# XX220-23-01

# ViconNet Web System

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# ViconNet Web System Installation & Configuration Guide


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# General

This manual provides information for installing the ViconNet Web System preinstalled on a PC. It is available as a rack-mount unit, VN-RMT-PCV8-RK, but will also be available as a tower if required, VN-RMT-PCV8. The term VN-RMT-PCV8 is used in this manual to refer to both units unless specifically stated otherwise

Before the Web Viewer can be used, a Web Server must be configured and registered. The VN-RMT-PCV8 provides the Web Server as its own dedicated server as a full service.

The ViconNet® Web System runs as a Windows® system service and provides a web server for the viewers; it is designed as a dedicated server and cannot run together with ViconNet or VMDC running on the same PC. This dedicated server allows a higher number of concurrent users (up to 25 web viewers tested; refer to datasheet for mobile devices).

The ViconNet Web System is compatible with ViconNet versions 4 and higher. Refer to the ViconNet software manual for details on setting up ViconNet. The software, VN-RMT-SW, is available and can be installed on a PC that meets the minimum requirements. Refer to current datasheet.

Refer to our website, www.vicon-security.com, for the latest version of this manual.

# Hardware Installation

This system should only be installed by a qualified technician using common hand tools and approved materials in accordance with the National Electrical Code ANSI/NFPA 70, state and local wiring codes.

The rack-mount model, VN-RMT-PCV8-RK is a 1 RU unit; the VN-RMT-PCV8 is an ITX mini chassis (desk-top) unit. These units meet requirements for an FCC Class A computing device and CE.

Vicon requires the use of line conditioners, voltage regulators and uninterruptible power supply (UPS) systems in the electrical power service.

Note

Read all instructions before beginning the installation.

## Accessory Kit

The provided accessory kit contains necessary items needed to install and wire the unit during installation:

**Table 1: Accessory Kit**

| Part | Description |
|---|---|
| CD and Manuals | Provides documentation and software (including current drivers) and license certificate |
| Front Door Key | Opens the front panel door |
| Power Cord | Used for power connection |
| Rail Bracket Kit | For rack mounting the VN-RMT-PCV8-RK |

## Unpacking and Inspection

All Vicon equipment is tested and inspected before leaving the factory. It is the carrier's responsibility to provide suitable delivery.

Inspect the cartons upon delivery and, if damage is present, make detailed notes on the carrier's bill. Then, obtain the carrier agent's signature and file a damage claim as soon as possible.

Open the cartons and inspect the equipment for damage. Save the cartons and packing material. If damage is present, contact the carrier and file a damage claim immediately. If the equipment must be returned for repair, follow the *Shipping Instructions* at the end of this manual.

## Unpacking the Unit

Carefully open the carton. Remove the accessory kit and the Web Server PC from the box and place them on a large, flat working surface. Open the accessory kit and verify the contents against the list in Table 1.

## Required Items for Installation

To properly install the VN-RMT-PCV8 there must be simple hand tools available such as a screwdriver, wrenches, pliers and wire cutters/strippers. To setup for operation there must be a keyboard and a mouse available to operate the GUI.

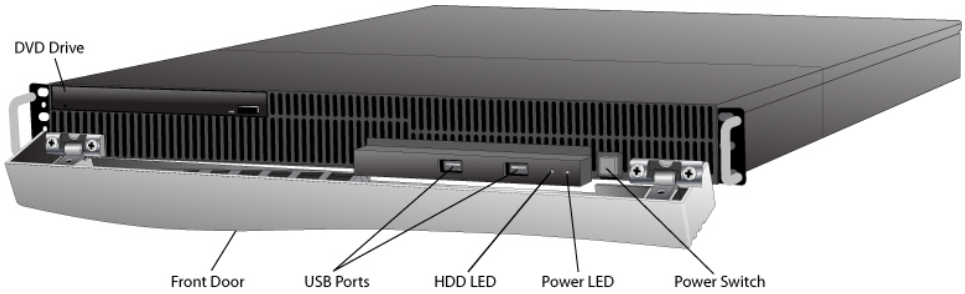
# Unit Components

This section describes the VN-RMT-PCV8-RK front and rear panels.

Note

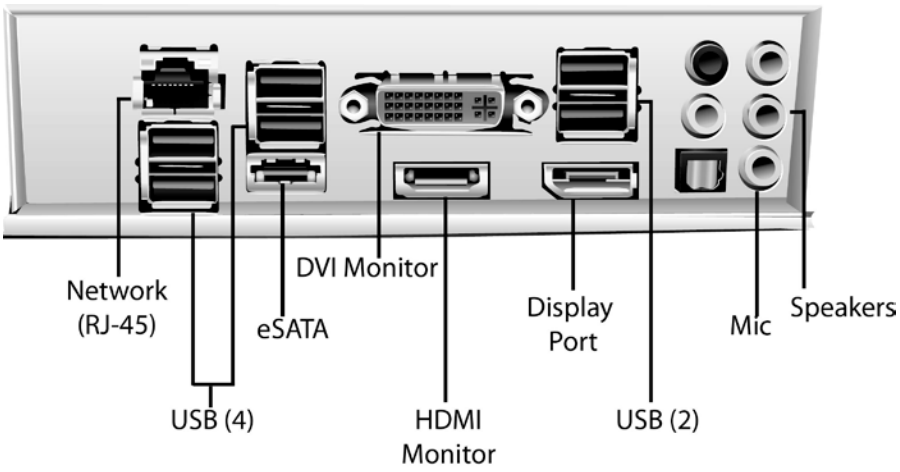
Ports may vary subject to variations in hardware, but will be similar in function.

## Front Panel Controls and Connections




- **Power Switch:** Used to power on the unit.
- **Power LED Indicator:** Blue LED used to display the power status (ON means unit on and OFF means unit off).
- **DVD Drive:** Used as a high-capacity removable data drive.
- **LED Viewing Holes:** Used to view the status of the LEDs without opening the front door.
- **Front Door:** Used to protect the front panel from unauthorized use.
- **Keyed Lock:** Used with the provided key to lock the front door.
- **HDD LED:** Red LED, blinks when disk is in use.
- **USB Ports:** Used for optional devices.

## Rear Panel Controls and Connections




- **Audio – Mic In/Speaker Output:** Jacks used for audio input and output.
- **Power Receptacle:** Used to connect the provided power cable.
- **Keyboard Port:** USB connector used to connect a standard PC keyboard.
- **Mouse Port:** USB connector used to connect a mouse.
- **USB Connectors:** Used for optional devices.
- **Network Port:** RJ-45 connectors; use to connect to a LAN/WAN (100/1000 Base T).
- **Monitor:** DVI and HDMI connectors provided. Display Port also available.
- **External Storage:** eSATA connector.
- **Display Port:** For monitors supporting the Display Port interface.

# Mounting

There are two types of mounting, depending on the model, either ITX mini chassis desktop or in a rack.

## Desktop

The desk or table must provide a surface of suitable strength for the unit's weight. In addition, there must be area left around the cabinet to provide suitable airflow for cooling. Do not place heavy items on the cover.

## Rack

The rack-mount model is designed to be mounted in a standard 19-inch (483 mm) wide vertical rack. A rail bracket kit is included to provide extra support for the unit when it is installed into the rack.

There are two adjustable rail brackets (right and left) provided. Adjust the length of the brackets so they can be secured to the front (1 screw) and rear (2 screws) on each side of the rack cage with hardware appropriate for the rack.

Slide the Nucleus into the rack on the brackets and secure with two screws on each side through the rack-mounting ears.

Note

It is recommended that at least 1 RU of space [1.75 in. (44.45 mm)] be left in between multiple recorders mounted in the same rack for cooling purposes.

⚠Warning

Failure to leave space for cooling between recorders may result in malfunctioning and possible failure of the unit.

# Installing the Web Service System

After the unit is mounted permanently, follow the steps in this section to install the hardware.

- **Step 1: Connecting the Hardware**, below
- **Step 2: Connecting the Power Supply**

Important Notes

The connection of external hardware may require simple hand tools. Do not apply power or plug-in the unit to any outlet until instructed to do so.

Disable the AC power to prevent installer injury and damage to the unit.

Before beginning the hardware installation, ensure that the following environmental conditions have been met:

- The surface on which the ***ViconNet*** hardware is to be placed must be level.
- The room or area designated for the ***ViconNet*** hardware installation must be well ventilated.

## Step 1: Connecting the Hardware

This procedure describes the various hardware connections that must be performed in order to operate the system.

1. Perform the following connections: (refer to Front and Rear Panel diagrams).
   - 1.1 Locate the keyboard on a flat surface near the unit. Connect the keyboard by inserting its connector into the correct port.
   - 1.2 Locate the mouse on a flat surface near the unit. Connect the mouse by inserting its connector into the correct port.
   - 1.3 Position the monitor in a permanent fixed location near the unit. Connect the monitor by inserting its VGA or HDMI connector into the VGA Monitor Output or HDMI port.
   - 1.4 Insert one side of a standard LAN cable to the Network Port's RJ-45 connector. Insert the other RJ-45 connector into the LAN side of the network.
   - 1.5 Connect external hardware devices to the relevant terminal.
   - 1.6 Insert the female end of the provided 120 VAC Power Cable into the unit's Power Receptacle. Do not connect the remaining end to a power receptacle until instructed. If using 230 VAC power, it is necessary to obtain a suitable power cord for use. This cable is a standard computer 230 VAC power cord.
2. Connect the monitor to the power source and power on.

## Step 2: Connecting the Power Supply

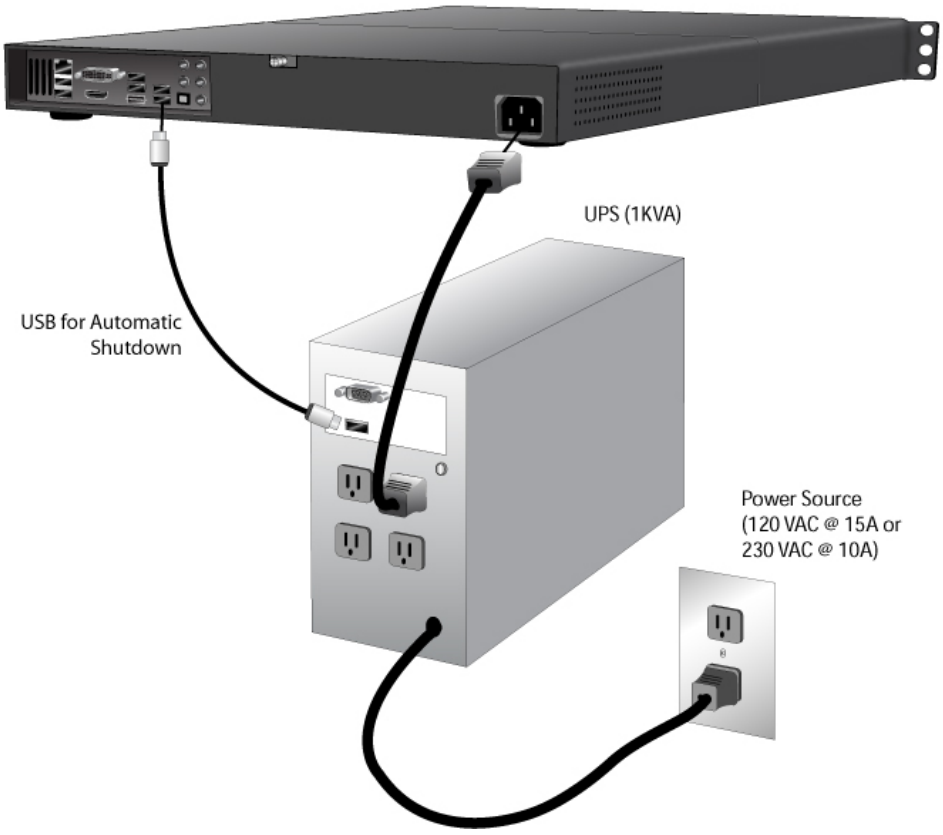
To ensure that the unit is protected during a power failure and that no important data is lost, it must be connected to an uninterruptible power source (UPS) before use.

**To connect the UPS:**

1. Connect the power cord to the UPS power receptacle.
2. Connect the UPS power cord to the wall outlet.
3. Power on the UPS and ensure that it is working properly.

Note

Refer to your UPS device's User Manual for a more detailed explanation of how to connect it properly.



# Operation

## Powering On the Unit

**To power on the system:**

With the unit set up as shown in *Installation*, open the front panel cabinet and press the front panel pushbutton Power Switch. The button does not lock into position; it remains in the out position, which is its default position, even when the system is running.

Important

Do not press any keyboard buttons at this time.

When the unit completes booting, the Main Screen is displayed.

## Powering Off the Unit

**To power off the system:**

With the unit booted and operational, press the **Shutdown** button in the *Site Setup* window. Follow the screen prompts and the system returns to the ViconNet desktop. Use the **Start** button to completely shut down the system.

**OR (this is not recommended, due to the possibility of data loss)**

Momentarily press the power switch. The system switches off, component by component.

Note:

The ViconNet Web Service software is factory installed on the VN-RMT-PCV8; it is not necessary to install the software. The following section is supplied only for your information or if the software ever has to be re-installed onto the unit.

# Software Installation

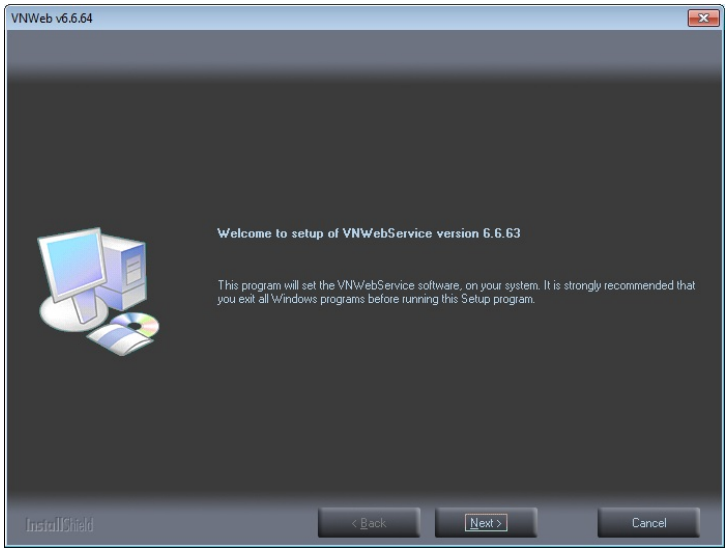
The ViconNet Web Service software comes fully installed on a PC. If software only was purchased, it can be installed on a PC that meets the minimum requirements. If the software version is being installed, it is shipped with a license that will support multiple concurrent users. The unit will have to be registered following installation. This is documented at the end of this manual. If the system has not been registered, it will allow only 2 concurrent users to connect to it; any additional users will be blocked.

Follow the steps below. The software is found on the ViconNet Web System CD/USB drive. The same procedure can be followed when doing either a fresh install or an upgrade to another version (i.e., version 6.0 to 6.6).

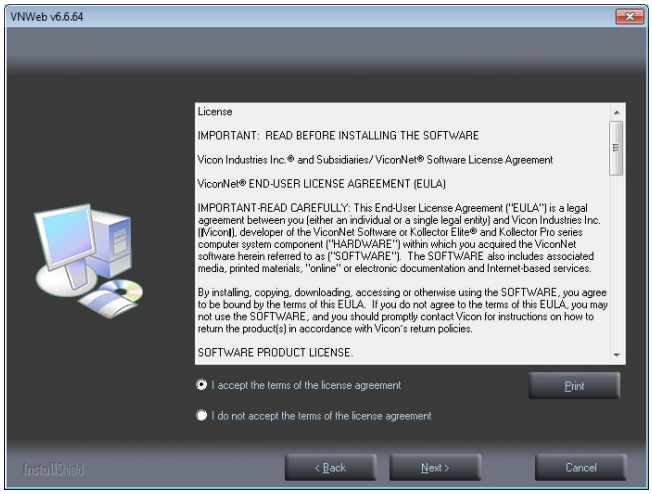
**Note:** The installation described below shows a typical Windows installation. The installation is similar for other Windows operating systems.

1. Insert the CD/USB drive in the drive and autorun will launch the CD. If autorun does not run, use Windows Explorer to navigate to the CD drive and click it to run the CD.bat.
2. The Software and Documentation selection screen displays. Click the **ViconNet WebService Software** link.

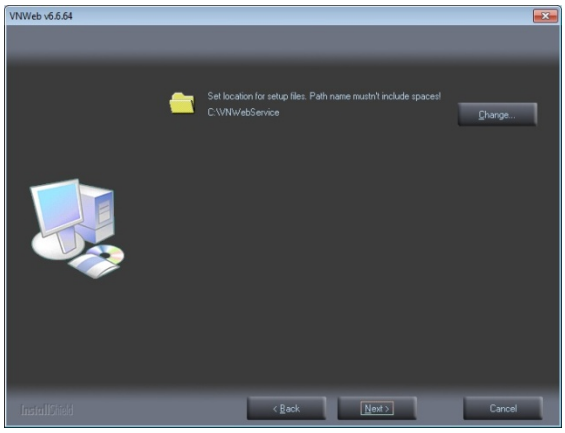
3. The Remote System software will be recognized and the following screen will display, followed by the welcome screen.



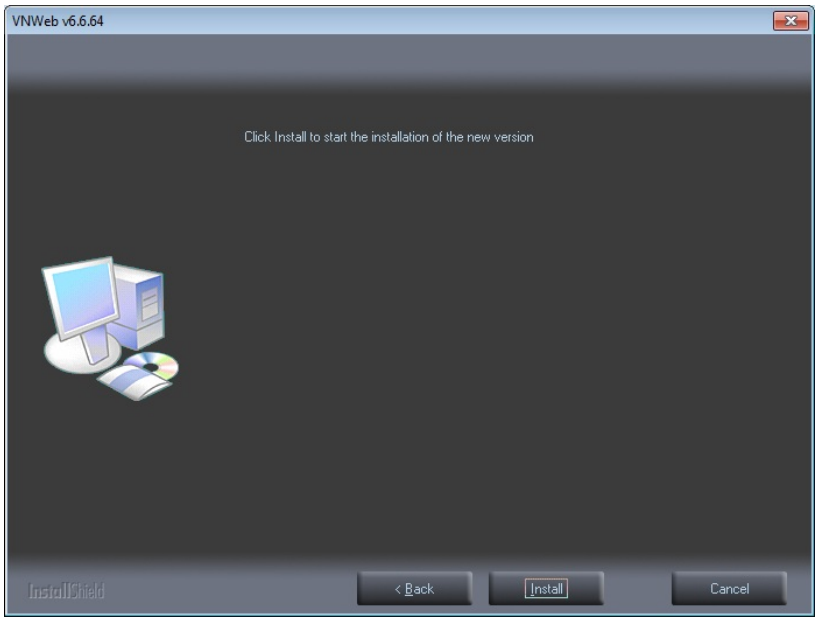

4. Click Next. The License screen displays. Select “I accept the terms of the license agreement” and click Next.



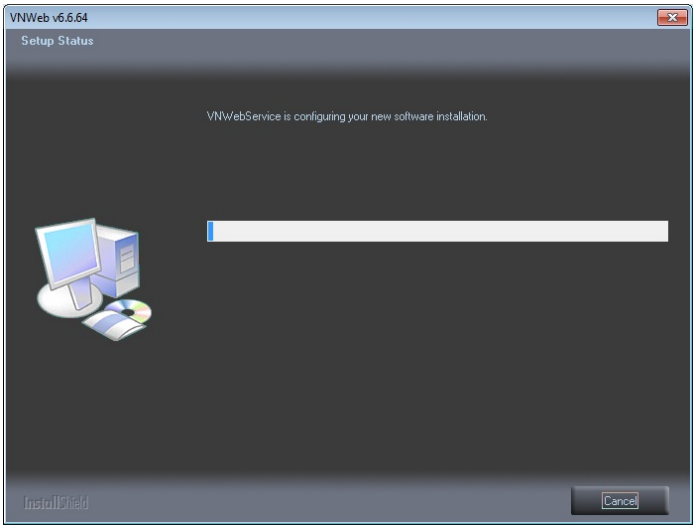

5. A screen displays to set the folder where the software is to install. Use the default folder or click Change to select a different location than the default. Then click Next.



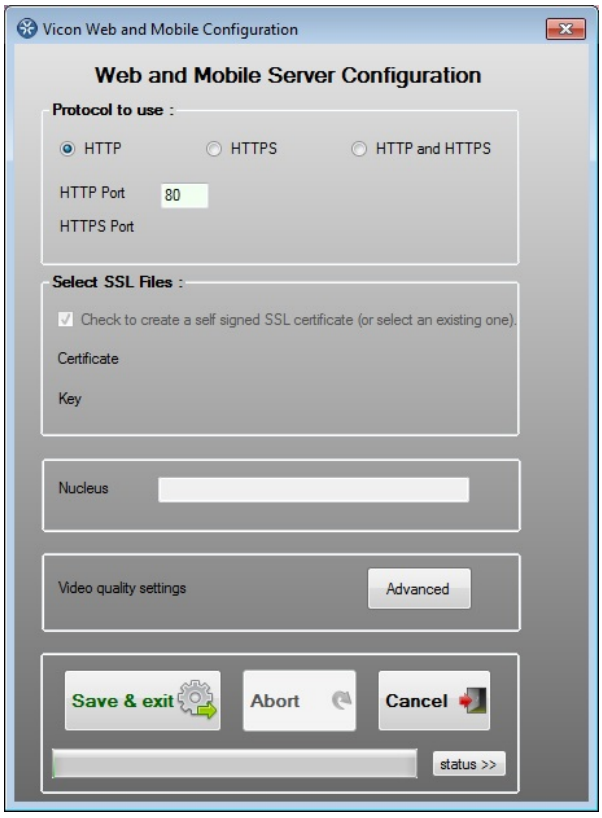
6. The Install screen displays. Click Install.



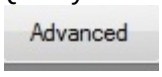

7. Several screens will display during the install process. Wait while setup is configuring. This can take a few minutes.
8. The software continues installing.



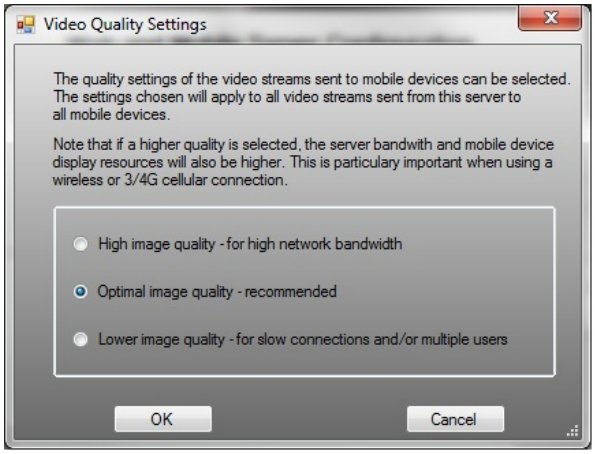

9. A screen displays to configure the Web and Mobile Server.




- HTTP is the standard communication protocol for the web and mobile viewers.
- If added security is required, select HTTPS or both HTTP and HTTPS. If HTTPS is selected, the SSL encryption fields will display to enter the certificate and key for communication with the web server. Either a self signed can be selected by checking the box or an official certificate issued by a CA (Certificate Authority) must be uploaded from your PC. Provide the path to the certificate directly, or use the **Browse** button to locate it.
- Enter the Nucleus IP of the system; ***this is an extremely important step***.

10. The system is set for Optimal image quality by default; it is recommended to keep this setting and no further action is necessary. If changes to the quality settings on the Video Quality Screen are required, this can be is accessed by clicking 

. The following screen displays.



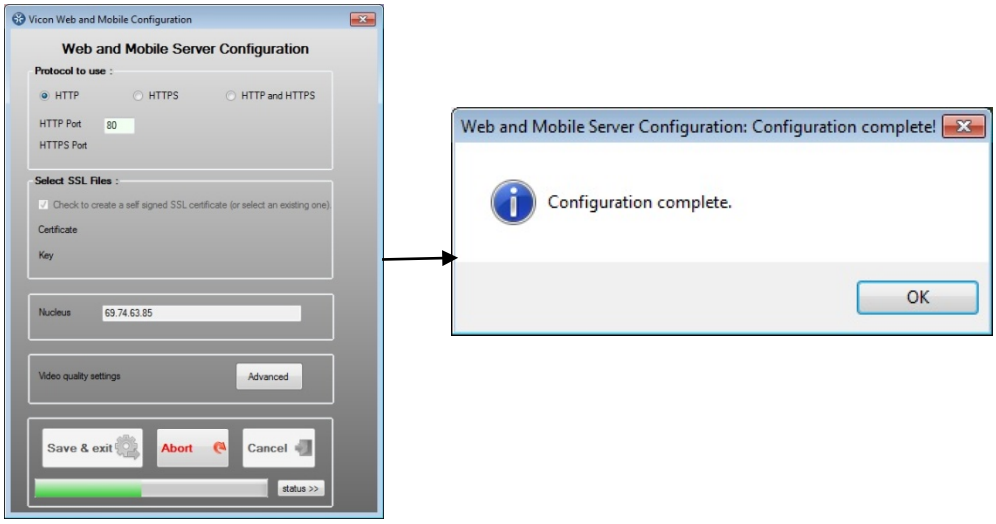

Consider changing this selection carefully. The selected Video Quality Setting applies to *all* video streams sent from this server and the selection does impact on the server and mobile device resources. Click OK if any change was made.

11. After configuration is complete, from the buttons at the bottom

, select Save & exit to start the configuration; select Abort stop the saving process or Cancel to reverse changes.

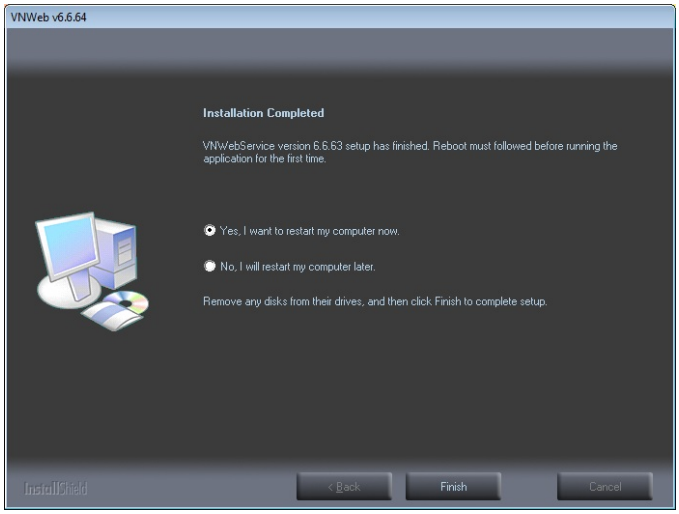
12. A status button is available that, when clicked, opens a window that displays the status of the configuration. Click hide to close this window.

13. After Save & exit is selected, the configuration will be saved and the following will display. When complete, the Configuration complete displays.

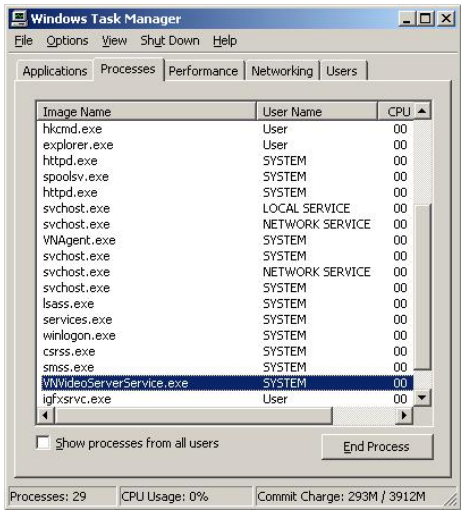


14. The installation will continue. Several screens will display, including VNAgent and ViconNet Drivers. Let the process continue.

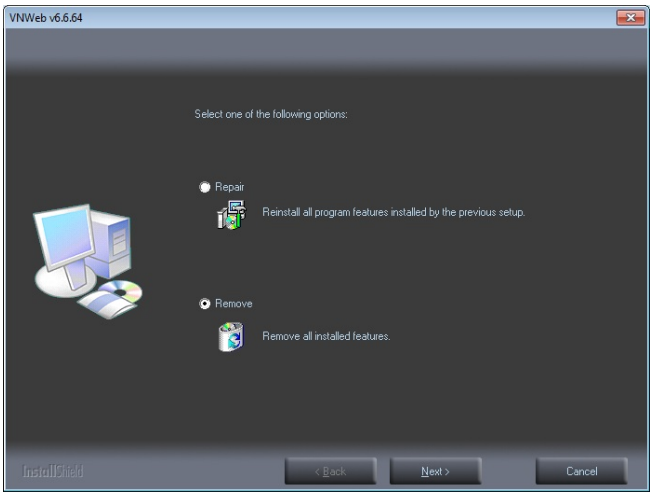
15. The Installation Completed screen displays. Select whether to restart the unit. Remove the CD from the drive. Click Finish.




16. The computer is now running the Web Service System and browsing to its IP address allows the ViconNet Web Viewer to open to control and view any devices on the system. You can confirm that the VNVideoServerService is running by looking in Windows Task Manager on the Web Server.



17. If at any point it is required to change either the Nucleus IP address or the Port Number setting, go to the Start button on the PC and click All Programs, Vicon, VN WebService to re-launch the Web Server configuration wizard, as explained from step 9 forward.
18. The software will go through the installation process. A screen to select Repair or Remove will display; select Repair and then Next.




19. From here the Nucleus IP address and the Port Number can be changed. When the repair is complete, the Repair Complete screen will display.

## Registration

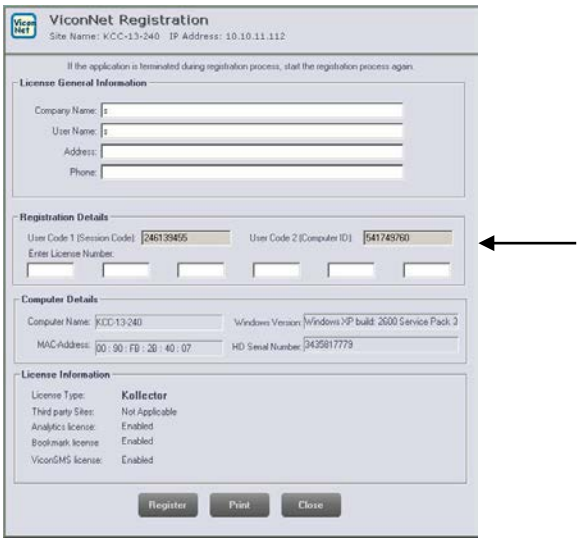
If you have a factory-certified VN-RMT-PCV8 with preinstalled software, it is pre-registered and will automatically start that way on boot-up. If the new installation is on a customer-supplied PC, a license (provided with the software kit) and registration process are required to access the full functionality of the application.

Since the Web System does not have a GUI, the registration must be done through the Nucleus or another remote Workstation on the system. The directions for opening the Registration Dialog Box are located in Chapter 3 of the Software Manual for ViconNet under “Registering Your System.” Be sure to open this dialog box before beginning the process. You will need information found in the registration dialog box as well as the information contained on the License ID label sent with the software to complete the registration process. The license provided with the software supports multiple concurrent users; failing to register the system will limit it to only 2 concurrent users and any additional users will be blocked.

From the Main screen on your Workstation, click Setup and select the specific Web Server to be configured. The setup screen opens and click

. The *Registration* window appears. Make a note of the

User Codes, as these are required to complete the licensing process.




Go to Vicon's website at www.vicon-security.com or go to http://ftp.vicon-security.com/regkeyoutside (this URL can be used if registering from a mobile device). At the website, click on the Support tab at the top and select Software Registration from the dropdown list; follow the online instructions.

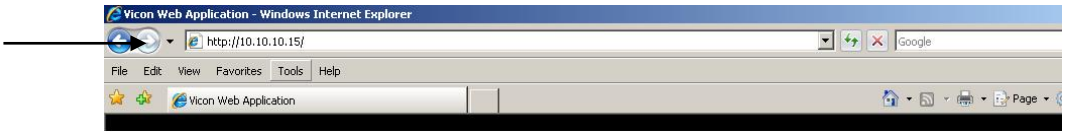
If you encounter any difficulties during registration, call Vicon at 1-800-645-9116 (US only) or 1-631-952-2288. Select the software registration option (Hours of Operation: Monday-Friday, 8:30 AM - 5:00 PM EDT).

**Note:** After entering the License ID and Password, the License Information Form will display. Fill this form out accurately. This is how you will be identified in Vicon's database for future reference. In the serial number field, enter the serial number of the PC on which the software is being installed.

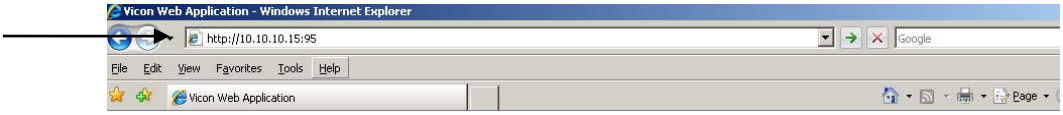
# Web Viewer

On your web browser, enter the IP address or DNS name of the system running the Web System; if you are using a port different than port 80 for your server, enter that as well.

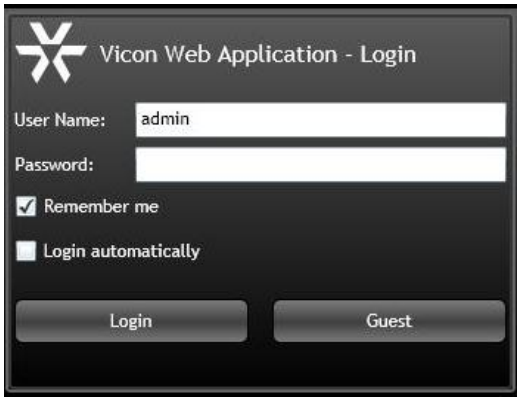
Example: Browsing to standard port 80




Example: Browsing to port 95 (add **:** and then port number to the IP address)




Once connection with the Web Viewer has been established, the login prompt will display.




Click the Login button. The Web Viewer Main screen displays.

The Web Viewer Main screen provides all the tools needed to work with the ViconNet system. Refer to manual XX220-0X for details on how to use the Web Viewer.

# 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 Europe Ltd.
   Brunel Way
   Fareham, PO15 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:

   - Name and address of the company returning the unit
   - Name of the Vicon employee who issued the R.A.
   - R. A. number
   - Brief description of the installation
   - Complete description of the problem and circumstances under which it occurs
   - 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.

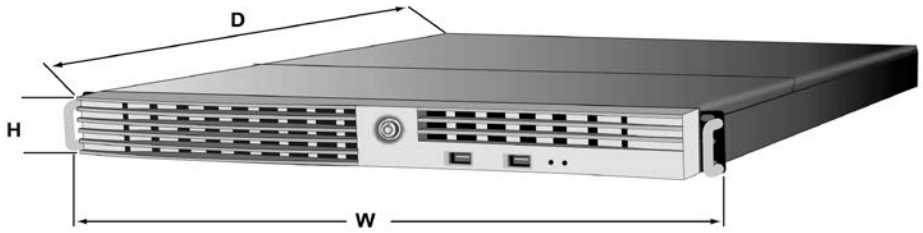
# Technical Information

| Electrical Characteristics | |
|---|---|
| **Input Voltage** | 115 - 230 VAC ±10%, 50/60 Hz nominal.<br>**NOTE:** Vicon requires the use of uninterruptible power supply systems (UPS) to prevent voltage fluctuations that can affect operation and cause damage to the equipment. Failure to comply with this violates the unit warranty. |
| **Current** | 115 VAC/230 VAC: 0.6 A/0.3 A |
| **Power Consumption** | 69 W nominal |
| **UPS Requirements** | • Capacity: 1000 VA/600 W<br>• Input:<br>  • Voltage: 100 - 230 VAC<br>  • Voltage Range: ±10%<br>  • Frequency: 47 – 63 Hz (auto detection) |
| **Heat Equivalent** | 242 btu/hr<br>**NOTE:** These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of the heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation. |
| **System** | CPU: Intel Core i5<br>RAM: DDR3 4 GB<br>Onboard LAN: 100/1000 Mbps TPO<br>OS System*: Windows® 7 Embedded, 64 bit. |
| **Connector Types & Quantities)** | Power: 1 standard 3-conductor female socket<br>Video Output: DVI connector or HDMI connector<br>Network Port: 1 Ethernet 100Base-T RJ-45 jack<br>Keyboard Port: USB<br>Mouse Port: USB<br>Peripheral Ports: 6 USB |

**If full Windows OS is required, contact your Vicon Representative.*

| Mechanical Characteristics | |
|---|---|
| **Application** | Indoor |
| **Mounting** | ITX mini chassis (desktop) or standard 19 in. (483 mm) rack mount and stackable, 1RU height |
| **Dimensions** | VN-RMT-RK Rack-Mount Unit:<br>Height (H): 1.75 in. (44.45 mm)<br>Width (W): 19.0 in. (483 mm) with racking ears; 17.6 in. (447 mm) without racking ears<br>Depth (D): 15.5 in. (394 mm), excluding connectors; 16.0 in. (406 mm), including connectors.<br>**Note:** Refer to Figure below. |
| **Weight** | Rack-mount unit: 14 lb (6.4 kg)) |
| **Construction** | Steel case and hardware |
| **Color** | Black |

| Environmental Characteristics | |
|---|---|
| **Operating Temperature Range** | 32 to 104° F (0 to 40° C) |
| **Operating Humidity Range** | 0 to 95% relative, non-condensing |
| **Storage Temperature Range** | -4 to 158° F (-20 to 70° C) |
| **Storage Humidity Range** | 0 to 95% relative, non-condensing |



# 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. 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.
9. For PTZ cameras, "Normal Use" excludes prolonged use of lens and pan-and-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 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.**

**Vicon Industries Inc.**

For office locations, visit the website:

**www.vicon-security.com**

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