REMOTE SURVEILLANCE INTERNET CAMERA

WIRED, WIRELESS, PAN/TILT, EASY CONNECT

INSTRUCTION MANUAL

English Version 1.0

MODELS:

LNE SERIES

LNE1001, LNE3003,LNZ4001

LOREX

Thank you for purchasing the Lorex Remote Surveillance Internet Easy-Connect Camera.

This manual refers to the following models:

- **LNE1001**: Wired, Easy Connect, Internet Camera
- **LNE3003**: Wired/Wireless, Day/Night, Easy Connect, Internet Camera
- **LNZ4001**: Wired/Wireless, Day/Night, Pan/Tilt, Easy Connect, Internet Camera

To learn more about this product and to learn about our complete range of accessory products, please visit our website at:

www.lorexcctv.com

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RICK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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 products ' 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.

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

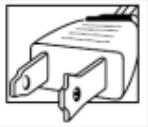
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

Important Safeguards

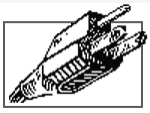
In addition to the careful attention devoted to quality standards in the manufacturing process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warning**s - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - 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 are provided for your safety.

   If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
5. **Power Sources** - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.
8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.
9. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.
10. **Camera Extension Cables** – Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
11. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

    Caution: Maintain electrical safety. Powerline operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.
12. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.

Service

13. **Servicing** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    - When the power supply cord or plug is damaged.
    - If liquid has been spilled or objects have fallen into the video product.
    - If the video product has been exposed to rain or water.
    - If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    - If the video product has been dropped or the cabinet has been damaged.
    - When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and car combination to overturn.
21. **Object and Liquid Entry** - Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

General Precautions

1. All warnings and instructions in this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning.
3. Do not use this unit in humid or wet places.
4. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked.
5. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge.

FCC CLASS B NOTICE

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for assistance

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows this manuals guideline to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

INDUSTRY CANADA STATEMENT

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This device has been designed to operate with an antenna having a maximum gain of 2 dBi.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

LNE1001 Features

- No networking knowledge required—GUARANTEED!
  - Plug in Camera, Run Discovery CD (DigiConsole, included)
  - CONNECT
- No DDNS/router configuration required
- Wired connectivity
- Remote Easy Connect (Yoics™ and MSN®)
- 10x digital zoom
- Supports VGA (640x480) resolution, 30 frames per second (real time)
- Web browser support: Internet Explorer, Firefox, Safari for viewing on PC or Mac
- Supports MPEG4, MJPEG, 3GPP
- MPEG4 enhanced compression for efficient video streaming
- Motion event triggers e-mail notification with JPEG image attachment 3GPP mobile support (e.g. iPhone® compatible)
- Two-way audio via integrated microphone and external speakers (not included)
- 6 channel surveillance application for real time viewing and recording
- Free LOREX DDNS included for remote connection
- Secure web management connectivity (password protected)
- Professional grade camera (HTTP event – camera can trigger or be triggered by other LOREX camera)
- Windows Vista® compatible

It really is that easy!

LNE3003 Features

- No Networking Knowledge Required, GUARANTEED!
    - Plug in Camera, Run Discovery CD (DigiConsole, included)
    - CONNECT
- No DDNS/Router Configuration Required
- Wired / Wireless IEEE 802.11b/g connectivity for flexible installation
- Remote Easy Connect (Yoics and MSN)
- 10x Digital Zoom
- Superior low-light performance with night-vision LEDs
- Supports VGA (640x480) resolution, 30 frames per second (real time)
- Web browser support: Internet Explorer, Firefox, Safari, for viewing on PC or Mac
- Supports MPEG4, MJPEG, 3GPP
- MPEG4 enhanced compression for efficient video streaming
- Motion event triggers e-mail notification with JPEG image attachment
- 3GPP mobile support (e.g. iPhone compatible)
- Two-way audio via integrated microphone and external speakers (not included)
- 6 channel surveillance application for real time viewing and recording
- Free LOREX DDNS included for guaranteed connection
- Secure web management User/Password protection
- Windows Vista Compatible

It really is that easy!

LNE4001 Features

- Wired/wireless 802.11b/g connectivity for flexible installation
- Professional grade camera (HTTP Event – camera can trigger or be triggered by other LOREX camera)
- Pan tilt control via iPhone
- Preset pan tilt tour
- Night vision - 30ft (10m), IR LEDs
- Remote easy connect (Yoics and MSN)
- No DDNS/router configuration required
- Secure web management connectivity (password protected)
- No networking knowledge required, GUARANTEED!
  - Plug in Camera, Run Discovery CD (DigiConsole, included)
  - CONNECT
- 10 x digital zoom
- 6-channel surveillance application for viewing and archiving
- Two-way audio via audio input/output (external microphone/speakers needed)
- Enhanced MPEG4 compression for efficient video streaming
- Crystal clear video quality in VGA (640x480) resolution @ 30 frames per second
- Supports common browsers (Internet Explorer, Firefox, Safari) to be viewed using PC or Mac
- Mobile support (3GPP) iPhone and iPod Touch®
- Alarm input/output (camera can be integrated with an alarm system—alarm triggers camera/motion triggers alarm)
- Motion event triggers e-mail notification with JPEG attachment
- No DDNS/router configuration required
- Windows Vista compatible

It really is that easy!

TABLE OF CONTENTS

GETTING STARTED

The system comes with the following components:

LNE1001

- POWER SUPPLY
- ETHERNET CABLE
- MOUNTING STAND
- MOUNTING KIT
- QUICKSTART GUIDE
  DOCUMENTATION CD

LNE3003

- POWER SUPPLY
- ETHERNET CABLE
- WIRELESS ANTENNA
- MOUNTING STAND
- MOUNTING KIT
- QUICKSTART GUIDE
  DOCUMENTATION CD

LNZ4001

- POWER SUPPLY
- ETHERNET CABLE
- WIRELESS ANTENNA
- MOUNTING BRACKET
- MOUNTING KIT
- QUICKSTART GUIDE
  DOCUMENTATION CD

***CAMERA CONFIGURATION MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC DETAILS.**
CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM, INCLUDING ALL COMPONENTS SHOWN ABOVE.

SYSTEM REQUIREMENTS

For setup and viewing, the camera requires the following:

- PC running Windows Vista / XP
- Internet connection
- Web browser: Internet Explorer 7 or later (with Active X), Mozilla Firefox, Safari

NOTE: If you are using a Mac, only certain functions are available on the camera. For details, see "Viewing Your Camera Using a Mac" on page 14.

Additional Requirements

To view your camera from a remote computer (remote viewing using Yoics), you may need to install the following:

- QuickTime® 7 or later: The QuickTime plug-in is required to view streaming video from your camera using Yoics. Download QuickTime at www.apple.com/quicktime/download
- QuickTime is also required for use with Web browsers other than Internet Explorer, i.e. Firefox, Safari

About Yoics

Yoics is secure, instant networking made easy. This camera is designed to work with Yoics easy-connect remote access, letting you connect to your camera anywhere, anytime. Visit www.yoics.com for more information on using Yoics.

NOTE: This manual refers to the camera operating using the Yoics Easy Connect Remote Access service. Yoics Easy Connect Remote Access service is subject to improvements and changes made by Yoics.

CAMERA OVERVIEW

LNE1001 Wired, Easy-Connect Internet Camera

1. **Focus**: Manually adjust the focus ring to sharpen the image.
2. **Lens**: 1/4" lens with a CMOS image sensor.
3. **Power LED Indicator**: Lights up solid blue when camera is powered on.
4. **Network Indicator**: Pluses blue during network access.
5. **Microphone**: Built-in microphone for listen-in audio over the network.
6. **Stand**: Assembled support stand for the camera.

LNE3003 Wired/Wireless, Day/Night, East-Connect Internet Camera

1. **Focus**: Manually adjust the focus ring to sharpen the image.
2. **Lens**: 1/4" lens with a CMOS image sensor.
3. **Power LED Indicator**: Lights up solid blue when camera is powered on.
4. **Network Indicator**: Pluses blue during network access.
5. **Microphone**: Built-in microphone for listen-in audio over the network.
6. **Stand**: Assembled support stand for the camera.
7. **Infrared LEDs**: 6 white-light LEDs for night vision.
8. **Wireless Antenna**: Removable wireless antenna.

LNZ4001 Wired/Wireless, Day/Night, Pan/Tilt, Easy-Connect Internet Camera

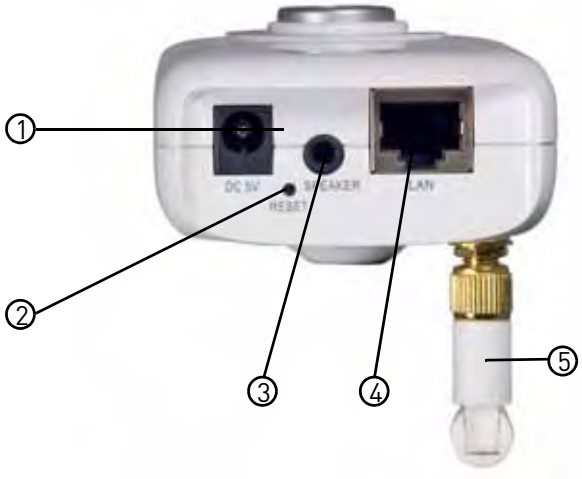
1. **Network Indicator**: Pluses blue during network access.
2. **Power LED Indicator**: Lights up solid blue when camera is powered on.
3. **Microphone**: Built-in microphone for listen-in audio over the network.
4. **Infrared LEDs**: 12 IR LEDs for night vision.
5. **Focus**: Manually adjust the focus ring to sharpen the image.
6. **Lens**: 1/4" lens with a CMOS image sensor.
7. **Wireless Antenna**: Removable wireless antenna.

REAR PANEL

LNE1001

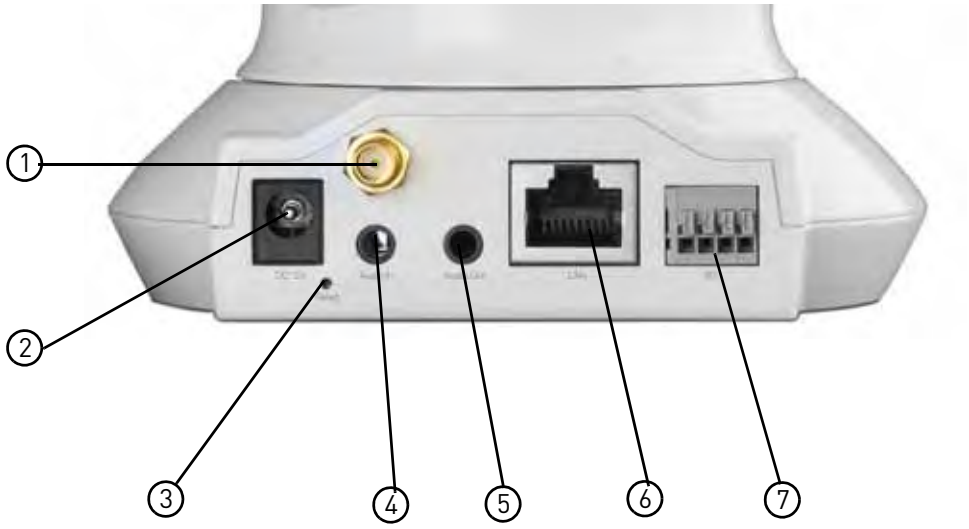
1. **Speaker**: 3.5 mm audio port for external speakers or other audio devices (not included).
2. **Reset**: Using a paper-clip, hold for 10 seconds to reset the camera to its default configuration.
3. **LAN**: Network port. Connect one end of the included network cable to this port, and then connect the other end of the network cable to a network router, switch, or active wall port.
4. **DC 5V**: Connect the 5V DC power adapter.

LNE3003 Series



1. **DC 5V**: Connect the 5V DC power adapter.
2. **Reset**: Using a paper-clip, hold for 10 seconds to reset the camera to its default configuration.
3. **Speaker**: 3.5 mm audio port for external speakers or other audio devices (not included).
4. **LAN**: Network port. Connect one end of the included network cable to this port, and then connect the other end of the network cable to a network router, switch, or active wall port.
5. **Antenna Connection (SMA)**: Connect the wireless antenna—angle at 90°, 180°; rotate 360°.

LNZ4001



1. **Antenna Connection (SMA)**: Connect the wireless antenna—angle at 90°, 180°; rotate 360°.
2. **12VDC**: Connect the 12V DC power adapter.
3. **Reset**: Using a paper-clip, hold for 10 seconds to reset the camera to its default configuration.
4. **Audio In**: 3.5 mm audio port for an external microphone (not included).
5. **Audio Out**: 3.5 mm audio port for external speakers or other audio devices (not included).
6. **Ethernet**: Network port. Connect one end of the included network cable to this port, and then connect the other end of the network cable to a network router, switch, or active wall port.
7. **Alarm Block**: Connection block for external alarm/motion devices (not included).

SETTING UP THE CAMERA

Basic setup for your network camera.

NOTE: Pedestal assembly refers to LNE1001 and LNE3003 series *only.*

To set up the camera:

1. Attach the stand to the base
2. Attach the mounting bracket to the stand.
3. Attach the camera to the completed pedestal. Use the thumb screws to secure the camera firmly.
4. Attach the wireless antenna to the back of the camera (LNE3003/LNZ4001 series *only*).

Figure 1.0 Assemble the pedestal

Figure 1.1 Attach pedestal to the camera

Figure 1.2 Attach the antenna to the camera (LNE3003 /LNZ4001 *only*)

Figure 1.3 Fully assembled camera (from top-right, LNE1001, LNZ4001, LNE3003)

POSITIONING THE CAMERA

Before you install the camera, carefully plan where and how it will be positioned.

Installation Warnings

- Select a location for the camera that provides a clear view of the area you want to monitor, which is free from dust, and is not in line-of-sight to a strong light source or direct sunlight.
- Route the cables so that they are not close to power or telephone lines, transformers, microwave ovens or other electrical equipment
- Select a location for the camera that has an ambient temperature between 32°F~113°F (0°C~45°C); Humidity 20-80% relative humidity (non-condensing)
- If you plan to install the camera in a location that has conditions not recommended in this manual, consult with a professional installer and consider use of a separate camera cover or housing
- Before starting permanent installation, have another person hold the camera for you while you verify its performance by observing the image on a monitor

Night Vision

The LNE3003 and LNZ4001 cameras include night vision LEDs, which provide the camera with the ability to view images in low light conditions. It is important to use the provided power adaptor when using the camera for prolonged periods in low light conditions.

MOUNTING THE CAMERA

The camera can be mounted to walls, ceilings, desks, tables, or other flat surfaces.

To mount the camera to a wall or ceiling:

1. Select a location for the camera. Make sure you are able to drive screws into the surface. If necessary, use the mounting bracket/pedestal to mark holes for drilling.
2. Use the small screws included in the mounting kit to secure the camera to the mounting bracket (LNZ4001 *only*; see figure 2.0).
3. Use the large screws and anchors to secure the camera and bracket/pedestal to the mounting surface (see figure 2.1).

Figure 2.0 Secure camera to bracket (LNZ4001 Series only)

Figure 2.1 Secure camera and bracket to wall (LNZ4001 Series)

Wall Mounting

Figure 2.2 Ceiling mounting (LNE1001/LNE3003 Series)

Figure 2.3 Secure camera and bracket to ceiling (LNZ4001 Series)

Ceiling Mounting

CONNECTING THE CAMERA

With the camera assembled, you can now connect the power and network cables.

To connect the camera:

1. Connect the included Ethernet cable to the Ethernet port on the rear panel of the camera.
2. Connect the other end of the Ethernet cable to a network router, switch, or active wall port.

   NOTE: For a wireless connection, the camera only needs to be wired to your network for initial setup and configuration. Once the camera is fully setup, you can disconnect the Ethernet cable and connect to your network wirelessly.
3. Connect the power adapter to the camera.
4. Plug in the power adapter to a power outlet.

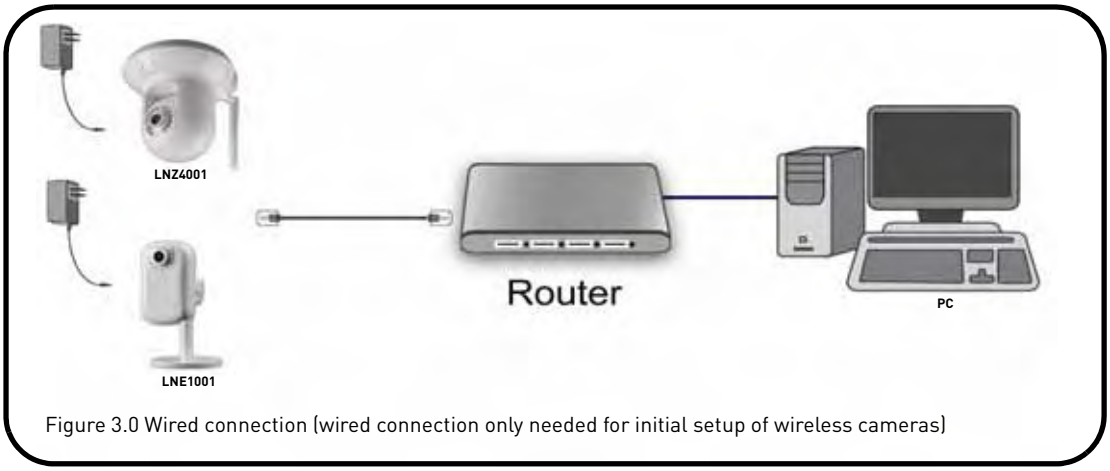


Figure 3.0 Wired connection (wired connection only needed for initial setup of wireless cameras)

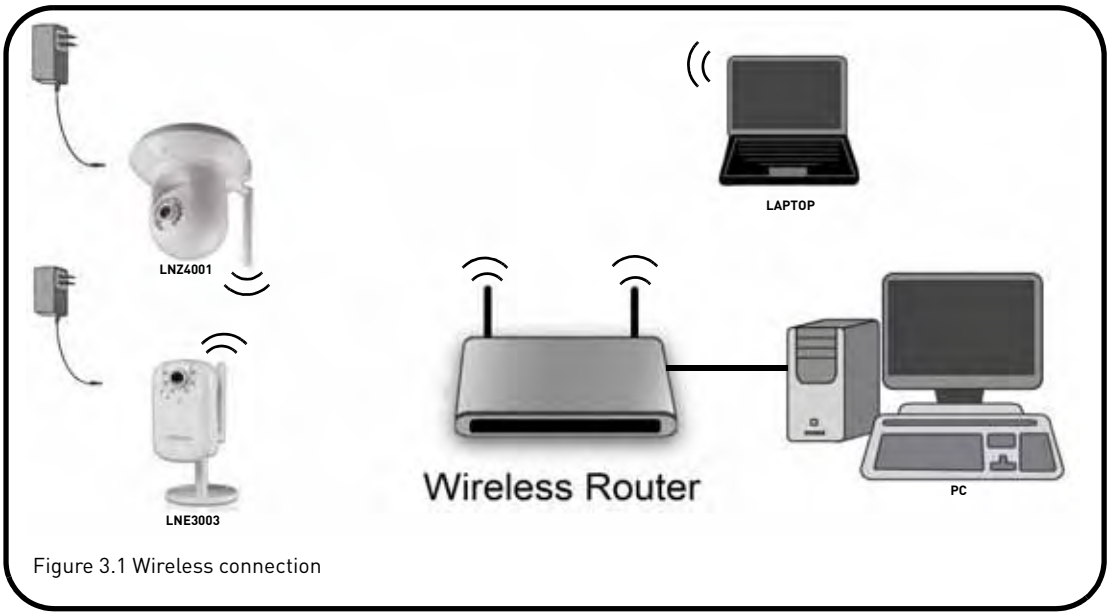


Figure 3.1 Wireless connection

CONFIGURING THE CAMERA

With the camera setup and connected, you can now set up local viewing, remote viewing, and wireless connectivity.

ATTENTION: Before starting the installation, please ensure your computer is connected to the same local network as the camera and has access to the Internet.

NOTE: It is recommended to install the camera when your computer is wired to the local network. If you are using the wireless connection on your computer, please connect your computer to your wireless router using an Ethernet cable (not included).

NOTE: The following refers to an installation on Windows Vista. Some steps may differ in Windows XP.

Opening DigiConsole

Use DigiConsole to setup your camera.

NOTE: Prior to using DigiConsole, visit www.lorexcctv.com and check for software and firmware updates. Please refer to the DigiConsole & DigiViewer Software Manual for more information on upgrading firmware.

To open DigiConsole:

1. Insert the included DigiConsole software CD into your CD/DVD-ROM drive. DigiConsole automatically launches.

Figure 4.0 DigiConsole main window

2. If a security pop-up window appears, click **Unblock** and **Continue** to allow DigiConsole access to the Internet.

   NOTE: If Autorun fails to start, go to Computer (My Computer for Windows XP users) and double-click the CD-drive to run the application. Follow step 2.

   NOTE: You do not need to install DigiConsole to view live video from the camera. However, if you wish to record and playback video, you must install DigiConsole to your computer. Please refer to the DigiConsole & DigiViewer Software Manual for more information on installing DigiConsole.

3. Click **Find** to discover Lorex cameras on your network.

Figure 4.1 Select your camera from the list of devices

4. Double-click the selected camera to launch *DigiViewer* in your default browser.
5. At the prompt, enter your **user name** and **password** (by default, **admin** / **admin**). For details on local viewing, see see "Setting Up Local Viewing" on page 16.

Finding Your Camera as an UPnP Device (optional)

You can also discover the camera as an UPnP (Universal Plug and Play) device by opening Network in Vista (My Network Places for Windows XP users).

To discover your UPnP device:

1. Turn on Network discovery and file sharing to find your camera as an UPnP device.

Figure 4.2 Turn on Network discovery

Figure 4.3 Allow Network discovery

2. Double-click the selected camera icon to launch DigiViewer in your default browser.

Figure 4.4 Find your camera as a UPnP device

3. At the prompt, enter your **user name** and **password** (by default, **admin** / **admin**). For details on local viewing, see "Setting Up Local Viewing" on page 16.

Viewing Your Camera Using a Mac

If you are using one of the Lorex network cameras with a Mac, you can view your camera using the Safari web browser.

NOTE: If using a Mac, you will not be able to record live video directly to your Mac.

Figure 5.0 DigiViewer in Safari using Mac OS X

To view your camera using a Mac:

1. Open **Safari**. Click (Bookmarks button) in the Bookmarks bar.
2. Under Collections, select **Bonjour**. The Bonjour list opens.

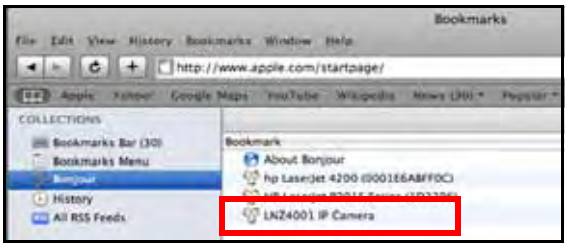


Figure 5.1 Double-click your device from the Bonjour list

3. Double-click your device from the Bonjour list.
4. Log in using your user name and password and select the box for Safari to remember your password. Click **Log In**. DigiViewer launches in the main Safari window.

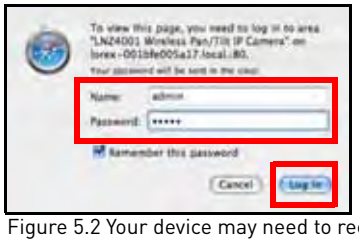


Figure 5.2 Your device may need to reconnect with the new wireless settings

NOTE: Safari 4 has different security settings. To ensure login, please select this box if using Safari 4.

NOTE: For details on viewing your camera from a remote location using a Mac, see "Using Yoics" on page 24.

USING THE CAMERA

DigiConsole was used to help you setup and configure your camera. You will use *DigiViewer* for viewing, playback, and further camera configurations.

NOTE: For complete details on DigiViewer functions, see "DigiViewer" on page 43.

About DigiViewer

DigiViewer is a browser-based remote surveillance software that lets you view, playback, record, and configure your network camera from a remote location.

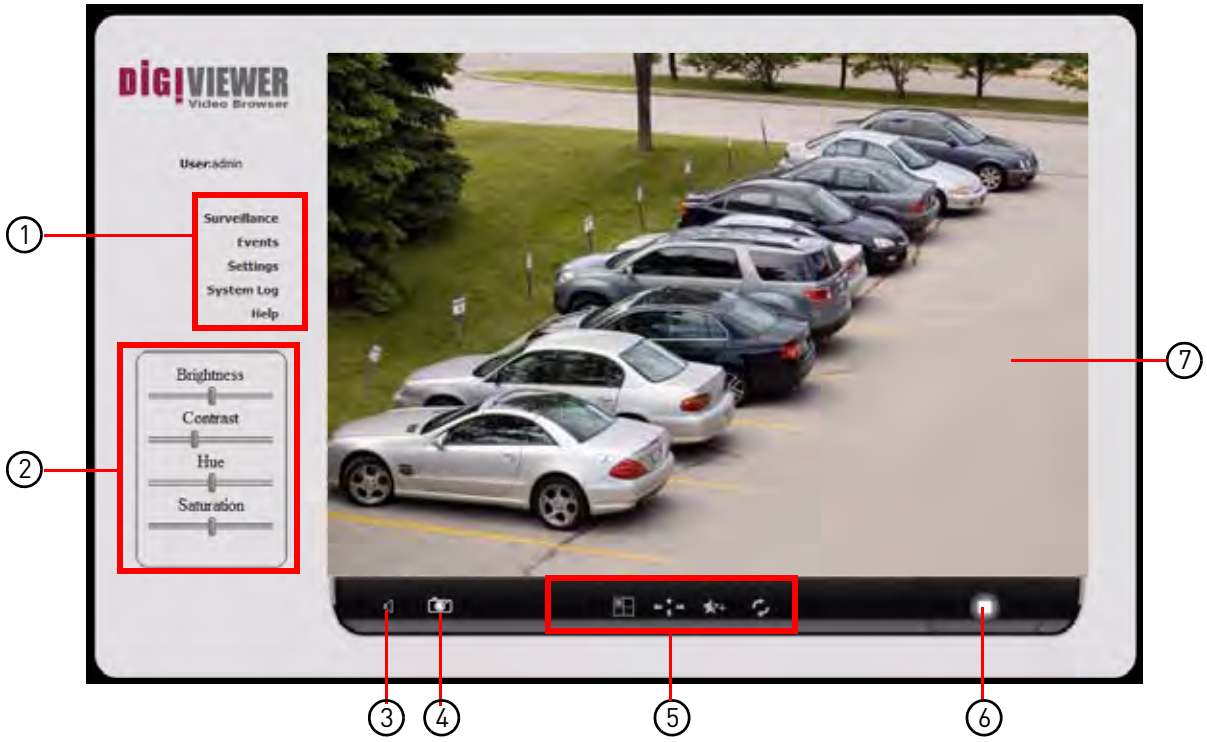


Figure 6.0 DigiViewer main screen

1. **Main Menu**: View or change configuration for Surveillance, Events, Settings, System Log, and Help.
2. **Advanced Control Panel**: Change channel displays, control PTZ cameras, or adjust picture once activated from the Advanced Controls Toolbar the bottom of the main window.
3. **Audio**: Controls the audio on the camera.
4. **Screenshot**: Click to capture the currently displayed video image as a still image in a separate browser window. This still image can be saved as a JPG file.
5. **Advanced Control Toolbar**: Adjust channel display, PTZ, Picture, and Rotate Image.
6. **Play/Stop**: Start/stop the live image.
7. **Main Display Screen**: View streaming live video from the camera in the main window.

Setting Up Local Viewing

With your camera now detected by DigiConsole, you can begin to view live images from your camera on your local network. When using Internet Explorer, you need to install ActiveX in order for DigiViewer to run properly; other supported browsers will require QuickTime.

To setup local viewing:

1. With DigiViewer open in your default browser, enter **admin** in the user name text field and **admin** in the password text field. If using Internet Explorer, you will be prompted to Install ActiveX Control.
2. Click the warning bar (it turns from yellow to blue) and select **Install Active X Control**.
3. Click **Unblock** or **Continue** in any subsequent security windows (this is only required for initial setup).
4. Click **Install** to start the installation. DigiViewer resets and live video streams in your browser.

Figure 6.1 Select ActiveX Install from the warning bar

ATTENTION: For security reasons, you should change the default username and password (admin) for the camera. For details on changing your user name and password, see "Accounts" on page 65.

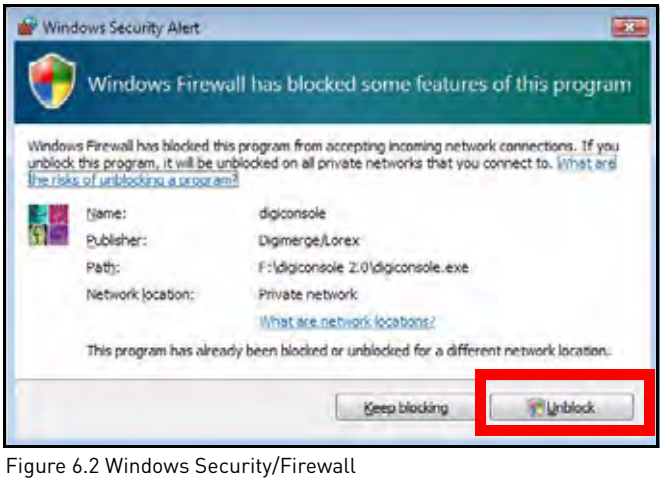


Figure 6.2 Windows Security/Firewall

Figure 6.3 Install ActiveX

Adjusting Focus

You can manually adjust the focus of the camera.

NOTE: Make sure the camera is powered on and connected to a network before attempting to adjust the focus.

NOTE: Please remove the clear vinyl cling over the lens before using the camera.

To adjust the focus:

1. Open DigiViewer in your default browser.
   NOTE: You can open DigiViewer from DigiConsole or directly in your browser using your camera's IP address.
2. Using DigiViewer as a monitor, turn the ring at the lens of the camera back and forth until image is in focus.

Figure 6.4 Manual focus ring (LNE3003 shown)

CONTROLLING PTZ

LNZ4001

ATTENTION: This section applies to LNZ4001 Series cameras only.

To use PTZ functions:

1. Open DigiViewer in your default browser.
2. Log in to your camera using your **user name** and **password** (by default, admin / admin).
3. Click  at the bottom of the main display screen. The PTZ Control pane appears on the left side of the main display screen
4. Use the navigation arrows to position the camera.

   NOTE: Zoom will not be saved as part of the preset.

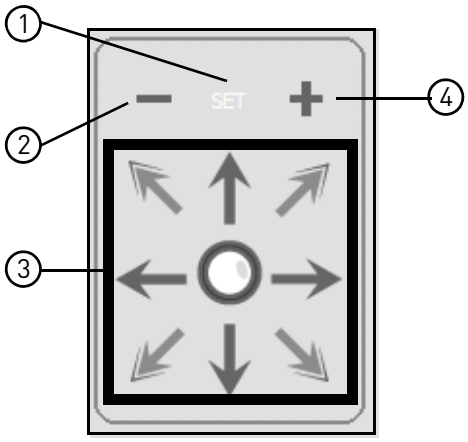


Figure 7.0 PTZ Control pane

1. **Set**: Open Preset and Patrol Control pane.
2. **-**: Zoom out.
3. **Navigation**: Pan and tilt the camera.
4. **+**: Zoom in.

4. Click **SET** to open the Preset/Patrol Control pane.

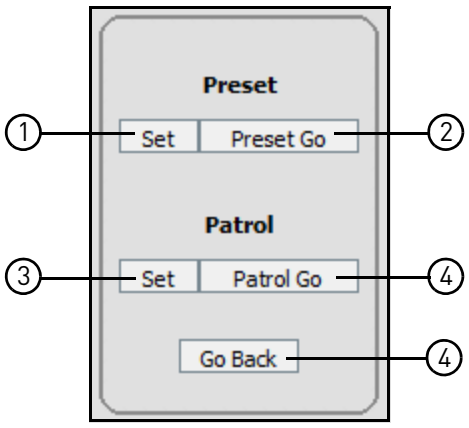


Figure 7.1 Preset / Patrol Control pane

1. **Set (Preset)**: Enter a preset number for the current position of the camera (i.e. Preset 1).
2. **Preset Go**: Open the list of presets.
3. **Set (Patrol)**: Open the list of tours.
4. **Patrol Go**: Activate patrol of the selected tour.

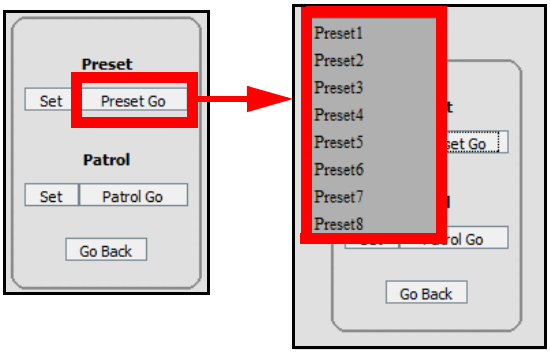


Figure 7.2 Preset List

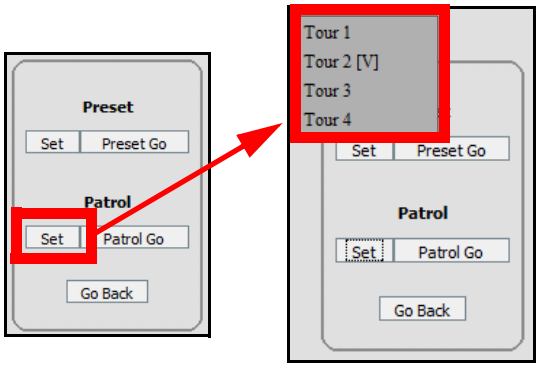


Figure 7.3 Tour List (V=default)

Presets, Tours, and Patrols

Preset, Tour, and Patrol are advanced features of a PTZ Internet camera. You can use DigiViewer to access and customized these advanced features.

A: Setting Presets

To set Presets:

1. Use the navigation arrows to position the camera at point where you want to patrol.
   - Click ↔ to pan left and right.
   - Click ↕ to tilt the camera up and down.
2. From the PTZ Control pane, click **SET** (see figure 6.4). The PTZ Control pane displays Preset/Patrol controls.
3. Under Preset, click **Set** (see figure 6.5).
4. From the prompt, "Applied Successfully," click **OK**.
5. Click **Go Back** to set a new position and repeat steps 1~4. You can set up to 32 positions; each Tour can have up to 8 positions.
6. *OPTIONAL*: Click **Preset Go** to view the list of set presets (i.e. Preset1, Preset2, etc.). Select a preset from the list. The camera will reposition itself to the selected preset.

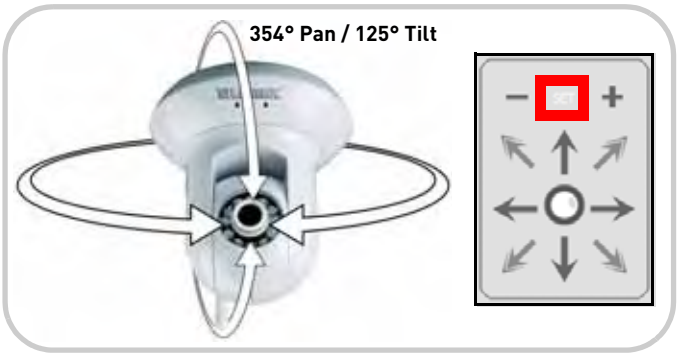


Figure 7.4 Set a position for the camera and then click Set.

Figure 7.5 In the Preset/Patrol pane, click Set to save the preset.

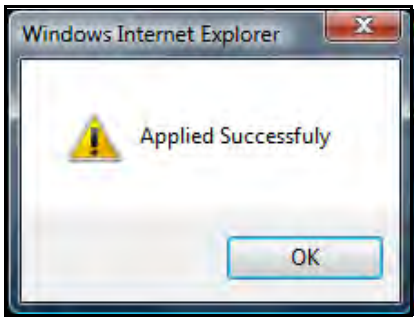


Figure 7.6 Click OK and repeat steps 1~4.

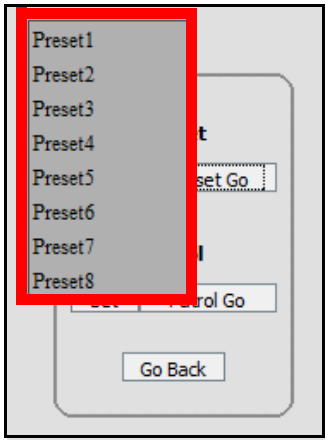


Figure 7.7 Click Preset Go to open list of presets

B: Customizing Tours

To customize a tour:

1. From Digiviewer, click **Events** and then click **Patrol**.
2. Select a Tour Number (e.g. Tour1).
3. Under Tour Position, click the **Order drop-down menu** and select an **Order number** (first will be the default position). Order refers to the position in the Position Number List (see figure 7.9).

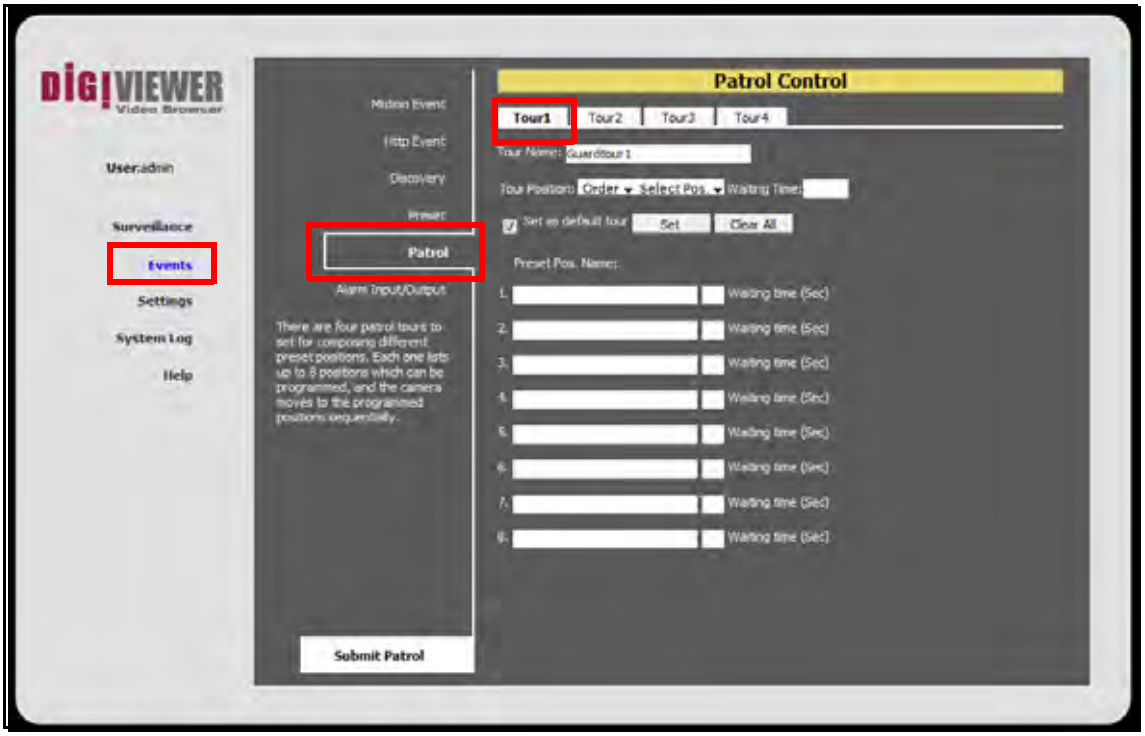


Figure 7.8 Patrol Control menu

4. Click the **Select Position drop-down menu** and select one of the positions you set in section A.
5. Under Waiting Time, enter a time (in seconds—99 seconds maximum) for the camera to pause on the position and then click **Set**. The position appears in the Preset Position List (see figure 6.9).

6. Repeat the order and position selection until you have completed the tour (each tour can have up to eight preset positions).

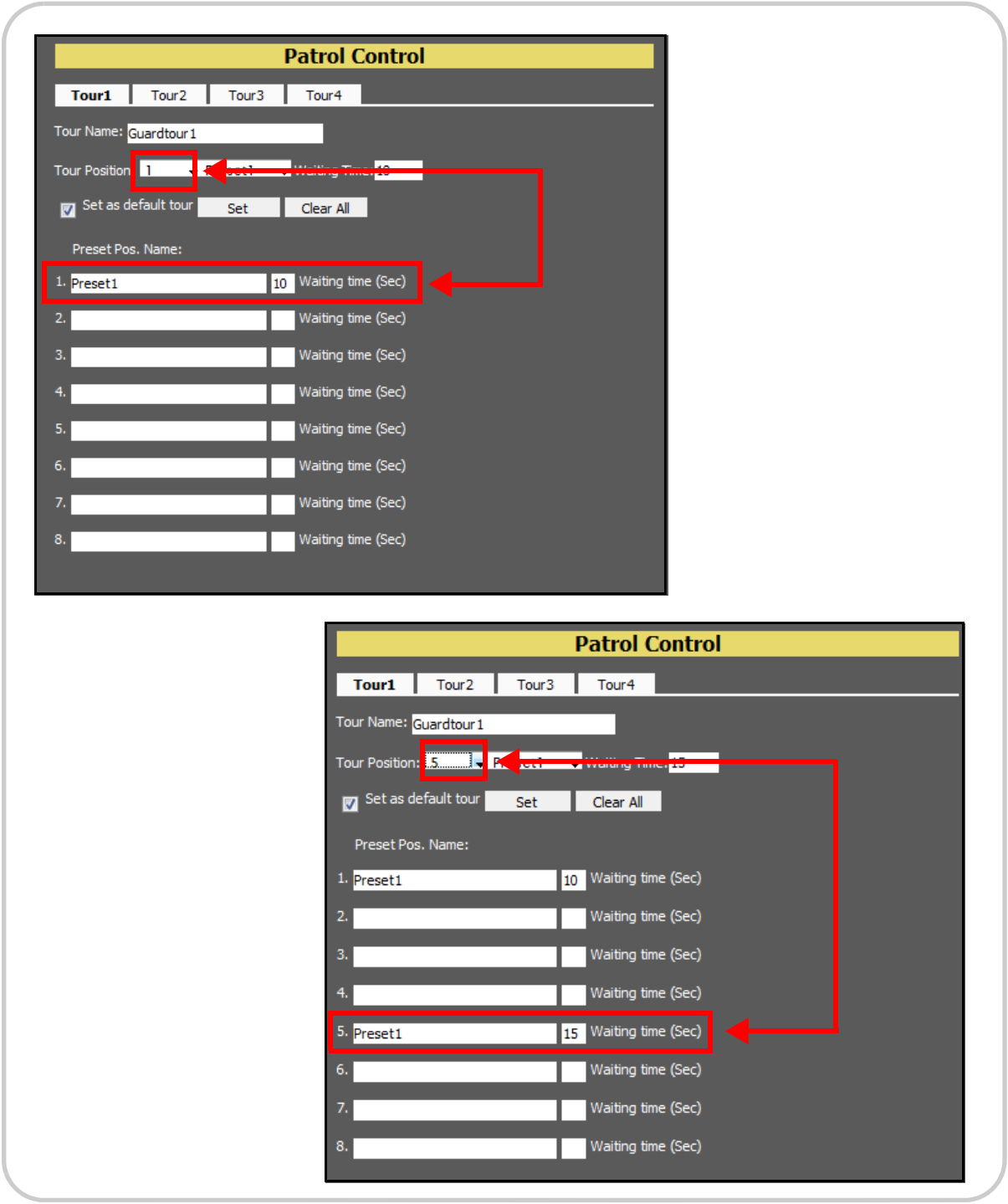


Figure 7.9 Tour positions—Tour position 1 appears as Preset Position 1 in the list (default). Tour position 5 appears as Preset Position 5 in the list.

7. Under Tour Name, enter a name for your tour or leave as default (Guardtour1).
8. Click **Submit Patrol**.

C: Using Patrols

Use the saved tour data to set an automatic patrol for the PTZ network camera.

To set a patrol:

1. From the DigiViewer main menu, click **Surveillance** and then click  .

Figure 7.10 Click Surveillance to return to live viewing and click "Play."

2. Click  , and from the PTZ Control pane click **Set** (see figure 6.11). The Preset/Patrol pane opens.

Figure 7.11 Open the PTZ Control pane and click Set.

3. Under Patrol, click **Set**, and then select the **Tour number** you saved in section B.
4. Click **Patrol Go** to start/stop the patrol tour.

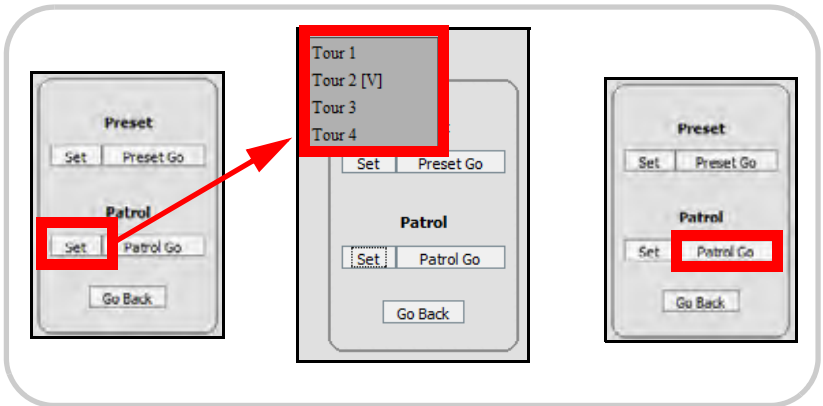


Figure 7.12 Select a Tour and click Patrol Go.

USING YOICS

The camera is designed to work with Yoics easy-connect remote access. Yoics remote viewing allows you to easily access your camera from a remote location without needing to configure your router. Register with Yoics to view your camera from a remote location anywhere, anytime.

NOTE: QuickTime is required for Yoics Remote Viewing. Download at www.apple.com/quicktime/download

NOTE: Yoics Easy Connect Remote Access service is subject to improvements and changes made by Yoics.

Registering with Yoics

Register for a free Yoics account to view your camera from any remote computer with an Internet connection, or from a 3G iPhone or iPod touch.

To register with Yoics:

1. From DigiViewer, click **Settings** and then click **Remote Access**.
2. Under Yoics Instant Networking, click **Register with Yoics**. The Lorex Remote Viewing page opens (http://lorex.yoics.com).

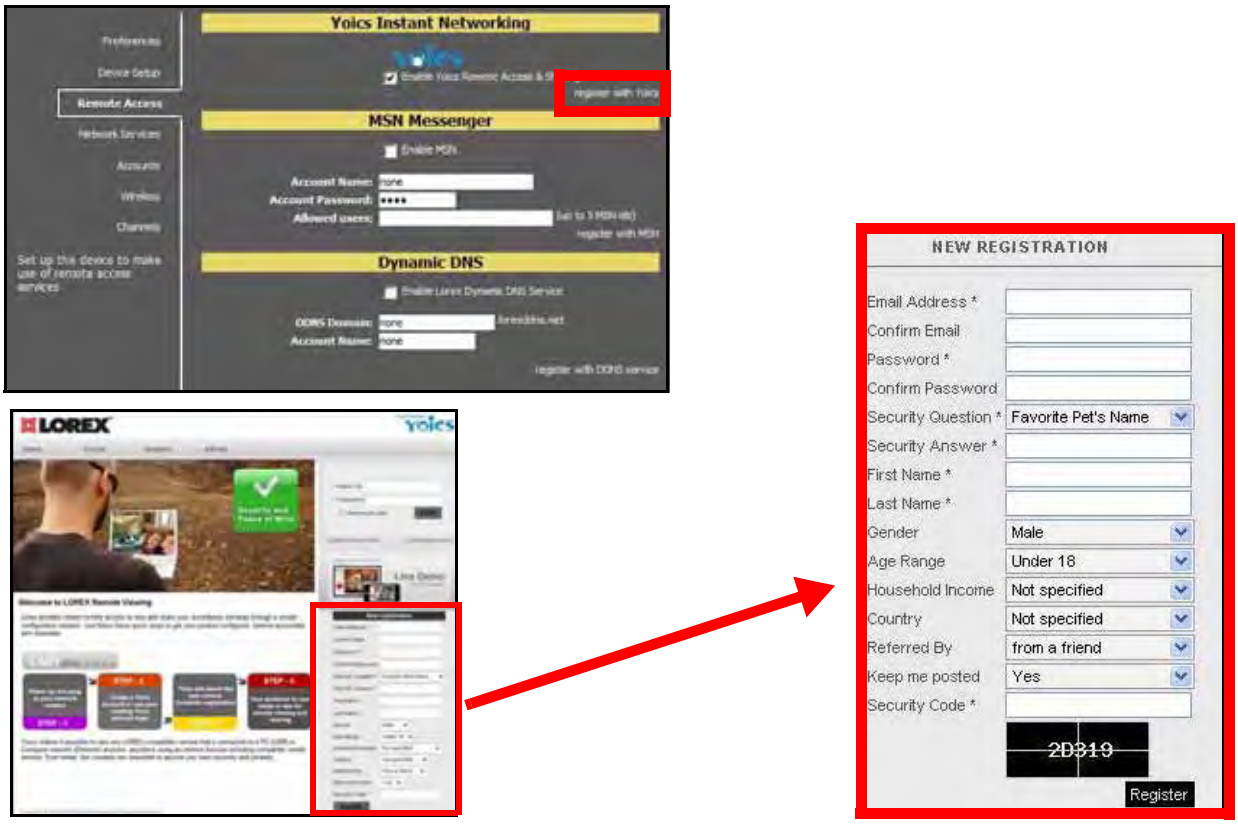


Figure 8.0 DigiViewer settings / registering with Yoics

3. Enter your personal information in the required fields (marked with *) and click **Register**.

You will be sent an email confirming your registration. Use the email address and password you entered when registering to login to lorex.yoics.com

Registering Your Camera

Once you have created an account with Yoics, you must register your camera in order to enable Yoics Easy Connect remote viewing.

You will need to register your camera **twice**. This is to register the camera for a **Video Stream** service (when using a Web browser), and a **Camera Viewer** service (when viewing from an iPhone or iPod touch).

To register you camera:

1. In your browser go to http://lorex.yoics.com and login using your username and password (from the confirmation email). Click **Yes** in any security windows.
2. From the Lorex pop-up, click **Complete Registration**. The Register New Devices page opens.

   NOTE: Please watch for Yoics pop ups; if the pop up is does not include the LOREX logo, you can click Remind Me Later to continue with the setup.

Figure 8.1 Click "Complete Registration"

3. To register the camera for Video Stream Service, enter a name for the camera in the Yoics Device Name text field and click **Register Now**. Video Stream will both be registered to your camera under "My Stuff."

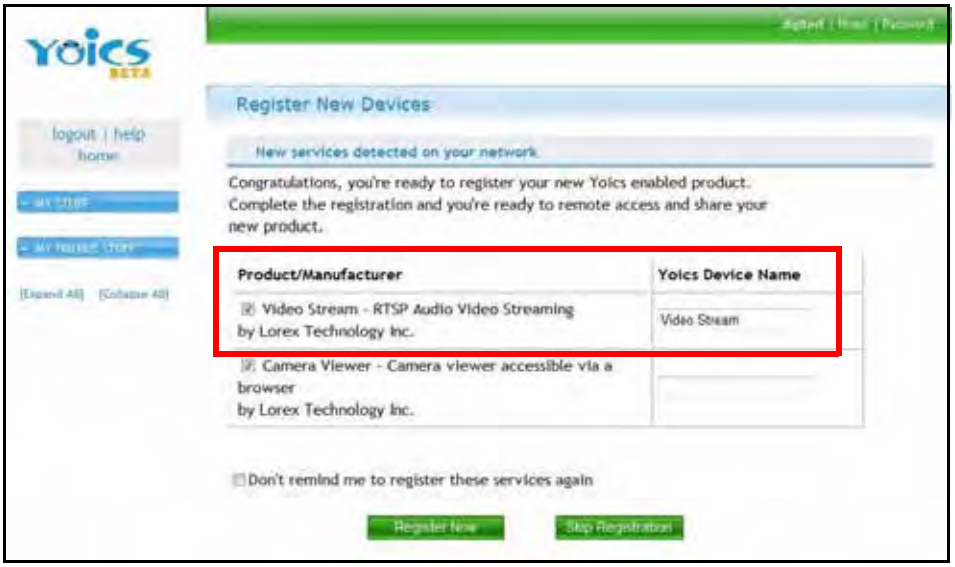


Figure 8.2 Register camera for Video Stream Service

4. Following the prompt, click **Complete Registration** to register the camera for Camera Viewer service.

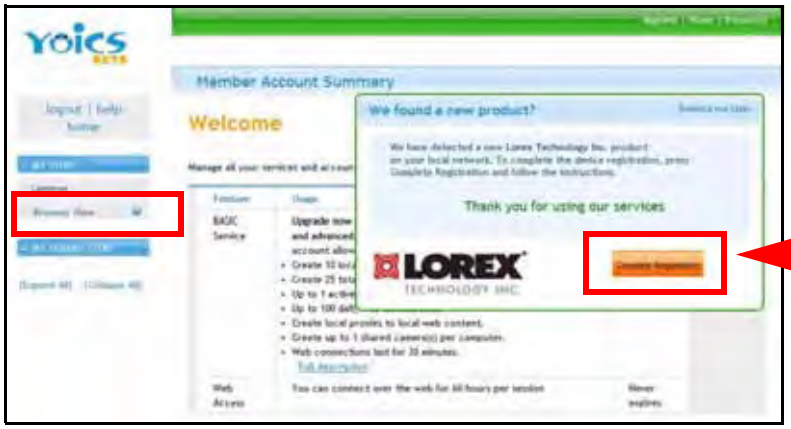


Figure 8.3 Click Complete Registration for Camera Viewer service

The Video Stream service appears under "My Stuff," but you need to click Complete Registration again and register your camera for the Camera Viwer Service.

5. Enter a name for the camera in the Yoics Device name field and click **Register Now.** Both Video Stream and Camera Viewer services are now registered to your camera and will appear under under "My Stuff."

Figure 8.4 Completed registration

TIP!

If your camera does not appear in the under "My Stuff," press F5 on your keyboard to refresh the page.

6. Under My Stuff, expand your camera and click a service (i.e. Video Stream) to view your camera.

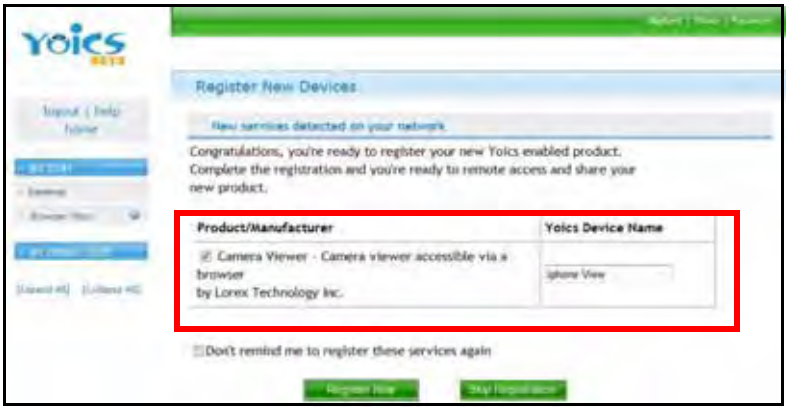


Figure 8.5 Register for Camera Viewer service

NOTE: For complete details on registering with Yoics and information on resetting or deleting services, see "Appendix J: Registering, Removing, and Resetting Yoics Services" on page 94.

Remote Viewing Using a Web Browser

To access your device remotely from a web browser:

1. In your browser, go to http://lorex.yoics.com and log in using your **user name** and **password**. Click **Yes** in the security pop-up window.
2. Under My Stuff, click the camera you want to view.
3. Enter you **user name** and **password** (by default, **admin**) to login to your camera.

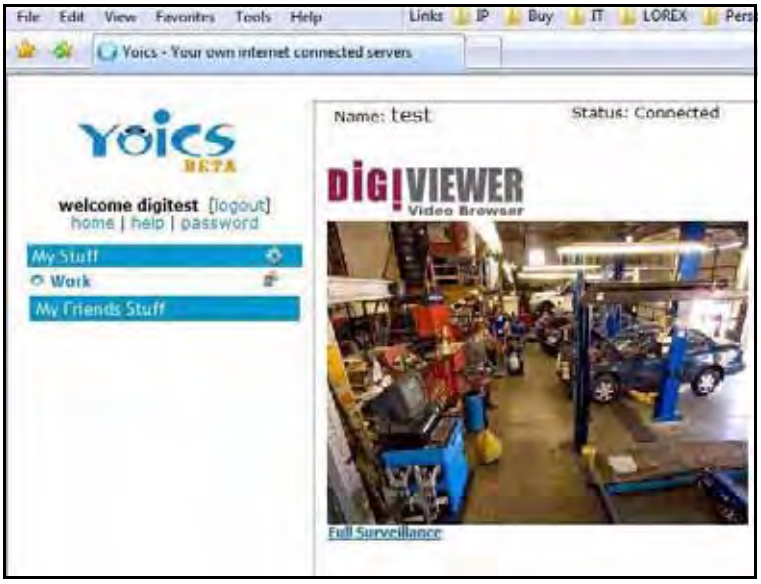


Figure 8.6 Remote viewing using a Web browser

ATTENTION: You will be able to view live video for 5~10 minutes then the connection will drop. To refresh the connection, click the camera icon again.

NOTE: You may need to install QuickTime for the Yoics site. If you have not installed the QuickTime plug-in, your browser will prompt you to do so now (www.apple.com/quicktime/download).

NOTE: If you have an external (WAN) static IP address or you have registered with the free LOREX DDNS service, you can configure your router to port-forward the incoming Internet connections to the camera. Use the static IP address or your customized lorexddns.net URL in the address field of your browser to access your camera. Yoics registration is not required when using this option. For details on setting up a FREE Lorex DDNS account, see "Appendix E: Setting Up DDNS Service" on page 83. For details on port-forwarding your router, see "Appendix D: Router Port Forwarding" on page 82.

ATTENTION: As a security measure, using Yoics remote viewing (PC or mobile) from one location will disable the option to use the same Yoics ID from a different remote location for approximately 30 minutes.

NOTE: You can also use MSN's Windows Live Messenger as an alternate remote viewing option. For details, see "Remote Viewing Using MSN Messenger" on page 30.

ATTENTION: If you want to use Yoics Remote Viewing and port forwarding, you must first register your camera with Yoics. For more information on port forwarding, see "Appendix D: Router Port Forwarding" on page 82.

Setting Up Wireless Connectivity

ATTENTION: This section is applicable to wireless camera models *only*.

With initial setup of the camera complete, you can configure settings in DigiViewer to employ a wireless network connection.

To setup wireless connectivity:

1. From DigiViewer, click **Settings** and then click **Wireless**. DigiViewer automatically scans for any wireless networks.
2. If not already enabled, select **Enabled** from the Wireless Mode drop-down menu.

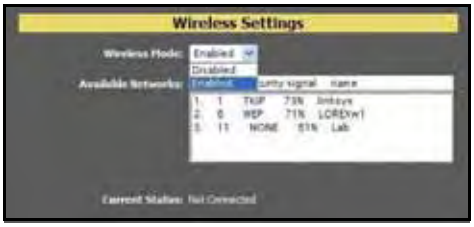


Figure 8.7 Enable a wireless connection

3. From the list of available networks, select the wireless network for the device. If protection/ encryption is enabled on the wireless router, you must enter the network password.

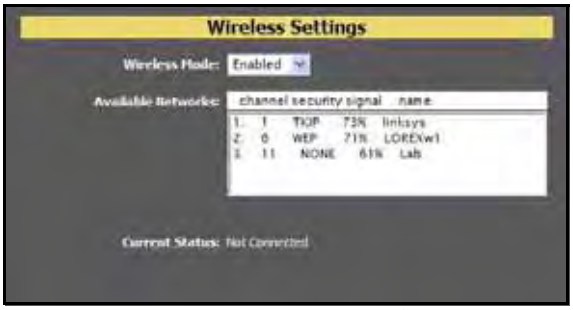


Figure 8.8 Select your wireless connection (enter password if necessary)

4. Click **Connect**. Allow DigiViewer a few moments to apply your new connection settings.
   NOTE: Changing wireless settings may require devices to reconnect.

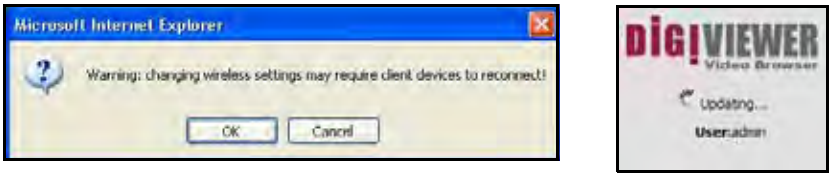


Figure 8.9 Your device may need to reconnect with the new wireless settings

5. Close the browser window.
6. Return to **DigiConsole**. From the Find menu, right-click your camera and select **Refresh the list of devices** (If DigiConsole was closed earlier, run the software again and click Find).
   NOTE: The camera should appear twice, with a different IP address (wired and wireless).
7. Disconnect the network cable from the camera.
8. Double-click the camera to launch DigiViewer in your default browser.
   NOTE: If using a Mac, use Bonjour in Safari to auto-detect your camera.

Remote Viewing from iPhone and iPod touch

You can use your iPhone or iPod touch to access your camera over Wi-Fi.

NOTE: Compatible with both iPhone 3G and iPhone 3GS.

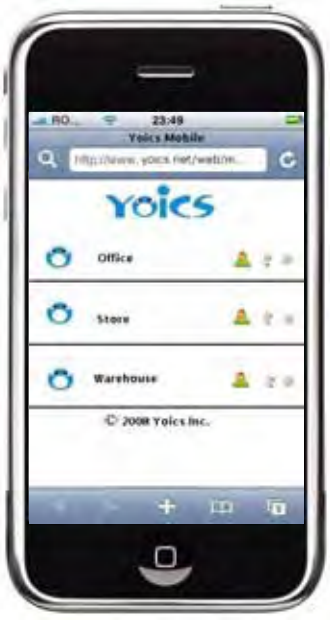
To access your device remotely from iPhone or iPod touch:

1. Using Mobile Safari, go to lorex.yoics.com and login using your Yoics **user name** and **password**.
2. Click the name of the device you want to view.
3. Enter your **username** and **password** (by default, **admin**) to login to the camera.

A.

B.

C.



D.

Figure 8.10 Remote viewing using iPhone or iPod touch

REMOTE VIEWING USING MSN MESSENGER

Your Easy-Connect Remote Surveillance Internet Camera can be accessed remotely using MSN's Windows Live Messenger™. Remote Viewing through Messenger involves first creating an MSN/ Windows Live account for the camera, configuring your camera in DigiViewer, and adding the camera as an MSN/Windows Live contact in Messenger.

Creating an MSN Account

The first step in accessing your camera through Messenger is to set up a new MSN account for the camera.

To create a new MSN account:

1. In your web browser, go to www.msn.com and click on **Hotmail**.

   NOTE: You can also register for MSN through DigiViewer (Settings>Remote Access and click **Register with MSN**).
2. Click **Sign up** to create a new account strictly for your Internet Camera.
3. From the "Create A Windows Live ID" page, enter a **Windows Live ID (user name)** and **password** and complete the **required personal information**.

   NOTE: Both @live.com and @hotmail.com will work with your Internet camera.
4. Click **I accept**. With the successful creation of your new MSN account, you will be taken to your Hotmail inbox. Use this new MSN/ Windows Live account to access your Internet Camera through Messenger. For example, **Lorex_Cam_1@hotmail.com**.

   NOTE: If you have more than one camera on your network (up to a maximum of 6) and want to view the cameras using Messenger, you will need to create an MSN account for **each camera**.

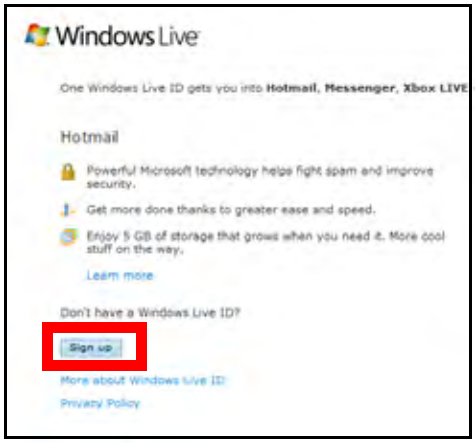


Figure 9.0 Create an MSN account for your camera

Figure 9.1 Enter required information

Download and Install Messenger

If not already installed on your PC, you can download Messenger from MSN.com or from microsoft.com.

Configuring MSN Messenger on Your Camera

Once you have registered a new MSN account for your camera, you need to configure your camera's network settings to allow you to access it remotely using Messenger.

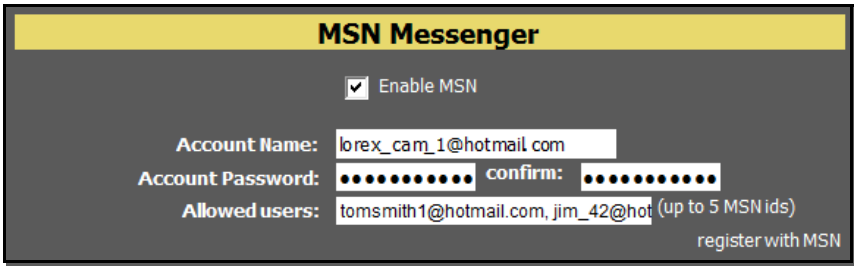


Figure 9.2 Enter the MSN address of the camera along with the MSN addresses of allowed users

To configure Messenger on your camera:

1. Open DigiViewer in your default browser.
2. Click **Settings** and then click **Remote Access**.
3. Under MSN Messenger, select **Enable MSN**.
4. Under Account Name, enter your newly created MSN/Windows Live user name. For example, **Lorex_Cam_1@hotmail.com**.
5. Under Account password, enter your **MSN account password**. Re-enter the password to confirm.
6. Under allowed users, enter up to 5 **MSN/Windows Live email addresses**. Make sure to add one of your active MSN/Hotmail addresses. Separate the addresses with a comma and a space. For example, tomsmith@hotmail.com, jim_jones@hotmail.com, etc.
7. Click **Submit Remote** to save your settings. Please allow a few moments for your camera to update.

Configuring MSN Messenger

With your camera configured for MSN in DigiViewer, you can add the camera's MSN address as one of your contacts in Windows Live Messenger.

To configure Windows Live Messenger:

1. On your PC, open Messenger (Start>Programs>Windows Live>**Windows Live Messenger**.
2. Sign in to Messenger using an **active MSN/Windows Live account**. **DO NOT** use the newly created account for your Internet camera.

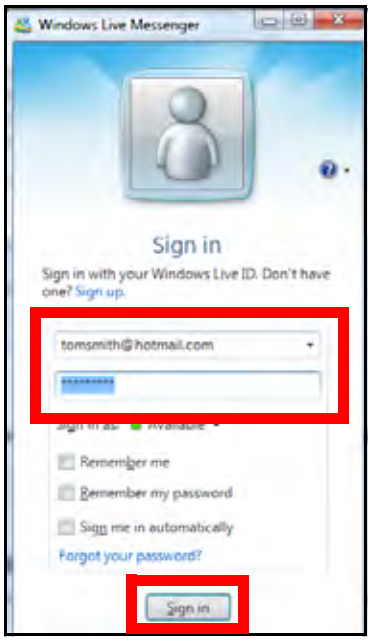


Figure 9.3 Sign in to MSN with an active account

3. You should immediately receive a prompt from the address of your Internet camera. Click **OK** to add the camera as a contact.

4. After a few moments, you should receive a message from the camera address. Click the prompt to view the camera's profile.

5. Click the web-cam icon in the top-left corner of the profile window and select **View this contact's webcam**. After a few moments you will be viewing live video from your camera.

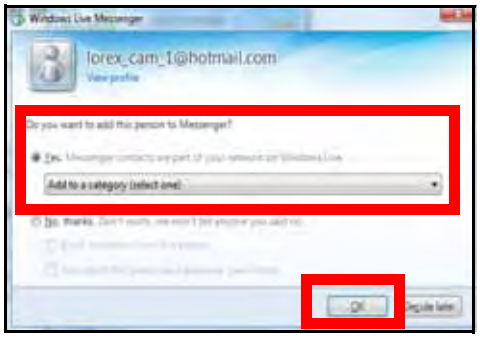


Figure 9.4 Add the camera as a contact

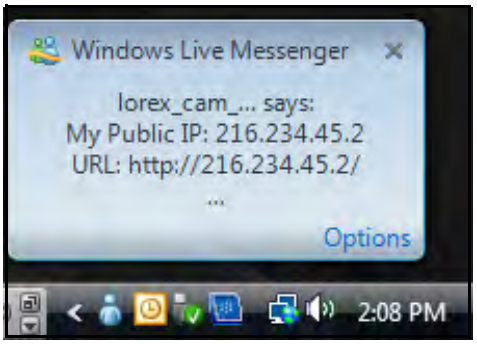


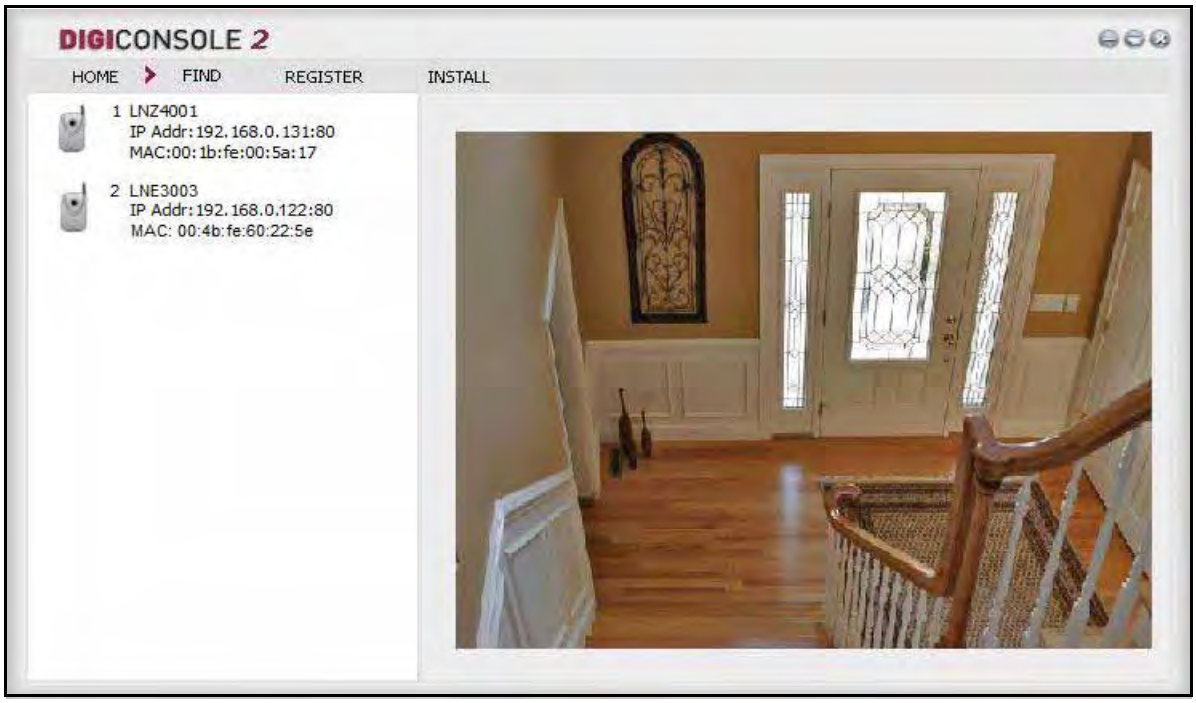
Figure 9.5 Click the prompt to view the profile

Figure 9.6 View the contact's webcam to see live video from your camera (image simulated)

Can't See the Video?

- Check the you have entered the correct MSN information in DigiViewer
- Do not select "Start a Video Call" —always select **View this contact's webcam**

DIGICONSOLE



About DigiConsole

DigiConsole is a discovery tool that lets you find Internet cameras on your local network.

System Requirements

The DigiConsole software (included with the IP device) has the following installation requirements:

Description	Requirement
CPU	Pentium® 4 or above
Operating System	Windows XP®/Vista
Memory	256 MB RAM (512 Recommended)
Video	16 MB of video memory
Network (LAN)	10/100 BaseT Network
Network (WAN)	384 Kbps upstream* *High-speed Internet service is recommended when using DVR Netviewer.
Hard Drive	50 MB - Installation space required * Additional Hard Drive space required for recording. Recorded file size will vary depending on recording quality settings

USING DIGICONSOLE

You can run DigiConsole from the software CD included with your product. Installing DigiConsole on your PC lets you record and view live streaming video.

NOTE: Installation necessary to record live video. Mac installation is not currently supported.

To open DigiConsole:

1. Insert your product CD in your CD/DV-ROM drive.

   NOTE: If Autorun fails to start, go to Computer (My Computer in Windows XP) and double-click the CD-drive to run the application. Follow step 2.

2. Double-click the **DigiConsole icon**.

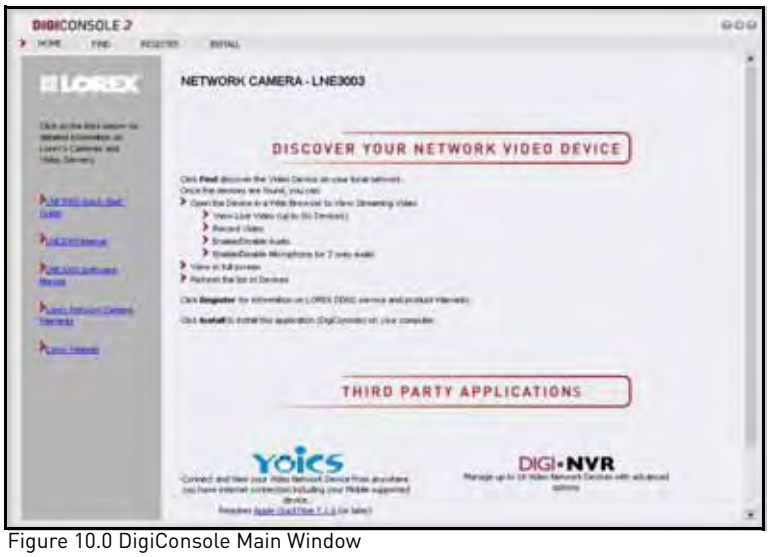


Figure 10.0 DigiConsole Main Window

The DigiConsole main window contains the following:

- Software documentation
- Discovery of all IP devices on your network
- Installation of DigiConsole on your PC
- Links to more product information on www.lorexcctv.com
- Warranty and DDNS registration

Home

DigiConsole consists of the following primary functions:

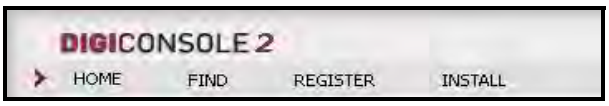


Figure 10.1 DigiConsole functions

- **HOME**: Main screen with links to software documentation and product information
- **FIND**: Locates all IP products on your network
- **REGISTER**: Lorex registration and Warranty information
- **INSTALL**: Installs DigiConsole to the local PC for easy access

Find

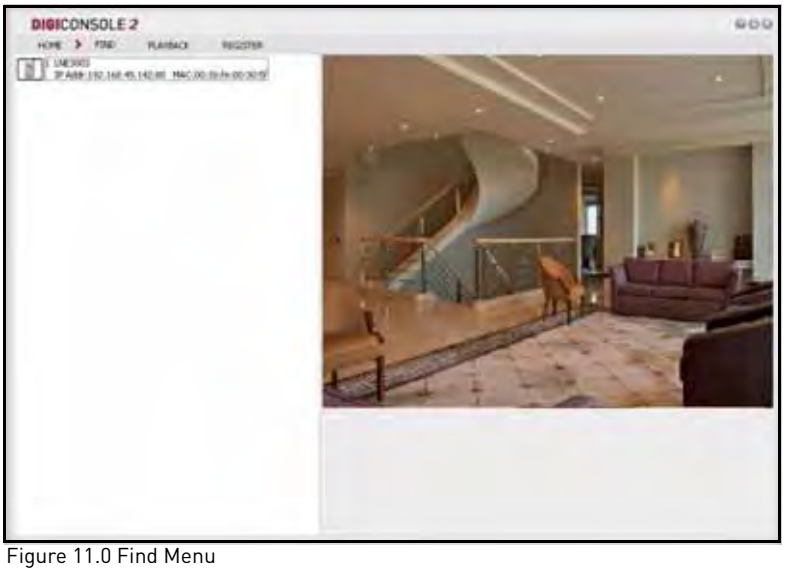


Figure 11.0 Find Menu

NOTE: You may need to grant DigiConsole access to your network. If necessary, click Unblock in any Security or Firewall windows.

The Find menu lets you discover Lorex IP devices on your network. Click Find to discover connected Lorex Internet cameras on your network.

NOTE: An IP device must be connected and networked to view live images. You may need to click Find several times to locate the device.

Find Menu Options

Once you have located a device on your network, you can access the following options for the device:

- Open device in browser
- View Live Video (only with DigiConsole installed to your PC)
- Refresh the list of devices

To access the menu, right-click the selected device.

Open device in browser

View live streaming video from the device using DigiViewer in your default web browser.

To open your device in a browser:

- Right-click the device and select **Open device in browser**. For details on using DigiViewer, see "DigiViewer" on page 43.

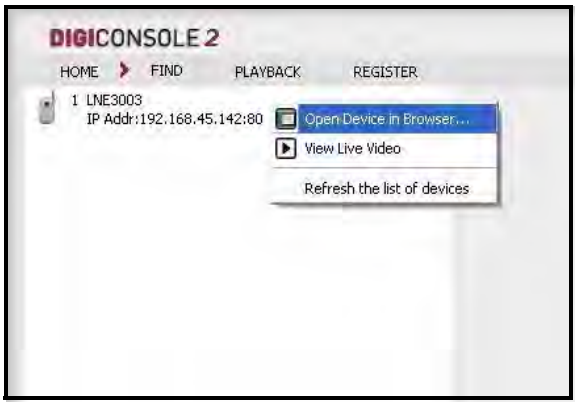


Figure 11.1 Open device in browser -- launch DigiViewer

View Live Image

NOTE: You must install DigiConsole to your PC in order to view live video in DigiConsole.

View Live Image displays live video from the IP device in DigiConsole.

To view live streaming video in DigiConsole:

- Right-click the device and select **View Live Image**. It make a few moments for the video stream to begin.

If you attempt to navigate away from the Find menu while viewing live video, a dialogue box will ask you if you want to cancel the video stream (see Figure 11.3).

- Click **OK** to stop the video stream, or click **Cancel** to maintain the video stream while in a different menu.

Figure 11.2 Live streaming in DigiConsole

Figure 11.3 Stop live video warning

Refresh list of devices

Manually refresh the device list if you have performed firmware updates, added any new devices, or changed network settings.

To refresh the device list:

- Right-click the device and select **Refresh the list of devices**

Live Video Options

NOTE: You must install DigiConsole to your PC in order to view live video in DigiConsole.

With live video playing in DigiConsole, you can access more options for the IP device.

To view more options, right-click the selected device and choose any of the following:

- **Open Device in Browser**
- **Stop Live Video**
- **Record Video Image**
- **Mute Audio From Camera**
- **Enable Microphone**
- **Full-screen mode**
- **Refresh the list of devices**

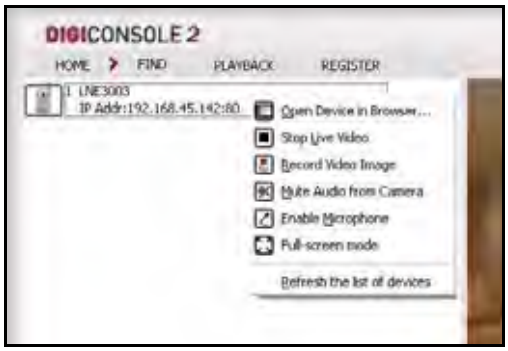


Figure 11.4 Live video options

Open device in browser

View live, streaming video from the device using DigiViewer in your default web browser.

To open your device in a browser:

Right-click the device and select **Open device in browser**. For details on using DigiViewer, see "DigiViewer" on page 43.

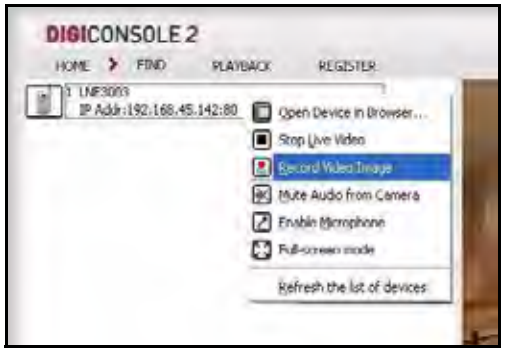


Figure 11.5 Record

Stop Live Video

Select this option to stop the live video stream in DigiConsole.

Record Video Image

Select this option to record the live video stream to your PC as an AVI file. For details, *see "Recording Live Video" on page 41.*

To record live video:

- Right-click the device and select **Record Video Image**

Figure 11.6 Recording live video

To stop recording:

- Right-click the device and select **Stop Recording**

NOTE: You can only record live video once you have installed DigiConsole to your PC. Mac installation is not supported. For more details, see "Installing DigiConsole" on page 39.

Mute Audio From Camera

Select this option to mute the audio feed from the device.

Enable microphone

Select this option to enable two-way audio. Two-way audio requires speakers attached to a camera and a microphone enabled on your PC for microphone recording.

Full-screen Mode

Select this option to view the live video in full-screen.

Press **ESC** on your keyboard to cancel.

Refresh the list of devices

Manually refresh the device list if you have performed firmware updates, added any new devices, or changed network settings.

Figure 11.7 Full-screen video

Register

Click Register for information on how to register your camera for Lorex's FREE DDNS service; warranty information is also displayed. *For more details,* see "Appendix E: Setting Up DDNS Service" on page 83.

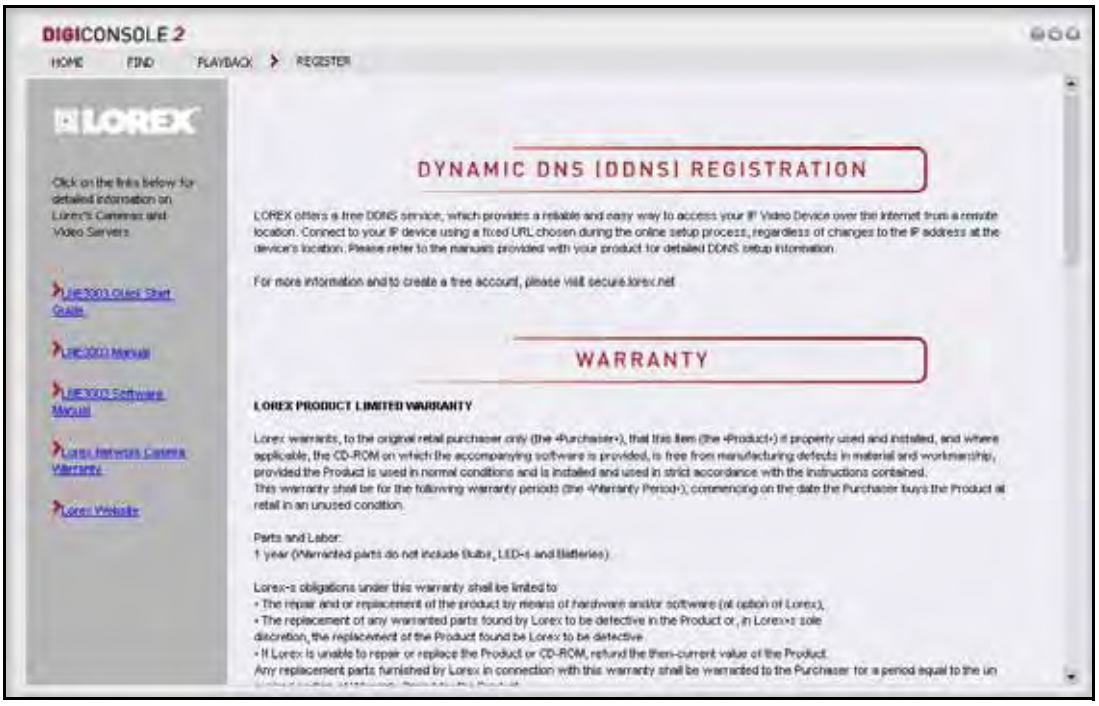


Figure 11.8 DDNS and warranty information

INSTALLING DIGICONSOLE

You can run DigiConsole from the software CD included with your product. However, you can also choose to install DigiConsole to your PC. Installing DigiConsole allows you to record and playback live video.

NOTE: Mac installation is not supported.

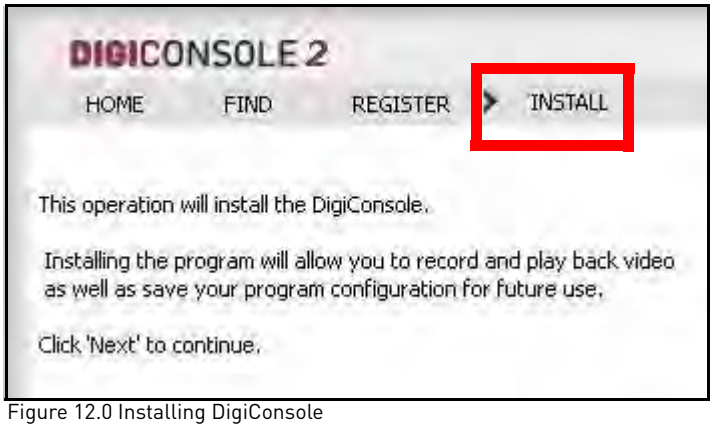


Figure 12.0 Installing DigiConsole

NOTE: External programs and components will be installed during the DigiConsole installation.

To install DigiConsole:

1. Click **INSTALL** to begin installing DigiConsole on your PC.
2. Click **Next** to continue.
3. Read the License Agreement and click **Accept License** to continue.
4. Click **Next** to install DigiConsole to the default directory.

   OR
5. Click **[...]** to change the save location; you can also edit the Start Menu name. Click **Next** to continue.
6. Click **OK** in the dialogue box to finish the installation. Exit and re-open DigiConsole using the **desktop icon** before making further changes.

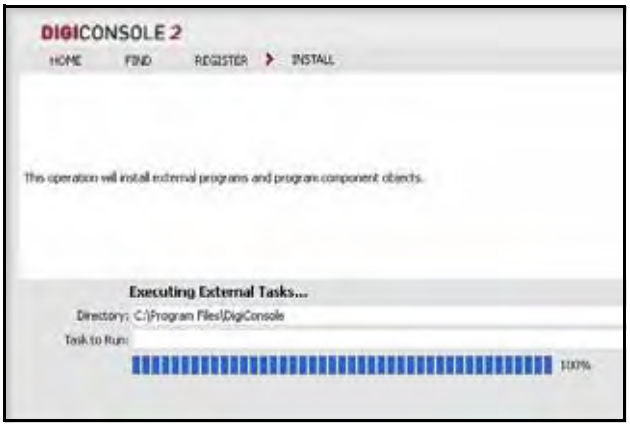


Figure 12.1 Completing the installation

Figure 12.2 DLL Server message upon installation completion

UNINSTALLING DIGICONSOLE

To uninstall DigiConsole:

1. Select Start>Settings>Control Panel>**Add or Remove Programs**.
2. From the Add or Remove Programs list, select DigiConsole and click **Change/Remove**.

Figure 13.0 DigiConsole Uninstaller window

3. In the DigiConsole Uninstaller window, click **OK**.

   NOTE: Your data files and recorded files are not removed when uninstalling DigiConsole. To remove these files manually, delete the DigiConsole folder on your hard drive.

Figure 13.1 DigiConsole removal complete

4. Close the DigiConsole Uninstaller window.

   NOTE: You should restart your PC after uninstalling any application.

RECORDING LIVE VIDEO

With DigiConsole installed on your PC, you have the option to record and playback live video.

NOTE: Recording does not include audio.

Figure 14.0 Recording live video

To record live video:

1. Click **Find**, and select your camera from the list of devices.
2. Right-click the camera and select **View Live Image**. Allow a few moments for the live video to start. You can only record video once live video is being streamed form the device.
3. Right-click the camera again, and select **Record Video**. DigiConsole begins recording immediately.

   NOTE: If you navigate away from the Find menu while recording, a dialogue window asks you if you want to cancel the video stream. Click **OK** to cancel the video stream and quit recording; click **Cancel** to maintain the video stream and continue recording.

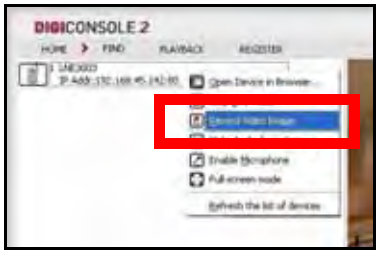


Figure 14.1 Begin live recording.

To stop recording:

- Right-click the active camera and select **Stop Recording**

NOTE: By default, recorded video is saved to `C:\Documents and Settings\user\DigiConsole\Video\`.

Figure 14.2 A red light next to the device icon indicates live recording.

Estimated Recording Times in DigiConsole (per one camera):

Description	Specification
Compression	MPEG4
Resolution	VGA (480x680)
Time	1 hour = 160 MB 1 day = 4 GB 1 week = 28 GB

PLAYING RECORDED VIDEO

Once you have recorded live video, you can access the video from DigiConsole.

NOTE: You must have DigiConsole installed on your PC in order to record and playback live video.

NOTE: Playback in Windows Media Player requires the Xvid codec. A link to Xvid can be found on the Home page of DigiConsole.

Figure 15.0 Playing recorded video

To playback recorded video:

1. Click **PLAYBACK** at the top of the DigiConsole window. The Playback menu opens with the columns Device, Time, and Size.
2. Under Device, expand the device trees to view the recorded video files for specific IP devices on your network. You can also expand **All Devices** to view all the recorded video files from all the devices at once.
3. Double-click a selected file to open the file in your default media player (e.g. Windows Media Player™, VLC).

   OR

4. Select a file and then right-click to select one of the following:
   - **Play Back Recorded Video**: Video file plays in your default media player.
   - **Open Recorded Video Folder**: Recorded video folder opens in Windows Explorer (`C:\Documents and Settings\user\DigiConsole\Video\`) for you to playback or manage the file as you wish.

Figure 15.1 Expand the device tree

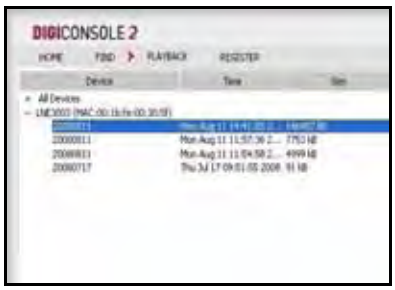


Figure 15.2 Select a file for playback

DIGIVIEWER

About DigiViewer

DigiViewer software is a browser-based security application that lets you view live video, control, and configure IP devices on your network from a compatible Web browser.

NOTE: DigiViewer is not installed to the local PC.

System Requirements

Description	Requirement
CPU	2.4 GHz Pentium® 4 or above
Operating System	Windows XP/Vista; Mac OS 10.4 or greater (viewing only)
Browser	Internet Explorer 7 or greater; Firefox 2 or greater; Safari 2 or greater
Media Player	ActiveX (Internet Explorer); QuickTime (Firefox, Safari)
Memory	1 GB RAM (more than 1 GB recommended)
Video	16 MB of video memory
HDD	2 GB of free space
Network (LAN)	10/100 Base-T Network
Network (WAN)	384 Kbps upstream*

OPENING DIGIVIEWER

You can open DigiViewer by two methods: from DigiConsole or from a Web browser. For initial use, we recommend opening DigiViewer through DigiConsole.

Figure 16.0 DigiViewer main screen

To open DigiViewer:

DigiConsole

1. Launch DigiConsole from the software CD included with your product (or from the Desktop or Start Menu if installed on your local PC).
2. From the DigiConsole main window, click **Find** to discover IP devices on your network.
3. Double-click your camera from the device list. DigiViewer opens in your default browser (Internet Explorer 7 or later recommended).
4. Log in using your **user name** and **password** (by default, **admin** / **admin**).

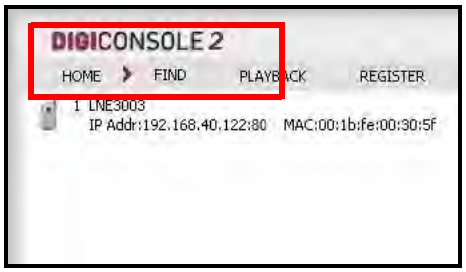


Figure 16.1 Enter the IP Address in your browser

Web browser

- Open a Web browser (Internet Explorer recommended—ActiveX required with Internet Explorer) and enter the **IP Address** of your device in the browser's address bar.
  - **Local Access**: Use DigiConsole to locate the IP Address of your device. The IP Address is next to the device name in the list of discovered items in the Find menu.
  - **Remote Access**: Use the External IP address or DDNS URL

Figure 16.2 Login to your device

SURVEILLANCE

DigiViewer streams live video in Surveillance mode. If you select other DigiViewer options, such as Settings or Events, click Surveillance to return to live viewing.

The DigiViewer main window consists of a main menu on the left panel, live video image, and advanced controls toolbar.

Figure 17.0 DigiViewer main window / Surveillance main window

1. **User**: The currently logged in user—admin, general, or guest.
2. **Main Display Screen**: Shows live video from connected a connected camera(s).
3. **Main Menu**: Select from Surveillance (live viewing), Events, Settings, System Log, and Help.
4. **Advanced Control Panel**: Shows Image options, channel displays, or PTZ controls.
5. **Audio**: Click to turn audio from the camera ON/OFF.
6. **Snapshot**: Click to take a screenshot of the image in the main display screen.
7. **Advanced Controls Toolbar**: Select Channel Display, PTZ, picture options, or rotate image.
8. **Live Image**: Click to start/stop the live image.

User

There are three user authorities in DigiViewer: admin (administrator), general user, and guest. For details on managing users and passwords, see “Accounts” on page 65.

Main Display Screen

Displays live streaming video from the camera as well as option menus.

Main Menu

The Main Menu consists of the following:

- **Surveillance**: Live Viewing; always click Surveillance to return to Live Viewing
- **Events**: Configuration settings for Motion Detection
- **Settings**: Configuration settings for the IP Device
- **System Log**: View the list of events, actions, operations of DigiViewer
- **Help**: Displays support and contact information

NOTE: Complete Main Menu only available when logged in as the Administrator. General users are limited to Surveillance and Help. *See* Accounts *for more details.*

Advanced Controls Tool Panel

Change channel displays, control PTZ cameras, or adjust picture once activated from the Advanced Controls Toolbar the bottom of the main window. *See Figures 7.4 ~ 7.6.*

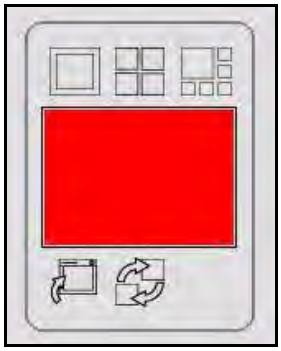


Figure 17.1 Channel Displays

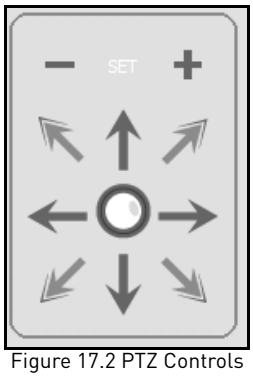
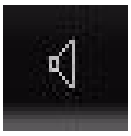


Figure 17.2 PTZ Controls

Figure 17.3 Image Sliders



Audio

Controls the Audio on the IP Device (on Audio Enabled devices only.

Please refer to the Hardware Manual for the specific model).

Still Image Capture Button

Click to capture the currently displayed video image as a still image in a separate browser window. This still image can be saved as a JPG file.

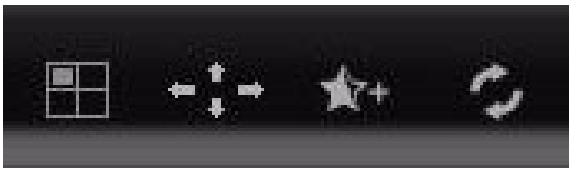
To save a still image:

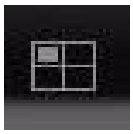
1.Right-click anywhere on the image and select **Save Picture As**.

2.From the Save As window, select a save location, file name, and click **Save**.

Advanced Controls Toolbar

Click to activate Advanced Controls at the bottom of the main window:

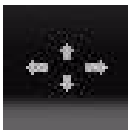




Channel Display

View Single-Screen, Quad, and Six-channel displays.

Click  to view Full-Screen. Click  to change channels automatically in Sequence mode.



PTZ

Control movement and presets of a PTZ camera. For more details, see “Controlling PTZ” on page 18.

Picture

Use the sliders to adjust Brightness, Contrast, Hue and Saturation. Click the text to set to default (i.e. click "Brightness" to set to default)

Rotate Image

Rotates the live video in 90° clockwise increments (Internet Explorer with ActiveX only).

Live Image

Click  to start live video.

NOTE: You must click  to start live video after viewing Settings, Events, Logs, or Help.

Click  to stop live video and show a still image. Click  again to resume playback.

NOTE: When returning to Surveillance mode, you may need to click  to resume live viewing.

EVENTS

Use the Events menu to configure options and settings for Motion Events, HTTP Events, PTZ options, and Alarm input/output.

NOTE: PTZ and alarm input/output is applicable to LNZ4001 Series models *only.*

To open the Event menu:

- Click **Events** in the DigiViewer main window.

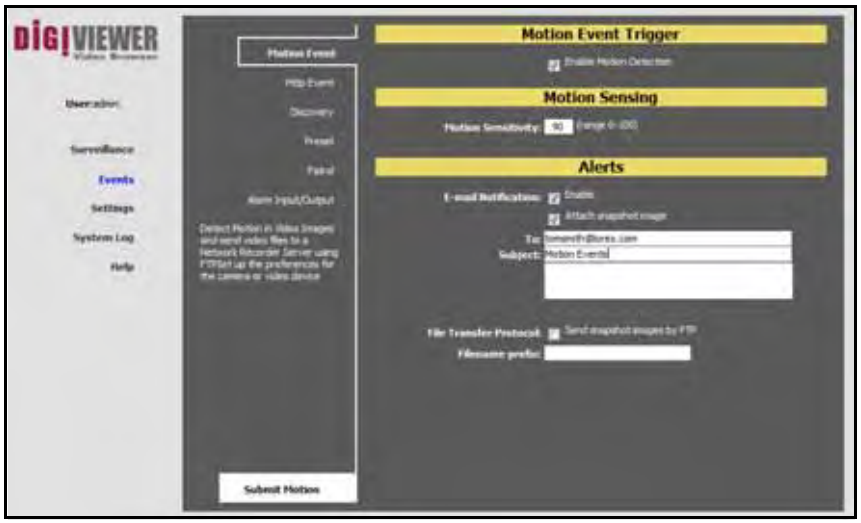


Figure 18.0 Events menu (by default, Motion Events menu)

Motion Events

Use the Motion Events menu to configure motion detection and email notification.

To enable motion detection:

1. Under Motion Event Trigger, select **Enable Motion Detection**.
2. Under Motion Sensing, enter a **numeric range for motion sensitivity** from 0 (no sensitivity) ~ 100 (very high sensitivity). By default, motion sensitivity is set to 90.
3. Click **Submit Motion** to save your settings.

   NOTE: You must enter SMTP information in order to send an email alert. For details, see "Outgoing Email Server" on page 63.

To enable email alerts:

1. Under E-Mail Notification, select **Enable**.
2. *Optional*: Select **Attach graphic image** if you want to attach a JPEG to the email.
3. Enter the recipient address in the "To" field; subject and body text are optional.
4. Click **Submit Motion**.

   NOTE: Check the FTP box to send the snapshot image to an FTP server. Enter the filename prefix in the text field. Your FTP server needs to be setup separately. Enter the FTP server login information in Settings>Network Services>**Network Recorder Server**. For details, see "Network Recorder Server" on page 64.

HTTP Events

Use the HTTP Event menu to configure HTTP Events on your networked camera. With HTTP Events enabled, your Internet camera can be triggered by motion or a triggered 12V alarm from another camera. The camera can trigger an HTTP server, a 12 volt alarm sensor, or another camera for a pre-configured action. For more details, see "Appendix H: Setting Up HTTP Events" on page 89.

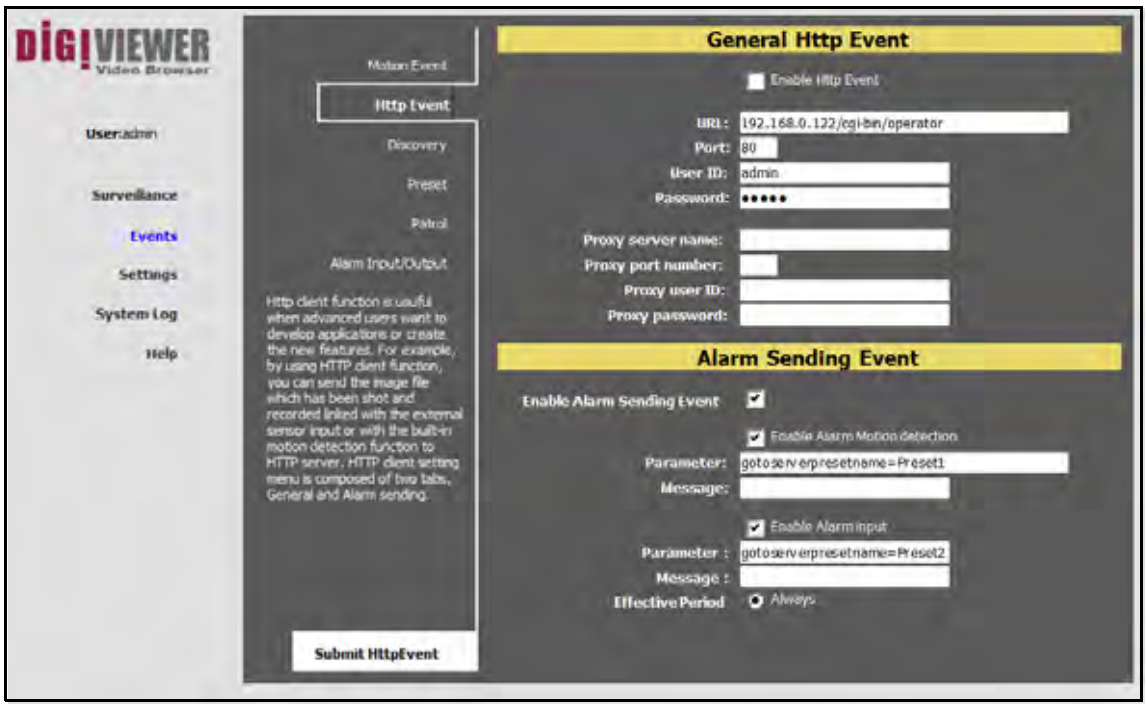


Figure 18.1 HTTP Event menu

To enable HTTP Events:

1. Under General HTTP Event, select **Enable HTTP event**.
2. Under URL, enter the **IP address/DDNS domain** of the target camera or network device followed by **/cgi-bin/operator/ptzset**. For example, 192.168.0.122:81/cgi-bin/operator/ptzset
3. Enter the **Port number**, **user ID** and **password** of the target camera.
4. **OPTIONAL**: If using a proxy server, enter the proxy server name, port, user name, and password in the fields.
5. Under Alarm Sending Event, select **Enable Alarm Sending Event**.
6. Select **Enable Alarm Motion Detection**.
7. Enter the following parameter: **gotoserverpresetname=[Preset#]**. For example, gotoserverpresetname=Preset1. Make sure you enter the preset name EXACTLY as it appears in the Preset list (Settings>Preset).
8. Select **Enable Alarm input**.
9. Enter the following parameter: **gotoserverpresetname=[Preset#]**. For example, gotoserverpresetname=Preset2.
10. Click **Submit HTTP Event** to save your settings.

Discovery

Use the Discovery menu to allow discovery of your network devices using Bonjour and UPnP (Universal Plug and Play). By default, Bonjour and UPnP are enabled on the camera.

If you are using one of the Lorex network cameras with a Mac, Bonjour will allow you to connect to your camera using DigiViewer in Safari. For details on detecting and viewing your camera using a Mac, see "Viewing Your Camera Using a Mac" on page 14.

NOTE: You will not be able to record live video directly to your Mac.

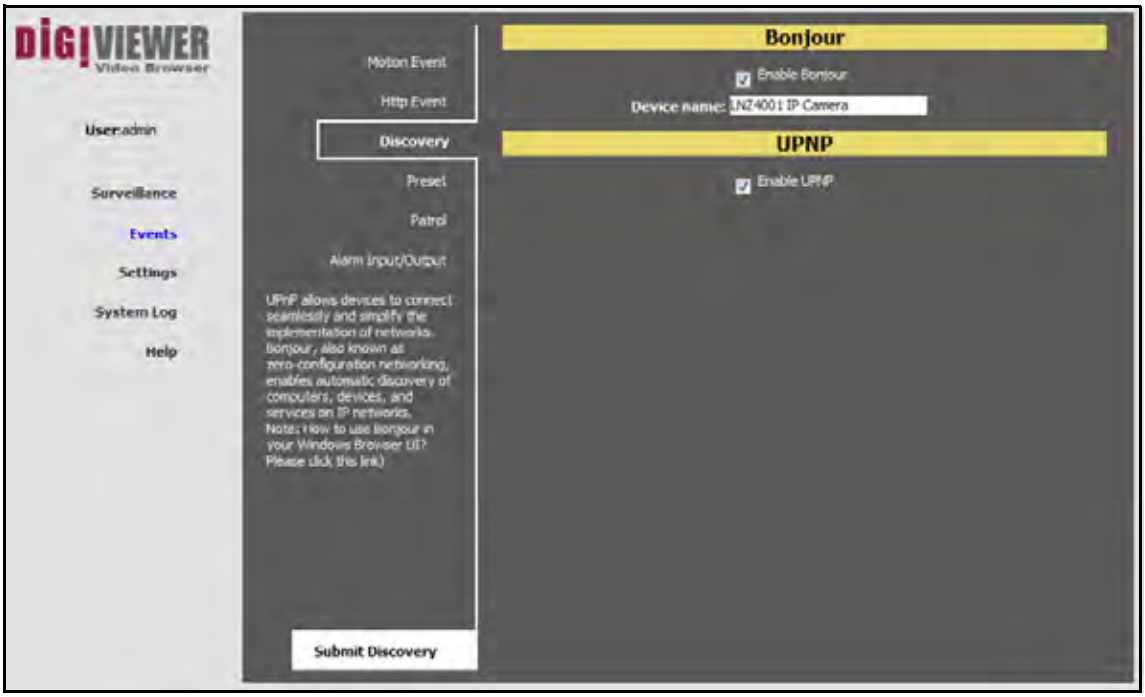


Figure 18.2 Discovery menu

To enable/disable Bonjour:

1. Under Bonjour, select **Enable Bonjour**.
2. If desired, enter a new name for your device in the Device Name field. This will be the name of your device on your network.
3. Click **Submit Discovery** to save your settings.

UPnP

By default, your network camera has UPnP enabled. This allows you to connect to your camera from the Network menu in Windows Vista / My Network Places in Windows XP.

NOTE: You must turn on Network Discovery in Windows in order to discover and connect to devices on your network. For details, see "Finding Your Camera as an UPnP Device (optional)" on page 13.

To enable/disable UPnP:

1. Under UPnP, select/deselect **Enable** (default).
2. Click **Submit Discovery** to save your settings.

NOTE: UPnP can be used instead of DigiConsole to discover your camera and launch DigiViewer.

Preset

ATTENTION: This section is applicable to LNZ4001 camera models *only*.

Use the Preset menu to configure up to 32 presets on a PTZ Internet camera.

NOTE: You must have at least one saved preset on the camera in order to use the Preset menu. For details on setting presets, see "Events" on page 48.

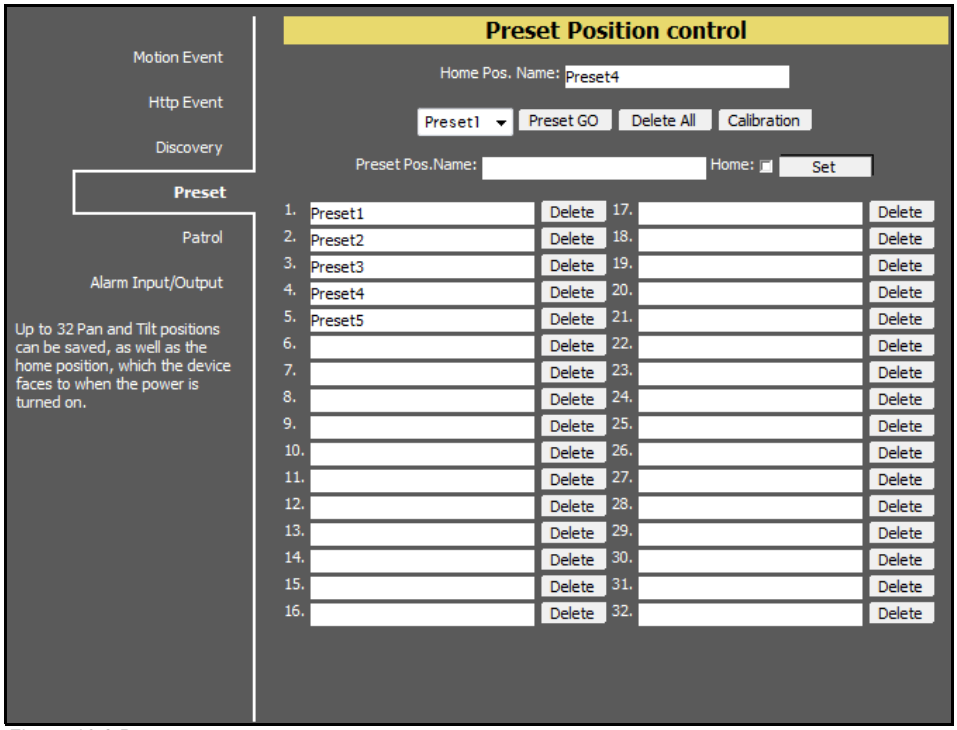


Figure 18.3 Preset menu

To view a preset position:

- From the drop-down menu, select one of your presets. Click **Preset GO** to position the camera to this preset

To calibrate the camera:

- Click **Calibration** to reset the camera to the default position

NOTE: For more details on resetting and calibrating the camera, see APPENDIX

To rename a preset:

1. Select a preset from the drop-down menu and click **Preset Go**.
2. In the Preset Pos. Name field, enter a new name for the preset and click **Set**. The new preset name is added sequentially to the Preset List, but the old preset is not deleted.

To delete a preset:

- Select one of the presets from the list and click **Delete**.

NOTE: The preset is immediately deleted. This step cannot be undone.

NOTE: The next preset added will replace the previously deleted preset. For example, you have 10 presets on your PTZ camera and delete Preset2. When you add another preset, that new preset will be Preset2, not Preset11.

Home Position

The Home Position is the position that the camera will automatically take when the camera is powered on.

To set the Home Position:

1. Enter a preset from the list in the **Preset Pos. Name** field.
2. Select the box beside Home and click **Set**. The new Home Position will appear in the Home Pos. Name field at the top of the menu.

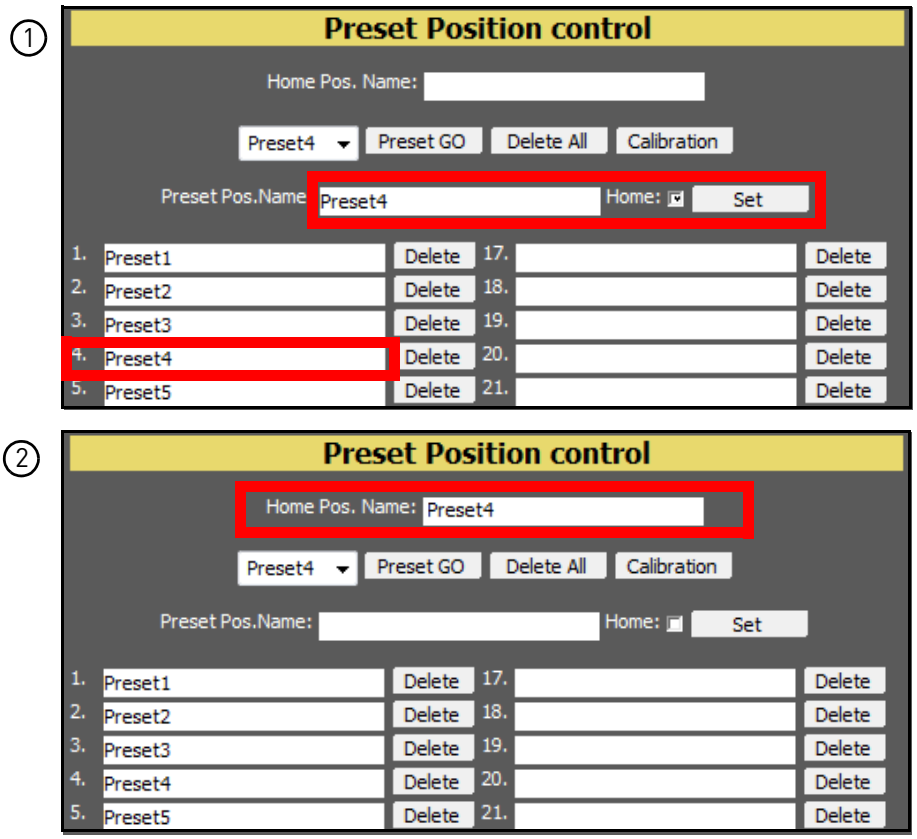


Figure 18.4 Setting the Home Position

Patrol Control

You can set up to four patrol tours composed of up to eight preset positions. The camera will move to the programmed positions sequentially.

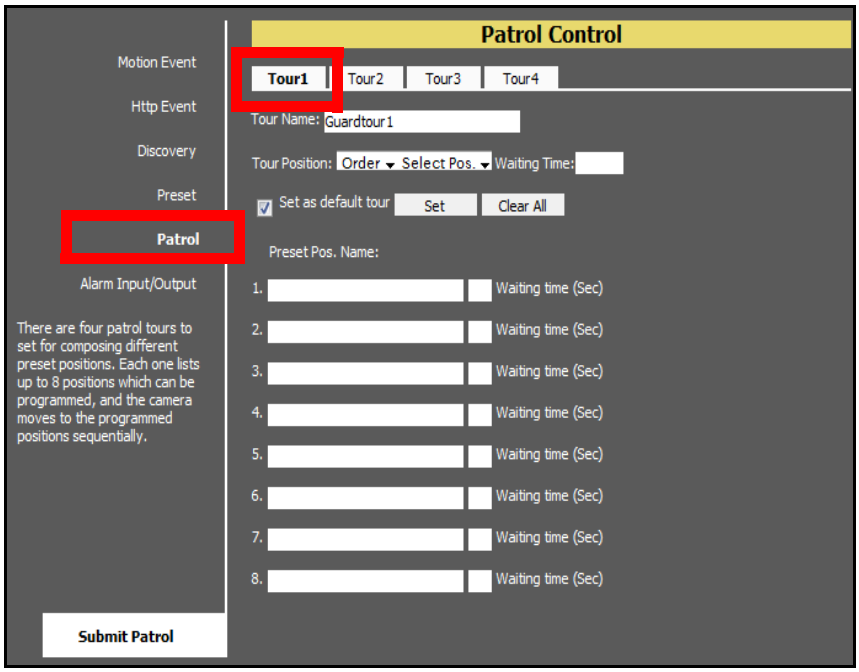


Figure 18.5 Patrol Control menu

To set a patrol tour:

1. Select a Tour Number (e.g. Tour1).
2. Under Tour Position, select an **Order number** from the Order drop-down menu (first will be the default position). Order refers to the position in the Position Number List (see figure 6.9).
3. Select a **preset position** from the Select Pos. drop-down menu.
4. Under Waiting Time, enter a **time** (from 1~99 seconds) for the camera to pause on the position. Select the box to make the tour your default patrol tour.
5. Click **Set**. The position appears in the Preset Position List (see figure 6.9).
6. Repeat steps 1~5 until you have completed the tour (each tour can have up to 8 positions).

Figure 18.6 Saved Patrol Tour

7. Under Tour Name, enter a name for your tour or leave as default (Guard Tour 1).
8. Click **Submit Patrol**. Please allow a few moments for the PTZ camera to update with the new patrol tour.

Alarm Input/Output

ATTENTION: This section is applicable to LNZ4001 camera models *only*.

Configure Alarm Input settings for an external alarm/sensor (not included) and Alarm Output settings for an external alarm light/siren (not included).

Alarm Input

To configure alarm input settings:

1. Connect a 12V external alarm sensor (i.e. motion sensor), to the Input ports of the alarm block on the rear panel of the camera.
2. Open DigiViewer and click Events>**Alarm Input/Output**.
3. Under Alarm Input, select the box, **Enable Sensor Input 1**.
4. Under Trigger Condition, select **High** for a Normally Open circuit (NO) or **Low**, for a Normally Closed circuit (NC).

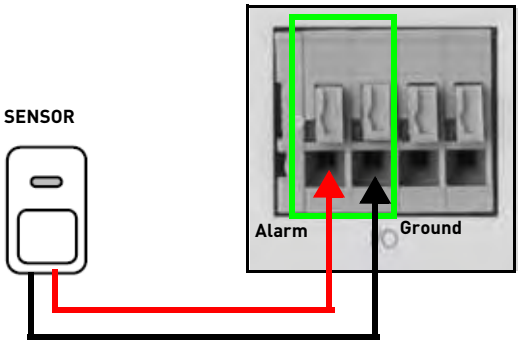


Figure 18.7 Alarm input

5. Under Camera Move, select a **preset** from the Select Pos. drop-down menu. When an external alarm or sensor is triggered, the PTZ camera will turn to the position of the selected preset.

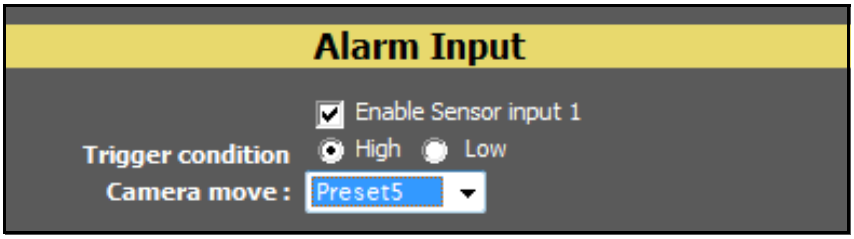


Figure 18.8 Alarm input

6. Click **Submit In/Output** to save your settings.

Alarm Output

To configure alarm output settings:

1. Connect an external alarm, such as light or siren, to the two right ports of the alarm block on the rear panel of the camera.
2. Open DigiViewer and click Events>**Alarm Input/Output**.
3. Under Alarm Output, select the box, **Alarm output**.
4. Under Digital Output, select **High** for a Normally Open circuit (NO) or **Low**, for a Normally Closed circuit (NC).

   NOTE: Trigger Condition will always be Alarm.

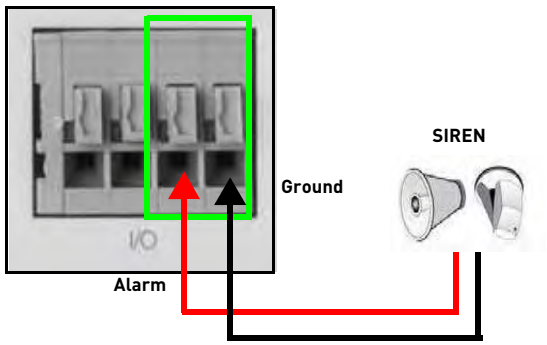


Figure 18.9 Alarm output

5. Under alarm, select the following:
   - **Motion detection**: the external alarm (light, siren) will be triggered when motion is detected by the camera
   - **Alarm input**: the external alarm (light, siren) will be triggered when the connected alarm sensor is triggered
   - Select both if desired
6. Under Alarm duration, select **1~60 seconds**, or **OFF**. The longer the duration, the longer the light/siren will be active.

   NOTE: Effective period is set to always by default.

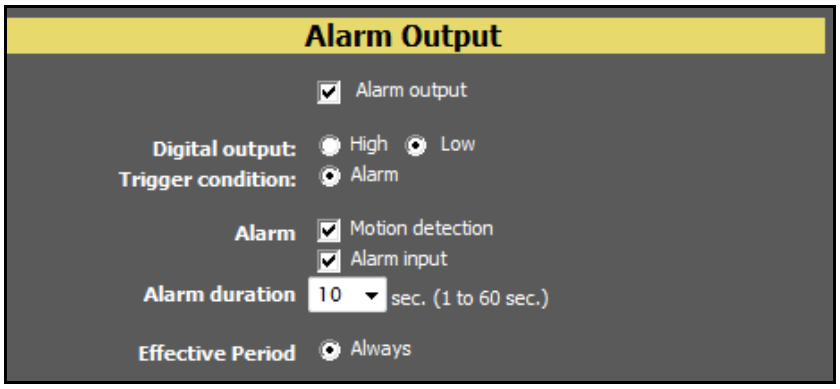


Figure 18.10 Alarm output

7. Click **Submit In/Output** to save your settings.

SETTINGS

The Settings Screen controls the options and configurations for the camera.

To open the Settings menu:

- Click **Settings** in the DigiViewer main window

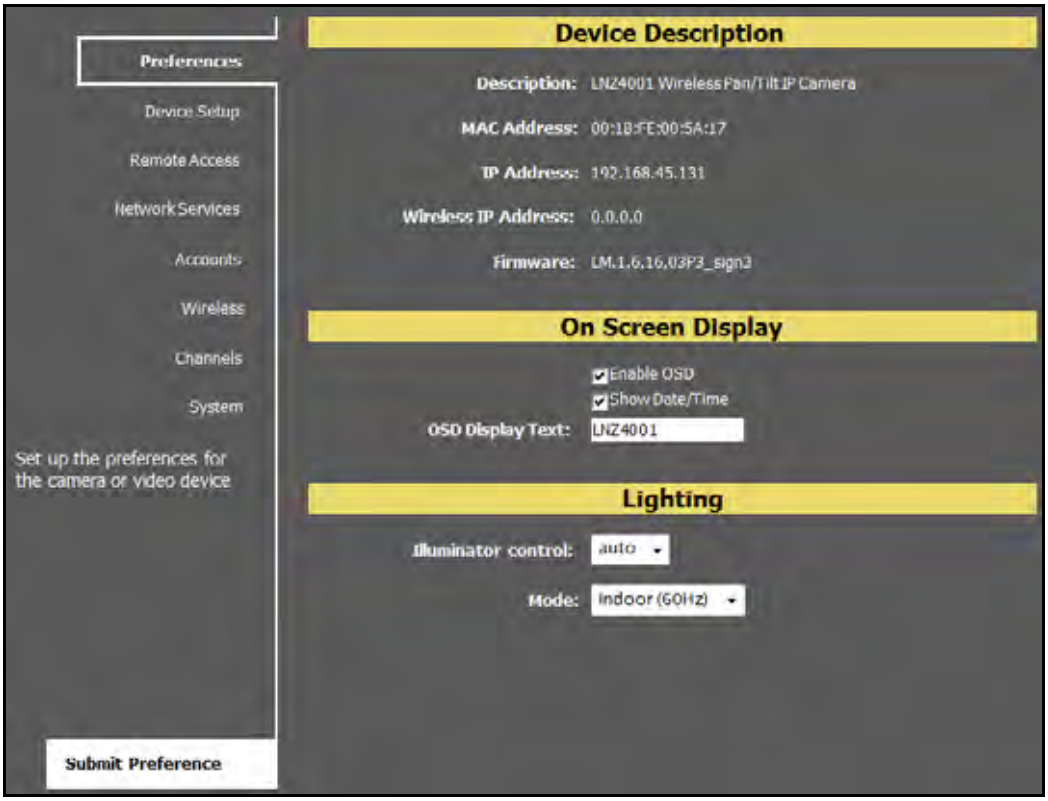


Figure 19.0 Settings menu

The Settings menu consists of the following options (click to open the related sub-menu):

- **Preferences**: View device network information, configure On Screen display, and configure IR Sensor (by default, the Settings menu is also the Preferences menu)
- **Device Setup**: Configure network settings and adjust the system clock
- **Remote Access**: Configure settings for remote viewing through DDNS, MSN, or Yoics
- **Network Services**: Configure the Outgoing Email Server and the FTP recording server
- **Accounts**: Enter user names and passwords for five users and one guest user for the device
- **Wireless**: Configure settings for wireless networking (LNE3003 and LNZ4001 Series *only*)
- **Channels**: Configure settings for up to 6 Internet cameras and video servers
- **System**: Advanced parameter settings including camera restart, factory defaults, and firmware upgrade

Preferences

Open the Preferences sub-menu to view network information for your device, as well as settings for the on-screen display and lighting.

Figure 19.1 Preferences menu

Device Description

The Device Description menu lists the following important information about your camera:

- **Description**: IP Device name
- **MAC Address**: The physical address of your camera on your local network
- **IP Address**: The network address of your camera
- **Wireless IP Address**: The wireless network address of your camera (LNE3003/LNZ4001 only)
- **Firmware**: The firmware number presently on your camera

On Screen Display

To configure OSD options:

1. Select **Enable OSD**. If selected, the OSD will appear on the Surveillance main screen during live viewing.
2. Select **Show Time**. If selected, the time will appear on the Surveillance main screen during live viewing. The date and time appear in the following format: YY-MM-DD; HH:MM:SS.
3. Under OSD Display Text, enter an 8-character **text/title/name** to be displayed on the Video Display screen. For example, Cam 1, PTZ 2, Hall, Door 3, etc.

   NOTE: Make sure the On-Screen Display is disabled before entering new OSD Display Text.
4. Click **Submit Preferences**. Please allow a few moments for your camera to update.

Figure 19.2 OSD with text and time

Lighting

To configure lighting settings:

1. Under Illuminator control, select **AUTO**, **ON**, or **OFF** from the drop-down menu. This option control the night vision LEDs around the lens. By default, the camera is set to Auto.
2. Under Mode, select **Outdoor**, **Indoor 50 Hz**, or **Indoor 60 Hz**. This option controls the mode of the night vision LEDs. By default, the camera is set to Indoor 60 Hz.
   NOTE: With the IR Sensor set to auto, you can still set the mode to Outdoor, Indoor 50 Hz, or Indoor 60 Hz.
3. Click **Submit Preferences**. Please allow a few moments for your camera to update.

Device Setup

The Device Setup menu controls the Internal Networking Information for the IP Device.

To open the Device Setup menu:

- Click Settings>**Device Setup**

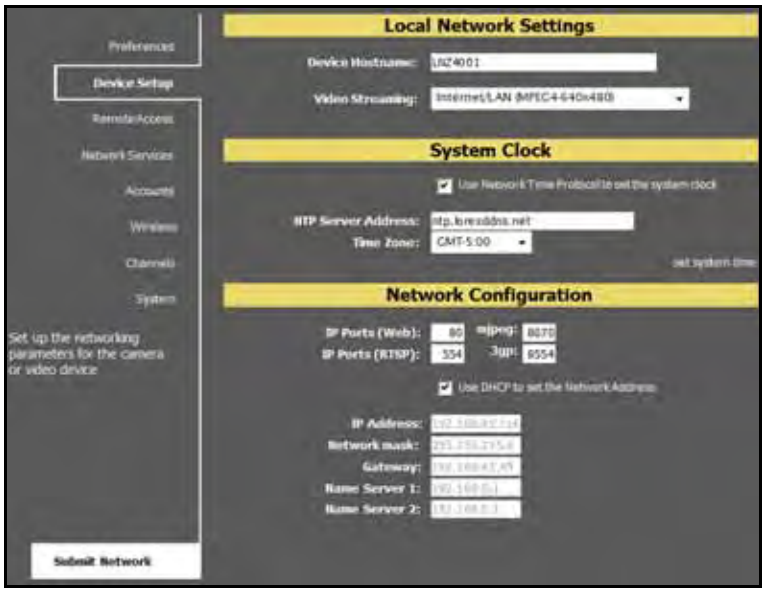


Figure 20.0 Device setup menu

Local Network Settings

To configure local network settings:

1. Under Device Hostname, enter a name for your device. This will be the name of your device on your local network.
2. Under Video Streaming, select the video quality for your network configuration:

   - **Local Area Network (MPEG4-640x480)**
   - **Internet/LAN (MPEG 4-640x480) [default]**
   - **High Speed (MPEG 4-640x480-CBR)**
   - **Slow Internet (MPEG 4-320x240)Internet/LAN (MJPEG-640x480)**
   - **High Speed (MJPEG - 320x240)**
   - **Slow Internet (MJPEG - 160x120)**

3. Click **Submit Network**. Please allow a few moments for your camera to update.

System Clock

To configure the system clock:

1. Select the box to enable/disable Network Time Protocol (NTP). NTP automatically sets the system clock using a Network Time Server. By default, the NTP server is enabled.

   NOTE: The Network Time Protocol (NTP) is a protocol for synchronizing the clocks of computer systems to a central time server.
2. Under NTP Server Address, enter the address of the NTP Server. The default setting is **ntp.lorexddns.net**, however any other NTP server can be used if desired.
3. Under Time Zone, select the time zone to the local time from the drop down menu (**GMT -12 ~ GMT+0 ~ GMT +12**).
4. Click Submit Network. Please allow a few moments for your camera to update.

OPTIONAL:

1. Click **Set System Time**, to set the time on the camera to the local time on your PC. This will disable the NTP server.
2. Click **OK** in the confirmation window. Please allow a few moments for your camera to update.

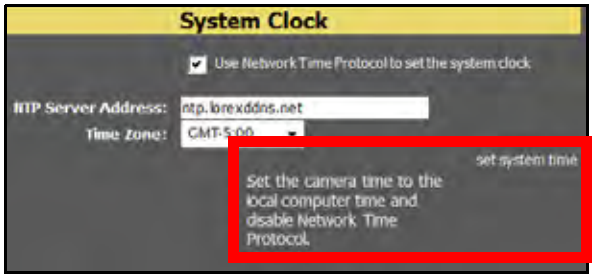


Figure 20.1 Set time on the device to the local time on your PC

Network Configuration

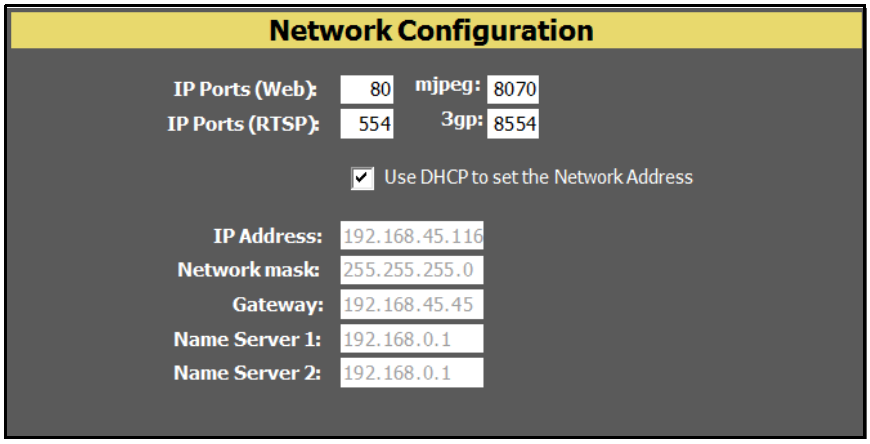


Figure 20.2 Network Configuration menu

To configure network options:

1. If desired, change the following ports:
   - **IP Port (Web)**: The Web Port used for web browser access (HTTP) (by default, 80)
   - **IP Port (RTSP)**: The IP Port used for live video streaming (RTSP) from the IP Device (by default, 554)
   - **mjpeg**: The network port for MJPEG transmission (by default, 8070)
   - **3gp**: The network port used for streaming to a mobile phone (by default, 8554).

ATTENTION: If using multiple cameras, each camera must have a unique Web port and an RTSP port. You MUST forward (open) the new ports on your router. For more details, see "Appendix D: Router Port Forwarding" on page 82. Also, please view Lorex's Port Forwarding Guide on our support page for information on how to port forward ports on your router.

2. By default, your camera is set to use DHCP to set a network address. Leave the box selected to use DHCP—go to **step 4**. If you deselect the box to enter static network information, go to **step 3**.
3. OPTIONAL—enter your network information in the following fields:
   - **IP Address**: The numeric address assigned to the IP Device.
   - **Network Mask & Gateway**: The numeric addresses assigned to the Network Router.
   - **Name Server 1 & 2**: The external IP address of the Name Server. The Name Server is a machine on a network that enables a hostname to be resolved into an IP address. (i.e. www.lorexcctv.com translates to IP Address 207.97.199.227)

   NOTE: Contact your Internet Service Provider for the IP address of your DNS server.
4. Click **Submit Network** to save your settings. Please allow a few moments for your camera to update.

   NOTE: Incorrect changes to the network settings will prevent the device from communicating, and may require a Hardware Reset to resolve. For details, see "Appendix I: Rebooting, Resetting, and Recalibrating the Camera" on page 92.

Remote Access

Use the Remote Access Menu to configure remote viewing settings for your device through Yoics, MSN, or Lorex DDNS.

To open the Remote Access menu:

- Click Settings>**Remote Access**

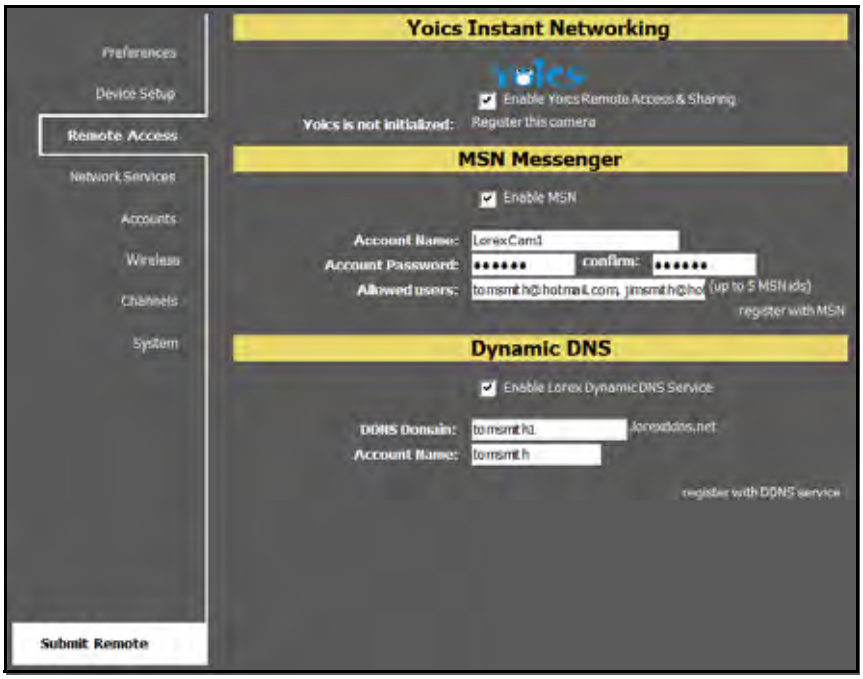


Figure 21.0 Remote Access menu

Yoics Instant Networking

By default, your Internet camera is enabled with Yoics Easy-Connect Remote Viewing.

To configure Yoics Instant Networking:

1. Select **Enable Yoics Remote Access & Sharing**.
2. If you have not yet registered your camera, click **Register this camera**. For details on registering your camera with Yoics, see
3. Click **Submit Remote** to save your settings. Please allow a few moments for your camera to update.

   NOTE: For more information on Yoics Easy Connect Remote Viewing, see “Using Yoics” on page 24.

   NOTE: You can also remove Yoics remote access service from this menu. For details, see “Appendix J: Registering, Removing, and Resetting Yoics Services” on page 94.

MSN Messenger

Your Easy-Connect Remote Surveillance Internet Camera can be accessed remotely using Windows Live Messenger.

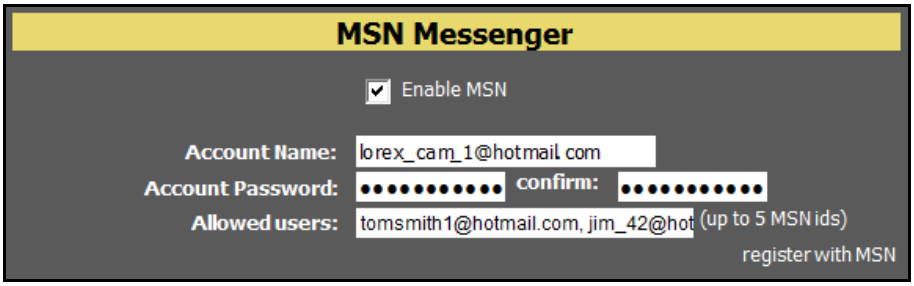


Figure 21.1 Enter the MSN address of the camera along with the MSN addresses of allowed users

To configure your camera for remote viewing with MSN:

4. Under MSN Messenger, select the box, **Enable MSN**.
5. Under Account Name, enter your newly created MSN/Windows Live user name. For example, **Lorex_Cam_1@hotmail.com**.
6. Under Account password, enter your **MSN account password**. Re-enter the password to confirm.
7. Under allowed users, enter up to 5 **MSN/Windows Live email addresses**. Make sure to add one of your active MSN/Hotmail addresses. Separate the addresses with a comma and a space. For example, tomsmith@hotmail.com, jim_jones@hotmail.com, etc.
8. Click **Submit Remote** to save your settings. Please allow a few moments for your camera to update.

   NOTE: For complete details on setting up remote viewing through MSN, see "Remote Viewing Using MSN Messenger" on page 30.

Dynamic DNS

You can also access your camera remotely using Lorex's FREE DDNS service.

NOTE: If you have yet registered for Lorex DDNS, click **Register with DDNS Service** at the bottom of the Remote Access screen.

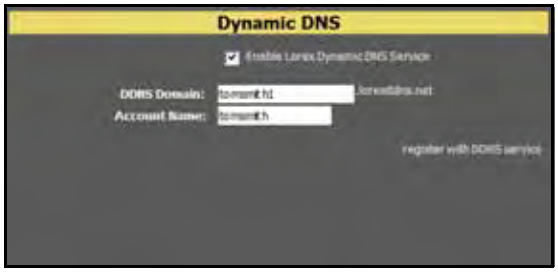


Figure 21.2 Enter DDNS information

To configure DDNS settings:

1. Select the box, **Enable Lorex Dynamic DNS service**.
2. Under DDNS Domain, enter your **domain name** for the free Lorex DDNS service. This information can be found in the email received after a successful registration.
3. Under account name, enter the **user name** you need to login at http://lorexddns.net—This information can be found in the email received after a successful registration.

   NOTE: For more details, see "Appendix E: Setting Up DDNS Service" on page 83.

Network Services

The Network Services Menu controls the External Networking Information for the camera (used for Remote Access).

To open the Network Services menu:

- Click Settings>**Network Services**.

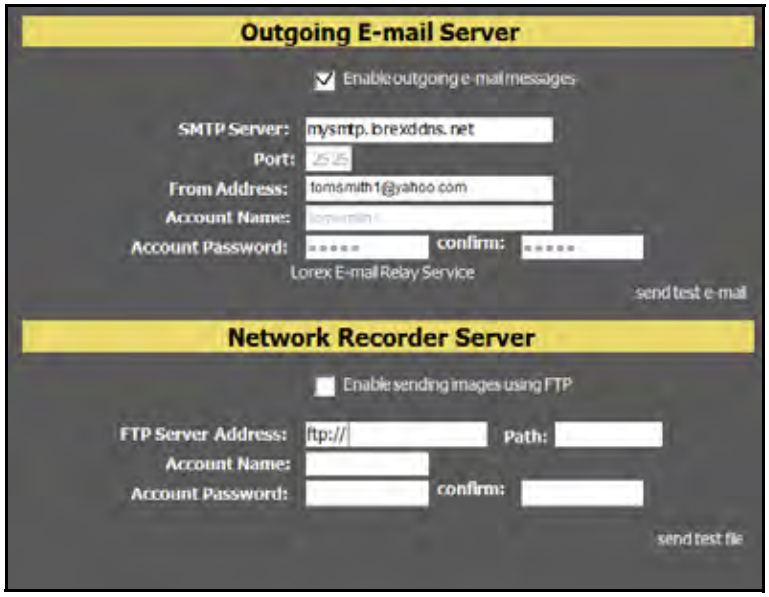


Figure 22.0 Network Services menu

Outgoing Email Server

If you have registered for Lorex's FREE service, you can use the Lorex Email Relay (mysmtp.lorexddns.net) to send email notification for triggered events on your camera. If desired, you can also use your own email server.

To configure email server options:

1. Select the box **Enable outgoing email messages**. This will send an email notification whenever motion is detected by the camera(s) or an external sensor is triggered. If using Lorex DDNS, go to **step 4**. If using your own email server, go to **step 2**.

   NOTE: To configure motion sensing, see "Motion Events" on page 48.
2. Under SMTP Server, enter the SMTP server address for the outgoing email account.
3. Under Port, enter the outgoing email port.

   NOTE: The port may have to be forwarded on your router.
4. Under From Address, enter the sender's email address for the outgoing email notification. If using Lorex DDNS, go to **step 7**.
5. Under Account Name, enter the user name/ID required for the email server.
6. Under Account Password, enter the password for the email server. Re-enter the password to confirm.
7. Click **Submit Services** to save your settings. Please allow a few moments for your camera to update.
8. Click **Send test email** to verify you have entered the correct network information.

Network Recorder Server

NOTE: This section is for advanced user. Knowledge of FTP servers is required.

NOTE: Your FTP server must be set up separately.

You can also send snapshots of triggered events to an FTP server.

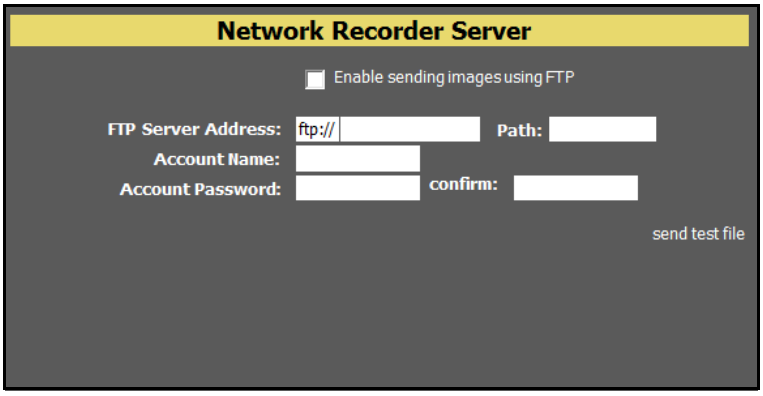


Figure 22.1 FTP server information

To configure network recorder server options:

1. Select the box **Enable sending images using FTP**.
2. Under FTP server address and path, enter the URL or IP address of the FTP server.
3. Under Account Name, enter the **user name** to access the FTP server.
4. Under Account Password, enter the **password** to access the FTP server.

Accounts

Use the Accounts Menu to control user accounts and access to the camera.

There are three user authorities on the camera:

- **Admin**: Unrestricted access to the device including all settings and options; default user name and password: **admin/admin**
- **General:** Access to basic operations, including display controls and settings in Surveillance mode and Help; user name and password are customizable
- **Guest**: Access to basic Surveillance (starting/stopping live video) and Help; default user name and password: **guest/guest**

To open the Accounts menu:

- Click Settings>**Accounts**

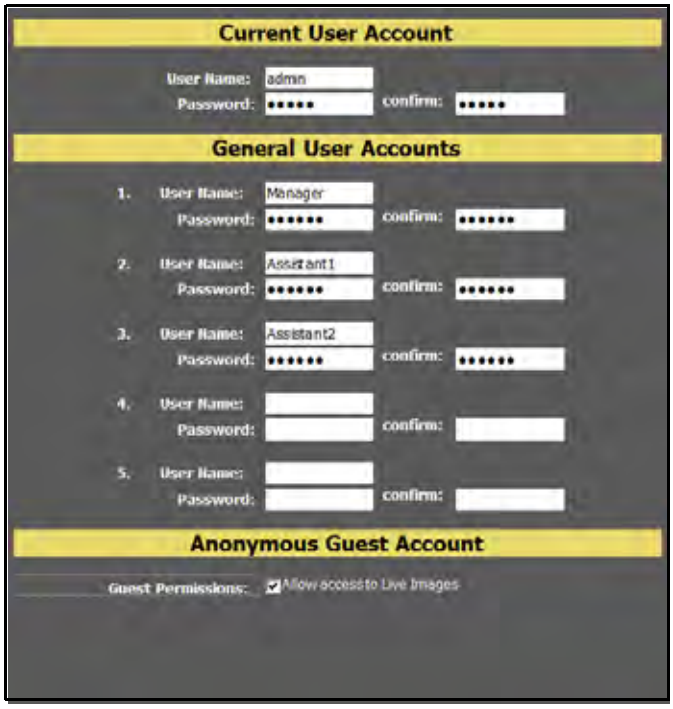


Figure 23.0 Accounts menu

Current User Account

Current User Account shows the user name and password of the currently logged-in user. By default, the administrator (admin) has unrestricted access to all the settings of the device.

NOTE: You can only have *one* administrator account.

To configure administrator options:

1. Under User Name, enter the **new name** for the administrator (by default, admin).
2. Under Password, enter the **new password** for the administrator (by default, admin). Enter the password again to confirm.
3. Click **Submit Accounts** to save your changes. Please allow a few moments for your camera to update.

General User Accounts

The General user has limited access to the settings of the server. You can only create five General User accounts.

To configure general user options:

1. Under User Name, enter the **new name** for [General User 1].
2. Under Password, enter the **new password** for [General User 1]. Enter the password again to confirm.
3. Repeat steps 1~2 for the other four general users (if necessary).
4. Click **Submit Accounts** to save your changes. Please allow a few moments for your camera to update.

Anonymous Guest Account

Use the Guest account for users that you do not want to access the settings and options of your camera.

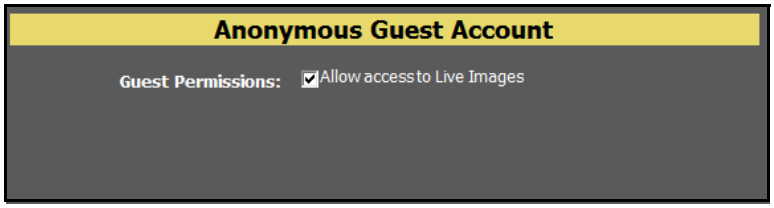


Figure 23.1 Anonymous Guest Account menu

To configure guest options:

1. Under Guest Permissions, select **Allow access to live images**. This will allow the guest to view live video from the camera. The guest cannot configure viewing or display options and does not have access to camera settings and configurations.

   NOTE: Any user can access the system if the Guest Account is on.
2. Click **Submit Accounts** to save your changes. Please allow a few moments for your camera to update.

Wireless

ATTENTION: This section is applicable to LNE3003 and LNZ4001 camera models *only*.

Use the Wireless menu to configure wireless networking options for your wireless cameras. DigiViewer supports OPEN, WEP, WPA, and WPA2 encryptions.

To open the Wireless menu:

- Click Settings>**Wireless**

Wireless Settings

Figure 24.0 Wireless menu

To configure wireless settings:

1. Under Wireless Mode, select **Enabled** from the drop-down menu. DigiViewer will scan for available wireless networks.
2. Select a network from the list. Options will vary depending your wireless network—these options are automatically filled in.
   - **Network Name (ESSID)**: The name of the selected wireless network
   - **Current Status**: Displays Connect/Not Connected
   - **Mode**: Displays Managed or Unmanaged depending on your network
   - **Authentication**: Will display OPEN or WPA depending on your network
   - **Encryption**: Displays encryption styles
3. Under WPA/WEP Password, enter the **password** required to access your network.
4. Leave the box selected to use DHCP to set the Network Address (default). Go to **step 5**. If you want to set your own static wireless network information, deselect this box and go to **step 4**.
5. **OPTIONAL**—enter your static wireless networking information in the following fields:
   - **IP Address**: The wireless IP address for your wireless device
   - **Network Mask & Gateway**: The numeric addresses assigned to the Network Router
   - **Name Server 1 & 2**: The external IP address of the Name Server. The Name Server is a machine on a network that enables a hostname to be resolved into an IP address. (i.e. www.lorex.com translates to IP Address 207.97.199.227)
6. Click **Submit Wireless** to save your settings. Please allow a few moments for your camera to update.

For more details, see "Setting Up Wireless Connectivity" on page 28.

Channels

Use the Channels menu to enter information about other cameras on your network. You can connect up to six network cameras and video servers for unified, simultaneous viewing.

NOTE: For better security do not access these remote cameras using administrator accounts, use general operator accounts instead.

To open the Channels menu:

- Click Settings>**Channels**

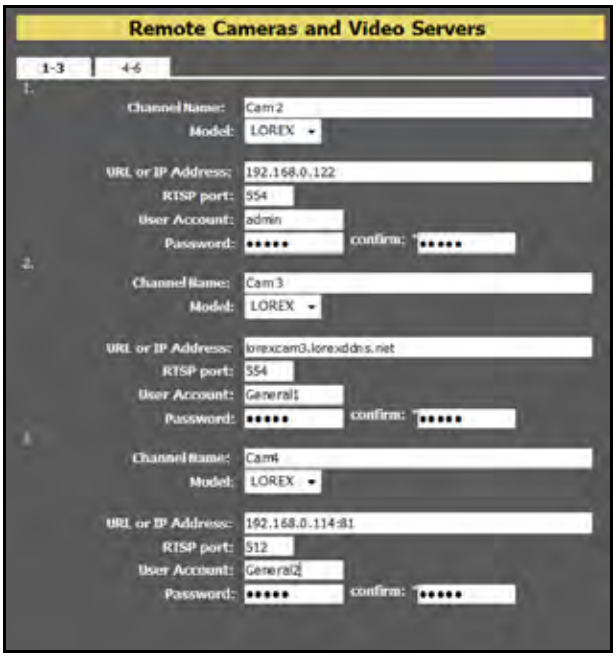


Figure 25.0 Channels menu

ATTENTION: If you change the Web or RTSP ports on any additional cameras, you must enter that new port information in the respective fields of the Channel menu. Also, you must port forward these ports on your router.

Remote Cameras and Video Servers

To configure channel options:

1. Under Channel Name, enter a **name** for the channel.
2. Under Model, select **LOREX** (default).
3. Under URL or IP Address, enter the **IP Address** or **DDNS domain** of the remote/additional camera.

   NOTE: Use the DDNS domain of the camera is accessing the camera remotely, or if the camera is on a different network.
4. Under RTSP Port, enter the **streaming video port** for the streaming video port for the camera (by default, 554).
5. Under User Account, enter the **user name** for the camera.
6. Under password, enter the corresponding **password** to access the camera. Re-enter the password to confirm.
7. Repeat steps 1~6 for any additional cameras. Click the tabs at the top of the screen to switch between groups of cameras.
8. Click **Submit Channels** to save your settings. Please allow a few moments for all the cameras on the network to update.

System

Use the System menu to access Advanced Parameter Settings to perform device maintenance and firmware upgrades.

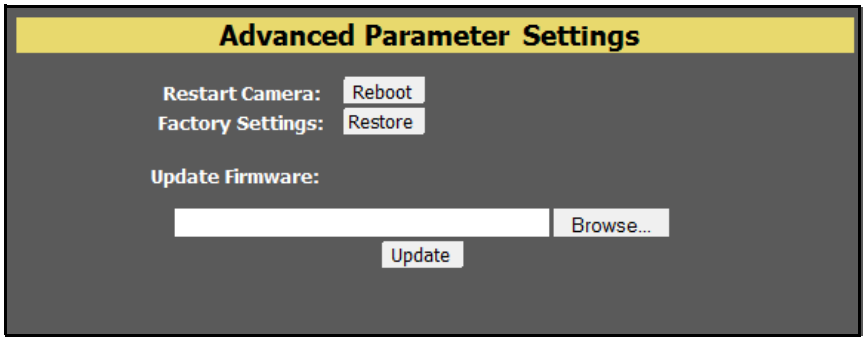


Figure 26.0 Advanced Parameters menu—Maintenance and upgrades

Advanced Parameter Settings

The restart your camera:

- **Restart Camera**: Click **Reboot** to restart your camera. Wait a few moments for device to restart

To restore factory defaults:

- **Factory Settings**: Click **Restore** to restore your device to its factory settings. Wait a few moments for the changes to take effect

Upgrading Firmware

When new firmware becomes available for your product, you can use DigiViewer to upgrade the device.

NOTE: Ensure your device is connected to your network prior to performing a firmware upgrade.

Figure 26.1 Select the file and click Open.

To upgrade firmware:

1. Visit www.lorexcctv.com and download the latest firmware for your camera from its product page.
2. Open DigiViewer.
3. Click **Settings** and then click **System**.
4. From the System menu click **Browse** to locate the firmware file on your PC and then click **Update**.
5. Click **OK** in the dialogue box to confirm the file transfer.

   NOTE: Allow a few moments for the upgrade to take place. Status bars will show the progress of the upgrade (*see figure 26.2*). DigiViewer will reset to the main screen once the upgrade is complete.

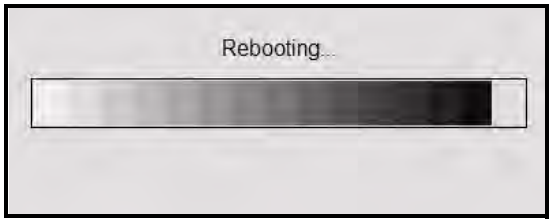


Figure 26.2 Upgrade progress.

SYSTEM LOG

Open the System Log to view all the activity related to the devices on your network. Changes to settings or configurations are listed in the System log.

To open the System Log:

- Click Settings>**System Log**

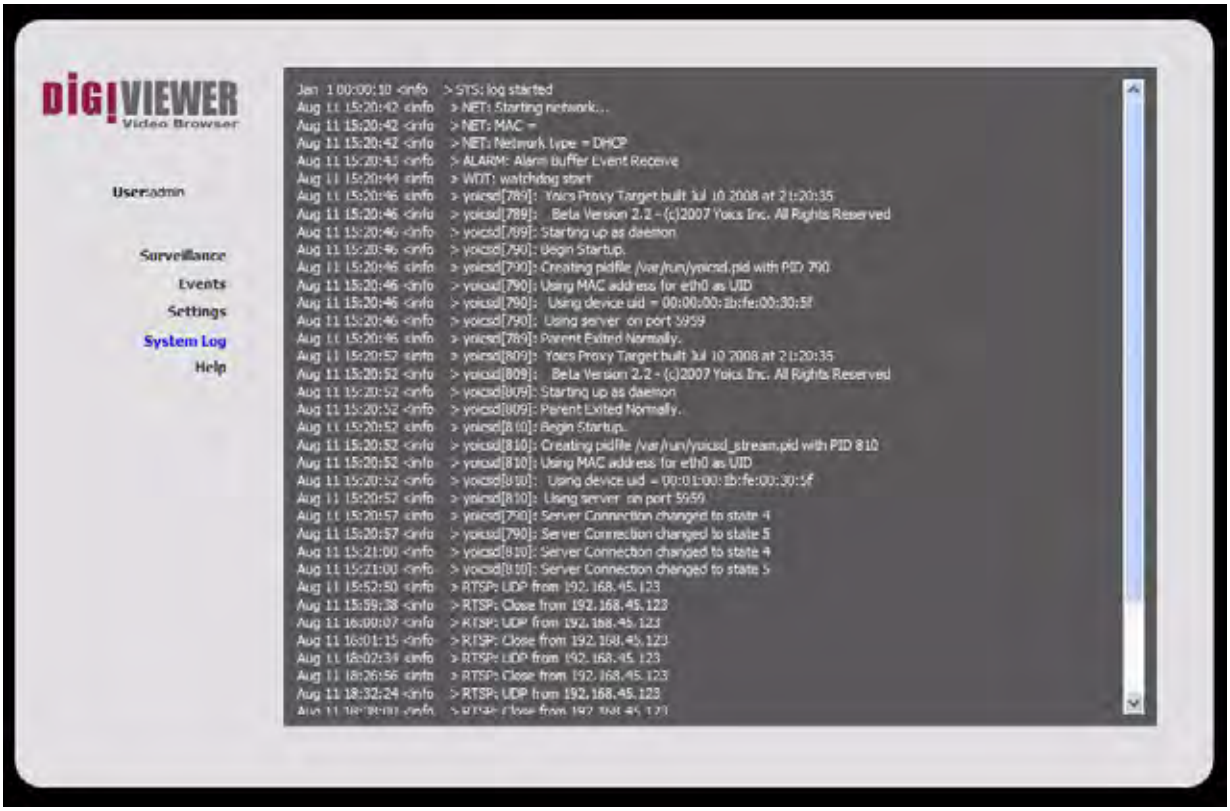


Figure 27.0 System Log menu

HELP

Open the Help screen to view support and contact information for DigiViewer.

To open the Help screen:

- Click Settings>**Help**

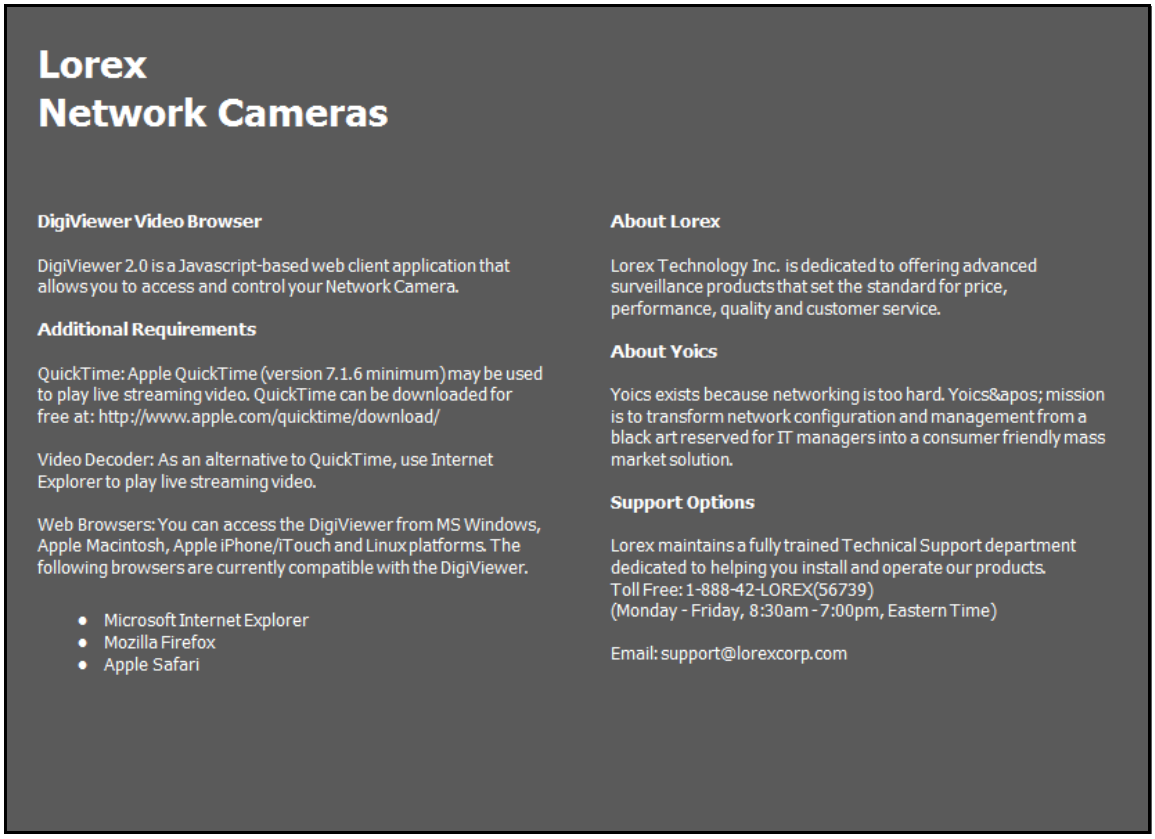


Figure 28.0 Help screen

The Help menu also displays DigiViewer information, system and software requirements, and a link to contact Lorex Customer Support.

APPENDIX A: CAMERA SPECIFICATIONS

LNE1001

SPECIFICATIONS

Models:	LNE1001
Image Sensor:	1/4" Progressive Color CMOS Senser
Video Format:	VGA
Effective Pixels:	VGA: 640H x 480V
Scan System:	Progressive CMOS
Sync System:	Internal
S/N Ration	50Db
Iris:	AES (Shutter Speed: VGA : 1/7.5 ~ 1/120 sec.)
Zoom:	10x Digital
Minimum Illumination:	0.5 LUX
Lens/Focal Length/Type:	4.0 mm Fixed
Lens Mount Type:	Fixed
Aperture:	F2.0
FOV (Diagonal):	49 degree
Unit Weight:	77.4 g / 0.2 lb
Unit Dimensions:	3.7"/ 96mm x 2.7" / 68mm x 1.2"/ 31mm (W x D x H)
Video Compression:	Motion JPEG & MPEG-4
Max Resolution:	640 x 480 (VGA)
Frame Rate:	Motion JPEG: Up to 30 fps in all resolutions MPEG-4: Up to 30 fps in all resolutions
Video Streaming:	RTSP MPEG-4, HTTP Motion JPEG and MPEG-4 Controllable frame rate and bandwidth 3GPP/ISMA RTSP compatible
Audio:	Two-way (full duplex) Built-in microphone
Alarm and Event Management:	Motion event triggers e-mail notification with JPEG image attachment or upload to FTP
Connectors:	Ethernet RJ-45, audio line out, Power
Processors and Memory:	ARM9 based 32-bit RISC CPU 32MB RAM, 4MB Flash
Operation System:	Linux 2.4
Power:	5V DC, 1 A ; Max 5W
Operating Conditions:	0-50 °C (32 - 113 °F) Humidity 20-80% RH (no condensing)
Browser Support:	Internet Explorer, Firefox, Safari
PC Desktop Application Support:	Windows XP, Windows Vista
Remote Viewing Support:	Yoics (Easy Connect) , MSN, DDNS
Mobile Support:	3GPP, Wi-Fi (iPhone™ / iPod touch™, supported 3GPP Mobile Phone)
Supported Protocols:	TCP/IP, DHCP, ARP, ICMP, FTP, SMTP, DNS, NTP, Bonjour, UPnP, RTSP, RTP, HTTP, TCP, UDP, 3GPP/ ISMA RTSP
Video Surveillance Software:	PC based DigiConsole surveillance application for viewing, recording and archiving up to 6 cameras included (Compatible with 16 camera DigiPlayer software)
Approvals:	CE, FCC, RoHS

LNE3003

SPECIFICATIONS

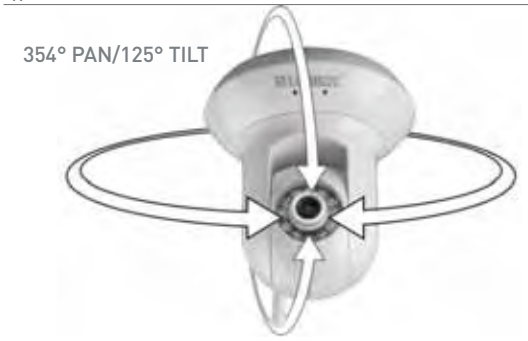
Models:	LNE3003
Image Sensor:	1/4" Progressive CMOS Sensor
Video Format:	VGA
Effective Pixels:	VGA: 640H x 480V(307K)
Scan System:	Progressive
Sync System:	Internal
S/N Ration	More than 50Db without AGC
Iris:	AES
Zoom:	10x Digital
Minimum Illumination:	0.5 LUX without LEDs, 0 LUX with Night Vision LED
Lens/Focal Length/Type:	4.0 mm Fixed
Lens Mount Type:	Fixed
Aperture:	F2.0
FOV (Diagonal):	58 degree
LED/Qty/LED Type (nm)/ Night Vision Range:	white LED / 6 pieces / 5m / 17 Ft
Unit Weight:	0.12 kg/0.26 Lbs
Unit Dimensions:	4.1" / 104mm X 2.5"/63mm X 1.4"/35mm (W X D X H)
Video Compression:	Motion JPEG & MPEG-4
Max Resolution:	640 x 480(VGA)
Frame Rate:	Motion JPEG: Up to 30 fps in all resolutions MPEG-4: Up to 30 fps in all resolutions
Video Streaming:	RTSP MPEG-4, HTTP Motion JPEG and MPEG-4 Controllable frame rate and bandwidth 3GPP/ISMA RTSP compatible
Audio:	Two-way (full duplex) Built-in microphone
Alarm and Event Management:	Built-in motion detection triggers e-mail notification with picture attached Image upload via FTP
Connectors:	Ethernet RJ-45, audio line out, Power
Processors and Memory:	ARM9 based 32-bit RISC CPU 32MB RAM, 4MB Flash
Operation System:	Linux 2.4
Power:	5V DC,max 4.5 W
Operating Conditions:	0-45 °C (32-113 °F) Humidity 20-80% RH (non-condensing)
Browser Support:	Internet Explorer, Firefox, Safari
PC Desktop Application Support:	Windows XP, Windows Vista
Remote Viewing Support:	Yoics (Easy Connect) , MSN, DDNS
Mobile Support:	3GPP, Wi-Fi (iPhone™ / iPod touch™, supported 3GPP Mobile Phone)
Supported Protocols:	TCP/IP, DHCP, ARP, ICMP, FTP, SMTP, DNS, NTP, UPnP,RTSP, RTP, HTTP, TCP, UDP, 3GPP/ ISMA RTSP
Video Surveillance Software:	PC based surveillance application for viewing, recording and archiving up to 6 cameras
Approvals:	CE,FCC,RoHS

LNZ4001

SPECIFICATIONS

Models:	LNZ4001
Image Sensor:	1/4" Progressive Color ; CMOS Sensor
Video Format:	VGA
Effective Pixels:	VGA : 640 H x 480 V
Max Resolution:	640 x 480(VGA)
Scan System:	Progressive CMOS
Sync System:	Internal
S/N Ration	50 dB
Iris:	AES (Shutter Speed: VGA : 1/7.5 ~ 1/120 sec.)
Zoom:	10x Digital
Pan/Tilt:	354° pan range, 60°/sec pan speed 125° tilt range, 80°/sec tilt speed
Minimum Illumination:	0.5 LUX without IR LED , 0 LUX with IR LEDs on
IR LED/Qty/LED Type:	5 IR LEDs x 12 (850nm)
Night Vision Range:	10M
Day/Night Function:	Mechanical IR cut filter
Video Compression:	Motion JPEG & MPEG-4
Lens/Focal Length/Type:	4.3 mm Fixed
Lens Mount Type:	Fixed
Aperture:	F2.0
FOV (Diagonal):	55 degree
Unit Weight:	0.281 Kg/0.6 Lbs
Unit Dimensions:	112 x 114 x 114 mm (4.4"x 4.4" x 4.4") (W X D X H)
Video Compression:	Motion JPEG & MPEG-4
Max Resolution:	640 x 480(VGA)
Frame Rate:	Motion JPEG: Up to 30 fps in all resolutions MPEG-4: Up to 30 fps in all resolutions
Video Streaming:	Video Streaming: RTSP MPEG-4, HTTP Motion JPEG and MPEG-4 Controllable frame rate and bandwidth 3GPP/ISMA RTSP compatible
Audio:	Two-way (full duplex) Built-in microphone
Alarm and Event Management:	Motion event triggers e-mail notification with JPEG image attachment or upload to FTP
Connectors:	RJ-45 for Ethernet 10/100 Base-T, DC power jack, Terminal blocks for 1 alarm input, 1 output, Reset push switch, 3.5 mm jack for Mic/Line, 3.5 mm jack for line out
Termination:	1 port DI , 1 port DO
Input / Output:	Alarm input 5V/12V DC / Alarm output Max 30W
Processors and Memory:	ARM9 based 32-bit RISC CPU 32MB RAM, 4MB Flash
Operation System:	Linux 2.4
Power:	12V DC, 1A, Max 5W
Operating Conditions:	0-50 °C (32 - 113 °F) Humidity 20-80% RH (no condensing)
Browser Support:	Internet Explorer, Firefox, Safari

PC Desktop Application Support:	Windows XP, Windows Vista
Remote Viewing Support:	Yoics (Easy Connect) , MSN, DDNS
Mobile Support: Mobile	3GPP, Wi-Fi (iPhone™ / iPod touch™, supported 3GPP Phone)
Supported Protocols:	TCP/IP, DHCP, ARP, ICMP, FTP, SMTP, DNS, NTP, Bonjour, UPnP, RTSP, RTP, HTTP, TCP, UDP, 3GPP/ ISMA RTSP
Video Surveillance Software: (Compatible	PC based DigiConsole surveillance application for viewing, recording and archiving up to 6 cameras included with 16 camera DigiPlayer software)
Approvals:	CE, FCC, RoHS



APPENDIX B: ADDING CAMERAS

DigiViewer can let you view and control up to six Internet cameras simultaneously. To purchase additional LNE Series Internet cameras, please visit www.lorexcctv.com.

Setting up Additional Cameras

Following your camera's quick start guide and instruction manual, set up the additional camera(s). Make sure you have performed the following:

- Properly assembled the camera
- Mounted the camera to a desired location (optional)
- Connected the camera to your router
- Connected the camera to a power outlet

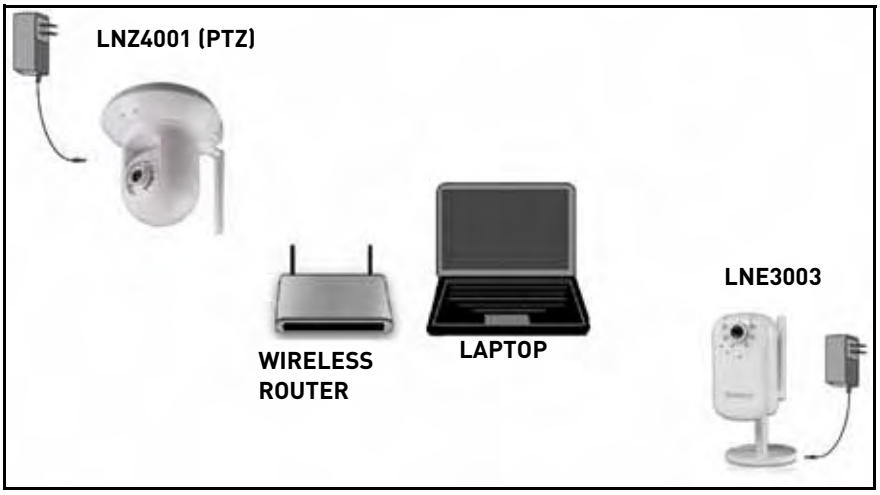


Figure 29.0 Assemble and setup an additional camera

Finding the Additional Cameras

To find the additional camera(s):

1. Launch DigiConsole (insert the software CD or if you have installed DigiConsole to your PC, select Start>Programs>**DigiConsole.**
2. Click **Find**. Your camera should appear in the list of device.

   NOTE: If you have added the new camera to your existing network, your new camera and your original camera should both appear in the device list. If you are adding the new camera to a different network...
3. Using DigiViewer, click Settings and then **Device Setup**.

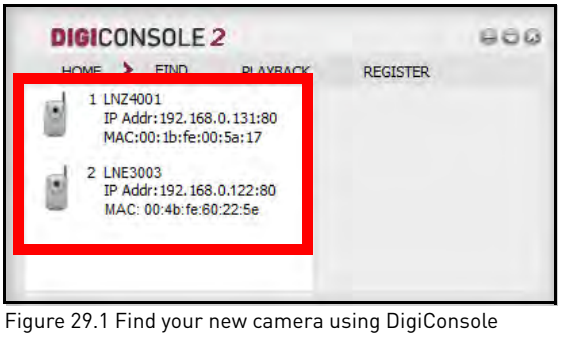


Figure 29.1 Find your new camera using DigiConsole

4. Under Network Configuration, enter a new Web port for the additional camera. By default, the Web port is 80. The new Web port must be different from that of the original camera. For example, change the Web port of the additional camera to **81**.

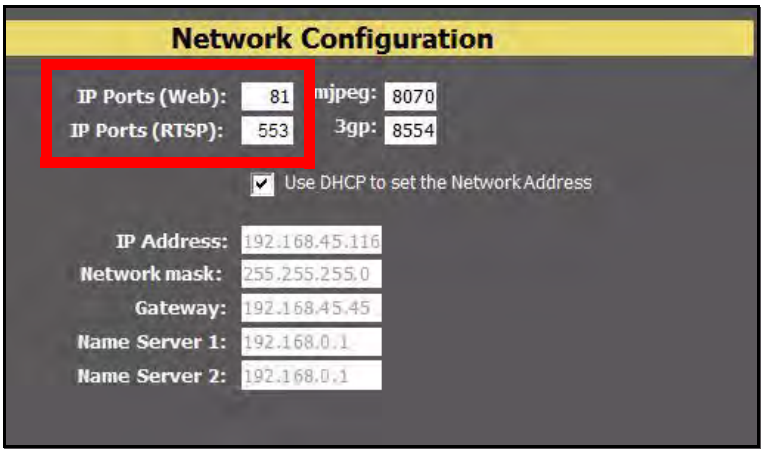


Figure 29.2 Change the Web port and streaming video port on your additional camera(s).

5. Enter a new RTSP port for live video streaming. By default, the streaming video port is 554. The new streaming port must be different from that of the original camera. For example, change the port to **553**.
6. Click **Submit Network** to save your settings.
7. Continue configuring your camera as desired.

ATTENTION: You must port forward the new Web ports and streaming video port for each additional camera in your router. In this example, we would need to port forward ports 81 and 553. For tips on port forwarding, see "Appendix D: Router Port Forwarding" on page 82.

For complete information on forwarding ports on your router, please refer to your router's instruction manual or visit your router manufacturer's website.

Port Ranges

You can set a range of ports in Network Configuration. This sets one port forwarding rule in your router instead of four. For example:

Port Name	Port	Change To:
IP Port (Web)	80	8000
IP Port (RTSP)	554	8001
mjpeg Port	8070	8002
3gp port	8554	8009

ATTENTION: The Mjpeg and 3gp ports cannot be set in sequence (i.e. 8002 & 8003) – you must leave a few numbers between these ports to prevent conflicting. Also, if you will not be using an iPhone or iPod touch to connect, you will not need to forward the 3gp port.

NOTE: Any changes will make the camera restart. Please allow a few moments for the camera to update.

Adding Cameras to DigiViewer

NOTE: Make sure additional cameras are setup and configured individually before entering their network information in the Channel menu of the original camera.

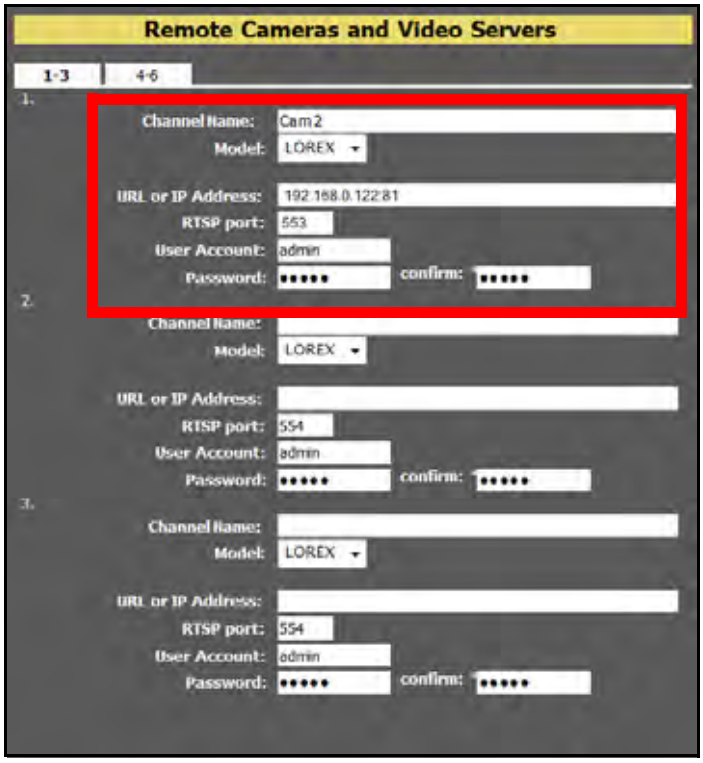


Figure 29.3 Enter the IP and login information of the additional camera in the Channels menu of the original camera

To add additional cameras to DigiViewer:

1. Double-click your original camera to launch DigiViewer in your default browser.
2. Log in to your original camera.
3. From DigiViewer, click **Settings** and then click **Channels**. You will add information about your new camera to the list of Remote Cameras and Video servers.
4. Under Channel Name, enter a **name** for the channel.
5. Under Model, select **LOREX** (default).
6. Under URL or IP Address, enter the **IP Address or DDNS domain name** of the additional camera combined with the new Web port. For example, **192.168.0.122:81**

   NOTE: If your additional camera will be on a different network than your original camera, you will need to enter the DDNS domain of the additional camera in the URL field combined with a new Web port. You will need to register the additional camera for Lorex's FREE DDNS service prior to entering any DDNS information in the Channels menu.
7. Under RTSP Port, enter the **streaming video port** for the streaming video port for the camera. For example, **553**.
8. Under User Account, enter the **user name** for the camera (by default, admin).
9. Under password, enter the corresponding **password** to access the camera. Re-enter the password to confirm (by default, admin).
10. Click **Submit Channels** to save your settings. Please allow a few moments for all the cameras on the network to update.

Viewing Cameras

Once your new cameras have been entered in the Channels menu, you can view them simultaneously in DigiViewer.

To view cameras simultaneously:

1. Log in to your original camera using DigiViewer in your default browser.
2. Click Surveillance. If necessary, click  to resume live viewing.
3. Click  to open the Channel Display menu.
4. Use the Channel Display menu to view channels in full-screen, quad, and 6-channel split-screen. Click the red squares to view the selected channel in single-channel.
5. Click  to view the selected channel in full-screen.
6. Click  to begin auto-sequence. DigiViewer will switch between the channels in single-channel view.

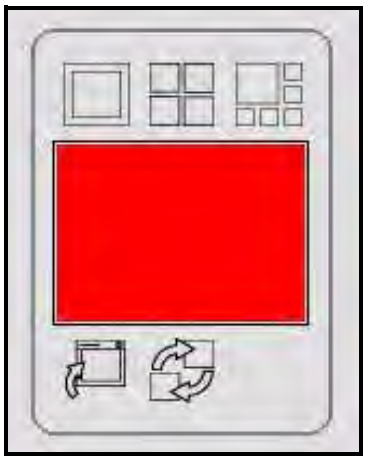


Figure 29.4 Channel Display menu

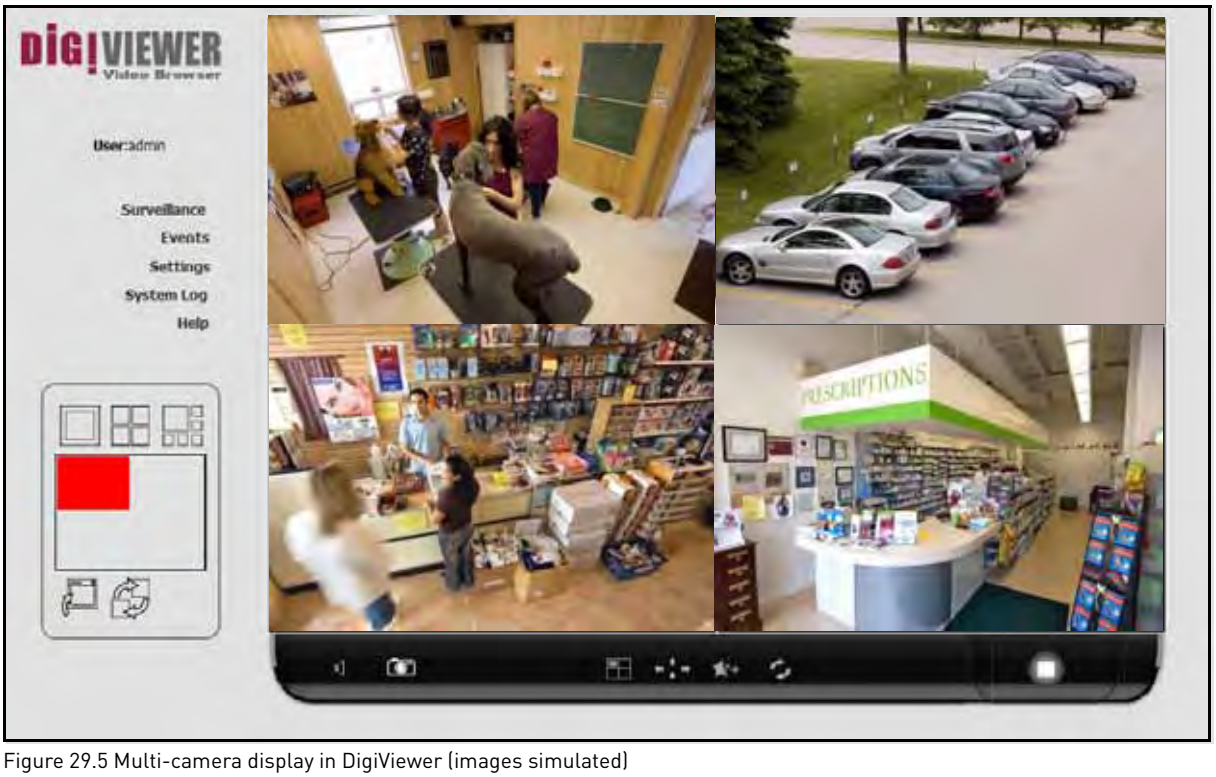


Figure 29.5 Multi-camera display in DigiViewer (images simulated)

APPENDIX C: NETWORK CONNECTIVITY

Your IP Device is designed to be controlled using your existing local network and the provided DigiConsole and DigiViewer software. You can also view your device remotely using Yoics Remote Access.

1. Connect the device to the router or switch using an Ethernet cable, and power on the device.
   NOTE: The device must be connected to the router prior to connecting power to the IP device.
2. Locate the MAC and IP address of your device using DigiConsole. For details, see "Locating the IP and MAC addresses" on page 81.
3. Run DigiConsole from the provided software CD (optional installation to PC), and configure DigiViewer to allow DDNS connectivity. For details, see "Appendix E: Setting Up DDNS Service" on page 83.

Figure 30.0 Network connectivity diagram

Locating the IP and MAC addresses

To find your IP and MAC addresses using DigiConsole:

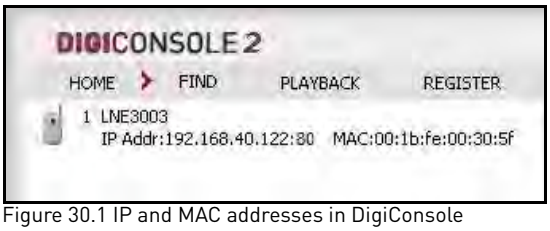


Figure 30.1 IP and MAC addresses in DigiConsole

1. Run DigiConsole from the software CD included with the product.
2. From the main menu, click **Find** to open the list of devices. DigiConsole automatically locates all available Internet cameras on the network.
3. Locate the IP and MAC addresses next to the device icon.
4. Record the MAC address. This information is necessary for the DDNS Registration process.

   NOTE: The IP Devices must be on the same local network as the PC for discovery and initial setup. Once the device is properly configured, you may access it remotely over the Internet.

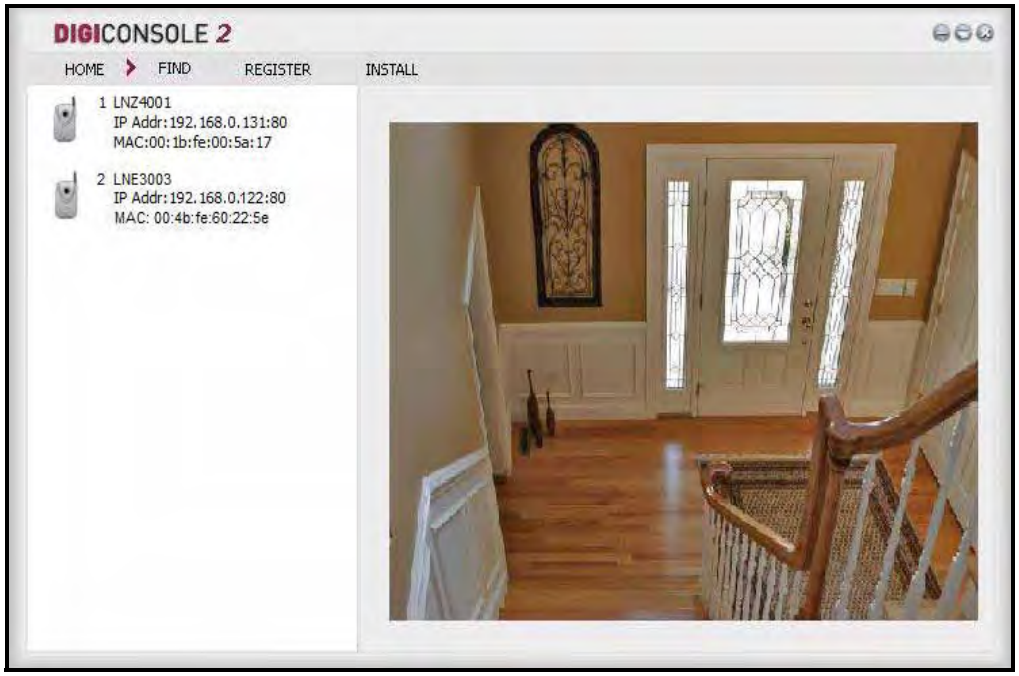


Figure 30.2 IP and MAC address are immediately visible in the device list

APPENDIX D: ROUTER PORT FORWARDING

In order to view the device remotely (over the Internet), follow the steps outlined on the following pages to setup a free DDNS Remote Access account.

You will need to enable port forwarding on your router to allow for external communications with your device. The following ports will need to be forwarded to remotely connect to your device:

- Video Port **554**
- Web Port **80**

Computers, IP cameras, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the router.

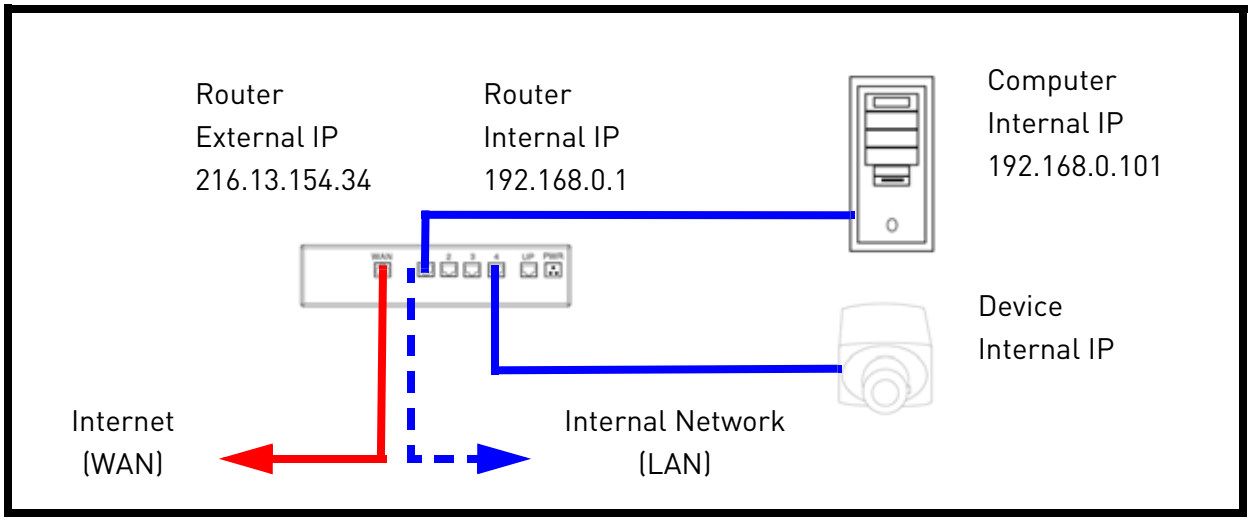


Figure 31.0 Network example with port forwarding

When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the router. The router then needs to decide where to send this data. This is when Port Forwarding becomes important.

Port Forwarding tells the router to which device on the internal network to send the data. When you set up port forwarding on your router, it takes the data from the external IP address:port number and sends that data to an internal IP address:port number (i.e Router External IP 216.13.154.34:554 to IP Device Internal IP 192.168.0.3:554).

NOTE: If using multiple IP Devices on the same network, you need to assign a different remote access port for each device.

The instructions found online in the Router Configuration Guides will assist you in the port forwarding configurations for a selection of different router models. Visit our Consumer Guides Support website at http://www.lorexcctv.com/support for more details.

APPENDIX E: SETTING UP DDNS SERVICE

Lorex offers a free DDNS server for use with your Internet camera. A DDNS account creates a website address that allows you to access your camera from a remote location.

To setup your free Lorex DDNS account:

1. In your browser go to http://lorexddns.net and click **Create Account**.

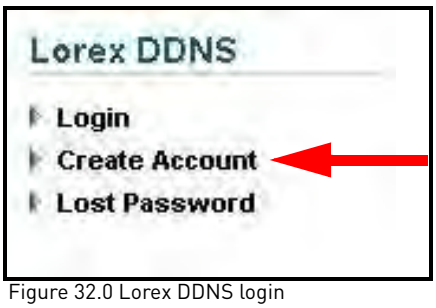


Figure 32.0 Lorex DDNS login

2. Complete the Account Information fields with your personal information. Complete the Warranty Information with your purchase details (optional).

Figure 32.1 Complete personal information fields

3. Complete the System Information fields:
   - **Product License**: Select your product model from the Product License drop down menu
   - **←Product Code→ - ←MAC Address→**: Locate the MAC address of your (recorded while loading the System)
   - **URL Request**: Choose a URL for your DDNS connection (i.e. your name, your company or business name, or anything of your choice.)

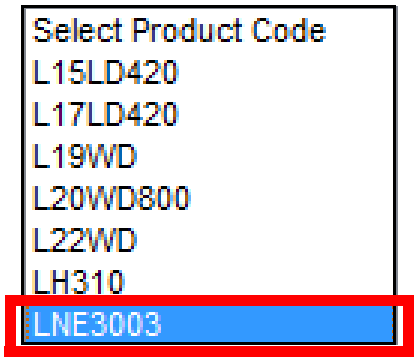


Figure 32.2 Select your model number

4. Once you have the entered the information, click **Create New Account**. The email will be sent to the address you entered in step 2.

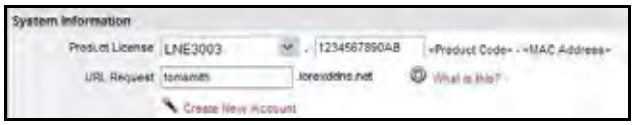


Figure 32.3 Click Create New Account

You will need this information for remote access to your system. Record your information below:

Username: _

Domain name*: _

Password: _

* Only the first part of the Domain Name is required for setup on the system. For example, if the full domain sent is *tomsmith.lorexddns.net*, you only need to enter **tomsmith** on the system.

Configuring DDNS in DigiViewer

Use the information from the DDNS confirmation email to configure DigiViewer to connect remotely to your device using DDNS.

Figure 34.0 Remote Access menu in DigiViewer

To configure DDNS in DigiViewer:

1. Open DigiViewer:
   - Open directly in your web browser using your device's IP address

   OR

   - From DigiConsole. From the Find menu, right-click the device and select **Open Device in Browser**
2. Enter the **user name** and **password** to login to the device.
3. From the DigiViewer main window, click Settings and then click **Remote Access**.
4. Under Dynamic DNS, select **Enable Lorex Dynamic DNS Service**.
5. Enter the d**omain name** and **user name** from your DDNS confirmation email. DigiViewer will automatically update with your newly entered DDNS information. Click **Surveillance** to return to the main window to ensure the changes have been implemented.

   NOTE: If you have not already registered for free Lorex DDNS Service, click **Register with DDNS Service** at the bottom of the remote access window to go to the Lorex DDNS website.

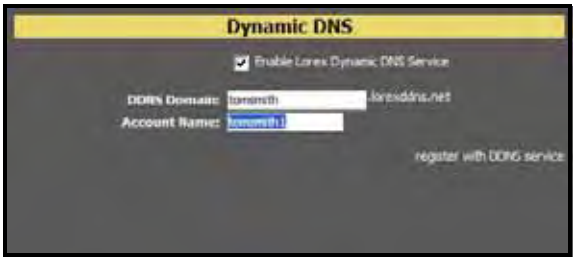


Figure 34.1 Enter DDNS information confirmation email

Figure 34.2 Allow DigiViewer to update before closing browser window

APPENDIX F: CONNECTING ALARM AND MOTION DEVICES

This section is applicable to LNZ4001 Series models *only*.

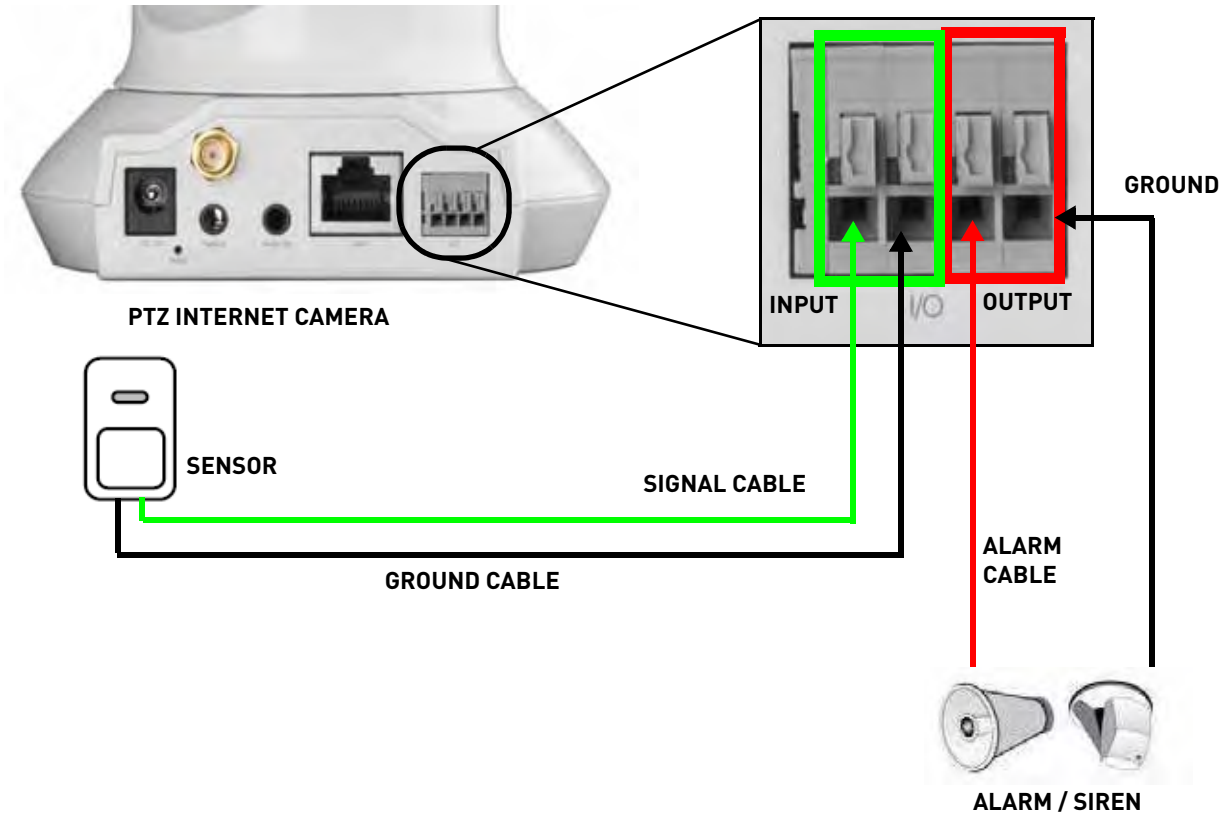


Figure 35.0 Alarm block on rear panel of LNZ4001 cameras

You can connect 12V alarm and motion devices to an LNZ4001 Series camera. When an alarm is triggered, the PTZ Internet camera can be set to automatically turn towards the triggered area.

To connect an external alarm sensor to the system:

1. Connect the Signal Cable to the desired **left-most port** on the rear panel.
2. Connect the Ground Cable to the port (second from left) on the rear panel.
3. If desired, connect an alarm or siren to the output ports on the rear panel.
4. Enable Alarm Input and Output in DigiViewer>Events>**Alarm Input/Output**. For complete details, see "Alarm Input/Output" on page 54.

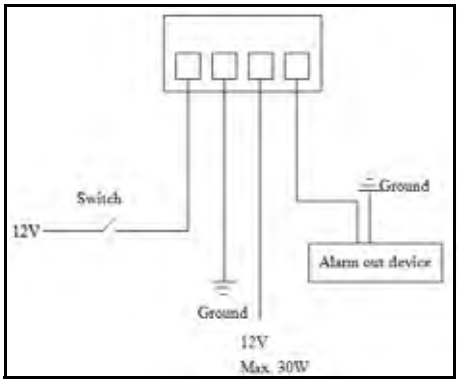


Figure 35.1 Alarm block connections

APPENDIX G: REMOTE ACCESS WITH INTERNET EXPLORER

You can access your device from a remote location without using DigiConsole.

Figure 36.0 Access your device remotely using Internet Explorer

To access your device remotely using Internet Explorer:

- Open Internet Explorer, and enter the Local IP address of the camera (i.e. http://192.168.0.104 if inside the Local Network), or the Remote IP address of the camera (i.e. http://72.154.89.164) or the DDNS domain of the camera (http://myurl.lorexddns.net)

Internet Explorer Security Warnings

Several security warnings may appear (based on your Internet Explorer settings) when launching DigiViewer in Internet Explorer. If not already installed on your system, you need to install ActiveX. You also need to grant DigiViewer and other related components or applications access to the Internet.

To install ActiveX:

1. Click the warning bar (it turns from yellow to blue) and select Install ActiveX Control.

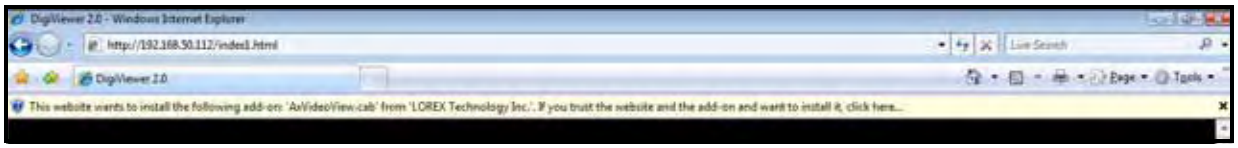


Figure 36.1 Right-click the warning bar in Internet Explorer

2. Click **Unblock** or **Continue** in any subsequent security windows. Some IP devices require connectivity across the network, and may be flagged by the Windows Firewall when a connection to your PC is made.
3. Click **Install** to start the installation. DigiViewer resets and live video streams in your browser.

Figure 36.2 You must install ActiveX for DigiViewer to function properly

Figure 36.3 Unblock applications to allow access to the Internet

APPENDIX H: SETTING UP HTTP EVENTS

Your Lorex Internet camera includes an advanced feature that allows you to enable HTTP Events.

NOTE: HTTP Events require at least two cameras on the same network.

HTTP Event means that if motion is detected, or an alarm is triggered on one camera, an event notification can be sent to another camera. A PTZ Internet camera can be programmed to automatically turn towards the target area.

Example

Positioning the Cameras

Camera A, an LNZ4001 PTZ camera, is mounted to the ceiling in one corner of an office. Camera B, an LNE3003, has been placed to monitor the door at the opposite end of the room.

ATTENTION: Make sure you can view each camera in DigiViewer before setting up an HTTP Event Trigger. Multiple cameras on your network require their own Web ports and RTSP ports. You can configure the ports of each camera from DigiViewer>Settings>Device Setup>**Network Configuration**.

Setting a Preset

You must set a preset location for the PTZ prior to configuring HTTP triggering. In this example, you want the PTZ camera to turn towards Camera B when an HTTP event is triggered.

To set a preset:

1. Open DigiViewer.
2. Click  at the bottom of the main display screen. The PTZ Control pane appears on the left side of the main display scree
3. Click the navigation arrows to position the camera to face Camera A.

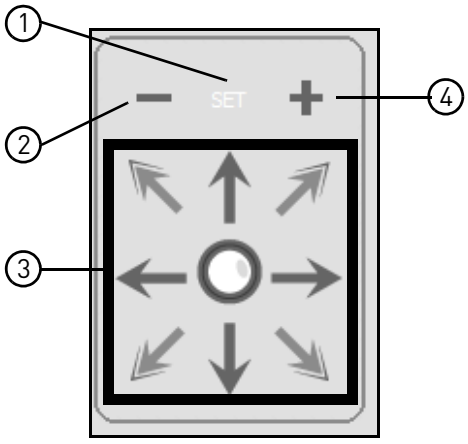


Figure 37.0 PTZ Control pane

1. **Set**: Open Preset and Patrol Control pane.
2. **-**: Zoom out.
3. **Navigation**: Pan and tilt the camera.
4. **+**: Zoom in.

4. Click **SET** to open the Preset/Patrol Control pane.

Figure 37.1 Click Set

5. Click **Set** to save the position as a preset.

Entering HTTP Event Information

With your preset saved, you must now enter the network information for Camera A as an HTTP Event.

To set an HTTP event:

1. From DigiViewer, click **Events** and then click **HTTP Event**.
1. Under General HTTP Event, select **Enable HTTP event**.
2. Under URL, enter the **URL/DDNS domain** of Camera A followed by **/cgi-bin/operator/ptzset**. For example, 192.168.0.122:81/cgi-bin/operator/ptzset
3. Enter the **Port number**, **user ID** and **password** of Camera A.
4. *Optional*: If using a proxy server, enter the proxy server name, port, user name, and password in the fields.
5. Under Alarm Sending Event, select **Enable Alarm Sending Event**.
6. Select **Enable Alarm Motion Detection**.
7. Enter the following parameter: **gotoserverpresetname=[Preset#]**. For example, gotoserverpresetname=Preset1. Make sure you enter the preset name EXACTLY as it appears in the Preset list (Settings>Preset).
8. Select **Enable Alarm input**.
9. Enter the following parameter: **gotoserverpresetname=[Preset#]**. For example, gotoserverpresetname=Preset2.
10. Click **Submit HTTP Event** to save your settings.

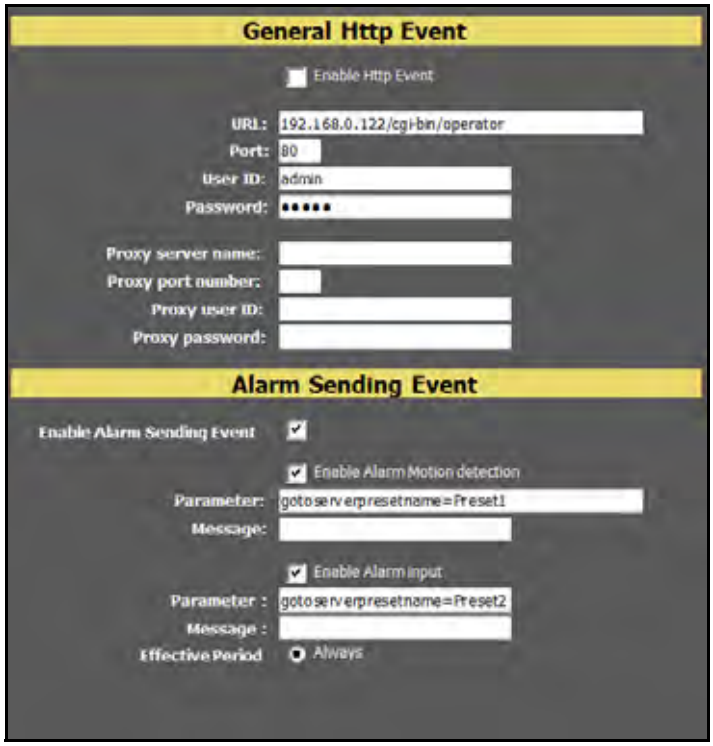


Figure 37.2 Completed HTTP Event and Alarm Sending Event fields

Result

Camera A will now turn to face Camera B when motion is detected by Camera B.

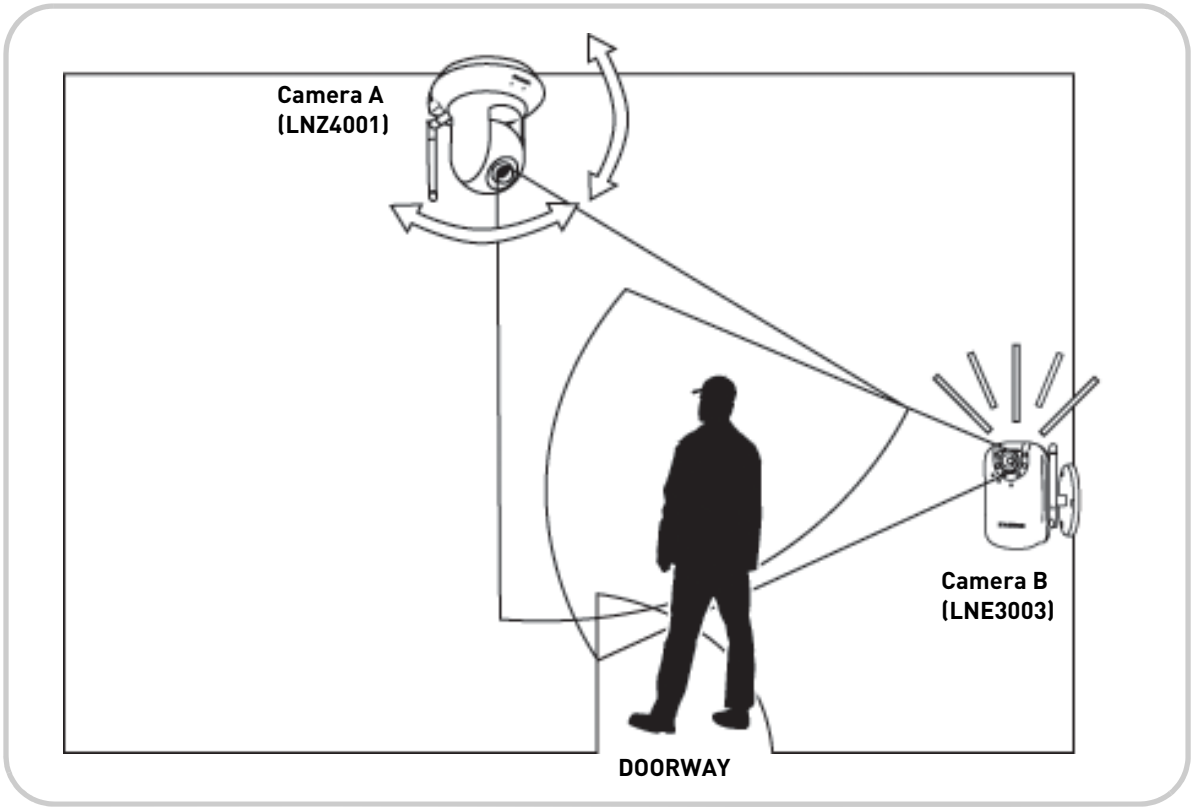


Figure 37.3 HTTP Event trigger diagram

When Camera B detects motion, such as an intruder, Camera A will immediately turn to face the doorway.

If desired, you can also program an external alarm to trigger the movement of Camera A. For instance, you could set an alarm sensor on the door. When the door is opened, this would trigger Camera A to face towards the doorway.

APPENDIX I: REBOOTING, RESETTING, AND RECALIBRATING THE CAMERA

If you experience problems or errors with your camera, you may simply need to reset the camera. Your camera features both a software reboot and hardware reset, and can be restored to factory defaults. PTZ Internet cameras can also be calibrated to resolve any positional issues.

Rebooting the Camera

If your camera freezes, or experiences other technical errors, please try rebooting the camera from DigiViewer. Rebooting should solve most common freezes and hang-ups.

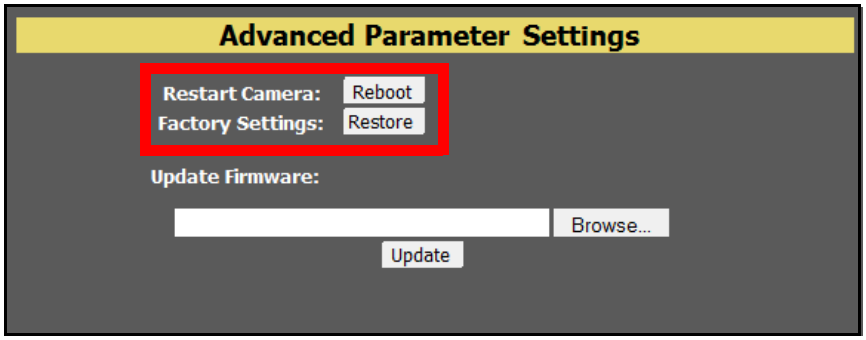


Figure 38.0 Click Reboot

To reboot the camera:

1. From DigiViewer, click Settings and then click **System**.
2. Under Advanced Parameter Settings, click **Reboot**. Please allow a few moments for your camera to reboot. When rebooting is finished, your camera will return to Surveillance mode.
3. Click  to resume live viewing.

Restoring Factory Defaults

If necessary, you can also restore your camera to factory defaults.

To restore factory defaults:

1. From DigiViewer, click Settings and then click **System**.
2. Under Advanced Parameter Settings, click **Restore**. Please allow a few moments for your camera to reboot. When rebooting is finished, your camera will return to Surveillance mode.
3. Click  to resume live viewing.

Resetting the Camera

If you are still experiencing problems with your camera, you can perform a hardware reset.

To reset your camera:

1. Make sure the camera is powered on and connected to your network.
2. Using a pin, press and hold the Reset button on the rear panel of the camera for 10~15 seconds.
3. Release the button. After a few moments you should hear a couple of "clicks" from the lens and the image in DigiViewer will go black. The lens of the PTZ camera will spin and recalibrate.
4. Wait for DigiViewer to return to Surveillance mode and then click  to resume live viewing.

Figure 38.1 Hold Reset for 10~15 sec.

NOTE: If you are using a PTZ Internet Camera, you may need to recalibrate the camera after performing a hardware reset.

NOTE: Performing a hard reset will remove all Yoics remote viewing services registered to your camera. You will need to register for Yoics services (Video Stream, Camera Viewer) again at www.yoics.com. For complete details on registering and removign Yoics services, see "Appendix J: Registering, Removing, and Resetting Yoics Services" on page 94.

Recalibrating the Camera

NOTE: This section is applicable to LNZ4001 camera model only.

Your PTZ Internet camera may need to be recalibrated if you ever reposition the camera or perform a hardware reset.

To recalibrate the camera:

1. From DigiViewer, click Events and then click **Preset**.
2. Click **Calibration**. The lens will spin and re-orient itself to the position of the camera.

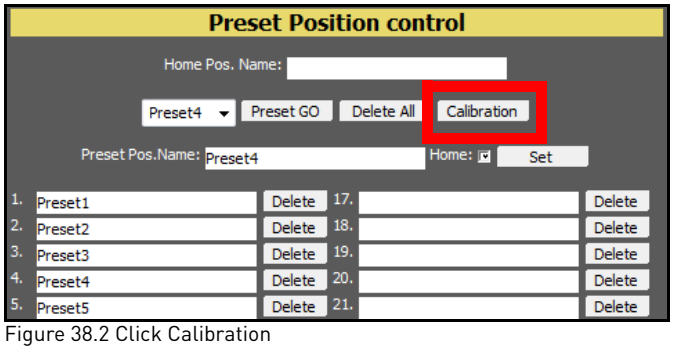


Figure 38.2 Click Calibration

3. Click **Surveillance** and then click  to resume live viewing.
4. Click  to open PTZ controls.
5. Use the PTZ navigation arrows to verify that the camera has been calibrated properly. If not, repeat steps 1~2.

APPENDIX J: REGISTERING, REMOVING, AND RESETTING YOICS SERVICES

The camera is designed to work with Yoics easy-connect remote access. Register with Yoics to view your camera from a remote location anywhere, anytime.

NOTE: QuickTime is required for Yoics Remote Viewing. Download at www.apple.com/quicktime/download

NOTE: Yoics Easy Connect Remote Access service is subject to improvements and changes made by Yoics.

Registering Your Camera

Once you have created an account with Yoics, you must register your camera in order to enable Yoics Easy Connect remote viewing.

You will be asked to register more than once. This is to register the camera for a **Video Stream service** (when using a Web browser), and a **Camera Viewer service** (when viewing from an iPhone or iPod touch).

To register you camera:

1. In your browser go to http://lorex.yoics.com and login using your username and password (from the confirmation email). Click **Yes** in any security windows.
2. From the Lorex pop-up, click **Complete Registration**. The Register New Devices page opens.

   NOTE: Please watch for Yoics pop ups; if the pop up is does not include the LOREX logo, you can click Remind Me Later to continue with the setup.

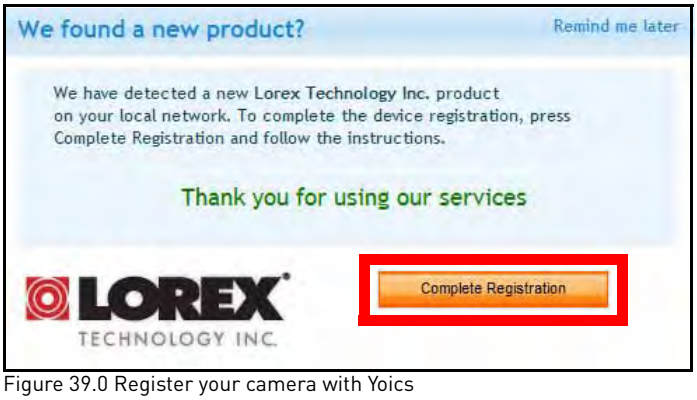


Figure 39.0 Register your camera with Yoics

3. To register the camera for Video Stream Service, enter a name for the camera in the Yoics Device Name text field and click **Register Now**. Video Stream will both be registered to your camera under "My Stuff."

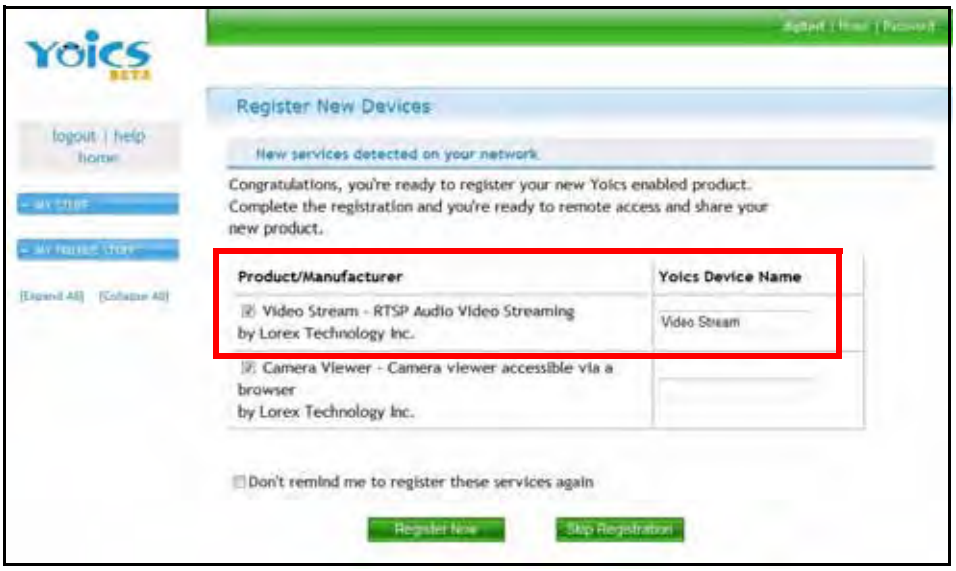
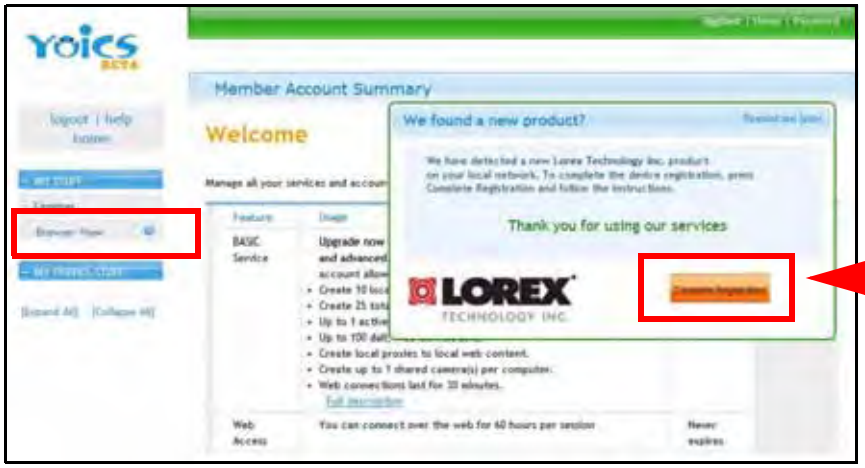


Figure 39.1 Register camera for Video Stream Service

4. Following the prompt, click **Complete Registration** to register the camera for Camera Viewer service.



The Video Stream service appears under "My Stuff," but you need to click Complete Registration again and register your camera for the Camera Viwer Service.

Figure 39.2 Click Complete Registration for Camera Viewer service

5. Enter a name for the camera in the Yoics Device name field and click **Register Now**.

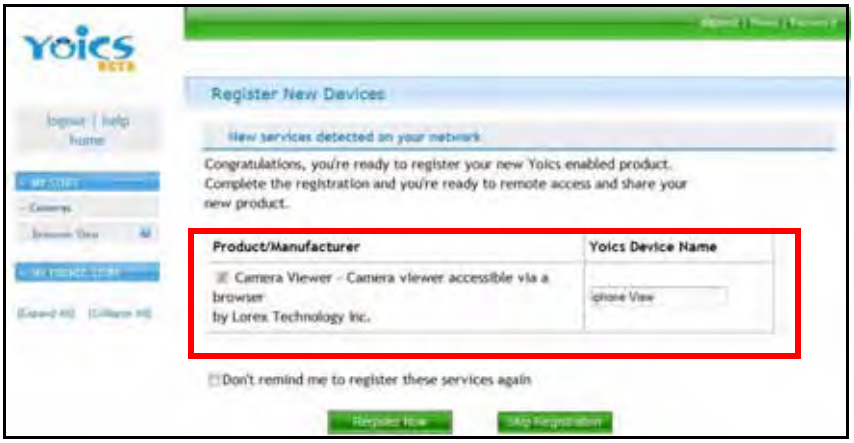


Figure 39.3 Register for Camera Viewer service

Both Video Stream and Camera Viewer services are now registered to your camera and will appear under under "My Stuff."

Figure 39.4 Completed registration

TIP!

If your camera does not appear in the under "My Stuff," press F5 on your keyboard to refresh the page.

Removing Yoics Services

If desired, you can remove Yoics services (Video Stream, Camera Viewer) from your camera.

To remove Yoics services:

1. Log in to the Yoics website using your Yoics ID and password.
2. Under My Stuff, expand "**Cameras**". Click the **icon** next to the service you wish to remove. The Settings page for the selected service opens.
3. Under Service Details, click **Advance Service Settings**.

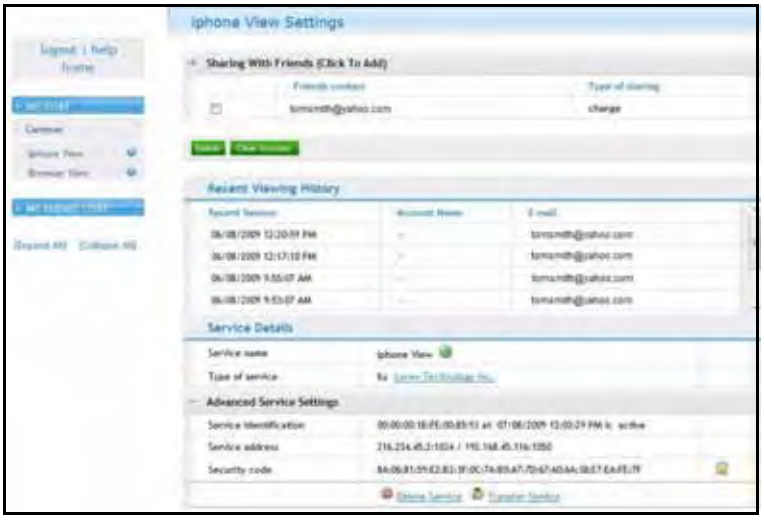


Figure 39.5 Service Settings—click Delete Service

4. Click **Delete Service** and approve the deletion.

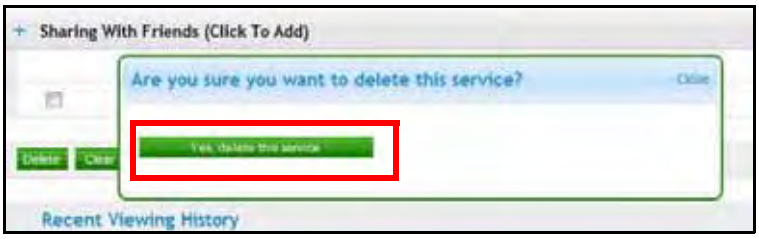


Figure 39.6 Approve the deletion

5. Repeat steps 2~4 for other services you wish to remove.

Removing Services Using DigiViewer

You can also remove all Yoics services registered to your camera using DigiViewer.

To remove Yoics servics using DigiViewer:

1. Open DigiViewer in your default browser using DigiConsole or through the camera's IP address/DDNS domain name.
2. Log in to your camera using your user name and password (by default, admin/admin).
3. Click **Settings** and then click **Remote Access**.
4. Under Yoics Instant Networking, click **Unregister**.

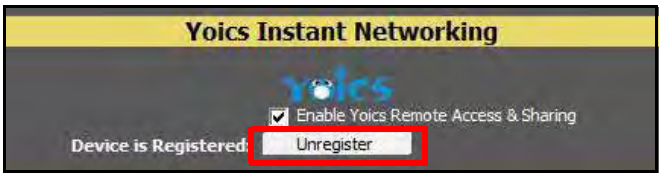


Figure 39.7 Click Unregister to remove all Yoics services

NOTE: Press F5 on your keyboard to refresh the page.

NOTE: Performing a hard reset of your camera will also remove all Yoics services registered to your camera. For details, see "Appendix I: Rebooting, Resetting, and Recalibrating the Camera" on page 92.

Resetting Yoics Services

If you remove Yoics services using DigiViewer or due to a hardware reset, you can quickly reset the services from the Yoics website.

To reset Yoics services:

1. In your browser, go to www.yoics.com and log in using your Yoics ID and password.
2. A pop-up will alert you to the fact that Yoics remote viewing services have been removed from your camera. Click Reset Service.

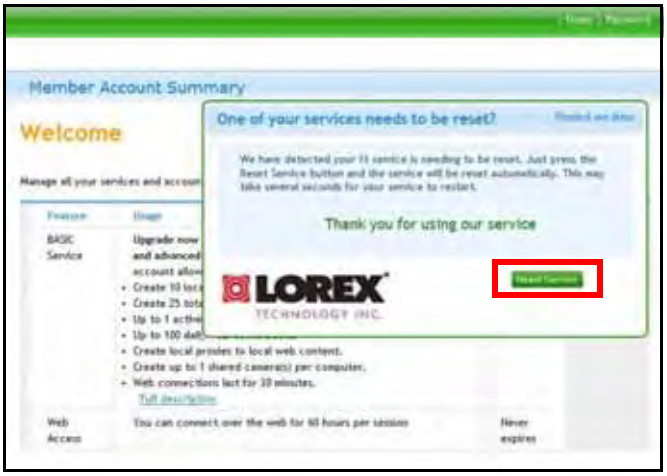


Figure 39.9 Rest Yoics service

3. Repeat step 2 for remaining Yoics services.

Troubleshooting Camera Registration

If you still cannot see your camera after registering for Yoics services, use the Unregister and Enable check mark to retry renewing the connection to registration.

1. Open DigiViewer in your default browser using DigiConsole or through the camera's IP address/DDNS domain name.
2. Log in to your camera using your user name and password (by default, admin/admin).
3. Click **Settings** and then click **Remote Access**.
4. Under Yoics Instant Networking, click **Unregister.**
5. Deselect **Enable Yoics Remote Access** and click **Submit**.
6. Refresh the browser page (press F5 on your keyboard).
7. Select Enable Yoics Remote Access and click Submit.
8. Refresh the browser page.
9. Repeat the registration process at the Yoics website.

IT'S ALL ON THE WEB!

Tout est sur le Web!

¡Todo está en la Web!

- Product Information
  Information sur le produit
  Información acerca del producto
- User Manuals
  Guides de l'utilisateur
  Guías del usuario
- Quick Start Guides
  Guides de démarrage rapide
  Guías de arranque rápido
- Specification Sheets
  Fiches signalétiques
  Fichas de especificaciones
- Software Upgrades
  Mises à jour du logiciel
  Actualizaciones del programa
- Firmware Upgrades
  Mises à jour du micro-logiciel
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