

X5S/X4S DVR & NVR

QUICK SETUP MANUAL v1.0



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Welcome

Thank you for purchasing our video surveillance recording device. This quick setup manual is designed to help you set up and configure your Ascendent X5S/X4S DVR or NVR. This manual covers both Digital Video Recorders (DVRs) and Network Video Recorders (NVRs), and some parts may not apply to both.

1 Setup

1.1 Important Installation Instructions

- All installations and operations should conform to your local electrical safety codes.
- The product must be grounded to reduce the risk of electric shock.
- Ascendent assumes no liability or responsibility for fire or electrical shock caused by improper use or installation.
- The recording device must be connected to an Uninterruptible Power Supply (UPS) with Auto Voltage Regulation (AVR) in order to protect from fluctuations in power that can harm the device. Failure to use an AVR UPS with the recording device will void its warranty.
- These devices should not be subjected heavy stress, vibration, liquids, or very high humidity during transportation, storage, or operation.
- The device should be installed in a cool place that is away from direct sunlight, flammable materials, explosive substances, etc. This device shall be transported, stored and used only in these environments.
- Avoid extremely hot environments and any heat sources.
- Avoid high humidity environments.
- Install in an area with adequate ventilation; do not block any cooling vents on the device. Do not install upside down or sideways. Handle with care.
- Do not apply power to the device before completing installation.
- Do not place objects on top of the device.
- Only use accessories recommended by the manufacturer. Before installation, please open the package and ensure all the components are not damaged. Contact your dealer immediately if something is damaged.
- All examination and repairs of the device should be performed by qualified service technicians only. We are not liable for any problems caused by unauthorized modifications or attempted repairs on devices.
- Improper use of battery may result in fire, explosion, or personal injury. When replacing the internal battery, please be sure to replace with the same type and model of battery.

- Ascendent recommends changing the passwords of the user accounts before setting up external network access (allowing remote access to the internet).

1.2 Device Setup

Remove the DVR/NVR from the box and setup on a flat surface. Use the supplied power adapter to plug into the back of the device and plug the adapter into a UPS. Connect to a monitor using a VGA cable or HDMI cable. Connect the supplied mouse into an empty USB port on the device. Press the power button/switch to turn on the DVR/NVR. If you have an NVR, you will need to connect an ethernet cable to the ethernet port on the back of the NVR to allow for connections to IP cameras.

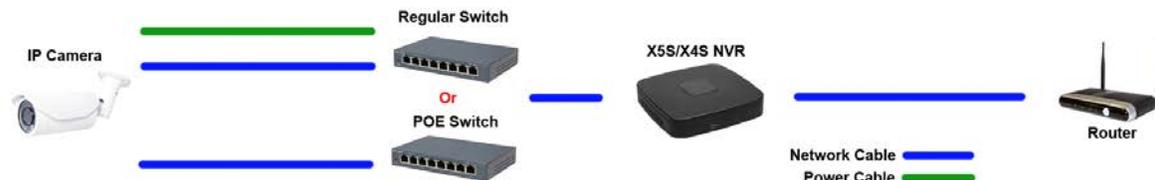
1.3 Connecting Cameras

DVR

If you have an analog, SDI or HDX DVR connect a BNC cable from the back of the DVR to the camera's BNC connector. Then connect the camera's power adapter.

NVR

If you have an NVR and IP cameras you can power the cameras with regular power supplies, or a PoE switch (with compatible PoE IP cameras). PoE IP cameras allow for easy installations, as you can connect a single ethernet cable from the PoE switch to the IP camera without requiring any other cabling. Connect an ethernet cable from your switch to the same network that the NVR is connected to. See example below.



Note: IP networks vary in size and complexity and may appear different than this example.

**Note: Some NVRs may come with 4 or 8 PoE ports built into the back of the NVR. If you are not familiar with advanced networking techniques, do not plug IP cameras into these PoE ports as it will automatically change the cameras IP addresses and put those cameras on an isolated network. When on that isolated network, you will not be able to easily access those cameras on your main network to setup camera settings like: scheduling, date & time, and motion detection sensitivity.

*You can change those camera settings by changing a computer's (on the same physical network) settings to:

IP address 10.1.1.x
Subnet Mask: 255.255.255.0
Default Gateway: 10.1.1.1
Primary DNS: 8.8.8.8
Secondary DNS: 8.8.4.4

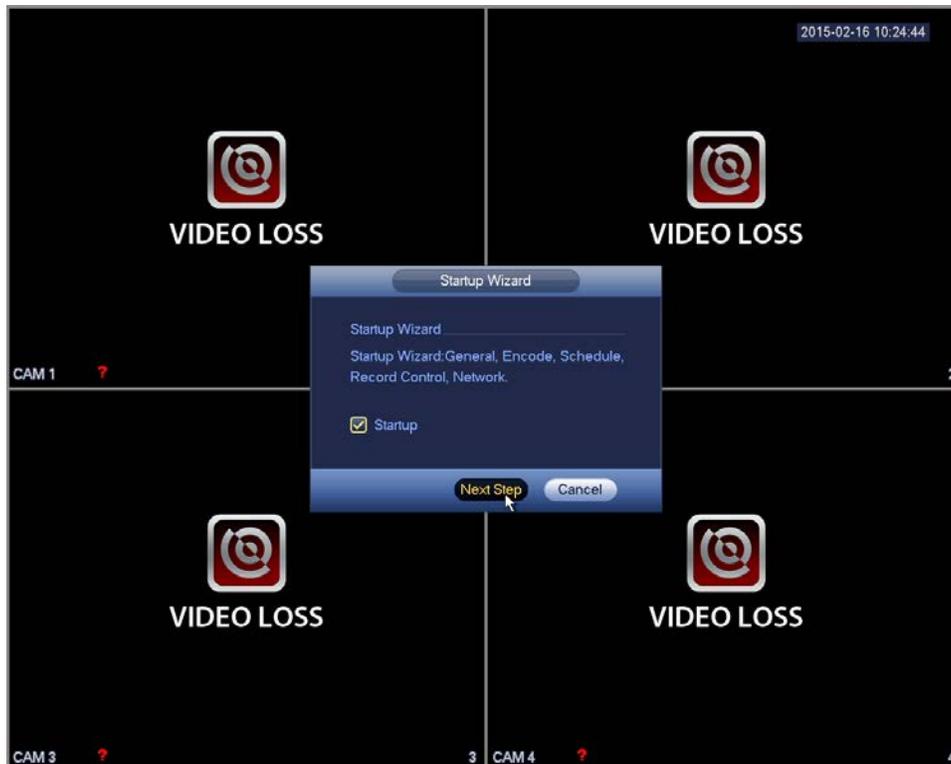
Then login to the IP camera using the web interface.

1.4 Startup Wizard

1.4.1 DVR Startup Wizard

The Startup Wizard will help you quickly setup your DVR. When you first start up your device, the Startup Wizard window should appear. If it does not appear automatically, right click and go to "Main Menu", then under the Setup area click "System". In the "General" settings area, check the checkbox to the left of "Startup Wizard", then click the "Apply" button then the "OK" button. Now restart the device by clicking the "Shut Down" button and choose "Restart".

After the device restarts, the Startup Wizard will appear.



Click "Next Step".



Login using User Name: 888888 and Password: 888888

You will now see these settings:



You may change the “Device Name” and “Auto Logout” settings.

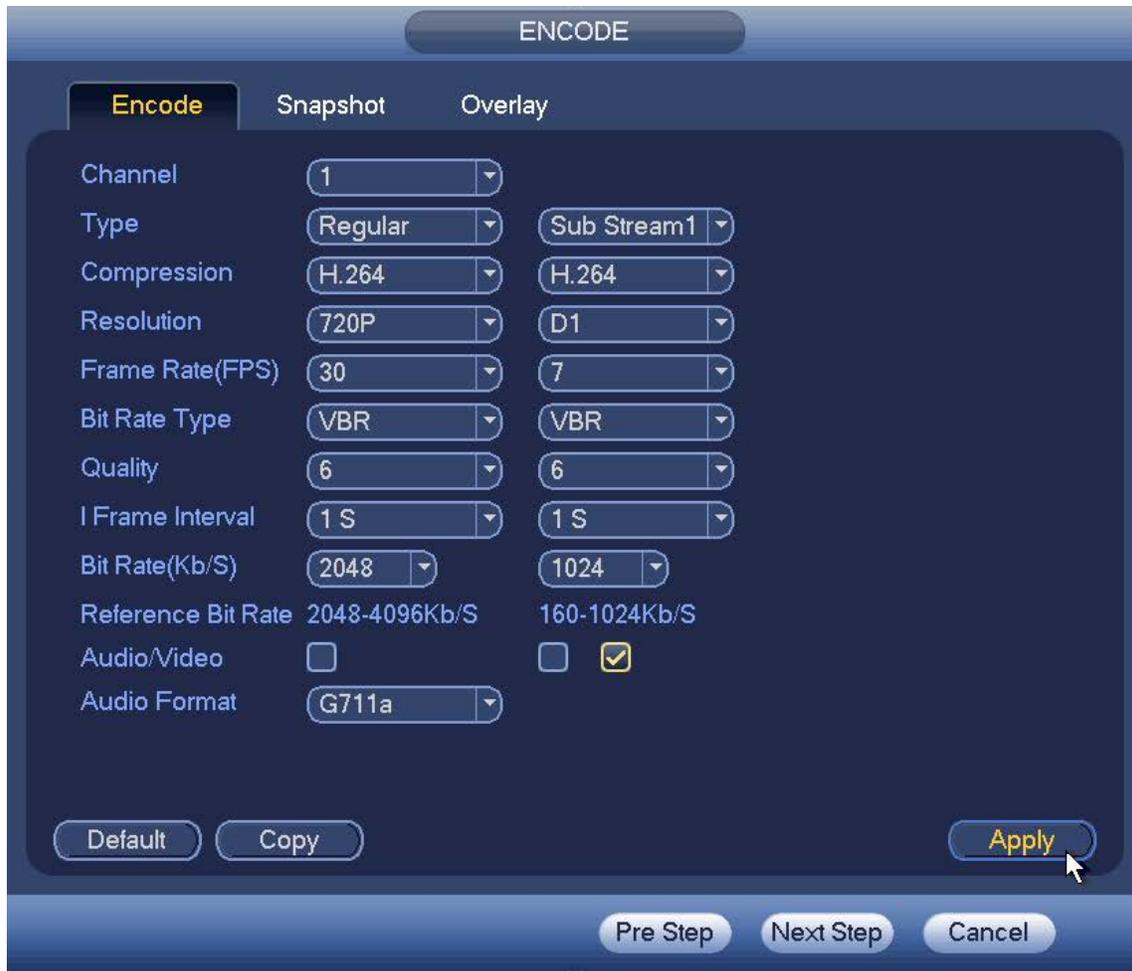
Click "Date&Time".

The screenshot shows a configuration window titled "GENERAL" with three tabs: "General", "Date&Time", and "Holiday". The "Date&Time" tab is active. The window contains the following fields and controls:

- Date Format:** A dropdown menu set to "YYYY MM DD".
- Time Format:** A dropdown menu set to "24-HOUR".
- Date Separator:** A dropdown menu set to "-".
- System Time:** A field showing "2015 - 02 - 16 10 : 25 : 44" and a time zone dropdown set to "GMT-07:00". A "Save" button is located to the right of the time zone dropdown.
- DST (Daylight Savings Time):** A checked checkbox. Below it, "DST Type" has two radio buttons: "Day of Week" (selected) and "Date".
- Start Time:** A series of dropdowns for month ("Mar"), day ("1st"), and day of the week ("Su"), followed by a time field "02 : 00".
- End Time:** A series of dropdowns for month ("Nov"), day ("2nd"), and day of the week ("Su"), followed by a time field "02 : 00".
- NTP (Network Time Protocol):** An unchecked checkbox.
- Server IP:** A text field containing "time.windows.com" and a "Manual Update" button.
- Port:** A text field containing "123".
- Interval:** A text field containing "60" followed by the unit "min".

At the bottom of the window, there are three buttons: "Default", "Apply" (with a mouse cursor pointing to it), and "Next Step". At the very bottom of the application window, there are three more buttons: "Pre Step", "Next Step", and "Cancel".

Set the correct date & time and select your time zone then click "Save".
Set the DST (Daylight Savings Time) settings then click "Apply". Click "Next Step".



This is where you set each camera resolution and quality settings for each of the recording modes (Regular/MD/Alarm). Main stream settings are on the left, the sub stream settings are on the right. Main stream the recorded resolution, sub stream is used when viewing multiple cameras on one screen and for mobile viewing to reduce bandwidth and processor usage.

Select the camera channel number or select "All". We recommend setting the resolutions to the highest size available on each camera. Select the compression type (H.264H is better than H.264, which is better than H.264B).

Select "VBR" bit rate type and quality "6". Use the following bit rate [Kb/S] setting depending on camera resolution: CIF=512/768, D1=1024/2048, 720P=2048, 1080P=4096, 3MP 2052 x 1536=6144, 5MP 2592 x 1920=8192. These are recommended bit rate settings, you may want to select a higher or lower bit rate depending on your requirements. Higher bit rate settings will increase storage usage, but may improve image quality.

Click "Apply" then click "Next Step".



Select the camera channel you want to set recording schedules for, or select “All”, then click the gear icon on the right. A new window will open as shown in the picture below.

Here you may specify up to 6 recording periods and recording types for each day. We recommend using MD (Motion Detection) as it will only record when there is motion detected on a camera, saving hard drive space, and makes searching for an incident much easier.

In the example picture above, the schedule is set to record when motion is detected 24hrs/day. Under Copy you may select other days to copy this schedule to when the “Save” button is clicked.



“Regular” will record continuously [this will fill up your disk storage the fastest]. “Alarm” will record only when an external alarm device is triggered. “MD&Alarm” requires motion detection and an external alarm device to be triggered before recording.

When you have set your recording schedule, click “Save”, and “Next Step” in the previous window.



This page should be set as shown above. Click “Next Step”.

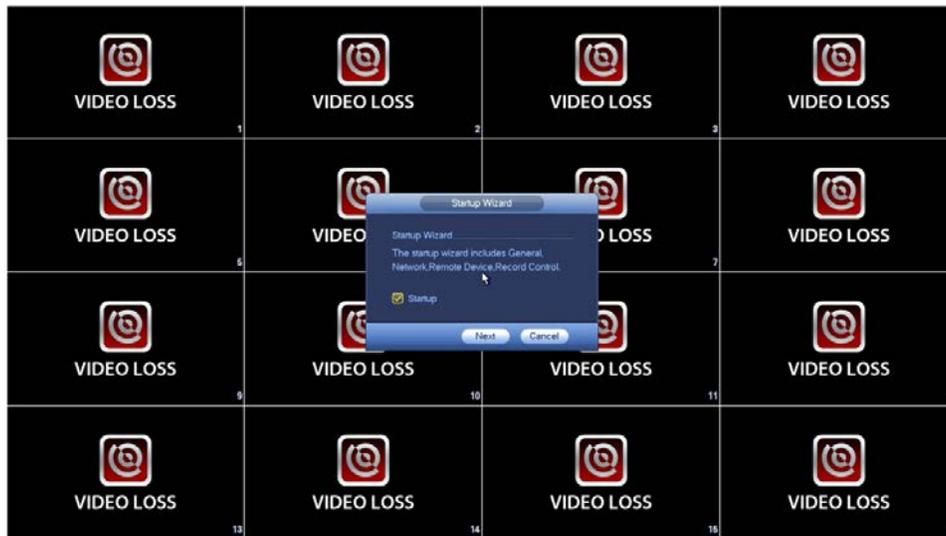


Under NETWORK you can configure your device’s IP address settings, you may select “Static” and manually enter your network settings. If your your network supports DHCP, you may click the DHCP box. This allows your router to assign an IP address to your DVR automatically. Once you have entered your network settings click “Finished”. The Startup Wizard is complete.

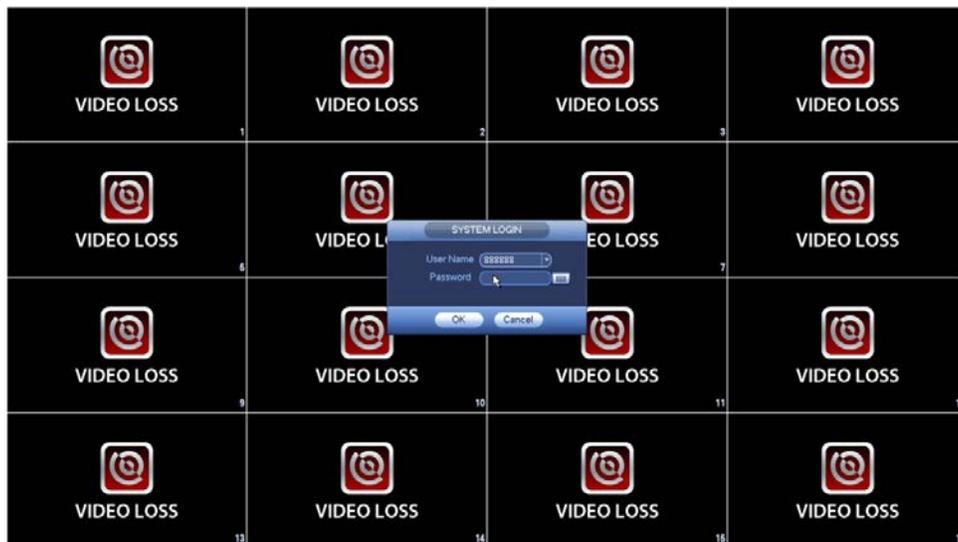
1.4.2 NVR Startup Wizard

The Startup Wizard will help you quickly setup your NVR. When you first start up your device, the Startup Wizard window should appear. If it does not appear automatically, right click and go to “Main Menu”, then under the Setup area click “System”. In the “General” settings area, check the checkbox to the left of “Startup Wizard”, then click the “Apply” button then the “OK” button. Now restart the device by clicking the “Shut Down” button and choose “Restart”.

After the device restarts, the Startup Wizard will appear.



Click “Next”.



Login using User Name: 888888 and Password: 888888

You will now see these settings:



You may change the “Device Name” and “Auto Logout” settings. Click “Date&Time”



Set the correct date & time and select your time zone then click “Save”.
Set your DST (Daylight Savings Time) settings then click “Apply”. Click “Next”.



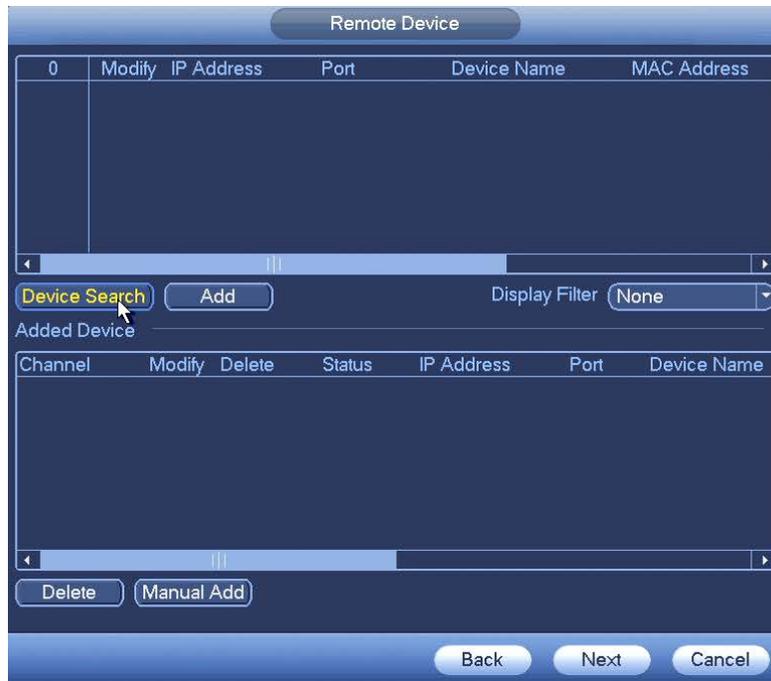
If you have an NVR, you must set the IP address of the NVR in the same range as your IP cameras.

Example: If your IP camera's IP address is 192.168.0.120 the rest of your network device IP addresses (including the NVR) will need to be 192.168.1.x to function properly. Therefore if your router's IP address is 192.168.0.1 and other network devices are set in a range of 192.168.0.x but your NVR's network settings are set to IP address 192.168.1.223 with a default gateway of 192.168.1.1 (as shown in picture above), then the IP camera will not be able to connect to the NVR. In that case you would need to set your NVR's network settings to 192.168.0.223 and the default gateway to 192.168.0.1. Similarly if your IP camera was set to a 192.168.1.x IP address and the network devices and NVR were set IP addresses in the range of 192.168.0.x then you would need to change the IP camera to be in the 192.168.0.x IP range.

If your network supports DHCP, you can click the DHCP box. This allows your router to assign an IP address to your DVR automatically.

Note: When setting a device's IP address, it is important to choose an address that is not currently in use by another device. If two devices are assigned the same IP address, this will cause a conflict and both devices may not function properly on the network.

Click "Next".



Click "Device Search".



A list of network devices should load in the top area of the window [as shown in picture above]. Using the check boxes on the left, select the IP cameras you would like to record on the NVR, and click "Add".

Remote Device

74	Modify	IP Address ^	Port	Device Name	MAC Address ^
19		192.168.1.117	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
20		192.168.1.118	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
21		192.168.1.119	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
22		192.168.1.120	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
23		192.168.1.121	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
24		192.168.1.122	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9
25		192.168.1.123	37777	X5-3MP-EB-28	4c:11:bf:8d:2c:9

Device Search Add Display Filter

Added Device

<input type="checkbox"/>	Channel	Modify	Delete	Status	IP Address	Port	Device Name
<input type="checkbox"/>	1				192.168.1.120	37777	X5-3MP-EB-28
<input type="checkbox"/>	2				192.168.1.121	37777	X5-3MP-EB-28
<input type="checkbox"/>	3				192.168.1.122	37777	X5-3MP-EB-28
<input type="checkbox"/>	4				192.168.1.123	37777	X5-3MP-EB-28

Delete

Back

The cameras will then be added below in the “Added Device” area. If the connection to the IP camera is successful the round “Status” icon will change from red [not connected] to green [connected]. If the status icon stays red, click the pencil “Modify” icon and ensure that the “User Name” and “Password” credentials match the user name and password that are set on the IP camera. (usually set to Username: admin Password: admin by default). Click “Next”.



Select the camera channel you want to set recording schedules for, or select “All”, then click the gear icon on the right. A new window will open as shown in the picture below.



Here you may specify up to 6 recording periods and recording types for each day. We recommend using MD [Motion Detection] as it will only record when there is motion detected on a camera, saving hard drive space, and makes searching for a incident much easier.

In the example picture above, the schedule is set to record when motion is detected 24hrs/day. Under Copy you may select other days to copy this schedule to when the “Save” button is clicked.

“Regular” will record continuously [this will fill up your disk storage the fastest]. “Alarm” will record only when an external alarm device is triggered. “MD&Alarm” requires motion detection and an external alarm device to be triggered before recording.

When you have set your schedule for recording, click “Save”, then click “Finish” in the previous window. The Startup Wizard is complete.

1.5 Camera Configuration Settings

1.5.1 DVR - Encode Settings

Right click -> "Main Menu" -> "Camera" -> "Encode"



This is where you set each camera resolution and quality settings for each of the recording modes (Regular/MD/Alarm). Main stream settings are on the left, the sub stream settings are on the right. Main stream the recorded resolution, sub stream is used when viewing multiple cameras on one screen and for mobile viewing to reduce bandwidth and processor usage.

Select the camera channel number or select "All". We recommend setting the resolutions to the highest size available on each camera. Select the compression type (H.264H is better than H.264, which is better than H.264B).

Select "VBR" bit rate type and quality "6". Use the following bit rate [Kb/S] setting depending on camera resolution: CIF=512/768, D1=1024/2048, 720P=2048, 1080P=4096, 3MP 2052 x 1536=6144, 5MP 2592 x 1920=8192. These are recommended bit rate settings, you may want to select a higher or lower bit rate depending on your requirements. Higher bit rate settings will increase storage usage, but may improve image quality. Click "Apply" then click "Save".

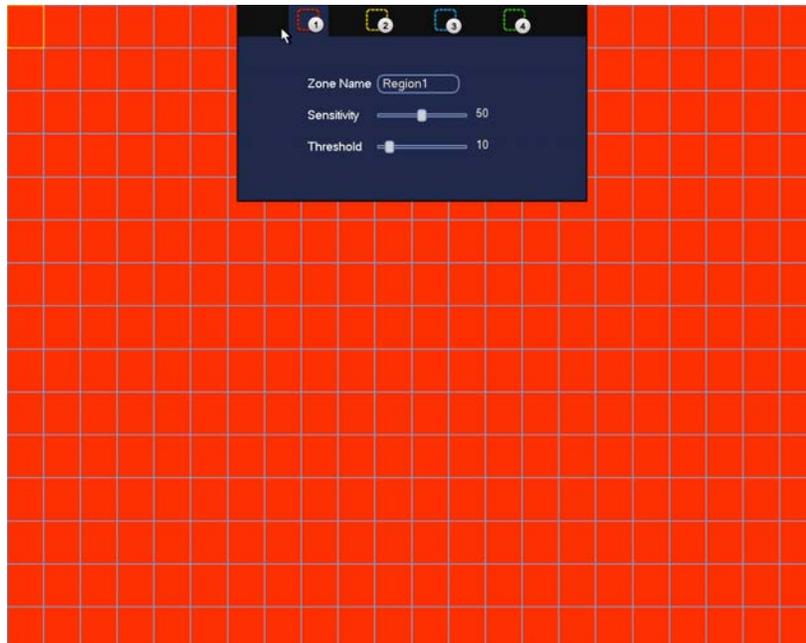
1.5.2 DVR - Motion Detection Setup

Right click -> "Main Menu" -> "Event" -> "Detect" -> "Motion Detect"

Use the following settings for each camera channel you require to have motion detection. Make sure the "Enable" box is checked then click the "Region Setup" button.



Using the mouse, add or remove areas that you want motion detection. A transparent red mask is added to motion detection enabled areas. If no red mask is shown that area will not detect motion.



When you move your mouse cursor to the top of the screen, motion detection sensitivity and threshold settings appear. We recommend these settings: Sensitivity=50 Threshold=10. You may set multiple zones with different thresholds by clicking "1,2,3,or 4" at the top of the page.

1.5.3 DVR - Camera/Channel Names

Right click -> "Main Menu" -> "Camera" -> "Cam Name"



You may change camera names here.

1.5.4 DVR - Camera Image Settings



Use this area to adjust each camera's saturation, brightness, contrast, and sharpness settings.

1.5.5 NVR - Encode, Motion Detection, Camera Names, Date & Time

Some IP cameras support remove configuration of encode, motion detection, and camera name settings from the NVR. However for the best results and accuracy of settings, they should be set on the IP camera directly via the web client interface as shown below.

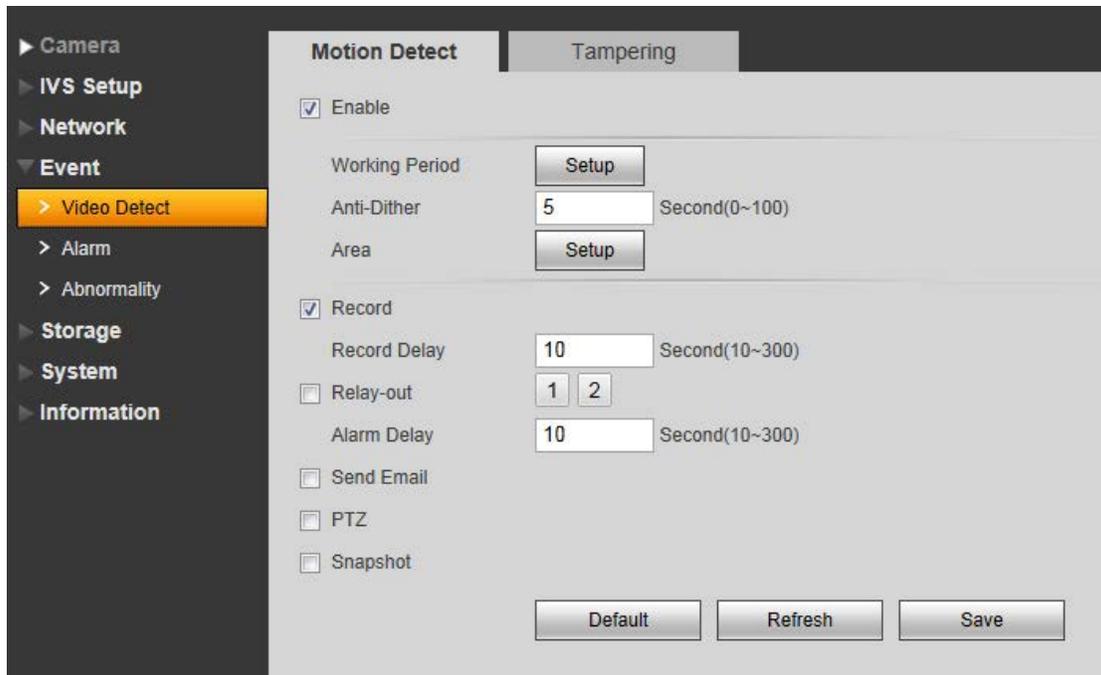
*Note: IP camera interfaces, menus, and settings will vary based on model.



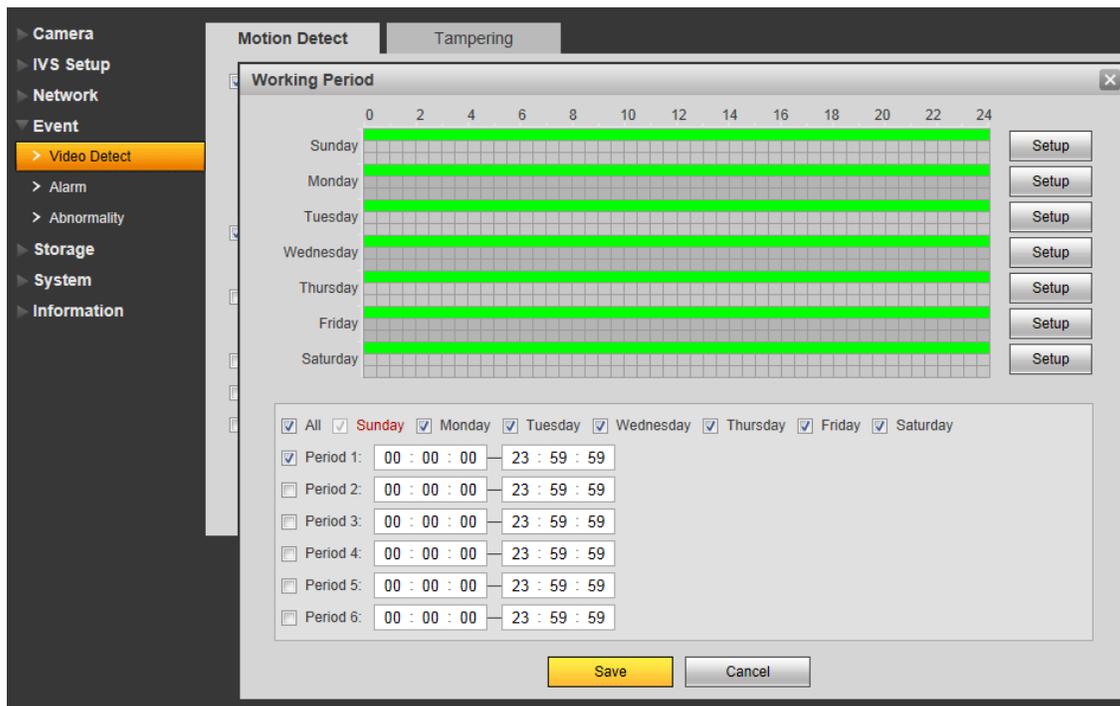
Using Internet Explorer enter the IP address of the IP camera. Login with Username: admin Password: admin [if the Username or Password have been changed this does not apply].

Note: You will need to install an Active X control which may require allowing unsigned Active X controls under Trusted Sites. See section 5.1.1 Internet Browser Setup for more information on Active X installation.

Click the "Setup" tab near the top of web page. Click on "Event" on the left side, then click "Video Detect". Under the "Video Detect" tab, use the settings shown in the following picture.

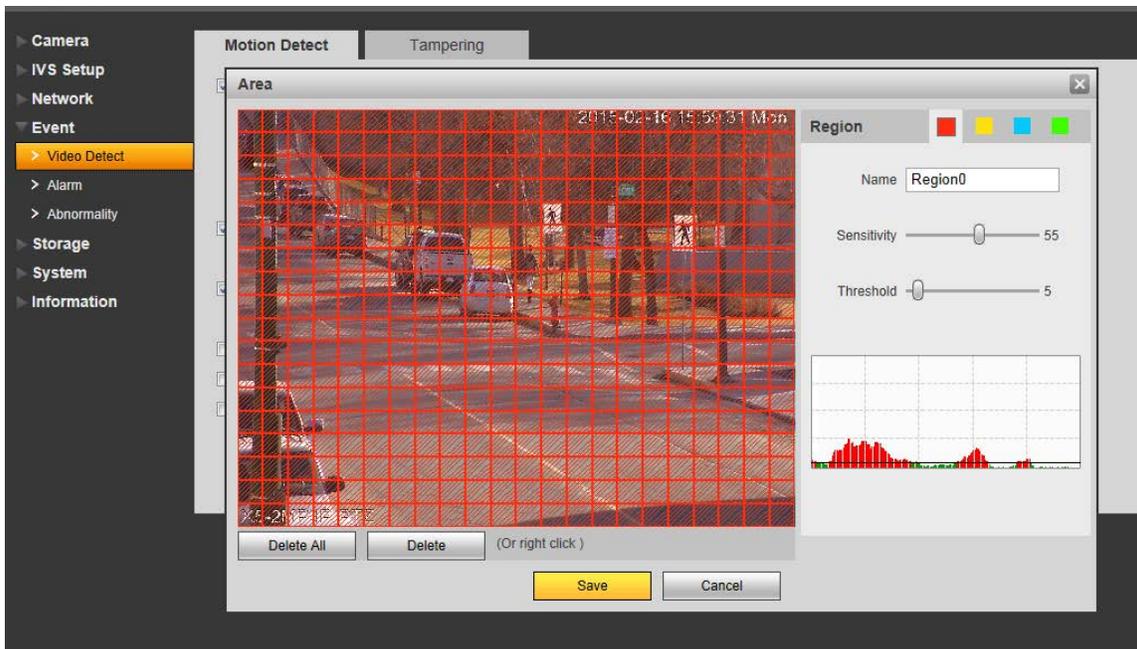


Click “Setup” beside “Working Period”.

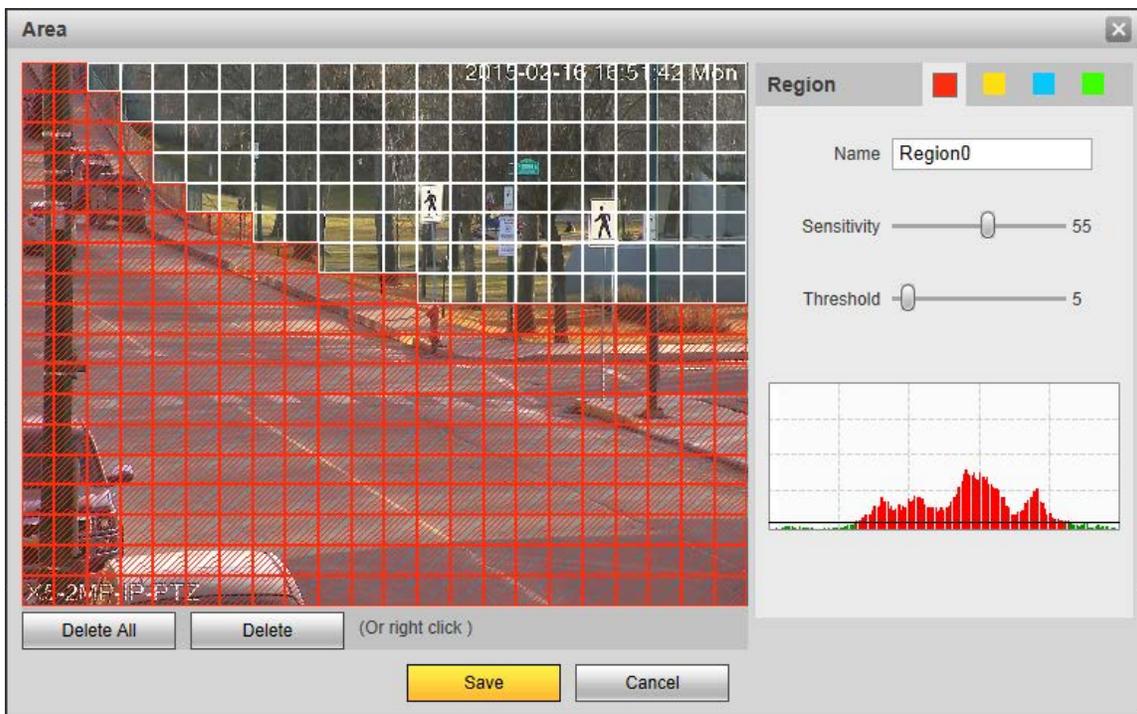


Select the “All” check box, then the “Period 1” check box. Click “Save”

Click the “Area Setup” button.

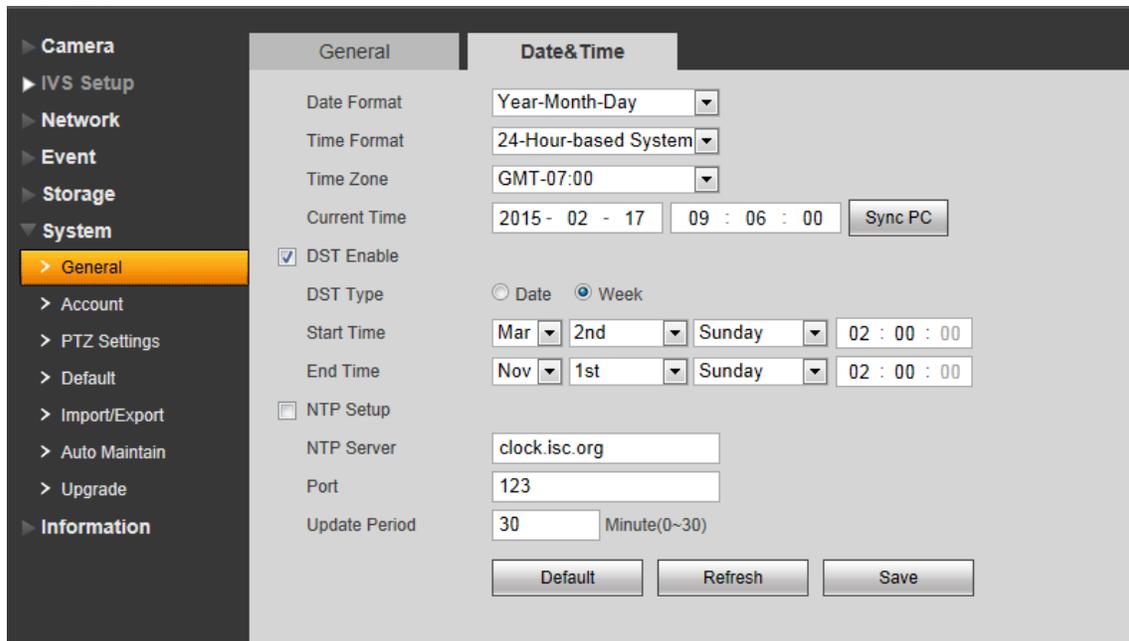
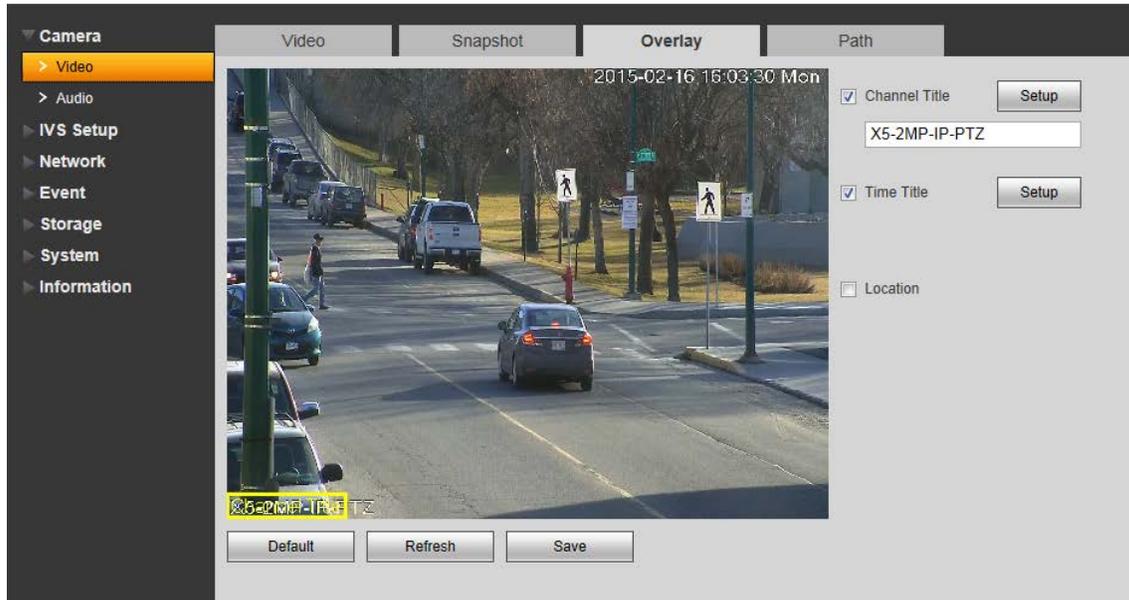


The motion detection enabled zone is shown as a red transparent mask or a red grid over the image. If you don't want motion detection enabled in a certain area, left click and drag to deselect areas. The picture above shows motion detection enabled on across the whole image. In the example below, we have motion detection enabled everywhere but the park area.



In the park area motion detection is disabled. For most applications use a Sensitivity setting of 55, and a Threshold setting of 10. Click "Save" then click "Save" again in the previous "Motion Detect" window.

To change the camera channel title that is displayed on the screen, click “Setup”, then click “Camera” on the left side, then click “Video”. Click on the “Overlay” tab, make sure the “Channel Title” and “Time Title” check boxes are checked. Then click “Setup” to enter the desired camera name. Click “Save”.



To change the camera’s date and time, click “Setup”, then “System” on the left side, then click “General”. Click on the “Date&Time” tab. Set to the correct date and time, then set your local time zone and daylight savings time settings. Click “Save”

1.6 Recording Schedule

The recording schedule determines when the device records and what event triggers the recording. This process is the same on a DVR or an NVR.

Right click -> "Main Menu" -> "Storage" -> "Schedule" -> click the "Record" tab to the right.

Select the desired camera channel or click All to set all channels, then click the gear icon to the right.

The screenshot shows the 'SETTING' menu with 'STORAGE' selected. Under 'STORAGE', the 'SCHEDULE' tab is active. The 'Record' sub-tab is selected, showing a grid for configuring recording schedules. The grid has columns for hours (0-24) and rows for days (All, Sun, Mon, Tue, Wed, Thu, Fri, Sat). A yellow bar is present in every cell of the grid, indicating recording is enabled. Above the grid, there are options for 'Channel' (All), 'Pre-record' (4s), 'Redundancy' (unchecked), and 'ANR' (1800s). Below the grid, there are buttons for 'Default', 'OK', 'Cancel', and 'Apply'. A mouse cursor is pointing at a gear icon on the right side of the grid.

SETTING

CAMERA NETWORK EVENT STORAGE SYSTEM

SCHEDULE

HDD MANAGER

RECORD

ADVANCE

Record Snapshot

Channel All Pre-record 4s Redundancy ANR 1800s

Regular MD Alarm MD&Alarm

All 0 2 4 6 8 10 12 14 16 18 20 22 24

Sun

Mon

Tue

Wed

Thu

Fri

Sat

Default OK Cancel Apply

Period

Current Date: Sun

Period 1	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input checked="" type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm
Period 2	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm
Period 3	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm
Period 4	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm
Period 5	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm
Period 6	00 : 00 - 24 : 00	<input type="checkbox"/> Regular	<input type="checkbox"/> MD	<input type="checkbox"/> Alarm	<input type="checkbox"/> MD&Alarm

Copy

All
 Sun
 Mon
 Tue
 Wed
 Thu
 Fri
 Sat

Save

Here you may specify up to 6 recording periods and recording types for each day. We recommend using MD [Motion Detection] as it will only record when there is motion detected on a camera, saving hard drive space, and makes searching for an incident much easier.

In the example picture above, the schedule is set to record when motion is detected 24hrs/day. Under Copy you may select other days to copy this schedule to when the “Save” button is clicked.

“Regular” will record continuously [this will fill up your disk storage the fastest]. “Alarm” will record only when an external alarm device is triggered. “MD&Alarm” requires motion detection and an external alarm device to be triggered before recording.

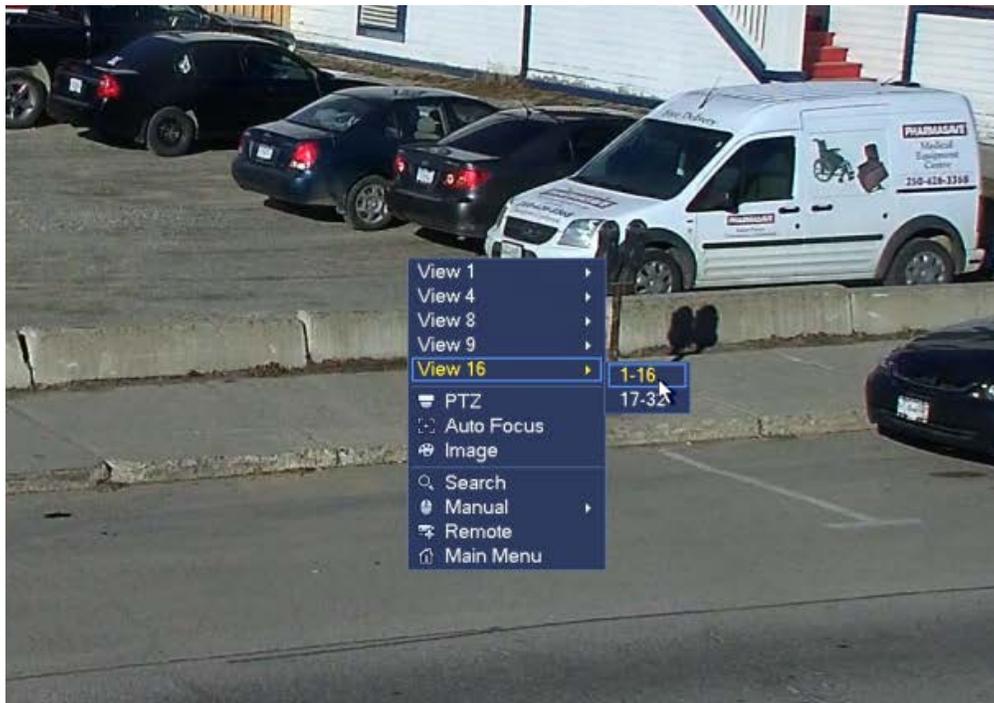
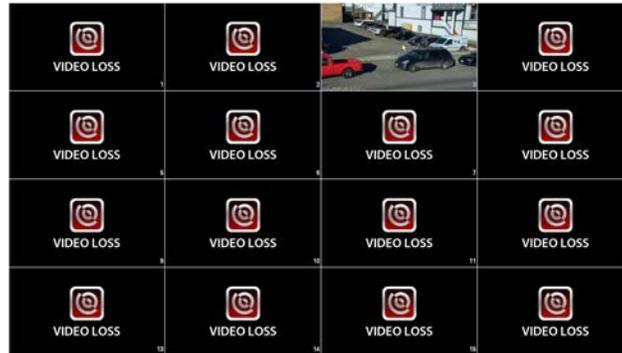
When you have set your schedule for recording, click “Save”, then click “Apply” then “OK” in the previous window.

2 Live View Features

2.1 Basic Navigation

2.1.1 Changing Views

To view a camera fullscreen, double click on a camera image. To exit full screen, double click the camera image again.



You can change the view settings to display multiple cameras on the screen by right clicking and selecting the view you want. You can choose 1, 4, 8, 9, 16 cameras [depending on how many channels your device supports].

Note: NVRs will use the sub stream resolution from the IP camera when viewing multiple cameras at once. If an IP cameras sub stream is disabled or improperly configured this may cause a camera to appear blank. Also depending on the NVR model and resolution of your IP cameras it may not be possible to display all IP cameras at once.

2.1.2 Navigation Bar

The navigation bar is designed to quickly change commonly used settings.

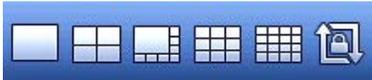
While viewing multiple cameras, or one camera full screen, you can left click once to open the navigation bar at the bottom of screen. The navigation bar must be enabled in settings. To enable the navigation bar, right click, select “Main Menu”, under the Setting area click “System”, then “General”. Ensure the check box beside “Navigation Bar” is checked. Click “Apply”, then “OK”.



Navigation Bar Descriptions:



Main Menu, Minimize Navigation Bar



Change Views [1/4/8/9/16], Toggle Tour [auto cycle cameras]



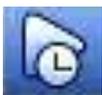
PTZ, Image Adjustments, Search, Events, Channel Info



Remote Devices, Network Settings, HDD Manager, USB Manager

2.1.3 Quick Menu

Move your mouse cursor to the top of a camera screen to access the quick view menu.



Instant Playback

Click to playback the current channel's last 5 minutes of recorded video. You can increase this time by going to “Main Menu” -> “System” -> “General”, then adjust the time under Realtime Playback.



Digital Zoom

This button activates digital zoom, left click and drag a box to zoom in on a specific area. Once zoomed in you can click and drag to move up/down/left/right. You may also use the digital zoom feature by scrolling the mouse wheel.

Note: Digital zoom will not zoom the camera lens, it only magnifies pixels on the screen. If you zoom in too much, the image may become pixelated.



Instant Backup

If you have a USB drive attached, you can click this button to start recording a video clip of the selected camera to the USB drive.

When you click the Instant Backup button, the icon will change to  to indicate recording to the USB drive. Click this button again to stop recording to the USB device. If a USB drive is not connected “No USB Device” will be displayed.



Snapshot

Not currently implemented.



Voice Chat

Click to initiate voice chat with connected clients. Note: Microphone and speakers must be connected. Not supported on all devices.



Remote Device - (NVRs only)

You may use this button to access your NVR's remote device settings to add or remove IP cameras and view their configuration.

2.2 PTZ Controls

PTZ commands are sent via RS485 or TCP/IP depending on the type of PTZ camera [Analog or IP].

If you have a PTZ camera you can access the PTZ controls by right clicking on that camera channel and selecting “PTZ”, the PTZ control window will open.

If you are unable to get PTZ controls to work, please check the following settings:

- Check settings on the DVR/NVR “Main Menu” -> “System” -> “PTZ” select the channel the camera is connected to, and verify the correct PTZ address, baudrate, and protocol settings are selected.
- If you are using an IP PTZ then “PTZ Type” should usually be set to “Remote” and the PTZ address, baudrate, and protocol settings should be set on the IP PTZ via its web client.
- Check that the RS485 wires are connected to the proper ports on the DVR/NVR, and verify that the polarity is correct.

PTZ control window



Use the arrows to operate the pan/tilt functions of the PTZ camera.

Use the zoom buttons to zoom in and out.

Use the focus buttons to adjust the focus of the camera lens.

Use the iris buttons to adjust how much light is allowed to enter the camera lens.

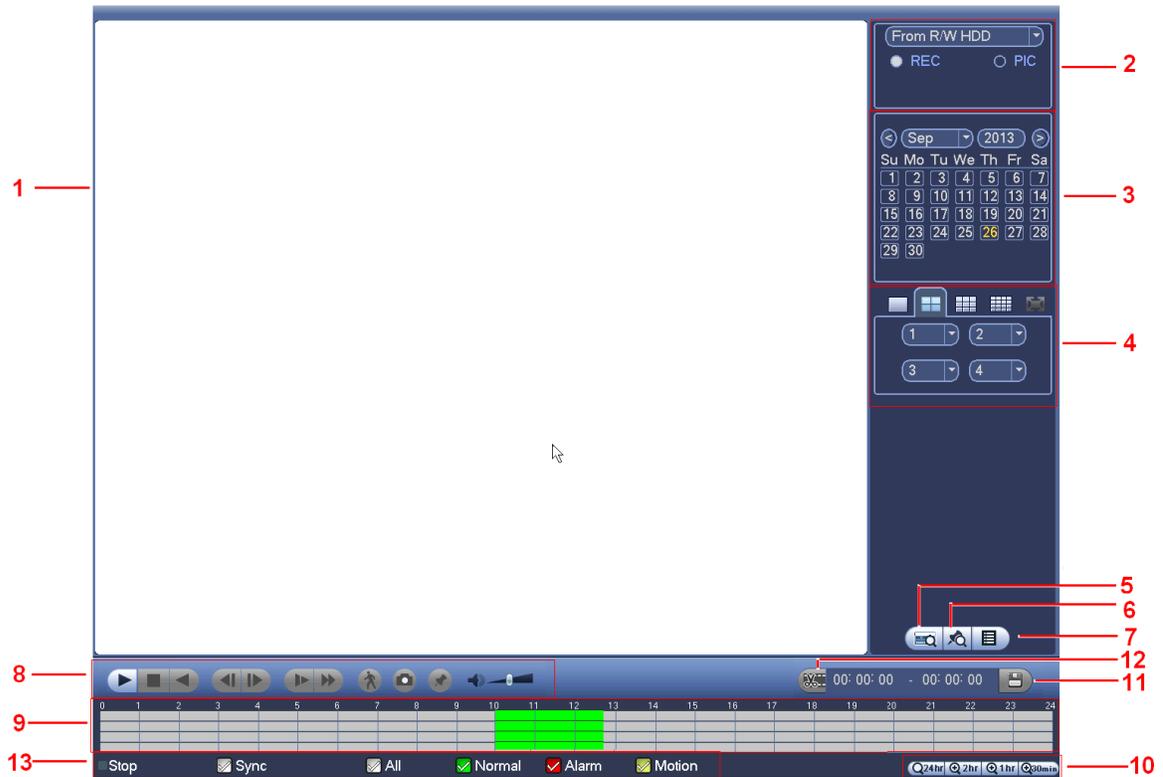
Note: If you lower the amount of light entering iris too much, it will result in a black screen/no image.

3 Playback Features

3.1 Playback

To playback recorded video, right click and select “Search”. This will open the Playback interface. To exit this interface and return to live view simply right click.

Playback Interface



1. Display Window: Display area for recorded video, Supports 1/4/9/16-window playback.

2. Search Type: Select device to search [HDD or USB drive], select video or snapshots [REC/PIC].

3. Calendar: Choose the date that you want to search. A blue highlighted date indicates recorded video on that date.

4. Playback Views and Channel Selection: 1/4/9/16 playback view [may vary by model], select which channels to view in each window.

5. Card Number Search: Not currently implemented.

6. Search Marked Files: Displays a list of files previously marked by using the “Add Mark” button [not supported on some models].

7. File List: Displays the list of recorded files on the selected date. R=Continuous Recording, A=Alarm Recording, M=Motion Recording.

8. Playback Controls: ▶/|| Play/Pause ⏹ Stop ◀ Reverse Play |◀/▶| Previous/Next Frame (only active when video is Paused). ▶ Slow Playback ▶▶ Fast Forward 🏠 Smart Play (not currently implemented) 🔊 Volume of Playback 📷 Snapshot: Not currently implemented. 📌 Add Mark: Allows a specific time to be marked and named to be quickly accessed at a later time.
9. Time and Channel Bar: Displays the selected day in 24hr format, shows recorded video in coloured sections on the selected channels.
10. Timeframe Selection: Determines the amount of time shown on the Time and Channel bar. Options are 24hr, 2hr, 1hr and 30min.
11. Save Clip: Click to save the video clip to a USB drive.
12. Video Clip Selection: Click to set the start and end time of a video clip.
13. Status Bar: Shows current status of video player (Play, Pause, Stop... Etc). Options for displaying and hiding types of recordings (Regular, Alarm, Motion, All). Sync allows for synchronizing the playback time of different channels during playback. When sync is not selected, you may view multiple channels' recordings from different times.

3.2 Digital Zoom

To activate digital zoom during playback, start playing the recorded video, then left click and drag a box in an area you want to zoom in on. The cursor will change to a magnifying glass, click inside the green box with the magnifying glass to zoom. To exit Digital Zoom, simply right click.

Please note that digital zoom does not zoom the camera lens, it only magnifies the pixels on the screen. If you zoom in too much, the image may become pixelated.

3.3 Saving Video Clips

First select the start time by clicking on the desired time and channel on the time and channel bar, then click the video clip button. This should set the start time, then select the end time by clicking on that same channel at a later time, click again on the video clip button to add the end time. Use the save clip button to save the clip to a USB drive. This will open a backup window and allow you to select a USB drive to save the video clip to.

3.4 Marking Video Clips

Marking video clips is useful for labeling an incident for backup or review at a later time.

It will mark the date and time of video clip, and labels the mark with the name of your choice. To mark a video clip, find the desired channel and time you want to mark, then click the  “Add Mark” button. The marked file is then added to the marked files list. While in single view playback mode with the appropriate channel selected, you can click the  button to view the marked files list. This will only display marked files that were saved from that channel. Double click on a marked file in list to bring up that file, then you can play video clip or save to a USB device.

You can delete a marked file by clicking the  “Mark Manager” button, selecting a channel, start and end date, and click “Search” to find marked files. A list of marked files will be displayed, to delete a marked file, select the check box beside the file then click the “Delete”.

4 Backup

4.1 Backup to USB Drive or DVD Drive

To backup to a USB drive or DVD drive, go to “Main Menu” -> “Backup”.

This opens the backup interface window. To switch between saving to a USB drive or a DVD drive, click the “Browse” button then select drive type in the “Device Name” drop down list and click “OK”. Now select the type of recordings you want to backup [All, Alarm, MD, Alarm/MD, Regular, Pic]. Enter a start and end time to search, select the channel or “All” and select “DAV” under file format. Then click the “Add” button, a list of all files matching the search criteria will be generated. You can select or deselect files to be backed up. Click “Start” to begin the backup process. A progress bar and estimate of time remaining is displayed at the bottom of window.

4.2 Playback Video Recordings on a PC

Take the USB drive or DVD with the backed up video recordings on it. Place in a PC and open the correct drive in “My Computer”. Open the file called “Play.exe”, the video player will open. You can use the “Previous File”  and “Next File”  buttons to switch between playing the backup video files. You may also use the standard Play/Pause, Fast Forward, Rewind, and slow play features with this player software.

5 Advanced Network Features

5.1 Internet Browser Interface

5.1.1 Internet Browser Setup

You can access your DVR/NVR remotely using an internet browser interface. The DVR/NVR must be connected to your network. Using Internet Explorer navigate to the IP address of the device to access the browser interface. While some models do support Firefox, Safari, etc, we recommend using Internet Explorer for best performance and compatibility.

In order to use the ActiveX plugins, you will need to go to Internet Explorer menu "Tools" -> "Internet Options" -> "Security" tab, then click on "Trusted Sites" zone then click "Custom Level...". Scroll down to the setting called "Download Unsigned ActiveX Controls". Set this to "Enable". Click "OK" Now click the button "Sites", enter the IP address of the DVR/NVR here, then click add. Uncheck the check box called "Require server verification [https:] for all sites in this zone" and click close. Then click "OK" button in the Internet Options window. Now type your the device's IP address in the address bar and press enter.

A login page should now appear. If this page is loading incorrectly, press the F12 key to open the "Developer Tools" window. Depending on the version of Internet Explorer you are using, the settings you need to change will either be along the top and are called "Browser Mode/Document Mode" or in a tab called "Emulation" try setting a different Browser Mode like "IE8" and set the Document Mode to match the same version as the Browser Mode. The page should refresh and you should now be able to login.

A notification will come up asking you to install the ActiveX plugins. Press the allow and install buttons to continue installing the plugins. If it prompts you to close Internet Explorer during the installation process, please close all Internet Explorer windows to install the plugins correctly.

Login to the internet browser interface.



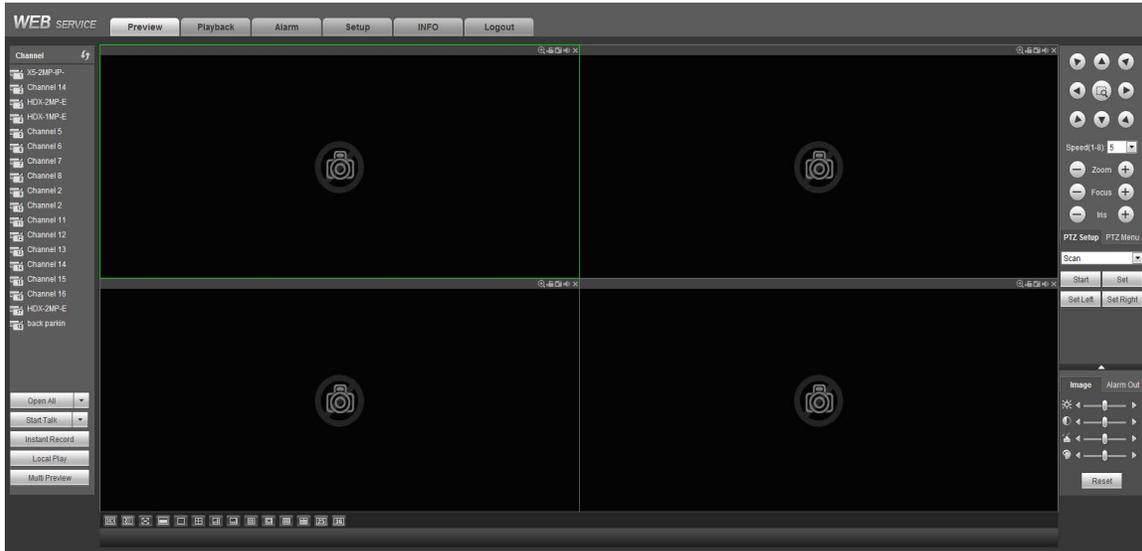
Your admin username and password will be the same as you have set on your

device.

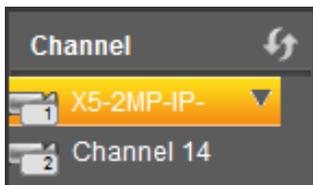
Default: Username: admin Password: admin

5.1.2 Browser Interface

When you login successfully, the web page should load as shown below.



To view your cameras, click the desired camera view from the display bar near bottom of window. Then click a blank camera screen you want to view video on, and click a camera from the list of available cameras shown below.



When a camera is connected, the camera's icon and name are highlighted in yellow. You can also open all cameras by click the "Open All" button at bottom of the camera list.

Once connected to the cameras you can operate PTZ controls using the menu on the top right.

To view recorded video, click the "Playback" tab near the top of web page. The playback web interface open. This interface operates similarly to the DVR/NVR's Playback Interface as mentioned in section **3 - 3.4**

You can also change your device's configuration settings remotely under the "Setup" tab.



5.2 ARMS Pro/HD Apps

Ascendent Technology Group's ARMS Pro/HD app is designed to provide you with remote viewing of your DVR/NVR on a smart phone or iPad. These apps are available on the Apple App Store and Google Play Store. Follow the links below to view these apps.

[ARMS Pro - iTunes App Store](#) for iPhone

[ARMS HD - iTunes App Store](#) for iPad

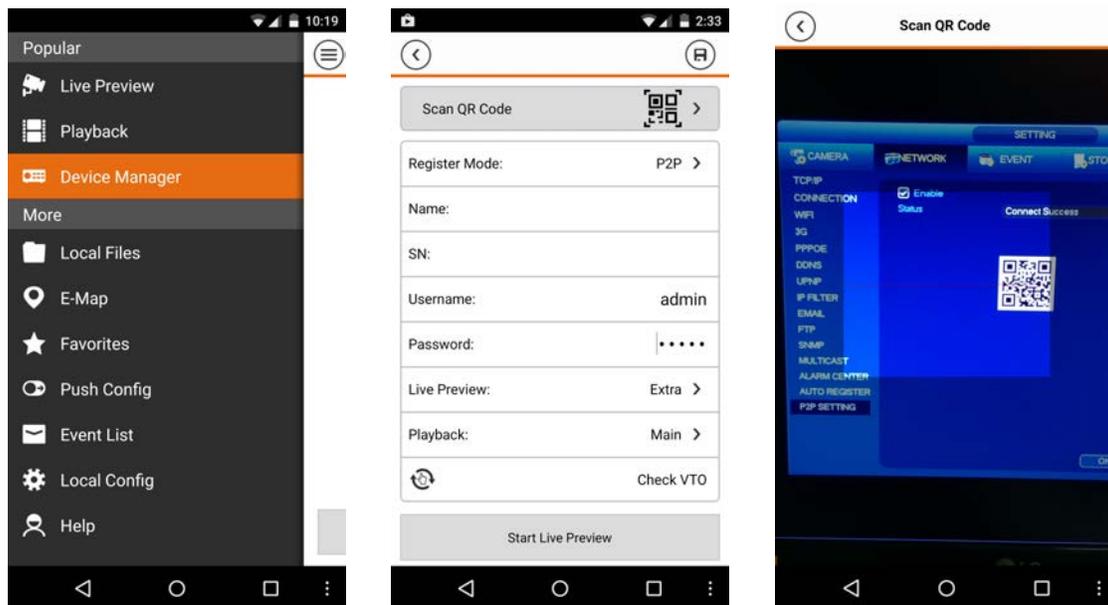
[ARMS Pro - Google Play Store](#) Android

5.2.1 P2P Easy Config (available on select models)

P2P Easy Config allows for a quick and simple setup to connect your DVR/NVR to the ARMS Pro/ARMS HD app.

On your DVR/NVR go to "Main Menu" -> "Network" -> "P2P Setting"

Check the "Enable" check box then click the "Apply" button. The status should change to "Connect Success". Open the ARMS Pro/ARMS HD app.

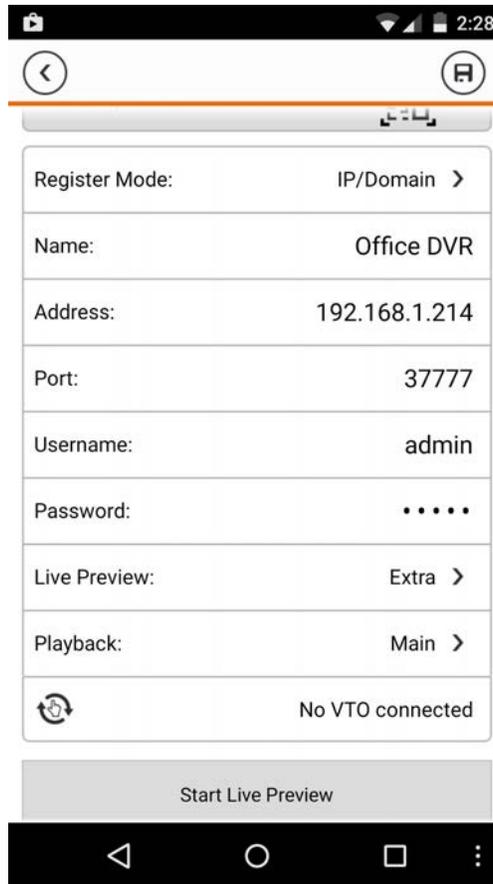


Press  to go to main menu. In the main menu select "Device Manager" then press the  button at the top right. Set the register mode to "P2P" then click the "Scan QR Code" button. Aim your smart phone or iPad camera at the recording device's display screen showing the QR code. When the camera detects the QR code in the QR code scanning area, the settings will automatically be entered in the previous connection settings page. Enter a name for this connection in the "Name" field. Enter the correct username and password. Then click the "Start Live

Preview” button. The Live Preview will now load and you should now be able to view the cameras connected to your DVR/NVR.

5.2.2 Custom Connections

If your device does not support the P2P Easy Config, you will need to manually setup the ARMS Pro/ARMS HD app connection to your recording device. To do this open the ARMS Pro/ARMS HD app then press  to go to main menu. Select “Device Manager” then press the  button at the top right. The connection settings page will open.



Change “Register Mode” setting to “IP/Domain”, and enter a name for this connection in the “Name” field. Enter the DVR/NVR’s IP address in the “Address” field. Use default “37777” for the “Port” setting [port number may be different if changed on DVR/NVR or router’s port forwarding settings]. Enter the username and password [if the device’s admin account password has been changed, use the updated password]. Set “Live Preview” settings to “Extra” and “Playback” to “Main”. Press “Start Live Preview” to save and view cameras.

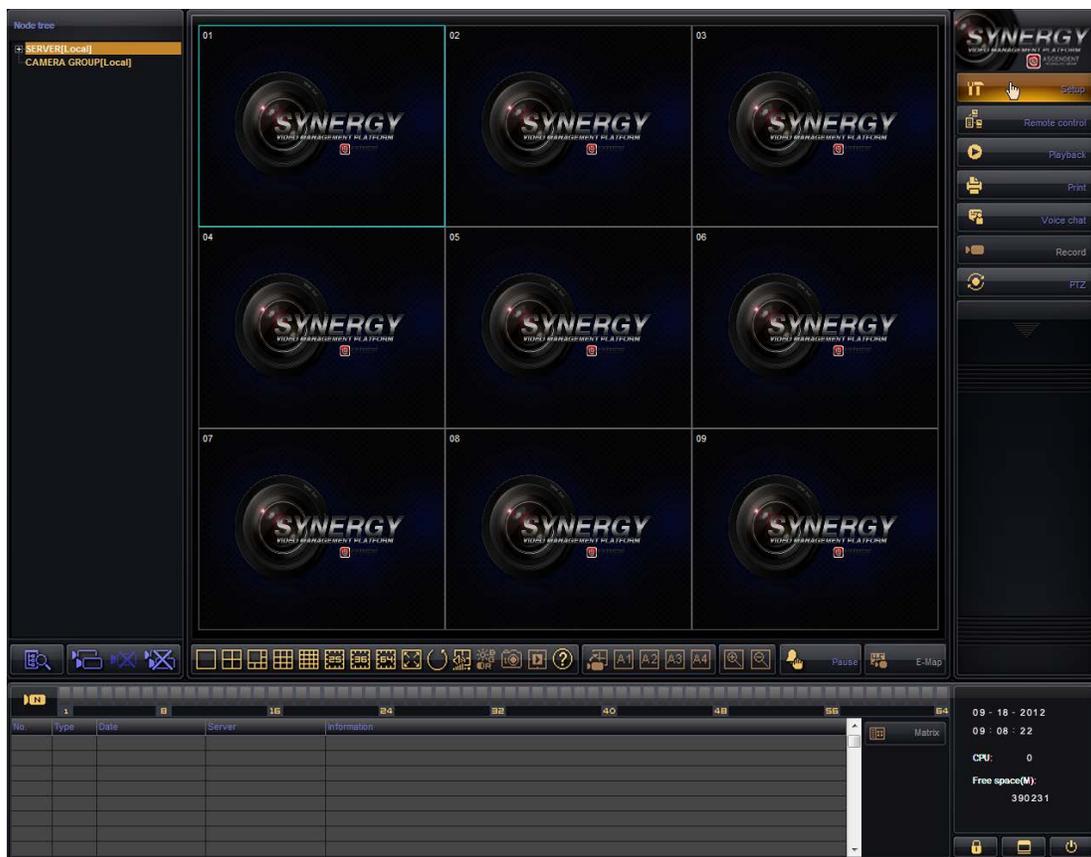
For more information on using the Arms Pro/HD app, open the Arms Pro/HD “Help” section in the main menu.

5.3 Connecting to the X5 Synergy VMS Software

The X5 Synergy VMS software is designed to turn your PC into a video monitoring station, with live viewing, recording and control capabilities for IP cameras, video servers, and standalone DVRs and NVRs.

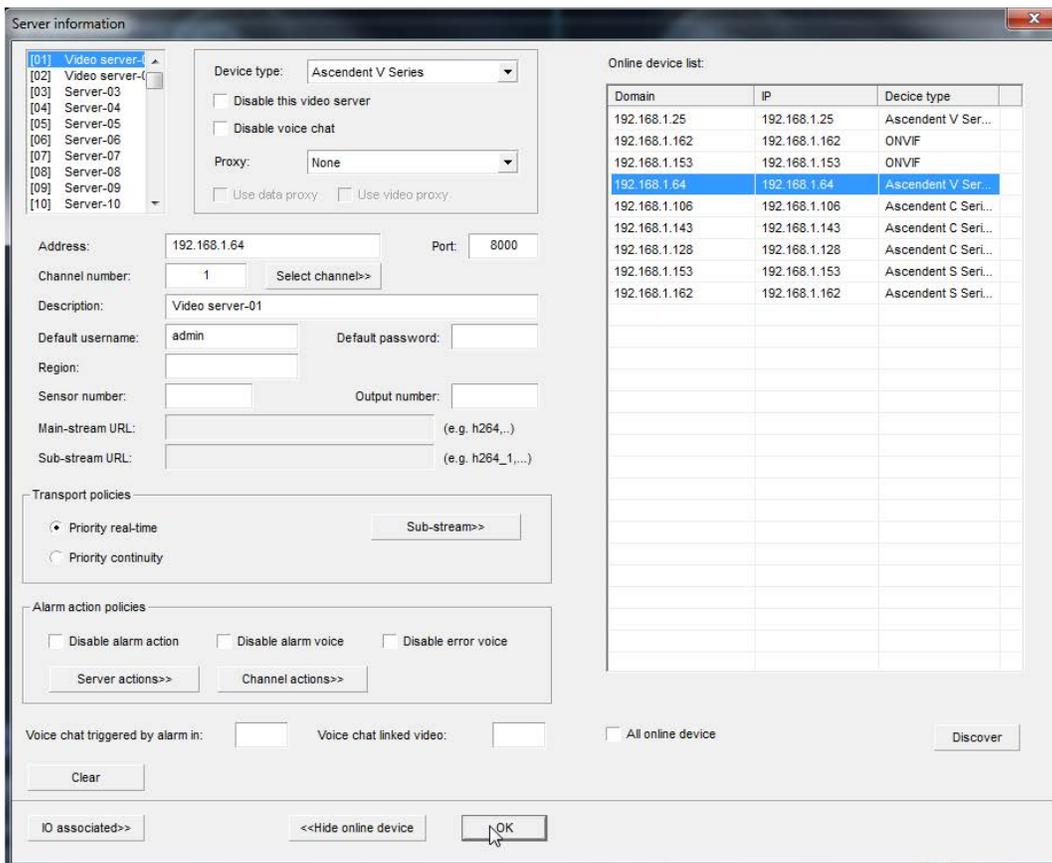
To connect to your X5S/X4S standalone DVR/NVR with the X5 Synergy VMS software, follow these steps:

Install the X5 Synergy VMS software. Then open the software and click the **Setup** button to the right of the main video screen(s). [Fig. 1-0]



[Fig. 1-0]

Click “OK” after entering your login credentials, the default password for “Supervisor” is blank. Select **Server setup** in the top left corner and it will open the “Server information” window. At the bottom of the new window click on **Show online device** then click **Discover** on the right side of the screen. Select your X5S/X4S/IP camera from the list and ensure that the “Channel number” field contains the number of video feeds on your X5S/X4S device. Enter your default username and password, “admin” is the default for X5S/X4S devices. [Fig 1-1].



[Fig. 1-1]

After verifying your information click OK, then OK again. On the left side of the default window you should see “Server[Local]”, click this to expand it and double-click on DVR. Right click on a camera and click “Connect to main-stream, this will open the main stream from that channel in the selected video window.

For more information on using the X5 Synergy VMS software, please download the guide located on our website: [X5 Client Quick Guide](#)

5.4 UPnP Settings

UPnP (Universal Plug and Play) is a protocol that provides automatic port forwarding, eliminating the need for complex router port forwarding configuration.

Note: Your router must support UPnP for this function to work.

Make sure the UPnP function is enabled in your router's configuration settings. Then on your recording device go to "Main Menu" -> "Network" -> "UPnP".

The UPnP settings are displayed as shown below (may vary depending on device).

SETTING

CAMERA NETWORK EVENT STORAGE SYSTEM

TCP/IP
CONNECTION
WIFI
3G
PPPOE
DDNS
UPnP
IP FILTER
EMAIL
FTP
SNMP
MULTICAST
ALARM CENTER
AUTO REGISTER
P2P SETTING

Enable

Status: Success

LAN IP: 192 . 168 . 1 . 1

WAN IP: 184 . 70 . 220 . 178

Port Mapping List

	<input type="checkbox"/>	Service Name	Protocol	Internal Port	External Port
7	<input type="checkbox"/>				
1	<input checked="" type="checkbox"/>	HTTP	TCP	80	80
2	<input checked="" type="checkbox"/>	TCP	TCP	37777	37777
3	<input type="checkbox"/>	UDP	UDP	37778	37778
4	<input type="checkbox"/>	RTSP	UDP	554	554
5	<input type="checkbox"/>	RTSP	TCP	554	554
6	<input type="checkbox"/>	SNMP	UDP	161	161
7	<input type="checkbox"/>	HTTPS	TCP	443	443

Add Delete

Default OK Cancel Apply

Click the Enable button at the top of window [this button may be labeled as "PAT"]. Only select the check boxes of "HTTP/TCP/80/80" and "TCP/TCP/37777/37777" as shown above, then click "Apply". The "Status" field near the top should change to "Success", and the LAN IP and WAN IP will be displayed.

To modify the protocol, internal port, or external port of one of these entries, you will need to double click on an item in the list. This will open the "Port Info" window.



You can edit the service name, protocol, and port number.

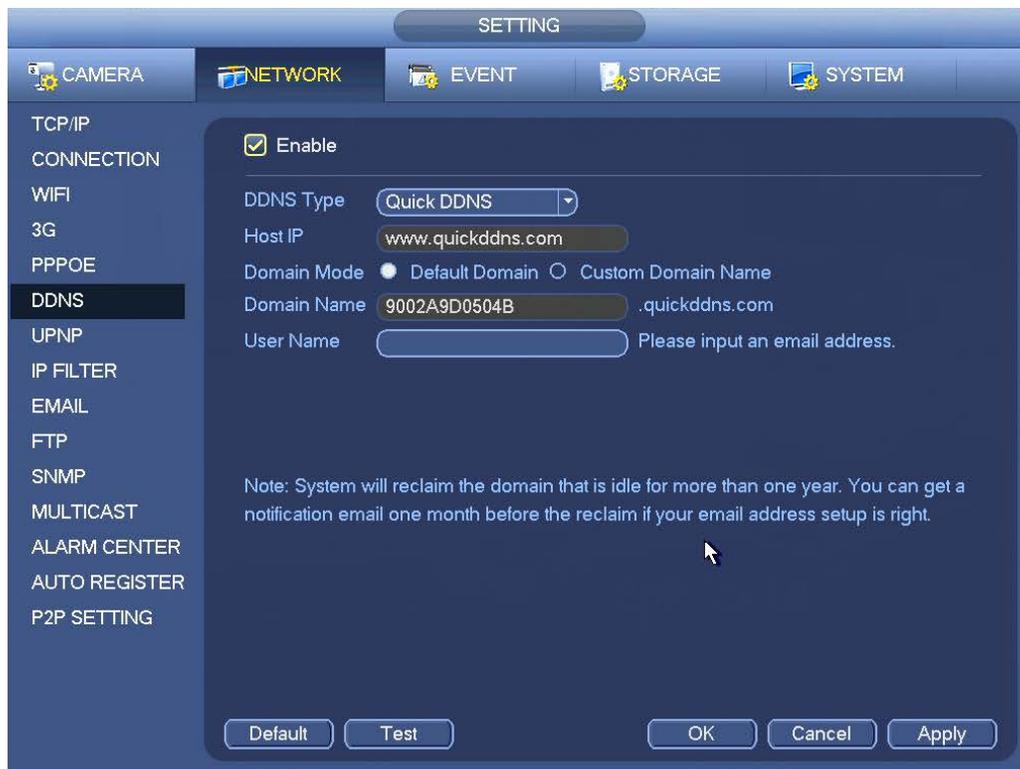
5.5 DDNS Settings

DDNS [Dynamic DNS] is a protocol that allows the use of a URL address instead of an IP address to access a remote device. This eliminates the need for a static external IP address at DVR/NVR install locations, and also provides an easy to remember URL address.

Note: DDNS requires the appropriate ports to be forwarded to the DVR/NVR.

To enable DDNS go to “Main Menu” -> “Network” -> “DDNS”.

The DDNS settings are displayed below.

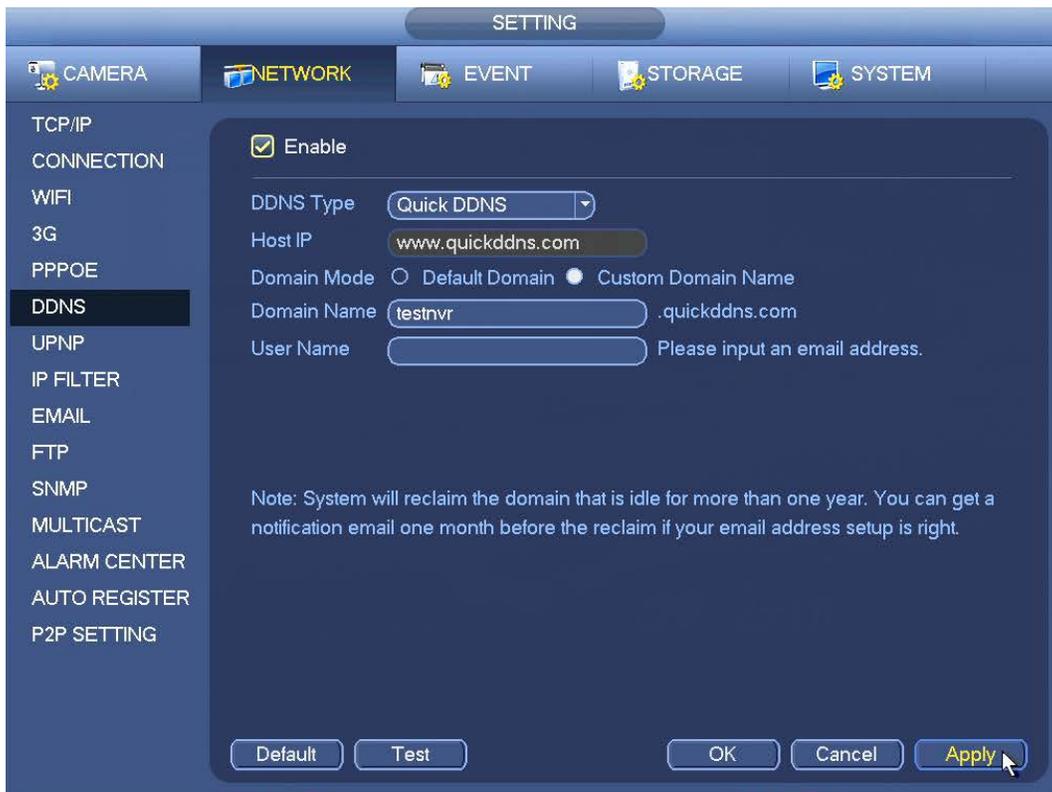


Click “Enable”, then select “Quick DDNS” from the DDNS Type drop down menu.

“Domain Mode” can be set to “Default Domain” or “Custom Domain Name”. In the example picture above, the Default Domain setting would create a URL address of “9002A9D0504B.quickddns.com”, and would allow you to access the device by entering that URL address in a web browser, or client software/app.

Choosing “Custom Domain Name” for the “Domain Mode” setting allows you to choose a URL address name. In the example pictured below, we have created a URL address of “testnvr.quickddns.com”, this would allow you to access the device by entering that URL address into your web browser or client software/app.

Click the “Test” button to check that your settings are valid, a message should pop up that says “Successfully Registered”.



To save your DDNS settings, click the “Apply” button then click “OK”.

Note: User Name/E-mail address are not required.

Thank you for reading this manual. For any further questions regarding your Ascendent DVR/NVR, please contact your installer.