

IMPORTANT! - Read Before Heading to the Job Site

The following items are required during the installation of a WPS-DVR. It is recommended that these items are reviewed before configuring the DVR. Preparing these items in advance will allow for the installation to be performed smoothly.

- ☐ All Cameras and display devices that will be connected to the DVR
- ☐ Network Connection near the location of the DVR
- ☐ Administrator rights to the computer that will be used to access the DVR
- ☐ Router Details – Contact the network admin to obtain
 - Admin Rights – Required to setup the network and port forwarding for remote access.
 - Default gateway
 - Net Mask Address
 - DNS Address
 - Static IP to assign to the DVR

Table of Contents

1. CONNECT AND CONFIGURE THE DVR	2
2. CONFIGURE INTERNET EXPLORER FOR FIRST USE.....	3
3. CONFIGURE RESOLUTION AND VIDEO STREAMING	5

1. CONNECT AND CONFIGURE THE DVR

1.1. CONNECT DEVICES

Before powering on the DVR, connect a VGA or composite monitor, cameras, and the mouse. Some models can be connected to a display via HDMI as an alternative to VGA or composite.

1.2. POWER ON THE DVR

Connect the power cord and turn on the POWER switch to begin the boot-up process. Some models do not have a power switch, on these models the boot-up process will begin when the power supply is connected.

1.3. LOG IN

To log into the DVR, move the mouse cursor to the bottom of the screen and select the menu icon, or "right-click" the mouse.



- Select Login/Logout
- The DVR is factory preset to ADMINISTRATOR level
- Login Name: **user**
- Password: **1234** (For security purposes, it's recommended to change the default password to prevent unwanted access.)

1.4. CONFIGURE DVR NETWORK SETTINGS

1.4.1. Basic DVR Network Configuration

- From the main **MENU**, select **Setup**  then **Network**. 
- Set the **Net Type** to Static IP.
- Enter the **Static IP Address** issued by the network admin.
- Enter the **Net Mask** for the network.
(usually 255.255.255.0)
- Enter the **Default Gateway**.
(Address used to access the router)
- Enter the **DNS Address**.
(Same address as Default Gateway)
- Select **Advanced** to enter port settings.

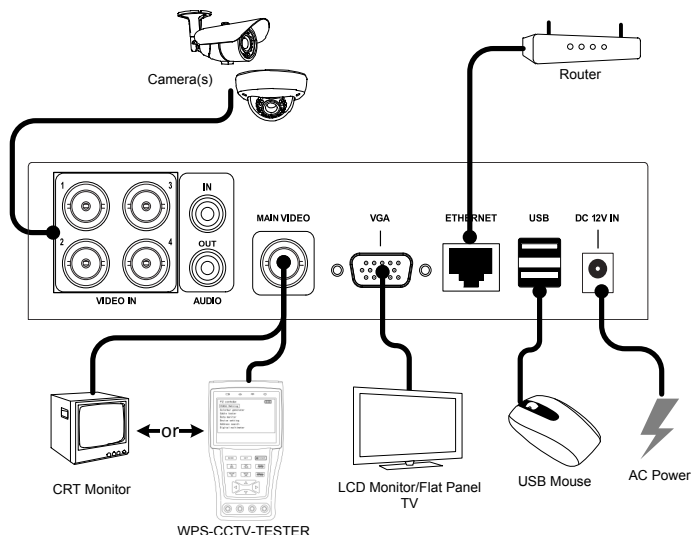
Network Setup		
Net Type	Static IP	
Static IP	IP Address	
	Net Mask	
	Gateway	
	DNS	
PPPoE	Username	
	Password	
DDNS	Type	
	URL	
	Username	
	Password	
E-mail	FTP	Advanced

1.4.2. Advanced DVR Network Configuration

- Set **Control Port** (Default 67).
- Set **Data Port** (Default 68).
- Set **HTTP Port** (Default 80).
- EXIT SETUP** and save the settings.

Advanced Network Setup	
Control Port	67
Data Port	68
HTTP Port	80
WAP Picture Quality	Normal
Video Stream	QCIF-Super fine
MAC Address 00:50:56:76:03:C4	

The ports listed are the default ports used by networks. Due to the routers configuration, these may need to be changed. See **CONFIGURE INTERNET EXPLORER FOR FIRST USE** on Pg. 3.



2.CONFIGURE INTERNET EXPLORER FOR FIRST USE

2.1. CONFIGURE THE ROUTER FOR PORT FORWARDING

Confirm the port forwarding in the router setup matches the ports you entered in **Step 4** of the **Initial Setup** above (see the **Router Setup Application Note** found in the manual on the included disc for more information).

2.2. Complete Internet Explorer Configuration

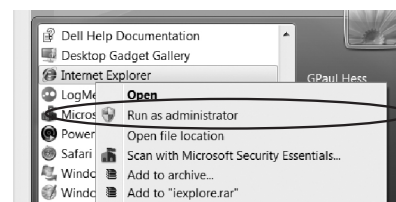
This DVR supports Internet Explorer (32bit) on a Windows platform. Before opening Internet Explorer to initially set up the DVR, the PC user must have administrator rights for the PC. **Run the Internet Explorer Browser interface as an administrator.**

A. Click on the Start Menu.

B. Find Internet Explorer and right click on the icon.

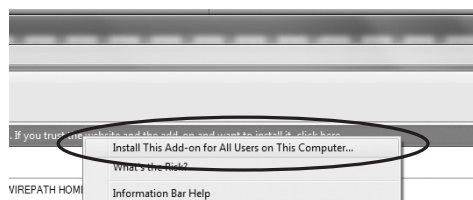
C. Select Run as Administrator.

D. In the address bar, enter the IP address assigned to the DVR in **Step 4** of the **Initial Setup**. The PC must be connected to the same network as the DVR. The address will look similar to: **http://###.###.###.###:PP/ie.htm**

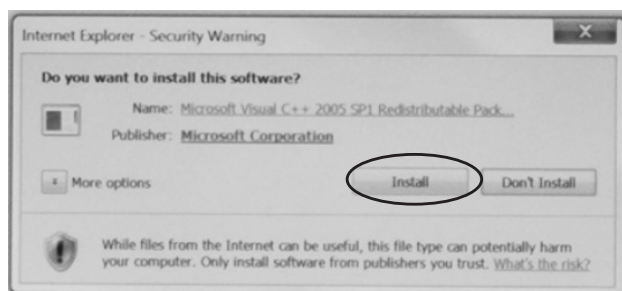


- **###.###.###.###** is the IP address entered into the DVR in **Step 4** of the **Initial Setup**.
- **PP** is the HTTP port entered into the DVR in **Step 4** of the **Initial Setup** and it must match the HTTP port forwarding set up in the router in **Step 1** above.
- **/ie.htm** is the extension for the DVR and must be included at the end of the IP address.

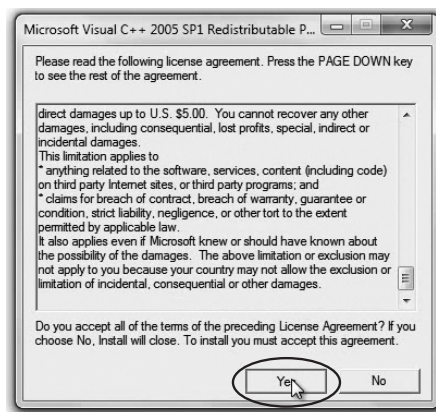
E. Once connected to the DVR, a yellow dialogue box will appear at the top of the IE window regarding the add-in. Right click on the yellow box at the top of the page and select **Install This Add-on for All Users on This Computer**.



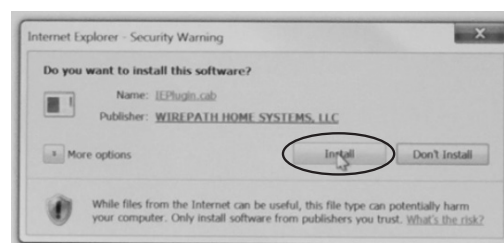
F. The web page will load and launch an Install request to install software. Select **Install**.



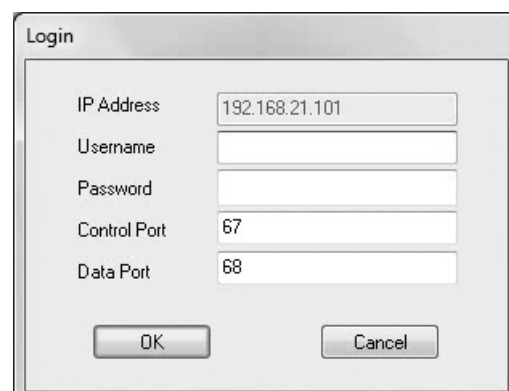
G. Select Yes to agree to the license.



H. Select Install to install the .cab file.



I. Enter the Username and Password for the DVR (see **Step 3** in the Initial Setup). Confirm the Control and Data Port settings are populated with the correct port numbers entered in **Step 4** of the Initial Setup.



J. The Internet Explorer user interface will be shown as below:

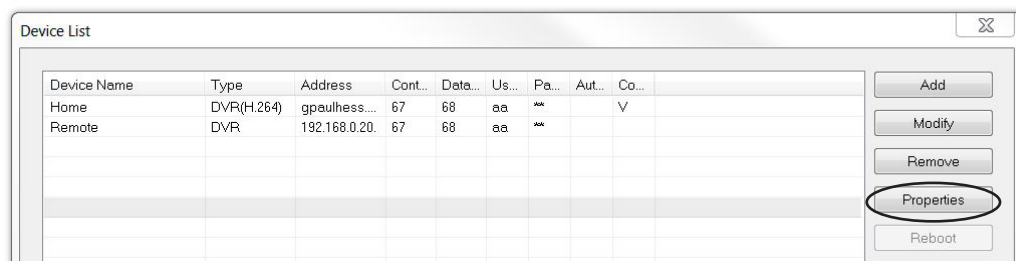


Recommendation: If using a private computer, save the DVR address to the Favorites and Trusted Sites lists to easily connect to the DVR. It is also recommended to "drag" the web address to the desktop to create an icon to directly connect to the DVR.

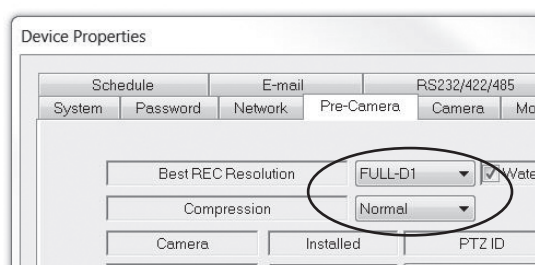
3. CONFIGURE RESOLUTION AND VIDEO STREAMING

A. Select the **Device Config**  icon from the Internet Explorer browser user interface.

B. In the **Device List**, select the appropriate DVR you want to connect to from the list and click on **Properties**.



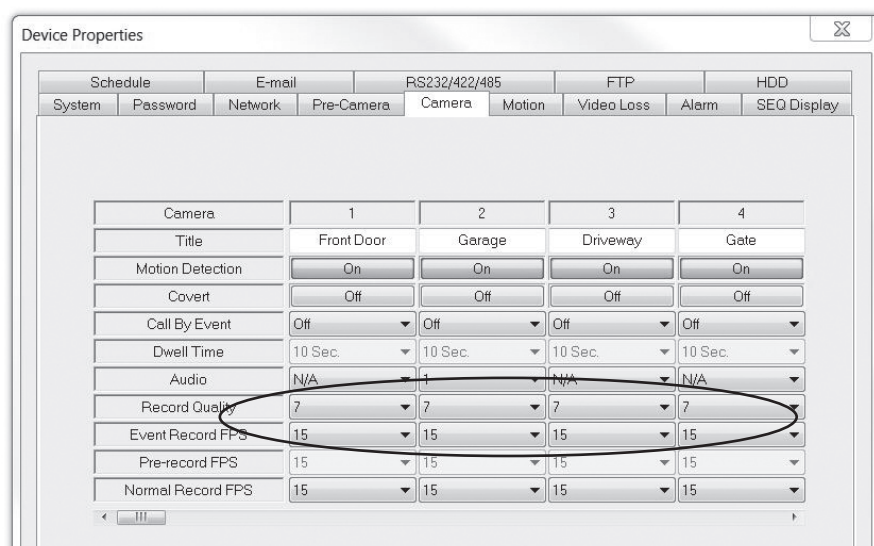
- Use the **Pre-Camera** tab to set **Record Resolution** and **Compression** - **Best REC Resolution** – How the DVR records the video depends on the internal hard drive. Options include:
 - CIF = 360x240 (Lowest Resolution, but offers the maximum amount of HDD storage)
 - Half D1 (2CIF) = 720x240
 - Full D1 (4CIF) = 720x480 (Highest Resolution, but offers the minimum amount of HDD storage)
- **Compression** – Its recommended to keep the default “Normal” setting to the default of **Normal** as it offers the least amount of compression and streams video at the highest resolution.



- Use the **Camera** tab to name the cameras, adjust the record quality, and set the Frames Per Second.

- **Record Quality** – Options are a scale of 1-9. The higher the number, the higher the quality of the recording.
- **Frames per Second (FPS)** – Set the FPS for each camera individually.

Note: The total FPS for all cameras cannot exceed DVRs maximum frame rate for the selected resolution.



Set the **Video Stream** in the **Network** tab. Video Stream is the quality of the video viewed remotely through Internet Explorer or on a Smartphone. This does not affect the quality of video being recorded to the DVR. Options include:

Record – This matches the quality of the video in the settings made in the **Pre Camera** tab. Typically, this is higher quality, but based on the bandwidth capability of the network, the refresh rate of the image may be slow.

QCIF – This setting will enable Dual Streaming for IE and Smartphones, and will improve the refresh rate of the video. It is recommended that this is set to **QCIF Super Fine** – Best QCIF Resolution.

The screenshot shows the 'Device Properties' window with the 'Network' tab selected. The 'Video Stream' dropdown menu is highlighted with a red circle, showing 'QCIF - Fair' selected. Other visible settings include 'Static IP' with IP Address 192.168.0.20, Net Mask 255.255.255.0, Gateway 192.168.0.1, and DNS 192.168.0.1. The 'WAP Picture Quality' is set to 'Superfine'.

3.1.1. Recommended Settings for typical networks

Connection Type	Fiber /Cable	DSL / 3G	Smartphone
Record Setting	D1	D1	CIF
Compression	Normal	Normal	Normal
Record Quality	9	5	1
Video Stream	Record	QCIF Superfine	QCIF Fair
Notes	For the best quality video recording to the DVR and streaming to remote devices on a high speed network This setting provides the LEAST amount of record time.	For high quality video recording to the DVR and smooth motion steaming to medium speed networks	For the most efficient use of hard drive space and steaming to devices on a slow network This setting provides the MOST amount of record time.

C. To save the settings, Upload to the DVR.

The screenshot shows the bottom of the 'Device Properties' window with buttons for 'Download', 'Upload', 'Open', 'Archive', and 'Close'. The 'Upload' button is highlighted with a red circle.

D. Select Yes when asked to continue.

The screenshot shows a dialog box titled 'CMS OCX' with the following text: 'The configurations will be uploaded to the designated DVR, and then applied (except language) right away. The DVR connection will be disconnected if the associated settings are changed. Do you want to continue?'. There are 'Yes' and 'No' buttons at the bottom.

E. Close the Device Properties Menu and close the Device List.

DVR BASIC SETUP IS NOW COMPLETE

W I R E P A T H
SURVEILLANCE

120314-1628

© 2012 Wirepath Surveillance