware. We are therefore considered a "downstream user" as far as the REACH document is concerned. Vicon Motion Systems Ltd is therefore not obligated to register with the European Agency for Chemicals 'ECHA'.

Products sold by Vicon Motion Systems Ltd are "articles" as defined in REACH (Article 3 Definitions). Moreover and under normal and reasonably foreseeable circumstances of application, the articles supplied shall not release any substance. For that, Vicon Motion Systems Ltd is neither obligatory for registration nor for the creation of material safety data sheets.

In order to assure our customers of the continual supply of reliable and safe products, we ensure that our suppliers fulfill all requirements regarding chemical substances and prepared materials.

Waste Electrical and Electronic Equipment (WEEE)

The use of the symbol as a marking on the equipment, accessories or literature indicates that this product and its electronic accessories (e.g. USB cable) may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

Household users should contact either the retailer where they purchased this device, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchasing contract. This device and its electronic accessories should not be mixed with other commercial waste for disposal.

EU Declaration of Conformity (Vicon Vero cameras)

CE 0088

Declaration of Conformity

Medical Devices Directive 93/42/EEC as amended by EU Council Directive 2007/47/EC of 5th September 2007. Electromagnetic Compatibility to EMC Directive 2014/30/EU Electrical Safety to Low Voltage Directive 2014/35/EU.

We, Vicon Motion Systems Limited
Unit 14 Minns Estate
Oxford OX2 0JB
United Kingdom

declare that the VICON VERO Cameras manufactured by VICON MOTION SYSTEMS LIMITED meets ANNEX V and VII Section 5 of the Medical Devices Directive 93/42/EEC as amended by Directive 2007/47/EC in that the Quality Management System has been approved by Lloyd's Register Quality Assurance, a notified body of the European Union (Reg No. 0088) for the manufacture and support of the aforementioned CLASS 1(m) Medical device. Product configurations and software options (Vicon Vero cameras) right, detail the product configurations and software options that conform to the metrological requirements of the Directive.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

VICON MOTION SYSTEMS LIMITED has tested and demonstrated that all products of its own manufacture meet 2014/30/EU:

Electromagnetic Compatibility to:

EN60601-1-2:2007

General Requirements for Safety to:

Vero Cameras EN60601-1:2006 + A12:2014

Network Hub UL60950–1, 2nd Edition

Thomas Shannon, TD PhD FIE (Aust), CPEng (Biomed.)
Director of Compliance

20th April 2016

Not for use in an operating theater, anesthetic gas environment, or oxygen-rich environments. Not for use where there is a risk of compromising the essential performance of medical electrical equipment. Not suitable for use in high magnetic flux, ionizing radiation, dust ingress, high vibration, sterile, or life- or safety-critical environments.

Product configurations and software options (Vicon Vero cameras)

This section provides information relating to the EU Declaration of Conformity (Vicon Vero cameras).

Conformity of the Metrological Performance of CLASS 1 Products Manufactured in Accordance with Annex VII, Section 5 of the Medical Devices Directive 93/42/EEC of the 14th June 1993. As amended by EU Council Directive 2007/47/EC of 5th September 2007.

We, Vicon Motion Systems Limited
Unit 14 Minns Estate
Oxford OX2 0JB
United Kingdom

declare that the VICON VERO Cameras manufactured by VICON MOTION SYSTEMS LIMITED have been tested prior to shipment and meet the following metrological performance:

Measurement criteria

- Supporting software Blade 3.4 or later, Nexus 2.4 or later, and Tracker 3.3 or later.
- Resolution of the distance between the centers of two static 14 mm spherical markers located within a volume no less than 4 m x 4 m x 1.5 m to within 1 mm Mean; 1 mm Standard Deviation; sample size no less than 1,000.

About your Vicon camera packaging

The box in which your new Vicon Vantage, Vicon Vero or Vicon Vue camera arrived has a specially formed foam insert that holds the camera. This insert is made of a protective material that prevents most damage that could be caused during shipping. Vicon recommends that you retain this box as it provides the most convenient and safe way to ship your camera(s) in future.