

How to Remotely View Security Cameras Using the Internet



Introduction:

The ability to remotely view security cameras is one of the most useful features of your EZWatch Pro system. It provides the ability to check on your home or business with any computer or laptop which has an internet connection. The remote viewing feature also allows you to remotely review and download the recorded clips as well as view and control security cameras.

The following is intended as a basic guide to help you understand what is required to remotely view your security cameras through your EZWatch Pro DVR/Camera Server. For clarification, the term "DVR/Camera Server" is used to describe a computer which has the EZWatch Pro software installed and the security cameras connected to it. "DVR" stands for Digital Video Recorder. It is the main computer or server.

To accomplish remote viewing, the remote or off-site PC uses the internet to connect to the DVR. The DVR acts as the video server to feed the cameras video to the remote PC.

On Site:

First, the security cameras should be connected to the EZWatch Pro DVR. The DVR must be turned on and running the EZWatch Pro software. The DVR must have an internet connection, broadband (DSL or Cable) is required for our version 4.0 software to function. The DVR will require a static IP address (provided by your internet provider) or you can use our EZWatch IP service which eliminates the need for a static IP address. On page (2) you will find detailed information about choosing to use our EZWatch IP Service or pay your internet provider for a static IP.

Remote Computer:

The remote computer can be a standard PC or a laptop with DSL, Cable or Dial Up Internet access. We highly recommend using DSL or Cable internet connections, especially if you are going to remotely view four or more security cameras. Dial-Up access is acceptable if you are only working with one or two cameras.

Remote Access:

You have two options for remotely viewing your cameras using the internet. You can access the DVR/Server by using Internet Explorer or loading the Remote View software on to the remote PC. The Remote View software is found on the CD which came with your EZWatch Pro DVR.

Internet Explorer allows you to remotely use the most common functions of the DVR such as viewing cameras and playing back the recorded video clips. For systems not using Internet Explorer for viewing web pages, or systems which restrict the installation of Active X controls, the Remote View software is available as an alternative method of connecting and viewing the cameras remotely.

Internet Access, Viewing Cameras & How it Works

The emergence of high speed internet service in the late 90's brought about the use of static and dynamic IP addresses. These addresses allow users to connect to the internet through Internet Service Providers (ISP). The addresses work just like the mailing address for your home or business. It is the internet address your computer uses while it is connected to the internet.

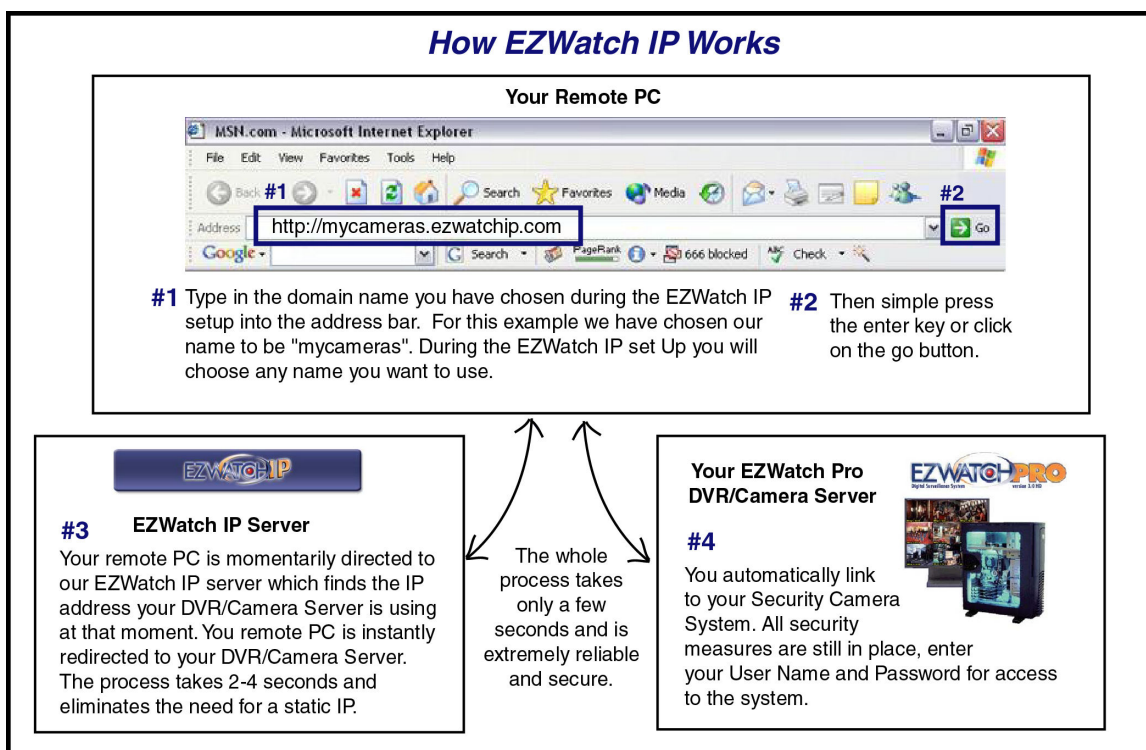
Both static and dynamic addresses work in similar ways. They both allow you access to the internet. But static addresses never change. Every time you access the internet you have the same address or IP. Dynamic addresses can change each time you connect to the internet. Because of this, dynamic addresses cause a problem when trying to link to the same computer multiple times through the internet. The address or IP for the computer you are trying to access can randomly change making it impossible for the remote computer to find the other computer through the internet. All internet providers will issue Dynamic IP address to their customers. Static IP addresses are considered an additional service and cost an additional monthly fee. Because of this you must choose to pay your internet provider for a static IP address or sign up for our EZWatch IP service which eliminates the need to pay for a static IP. We highly recommend using the EZWatch IP service because it usually saves you money and it allows our support technicians to provide complete trouble shooting support.

EZWatch IP Service:

The high cost of static IP addresses and their limited availability is why we have created our EZWatch IP service. This service eliminates the need for static IP addresses. It only requires a normal internet connection at both computers and the service greatly simplifies the set up process. EZWatch IP continuously monitors the IP address of the DVR and when you want to remotely view your cameras the service automatically redirects you to the IP address the DVR/Camera Server is currently using. The cost of our service is a 1-time charge of \$99.00, usually a fraction of the costs of static IPs.

How EZWatch IP Works:

The EZWatch IP service allows you to custom create a domain name on our server. You simply type that domain name into the address bar on your web browser and the EZWatch IP service automatically redirects you to your DVR/Server anytime you want to log into your system to view and control security cameras. This service greatly simplifies the remote viewing set up.



Setting Up Internet Access Using EZWatch IP Service



Step #1:

First make sure the EZWatch Pro DVR/Camera Server has a connection to the internet. This can be DSL, Cable or Dial Up. Make sure you are able to surf the web before moving to step 2.

Step #2:

Using the DVR/Camera Server, log on to our EZWatch IP web site at www.ezwatchip.com. Click on the Sign Up tab and enter in your information following the steps. After you have entered all your information, click on the download link and save the EZWatch IP Setup program to your computer. Be sure to remember where you saved this program so that you can find it when you are ready to run the installation.

Step #3:

Once the software download is complete. Click on the EZWatchIP-Setup.exe icon and click on Run to install the EZWatchIP software.



Follow the steps indicated. After you have completed the installation, if the program doesn't automatically open the sign on screen, then click on the Red EZWatchIP icon on your desk top.



This will open the log in screen where you will enter the user name and password you created when you signed up for the service. After you enter your information simply click the **Begin Update** button and you are finished. This will send the first communication to our IP server and activate your account.



If you encountered any problems up to this point please call our tech support personnel for help 1-866-241-3400.

After you click the **Begin Update** button the login in screen will disappear and our round red EZWatch IP icon will appear in your task bar. This icon indicates the service is operating.



The EZWatchIP program will check every 30 minutes to see if your Public IP Address has changed. If it has, it will send the new address to our system so that the domain name you created (test.ezwatchip.com for example) will now be changed and allow you to access your system remotely.

Step #4:

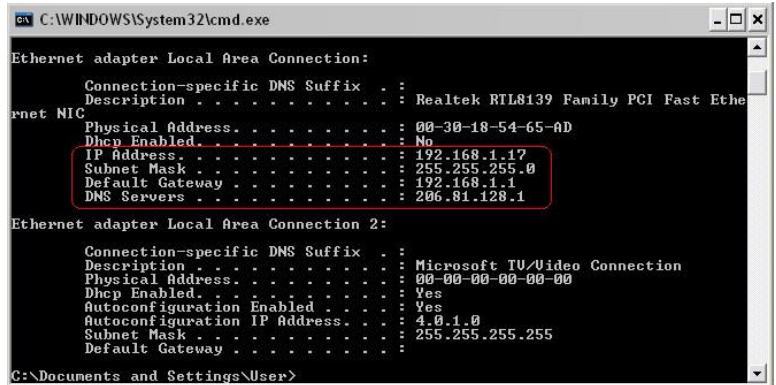
Now that you have your EZWatchIP service up and running the next step is to configure the DVR so that you can access it remotely. Following the steps on the next page will guide you through opening your ports on your router or modem so that you can now use the system. Just remember when you go to your remote location(s) when it asks you to enter your IP address you will instead enter your domain name you have created with EZWatchIP.

Configuring Your DVR for Remote Access Using the EZWatch IP Service or a Static IP

Note: The steps listed below are required for use with static IP address or the EZWatch IP service

Overview: This guide will assist you in the setup and configuration of a Router or Cable Modem that is configured with a Dynamic IP Address. The first thing you need to know is whether or not you're using Cable Internet or DSL. Typically, if you're using Cable Internet, you are being assigned an IP Address from your Service Provider dynamically. If using DSL, you will need to check with your Service Provider to see if your IP address is being dynamically assigned. If so, then you will also need to follow the steps below.

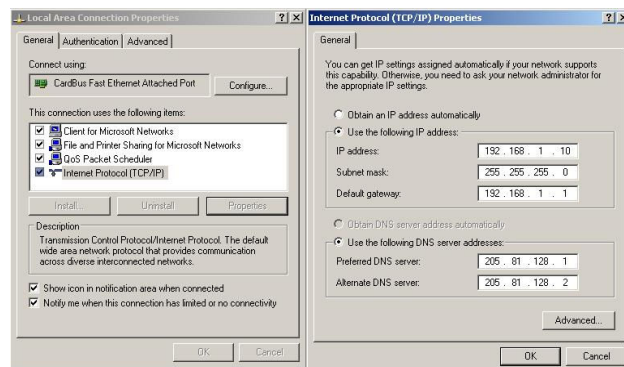
Step #1: Finding out your current IP Address: Click "Start", go to Run, and type cmd. This will bring up a command prompt with a blinking cursor. Type, ipconfig/all, this will display all of your current IP information. You will need to write down the following four numbers: IP Address: Subnet Mask: Default Gateway: DNS Servers: [There will be 2 of these addresses]



Go to Internet Explorer and type in the following address: <http://www.whatismyip.com> If your IP address is the same here as from ipconfig, then skip to step #6. This indicates that you have no local router and that you are connected directly to the internet. You will not need to set up port forwarding.

Step #2: How to manually configure a local IP address:

Click "Start, go to Control Panel. Click "Network and Internet Connections" then "Network Connections". Now, right click on your "Local Area Connection" and go to Properties. Then, left click once on "Internet Protocol (TCP/IP)" so it's highlighted and then below it click "Properties". In the Internet Protocol (TCP/IP) Properties window, you will input all the IP information we wrote down in Step #1. So choose "Use the Following IP Address" and put in your IP information. In the lower box, choose "Use the following DNS server addresses" and input your primary and secondary DNS server addresses. Lastly, click "Ok" at the bottom to save your settings. Now check to make sure you can still access the Internet. If you can, continue to Step #3, if not, you may need to double check your settings or contact our Technical Support Department for further assistance.



Step #3: Accessing your Router or Cable Modem:

First, you will need to find out exactly what brand of router or cable modem you're using. Normally, you can access your router or cable modem thru it's built in LAN interface. To do so, you would pull up Internet Explorer and in the address bar, type the Default Gateway address you wrote down in Step#1.



Hint: If the third portion of your IP address was a 1, then typically you would use 192.168.1.1 to access your router or cable modem. Or if the third portion of your IP address was 0, then you would use 192.168.0.1. Once you have successfully accessed your router or cable modem, you will need to input the user name and password.

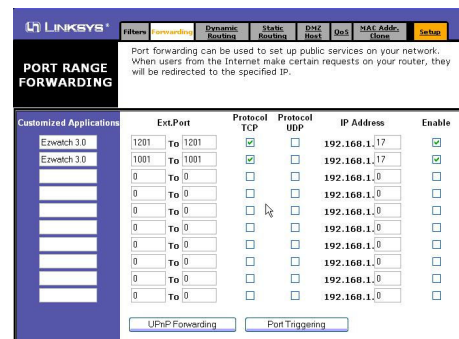


Step #4: Setting up Port Forwarding in your Router or Cable Modem:

Go to the web address www.portforward.com Click on Forwarding at the top and choose the router or cable modem your using and follow the instructions on how to setup port forwarding. You will follow the instructions step by step EXCEPT that you will need to forward on Ports 5150 and 5160 with the type being TCP. It will then ask you for an IP address, simply use the same IP address you assigned your computer in Step #1. You should have a button at the bottom that will allow you to save your settings. Click it to save your settings.

Hint: You will have an entry for both 5150 and 5160. Like the example below.

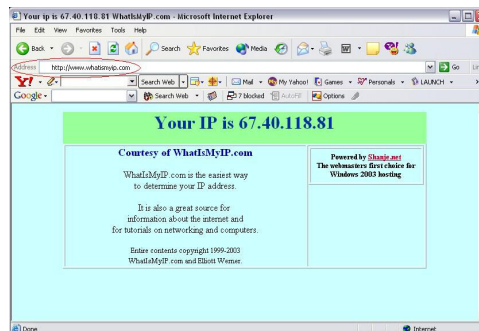
You will also need to forward ports 80 or 8000 for web browser access. **Note:** Some routers already have port 80 forwarded or included. Some ISP's block port 80 to prevent its users from web hosting. It is then necessary to use port 8000 instead. You should use port 8000 if you aren't sure.



Step #5: Finding the IP address of your DSL or Cable Modem:

The easiest way to determine the IP address of your DSL or Cable Modem is to go to the website www.whatismyip.com You will need to write this IP address down and take it with you. When you're at the remote computer, the Remote View application will prompt you for an IP address. This is the one you will use.

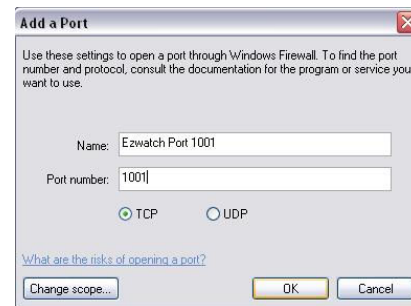
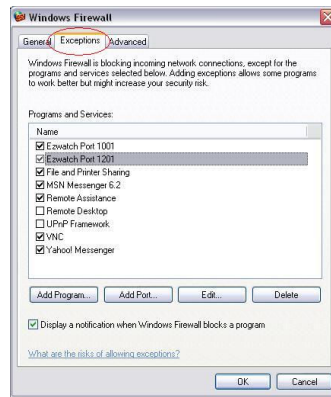
Hint: If you are accessing the computer from inside your network or from a computer that is also connected to the same router or cable modem, then you can input the local IP address of the computer running EZ Watch Pro 4.0.



Step #6: Firewalls:

If you are using any type of firewall whether it is software or hardware, you will need to open up ports 5150, 5160, and 80 or 8000. If not opened, the firewall will block the incoming request and you will not be able to connect. If you are using Window's XP with Service Pack 2 Installed, then you are behind a Firewall. Service Pack 2 in Window's XP has a built in Firewall that is automatically enabled on system start up. So if you're using Window's XP with Service Pack 2, you will need to open up ports 5150, 5160, and 80 or 8000 to allow the incoming connection. Follow the steps below to open the ports.

First, click "Start", then go to "Control Panel". In the Control Panel, click on the "Security Center" icon. This should bring up the Window's Security Center window. At the bottom of this page, click on "Windows Firewall", and it will bring up the Windows Firewall page. Here you will click on the "Exceptions" tab, and then click "Add Port" at the bottom to add the ports. You will need to add ports, one entry each for 5150, 5160, and 80 or 8000 as shown below. After you have added both ports, you can click "Ok" to save your settings.



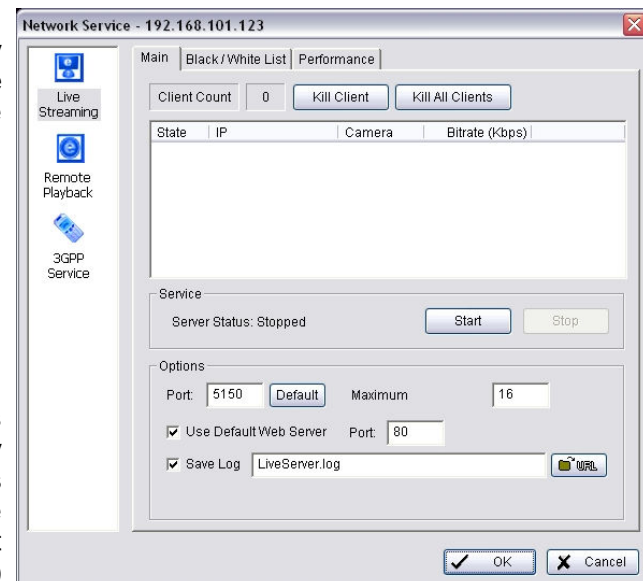
TIP: If you are behind a router or hardware firewall, you can disable windows firewall or any other software firewall on the computer. This allows total access for all the EZWatch applications and makes it easier to setup remote access. You do not need to worry about not having a firewall since a router acts as a firewall.

Step #7: How to setup the EZ Watch 4.0 Software:

The following will help you to set up EZ Watch 4.0 software so you can view your camera system from a remote location.

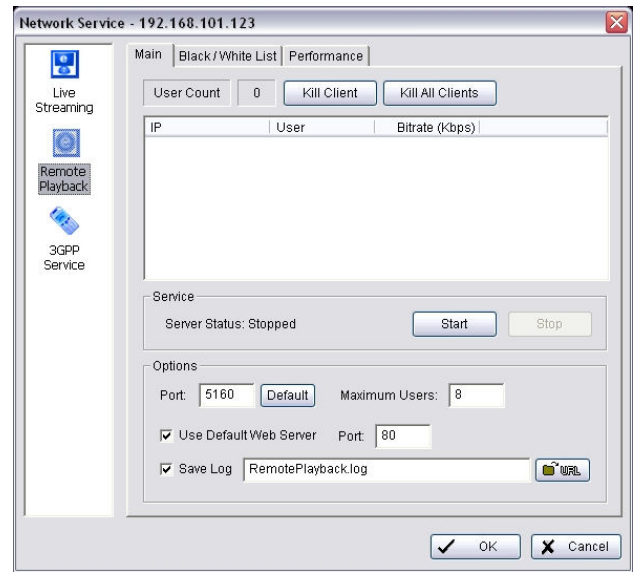
First: Open up the EZ Watch pro 4.0 Main Console. Within the main console, you can access the settings for the remote access by clicking on 'Config', and then selecting 'Network Service' from the menu that appears. This will give you three sections to configure the network service : Live Streaming, Remote Playback, and 3GPP.

Live Streaming configures your ability to connect and watch what's going on live from a remote PC. While people are connected, they will show up under 'Client Count'. The Kill Client/Kill All Client buttons will allow you to disconnect a person while they are watching the cameras. Port 5150 should be left alone, but if you cannot use Port 80 (Either because it's already in use or if it's blocked by your ISP) you will need to change the Default Web Server Port to 8000. Once the ports have been entered, Click on 'Start' to activate the server.



Remote Playback configures your ability to watch previously recorded clips from a remote location. Once again, if you cannot use Port 80 you will need to change the Default Web Server Port to 8000. Once the ports have been entered, Click on 'Start' to activate the server.

3GPP configures your ability to watch the cameras remotely using a cellular phone service. At the time this guide was created, no cellular phone services in the United States currently offers 3GPP support. Once 3GPP support is available then you will be able to view the cameras remotely on a compatible device.

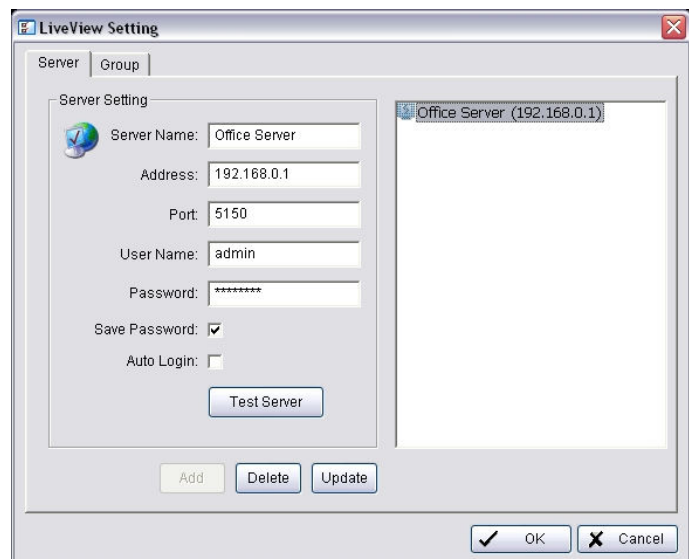


TIP: To ensure that the Live Streaming server and the Remote Playback server both start up automatically when you turn the Main Console on, click on Config, then Setting and place check marks in the boxes for both Live Streaming Server, and Remote Playback Server. If these selections are not checked, then you will need to turn the server on inside of the 'Network Service' window every time the software is restarted.

Step #8 How to access your camera system remotely using the Remote View software. This section will give you a brief overview of how to use the Remote View software to view your cameras and to do desktop administration. **You should be at a remote computer or location for these steps.** Installation: The Remote View software can be found on your EZ Watch Pro 4.0 installation CD. Insert the CD and follow the directions to install the software. When it asks for 'typical' or 'custom' setup, choose 'Custom' and make certain that Main Console is NOT selected. Follow the prompts as they appear to continue with the installation.

Once the installation has been completed, click on Start, open up 'All Programs', then open up the 'EZ Watch Pro' directory that appears there. Select the Remote Live Viewer to open the Remote View software.

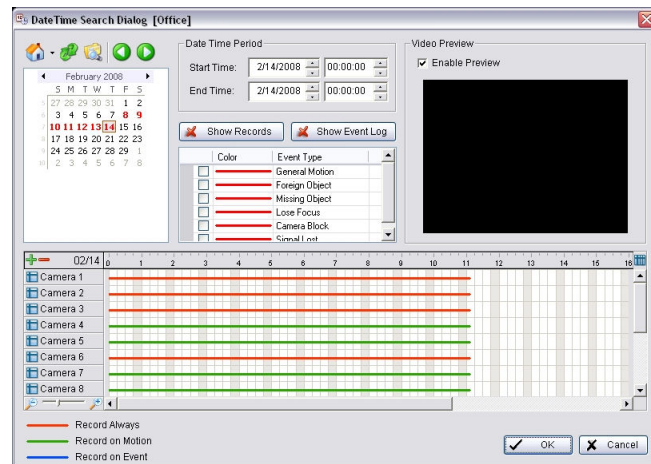
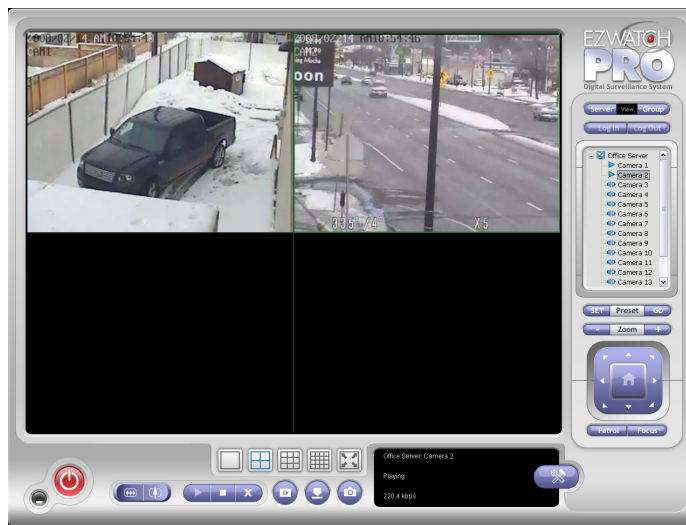
Once connected, you must first enter a new site to connect to. At the bottom of the screen, click on the Wrench-and-Hammer icon. It will pull up the Site Manager. Type the name of the site you're connecting to in the Server Name field. Enter your



Internet IP address or domain name in the address field, and leave the Port at 5150. The username by default is 'admin'. If you purchased the PC from EZ Watch Pro, the default password is '123', otherwise enter the password you created when you installed EZ Watch Pro 4.0. Hit 'Add' to add the server to the list on the right-side of the screen, then press OK when finished.

On the main screen, the site name should appear in the list on the right. Highlight the site name and click on 'Log In'. Once you are logged in, a list of all available cameras will appear – simply double-click on the camera to begin watching that camera remotely.

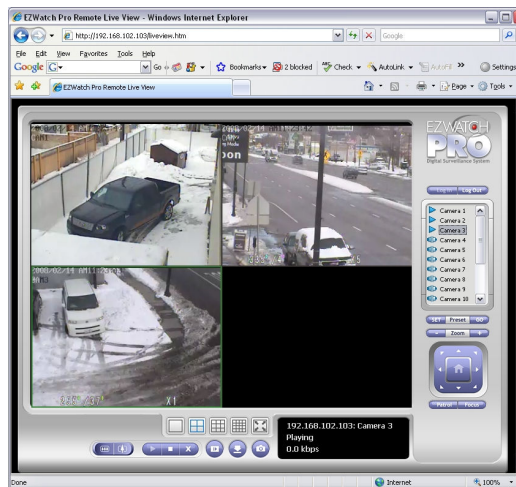
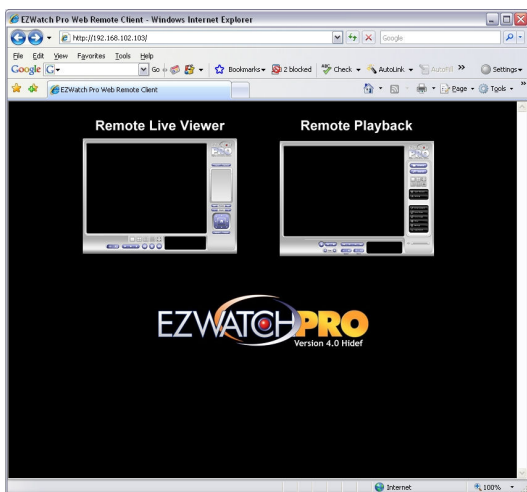
To play back previously recorded clips from the remote location, click on the Playback button at the bottom of the screen. Click on 'Remote Server', and fill out the fields with the same information entered for the live viewer. Once the server has been added, click on 'Open Record'. If a dialog box pops up asking you to log in to 'Local Machine', click on cancel. At the top-right corner of the Date and Time Dialog box is an icon of a house, with a down arrow next to it. Click on the Down Arrow and select the site you just added. The dates that contain recorded information should highlight in red, and when you click on one then the times that the camera recorded are displayed below. Select the cameras and times you wish to watch, then click OK to begin playback.



Step #9 How to access your camera server via Internet Explorer.

To access your system via Internet Explorer, simply Input your internet IP address or domain name into the address bar. A page will pull up asking if you wish to open the Remote Live Viewer, or if you wish to open the Remote Playback page. Once a selection is made, the page will open and ask for the username and password to connect. From there on, the steps to view the cameras or clips are the same as with the software.

TIP : If you are NOT using the default web port of 80, then you will need to type in a colon, followed by the port you are using. Example : <http://mydomain.ezwatchip.com:8000/>



**For Technical Support on any of the above, feel free to contact our Seasoned Support Staff for any questions or concerns you may have.
 Technical Support Toll Free: 866-241-3400**