Network Camera Manual

Version 2015-04

Directory

1   Note

Please prevail in kind, the instructions are for reference only.

This product may contain technical inaccuracies or typographical errors.

The products described in this manual may be updated at any time without notice.

This product manual shot may not from the same product, it is just for illustration.

If any doubt, or to obtain the latest procedures and additional documentation, please contact the company service department.

2　Precautions

The content is to make sure your operations of the products are strictly in accordance with this manual, so as to prevent danger or loss of property. So please read the manual carefully and keep it for your future reference before using the products.

As shown below, the preventive measures is divided into "Warning" and "Attention":

Warning: Without Warning may lead to death or serious injury.

Attention: Without attention may lead to injury or loss of property.

⚠	⚠
Warning To remind users to keep away from potential death or danger of serious injury.	**Attention** To remind users to keep away from potential injury or danger of property from loss

⚠ Warning:

- Please use the required power meets SELV (safety e xtra-low voltage circuit) to supply. In the accordance of IEC60950-1 ,the power should comply with the rated voltage of DC 12V and AC 24V (Depends on the specific model) of Limited Power Source.

- If the equipment works abnormal, please contact your purchasing store or the nearest service center. Do not disassemble or modify the equipment in any methods.(If do without permission,　user will be responsible for the result.)

- In order to reduce the risk of fire or electric shock, please prevent the product from raining and moisture.

- The installation should be done by the professionals and comply with local regulations.

- Please install the easy-used electric failure equipment into wiring of the building.

- The instruction of equipment installation on the ceiling: After installation, please to make sure the connection can withstand 50Newton(N) downward pull .

⚠ Attention:

- Before the camera running, please make sure whether the supply power is right.

- Please do not drop off or heavily strike the product.

- Please do not touch the image sensor optical element. If it is necessary to clean, please use the clean cloth slightly moist with alcohol to wipe dust; When not in use, please cover the lens to protect the image sensors.

- Please avoid focusing at glare (e.g. lighting, sunlight etc.), or it will be resulting in too bright or colorful vertical stripes on the screen (which is not camera's error) and affect life of image sensors.

- The laser beam may burn down image sensors. When the installation of laser beam used, please make sure that the surface of image sensors does not expose under the laser beam.

- Please avoid followed places: moisture, dusty, hottest, coldest (Normal work temperature range: $-14°F \sim + 140°F$) and strong electromagnetic radiation etc.

- Please do not accumulate more heat and maintain ventilation flow around the camera.

- When using the camera, please do not make water and any liquid flow into it.

- When delivering the camera, please packing as shipping out or with the same quality material of the factory.

Parts change regularly: Some parts of the products (e.g. Electrolytic Capacitors) should change regularly according to their average lifespan. Their lifespan would be different for the usin g environment and using time, so please check them regularly. For more information, please consult with your purchasing distributors.

3   Web access and parameter configuration

3.1 Network Connection

First to make sure the proper connection of the camera. Meanwhile, please check the PC's local network state. If the state

shows " ", the network connection is error.

The initial default IP address of the Camera is 192.168.1.88, please set IP address, Subnet mask and gateway for your

computer.

Please make sure the proper setting of IP address. You can check network connection by tool "Ping" attached with the

system after the setting.

3.2 Quick Access

The proper network connection can support multiple browsers, e.g. Internet Explorer, Firefox, Chrome etc.. To preview the

camera by IE Browser , please see the operating steps as follows:

1. Open your Internet Explorer and choose Tools/ Internet Options/ Security /Custom Level, then check "Enabled" or

   "Pop Up" under "ActiveX Control and Plug -in" and set the security level lower.
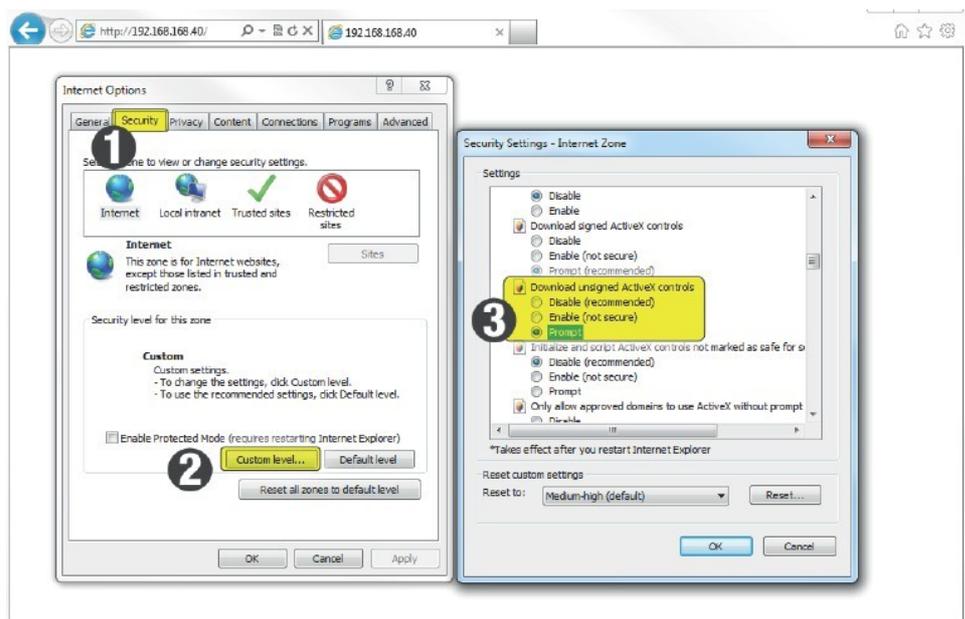

Figure 3-1 Set ActiveX Control and Plug-in

2. Please enter the camera's IP address in the address bar and click "Enter", the log-in interface will be shown up.

Then input   your camera's "User Name" (Default: admin), "Password" (Default: 123456) and click "Log in".


Figure 3-2 Log in

3. following interface will pop up a link "Please download the plug-in by clicking here" when you log in.

Please click it and install the plug-in then restart your browser to log in
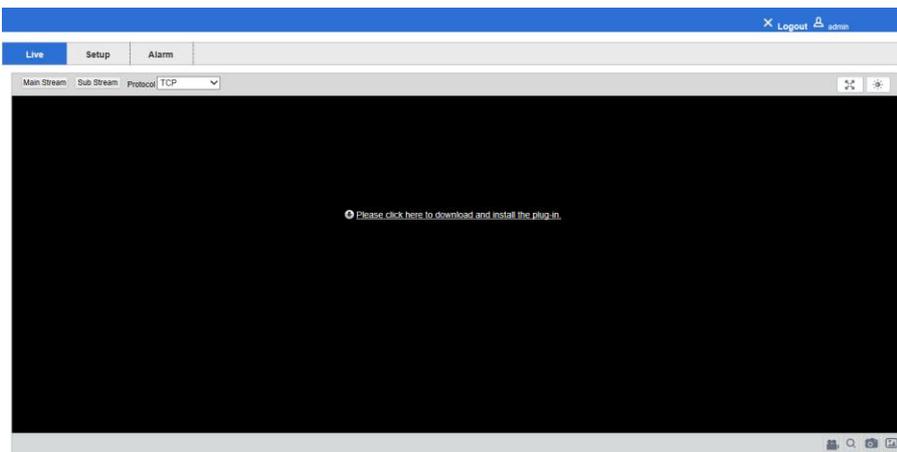
Figure 3-3 Download Plug -in

4. After installing the plug-in，Browsing the interface：

Figure 3-4 Browsing the interface

Preview interface information：

| Icon	Description
	Start recording / Stop recording
	Local electronic amplification
	Capture pictures
	Three shooting
Main Stream	Main Stream
Sub Stream	Sub Stream
Protocol TCP	Streaming Protocol Selection
	Full Screen Preview
	Image adjustment
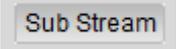
The interface can control the preview, video, capture pictures, intercom, audio on and

off。 Preview stream type can be set to "main stream" and "sub stream"。

Click the "enlarged" button, use the mouse to select the area you want to enlarge the frame, click the mouse again

that will restore the original screen.

Selectable streaming protocol TCP, UDP and multicast mode。

Image Adjustment: can set the color, brightness, contrast, saturation of the image。

3.3 Parameter Configuration

Click【Settings】，enter the parameter configuration interface。

3.3.1 Camera Settings

3.3.1.1 Audio &video configuration

Audio & video configuration shown in Figure 3-5：
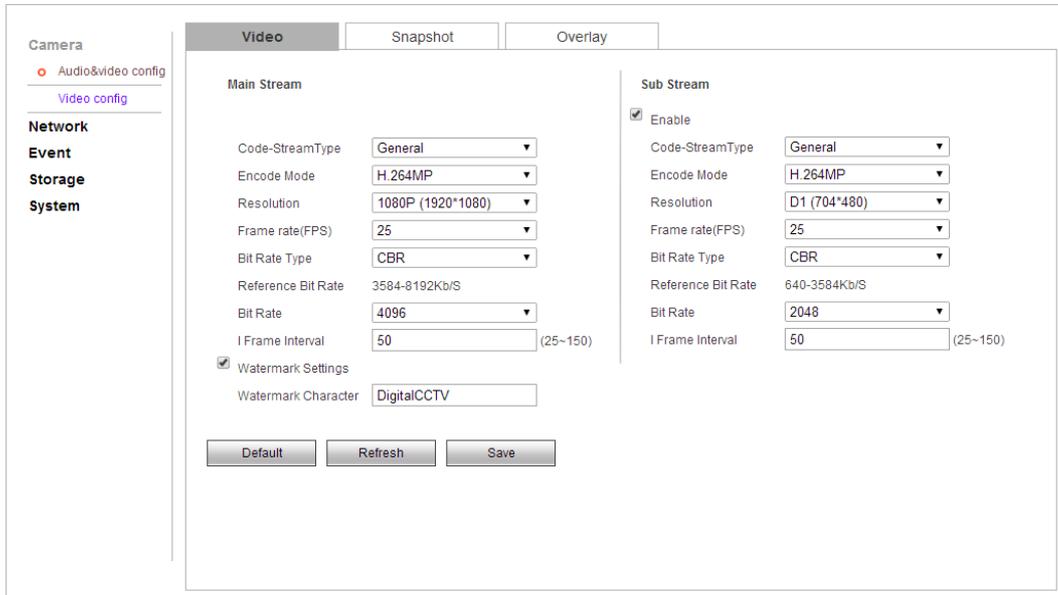
Figure3-5 Video Parameters

Audio & video config→Main Stream

Video stream configuration parameters are described below：

Parameters	Description
Code-StreamType	Choice of general code or motion detection code
Encode Mode	Set video encoding mode according to the actual demand
Resolution	Different types of camera supports multiple resolutions, according to the actual demand selecting the appropriate resolution
FPS	according to the actual demand selecting the FPS
Bit Rate Type	Choice of CBR or VBR
Bit Rate	set the appropriate rate according to the resolution
I Frame Interval	Not recommended modification
Watermark Settings	Watermark Settings

After modifying parameters，please click【Save】to save the

settings。Snapshot shown in Figure 3-6
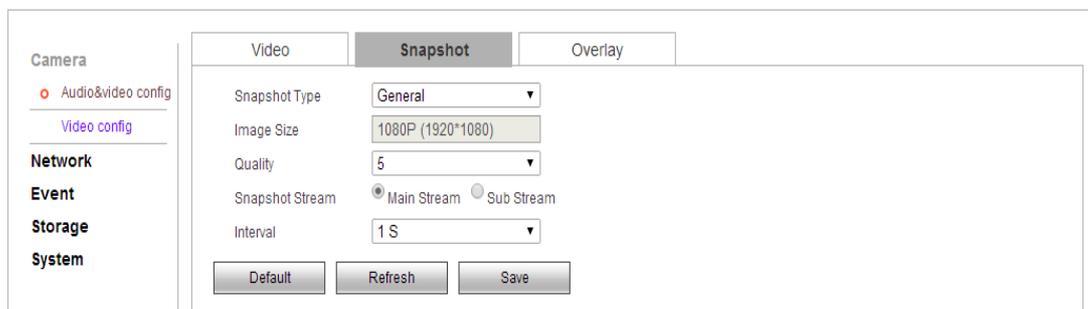
Figure 3-6 Snapshot

Audio & video config→Snapshot

By configuring the capture parameters, the device can automatically

capture。SnapshotType can choice General or Event。

"Image Size"： the image size is the main stream

resolution。Snapshot Stream can choice "Main Stream"or"Sub

Stream"。"Picetur Quality"can choice from 1-6（best）。

"interval"can choice according to the needing。

After modifying parameters，please click【Save】to save the settings。

Video overlay shown in Figure 3-5：
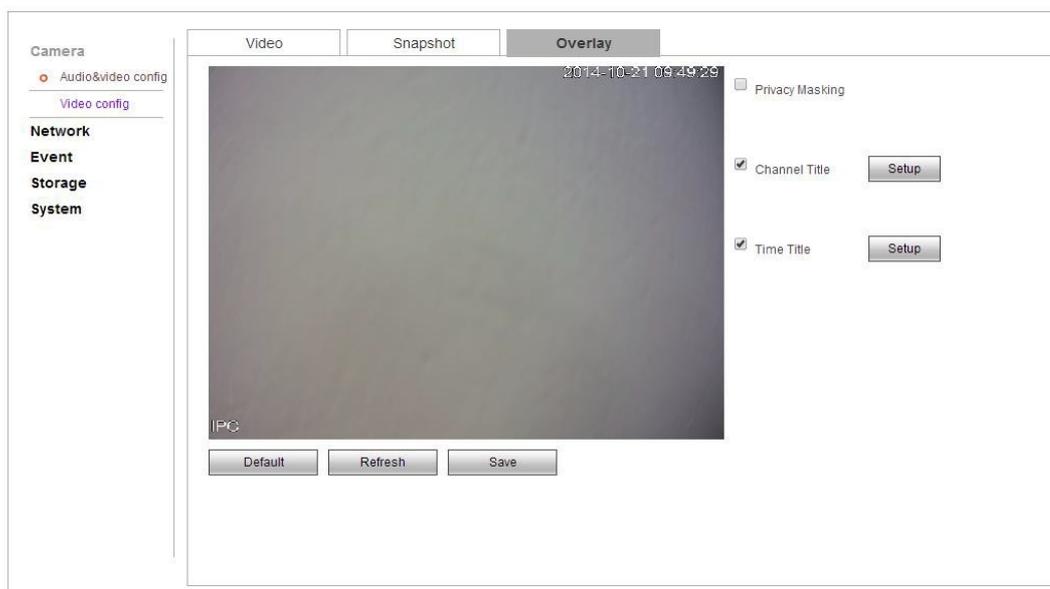
Figure 3-7 Overlay

Audio & video config→Overlay

Channel Title / Time title

Channel title can be set according to user needs. The display name, display date and display week can be chosen whether to enable according to the actual demand. User can drag the yellow box to change the time, date and the place of video channel names, and then click the save button
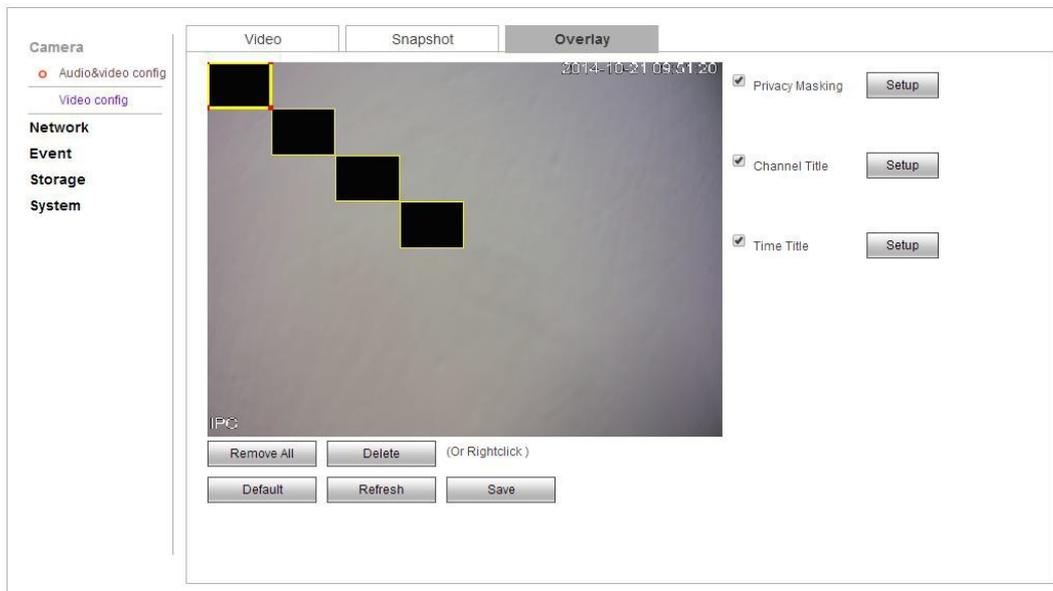
Figure3-8 Overlay

Overlay：

Checking the "overlay" means opening the video overlay function of IP Camera.

Zone setting：

Click the left mouse button and drag in the picture, and then release. A regional map is finnished.

At most four areas in the picture. When regional map is finished, click ok, end the regional map

Selecte draw area and click delete or click the right mouse button to clear the draw area.

After modifying related parameters, click ok button to save the Settings

3.3.1.2 Image configuration

Image configuration as show in figure3-9:
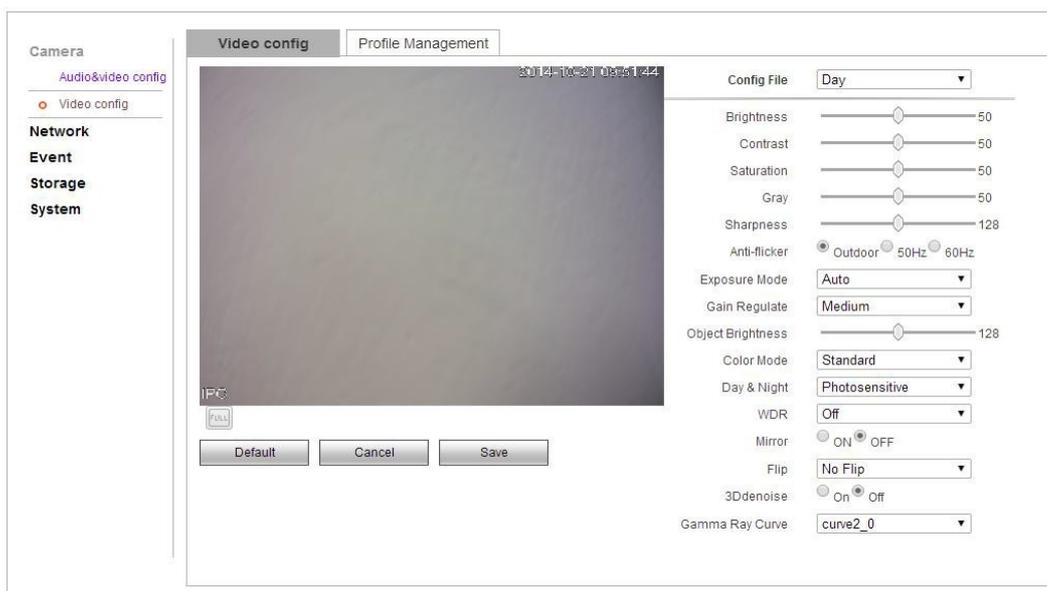
Figure3-9 Video Config

Image configuration→Image configuration

Camera image configuration file is convenient for customer to quickly adjust, choose "day","night"and "general" configuration according to actual situation.

User can adjust the image parameters of the camera, like "brightness", "contrast", "saturation", "gray", "sharpness", according to picture effect.

 "Auti-flicker" can choose "outdoor","50 hz","60 hz".

"Exposure mode"or camera electronic shutter model, can setting different shutter speed according to the different camera scenes, or choose the automatic mode that camera can adjust the shutter speed automatically according to the scene brightness.

"Gain regalate" used to adjust the gain upper limit, the user can choose different gain level in view of the actual situation.

"Color mode"adjusts the color of the image, customers can select the modes as "standard", "natural", "gorgeous" according to their preference.

"day/night mode" has three choices: "color", "photosensitive", "black and white", "color" mode stays color images during the day, "black and white" mode stays black and white image during the night, when selecting "photosensitive", equipment choose "day/night mode automatically" according to the external environment brightness.

"Real wide dynamic option" is suitable for the models with wide dynamic function, some models support wide dynamic

level adjustment, user can adjust the numerical level to change the strengthness of WDO according to the actual need.

"Mirror" and "Reverse", it's Convenient for the customer to change the orientation of the picture at any t ime.

"3 D denoise" is used to reduce the image noise, user can choose to enable or not according to the situation.

"Gamma ray curve", select curve2-0 by default

Note：

The front-end parameters configuration options in the display Settings includes the possible options for all product models in the document. The actual models only have a part of options, please refer to our specific equipment types. Part of parameters change need to restart the camera. Some options cannot be used at the same time.

3.3.2 Network Settings

3.3.2.1 PPPOE

**PPPOE Settings as shown in figure 3-10 :**
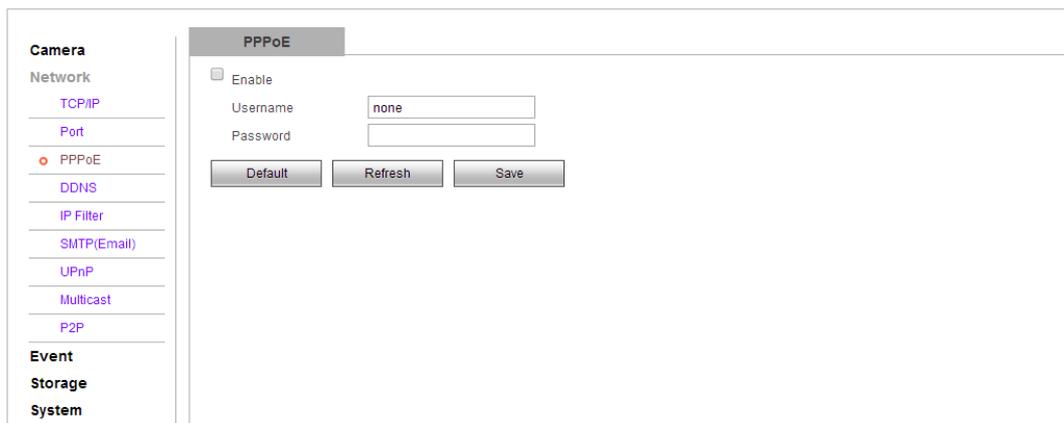
Figure3-8 PPPOE Setting

Network Setting→PPPOE

Check "enable dial", open PPPOE function.

Input PPPOE username and password, click ok. If dial successfully, camera will get a public IP address

After modifying related parameters, it needs to click ok button to save the associated settings.

Note：

Default gateway fail after PPPOE configuration open; after modifying the parameters of Network Settings, it needs to restart the IP camera.

3.3.2.2　DDNS

**DDNS Settings as shown in figure 3 -11:**

Figure3-11 DDNS Setting

Network Setting→DDNS

In public network environment, the majority of users use dynamic IP address by adopting DDNS (dynamic DNS) to access the network camera through the domain name, which can effectively solve the problem that it is unable to get the current dynamic IP to access the camera.

Check "enable DDNS" default that open DDNS function default

"DDNS type" includes "NO - IP", "DynDNS" and "FNT".

When using "DynDNS", "NO - IP" and "FNT", operators have the default server address, and don't need to fill port number and device domain that users apply in software operator website. The user name and password is the same as the one that user register account.

After modifying related parameters, it needs to click ok button to save the Settings

Note：

After modifying the parameters of Network setting, it needs to restart the network camera. DDNS function must be set to the correct IP address, mask, gateway, and DNS server, and this configuration can access the Internet.

3.3.2.3　IP permission

IP permission setting as shown in figure 3 -12:
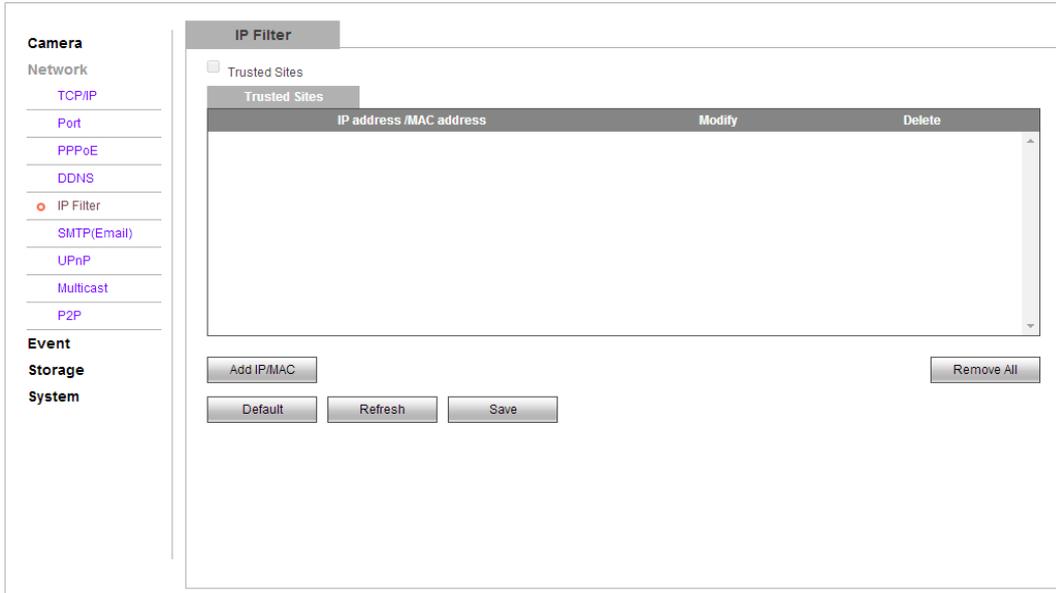
Figure3-12 IP Permission Setting

Network setting→IP permission

Users can check the "white list" option to enable this feature.

"White List" means that the IP address added to the address pool will be allowed access to the camera.

Users can click on [add IP / MAC] to add a new IP address to the address p ool, click the IP address added, then can operate the IP address pool by clicking the [amended], [deleted] and [empty] button .

3.3.2.4   SMTP (E-mail)

SMTP (E-mail) setting as shown in figure 3 -13:
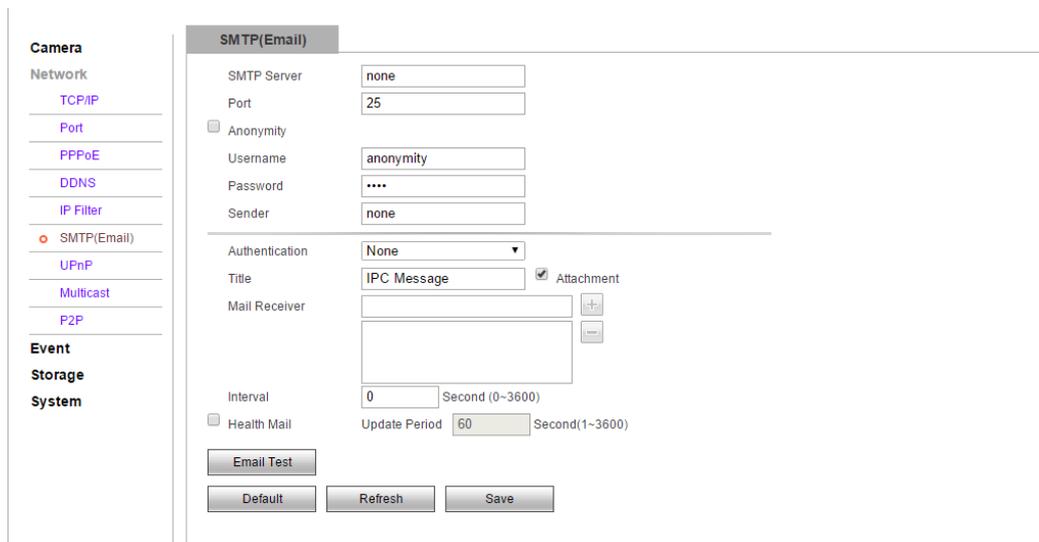
Figure3-13 SMTP (E-mail) Setting

Network setting→SMTP(E-mail)

When an alarm occurs, it can send a message to the specified mailbox by setting mail parameters .

Enter the address of the SM TP server, SMTP port number (default 25), user name, password, e-mail sender and recipient's name, address, theme and other information, and then click OK.

Encryption can check the "SSL Encryption" or "TLS encryption" approach.

Check the "Support Annex" , the mail will come with instant capture. User can set the capture interval.

After modifying the parameters, it needs to click OK button to save the settings.

Check "send health messages", the camera will send the device to run health messages by interval.

Mail contents include: the camera channel names, event type, event date/time, equipment type and accessories.

3.3.2.5　　UpnP

**UPNP Settings are described in 3-14：**
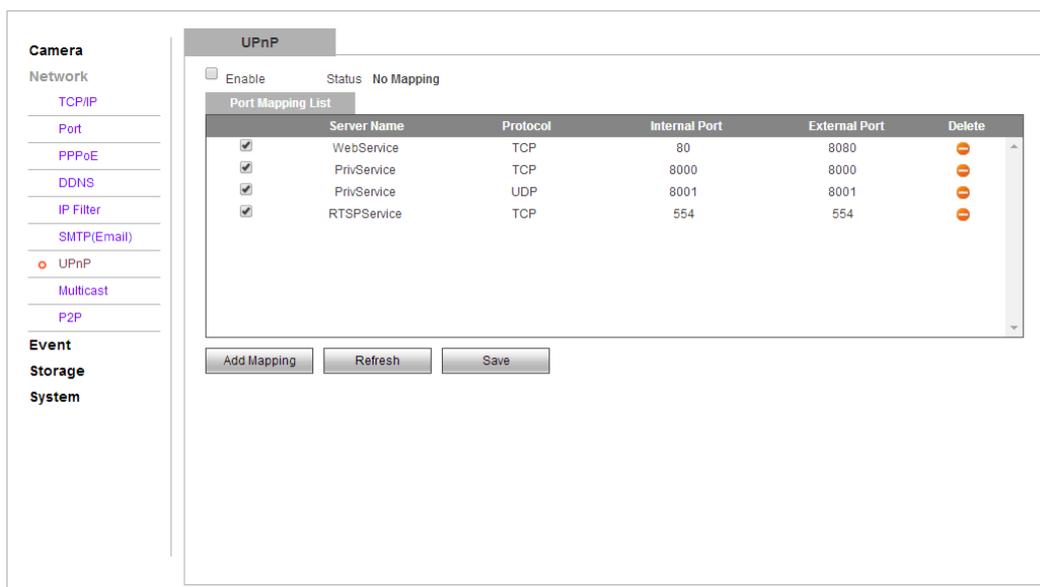
Figure 3-14 Upnp Settings

Network Settings→UPnP

After the UPnP protocol enabled, this function makes the camera to be discovered automatically, it can also realize the function of　automatically port mapping of　the router.

3.3.2.6　　Multicast

Multcast settings are described in 3-15：
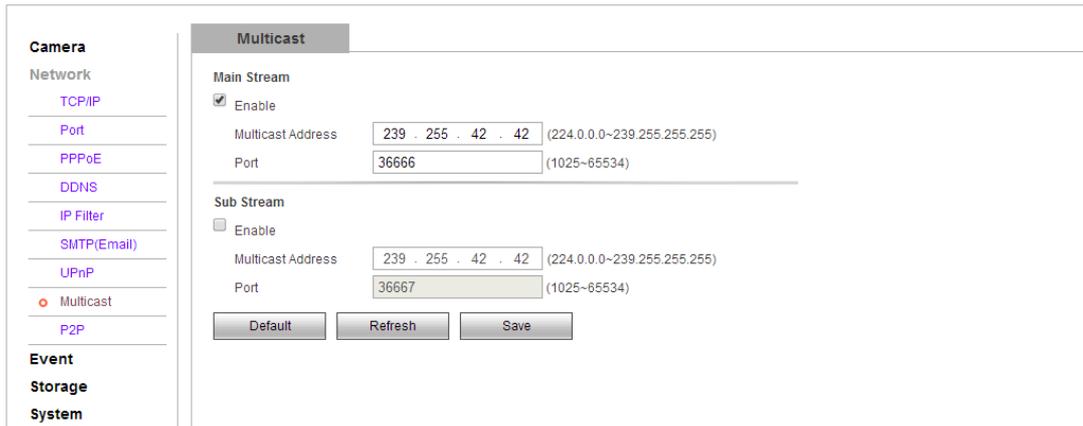
Feature 3-15 Multicast settings

Network settings→Multicast

When multicast is on, you can realize multicast by setting the address of multicast. In this way, you can not only improve

the efficiency of data transmission, but also can   reduce the possibility of congestion in main network.

3.3.2.7   P2P

**P2P settings are described in 3-16**：
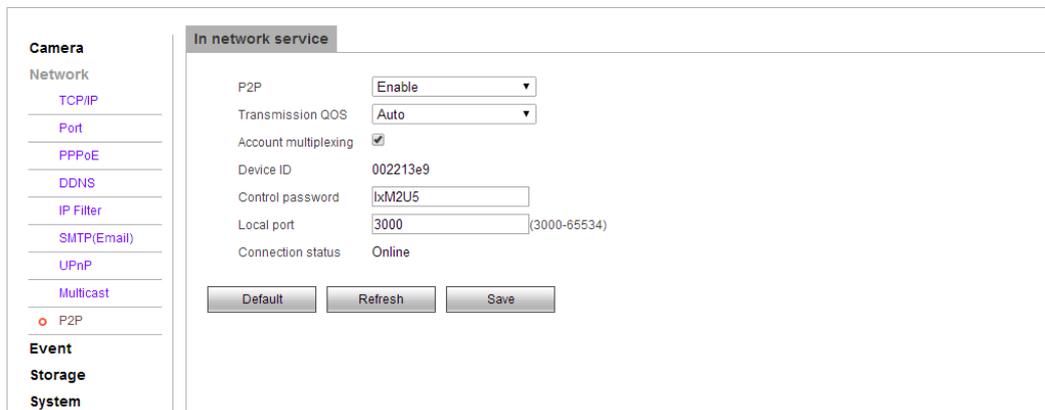
Feature 3-16 P2P setting

P2P→In network service

When in network service is on, the connection status is online, users can visit IPC with its ID and password by log in

www.vssweb.net.

3.3.3 Event management

3.3.3.1 Video detection
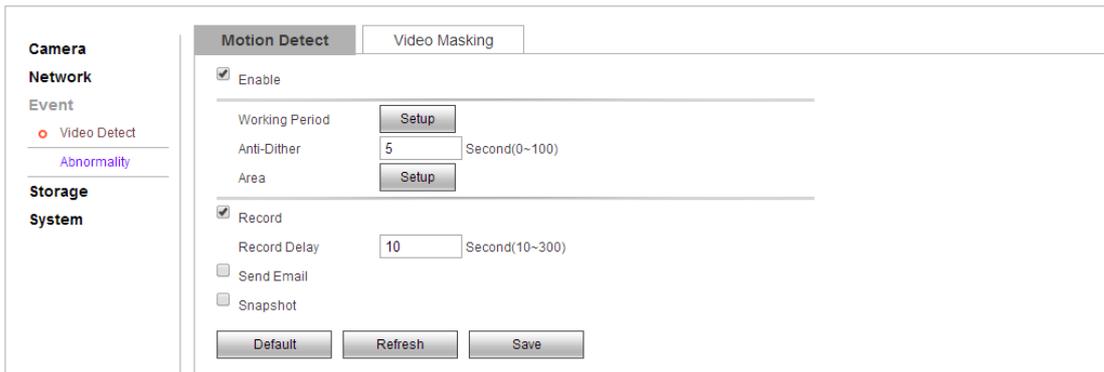
Feature 3-17 Motion detection settings

Video detection→Motion detection

Check"Enable"means the function of motion detection of the IPC is on.
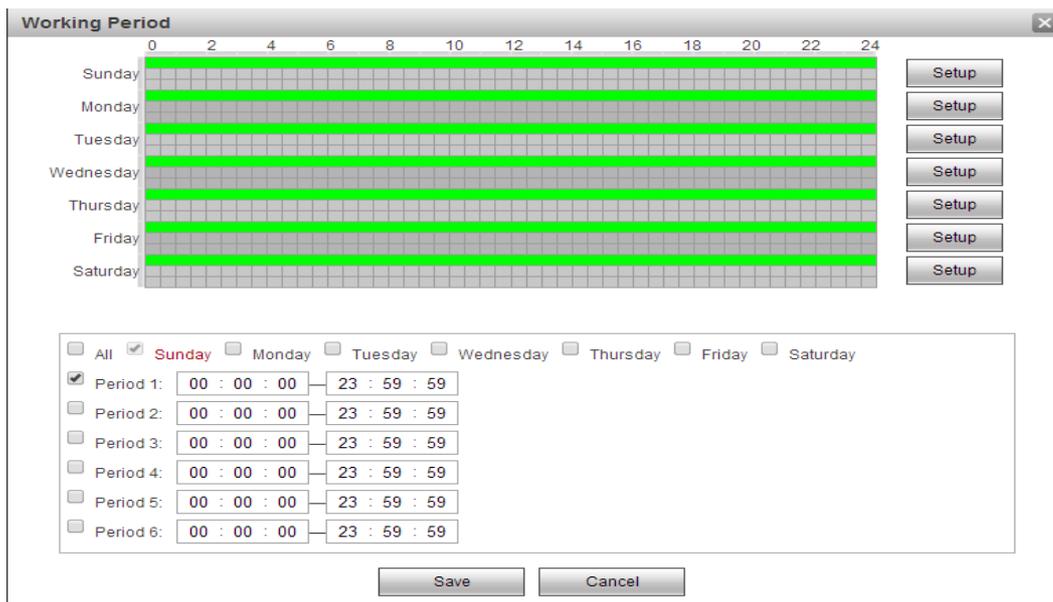
Feature 3-18 Arming-Disarming Period settings

Arming-Disarming Period：

The "Arming Period" can   display arming period of current motion detection.

You can set arming period by clicking [settings], you also can set arming period of the whole week or one day in a week.

You can set 6 periods of arming and disarming in detail.

You need to click [OK] to save the settings, after you set the parameters.

Tips:

You need to check [start motion detection] before you set arming period.
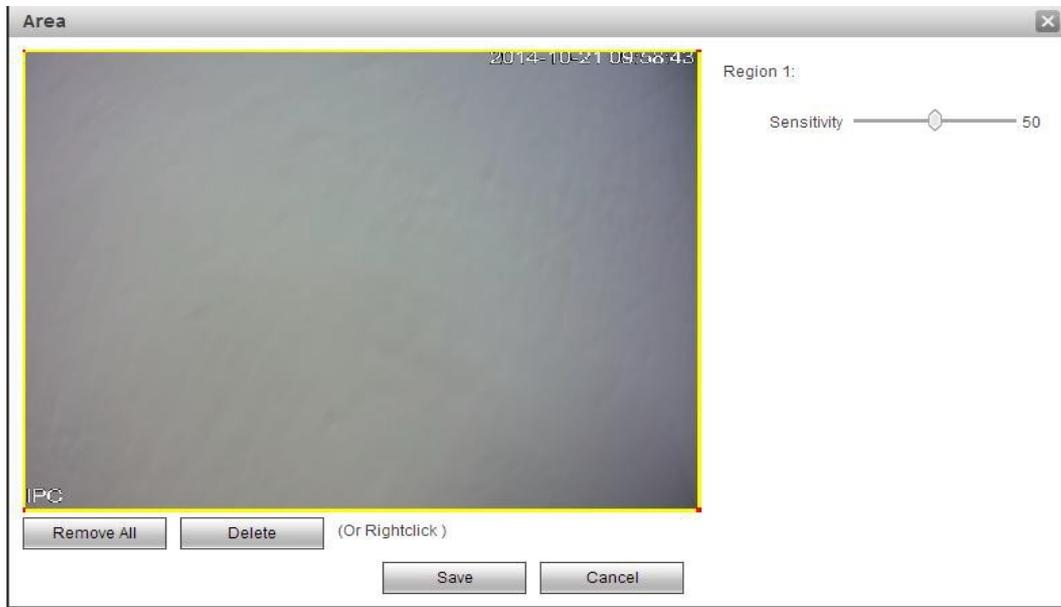
Feature 3-19 Motion detection area settings

Set area:

Enter [Area settings] by clicking set, click left key of mouse, drag it, then loose the left key, then the drawing of a motional detection area is finished.

You can at most draw 4 motion detection areas in a screen, click [OK], after you finish drawing all the areas.

You can clear the areas you drew by clicking [Clear] or right key of the mouse.

Sensitivity: Sensitivity coefficient in every area is 0-100, the function will not work when sensitivity coefficient is 0

Linkage pattern：

Linkage patterns are "Video link" 、 send email and snap shot.

You need to click[OK] to save parameters.

Video detection→Video Masking
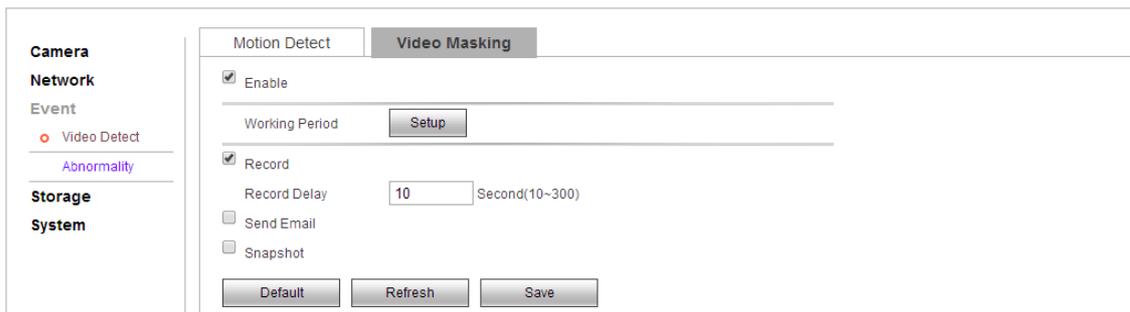
Feature 3-20 Video occlusion settings

Check "Default" means the function of abnormality of the IPC is on.
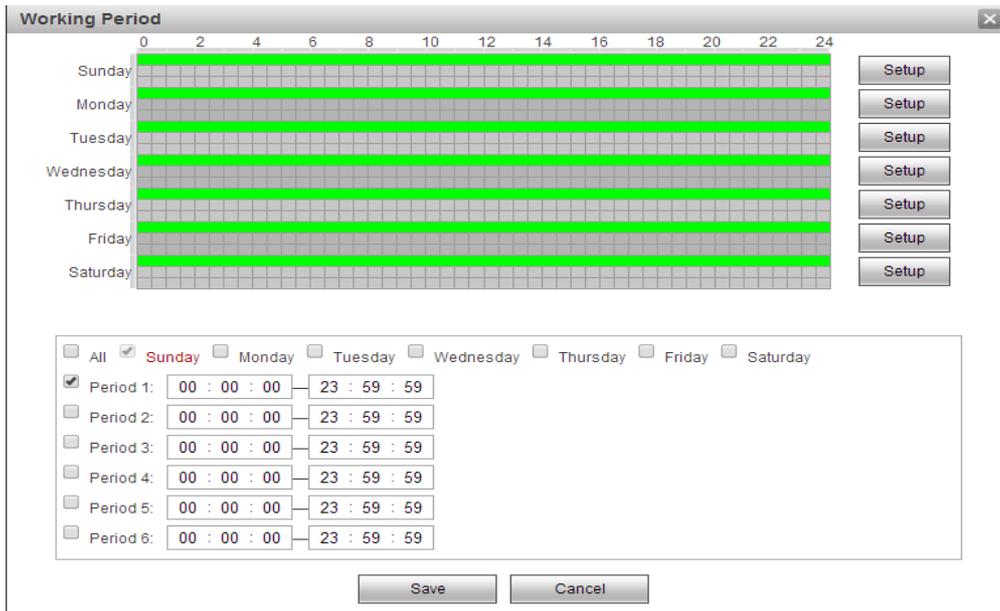
Feature 3-21 Arming period settings

Arming-Disarming period settings:

Arming time of motion detection can be shown in the option of "Arming time".

You can edit arming time by clicking [Settings], you can set arming period of the whole week or one day in the week.

You can set start and end time in 6 periods of the day in detail.

You can save the settings by clicking [OK] after you set the parameters.

Linkage model:

Linkage models are "video linkage"、"send email"、"snapshot".

You need to save settings by clicking [OK] after you change parameters.

3.3.3.2 Abnormal handling

Feature 3-22 Abnormality settings

When abnormal event occurs, the system will send an alarm message to prompt you after you set the parameters.

Figure 3-24 IP conflict settings

Exceptional handling→IP conflict

Click "Start" to enable the camera for sending alarm messages.

3.3.4 Storage manage ment

3.3.4.1　Storage　management

Management→ Record Schedule
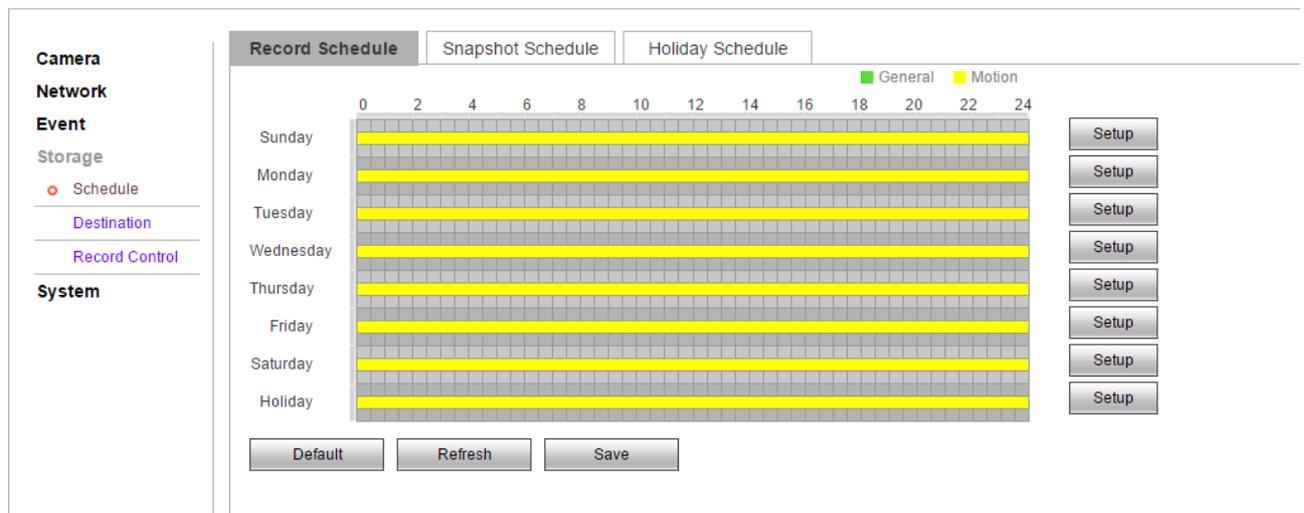
Figure 3-25 video management settings

Click "setting" to edit video mangermant, select the recording schedule and vedio mode.

There are two kinds of recording for cameras: automatic recording and manual recording. For the automatic

recording, refer to all-day time recording. For the manual recording, you can configure the recording schedule as much as   6

different recording time each day.

The record type can be normal/alarm.

Management→ Snapshot Schedule
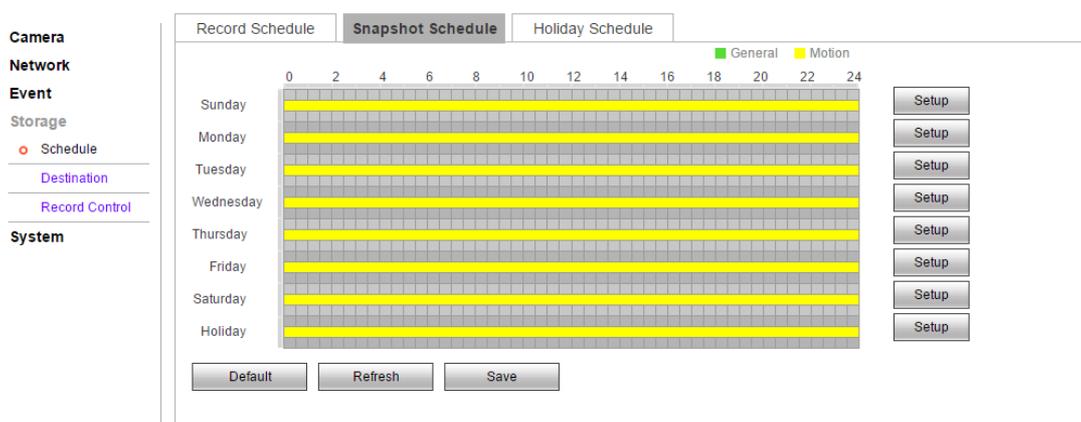
Figure 3-26 Image capturing settings

Click "setting"to configure picture capturing, select the capturing schedule and saving path。

There are two kinds of picture capturing: automatic image capture and manual image capture. For the automatic image capturing, refer to all-day time image capturing. For the manual image capturing, you can configure the recording schedule as much as 6 different image capturing time each day.

The image capturing type can be normal/motion detection.

Management→holiday time schedule
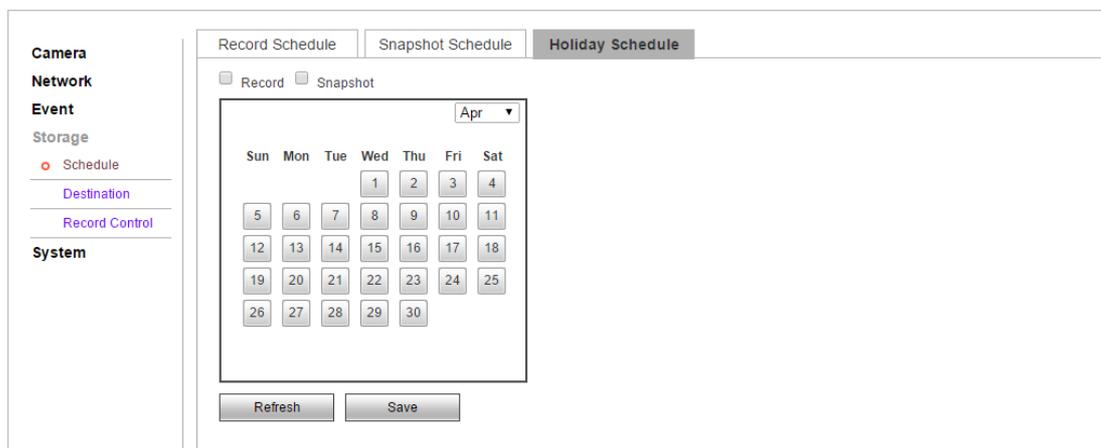
Figure 3-27 holiday time schedule setting

Select the holiday to configure the image recording and capturing mangement.

3.3.4.2 Destination

Figure 3-28 FTP setting

Destination→FTP

By configure the FTP parameter, you can control the two-way transmission of files on the internet to upload the images and files to the fixed FTP

The IP adress and port to the same as the subnet as that of the FTP. Sign the use name and password with upload permission in the FTP function.

Click the "OK" to save the configuration.

3.3.4.3 Record Control

Figure 3-29 Video control settings

Record control→Record control

【Video Length】 to package according to the time you record a video

【Pre-recording】for time to pre-record the video before you start the record, 0-5s is optional.

【HD Full Storage】Select "Cover" or "Stop" when the Hard disk is full,

【Recording Mode】Select Automatic/Manual/stop to chose the recording mode.

【Code Streaming】 Select Main Streaming/Auxiliary to chose the video streaming.

3.3.5 System Management

Configuring system settings is mainly for the basic configuring of cameras, including "Local settings" "User Management" "Default Settings" "Automatic Maintenance" "System Log" "Version" and etc.

3.3.5.1 Configuring Local Settings
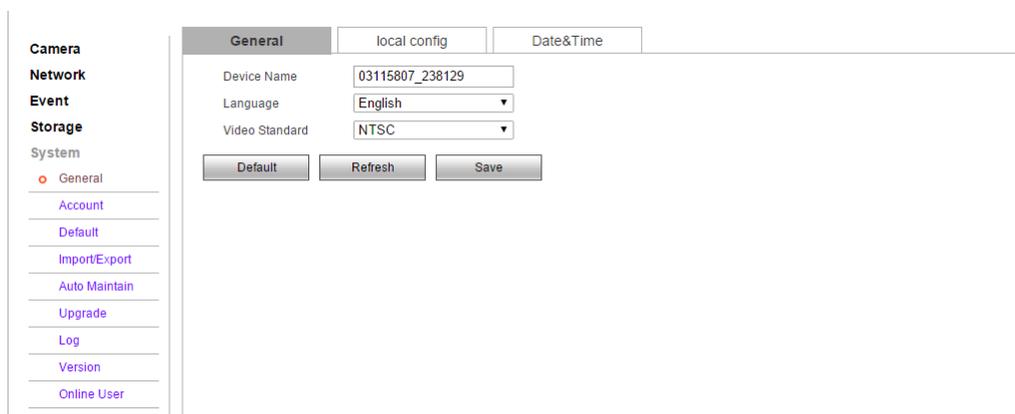
Figure 3-30 Local Configuration

Camera Configuration →Camera Configuration

In the Local Configuration Interface, you can set the Device name of the IP camera, the Language and the video format .
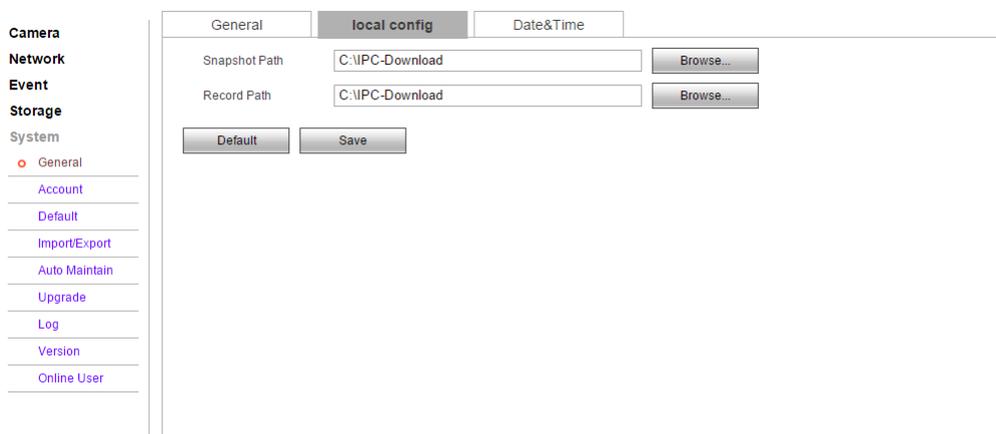
Figure 3-31 Camera Configuration

Local Configuration→Local Configuration

You can set the path of captured pictures and videos.

Figure 3-32 Time Settings

Local Configuration→Time Configuration

The Time Zone can be of your location or be set according to the actual situation.

In the Time Configuration Interface, you can configure the "NTP" settings to set NTP address, port number and time check interval, so as to check time at times according to the configuration; You can also click the **Sync with computer time** to synchronize the time of the camera with that of your computer.

You can enable daylight saving time if it is needed. The daylight saving time configuration can set the starting and ending date, specific to the hours.

Click Save to save the modified parameters.

3.3.5.2 User Management

Figure 3-33 User Settings

User Management→User

When the current user is "admin" super user, you can create as much as 32 users.

Create Users:

Click "Create users" to enter the user addition interface

Insert user name and password, and the user group can select "admin" or "other group". "User right" can set the basic permission and channel permission. Click "OK" to finish creating users.

Alter Users:

Select the user to modify, click "Modify" to enter the user editing interface, you can alter the User name, password, users group and privileges.

Add or modify the user both can configure the basic right and channel right settings.

Delete Users:

Select the user to delete, click delete to enter into a confirmation dialogue box, click "OK".

NOTE：

Admin super user can only change the password. Different models can create different number of users, please regard a practical number as a standard.
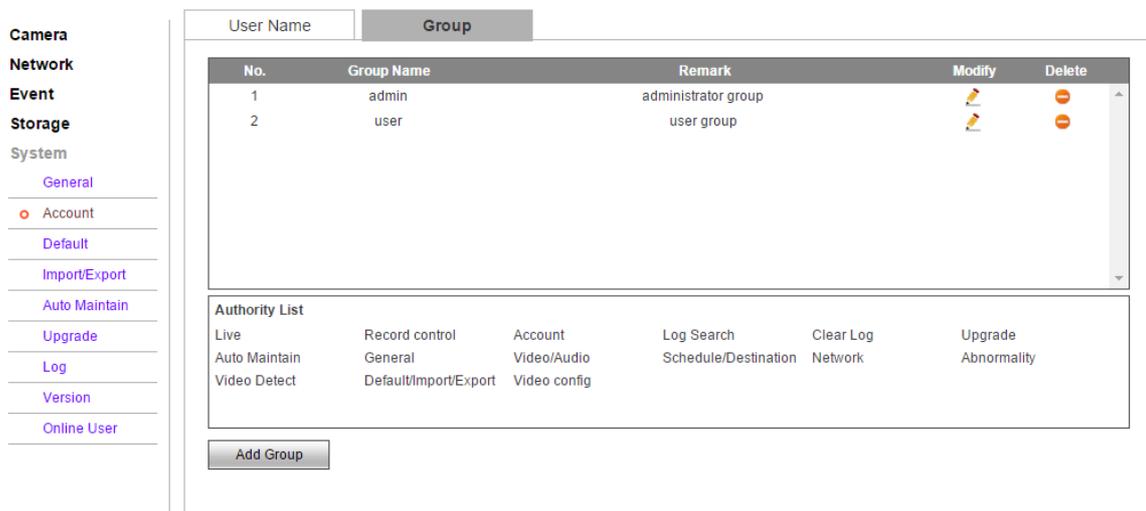
Figure 3-34 User Group Settings

User Management→User Group

Create user group

Click "Add Group" to enter group adding interface.

Enter the group name and remark. "User group privilege" can set the basic privilege and channel privilege, and then click "OK" to finish user group adding.

Modify User Group:

Select the user to modify, click "modify" to enter the editing interface, and alter the remark and privilege.

Add or modify the user group both can configure the basic right and channel right settings.

3.4　Alarm
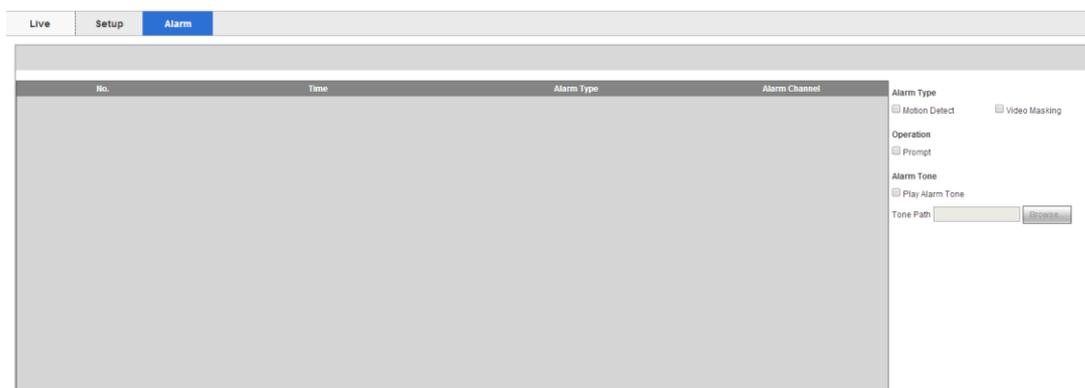
Figure3-35 Alarm interfaee

Alarm→ Type Selection

Click 【Alarm】 to enter alarm setting interface and check the alarm type on WEB port. Alarm type contains dynamic monitoring and monitoring masking. Alarm information including: Time, Alarm type, Alarm channel.

Alarm → Alarm Reminding

Check【Remind】Enable, Open reminding function: When the alarm occurs, the real-time previewing interface will appear alarm light, click alarm to enter alarming interface and check the text information.

Alarm→ Alarm Tone

Check【Play alarm tone enable】，It is selectable for the alarm tone with local HDD prerecording, the alarm tone is MP3 format.

Function

4.1 DDNS Function

4.1.1 VSSIP

VSSIP is a professional dynamic domain name analysis server embedded in our company's IPC, please contact to the dealer or agent for account number of DDNS. Click the enable in the configuration window after getting the account number, and input the account number information and it will do.

4.1.2 CN99（www.3322.org）

Register

Register New Users or Login at www.3322.org.

Click "My Control Panel" at the navigation bar.

Click "new" under the DDNS on the left side.

Fill in the name of the host machine, IP address will automatically detect in the current internet. Leave the Mail Servers blank, and then click the "OK" button.

Embedded IPC Setting

Open 【Main Menu】→【Configuration】→【Network】→【Advanced】→【DDNS】→Enable

Name	Configuration
DDNS	CN99 DDNS
IP	Members.3322.org
Port	80
Domain name	xxx.3322.org
User	xxx
Password	xxxxxx

After setting up the information as above, user can access the Embedded IPC via XXX.3322.org

Notice: The main machine's IP should refer to the information of the website.

4.1.3 NO-IP（www.no-ip.com）

Register

Register new username at no-ip, click 【Create Account】.

Create domain name, click 【Add a Host】.

Embedded IPC Setting

Open 【Main Menu】→【Management】→【Network】→【Advanced】→【DDNS】→【Enable】

Name	Configuration
DDNS	NO-IP DDNS
IP	dynupdate.no-ip.com
Port	80
Domain name	xxx.xxx.org
User	xxx）
Password	xxxxxx

4.1.4 Dyndns DDNS（www.dyndns.com）

Register

To login at dyndns, register an account.

Click on the confirmation link, login the account, click 【 Add Host Services 】 at [My Services], set your own realm name, and then operate according to the procedure.

Configuration of the Embedded IPC

Open 【Main Menu】→【Management】→【Network】→【Advanced】→【DDNS】→【Enable】

Name	Configuration
DDNS	Dyndns DDNS
IP	Members.dyndns.org
Port	80
Domain name	xxx.xxx.com
Username	xxx
Password	xxxxxx

4.1.5 Test and Verify DDNS

After setting the Embedded IPC, wait for a few minutes, analysis records will update. Click Operation in the Start Menu of

computer, input "cmd", click "OK" to open a window. As 错误！未找到引用源。 shows.
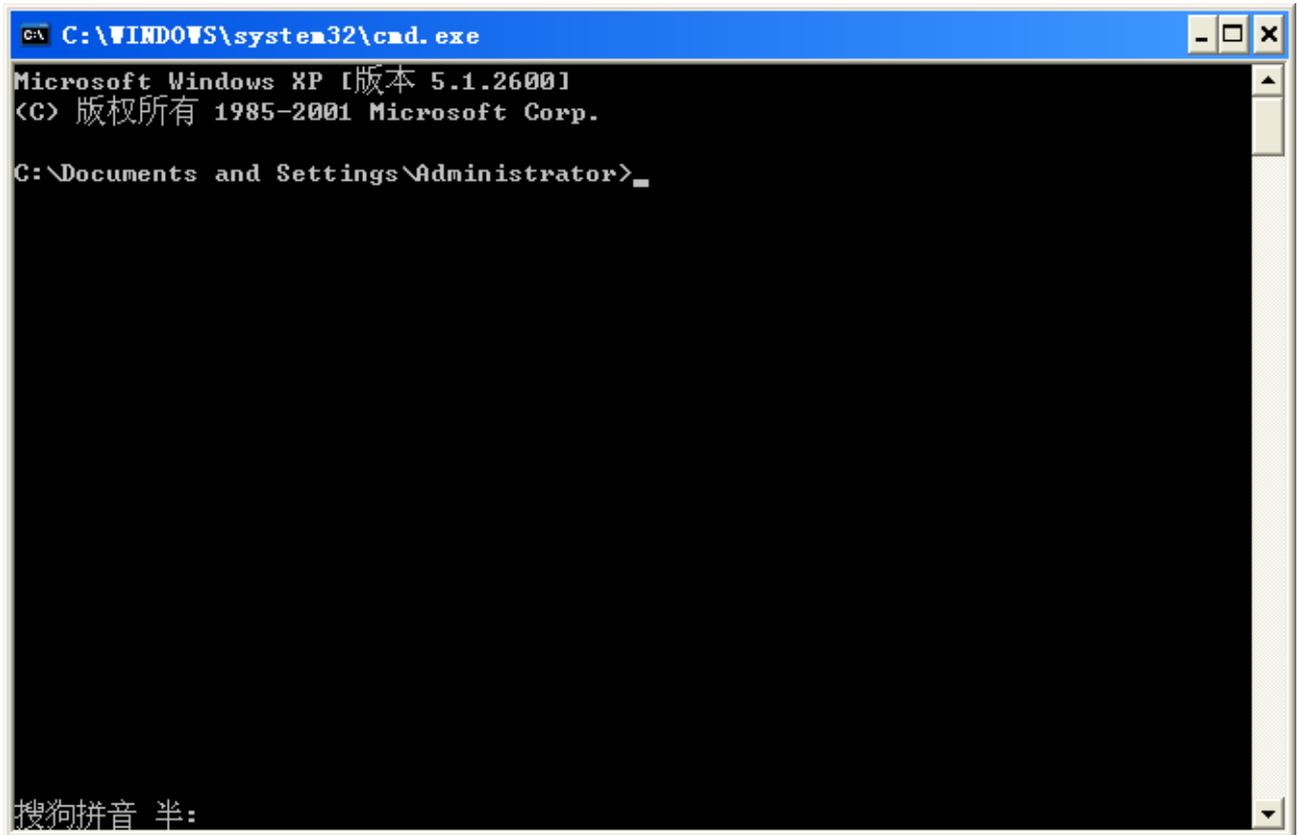
错误！未找到引用源。

Input "ping+ Domain name" then press Enter, as the 错误！未找到引用源。 shows.

错误！未找到引用源。

The computer will analyses the domain name configurated in IPC, and return to the current IP, as the picture shows underlined in red. When the IP corresponds to the embedded IPC's IP in Public internet, it means the DDNS is setting right. If they are not , please check the network connection of embedded IPC and DDNS information.

4.2 Port Mapping

Port mapping is mapping a port of outside web host's IP address to a machine inside web, and provide the service. When user connects to the port of the IP, the server will automatically map the request to the corresponding machine inside LAN.

With the function of port mapping, we can map many ports of a machine's IP address to different machines' different ports inside web. The port mapping can also have other special agent functions, like POP, SM TP, TELNET, etc. Theoretically, it can provide more than sixty thousand ports.For example, if we want to map a web server which has an IP address of 192.168.111.10, we just need to input the IP address and TCP port 80 into the port mapping chart of the router.

There are two ways to map the port: UPnP function of automatically map and modify the router's port mapping chart by manual.

4.2.1 UPnP Function

In order to get connection to the Embedded IPC through Public network, we need to set the Router to cross the NAT of Embedded

IPC. UPnP can make the NAT cross automatically by the UPnP agreement of Embedded IPC, and don't have to set the Router.

⚠ *Note: to realize the UPnP Function, there must be Router support and enable the UPnP Function.*

The first step

Connect the Router to the network, get to the Menu of the Router, set the Router, then get to port, and enable the UPnP Function.

Routers made by different manufacturers may have some difference, please refer to the specification carefully before setting the

Router.

The second step

Connect the Embedded IPCto the Router; the configuration will automatically gain the IP address or static IP. After setting up the IP,

click the Advanced Config. And get to【the Network transmission capacity, ports and multicast etc. 】to open the Enable at the

【UPnP port mapping】.

The default access port of Embedded IPC contains HTTP port 80 and TCP port 8000. If the port has been occupied by other LAN

equipment, please modify the default port number to an unuserd port number at 【network transmission capacity, ports, multicast

etc.】.

The third step

Enter the Router management interface; detect the port if there is already a Port mapping. If there is, it shows UPnP setting's

finished.

The forth step

Input the IP address in IE, and add port number of the Embedded IPC, for example: 155.157.12.227:81. If you want to enter by the

Client Software, use the TCP port offered by the outer net.

⚠ *Note: if there are a few embedded IPCs need to set the UPnP function, in order to avoid IP conflict, set the ports of*
embedded IPC into different ports numbers. Otherwise, it will choose the embedded IPC port set preceded as the first choice.

4.2.2 Manual Port Mapping

The first step

Connect the Embedded IPC to the Router, set the static IP.

The second step

Log in Router, enter into the configuration menu of Router, and set the menu. Then get to port, set the IP distributed by the

Embedded IPC, and set the rule of port mapping, add HTTP and TCP port into mapping list.

Default access ports of Embedded IPC include HTTP port 80 and TCP port 8000, if the ports are occupied by other LAN devices,

please modify the default port of the Embedded IPC into other vacant ports at 【 network transmission capacity, ports, multicast

etc.】.

The third step

Input the public net IP address in the IE, and add the port number of the Embedded IPC you want to access after the IP, for

example: http://155.157.12.227:81. If you want to access by Client Software, you can use the outer net TCP port directly.

Notice: for detail configuration setting, please refer to the user manual of Router.

4.3 NTP Function

Enable NTP function; make the time synchronization with both the IPC and GPS clock server, to ensure the accuracy of device

time.

4.3.1 Internet Configuration

Get to the 【Configuration】→【Network】, choose 【Advanced】, and then choose 【NTP】to set.

After the device can access the Internet, NTP server can use the standard NTP server at Internet as clock source. For example,

China National Center server timing (IP address: 210.72.145.44). Input the IP address and domain name of relative server at NTP

setting.

To activate NTP, click to choose "Enable".

The interval of changing time is from 1 to 65535 minutes.

4.3.2 Intranet Configuration

If IPC work under the intranet, user can set up a privately -owned server as clock source. NTP address in IPC configuration fill in

privately-owned NTP address can work.

Privately-owned NTP server can adopt standard NTP products and accurate time PC system. Please refer to below instruction

when adopt PC system as a NTP server.

NTP Server Set Up under Windows

Click "Start" menu → "Run"(or Win+R), and input "regedit" to get into REGEDIT.

Build a new key assignment of DWORD Value under :

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Parameters registry subkey;

Change the value to 1, and save.

Restart the computer.

NTP server set up under Linux system

Due to the particularity of Linux system, for detail way to erect the NTP server, please refer to every editions of the manual.

4.4 Voice Intercom

4.4.1 Summary

Embedded IPC Bidirectional Talk: user can talk to remote client software or Web via IPC audio input and output ports; user can

hear voice via IPC audio output ports when talking to remote by the client software or WEB voice intercom.

4.4.2 Configuration

Local Configuration

Connect a microphone to the MIC input port, connect loudspeaker to the audio output port.

⚠ *Note: local output needs active audio output device.*

Remote PC Configuration

Connect microphone and loudspeaker to computer.

Using

To use voice intercom, please open remote client software or Web and click "voice intercom" to achieve voice intercom function.

5 APPENDIX

5.1 TERMS

Dual-stream

Dual-stream: one high bit rate stream for the local HD store, QCIF/CIF/2CIF/DCIF/4CIF coding, other low bit rate stream for

network transmission, such as QCIF / CIF coding.

Dual-stream can achieve two different bandwidth stream requires of local transmission and remote transmission.

Local transmission with high stream can get a higher HD video storage and remote transmission use lower stream to adapt to the

CDMA / ADSL or other network to obtain higher image fluency.

I Frame

I frame: intra frame image, remove redundant information to compress the transmittal data, also called key frames.

B Frame

B frame: According to time redundant of the source image sequence previously encoded frame and account the source image

after the encoded frame to compress transmittal data, also known as bi-directional prediction frame.

P Frame

P-frame: according to image frame lower than the previous 'time redundant to compress transmittal data, also called predicted

frames.

Wide Dynamic

Bright parts and dark parts in particular can be seen very clearly at the same time. Wide dynamic range is a ratio between the

brightest luminance signal value and the darkest value.