WIFI

IP Camera

(DVR)

User Munual

Important Safeguards and Warnings

Do not place heavy objects on the DVR.

Do not let any solid or liquid fall into or infiltrate the DVR.

Please brush printed circuit boards, connectors, fans, machine box and so on regularly. Before the dust cleaning please switch off the power supply and unplug it.

Do not disassemble or repair the DVR by yourself. Do not replace the components by yourself.

Environment：

Please place and use IP camera under temperature between-10℃~60℃ and humidity less than 9%；

Do not use IP camera in smoky or dusty environment；

Avoid collision or strong fall.

Please insure the IP Camera level installation in a stable workplace.

Please install in ventilated place. Keep the vent clean.

Use within the rating input and output scope.

Suitable products：

This manual is suitable for all series of IP Camera from our company, including indoor box type, IR waterproof type, whelk type, dome type, home-use robot type, etc.

Special announcement：

The content including in this manual is refer to the most updated information when compilation, if there is something to be changed, will not further notice specially.

If got questions or requirement, please feel free to contact us at any time.

Catalogue

Chapter One: Product introduction

1.1 Product summary

The series DVR is designed specially for security and defence field which is an outstanding digital surveillance product. It introduces embedded LINUX operating system which is more stable. It introduces standard H.264mp video compressed format and G.711A audio compressed format which insures the high quality image, low error coding ratio and single frame playing. It introduces TCP/IP network technology which achieves the strong network communication ability and telecommunication ability.

The IPC can online applied as a part of a safety surveillance network. With the professional network video surveillance software it achieves the strong network communication ability and telecommunication ability. And IPC can individually work also.

It is applied to all kinds of occasion that need network remote monitoring, such as:

- ATM, Bank counter, supermarket, factory, etc.
- Foster care center, kingdom garden, school, etc.
- Intelligent gate control system.
- Intelligent building and residential manage system
- Unattended system like: Generating plant, telecom base station
- Outdoor device to monitor bridge, tunnel, block transportation status
- Production line and warehouse control.
- 24-hour monitor for road transportation.
- Remote monitor for forest, water source and river.
- Airport, train station, bus stop, etc.

1.2 Porduct main function

Real-time surveillance

·with analog output interface can do surveillance through device of monitor or DVR, etc.

Compression format

· Audio and video signal is compressed by individual hardware, to make the image and voice synchronously stable

Video playback function

·can do full real-time record, and search, net surveillance, video search and download, etc.

·support play back mode of fast-play, slow-play, etc.

·can do partial enlargement of any of the area

Network operation function

·can remote surveillance via network (including mobile)

·remote PTZ control

·remote video search and realtime playback

Alarm linkage function

·alarm link to record, snapshot, email sending, etc.

Telecom interface

·with RS485 interface for PTZ control

· with Ethernet port for remote access function , remote upgrade & maintaince function.

Intelligent operation

·for the same setting operation on menu can do copy & paste operation.

Chapter Two: Open case checking and cable connection

2.1 Open case checking

When you receive this product,

Firstly, check model No. on product is the same as what you ordered；

Then, check if there is obvious damage on packing, the protective material used for packing can afford most unexpected strike during transportation；

Finally, please take out IPC and remove the protective covers to check if there is obvious damage.

2.2 Installation on brace

The IPC is using the standard case, so it can be installed to a standard brace.

Installation steps and attentions：

1、make sure the temperature is between -10℃~60℃ ，humidity is less than 90%；

2、brace installed stable and firmly；

3、outdoor installation please pay attention to the severe weather；

4、when installing multi-device on the same line, please take protective measure to avoid over load of the line.

2.4 Video output connection

2.4.1 choose and connect video output device

1.BNC output：

BNC video output is divided into: PAL/NTSC BNC(1.0V_{P-P} ，75Ω)，can be connected to monitor or surveillance integrated equipment such as DVR, etc.

BNC output can support preview of the monitor image only.

Make sure the stable and reliable of transmission link：

The video transmission line should adopt high quality coaxial pair which is chosen by the transmission distance. If the transmission distance is too far, it should adopt shielded twisted pair, video compensation equipment and transmit by fiber to insure the signal quality.

The video signal line should be away from the electro magnetic Interference and other equipments signal lines. The high voltage current should be avoided especially.

Insure the connection stable and credible

The signal and shield lines should be firm and connected credible which avoid false and joint welding and oxidation.

2. Network output：

Connect to LAN and WAN via common standard, using the PC that is in the same LAN line with IPC by software or IE browser to set parameters, real-time preview, remote playback and download, etc.

When replace the monitor by the computer display, there are some issues to notice.:

1、do not make it running for a long time, in order to extend the using life of device.

2、regularly degauss to keep monitor normally work.

3、Keep away from device with severe electromagnetic interface.

TV is not a credible replacement as a video output. It demands reducing the use time and control the power supply and the interference introduced by the nearby equipments strictly. The creepage of low quality TV can lead to the damage of other equipments.

Chapter Three: IE log-in basic operation

Remark: keys in grey means do not support

3.1 Boot

Connect to power, then IPC is auto boot.

Remark：1. Make sure that the input voltage corresponds with the switch of the DVR power supply.

2. Power supply demands: 220V±10% /50Hz.

Suggest using the UPS to protect the power supply under allowable conditions.

3.2 Reboot

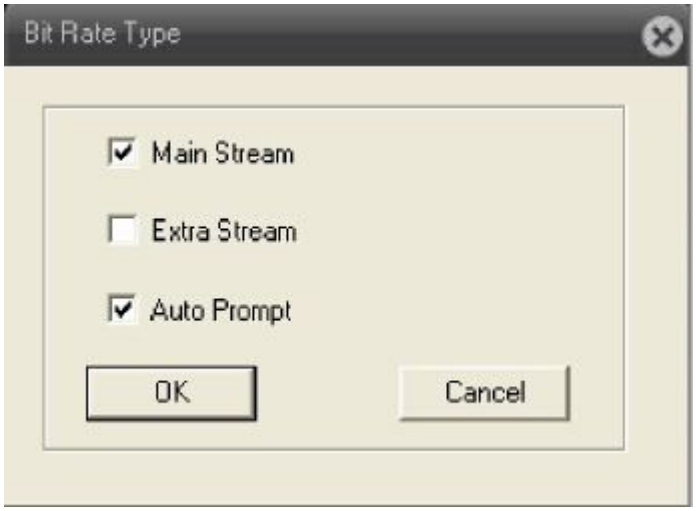
Reboot IPC is divided into soft reboot and hard reboot. Soft switch please enter【Devicecfg】> 【Advanced】 choose【reboot】； Hard reboot, to cut off power and reconnect it to reboot device

Pic : 3.1 Log-in

For safty sake, when firstly log-in, please go to "Account" to modify user name and password, see chapter 4.5.2 account manage).

3.4 Preview

After log-in successfully, will come out window of bit rate type as pic 3.2, can choose the main stream or extra stream u want for preview, and also can click at left side of preview page to set it.



Pic: 3.2 bit rate type

At preview page, can shows date, time and channel titile.

3.5 Setting menu

On preview mode, click

at top side ,， will come out window as pic:3.3.setting menu function including: Record, Alarm, System, Advanced, Info. Click icon at bottom side

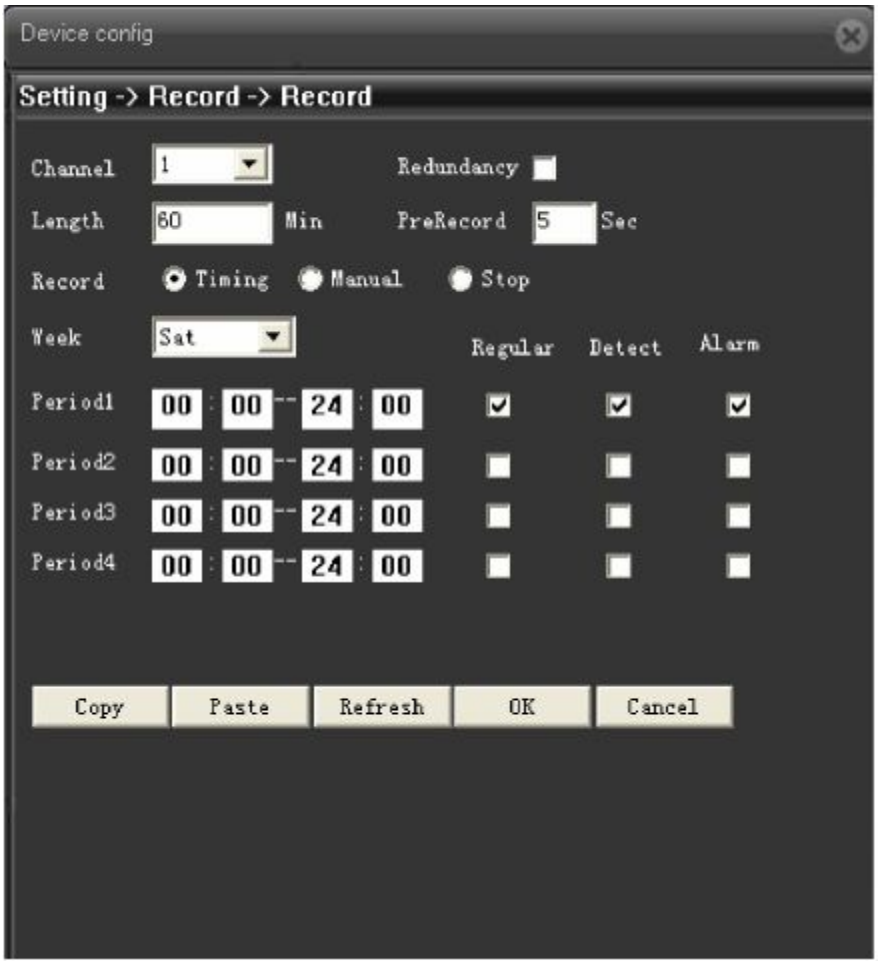
will enter related next menu of this function.

Pic: 3.3 shortcut menu

3.5.1 Record

Record function including: device record and snapshot settings.

1. Record setting



Pic: 3.4 Record setting

3.3 Log-in

When device turns on normally, need to log-in before operation, system will base on the authority of

log-in user to provide related function.

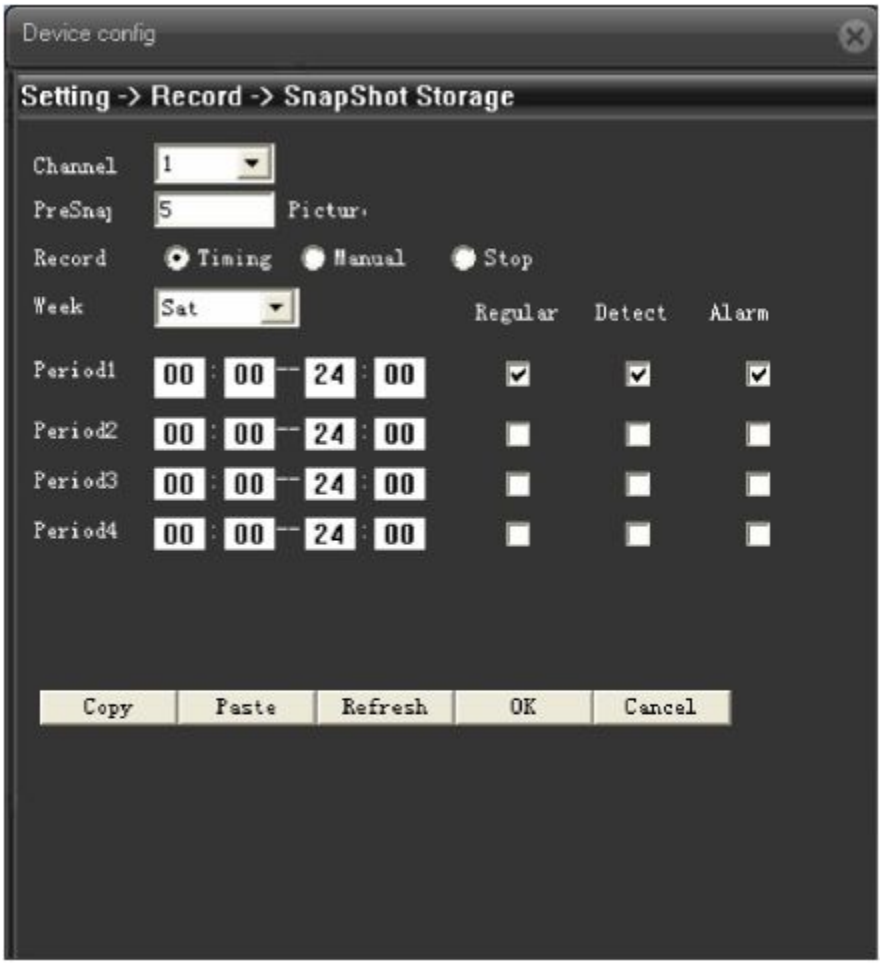
Default IP address：192.168.1.10，subnet mask：255.255.255.0，gateway：192.168.1.1

When device ex-fty, there are 3 preset users : admin、guest、default，default password is none,

admin is preset as super authority user, guest and default is preset with authority of preview and

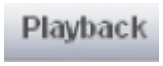
playback, admin and guest user can modify password but not authority, default is the user default log-in,

can modify authority but not password

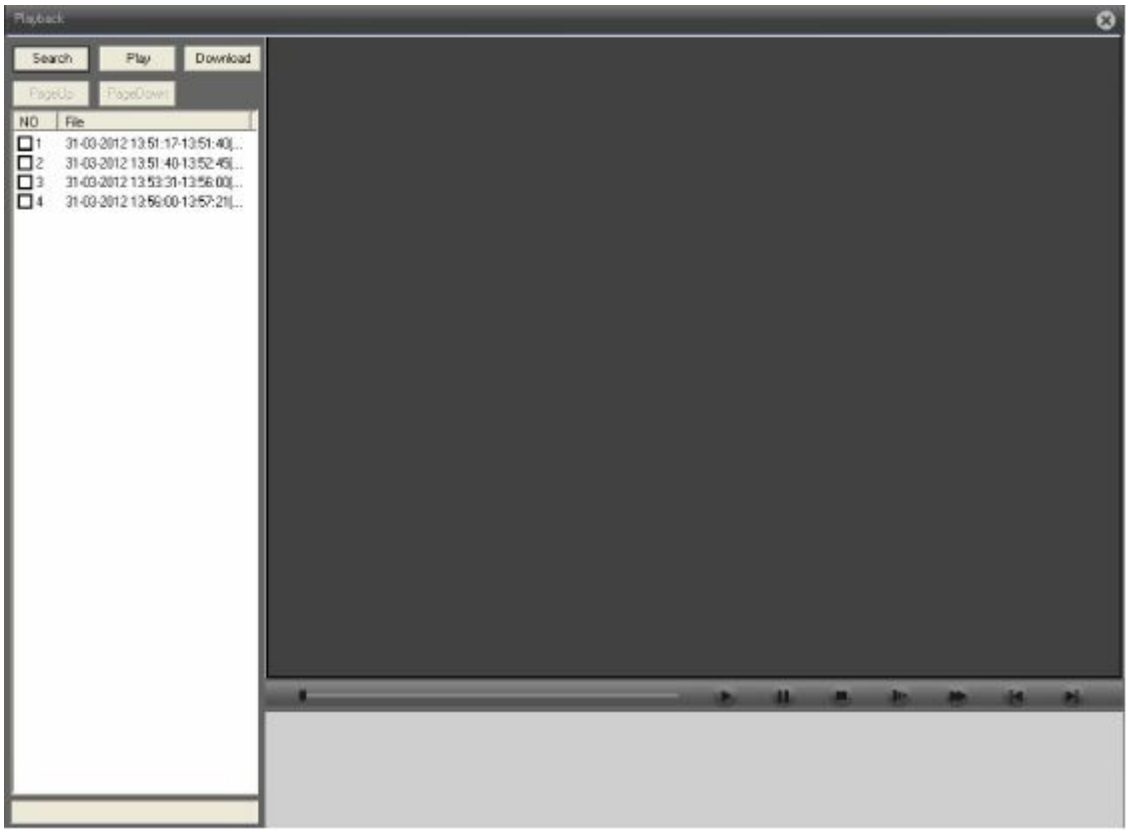


Pic: 3.5 Snapshot setting

3.5.2 Playback

click 

at upper left side on monitor page, to enter video playback page.



Pic 3.6 Playback

【Playback control button】see detail in below chart;

Button	Function	Button	Function
	Play		Pause
	Slow-play		Fast-play
	Previous frame		Next frame
	Stop		

Chart 3.1 playback control button list

Remark: Playback by frame should under the status of playback pause.

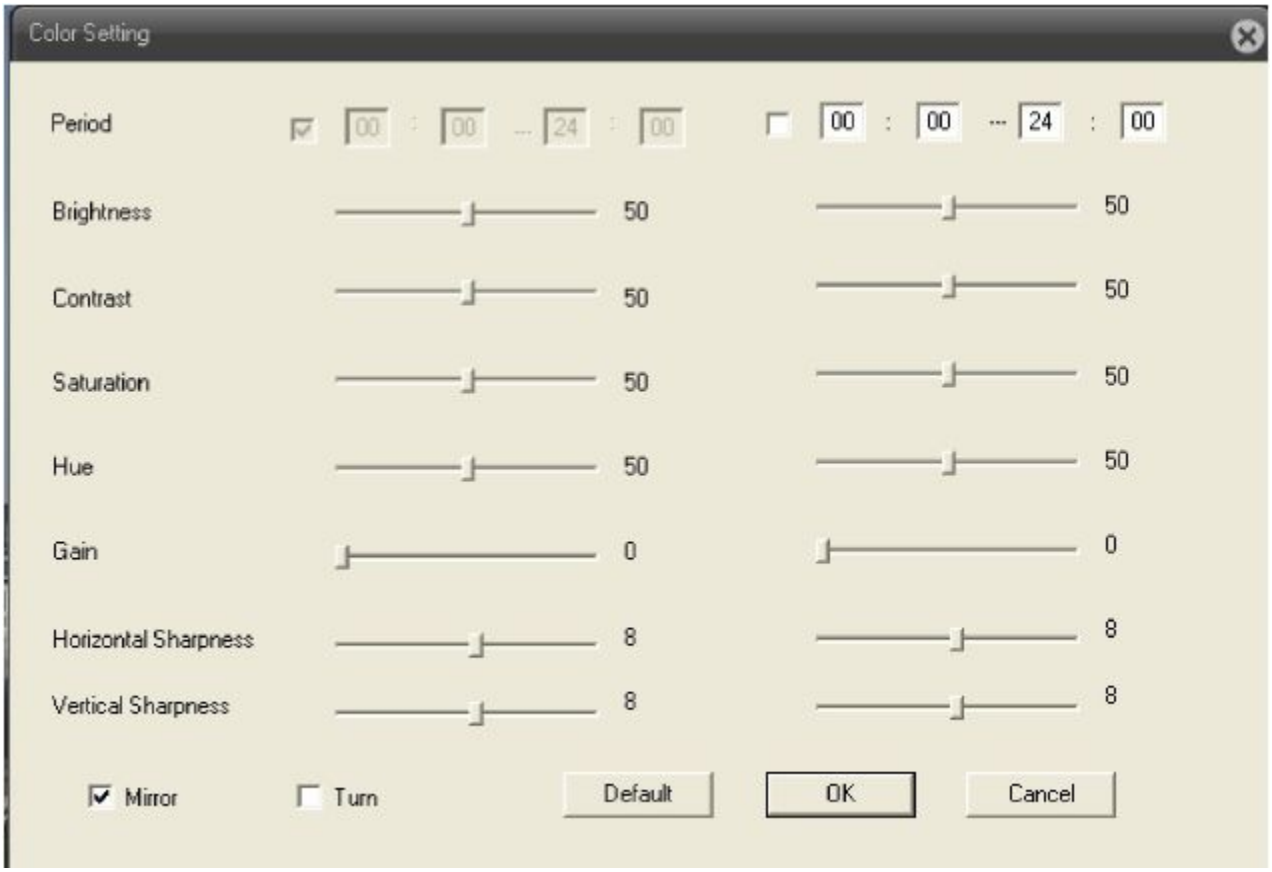
【Operate tips】to show the button function when cursor point it

Special feature:

Partial enlargement：**when single view full screen playback, can use right button to choose any size of area from the image, click left button in the chosen area, can enlarge this area to playback, double click left button will exit.**

3.5.3 Image color

Set image parameter of chosen channel (when single view preview, it should be current channel, when multi-view preview, it should be the channel where the cursor stay), you can enter the page by shortcut menu. Image parameters including: brightness, contrast, saturation, hue, gain, horizontal and vertical sharpness. Also can base on requirement to set different image parameter in different period.

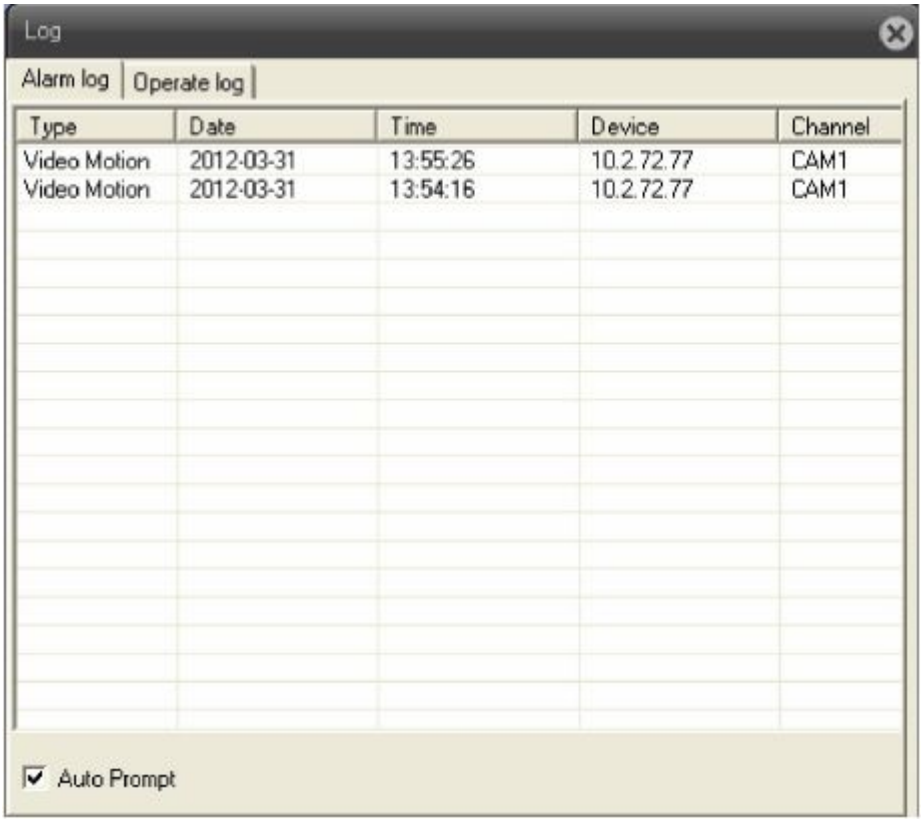


Pic: 3.7 Color setting

3.6 Log

Show alarm information and operation record, if u tick

at lower left side, when alarm happens, window tip will auto come out.



Pic: 3.8 Log information

Chaper Four: Main Menu

4.1 Main menu guideline

Main Menu	Submenu	Function summary
Record	Record	Set record config, record type, record period, etc.
	Snapshot	Set snapshot period, type , etc.
Alarm	Video motion	Set motion detect alarm channel, sensitivity, area, linkage parameters: alarm output, snapshot, recording, PTZ, email sending, ftp upload, etc.
	Video blind	Set video blind alarm channel, sensitivity, linkage parameters, alarm output, snapshot, recording, PTZ, email sending and ftp upload, etc.

	Video lost	Set video lost alarm channel and linkage parameters: alarm output, recording, snapshot, PTZ, Email sending, FTP upload, etc.
	Alarm input	Set alarm input channel and linkage parameters: alarm output, recording, snapshot, PTZ, email sending, FTP upload, etc.
	Alarm output	Set alarm mode: configuration, manual, stop
	Abnormal	Storage device not exist, not enough space, access storage device fail, IP conflict, network abnormal alarm
System	General	Set system time, data format, language, hard disk full time operation, machine number, video format, output mode, summertime, stay time
	Encode	Set encode mode: encode mode, resolution, frame rate, bit rate, image quality, code stream value, I frame interval parameter, video/audio enable.
	Network	Set basic net parameter, and DHCP、 DNS parameter，auto-gain IP address, network high-speed download, net transmission tactics
	Net service	ARSP、Mobile monitor、UPNP、FTP、WiFi、3G、alarm center、RTSP、PPPOE、NTP、Email、IP authority、DDNS parameter, etc.
	GUI display	Set channel title, cover area, time title, channel time overlap and position
	PTZ Config	Set channel, PTZ protocol, address, baud rate, data bit, stop bit, parity
	RS485	Set protocol, address, baud rate, data bit, stop bit, parity
	RS232	Set serial port function, baud rate, data bit, stop bit, parity

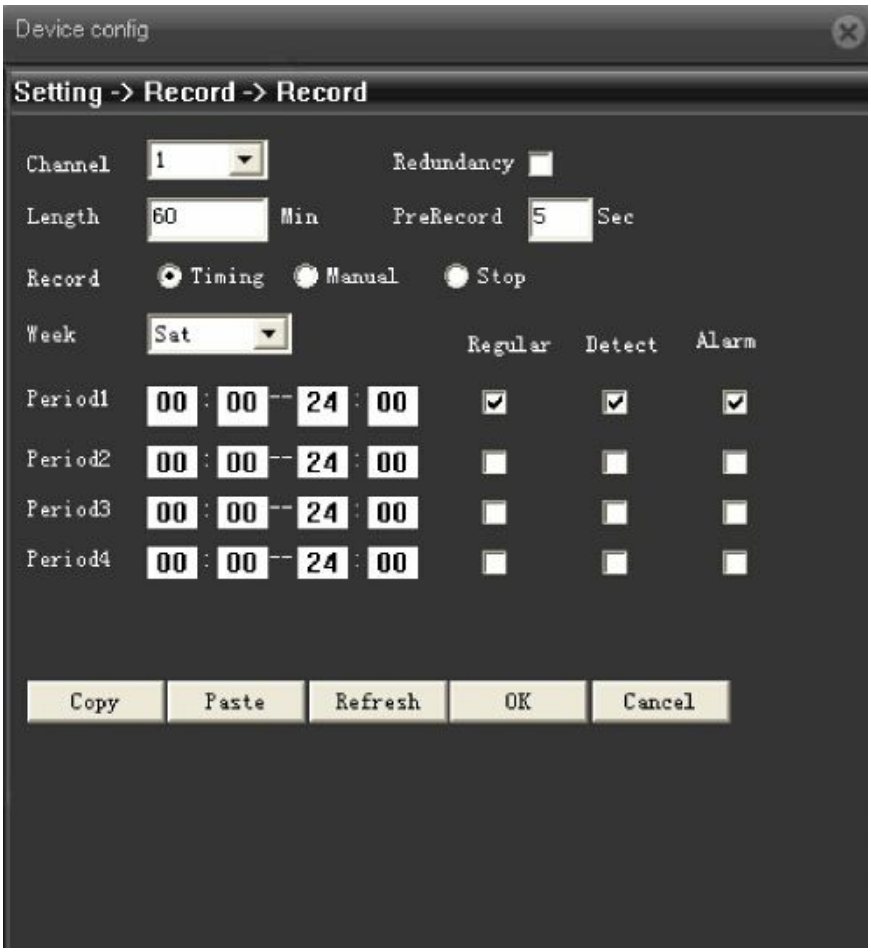
	Camera parameter	Exposure mode, Day/Night mode, Backlight compensation, Auto iris, profile, AE reference, AGC, slow shutter, IR_CUT, Image、Over-turn、anti-flicker etc
Advanced	HDD Manage	redundant, format disk, recover, partition, etc.
	Account	Modify user, group or password. Add user or group. Delete user or group.
	Auto maintain	Set auto reboot system, time to auto delete file
	Default	Restore setting status of : regular, encode, record, alarm, network, net service, GUI display, serial settings, account manage
	Import & Export	Config import, Config export, Log export
	Upgrade	To do net upgrade via IE or client software
	Reboot	IPC soft reboot
Info	HDD info	Show ttl space of HDD, type, space left, record time, etc
	Log	Can base on record type and time to search log, can clear the log information
	Version	Show alarm input output, system version, build date, etc

4.2 Record

Device do operation regarding record, including: **record & snapshot**.

4.2.1 Record setting

Set IPC parameter, when firstly turn on, system is default with record for 24hours. You can go to 【Device config】>【Record】>【Record】to do related setting.



Pic: 4.1 Record setting

【Length】to set the length of each recording file between 1-120min, default is 60min；

【PreRecord】to record 1-30s before motion happens (time length may slight different due to bit rate)

【Record control】set recode type: timing, manual & stop

Timing: Record according to the set video type (regular, detect and alarm)and time period.

Manual：Click the button and the according channel is recording no matter the channel in any state；

Stop：Click the stop button and the according channel stops recording no matter the channel in any state.

【Period】Set the time section of common recording, The recording will start only in the set range；

【Record type】Set recording type: regular, detect or alarm.

Regular：Perform the regular recording in the set time section. The video file type is “R”.

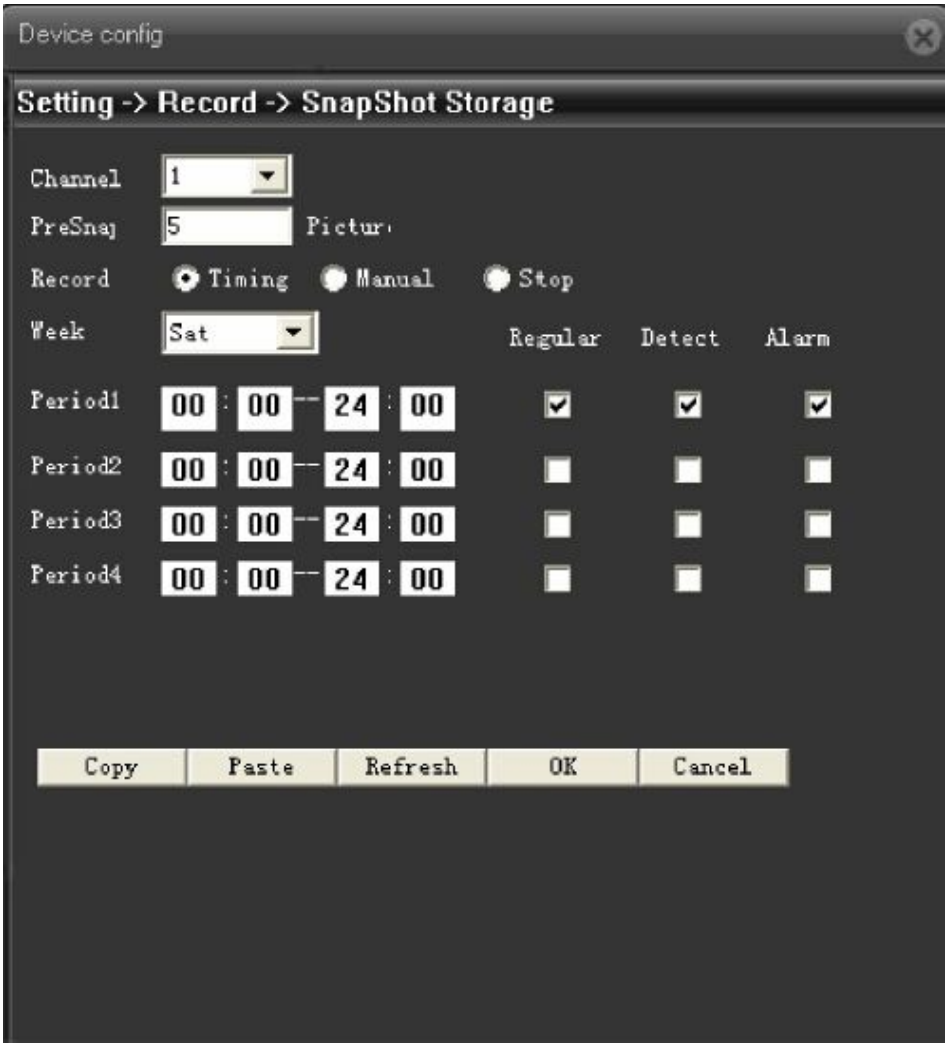
Detect: Trigger the “motion detect”, “camera mask” or “video loss” signal. When above alarm is set as opening recording, the “detection recording” state is on. The video file type is “M”.

Alarm: Trigger the external alarm signal in the set time section. When above alarm is set as opening recording, the “detection recording” state is on. The video file type is “A”.

Remark：related alarm setting, please refer to chapter 4.3 alarm part.

4.2.2 Snapshot storage

Setup snapshot parameters for different channels.At first time it's set for 24hours snapshot continuously, pls go to Main Menu->Record->Snapshot Storage for appropriate settings.



Pic: 4.2 Snapshot setting

【PreSnapshot】to take picture of 1-30 pcs before recording happens, default is 5 pcs

【Record】Set record type, "Timing" ,"Manual" and "Stop"

Timing: Realise snapshot according to record type(regular,detect and alarm) and period.

Manual: No matter what is the current status, once choose "manual" snapshot at related channels.

Stop: No matter what is the current status, once choose "stop",it will stop snapshot at related channels.

【Period】Set normal record period, it only startup Snapshot Storage at set period.

【Type】Three types: regular, detect and alarm

【Record type】Three types: regular, detect and alarm

Regular: snapshot at set period

Detect: snapshot at set period when motion detect, video blind and video loss which are preset for snapshot enable.

Alarm: snapshot at set period when alarm in which is preset for snapshot enable.

Note: for related alarm function, pls refer to chapter 4.3.

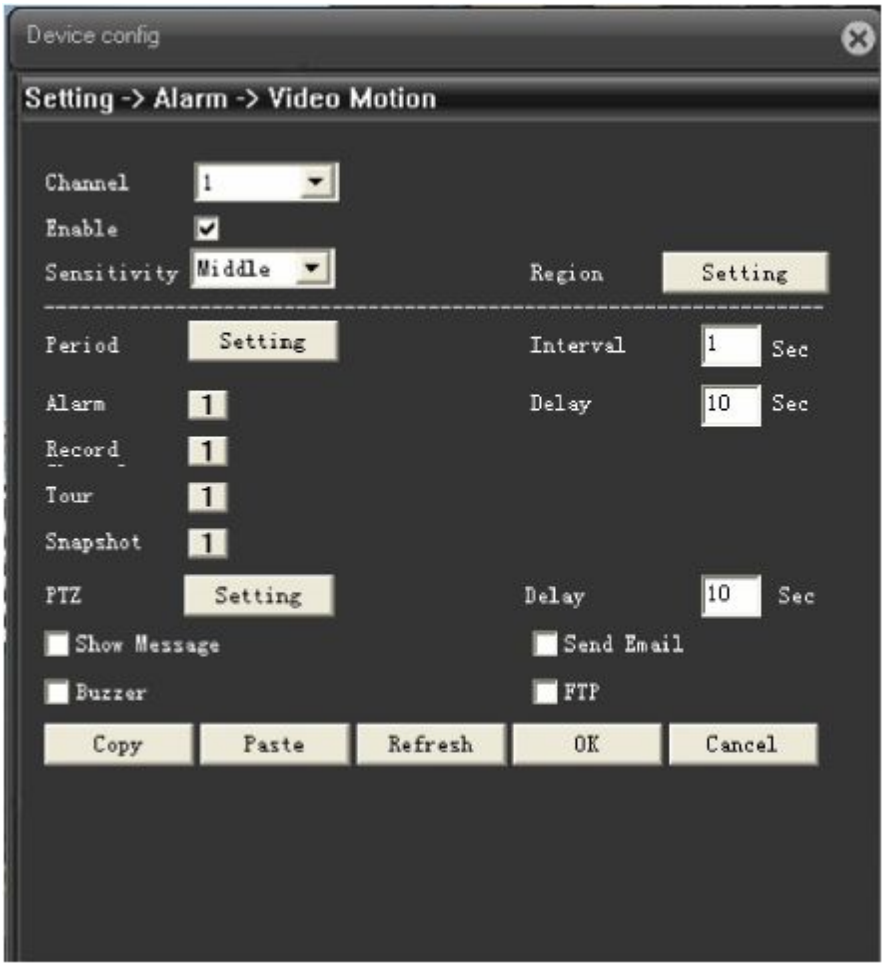
4.3 Alarm function

Alarm functions include: motion detect,video blind, video loss, alarm input and alarm output, abnormal dealing.

Pic 4.3 Alarm function

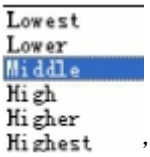
4.3.1 Motion detect

When system detects the motion signal that reaches the set sensitivity, the motion detect alarm and the linkage function is enable.



Pic: 4.4 motion detect setting interface

【Enable】 means enable motion detect function, enable it firstly then can do related setting.

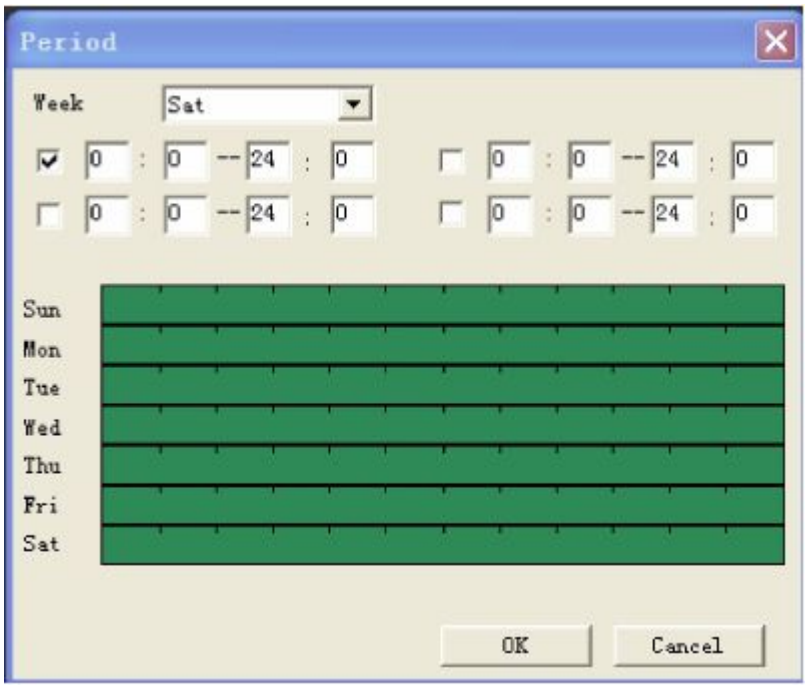
【Sensitivity】base on sensitivity, can set 6 grades: 

, the higher of sensitivity to the moving objects, the easier to sense the motion happens；

【Region】Click**Setting**，enter the setting region of PAL22X18，light blue region is the guard area of motion detect, dark blue region is the unguard area (show the monitor page), see pic 4.5. press left button of mouse, pull it to set region. (default whole region chosen is monitor area)

Pic: 4.5 region setting

【Period】Trigger the motion detect signal in the set time section, see pic:4.6. You can set according to week or set uniformly. Each day is divided into four time sections.tick ☑ mean setting is valid.



Pic: 4.6 Period Setting

【Interval】Only one alarm signal is turned on even there are several motion detect signals in the set interval 0-600s.

【Alarm output】Start the external equipment of corresponding linkage alarm when the motion detect alarm is turned on.；

【Delay】Delay a few moments and stop when the alarm state is turned off. The range is 10~300 seconds.

【Record channel】choose record, when alarm happens, system will trigger record signal of this channel；

Remark:to link record, need to enable motion detect of related period at【record setting】

【Snapshot】choose snapshot, when alarm happens, system will trigger snapshot signal of this channe；

Remark：to link snapshot, need to enable motion detect of related period at【record setting】

【record setting】

【PTZ Linkage】when alarm happens, link the PTZ of related setting channel, see pic:4.7；

Remark：to link PTZ, need to set related parameter at【System】>【PTZ control】，set preset point, cruise between points, interval, etc.

Pic: 4.7 PTZ linkage

【Delay】When alarm is over,recording will last some seconds(10~300sec),then stop.；

【EMAIL sending】tick ☑ ，means when alarm happens link email sending to inform user.

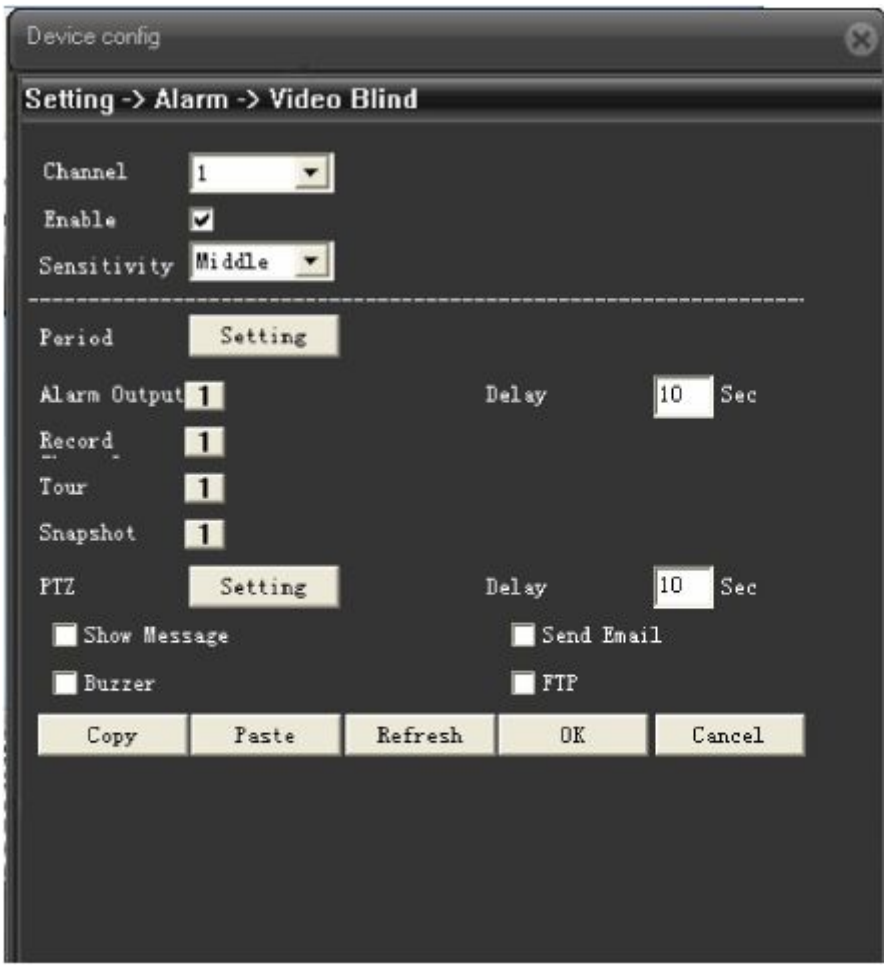
Remark：sending email, need to do related setting at【Net service】.

【FTP upload】tick ☑, means when alarm happens, if record or snapshot channel was chosen, the record file and snapshot image will be uploaded to the appointed position.

Remark：FTP upload, need to do related setting at【Net service】.

4.3.2 Video blind

When the video image is influenced by the environment such as bad brightness or reaching the set sensitivy parameter, the camera mask function is turned on and the linkage function is enable.

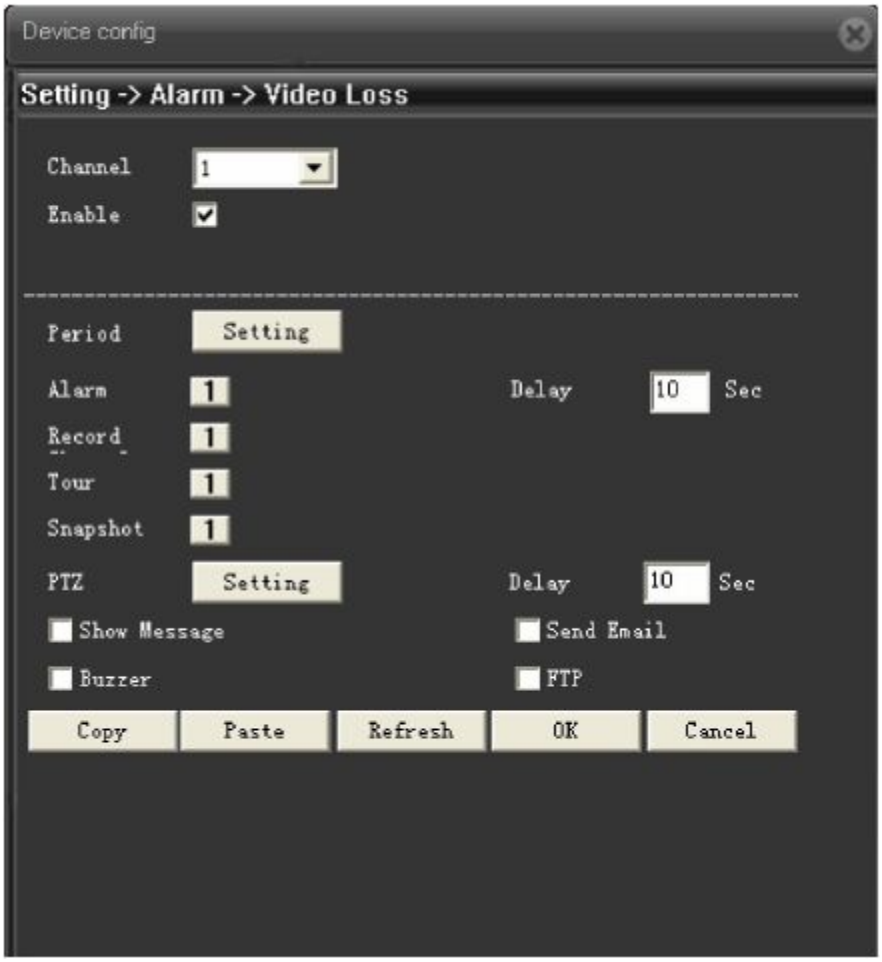


Pic: 4.8 video blind

Setting detail : refer to chapter 4.3.1 motion detect.

4.3.3 Video lost

When the equipment can not obtain the channel video signal, the video loss alarm is turned on and the linkage function is enable.



Pic: 4.9 Video lost

Setting detail: refer to chapter 4.3.1 motion detect.

4.3.4 Abnormal

Analyze and detect the software and hardware of current device, when abnormal issue was detected, device will make related respondence.

Pic: 4.10 abnormal

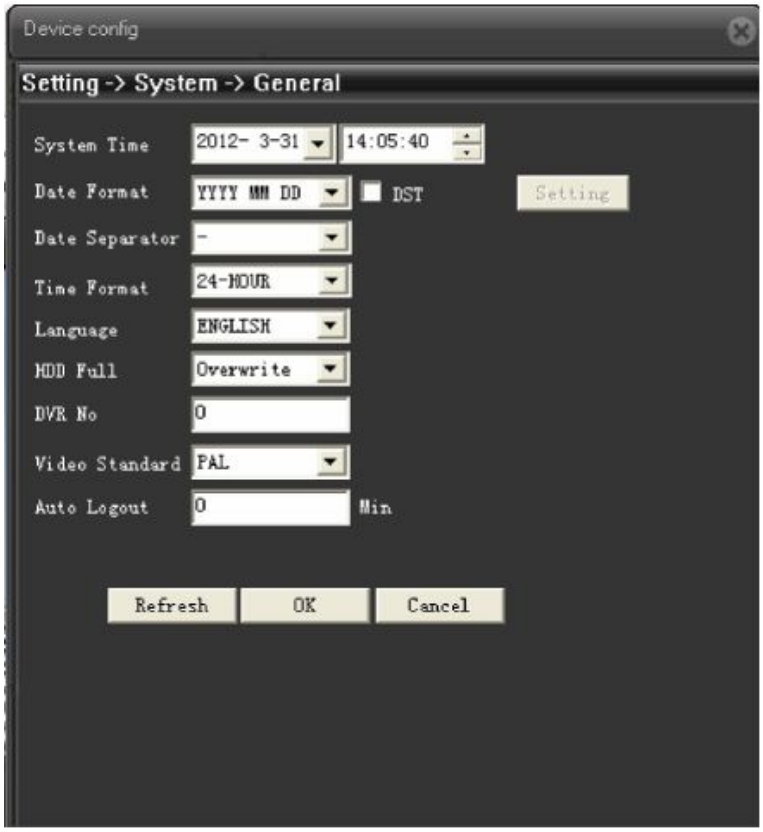
【Event type】choose event type at drop-down box

【Enable】tick to enable，open abnormal deal function, setting is valid only if it is enable.

4.4 System setting

To set parameter of all kinds of functions, setting including: **General**、**Encode**、**Network**、**Net service**、**GUI display**、**PTZ config/RS485**、**RS232**、**Camera parameter.**

4.4.1 General setting



Pic: 4.11 General setting

【System time】set current date and time of IP Camera.

【 Date format 】 choose date showing format, including ： year/month/date 、 month/date/year, date/month/year,

【Date separator】Choose list separator of the data format,

【Time format】choose time format, including: 24-hour and 12 hour；

【Language】at present support 29 kinds of language: simplified Chinese, Tradition Chinese, English, Bosnian, Finnish, French, Greek, Hungarian, Italian, Japanese, Germany, Polish, Portuguese, Russian, Spanish, Thai, Turkish, Vietnamese, Romanian, Brazilian, Indonesian, Swedish, Arabic, Bulgarian, Czech, Hebrew, etc.

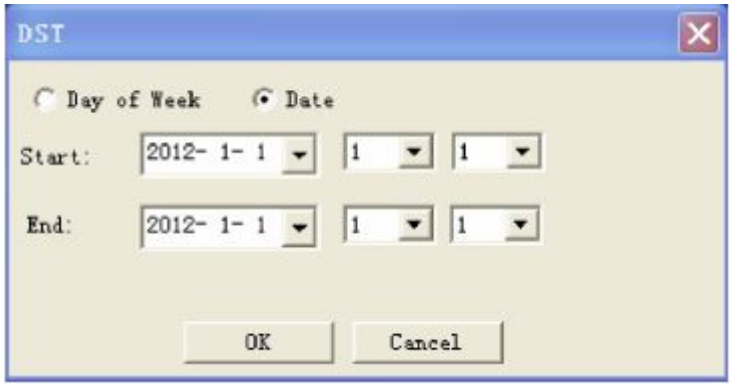
【HDD full】choose **Stop record**：means when the TF card is full, stop recording.

Choose **Over write**：means when the TF card is full, keep on recording, but the most previous file will be replaced.

【Video standard】support PAL or NTSC；

【DST】Tick DST, then click 【setting】, will come out window as pic: 4.12 & pic:4.13, to set the start time and end time of summertime via week or date.

Pic:4.12 DST (Week) setting

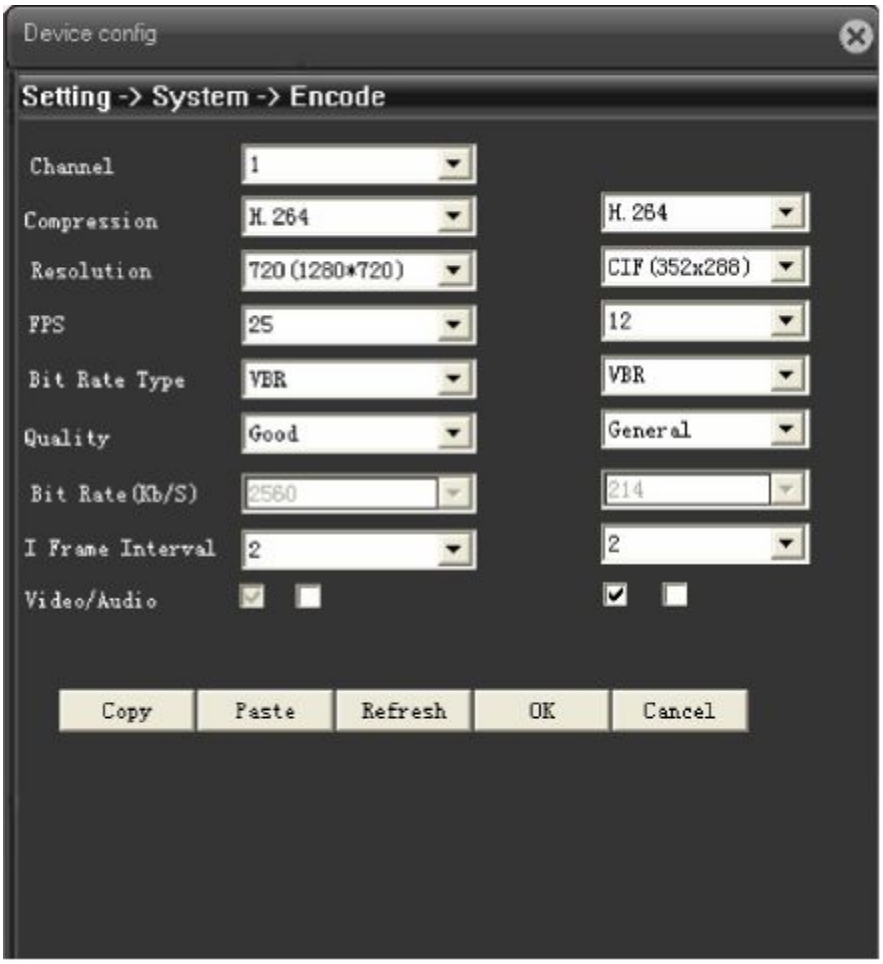


Pic:4.13 DST(Date) setting

4.4.2 Encode Seting

Set video/audio encode parameters, including image parameters of record file, remote monitor, etc. Left part is to set the encode parameter of each separated channel, right part is to set encode parameter of extra stream, dual stream is using one high bit rate stream for local high definition storage, support D1/HD1/CIF/QCIF encode, one low bit rate stream(QCIF encode) for net transmission, in order to maintain local storage and remote net transfer. Dual stream both considering to image quality and transmission quality under the current band bottleneck, and can breakthrough it, base on the bandwidth to flexibly choose stream format, to reach local high definition storage and low stream for net transmission back end.

Remark：Main application of extra stream: to do multi-channel real-time monitor, and mobile monitor when the network if poor.



Pic: 4.14 Encode setting

Encode setting

【Compression】Standard H.264MP；

【Resolution】show types of resolution: D1/HD1/CIF/QCIF；

【Frame rate】adjustable, real-time standard is： PAL，25 fps NTSC，30 fps；

【Bit rate type】you can choose CBR or VBR, image quality have 6 grades to choose under VBR type, then you can manual choose the bit rate value under CBR type.

【Image quality】set bit rate value to change the image quality, if supporting facility is available, the larger of bit rate value, the better of image quality.

Bit rate reference span ： D1 （ 512~2560kbps ） HD1 （ 384~2048kbps ） CIF （ 64~1024kbps ） , QCIF(64~512kbps)

【Frame interval】you can choose between 2~12s；

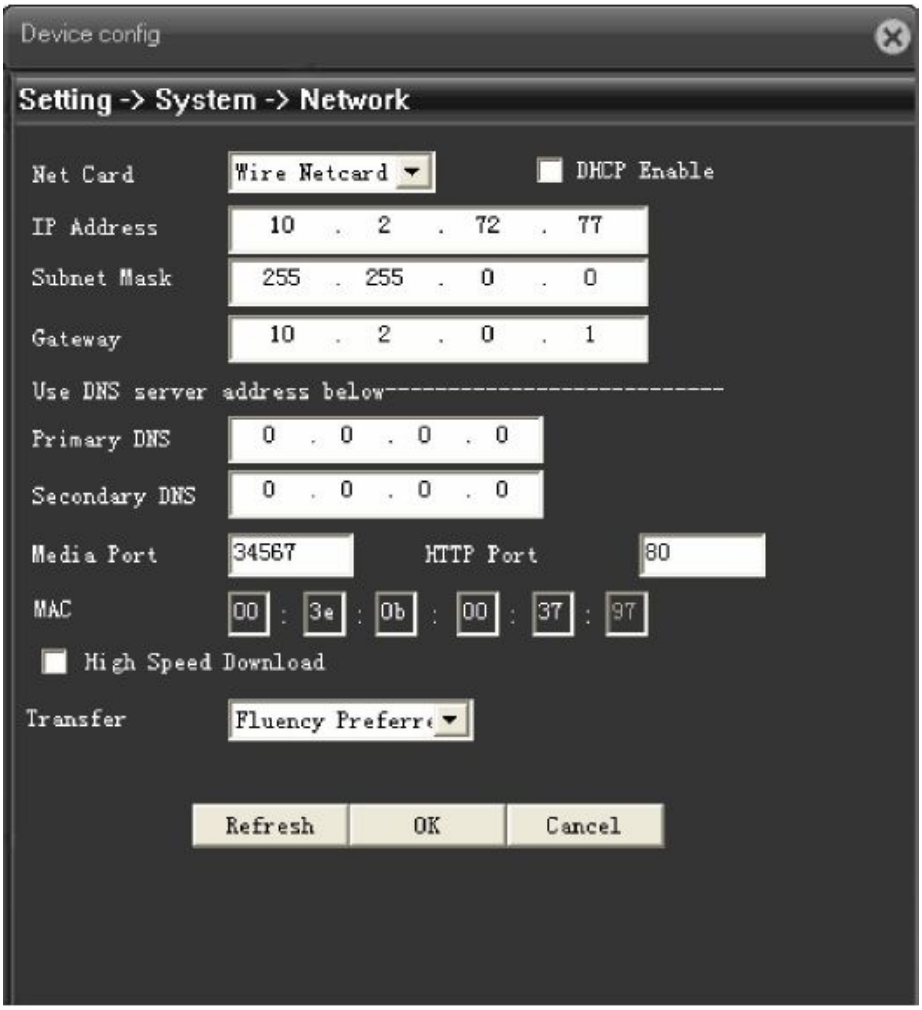
【audio/video】the icon was all ticked, means audio & video combine stream

Extra stream setting

Extra stream is used for client side monitor and mobile monitor.

The parameter setting of resolution, frame rate, stream control, bit rate value is the same as individual channel

4.4.3 Network setting



Pic: 4.15 Network setting

【Net card】you can choose wired net card;
【DHCP enable】to auto get IP address(not suggested);

Remark: need to set up DHCP server in advanced.。

【IP address】set IP address of device, default IP address is: 192.168.1.10;

【subnet mask】set subnet mask of device, default subnet mask is: 255.255.255.0;

【default gateway】set default gateway of device, default gateway is: 192.168.1.1;

【DNS setting】Domain Name Server. It translates the domain name into IP address. The IP address is offered by network provider. The address must be set and reboot then it works.;

【TCP port】default is 34567；

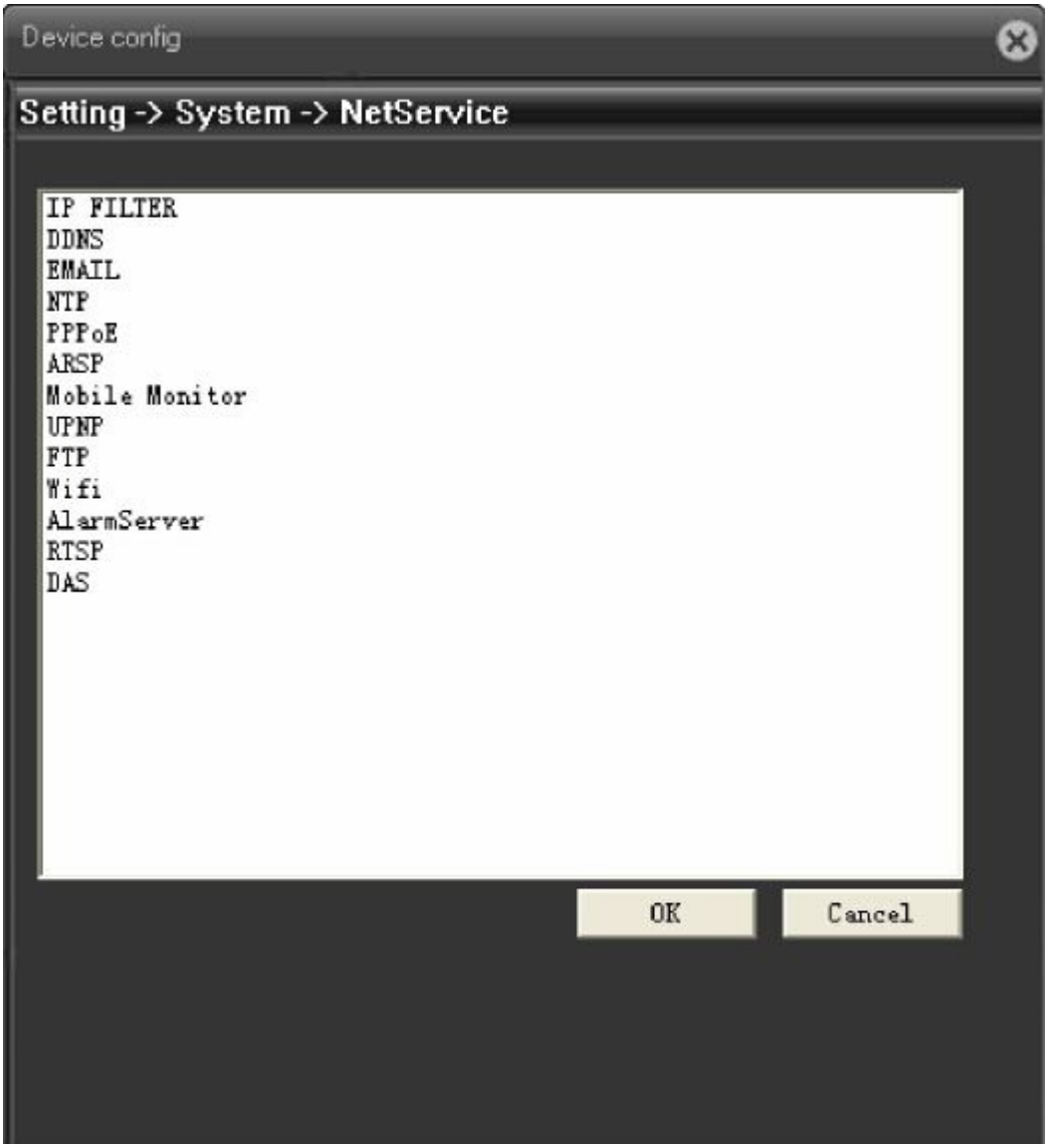
【HTTP port】default is 80；

【high speed download】Network high speed download；

【Transfer policy】there are 3 policies, adaptive, quality preferred, fluency preferred. Base on different setting, code stream is auto-adjusted, adaptive is eclectic between quality and fluency, also considers fluency when the quality is not greatly influenced. Fluency preferred and adaptive is valid only when the extra stream is enable, if extra stream is not enable, it will base on network status to adjust quality preferred.

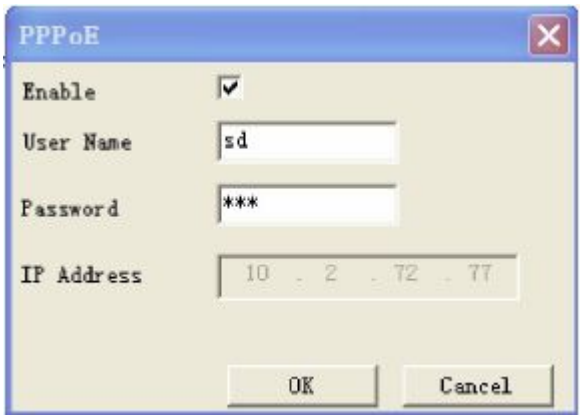
4.4.4 Net service

To config advanced network function, choose any item and double click it to config the parameters.



4.16 Net service

【**PPPoE** setting】



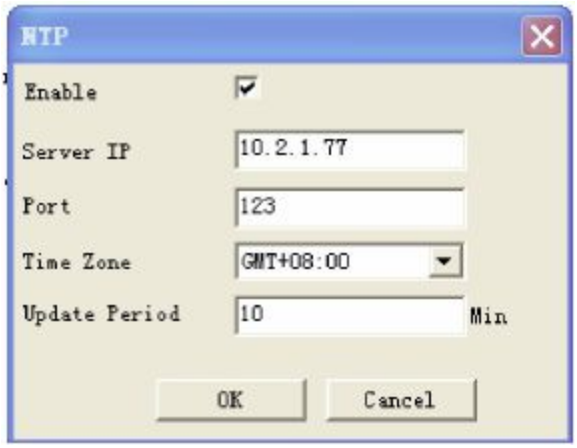
Pic: 4.17 PPPOE

Enabe：Tick ☑ means chosen, enable it firstly, then the setting is valid.

Input user name and password that provided by ISP（Internet server provider）, save it and reboot device, after reboot, IPC will auto connect to network by the way of PPPoE, if it is successful【IP address】will be changed to the dynamic WAN IP that just get.

Operation：PPPoE dial up successfully，check【IP address】，to get current IP of device, then access this device by this IP from client side.

【**NTP** setting】



Pic: 4.18 NTP setting

Need to install NTP service at PC

Enable：tick ☑ means chosen, setting is valid only when it is enable.

Server IP：input IP of PC that installed with NTP server

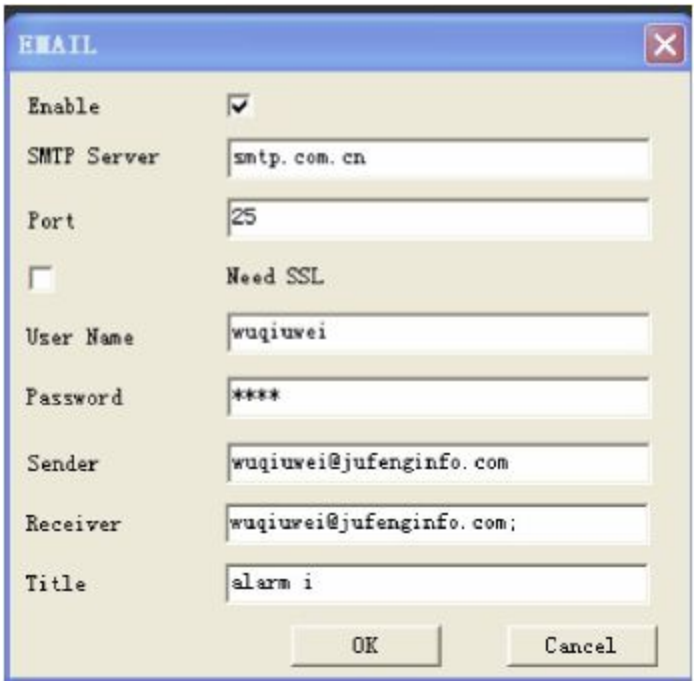
Port：default NTP port is 123，can base on the actural NTP server to set port no

Time zone：London GMT+0 Berlin GMT +1 Cairo GMT +2 Moscow GMT +3 New Delhi GMT +5 Bangkok GMT +7 Hongkong/Beijing GMT +8 Tokyo GMT +9 Sydney GMT +10 Hawaii GMT-10 Alaska GMT-9 Pacific time GMT-8 US mountain time GMT-7 US central time GMT-6 US eastern time GMT-5 Atlantic time GMT-4 Brazil GMT-3 Atlantic central GMT-2；

Update period：The same with the NTP server check interval. Default: 10minutes

【**EMAIL** setting】

EMAIL sending is used for sending alarm information and snapshot picture to appointed mailbox when alarm link to snapshot.



4.19 EMAIL setting

SMTP server：address of email server，can be IP address or domain name（if it is domain name, need to make sure the DNS is correct, then domain name can be correctly analyzed）

Port: Email server port number.；

SSL: Decide whether using Secure Socket Layer protocol to login；

User Name: Apply the email server user name.

Password: Input the password corresponding to the user.

Sender: Set the email sender address.

Receiver: Send the email to appointed receivers when the alarm is turned on. You can set three receivers at most.

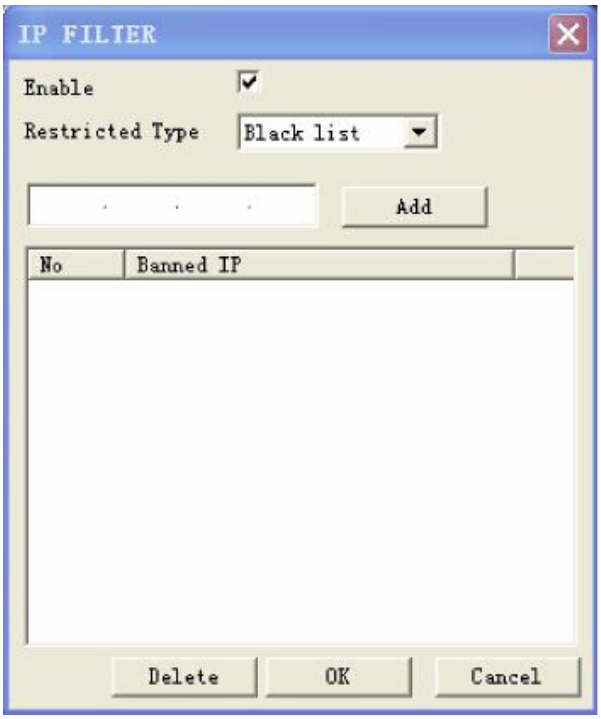
Title: You can set as you like.

【IP authority setting】

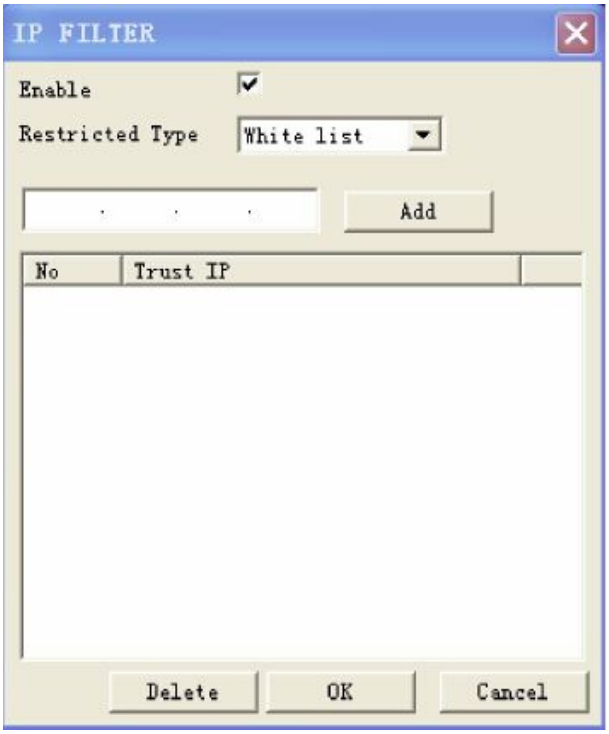
When choose the white list, only the IP in the list can connect to IP camera, list can support 64 IP setting；

When choose the black list, mean the IP in the list can not access IP camera via net, list can support 64 IP setting.

Can tick to choose and delete the set IP.



Pic: 4.20 IP authority setting（black list）



Pic: 4.21 IP authority setting（white list）

【DDNS】

Pic: 4.22 DDNS setting

To analyze server via dynamic domain name, choose DDNS type

Host domain name：Provide the domain name registered by DDNS；

Server domain name：the domain name that analyze server；

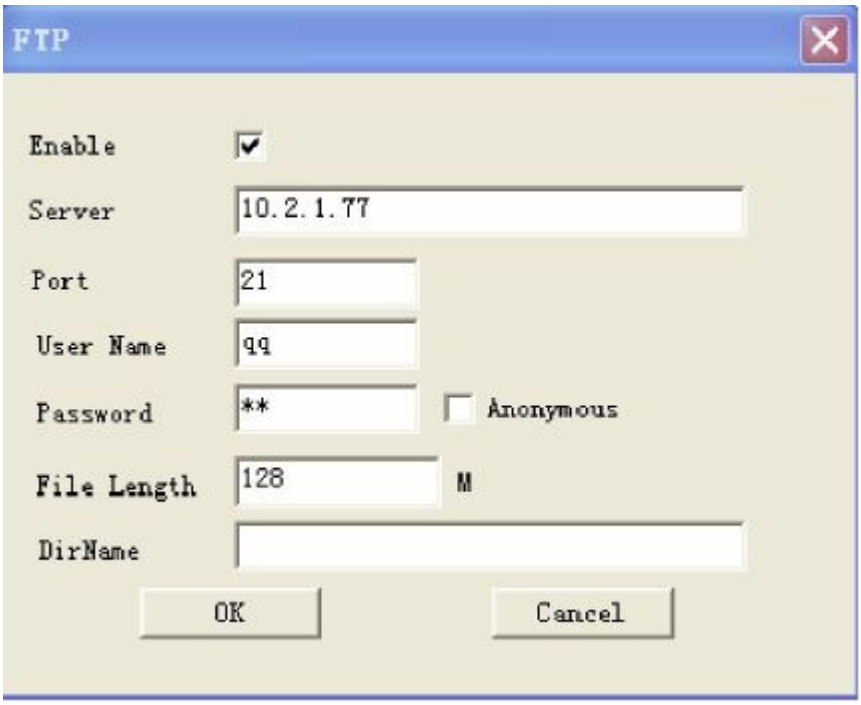
User name：Provide the account registered by DDNS.

Password：Provide the password registered by DDNS.；

When the DDNS is successfully configured and start, you can connect the domain name in the IE address column to visit.

【FTP setting】

FTP is available only when alarm happens,or alarm activates record and snapshot,it will upload related record and snapshot pictures to FTP server.



Pic: 4.23 FTP setting

【Enable】Click Enable,then all settings will be available

【Host IP】：IP address of FTP server；

【Port】Domain Port of FTP,default 21

【User Name】User name of FTP

【Password】Password of user

【Cryptonym】：tick means chosen, choose this, there is no need to set user name and password.

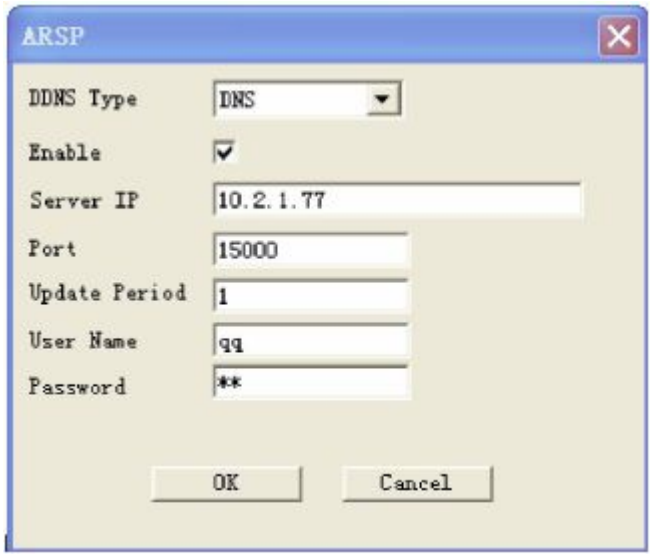
【Max File Length】Max length for upload files at every packed,default 128M

【Remote path】：the directory to upload file

Remark：the user should have the authority to upload file to server firstly.

【ARSP】

Startup DDNS server to add devices and manage it in the DDNS server



Pic: 4.24 ARSP setting

【type】：choose DNS

【Enable】：tick ☑ means chosen, setting is valid only when it is enable.

【server IP】：IP address of DDNS server

【Port No】：port No of device, corresponding to the listen port of DDNS；

【User name】：the user name that for device to log-in DDNS；

【Password】：password for above user name

【upgrade period】：Time interval of device synchronously to DDNS.

Remark：need to set up DDNS server before using

【Alarm center】

When alarm happens, report alarm information to alarm server

Pic: 4.25 Alarm center setting

【Protocol】protocol type is GENERAL；

【Enable】tick ☑ means chosen, setting is valid only when it is enalbe

【Server IP】IP address of Alarm Server；

【Port No】Port No. of device

【Alarm report】tick ☑ means chosen, report alarm information to server

【Log report】tick ☑ means chosen, report log information to server

【Mobile monitor setting】

To visit the device by mobile,pls make a router mapping of this port and use CMS to monitor and operate it by protocol.

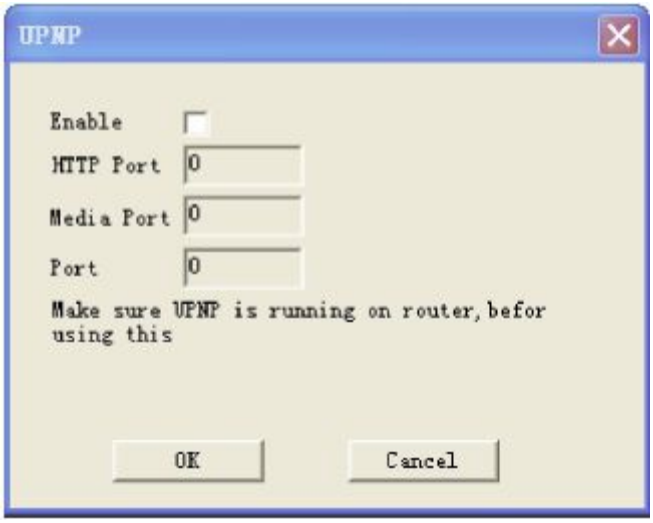
Pic: 4.26 Mobile monitor setting

【Enable】tick ☑ means chosen, open mobile monitor function, setting is valid only when it is enable.

【Port】port no for mobile monitor, which you need to make a router mapping of if want to visit it by mobile

【UPNP】

UPNP protocol can auto port forwarding on router,make sure UPNP is enable on router before use it.



Pic 4.27 UPNP setting

【Enable】tick ☑ means chosen，open UPNP function，setting is valid only when it is enable

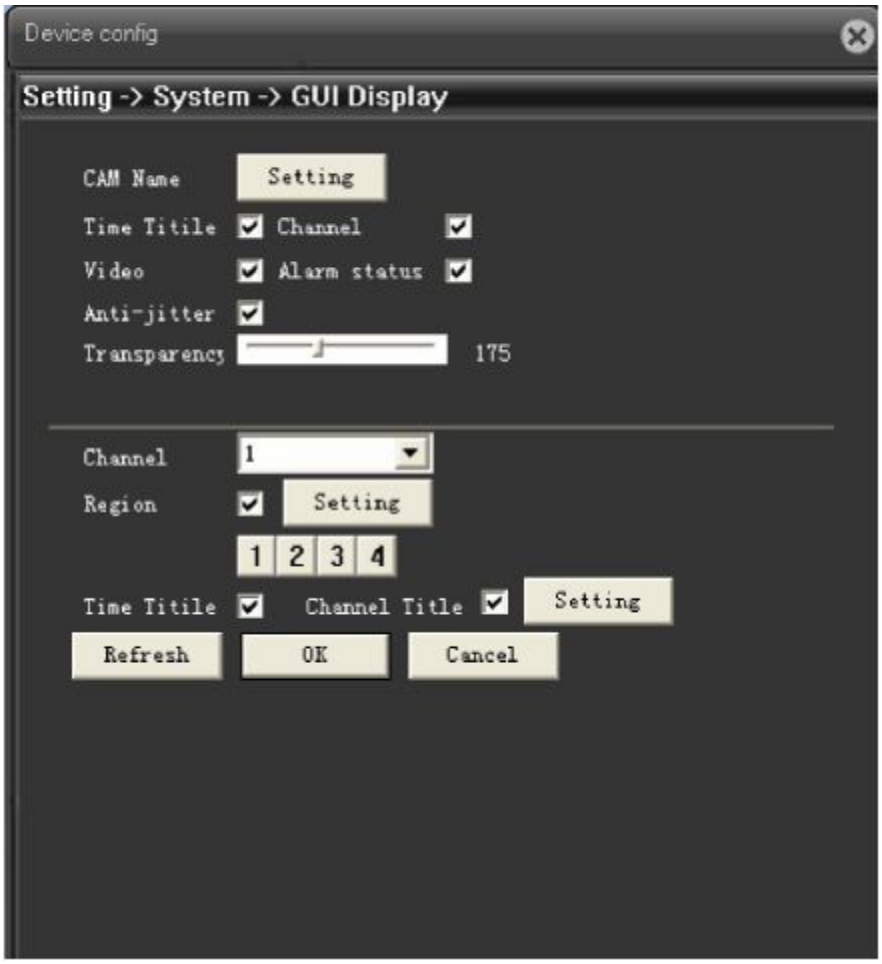
【HTTP】：Route will automatically distribute HTTP port for the device, when IE viewing, it need this port；

【TCP】：Router will automatically distribute TCP port for the device, when monitoring via CMS, it need this port.

【MobilePort】Router will automatically distribute Mobile Port for the device, when mobile monitor, it need this port.

4.4.5 GUI display

At local preview inteface, including：**Channel name, Time title, Channe title, Region cover**



Pic: 4.28 GUI display

【Channel Name】Click the channel name modify button and enter the channel name menu. Modify the channel name. The 16 Chinese characters and 25 letters are supportive.

【Time title】tick ☑ means chosen, to shows the system time on monitoring page；

【channel title】tick ☑ means chosen, show channel No at monitoring page.

【record status】tick ☑ means chosen, show the record status on monitoring page

【Alarm status】tick ☑ means chosen, show the alarm status on monitoring page.

【Transparency】choose the transparency of background image, span within: 128~255；

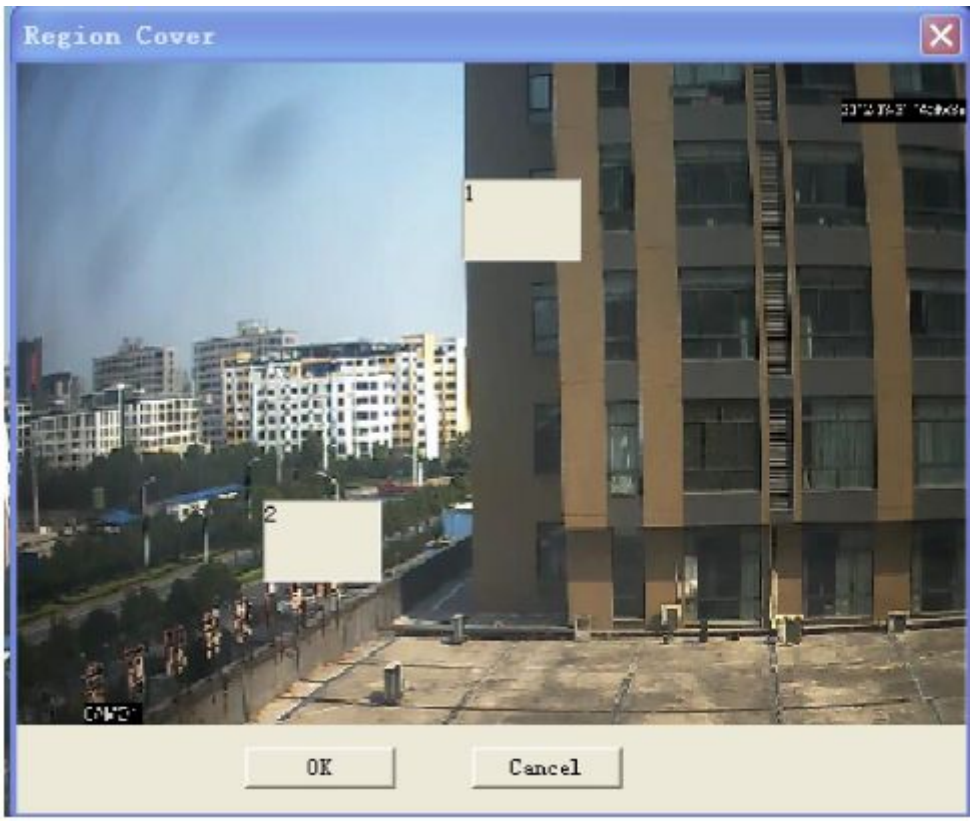
【Resolution】set resolution of monitor；

【Channel】choose channel No that set for encode output.

【Region Cover】tick ☑, choose region cover quantity, then click setting

，enter related channel, user can use mouse to choose any size of cover region, (the covered region, video output should be in black)

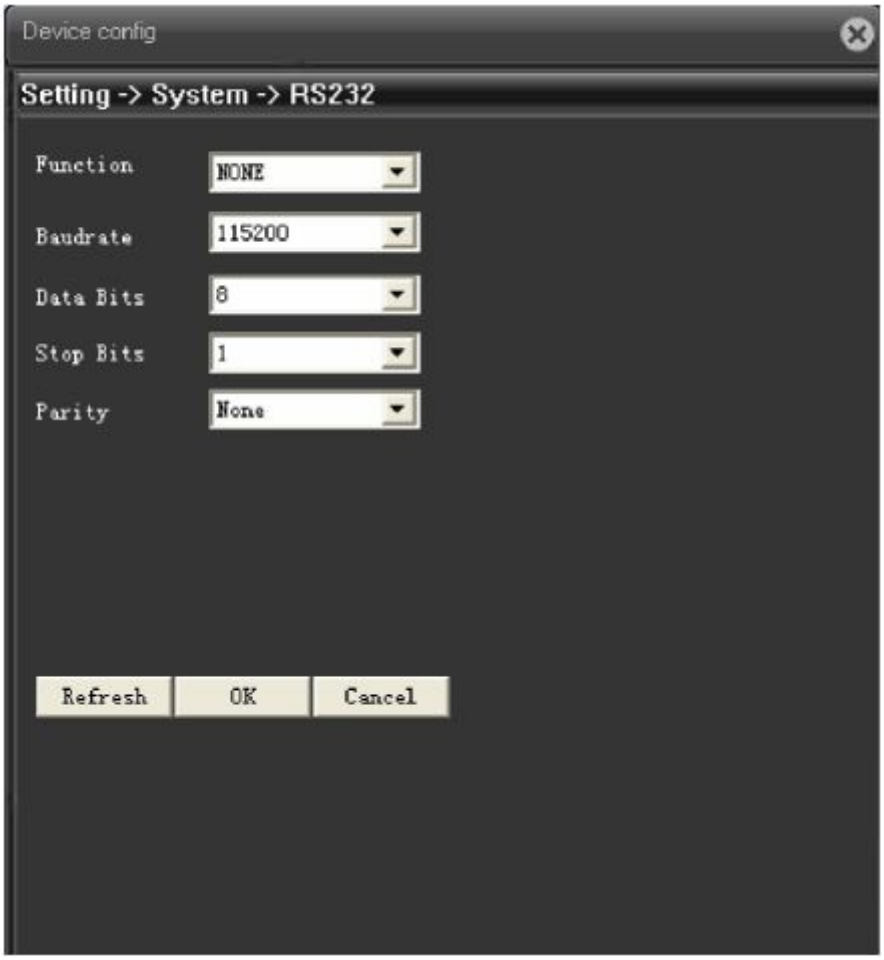
【Time title】与【Channel title】set time title and channel title whether need be show out and the position to show.



Pic: 4.29 region cover setting

Pic: 4.30 Channel and time title setting

4.4.6 RS232



Pic: 4.31 RS232

【Serial Port Function】Common serial port is used to debug and update program or set up specific serial port.

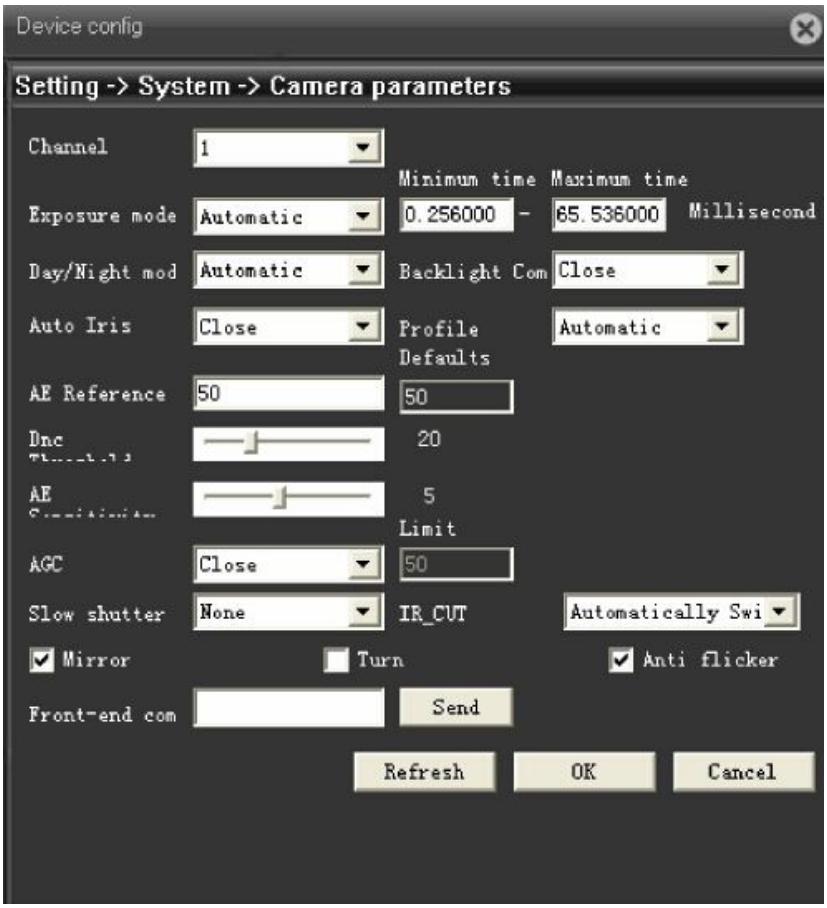
【Baud rate】Choose the corresponding baud rate length

【Data bits】Include 5-8 options.

【Stop bits】Include 2 options；

【Parity】Include odd, even, mark, space.

4.4.7 Camera parameter



Pic: 4.32 camera parameter

【Expose】can choose automatic（0.1 milisecond-80 milisecond）, or manual（1/25，1/50，1/120，1/250，1/500，1/1000，1/2000，1/4000，1/10000），default is automatic

【Day/night mode】can choose auto/color/ black and white, default is auto；

【Backlight compensation】can choose on or off；

【auto iris】can choose on or off；

【Porfile】can choose indoor or outdoor or auto, default is auto

【AE reference】can choose integers data between 0—100, default is 50；

【AGC】can choose on or off, limitation is between 0—100；

【Slow shutter】can choose none, low, medium, high, default is none.

【IR_CUT】can choose automatically switch or IR synchronous switch, default is automatically switch

【Mirror image】tick ☑,means enable the convert of left and right of monitoring page

【Over turn】tick ☑,means enable the convert of up and down of monitoring page

【Anti-flicker】tick ☑,enable anti-flicker to the fluorescent light

【Front-end Command】fill in command and send out, front end of IP camera will carry out this command

4.5 Advanced

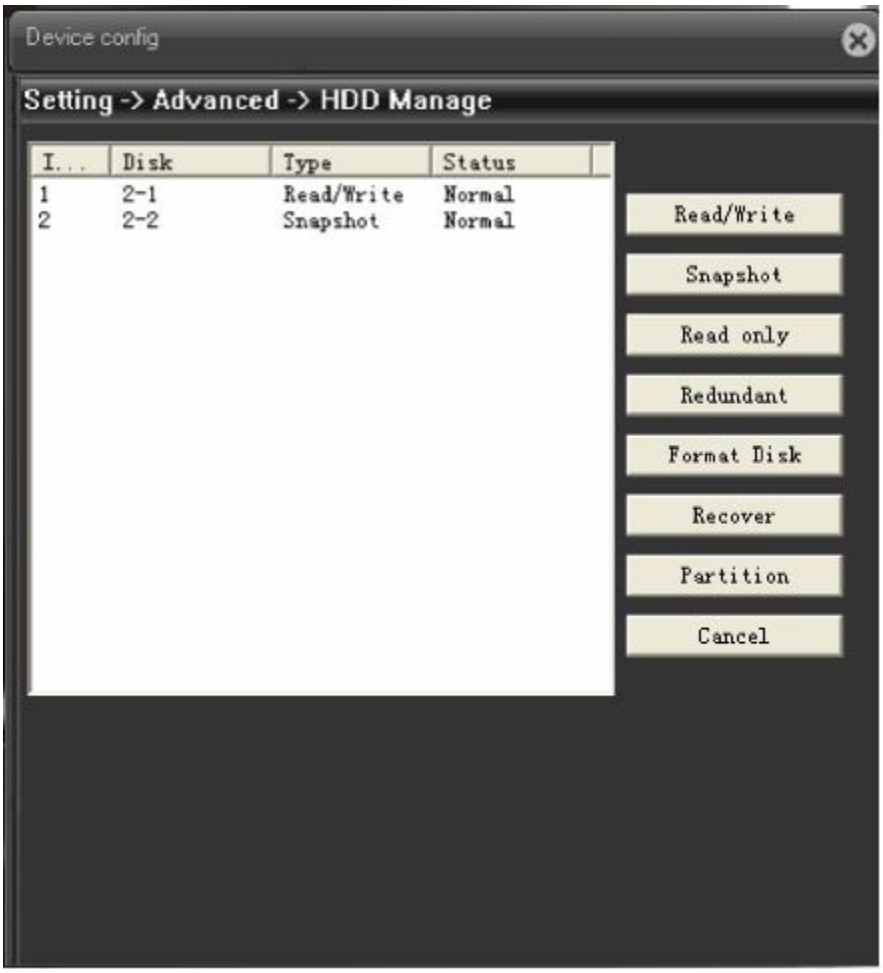
Advanced menu including：**HDD manage**、**Account**、**Auto Maintain**、**Default**、**Import & Export**、**Upgrade**、**Reboot**

4.5.1 HDD manage

To config TF card that installed in device. Menu shows the information of current TF card, including: type, status, total capacity. Operation to TF card including: set Read/Write, Read only, Redundant, Format disk, Recover, Partition, etc. Select the TF card, then click function button on the right side.

Remark：Read/Write：can read data and also can write data into it；

Read only：only can read data from the disk, but can not write data into it.



Pic: 4.33 HDD manage

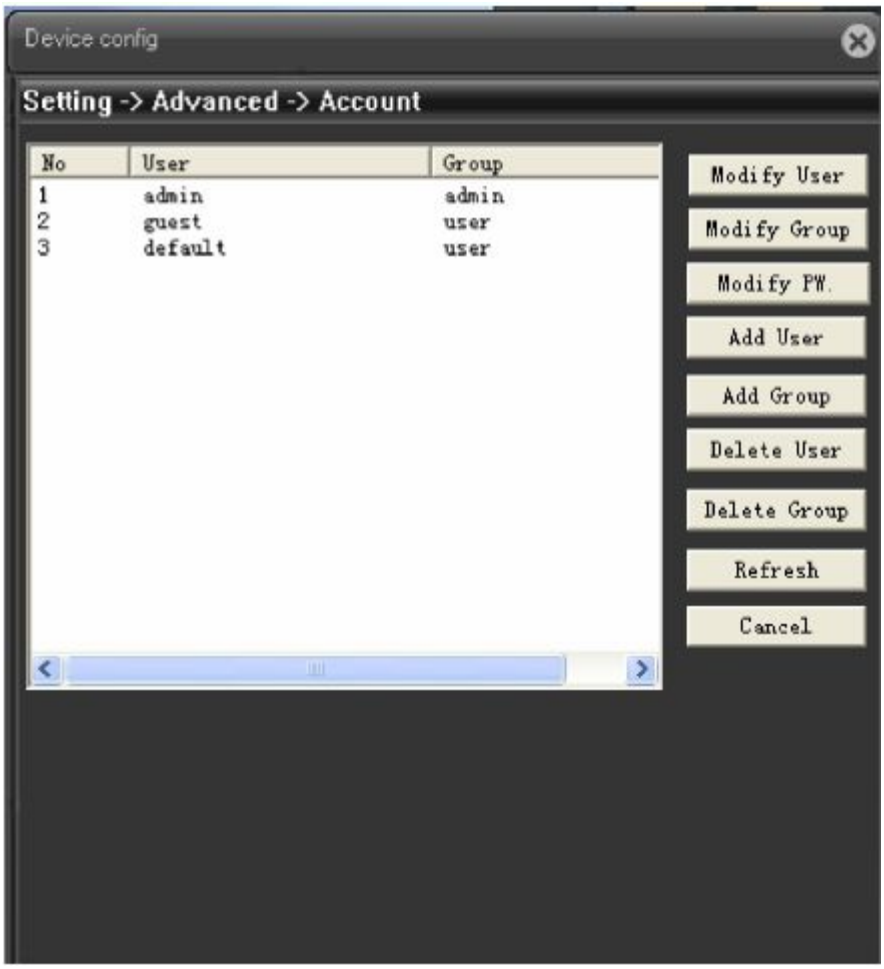
4.5.2 Account

Manage the user authority of this device

Remark：1. The character length is 8 bytes at most for the following user and user team name. The blank ahead or behind the character string is invalid.The middle blank in the character string is valid. Legal characters include: letter, number, underline, subtraction sign, dot.

2. There is no limit in the user and user group. You can add or delete the user group according to user definition. The factory setup include: user\admin. You can set the team as you wish. The user can appoint the purview in the group.

3. The user management include: group/ user. The group and user name can not be the same. Each user only belongs to one group.



Pic: 4.34 Account

【Modify User】Modify the existed user attribute.

【Modify Group】Modify the existed team attribute.

【Modify Password】Modify the user password. You can set 1-6 bit password. The blank ahead or behind the char string is invalid. The middle blank in the char string is valid,

Note：The user who possess the user control authority can modify its own or other users password

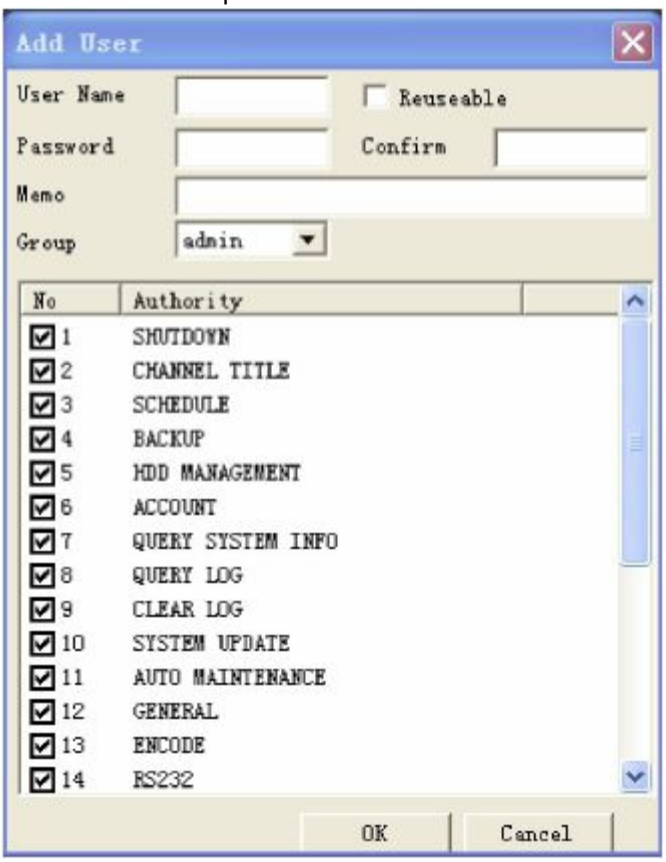
Pic: 4.35 Modify password

【Add user】Add a user in the team and set the user purview. Enter the menu interface and input the

user name and password. Choose the team and choose whether cover using the user. Cover using means that the account can be used by multiple users at the same time.

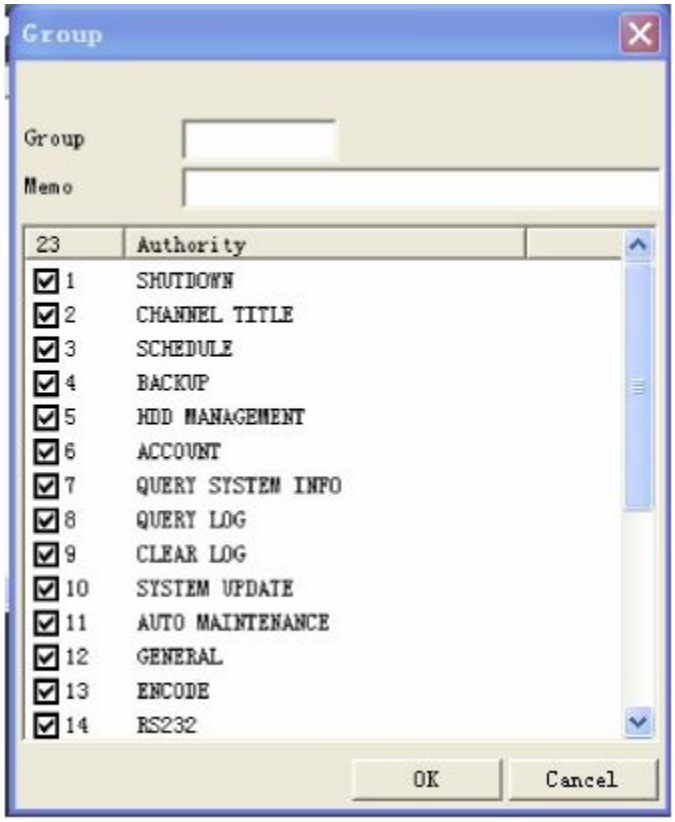
Once choose the team the user purview is the subclass of the team.

We recommend that the common user's purview is lower than the advanced user.



Pic: add user

【Add Group】Add a user team and set the purview. There are 36 different purviews: shut down the equipment, real time surveillance, playback, recording setup, video file backup and so on.



Pic: 4.37 add group

【Delete user】Delete the current user. Choose the user and click delete user button.

【Delete Group】Delete the current group. Choose the group and click delete group button.

Pic: 4.38 delete group

4.5.3 Auto-maintain

The user can set the auto reboot time and auto file deleting time limit.

Pic: 4.39 auto maintain

4.5.4 Default

The system restore to the default setup. You can choose the items according to the menu.

Pic: 4.40 default

4.5.5 Upgrade

Pic: 4.41 system upgrade

【upgrade file】to select upgrade file via IE or client software to do upgrading.

4.5.6 Reboot

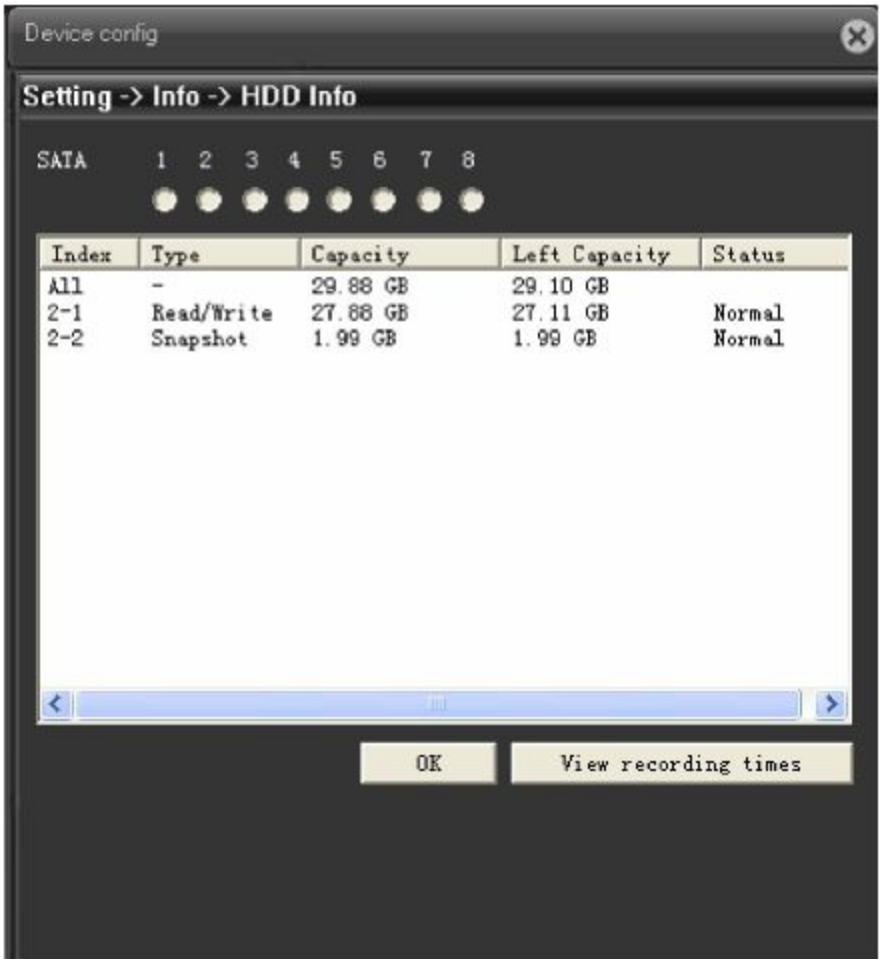
To do soft reboot of IP camera

4.6 Device info

Shows information of device, including：**HDD info**、**Log , Version**

4.6.1 HDD Info

Display the hard disk state: type, overall capability, residual capability, the recording time and so on.。



Pic: 4.42 HDD info

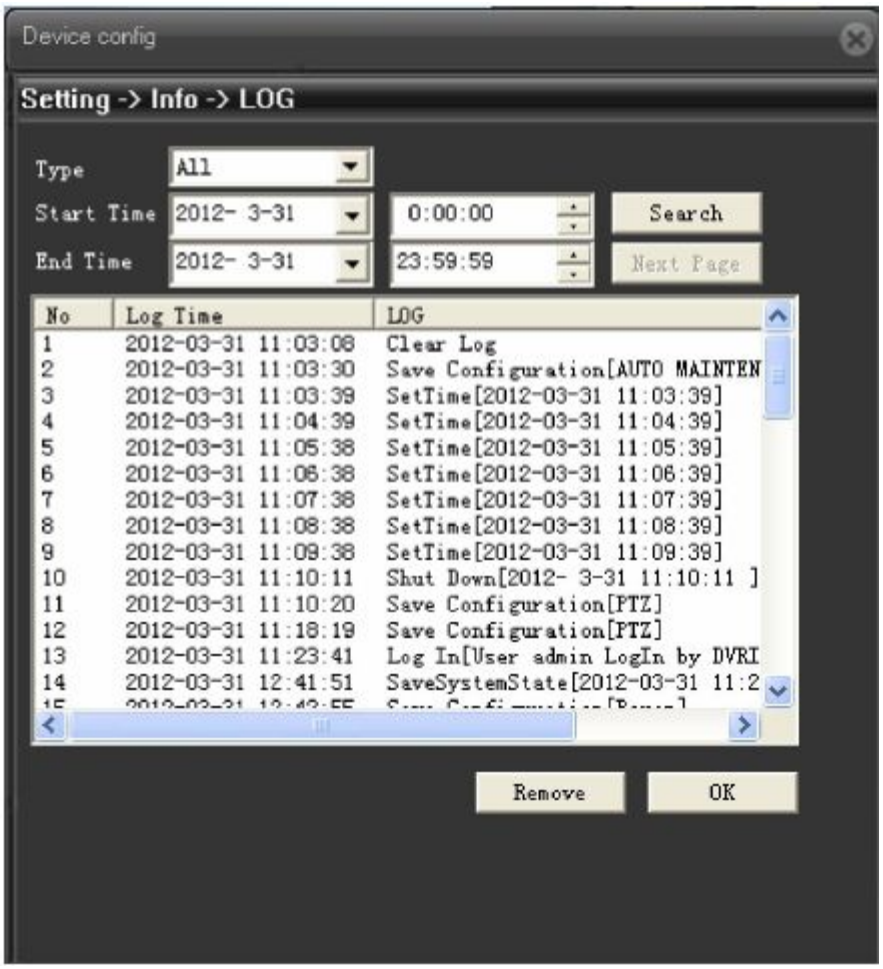
Tips ： means that the hard disk is normal. X means that the hard disk is broken-down.- means that there is no hard disk. If the user need to change the damaged hard disk, you must shut down the DVR and take up all the damaged hard disks,then install a new one.

* behind serial number means the current working disk such as 1*. If the corresponding disk is damaged, the information will show “？ ”.

4.6.2 Log

Base on set searching way to check log information

LOG type can be divided into：system operation, configuration operation, data management, alarm affair, recording operation, user management, file management and so on. Set the time section to look up and click the look up button. The log information will display as a list. (one page is 128 items) Press **Page up** or **Page down** button to look up and press **delete** button to clear all the log information.



Pic: 4.43 Log info

4.6.3 Version

Display the basic information such as hardware information, firmware version, built date , serial No. and so on.

Pic: 4.44 version info

Chapter 5 Basic operations for cloud

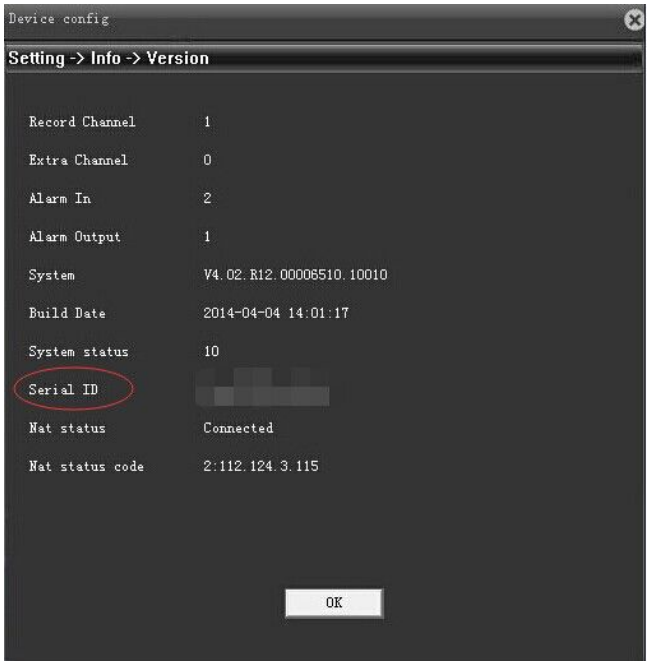
5.1 Cloud technology surveillance

Cloud technology, which uses the serial number to get access to the device, not only enables the device one step on net but also greatly brings convenience for customers to better monitor via wide area network.

***Note： Device that supports cloud technology should be in the WAN(Wide Area Network)firstly.**

➢ **Check the connection status of cloud technology**

Connect device to WAN first, then input the IP address of the IP camera in browser to view the images , enter【Main menu】>【Setting】>【info】>【Version】to find the serial ID of the IP camera.

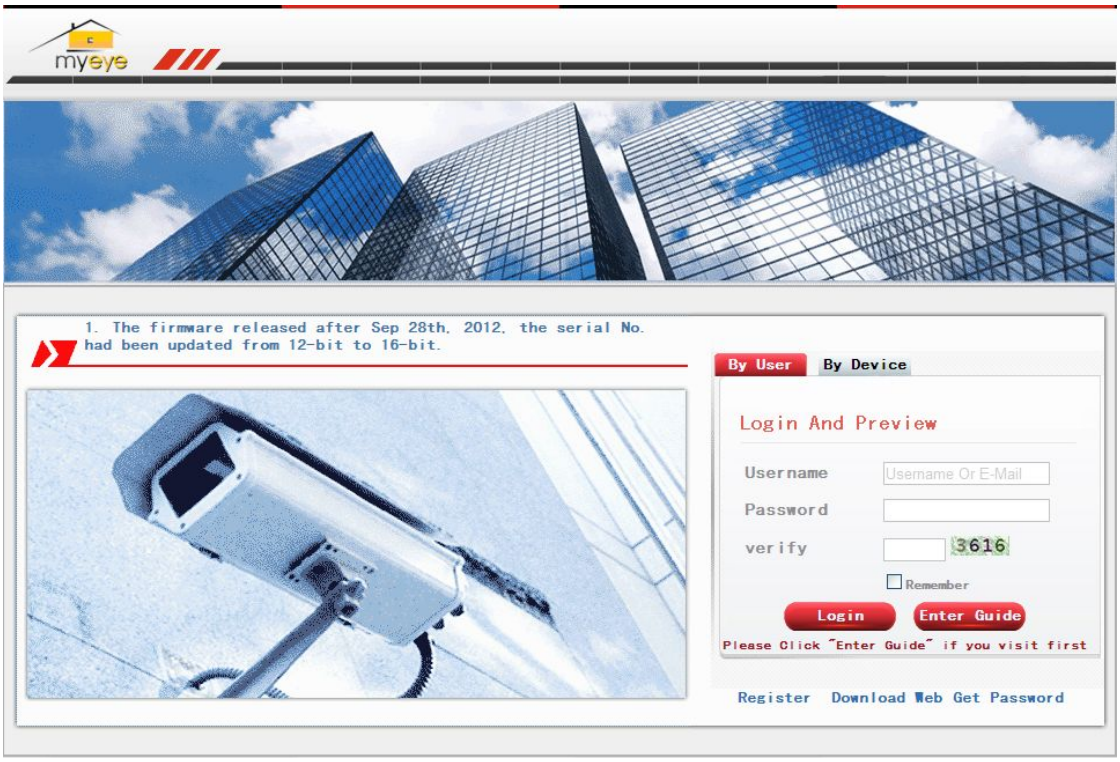


Pic 5.1.1&5.1.2 Cloud ID interface

- **Log in cloud server**

Enter http://xmeye.net to see below log.There are two ways to login: **by user** and **by device**, user can log in freely based on their needs.

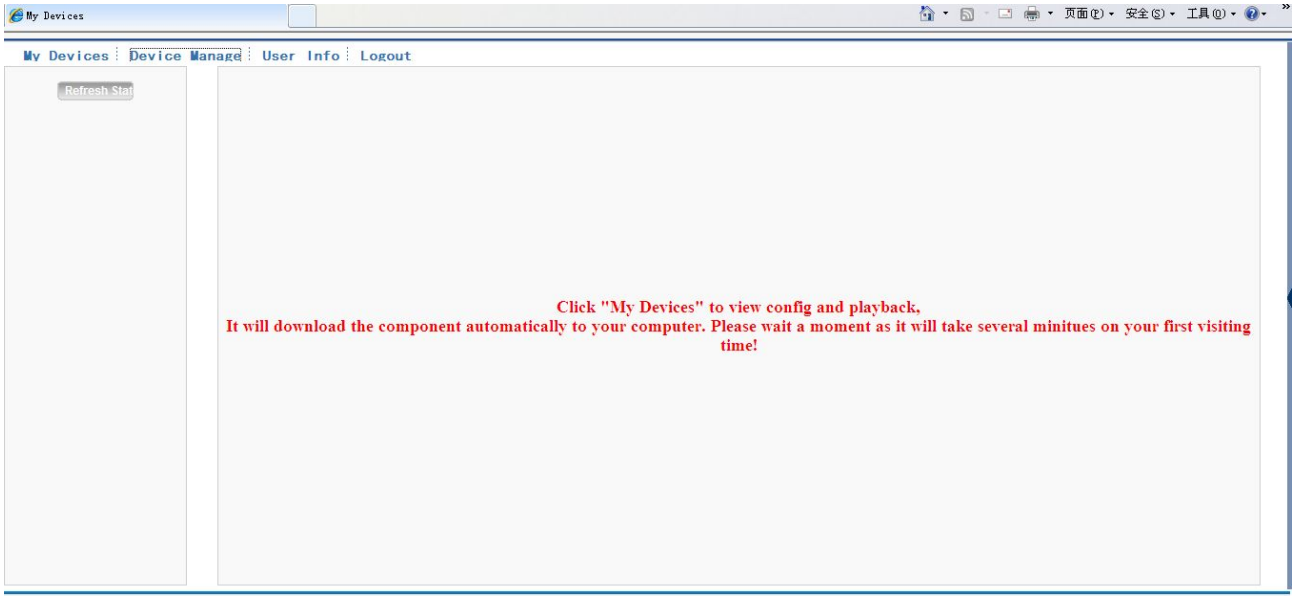
***Note: To log in by user, user needs to register at the first time.**



Pic 5.2 Cloud login interface

- **Log in by user**

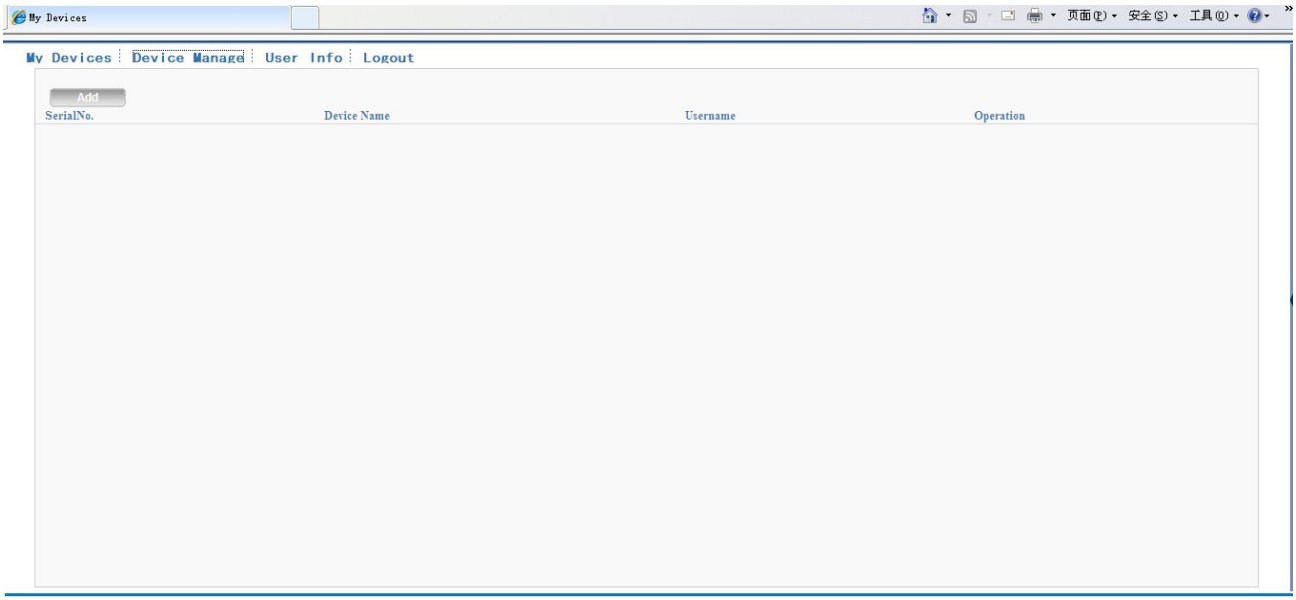
Customer logs in with their own registered user name and password, as below:



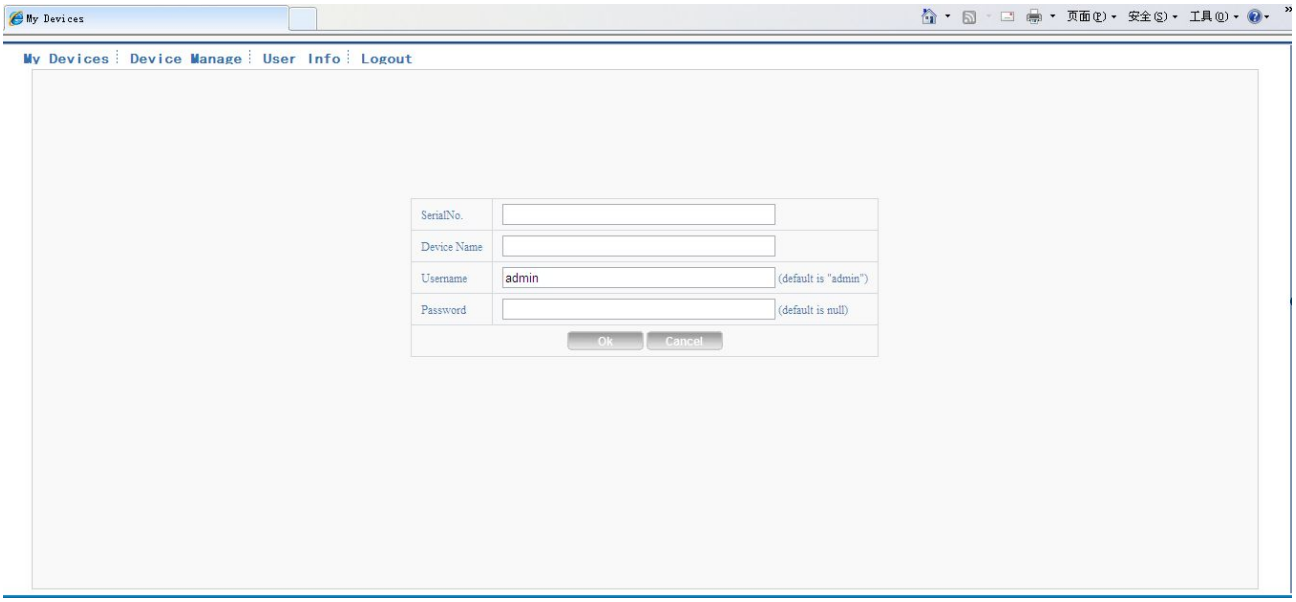
Pic 5.3 cloud technology operation interface

Device management:

Mainly used for adding device, click add to add a serial number for the device to be monitored.



Pic 5.4 device management interface

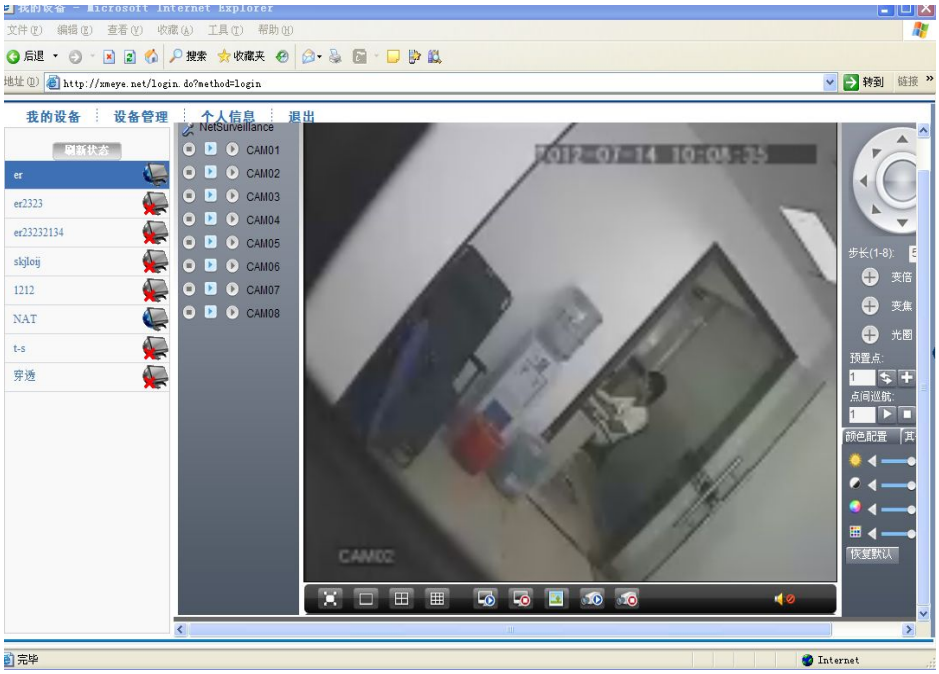


Pic 5.5 add interface at device manage

Note:in pic 5.5, the user name means the user name of monitored device, password means the password of corresponding user.

My Device

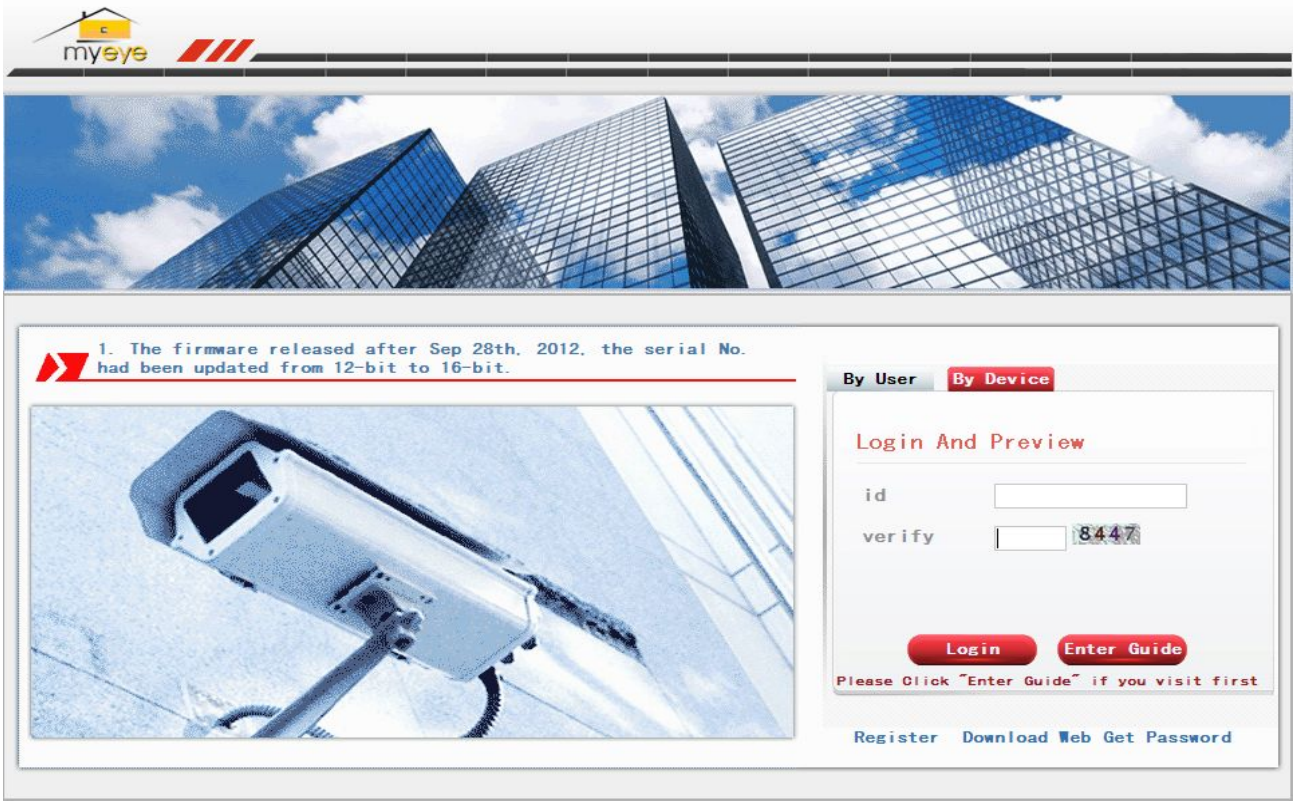
Mainly show all the added devices, click a device name which is successfully connected to the server can get access to the monitor.



Pic 5.6 monitor page - log in by user

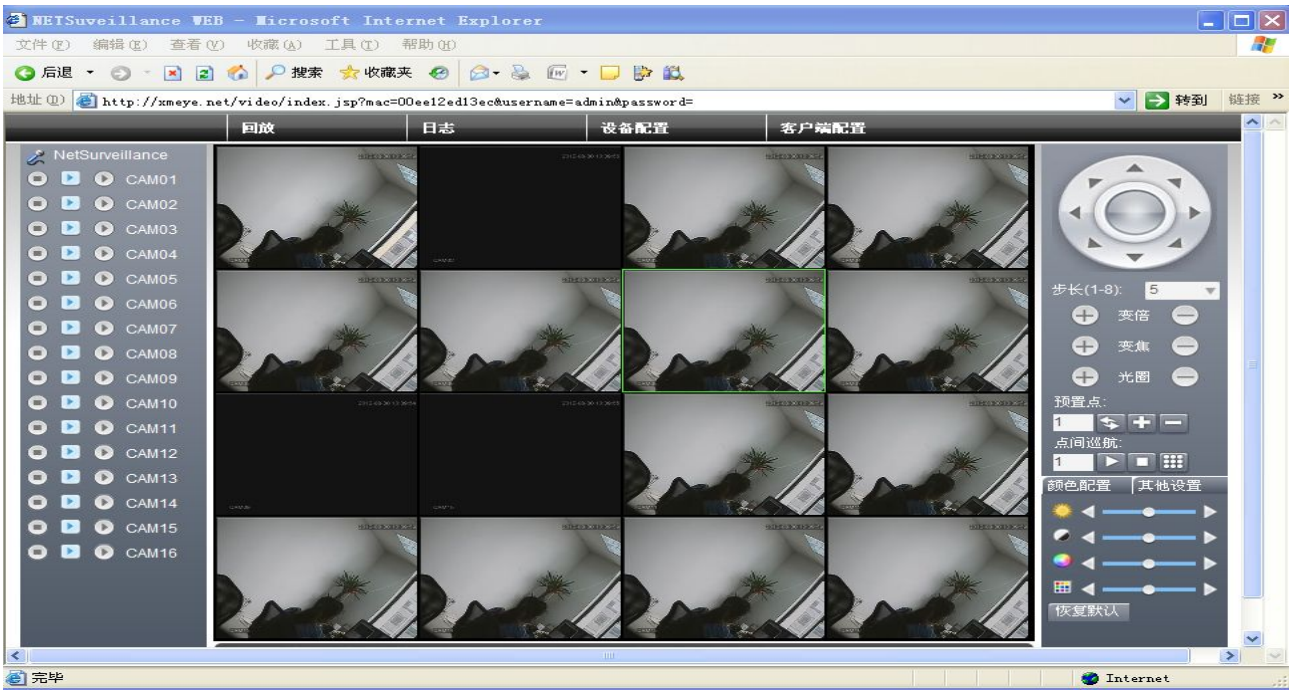
Note:the icon of ✕ means offline, the device doesn't connect to server successfully.

- **Log in by device**



Pic 5.7 log in by device interface

Input the serial number of device and the verify code to monitor and control the device directly.



Pic: 5.8 monitor page - log in by device

Chapter five: FAQ & Maintaince

5.1 FAQ and answer

If the problem u meet is not included in below items, please contact to local technical support or call customer service of headquarter, we will whole-heartedly serve for you.

1. Q：there is dark corner of lens
   A：1/3 lens only support CS lens be more than or equal to 6MM, can try to change with 1/2.5 or 1/2 lens (C mount lens need to add CS adapter ring
2. Q：Image color is bias towards red
   A：regularly because the device is in dark position, IR light is auto-on, while the device is remain in color mode. Compare to CMOS, CCD is less influenced by IR light, under same condition, CCD is slightly bias towards red.
3. Q：There is tailing smear of moving object
   A：enable the slow shutter makes the frame rate not enough. In order to achieve good image effect in the dark, we will auto enable the slow shutter, to extend the exposure time, if exposure time is over 40ms, the frame rate will not enough, that will cause tailing smear, you can shutdown slow shutter via CMS or WEB.
4. Q：Firmware upgrade fail
   A：Few firmware unofficial issued with BUG, can not upgrade via port 34567, but can upgrade via 34561. this is the reserve port for network upgrading.
5. Q：Can not boot
   A： a. Use upgrade tool to see if you can search IP address
   b. use monitor to see if there is image come out from analog output, whether IP

address is overlap, etc.

c. got image from analog output but can not search IP address, then to check web connection interface can not search IP, also analog output do not check power, can investigate via network indicator.

6. Q：IPC reboot after power off, using CMS to access, but failed, can not find device.

A：when the device is under rebooting, need use CMS to connect it after a while when it is finish rebooting.

7. Q：SD can do partition, after reboot, there is only one partition

A：a. make sure the total capacity of SD card is over 2G, and the space for recording is over 2G.

b. choose ”always recording” to record a file in SD card, then play it to see if it is normal.

c. pull out SD c a r d a n d i n s e r t i t i n t o P C , c o p y a c o m p r e s s f i l e t h a t w ith s am e cap aci ty of your SD car d, if u c an p ut i t i n, if yes, then cop y it out to see if c an norm al dec om press

8. Q：30W D1 960H 130W 200W how much space will be in each hour.

A：it is related to image quality, different image quality with different bit rate that is showed out, such as D1, default is 1Mbps 1M(1 second) *60*60/8=450M /hour, regularly, SD card for recording, suggest to set motion detect and alarm record and front side, other recording to be save at back side.

9. Q：Monitor image abnormal, such as too bright, image flicker, poor backlight compensation

A： a. base on the image color from client side and integrate with local environment to adjust it to be the best

b. adjust camera parameter on client side and integrate with local environment to adjust it to be the best

10. Q：UPNP function is not working

A：a. target router function is stable, suggest to use TP-LINK router

b. target router have UPNP function and it is enable

c. IP address of camera and router is not in the same network segment.

d. after enable UPNP function of camera and reboot device.

e. reboot target router

11. Q: NTP function in net service is not working

A： enable related function of NTP server.

12. Q：can not search out recent video file, if we set client side recording via CMS

A：If the client side is under recording, you can not search out file, you nee to stop recording firstly, then you will search out.

13. Q：Client side can not log-in when the IP address was revised, tips with: log-in over time and can not find device.

A： a. no IP conflict or MAC conflict

b. close client side, log-in again after 10s.

14. Q：WIFI function of IP camera is not working

A：a. WiFi module and device correctly connected.

b. target router support WIFI and it is enable

c. the password of router that device input is correct.

d. the WIFI module is used is 3070 series

e. IP address of device is in the same network segment.

15. Q：Set language in regular via CMS, language of CMS is without change

A：1. Language setting in regular is regarding the web side, not related to CMS

2.CMS client side config – language in regular config is to set language of CMS

16. Q：Camera can not control the connect PTZ

A：Client side PTZ config protocol, address etc should be same as connected PTZ

17. Q：Client side can not search out log info

A：make sure the searching period have log info and not be deleted.

18. Q：Can not upgrade via web side

A：1.firmware before October can not be upgrade via 34567 port, but only 34561 port.

2. if upgrade via 34561 port, need to config encode with resolution lower than 720P,can not set with 1080P.

19. Q：Camera under darker environment, will lose frame.

A：the slow shutter is default enable, it will extend exposure time in darker environment, then the frame rate will be not enough, you can close it via CMS.

20. Q：Monitor image of camera is not clear and with mosaic.

A：1. manual adjust lens, to make the image clear

2. set resolution to be the best level in encode config

3.set image quality to be the best under CBR, or bit rate value to be the maximum under CBR

5.2 Maintaince

1、Please brush printed circuit boards, connectors, fans, machine box and so on regularly.

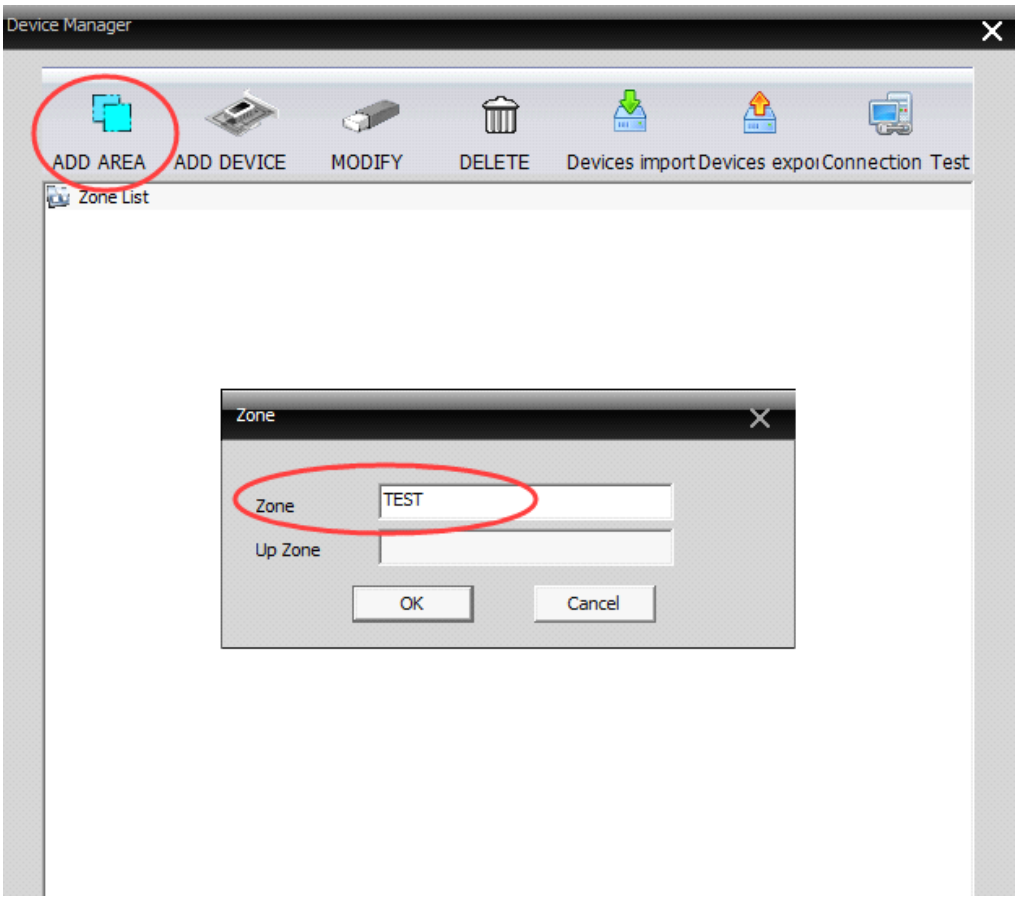
2、Please keep the grounding well done to prevent the video or audio signal interfered and the DVR from static or inductive electricity.

3、Do not pull out the video signal line or RS-232 port or RS-485 port with the power on。

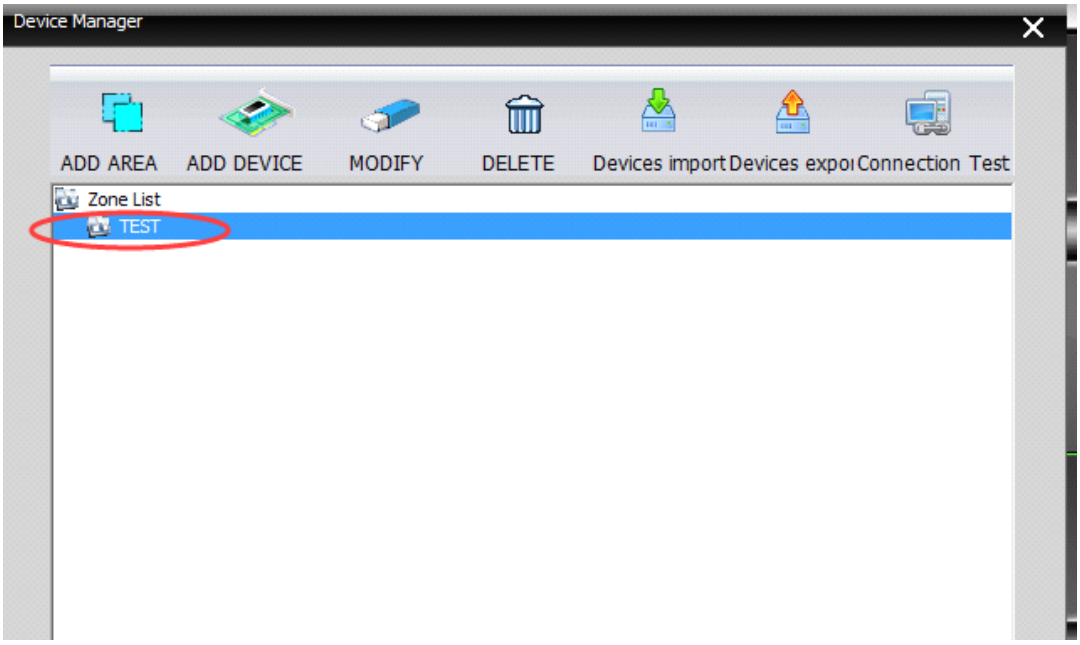
4、Please keep the IPC away from heat resource, and regularly investigate system and maintaince.

How to add wireless IP camera

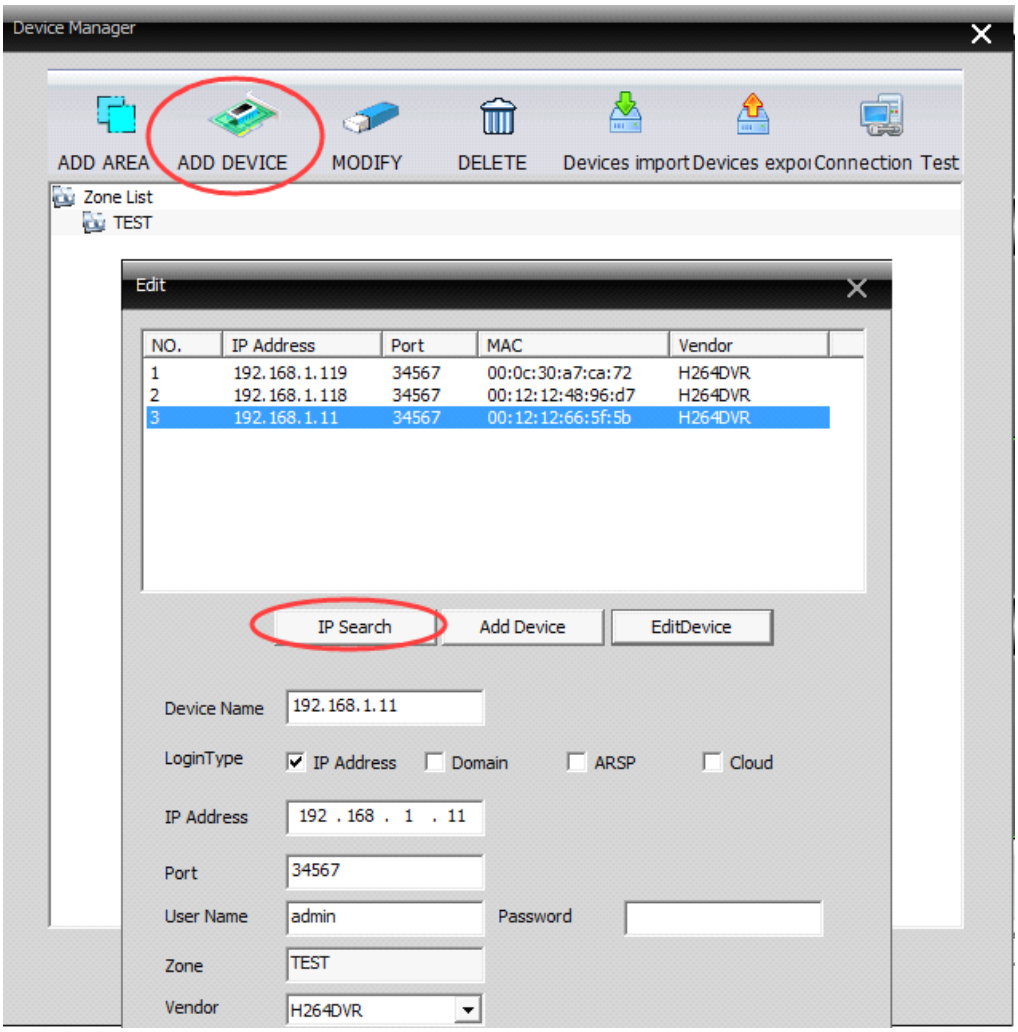
1. Find General_CMS software from the CD, and install it on computer
2. Connect the camera with internet cable and power
3. Open CMS , click “system-Device manager “ to add the device . Click “ADD AREA ”to add one zone , name the zone yourself .



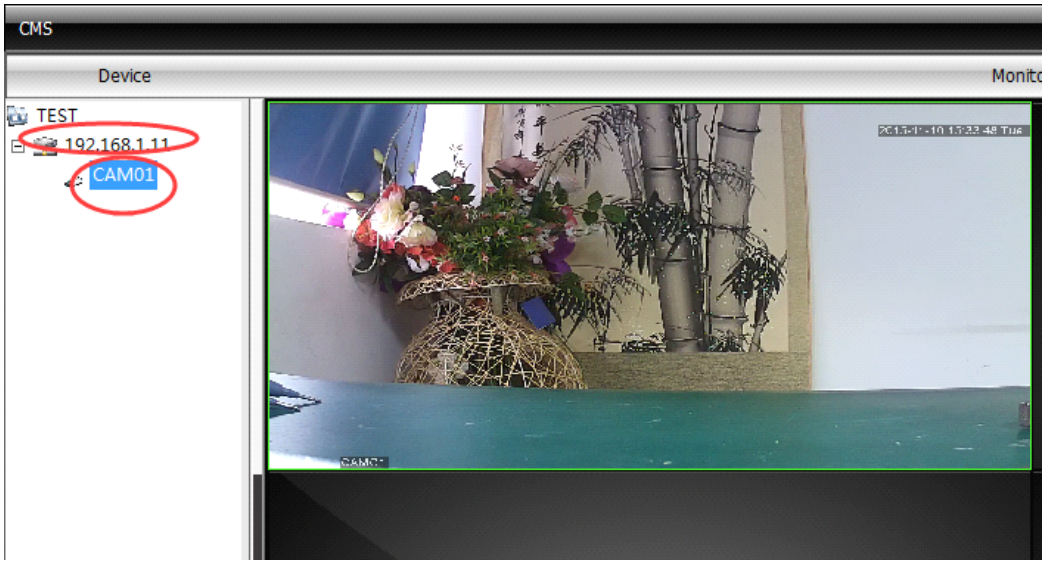
Choose the added zone with mouse to add device under this zone .



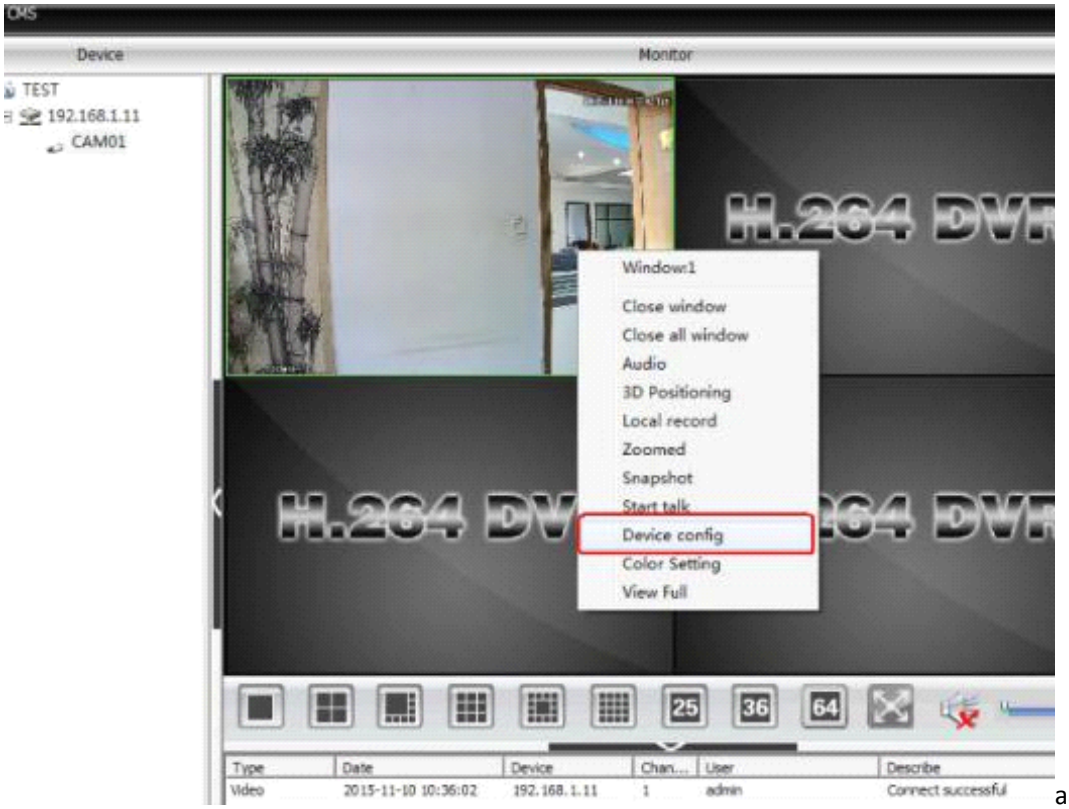
Click “ADD DEVICE ” -”IP Search ”, after you search out the IP address , then you click “OK”to save .



Return preview interface, Click the IP address , then you will find channel below the IP address . Click “CAM01” to connect the camera successfully .



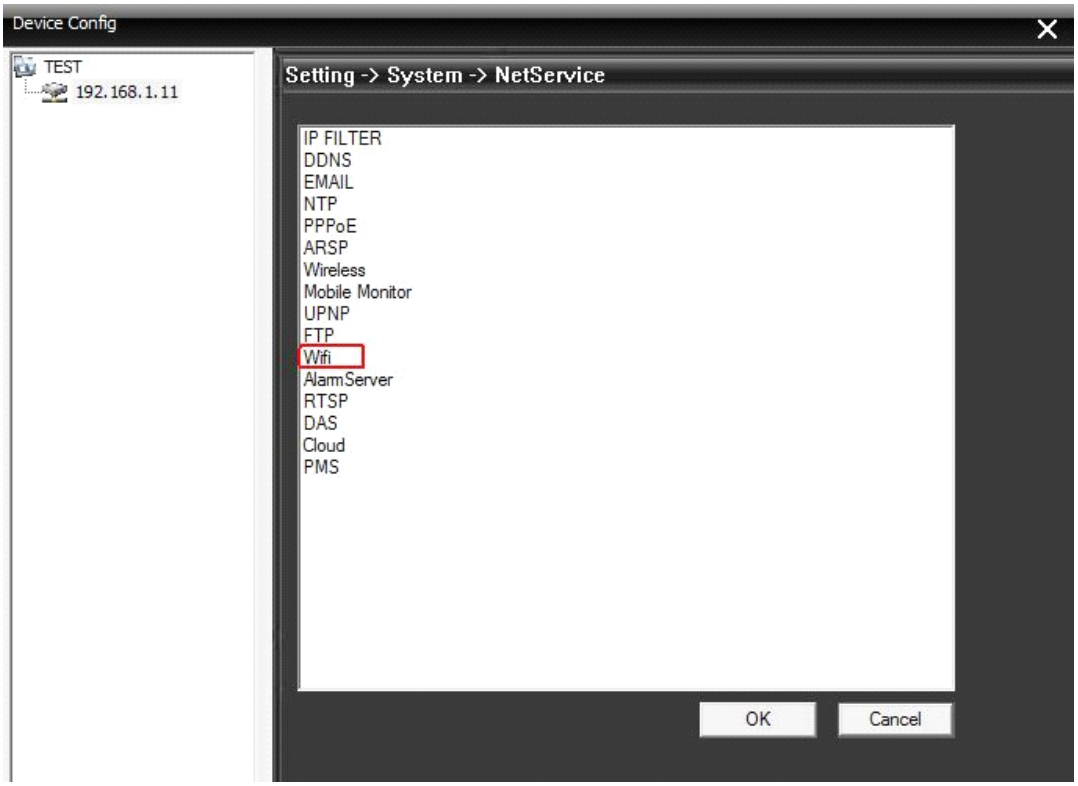
4. After you finish adding , then config the device as below photo, Right click the mouse - Device config



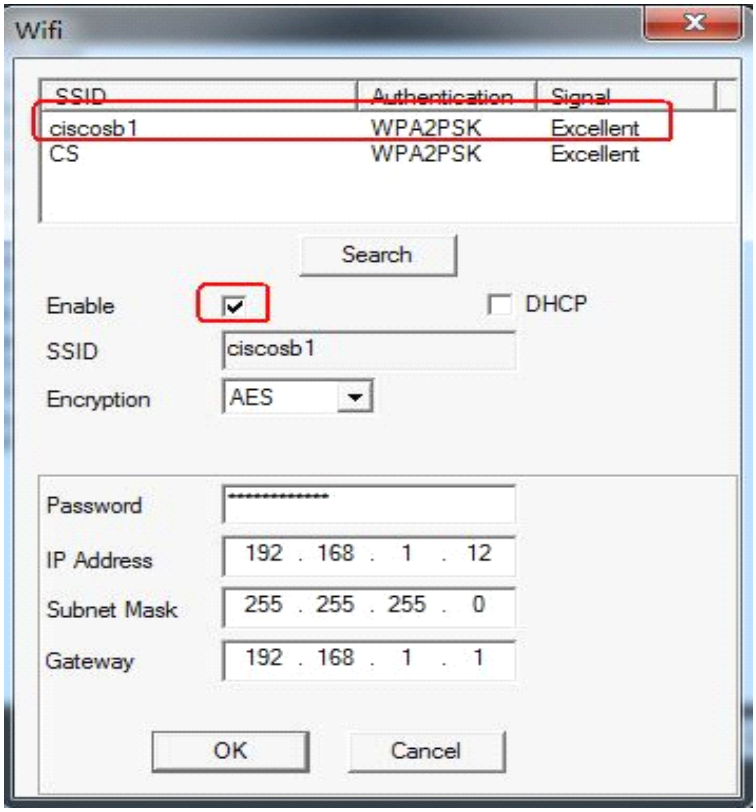
aaa

Click NetService

Click wifi to config the wifi

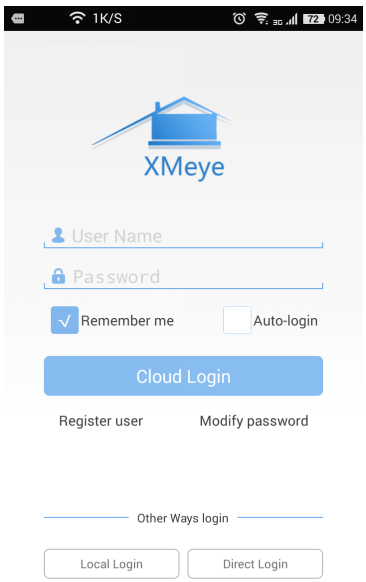


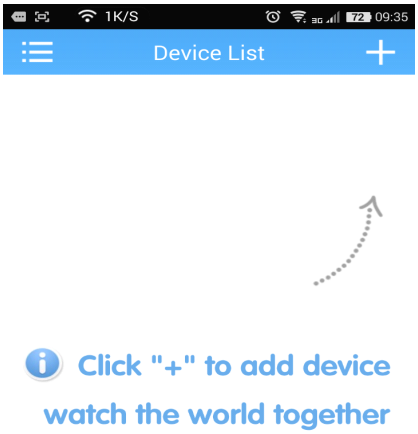
Search out the wifi signal to add it , then click ok to save. Quit the menu setting , move away the internet cable . Use the CMS to re-search and add the IP address of wireless camera . Finish config. (Refer Step 3)



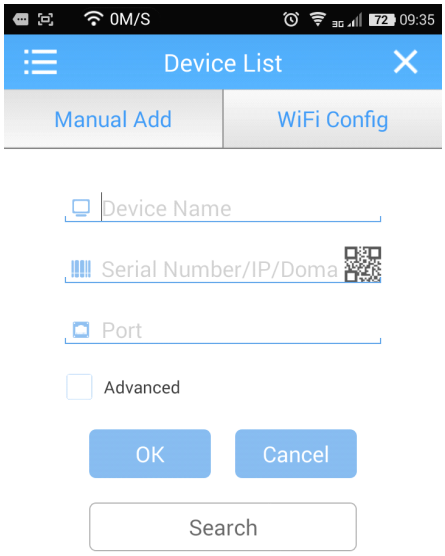
How to add the camera with mobile phone :

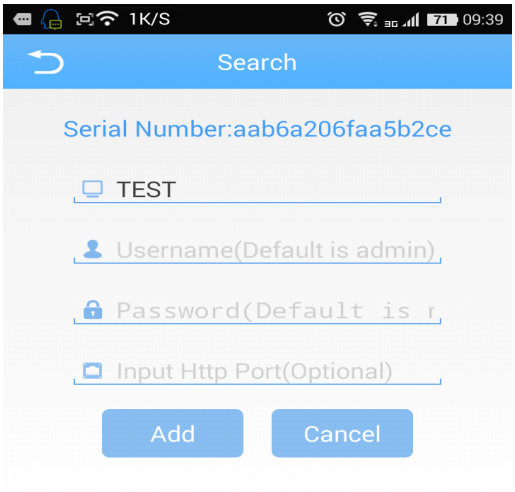
1. Download the software “XMeye” and install it into mobile phone
2. Open “XMeye”, click “Local Login ”, click “+” to add the device



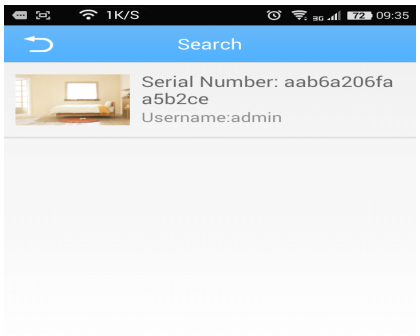


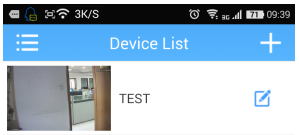
Click Search , then input the device name , user name (Default is admin), password (Default is blank) to add it

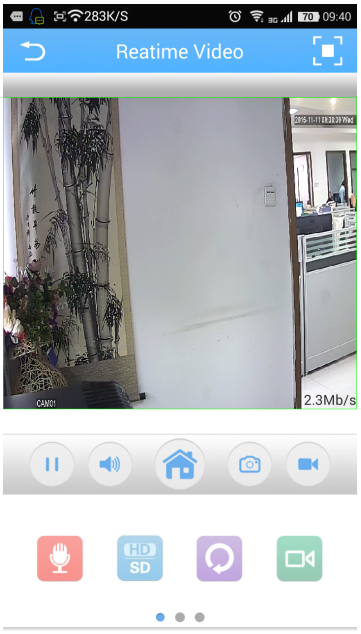




Add the device successfully , then click the device, access the device successfully .







Fcc Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to

Which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help
The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.