IP camera user manual

Please read user manual carefully before using

Attention

Announcement

The manual is for general use,function will vary according to models, please adhere to original products in case of any mistakes.
The manual is for operating reference, user can find information about related function, commands, detailed menu and operation guide.
It may include slightly inaccurate in technology , discrepancy in

function/operation or printer error.
Content may be modified and updated based on new function.

Safeguard

The content is to help client use products correctly, avoid of loss of property. Please read it carefully and keep it property for reference for the future

As follows, preventive measures include Warning and Attention.

Warning	To warn user to prevent the potential risk of death or serious injury
Attention	To remind user to prevent the potential risk of injury or property loss

Warning: Obey national or local area electrical safety regulation in the process of installing or using.

1.Please use adapter from legal supplier.

2.Do not connect too many IP cameras to one power supply(it may cause fire because of overloading of power supply).

3.Do not operate with power. Please disconnect power when wiring or tear open outfit.

4.Please fix IPC firmly when installing on wall or ceiling.

5.Please turn off power and unplug power cord when it appears smoking,stink or noising, and contact distributor or service center.

6.Do not take part or modify device if it doesn't work well. (Please kindly note that company is not liable to the problem caused by unauthorized modification or maintenance)

Attention

Please don't let objects fall down to the device or vibrate it, put it away from disturbance of magnetic field. Avoid of installing it in shaking or vulnerable places.

1.Please don't aim at strong light like sunshine or incandescent lamp, otherwise it will damage sensor.

2.Indoor camera cannot be installed in humid or raining place.

3.Please don't put device in location of direct sunlight or poor ventilation, or near to heat source like heater or heating installation.

4.Please don't set the device in dusty, humid or over high temperature environment.

5.Please wipe off the dust on the shell with a soft dry cloth when

cleaning. User can use neutral detergent instead of alkaline detergent when it's not easy to remove the dirt. Please use dedicated lens paper to sweep away the dust on cameras.

content

1 Product Description

1.1 System Requirement

1)Operation System: Microsoft Windows XP/2003/Vista/WIN7.0
2)Browser: Microsoft Internet Explorer 8.0 above
3)Hardware requirement: PU:Intel Core 2 Duo E4600 / 2.4 GHz or above
Internal Storage: 1GB or above
Graphics card: Nvidia GeForce 8600 GT or above
Network card: 10/100Mbps

1.2 Product Description

With the rapid development of our society, increasing requirement towards security product has been aroused in, and communication technology has greatly pushed forward the progress of security industry.
HD IP IR camera is a new generation of network video monitoring terminal, with clear CMOS sensor and high-performance IP processor chip, which secures full frame rate and HD liquidity sport video. The camera supports video coding compression and data transportation, with which users can get access to the real time remote image and voice. At night time, camera can give out the

infrared light which cannot be seen by human eyes. The device have been widely used in the field like financial, telecommunication, government, school, hospital, airport, factory, hotel and museums, etc.

1.3 Product Feature

- ARM926EJ video processor, embedded Linux operating system, embedded RTOS. Low bit rate, low power consumption, stable and reliable. Pure compression, watchdog function.
- H.264 video compression leads to high compression rate with good image quality; support dynamic code rate control.
- Seal structure design with good heat dissipation, IP66.
- Support dual-stream output with 1080P/720P/D1/CIF/QCIF.
- Short delay time and HD smooth liquidity video.
- ROI video compression technology to secures high-performance 3D digital noise reduction function and edge enhancement function.
- Main stream: 1920*1080,1280*960,1280*720; 720*576; sub-stream 720*576（D1）, 640*480(VGA), 352*288（CIF）, 176*144(QVGA).
- One RJ45 Ethernet port with 10/100M self-adjustable, support HTTP/RTSP/DHCP etc network protocol.
- H.246 High Profile encoding to support max resolution 2 million pixels(1920*1080), 1.3 million pixels(1280*960),1.0 million pixel(1280*720).
- Support dual-stream, code stream 32kbps-8Mbps can be adjusted, frame rate 1-25fps can be adjusted.
- Dot infrared light sets support maximum visual distance range up to 50M.
- ICR auto change, true day/night monitoring.
- Support auto digital shutter, adapt to different monitoring environment;
- Multiple function: web support basic and digest certification, anonymity visiting, mirror image, move detection, manual recording, alarm recording.
- Support ONVIF and GB28181.
- DC12V power supply input.

1.4 Hardware Description

series 3 device cable

Num	Description	Function
1	Audio output	connect audio output device
2	Audio intput	connect audio input device
3	12V/2A power supply input port	Supply power
4	RJ45 network port	network port 10/100 self-adaptable Ethernet port

picture 1-2

series 1 standard device integrated cable

Num	Description	Function
1	power port	Connect 12V/2A power supply
2	network port	network port 10/100 self-adaptable Ethernet port

1.5 Important Safeguards

- During the course of transportation and storage, the product should be avoided from incorrect operations such as heavy pressing, strong vibration, soaking etc, which may cause damage to the unit.
- Please place unit in ventilated location;
- The product should be avoided form over high temperature;
- Signal cable should keep away from high voltage cable;
- Please set device far away from strong thunder and electronic field.
- The product should follow all national and electrical standards

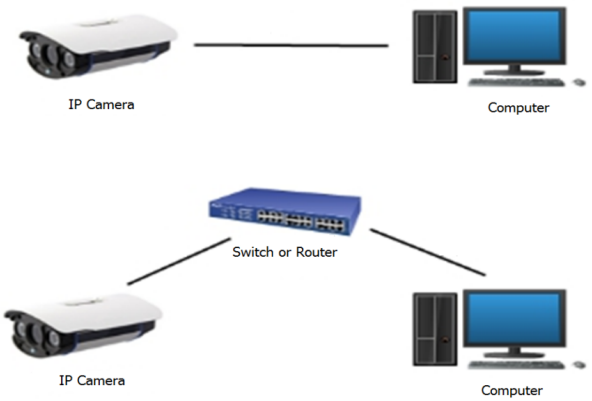
for safe equipotential ground connection.

- please set device in clean environment in case of dusty pollution.
- Do not let any foreign objects or liquid infiltrate into the unit, which may damage the machine.
- Please power off before cleaning unit with dry cloth. Do not use chemicals and aerosol to avoid damage;
- Please wore static-proof wrist strap when installing product.
- When mechanical problems arise, do not be in a haste to do any repairing, please refer to the user manual or qualified professionals to find the trouble. All servicing must be done by authorized person.

2 Connect Mode

2.1 LAN Connection

Connect IP camera to computer with net cable or by switch/ router.



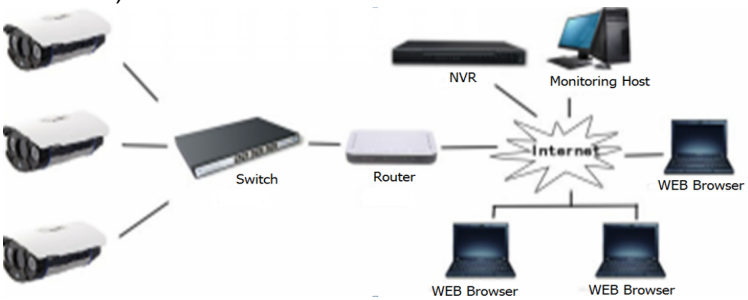
picture 2-1 LAN connecting

Tips: please make sure the IP address of computer and IP camera are in a same segment in case of network disconnection. The factory default IP address of IPC is 192.168.1.217, please modify the computer's to 192.168.1.XX(XX means any arbitrary value from 2 to 254). Ensure PC's IP address is different from IP camera's.

2.2 Network Connection

There are two ways to connect IPC to network

- Through static state IP address(need to apply from ISP operator)
- Through dynamic IP address(auto get it by DHCP or dial by PPPOE).



picture 2-2 network connecting

1)Through static IP address: it comes to two kinds of situation, with router and without router. For the former, set IP address which is applying from ISP operator as router's, make port mapping in router, user can log in camera by inputting static IP address in browser's

2)address bar. For the later, set the IP address applying from ISP operator as camera's, user can remote log in camera by inputting static IP address in browser's address bar.

A static IP can remote log in multiple units with router and log in only one device without it.

3)Through dynamic IP address: it comes to two situation. With and without router. As IP address which is auto distributed by DHCP change frequently is not convenient to log in unit by using IP address directly. Not recommend to use it.

3 User Guide

3.1 Device Log In

3.1.1 Log In Interface

First connect camera by LAN connection, open IE, input default IP address:192.168.1.217, click Enter. There will show log in interface as follow picture. User can search device by IPCamTool if they are not sure about the camera's IP address.

Initial state

default address	192.168.1.217		
user name	admin	operator	user
password	admin	operator	user

Attention: anyone who log in device by using default user name and password will have the same operating authorization which equal to administrator, so we suggest user modify or delete unnecessary user name and password after logging in for the first time to ensure the system' s safety.

- Click ENGLISH to choose Chinese or English interface.
- When the device is used for the first time,please download and install OCX widget before logging in. Process is as follows, click DownloadOCX in IE log in interface, close browse client after completing downloading, install OCX widget, open IE browse client again to register device to view the video.

User can enter into video preview interface as follows after logging in.

3.2 Main Interface

3.2.1 Toolbar Description

Attention: no audio and talkback function for standard version.

play setting,adjust video fluency and modify connect protocol type.

record, save the real time video & audio to local PC.

 snap, save the image to the local PC. (the default path is C:\IP Camera\,user can modify it in local set).

 Talk back: users can talk back to controllers at real time.

 Audio monitoring: monitor audio collected by external sound pick-up or inputted by external audio cable from front end.

 Alarm status: show the present alarm status.

 Amplification: Amplify the area which users chosen.

 Full screen: video become full screen. Press ESC to quit.

3.2.2 Video Image Format Description

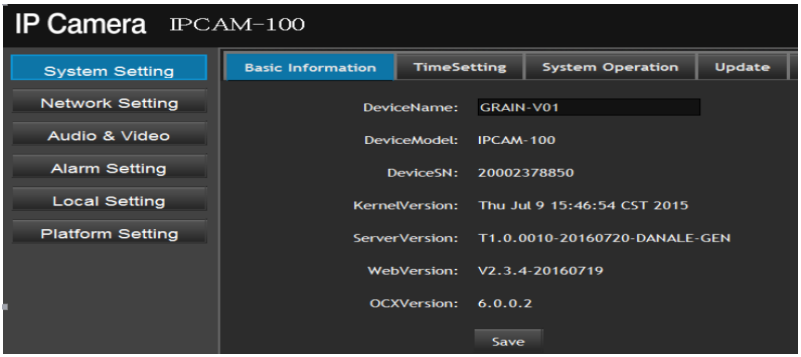
Device support dual stream preview.
Main stream : 1080P, 960P, 720P, D1, VGA,
Sub-stream: D1,VGA,CIF,QVGA.
Generally, 1080P, 960P, 720P, D1 are applied to LAN network, CIF is used for WAN network, QVGA is applicable to mobile phone network. User can choose related format according to demands.

3.3 Parameter Setting

3.3.1 System Setting

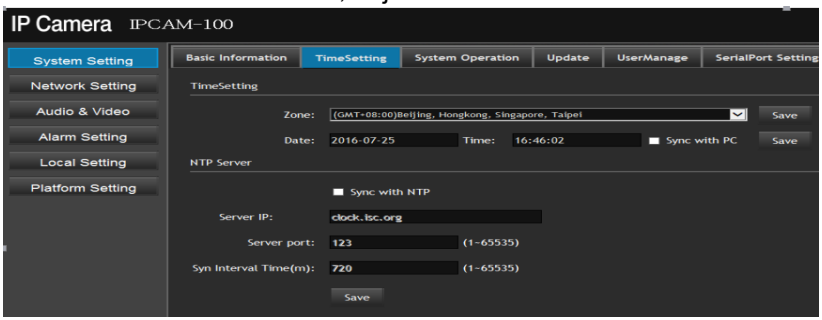
3.3.1.1 Basic Information

Basic information include [DeviceName], [DeviceModel], [DeviceSN], [KernelVersion], [ServerVision], [WebVision], [OXCVision].



3.3.1.2 TimeSetting

Users can select time zone, adjust date and time.

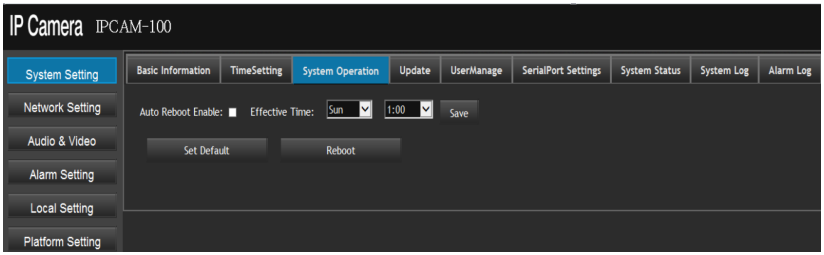


1.Zone setting: choose the local time zone, click [save].
2.Date setting: date can be matched with PC by selecting [Sync with PC] or modified manually, then click [save].
Tip: Manual setting won't be used if device's time is set to sync with PC.
3.NTP setting: choose [Sync with NTP] , input server IP, server port, sync interval time , click [save], then system time will be matched with internet time server(please ensure unit connect internet normally).

3.3.1.3 System Operation

In System Operation, [Auto Reboot Enable], [Reboot] ,[Reboot], [Set

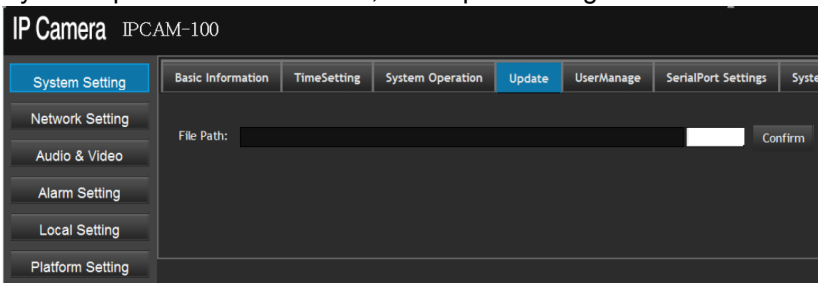
Default] for optional.



- [Auto Reboot Enable]: user can set auto restart time. Steps as follows,click [Auto Reboot Enable], set [Effective Time], time could be everyday or someday of a week, click [Save].
- [Reboot]: restart machine manually.
- [Set Default]: Default all the setting.

3.3.1.4 Update

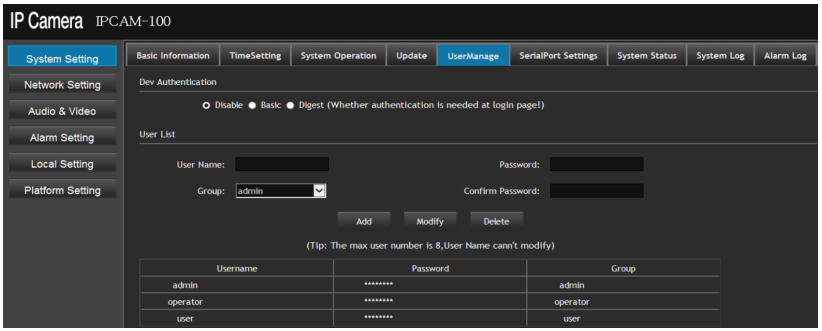
Software can be upgraded to latest version as following steps.
System update: click left button, select path of target file and confirm.



warning: do not cut off the power supply or operate device when upgrading.

3.3.1.5 UserManage

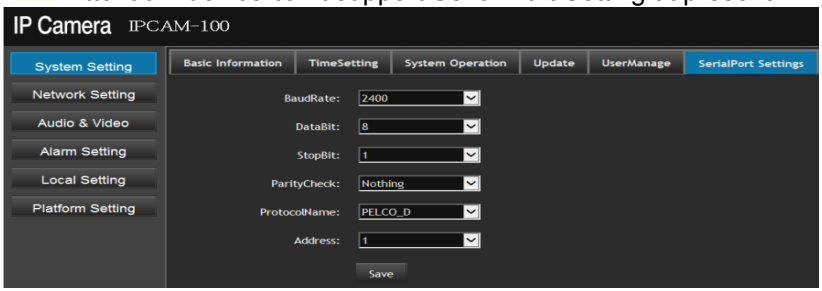
[UserManage] is used for device authentication, adding, modifying, deleting users.



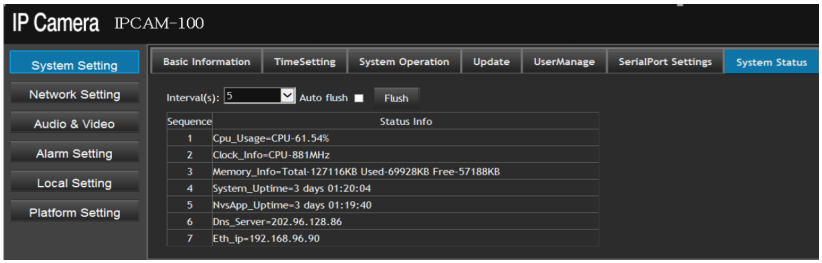
- [Dev Authentication]
- [Disable]: no need user name and password to log in.
- [Basic]: need right user name and password to log in.
- [Digest]: need right user name and password to log in, higher safety.
- [User List]: add, modify, delete user. 8 users maximum ,User name must be consist of numbers or letters and no more than 31 characters, password must be numbers or letters and length is from 4~8 characters.

3.3.1.6 SerialPort Settings

⚠ Attention: device can't support Serial Port Setting at present.



3.3.1.7 System Status

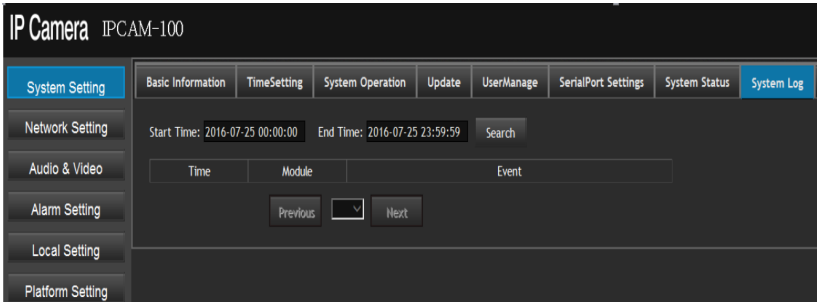


User can refresh page manually, or input interval time and click auto flush to auto refresh the system status.

N.1: CUP using status.
IN.2: clock information of CUP.
IN.3: status of system memory.
IN.4: using time of machine after power on.
IN.5: standing time of system start.
IN.6: DNS sever information.
IN.7: device's IP address

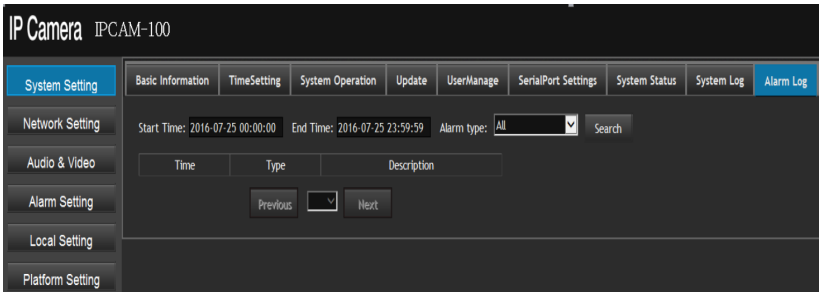
3.3.1.8 System Log

Select start time and end time, click [Search] to search system restarting and upgrading information.



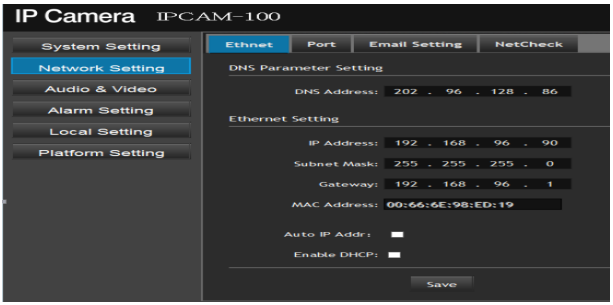
3.3.1.9 Alarm Log

Select start time and end time, click [Search] to search all alarming information.



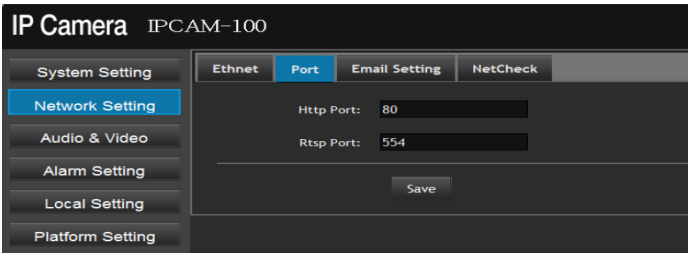
3.3.2 Network Setting

3.3.2.1 Ethernet



- User can set network parameter such as [DNS Address], [IP Address], [Subnet Mask], [Gateway].,etc, click [Save].
- [MAC Address]: machine's physical address, can not be changed
- [DHCP Setting]: click [Enable DHCP] to get network parameter, please confirm with administrator as this function need "DHCP Sever support"

3.3.2.2 Port



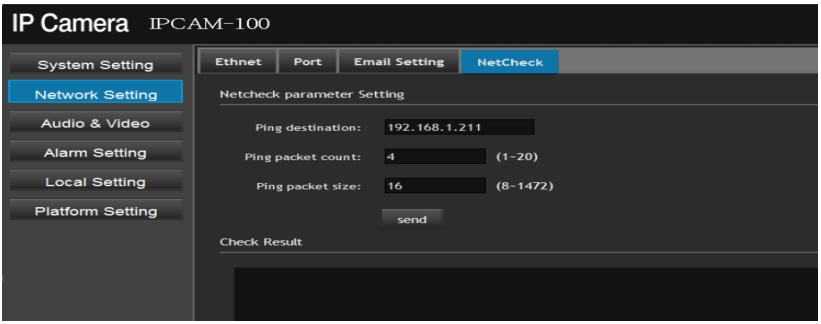
- [Http pott]: default 80, log in again after modifying and saving.
- [Rtsp port]: default 554, log in again after modifying and saving.

3.3.2.3 Email Setting

- [Server]: Email setting server domain name or IP address.
- [UserName]: Email setting server's user name.
- [Password]: Email setting server's password.
- [ToAddr]: Receiver's email address.

3.3.2.4 NetCheck

NetCheck is helping to check whether the network connects well.

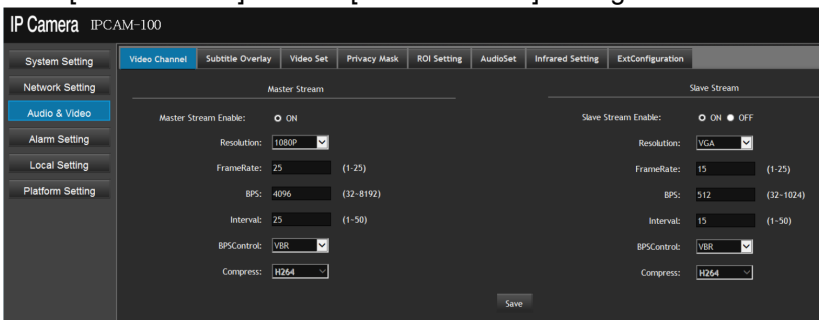


- [Ping destination]: input server's IP address which need to be connected.
- [Ping packet count]: input packet quantity.
- [Ping packet size]: input packet size.
- [check Result]: input right testing parameter, click [send], result will be showed several seconds later.

3.3.3 Audio & Video

3.3.3.1 Video Channel

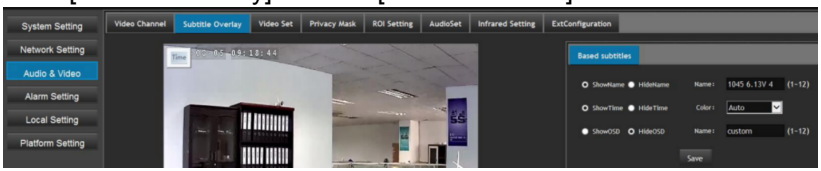
Click [Audio &Video] to enter [Video Channel] setting interface.



- Stream type: support master stream and slave stream.
- [Resolution]: master stream support 1080P, 960P, 720P, D1, VGA, slave stream support D1, VGA, CIF, QVGA.
- [FrameRate]: 1~25FPS for option.
- [BPS]: 32~8192kbps.
- [Interval]: 1-50 adjustable.
- [BPSControl]: support CBR and VBR.
- [Compress]: H264

3.3.3.2 Subtitle Overlay

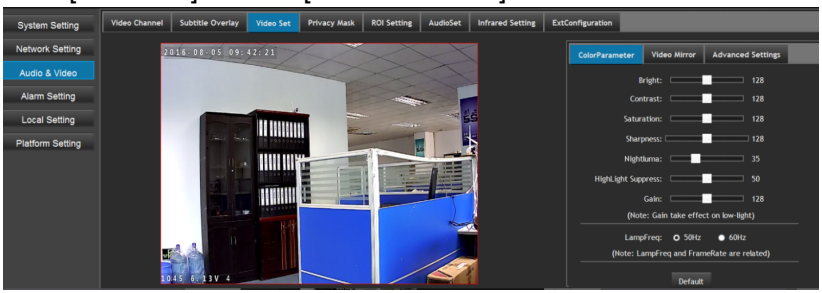
Click [Subtitle Overlay] to enter [Based subtitles] interface.



User can set showing or hiding OSD/name/time. [Name] is editable, OSD's position can be moved to anywhere by drugging.

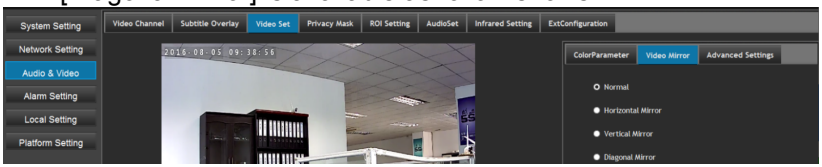
3.3.3.3 Video Set

Click [Vedio Set] to enter [ColorParameter] interface.



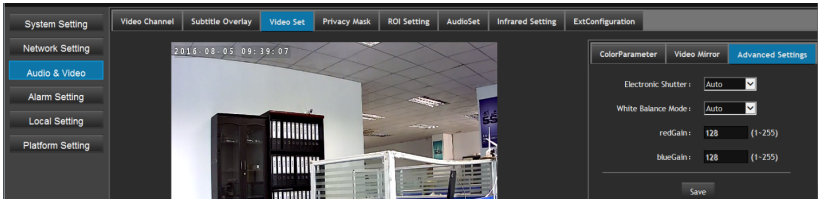
- User can adjust [Bright], [Contrast], [Saturation], [Sharpness], [HighLlight Suppress] to show the best display performance.
- [Nightluma] can be used in night vision image only as above shows.
- [LightFreq]: support 50HZ, 60HZ. Mostly indoor in China, it will be 50HZ, counties which adopt NTSC need select 60HZ.
- Click [Default] to restore default value.

◆ [Video Mirror]: [Normal], [Horizontal Mirror], [Vertical Mirror], [Diagonal Mirror] is available as follow shows.



- [Advanced Settings]: user can set [Electronic Shutter], [White

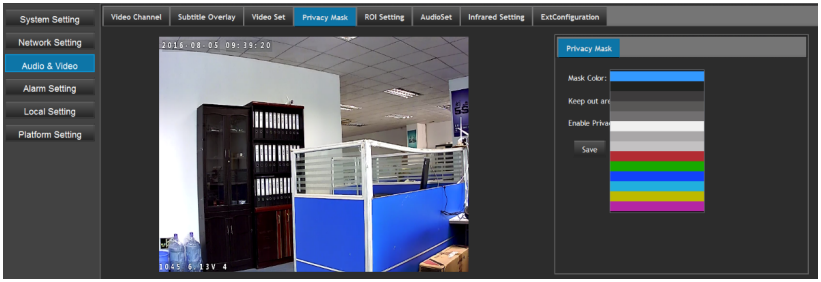
Balance Mode], or adjust [redGain] and [blueGain] manually.



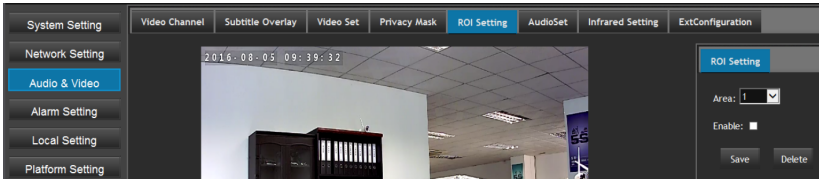
3.3.3.4 Privacy Mask

Some area won't be showed on monitoring picture by setting [Privacy Mask] to protect personal privacy.

- Step: click [Enable Privacy]-choose [Mask Color]-select mask area(8 area are available)-[save].



3.3.3.5 ROI setting

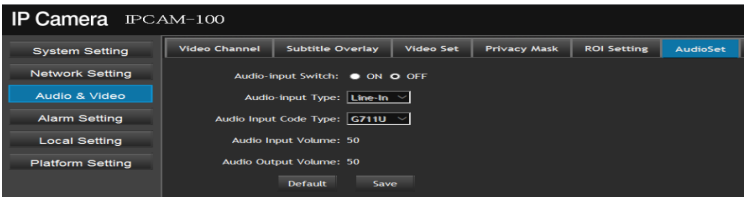


- Click [Enable]-select [Area](8 area available)-[Save] to set RIO. Performance will be more obvious in low steam or low picture quality.

3.3.3.6 AudioSet

Turn on or turn off the Audio-input Switch function, adjust audio input or output volume.

⚠ Attention: audio or talkback function are not supported by standard model device.



Audio-input Type: select Mic when connect sound pick-up or microphone, choose Line-in when connect liner audio.

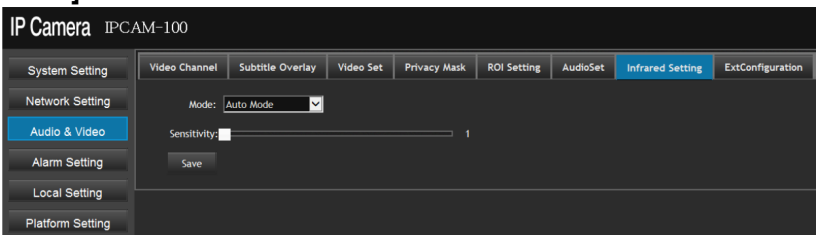
- [Audio-input Code Type]: support G711A or G711U.
- [Audio Input Volume]: adjust input volume.
- [Audio Output Volume]: adjust output volume.

3.3.3.7 Infrared Setting

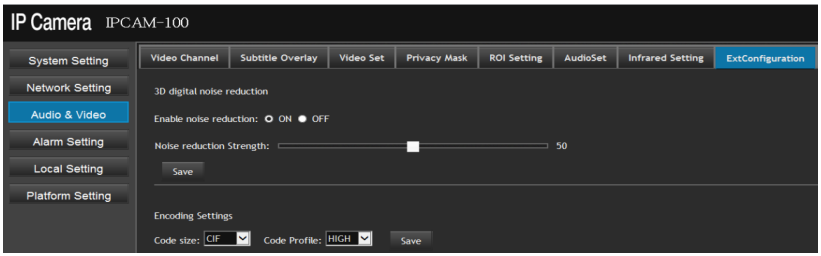
IR series product support [] and [Auto Mode] as follows.

- [Photoresistor Mode]: Running of infrared lamp is subject to photosensitive detection, it can adjust photosensitive induction through sensitivity, the higher, the
- [Auto Mode]: set image to color or B/W mode compellently. When sensitivity is 1, picture will be changed to color status, and value is 100, it will be B/W status. When comes to 2-99, graphic is going to be changed automatically according lighting environment.

⚠ **Attention: [Auto Mode] is used for adjusting image deliberately, [Photoresistor Mode] will work normally in [Auto Mode].**



3.3.3.8 Extconfiguration setting



[3D digital noise reduction]: user can choose [ON]/[OFF] and adjust reduction strength. The default value is 50.

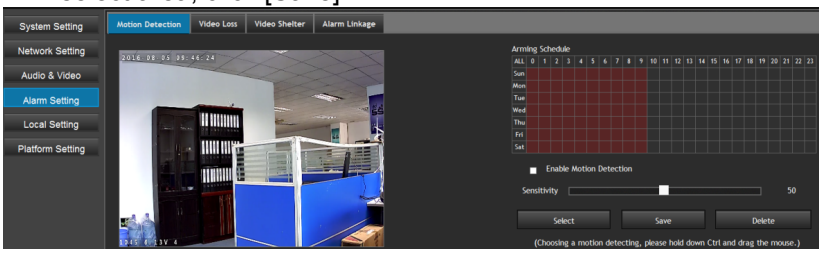
- [Encoding Setting]

[Code Size]: support 1080P,960P,720P,D1,VGA,CIF,QVGA
[Code Profile]: support HIGH/MAIN/BASE

3.3.4 Alarm Setting

3.3.4.1 Motion Detection

- Click [Alarming Setting] to enter [Motion Detection] interface.
- User can set motion detection time by [Arming Schedule]
- Click [Enable Motion Detection], select [Sensitivity](value range from 1~100, the higher the value is, the more sensitive the detection is), choose [Select], press ‘Ctrl’ and use mouse to select area, click [Save].

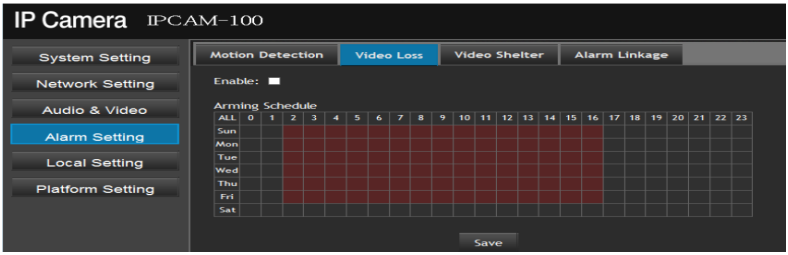


3.3.4.2 Video Loss

- Click [Video Loss] to enter interface below. User can set video loss time by [Arming Schedule].
- Use mouse to click time, or press left mouse button, drug it to

choose time, the selected area will turn to red.

- Steps: click [Enable]-select [Arming Schedule]-[Save].



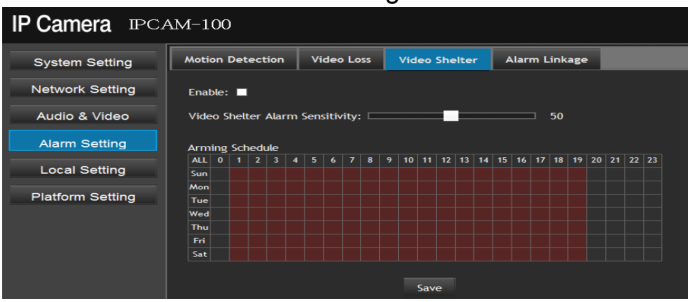
3.3.4.3 Video Shelter

- Click [Video Shelter] to enter interface below to set video shelter time.
- Steps: select [Enable]-set sensitivity value(range from 1~100)-set [Arming Schedule]-[Save]

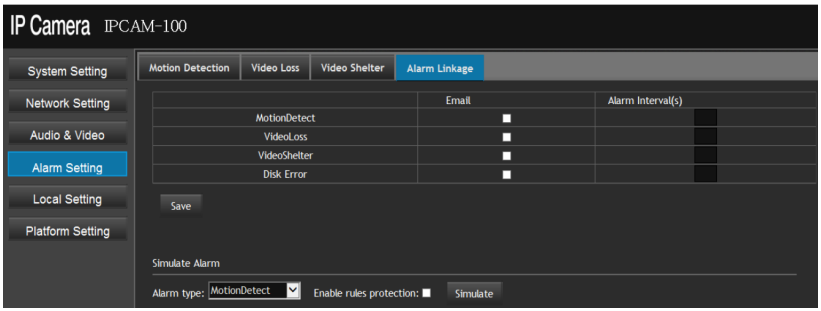
There are two way to set arming schedule.

一.Click time by mouse

二.Press left muse button and drug it to select time

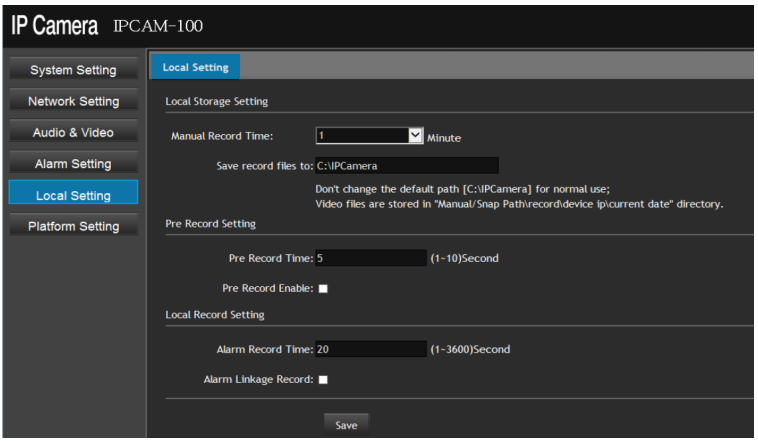


3.3.4.4 Alarm Linkage



- [Alarm Interval]: interval for inputting/sending alarm information, user can select [Email] to send it.
- [Simulate Alarm]: simulate triggering a variety of alarm events to test whether the alarm linkage works well or not.

3.3.5 Local Setting



- [Pre Record Setting]: set pre record time when alarm linkage record active.
- [Local Storage Setting]: choose record time and path.
- [Pre Record Setting]: set pre record time
- [Alarm Linkage Record]: choose alarm linkage record, it will start record when alarming.

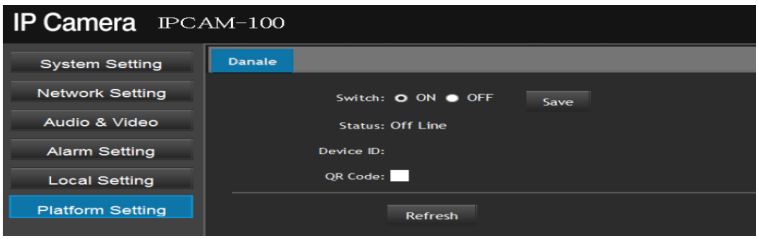
Set the recording time.

Click [Save].

3.3.6 Platform Setting

The device support cellphone viewing on Danale platform, steps as follows:
Step1: download and install Danale APP at http://www.danale.cn/ or scan QR code below by android or IOS mobile phone, sign in a personal or enterprise account.

Steps2: ensure IPC connect internet, use IE to log in IPC, select parameter setting, click [Platform Setting], choose [ON], refresh device until device shows online.



Steps3: open client software by android or apple cellphone, input user name and password to sign in;
Steps4: click ”+” to enter add device interface, user can input device’s ID or scan QR to add camera.
Steps5: double click machine to remote view picture and set related parameters according Danale client software description.

4 FQA

1) Forget device's address
   Solution: search it with IPTOOLS
2) Forger password
   Solution: click device and press reset button, then input default user name and password.

3) IE are not able to log in IP camera
   Possible reason 1: network connect failure
   Solution1: connect PC to internet to test whether it works normally, user can check cable, virus., etc until unit can ping successfully to computer.
   Possible reason 2 : IP address is occupied by other device.
   Solution: connect IPC with computer individually, reset IP address.
   Possible reason 3: camera's IP address and computer's are in different segment.
   Solution: set IP address in the same segment.
   Possible reason 4: unknown
   Solution:press "reset" to restore default IP address, connect computer again.
   Possible reason 5: device failure
   Solution: return to maintenance.

4) no picture after connecting
   Possible reason 1: OCX install in a wrong way
   Solution: close all the antivirus, download and install OCX again, log in device.
   Possible reason 2: power supply
   Solution: test output voltage to check whether it meet requirement. If not, change it.
   Possible reason 3: aperture setting
   Solution: check whether it opens or not when using manual aperture, or adjust LEVEL potentiometer to let aperture in appropriate location if use auto aperture.
   Possible reason 5: device failure
   Solution: return to maintenance.

5) low quality picture
   Possible reason 1: focus not clear

Solution: adjust lens' focal focus to make it clear

Possible reason 2:interference of power cable.

Solution: Remove sources of interference or exchange power supply

Possible reason 3: device failure

Solution: return for maintenance

6) Layered or distortion in video

Solution:

1) Make sure the video standard of "video input" and "device's image" are the same(both are PAL or NTSC).

2) check whether power or net cable are under electromagnetic interference.

3) Contact professional person for maintenance.

7) snowflake point on picture

Possible reason 1: power supply's quality

Solution : choose high quality power supply.

Possible reason 2: infrared lamp quality

Solution : choose high quality infrared lamp.

Possible reason 3: illumination are too high

Solution : choose low illumination IR IPC.

Possible reason 4: IR IPC failure

Solution : return for maintenance

8) night vision

Possible reason 1: light though lens is not enough.

Solution : enlarge light

Possible reason 2: IR IPC's quality

Solution : choose high quality IR device

9) color rendition is not enough in day time

Possible reason: camera filters

Solution: choose high quality filter.

10)picture blur

Possible reason: inappropriate focal length

Solution: adjust focal length

Possible reason 2: low video bit rate

Video cannot be applied to high rate bite because of restriction of network bandwidth, user can adjust rate bite to get clear image in the

condition of no restriction of network bandwidth.

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