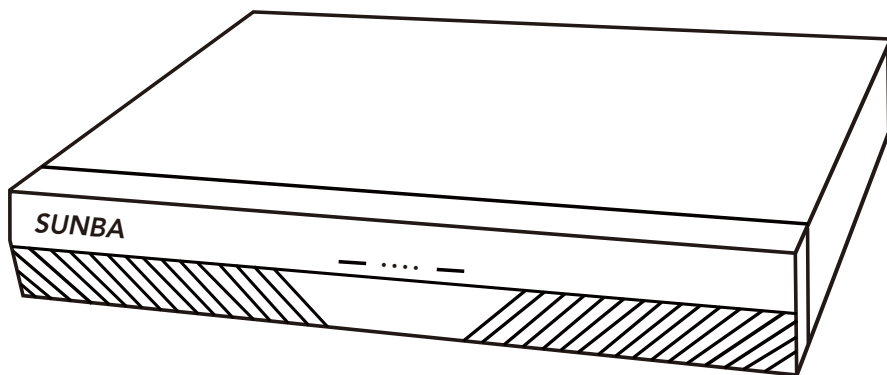


# SUNBA

Dedicated PTZ Camera Professional

## SUNBA 8CH H.265/H.264 Network Video Recorder User Manual

(NVR-8008T-P / NVR-F2008PL)



2018/04  
Version 1.0



Visit <http://nvr.sunba.net> to access the step by step YouTube video tutorials for setting up Sunba NVR.

# FCC Warning (U.S.A)



The device has been tested in compliance with limits set by Part 15 of Federal Communication Commission (Class B). The operation of the device is thus limited by the following two conditions:  
1) it is not permitted to cause harmful interference to any authorized radio communications, and 2) it must accept any interference it receives.

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# 1. Overview and Specification

The series NVR is an 8 channel high performance embedded network video recorder. The system is dedicated to store digital videos captured by front-end devices such as IP Camera (IPC). This series NVR can perform live video preview, recording, playback, remote access, and backup.

Feature	Model NVR8008T-P	Model NVR-F2008PL
Main Processor	Hi3798M	Hi3520D
Operating System	Embedded Linux	
System Resources	Simultaneous multi-channel real-time view, recording, playback, network operation & USB backup	
Operator Interface	16-bit true color graphic menu operation interface, support mouse operation	
Preview	1/4/8/16	1/4/8/12
Video Input (IP)	4*5M/8*4M/4*3M/12*1080P/16*960P	8*1080P/12*960P/8*720P
Video Standard	PAL(25f/s); NTSC(30f/s)	
Video Compression	H.265/H.264	H.264
Display Quality	4K(3840*2160)/1920*1080/1440*900/1280*1024/1280*720/1024*768	1920*1080/1440*900/1280*1024/1280*720/1024*768
Playback Quality	5M/4M/3M/1080P/960P	1080P/960P/720P
Decode	2*5M/2*4M/4*3M/4*960P	2*1080P/4*960P/4*720P
Motion Detection	Sunba cameras: supported; 3 <sup>rd</sup> party camera: depending on ONVIF Compatibility, not guaranteed	
Audio Compression	G.711A	
Intercom	Unsupported	
Recording mode	Manual (Continuous)>Schedule>Video Detection	
Local Playback	2*5M/2*4M/4*3M/4*1080P/4*960P	2*1080P/4*960P/4*720P
Search Mode	Search by Time/Date/Event/Channel	
Record Storage	HDD, Network	
Backup Mode	Network Backup, USB Hard Disk, USB Burner, SATA Burner	

Backup Mode	Network Backup, USB Hard Disk, USB Burner, SATA Burner	
Video Output	HDMI/VGA	
Audio I/O	0/0	
Alarm I/O	0/0	
Network interface	1* 10M/100M Adaptive Ethernet port, 8* PoE Ports (802.3at/af)	1* 10M/100M Adaptive Ethernet port
USB interface	2*USB2.0 Port	
Hard disk	1*SATA(Up to 6TB for Each Disk)	
PTZ control	Control PTZ Device by Network	
ONVIF	Supported	
Power Supply	DC48V/3A	DC12V/2A
Power Consumption	<10W (Without HDD)	
PoE Power per Port	Max: 30W ; Supports both 803.af/803.at	N/A
Total PoE Power Budget	144W	N/A
Work Environment	Temperature:0℃-+55℃ , Humidity:10%—90%RH , Atm:86kpa—106kp	

# 2. Front Panel and Rear Panel

## 2.1 Front Panel



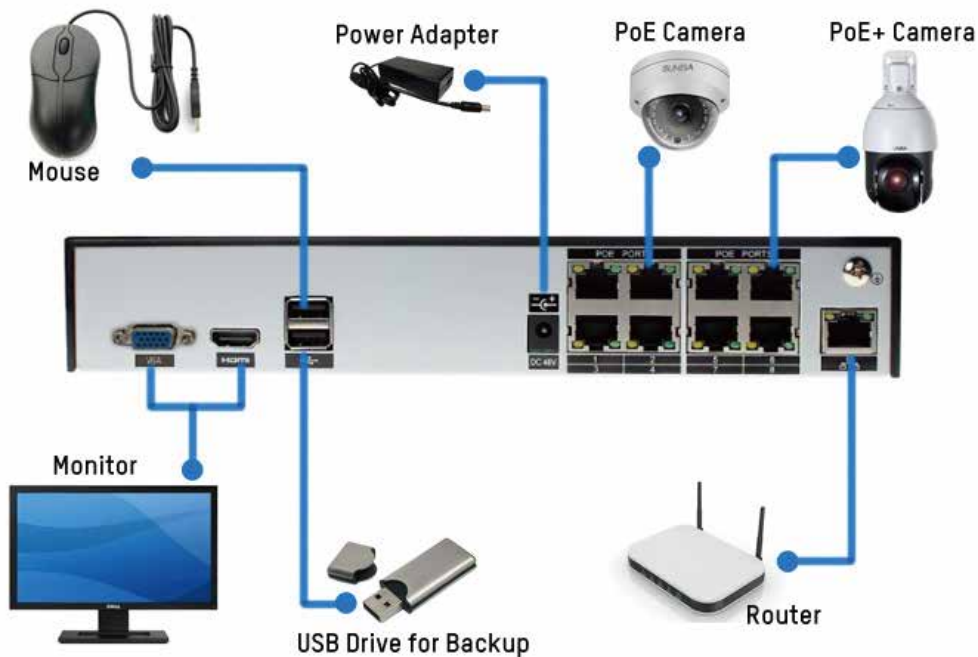
ICON	DESCRIPTION
IR	IR Receiver Interface
Power	Turns solid red when the NVR is powered
HDD	Turns solid red
Alarm	Turns solid blue if turned on
ESC	Exit the current menu or go back to the previous menu
MENU	Open the menu, or confirm the selection once in the menu

ENTER	Confirm the select
⤴	Direction Button: Navigate between different fields and items in the menu
⤵	
✓	
⬅	

## 2.2 Rear Panel

Disclaimer: the following diagrams and pictures use NVR-8008T-P as an example. Please refer to the product detail page to check the correct rear panel of NVR-F2008PL.

**Note NVR-F2008PL does not have PoE ports on the back.**



ICON	DESCRIPTION
VGA	VGA video output port can connect to a monitor or TV to view analog video.
HDMI	High definition multimedia signal output port transmit uncompressed high definition video and multiple-channel data to the HDMI port of the displaydevice.
DC 48V	Connects to 48V3A DC power adapter.
PoE Ports	Built-in switch that supports PoE (802.af) and PoE+(802.3at) with auto-identification.
USB Ports	USB 2.0 Ports that can connect to a mouse for control and to USB drives for backup.
LAN Port	10M/100M self-adaptive Ethernet port. Connects to router or other network adapters.

### 3. HDD Installation

**Step 1.Remove the 4 screws on both sides of the NVR**



**Step 2.Slide out the NVR cover**



**Step 3.Put in the HDD**



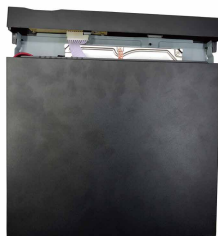
**Step 4.Install and secure the HDD on the NVR from the bottom using 4 screws come with the package**



**Step 5.Plug-in the data and power cable for the HDD**



**Step 6.Put back the NVR cover**

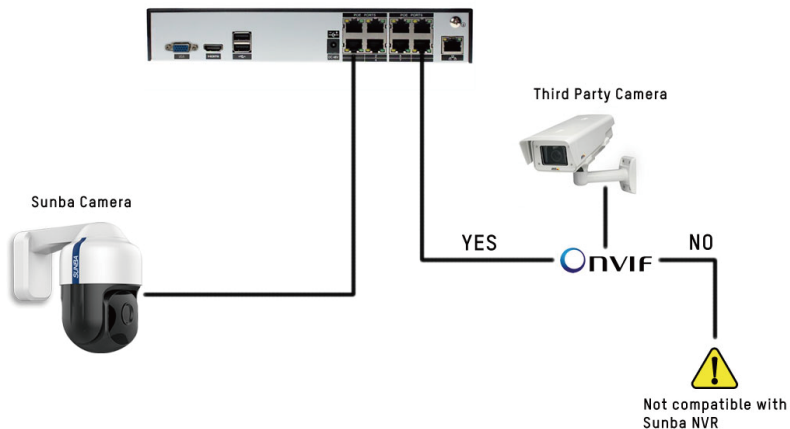


**Step 7.Install the screws back on the sides of the NVR**



## 4. Connecting to IP Camera

### 4.1 PoE Connection



Note: 3rd party IP Camera MUST BE ONVIF compliant in order to be added to Sunba NVR

ONVIF 3rd party cameras don't support plug and play. Please read **Chapter 6** on how to add ONVIF cameras to the NVR.

### Is the NVR able to supply enough power to my PoE camera?

Users can do the math:

The total budget of the NVR is 144W.

1 \* 20X PTZ camera takes 25~30W;

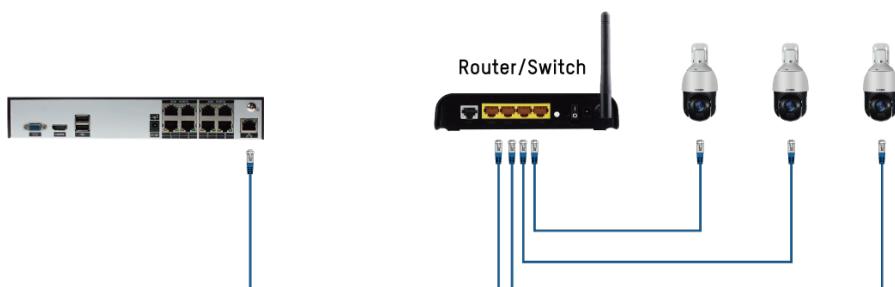
1 \* 4X PTZ camera or fixed dome/bullet camera takes 15.4W;

Calculate the wattages taken by other cameras and evaluate the wattages left for your unit.

For example, if 7 cameras are already connected to the NVR and consume 140W, only 4W will be left for the 8th camera; in this case, the NVR may not be able to support the 8th camera.


## 4.2 Non-PoE Connection

This is for NVR-F2008PL or 3rd party cameras that cannot be recognized in the built-in switch of the PoE NVR. Non-PoE cameras must be power separately and connect to the same LAN network with the NVR.

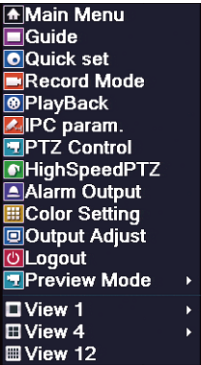




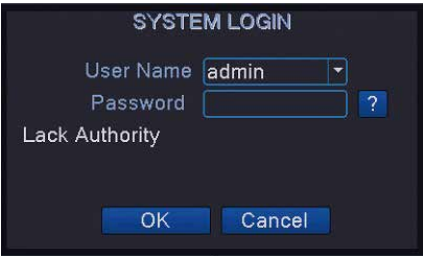
# 5. Operations and Setting

 Note the UI and snapshots below were taken from NVR8008T-P. NVR-F2008PL shares exactly the same configuration logic but the UI may differ slightly. For any questions, feel free to contact [support@sunba.net](mailto:support@sunba.net).

Access the NVR Main Menu by either pressing the "MENU" button on the NVR front panel or by making a right click on the screen and select the first item from the right click (context) menu.



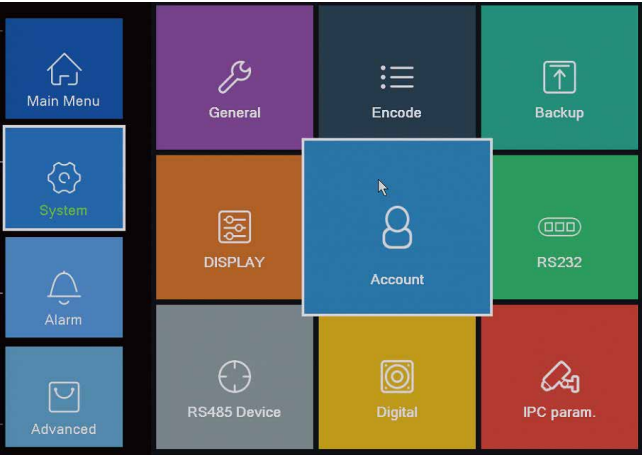
The default account for the NVR is:  
Username: admin  
Password: (leave it blank)



Note: For security purposes, please modify your password after your first login.

## 5.1 Account Management

You can add additional accounts and modify your administrator account password in Main Menu-Account.

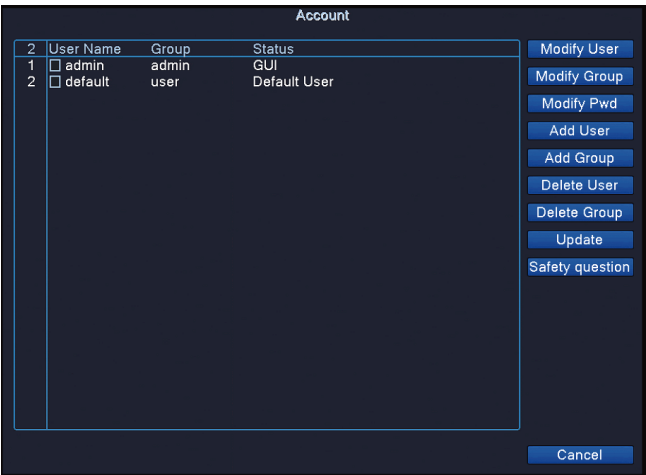


By default, there are two existing accounts associated with the NVR.

Username:admin Password:(blank) **[Administrator]**

Username:default Password:default **[User]**

The user “default” is a reserved user for system interior use only and cannot be deleted. It only has the rights to access live view and check playbacks, but has no access to any other advanced features. This default user is suitable so that you can view some channels without logging in or you can assign the account to Security Guards/Police without granting access to other features.



Modify Password: Select a user from the account list, and click “Modify Pwd”.

Add/Delete/Modify Group: A user can belong to a certain group. For example, the admin/blank password set belongs to the administrator group. You can set specific purviews of certain user groups. By default users under the “admin group” gets access to all features of the NVR while users under the “user group” gets access to limited features of the NVR. You can click “Modify Group” to assign/set specific rights of a group.

Add/Delete/Modify User: You can add a user by clicking “Add User”, delete a user from NVR by “Delete User.” Specifically, you can also set the rights and privileges of the user by selecting a user from the account list and click “Modify User.”

Update: Refresh the account list.

Safety Question: Set the safety question to reset account password and retrieve access in case that the original password has been forgotten.

Safety question

Please set these safety questions in order to reset password later

Question

Please select Question

Answer

Confirm Answer

Question

Please select Question

Answer

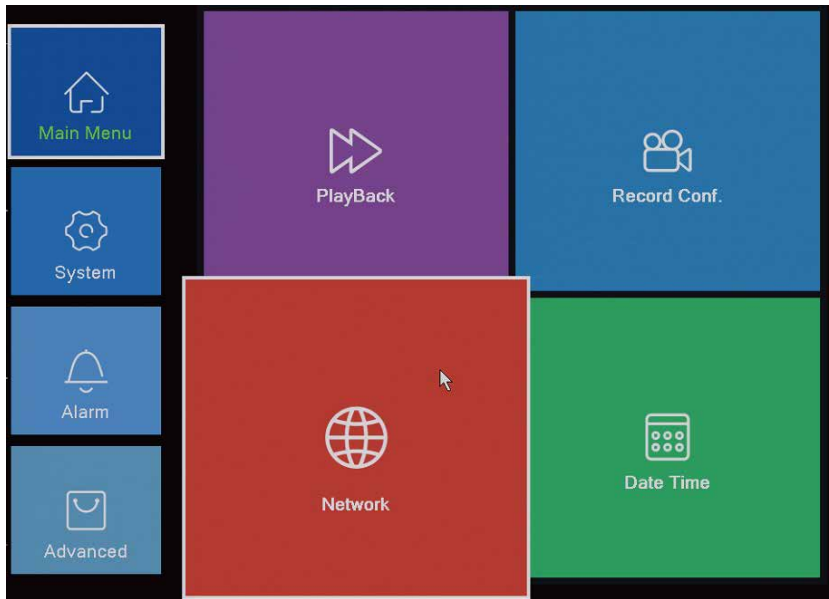
Confirm Answer

OK

Cancel

## 5.2 Network

The network setting page can be accessed from Main Menu-Network.



The network menu shows the current IP, submask, gateway, DNS, TCP port and http port of the device.

DHCP is a network protocol that enables a server to automatically assign an IP address to a network machine. We suggest assigning a Sunba NVR with a static IP address (by default) and disable this function to avoid potential IP conflict especially if you have multiple network machines connected to a same server (eg., a router or a switch). Also do not enable DHCP if you set port forwarding on your server for external connection to the NVR on the LAN.

Please make sure the NVR Gateway/IP Address matches the Gateway of the server (router). For example, if the router IP is 192.168.0.1, you need to modify the Gateway of NVR to 192.168.0.1 and IP Address to 192.168.0.X where X can be any integer between 2 to 255. However, no two devices on the same network shall share the same IP Address. Make sure your NVR doesn't conflict with other devices on the LAN Network. Failure to properly configure the NVR network will affect remote access of the device.

**Network**

Net Card: Wire Netcard ☐ DHCP Enable

IP Address: 192 . 168 . 1 . 119

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

Primary DNS: 192 . 168 . 1 . 1

Secondary DNS: 8 . 8 . 8 . 8

Media Port: 34567

HTTP Port: 80

HS Download: ☐

Transfer Policy: Quality Prefe

NetService

OK Cancel

Media Port: Same as TCP Port. Default is 34567. If modified, please power cycle the device.

Http Port: Default is 80. If modified, please power cycle the device. If this value is modified, in the web browser, users must login to the NVR using http://IP:http port.


DNS: Domain Name Server that translates domain name into IP address. It is recommended to set the DNS by the same value as offered by your ISP.

Transfer Policy: there are three strategies: Self-adaptive, Quality preferred or Fluency preferred. The video stream will adjust according to the setup. Quality preferred transfer policy delivers best quality but the video may be lagged. Self-adaptive is the tradeoff between quality preferred and fluency preferred. Fluency preferred and self-adaptive are valid only when the sub stream is turned on.

Click NetService to open the submenus of network configuration.



### 5.2.1 PPPoE

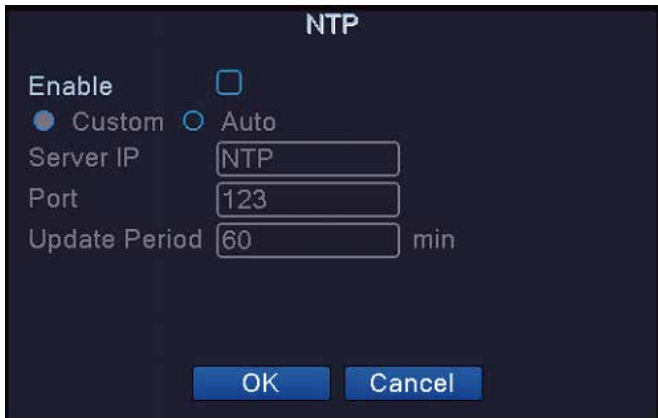


PPPOE connection stands for a dial-up internet connection. User needs to input a valid username and password offered by the ISP for connecting the device to the internet. This only takes effect when the NVR is directly connected to the modem.

### 5.2.2 NTP

NTP means Network Time Protocol. NTP takes a single time source that is received by a NTP server to ensure VMS system to run to the exact same time. It is useful for customers to calibrate the time and also for regions that have constant daylight saving.

The US National Institute of Science and Technology has collected local NTP servers for many states in USA: <http://tf.nist.gov/tf-cgi/servers.cgi>



### 5.2.3 Email Alert

Users can enable this function for email alert with any motion detection. For details on how to use this function (example of gmail will be provided), please refer to the FAQ page:

<https://www.sunba.net/en/faq/enable-motion-detection-email-photo-alertss-unba-ip-cameras/>

### EMAIL

Enable ☐

SMTP Server

Port

Need SSL ☐

User Name

Password

Sender

Receiver

Title

## 5.2.4 IP Filter

In this submenu, all IP listed on the blacklist are blocked from accessing to the camera. If you enable the whitelist function, only IP on the whitelist are able to access to the camera.

### IP FILTER

Enable ☐

Restricted Type

0	Banned IP

### 5.2.5 DDNS

DDNS means Dynamic DNS. If your external IP address is dynamically assigned, you will need to frequently update settings used to connect to your camera over the Internet whenever a new IP address is assigned by your ISP. This is time consuming. A DDNS service communicates with your router and translates the dynamic IP address into a static URL. You will need to register with a DDNS service provider such as NO-IP or DynDNS before using this function.

However, this function is rarely used over NVR as many routers (ASUS, TP-LINK, NETGEAR etc) now support DDNS configuration within the router, which is more convenient and support most popular DDNS service providers.



The screenshot shows a 'DDNS' configuration window. It has a title bar 'DDNS'. Below it, there are several fields: 'DDNS Type' with a dropdown menu showing 'CN99', 'Enable' with an unchecked checkbox, 'Domain Name' with a text box containing 'your.3322.org', 'User Name' with an empty text box, and 'Password' with an empty text box. At the bottom, there are two buttons: 'OK' and 'Cancel'.

### 5.2.6 FTP

FTP function allows VMS to upload a video or snapshot to a remote FTP server when an event (such as motion detection, video masking, video loss) occurs. Note: Video will NOT upload to your FTP server if a memory card (TF format card) is not inserted into the memory card slot because the camera has limited RAM that is unable to serve as a media to store videos before uploading to the FTP server. However, snapshot upload does not require a memory card.

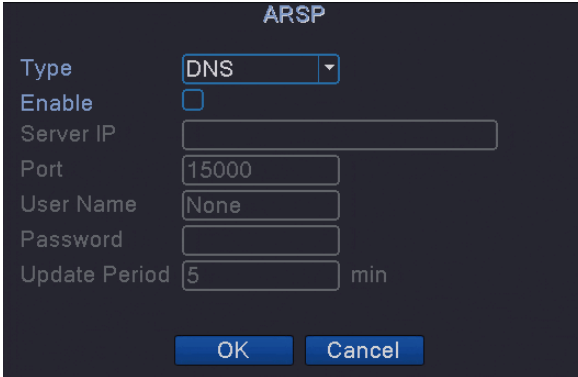


The screenshot shows an 'FTP' configuration window. It has a title bar 'FTP'. Below it, there are several fields: 'Enable' with an unchecked checkbox, 'Server IP' with a text box containing 'FTP', 'Port' with a text box containing '21', 'User Name' with an empty text box, 'Password' with an empty text box, and 'Anonymous' with an unchecked checkbox. Below these, there is a 'Max File Length' field with a text box containing '1024' and 'MB' next to it, and a 'DirName' field with an empty text box. At the bottom, there are three buttons: 'Test', 'OK', and 'Cancel'.



### 5.2.7 ARSP

Setup a server to add devices and manage it remotely in the server. This is a conventional way of connecting your NVR remotely and is not widely used today.

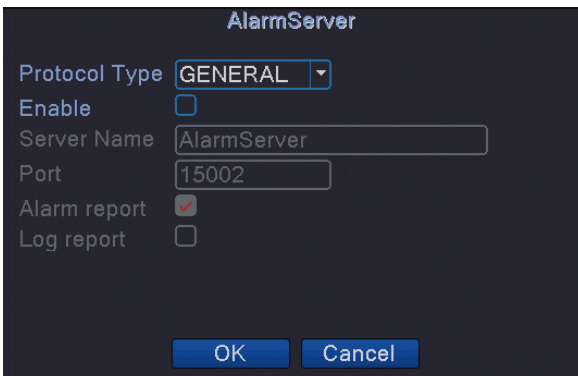


The ARSP configuration dialog box has a title bar labeled "ARSP". It contains the following fields: "Type" is a dropdown menu with "DNS" selected; "Enable" is an unchecked checkbox; "Server IP" is an empty text input field; "Port" is a text input field with "15000"; "User Name" is a text input field with "None"; "Password" is an empty text input field; "Update Period" is a text input field with "5" followed by the unit "min". At the bottom are "OK" and "Cancel" buttons.

In case that the NVR's external IP changes due to ISP, the ARSP option enables remote browser login to the NVR. This would allow you to remotely look up the NVR's current IP, and manually update it in the app settings. This can be useful if you choose not to use dynamic DNS.

### 5.2.8 Alarm Server

The alarm server interface is shown as below. The NVR can upload alarm signal to the syslog server when local alarm occurs. Before you use alarm server, please set up and specify server IP, port and etc. When an alarm occurs, the NVR can send out data as defined by the protocol, so the syslog server can get the data.

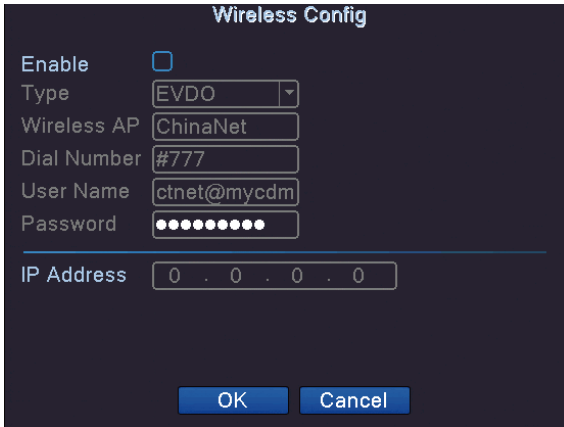


The AlarmServer configuration dialog box has a title bar labeled "AlarmServer". It contains the following fields: "Protocol Type" is a dropdown menu with "GENERAL" selected; "Enable" is an unchecked checkbox; "Server Name" is a text input field with "AlarmServer"; "Port" is a text input field with "15002"; "Alarm report" is a checked checkbox; "Log report" is an unchecked checkbox. At the bottom are "OK" and "Cancel" buttons.

### 5.2.9 Wireless Config

This function is applicable when the unit is connected to WiFi adapters or wireless AP.

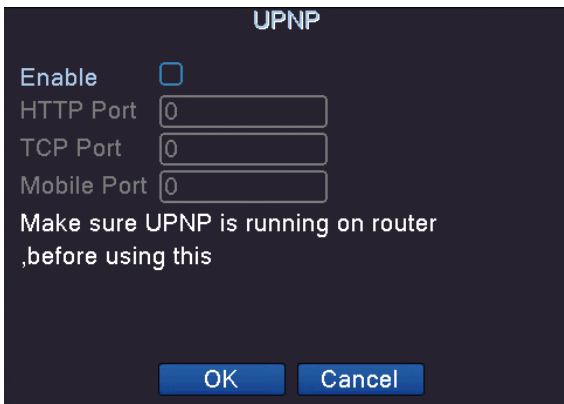
Please fill out the information your adapters below to connect the NVR to the internet.



The 'Wireless Config' dialog box has a dark background. At the top, the title 'Wireless Config' is centered in white. Below the title, there are several input fields: 'Enable' with an unchecked checkbox, 'Type' with a dropdown menu showing 'EVDO', 'Wireless AP' with a text box containing 'ChinaNet', 'Dial Number' with a text box containing '#777', 'User Name' with a text box containing 'ctnet@mycdm', and 'Password' with a masked text box showing ten dots. A horizontal line separates these fields from the 'IP Address' field, which is a text box containing '0 . 0 . 0 . 0'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

### 5.2.10 UPNP

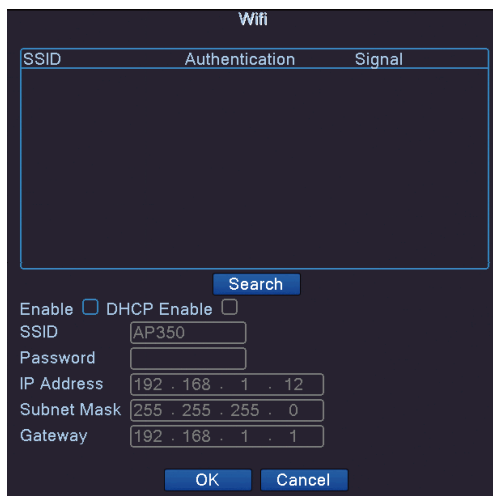
UPNP means Universal Plug and Play. It makes it easy for another network device to seamlessly discover and connect to your camera if you enable this function. However it creates a risk of being hacked, because any UPnP device blindly accepts communications from any source. If your router's UPnP function is enabled, your camera can be easily attacked and hacked. Thus we do not suggest to enable this function on Sunba NVR for average customers for home & business surveillance purpose.



The 'UPNP' dialog box has a dark background. At the top, the title 'UPNP' is centered in white. Below the title, there are three input fields: 'Enable' with an unchecked checkbox, 'HTTP Port' with a text box containing '0', 'TCP Port' with a text box containing '0', and 'Mobile Port' with a text box containing '0'. Below these fields, there is a line of text: 'Make sure UPNP is running on router ,before using this'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

### 5.2.11 WiFi

This function is for device with built-in WiFi signal and is not applicable for Sunba NVR.



The WiFi configuration interface has a title bar labeled "Wifi". Below it is a table with three columns: "SSID", "Authentication", and "Signal". The table body is empty. Below the table is a "Search" button. Underneath are two checkboxes: "Enable" (unchecked) and "DHCP Enable" (unchecked). Below these are input fields for "SSID" (containing "AP350"), "Password" (empty), "IP Address" (containing "192 . 168 . 1 . 12"), "Subnet Mask" (containing "255 . 255 . 255 . 0"), and "Gateway" (containing "192 . 168 . 1 . 1"). At the bottom are "OK" and "Cancel" buttons.

### 5.2.12 RTSP

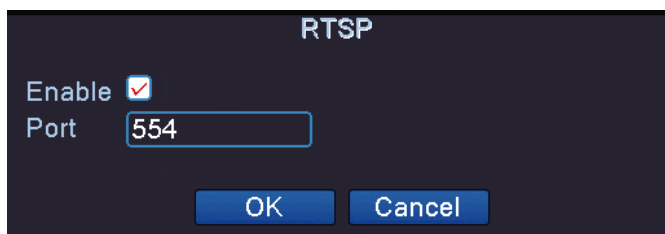
RTSP is the abbreviation for real-time streaming protocol. By default, this function is activated to enable the real-time streaming of your camera view from a third-party RTSP provider.

Please use URL

"rtsp://IP:554/user=admin&password=&channel=1&stream=0.sdp?real\_stream", where 0=mainstream and 1=substream.

For example, if the NVR has the LAN IP address 192.168.1.9 and has no password, then the URL is

"rtsp://192.168.1.9:554/user=admin&password=&channel=1&stream=0.sdp?real\_stream".

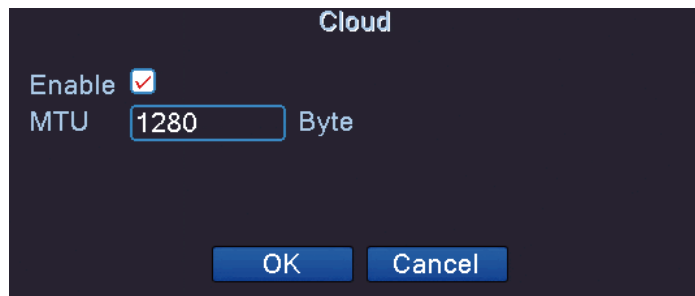


The RTSP configuration interface has a title bar labeled "RTSP". Below it are two checkboxes: "Enable" (checked) and "Port" (containing "554"). At the bottom are "OK" and "Cancel" buttons.

### 5.2.13 Cloud

In order to use P2P cloud connection to a Sunba camera, this function is activated by default.

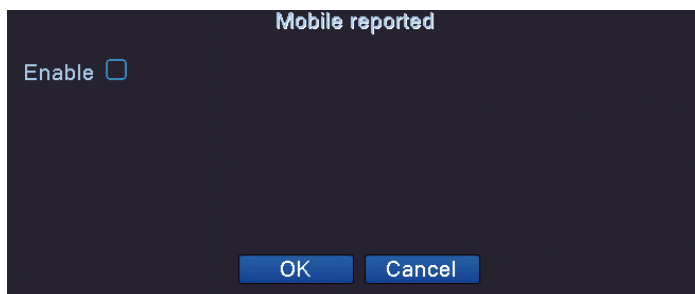
You can disable the function if you choose to use other methods to remotely access the camera or to deactivate all network transmission to the public network.



The screenshot shows a dark-themed dialog box titled "Cloud". It contains an "Enable" checkbox which is checked with a red checkmark. Below it, the label "MTU" is followed by a text input field containing the number "1280" and the word "Byte". At the bottom of the dialog are two blue buttons labeled "OK" and "Cancel".

### 5.2.14 Mobile Reported

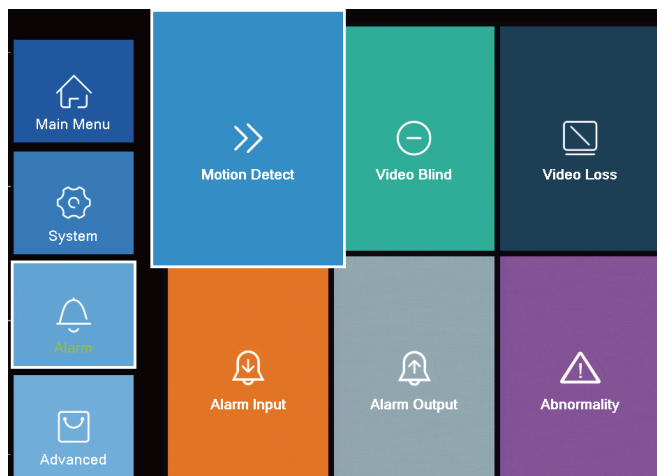
Please enable this function if you wish to receive events text push notification on your smartphone.



The screenshot shows a dark-themed dialog box titled "Mobile reported". It contains an "Enable" checkbox which is currently unchecked. At the bottom of the dialog are two blue buttons labeled "OK" and "Cancel".

## 5.3 Alarm

The alarm page can be accessed from Main Menu-Alarm.



### 5.3.1 Motion Detect

The motion detect page enables you to configure alarm format when a movement is detected by the camera.

Motion Detect

Channel 1

Enable ☐

Sensitivity Middle

Region Set

---

Period Set

MD Interval 2 Sec.

AlarmOut 1

OutDelay 10 Sec.

Record Channel 1 2 3 4 5 6 7 8 9 10 11 12

Tour 1 2 3 4 5 6 7 8 9 10 11 12

PTZ Activation Set

PostRec 10 Sec.

Show Message ☐

Send Email ☐

Buzzer ☐

Write Log ☐

FTP upload ☐

Mobile reported ☐

Advanced
OK
Cancel

Please first check the box next to the “Enable” option.

**Motion Detect**

Channel:  Enable: ☒

Sensitivity:  Region:

---

Period:  MD Interval:  Sec.

AlarmOut:  OutDelay:  Sec.

Record Channel:

Tour:

PTZ Activation:  PostRec:  Sec.

Show Message: ☐ Send Email: ☐

Buzzer: ☐ Write Log: ☐

FTP upload: ☐ Mobile reported: ☐

**[Region]** Select the detection area on the camera view.

**[Sensitivity]** Select the detection sensitivity level accordingly.

**[Period]** Select the schedule (daily or weekly) of detection period. You can choose up to four time periods per day for motion detection functions.

**Set**

☒ 00:00 - 24:00 ☐ 00:00 - 24:00

☐ 00:00 - 24:00 ☐ 00:00 - 24:00

0 3 6 9 12 15 18 21 24

Sun ☐

Mon ☐

Tue ☐

Wed ☐

Thu ☐

Fri ☐

Sat ☐

**[Interval]** Set time interval between 0 and 600 seconds. Only one alarm will be sent in the time interval even if multiple motion detections are triggered.

**[Alarm Out]** Not supported on Sunba IP cameras.

**[OutDelay]** The total amount of motion detection period, which also determines

the length of motion video clip. The range is 10-300 seconds.

**[Record Channel]** Select the channels that will be recorded when a motion is detected.

**[Tour]** Select the channels that will be included in a display tour when a motion is detected.

Note: TF card must be installed into the camera’s internal TF card slot to enable this function.

Also, please enable motion detection of the same time period at “Record Config” under “Storage Config”.

**[Snapshot]** A snapshot will be taken when a motion is detected and send the snapshot via email if the email push function is enabled in NetService.

**[PTZ Activation]** Activate the PTZ function (Preset position, Cruise, or Pattern) once the motion is detected. Note: you need to set preset, cruise, and pattern in advance.

**[Show Message]** Switch on or off message alarm on the NVR when a motion detection occurs.

Alarm Status

Index	1	2	3	4	5	6	7	8	9	10	11	12
Alarm	<input type="checkbox"/>											
Video Loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motion Detect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video Blind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPC Alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advanced

OK

**[Send Email]** Switch on or off this function to send email alert when a motion detection occurs.

Note: Users need to set up “Email” server under “Network”.

**[White Log]** Switch on or off this function to keep the log for the event in the NVR.

**[Buzzer]** Switch on or off the buzzer alarm when a motion detection occurs (only NVR with buzzer will be supported). NVR-F2008PL doesn’t support buzzer alarm.

**[FTP]** Switch on or off this function to send snapshot and/or video to a FTP server when a motion detection occurs.

Note: Users need to set up “FTP” server under “Network”.

**[Mobile Reported]** Switch on or off this function to send snapshot and/or video to a FTP server when a motion detection occurs.

Note: Users need to enable “Mobile Reported” under “Network”.

### 5.3.2 Video Blind

Video Masking/Video Blind is another alarm event that happens when camera lens/image has been purposely covered to disrupt the surveillance. Whenever this event occurs, the NVR can activate various reporting functions.

Please refer to Chapter 5.3.1 for detail settings.

Video Blind

Channel

1

Enable

☒

Sensitivity

Middle

Period

Set

AlarmOut

1

OutDelay

10

Sec.

Record Channel

123456789101112

Tour

123456789101112

PTZ Activation

Set

PostRec

10

Sec.

Show Message

☐

Send Email

☐

Buzzer

☐

Write Log

☐

FTP upload

☐

Mobile reported

☐

Advanced

OK

Cancel

### 5.3.3 Video Loss

When NVR loses the channel video signal, video loss event occurs. Whenever this event occurs, the NVR will activate various reporting functions according to the settings below.

Please refer to Chapter 5.3.1 for detail settings.

Video Loss

Channel

1

Enable

☒

Period

Set

AlarmOut

1

OutDelay

10

Sec.

Record Channel

123456789101112

Tour

123456789101112

PTZ Activation

Set

PostRec

10

Sec.

Show Message

☐

Send Email

☐

Buzzer

☐

Write Log

☐

FTP upload

☐

Mobile reported

☐

Advanced

OK

Cancel



### 5.3.4 Alarm Input

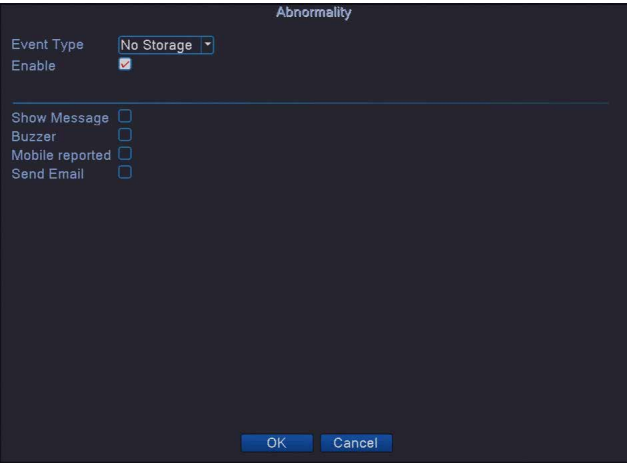
This function is not supported on NVR-F2008PL or NVR8008T-P.

### 5.3.5 Alarm Output

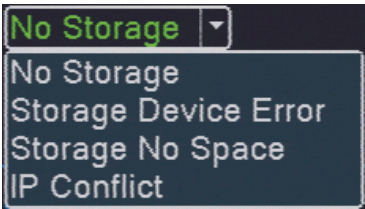
This function is not supported on NVR-F2008PL or NVR8008T-P.

### 5.3.6 Alarm Abnormality

When NVR detects software or hardware abnormalities, the alarm will be triggered.



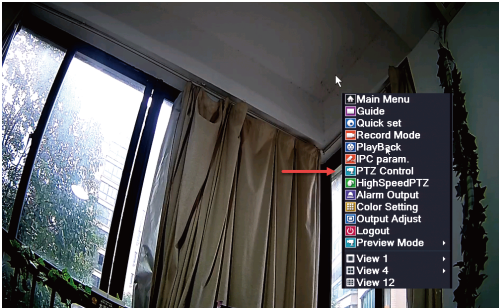
Four alarm event types can be selected in the drop-down box (below).



Please refer to Chapter 5.3.1 for detail settings.

## 5.4 PTZ Control

Open the right-click menu, and select PTZ Control to turn on the PTZ Control Panel.



Below is the fundamental PTZ Control panel. Eight directions are supported.

**[Hide]** Click "Hide" to hide the control panel. An icon will appear on the lower right corner. Click the icon to retrieve the control panel.

**[Speed]** The PTZ step size of the camera. The greater the speed, the faster the camera moves. By default the speed will be 5. Valid Range: 1~8.

**[Preset]** Enter the preset value. Valid Range: 1~255.

**[+]** Add a preset.

**[-]** Delete a preset.

**[Start]** Call a preset.

**[Zoom]** Click + to zoom in and – to zoom out.

**[PTZ Trace]** This function will hide the PTZ control panel and the PTZ control will be controlled by dragging the mouse. This function is also called High Speed PTZ.

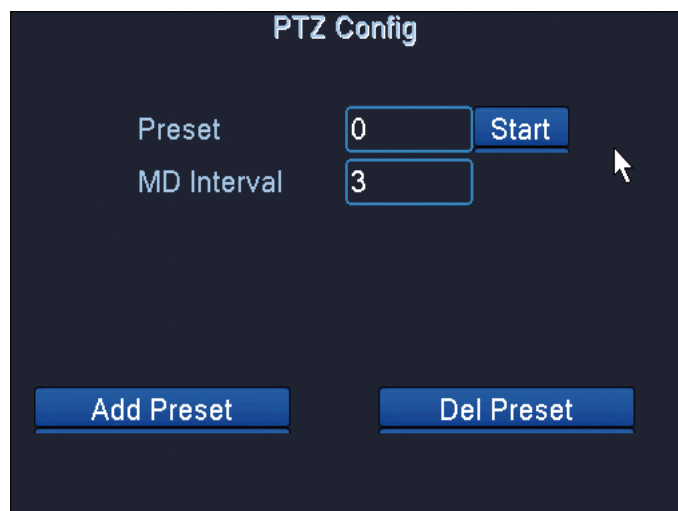
**[Cancel]** Exit the control panel.



Click “Advanced” to access patrol, boundary scan and other PTZ related functions.



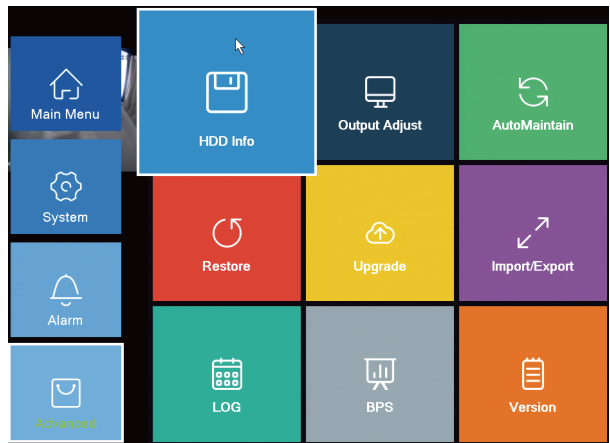
Click the numeric value box under Tour to name the tour order. Click + next to Start to add/delete preset into the tour, and set its interval. Click – to delete the tour.



- [Left] Click to set the left boundary of auto scan.
- [Right] Click to set the right boundary of auto scan.
- [Auto Pan] Click to start 360 degrees auto pan.
- [Flip] Flip the camera 180 degrees vertically (for cameras support auto-flip only).
- [Auto Scan] Click to start auto scan.
- [Reset] Reset the patrol/tour setting.

### 5.5 HDD Management

Please follow instructions from Chapter 3 to install the HDD first. The HDD Management page can be accessed from Main Menu-Advanced-HDD Info.



All recognized storage drives will be displayed on the page.



- [Format Storage]** Erase all information from the hard drive.
- [Recover]** Recover the lost files from the hard drive (redundant drive only).
- [Partition]** Split the drive spaces to store recordings and snapshots in separate drives. A reboot will take place when drive partition completes.



- [Read/Write]** Set the hard drive into Read/Write mode (default mode).
- [Redundant]** Applicable only for NVR with dual-drive slots. Set the hard drive into Redundant mode as a backup drive. This drive usually serves as the duplicate (backup) drive of the Read/Write main drive.
- [Read Only]** Set the hard drive into Read-only mode. No new recordings can be stored into the hard drive but the existing recordings can be read.

## 5.6 Channel Management

See Chapter 6.3.2.

## 5.7 Channel Type

The channel type page can be accessed from Main Menu-System-Digital.



The channel type diagram below shows the possible channel configuration for NVR application.

ChannelType

IP					
1080P	960P	3M	5M	4M	4K
<input type="checkbox"/>	-	-	-	8	-
<input type="checkbox"/>	-	-	4	-	-
<input type="checkbox"/>	16	-	-	-	-
<input type="checkbox"/>	-	4	-	-	-
<input checked="" type="checkbox"/>	12	-	-	-	-
<input type="checkbox"/>	-	-	-	-	4

Playback channel: 4  
Maximum number of preview: 12

OK Cancel

## 5.8 Channel Type

The channel status page can be accessed from Main Menu-System-Digital.

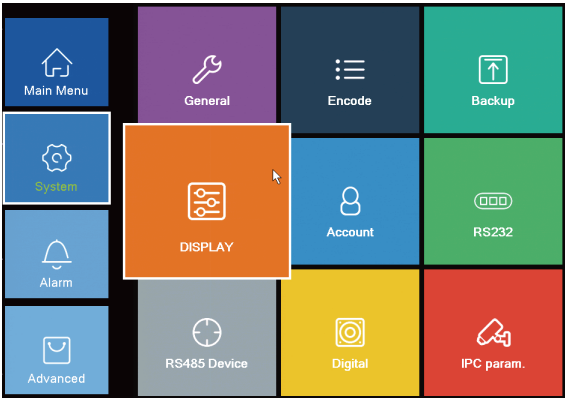


Channel status enables quick troubleshooting on each channel as it shows the current condition of each channel including "Not Config", "Connected", "Wrong Username/Password", "Offline" etc.

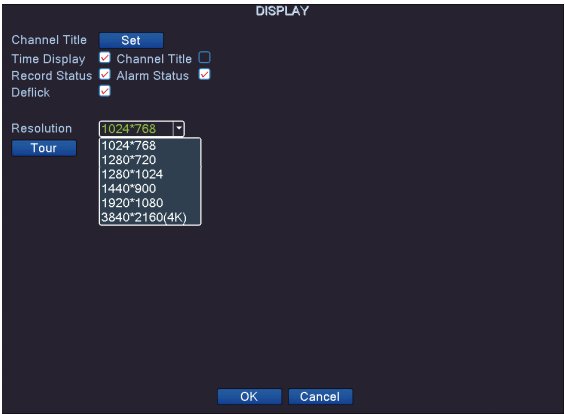
If any channel drops or cannot be connected, it is recommended to start by examining the channel status.

## 5.9 Display

The display setting page can be accessed from Main Menu-System-Display.



You can select to enable/disable displays for Time, Channel Title, Record Status and Alarm Status for end-devices. The monitor display ranges from 1024\*768, 1280\*720, 1280\*1024, 1440\*900, 1920\*1080 to 3840\*2160 (4K).



Click “Set” next to Channel Title to edit titles for all channels:

Channel Title

Channel1	<input type="text" value="D01"/>	Channel2	<input type="text" value="D02"/>
Channel3	<input type="text" value="D03"/>	Channel4	<input type="text" value="D04"/>
Channel5	<input type="text" value="D05"/>	Channel6	<input type="text" value="D06"/>
Channel7	<input type="text" value="D07"/>	Channel8	<input type="text" value="D08"/>
Channel9	<input type="text" value="D09"/>	Channel10	<input type="text" value="D10"/>
Channel11	<input type="text" value="D11"/>	Channel12	<input type="text" value="D12"/>

OK

Cancel

Click “Tour” to set up display tours on the monitor with a designated motion detection interval.

Choose whether to return back to static view after the end of the tour.

Tour

Enable Tour

☐

MD Interval

Sec.

View 1

1

2

3

4

5

6

7

8

9

10

11

12

View 4

1

2

3

View 12

1

Alarm Tour Type

MD Interval

Sec.

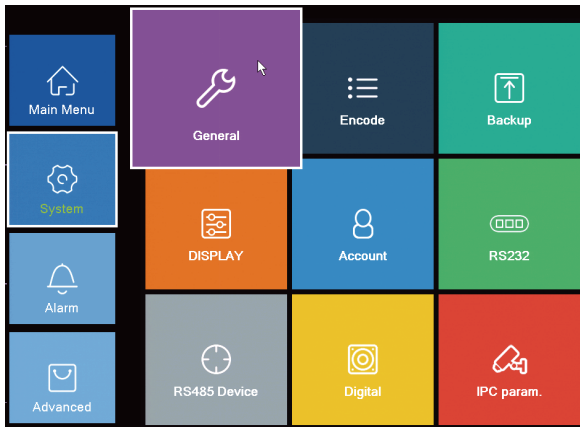
Return after finished

☐

### 5.10 Basic Setting

The general setting page can be accessed from Main Menu-System-General.





In the General menu, users can set Machine name, assign NVR number (if you have multiple recorders), languages, video standard, actions when storage is full and the time limit for auto-login. The video standard is critical to the maximum frame per second allowed (usually 30 fps@NTSC and 25 fps@PAL) and must be consistent between end-device and NVR.

General

Machine Name

LocalHost

DVR No.

0

Language

ENGLISH

Video Standard

NTSC

Storage Full

Overwrite

Auto Logout

0

min

Guide

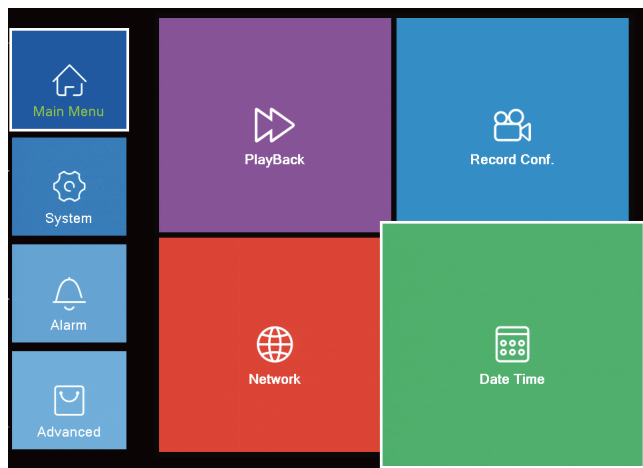
☐

OK

Cancel

### 5.11 Date and Time

The general setting page can be accessed from Main Menu-Date Time.



Users can specify the time zone, time, date and the preferred display formats. Check DST to enter the effective range of Daylight Saving Time.

 The image shows a 'Date Time' configuration window with a dark background. It contains the following fields and options:
 

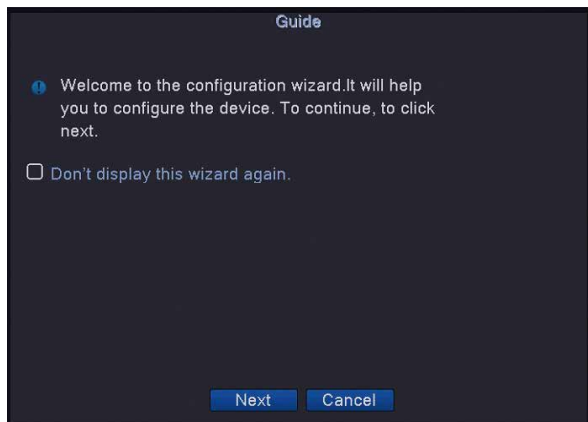
- Time Zone:** A dropdown menu showing '[UTC-08:00]Pacific Time(U.S.)'.
- System Time:** A text field showing '2018 - 03 - 12 22: 47: 39'.
- Date Format:** A dropdown menu showing 'YYYY MM E'.
- Date Separator:** A dropdown menu showing '-'.
- Time Format:** A dropdown menu showing '24-HOUR'.
- DST:** A checkbox that is checked.
- Day of Week / Date:** Radio buttons for 'Day of Week' and 'Date', with 'Date' selected.
- Start:** A date and time field showing '2018 - 05 - 01 01: 01'.
- End:** A date and time field showing '2018 - 10 - 01 01: 01'.

Please check 5.2.2 NTP if you want to constantly calibrate the system time with local server.

## 6. Add Device to NVR

### 6.1 Configuration Wizard

The configuration wizard allows the NVR to go through the necessary windows (network, time, smartphone QR code etc) recommended for setting up the NVR properly. Click "Next" if you would like the configuration wizard to lead you through the setup process. Click "cancel" if you wish to setup the NVR manually. See Figure 6-1.



Set up the time and language of the NVR. Click Next to save the changes and go to the next interface.

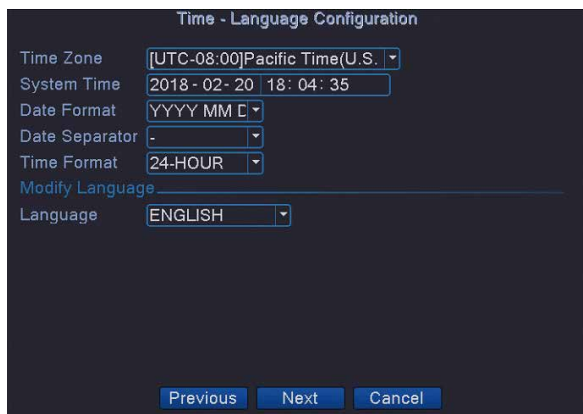


Figure 6-2

The Wizard tool will test whether the NVR is successfully connected to the internet. If not, it will show “Test Gateway---ERR” (Figure 6-4), otherwise it will show the following:

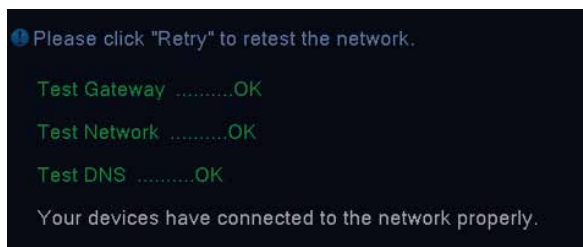


Figure 6-3

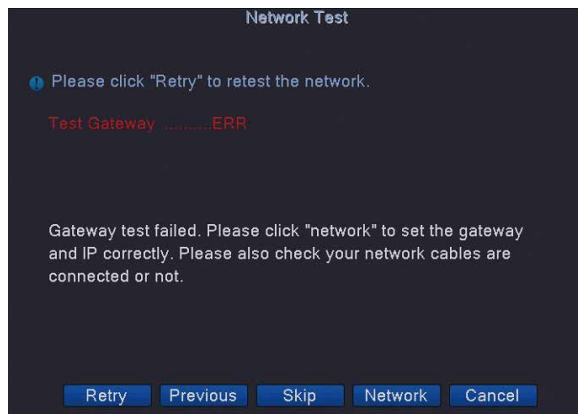


Figure 6-4

You can choose to “Retry” the network status examination test, “Skip” the test part to proceed the Wizard Configuration or click “Network” to manually configure NVR network parameters (Figure 6-5).

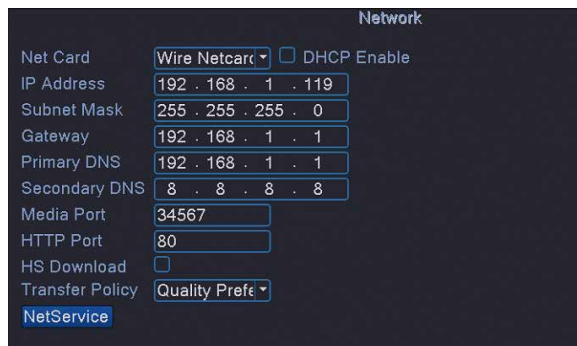
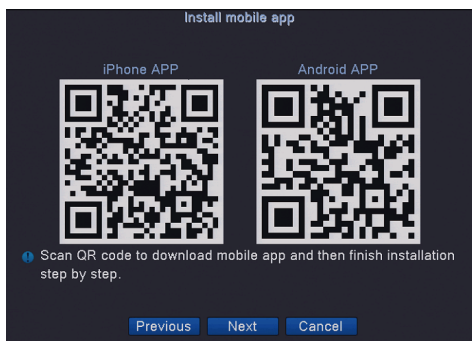


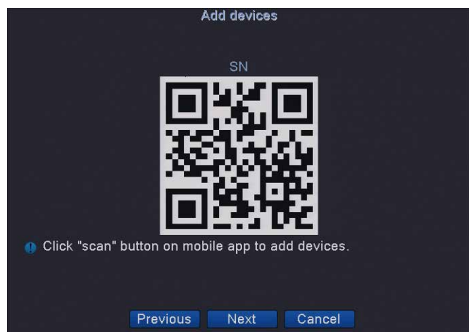
Figure 6-5

Please refer to Chapter 5.2 for details regarding network configuration.

The next interface of the Configuration Wizard will enable you to scan the QR code to install the corresponding smartphone apps. Note, if any of the network test (gateway, network, DNS) above fails, you may not be able to access the NVR through the mobile app. Read **Chapter 11. Remote Access** for more details regarding smartphone setup.



Click Next to scan the QR code to retrieve the NVR Serial Number (aka. Cloud ID/P2P Code) that can be used in the Smartphone app to remotely access the NVR. Read **Chapter 11. Remote Access** for more details regarding smartphone setup.

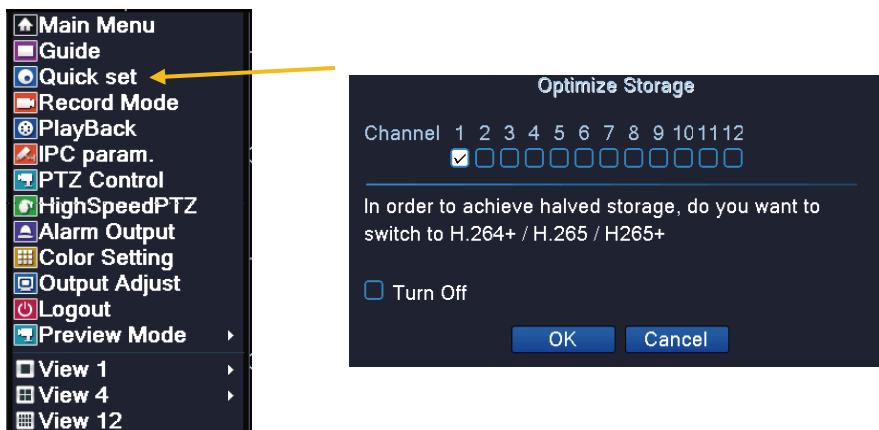


Click Next to enter the IP Channel Quick Set tool that will automatically detect all online IP cameras with an easy interface for you to add and configure them all.

## 6.2 Sunba Camera/Plug & Play

Connect the Sunba PoE camera directly to PoE ports on the rear panel of NVR, the NVR shall automatically connect to Sunba cameras and display video on its channel within one minute (Note: Please wait for the camera to finish its self-diagnostic process). A prompt will pop out with suggestions to switch to H.264+, H.265 or H.265+ to optimize storage space. Click "OK" to accept changes or click "Turn Off" and OK to disable the prompt. Users need to enable H.265 option in Main Main-Encode for the corresponding channel as well.

If Sunba camera does not show up automatically on the monitor after 2~3 minutes, please open the right-click menu and choose "Quick Set".



The NVR will manually connect to all searchable end-devices. Select the device and click "add" if the devices are not being added automatically.

[Search] will detect all IP cameras on the network.

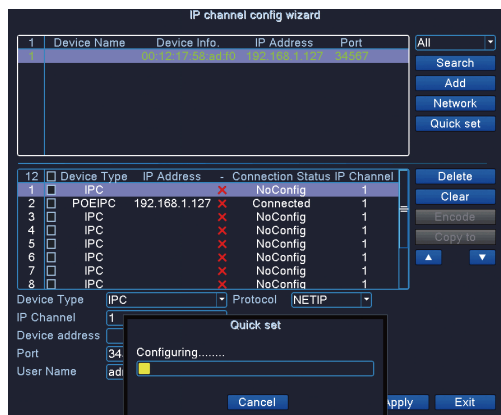
[Add] will add the selected IP camera, that appears in the search box to an unoccupied channel below.

[Network] will modify the IP address of the camera.

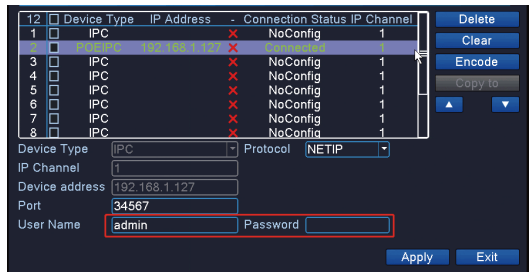
[Quick Set] will automatically assign all searched device into the unoccupied channel below.

[Delete] will delete the camera from the selected channel.

[Clear] will clear all channel configuration.



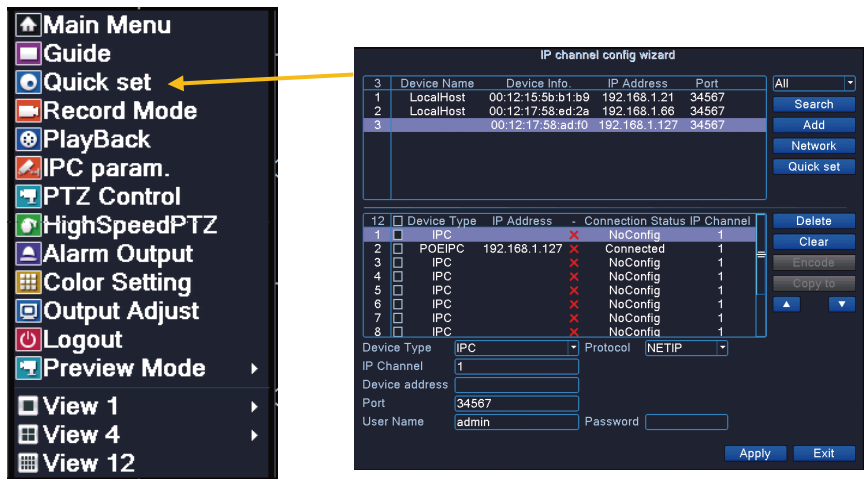
If the connection status shows error messages such as “Wrong Username/Password”, please select the device and update the correct channel info including Protocol (NETIP for Sunba cameras), port, username and password. Click “Apply” to save changes. End-device username and password cannot be changed in NVR and shall be edited by accessing the end-device interface directly through desktop and smartphone app.



### 6.3 Third Party ONVIF Camera/Manual Add/Remote Device Add

#### 6.3.1 Quick Set

Please open the right-click menu and choose “Quick Set”.



The NVR will manually connect to all searchable end-devices. Select the device and click “add” if the devices are not being added automatically.

**[Search]**will detect all IP cameras on the network.

**[Add]**will add the selected IP camera, that appears in the search box to an unoccupied channel below.

**[Network]**will modify the IP address of the camera.

**[Quick Set]**will automatically assign all searched device into the unoccupied channel below.

**[Delete]**will delete the camera from the selected channel.

**[Clear]**will clear all channel configuration.

If the connection status shows error messages such as “Wrong Username/Password”, please select the device and update the correct channel info including Protocol (ONVIF for 3rd party cameras), port, username and password. Click “Apply” to save changes. End-device username and password cannot be changed in NVR and shall be edited by accessing the end-device interface directly through desktop and smartphone app.

12	<input type="checkbox"/>	Device Type	IP Address	-	Connection Status
1	<input type="checkbox"/>	IPC	192.168.1.66	✗	Wrong username or password
2	<input type="checkbox"/>	POEIPC	192.168.1.127	✗	Connected
3	<input type="checkbox"/>	IPC		✗	NoConfig
4	<input type="checkbox"/>	IPC		✗	NoConfig
5	<input type="checkbox"/>	IPC		✗	NoConfig
6	<input type="checkbox"/>	IPC		✗	NoConfig
7	<input type="checkbox"/>	IPC		✗	NoConfig

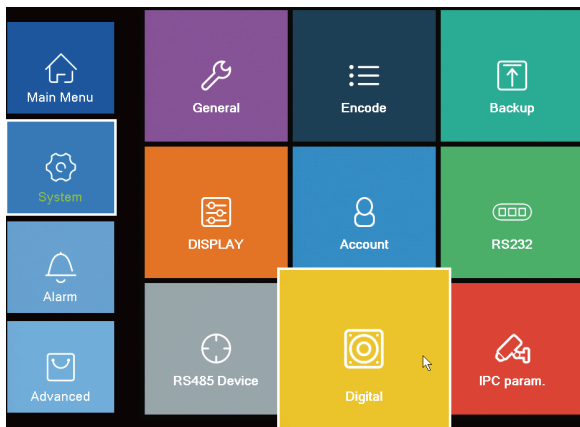
Device Type	IPC	Protocol	ONVIF	检测(Alt + A)
IP Channel	1			
Device address	192.168.1.66			
Port	8000			
User Name	admin	Password		
		Apply	Exit	

The correct ONVIF ports of 3rd party cameras can be retrieved from manufacturer’s user guide.

### 6.3.2 Channel Management

Users can also configure channels at Main Menu-System-Digital-Digital Channels. This function also enables you to add remote IP cameras to the NVR.





In the channel management page, please select “Enable” to start configuring the channel.

**[Channel]** This allows you to browse and select all available channels to configure.

**[Time Sync]** You can determine whether and specifically how you want to synchronize the time of the camera with the NVR.

**[Decode Order]** You can select how you want the NVR to decode your device. Video Quality: Real time>Middle>Fluency Preferred. Better video quality may require improved network bandwidth.

**[Connection mode]** “Single connection” means you only want one camera to appear per channel. If you select “multi-link”, you can add multiple cameras to the channel and every camera will have a specific “polling time” (dwelling time) before the channel displays the next

**[Synchronization resolution]**If you select synchronization resolution, the camera in the channel will display the same resolution as it is in its native interface.

**[Add]**Click to add a device to the channel.

**[Delete]**Select and click to delete a device from the channel.

To add a camera, click add and the following page will appear.

Remote access configuration

Config Name

chConfig01

Device Type

IPC

Protocol

NETIP

IP Channel

1

Device address

192.168.1.20

Network

Port

34567

User Name

admin

Password

0	Device Name	Device Info.	IP Address	Port
---	-------------	--------------	------------	------

Protocol

All

Search

OK

Cancel

You can click “search” to search the camera on the network.  
If you want to add a remote camera, please enter its WAN IP, corresponding port, protocol and account info. Click to select a device from the searched results, then please modify its corresponding protocol, port and username/password to login purpose. If your camera cannot be searched on NVR but it is on the same network, please manually input its IP, protocol, username/password as well.

Remote access configuration

Config Name

chConfig01

Device Type

IPC

Protocol

NETIP

IP Channel

1

Device address

192.168.1.20

Network

Port

34567

User Name

admin

Password

3	Device Name	Device Info.	IP Address	Port
1	LocalHost	00:12:15:5b:b1:b9	192.168.1.21	34567
2	LocalHost	00:12:17:58:ed:2a	192.168.1.66	34567
3		00:12:17:58:ad:f0	192.168.1.127	34567

Protocol

All

Search

OK

Cancel

For Sunba IP cameras, please double check the username/password, the protocol (NETIP) and port (TCP port) will automatically be detected.

For 3rd party non-Sunba IP cameras, please check the protocol (ONVIF usually) and the corresponding ONVIF port as well. Note: Many manufacturers such as Hikvision use http port as ONVIF port.

Remote access configuration

Config Name

chConfig01

Device Type

IPC

Protocol

NETIP

IP Channel

1

Device address

192.168.1.21

Network

Port

34567

User Name

admin

Password

After all information has been filled out properly in the above section, please click “OK” and you will go back to the previous page with a device listed under this channel.

Digital channels

Channel

1

Enable

☒

Time Sync

Time and Tir

Decode Order

Middle

Connection mode

Single conn

Synchronization resolution

☒

Network Configuration list

	Config Name	Device Type	IP Address	-	IP Channel
1	<input checked="" type="checkbox"/> chConfig01	IPC	192.168.1.21		1

Add

Delete

Advanced

OK

Cancel

Click “OK” and the video will appear for this channel if all information is correct.



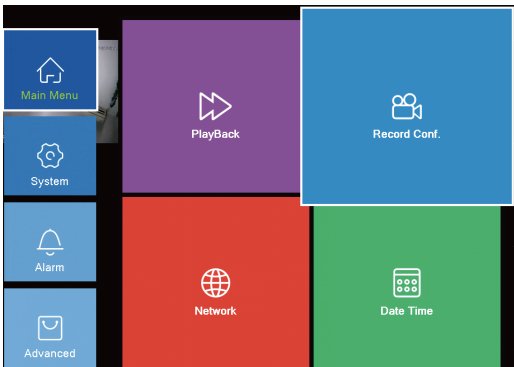
# 7. Record

This chapter will cover how to setup different types of recording plans including manual (regular) recording, scheduled recording as well as motion detected recording. Record mode can be switched and setup easily through the right-click menu by selecting the "Record Mode".



Users can assign the specific record mode to the channel.

Detailed recording plans can be configured in Main Menu-Recording Config:



Select a channel from the drop-down list Channel 1 to start configuring the recording plan. The NVR shall install a hard drive to initiate this function. Please refer to Chapter 3 for installing a hard drive.

**Record Conf.**

Channel 1      Redundancy ☐

Length 60 min

Mode   ☒ Schedule   ☐ Manual   ☐ Stop

Week   All      Regular   Detect   Alarm

Period	Time Range	Regular	Detect	Alarm
Period 1	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">24:00</span>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Period 2	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advanced
OK
Cancel

**[Redudancy]** Record to the redundancy drive.

**[Record Length]** Set the length of each recording file between 1 to 120 mins and the default is 60 mins.

**[PreRecord]** It is used to set the video to start recording earlier than a motion happens. This function is only equipped in Sunba 24 channel network video recorder.

**[Mode]** Set the record type, timing, manual and stop.

**[Timing]** To record according to scheduled time period.

**[Manual]** To record any time for any status until manually stopped.

**[Stop]** Stop recording.

**[Regular]** Regular recording in a scheduled time period.

**[Detect]** Record when NVR detects "motion detect", "camera masking", or "video loss". Users need to enable "record" for these events (refer to these sections for details).

**Record Conf.**

Channel 1      Redundancy ☐

Length 60 min

Mode   ☐ Schedule   ☒ Manual   ☐ Stop

Week   All      Regular   Detect   Alarm

Period	Time Range	Regular	Detect	Alarm
Period 1	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">24:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 2	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	<span style="border: 1px solid black; padding: 0 5px;">00:00</span> - <span style="border: 1px solid black; padding: 0 5px;">00:00</span>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advanced
OK
Cancel

A tape icon  will appear if recording mode is turned on for the channel.

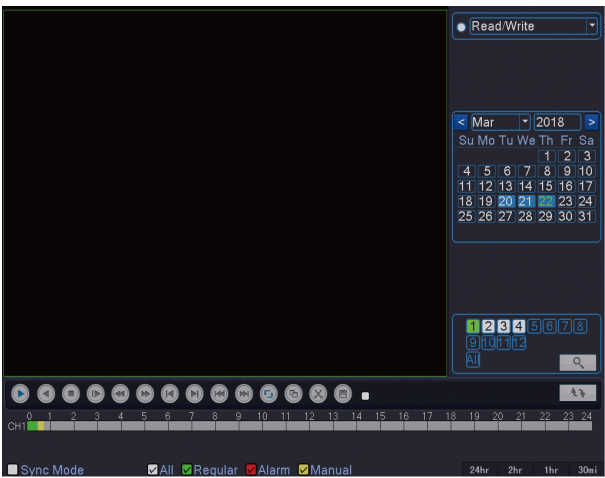


## 8. Playback

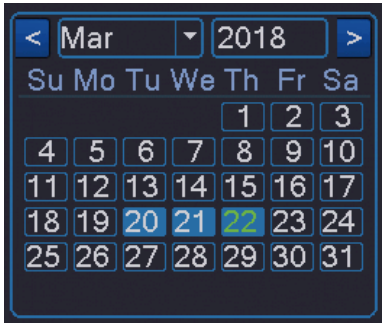
Playbacks can be accessed through the right-click menu by selecting the “Playback”.

Below is the playback page.

Select the disk type  where playbacks are stored into



Select a date to check playbacks on the calendar.



Select the channels to playback. Users can playback up to 2 channels together on NVR-F2008PL. Users can playback up to 4 channels together on NVR8008T-P.

Click to de-select a channel and select the other channel to playback.



Start the video playback.



Step the video playback.



Pause the video playback.



Slowly playback the video.



Play reversely.



Slow forward.



Fast forward.



Play the previous file.



Play the next file.



Repeat playback.




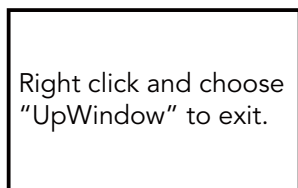
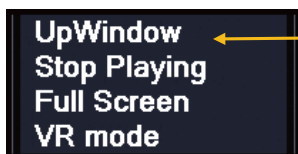
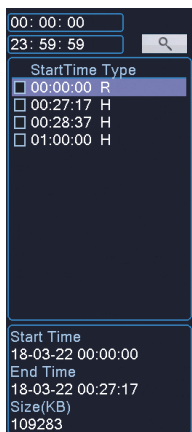
View in full screen.



Backup.

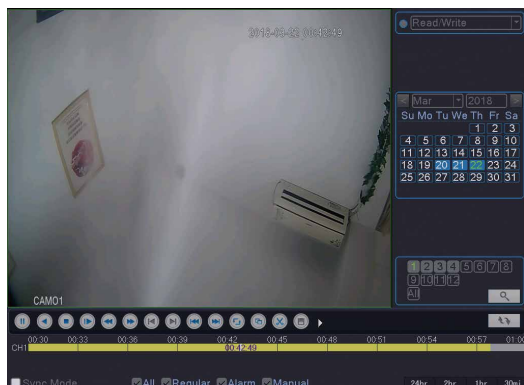


Click  to change time display and search format. All available video clips will appear by time and you can select the specific time clip to palyback.



## 8.1 Manual

Manual recording will appear in yellow bar as below.



← yellow bar

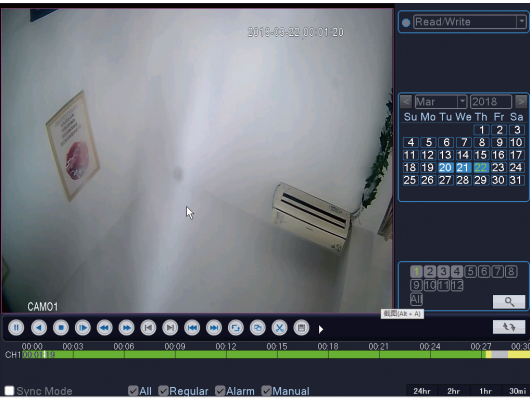


To enable manual recording, select manual in Recording Config. See details in Chapter 7.



## 8.2 Schedule

Scheduled regular recording will appear in green bar as below.

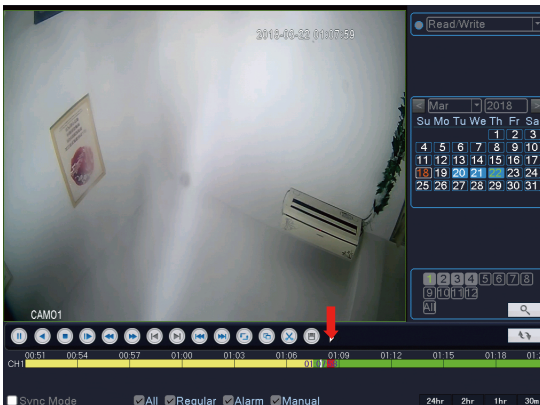


To enable scheduled regular recording, select scheduled in Recording Config, and select your desired time range for recording. See details in Chapter 7.



### 8.3 Motion Detection

Motion detected recording will appear in red bar in the timeline as below (shown by red arrow).



To enable motion detection recording, select scheduled in Recording Config, and check "detected".

Record Conf.

Channel  Redundancy ☐

Length  min

Mode ☒ Schedule ☐ Manual ☐ Stop

Week  Regular Detect Alarm

Period 1	<input type="text" value="00:00 - 24:00"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Period 2	<input type="text" value="00:00 - 00:00"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 3	<input type="text" value="00:00 - 00:00"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period 4	<input type="text" value="00:00 - 00:00"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advanced OK Cancel

See details in Chapter 7.  
You need to enable recording in Main Menu-Alarm-Motion Detect as well.

Motion Detect

Channel  Enable ☒

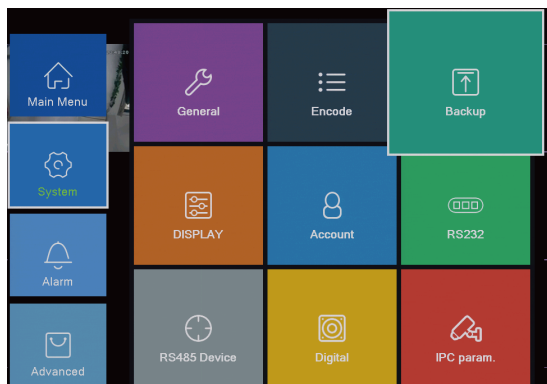
Sensitivity  Region

Period	<input type="button" value="Set"/>	MD Interval	<input type="text" value="2"/> Sec.
AlarmOut	<input type="text" value="1"/>	OutDelay	<input type="text" value="10"/> Sec.
Record Channel	<input type="text" value="1 2 3 4 5 6 7 8 9 10 11 12"/>		
Tour	<input type="text" value="1 2 3 4 5 6 7 8 9 10 11 12"/>		
PTZ Activation	<input type="button" value="Set"/>	PostRec	<input type="text" value="10"/> Sec.
Show Message	<input checked="" type="checkbox"/>	Send Email	<input type="checkbox"/>
Buzzer	<input checked="" type="checkbox"/>	Write Log	<input type="checkbox"/>
FTP upload	<input type="checkbox"/>	Mobile reported	<input type="checkbox"/>

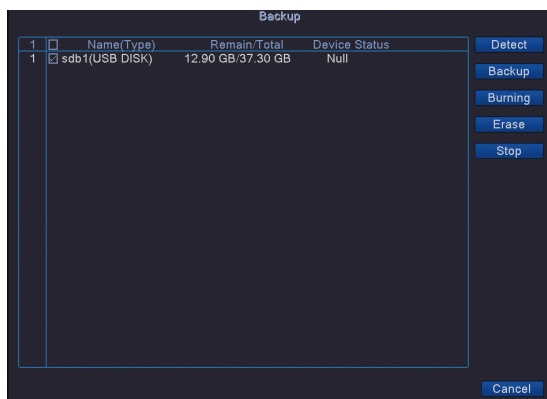
Advanced OK Cancel

# 9. Backup

Backup can be accessed through the right-click menu by selecting the Main Menu-System-Backup.



To start backing up, please connect the supported backup storage equipment to the USB slot of the NVR. Then select the device from the list, and click "Backup" to backup the existing recording.



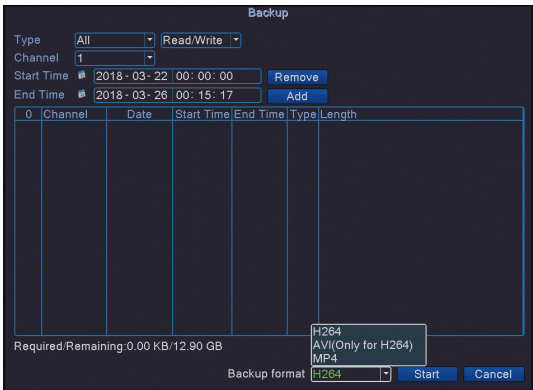
**[Detect]** Search available backup equipment.

**[Burning]** Occupy all available spaces in the equipment as backup.

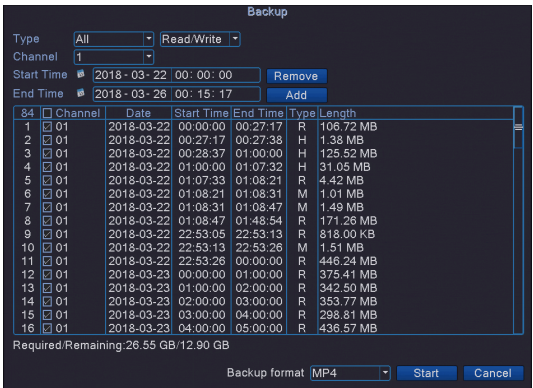
**[Erase]** Format the backup equipment.

**[Stop]** Stop backup.

In the following menu, select the backup format to choose the output video format for the backup files. Users can select from H.264, AVI and MP4..

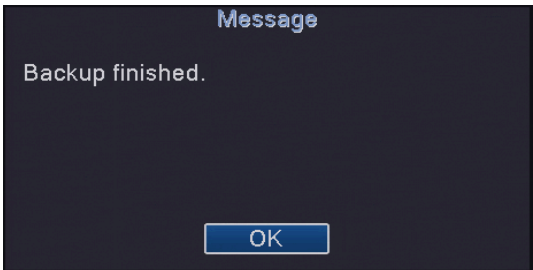


Click "add" to see all available files in the selected channel, date range, and file type.



In the file type, R stands for regular scheduled videos, H stands for manual recorded videos and M stands for motion detection videos. Select the files in the dropdown list, and click "start" to initiate backup.

The following message will pop out as soon as the backup finishes.



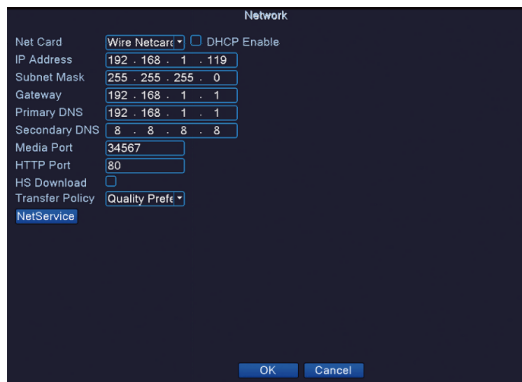


4) If you are still unable to install the plugin. Please contact support@sunba.net.

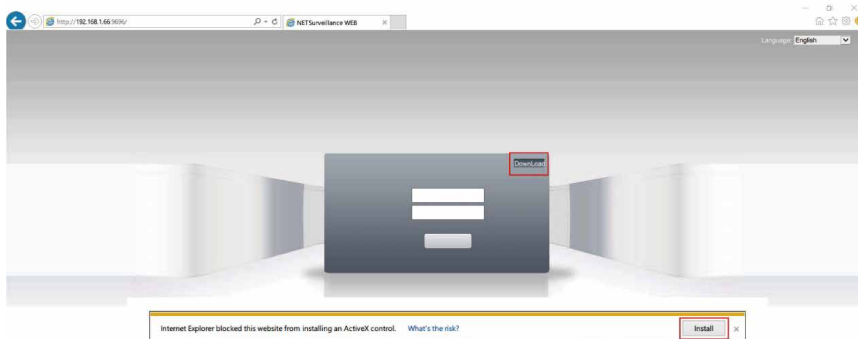
## 10. IE/Desktop Client Operation

### 10.1 Internet Explorer

1) Enter the IP address of your NVR, you can check the IP address in Main Menu-Network. If you have changed the http port of the NVR, you need to log in as IP: http port...



2) Install the web plugin following the request popped by the browser. Please make sure the browser is CLOSED during the installation. If you are unable to download the plugin, please go to download.sunba.net to download the plugin.



3) You can change the language from the upper right corner. Changes only take effect after you successfully install the plugin, otherwise the text will show "?????" or disappear.

## 10.2 VMS Desktop

Download the VMS software from: <http://www.sunba.net/en/download/>

1. After the NVR has been properly connected to the router, please open VMS and click "Login" (the username/password for logging into the VMS PC is admin/admin and admin/(null) for VMS Mac). Note your computer must connect to the same LAN network as the NVR.



2. Open Device Manager

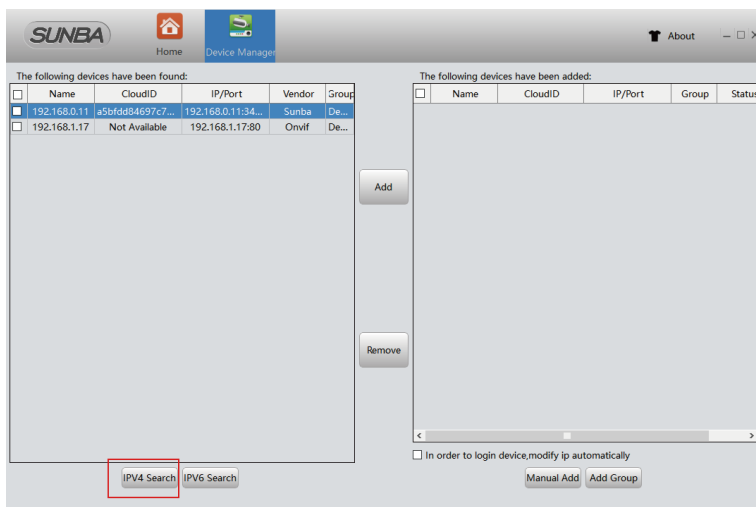


3. Your Sunba NVR should show up on the left zone automatically with its IP address(check Main Menu-Network). Click IPV4 Search if you don't see the NVR.

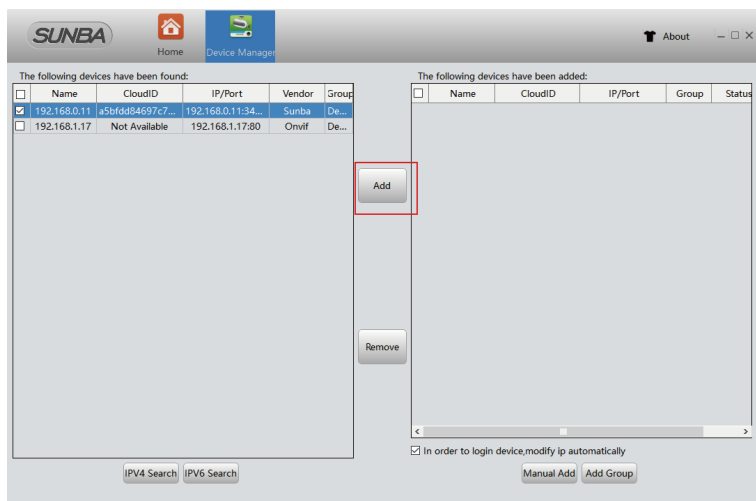
Try the following if no device shows up:

- A. Temporarily disable the firewall.
- B. Connect the NVR directly to your parental router.
- C. Contact support@sunba.net

4. Select the device you want to add and select "in order to login device, modify IP automatically".

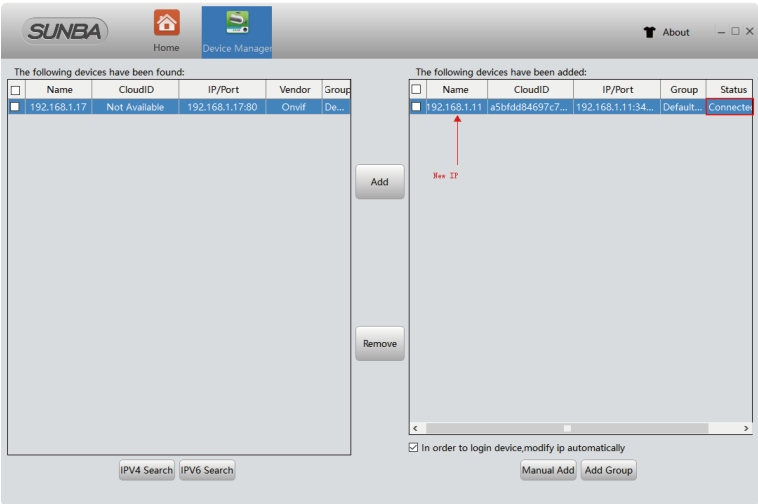


5. Click "add" to add the NVR to VMS.

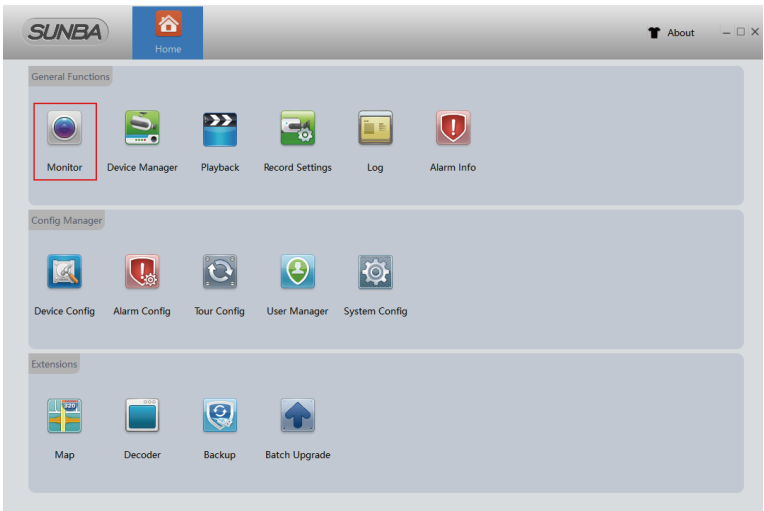




6. The NVR will be automatically connected and changed to a correct IP matching local network. You can modify this IP later.



7. Live View  
Go to Home panel and select "Monitor".



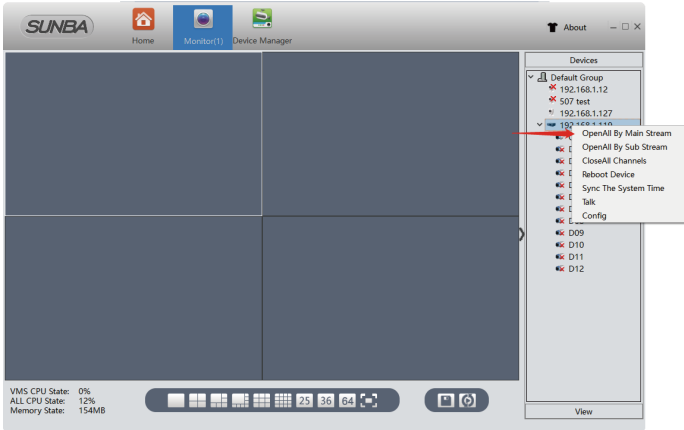
Then right-click the device and select "open all by main stream".

Note:

main stream = clear video

extra stream = video in lower quality but with better transmission

Please select the correct stream according to the network quality.



# 11. Remote Access

## 11.1 Smartphone

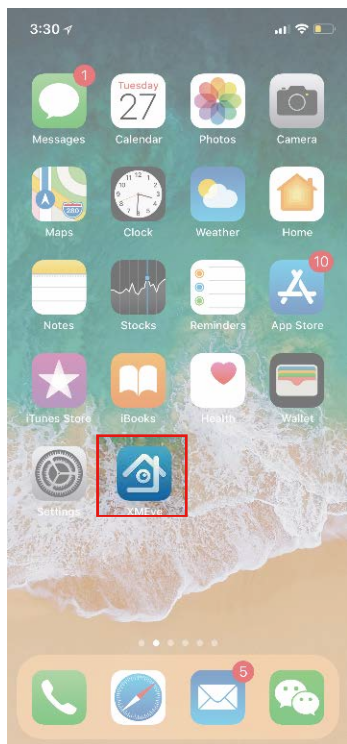
Scan the barcode below to download the app XMEye.



Android



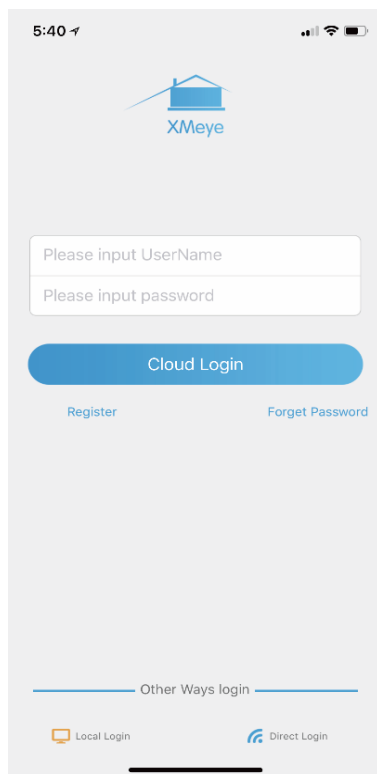
iOS

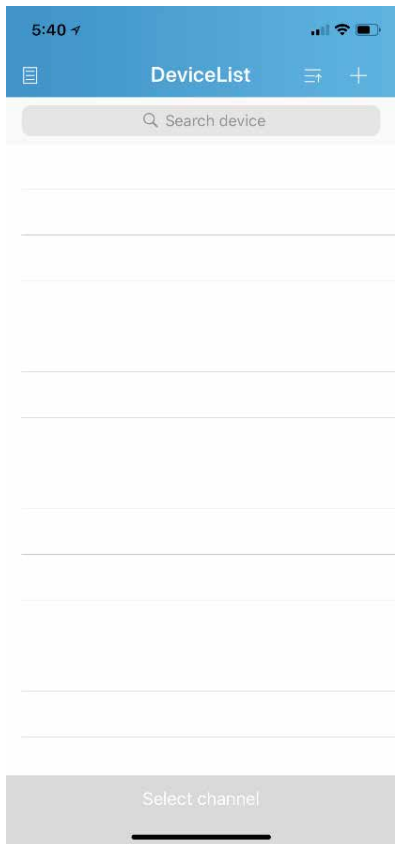


Step 1.  
Tap to open the XMEye app.

Step 2.  
Register an account if you want to enable the text push alarm function. You will need to enable the **Mobile Reported** function in the NVR as well (read **Chapter 5.2 Network**). After registration, input your username and password, and tap **"Cloud Login"**. If you failed to register an account on the app, you can register it online via **xmeye.net**.

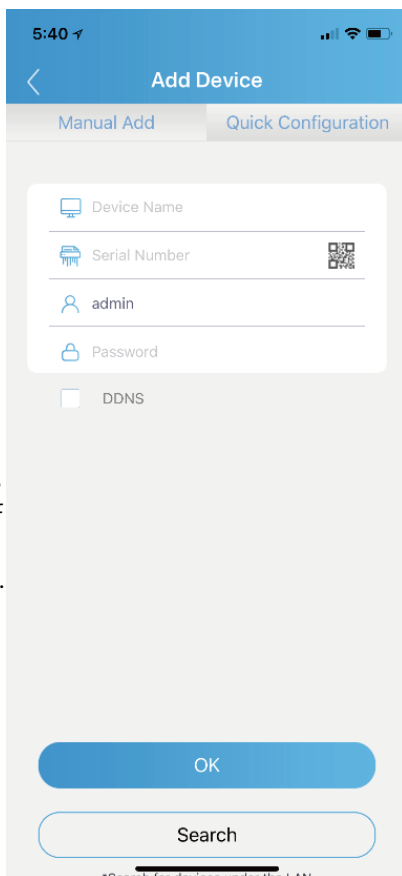
Tap **"Local Login"** if you wish to store your device information locally.





Step 3.

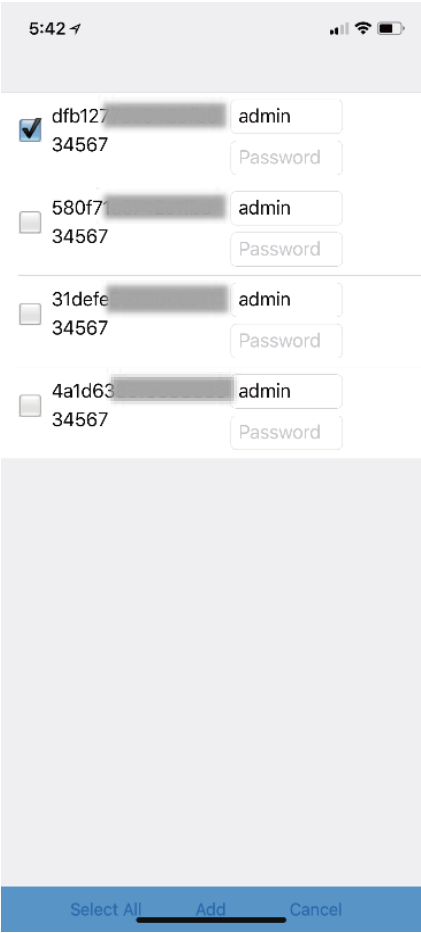
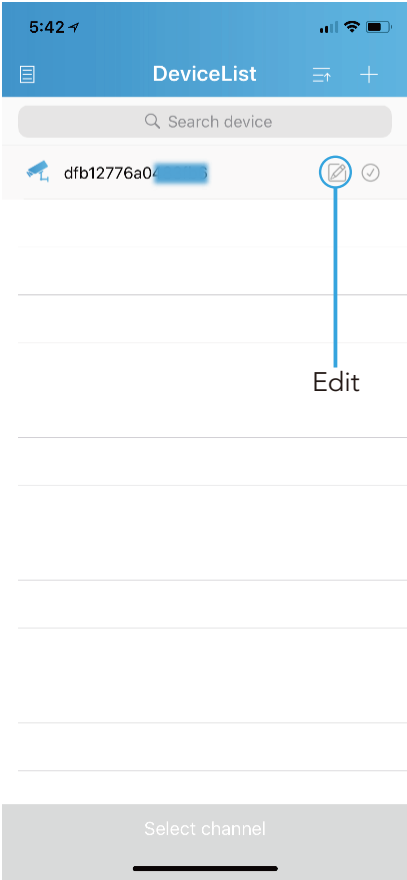
You will proceed to the device list. Tap "+" on the upper right corner to add device.



Step 4.

Please make sure the NVR and smartphone are connected to the same local network. If your smartphone is connected to 4G/LTE, you are unable to search equipment online. Tap "**Search**" on the bottom to search device online.

Step 5.  
All online devices will be displayed from the list. Select the P2P code (aka. Cloud ID) of NVR from the list. The P2P code of NVR can be found on the label of the box or from the **System-Version** menu. Tap **Add** and proceed to the next screen.

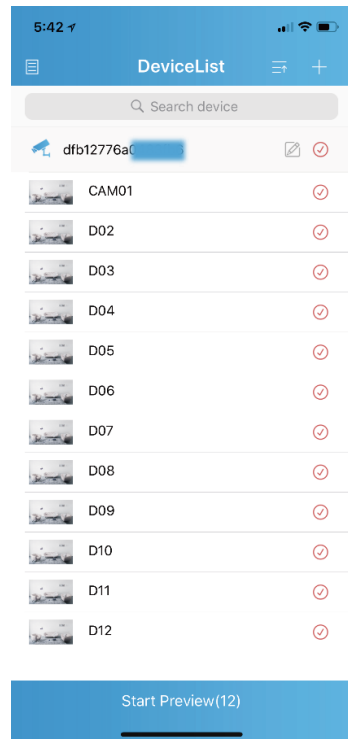
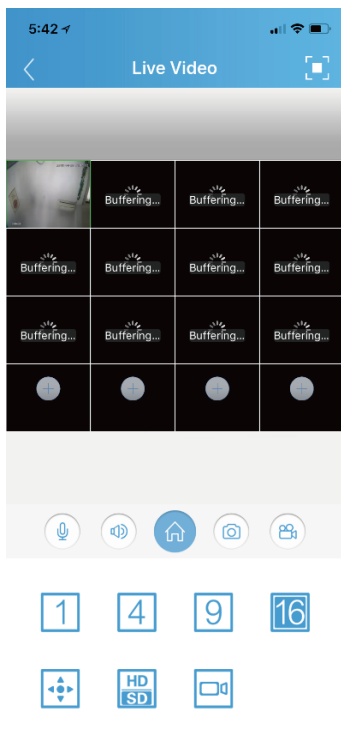


Step 6.  
The selected device will be added here. Click the edit button to rename the NVR. Tap the device name to expand channels.

Step 7.

All channels of the existing device will be expanded.


Tap to select all end-devices you want to view and tap **"Start Preview"**.

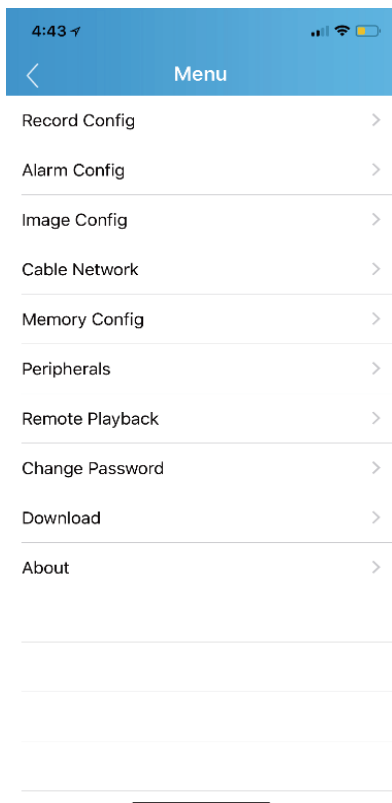


Step 8.

All selected channels will start preview.

- Preview in 1 window.
- Preview in 4 split windows.
- Preview in 9 split windows.
- Preview in 16 split windows.
- Open PTZ control panel.
- Switch between SD/HD mode (1 window mode only).
- Check remote playback.
- Speak.  
(only for devices with two-way communication)
- Enable audio.
- Tap to open the main menu.
- Take a snapshot and save to the smartphone.
- Record videos to the smartphone. "

Step 9. In the  main menu, you can configure advanced features of the NVR such as modifying password and enable alarms etc.



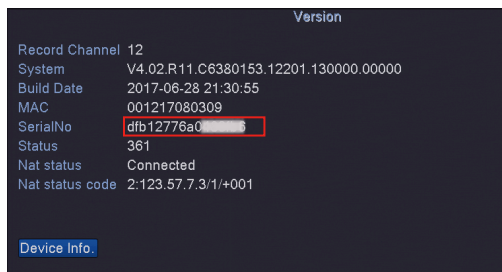
## 11.2 Desktop

### 11.2.1 P2P Function

P2P cloud technology enables customers to remotely access, control and configure their NVR through internet even if you are thousands miles away.

Warning: P2P function may not work if you modify the default media port (34567) of the NVR or the DNS of your NVR is not on the same subnet as your router. Your NAT status by DeviceConfig->Version needs to be "connected" before you are able to access your NVR through P2P.

Find Your P2P Code from the package or from Main Menu-Advanced-Version  
Note P2P Code = Cloud ID = Serial Number



In VMS, click “Manual Add” in Device Manager and add the NVR with its corresponding Cloud ID, username and password.

Internet Explorer:

Please go to [xmeye.net](http://xmeye.net) and use “Device Login”. Enter the Cloud ID of the NVR and associated username and password.

## 11.2.2 Port Forwarding

Please forward BOTH http port (80 by default) and TCP (media) port (34567 by default) and refer to the manual of your router for detailed steps of port forward in order to remotely access using a WAN IP.

## 11.2.3 VPN

This is recommended for customers who have static IP address and advanced router functions.

First, your router MUST support VPN. Then please refer to the corresponding manual of your router to establish a VPN for the local network where the camera is connected to. For example, the VPN was setup for the router at your home where the NVR is installed. Please remember the username and password of the VPN. Then, at any remote location, you can always setup a new network using VPN to remotely access your NVR at home.

If you have any questions or concerns, please contact [support@sunba.net](mailto:support@sunba.net)