Please read this manual thoroughly before use, and keep it handy for future reference.
WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION

EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert 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.

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

PRECAUTIONS

Safety ------------------------------- Installation -------------------------------

Safety

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Height and vertical linearity controls located at the rear panel are for special adjustments by qualified personnel only.

Installation

Before installation, carefully read the manual to ensure correct operation and setup, heeding all warnings and instructions.

Do not install the device near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.

Only use attachments/accessories specified by the manufacturer.

Do not install the device in a place where it is exposed to gas or oil.

Cleaning -------------------------------

Clean the unit with a slightly damp soft cloth.
Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.
FCC COMPLIANCE STATEMENT

INFORMATION TO THE USER: 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. 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.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.
CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. CAUTION – THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.
16. Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.
17. ITE is to be connected only to PoE networks without routing to the outside plant.
1. Description

The information in this manual provides quick installation and setup procedures for the IP Camera Domes. These units should only be installed by a qualified technician using approved materials in conformance with federal, state, and local codes. Read these instructions thoroughly before beginning an installation. Always refer to Vicon’s website to assure you have the most up-to-date manual, www.vicon-security.com.

The IP Camera Domes is designed for demanding security installations. It offers a number of fixed network camera versions that deliver crisp clear images to fit any installation need; models with IR illuminators are available. The IP cameras are fully compatible with all ViconNet® systems; its ONVIF certification provides an open-platform for integration into other video management systems.

The housing is designed for easy installation. PoE eliminates the need for power cables, providing a cost-effective method of installation. The IP camera features an auto iris lens that adapts to changing outdoor lighting; the true day/night camera includes a removable IR cut filter. The camera dome is IP66 rated with a vandal-proof casing that withstands rain, dust and vandalism. It provides 3-axis adjustment. The alarm input and alarm output can be used to connect various third party devices, such as door sensors and alarm bells.

1.1 Components

The system comes with the following components:

- Camera unit
- Installation CD
- Installation Guide
- Template Sheet
- Accessory Kit

Check your package to make sure that you received the complete system, including all components shown above.
2. Installation

For the network camera to operate, it is necessary to connect a network cable for data transmission and power connection from supplied power adapter. Depending on operation methods, it is possible to also connect an alarm cable.

2.1 Overview

Unpacking and Inspection
All Vicon equipment is tested and inspected before leaving the factory. It is the carrier responsibility to deliver the equipment in the same condition as it left the factory.

Inspection for Visible Damage
Immediately inspect the cartons upon delivery. Make a note of any visible damage on all copies of the carrier’s freight bill.

Make sure the carrier’s agent (the person making the delivery) signs the note on all copies of the bill. If the agent does not have claim forms, contract the carrier’s office.

Inspection for Concealed Damage
As soon as possible after delivery, unpack the unit and inspect it for concealed damage. Do not discard the carton or packing materials. If the unit is damaged, contact the carrier immediately and request forms for filing a damage claim. Make arrangements for a representative of the carrier to inspect the damaged equipment. If the equipment must be returned for repair, follow the Shipping Instructions at the end of this manual.

Mounting the Unit
Select a location for the installation of the camera. Be sure the area around the selected location is clear of obstacles (such as steel beams, headers, pipes, electrical wiring, etc.) which would interfere with the mounting of the camera and that the location can support the weight of the unit. Video and power cables must be routed to the installation location.

⚠️ Caution: Do not attach these units to drywall surfaces and do not install mounting screws into the end grain of wood.
1. Loosen the three Torx screws as shown in Figure 1. Do not remove the screws. Lift the trim ring off the mount and set aside.

2. Drill the mounting location using the supplied drill guide label. (Fig. 2)

3. Attach the surface mount to the ceiling as shown in Figure 2. M5x30 fasteners are supplied. If other fasteners are required, you will need to obtain them.

4. Insert the bottom case into the surface mount as shown in Figure 2. Turn the locking flaps outward as shown in Figures 3 and 4 to attach the bottom case to the surface mount.

5. Install the trim ring onto the surface mount and tighten the Torx screws.

**Note:** Failure to thoroughly coat threads will result in moisture entering the housing and eventual failure of the unit.
Note: For outdoor installations, Vicon recommends that the vent plug should only be used if fogging conditions exist. Additionally, if the side cable access hole is used, the base must be mounted so the hole is pointed directly downward.

INSTALLATION - Surface Mount

Figure 3

Figure 4
NOTE: The ceiling tile cannot be thinner than 0.15 inch (3.7 mm)

1. Loosen the three Torx screws as shown in Figure 1.
   Do not remove the screws. Lift the trim ring off the mount and set aside.
   **Note:** Set the surface mount aside. It is not needed for this installation.

2. Remove the ceiling tile from the ceiling. Draw a circle with a diameter of 116 mm on the tile
   (You can use carton with a hole). Cut the circle out of the ceiling tile. **(Fig. 2)**

3. Install the bottom case in the ceiling as shown in Figure 2.
   Turn the locking flaps outward as shown in Figures 3 and 4 to attach
   the bottom case to the ceiling.

4. Install the trim ring onto the surface mount and tighten the Torx screws
INSTALLATION - In Ceiling

Figure 3

Locking flap's Screws (x3)

Locking flap (x3)

Figure 4

CEILING / WALL
See the diagrams below for the exact dimension of the network camera dome.

**EXTERNAL DIMENSION**

<table>
<thead>
<tr>
<th>Window Size</th>
<th>0.1 in. (3.0mm thick), impact-resistant P.C (LEXAN) 3.9in (9.9cm)diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Entry</td>
<td>One 1&quot; opening holes</td>
</tr>
<tr>
<td>Weight - Unit: Shipping:</td>
<td>1.21 lb. (0.55kg)  1.54 lb. (0.7 kg)</td>
</tr>
</tbody>
</table>
2.2 Connections

- Connection Description

<table>
<thead>
<tr>
<th>NO</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RJ-45</td>
<td>Ethernet, RJ-45 port compatible with 10/100Mbps PoE Modular Jack</td>
</tr>
<tr>
<td>2</td>
<td>DC Jack</td>
<td>Main Power, DC Jack, DC12V</td>
</tr>
<tr>
<td>3</td>
<td>AI: Alarm In</td>
<td>Alarm input and output, 3pin terminal</td>
</tr>
<tr>
<td></td>
<td>G: GND</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MIC: Audio In</td>
<td>Audio line input, 2pin terminal</td>
</tr>
<tr>
<td></td>
<td>G: GND</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SPK: Audio Out</td>
<td>Audio line output, 2pin terminal</td>
</tr>
<tr>
<td></td>
<td>G: GND</td>
<td></td>
</tr>
</tbody>
</table>

- **Micro SD memory card insertion**
  Remove the bubble of the camera to insert the SD memory card.
- **Connecting to the RJ-45**
  Connect a standard RJ-45 cable to the network port of the network camera. Generally a cross-over cable is used for direct connection to PC, while a direct cable is used for connection to a hub. You can also use a router featuring PoE (Power over Ethernet) to supply power to the camera.

- **Connecting Alarms**
  **AI (Alarm In):** You can use external devices to signal the network camera to react on events. Mechanical or electrical switches can be wired to the AI (Alarm In) and G (Ground) connectors.
  **G (Ground):** Connect the ground side of the alarm input and/or alarm output to the G (Ground) connector.
  **AO (Alarm Out):** The network camera can activate external devices such as buzzers or lights. Connect the device to the AO (Alarm Out) and G (Ground) connectors.

- **Connecting the Power**
  Connect the power of 12 VDC 450mA for the network camera. Connect the positive (+) pole to the `+` position and the negative (-) pole to the `-` position for the DC power.
  - Be careful not to reverse the polarity when connecting the power cable.
  - A router featuring PoE (Power over Ethernet) can also be used to supply power to the camera.
  - For the power specifications, refer to the Appendix, Product Specification.
  - If PoE and 12 VDC are both applied, the camera will be supplied with power from PoE.

- **Connecting Audio**
  Connect Speaker to Audio line output and external Mic to Audio input line.
2.3 Network Connection and IP assignment

The network camera is designed for use on an Ethernet network and requires an IP address for access. Most networks today have a DHCP server that automatically assigns IP addresses to connected devices. By the factory default, your camera is set to obtain the IP address automatically via DHCP server. If your network does not have a DHCP server the network camera will use 192.168.1.100 as the default IP address.

If DHCP is enabled and the product cannot be accessed, run the "Smart Manager" utility on the CD to search and allocate an IP address to your products, or reset the product to the factory default settings and then perform the installation again.

1. Connect the network camera to the network and power up.

2. Start SmartManager utility (Start>All Programs>SmartManager>SmartManager); the main window displays. After a short while any network devices connected to the network will be displayed in the list.

3. Select the camera on the list and click right button of the mouse. The pop-up menu below displays.

4. Select Assign IP. The Assign IP window displays. Enter the required IP address.

Note: For more information, refer to the Smart Manager User’s Manual.
2.4 Resetting to the Factory Default Settings

To reset the network camera to the original factory settings, go to the Setup > System > Maintenance web page (described in “System > Maintenance” of Users Manual) or use the Reset button on the network camera, as described below:

- **Using the Reset Button**
  Follow the instructions below to reset the network camera to the factory default settings using the Reset button.

  1. Switch off the network camera by disconnecting the power adapter.
  2. Press and hold the Reset button with a straightened paperclip while reconnecting the power.
  3. Keep the Reset button pressed until the Status indicator blink.
  4. Release the Reset button.
  5. When the Power Indicator changes to Green (may take up to 40 seconds), the process is complete and the network video camera has been reset.
  6. The network camera resets to factory defaults and restarts after completing the factory reset.

**CAUTION:** When performing a Factory Reset, you will lose any settings that have been saved. (Default IP 192.168.1.100)

**System Requirement for Web Browser**

**Operating System:** Microsoft® Windows® 98, Microsoft Windows ME, Microsoft Windows 2000, Microsoft Windows XP, or Microsoft Windows Vista®

**CPU:** Intel® Core™ 2 Duo 2GHz or higher, 1 GB RAM or more, 10 GB free disk or higher

**VGA:** AGP, Video RAM 32 MB or higher (1024x768, 24 bpp or higher)
Vicon Industries Inc.

For office locations, visit the website:

www.vicon-security.com