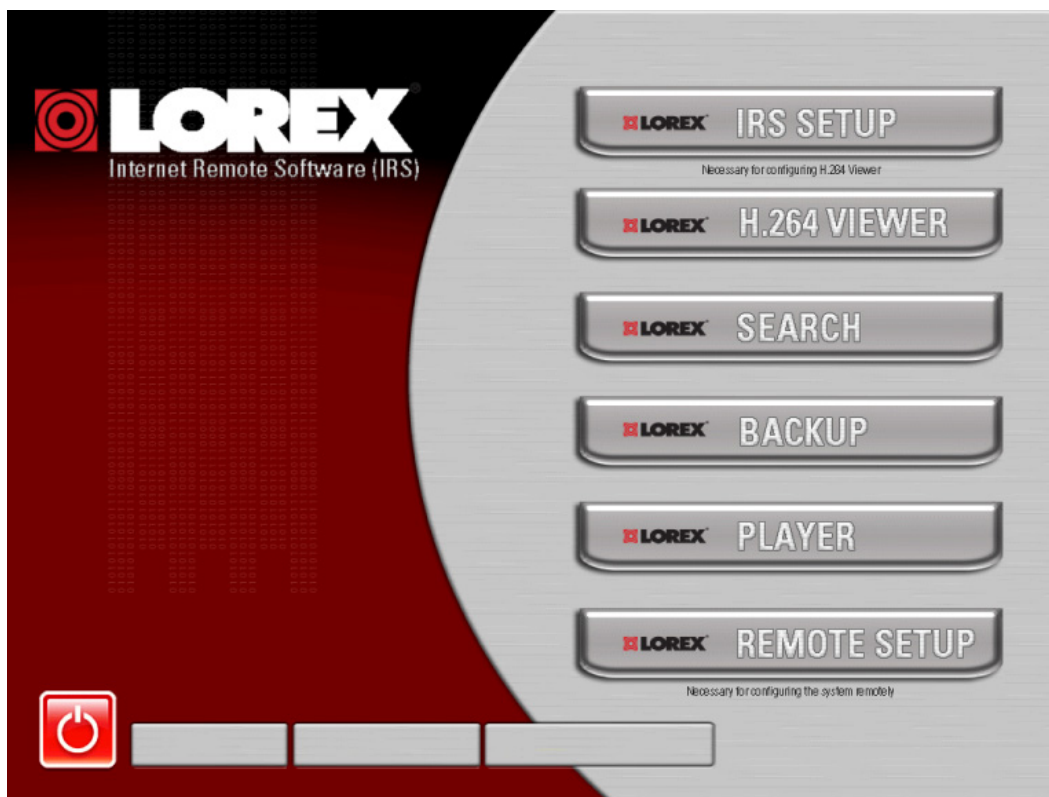


LOREX CLIENT 2.2 Integrated Remote Agent Software

Instruction Manual

English Version 1.0



MODEL:
L15LD420 / L17LD420 Series



www.lorexcctv.com

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Please visit us on the web for the most current Manuals, Quick Start Guides and Firmware. Additional Language Manuals are also available at:
<http://www.lorexcctv.com>

System Requirements

The Lorex Client 2.2 software (included with the System) has the following installation requirements.

Minimum System Requirements:

Operating System	Windows XP Home Edition Windows XP Professional Windows Vista
Processor	Pentium 4 - 1.5 GHz Processor (or equivalent)
Memory	512 MB RAM (1GB Min. Recommended)
Hard Drive	50 MB - Installation space required * Additional Hard Drive space required for recording. Recorded file size will vary depending on recording quality settings

Recommended System Requirements:

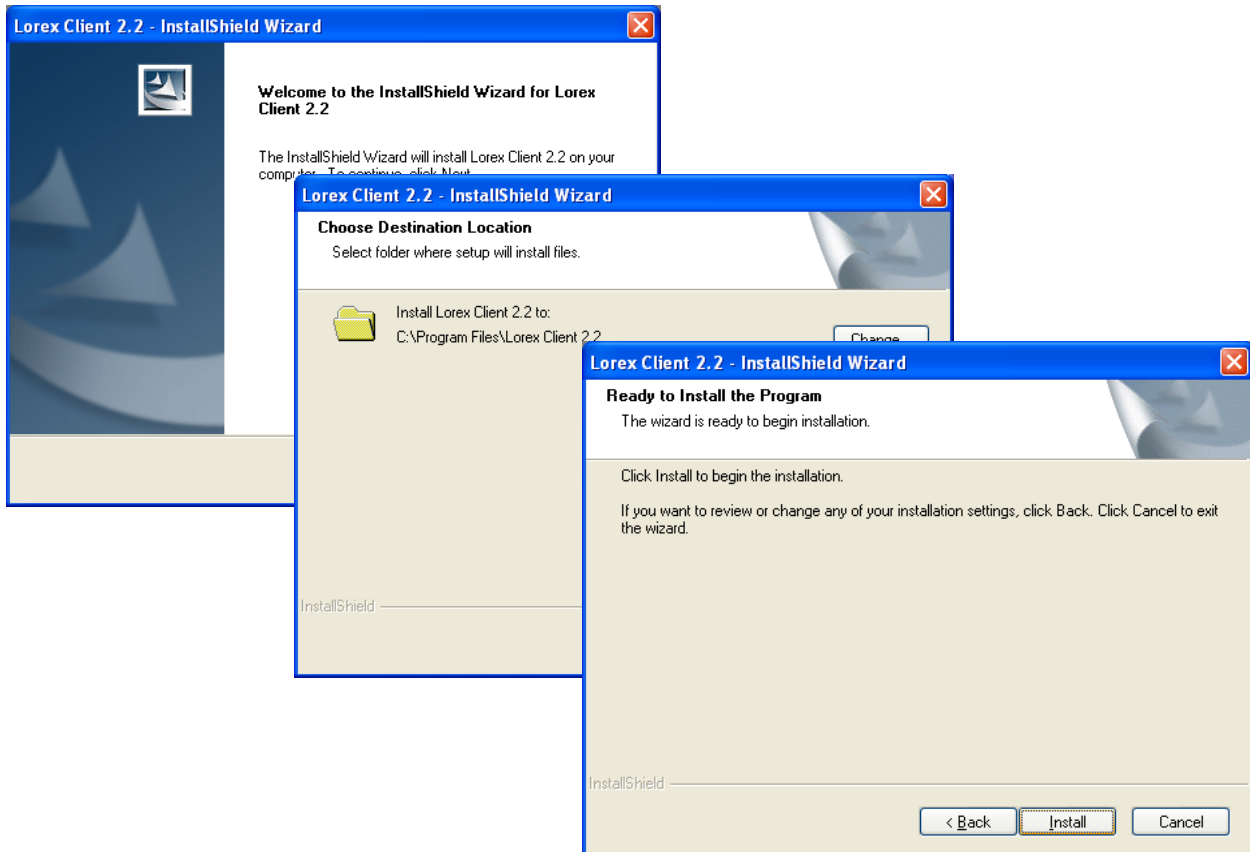
Operating System	Windows XP Home Edition Windows XP Professional Windows Vista
Processor	Pentium 4 / 3 GHz Processor (or equivalent)
Memory	1024 MB RAM
Hard Drive	50 MB - Installation space required * Additional Hard Drive space required for recording. Recorded file size will vary depending on recording quality settings
Internet Requirements	Requires a high speed internet connection (minimum upload speed: 256Kb/s, download speed 512Kb/s) and a broadband router – not included. Typical network remote viewing at 1-2 FPS (Frames Per Second). Please check with your Internet Provider for your current upload and download speeds - this may impact the performance of the Audio and PTZ functions over the Internet (WAN).

Please refer to the Lorex Client 2.2 Software User Guide included with your Observation System for further details. Visit the Lorex support website at <http://www.lorex CCTV.com> for information on Windows Vista compatibility.

Lorex Integrated Remote Agent Software Installation

Place the Installation CD in the CD-ROM Drive of your Computer. Select the Install Wizard for the Lorex Client 2.2 Software to begin.

1. Click the **NEXT** button on all dialogue windows to continue the Installation:



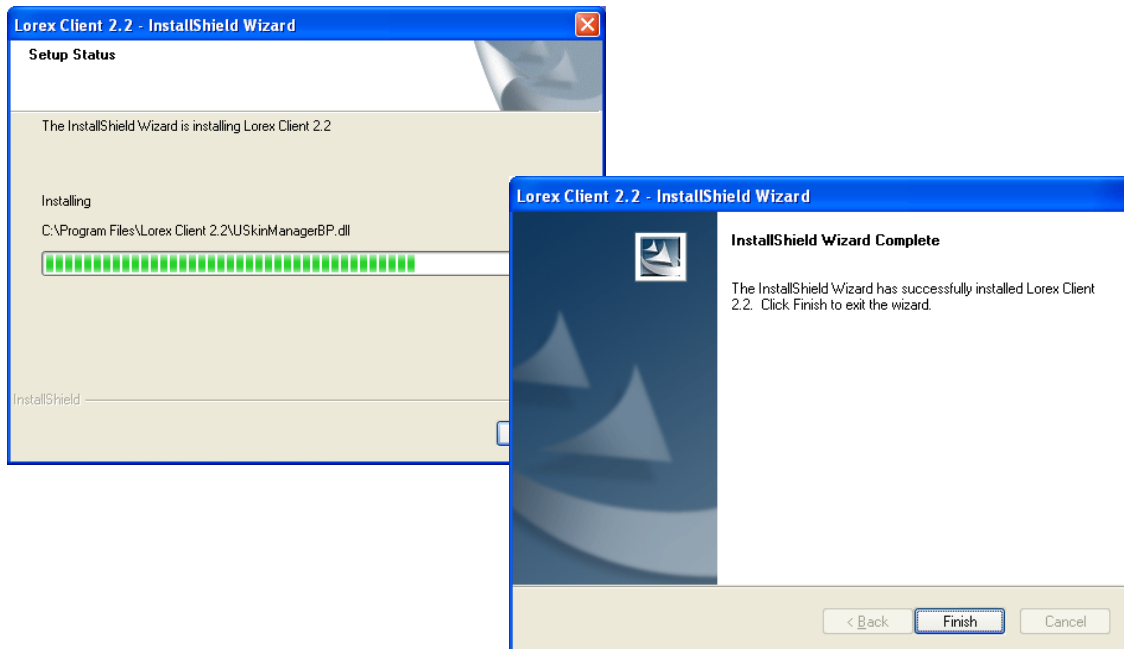
2. Press the **Install** Button to initialize the installation process.

NOTE: If the Installation Process does not automatically start, you will have to begin the installation process manually:

- Double Click the **MY COMPUTER** icon on your Desktop
- Double Click the **CD-ROM DRIVE** (Drive Letter will vary depending on the number of drives in your computer)
- Double Click the **LOREXCLIENT.EXE** file (may appear as **LOREX CLIENT** with no file extension, depending on your system settings).

The Installation Process will begin.

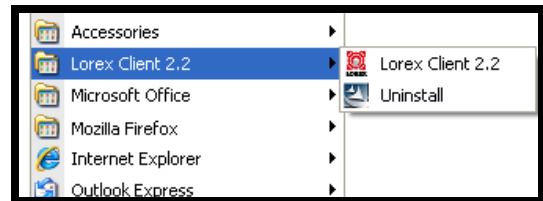
3. The installation process will continue. Once the install is complete, press the Finish button.



NOTE: Make sure to close all open programs and save any open files before rebooting the system.

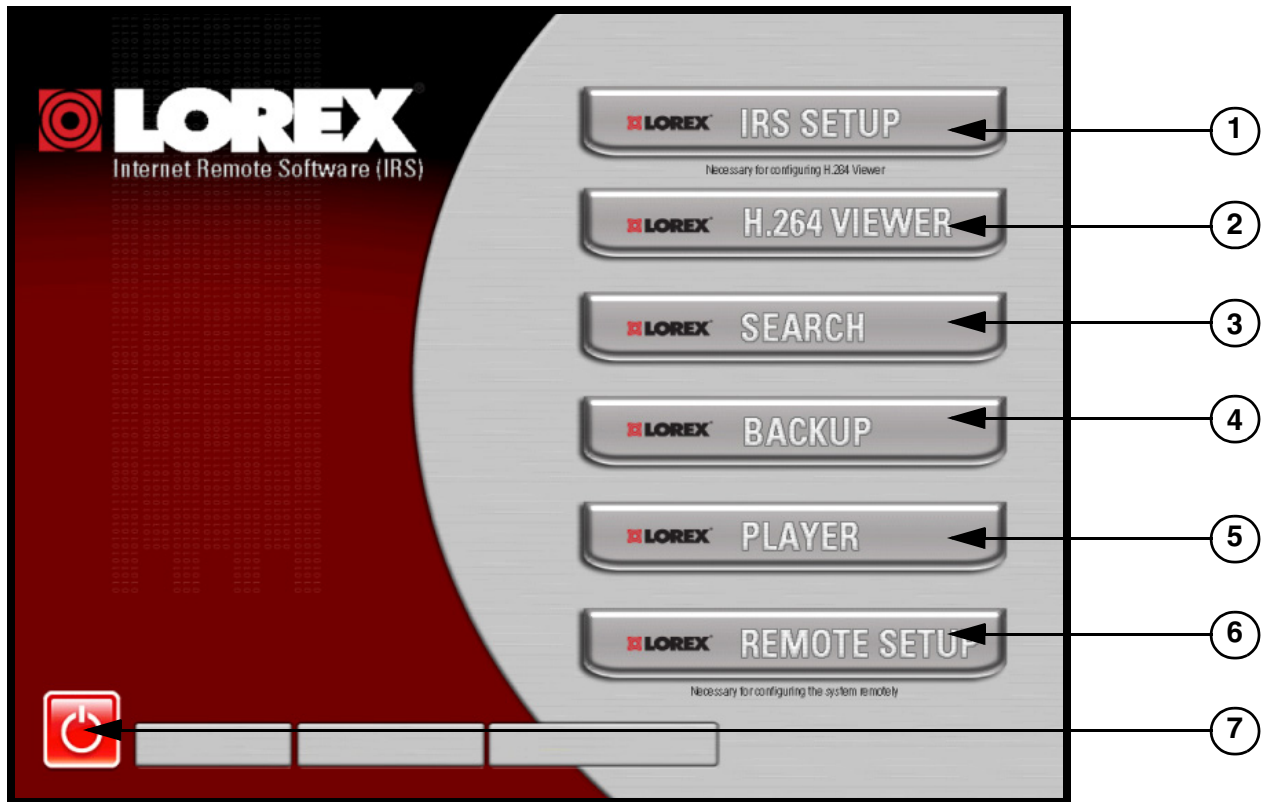
Program Shortcuts

- Start Menu - Programs - Lorex Client 2.2
 - Lorex Internet Remote Software
- Desktop Shortcut for:
 - Lorex Internet Remote Software



Integrated Remote Agent Software - Main Screen

The Lorex Client allows you to remotely connect to your system, and view live images.

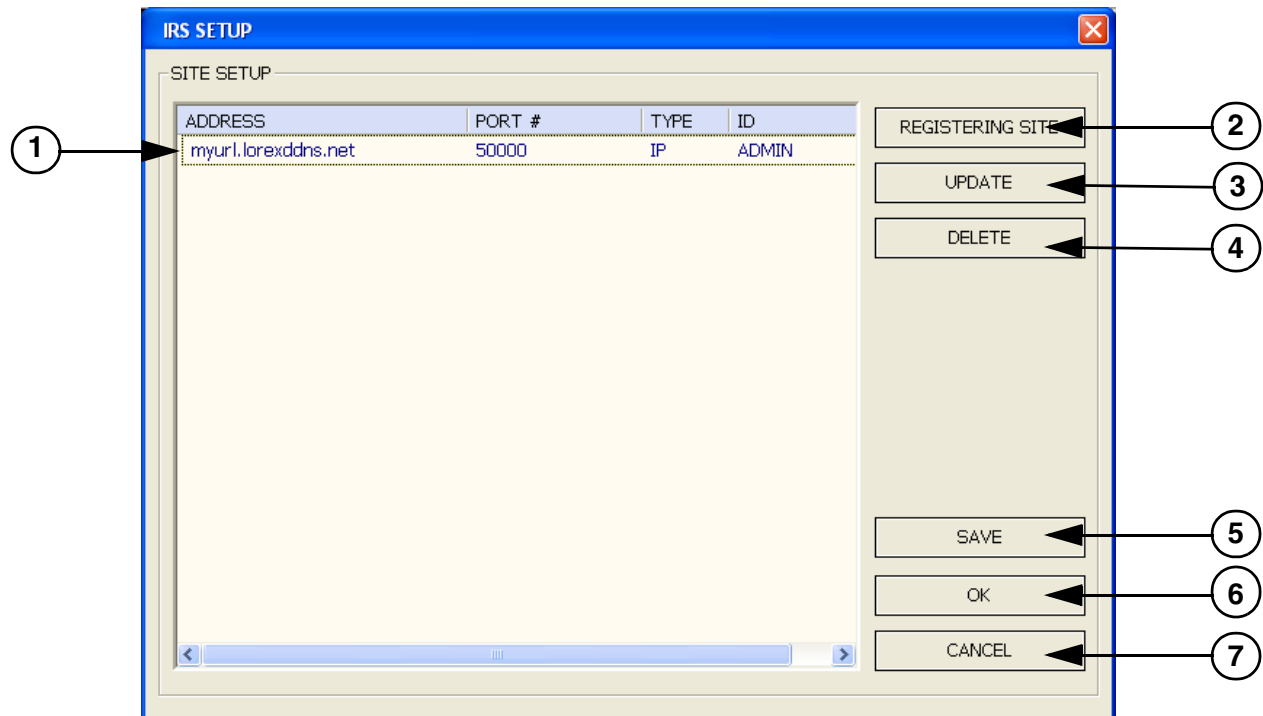


1. IRS Setup	2. H.264 Viewer	3. Search
4. Backup	5. Player	6. Remote Setup
7. Exit		

1. **IRS Setup** - Used to configure the System Remote Access Settings. A remote location must be configured, and a connection made to the system prior to using the H.264 Viewer, Search, Backup or Remote Setup options.
2. **H.264 Viewer** - Used to remotely connect and view video from the remote System using H.264 video compression.
3. **Search** - Used to search and playback recorded video from a remote location.
4. **Backup** - Used to backup data from a remote location to the local PC.
5. **Player** - Used to playback data that was backed up from the System (using a USB Memory Stick) or backed up using the Backup Software.
6. **Remote Setup** - Configuration and setup for remote system configurations.
7. **Exit** - Exits the Integrated Remote Access program.

1. IRS Setup

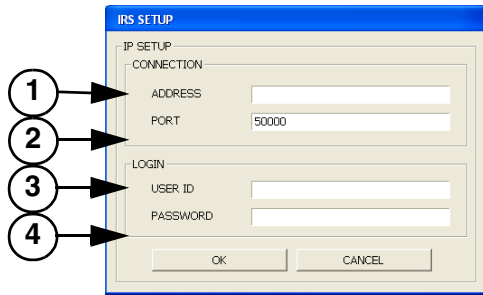
The IRS Setup is Used to configure the System Remote Access Settings. A remote location must be configured, and a connection made to the system prior to using the H.264 Viewer, Search, Backup or Remote Setup options.



1. IP List	2. Registering Site	3. Update
4. Delete	5. Save	6. OK
7. Cancel		

1. **IP LIST** - Lists the previously Registered Sites by System IP or DDNS Location.
2. **REGISTERING SITE** - Used to add new System Information to the list.
3. **UPDATE** - Used to make changes to existing site information. Highlight the desired site, and click the Update button to modify.
4. **DELETE** - Used to delete System profiles.
5. **SAVE** - Saves changes to the selected IP address.
6. **OK** - Select a site from the list, and click OK to connect to the remote site.
7. **CANCEL** - Exits the IRS setup screen.

Registering a Site



IP SETUP / CONNECTION:

1. **ADDRESS** - Enter the IP address or DDNS Address for the System:

- **Internal IP Address** - If using the software within the same network, enter the Internal IP Address (i.e. 192.168.1.104)
- **External IP Address** - If using the software from a remote location, use either the External IP Address (i.e. 72.45.122.30), or use the DDNS Address.
- **DDNS Address** - Enter the URL configured from <http://www.lorexddns.net> (i.e. myurl.lorexddns.net)

2. **PORT** - The default port is 50000. The only time the port number needs to be changed, is if a new port has been assigned on the System. Please refer to the Hardware Manual for details.

IP SETUP / LOGIN:

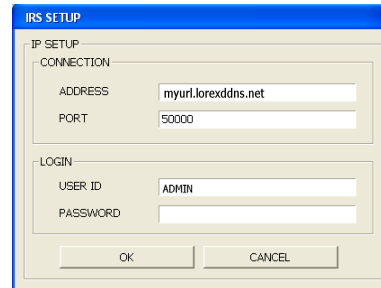
3. **USER ID** - Enter the User ID for the System (same as the System login):

- Default ID: ADMIN
- Other users can be configured on the System for Remote Access. Please refer to the hardware manual for User setup.

4. **PASSWORD** - Enter the Password to match the System User ID:

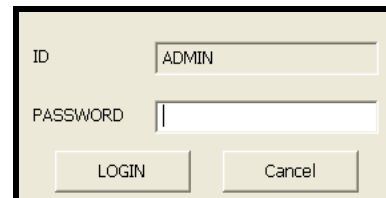
- Default ADMIN Password: <blank>
- Other users can be configured on the System for Remote Access (One ADMIN, One MANAGER and up to 8 USER accounts), for a total of 10 logins. Note that if using multiple concurrent connections, the performance will be slower due to bandwidth constraints.

Your completed screen should appear similar to:



Connecting to the Remote System:

Select the System from the IP list on the main IRS Screen. Click on the OK button to connect to the Remote System.



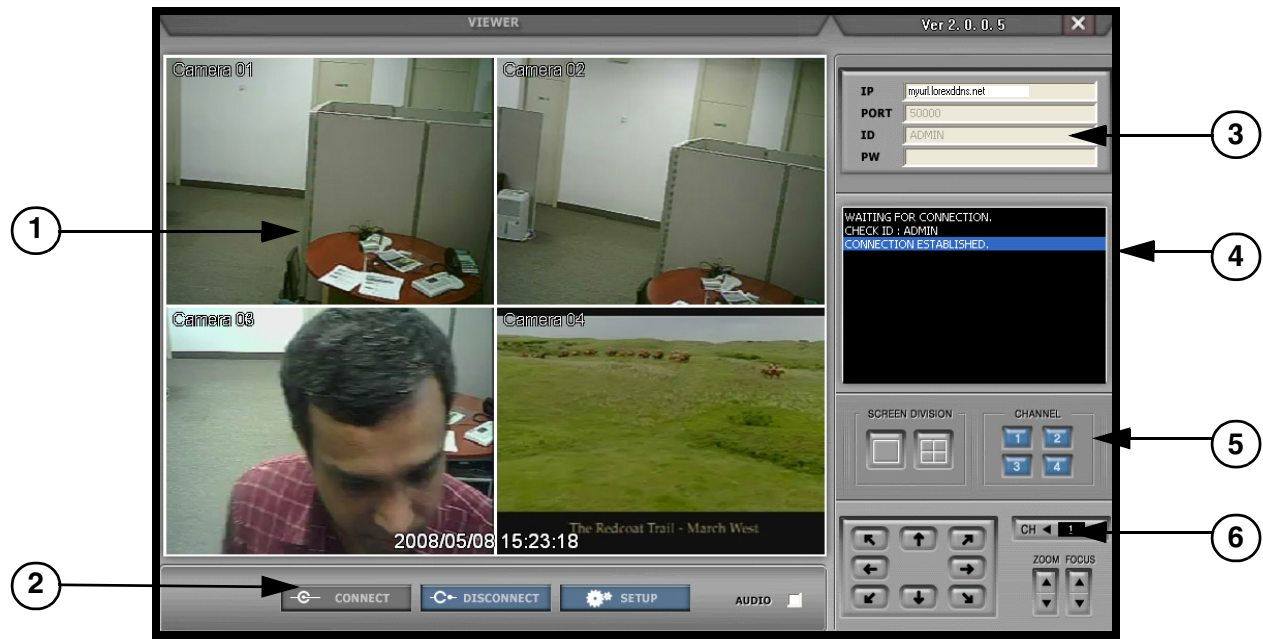
Enter the Password (the System ADMIN password is blank by default), and click LOGIN to connect.

After you successfully connect, the login screen will disappear, and all the buttons in the main screen will be activated.



2. The H.264 Viewer

The H.264 viewer is used to remotely monitor the system using H.264 video compression. The IRS Setup must be configured and connected prior to using the H.264 Viewer.

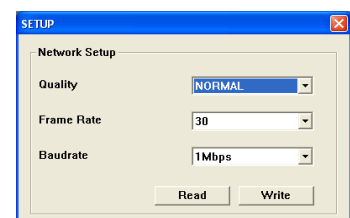


1. Main Screen View	2. Connect / Disconnect / Setup	3. Connection Information
4. Status Window	5. Screen Views	6. PTZ Controls

1. **Main Screen Camera View** - Displays the cameras in live view.

2. **Connect / Disconnect / Setup** - Used to connect or disconnect from a configured System. Use the setup to configure the data transfer settings:

- **Connect** - Click the Connect Button to establish a connection to the Remote System (must be configured in the IRS Setup first). The connection details appear in the Status Window (#4).
- **Disconnect** - Stops the connection to the Remote System.
- **Setup** - Opens the Data transfer setup window. The parameters will allow you to optimize the image quality for your specific network bandwidth:
 - **Quality** - Set the Image Quality from the Remote System to Normal, High or Highest.
 - **Frame Rate** - Controls the DATA RATE from the remote system. Typically a higher frame rate should result in a smoother image, however due to data compression and bandwidth constraints with H.264 compression, it is recommended to set the frame rate to 10~15 FPS for higher quality network viewing. Set Values: 3, 5, 10, 15 & 30 FPS.
 - **Baudrate** - Set the data transfer speed from the remote system. Set Values: 500Kbps, 700Kbps, 850Kbps, 1Mbps or 1.5Mbps.
 - Click the READ Button to retrieve system settings, and press Write to save the System settings.



1. Main Screen View	2. Connect / Disconnect / Setup	3. Connection Information
4. Status Window	5. Screen Views	6. PTZ Controls

3. Connection Information - The Connection Information will automatically be populated once it has been entered into the IRS Setup (and a connection to the System has successfully been established). This information can also be manually changed on this screen:

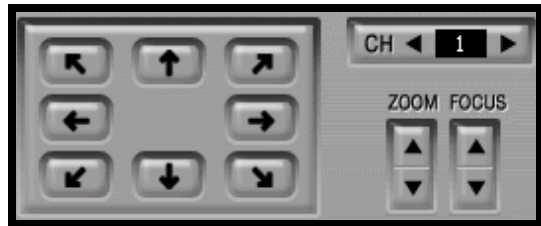
- IP: Enter the IP address of the System
- PORT: Enter the PORT for the system (default 50000)
- ID: Enter ID (default: ADMIN)
- PW: Enter the password (default: blank)

NOTE: To use the DDNS as a connection type, you must first enter the DDNS information into the IRS Setup Program.

4. Status Window - Displays the current connection status and bit rate.

5. Screen Views - Changes the Screen Division to Single Channel view or 4-Channel Split Screen View. Use the Channel Buttons 1~4 to switch to the corresponding camera.

6. PTZ Controls - Use the PTZ Controls to change the view on a PTZ Type Camera (if connected - PTZ Cameras are not provided with the System).



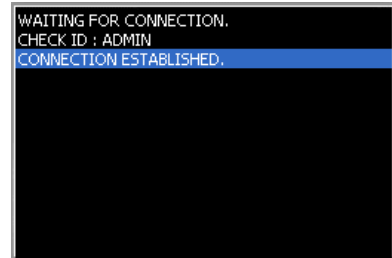
Set the CH number to the PTZ Camera, then click the arrow keys to change the viewing angle. Use the UP and DOWN arrows to increase and decrease the ZOOM and FOCUS.

To View Live Camera Images:

1. Click on the Connect button to access the Remote System.



2. The Connection Log will display a CONNECTION ESTABLISHED message once the Remote System has been accessed.



3. Search

The Search window is used to search through previously recorded data on the Remote System. The IRS Setup must be configured and connected prior to using the Search Player.



1. Main Screen View	2. Playback Controls	3. Connection Information
4. Screen Views	5. Status Window	6. Start / End Time
7. Control Buttons	8. Search Time	

1. **Main Screen Camera View** - Displays the cameras during video playback.

2. **Playback Controls** - The Playback controls become active once video has been loaded into the Search window. Use the controls to Reverse Playback (fast), Reverse Playback (normal), Stop/Pause, Play regular speed or fast forward.

3. **Connection Information** - The Connection Information will automatically be populated once it has been entered into the IRS Setup (and a connection to the System has successfully been established). This information can also be manually changed on this screen:

- IP: Enter the IP address of the System
- PORT: Enter the PORT for the system (default 50000)
- ID: Enter ID (default: ADMIN)
- PW: Enter the password (default: blank)

4. **Screen Views** - Changes the Screen Division to Single Channel view or 4-Channel Split Screen View. Use the Channel Buttons 1~4 to switch to the corresponding camera.

5. **Status Window** - Displays the current connection status and bit rate.

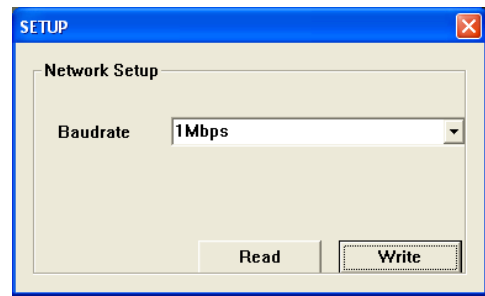
6. **Start / End Time** - Displays the Start and End times of the available recording.

3. Search

1. Main Screen View	2. Playback Controls	3. Connection Information
4. Screen Views	5. Status Window	6. Start / End Time
7. Control Buttons	8. Search Time	

7. Control Buttons - Used to connect or disconnect from a configured System, configure the data transfer settings and display the list of searchable Events.

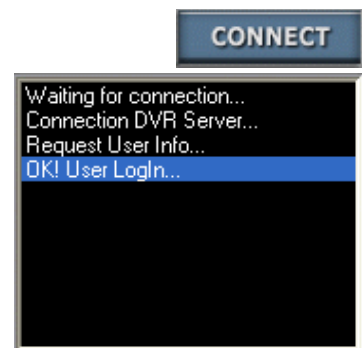
- **Connect** - Click the Connect Button to establish a connection to the Remote System (must be configured in the IRS Setup first). The connection details appear in the Status Window (#4).
- **Disconnect** - Stops the connection to the Remote System.
- **Event** - Retrieves a list of Recorded Events from the System. Select an event to display the corresponding video.
- **Setup** - Opens the Data transfer setup window. The parameters will allow you to optimize the image quality for your specific network bandwidth:
 - **Baudrate** - Set the data transfer speed from the remote system. Set Values: 500Kbps, 700Kbps, 850Kbps, 1Mbps or 1.5Mbps.
 - Click the READ Button to retrieve system settings, and press Write to save the System settings.



8. Search Time - Enter the desired Start time for searching through previously recorded data. Set the Search time by Year / Month / Day / Hour / Minute / Second. Once the desired date has been set, click the PLAY Button to start the playback of the desired data.

To Search for Previously Recorded Video:

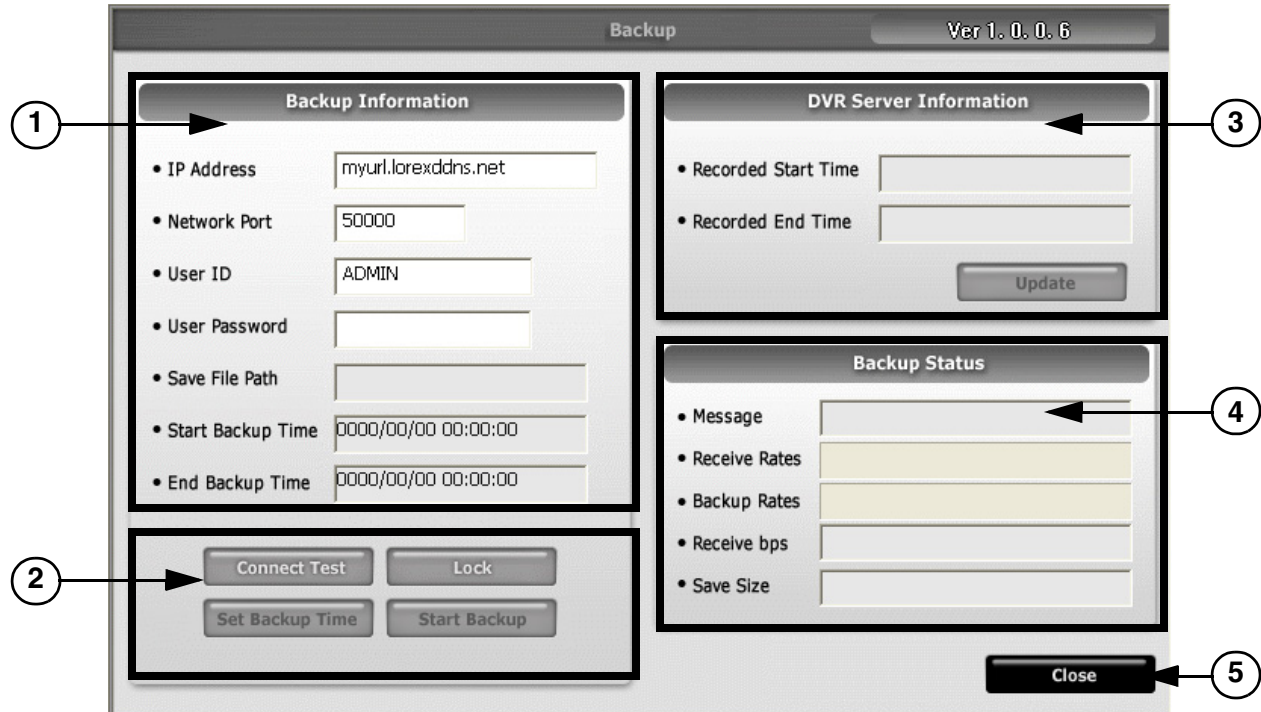
1. Click on the Connect button to access the Remote System.
2. The Connection Log will display a CONNECTION ESTABLISHED message once the Remote System has been accessed.
3. To find data, click on either EVENT (to load the Event list), or set a Time and Date using the bottom bar.
5. Press the PLAY/PAUSE button to start the playback.



NOTE: It may take a few minutes for video data to load.

4. Backup

The Backup window is used to create a local backup of the System date to the PC. The IRS Setup must be configured and connected prior to using the Backup Application.



1. Connection Information	2. Connection Setup	3. DVR Server Information
4. Backup Status	5. Setup / Close	

1. Connection Information - Enter the System Connection information, including:

- IP Address: Enter the IP address or DDNS Address of the System (must be configured in IRMS Setup, and a connection established).
- Network Port: Enter the port for the System (50000 by default).
- User ID: Enter "Admin" (or another user as configured in the Remote System).
- User Password: Enter Admin's password (blank by default)
- Save File Path: Set a path to save the backup file (This function is active only when the connection is established)
- Start Backup Time: The start time of file backup (This function is only active under the connection is established")
- End Backup Time: The end time of file backup (This function is only active under the connection is established")

2. Connection Setup -

- Connect Test: Click to test the connection status. A success message should appear in the Message Box (#4) when a connection is established.
- Lock / Unlock: Locks the System for Backup, and retrieves list. Click UNLOCK to stop.
- Set Backup Time: Set the start/end time, size and path of file backup.
- Start Backup: Active the backup function.

4. Backup

1. Backup Information	2. Connection Setup	3. DVR Server Information
4. Backup Status	5. Setup / Close	

3. **DVR Server Information** - Displays the information from the Remote System:

- Recorded Start Time: Displays the recorded start time.
- Recorded End Time: Displays the recorded end time.
- Update Button: Update the recorded time.

4. **Backup Status** -

- Message: Displays System messages, and displays the backup status.
- Receive Rate: Displays the percentage of the received backup image.
- Backup Rate: Displays the completed percentage of the backup image.
- Receive bps: Displays the bits per second (bps) of the received backup image.
- Save Size: Displays the size of the backup image.

5. **Close** - Pressing the Close button will exit the program, and return to the Main Window.

Backup Procedure

1. Select the “Connect Test” button to test the status of the System Connection.
2. Select the “Lock” button to get the Record start/End time from the System.
3. Select the “Set Backup Time” setting to configure the backup function



- Indicate the recorded start/end time
- Click [Find] to set the path for saving the backup file
- Set the file size of backup file (30~700MB)
- Set the start/end time of file backup

4. Click the “Apply” button to apply all settings
5. Select “Start Backup” to begin the backup process

NOTE: The User can cancel the backup at any time.

5. Player

The Player allows you to playback data on your PC which was previously retrieved from your System, or backed up to USB Thumbdrive or removable hard drive. You do not need a connection through the IRMS Setup to use this application.



1. Main Screen Camera View	2. Playback Position Bar	3. Delay Settings
4. Current Time Display	5. Playback Status	6. Screen Display
7. System / File Buttons	8. Audio / Playback Controls	

- 1. Main Screen Camera View** - Displays the cameras during video playback.
- 2. Playback Position Bar** - Click and drag the bar to change the video playback time.
- 3. Delay Setting:** Sets the Video Playback delay to 1, 2, 4, 8, 16 and 32x Speed (in seconds).
- 4. Current Time Display** - Displays the time on the PC
- 5. Playback Status** - Displays the Start and End time of the selected video backup file.
- 6. Screen Display** - Changes the screen display to Single or Quad view. Select a camera number to display the selected video channel onscreen.

1. Main Screen Camera View	2. Playback Position Bar	3. Delay Settings
4. Current Time Display	5. Playback Status	6. Screen Display
7. Control / File Buttons	8. Audio / Playback Functions	








7. Control / File Buttons - Use the control buttons to Open a file, edit the image, save the video to an AVI format, or close the program:

- **OPEN:** Opens the backup file.
- **EDIT:** Edits the backup image.
- **AVI SAVE:** Saves the backup file to an AVI file format.
- **EXIT:** Closes the Player program.

8. Audio / Playback Functions - Controls the audio and playback of a loaded video file:

- **Audio Playback** - Controls the audio playback:
 - ON: Turns the playback of audio ON or OFF.

• **Playback Controls:**

-  Return to the beginning of the video.
-  Fast Reverses the playback.
-  Reverses the playback.
-  Pause the playback.
-  Play the Video.
-  Fast Forward the playback.
-  Go to the end of the Video Playback.

NOTE: To use the AVI File Save or Edit Tool features, the Player must be in FULL SCREEN CAMERA VIEW MODE and **not** in QUAD View.

Saving an AVI File

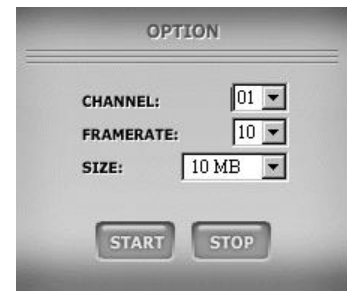
1. Click to open the backup file
2. Click to select single channel.
3. Click to open the AVI SAVE function.



4. CHANNEL: Select a single channel

- FRAMERATE: Set the frame rate
- SIZE: Set the file size of AVI SAVE
- START: Start AVI SAVE
- STOP: Stop AVI SAVE

5. The AVI file path will be saved under C:\WEB_BACKUP



Using the Edit Tool

Note: Select a single channel to use the Edit functions - this will not work in QUAD View.

1. CONTRAST



- Increase contrast.
- Decrease contrast.

2. BRIGHTNESS



- Increase brightness.
- Decrease brightness.

3. SHARPNESS



- Increase sharpness.

4. BLUR



- Increase softness.

5. SAVE



- Saves video in JPEG file format to the folder where the player is installed (C:\WEB_BACKUP).

6. PRINT

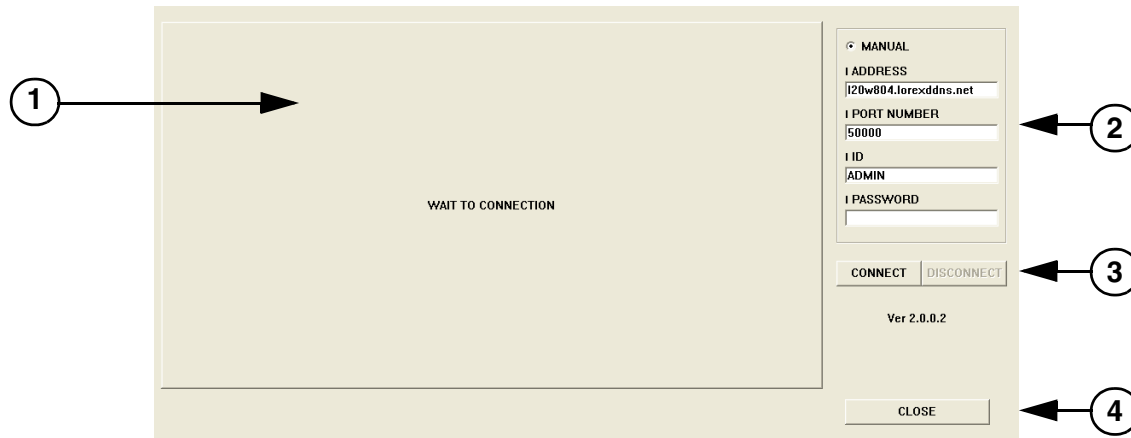


- Prints current still video image.



6. Remote Setup

The Remote Setup is used to change the settings on the Remote System. The IRS Setup must be configured and connected prior to using the Remote Setup Application.



1. Configuration Display Window - Displays the System Settings (once a connection to the Remote System has been established). Please refer to the Hardware Manual for specific System Settings and Configurations.

2. Connection Information - The connection information is automatically populated once a connection has been made with the IRMS Setup. This information can also be manually changed on this screen.

3. Connect / Disconnect - Click to Connect to the Remote System. Once a connection has been made, the Display Window will show the settings that can be changed on the System. Click the Disconnect button to close the connection.

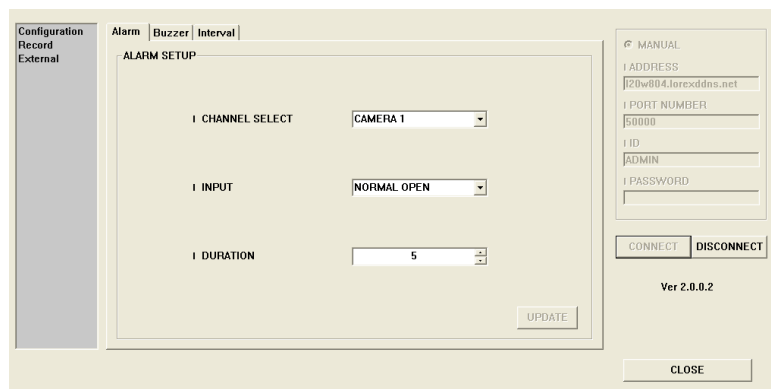
4. Close - Closes the window.

Configuration / Alarm:

Configure the Alarm IN options for each channel, corresponding to the Alarm Block.

- **Channel Select:** Choose a Camera.
- **Input:** Set to Normally Open or Normally Closed.
- **Duration:** Set the Alarm Duration (in seconds)

Click the Update button to change the Remote Settings.



Configuration / Buzzer:

Configure the Buzzer options for the System.

- **Key Tone:** Turns the System keypad beeping ON or OFF.
- **Video Loss:** Turns the buzzer on when a Video Loss is detected.
- **Alarm Active:** Turns the buzzer on when an Alarm is detected.
- **Motion Detection:** Turns the buzzer on when Motion is detected.

Click the Update button to change the Remote Settings.

Configuration / Interval:

Configures the timing intervals for several System functions.

Switching Interval Times:

- **Sequence Screen:** Sets the time for each screen to be displayed when in Sequence mode.
- **PIP Screen:** Sets the time for each screen to be displayed in PIP Mode.

Event Record Time:

- **Event Update:** Determines the amount of time between each event being written to the System log.

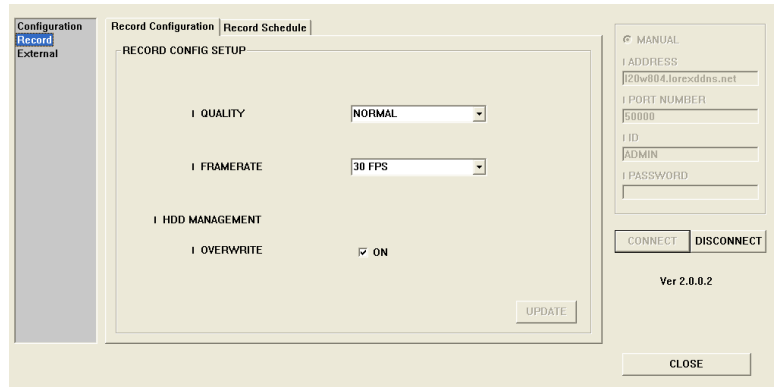
Click the Update button to change the Remote Settings.

Record / Record Configuration:

Configures the recording settings for all channels.

- **Quality:** Set the quality to Normal, High or Highest.
- **Framerate:** Set the Frame Rate to 1, 2, 3, 5, 7, 10, 15 or 30 FPS.
- **Overwrite:** Turns the Hard Drive overwrite ON or OFF.

Click the Update button to change the Remote Settings.

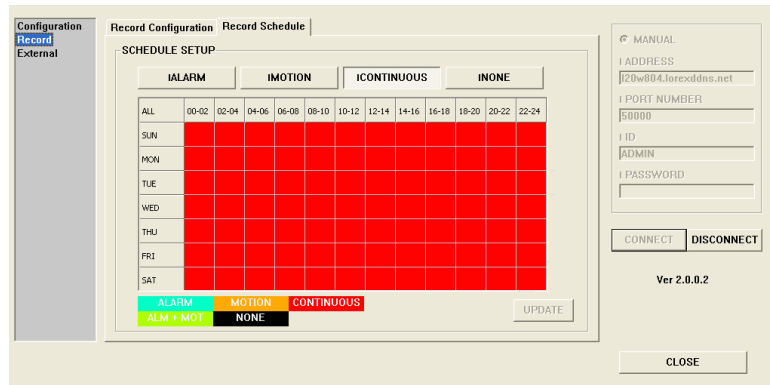


Record / Record Schedule:

Configures the schedule for recording on all channels. Click the ALARM, MOTION, CONTINUOUS or NONE Buttons, then click the squares in the Time / Date grid to set.

Note: Alarm and Motion recording types can be doubled on a square. For example. click on Alarm, and set the block for Sunday 00-02 - the block will turn Turquoise. Click the Motion option, then click the same block (Sunday 00-02) - the block will turn green indicating that both Alarm and Motion are set.

Click the Update button to change the Remote Settings.



External / Audio:

Configures the audio settings for the System.

Audio Setup: Select a channel with Audio:

- **Input Volume:** Set the Audio Input volume for the Selected channel.
- **Output Volume:** Set the output volume for the System.

Click the Update button to change the Remote Settings.

External / Network

Configures the network data transfer settings for the System.

- **Baudrate** - Set the data transfer speed from the remote system. Set Values: 500Kbps, 700Kbps, 850Kbps, 1Mbps or 1.5Mbps.

Click the Update button to change the Remote Settings.

Appendix #1 - Setting up Remote Viewing

Setting up the Remote Viewing Feature requires several steps. Networking skills are required to correctly configure the remote viewing functions.

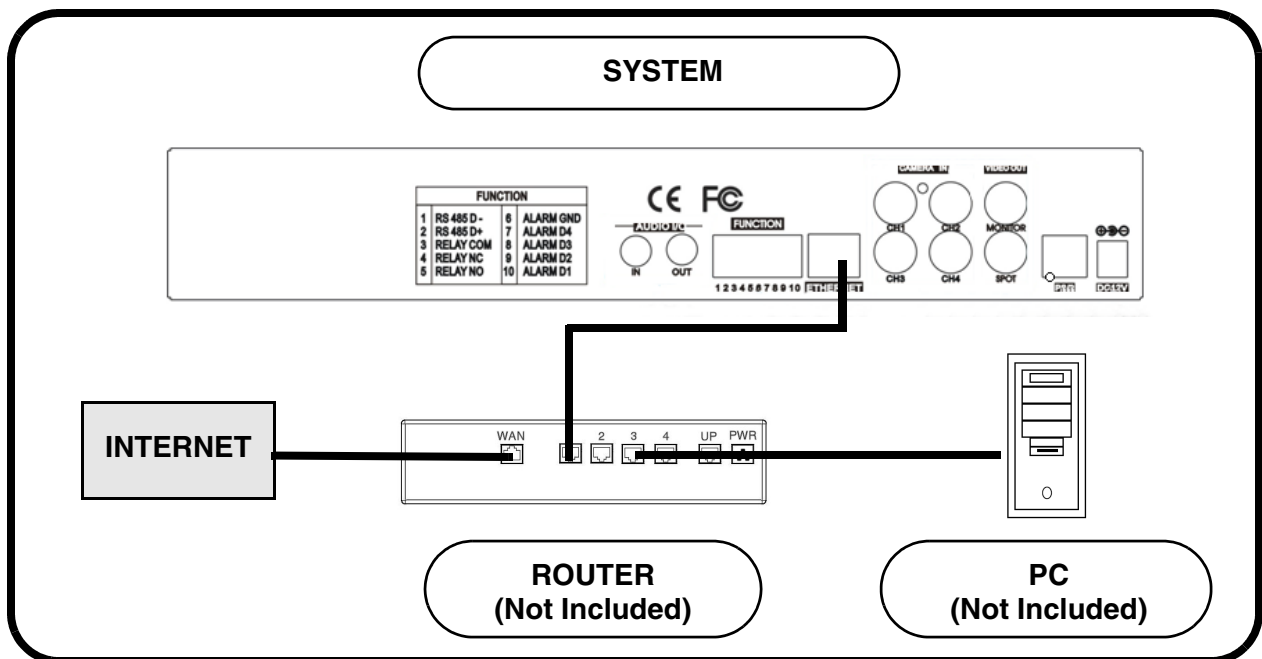
What do you need?

- The LCD/DVR System.
- A PC with the installed with the Lorex Client 2.2 Integrated Remote Agent Software
- A Router (not provided with the system) and High Speed Cable or DSL Internet Connectivity (for remote viewing outside your network)

Network Setup / Remote Access Overview

The System can be remotely controlled using your existing network and the Lorex Client 2.2 software or Internet Explorer.

1. Connect the System to the Router using the supplied Ethernet Cable. Power the System on. The System must be connected to the router prior to powering on the system. This allows the system to communicate on your network



2. Find the IP address of your System through the Menu System on the unit.
3. Enable **PORT FORWARDING** on your Router. Refer to the included Router Guide and Basics of Remote Video Access Guide for further assistance with your specific network setup and hardware.
4. Set up a web account at <http://www.lorexddns.net>.
5. Setup the System DDNS.
6. Configure the software, using the information gathered on the following pages.

Network Checklist

The following checklist is provided to assist you in confirming that all steps have been successfully performed during Network Setup. Use this checklist in conjunction with the steps outlined on the following pages.

1. I have the following:
- High Speed Internet
 - A Router
 - The Ethernet Cable provided with this system
 - The System
 - A PC with the Remote Access software installed
2. I have confirmed that my System is set to automatically complete my Network settings (DHCP is set to ON):
- Press the SETUP button on the Front Panel -or- Press SETUP on the Remote -or- Right Click on the screen and select the SETUP option.
 - From the main menu, select the EXTERNAL DEVICE option. Select the TCPIP SETUP Menu, then choose the IP SETUP Menu.
 - Confirm that DHCP Mode is set to AUTOMATIC
3. I have turned off the System, and performed the following:
- Connected the Ethernet Cable to the back of the System
 - Connected the other end of the Ethernet Cable to my Router
- NOTE:** Network Setup will not work if you do not have a router
4. I have found my System Information by navigating through the System Menus (MAIN MENU / EXTERNAL DEVICE / TCPIP SETUP / IP SETUP):
- My IP Address is: _____
 - My MAC Address is: _____

NOTE: If your IP address is showing as **127.0.0.1** or **0.0.0.0** please return to Step 1 and review all menu settings. Check to make sure that your Ethernet cable is properly connected to your Router and System.

5. I have enabled PORT FORWARDING on my Router for:

- Port 80
- Port 50000

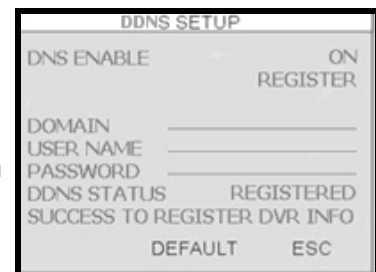
NOTE: Each Router is different, therefore the port forwarding settings will vary by model. Please visit us on the web at <http://www.lorexcctv.com/support> for assistance with several of the most common router types. If your router is not listed, please refer to the manual that came with your Router, or your Router manufacturer for assistance.

6. I have configured the DDNS for remote access to my system at <http://www.lorexddns.net>, and my configuration information is:

- Username: _____
- Password: _____
- Domain Name: _____

7. I have configured my System to connect to the DDNS Server by completing my Network settings:

- Press the SETUP button on the Front Panel -or- Press SETUP on the Remote -or- Right Click on the screen and select the SETUP option.
- Select the EXTERNAL DEVICE option
- Select the TCPIP SETUP option
- Select the DDNS SETUP Menu.
- Set the DNS ENABLE option to ON, and complete the following:
 - Domain Name: Enter the name you set for the DDNS web configuration.
 - User ID: Enter your user ID
 - Password: Enter your password
- Click the REGISTER Option to confirm the connection details.
- A success message will appear. Reboot the System.

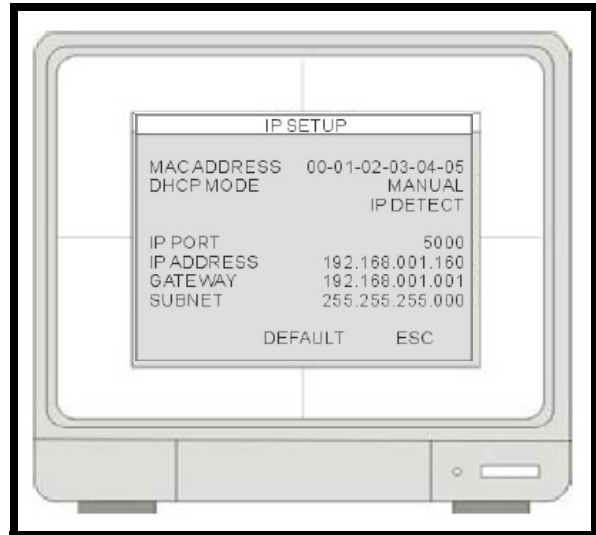


8. Configure the Remote Access Software:

- If you are connecting from within your network (i.e. The System and your PC are both inside your house), you only need to enter the IP address of the System into the software (i.e. 192.168.0.105)
- If you are connecting from outside your network (i.e. The System is at Home, and your PC is at work), use the DDNS Domain Name to configure the software).

IP & MAC Address

1. Access the Main Menu Setup screens, and navigate to the **SYSTEM MENU - EXTERNAL DEVICE - TCP/IP SETUP - IP SETUP** option.
2. Record the **MAC Address** of your system. This information is **NECESSARY** for the DDNS Setup process. The MAC Address is 12 characters with no spaces or dashes.
3. Confirm that the **DHCP MODE** is set to **AUTOMATIC**. This will allow your system to lease an IP ADDRESS from your router. If the system is not set to **AUTOMATIC**, change the setting and click **IP DETECT** - the system will obtain an IP address.
4. The IP PORT is 50000 by default. The IP Address, Gateway and Subnet are assigned to your system by your router. If the settings are not displayed, and the unit is set to **DHCP MODE: AUTOMATIC**, you may need to click **IP DETECT** - the system will obtain an IP address.
5. Press ESC to exit.



NOTE: The system will lease networking information from your Router. If you wish to set your information manually, then set the DHCP MODE to MANUAL. Please consult your Hardware Manual for further Menu options.

Finding Your External IP Address

You may use your External IP address to connect to your System. One of the fastest ways to find this information is to use a 3rd Party website such as <http://www.showmyip.com>

Your IP address can also be found within your Router settings. Refer to your router user guide for further details.

NOTE: Your External IP address may occasionally change, based on your specific Internet Provider. A DDNS Service allows you to connect to your unit, regardless of an IP Address change by providing you with a Dynamic Address (and connecting via your system specific MAC address).

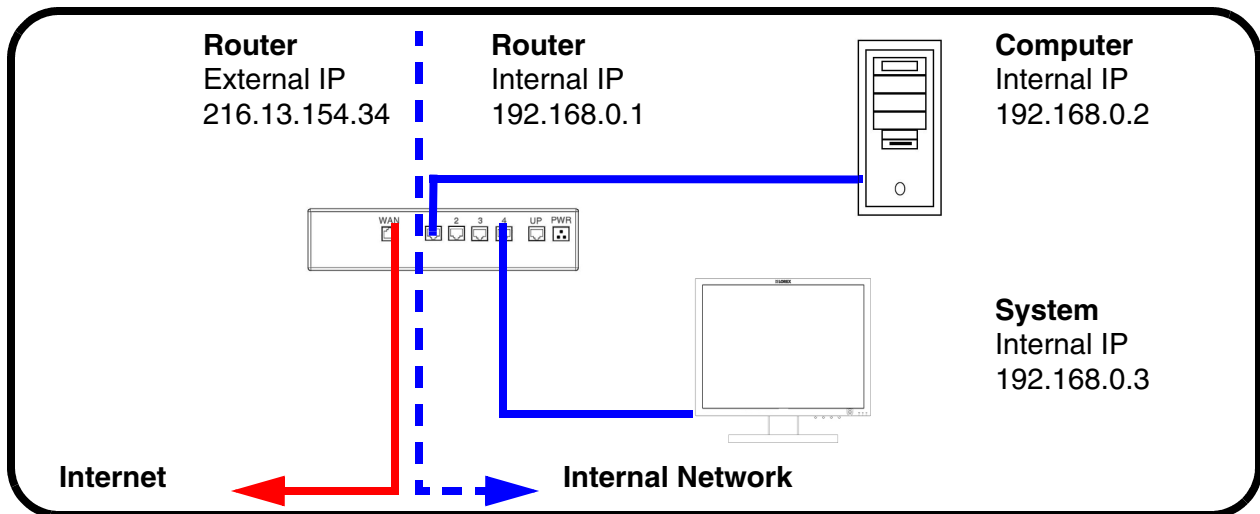
Network - Router Port Forwarding

You will need to enable port forwarding on your Router to allow for external communications with your System for ports:

- TCP/IP PORT 50000
- WEB PORT 80

Computers, Systems, 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.

NETWORK EXAMPLE



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 this data is to be sent to. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router which device on the internal network to send the data to. 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 216.13.154.34:50000 to System Internal IP 192.168.0.3:50000**).

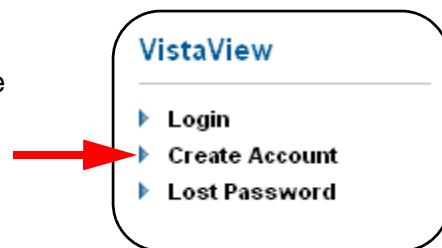
The instructions found online in the [Router Configuration Guide](#) will assist you in the port forwarding configurations for a selection of different router models.

Visit our [Consumer Guides Support](http://www.lorexcctv.com/support) website at <http://www.lorexcctv.com/support> for details

Network - Setting Up Your DDNS Account

Lorex offers a free DDNS service for use with your System. A DDNS account allows you to set up a web site address that points back to your Local Network. The following outlines how to set up your free DNS account.

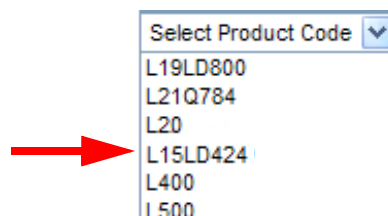
1. Navigate to <http://www.lorexddns.net>
2. Select the **Create Account** option from the list on the left side of the screen.



3. Complete the **Account Information** fields with your personal information. Complete the **Warranty Information** with your purchase details.

4. 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.)



NOTE: Make sure to write down your information **BEFORE** clicking on the Create New Account link. This information is important for your System Setup.

User Name: _____ *

Domain Name: _____

Password: _____

* Only the first part of the Domain Name is required for setup on the System. If the full Domain sent is myurl.lorexddns.net, the unit only requires that only **myurl** be entered.

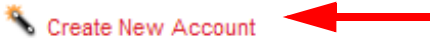
5. Click the **Create New Account** link at the bottom of the form to submit your request.

System Information

Product License L15LD424 - 1234567890AB <Product Code> - <MAC Address>

URL Request myurl lorexddns.net [What is this?](#)

By clicking on "Create New Account" you accept the [Terms of Service](#).



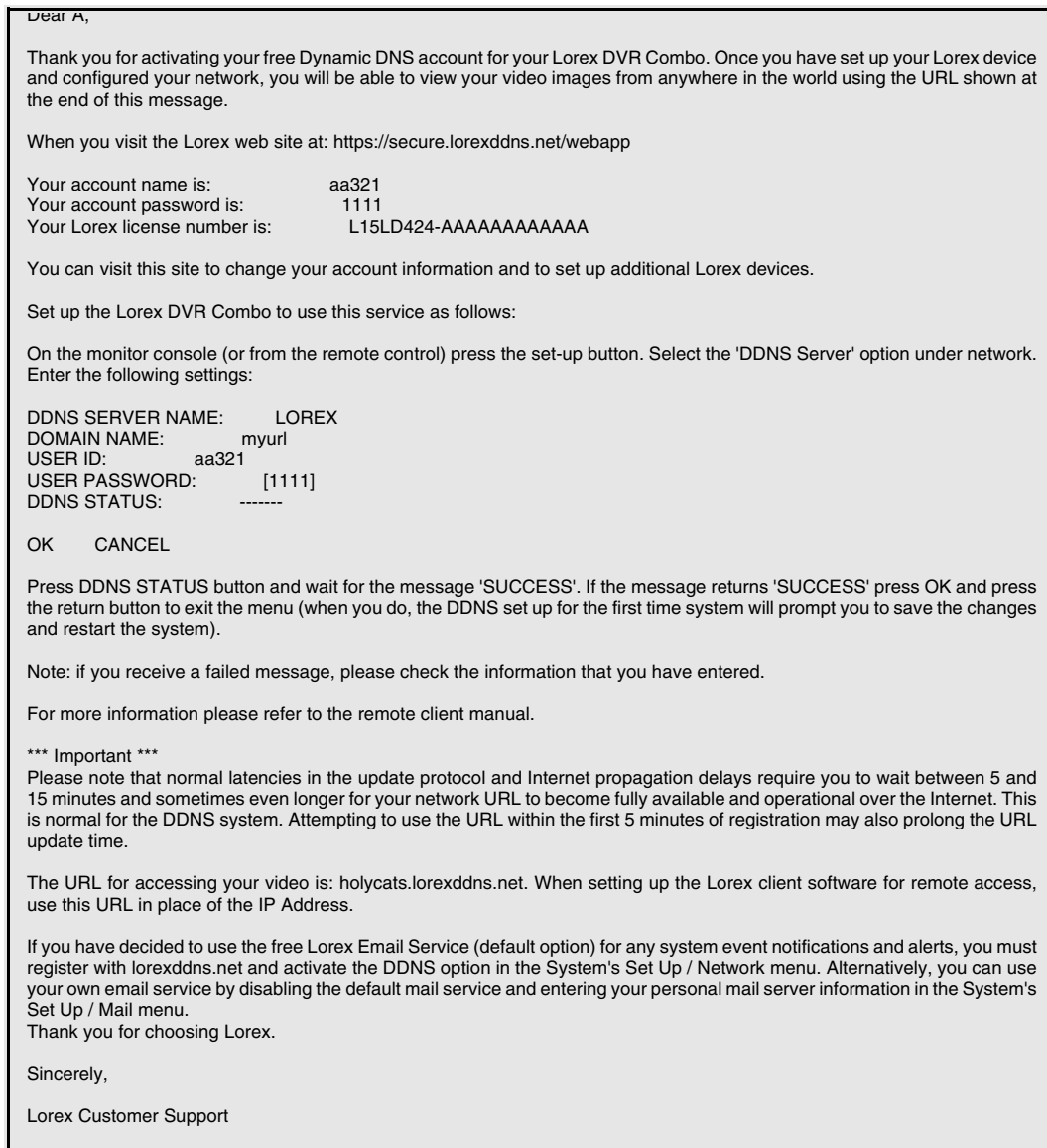
6. Your **Account** information will be sent to you at the **E-mail Address** you used in **Step 3**.

DDNS Server Name: [LOREX](#)
Domain Name: myurl
User ID: tomsmith1
Password: (your password)

You will need this information for remote access to your System. Remember to record ***YOUR*** information before clicking on the Create New Account link.

There are two ways to find your DDNS Configuration information at a later date.

1. Review the Email sent to you by Lorex:



NOTE: If you entered an incorrect Email address when setting up the DDNS, you will NOT receive this email. To review the email, you must log into the DDNS Website.

2. Log into the Lorex DDNS Website at <http://www.lorexddns.net> and enter your Username and Password.

Click the **ACTION** button located on the console to display a copy of the Configuration email:

Name	URL/IP	Type	Select	Action
Video Device 1	cats.lorexddns.net	L20WD800	<input checked="" type="checkbox"/>	

Thank you for activating your free Dynamic DNS account for your Lorex DVR Combo. Once you have set up your Lorex device and configured your network, you will be able to view your video images from anywhere in the world using the URL shown at the end of this message.

When you visit the Lorex web site at: <https://secure.lorexddns.net/webapp>

Your account name is: aa321
Your account password is: 1111
Your Lorex license number is: L15LD424-AAAAAAAAAAAAA

DDNS SETUP

Once the DDNS settings have been configured online, the information must be entered on the Observation System to allow for remote connection via the Lorex Client 2.2 Software (or through Internet Explorer):

1. Access the Main Menu Setup screens, and navigate to the **SYSTEM MENU - EXTERNAL DEVICE - TCP/IP SETUP - DDNS SETUP** option.

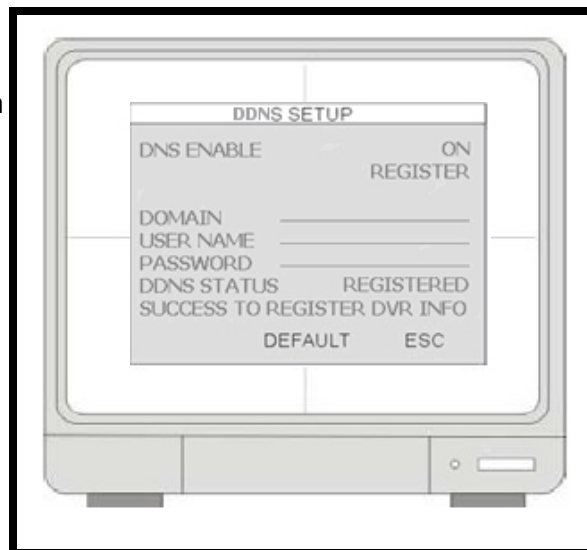
2. Set the **DDNS ENABLE** to ON.

3. Enter the following information:

- **DOMAIN** - Use the first part of your Registered URL (i.e. If you used myurl.lorexddns.net, only enter the myurl portion).
- **USER NAME** - Enter the Username used on the DDNS Website
- **PASSWORD** - Enter the password used on the DDNS Website
- **REGISTER** - Select the REGISTER link to allow the System to communicate with the DDNS server, and register the information to the DDNS database.

NOTE: A SUCCESS TO REGISTER DVR INFO message will be displayed upon successful completion.

4. Save the changes, and exit from the menu.



My Connection Information

Record your system specific information below for easy reference:

Internal IP Address (on the System): _____
External IP Address*: _____
MAC Address (on the System): _____
User Name (as set in the DDNS Website): _____
Password (as set in the DDNS Website): _____
DVR Name (as set in the DDNS Website): _____

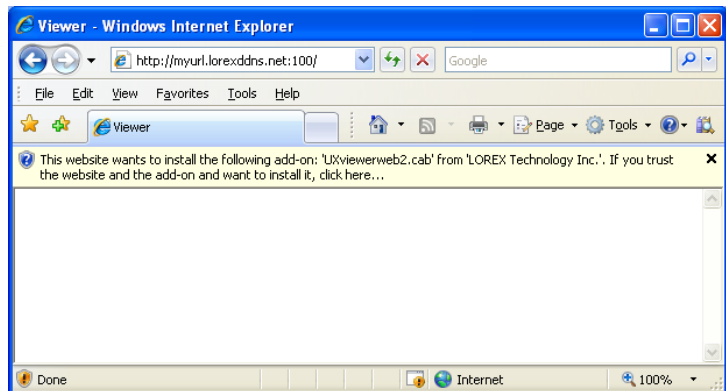
Appendix #2 - Remote Viewing with Internet Explorer

Video from the System can be viewed using the Internet Explorer interface (for remote viewing and backup).

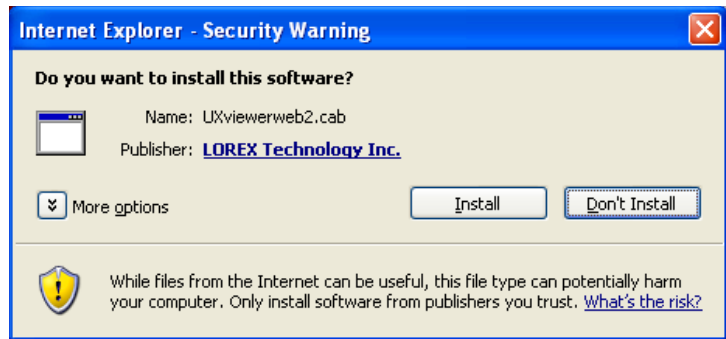
1. Open the Internet Explorer Browser (this is the only supported browser).
2. Enter your System address in the Address bar (i.e. <http://myurl.lorexdds.net>).

Note: The web interface may take a few minutes to load - please be patient!

3. The first time the Web Interface loads, you will be required to download the Internet Explorer Remote Web software on the PC. Click the Warning on the top of the window, and select **INSTALL**.



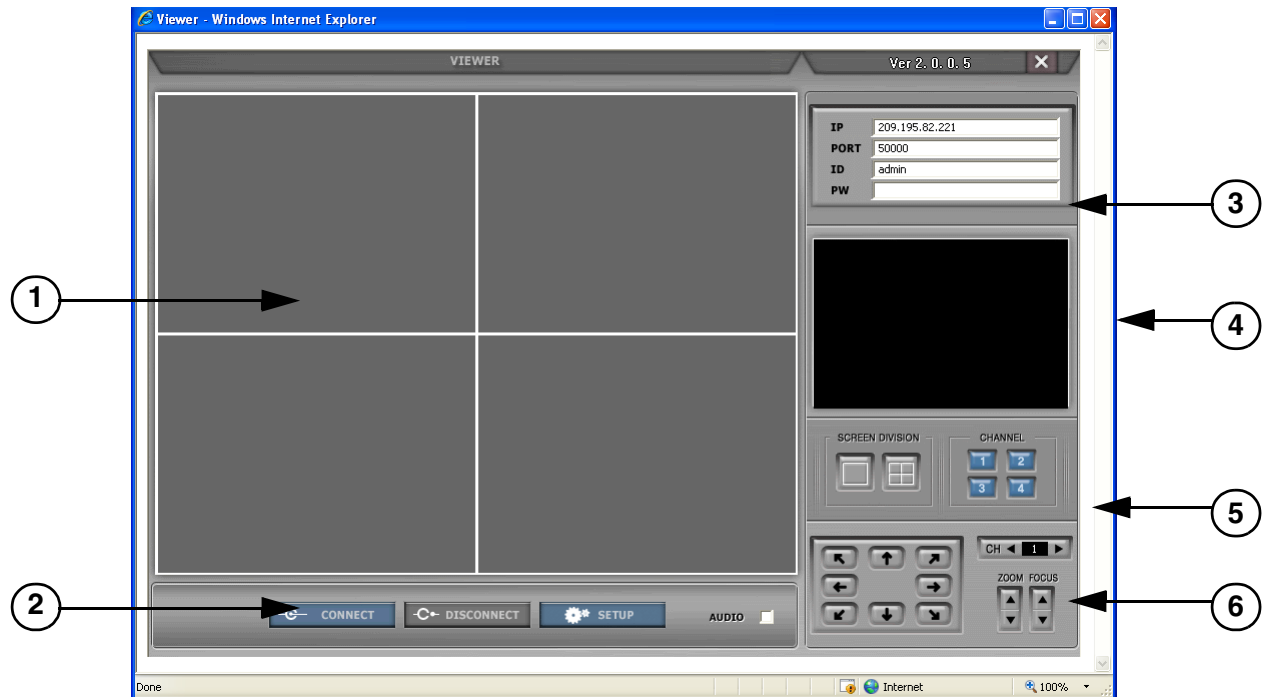
4. A new window will open. Click the **INSTALL** button to complete the setup process.



NOTE: Many factors impact the performance of your web browser such as security settings, popup blockers, firewall settings, routers, and other network conditions that are specific to the end user. Lorex recommends using the included Lorex Client software.

Web Player Interface Screen

The Web Player functions in the same way as the H.264 Viewer. Please refer to the H.264 Player section of this manual for details.



1. Main Screen View	2. Connect / Disconnect / Setup	3. Connection Information
4. Status Window	5. Screen Views	6. PTZ Controls

1. **Main Screen Camera View** - Displays the cameras during video playback.

2. **Connect / Disconnect / Setup** - Used to connect or disconnect from a configured System. Use the setup to configure the data transfer settings:

3. **Connection Information** - The Connection Information will automatically be populated once it has been entered into the IRS Setup (and a connection to the System has successfully been established). This information can also be manually changed on this screen:

4. **Status Window** - Displays the current connection status and bit rate.

5. **Screen Views** - Changes the Screen Division to Single Channel view or 4-Channel Split Screen View. Use the Channel Buttons 1~4 to switch to the corresponding camera.

6. **PTZ Controls** - Use the PTZ Controls to change the view on a PTZ Type Camera (if connected - PTZ Cameras are not provided with the System).

It's all on the web

 **Product Information**


 **Specification Sheets**

 **User Manuals**

 **Software Upgrades**

 **Quick Start Guides**

 **Firmware Upgrades**



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