Intelligent IP Camera User Manual (Web Browser)

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Menu

1 Preview Interface	4
1.1 Main Menu	4
1.2 Language	4
1.3 Video Stream Configuration	4
1.4 Stream Channel	5
1.5 Camera Info	5
1.6 Live view	5
1.7 OSD Buttons	5
1.7.1 Video Set Window	6
1.7.2 Snapshot and Record Settings	9
1.8 Video ActiveX	10
2 Settings Interface	10
2.1 Basic Settings	11
2.1.1 Time	11
2.1.2 Users	11
2.1.3 TCP/IP	12
2.1.4 Port	13
2.1.5 Audio	14
2.1.6 Video Stream	14
2.1.7 System	17
2.1.8 Maintenance	17
2.2 System	18
2.2.1 Time	18
2.2.2 System Info	18
2.2.3 Maintenance	19
2.2.4 Serial Port	19
2.2.5 Alarm	19
2.2.6 System Status	20
2.3 Network	20
2.3.1 TCP/IP	20
2.3.2 Port	21
2.3.3 WIFI	21
2.3.4 3G	21
2.3.5 FTP	22
2.3.6 PPPoE	22
2.3.7 SMTP	23
2.3.8 UPnP	24
2.3.9 RTSP	24
2.3.10 ID Register	25
2.4 Audio & Video	25
2.4.1 Audio	25
2.4.2 Video Stream	25

2.4.3 Image Setting	25
2.4.4 Privacy Mask	26
2.4.5 Video Shield	27
2.4.5 Motion Detection	27
2.5 Storage	28
2.5.1 SD Card	28
2.5.2 Record	28
2.6 Event	29
2.6.1 Event Server	29
2.6.2 Event Type	29
2.6.3 Schedule Record	30
2.6.4 Schedule Upload	31
2.6.5 Schedule Snapshot	31
2.7 Safety	32
2.7.1 Users	32
2.7.2 IP Filtering	32
2.8 Log	33
2.8.1 Log Settings	33
2.8.2 Log Info	33

1 Preview Interface

The IE preview interface contains 8 zones as below:



1	Main menu	5	Camera info
2	Language	6	Live view
3	Video stream config.	7	OSD buttons
4	Stream channel	8	Link for Video ActiveX

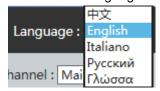
1.1 Main Menu

The main menu contains 2 parts:

- Preview: the main interface to do live view.
- Settings: to set parameters of system, network, video& audio, storage, event, safety, log, and do maintenance such as resetting to default and upgrading.

1.2 Language

Switch to the language meets your requirement.



1.3 Video Stream Configuration

Concerning video stream configuration, there are 4 options for users:

- Quality first: It can ensure the quality of video and occupy more bandwidth;
- Bandwidth Quality Balance: It can provide high quality picture based on certain band

width;

- Bandwidth First: It can ensure the smooth streaming of video;
- Mobile Devices: It's used for mobile devices to view video image.



1.4 Stream Channel

It provides 2 kinds of video streams:

- Main stream: with resolution 720P, 1080P or higher;
- Sub stream: with resolution D1 (704*576), VGA (640*480), CIF (352*288) and QVGA (320*240).

Quick way to optimize picture quality display: select "Video Stream Config: Quality First" and "Chanel: Main Stream". For video stream parameters settings, please refer to Chapter 2.4.2.



1.5 Camera Info

It provide overlapping displayed the camera name, encode type, resolution, frame rate, transmission speed, date & time, other customized text and image information. For camera info setting, please refer to Chapter 2.1.6.1 Common and 2.1.8 Maintenance -General.

1.6 Live view

It's used to display current camera image.

1.7 OSD Buttons

You can set basic functions by clicking relative buttons.

⊕ □: Play/ Stop preview. Video transmission will stop after clicking this button and no live video will show. Video transmission will return to normal after clicking the button again.

: Snap the current image.

Enter/Exit Full-screen display mode. You can also double click the image to enter/exit full screen display.

🥄 : Digital Zoom

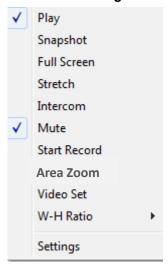
: Start/Stop Record

: Turn on / Turn off interphone

🔌 : Turn on / Turn off Speaker

Volume Control

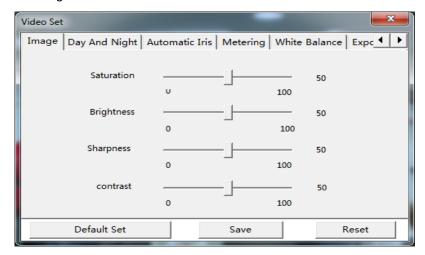
Users also can right click on the live preview screen to get following menu:



Menu	Description
Play	Play/Stop preview
Snapshot	Snapshot
Full Screen	Enter/Exit full screen
Stretch	Stretch/Shrink the screen
Intercom	Start/Stop interphone
Mute	Enable/Disable audio
Start Record	Start/Stop record
Area Zoom	Area zoom/Restore Zoom
Video Set	Open Video Set window
W-H Ratio	Width Height ratio, default /4:3/16:9 optional
Settings	Open Settings window

1.7.1 Video Set Window

Click Video Set tag on menu list of preview screen to enter video set panel shown as below image.



Default Set: click this button to get the Video Set default settings.

Save: click this button to save your changes.

Reset: click this button to abandon your changes.

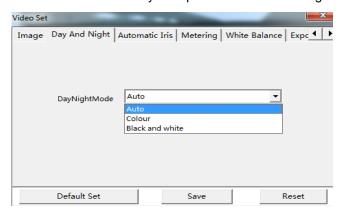
Image:

Saturation: 0-100 configurable Brightness: 0-100 configurable Sharpness: 0-100 configurable Contrast: 0-100 configurable

Day and Night:

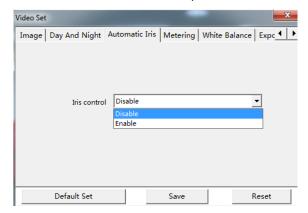
Auto: Day/night switch automatically Color: always keep color image.

Black and white: always keep black and white image



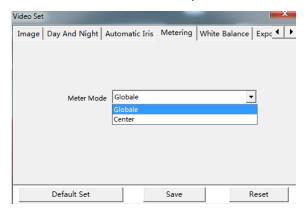
Automatic Iris

Iris control: Disable/Enable optional



Metering:

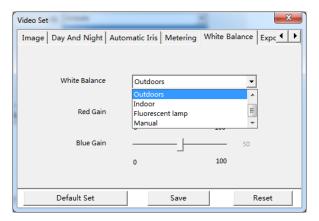
Meter Mode: Global/Center optional



White Balance:

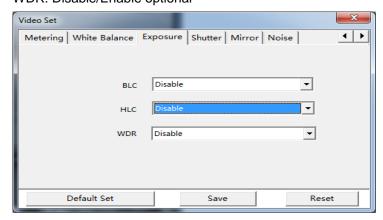
White Balance: Outdoors/Indoor/Fluorescent lamp/Manual

Red Gain & Blue Gain: 0-100 configurable



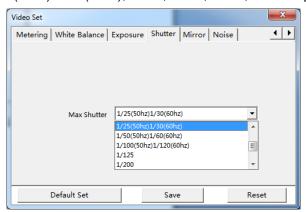
Exposure:

BLC: Disable/Enable optional HLC: Disable/Enable optional WDR: Disable/Enable optional



Shutter:

Max shutter: 1/5, 1/10, 1/15, 1/20, 1/25(50hz)1/30(60hz), 1/50(50hz)1/60(60hz), 1/100(50hz)1/120(60hz), 1/125, 1/200, 1/500, 1/1000 optional.



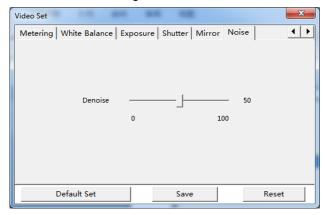
Mirror:

Image Mirror: None, Vertical, Horizontal, Vertical Horizontal optional.



Noise:

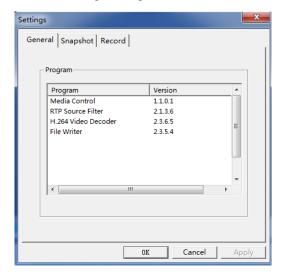
Denoise: 0-100 configurable



1.7.2 Snapshot and Record Settings

Click Settings tag on menu list of preview screen to enter settings panel, shown as below image.

General: Program's general information is listed here.



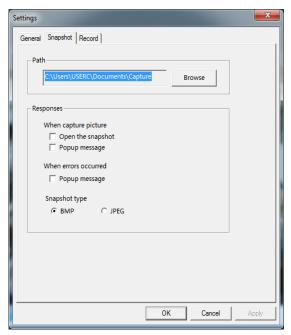
Snapshot: Change snapshot's basic setting here.

Click Browse to select a path to save snapshots.

Response: When capture picture, enable/disable Open the snapshot, Popup message.

When errors occurred, enable/disable Popup message.

Snapshot type: BMP or JPEG.



Record:

Save as: click Browse to select a path to save the recorded files.



1.8 Video ActiveX

If there is no video automatically, please manually download Video ActiveX.

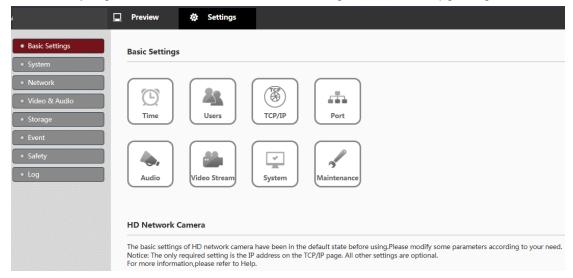
Please enable of functions under ActiveX controls and plug-ins on "Internet Options" interface if ActiveX downloading fails.

On "Internet Options" interface, click "Custom level" button to enter into "Security Settings-Internet Zone", then enable all of functions under ActiveX controls and plug-ins.

2 Settings Interface

Click Setting on the screen to enter Setting interface.

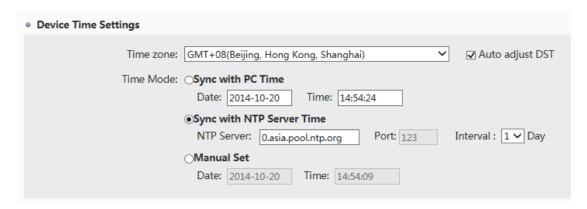
Users can make basic settings, set parameters of system, network, video& audio, storage, event, safety, log, and do maintenance such as resetting to default and upgrading.



2.1 Basic Settings

There are 8 quick access icons for basic settings, as above image shown: Click each icon to enter corresponded menu page.

2.1.1 Time



Choose time zone according to requirements. "Auto adjust DST" can be enabled.

There are three time modes optional:

- Sync with PC time.
- Sync with NTP server time: please fill in the right info about NTP server address and port, and set 1 to 5 days as interval.
- Manual Set: you can set time manually.

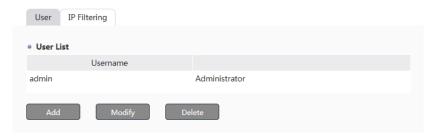
Device time will show on the upper left corner of preview interface after saved.

2.1.2 Users

2.1.2.1 User List

Existing user List shows as below. There are max. 15 users including admin.

Safety



2.1.2.2 User configuration

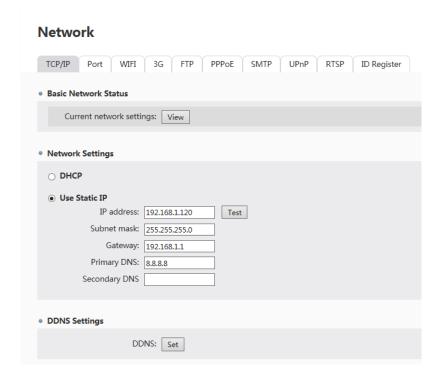
Add user: click "add" button and fill in user name, password, and confirm password in the pop-up window. Set it as role administrator, operator, or viewer. Different roles have different authority. No **upgrading** and user management authority for operators. Only log & report authority for viewers.



Edit User: select the user and click edit, then change its password and authority. For the default user admin, only password can be changed.

Delete User: select the user and click delete, then it will be deleted. The default user admin can't be deleted.

2.1.3 TCP/IP



Basic Network Status:

Click View to see your network camera's current network settings.

Network Settings:

DHCP: Click the checkbox of DHCP to enable this function.

USE Static IP: Click the checkbox of Use Static IP to enable this function, and then input its IP address, Subnet mask, Gateway, Primary DNS and Secondary DNS.

The camera will restart after changing its IP address.

DDNS Settings:

Click Set to change your DDNS settings.

2.1.4 Port

Http port, RTSP port and TCP port are available for changing.

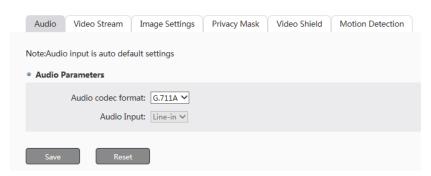
Http port: 10000..50000, default is 80. RTSP port: 10000..50000, Default is 554 TCP port: 10000..50000, Default is 6000.

Network



2.1.5 Audio

Video & Audio



Audio codec format: G.711A or G.711U. Audio codec format will work after camera restarting. Audio Input: Line-in or MIC. Microphone input will work if the camera hardware supports it. Click Save to save your settings or click reset, to do settings again.

2.1.6 Video Stream

There are three tabs for video stream settings: common, video stream and MJPEG.

2.1.6.1 Common

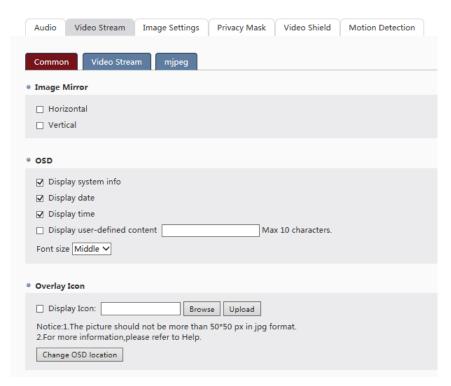
Image mirror: Users can do horizontal mirror and vertical mirror.

OSD: Click the checkbox "Display system info", "Display date", "Display time" and "Display user-defined content (characters size can be large, middle or small)" and then relative info will show in the upper left corner of the live view interface in default.

Overlay Icon: browser the picture (50*50 JPG file) and upload it then it will show in the live view window.

Change OSD location: users can move OSD info and overlay icon to other locations.

Video & Audio



Date and time Format: Options YYYY-MM-DD, MM-DD-YYYY and DD-MM-YYYY for date format and 12h and 24h for time format. They show in the second line of the live view window in default.

Analog Output Setting: click the checkbox "enable analog video output" then image will show when the camera is connected to analog DVR. Or the analog image will be locked. This function only works when the camera hardware supports analog output. Click Save to save your settings or click reset, to do settings again.



2.1.6.2 Video Stream

Encode type is always H.264.

Main stream Resolution: 5M > 3M > 1080P (2M) > 960P (1.3MP) > 720P (1MP).

Sub stream Resolution: D1> VGA > CIF >QCIF.

Key frame Interval: 25-100 (means how many fps comes one key frame, 25 means after every 25fps there is 1 key frame come, the smaller you choose, the quicker to switch from main-sub stream, the higher storage need).

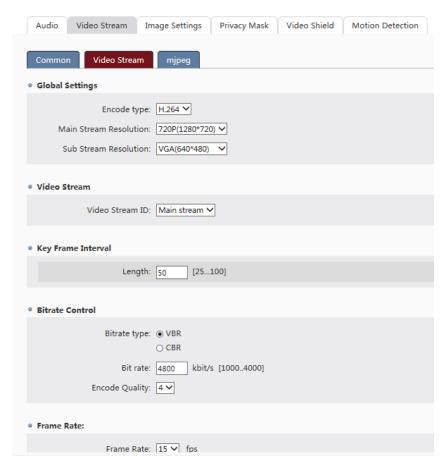
Bit-rate Type:

For Main Stream/Sub stream: VBR, CBR (set bit rate according to limitation range, the higher the better picture quality but higher storage need).

Bit rate: main stream's bit rate is 1500~4000 kbit/s configurable for 720P/960P, 3000~8000 kbit/s configurable for 1080P. Sub stream's bit rate is 50~1000 kbit/s configurable.

Encode Quality: 1-6 configurable (6 is the best) for VBR bit type.

Frame Rate: 1-30 or 1-25 configurable.



2.1.6.3 MJPEG

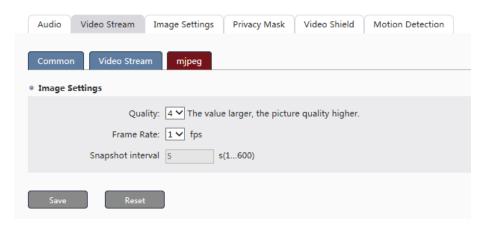
MJPEG:

Quality: 1-7 configurable, the larger value, the higher image quality.

Frame rate: 1-5 configurable.

Snapshot interval: 1-600s configurable.

Video & Audio



2.1.7 System

Users can find out the camera's firmware version, hardware version, Onvif version, MAC address and serial number here.

System



2.1.8 Maintenance

Reboot: Reboot the camera.

Default: Reset all parameters except IP to default settings.

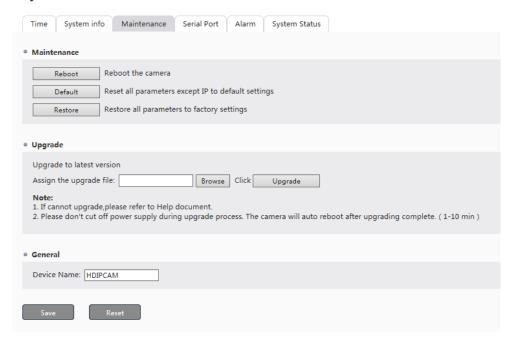
Restore: Restore all parameters to factory settings.

Upgrade: browser the upgrading file and then click upgrade. Please don't power off while

doing upgrading. Windows firewall may should be turned off before upgrading.

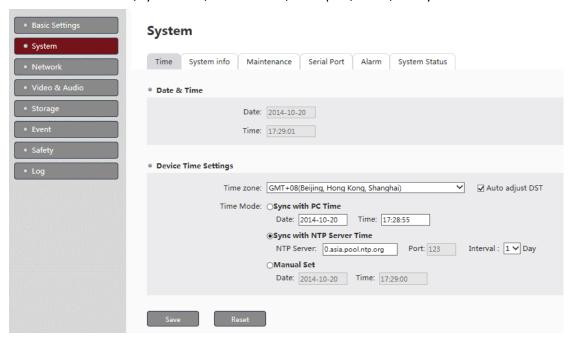
General: name your device and it will show on the live video window quickly.

System



2.2 System

There are 6 tabs: time, system info, maintenance, serial port, alarm, and system status.



2.2.1 Time

Refer to 2.1.1 for details.

2.2.2 System Info

Refer to 2.1.7 for details.

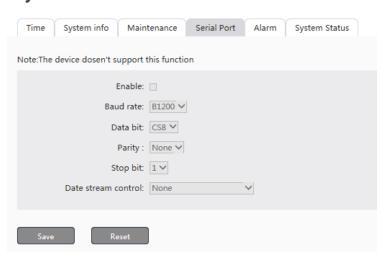
2.2.3 Maintenance

Refer to 2.1.8 for details.

2.2.4 Serial Port

It's used to enable/disable serial port function. This function only works when the camera hardware supports it.

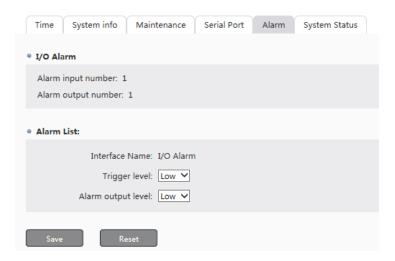
System



2.2.5 Alarm

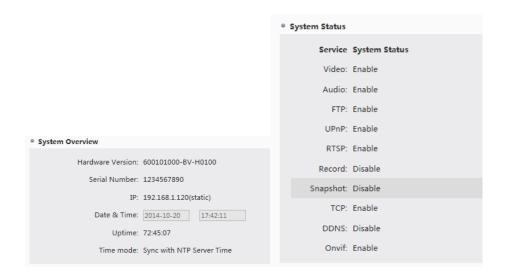
It's used to set alarm function. This function only works when the camera hardware supports it.

System



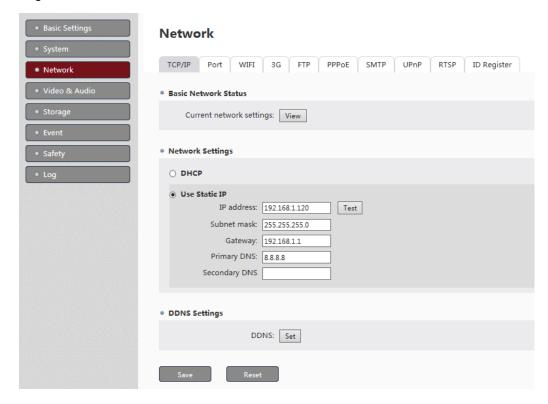
2.2.6 System Status

It shows system overview and main functions enabled/disabled.



2.3 Network

There are 11 tabs: TCP/IP, Port, WIFI, 3G, FTP, PPPoE, SMTP, UPnP, RTSP, and ID Register.



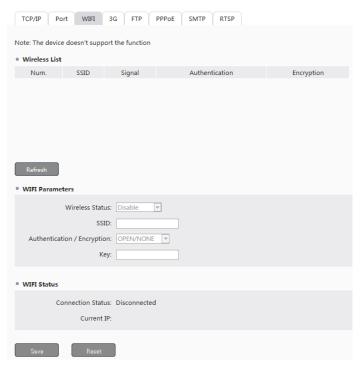
2.3.1 TCP/IP

Refer to 2.1.3 for details.

2.3.2 Port

Refer to 2.1.4 for details.

2.3.3 WIFI

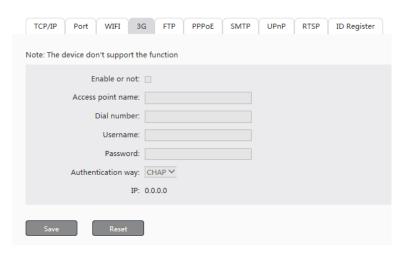


WIFI parameters can be set if the device supports WIFI function. Fill in the SSID and key, and select the correct Authentication/ Encryption mode.

2.3.4 3G

3G parameters can be set if the device supports 3G function. Fill in the access point name, dial number, username, password, and select the correct Authentication mode. An IP address will be assigned to this device after setting correctly.

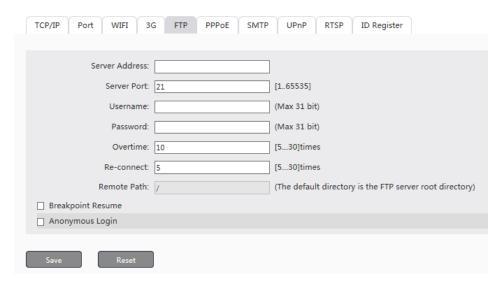
Network



2.3.5 FTP

Users can set FTP server's info here.

Network



2.3.6 PPPoE

The Point-to-Point Protocol over Ethernet (PPPoE) is a network protocol for encapsulating PPP frames inside Ethernet frames. Enable PPPoE and then fill in username and password to make PPPoE function works.

Network



2.3.7 SMTP

Please set gateway and DNS info before SMTP settings.

Main email server: the default SMTP server.

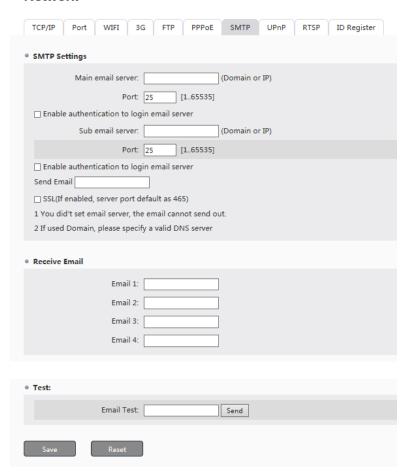
Sub email server: when main email server is not available, sub email server will be activated.

Click the checkbox of Enable authentication to login email server, to input user name and password (if required).

Click the checkbox of SSL to enable SSL function (if required).

Type in the email address to receive test email with title of Just for Test.

Network



2.3.8 UPnP

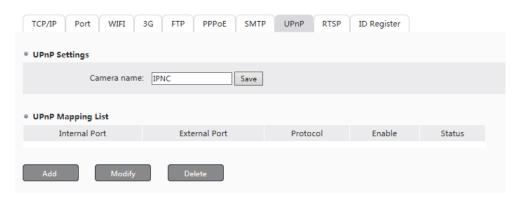
This function needs Router's support.

Camera Name: IPNC in default. Max. 20 characters.

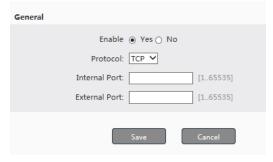
UPnP mapping list: max. 10 mapping.

Add UPnP mapping manually: click Add then choose enable Yes, fill in internal port and external port.

Network



UPnP Mapping Settings



2.3.9 RTSP

The Real Time Streaming Protocol (RTSP) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers. The protocol is used for establishing and controlling media sessions between end points.

Network



2.3.10 ID Register

Enable register: Click the checkbox to enable it.

Server IP: the DNS server IP.

Server Port: 9700 in default. Please make changes in DNS server if needed.

Device ID: it should be a combination of letters and numbers in the format of "a.b.c". with

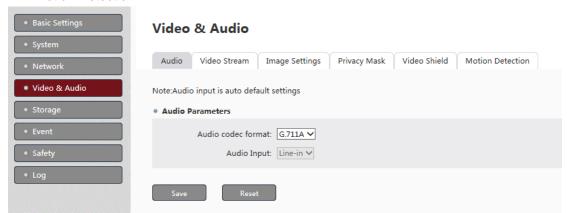
Min. 1 letter.

Network

TCP/IP	Port	WIFI	3G	FTP	PPPoE	SMTP	UPnP	RTSP	ID Register
	Enal	ble regis	ter:						
		Server	IP: 0.0	.0.0					
	:	Server Po	ort: 1				[165535]		
		Device	ID:				[a.b.c]		
Save		Reset							

2.4 Audio & Video

There are 6 tabs: Audio, Video Stream, Image Settings, Privacy Mask, Video Shield and Motion Detection.



2.4.1 Audio

Please refer to 2.1.5 for details.

2.4.2 Video Stream

Please refer to 2.1.6 for details.

2.4.3 Image Setting

Saturation: 0-100 configurable

Brightness: 0-100 configurable Sharpness: 0-100 configurable Contrast: 0-100 configurable

White Balance: Auto/Outdoor/Indoor/Sunlight Lamp

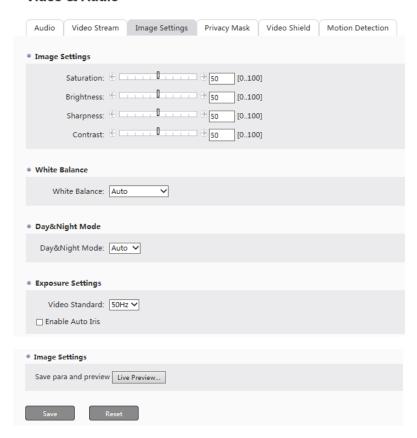
Day&Night mode: Auto/Color/B&W

Exposure Settings:

Video Standard: 50HZ (for PAL format), 60HZ (for NTSC format) Select the checkbox of Enable Auto Iris to enable auto iris function.

Click Live Preview to check the image.

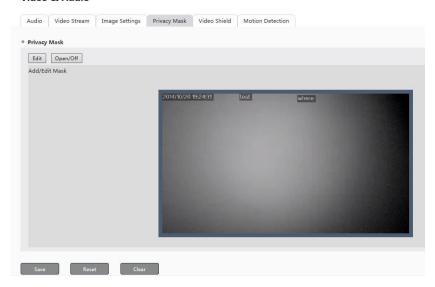
Video & Audio



2.4.4 Privacy Mask

Max. 4 privacy zones are supported. Click Edit, draw zones by mouse and then save the zones. Click Clear to cancel all existing zones. Open/off button is for enable/disable the privacy mask function.

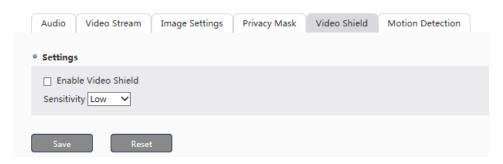
Video & Audio



2.4.5 Video Shield

When the cameras are shielded by unidentified object, alarm info will be output if video shield function is enabled.

Video & Audio

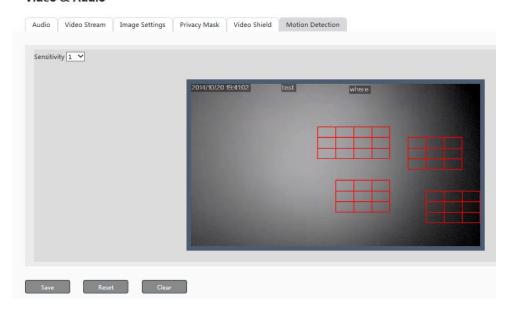


2.4.5 Motion Detection

To enable motion detection alarm, please draw zones (max. 4) by mouse and save them. Click clear to delete existing detection zones.

You can change its Sensitivity. 10 is the highest and 1 is the lowest.

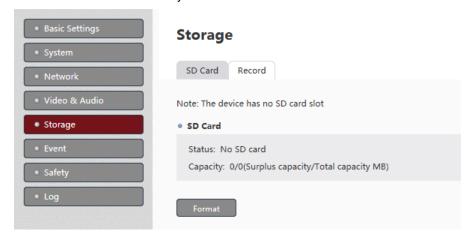
Video & Audio



2.5 Storage

2.5.1 SD Card

SD card status and capacity will show here. Please format the SD card the first time you use it. This function only works when the camera has SD card slot.



2.5.2 Record

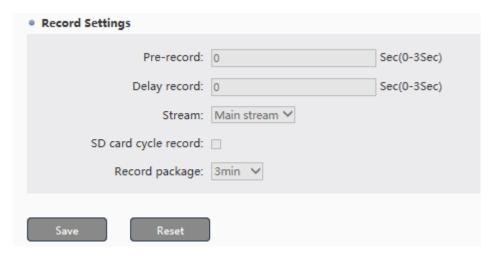
Pre-record: 0-3 sec.
Delay-record: 0-3 sec.

Recording stream: main stream or sub stream.

SD card cycle record: while surplus capacity is lower than 256M, the camera will delete the earliest video until it exceeds 1G.

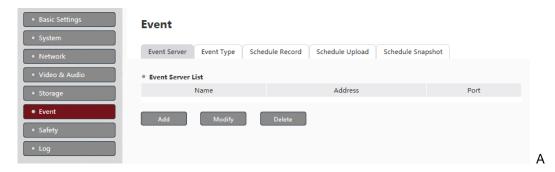
Record package: video can be stored as a package every 3 minutes, 5 minutes, or 10

minutes.



2.6 Event

2.6.1 Event Server



dd server: set TCP server's name, address and port. Max. 8 servers can be added.

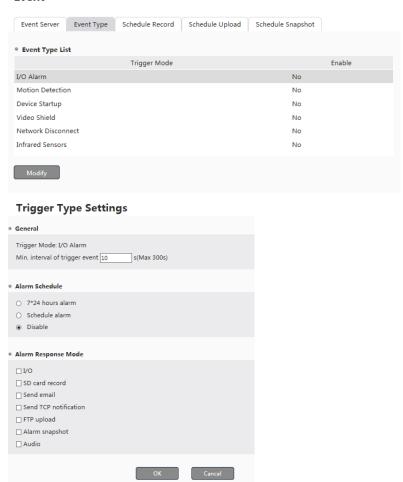
Modify: select a server, change its address and port.

Delete: select a server, delete it from the list.

2.6.2 Event Type

There are several kinds of trigger modes: I/O Alarm, motion detection device startup, video shield, network disconnect, and infrared sensors. Different alarm schedule (7*24 hours alarm, scheduled alarm, disable) and alarm response (I/O, SD card record, Send email, Send TCP notification, FTP upload, Alarm snapshot, Audio) can be set according to different trigger mode. Min. interval of trigger event can be set as 0~300 sec.

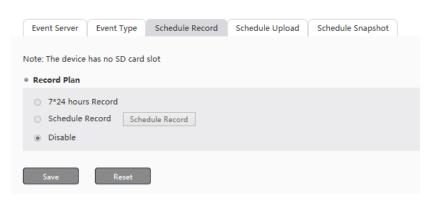
Event

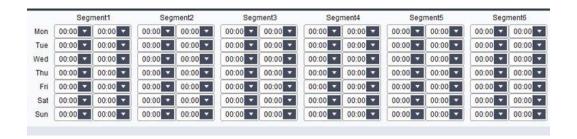


2.6.3 Schedule Record

There are 3 kinds of record plan: 7*24 hour record, schedule record and disable record. Concerning schedule record, users can set 6 segments for each day (Monday to Sunday).

Event

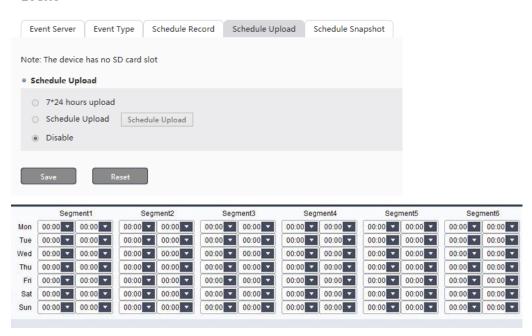




2.6.4 Schedule Upload

There are 3 kinds of upload plan: 7*24 hour upload, schedule upload and disable upload. Concerning schedule upload, users can set 6 segments for each day (Monday to Sunday).

Event

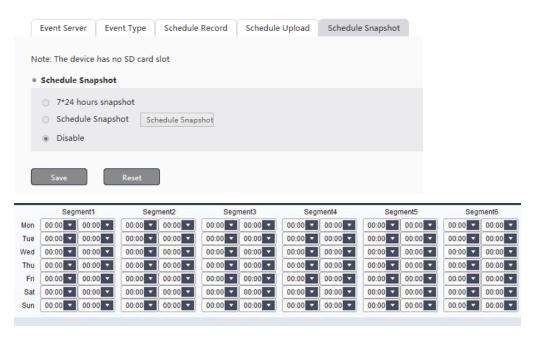


2.6.5 Schedule Snapshot

There are 3 kinds of snapshot plan: 7*24 hour snapshot, schedule snapshot and disable snapshot. Concerning schedule snapshot, users can set 6 segments for each day (Monday to Sunday).

Refer to **2.1.6.3 MJPEG** for snapshot image quality, frame rate and snapshot interval, and **1.7.2 Snapshot and Record Settings** for snapshot record path, response and image type (BMP or JPEG).

Event



2.7 Safety

2.7.1 Users

Please refer to 2.1.2 for details.

2.7.2 IP Filtering

IP filtering function help us aviod access from certain IP addresses by setting Deny List. Click the checkbox of Enable IP Filtering, select Deny, and then add filtering IP addresses by defining start IP and end IP.

Besides, IP filtering function help us allow access only from certain IP addresses by setting Allow List. Click the checkbox of Enable IP Filtering, select Allow and then add filtering IP addresses by defining start IP and end IP.



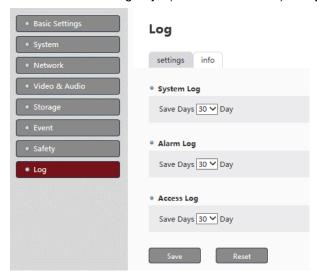
IP Filtering Settings



2.8 Log

2.8.1 Log Settings

Users can set saving days (10/20/30/40/50/60) for system log, alarm log and access log.



2.8.2 Log Info

Log files can help you troubleshooting. Download relative log files you need. Please note that it may take some time to download log files.

Log

