IE OPERATION GUIDE

Contents

Chapter One: IE log-in basic operation

Remark: keys in grey means do not support

1.1 Boot

Connect to power, then Network Camera is booted automatically.

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

2. Power supply demands:DC12V/2A；

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

1.2 Reboot

Reboot Network Camera is divided into soft reboot and hard reboot.

Soft switch：enter the【DeviceCfg】>【Advanced】in【Reboot】;

Hard reboot：to cut off power and reconnect it to reboot device.

Explain：

1. Power recovery

   If IPC happens with abnormal shut down when it is under recording, after reboot, it will auto-save the record info before shutdown and restore to status before shutdown.

2. Change TF card:

   When change TF card, please cut off power supply firstly.

1.3 Log-in

When device turns on normally, need to log-in before operation, system will provide related function according to the authority of log-in user.

Default IP address：192.168.1.20，subnet mask：255.255.255.0，gateway：192.168.1.1

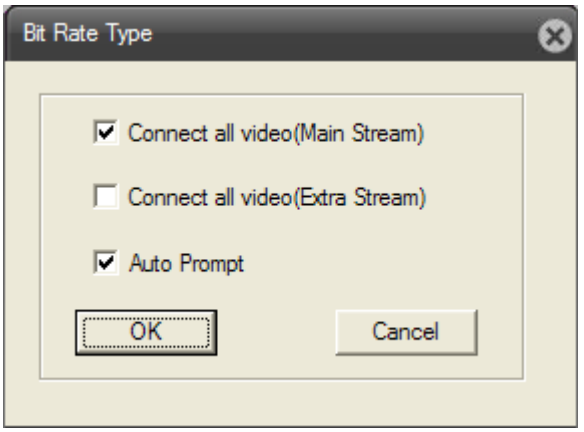
When device ex-factory, there are 3 preset users : admin guest default，default password is none, admin is preset super authority user, guest and default is preset for authority of preview and playback, admin and guest user can modify password but not authority, default is the user default log-in, can modify authority but not password.

Picture 1.1 Login

For your safty, please go to “Account” to modify user name and password when firstly log-in, see chapter 2.5.2 account manage).

1.4 Preview

After log-in, There will be a window of bit rate come out as Picture 1.2, after log in, choose the main stream or extra stream u want for preview, and also can click  at left side of preview page to set it.



Picture 1.2 Bit Rate Type

At the preview page, you can see date, time and channel title.

See picture 1.3, the menu from left to right means: full screen button, single image, full channel play, close channel, snap, full channel video, close video.

Picture 1.3 The shortcut menu

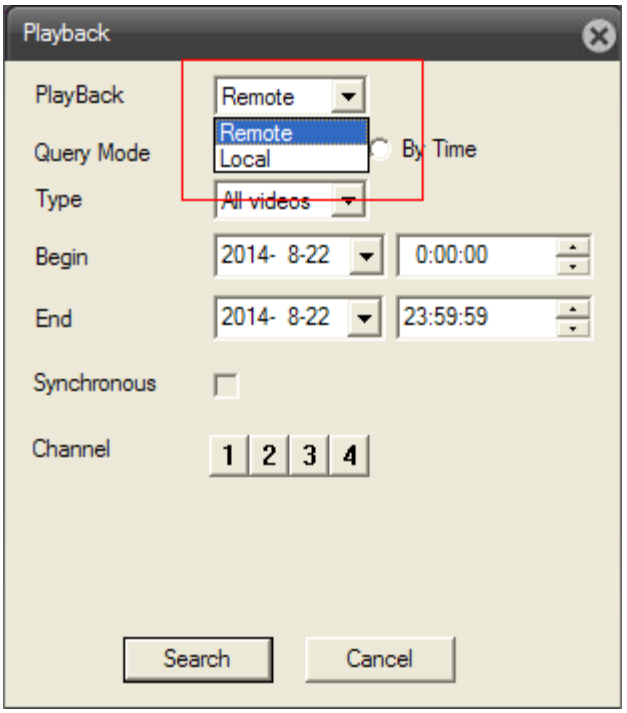
1.5 Playback

on play the video file in TF card, click 

at upper left side on monitor to enter video playback page which including remote playback and local playback.

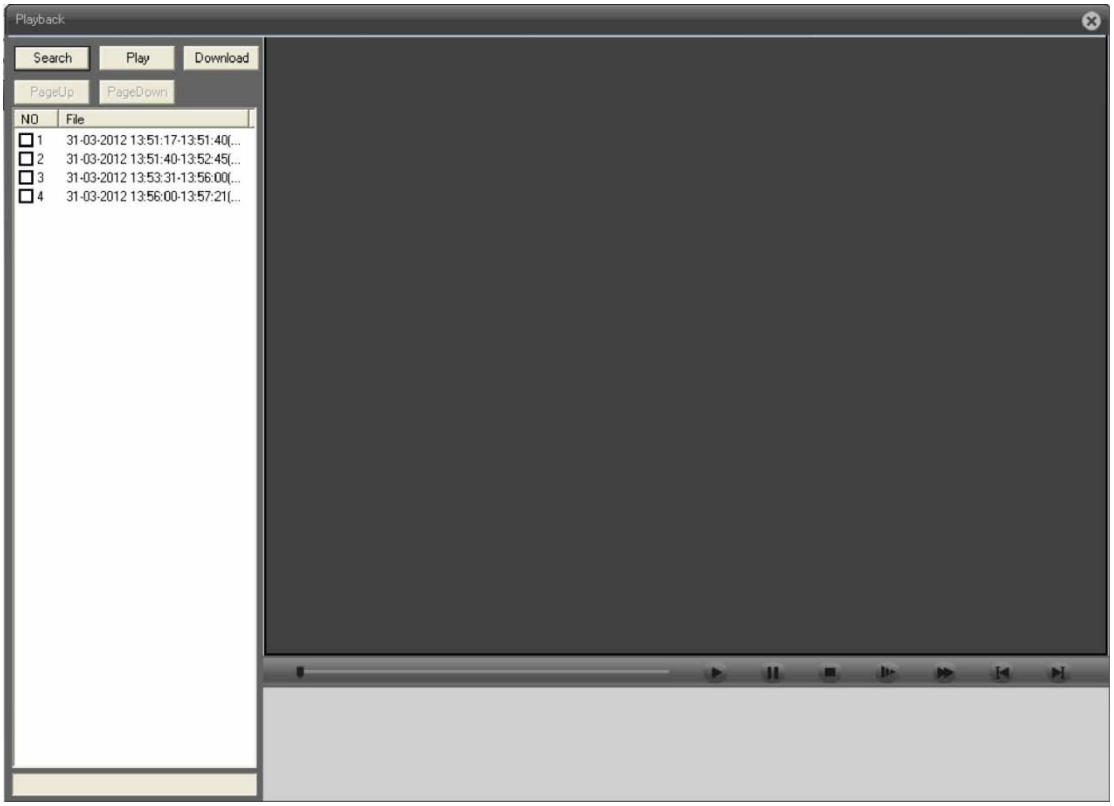
Remote playback for TF card that IP Camera support.

Local playback for IE



Picture 1.4 Playback01

Remark: Device normal playback, the TF card that used for video storage should be set as read/write or read only (please refer to HDD Manage)



Picture 1.5 Playback02

Playback control button, see detail in below chart

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

Chart 1.1 playback control button list

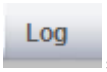
Remark： Playback by frame should under the status of playback pause.

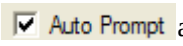
【Operate tips】to show the button function when cursor point it

Special feature:

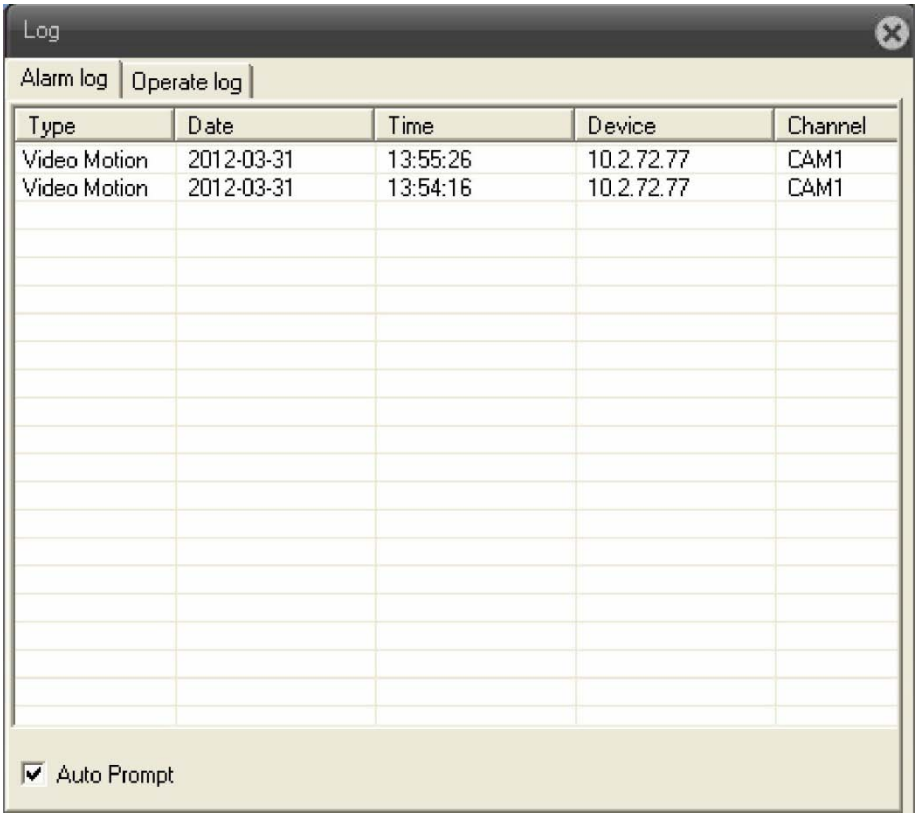
Partial enlargement: when single view full screen playback, can use right button to choose any size of area from the image, click left button in the chosen area, can enlarge this area to playback, double click left button will exit.

1.6 Log

The preview mode, click the icon to enter 

, Show alarm information and operation record, if you tick 

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



Picture 1.6 Log information

1.7 DeviceCfg

The preview mode, click the icon to enter DeviceCfg，Menu： Record，Alarm，System，Advanced，Info.

Click the button below for next menu setting:

Picture 1.7 DeviceCfg

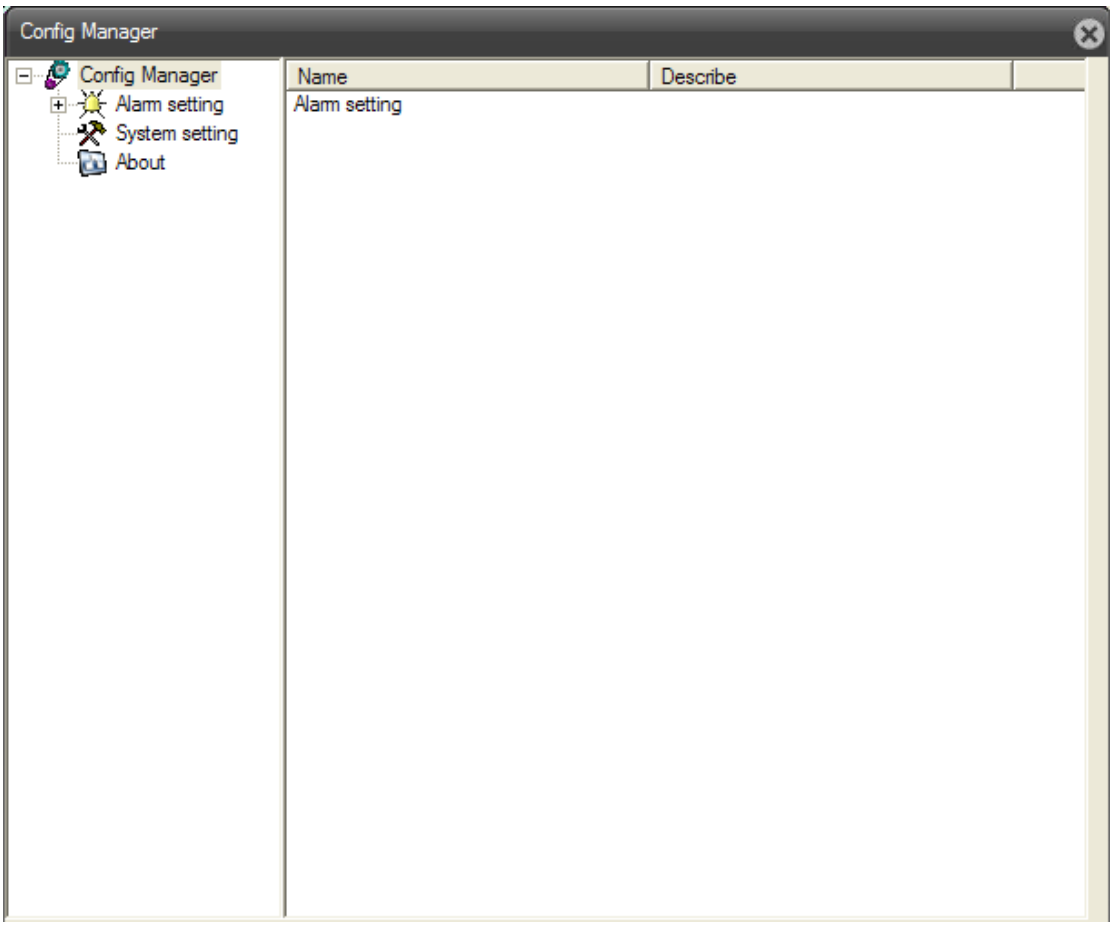
1.8 LocalCfg

The preview mode, click the icon to enter DeviceCfg，Menu： Alarm setting, System setting, About.

Alarm setting：Alarm noticed by Normal Setting Alarm link setting and Voice

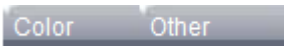
System setting：Setting IE recording and picture DIR, length and AVI format can be setting

About：Network camera versions description



Picture 1.8 Local manager

1.9 Image Color

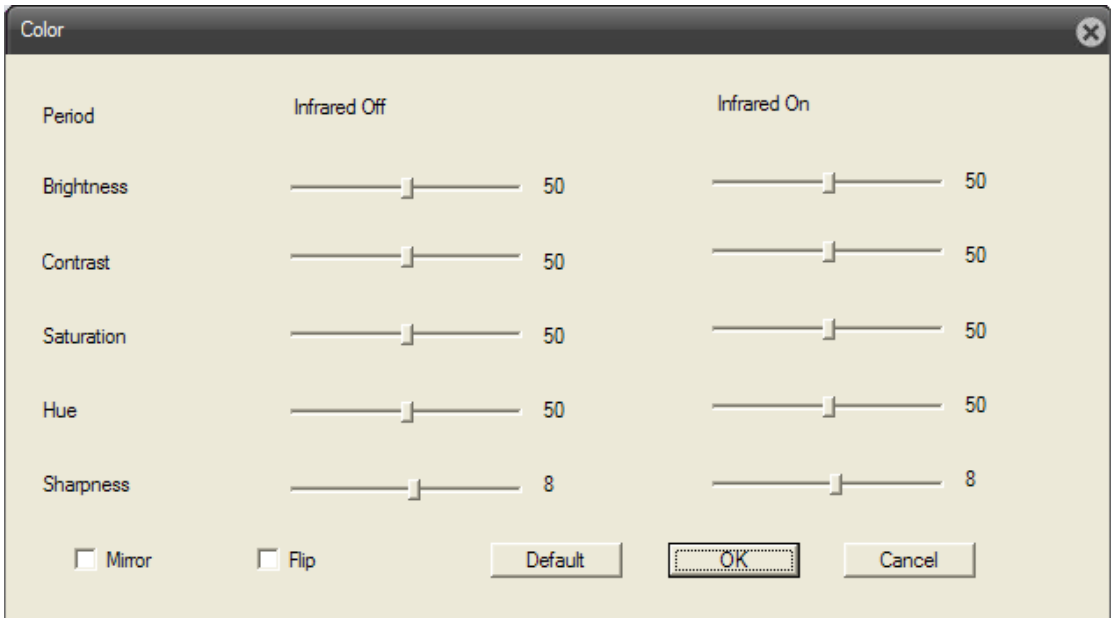
The preview mode, click the icon to enter 

① Color: Picture 1.9 color setting on selected channel, image parameter include: Brightness, Contrast, Saturation, Hue

Picture 1.9 Color Picture 1.10 Other Picture 1.11 Serial ID

② Other: Picture 1.10 Reboot network camera, change scale (Picture 1.11search network serial No. QR code), picture color (Picture 1.12)

Picture 1.12 : color setting on selected channel, image parameter include: Brightness, Contrast, Saturation, Hue, Sharpness, Mirror, Flip. setting Infrared on or off to get two different image.



Picture 1.12 Color setting

Special feature:
Infrared Off : Day Color Image

Infrared On: Night B/W image

Chapter Two: DeviceCfg

2.1 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 ending, ftp upload, etc.
	Video Loss	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、UPNP、FTP、WiFi、3G、 ALARM CENTER、RTSP 、PPPOE 、NTP 、Email 、 IP AUTHORITY、DDNS ETC.
	GUI Display	Set channel title, cover area, time title, channel time overlap and position
	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 、 rolling over 、 anti-flashing etc.
Advanced	HDD Manage	Do operation to TF card, such as set read/writ, read only, 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
	Reboot	IPC soft reboot
	Upgrade	To do net upgrade via IE or client software
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
	Version	Show alarm input output, system version, build date, etc

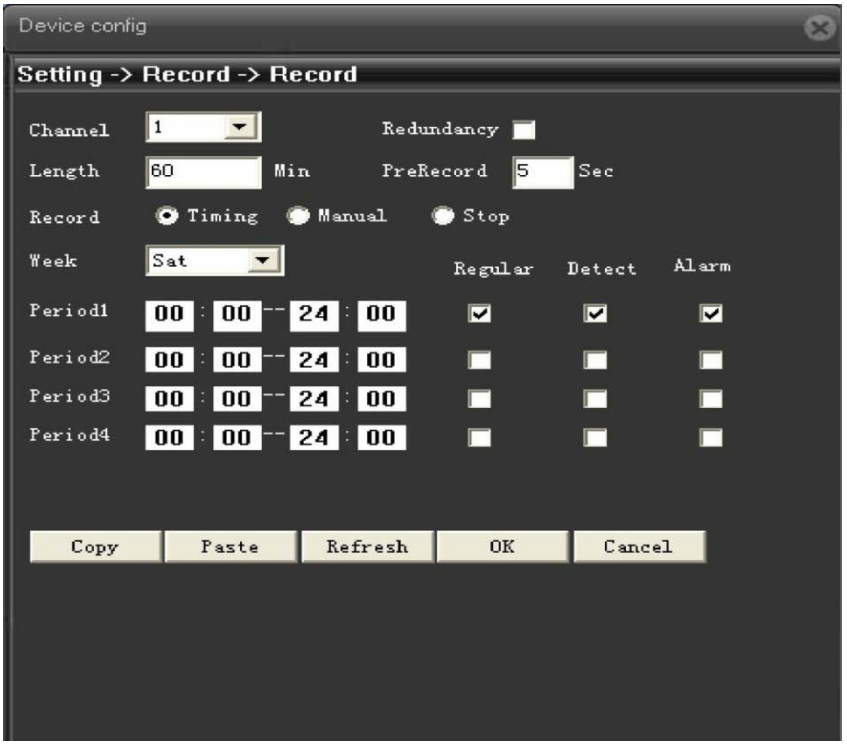
2.2 Record

Device do operation regarding record, including: **Record & Snapshot**.

2.2.1 Record

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

Remark: Device installed with TF card and set it as Read/Write, then it can normally record.(detail please refer to chapter 2.5.1 HDD manage)



Picture 2.1 Record setting

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

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

【Record control】 Setting 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".

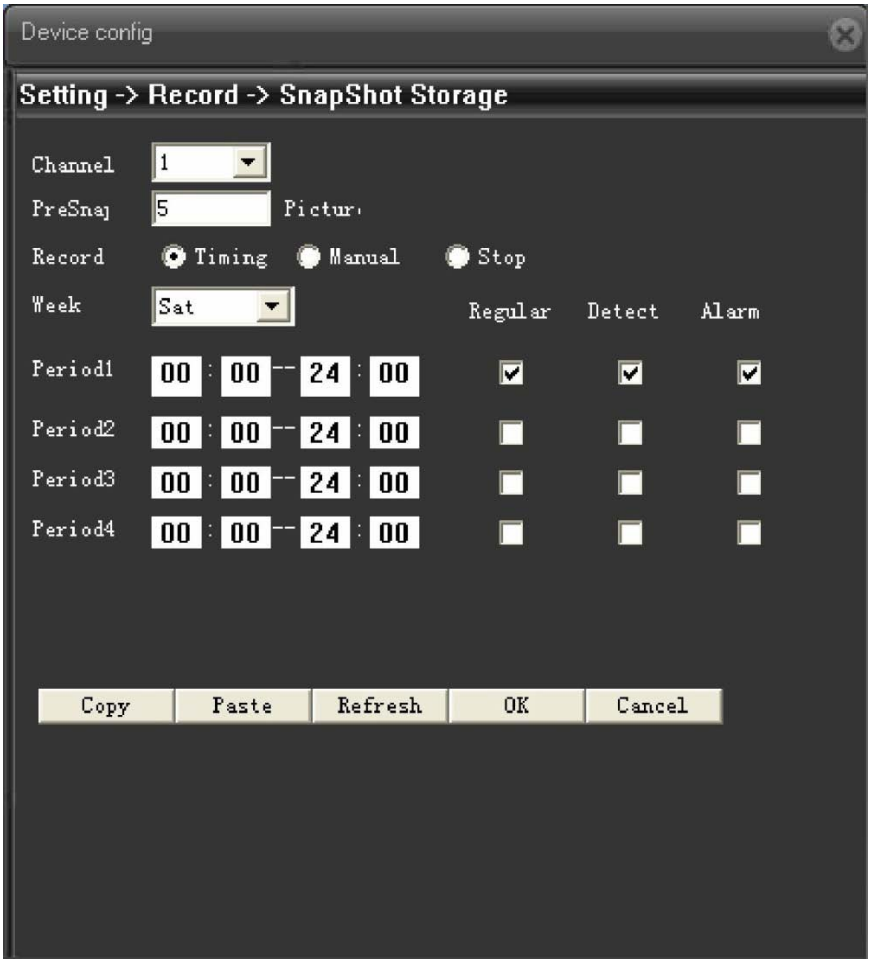
Alarm : Trigger the external alarm signal in the set time section. When above alarm is set as opening recording, the "detection recording" state is on. The video file type is "A".

Remark： related alarm setting, please refer to chapter 2.3 alarm part.

2.2.2 Snapshot

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.

Remark: Device installed with TF card and set partition, Snapshot should more than 1G, then device can normally take snapshot. （detail please refer to chapter 2.5.1 HDD manage）



Picture 2.2 Snapshot setting

【Pre-Snapshot】 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" ,it will have 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.

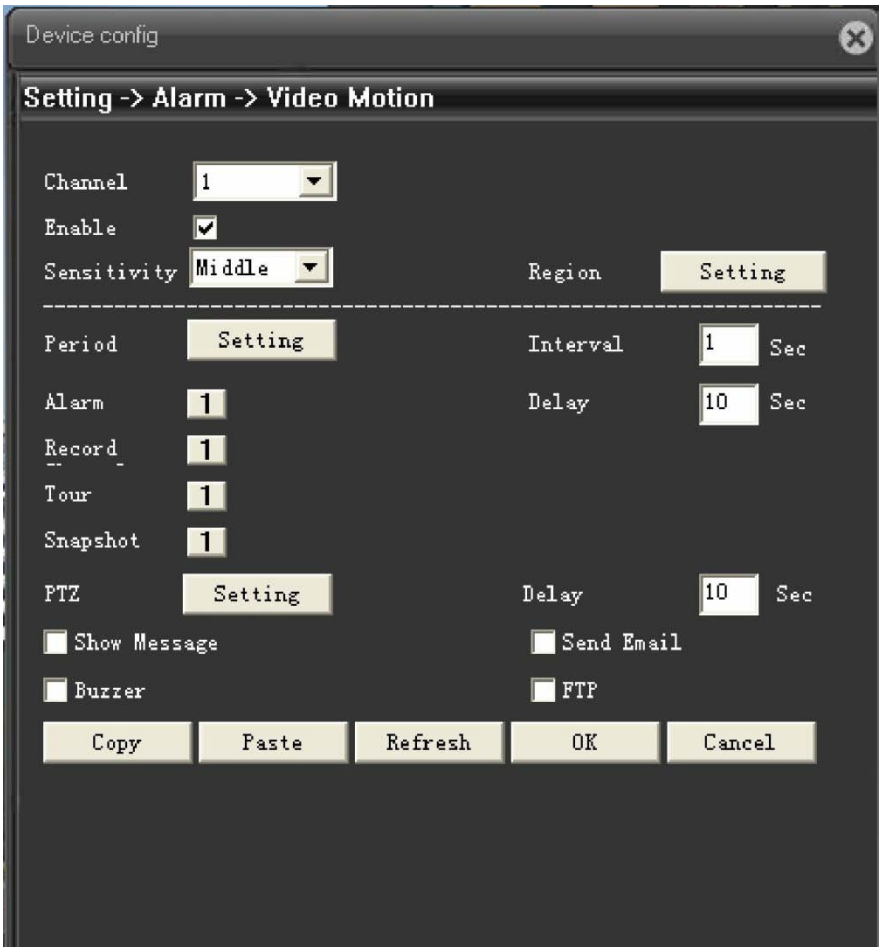
2.3 Alarm

Alarm functions include: Video Motion, Video loss, Alarm Input, Alarm Output, Abnormal.

Picture 2.3 Alarm

2.3.1 Video Motion

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

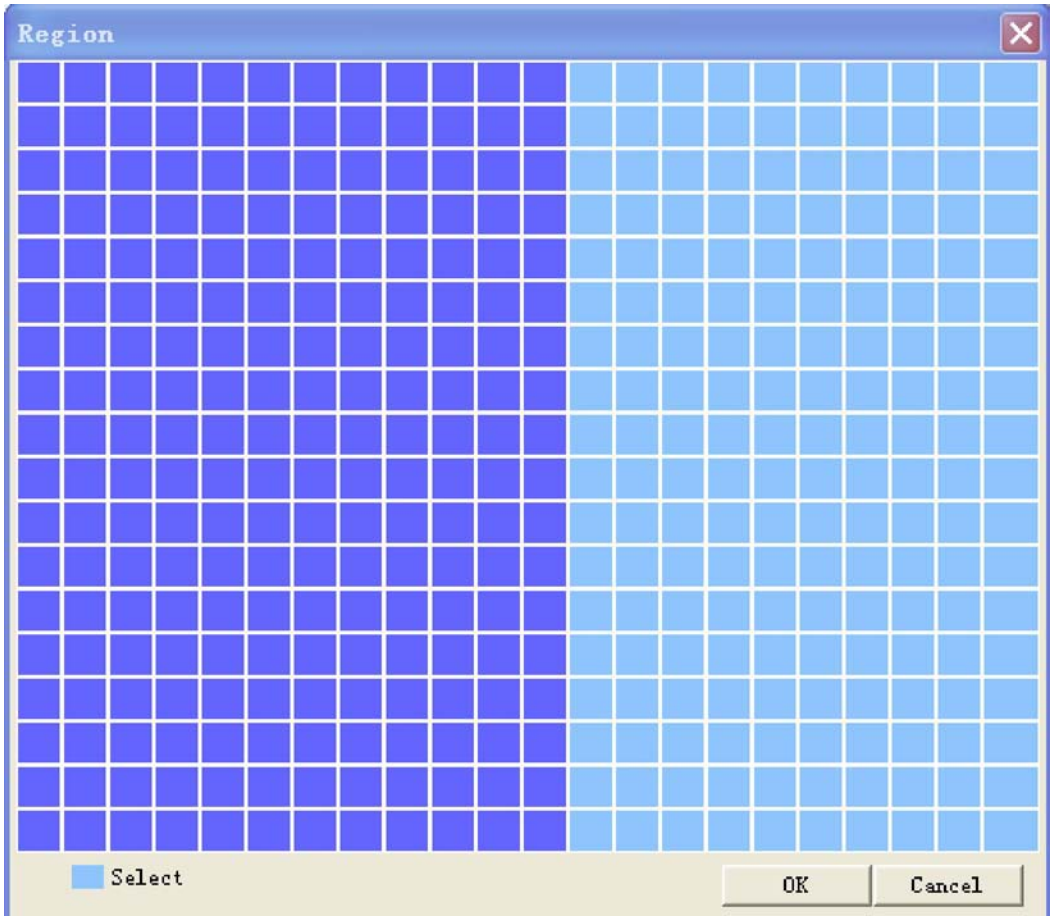


Picture 2.4 motion detect setting interface

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

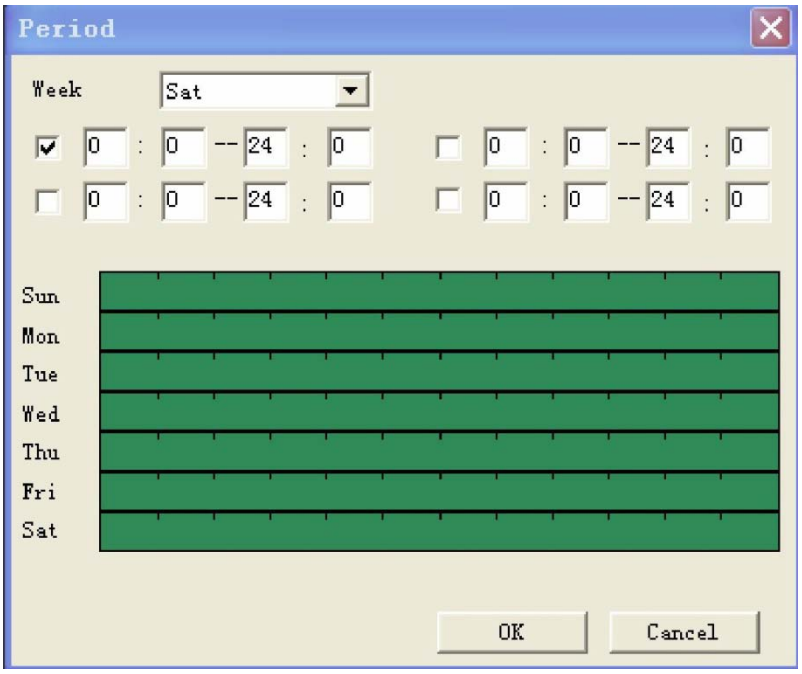
【Sensitivity】 based on sensitivity, can set 6 grades: Lowest Lower Middle High Higher Highest , the higher of sensitivity to the moving objects, the easier to sense the motion happens;

【Region】 Click Setting, enter the setting region of PAL22X18，light blue region is the guard area of motion detect, dark blue region is the unguarded area (show the monitor page), see Picture 2.5. press left button of mouse, pull it to set region. (default whole region chosen is monitor area)



Picture 2.5 region setting

【Period】 Trigger the motion detect signal in the set time section, see Picture 2.6. You can set according to week or set uniformly. Each day is divided into four time sections. tick ☑, mean setting is valid.



Picture 2.6 Time 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;

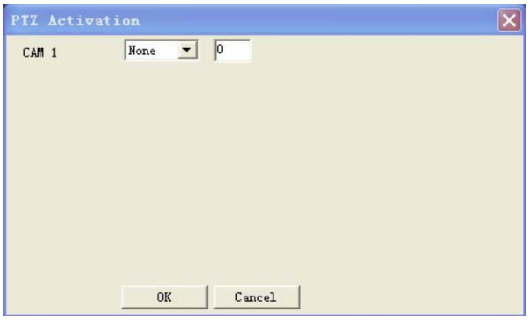
Remark: to link record, need to enable motion detect of related period at 【record setting】

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

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

【PTZ Linkage】 when alarm happens, link the PTZ of related setting channel, see Picture 2.7;

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



Picture 2.7 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.

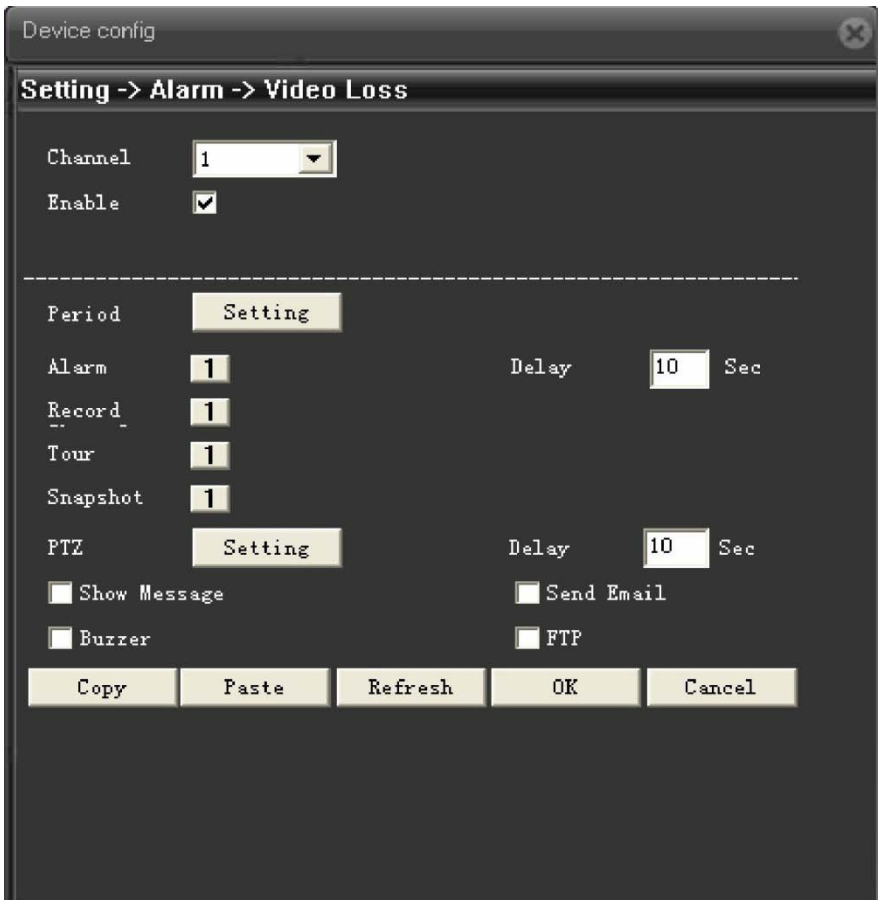
Remark: sending email, need to do related setting at 【Net service】.

【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】

2.3.2 Video Loss

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



Picture 2.8 Video lost

Setting detail: refer to chapter 2.3.1 motion detect.

2.3.3 Alarm Input

Connect with the alarming port with open and close set and smoke detector, it alarms and start linkage function when the system detect any motional signal.

Picture 2.9 Alarm Input

【Enable】 Means chosen, open alarm input function for setting.

【Type】Choose open or close according to alarming port style.

【Period】 The device only alarms during the setting time as Picture.2.6, you can set by week or one time setting for 4 time period , click at the setting period.

【Interval】The interval setting time 0—600s.

【Alarm Output】 The device start the alarming output port equipment while alarming;

【Delay】 For the alarming postpone for 10~300 S while setting alarm finish;

【Record Channel】 The system will send the video image through the setting channel while alarming.

Note: For linkage video, please preset in video setting for timing detect video

【Snapshot】The system will start snapshot signal through the setting channel while alarming.

Note: For linkage snapshot, please preset in video setting for igniting detect video

【PTZ Activation】 The system will start PTZ link through the setting channel while alarming. See picture 2.7;

Note: lease preset PTZ Link in 【system setting】 for 【PTZ control】, and set the presetting point, time circle and interval timing etc.

【Delay】the video postpone for 10~300 before stop while alarming;

【Send EMAIL】☑ means to send E-mail for informing user while alarming.

Note: For Send EMAIL, please make setting in 【internet service】。

【FTP 】☑ means to upload the video file or image to the designated place through the setting channel if choose video channel or snapshot channel while alarming.

Note: uploading FTP, Please make setting in 【Net service】

2.3.4 Alarm Output

Connect with alarming light or bell through the alarming device.

Picture 2.10 Alarm Output

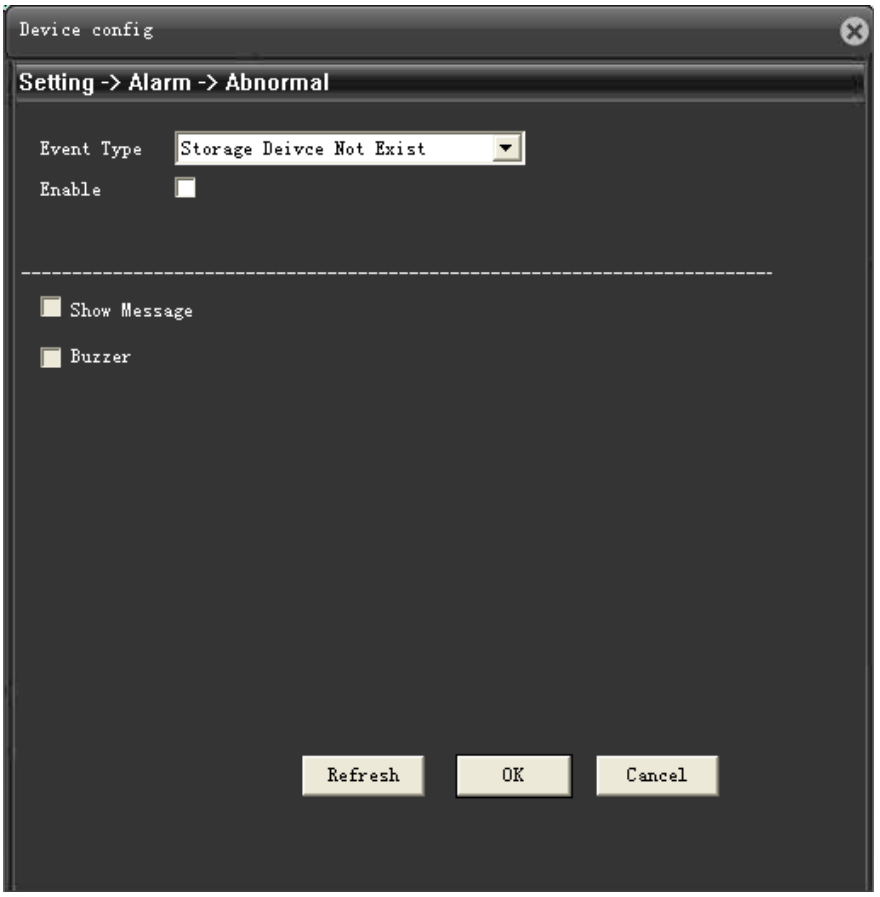
【Configuration】☑Means to realize the motion detect and alarming input, linkage output.

【Manual】☑ for alarming output.

【Stop】☑For stop present alarming output.

2.3.5 Abnormal

Analysis and check the device hardware and software, If abnormal, device will respond by message or Buzzer.



Picture 2.11 Abnormal

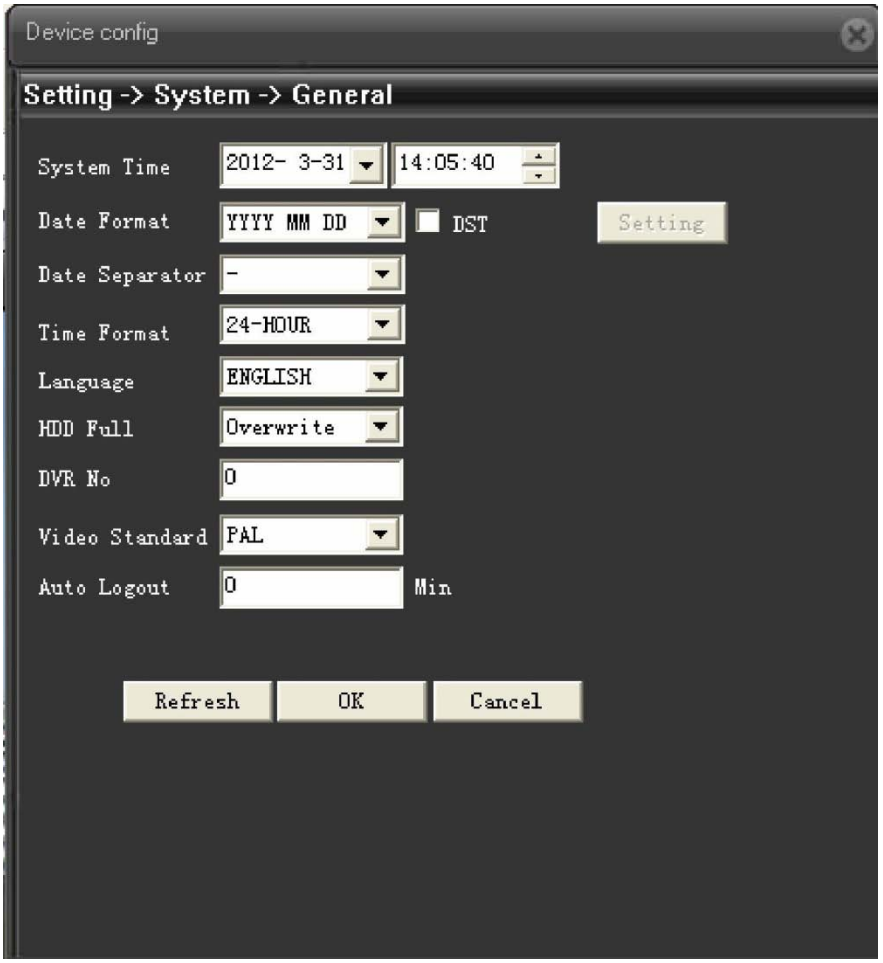
【Event Type】 Choose different abnormal by drop-Down list.

【Enable】 Selected Enable, open this function , it is able to use.

2.4 System

To set parameter of all kinds of functions, setting including: General, Encode, Network, Net service, GUI Display, RS232, Camera parameter.`

2.4.1 General



Picture 2.12 General

【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,

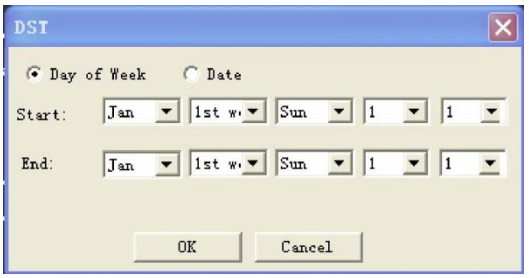
【Time Format】choose time format, including: 24-hour and 12 hour;

【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.

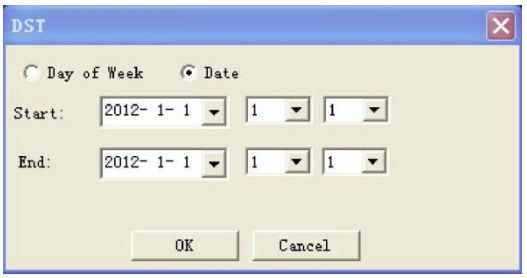
【HDD full】choose Stop record：means when the TF card is full, stop recording. Choose Over write: means when the TF card is full, keep on recording, but the most previous file will be replaced.

【Video standard】support PAL or NTSC;

【DST】Tick DST, then click 【setting】, will come out window as Picture 2.13, to set the star time and end time of summertime via week or date.



Picture 2.13 DST (Week) setting

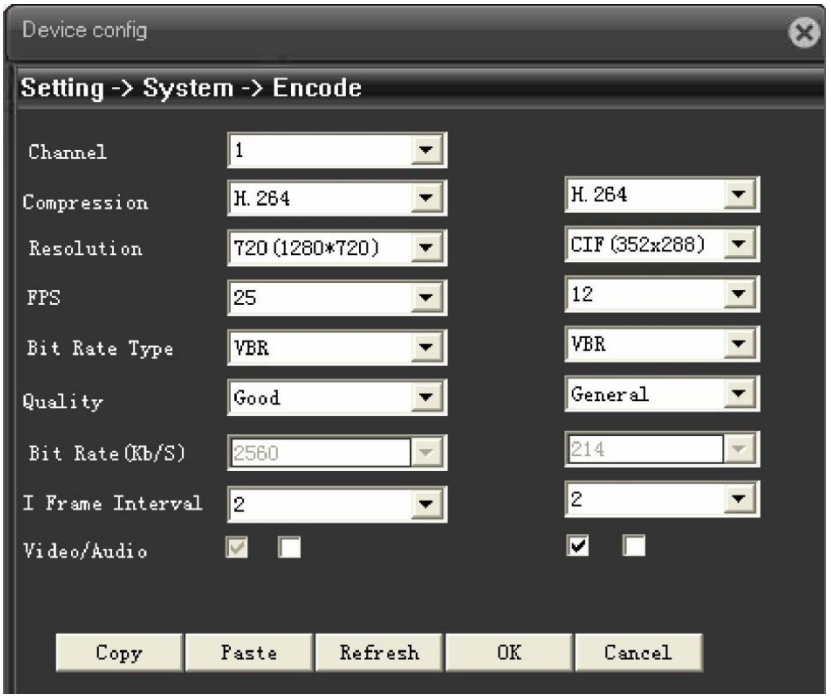


DST(Date) setting

2.4.2 Encode

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



Picture 2.14 Encode

【Compression】Standard H.264MP；

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

【FPS】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.

【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)

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

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

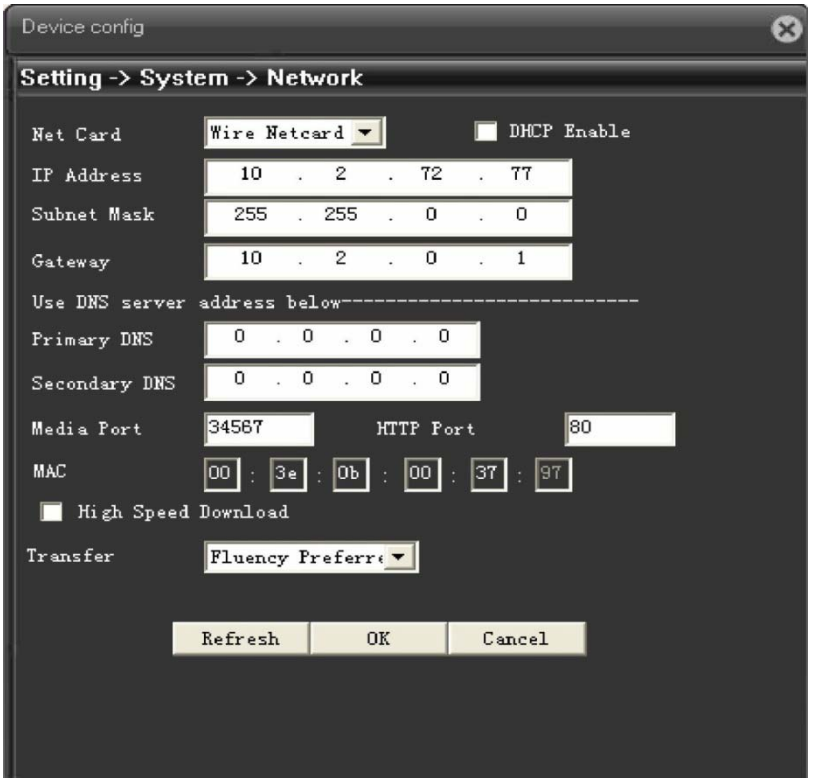
Extra stream setting:

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

1MP: PAL: 720P(1024~4096kbps) D1(512~2560kbps)
NTSC: 720P(1024~4096kbps) D1(512~2560kbps)
1 3MP: PAL: 960P(1024~5120kbps) 720P(1024~4096kbps)
NTSC: 960P(1024~5120kbps) 720P(1024~4096kbps)
2MP: PAL: 1080P(1024~7954kbps) 720P(1024~4096kbps)
NTSC: 1080P(1024~8192kbps) 720P(1024~4096kbps)

2.4.3 Network



Picture 2.15 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： 192.168.1.20；

【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；

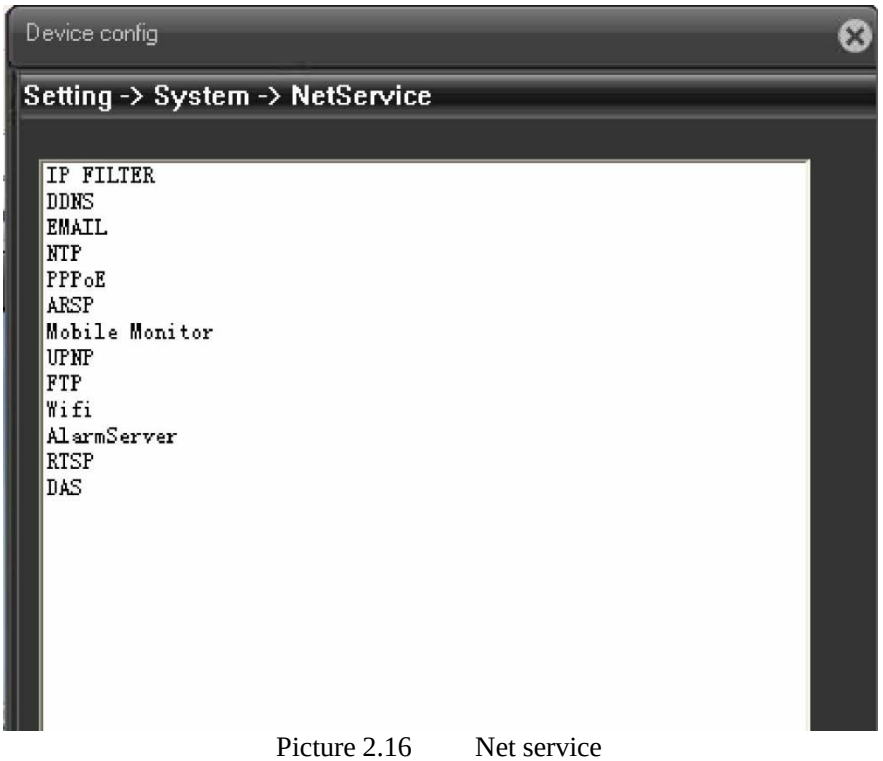
【high speed download】Network high speed download；

【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

2.4.4 Net service

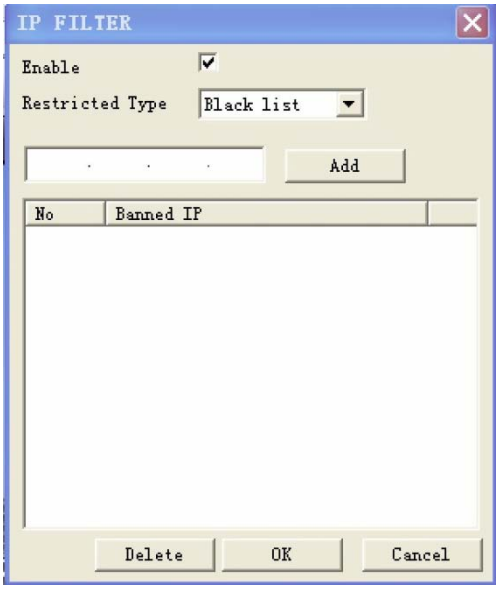
To configure advanced network function, choose any item and double click it to config the parameters.



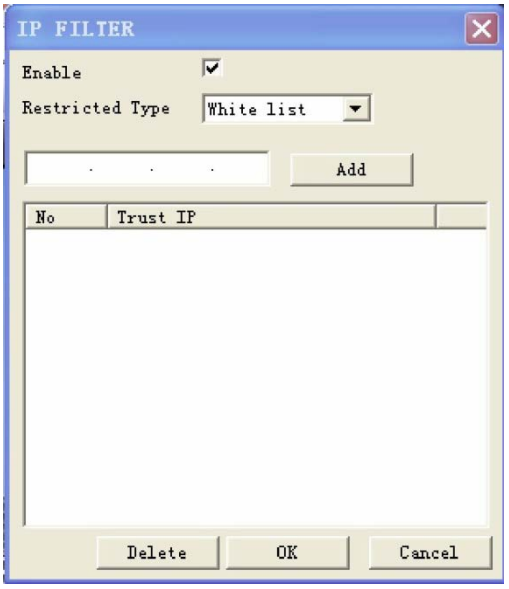
Picture 2.16 Net service

【IP FILTER】

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.

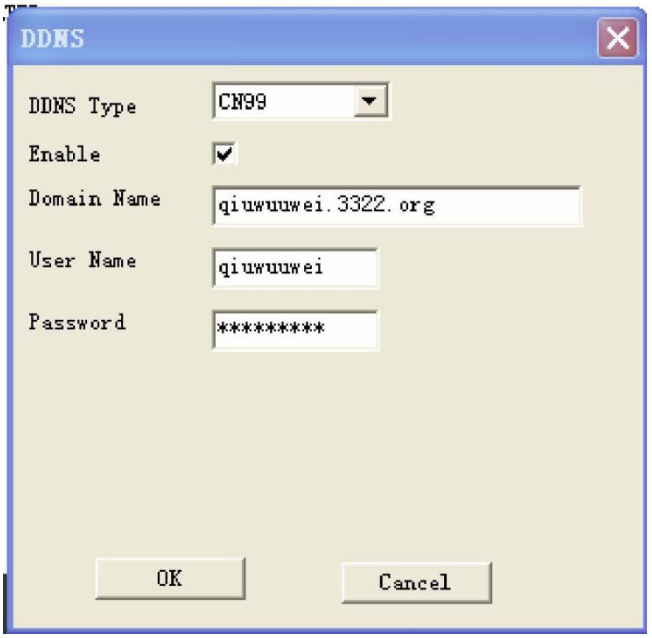


Picture 2.17 IP authority setting black list



Picture 2.18 IP authority setting white list

【DDNS】



Picture 2.19 DDNS setting

To analyze server via dynamic domain name, choose DDNS type

Domain name: Provide the domain name registered by DDNS;

Server domain name: the domain name that analyze server;

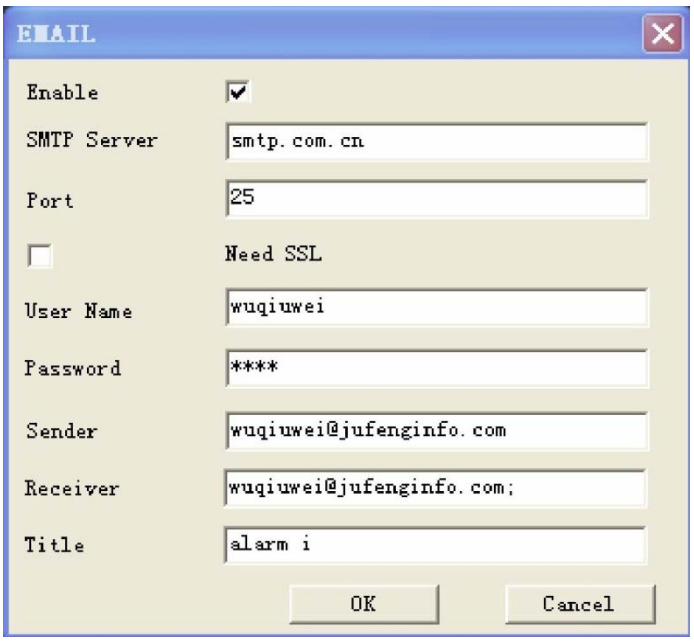
User name: Provide the account registered by DDNS.

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.

【EMAIL 】

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



Picture 2.20 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.

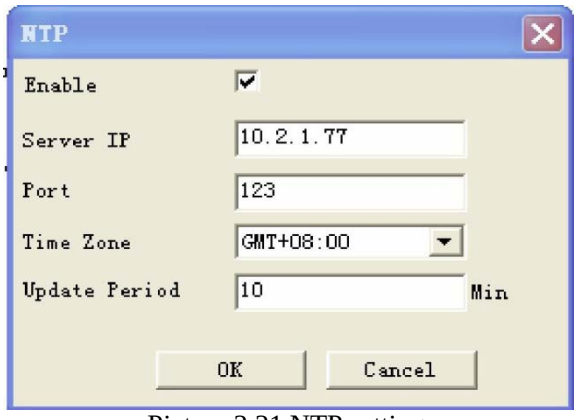
Password: Input the password corresponding to the user.

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

【NTP 】



Picture 2.21 NTP setting

Need to install NTP service at PC

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

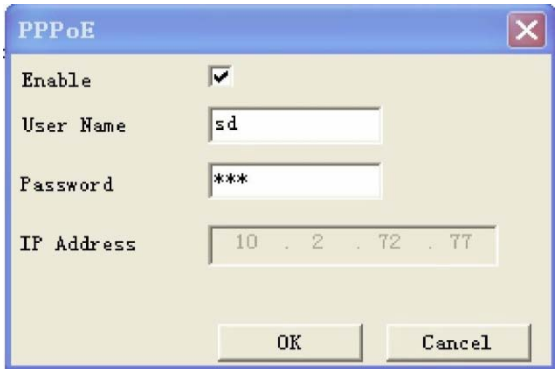
Server IP：input IP of PC that installed with NTP server

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 HawaiiGMT-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

【PPPOE 】



Picture 2.22 PPPOE setting

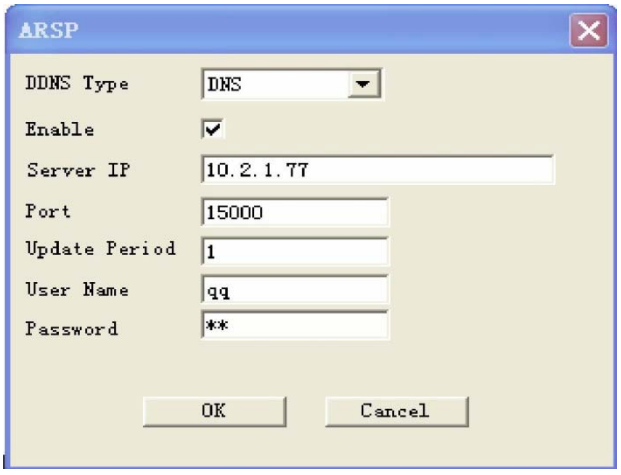
Enable：Tick  means chosen, enable it firstly, then the setting is valid

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.

【ARSP】

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



Picture 2.23 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

【Mobile Monitor】

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

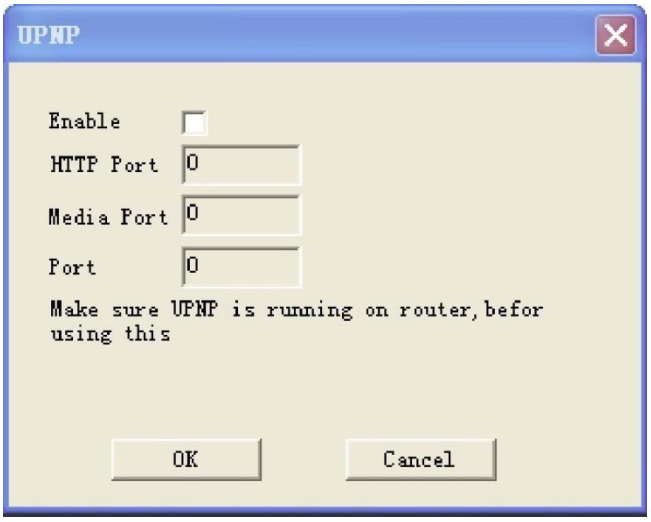
Picture 2.24 Mobile Monitor setting

【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.



Picture 2.25 UPNP setting

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

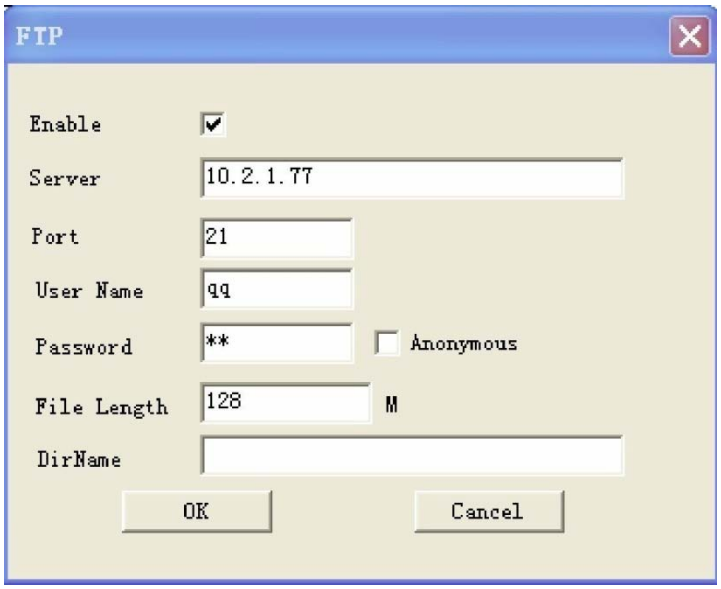
【HTTP】： Route will automatically distribute HTTP port for the device, when IE viewing, it need this port

【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.

【FTP 】

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



Picture 2.26 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.

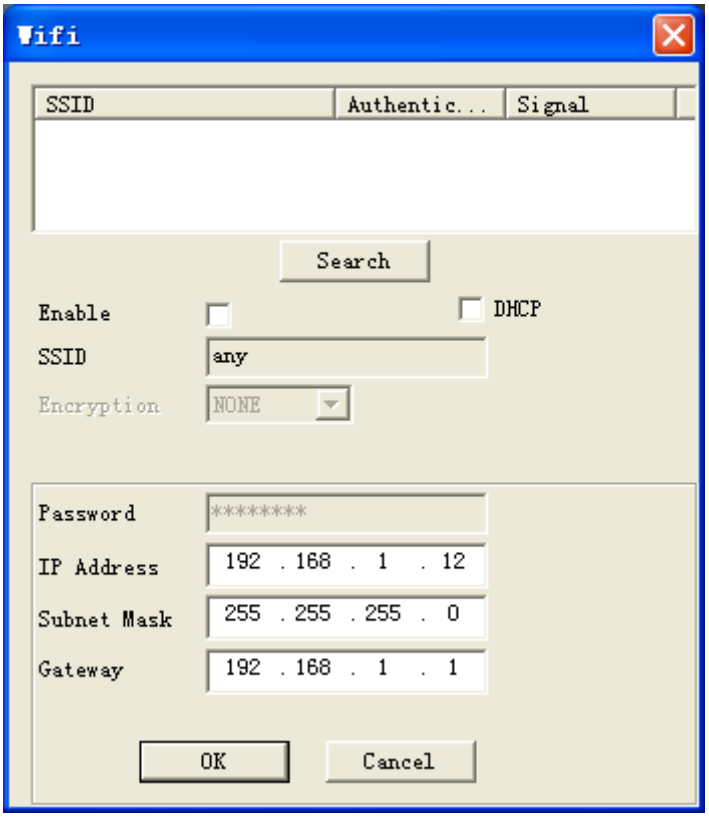
【Max File Length】Max length for upload files at every packed,default 128M

【Remote path】： the directory to upload file

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

【Wifi 】

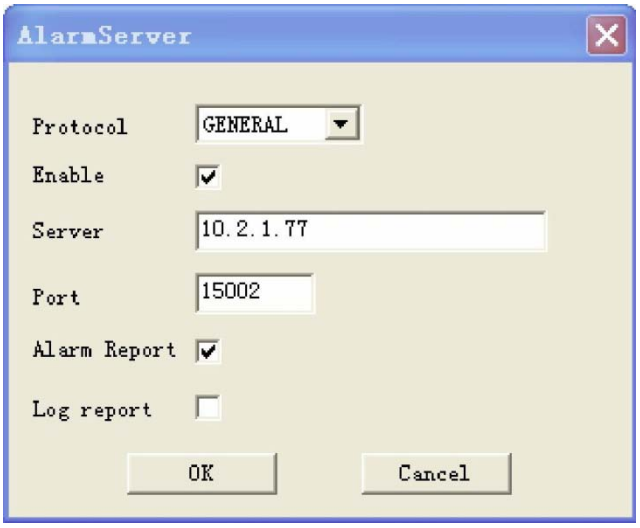
Selected “Enable” click ”search” to search WIFI router, choose WIFI name and fill the password, manual input IP address or auto search by DHCP, suggested to use DHCP.



Picture 2.27 Wifi setting

【Alarm Server】

When alarm happens, report alarm information to alarm server



Picture 2.28 Alarm Server setting

【Protocol】 type is GENERAL£»

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

【Server】 IP address of Alarm Server£»

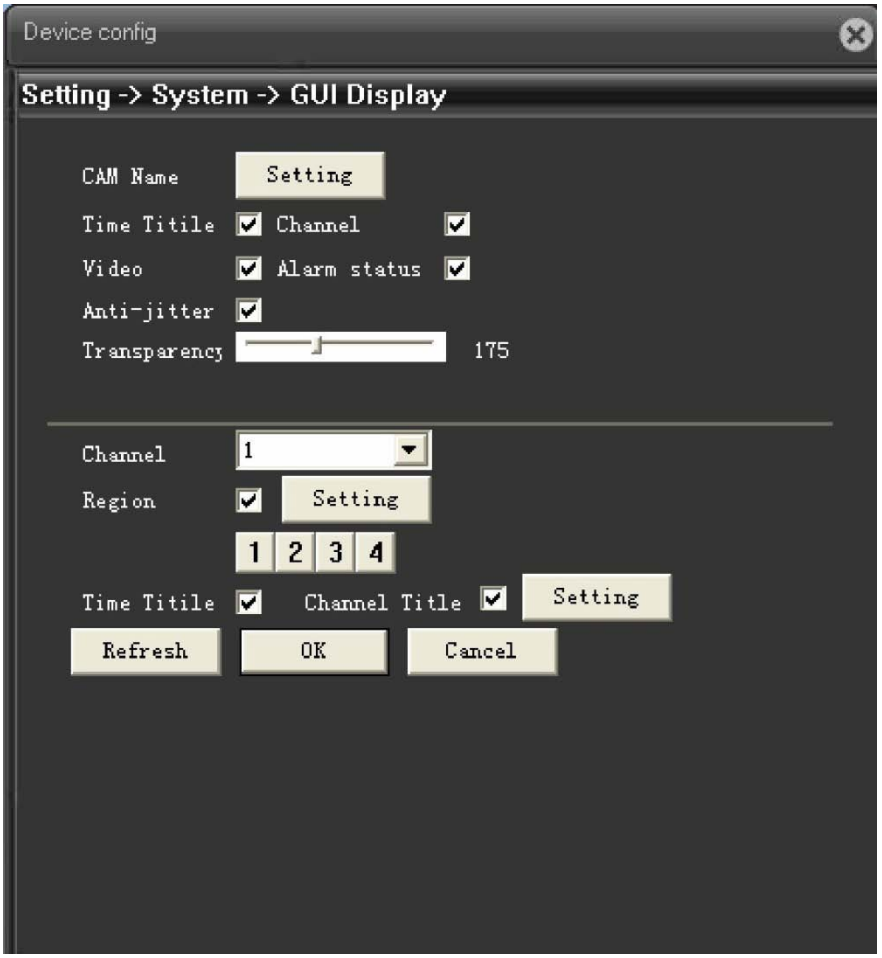
【Port】 No Port No. of device

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

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

2.4.5 GUI Display

At local preview interface including: Channel name, Time title, Channel title, Region cover



Picture 2.29 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

【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;

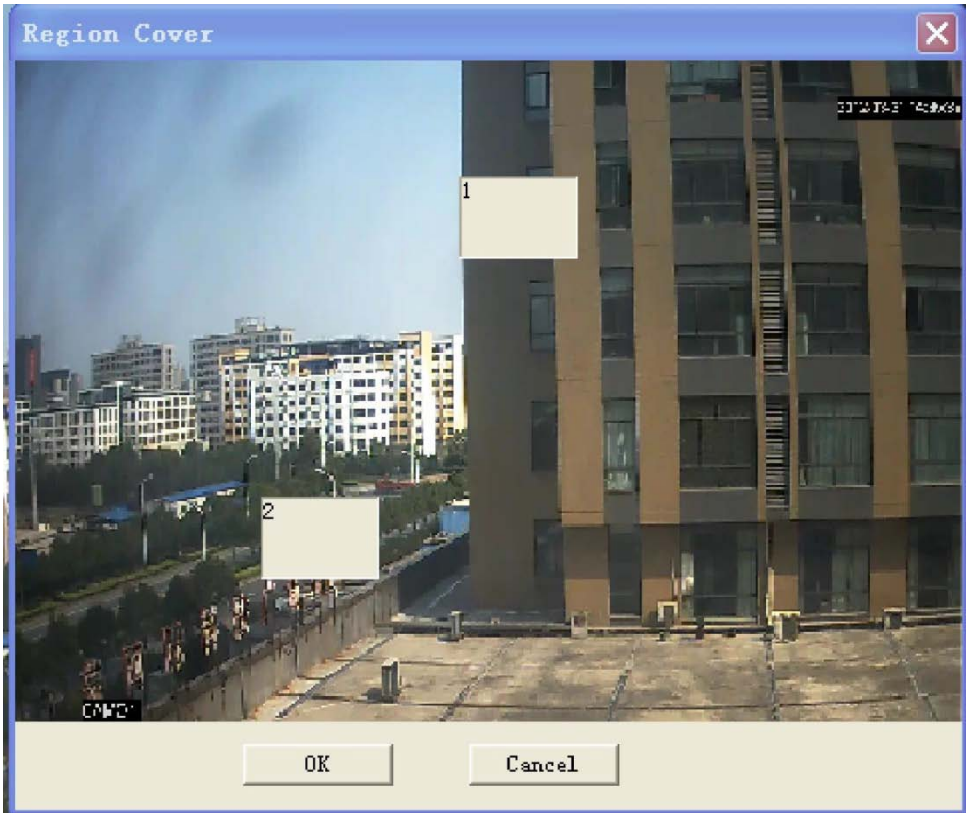
【Resolution】set resolution of monitor;

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

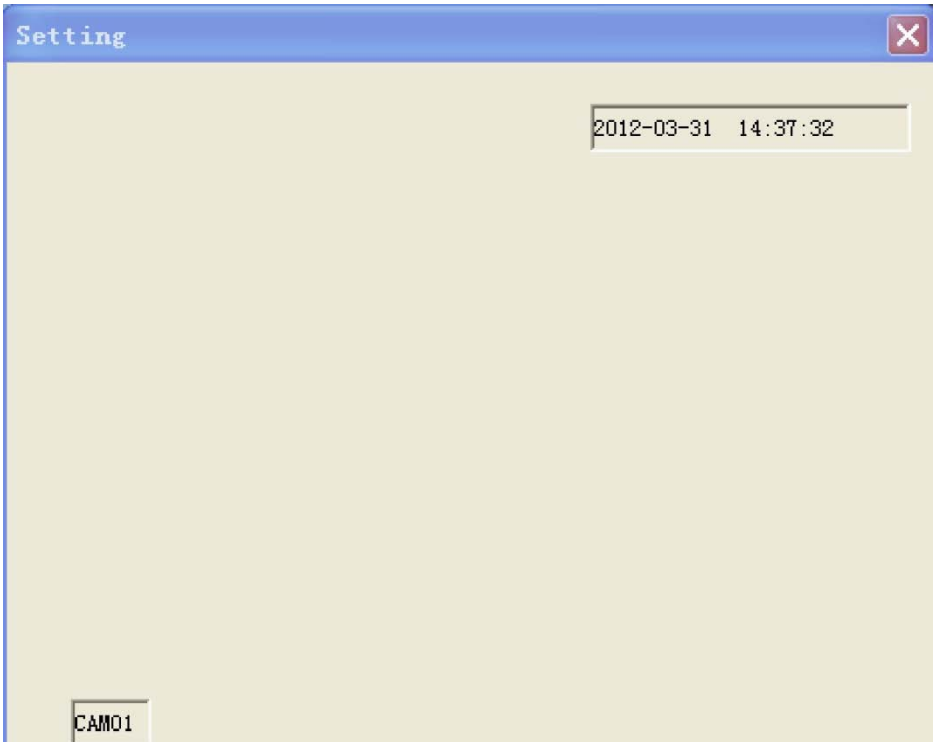
【Region Cover】tick , choose region cover quantity, then click setting

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

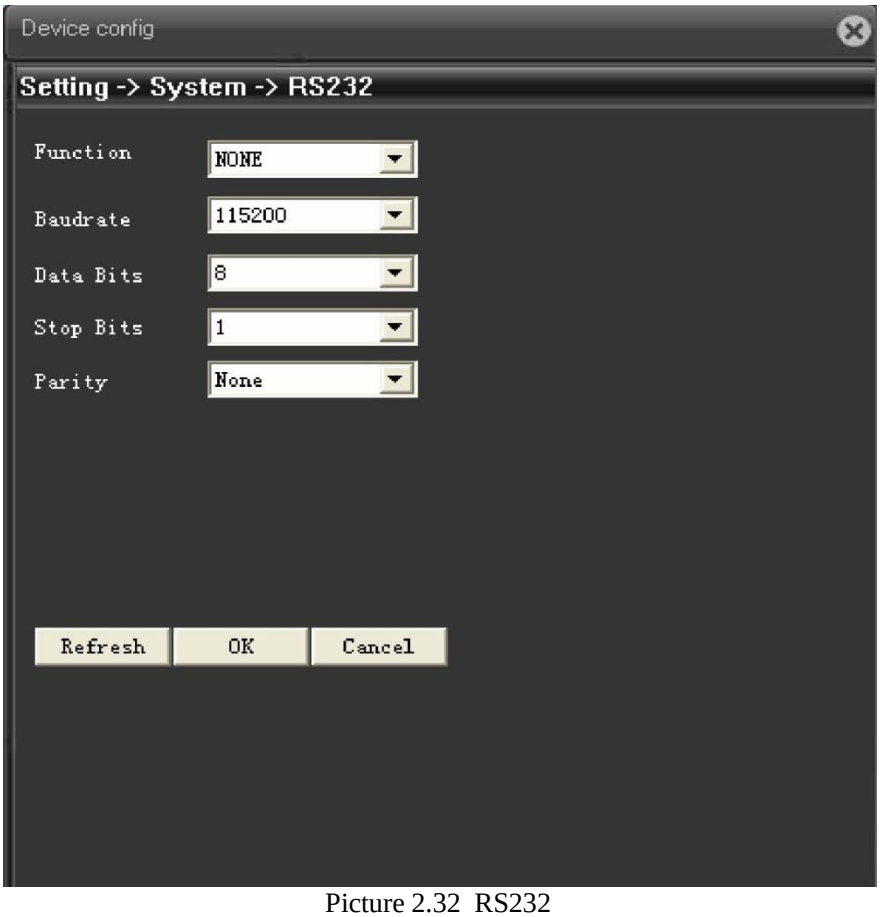


Picture 2.30 region cover setting



Picture 2.31 Channel and time title setting

2.4.6 RS232



Picture 2.32 RS232

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

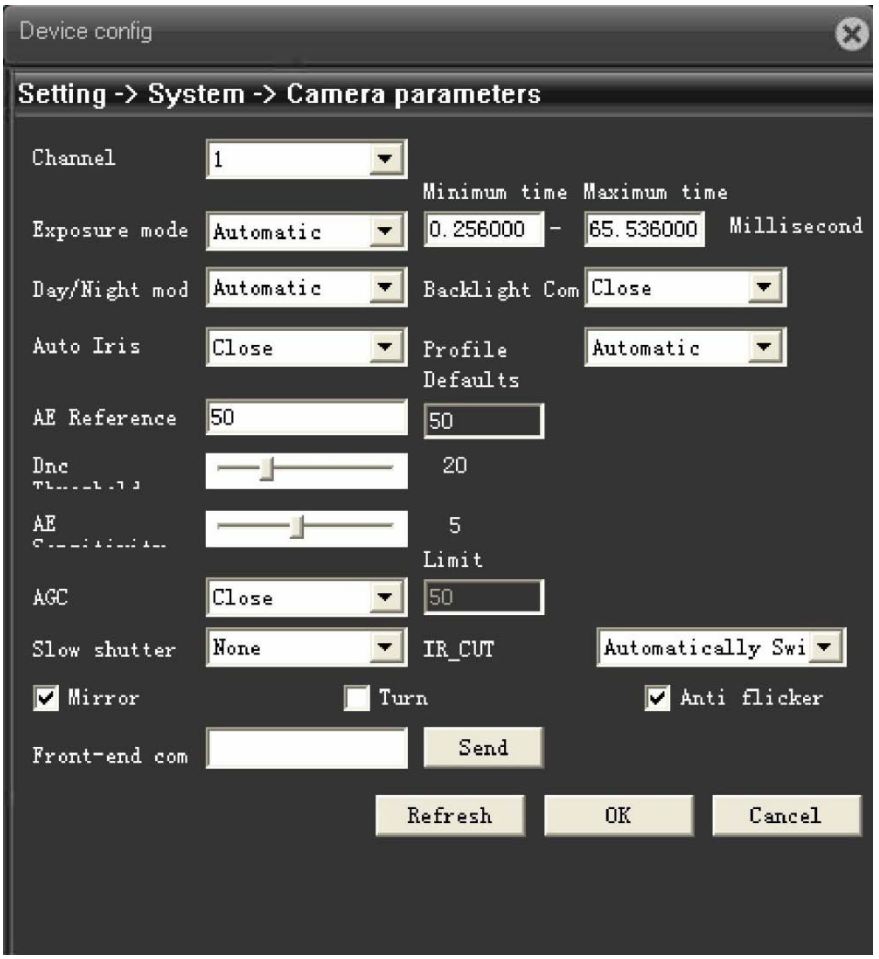
【Baud rate】Choose the corresponding baud rate length

【Data bits】Include 5-8 options.

【Stop bits】Include 2 options；

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

2.4.7 Camera parameter



Picture 2.33 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

2.5 Advanced

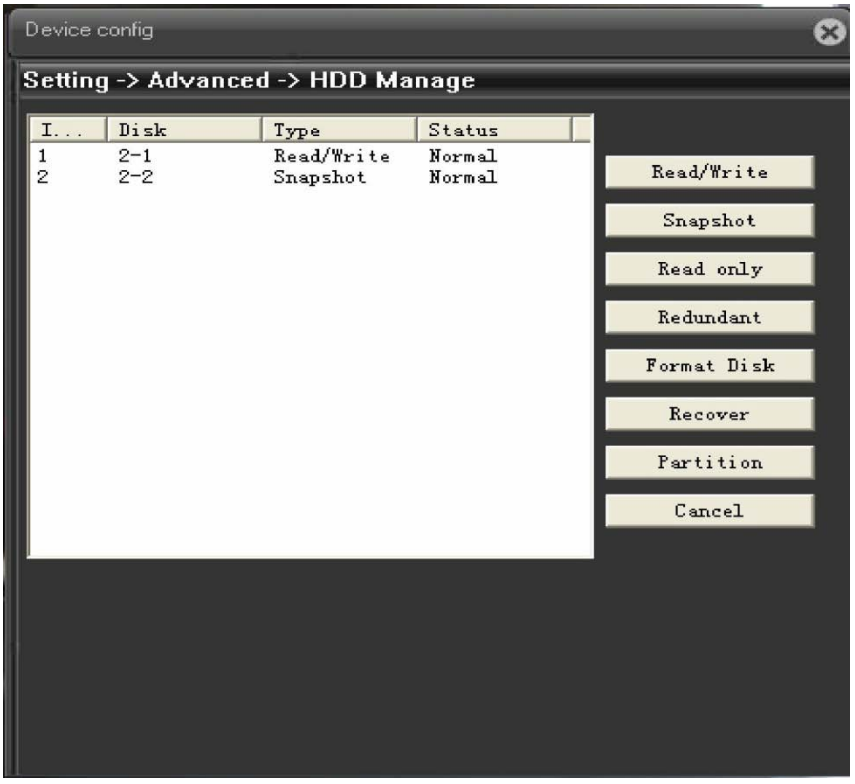
Advanced menu including: HDD Manage, Account, Auto Maintain, Default, Import Export, Reboot, Upgrade.

2.5.1 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



Picture 2.34 HDD Manage

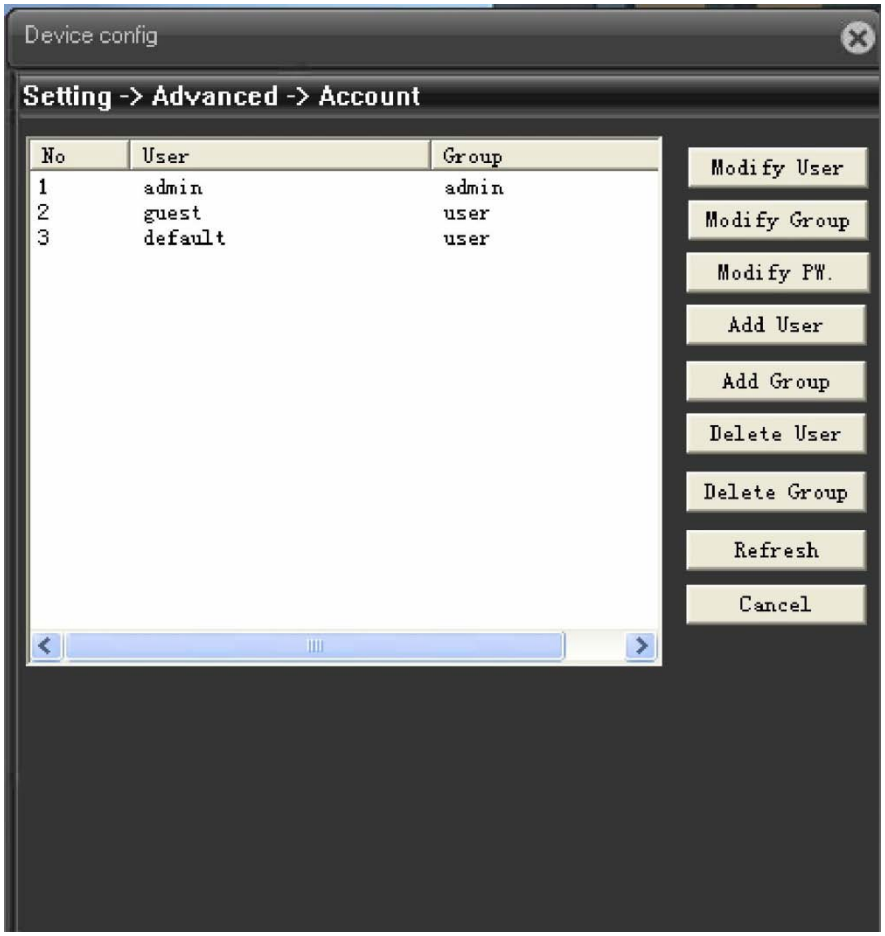
2.5.2 Account

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.



Picture 2.35 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,

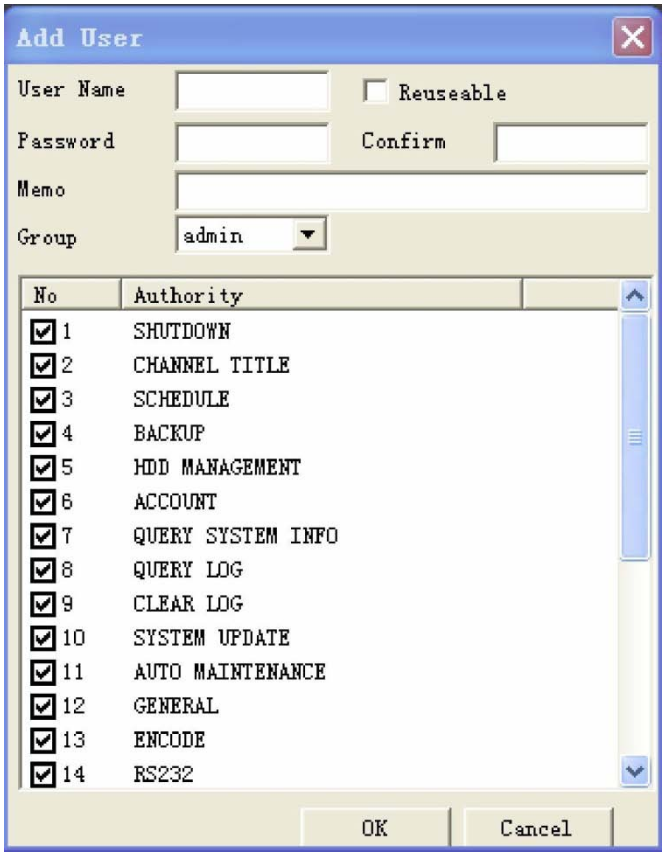
Note：The user who possess the user control authority can modify its own or other users password

Picture 2.36 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.

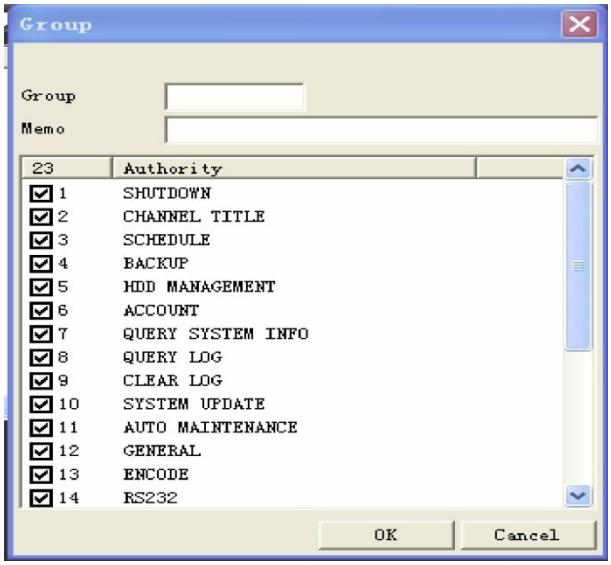
Once choose the team the user purview is the subclass of the team.

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



Picture 2.37 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.



Picture 2.38 add group

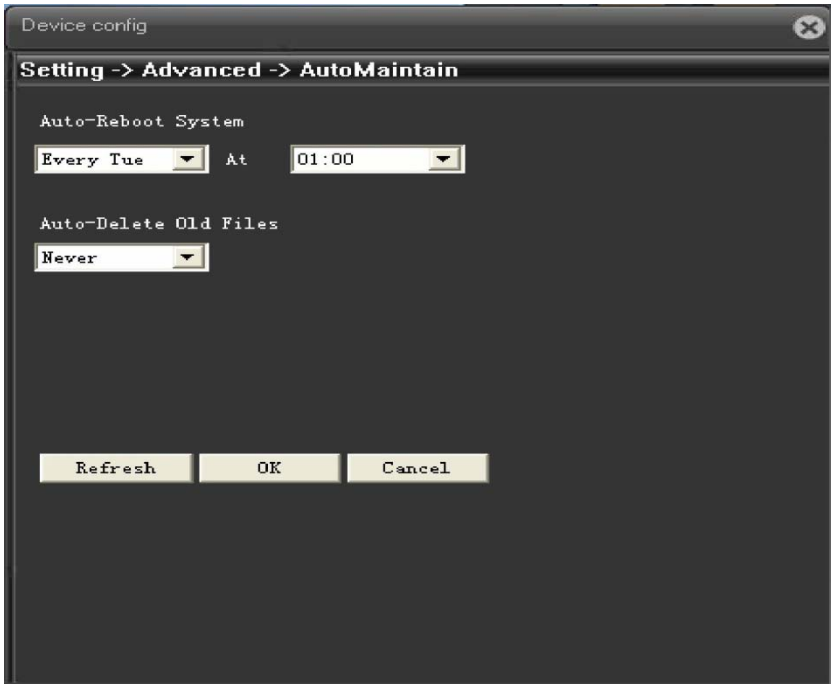
【Delete user】Delete the current user. Choose the user and click delete user button.

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

Picture 2.39 delete group

2.5.3 Auto Maintain

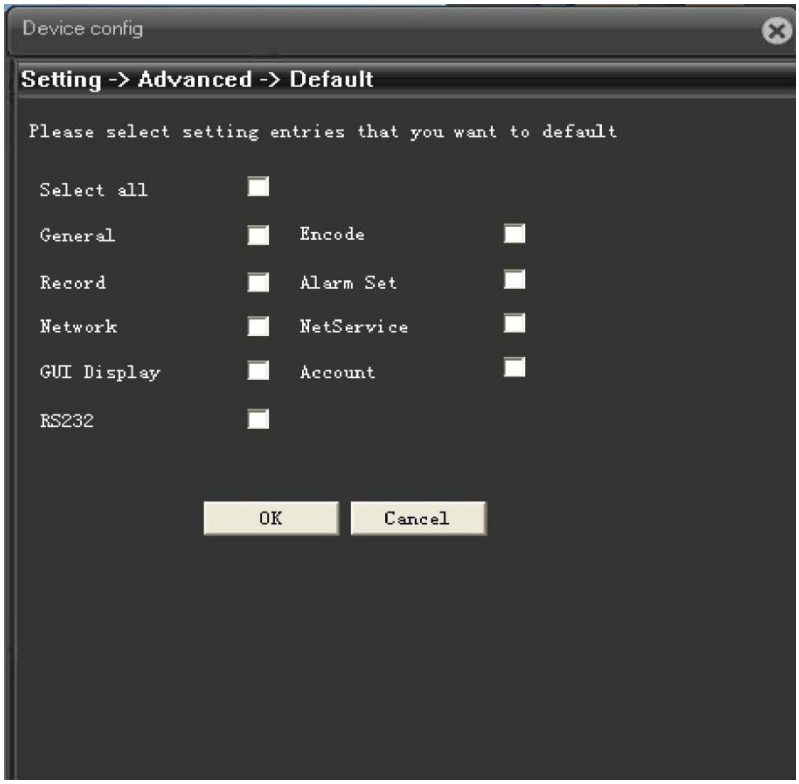
The user can set the auto reboot time and auto file deleting time limit.



Picture 2.40 Auto Maintain

2.5.4 Default

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



Picture 2.41 default

2.5.5 Import Export

Picture 2.42 Import Export

【Import Export】Setting Config Import, Congfig Export and Log Export by network IE.

2.5.6 Reboot

To do soft reboot of IP camera

2.5.7 Upgrade

Picture 2.43 system upgrade

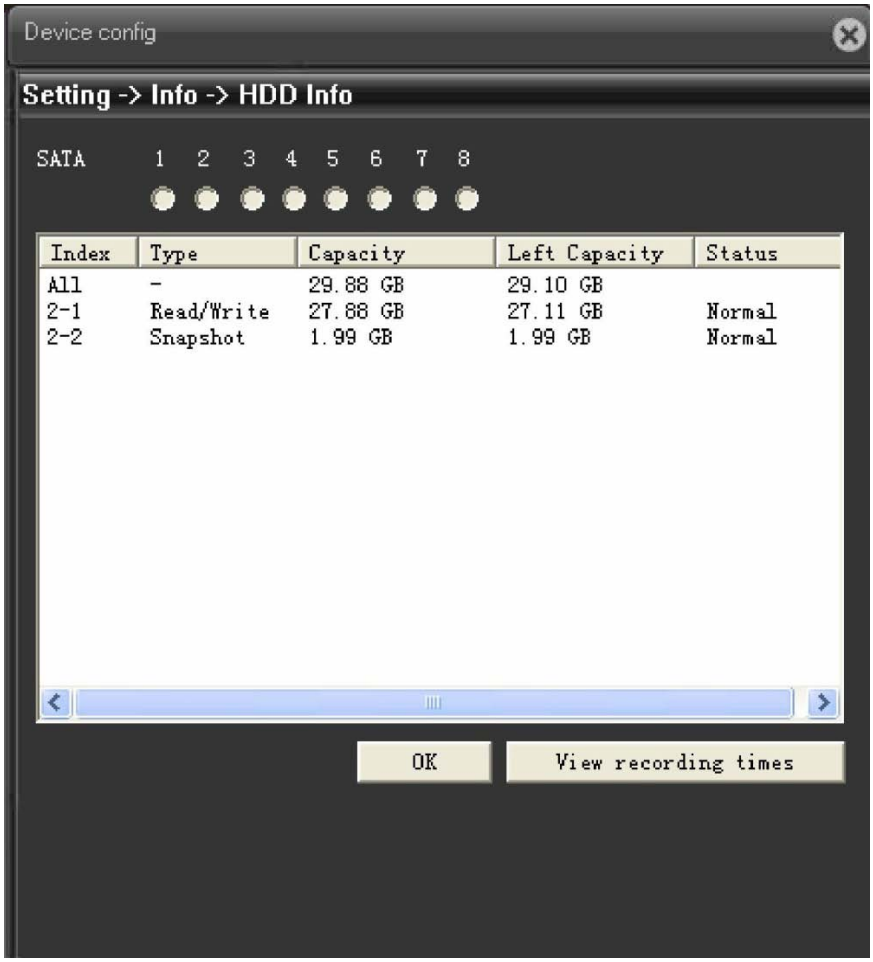
【upgrade file】to select upgrade file via IE or client software to do upgrading.

2.6 Info

Shows information of device, including: HDD Info, LOG, Version.

2.6.1 HDD Info

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



Picture 2.44 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.

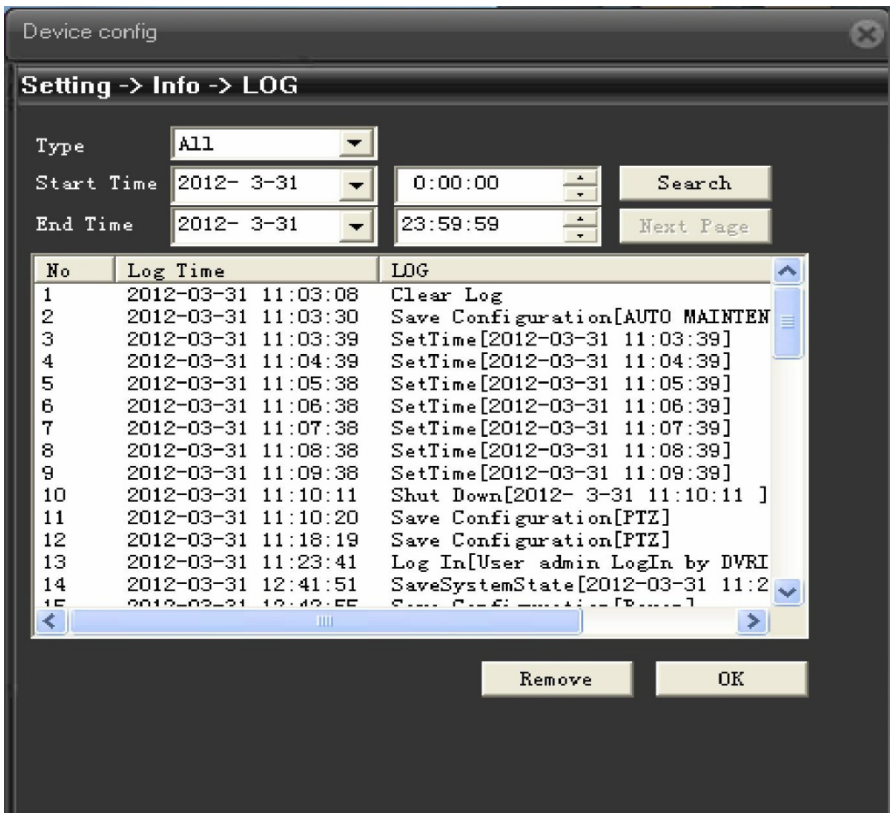
* behind serial number means the current working disk such as 1*. If the corresponding disk is damaged, the information will show "？".

2.6.2 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.



Picture 2.45 LOG Info

2.6.3 Version

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

Picture 2.46 版本信息

ppendix 1.TF card capacity calculation

First time install IP Camera, make sure the TF card was installed

1.TF card capacity

To make sure normally realize the function, suggest to use TF card minimum 4G, and Maximum 32G, for stability, we suggest to Kinston 16G TF card。

2.Chooing total capacity

TF card capacity calculate formula as below：

TF card capacity（M）= Require time（hour）* capacity each hour（M/hour）

Then we can get recording time formula as below:：

Recording time（hour）= $\frac{\text{TF card total capacity}}{\text{Capacity each hour （M/hour）}}$

IP camera is using MPEG4/H.264 compression, the dynamic scope is quite large itself,so calculate capacity need base on bit rate value to statics capacity of each hour each channel.