

H.264 WIRELESS 720P NVR BOX



USER MANUAL

4 channel wireless NVR BOX

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Chapter one: Product Description

1.1 General Description

This equipment is designed specifically for the field of a number of digital security surveillance products, which uses an Embedded Processor Init (MPU) and operating systems, combined with the field of the latest IT technologies, such as video and audio encode/decode, high-capacity hard disk recorder, TCP / IP network technology, code in FLASH, making system operation more stable. This equipment, with network video and audio recorder (NVR) and network video and audio server (NVS) features at the same time, can works not only in local independently, but also be networked to form a powerful security monitoring network. It applies to bank, telecommunications, electric power, justice, transportation, residential area, factory, warehouses, water conservancy facilities and other areas and departments of the safety precautions.

1.2 Technical Parameters

Name	4 channel wireless NVR
Operation system	Embedded Linux OS
Network Video	4CH
Network video input broadband	20Mbps
Audio Bitrate	64Kbps
HDMI input	1ch, resolution: 1024x768, 1366x768, 1440x900,1920x1080p
VGA output	1ch, resolution: 1024x768, 1366x768, 1440x900,1920x1080p
Video Resolution	720P/D1
synch-playback	4CH

Video/Capture mode	Maual、Time、Motion、Alarm
Playback mode	Real time、Routine、Event
Backup	USB backup
Alarm Input	4ch (optional)
Alarm Output	1 ch (optional)
Type	1*SATA interface
Max Capacity	4 TB at most for each
Network Interface	1 adaptable RJ45 10M/100M, 1 WIFI interface
USB Interface	1 USB 2.0
Protocol	UPnP (play&plug)/SMTP (email survice)/PPPoE (dial-up) DHCP (Automatically obtain an IP address), etc...
Power Supply	DC12V/2A
Power Consumption (W)	≤15W (Without HDD)
Operate Temperature (° C)	-10℃~+55℃
Working Humidity (%) RH	10%~90%
Size	257mm (W) × 210mm (V) × 45mm (H)
Weight (excluding HDD)	≤1Kg

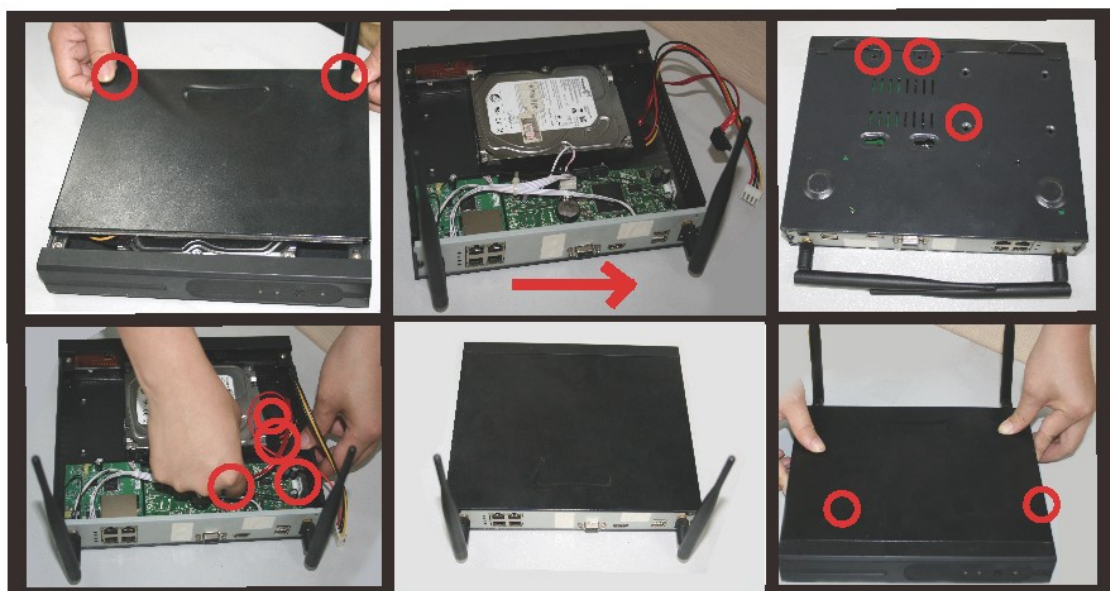
Technical Parameters	Model	1.0 Mega pixel wireless IP camera
	Sensor	1/4" Progressive Scan Sensor
	Signal System	PAL/NTSC
	Resolution	1280 x 720 16: 9 High Definition
	Minimum illumination	Color: 0.1 Lux; B/W: 0.01 Lux
	Shutter	1/25s to 1/25,000s
	LED	6pcs Array LED
	Night vision	25meters
	Lens	2.8mm
	View Angle	45~50degree
	OSD	Date Time & Title
	White Balance	Auto
	Day & Night	Auto / Color / BW
	3D-DNR	Auto
	Mirror/Flip	On / Off
	Frame Specification	Three Streaming at the Same Time: H.264 128x720@25fps or below H.264 640x360@25fps or below
	S/N	> 39.1 Db

General Specification	Interface	RJ45 / WIFI 802.11b/g/n
	Anti-thunder Level	Standard IEC61000-4-5
	Working Temperature/Humidity	-10℃ to +50℃ / 30% to 80% RH
	Working Temperature/Humidity	-20℃ to +60℃ / 20% to 90% RH
	Power Input	DC12V/ 1A
	Power consumption	≤15W
	Size	205(L) × 70(W) × 55 (H)mm
	Weight	500g
	Level of Protection	IP66

1.3 Hard Drive Installation

If the NVR you have bought is not with Hard Drive, for first time use, please install an internal SATA II and III 3.5" hard drive by bellow steps:

- 1.Remove the screw of NVR
- 2.Connect the HDD cable and power line
- 3.Assemble the screw and fix the HDD in the bottom of NVR
- 4.Close the cover and fix it



1.4 Camera and NVR connect way

- 1、 connect the power supply to NVR and camera; connect a monitor to NVR.
- 2、 wait 1minute time, camera's video can send to NVR automatically. Make sure the distance between camera and NVR is short at the beginning. The antenna of camera &NVR should be parallel. See bellow picture.



Correct way



Wrong way

Chapter Two: Structure Appearance Description

2.1 Panel Description

4 channel NVR Front Panel Description:

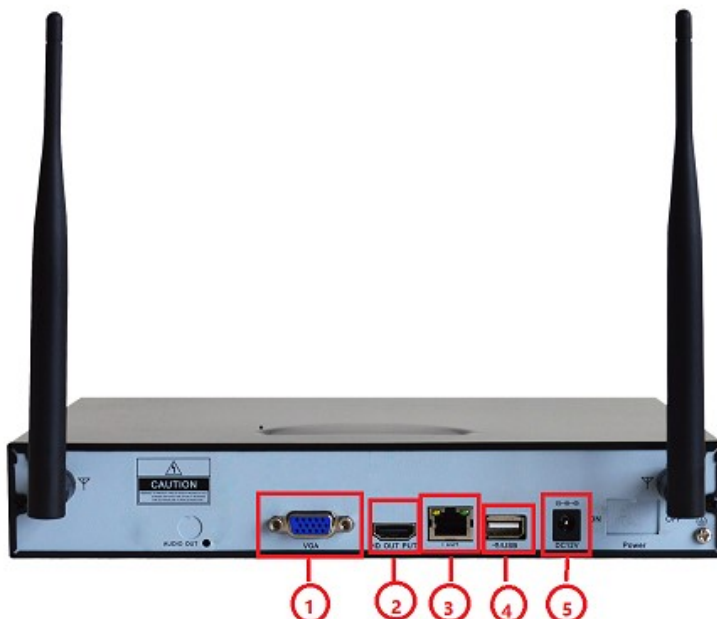


Pic 2.1

1. POW: Power States LED
2. HDD: HDD State LED

2.2 Product Interface Description

4 channel NVR Rear Panel Description:



Pic 2.2

- 1、VGA: Video Output Connector
- 2、HDMI: Video Output Connector
- 3、NET: RJ-45 Standard Network Connector
- 4、USB: Standard USB Connector
- 5、DC12V: 12V(DC) Power Connector

2.3 Mouse Description



Operation	Function
Double left click	Double click one item in the file list to playback the video.
	Double click the playback video to zoom in or out the screen.
	Double click the channel to make it full screen display.
	Double click again to resume the multi-window display.
Left click	Choose the according function in the menu.
Right click	Pop desktop shortcut menu in preview state.
	Current shortcut menu in the menu.
Press middle button	Add or subtract number in the number setting.
	Switch the item.
	Page up or down in the list.
Drag mouse	Set the motion detect area.
	Set the cover area.

2.4 Log in, Input method Description

Log In

When the NVR booted, you can login to enter the menu. Default user name is “admin”, and no password is required.



Pic 2.3

Pic 2.4

Name	Description	Function
Number	0~9	Input 0~9
Character	- / . _ * # @	Input characters
Cap/Small	caps	switch
Back	←	delete

Chapter Three: Description of Operation System

3.1 Turn on / off

Confirm that AC voltage accessible matches with NVR. Ensure that the NVR power outlet connect with a good middle ground grounding. After switching power, the device started, **【POWER】** light is on. Turn into system, if the panel status light flashing, it's normal conditions.

3.2 Preview

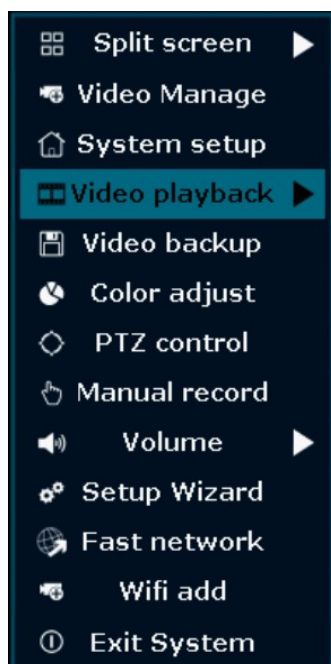
After device start, preview interface can be seen immediately. you can see the system date, time, channel name. and the Cloud ID number.



3.3 Main Menu Introduction

3.3.1 main menu list

Right click mouse, it will pop-up the main menu. Main menu consists of the following column:

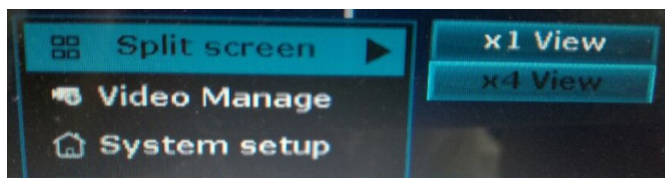


Pic 3.2

Split Screen (split the screen by 1 or 4 channel), Video Manage, System setup, Video playback, Color Adjust, PTZ control(NOT working for wireless NVR kit, please neglect it), Manual record, Volume, Setup Wizard, Fast Network, Wifi Add, Exit System.

3.3.2 Split Screen

Right click mouse → "Split Screen", you can see 1channel or 4channel.



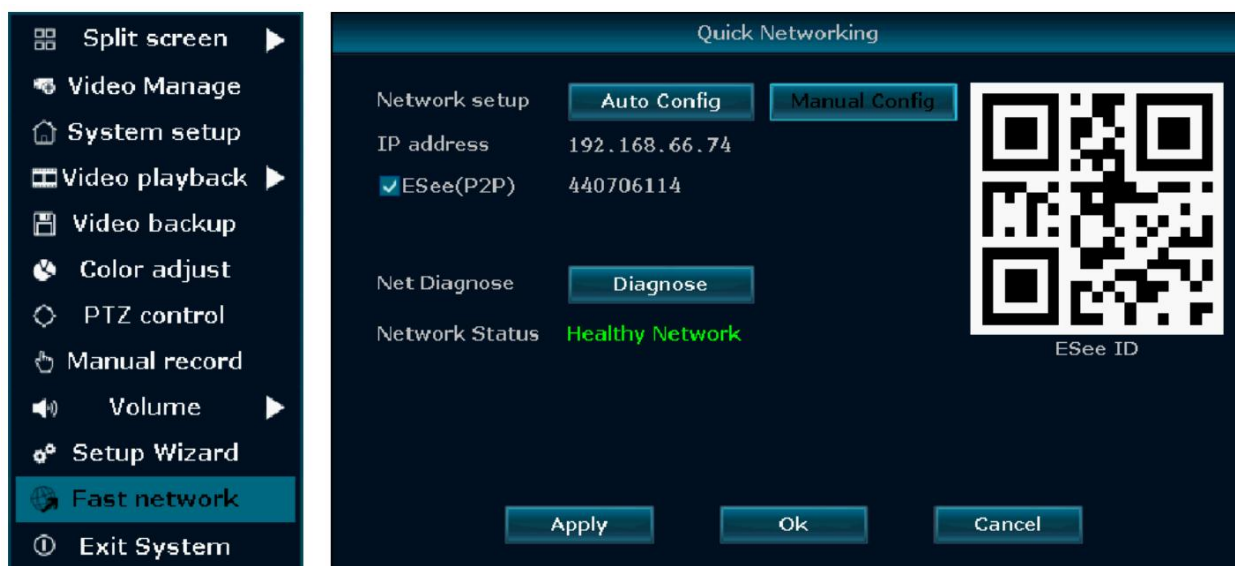
Pic 3.3.2

3.4 Fast networking

Right click mouse, choose fast networking- Choose Auto Config, Click OK

If want to manual con fig, input IP address, click diagnose.

If shows healthy network, indicates the connection of Internet is good. If shows network anomaly, please process according to the clew.(Ensure your device has accessed network)



Pic 3.4

3.5 Video Manage (add extra IP camera if needed)

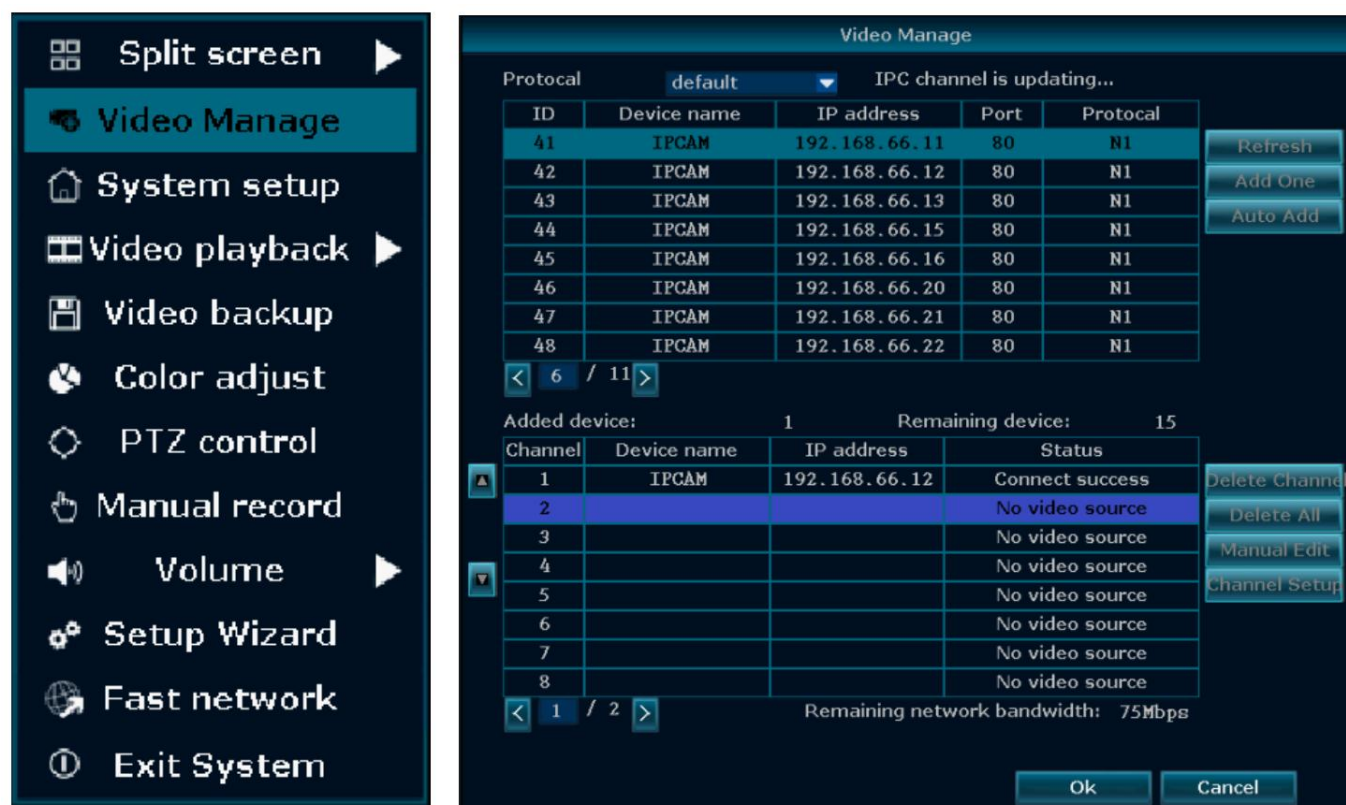
The 4pcs IP camera has already being matched into the NVR when you buy the product, but if you lost 1 camera video, you need to add it by yourself:

Right click mouse in main menu—→ Video Manage- →Refresh to search IPC

Two way to add IPC 1.) Click the IPC searched, then click add, IPC will add to target channel

2.) Click Auto add(Auto add can add all the IPC searched to channel list)

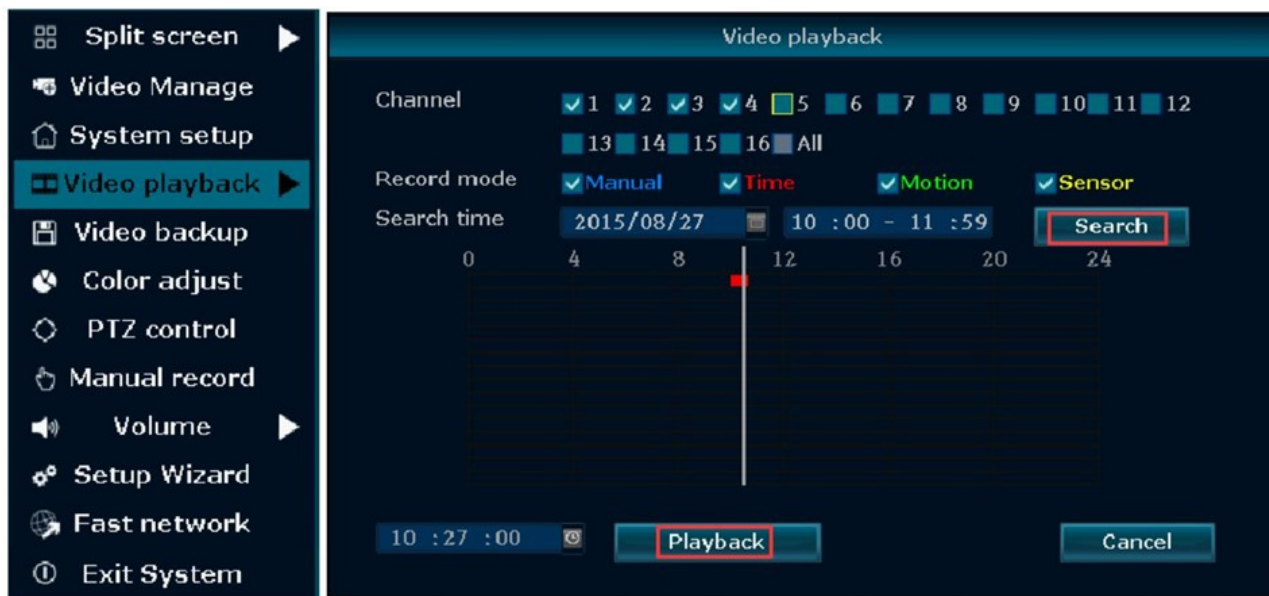
Delete channel: Delete channel information Edit channel: Manually revise channel parameters(such as password of user name) Click OK to finish operation.



Pic 3.5

3.6 Video Playback

Right click mouse in main menu---Video playback---choose channel No.---choose Record mode---In search time, input beginning time and end time---click search, recording will come out, drag time bar---click playback to start



Pic 3.6

Channel: to choose the target channel by clicking the check box.

Record mode: to choose the recode mode by clicking the check box

Search time: input the Starting and finishing time into edit box

Search: After setup the above search condition, click "search" to begin the corresponding video file searching and show the files. Red means time recording, green means MD recording, yellow means sensor recording.

Playback : chose playback and turn into playback interface. In the search list box, choose the time bucket according up, down, left, right key or move the mouse. Click  or left mouse to enter "video playback "Interface

Cancel: back to previous menu.

3.7 Video back up

Video back up need a USB disk to plug in the USB slot of the NVR,

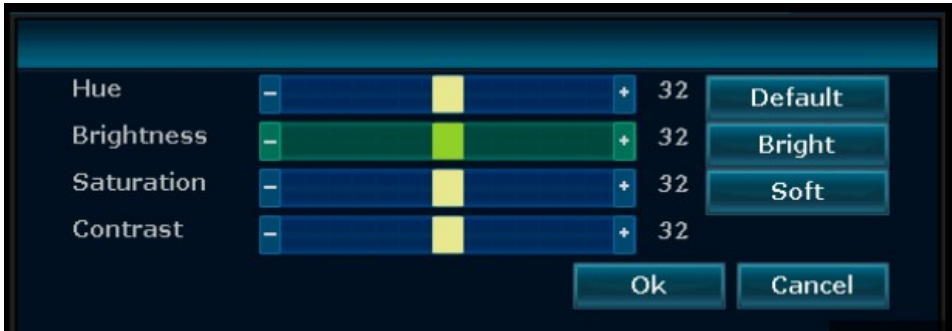
Right click mouse in main menu--->Video backup--->choose channel No. --->choose Record mode--->In search time, input beginning time and end time--->click search, recording will come out--->choose the video which need to backup--->click video backup



Pic 3.7

3.8 Color adjust

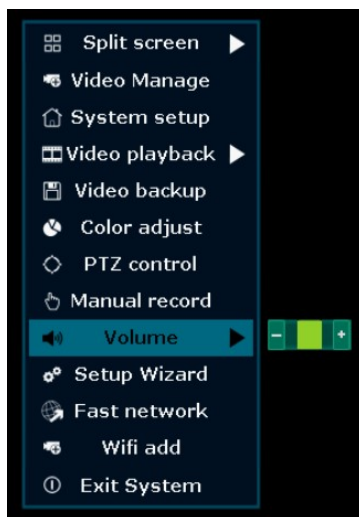
Right click the mouse, then turn in to the “Color adjust”.



Pic 3.8

3.9 Volume

Right click the mouse, then turn in to the “Volume”.



Pic 3.9

3.10 Manual record



Pic 3.10

In the shortcut menu, click manual record to enter the setup the manual record interface.

Manual record menu illustration

Manual record menu include several parts:

Channel: ☒ means open; ☐ means close.

All on: start all the channel.

All off: close all the channel.

OK: confirm an exit

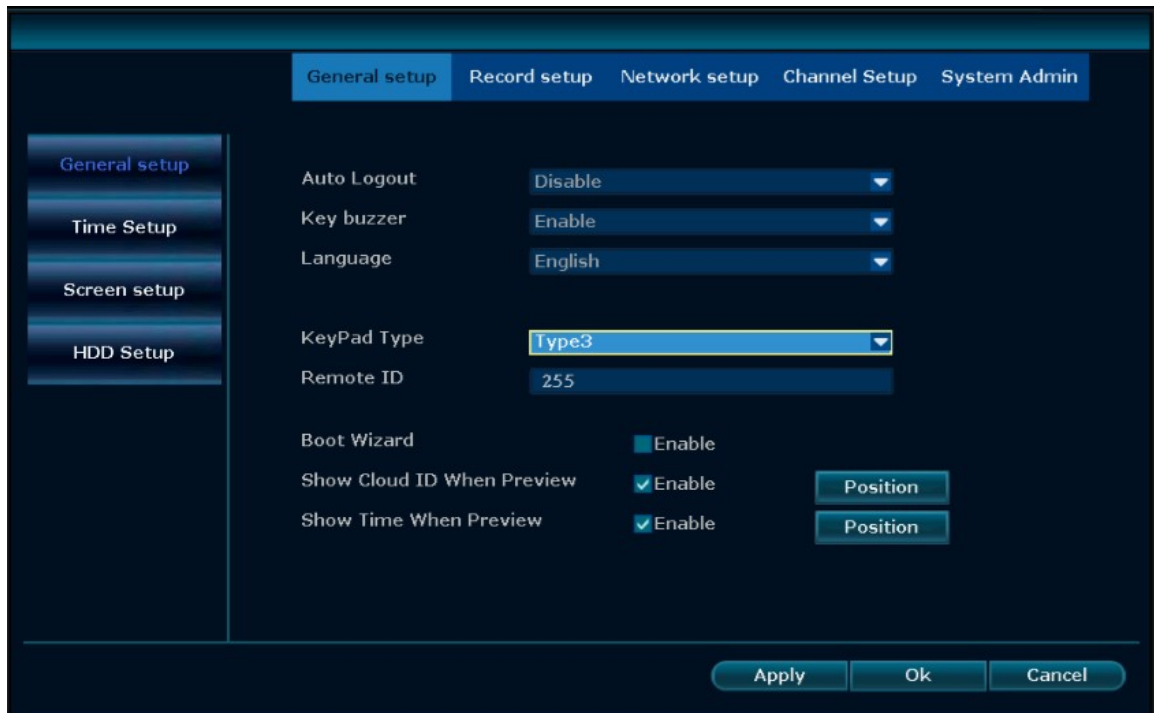
Cancel: click cancel can exit the manual record interface and back to main menu.

3.11 System Setup

Click "Setup" in the shortcut menu, the first class menu including: video playback, video backup ,system setup, system info, system logout.

In the setup menu, Choose “system setup” and turn into it's sub menu. It includes: General setup, Record setup, Network setup, Channel setup, System Admin.

3.11.1 General setup



Pic 3.11.1

Right click mouse, Choose the "General setup" and turn into it's setup interface.

Time: The real time when preview, click "refresh" after setting, make sure saving when it shows" the recording will stop once you modify the time"

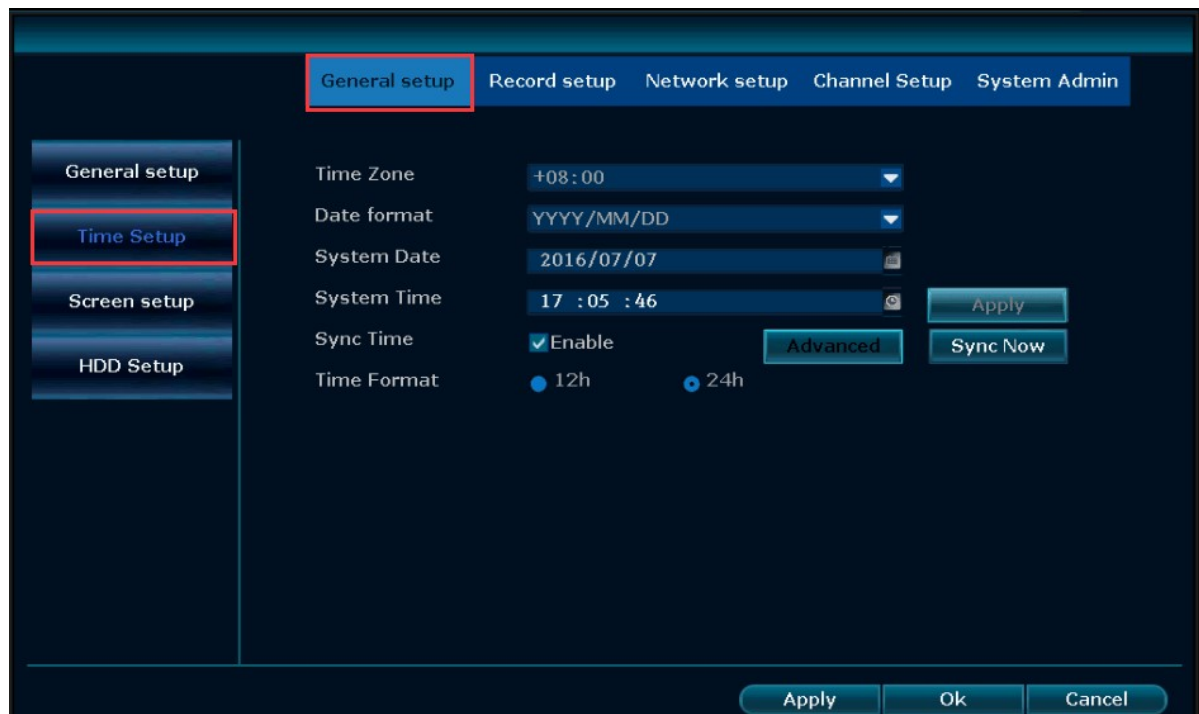
Key Buzzer: Enable, there is sound with the controller or pressing key on front panel, disable, without sound.

Language: There is multiple choice according to users, Chinese and English and so on.

Remote ID: controller connect by device number when it is used to control. The remote controller should be correspond with the ID so that it can work.

After setting finished, click"OK", the information will be saved. Click "cancel" to exit without saving.

3.11.2 Time Setup



Pic 3.11.2

Right click mouse, Choose the "General setup"--> "Time Setup"

System Date: chose the right Date as needed by clicking select box

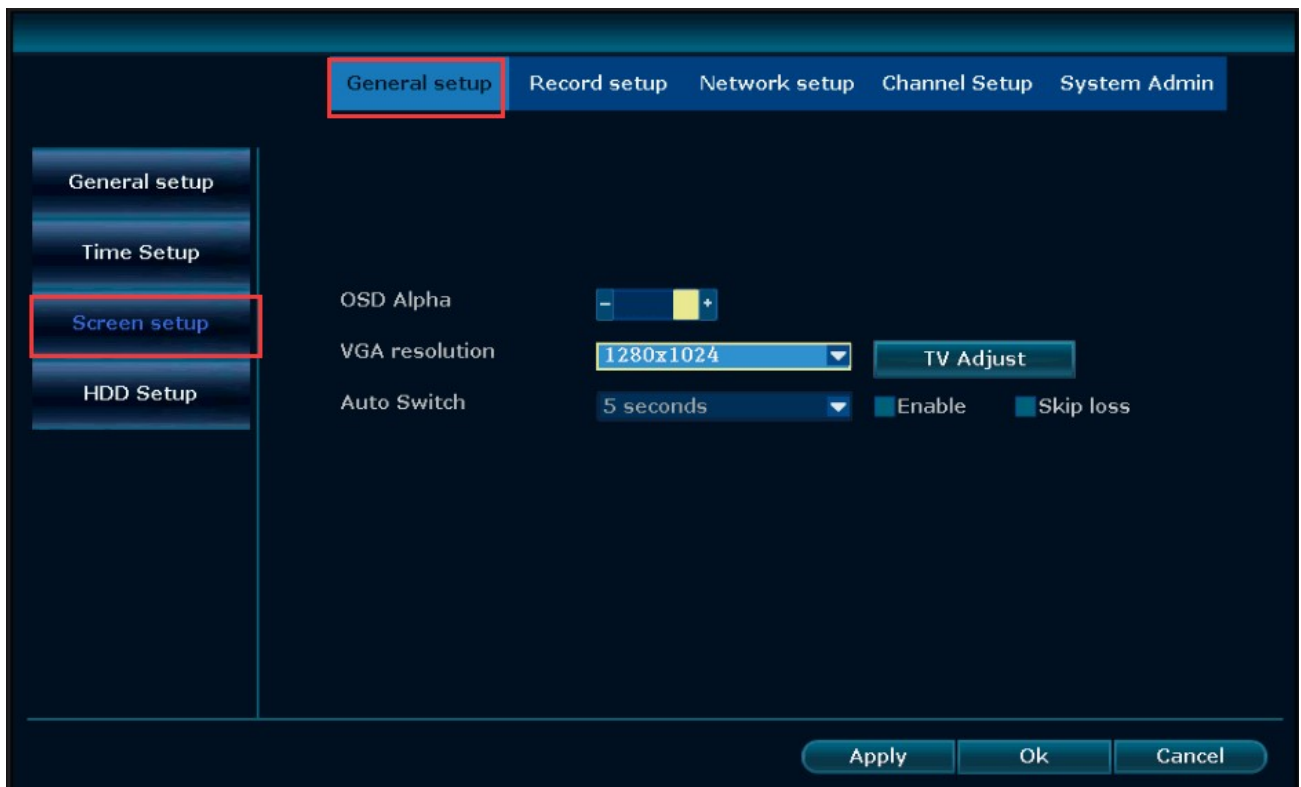
System Time: click and enter the local time.

Date Format: Y/M/D", "D/M/Y", "M/D/Y"

3.11.3 Screen Setup

Right click mouse, Choose the "General setup"--> "Time Setup"

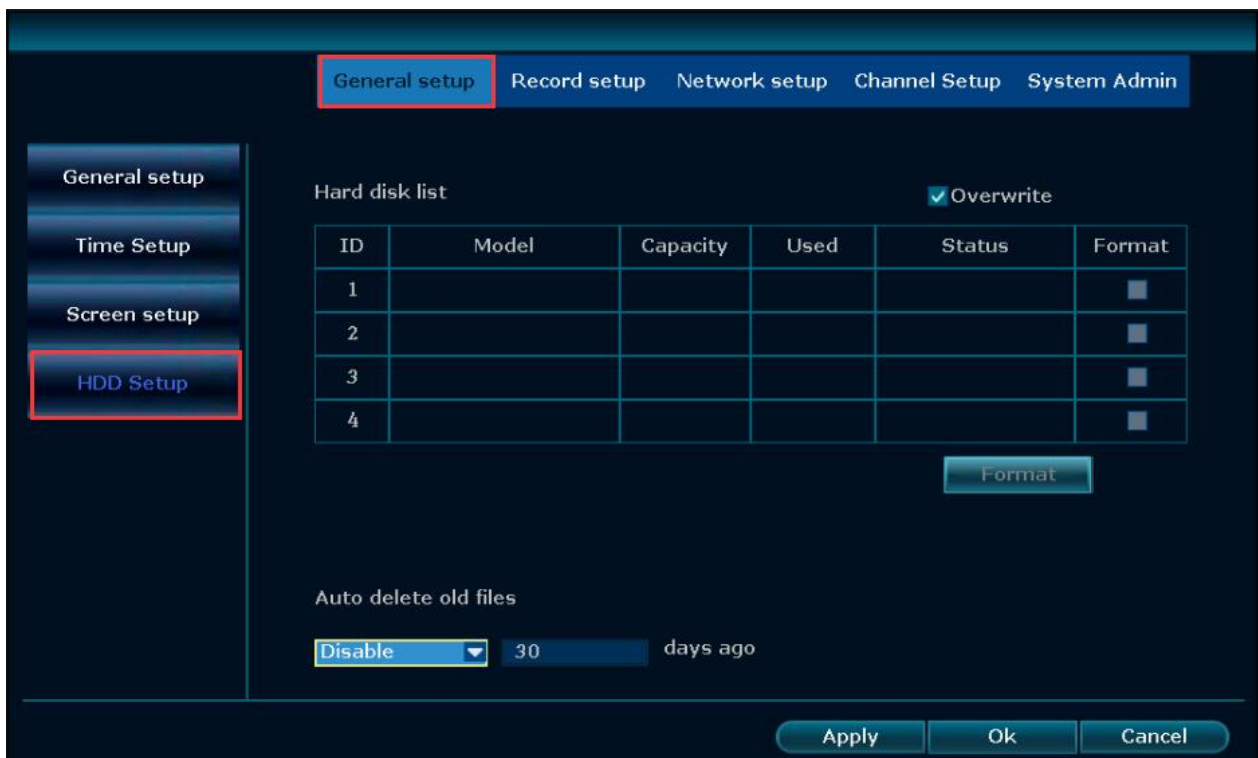
OSD Alpha: OSD menu transparency. Can be adjusted as needed



Pic 3.11.3

3.11.4 HDD Setup

Right click mouse, Choose the "General setup"--> "HDD Setup"



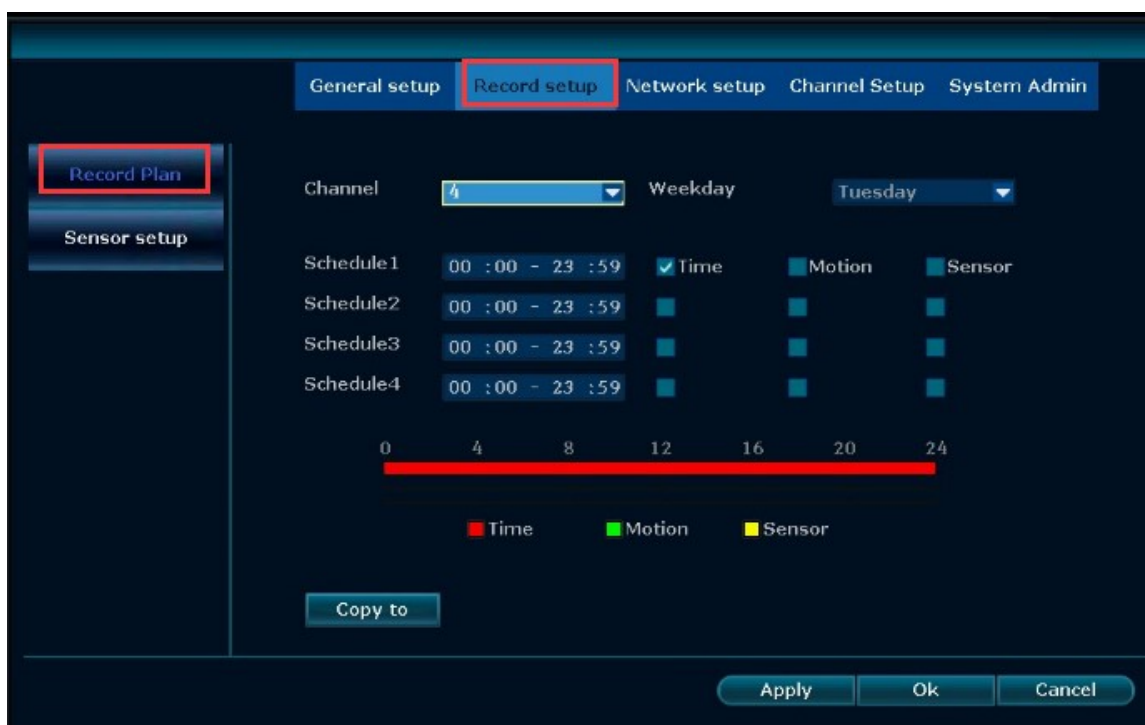
Pic 3.11.4

Overwrite: “☑” earliest recording files will be covered when the disk is full, “☐” shows not cover.

Format: “☑” stands selected, “☐” stands not selected, when click "format" a confirm interface will pop up, then click confirm to format, click cancel to return the main interface

3.12 Record Setup

3.12.1 Record Plan



Pic 3.12.1

Right click mouse, Choose the "General setup"--> “Record Setup” --> “Record Plan”

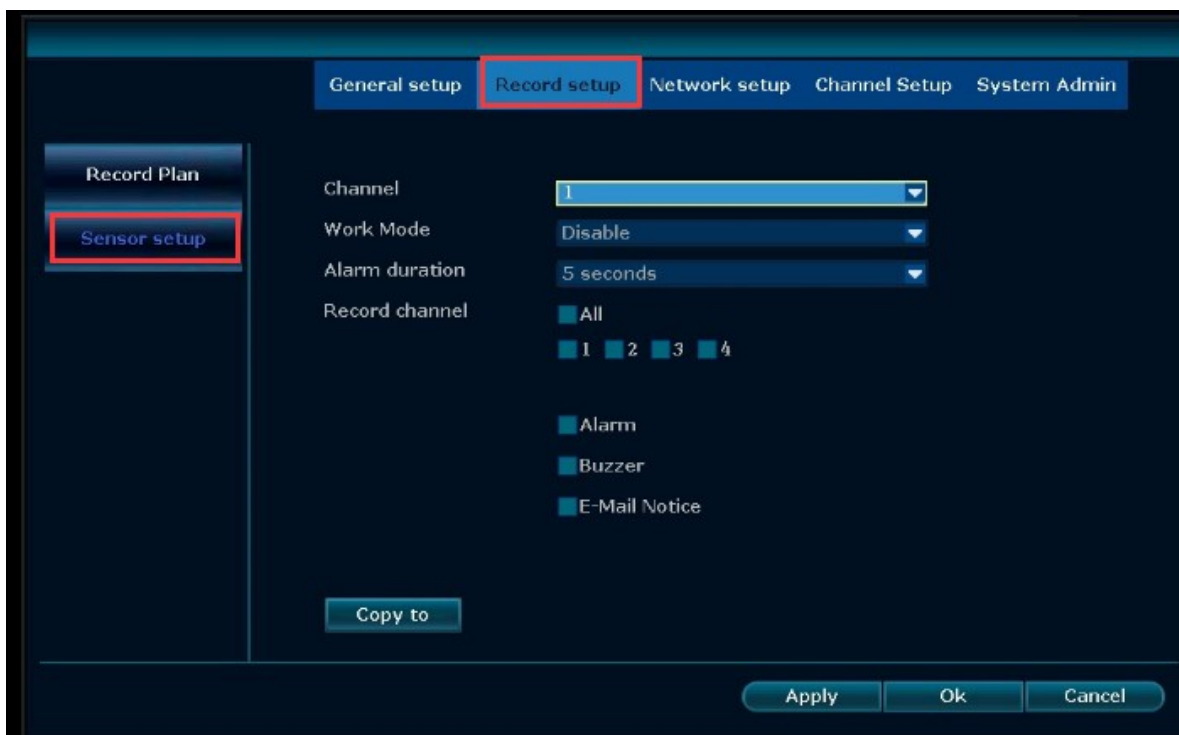
Channel : choose the right channel as needed by clicking the inverted triangle

Weekday: chose the right day as user's need, "ALL" means all days in a week.

Image mode and time : Every time slot can set different recording mode in all 4 time slot. "Time" recording with red color , "Motion" recording with green color , "Sensor" recording with yellow color ; “☑” means working , “☐” means invalid. The bottom parts has times status display, whole schedule from time 0~24 hours

Copy to : select the target channel on the right of "copy to "button ,click "copy to" & "OK " then system will set the current channel setup information to other target video channel. Click button "cancel", the setup information is non-saved but to exit.

3.12.2 Sensor Setup



Pic 3.12.2

Right click mouse, Choose the "General setup"--> "Record Setup" --> "Sensor Setup"

Channel: choose the right channel, click the select box to choose

Work mode: setting to start alarm or not

Alarm duration: set up alarm duration time

Recording channel: When alarm is triggered, channel needed to be recorded

Alarm: "☑" enable alarm, "☐" close alarm

Buzzer: "☑"start buzzer, "☐" close buzzer

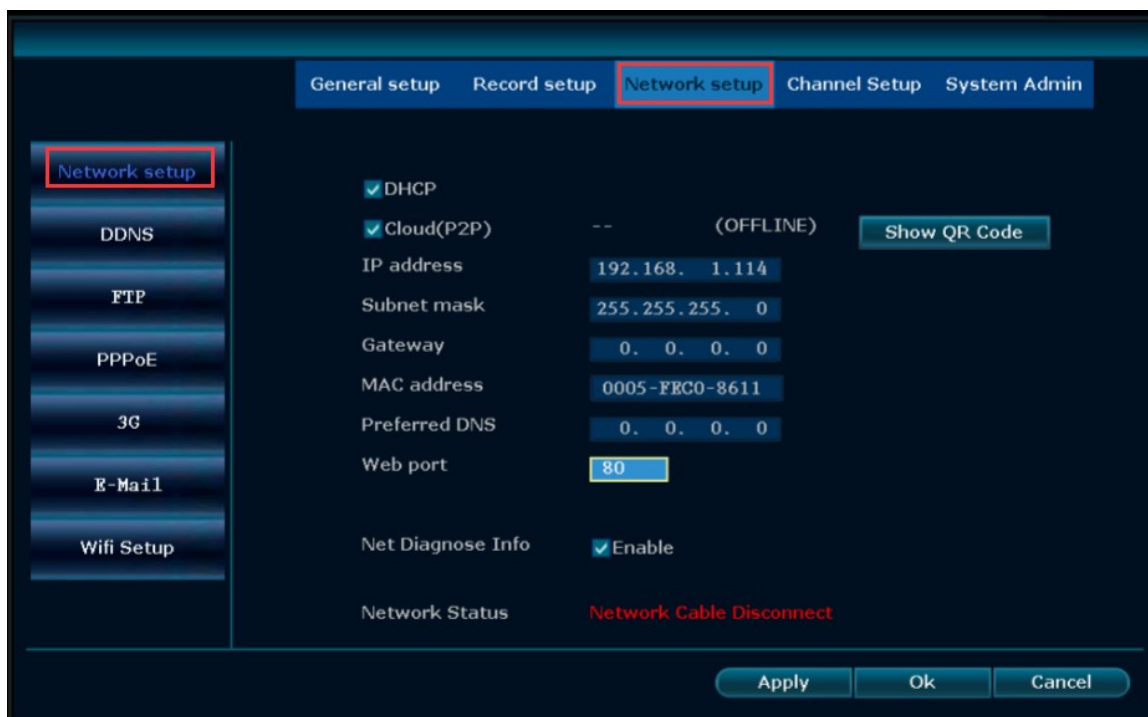
Screen notice: "☑"alarm icon shows on the screen, "☐" no alarm icon shows on the screen

Copy to: choose the target channel in the right select box, click" copy to" ,the setting information will be applied to other channel.

After the setting, click "OK" to exit with saving the , or click "cancel" to exit without saving.

3.13 Network Setup

3.13.1 Network Setup



Pic 3.13.1

Right click mouse, Choose the "General setup"--> "Network Setup"

DHCP: select whether to start up DHCP to automatically obtain IP . “☒”means works ; “☐” means non-work

Cloud ID: after connecting internet ,the cloud ID will show on line with a number ,it can be used in IP remote monitoring in ESeenet network server

IP address : the IP address must be unique and can not be in conflict with the host or workstation on the same network segment

Subnet Mask : subnet for the network segment.

Gateway: need to set the gateway address to achieve communication between the different network segments.

MAC address: showing the device's MAC address

DNS address : devices used PPPOE protocol to access network to gain a dynamic IP address

Web port : port number IE browser visit , default port is "80"

3.13.2 DDNS

Right click mouse, Choose the "General setup"--> "Network Setup" --> "DDNS"

DDNS setting: automatic analytic function of dynamic domain name, “☒”Enable , supported 3322、change ip、no-ip、dyndns, oray.

Select the right network server and input user name, password and domain name

The screenshot shows the 'Network setup' menu with 'DDNS' selected. The configuration fields are as follows:

Field	Value
DDNS Function	☒ Enable
DDNS provider	Dyndns
URL	test.dyndns.org
Username	test
Password	****

Buttons: Test, Reset All, Apply, Ok, Cancel

Pic 3.13.2

3.13.3 FTP

Right click mouse, Choose the "General setup"--> "Network Setup" --> "FTP"

The screenshot shows the 'Network setup' menu with 'FTP' selected. The configuration fields are as follows:

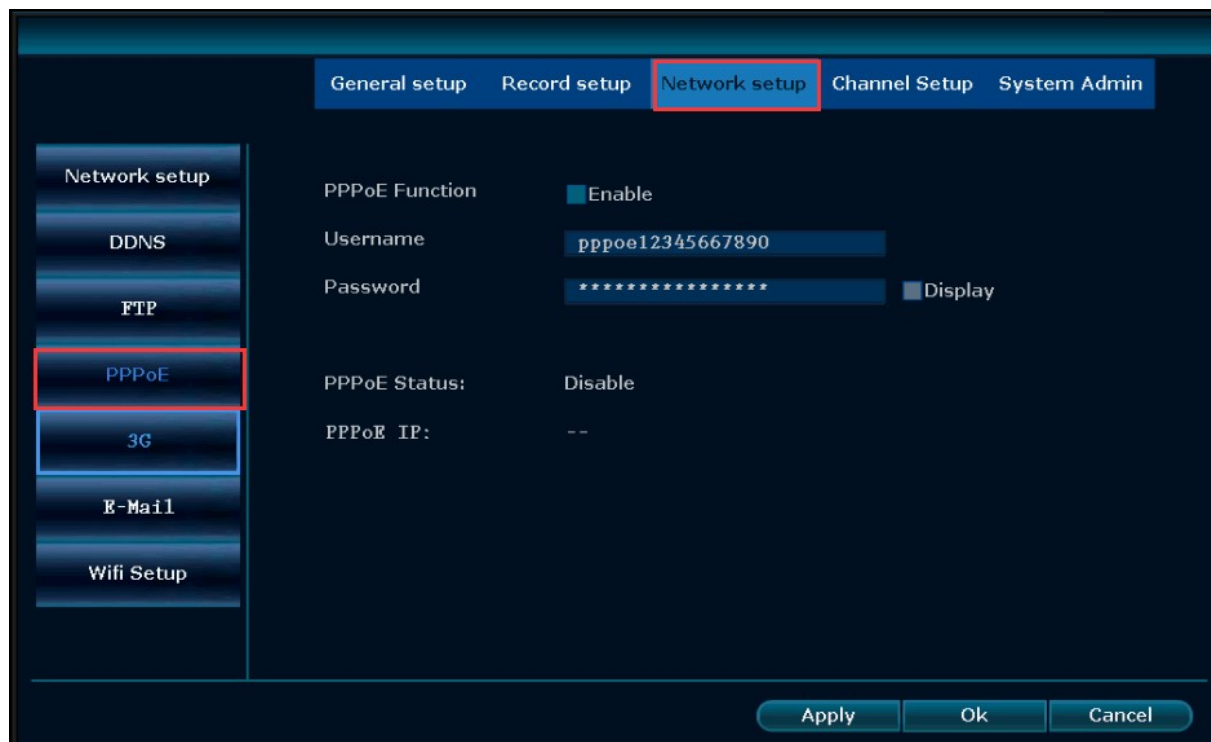
Field	Value
FTP Function	☒ Enable
FTP Server	
Port	21
Anonymous Enable	☐
Username	
Password	
Remote Folder	/
File Max Size	30 MB
Schedule	Set, Test

Buttons: Apply, Ok, Cancel

Pic 3.13.3

3.13.4 PPPOE

Right click mouse, Choose the "General setup"--> "Network Setup" --> "PPPOE"



Pic 3.13.4

PPPOE configuration :

Enable : “☒ PPPOE” means to start up PPPOE dial-up. “☐” means not to start up

PPPOE user: input the user name of ISP into edit box

PPPOE password : input the password of ISP into edit box

After the page setup is completed, click "OK " to save the changes ; click "cancel " , non-save but exit.

3.13.5 E-Mail

Right click mouse, Choose the "General setup"--> "Network Setup" --> "E-Mail"

When system get the alarm or motion detection, it will send email to your setting email address. “☒”enable email function.

Name	Detail function
SMTP server	Input format: smtp.####.com for example: smtp.126.com
Username	Full email address, for example: 123456@126.com
Password	Email password
Encryption Type	none, if test failed, change to SSL

Sender	Full email address, for example: 123456@126.com
Sendee (receiver)	Full email address, can also use sender's email address
interval	Time gap for each two email
Health Mail Interval	Time gap for email sending when NVR is normal working

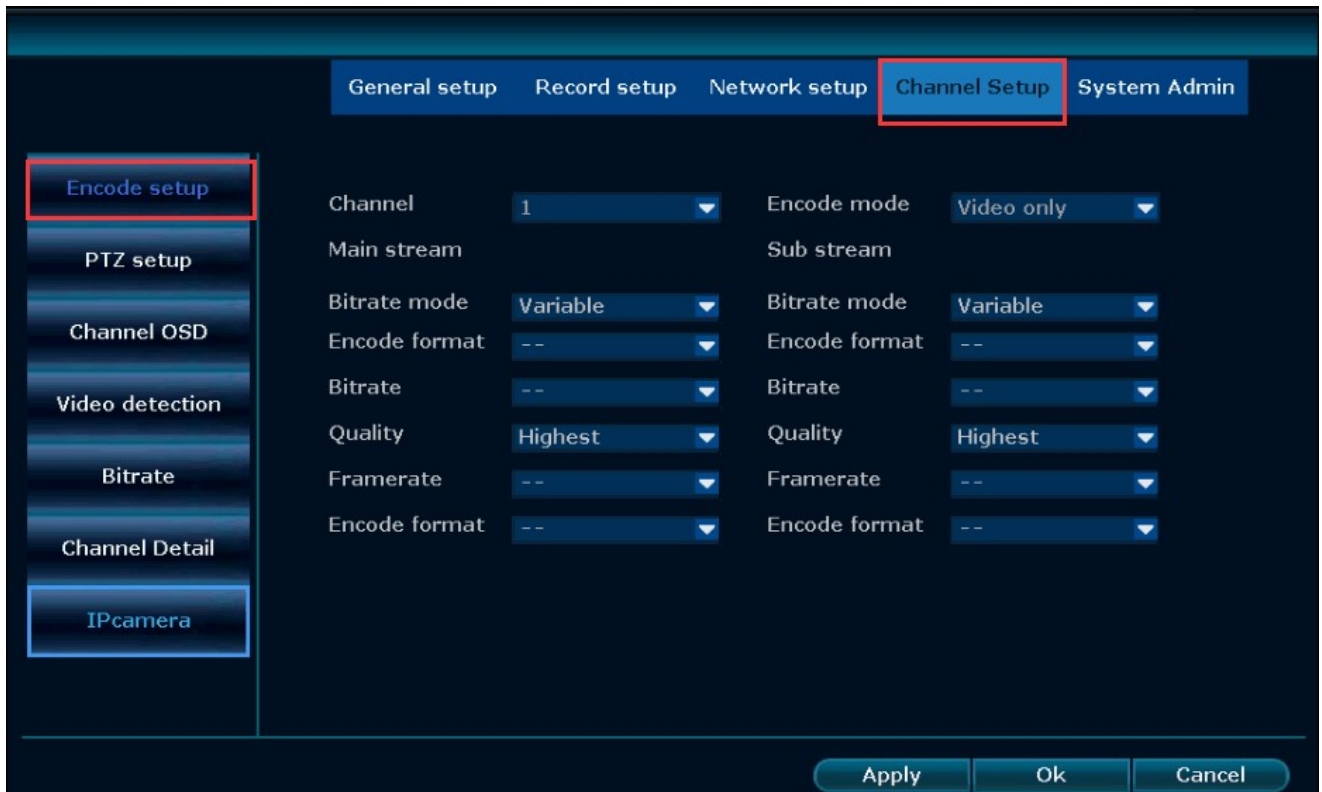
If email can not be sent, make sure the email system has SMTP server.



Pic 3.13.5

3.14 Channel Setup

3.14.1 Encode Setup



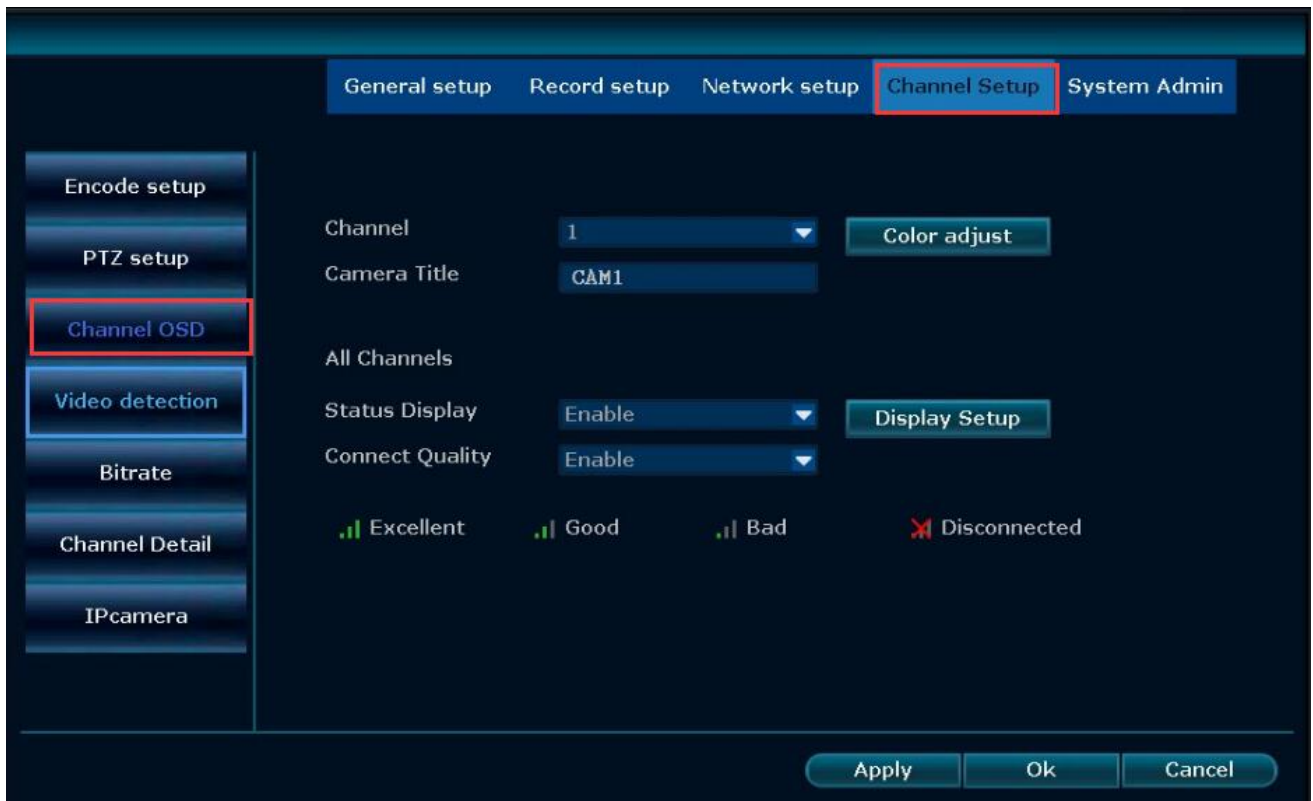
Pic 3.14.1

Right click mouse, Choose the "General setup"--> "Channel Setup" --> "Encode Setup"

3.14.2 Channel OSD

Right click mouse, Choose the "General setup"--> "Channel Setup" --> "Channel OSD"

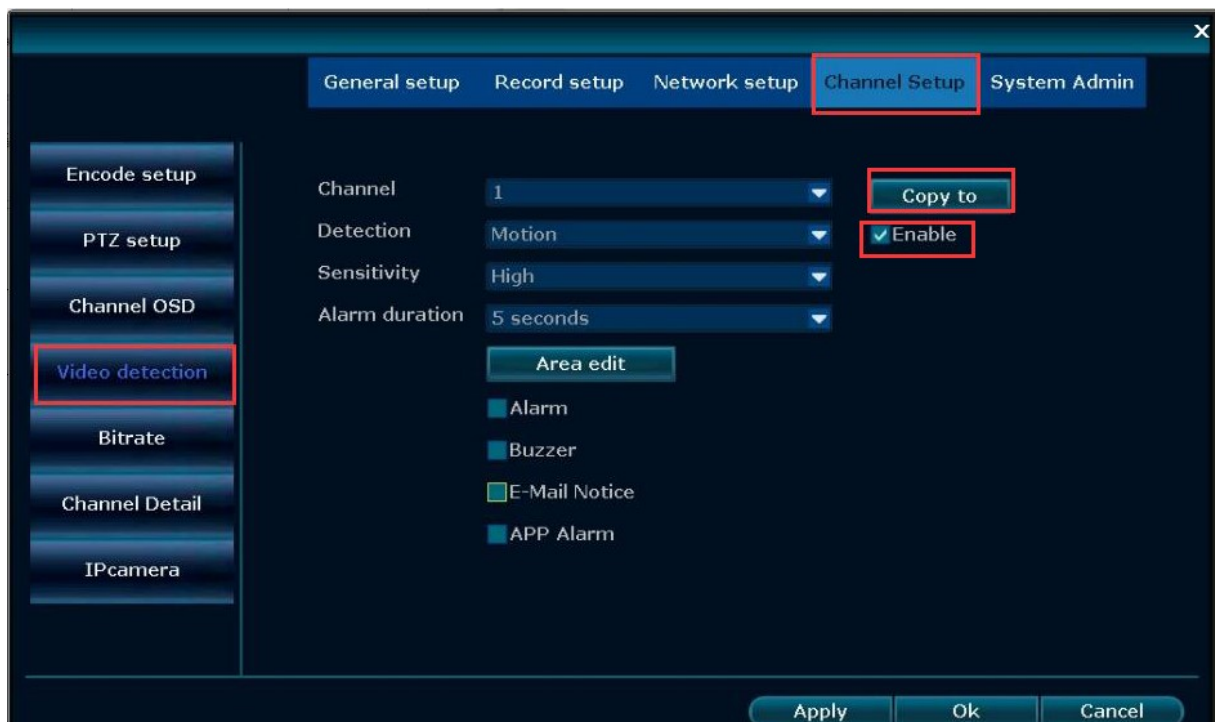
You can name each channel and adjust the color of each channel.



Pic 3.14.2

3.14.3 Video Detection

Right click mouse, Choose the "General setup"--> "Channel Setup" --> "Video Detection"



Pic 3.14.3

Sensitivity : chose the trigger video detection sensitivity

Detection type: select detection type --motion, video loss ,“keep out” alarm

Alarm duration: after chose the trigger video detection, the time alarm last

Area edit : set motion detection area ;move by choosing left of mouse.

Record channel : system defaulted channel after trigger video detection,,

Alarm: “☒”means start , “☐”means non start .

Buzzer : “☒”means start , “☐”means non start.

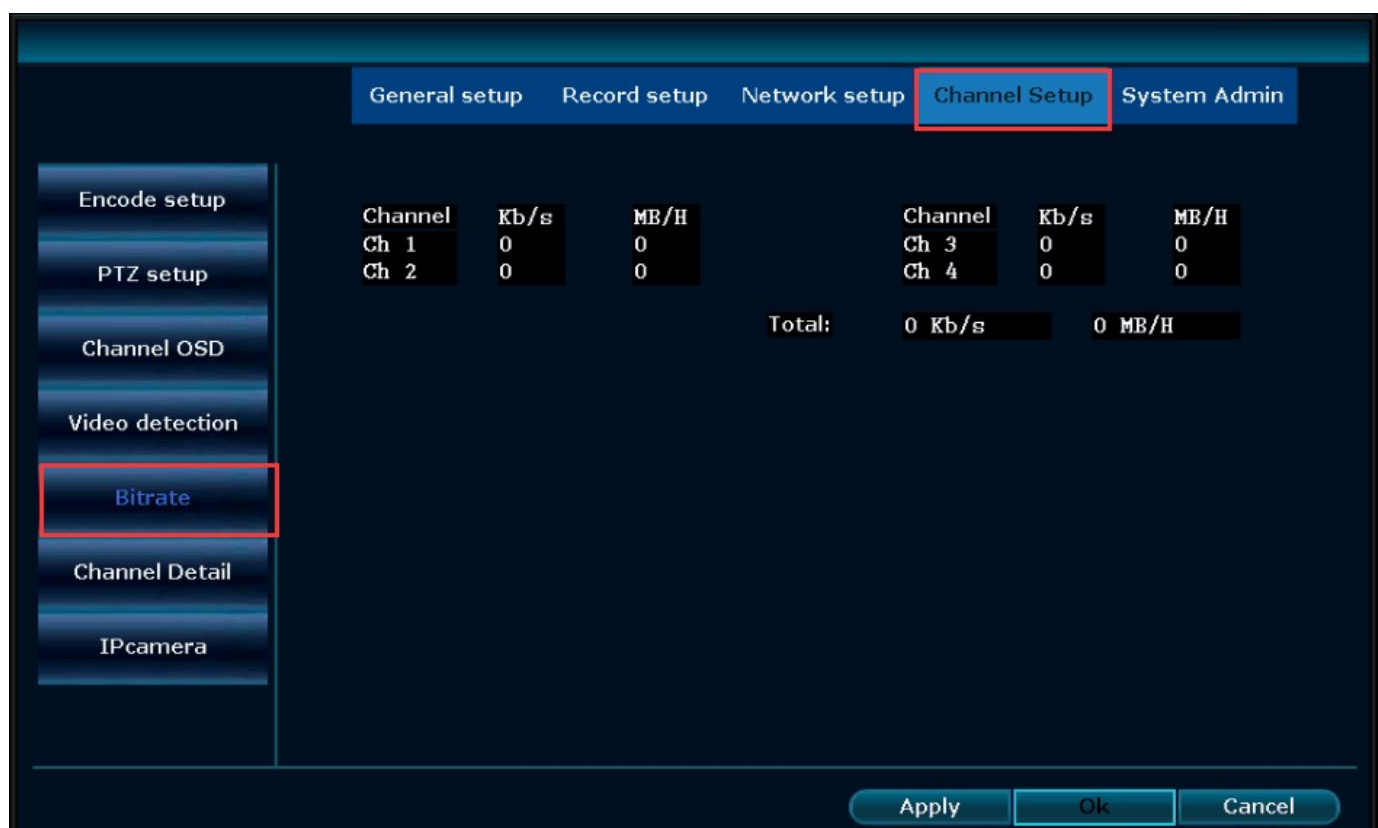
OSD : “☒”means "detection " marks shows on screen,, “☐” means non show

E-Mail notice : “☒” means E-Mail valid, “☐” means E-Mail invalid.

Copy to : select the target channel on the right of "copy to "button ,click "copy to" & "OK " then system will set the current channel setup information to other target video channel. Click button "cancel", the setup information is non-saved but to exit.

3.14.4 Bitrate

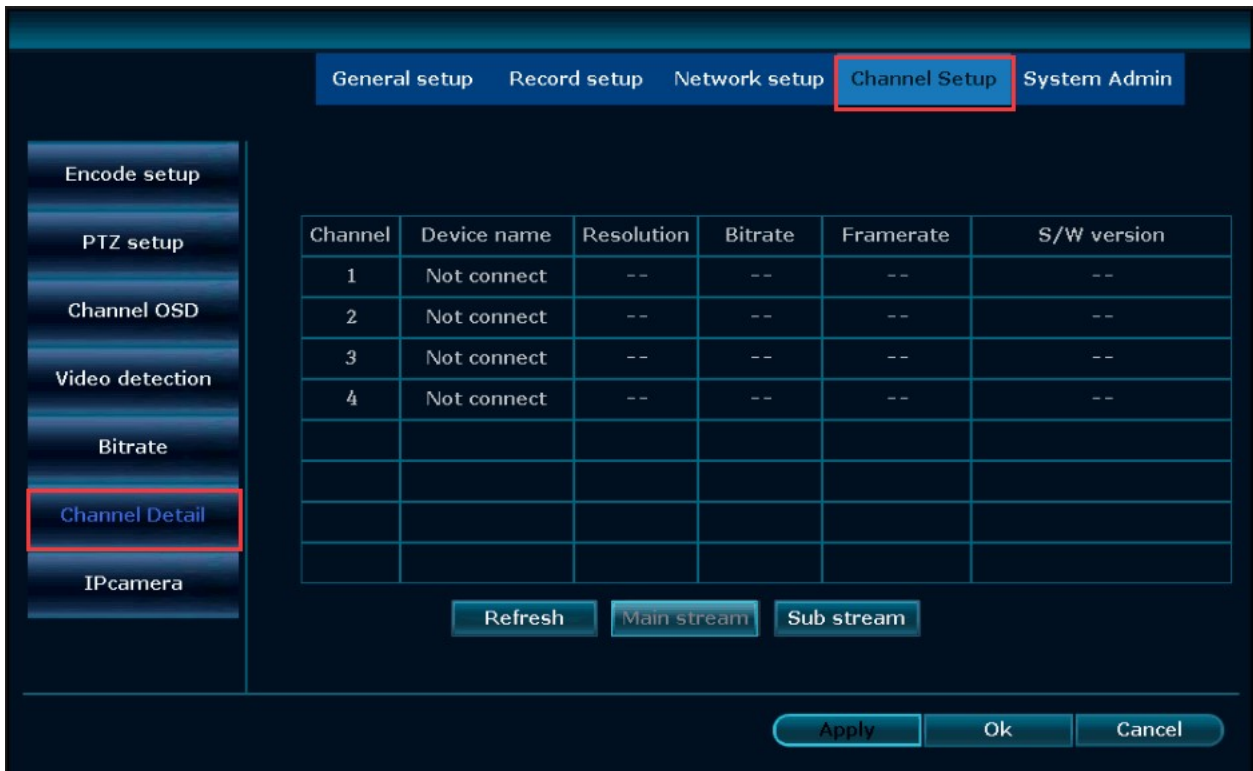
Right click mouse, Choose the "General setup"--> “Channel Setup” --> “Bitrate”



Pic 3.14.4

3.14.5 Channel Detail

Right click mouse, Choose the "General setup"--> “Channel Setup” --> “Channel Detail”



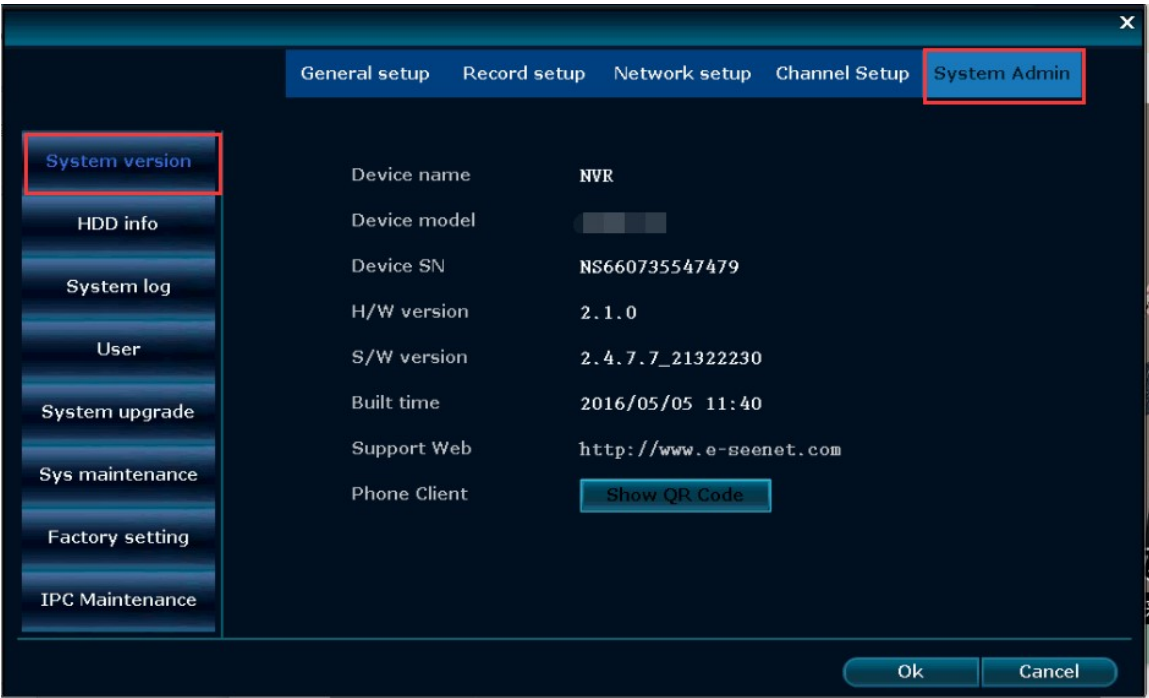
Pic 3.14.5

3.15 System Admin

Right click mouse, Choose the "General setup"--> "System Admin"

3.15.1 System version

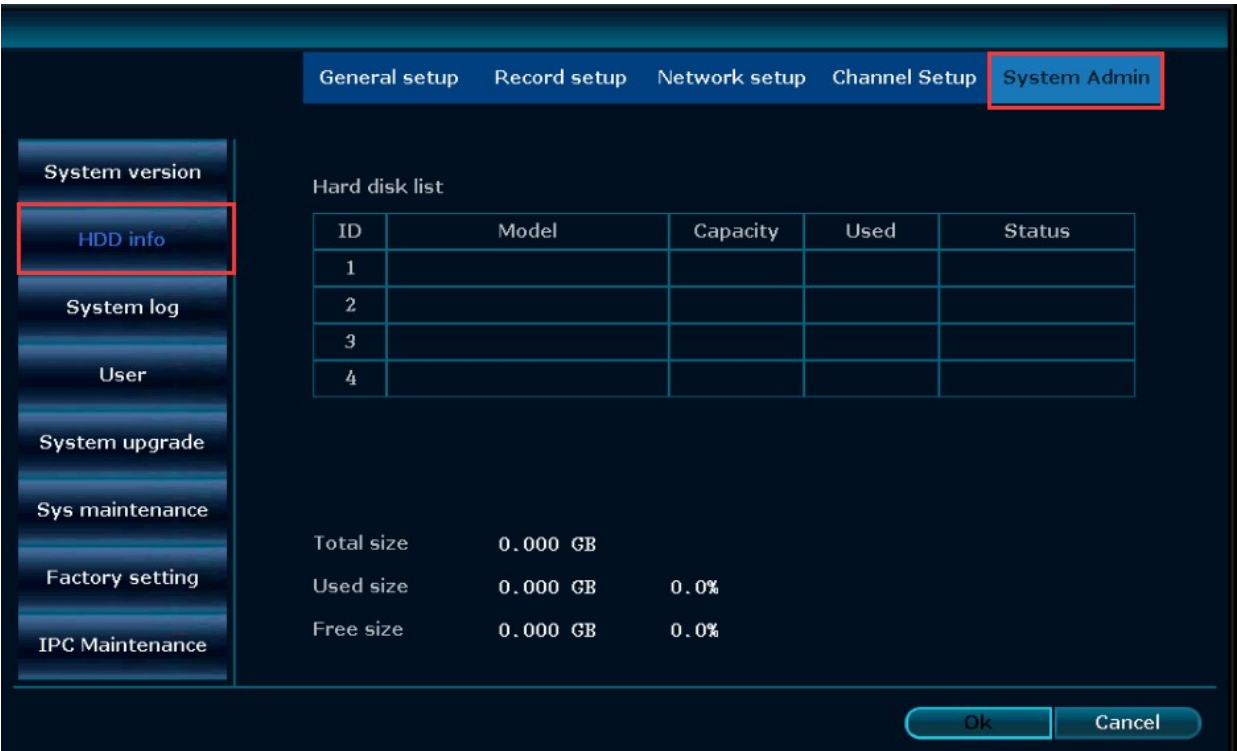
Right click mouse, Choose the "General setup"--> "System Admin" --> "System Version"



Pic 3.15.1

3.15.2 HDD info

Right click mouse, Choose the "General setup"--> "System Admin" -->"HDD info"

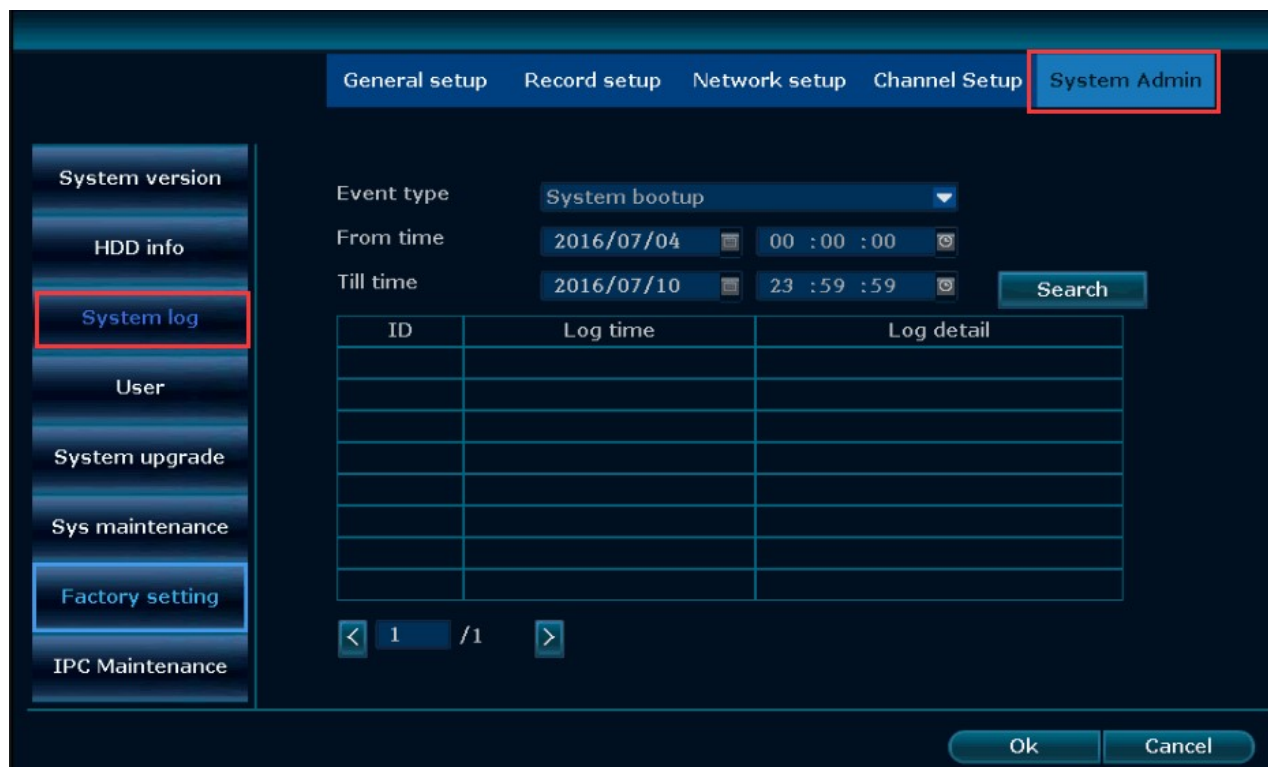


Pic 3.15.2

3.15.3 System log

Right click mouse, Choose the "General setup"--> "System Admin" -->"System Log"

Choose the log type which need to check from list box, and input the time period in the edit box, then click" search", the related log information will showed below, you can turn the page by click " previous" and "next", or input target page to turn



Pic 3.15.3

3.15.4 User management

Right click mouse, Choose the "General setup"--> "System Admin" -->"User"



Pic 3.15.4

In the management tool, click "user management".

Add user: input a new user name in the edit box and set up the operational authority. Choosing in the right check box, "☑" users can use it, "☐" users can not use it. Click the "password setup" to set the new password, or it can be the default password.

Delete user: delete the selected user (But Admin, other user has no the right to set up or delete other users)

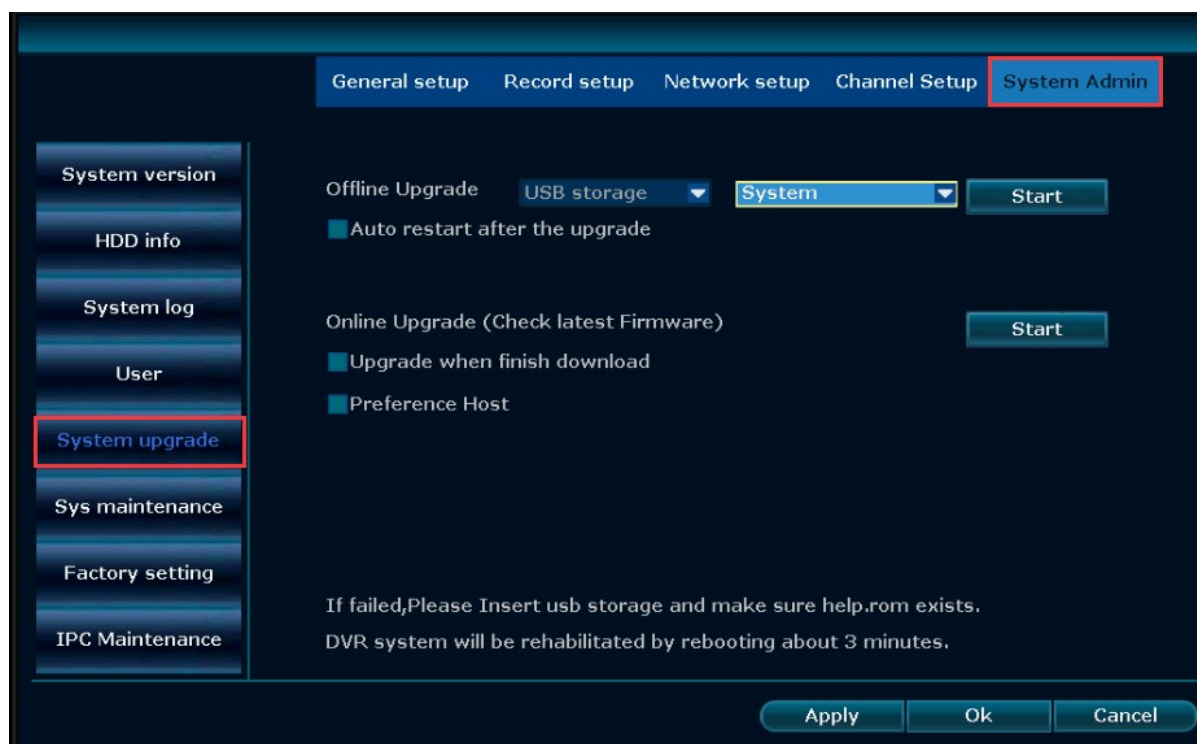
Modify user: Modify the selected user (But Admin, other users has no the right to set up other user permissions)

Set password: set password of logging in user

After the setting, click "OK" to save and exit, or click "cancel" to exit without saving.

3.15.5 System Upgrade

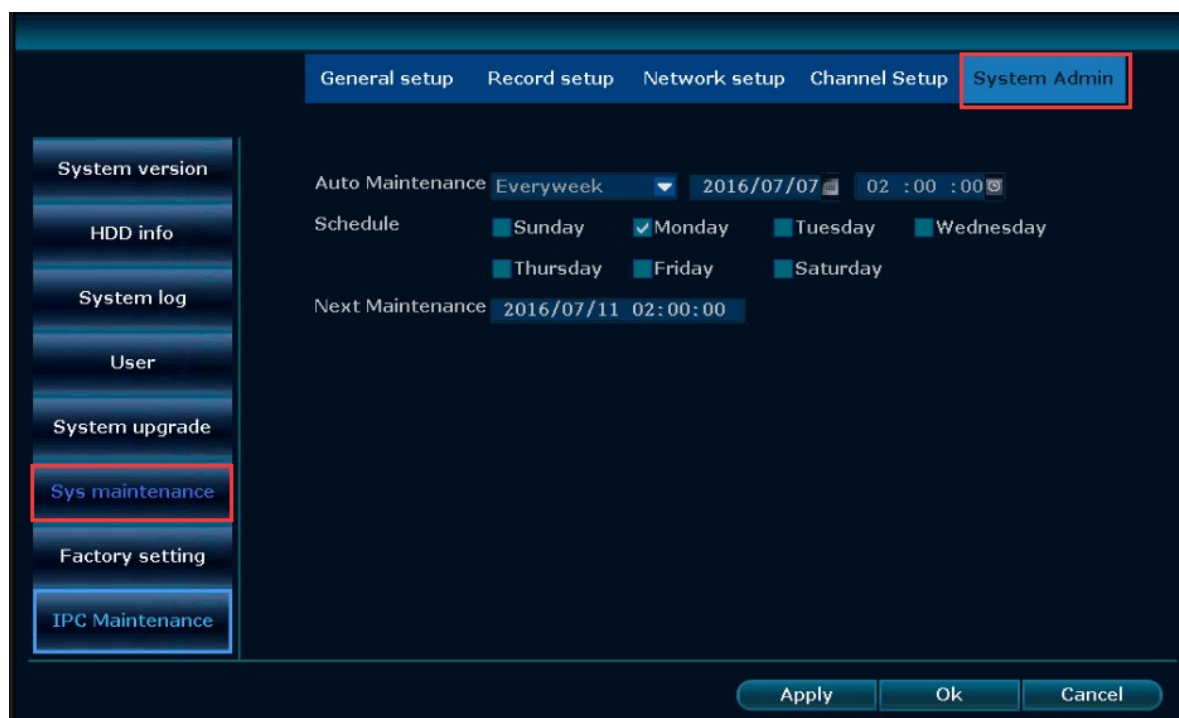
Right click mouse, Choose the "General setup" --> "System Admin" --> "System Update"



Pic 3.15.5

3.15.6 System maintenance

Right click mouse, Choose the "General setup" --> "System Admin" --> "System Maintenance"



Pic 3.15.6

In the " management tool", click "HD management",enter setting interface

Auto reboot: setting automatic reboot time, it can set" Saturday to Sunday" . "Never" means do not reboot automatically.

Firmware upgrade: copy firmware to the root directory of USB drive,insert USB,select the USB storage device, then click "start" to upgrade. When upgrade is completed,click"OK" then system auto reboot.

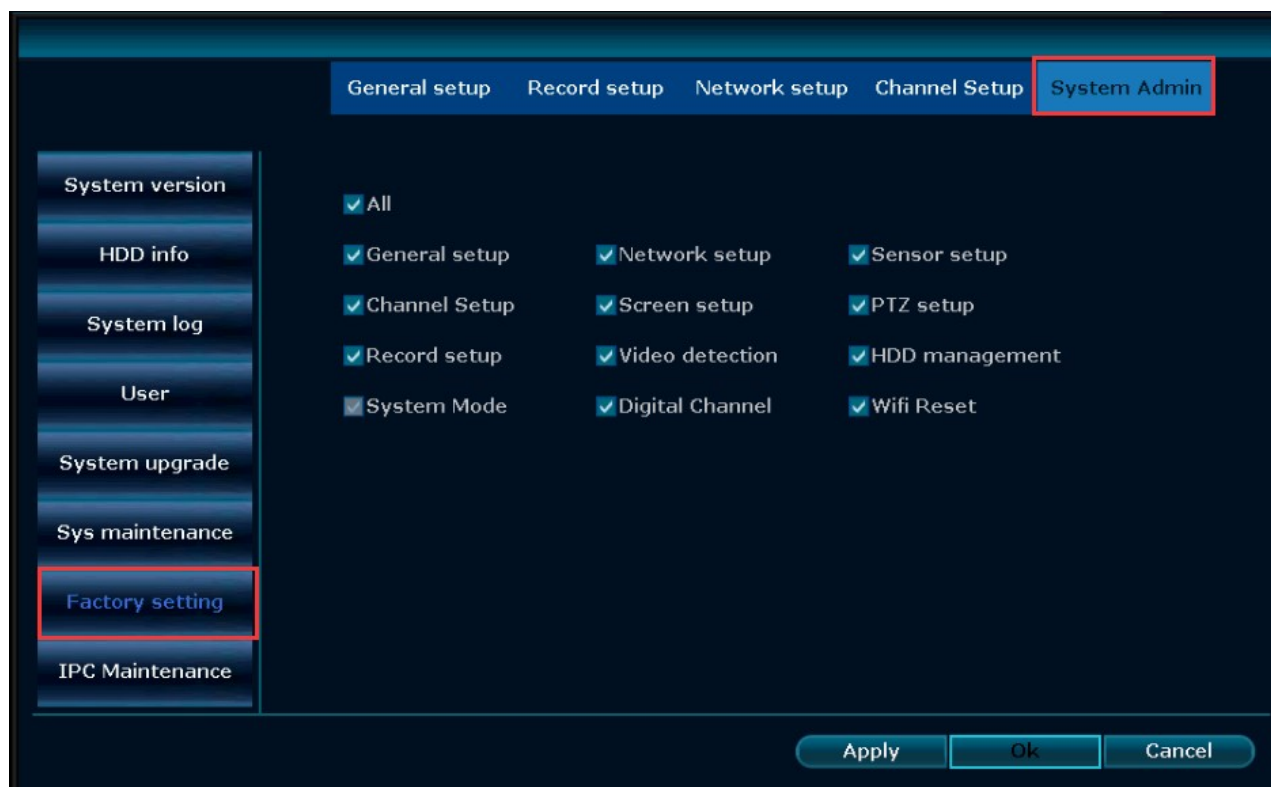
Note:

1).Firmware name should be: FWHI1504A_***.com(4ch), FWHI1508A_***.com (8ch), “***” means the publish time: such as FWHI1504A_20110520.com

2). During upgrade,do not cut up power to protect from device damage

3.15.7 Factory setting

Right click mouse, Choose the "General setup"--> "System Admin" -->"Factory Setting"



Pic 3.15.7

Select the terms which need factory setting, click "OK"to save and exit or click "candle" to exit without saving.
Remarks: after factory setting, all the settings will be the initial one, please use carefully.

3.16 Exit System

In the main menu, click "system logout", pop up setting interface



Pic 3.16

User logout: apply for logging users. After logout, if you want to use the device continue,need to login again

System reboot: It will reboot after "OK".