User's Guide

plustek

Network Video Recorder

- ➢ **Setup**
- ➢ **Configuration**
- ➢ **Technical Guides**

While all efforts have been made to ensure the accuracy of all contents in this manual, we assume no liability for errors or omissions or by statements of any kind in this manual, whether such errors are omissions or statements resulting from negligence, accidents, or any other cause. The contents of this manual are subject to change without notice.

This NVR device is intended to be used in a lawful manner. Certain uses of the NVR device may be prohibited by local laws in some countries of states, such as the surreptitious recording of audio and/or video communications for certain purposes. If you have any question about whether a proposed use of your products is lawful, you should consult a local legal authority before proceeding.

The product is designed and produced to achieve sustainable environmental improvement. We strive to produce products in compliance with global environmental standards. Please consult your local authorities for proper disposal. The product packaging can be recycled.

Attention to recycling (For EU countries only)

Protect your environment! This product should not be thrown into the household waste container. Please give it to the free collecting center in your community.

The screen shots in this guide were made with Windows 7. If you are using Windows XP / Vista / 8, your screens will look somewhat different but functions are the same.

Table of Contents

Introduction

Thank you for choosing us as your NVR supplier. Like all of our products, your new NVR is thoroughly tested and backed by our reputation for unsurpassed dependability and customer satisfaction. We hope you will continue to turn to us for additional quality products as your computing needs and interests grow.

How to Use This Guide

This User's Guide provides instructions and illustrations on how to setup and configure your NVR. This guide assumes the user is familiar with Microsoft Windows. If this is not the case, we suggest you learn more about Microsoft Windows by referring to your Microsoft Windows manual before using your NVR.

The **Introduction** section of this manual provides an outline of this manual, and describes the minimum system requirements, the main features and box contents.

Chapter I describes how to set up basic NVR and IP Camera system in the network environment.

Chapter II describes how to log in to the NVR interface and the NVR viewer window operations.

Chapter III provides you with plenty of illustrations and information about advanced configuration of the NVR. You may get familiar with it and try out all functions provided with the NVR.

Chapter IV provides useful technical information and usage tips.

Appendix A covers the glossary that may help you to know more about the network and network devices.

Appendix B contains our customer service, limited warranty agreement and FCC statement.

Conventions of This Guide

"XXX" — Represents commands or contents on your computer screen.

Bold — Represents important notes.

A Note about Icons

This guide uses the following icons to point out information that deserves special attention.

 Warning: A procedure that must be followed carefully to prevent injury, or accidents.
Warning

 Attention: Instructions that are important to remember and may prevent mistakes.
Attention

 Information: Optional tips for your reference.
Information

Safety Precautions

Before using this device, please read the following important information carefully to eliminate or reduce any possibility of causing damage and personal injury.

1. Do use the AC adapter that comes with this device (if it is available). Use of other AC adapters may lead to malfunction, hard disk damage, overheating, electrical shock, fire or injury.

2. Keep the space around the adapter clear in case you need to quickly unplug the adapter during emergencies.

3. Keep the NVR protected from liquids.

4. Do not install the device near any heat sources such as radiators or other devices. Install the device only in environments that meet the factory specifications.

5. Ensure that the NVR is properly secured to a stable surface. Major shocks, jolts and/or excessive vibration may damage the sensitive electronics inside the NVR.

6. Ensure there is ample room for any cables leading to and coming from the NVR.

7. Use only attachments/accessories such as cover and plates specified by the manufacturer.

8. Do not touch the unit or the AC adapter when they are powered on.

9. Unplug the device if you don't need to use it for a certain period of time to avoid any risks of causing fire.

10. Do not disassemble the NVR case. This device contains no user-serviceable parts. Leave servicing to qualified personnel.

11. Do not remove the NVR's hard disk(s) while the device is still turned on and operating. Please make sure the power is disconnected from the NVR or your hard disk may be damaged.

12. Please contact your distributor to obtain a list of compatible IP cameras.

13. Damaged wire could cause fire or electrical shock. Keep the power cord straight and without twisting, bending or scraping it.

14. Moisture condensation may occur inside this device and cause malfunction under these conditions:

    - When this device is moved directly from a cold to a warm location.

    - After a cold room is heated.

    - When this device is placed in a damp room.

    To avoid moisture condensation, you are recommended to follow below procedure:

    - Seal this device in a plastic bag for it to adapt to room conditions.

    - Wait for 1 ~ 2 hours before removing this device from the bag.

15. Avoid excessive smoke, mechanical, dust, or direct sunlight.

16. Do not incorrectly replace the battery on the Server main board. There is risk of explosion if the battery is replaced with an incorrect type. Dispose of used batteries according to the instructions.

Information The mark shown to the left is in compliance with the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE). The mark indicates the requirement NOT to dispose the equipment as unsorted municipal waste, but use the return and collection systems according to local law. If the batteries, accumulators and button cells included with this equipment, display the chemical symbol Hg, Cd, or Pb, then it means that the battery has a heavy metal content of more than 0.0005% Mercury, or more than 0.002% Cadmium, or more than 0.004% Lead.

Main NVR Features

- Easy one-push button for quick installation
- Easy remote accessibility via Plustek EasyLink® & UDID (Unique Device Identification)
- Effective video preview over Internet via Plustek Dual-Stream Recording Technology®
- Intuitive and powerful playback functions for investigation
- Alarm View for alarm monitoring and instant playback

Minimum System Requirements[1]

The NVR is recommended to work with personal computer or network that meets the following requirements:

| Operating System	Microsoft Windows XP / Vista / 7 / 8
CPU	Intel Core 2 Duo, 2.6GHz or above
Web Browser	Microsoft Internet Explorer 9.0 or above[2], Chrome, FireFox
RAM	1 GB or above
Network	10/100/1000 Mbps (RJ-45)

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[1] The system requirements here are only a guideline, as in general the better the computer (motherboard, processor, hard disk, RAM, video graphic card), the better the results.
[2] The program is available with Microsoft Windows and therefore is not included in the Setup/Application CD-ROM of this product.
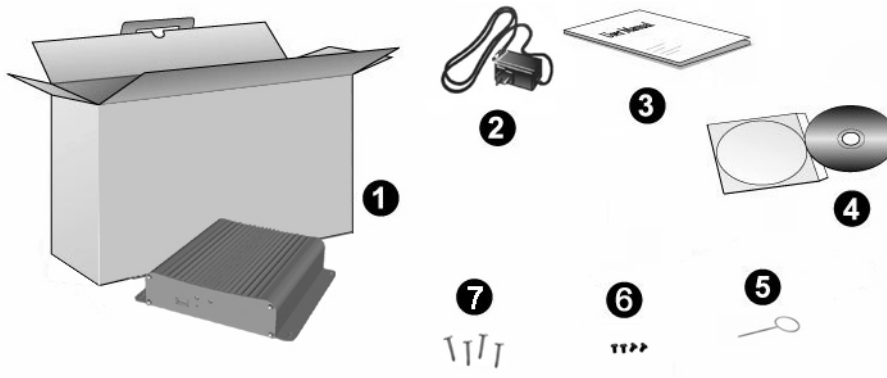
Box Contents[3]

Before you start installing your NVR, check the box contents to make sure all parts are included. If any items are damaged or missing, please contact the vendor where you purchased your NVR or our customer service directly.

NVR X840P / X880P / X888P
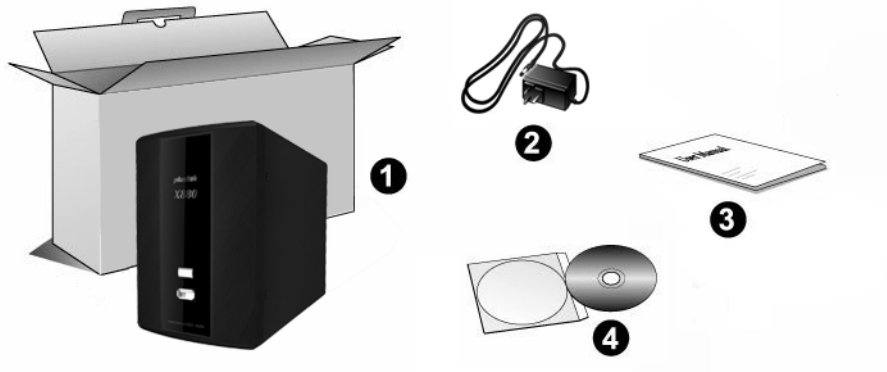
1. NVR
2. AC Adapter
3. Quick Guide
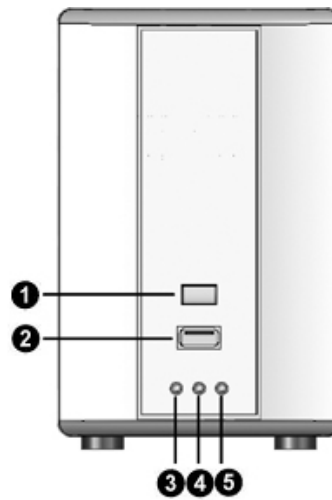4. Installation CD

NVR Slim388Pro / Slim380Pro

1. NVR
2. AC Adapter
3. Quick Guide
4. Installation CD
5. MFB (Multi-Function Button) Pin / Reset Pin
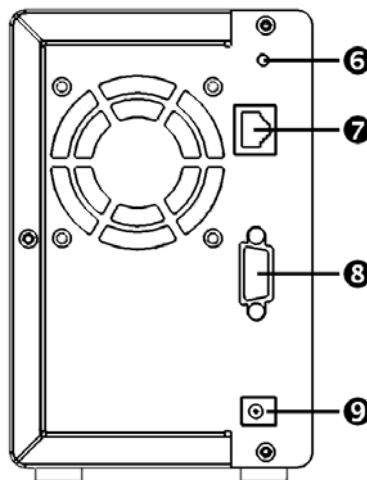6. Hard Disk Screws x 4
7. Device Mounting Screws x 4

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[3] Save the box and packing materials in case you need to transport this NVR in the future. The product packaging can be recycled.

Overview

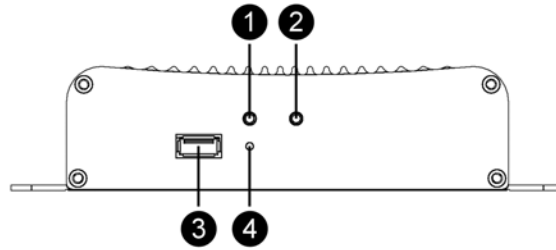## NVR X840P / X880P / X888P

1. Multi-Function Button
2. USB Port
3. Power/Status Indicator
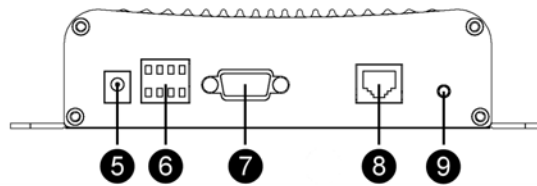4. HDD2 Indicator[4]
5. HDD1 Indicator

6. RESET Hole
7. LAN Port
8. VGA Port
9. DC-Jack

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[4] This function may or may not be available depending on the NVR model you purchase.

NVR Slim388Pro / Slim380Pro

1. Power/Status Indicator

2. HDD Indicator

3. USB Port

4. MFB (Multi-Function Button) Hole

5. DC-Jack

6. GPIO terminal

Pin (from left to right, top to bottom row)	Function
1 (Output 2)	Output 2
2 (Output 1)	Output 1
3 (Input 2)	Input 2
4 (Input 1)	Input 1
5 (Ground)	Ground
6 (Console)	Console
7 (Console)	Console
8 (Console)	Console

7. VGA Port

8. LAN Port

9. RESET Hole

Chapter I. Setup the NVR

Before you setup the NVR, please make sure all components are available and ready. A list of the package contents is provided in the Box Contents section of this guide. If any items are damaged or missing, please contact the vendor where you purchased your NVR or our customer service directly.

Attention	Please make sure a hard disk is installed in the NVR before you use the NVR system.

Setup the NVR System
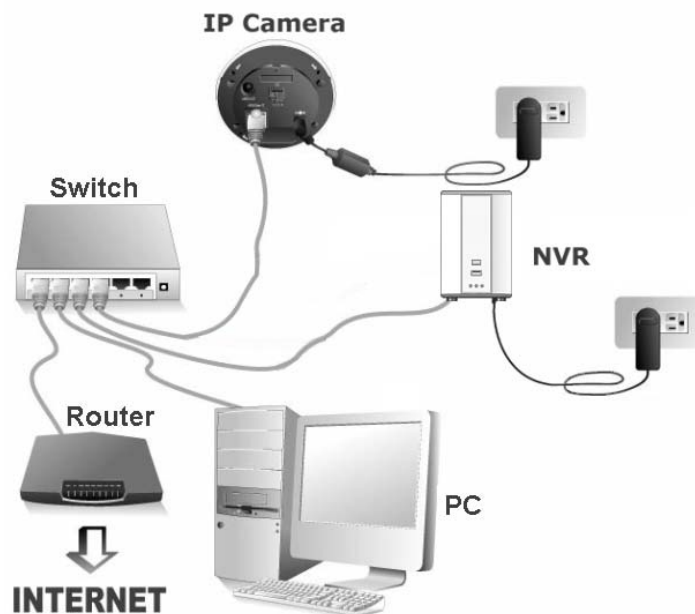
To set up the NVR system in your LAN environment:

Attention	Please properly configure the IP addresses of the NVR and the IP cameras before connecting to the Switch. For example, assuming the NVR's IP address is 192.168.10.1, an IP camera's address should range from 192.168.10.2~240.

1. Connect IP cameras to the Switch's LAN port.

2. Plug the RJ-45 connectors into the NVR's LAN port and the Switch's LAN port.

3. Plug the AC adapter into the DC-Jack of the NVR. Plug the other end of the power cable into a standard AC power outlet. After the NVR has booted, it will beep three times and the HDD indicator will blink slowly to indicate that the hard disk has not yet been formatted for use.

   Note: If no hard disk is installed when the NVR is powered on, the NVR will beep every 10 seconds and the HDD indicator will blink slowly.

4. Press and hold the "Multi-function" button on the front panel of the device for 3 seconds to begin the fully automatic setup of the NVR. The hard disk will be formatted first. The HDD indicator will blink quickly to indicate that the hard disk format is in process.

5. The NVR will beep twice when the format process is finished and the status indicator will blink quickly. The NVR will now add all available IP-cameras in your network to the NVR automatically. When the cameras are added, the NVR will reboot, indicated by a long beep.

   Note: The IP-cameras need to be in their factory default configuration for automatic setup to work.

6. Connect a PC or Laptop to the Switch's LAN port.

7. Insert the Installation CD, included with your NVR, into your CD-ROM drive.

8. Double click the "vcredist_x86.exe" file in your language on the CD-ROM to install the "Microsoft Visual C++ 2008 SP1 Redistributable Package (x86)". **Attention**: If you are running on Windows XP / 8, you must install this patch before you can start monitoring. Otherwise please proceed with the next step.

9. Run the "Network Device Search Tool" application on the CD-ROM to search for NVRs.

10. Your NVR works properly when the NVR appears in the Network Device Search Tool window.

11. Double-click on your NVR. The NVR's login page should be opened automatically. Enter the NVR's "Username" and "Password" and change the "Language" if necessary, then click on the "Login" button to log in to the NVR. The "admin" and "admin" are the default user name and password for your first login of the NVR as Administrator. If you are prompted to install an element required to view the live view page of the NVR, please follow the on-screen instructions to install the element.

Username	admin
Password	•••••
Language	English	Login
	☑ Remember the settings

Chapter II. Getting Started with the NVR

Log in to the NVR

Log in to the NVR - Method I. - by using the Network Device Search Tool Application

The Network Device Search Tool is an application that can detect Plustek NVR(s) that are connected to an organization's network or your PC.

1. Insert the Installation CD into your CD-ROM drive.

2. Open the "SearchTool" folder on the Installation CD and double-click on "Plustek_Network_Device_Search_Tool.exe".

3. The Network Device Search Tool window is displayed.

 Attention	Depending on your LAN environment (DHCP or Static IP), you may want to configure the NVR's network settings at this point. Contact your network administrator for the correct values to enter, then enter a valid "Account" / "Password" before clicking "Submit".

4. Select and double click on the desired NVR.

5. The System Login page appears on the screen. You may choose the system language from the drop-down list.

 Information	The NVR interface uses ActiveX controls. Should you get any error messages when opening the page, please ensure that ActiveX controls are enabled and allowed.

6. When you log in to your NVR for the first time, enter "admin" as your user name and "admin" as your password.

7. Click "Login" to enter the system.

Log in to the NVR - Method II. - by using the Internet Explorer (IE)

When you connect the NVR to the LAN with a static IP address, you may log in to the NVR by directly entering the IP address in the IE Address Bar.

1. Start the Internet Explorer, enter the IP address of the NVR in the IE address bar, and press "Enter" on the keyboard to launch the System Login page.

2. The System Login page is displayed. You may choose the system language from the drop-down list.

3. Enter "admin" as your user name, "admin" as your password and click "Login".

Log in to the NVR - Method III. - by using EasyLink and UDID

The EasyLink program allows you to easily connect to your NVR from any computer using the NVR's **U**nique **D**evice **Id**entification (UDID).

1. Connect a USB drive to the NVR.

2. Press the "Multi-function" button.

3. The NVR will beep and copy the files required to establish a connection via EasyLink to the USB drive (including a .bmp file containing a QR-code image with the UDID).

4. The NVR will beep twice to indicate that the files have been copied successfully. Please wait 5 seconds before removing the USB drive from the NVR, and then connect it to any desired computer.

5. Launch the EasyLink.exe file on your USB-drive. The UDID will be loaded automatically. If you are prompted to allow the program through the Windows Firewall, please click on the "Allow access" button to allow it.

6. Click on the "Create Tunnel" button.

7. Click on the "Connect" button. The NVR's login window will open in your default web browser.

	• The connection dialog of the EasyLink program has to be kept open when using this method to connect to your NVR. If you accidently close the EasyLink program, just launch it again and click on the "Create Tunnel" button to continue using your NVR. • If the NVR system times out due to inactivity, you need to close and re-launch the EasyLink program. Then click on the "Create Tunnel" button to continue using your NVR. • When you are done using the NVR, click on the "LogOut" button on the NVR homepage, then click on the "Close" and "Exit" button in the EasyLink program.
Attention	

Easy Accessibility with EasyLink and UDID

The EasyLink program allows you to easily connect to your NVR from any computer using the NVR's **U**nique **D**evice **Id**entification (UDID).

How to obtain the UDID

Method I – by using a USB drive

1. Connect a USB drive to the NVR.

2. Press the "Multi-function" button.

3. The NVR will beep and copy the files required to establish a connection via EasyLink to the USB drive (including a .bmp file containing a QR-code image with the UDID).

4. The NVR will beep twice to indicate that the files have been copied successfully. Please wait 5 seconds before removing the USB drive from the NVR.

Method II – by using a mobile device

1. Scan the QR-code on the side or bottom of the device with your mobile device to obtain the 20-digit UDID.

   Note: An application capable of scanning QR-codes is required

Method III – by using a computer

1. Log in to your NVR using the IP address of the NVR and open the "Setup" > "System" > "Status" page. The UDID will be listed there.

2. Write down the UDID.

Connect to your NVR from any computer using EasyLink and UDID

1. Visit our website to download the EasyLink setup program or insert the installation CD into your CD-ROM drive. Launch the setup program to install the EasyLink program. If you used the USB drive method to obtain the UDID, connect it to your computer.

2. Launch the EasyLink program from the shortcut from your desktop. If you used the USB drive method to obtain the UDID, launch the EasyLink.exe file on your USB drive. If you are prompted to allow the program through the Windows Firewall, please click on the "Allow access" button to allow it.

3. Enter the 20-digit UDID into the UDID field. If you used the USB drive method described earlier, the UDID will be loaded automatically. Enter the HTTP port number if needed. The default port number is 80.

4. Click on the "Create Tunnel" button.

5. Click on the "Connect" button. The NVR's login window will open in your default web browser.

6. Enter the NVR's "Username" and "Password" and change the "Language" if necessary, then click on the "Login" button to log in to the NVR.

<table>
<tr>
<td><img> Attention-
Attention</td>
<td>The connection dialog of the EasyLink program has to be kept open when using this method to connect to your NVR. If you accidently close the EasyLink program, just launch it again and click on the "Create Tunnel" button to continue using your NVR.
If the NVR system times out due to inactivity, you need to close and re-launch the EasyLink program. Then click on the "Create Tunnel" button to continue using your NVR.
When you are done using the NVR, click on the "LogOut" button on the NVR homepage, then click on the "Close" and "Exit" button in the EasyLink program.</td>
</tr>
</table>

NVR Viewer Windows

Live

Click the "Live" button at the top right corner to display the live view page. The "Live" page will show the camera screens, displaying the live video stream captured by the cameras. For 4-channel models, the live view page will be split into 4 even windows; for 8-channel models, the live view page will be split into 1+7 windows, where window 1 is called the "focus" window and will be streamed at the highest resolution, while the 7 smaller windows will be streamed at low resolution to conserve bandwidth. The yellow frame indicates the selected camera channel. Click on the gray title bar on top of each window to select that channel. There are a few lights in the top-right corner of each window to indicate the channel status. The red light ⬤ indicates that the video stream is being recorded. The walking man 🚶 indicates that an alarm is being triggered.
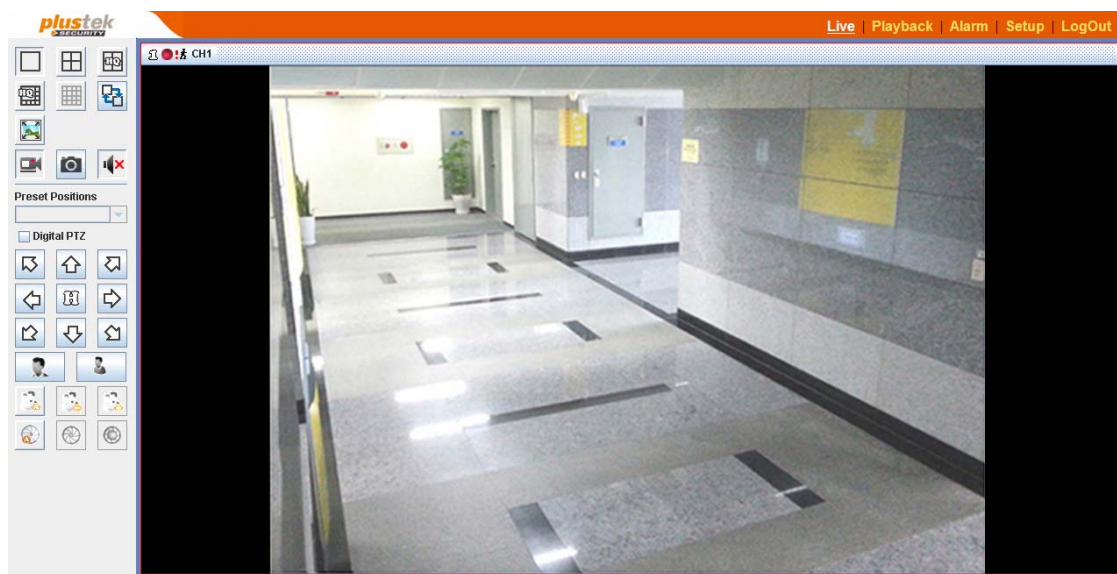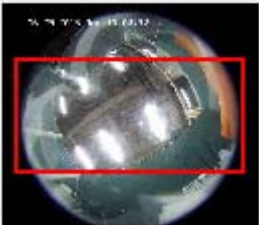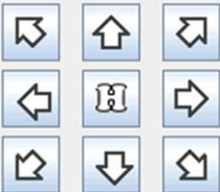
Toolbar functions[5]

The buttons in the Toolbar and their respective functions are shown in the following table:

Button	Function
⬜	Click this button to display one channel at a time.
⊞	Click this button to display 4 channels at a time.
田HQ	Click this button to display 4 channels at a time in higher video quality. It is recommended to only use this mode in an Intranet environment since displaying 4 channels in high quality requires more network bandwidth.

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[5] The following functions are available only when the connected IP Camera is supported.
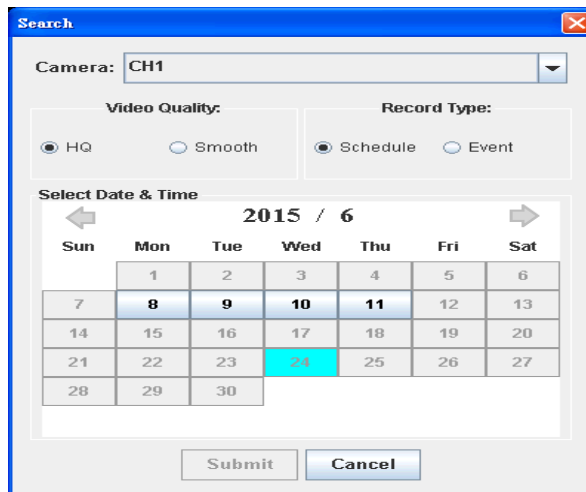
	Click this button to display 8 channels at a time in a 1+7 configuration. Window 1 will be streamed at the highest resolution, while the 7 smaller windows will be streamed at low resolution to conserve bandwidth (This function may or may not be available depending on the NVR model you purchase.)
	Click this button to switch to the next group of channels.
	Click this button to fit the video into each screen window.
	If currently not recording, click this button to immediately start the recording process. Click this button again to stop the recording process.
	Click this button to capture a snapshot of the channel. A note will be displayed to tell you the folder and filename the snapshot was saved under. You may open the folder and find the snapshot image.
	Click this button to mute the selected channel.
Preset Positions P2 ▼	Select the preset position from the drop-down list to move to the predefined position of the supported camera. Please go to the "Setup" page and click on "Camera", "Channel" tab to create the drop-down list options in advance.
☑ Digital PTZ 	Tick the check box to perform pan, tilt, and zoom operations digitally by moving the mouse pointer on the 1x1 viewer window of the selected channel. Select the desired channel and click ☐ to make that window the focus window. Click 👤 to zoom in and move the mouse pointer on the viewer window to perform digital PTZ operations.
	If you are using a PTZ network camera, the PTZ Setting button will be activated. Click on the button to make PTZ adjustment of the camera. By PTZ control, you may focus the network camera to a desired position. Click these arrow buttons to adjust the direction of the camera lens. Click 🏠 to reset the camera to its home position.
	Click this button to zoom in.
	Click this button to zoom out.
	Click this button to automatically adjust lens focus.

	Click this button to focus near.
	Click this button to focus far.
	Click this button to automatically adjust Iris levels. The camera's iris (aperture) will adjust itself automatically to control the amount of light that will reach the camera sensor.
	Click this button to close the iris.
	Click this button to open the iris.

Playback

Click the "Playback" button at the top right corner to display the records playback page.

1. The "Search" dialog appears. Clicking the button will also open this dialog window.

    - **Select Date**

        Click on the date you want to review in the calendar. The dates with video records are displayed in bold fonts.

    - **Camera**

        Select the camera to play back its video footage.

2. Select the options of the "Video Quality" and "Record Type" to submit the search conditions.
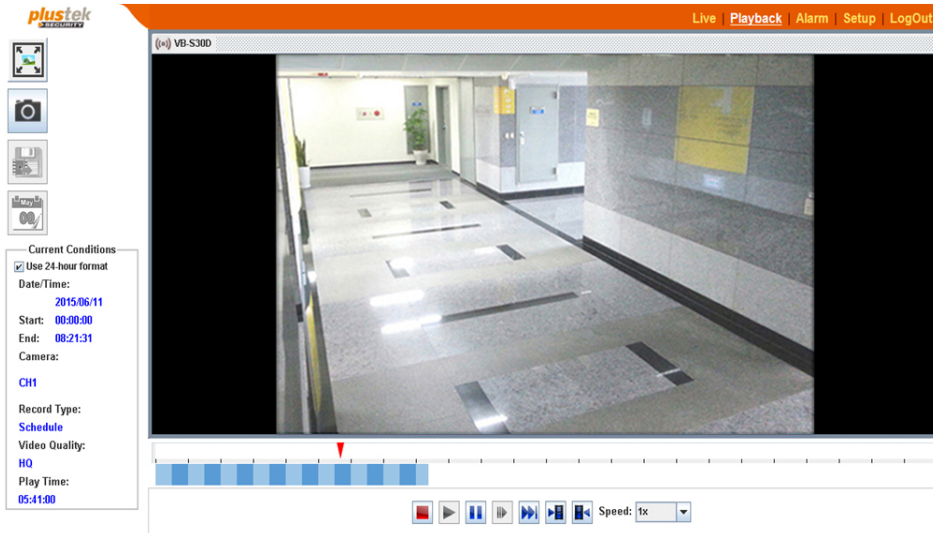
3. Click the [button] button to export the selected record. The "Video Export" dialog appears. Enter the desired "Start Time" and "End Time" then click "Export" to export the selected record. Tick the checkbox of "Use 24-hour format" to display in 24-hour format. You can cancel an ongoing export operation by clicking on the "Stop" button. Tick the checkbox of "Post Time Information on Video" to display time on the video. You can specify an export folder by clicking on the "…" button, then selecting the desired folder in the dialog that appears. Click on the "Exit" button to close the "Video Export" dialog.
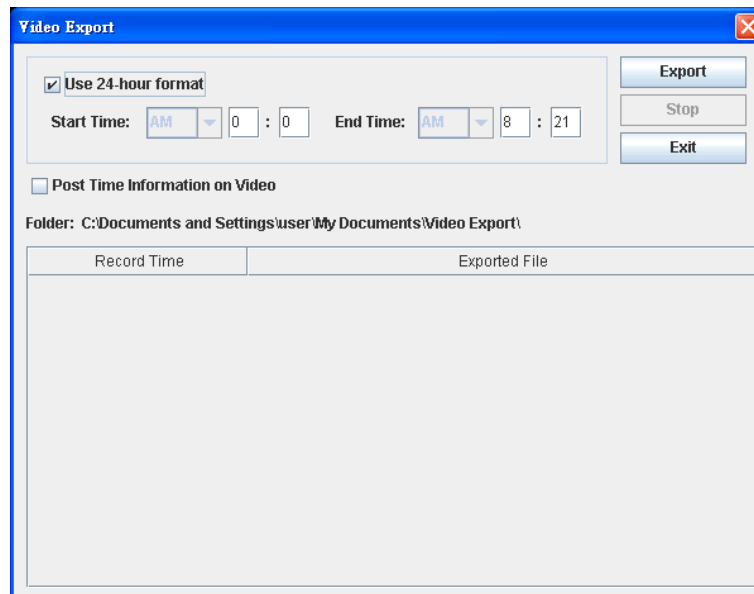
4. Click the [button] button to take a snapshot of the currently displayed image.

5. Click the [button] button to switch to full screen mode. Click this button again or press the "Esc" button on your keyboard to exit the full screen mode.

6. Click the buttons at the bottom of the playback window to control the video playback. The buttons and their respective functions are shown in the following table:
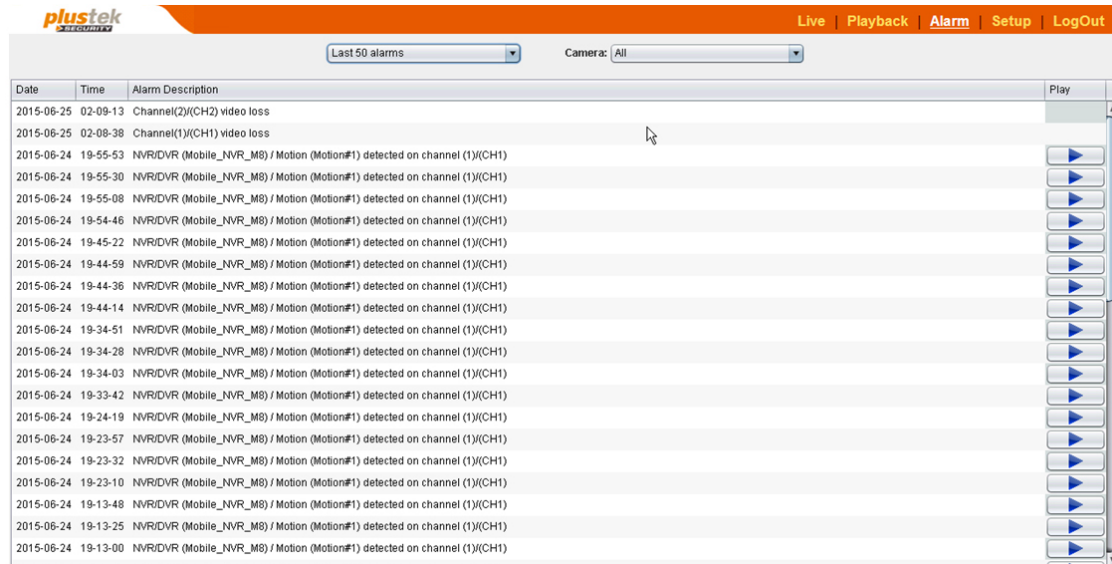
■	Stop
▶	Play
❚❚	Pause
▮▶	Move forward to next frame (frame by frame)
▶▶▮	Fast Forward
▶▮	Event recording: Jump to the next section of the selected recording. Schedule recording: Jump 5 minutes forward.
▮◀	Event recording: Jump to the previous section of the selected track. Schedule recording: Jump 5 minutes backwards.

7. In the status bar area under the control buttons, you may move the ▼ button to a desired location to playback from that point. Also, you may select the speed option from the drop-down list to change the playing speed as needed.

Speed: 1x ▼

Alarm[6]

Click the "Alarm" button at the top right corner to display the alarm records page. You may select to display the "Last 50 alarms", "Last 100 alarms", "Last 200 alarms", "Last 500 alarms" or "All alarms" from the drop-down list. You may use the "Camera" drop-down list to only display one channel's alarm records. Click the [▶] button to playback a desired alarm record.

Log out of the NVR

To exit the NVR page, click the "Logout" button at the top right corner of the NVR's main page.

Attention	Please do NOT click on the [✕] button on the Internet Explorer window to exit the NVR. Clicking on the [✕] button will not change the logged-in status of the user.

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[6] This function is available with XPERT series products.

Chapter III. Advanced NVR Configuration

The administrator has the right to access all the NVR functions and can make advanced configurations for the NVR according to the special requirements.

To enter the Setup settings page:

1. Click the "Setup" button at the top right corner to display the advanced configuration page. The left side of the page shows the configuration menu. There are 7 menus available: "System", "Network", "Camera", "Recording", "Event", "Management" and "Logs".

2. Click on each menu item to enter the sub-menus. You may configure the settings according to your special requirements.

The following individually describes the menus and the related settings.

System

Status

SYSTEM	Current Version : 3.1.0.0 (3.0.0.18)	Setup
Device Name	Office@Paris	
UPnP	Enable	
UDID		

NETWORK		Setup
MAC	00-15-8e-30-0b-86	
Connection Type	DHCP	
IP Address	10.1.0.49	
Subnet Mask	255.255.0.0	
Default router	10.1.100.1	
Primary DNS	10.1.1.30	
Secondary DNS	10.1.1.11	

SERVICES		Setup
SMTP	Disable	
FTP	Disable	
DDNS	Disable	
Port Forwarding	Disable	

Hard Disk		Setup
Size	320 GB	
Usage	0%	

Driver	
Camera Driver	General Camera 3.0.6.1 Allnet Network Camera 3.0.6.3 Axis Network Camera 3.0.6.1 Brickcom Network Camera 3.0.6.18 Canon Network Camera 3.0.6.7 D-Link Network Camera 3.0.6.6 Dynacolor Network Camera 3.0.6.1 EDiMAX Network Camera 3.0.6.12 EtrovisionV2 Camera 3.0.6.6 Messoa Camera 3.0.6.5 Onvif Camera 0.9.0.0 Panasonic WV Network Camera 3.0.6.10 Plustek_vs 3.0.6.5 Sony Network Camera 3.0.6.3 Vivotek Network Camera 3.0.6.21 Zavio Network Camera 3.0.6.4

View the current NVR status

Go to the "Setup" page and click on "System", "Status" tab, and the current status of the NVR will be displayed.

You can alter some of the settings shown in this section from other menu items. You may click the **Setup** button to configure each setting.

Server

Device Name	Office@Paris
Video-Out	☐ Enable
UPnP	
UPnP Service	☑ Enable

Save   Cancel

Configure the server settings

Go to the "Setup" page and click on "System", "Server" tab and you may configure the server settings. You may define the "Device Name" of the NVR you use, e.g. Office@Paris.

Enable Video-Out:

Check "Enable" if you want the NVR enable the hardware VGA video-out port. You will be able to connect a VGA monitor to the VGA port for direct viewing of all live streams.

Note: Channels will be streamed at lower resolution to conserve NVR system resources. It is recommended to disable this feature when you are not using it.

Enable UPnP:

Check "Enable" if you want the NVR to act as a UPnP device. You will be able to visit the NVR from "My Network Places".

Click the "Save" button to save the settings.

Date/Time

System Time	2013/08/13 10:6:41
Set Time Zone	
Time Zone	(GMT-08:00) Pacific Time (US & Canada); Tijuana
☑ Automatically adjust for daylight saving time changes.	
Save Cancel	

Time Synchronization Method		
⊙ NTP Server		
	⊙ time.windows.com	
	○	(host name or IP address)
○ Computer Time	Date : 2013 / 8 / 13	Time : 10:3:52
○ Set manually	Date : ___ / ___ / ___	Time : ___ : ___ : ___
Save Cancel		

Set the Time Zone:

1. Go to the "Setup" page and click on "System", "Date/Time" tab.
2. Select the desired Time Zone from the drop-down list.
3. Check the "Automatically adjust for daylight saving time changes" option if needed.
4. Click the "Save" button to save the settings.

Set the Time Synchronization Method:

1. You may set the NVR date and time using any of the following three ways:
   a. Synchronize the NVR date and time with a NTP (Network Time Protocol) server. Select the NTP Server you want to use.
   b. Synchronize the NVR with the computer time.
   c. Manually set the Date and Time by entering the Date and Time in the blanks.
2. Click the "Save" button to save the setting.

Maintenance

Current Version :3.5.0.4 (3.0.0.1)		
Update firmware		
Specify the firmware to upgrade to : [____] [Browse...] Note : Do not disconnect power to unit during the upgrade . The unit restarts automatically after the upgrade has completed .		[Upgrade]
Backup settings		
Save all parameters and user-defined scripts to backup file.		[Backup]
Restore settings		
Use a saved backup file to return the unit to a previous configuration specify the backup file to use : [____] [Browse...]		[Restore]
Reset to default		
Reset all parameters to the original factory settings ☑ Except network settings (By ticking this check box, the preset network settings will not be changed.)		[Reset]
System restart		
Restart the Device		[Restart]
Automatic Restart		
☐ Enable; restart everyday at [12] H [0] M		[Save]
System Information		
System Information		[Export]
Debug Information		[Export]

Go to the "Setup" page and click on "System", "Maintenance" tab to display the Maintenance page. On the Maintenance page, you may update or restore the firmware, backup and restore settings, reset or restart the NVR system or save the system information for technical support.

Upgrade firmware

Upgrade the firmware:

Click on the "Browse" button to select the firmware file and then click on "Upgrade" button to perform the task.

Backup settings

Backup the current settings:

Click on the "Backup" button to backup all the settings you have made in the NVR system, and a window will pop up asking you to save the backup file. You may choose a saving folder for the backup file.

Restore settings

Restore previous settings:

You may restore the NVR to previous settings by loading a saved backup file. (See the above Backup settings section for more information on how to backup system settings.)

1. Click on the "Browse" button to find the backup file you have saved.

2. Click the "Restore" button and the restoration will start automatically.

3. The system will restart after the restoration is complete.

Reset to default

Click the "Reset" button and the NVR will reset to the default factory settings. If the "Except network settings" option is checked, the settings in the [Network](#) pages will not be changed to default settings after you reset the NVR.

System restart

Click the "Restart" button to restart the NVR.

Automatic restart

Check "Enable" and enter the specific time in 24-hour time format if you want the NVR to automatic restart at the scheduled time every day. Click the "Save" button to save the restart schedule.

Export System Information

Export the system and/or debug information for technical support. Click the "Export" button to save the system and/or debug information, and send the information to our customer service for technical support.

Network

Settings

Go to the "Setup" page and click on "Network", "Settings" tab. In the Settings menu, you may configure the NVR's settings accordingly.

○ **Obtain IP via DHCP**	
● **Use the following IP**	
IP Address	10 . 1 . 0 . 49
Subnet Mask	255 . 255 . 0 . 0
Gateway	10 . 1 . 100 . 1
HTTP Port	
Port number	80
DNS	
○ **Obtain a DNS address automatically**	
● **Use the following DNS address**	
Primary DNS address	. . .
Secondary DNS address	. . .

Save   Cancel

Choose the IP assignment method:

1. Select either DHCP or static IP:
   - If the NVR is connected to a network that uses a DHCP server to assign IP address, you may select the "Obtain IP via DHCP" radio button. The NVR will automatically receive an available IP address from the DHCP server in your organization's network.

- Otherwise, you may manually set the NVR's IP address by selecting the "Use the following IP" radio button, and fill in the blanks of "IP address", "Subnet Mask" and "Gateway".

2. Enter the HTTP port number if needed. The default port number is 80.

Enter the DNS address if needed:

You may select the "Obtain a DNS address automatically" radio button to obtain the DNS address automatically. If you want the NVR to use a specific DNS server, you will need to enter at least one (Primary) DNS address.

1. Enter the IP address of the "Primary DNS Address" properly.

2. Enter the IP address of the "Secondary DNS Address" properly.

Camera

You may add and configure the settings for the IP Cameras as follows:

Channel

Channel		Name	Device Name (Source)	IP Address : Port	Status
1	○	CH1	DS-2CD6362F-I(N)	10.1.15.63:80	Connect;Record :On;Alarm:On
2	◉	CH2	VB-H41(N)	10.1.200.41:80	Connect;Record :Off;Alarm:On
3					
4					
5					
6					
7					
8					

[Edit] [Delete] [Restore] [Restart] [Motion] [Preset]

NO.	Device Name	IP Address	Port

[All Brands ▾] [Search] [Select]

[New Camera]

Vendor	Please select the vendor ▾
Device Name	
Name	
User Name	
Password	
Confirm Password	
IP Address	[ ].[ ].[ ].[ ]
WEB Port	80

☐ Enable default motion recording

Add an IP Camera

1. Go to the "Setup" page and click on "Camera", "Channel" tab.

2. Select a vendor from the drop-down list to only search for IP cameras of a specific vendor, or select "All Brands" to search for all available IP Cameras.

	The system allows you to find and add Onvif-compliant IP cameras. It does not guarantee to support all IP cameras that declare themselves as Onvif-compliant. "Restart", "Reset", "Motion" and "Text Overlay" functions will be disabled with Onvif type IP cameras.
Information	

3. Click the "Search" button, and the NVR will automatically detect and list any

available IP Camera with its "Device Name", "IP Address" and "Port".

NO.		Device Name	IP Address	Port
1	⦿	Acromedia HD Series IPCAM	10.1.0.82	80
2	○	WV-SP105 SP105	10.1.0.160	80
3	○	WV-SF336 SF336	10.1.15.36	80
4	○	Panasonic NW484	10.1.0.56	80

Onvif ⌄ [Search] [Select]   1 2

4. Click on the page icon to select a desired IP Camera. Click the "Select" button and the selected camera's information will be displayed in the following columns.

NO.		Device Name	IP Address	Port
5	⦿	SNC-RH164	10.1.13.164	80
6	○	WV-SP102 SP1021a	10.1.0.213	80
7	○	WV-SC385 SC385	10.1.1.201	80
8	○	Panasonic NF302	10.1.0.148	80

Onvif ⌄ [Search] [Select]   1 2

[New Camera]

Vendor	Sony ⌄
Device Name	SNC-RH164
Name	SNC-RH164
User Name	
Password	
Confirm Password	
IP Address	10.1.13.164
WEB Port	80
☐ Enable default motion recording	

[Add]

5. Set the "Device Name" for the IP Camera. The "Name" is of more importance as it will be used throughout the menus and the user interface of the NVR Viewer. Enter the IP Camera's "User Name" and "Password". Enter the password again in "Confirm Password". Activate the "Enable default motion recording" checkbox if desired.

Vendor	Sony ⌄
Device Name	SNC-RH164
Name	SNC-RH164
User Name	admin
Password	•••••
Confirm Password	•••••
IP Address	10.1.13.164
WEB Port	80
☐ Enable default motion recording	

[Add]

6. Click the "Add" button to add the IP Camera to the channel list. The IP Camera's connection, recording and alarm status will be shown.

Channel		Name	Device Name	IP Address : Port	Status
1	⦿	Hallway	SONY SNC-RH164(N)	10.1.13.164:80	Connect;Record:On;Alarm:Off
2	○				
3	○				
4	○				

[Edit] [Delete] [Restore] [Restart] [Motion] [Preset]

Add a new IP Camera manually

1. Go to the "Setup" page and click on "Camera", "Channel" tab.

2. Select a "Vendor" from the drop-down list. Enter the IP Camera's "Name" that will be used throughout the menus and the user interface of the NVR Viewer, the "Device Name", "IP Address", "WEB Port" "User Name" and "Password". Enter the password again in "Confirm Password". Activate the "Enable default motion recording" checkbox if desired.

Vendor	Sony ⌄
Device Name	SNC-RH164
Name	Hallway
User Name	admin
Password	•••••
Confirm Password	•••••
IP Address	10 . 1 . 13 . 164
WEB Port	80
☐ Enable default motion recording	
Add	

3. Click the "Add" button to add the IP Camera to the channel list. The IP Camera's connection, recording and alarm status will be shown.

Channel		Name	Device Name	IP Address : Port	Status
1	⦿	Hallway	SONY SNC-RH164(N)	10.1.13.164:80	Connect;Record:On;Alarm:Off
2	○				
3	○				
4	○				

| Edit | Delete | Restore | Restart | Motion | Preset |

Add a new general IP Camera manually

ⓘ **Information**	This method is intended for power users as it requires knowledge of the IP camera's RTSP URLs. Contact your IP camera's manufacturer for the correct URLs to enter.

If you have an IP camera of an unsupported vendor you can follow below instructions to add it to the NVR.

1. Go to the "Setup" page and click on "Camera", "Channel" tab.

2. Select "General Camera" from the drop-down list. Enter the IP Camera's "Name" that will be used throughout the menus and the user interface of the NVR Viewer, the "Device Name", "IP Address", "RTSP Port", "RTSP Path (main stream)", "RTSP Path (second stream)", "User Name" and "Password". Enter the password again in "Confirm Password". Activate the "Enable default motion recording" checkbox if desired.

Vendor	General Camera
Device Name	SNC-RH164
Name	Hallway
User Name	admin
Password	•••••
Confirm Password	•••••
IP Address	10 . 1 . 13 . 164
RTSP Port	554
RTSP Path (main stream)	rtsp://ip_adx/media/video1
RTSP Path (second stream)	rtsp://ip_adx/media/video1
☐ Enable default motion recording	
Add	

3. Click the "Add" button to add the IP Camera to the channel list. The IP Camera's connection, recording and alarm status will be shown.

Channel		Name	Device Name	IP Address : Port	Status
1	⦿	Hallway	SONY SNC-RH164(N)	10.1.13.164:80	Connect;Record:On;Alarm:Off
2	○				
3	○				
4	○				

Edit Delete Restore Restart Motion Preset

Change the IP Camera information

Channel		Name	Device Name	IP Address : Port	Status
1	⦿	Hallway	SONY SNC-RH164(N)	10.1.13.164:80	Connect;Record:On;Alarm:Off
2	○				
3	○				
4	○				

Edit Delete Restore Restart Motion Preset

1. In the channel list, you may select the IP Camera by clicking the respective radio button.

2. You may click the "Edit" button to edit the information of the IP Camera.

3. You may click the "Delete" button to delete the IP Camera.

4. You may click the "Restore" button to reset the IP Camera to its factory default values.

5. You may click the "Restart" button to restart the IP Camera.

6. You may click the "Motion" button to set the motion detection window and the event settings.

7. You may click the "Preset" button to set the drop-down list options of Preset Positions in the live view window.

Motion Detection

Set motion detection conditions for each camera:

> **(i)** **Information**
>
> If you activated the "Enable default motion recording" checkbox when adding a camera on the "Setup" > "Camera" > "Channel" page, a full-screen detection window + event will already be created for you.

1. Go to the "Setup" page and click on "Camera", "Channel" tab.

2. Select the desired camera from the channel list and click the "Motion" button.

3. On the "Motion Detection" page, select a desired Motion Window to configure its settings.

   - If you do not see any motion detection frame in the camera window, click the "New" button on the "Motion Detection" page. A blue motion detection frame will be created and you may configure its settings.

   - If you see motion detection frames in the camera window, select a "Motion Windows" from the drop-down list on the "Motion Detection" page. The motion window will be activated with blue borders and you may configure its settings.

4. Drag the blue borders of the active Motion Window to define the window shape, size and position.

5. Enter the "Name" that will be used throughout the menus and the user interface of the NVR Viewer.

6. In the "Detection Method" drop-down list, select "Included" if you want to detect the motion of the area within the frame, or "Excluded" if you want to detect the motion of the area outside the frame.

7. Adjust the sliders to define:

- The "Sensitivity" of the color and luminance difference that will trigger the motion detection.

- The "History" – the duration an object has to stay within the motion detection frame to trigger the motion detection.

- The "Object Size" that will trigger the motion detection.

8. Check "Display All Windows" to display all the motion windows in the camera view. Uncheck the option if you only want to see the active motion window.

9. Click the "Delete" button to delete the active motion window.

10. Please make sure to click the "Apply" button in order to save the changes you have made.

11. You may click the "Test" button to test the motion detection settings. Click the "Stop" button to stop the testing. Click the "Finish" button to bring you to the event wizard.

	The Motion Detection settings for a camera will not take effect until you configure Motion Detection as an Event Trigger for the camera. Please refer to the Channel section for more information.
Information	

Video

CH1	
Image Appearance	
Video format	H.264
Resolution	1280x1280
Quality	Normal
Frame rate	10 fps
Text Overlay (Note: it may be disabled depends on camera's capability)	
☑ Include date / time	
☐ Include text	Hikvision
Place text/date/time at	---
Local Video Output	
☑ Disable (Note: in the case that a camera provides single-stream with resolution is larger than 1280x720, it shall always be disabled.)	

Save   Cancel

Set video display:

1. Go to the "Setup" page and click on "Camera", "Video" tab.

2. Select the camera you want to adjust the video settings for from the drop-down list.

3. In "Image Appearance" section, you may adjust the Video format, Resolution, Quality, and Frame rate of the video image displayed by the camera.

4. In the "Text Overlay" section, you can add some text information to the video image, such as date/time and/or a text title. You may choose to have the information displayed at the top or bottom of the image by selecting the respective option from the drop-down list. The text information will be shown in the live view, on snapshots and recorded videos.

5. In the "Local Video Output" section, you can add tick the check box to disable local video output function.

6. Click the "Save" button to save the settings.

Estimate recording capacity:

Actual recording capacity may differ depending on the hard disk size, the image quality and the recorded "Frame rate". For example, your NVR's hard disk is 320 GB and you want to record one channel 24 hours a day. If you set the image quality at "Normal" (the image size is about 48 KB per frame) and the recorded "Frame rate" at 10 fps, you may approximately record about 7.72 days.

Disk data recording chart (approximately)

Frame rate	**Quality** (Image quality)	**Hard disk capacity** (days)						
		250GB	320GB	500GB	750GB	1000GB	1250GB	1500GB
10 fps (frames per second)	**High** (96KB)	3.02	3.86	6.03	9.04	12.06	15.07	18.08
	Normal (48KB)	6.03	7.72	12.06	18.08	24.11	30.14	36.17
	Low (24KB)	12.06	15.44	24.12	36.16	48.22	60.28	72.34

Notes:
- Recording conditions: 1 channel, recording time: 24 hours/day.
- All above figures are estimates, actual figures may differ depending on the complexity of the real situation.

Audio

Set Audio Settings:

Attention	The "Audio" function is available only when the connected IP Camera is supported.

1. Go to the "Setup" page and click on "Camera", "Audio" tab.

2. Select the camera you want to adjust the audio settings for from the drop-down list.

3. Tick the "Enable audio" check box to enable the audio function. You may select Source and Audio Volume from the drop-down list.

4. Click the "Save" button to save the settings.

Recording

Policy

Go to the "Setup" page and click on "Recording", "Policy" tab to configure schedule settings.

To pre-set the record schedule for each individual camera:

1. Select the camera from the drop-down list.

2. Select the "Always recording" option to record video all the time.

3. Select the "Schedule-based recording" option to record video at the scheduled periods.

   a. Set the "Start Time" and "End Time" for the NVR to record during the day. Select the day (or days) of the week to record. For example, you can enable the recording from 6 pm to 12 pm for every day of the week.

   b. Select a preset record schedule setting and check the "Active" checkbox to activate the record schedule.

   c. You may set up to 6 schedules from "No 1" to "No 6".

4. Select the "No recording" option if you do not want to record video.

5. Click the "Save" button to save the settings for the camera.

> **Information**
>
> For security reasons, you may schedule the recording 24 hours a day and 7 days a week.

Event

Go to the "Setup" page and click on "Recording", "Event" tab to set the pre-event and post-event recording time.

Click the "Save" button to save the settings.

Hard Disk

For XPRESS Series

Size	320 GB
Status	PASS
Usage	89%

`Format`

Go to the "Setup" page and click on "Recording", "Hard Disk" tab to check the size, status and usage of the hard disk.

If you want to format the hard disk, you can click on the "Format" button. Please note that all the data on the hard disk will be permanently deleted.

For XPERT Series

Size	HDD#1 : 320 GB; HDD#2 : 320 GB
Status	HDD#1 : Pass; HDD#2 : Pass
RAID Level	RAID 0
Usage	5%

`Format(RAID 0)`   `Format(RAID 1)`

If you have 2 hard disks installed, you can click on the "Format(RAID 0)" or "Format(RAID 1)" button to create RAID 0 or 1 system respectively.

RAID 0 uses data striping to create one large volume, high performance virtual drive. However if one hard disk fails, all data will be lost.

RAID 1 uses data mirroring to create redundancy, where data on both hard disks will be identical. The system will continue to function even if one hard disk fails.

Event

Channel

In the event settings menu, you may configure the event the IP Camera responds to and the output reaction the IP Camera will trigger.

Add an event

Channel `Hallway ▾`   `Add`

1. Go to the "Setup" page and click on "Event", "Channel" tab to enter the event settings page.

2. Select the desired "Channel" from the drop-down list.

3. Click the "Add" button to enter Event Wizard page.

Event > Channel > Hallway > Event Wizard > Trigger Source

Event Name	Motion Detection

Triggered Source

⊙ Motion Detection
   In `Untitled #1 ▾` When motion detection `starts ▾`
○ Camera Digital Input Ports
   In `1 ▾`   When Input `Active ▾`
○ Sound
   When volum level rises above `5 ▾`
○ Video Loss
○ Device Digital Input Ports
   In `Input #1 ▾` When Input is Active

`Cancel` `Next>>`

4. Define a name for the event setting.

5. Choose the "Triggered Source[7]" you want to respond to by clicking the radio button of "Motion Detection", "Camera Digital Input Ports", "Sound", "Video Loss" or "Device Digital Input Ports". Click the "Next" button to continue.

Attention	This function is available only when the connected IP Camera is supported.

- For the "Motion Detection" event, you will need to configure Motion Detection settings for the camera (Please go to the "Setup" page and click on "Camera", "Channel" tab to configure Motion Detection with "Motion" button). Choose the Motion Detection window from the drop-down list and the motion detection event as "starts", "stops" or "starts-stops".

- For the "Camera Digital Input Ports" event, you will need to connect an external sensor or device to the camera's input port. Choose the input event from the drop-down list as "active", "inactive" or "change".

- For the "Sound" event, you will need to select the sound volume level at which the event will be triggered. This function is only available when the connected IP Camera is supported.

- For the "Device Digital Input Ports" event, you will need to connect an external sensor or device to the NVR's input port. Choose the input port from the drop-down.

6. Select to "Always enable", "Enable of schedule" or "Disable" the Schedule. Click the "Next" button to continue.

- Select the "Always enable" option to record video all the time.

- Select the "Enable of schedule" option to record video at the scheduled periods.

  a. Set the "Start Time" and "End Time" for the NVR to record during the. Select the day (or days) of the week to record. For example, you can enable the recording from 6 pm to 12 pm for every day of the week.

  b. Select a preset record schedule setting and check the "Active" checkbox to activate the record schedule.

---

[7] The XPRESS series only supports Motion Detection.

    c. You may set up to 6 schedules from "No 1" to "No 6".

- Select the "Disable" option if you do not want to record video.

7. Choose the "Action[8]" you want to take by ticking the checkbox of "Upload Snapshot to FTP Server", "Send email via server", "Auto Record" or "Activate Device Digital Output Port of". Click the "Finish" button to complete the settings.

- You may activate the Output Port by ticking the "Trigger Device Digital Output Port" checkbox. When an event is triggered, the output port will enable the IP Camera to send an alarm signal to an external sensor or device. (Please refer to the camera's manual for more information on External Input/Output Interface.) Set the "Duration" the output port will remain active.

- If you want to send recorded images to a desired FTP server when an event is triggered, tick the "Upload Snapshot to FTP Server" checkbox. A FTP server should be pre-set in the FTP list to enable this feature. (Please refer to the FTP section for more information.)

  a. Duration: The default value is 3 seconds. For example, if you set 3 seconds in this field, the NVR will uploads all images recorded for the 3 seconds to the selected FTP server.

  b. Every 1 sec maximum xx Frame: When an event is triggered, the number of the image frames that the NVR will upload to the FTP Server is determined by this setting. This value cannot be higher than the "Frame Rate" value on the "Video" page. (Please refer to the Video section for more information).

  For example:

  You set the NVR to upload all images recorded for **3** seconds and set the "Frame rate" to "15" fps. When an event is triggered, the NVR will upload a maximum of 45 recorded image frames to the FTP server.

- If you want to send an alert email to a desired email address when an event is triggered, tick the "Send email via server" checkbox. Enter in the "Subject" of the email. An email account should be pre-set in the SMTP menu to make the auto-mailing effective. (Please refer to the SMTP section for more information.)

- Check "Auto Record" to record the event when triggered.

- You may activate the NVR's output port by ticking "Activate Device Digital Output Port of" checkbox. When an event is triggered, the NVR will activate an external sensor or device. Go to the "Setup" page and click on "Management", "GPIO" tab to set the "Output Duration(Sec).

---

[8] Trigger Device Digital Output Port is supported with XPERT series products.

Modify or delete an event

In the Event page, select an existing event and click the "Modify" button to modify the event or click the "Delete" button to delete the event.

Channel Hallway ▾	Add
Motion Detection	
Trigger Source : Motion Detection. (Untitled #1 : starts)	Modify
Schedule : Always enable	Delete
Action : E-mail	

System

☐ Disk read/write failure	Action
☐ Upload to FTP server failure	Action
☐ System status report	Action
☐ Hard disk recycle report	Action
Save Cancel	

Go to the "Setup" page, click on "Event", "System" tab, and the setting page displays. You can configure to notify related personnel via e-mail when necessary.

1. If you want to send an email to notify the administrator about some special situations or special reports, tick the checkbox before the respective options. Click the "Action" button to continue.

2. Check the "Send email via server" option. (If you configure the System status report settings, you may additionally set the specific time to send the daily report.) Enter the "Subject" of the email. Click the "Finish" button to complete the settings.

Management

Users

User ID	User Name	Password	Re-type Password
Administrator	admin	••••••••	••••••••
1 Operator ▾	operator	••••••••	••••••••
2 Viewer ▾	viewer	••••••••	••••••••
3 Viewer ▾			
4 Viewer ▾			
5 Viewer ▾			
6 Viewer ▾			
7 Viewer ▾			
8 Viewer ▾			
9 Viewer ▾			
Save Cancel			

Go to the "Setup" page and click on "Management", "Users" tab to display the Users page. An Administrator account with the User Name "admin" and default Password "admin" is pre-set. Please change the administrator's password as soon as possible to avoid unauthorized usage.

The "Administrator" can add several "Viewers" or "Operators". The following table lists the privileges of the different user accounts:

User Privilege	Viewer	Operator	Administrator
View "Live" page	O	O	O

Select "Language"	O	O	O
Control camera viewer	X	O	O
View "Playback" page	X	O	O
View "Alarm[9]" page	X	O	O
View "Setup" page	X	O	O
Modify "Setup" page	X	X	O
Snapshot (Live)	O	O	O
Snapshot (Playback)	X	O	O
Download selected record	X	O	O
Control manual recording	X	X	O

Services

SMTP ADD	Name : Plustek mail server #1 Sender Address : administrator@plustek.com.tw Mail Server : plustek.smtp.com.tw User Name : administrator	Edit Delete
FTP ADD	Name : Plustek FTP Server #1 FTP Server : ftp.plustek.com.tw User Name : administrator@plustek.com.tw	Edit Delete
DDNS ADD	members.dyndns.org	Edit Delete
Port Forwarding	☐Enable; Port Number 80	Submit

SMTP

Go to the "Setup" page and click on "Management", "Services" tab. Click the "Add" button in the "SMTP" column. In this menu you can configure several email addresses. The NVR can automatically send alarm messages by using the configured email addresses when an event is triggered. (See the Channel section for more information about automated email alerts.)

Add email addresses:

1. Go to the "Setup" page and click on "Management", "Services" tab.

2. Click the "Add" button in the "SMTP" column and enter the SMTP information on this page.

SMTP	
Name	Plustek mail server #1
Sender Address	administrator@plustek.com.tw
Mail Server	plustek.smtp.com.tw
User Name	administrator
Password	••••
Confirm Password	••••
Send to	Add
	john@myretailshop.com Delete Test

Save Cancel

---

[9] This function is available with XPERT series products.

3. Enter the "Name", "Sender Address", "Mail Server", "User Name" and "Password" of the email account. Enter the password again in "Confirm Password".

4. Enter an email address in the "Send to" field and click the "Add" button to add the email address to the recipient list. Select a desired email address and click the "Test" button to test the mail server.

5. Click the "Save" to save the setting.

FTP

Go to the "Setup" page and click on "Management", "Services" tab. Click the "Add" button in the "FTP" column. In this page you can configure several FTP servers. The NVR can automatically send recorded images to the configured FTP server when an event is triggered. (See the Channel section for more information about automated uploading to the FTP server.)

Add a FTP Server:

1. Go to the "Setup" page and click on "Management", "Services" tab.

2. Click the "Add" button in the "FTP" column and enter the FTP server information in this page.

FTP Server	
Connection Name	Plustek FTP Server #1
Server	ftp.plustek.com.tw
User Name	administrator@plustek.com.tw
Password	••••
Confirm Password	••••
Server Directory	snapshot

Save   Cancel   Test

3. Enter the following information:

- Connection Name: Enter the name for this FTP Server, e.g. Plustek FTP Server #1.

- Server: Enter the address of this FTP Server, e.g. ftp.plustek.com.tw.

- User Name: Enter the user name to log in with, e.g. administrator@plustek.com.tw.

- Password: Enter the password to log in with, e.g. 1576.

- Confirm Password: Enter the password again.

- Server Directory: Enter the directory path on the FTP server to save the files in, e.g. snapshot.

4. Click the "Save" button to save the settings.

DDNS

Configure DDNS settings:

1. Go to the "Setup" page and click on "Management", "Services" tab.

2. Click the "Add" button in the "DDNS" column.

3. If you want the NVR to utilize a DDNS Service, click "Enable".

4. a. Select "members.dyndns.org" as "DDNS Server" from the dropdown list

   Please go to the http://www.dyndns.org/ website to register an account. After you successfully register your account and domain name, enter the registered "User Name", "Password", "Confirm Password", and "Host Name".

DDNS Service	☐ Enable
DDNS Server	members.dyndns.org
User Name	myddns
Password	••••
Confirm Password	••••
Host Name	
Status	
Save Cancel	

- User Name: Enter the user name to log in your account.

- Password: Enter the password to access your account.

- Confirm Password: Enter the password again.

- Host Name: Enter the registered unique name together with the selected domain name, e.g. xyz.homeip.net.

   b. Select "dyn.plusteksecurity.com" as "DDNS Server" from the drop-down list

   After the device has been restarted or changed IP, it will report to the DDNS server automatically. You will get an URL address like "xxxxxxxxxxxx.dyn.plusteksecurity.com" (where xxxxxxxxxxxx is the MAC Address of this device) in the "Host Name" field. You can enter this URL address in the browser of a Smart Phone or PC to access this device.

DDNS Service	☐ Enable
DDNS Server	dyn.plusteksecurity.com
Host Name	00158E300D76.dyn.plusteksecurity.com
Status	
Save Cancel	

5. Click the "Save" button to save the setting.

Port Forwarding

Configure port forwarding settings if necessary:

Port Forwarding	☐ Enable; Port Number 80	Submit

If it is necessary you may tick the check box of "Enable" and modify the port number.

Click "Submit" to save the settings. This function is only available when connecting with compatible Router.

GPIO

I/O Pin	I/O Name	Active Definition	Current Status	Output Duration(Sec)
Input #1	Input #1	Ground Circuit	Inactive	N/A
Input #2	Input #2	Ground Circuit	Inactive	N/A
Output #1	Output #1	Ground Circuit	Inactive	10 ∨
Output #2	Output #2	Ground Circuit	Inactive	10 ∨
Save				

Go to the "Setup" page and click on "Management", "GPIO" tab to display the GPIO page. On this page you can view the status and configure some settings of your external input and output port.

- I/O Name: Enter the name you wish to use for the respective input or output port.

- Active Definition: Shows you which status is defined as "active". "Ground Circuit" is always defined as a port's active status and cannot be changed.

- Current Status: Shows you the port's current status as defined by the "Active Definition".

- Output Duration(Sec): Only applicable to output ports. Set the duration the output port will remain active using the drop-down list.

Logs

System

No.	Type	Date	Time	User	Source IP	Content
1	Normal	2013-05-10	11:21:27	admin	10.1.13.229	(admin)login
2	Normal	2013-05-10	11:21:25	admin	10.1.13.229	(admin)logout
3	Normal	2013-05-10	11:21:25	admin	10.1.13.229	(admin)login
4	Normal	2013-05-10	11:20:42	admin	Localhost	Export system log(All)
5	Normal	2013-05-10	11:15:21	admin	10.1.13.229	(admin)timeout
6	Normal	2013-05-10	11:10:15	admin	10.1.13.229	(admin)login
7	Normal	2013-05-10	11:10:13	admin	10.1.13.229	(admin)logout
8	Normal	2013-05-10	11:10:13	admin	10.1.13.229	(admin)login
9	Normal	2013-05-10	10:55:23	admin	10.1.13.229	(admin)timeout
10	Normal	2013-05-10	10:50:01	admin	10.1.13.229	(admin)login
11	Normal	2013-05-10	10:49:59	admin	10.1.13.229	(admin)logout
12	Normal	2013-05-10	10:49:59	admin	10.1.13.229	(admin)login
13	Normal	2013-05-10	10:41:09	admin	10.1.13.229	(admin)timeout
14	Normal	2013-05-10	10:35:17	admin	10.1.13.229	(admin)login
15	Normal	2013-05-10	10:18:17	admin	10.1.13.229	(admin)logout
16	Normal	2013-05-10	10:02:34	admin	10.1.13.229	(admin)login

Delete   Export   Page 1 2 3 4 5 6 7 8 9 10 >|

Go to the "Setup" page and click on "Logs", "System" tab to display the system log page. Select "All", "Normal" or "Error" from the drop-down list. The system log page keeps a record on the settings or changes made in the NVR system. Click "Export" to export the log file, or click "Delete" to delete all the records.

Camera

No.	Type	Date	Time	User	Source IP	Content
1	Alarm	2013-05-10	12:20:00	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
2	Alarm	2013-05-10	12:19:48	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
3	Alarm	2013-05-10	12:19:33	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
4	Alarm	2013-05-10	12:18:49	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
5	Alarm	2013-05-10	12:18:23	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
6	Alarm	2013-05-10	12:18:06	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
7	Alarm	2013-05-10	12:17:56	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
8	Alarm	2013-05-10	12:17:36	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
9	Alarm	2013-05-10	12:17:26	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
10	Alarm	2013-05-10	12:17:09	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
11	Alarm	2013-05-10	12:16:57	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
12	Alarm	2013-05-10	12:15:53	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
13	Alarm	2013-05-10	12:15:35	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
14	Alarm	2013-05-10	12:15:25	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
15	Alarm	2013-05-10	12:15:07	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)
16	Alarm	2013-05-10	12:14:11	System	Localhost	NVR/DVR (Office@Paris) / Motion (Untitled #1) detected on channel (1)/(Hallway)

Delete   Export   Page 1 2 3 4 5 6 7 8 9 10 >|

Go to the "Setup" page and click on "Logs", "Camera" tab to display the camera log page. Select "All", "Normal", "Error" or "Alarm" from the drop-down list. The camera log page keeps a record on the settings or changes made for all the cameras. Click "Export" to export the log file, or click "Delete" to delete all the records.

Chapter IV. Technical Guides

This chapter covers plenty of useful technical information on using the NVR, which will help you get more familiar with this network device. For further information about networks, you may read their definition or explanation in the Appendix A: Glossary section of this guide.

LED Indicators[10]

The LED indicators at the front of the NVR indicate the status of the NVR, as described below:

Activity	Status LED	HDD1 LED	Buzzer
System power on	Light off	Light off	One beep sound
System ready, HDD OK	Consistent light on	Consistent light on	One 1-sec beep sound
System ready, no HDD	Consistent light on	Consistent blinking	One 1-sec beep sound every 10 seconds
System ready, HDD not formatted	Consistent light on	Consistent blinking	One 3-beep sound
HDD formatting (local or remote)	Consistent light-on	Consistent blinking until process done	One 2-beep sound
HDD ready	Consistent light-on	Consistent light-on	
Camera searching & adding (only local)	Consistent blinking during process; consistent light-on when process done	Consistent light-on	One 2-beep sound when process done
HDD format failure	Consistent light-on	Consistent blinking	One 3-beep sound every 10 seconds
HDD recording	Consistent light-on	Consistent blinking	
HDD read/write failure	Consistent blinking	Consistent blinking	One 3-beep sound every 10 seconds
USB flash drive detected	Consistent blinking when USB detected	Consistent light-on	One 0.5-sec beep sound when USB detected
USB flash drive write	Consistent blinking; consistent light-on when process done	Consistent light-on	One 2-beep sound when done
USB flash drive write failure	Consistent light-on	Consistent light-on	Three 3-beep sound for 3 seconds

---

[10] This function may or may not be available depending on the NVR model you purchase.

Search Tool

The Network Device Search Tool is an application that can detect Plustek NVR(s) that are connected to an organization's network or your PC.

The NVR list is displayed in the white pane of the window. You may select one of the NVRs to configure for your surveillance needs if you are the authorized user of that NVR.

1. Enter the administrator's "Account" and "Password" of the selected NVR. Only the administrator is allowed to configure settings.

2. Name the selected NVR in the "Name" section.

3. Enter the correct IP address of the NVR if you have "STATIC" checked. If you have "DHCP" checked, please jump to Step 5.
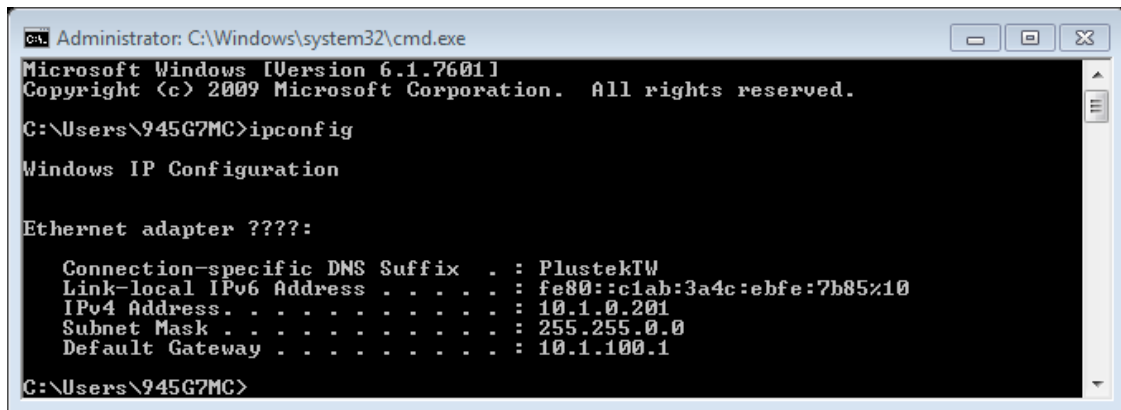
	The NVR should have the same IP configuration information of your PC except the IP address. Please refer to the "IP Configuration Information" section to get the correct subnet mask and gateway of your PC.
Information	

4. Enter the subnet mask of your network in "Submask".

5. Enter the "Gateway" of your network.

6. Enter "80" as "Http port".

7. Click the "Submit" button to apply the settings.

8. Click the "Update" button to refresh the list in the white pane of this window.

IP Configuration Information

You may get the IP configuration information of your PC by following the steps below:

1. Click "Start" → "All Programs" → "Accessories" → "Command Prompt" to access the Command Prompt window.

2. Enter "ipconfig" after "C:\>" and press the "Enter" key on your keyboard.

3. Write down the information including "IP Address", "Subnet Mask" and "Gateway" for IP configuration of the NVR.

```
Administrator: C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\945G7MC>ipconfig

Windows IP Configuration


Ethernet adapter ????:

   Connection-specific DNS Suffix  . : PlustekTW
   Link-local IPv6 Address . . . . . : fe80::c1ab:3a4c:ebfe:7b85%10
   IPv4 Address. . . . . . . . . . . : 10.1.0.201
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : 10.1.100.1

C:\Users\945G7MC>
```

Information	When you connect the NVR to your community network, the PC IP configuration information is for your reference. Revise the last number to specify a unique IP address for the NVR.

Use the NVR with Dynamic IP Address

In some organizations' networks, you may be provided with a dynamic IP address. That is, each time your network device is connected to the network, it may be assigned with a different IP address.

When you need to deploy the NVR in such a network, you need to configure the NVR before connection.

You may follow the steps described below:

1. Connect the NVR to the network via Ethernet switching hub.
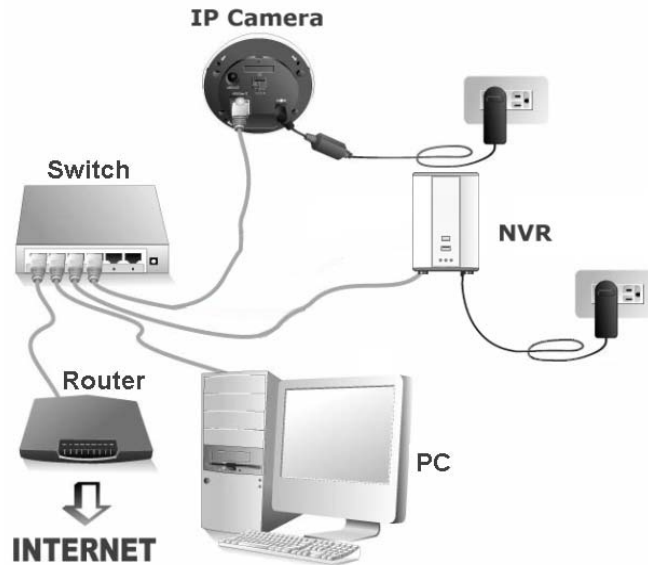
2. Insert the installation CD into the CD-ROM drive open the "SearchTool" folder on the Installation CD and double-click on "Plustek_Network_Device_Search_Tool.exe". The NVR that you connected to your network will be displayed in the opened window.
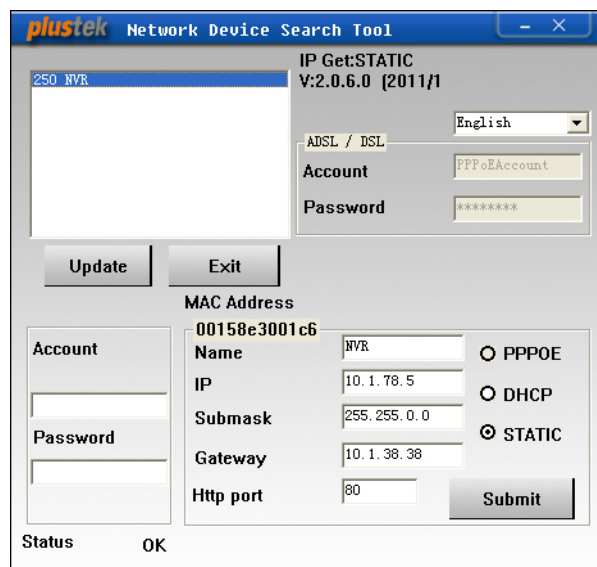
3. If you choose the "STATIC" option, please enter the "Submask" and "Gateway" in the Search Tool window, revise the last number of your PC's IP address to create a new unique IP address for the NVR, enter "80" as "Http port", and click the "Submit" button to apply the changes.

Please refer to the "IP Configuration Information" section to get the IP address, Submask and Gateway of your PC.

4. Click the "Update" button in the Search Tool window to update the information in the left pane of the window and double click the NVR to log in.

5. You may log in by simply entering the "Host Name" in the IE address bar after completing the above configuration.

Proxy Server

A proxy server is generally used to connect to the Internet in order to maintain the security of a network in some corporate environments. When your NVR is connected to such a network, the proxy server may prevent you from accessing the NVR. Please consult your network administrator or ISP for any details on disusing proxy server in your corporate environment.

You may follow the steps below to disuse the proxy server:

1. Start up the Internet Explorer, click "Tools" and choose "Internet Options" from the drop-down menu.

2. Click the "LAN Settings" button in the "Connections" tab.
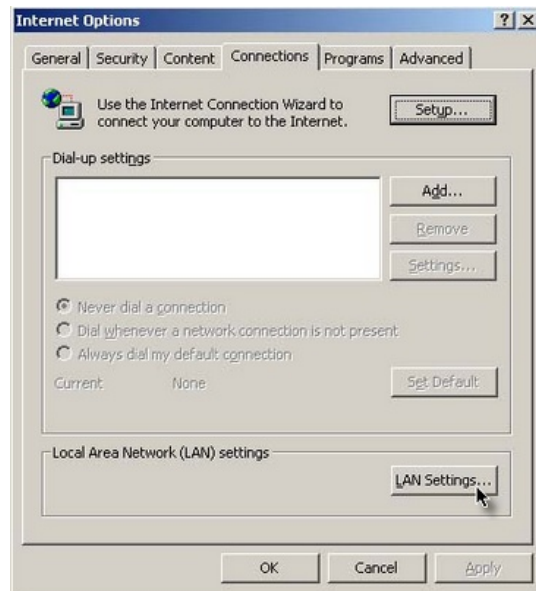
3. You may uncheck the "Use a proxy server" option, and click the "OK" button in the window. Or click the "Advanced…" button in the LAN Settings window and follow Step a and Step b.
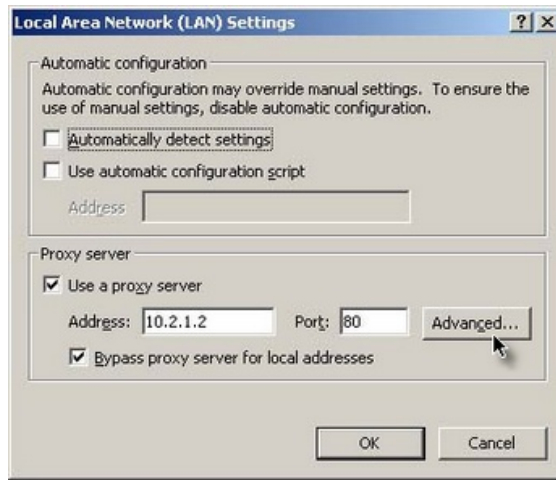
a. Enter the NVR's IP address in the "Exceptions" field on this page.

b. Click the "OK" button in the "Proxy Settings" window to confirm the settings.
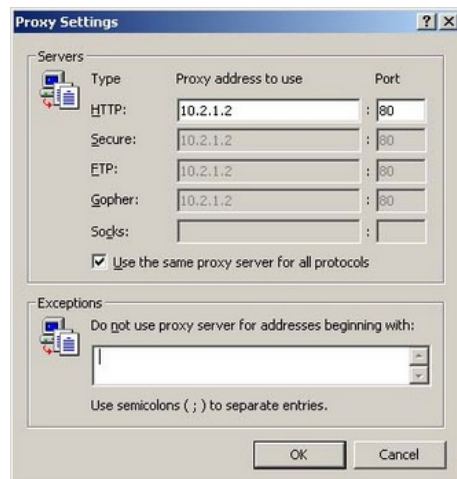
RTSP Server Feature

The system allows external or third party VMS/CMS systems to retrieve the NVR's live video and playback channels by using RTSP commands.

Reset the NVR[11]

The RESET function of the NVR allows you to return the NVR to its factory default settings.

To reset the NVR, please keep your NVR connected to your network and follow the steps:

1. Insert the reset pin into the RESET hole of the NVR.

2. Stab the RESET button with the pin for 5 seconds.

3. All settings are reset to their factory default settings.

Attention	All the settings you have configured in the NVR will be lost after resetting. Please make sure to Backup settings if necessary before resetting.

---

[11] This function may or may not be available depending on the NVR model you purchase.

Appendix A: Glossary

You may read through the below definitions for better understanding of the network environment, and this may probably help you to deal with the network problems when using any network devices. However, the knowledge covered in the chapter won't fail you to setup and use the NVR.

For more information about those definitions, you may study them in relevant books on network or network device.

ADSL

ADSL (Asymmetric Digital Subscriber Line) is a technology for transmitting digital information at a high bandwidth on existing phone lines to homes and businesses. Unlike regular dialup phone service, ADSL provides an "always on line" connection.

ActiveX controls

An ActiveX control is a component program object that can be re-used by many application programs within a computer or among computers in a network. The technology for creating ActiveX controls is part of Microsoft's overall ActiveX set of technologies, chief of which is the Component Object Model (COM). When you use Internet Explorer to browse website, ActiveX controls may assure the normal displaying of images.

DHCP

DHCP (Dynamic Host Configuration Protocol) is a communications protocol that lets network administrators manage centrally and automate the assignment of Internet Protocol (IP) addresses in an organization's network.

DNS

DNS (Domain Name System) is a service that locates various Internet domain names and translates them into Internet Protocol addresses. DNS service may increase the responding speed and accuracy of a specified web site.

HTTP

HTTP (Hypertext Transfer Protocol) is a standard protocol used widely on World Wide Web, and all files (text, graphic images, sound, video, and other multimedia files) transferred on WWW follow this protocol. As soon as a Web user opens their Web browser, the user is indirectly making use of HTTP.

FTP

File Transfer Protocol (FTP), a standard Internet protocol, is the simplest way to exchange files between computers on the Internet. FTP is commonly used to download and upload files (the formats includes: *.txt, *.exe, *.pdf, *.doc, *.mp3, *.zip, *.rar and ect.) between two computers. When uploading or downloading, one computer can be regarded as FTP sever, the other is client terminal.

Gateway

A gateway is a network point that acts as an entrance to another network. In a network for an enterprise, a computer server acts as a gateway node, and also a proxy server and a firewall server.

IP Address

An IP Address is a 32-bit number that identifies each sender or receiver of information that is sent in packets across the Internet. An IP Address has two parts: the identifier of a particular network on the Internet and an identifier of the particular device (which can be a server or a workstation) within that network.

Internet Protocol

The Internet Protocol (IP) is the method or protocol by which data is sent from one computer to another on the Internet. When you send or receive data (for example, an e-mail note or a Web page), the message gets divided into little chunks called packets. Each of these packets contains both the sender's Internet address and the receiver's address. The Internet Protocol just delivers them.

IMAP

IMAP (Internet Message Access Protocol) is a standard protocol for accessing e-mail from your local server. IMAP requires continual access to the server during the time that you are working with your mail. IMAP provides the user more capabilities for retaining e-mail on the server and for organizing it in folders on the server. IMAP can be thought of as a remote file server.

MAC Address

In a local area network (LAN) or other network, the MAC (Media Access Control) address is your computer's unique hardware number. (On an Ethernet LAN, it's the same as your Ethernet address.)

LAN

A local area network (LAN) is a group of computers and associated devices that share a common communications line or wireless link and typically share the resources of a single processor or server within a small geographic area (for example, within an office building).

JPEG

JPEG (pronounced "jay-peg) is a format that is commonly used for color images displayed on the Internet. JPEG reduces the file size of an image by discarding some of the non-critical data of the image. JPEG retains all of the color information of an image and offers varying degrees of compression.

Network

In information technology, a network is a series of points or nodes interconnected by communication paths. Networks can interconnect with other networks and contain sub networks.

NTP

NTP (Network Time Protocol) is a protocol designed to synchronize the clocks of computers over a network.

POP3

POP3 is a client/server protocol in which e-mail is received and held for you by your Internet server. POP can be thought of as a "store-and-forward" service. POP and IMAP deal with the receiving of email, and SMTP is a protocol for simply transferring email across the Internet.

Port Number

In programming, a port (noun) is a "logical connection place" and specifically, using the Internet's protocol, TCP/IP, the way a client program specifies a particular server program on a computer in a network. For the HTTP service, port 80 is defined as a default and it does not have to be specified in the Uniform Resource Locator (URL).

PPPoE

PPPoE (Point-to-Point Protocol over Ethernet) is a specification for connecting multiple computer users on an Ethernet local area network to a remote site through common customer premises equipment, which is the telephone company's term for a modem and similar devices. PPPoE can be used to have an office or building-full of users share a common Digital Subscriber Line (DSL), cable modem, or wireless connection to the Internet. PPPoE combines the Point-to-Point Protocol (PPP), commonly used in dialup connections, with the Ethernet protocol, which supports multiple users in a local area network. The PPP protocol information is encapsulated within an Ethernet frame.

Proxy Server

A proxy server is associated with or part of a gateway server that separates the enterprise network from the outside network and a firewall server that protects the enterprise network from outside intrusion. To the user, the proxy server is invisible.

SMTP

SMTP (Simple Mail Transfer Protocol) is a TCP/IP protocol used in sending and receiving e-mail. However, since it is limited in its ability to queue messages at the receiving end, it is usually used with one of two other protocols, POP3 or IMAP, that let the user save messages in a server mailbox and download them periodically from the server. In other words, users typically use a program that uses SMTP for sending e-mail and either POP3 or IMAP for receiving e-mail.

Subnet Mask

Once a packet has arrived at an organization's gateway or connection point with its unique network number, it can be routed within the organization's internal gateways using the subnet number as well. The subnet mask allows router know whether two IP addresses belong to the same subnet.

TCP/IP

TCP (Transmission Control Protocol) is a set of rules (protocol) used along with the Internet Protocol (IP) to send data in the form of message units between computers over the Internet. While IP takes care of handling the actual delivery of the data, TCP takes care of keeping track of the individual units of data (called packets) that a message is divided into for efficient routing through the Internet.

WEP

WEP is the short form of Wired Equivalent Privacy. It is a security protocol for wireless local area networks (WLANs) defined in the 802.11b standard. With less secure physical structure than LAN, WLANs are more vulnerable to tampering. WEP is to provide security by encrypting data over radio waves from one end point to another.

Appendix B: Customer Service and Warranty

If you encounter problems with your NVR, please review the installation instructions and operation suggestions contained in this guide.

Visit our website www.plusteksecurity.com for more customer service information. For further assistance call our customer support phone number listed on the website. One of our representatives will be happy to assist you from Monday through Friday during office working hours.

To avoid delays, please have the following information available before calling:

- NVR model number
- NVR serial number (Located at the bottom of the NVR)
- A detailed description of the problem
- Your computer manufacturer and its model number
- The speed of your CPU (Pentium 4, etc.)
- Your current operating system and BIOS (optional)
- Your browser name and its version (Ex. IE7, 7.0.5730.11)
- Name of software package(s), version or release number and manufacturer of the software
- Other USB devices installed

Statement of Limited Warranty

This Statement of Limited Warranty applies only to the options you originally purchase for your use, and not for resale, from an authorized reseller.

The manufacturer warranty includes all parts and labor, and is not valid without the receipt of original purchase. To obtain warranty service, you may contact the authorized dealer or distributor, or visit our website to check out the available service information, or send a request via E-mail for further help.

If you transfer this product to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this statement to that user.

We warrant that this machine will be in good working order and will conform to its functional descriptions in the documentation provided. Upon provision of proof of purchase, replacement parts assume the remaining warranty of the parts they replace.

Before presenting this product for warranty service, you must remove all programs, data and removable storage media. Products returned without guides and software will be replaced without guides and software.

This Limited Warranty service does not provide for carry-in exchange when the problem results from accident, disaster, vandalism, misuse, abuse, unsuitable environment, program modification, another machine or non-vendor modification for this product.

If this product is an optional feature, this Limited Warranty applies only when the feature is used in a machine for which it was designed.

If you have any questions about your Limited Warranty, contact the approved retailer from whom you bought the product or the manufacturer.

THIS LIMITED WARRANTY REPLACES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABLITY AND FITNESS FOR A PARTICULAR PURPOSE. HOWEVER, SOME LAWS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES. IF THESE LAWS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO OTHER WARRANTIES APPLY AFTER THAT PERIOD.

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply.

Under no circumstances are we liable for any of the following:

1. Third party claims against you for losses or damages.

2. Loss of, or damage to, your records or data; or

3. Economic consequential damages (including lost profits or savings) or incidental damages, even if we are informed of their possibility.

Some jurisdictions do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

FCC Radio Frequency Statement

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular television reception (which can be determined by turning the equipment off and on), 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 to an outlet on a circuit different from that which the receiver is connected.

- Shielded interconnect cables and shielded power cord which are supplied with this equipment must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device.

- Consult the dealer or an experienced radio/TV technician for help if the conditions persist.

- Changes or modifications not expressly approved by the manufacturer or authorized service center could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.