IP Camera User's Manual

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1 Download and install ActiveX

When you first log in to our IP camera, you may see a prompt box as below via Windows OS. You need to install ActiveX Control when you visit IP camera for the first time through IE browser.

ActiveX installing method: automatic download installation. Input the IP address of IP camera in Internet Explore to enter. Click **Install** to download the ActiveX:

Figure 1



Note: ActiveX will be installed automatically.

Suggestion: change the security level of IE:

Please change the security level of IE, IE tools-> Internet options->Security->Custom level. As Figure 2, and change the parameters as Figure 3, Figure 4:

Internet Options
General Security Privacy Content Connections Programs Advanced
Select a zone to view or change security settings.
🛛 🔍 🔩 🗸 🚫
Internet Local intranet Trusted sites Restricted sites
Internet
This zone is for Internet websites, except those listed in trusted and restricted zones.
Security level for this zone
Allowed levels for this zone: Medium to High
Medium-high Appropriate for most websites Prompts before downloading potentially unsafe content Unsigned ActiveX controls will not be downloaded
Enable Protected Mode (requires restarting Internet Explorer)
Custom level Default level
Reset all zones to default level
OK Cancel Apply

Figure 3



Miscellaneous	*
Access data sources across domains	
Allow dragging of content between domains into separate wi	_
Allow dragging of content between domains into the same wi	=
Allow META REFRESH	
Allow scripting of Microsoft web browser control	
Allow script-initiated windows without size or position constra	
Allow webpages to use restricted protocols for active conten	
Allow websites to open windows without address or status b	
Display mixed content	
Don't prompt for client certificate selection when only one ce	
Drag and drop or copy and paste files	
Enable MIME Sniffing	
Include local directory path when uploading files to a server	
Include local directory path when uploading files to a server	
Disable	
Enable	

2 Login

Reopen Internet Explorer after ActiveX installation is complete, enter IP address of the IP camera to turn to login page, enter username and password (default setting is admin/pass), click login to enter into main interface see Figure 5:

Figure 5

IP Video192.168.0.200requires a username and password.					
Warning: This server requires that you se in an unsecured manner.	end your usernar	ne and password			
admin					
	Login	Cancel			

3 Live Preview

See Figure 6 for the interface of Live Preview:



In the live view interface, users can do operations including snapping, recording, playback, call, listen, clear alarm, log search, local zoom of image, full-screen viewing, PTZ and lens control.

- Main Stream: call the main stream of camera to get the best quality.
- Sub Stream: call the sub stream of camera, with low resolution, suitable for bad network or Internet.
- Snap: click snap , snap the current image and save it in .JPG format automatically to the storage directory of snapped images.
- Record: manual image recording, automatically record current images and save them in .264 format to the storage directory of recorded images after the recording function is turned on. Displayed status after recording starts:
- Call: after turn on the audio talkback switch, the talkback between PC and IP camera can be performed given that audio talkback device is installed to the IP camera. The displayed status after audio turns on:
- Listen: after switch on the monitoring switch, PC can monitor the sound at the device end. The displayed status after monitoring starts:

Double-click to display full screen image.

- Full: double-click to display in full-screen image, right click or click esc to exit full screen mode.
- PTZ: allows adjust zoom, can set preset tour.

4 Replay

Click **Replay** to enter into video playback page, see Figure 7.

		Live view	Replay Language Log out
System	Video / Audio	Network	Maintenance



5 System 5.1 System config

Click **Config** to enter system settings, see Figure 8.

Figure 8



See Figure 9 for the interface of system settings:

Figure 9

				Live view	Replay Language Log out
System	Video / Audio	•	Netw	vork	Maintenance
Local Config Device Setting	System >> Local Cont	fig			
Record Setting Snap Setting	Preview Mode	Real Time	*		
COM Setting System Info	Reset Mosaic				
System Time	Record file packing time	1	*	Mins	
System Log	Record File Path	D:\cmsrec\			
		Save			

- Preview Mode: users can choose real time priority or fluency priority mode according to their needs.
- Reset Mosaic: select this option to make image quality better, but CPU usage rate will be higher at the same time.
- Record file packing time: set packing time of record files for local PC when it is recording.
- Record File Path: set the storage directory for local records and snapped files.
- After these parameters were set, please click Save to make them valid.

Tips: If the file cannot be saved or file path cannot be modified.

- When open IE browser, select to run as administrator.
- Use administrator account login computer directly.

5.2 Video/Audio Settings5.2.1 See Figure 10 for the interface of Audio Parameter.

Figure 10

			Live view Rep	olay Language Log ou
System	Video / Audio	Netw	ork	Maintenance
Audio Parameter	Video / Audio >> Audi	o Parameter		
OSD Settings				
Video Coding	Enable			
Video Mask				
Video Parameter	Audio Input	Mic	~	
Picture Parameter	Compression Type	G 711A	~	
Smart Stream	Compression Type	S. TIS	•	
Smart Detect	Audio Bitrate	16000	\sim	
Smart Control				
Motion Detection	Sampling Rate	8k	~	
Sensor Detection	Input Volume		7	
Network Detection				
	Output Volume			

- Enable: turn on or turn off the audio of IP camera, when there is no need for audio, close audio input to save DSP resource and network resource. Audio is disabled by default.
- Audio Input: MIC or Line In input selectable.
- Compression Type: support three types of audio compression format: G.726, G.711A, and G.711U.
- Sampling Rate: support audio sample rates of 8k and 32k.
- Input Volume: adjust the device's input volume to control the volume of listen.
- Output Volume: adjust the device's output volume to control the volume of call.

After parameters were set, please click Save to make them valid.

5.3 Video Settings

5.3.1 Text Overlay

See Figure 11 for the interface of OSD Settings:



- Title: the name of video channel, displayed at the bottom left of image (movable), maximum characters allowed: 32.
- Color: to select text colors.
- OSD: display or not to display Title, Date, Time, Week, Date Format and Frame/Bitrate of channels.
- Position: can adjust the display position of video title and Date, Time, Week.

After parameters were set, please click Save to make them valid.

5.3.2 Video Coding

See Figure 12 for the interface of Video Coding:

Fig	ure	12
<u> </u>		

			Live view Replay	Language Log ou
System	Video / Audio	Networ	k 💦	Maintenance
Audio Parameter	Video / Audio >> Vi	deo Coding		
OSD Settings		-		
Video Coding		Main Stream		Sub Stream
Video Mask				ous orean
Video Parameter	Coding Level	Main Profile 🗸	Coding Level	Main Profile V
Picture Parameter	Coding	H.264 V	Coding	H.264 V
Smart Stream	occurry		obully	
Smart Detect	Resolution	1920 * 1080 🗸	Resolution	320 * 240 🗸
Smart Control	Quality	Normal V	Quality	Basic V
Motion Detection	- and the second s			
Sensor Detection	Advanced	\checkmark	Advanced	\checkmark
Network Detection	Rate control	VBR 🗸	Rate control	VBR 🗸
	Quality	Better 🗸	Quality	Bad 🗸
	Bitrate limits	(30~16384Kb/S)	Bitrate limits	(30~16384Kb/S)
	Bitrate(Kb/S)	3480	Bitrate(Kb/S)	256
	Frame rate(F/S)	25 (1~25)	Frame rate(F/S)	15 (1~
	GOP(F)	25 (1~200)	GOP(F)	50 (1~
	LAN WAN		LAN V	/AN
	Save			
	* LAN:LAN Default.			
	* WAN:WAN Default.			

- Coding Level: baseline and Main profile available, only for H.264 compression format. Baseline is suitable for low delay, and the situation have requirement on real time. Main profile is suitable for better quality.
- Coding: H.264 and MJPEG.
- Resolution: set resolution of images.
- a.720P support:
- Preferred Stream: 1280*1024 / 1280*960 / 1280*720.
- Alternate Stream: 720*576 / 640*480 / 640*352 / 320*240.
- b.1080P support:
- Preferred Stream: 1920*1080 / 1280*960 / 1280*720.
- Alternate Stream 720*576 / 640*480 / 640*352 / 320*240.
- Quality: to select suitable quality according to requirement: Fine, Normal, and Basic. The parameters can also be user-defined by choosing **advanced**.
- Rate control: CBR and VBR are optional. CBR adopts constant encoding bitrate, VBR adopts variable encoding bitrate.
- Quality:

- a.Under CBR setting: set the bitrate range through **Image Quality.** If self-adaption is selected, it means the bitrate is controlled by the software. Another option is ±10%~±50%, ±10% means the bitrate range from -10% to +10% of the bitrate value.
- b.Under VBR setting: set image quality through **Image Quality**, 6 levels are available, from best to worst.
- Bitrate: the range of preferred and alternate stream is 30~16384Kbps. Higher bitrate setting can generate better image quality, but it occupies more bandwidth, please adjust the setting according to your actual bandwidth.
- a. Under CBR setting, **Bitrate** is the constant bitrate of encoding.
- b. Under VBR setting, **Bitrate** is the variable bitrate of encoding.
- Frame rate: set encoding frame rate per second. Under poor network condition, frame rate can be reduced to control encoding bitrate to make motion images flow more smoothly.
- GOP: adjustable between 1~200 (Preferred Stream), 1~200 (Alternate Stream). Smaller I frame
 interval means higher bitrate and better image quality. It is recommended to set the frame interval
 as above 25.
- LAN default value:
- a.Main stream:
- H.264 Coding: GOP: 75, frame rate: 25, rate control: VBR, image quality: better 720P: 2048kps, 1080P: 4096kps.
- MJPEG Coding: GOP: 75, frame rate: 25, rate control: VBR, image quality: better 720P: 9216kbps, 1080P: 10240kbps.
- b.Sub Stream:
- H.264 Coding: GOP: 50, frame rate: 25, bitrate: VBR, 512kbps, image quality: Bad.
- MJPEG Coding: GOP: 50, frame rate: 25, bitrate: VBR, 4096kbps, image quality: Bad.
- WAN default value:
- H.264 Coding: GOP: 25, frame rate: 5, bitrate: CBR, 384kbps, image quality: Bad.
- MJPEG Coding: GOP: 25, frame rate: 5, bitrate: CBR, 4096kbps, image quality: Bad.

After these parameters were set, please click Save to make them valid. After changing the coding level, resolution and coding, device will restart.

Note: Non-professional users, please use **Advanced Settings** with caution.

5.3.3 Video Mask

See Figure 13 for the interface of Video Mask:



- Enable Mask: enable or disable video masking.
- Mask area set: click and move cursor to set image masking area, an image can be entirely or partially masked, maximum 4 areas are supported.
- All: mask the whole image.
- Clear: clear masked areas.

After these parameters were set, please click Save to make them valid.

5.3.4 Video Parameter

See Figure 14 for the interface of Video Parameter:

System	Video / A	Audio	Netw	ork	Maintenance
dio Parameter	Video / Aud	lio >> Video Para	meter		
OSD Settings	140077440		inotor		
Video Mask	Images	Basic	IR	Advanced	
deo Parameter	Bri.	×0	128		
ture Parameter	Con.	00	128		
Smart Detect	Hue	• 0	128		
mart Control	Sat.	8) 150		
nsor Detection	Sharpness	Δ -0-	25		
work Detection	Gamma	— -0	20		
	BLC	-0	56		
	Image	Transparent V			
	Catador	•			
	Sav C	e lick the corresponding	g icon or title, set th	ne default value.	
	Saw * C	e	g icon or title, set th	ne default value. Live view Repl	ay Language Log out
System	Saw • C	e lick the corresponding	g icon or title, set th Netwo	e default value. Live view Repl	ay Language Log out Maintenance
System Audio Parameter OSD Settings	Saw • C Video / Au	e lick the corresponding Audio dio >> Video Paran	g icon or title, set th Netwo	ne default value. Live view Repl	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding	Saw * C Video / Au Images	e Llick the corresponding Audio dio >> Video Parat Basic	g icon or title, set th Netwo neter	Live view Repl	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Mask	Saw * C Video / Au Images	Contraction	gicon or title, set th Netwo neter	Live view Repl	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter	Saw * C Video / Au Video / Au Images Mirror	Close	neter IR Close	Live view Repl Chick Repl Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream	Saw * C Video / Au Video / Au Images Mirror LSC	Close	neter IR Close CTB Auto	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Detect Smart Detect Smart Detect	Video / Au Video / Au Images Mirror LSC 3D-DNR	Close	lg icon or title, set th Networ meter IR Close CTB Auto Cutting way	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection	Video / Au Video / Au Images Mirror LSC 3D-DNR WDRStrr	Close	g icon or title, set th Networneter IR Close CTB Auto Dutting way [comp	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection	Video / Au Video / Au Images Mirror LSC 3D-DNR WDRStree	Close	p icon or title, set th Networ meter IR Close CTB Auto Cutting way comp 35	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Video / Au Video / Au Images Mirror LSC 3D-DNR WDRStre Video	Close	a icon or title, set th Network meter IR Close CTB Auto Cutting way Comp 35 S50HZ	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Video / Au Video / Au Images Mirror LSC 3D-DNR WDRStre Video Standard	Close C	g icon or title, set th Netwo neter IR Close CTB Auto Cutting way comp 35 ©50HZ	Advanced	ay Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Video / Au Video / Au Images Mirror LSC 3D-DNR WDRStrr Video Standard Iris Mode	Close Convertient	a icon or title, set th Networ IR IR Close CTB Auto Comp 35 Cotting way Comp 35 COC Auto	Live view Repl rk Advanced	ay Language Log out Maintenance

System	Video / Audio	Networ	rk)	Maintenance
Audio Parameter	Video / Audio >> Video	Parameter		
OSD Settings		, r arameter		
Video Coding	Images Basic	IR	Advanced	
Video Mask				
Video Parameter	IR mode	IR Detection	~	
Picture Parameter		High Level	~	
Smart Stream	Black-Color	4 S		
Smart Detect	Color-Black	0 s		
Smart Control				
Sensor Detection	ICR	Low Level	~	
Jetwork Detection	IR	Auto	~	
	IR Direction	High Level	~	
	Save Click the corres	sponding icon or title, set the	default value. Live view Re	play Language Log out
System	Save * Click the corres	sponding icon or title, set the Network	default value. Live view Rej	play Language Log out Maintenance
System Audio Parameter OSD Settings	Save * Click the corres Video / Audio Video / Audio >> Video	oponding icon or title, set the open of the set the open of the set of the se	default value. Live view Rej	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding	Save * Click the corres Video / Audio Video / Audio >> Video Images Basic	ponding icon or title, set the Networl P Parameter	default value. Live view Rej	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask	Save * Click the corres Video / Audio Video / Audio >> Video Images Basic	ponding icon or title, set the Network o Parameter	default value. Live view Rej Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter	Save * Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation	ponding icon or title, set the Network Parameter IR Non-Rotation	default value. Live view Rej K Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter	Save Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation	ponding icon or title, set the	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect	Save Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain	ponding icon or title, set the	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control	Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain Exposure Time	ponding icon or title, set the set the set the set the set of the set the set of the set the set of	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection	Save Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain Exposure Time WB	ponding icon or title, set the or Network D Parameter IR IR Non-Rotation IBC 25 Value Valu	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection	Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain Exposure Time WB	ponding icon or title, set the original set of the set the original set of the set of th	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Save Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain Exposure Time WB AntiFogging	ponding icon or title, set the original set of the set the original set of the set the original set of the set	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Save Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation Gain DGain Exposure Time WB AntiFalseColor	sponding icon or title, set the original set of the set	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Save * Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation AGain DGain Exposure Time WB AntiFogging AntiFalseColor Image Stabilizer	Auto Open Open Open Open Open Open Open Open	Advanced	play Language Log out Maintenance
System Audio Parameter OSD Settings Video Coding Video Mask Video Parameter Picture Parameter Smart Stream Smart Detect Smart Control Motion Detection Sensor Detection Network Detection	Save Click the corres Video / Audio Video / Audio >> Video Images Basic Rotation Gain Exposure Time WB AntiFogging AntiFalseColor Image Stabilizer	sponding icon or title, set the results of the t	Advanced	play Language Log out Maintenance

- Images Color: adjust the Brightness, Contrast, Hue, Saturation, Acutance, and Gamma of video. Image mode: Transparent and True Color.
- Basic
- a. Mirror: set mirror, horizontally rotate the video.
- b. Flip: set flip, vertically rotate the video.
- c.60HZ or 50HZ: in indoor environment, if the flashing of lamps results in the flickering of images, please select 50HZ or 60HZ according to the power frequency. 50HZ is suitable for PAL system, 60HZ is suitable for NTSC system.

- d.CTB: set CTB, IPC will automatically turns on D/N function according to the image's situation.
- e.WDR: set WDR, enhance the image quality in areas with strong light source (sunlight, lamps or reflectors, etc.), shadow of high-brightness, backlight.
- f. 3D-DNR: set 3D NR to get a clearer picture in low light environment, effectively eliminate video noise and color noise in low light conditions.
- g.WB: you can choose manual WB or AWB mode to adjust white balance, default is AWB open. h.Iris:
- Set Non-Auto Iris, Can be used with non-auto iris lens.
- Set DC Auto Iris, Adjust the control level of auto-iris to control the luminous flux.

Auto Iris Shading: for the first time using auto iris, please redress the iris in the light box.

- IR
- a.IR Mode: this function is only for camera with infrared function, it supports 3 kinds of detection mode, suitable for different infrared light board and situation.
- Time Detection: for this mode, set the time to turn day mode and B/W mode, this mode have first priority.
- **Video Detection**: for this mode, the sensor will detect the value of lux. It determines whether to turn to B/W mode or not. The larger the value is, the more sensitive it is to turn to B/W mode.
- **IR Detection**: for this mode, the photo-resistor will detect the value of lux. To suit different infrared light board, it supports 3 kinds of mode:
- Low level mode, when the device get low level voltage from Infrared light board, the device will turn to B/W mode.
- High level mode, when the device get high level voltage from infrared light board, the device will turn to B/W mode.
- Auto detection mode, when the device is power on, it will take sample of light, then just it is day mode or B/W mode, and it also get the value of voltage from infrared light board, combination the two value and take them as the condition to turn to day mode or B/W Mode.
- b. Black-color: the video from Black-White to color when the detection becomes effective.
- c. Color-black: the video from color to Black-White when the detection becomes effective.

Note: The two time control only in the IR Detection mode.

d.ICR Setting the control level of the IR-CUT according to the IR-CUT control level.

- e.IR this function suit for the camera with IR-CUT and infrared light board. eg: for ICR, when set low level, it means when the device send a low level voltage to IR-CUT module, the IR-CUT will turn to B/W mode.
- Advanced
- a. Rotation: supports 90 degrees and 270 degrees rotation.
- b.Gain value: change the value of AGC. It can adjust the effect of image in low light-level.
- c.Exposure: set the value of shutter to control exposure time.
- d.WB: can select manual WB or AWB mode to adjust white balance, AWB is default open.
- e.AntiFogging: set anti fogging function. When the density of fog up to a high value, the ISP will change the brightness and contrast to improve the quality of image.
- f. AntiFalseColor: set anti false color function, can cancel the Moore profile effect in high frequency part.

After these parameters were set, please click Save to make them valid.

5.3.5 Picture Parameter

See Figure 15 for the interface of **Picture Parameter**:

Figure 15

			Live view	Replay Language Log o
System	Video / Audio		Network	Maintenance
Audio Parameter	Video / Audio >> Pic	ture Parameter		
OSD Settings				
Video Coding	Disture Format	ina		
Video Mask	Ficture Format	199	•	
Video Parameter	Resolution	1920 * 1080	~	
Picture Parameter				
Smart Stream	Save	1		
Smart Detect		,		
Smart Control				
Motion Detection				
Sensor Detection				
Network Detection				

• Picture: currently supports images of JPG format only, megapixel camera definition is the same as set in video definition.

After these parameters were set, please click Save to make them valid.

5.4 Smart 5.4.1 Smart Stream

Figure 16

		Live view	Replay Language Log out
System	Video / Audio	Network	Maintenance
Audio Parameter OSD Settings	Video / Audio >> Smart Stream		
Video Coding		2001 12:01:00:01:03:547	
Video Mask	Close		
Video Parameter		N 2	
Picture Parameter			
Smart Stream	Auto		
Smart Detect			
Smart Control			
Motion Detection	ROI		7 - 7
Sensor Detection			·
Network Detection		ROI Set Clear	
	Save		
	 Intelligent code to detect the default off Open intelligent detection of encoding, video prompts the video quality. Open intelligent regional settings, the maxim 	still is automatically reduced vide	eo quality; video motion, automatically le regional image quality

Smart Stream, when this function is enabled, IP Camera will control the stream bitrate according to the real IP Camera scenes. And user can set the ROI, IPC will improve image quality in ROI. This will reduce hard disk storage space, reduce the bandwidth requirements and increase recording length.

• Close: open or close Smart Stream function, default **Close**, like Figure 16, while select **Auto** or **ROI**, smart stream will be opened, like Figure 17:

Figure 17

	Close
Figure 18	
	Video / Audio >> Smart Stream
	Close
	Auto
	ROI

Auto: the selected region of interest for intelligent control stream. The area is set to remain high definition. The area has not been set, and the device will automatically reduce the stream.

Figure 19

/ideo / Aud	tio >> Smart Stream	
(Diose	
	Auto	Sensity High 💌
	ROI	

Detection sensitivity: the detection sensitivity is divided into low, medium and high. Default level is high.

ROI: to set a regional intelligence streams, up to four regions of interest, like Figure 20



5.4.2 Smart Detect

Figure 21

Detection methods: smart cover detect and smart focus detect, see Figure 21.

System	Video / Audio	Network	Maintenance
Audio Parameter	Video / Audio >> Smart Detect		
OSD Settings			
Video Coding	Smart Cover Detect		
Video Mask	Smart Cover Detect		
Video Parameter	Cover Switch	OSD Output	linkage motion
Picture Parameter		COD Calpar	in age motori
Smart Stream			
Smart Detect			
Smart Control	Smart Foucs Detect		
Motion Detection			
Sensor Detection	Focus Switch	OSD Output	linkage motion
Network Detection			

- Smart Cover Detect: start occlusion detection, when device detects the current real-time video is blocked, the device will automatically handle the corresponding event.
- a.Cover Switch: open/close smart cover detect.
- b.OSD Output: when the cover alarm is triggered, the screen output prompt, this feature must be enabled screen output switch. After an alarm message appears, it will automatically disappear after 2 minutes if not manually cleared.
- c.Linkage motion: motion detection alarm needs to be enabled, after opening association when the video is blocked and the entry into force of motion alarms, video tampering effect.
- Smart Focus Detect: start out of focus detection, the device detects the lens out of focus, it will automatically handle the corresponding event.
- a.Focus switch: open/close smart focus detect.
- b.OSD Output: upon detection of the lens being out of focus, the linkage screen output prompt, this feature must be enabled screen output switch. Screen prompt will disappear after a shot clear tone.
- c.Linkage motion: motion detection alarm needs to be enabled, after opening associated lens out of focus when it is detected and motion alarm is in effect, out of focus alarm.

After parameters were set, please click Save to make them valid.

5.4.3 Smart Control

See Figure 22 for the interface of Smart Control:

			Live vie	ew Replay Language Log out
System	Video / Audio		Network	Maintenance
Audio Parameter	Video / Audio >> Sma	rt Control		
OSD Settings				
Video Coding	Smart Control Sv	vitch		
Video Mask	Creat Law Linkt	001	00	
Video Parameter	Smart Low Light	Close	Copen	
Picture Parameter				
Smart Stream	Save			
Smart Detect				
Smart Control				
Motion Detection				
Sensor Detection				
Network Detection				

- Smart Control Switch: open/close smart control.
- Smart Low Light: open smart low-light, low-light environments will enhance video effect.

Other alarms reference 5.7.

5.5 Network Settings 5.5.1 Basic Setting See Figure 23 for the interface of **Basic setting**:

Figure 23

			Live	view Replay Lanç	juage Log out
System	Video / Audio		Network	Main	tenance
Basic	Network >> Basic S	etting			
LAN		•			
PPPOE	Pata Part	5000			
UPNP	Data Port	5000			
EMail	Web Port	80			
FTP	ONV/E Dort	2000			
DDNS	ONVIP Port	2000			
VPN	Sav				
RTSP	<u>our</u>	2			
IP EMail					
Connecting					
Mobile					

- Data port: default value is 5000 (It is recommended not to change it).
- Web port: default value is 80 (It is recommended not to change it).
- ONVIF port: default value is 2000 (It is recommended not to change it).

After these parameters were set, please click Save and the device will reboot to make the parameters valid.

5.5.2 LAN Setting

See Figure 24 for the interface of LAN setting:

Figure 24

Basic	Network >> LAN	Setting	
LAN		-	
PPPOE	DHCP Enable		
UPNP	DITOP Ellable		
EMail	IP Version	IPV4	~
FTP	ID	102 169 0 2	200
DDNS	IF	192.100.0.2	200
VPN	Subnet Mask	255 . 255 . 255 .	0
RTSP			
IP EMail	Gateway	192.168.0.	1
Connecting	Preferred DNS	168 . 95 . 1 .	1
Mobile			
	Alternate DNS	8.8.8.	8
	MAC	d0-22-12-ab-12-3	34
	_		

• DHCP Enable: if DHCP function of the router is enabled, IP camera will automatically fetch IP address from the router.

- IP: set the camera's IP address.
- Subnet mask: default value is 255.255.255.0 It is recommended not to change it).
- Gateway: set the gateway IP of IP camera, for example when the device is connected to public network via a router, the gateway IP is the router IP.
- DNS: the default DNS address is use 8.8.8.8.
- MAC: the physical address of IP camera (It is recommended not to change it).

Note: after revise and save parameters, the device will restart. If it is applied in LAN, please pay attention to avoid IP collision.

5.5.3 PPPOE Setting

See Figure 27 for the interface of **PPPOE setting**:

Figure 27

Basic	Network >> PPPO	E
LAN		
PPPOE		
UPNP	Enable	
EMail		
FTP	IP	
DDNS	UserName	
VPN		
RTSP	Password	
IP EMail	Online Time	Ominutes
Connecting		
Mobile		

- Enable: enable or disable PPPOE dial-up function.
- IP: after successful setting of device dial-up, it will display the public IP Address.
- Username: ADSL dial-up account, obtain from the IP service provider.
- Password: ADSL dial-up password, obtain from the IP service provider.
- Online time: start timing after dial-up to see the online duration after successful dial-up.

After these parameters were set, please click Save to make them valid.

5.5.4 UPNP setting

See Figure 28 for the interface of UPNP setting:

Basic	Network >> UPNP	
LAN		
PPPOE		
(UPNP)	Enable	
EMail		
FTP	Network Card	Lineate 💌
DDNS	Mar da	Designate
VPN	Node	Designate
	Server URL	
IP EMail	Data Port Map No.	5000
Connecting		
Mobile	Web Port Map No.	80
	Data Mapping Status	0
	Web Mapping Status	0
		Save
	* Data port map No.:device	data port forwards to external network port.
	* Web port map No.:device	web port forwards to external network port.
	In specified mode, only on	an manning to the appointed nort, if nort was occupied then manning failed

port will auto-increment till map successful.

Auto-mapping of port, when IP camera is connected to a router with UPNP function enabled, the router will automatically map the port in UPNP settings to public network, manual port mapping by users is not necessary.

- Network card: select the type of NIC connecting UPNP router. For WIFI models, when IP camera is connected to router via WIFI network, select wireless mode.
- Mode: designate mode and auto mode.
- Designate mode means to specify data mapping port and web mapping port to router.
- Auto mode means data mapping port and web mapping port are set up by router.
- Server URL: IP address of the router with UPNP function.
- Data port map No.: data mapping port of user-specified device on the router (works only under specified mode).
- Web port map No.: web mapping port of user-specified device on the router (works only under specified mode).
- Data mapping status: when UPNP function runs successfully, the status bar will echo the data port mapped to the router by the device.
- Web mapping status: when UPNP function runs successfully, the status bar will echo the web port mapped to the router by the device.

After these parameters were set, please click Save to make them valid.

5.5.5 Email setting

See Figure 29 for the interface of UPNP setting:

Figure 29

Basic	Network >> EMail
LAN	
PPPOE	
UPNP	То
EMail	@
FTP	gmail.com 🗸
DDNS	
VPN	Binding email
RTSP	
IP EMail	Save
Connecting	
Mobile	

To set the mailbox addresses and parameters of alarm mails and public network IP mails.

- To: mailbox that will receive the mails.
- From: mailbox that will send the mails.
- Password: the login password of the mailbox that will send the mails.
- MAIL title: title of the mails.
- SMTP Port: port of SMTP, every mail server have different port. For example, the server port of Gmail is 465.
- a. Commonly used mail server configuration:
- b.Gmail mail server:
- SMTP server: smtp.gmail.com
- SMTP user name: username@gmail.com
- SMTP port: 465
- SSL: enabled
- SSL: disabled

5.5.6 FTP setting

See Figure 30 for the interface of **FTP setting**:

Figure 30

Basic	Network >> FTP	Setting	
LAN			
PPPOE			
UPNP		Main Server	Sub Server
EMail			
FTP	Server URL		
DDNS	Server Port	21	0
VPN			
RTSP	FTP Catalog	/	/
IP EMail	UserName] []
Connecting	ooontaino		
Mobile	Password		
	Start Port	1024]
	End Port	2048]
	Sa	ave	

FTP server sends the record files and snapped images generated after alarm is triggered in FTP mode to specified FTP server. It supports 2 FTP servers, when the preferred one goes wrong, system will switch to the alternate one.

- Server URL: the IP address or HTTP address of FTP server.
- Server Port: port of FTP server, the default port is 21.
- FTP Catalog: path on remote FTP server, if the path does not exist or has not been filled in, the device will create a file folder under the root directory of FTP server.
- User name and Password: user name and password of FTP server.

Note: To upload the record files and snapped images, you must have the authority to write on the FTP server.

5.5.7 DDNS setting

See Figure 31 for the interface of DDNS setting:

Basic	Network >> DDNS			
LAN				
PPPOE				
UPNP	DynDNS		~	
EMail	,	L		1
FTP	Enable		URL	no-ip.com
DDNS	UserName			
(VPN)	oscintanto]
RTSP	Password			
IP EMail	Domain]
Connecting	Domain]
Mobile	Server URL	www.no-ip.com		
	Server Port	30000]
	Data port map No.	5000]
	Web port map No.	80]
	Update Interval	30 minutes	*]
	Domain e.g.: test1.no	-ip.com		
		Save		

Bind the device with a fixed domain name by DNNS setting so that visiting to the device can be realized no matter how the public IP changes.(refer to appendix 3 for detailed steps)

- Enable: enable or disable DDNS function.
- Service Provider: support dyndns.org.
- User Name: user name registered in DDNS server.
- Password: user password registered in DDNS server.
- Domain: the domain name set up by users.
- Server URL: DDNS server address. When DDNS address is the domain name, please set the DNS address in basic parameters correctly.
- Server Port: default value is 30000, this is the DDNS server's port (It is recommended not to change it).
- Data port map No.: fill in the external data port mapped by the IP camera on the router that is connected to public website.
- Web port map No.: fill in the external web port mapped by the IP camera on the router that is connected to public website.
- Update Interval: select the upgrade interval time, eg: 30 minutes, so the IP camera will upgrade the WAN IP to the DDNS every 30 minutes.

After these parameters were set, please click Save to make them valid.

5.5.8 VPN setting

See Figure 32 for the interface of VPN setting:

Figure 32

Basic	Network >> VPN	
LAN		
PPPOE		
UPNP	Enable	
EMail		
FTP	Server URL	
DDNS	UserName	
VPN		
RTSP	Password	
IP EMail	ID	0.0.0.0
Connecting	IF	0.0.0.0
Mobile	Status	
		Save

- Enable: enable or disable VPN function.
- Server URL: IP address or domain of VPN server.
- User Name: user registered in VPN server.
- Password: user password registered in VPN server.
- IP: display IP after successful VPN dial-up.
- Status: display the status of dial-up.

After these parameters were set, please click Save to make them valid.

5.5.9 RTSP setting

See Figure 33 for the interface of RTSP setting:

Figure 33

Basic	Network >> RTSP Setting	
LAN		
PPPOE		
UPNP	Enable	V
EMail		_
FTP	Enable Authentication	
DDNS	Packet Size	1460
VPN		
RTSP	Port	554
IP EMail		
Connecting	Communicate	Multicast
Mobile	Multicast Server Address	239.0.0.0
	Main Stream Multicast Video Port	1234
	Wall Offean Walleast Video For	
	Main Stream Multicast Audio Port	1236
	Sub Stream Multicast Video Port	1240
	Sub Stream Multicast Audio Port	1242
	Onvif PassWord Enable	
		Save

- Enable: check RTSP switch to enable RTSP function. RTSP function is enabled as default.
- Enable Authentication: check encryption switch, disabled as default, when enable encryption, the password is required when using VLC player connect to camera.

a.Open: rtsp: //ip/av0_0&user=admin&password=pass.

b.Close: rtsp: //ip/av0_0(&user=admin&password=pass), () optional content. av0_0,frist"0" shows channel:0,1,2,3, represent the channel :1, 2, 3, 4; IP camera has only one channel, fill in"0"; the second "0" shows main / sub stream, 0: main stream, 1: sub stream; if the authentication mode is changed, the camera reboot.

• RTSP port: default port is 554. With RTSP function enabled, users can review the audio and video streams in real time via players that supports standard RTSP protocol.

- Communication: multicast function is enabled as default.
- Multicast Server Address: when the camera supports multicast, the camera will be the multicast server. And it will have the multicast address,239.0.0.0 as default address. Multicast port, video of main stream and sub stream using port 5010 and 5020, audio of main stream and sub stream using port 5012 and 5022.

After these parameters were set, please click Save to make them valid.

5.5.10 Public IP noticed by email See Figure 34 for the interface of **Public IP noticed by email**:

Figure 34

Basic	Network >> IP EMa	il
LAN)	
PPPOE)	
UPNP	Enable	
EMail)	
FTP	Update Interval	Default 💌
DDNS)	
VPN)	Save
RTSP)	
IP EMail]	
Connecting)	
Mobile)	

- Enable: check this switch to enable public IP mail notification function.
- Update Interval: select the interval of public IP mail notifications. After this function is enabled, when the device detects public IP changed, it will send notification

mail to the mail address that is set in mail setting.

After these parameters were set, please click [Save] to make them valid.

5.5.11 Connect setting

See Figure 35 for the interface of **Connect setting**:

Figure 35

Basic	Network >> Conne	ect Setting	
LAN		-	
PPPOE			
UPNP	Enable		
EMail			
FTP	Server URL		
DDNS	Server Port	5000	
VPN			
RTSP		Save	
IP EMail		Curc	
Connecting			
Mobile			

- Enable: enable or disable active connection of the device to surveillance center.
- Server URL: the address of surveillance center.
- Server Port: the port of surveillance center, e.g. 5000.

After setting all the network parameters, click Save to make the parameters valid.

5.5.12 Mobile

UUID mobile terminal APP search UUID to label equipment. LAN custom fill in a string 1-32 numbers, letters or a combination of both can be used; internet use UUID provided by the manufacturer.

Figure 36

		Li	ive view Replay Language Lo	g out
System	Video / Audio	Network	Maintenance	
Basic	Network >> Mobile			
LAN				
PPPOE			同時的結合	
UPNP			10.100	
EMail	UUID ee97a71	8d5d7d76c925f022f		
FTP				
DDNS				
VPN				
RTSP	Save			
IP EMail				
Connecting				
Mobile]			

5.6 Storage Settings

This function is optional, can be purchased according to requirement.

5.6.1 Device Setting

See Figure 37 for the interface of **Device Setting**:

Figure 37

			Live view	Replay Language Log out
System	Video / Audio	Ne	twork	Maintenance
Local Config	System >> Device Set	ting		
Device Setting				
Record Setting	Choose No.	TotalSize(M)	FreeSize(M)	Status
Snap Setting				
COM Setting				
System Info				
System Time				
User Manage				
System Log	Format	Refresh		
	Code stream	Main Stream	~	
	Record file packing time	30	~	Mins
	Save			

- Storage Device: view information of SD card, including No., Total Size, Free Size and Status. Users can also click **Format** button to format SD card, during the formatting process, please click **Refresh** button to display formatting completion percentage.
- Code stream: set record stream for SD card, main stream and sub stream are selectable.
- Record file packet time: set packing time for record file .10M means recording files will be packed every 10 minutes.

Note:

- Hot-plugging is not recommended for SD card. Compulsory hot-plugging may damage the SD card, and may cause data loss or abnormal operation.
- Do not cut off the power of the device during formatting process.
- Ext2 file is used to format system by default.
- IP Camera does not support the storage that formatted into several partitions. So if need to format it on PC before using it, please format it into one partition.

After setting all the parameters, click Save to make the parameters valid.

5.6.2 Record Setting

See Figure 38 for the interface of Record Setting:

Figure 38

Local Config	System >> Record Setting					
Device Setting	-	-				
Record Setting						
Snap Setting	Time 1	0 : 0 23 : 59				
COM Setting						
System Info	Time 2	0 : 0 23 : 59				
System Time	File storage mode	E-mail Eto				
User Manage	r no otorago modo					
System Log		S =10				
		Save				

* The default save only in the storage device in the device

- Schedule Record: set the period of scheduled recording. Two periods are allowed.
- File storage mode: set the save scheduled recorded files to FTP server via FTP uploading. FTP server can be set up in FTP settings.

After setting all the parameters, click Save to make them valid.

Note: Record files are saved in FTP server. SD card is needed for cache memory support. Otherwise, record files will be overwritten by new files due to insufficient cache memory space.

5.6.3 Snap Setting

See Figure 39 for the interface of Snap Setting:

Figure 39

Local Config Device Setting	System >> Snap Sett	ing
Span Sotting		10
Shap Setting	Snap Interval	1.0 S
COM Setting	-	
System Info	Time 1	
System Time	Time 2	0:0-23:59
User Manage		
System Log	File storage mode	🗌 E-mail 🔄 Ftp
	(Save

* The default save only in the storage device in the device

- Snap Interval: set the interval of IP camera picture snapping, minimum interval is 1 second.
- Schedule Snap: set the period of scheduled snapping, two periods are allowed.
- File save mode: IP camera snapped pictures can be saved via E-mail sending or FTP uploading. E-Mail server can be set up in Mail Settings, FTP server can be set up in FTP Settings.

Note: when uploading picture via E-mail, up to 30 seconds interval time is recommended. If snapshots is too frequent, SMTP server will block the email.

After setting all the parameters, click Save to make the parameters valid.

5.7 Alarm Settings

This function is optional, can be purchased according to requirement.

5.7.1 Motion detection

See Figure 40 for the interface of Motion detection:

Figure 40

System	Video	Audio	Network		Maintenance	
Audio Parameter	Video / A	Audio >> Motion Dete	ection			
OSD Settings		iddio Inclion Delle				
Video Coding	100 5 10 100 100 SM					
Video Mask	10-11 No-2386-					
Video Parameter	2					
Picture Parameter						
Smart Stream						
Smart Detect						
Smart Control						
Motion Detection	A					
Sensor Detection						
Network Detection						
	Sensitivity Enable Time 1 Time 2	y 3 2 20:[0 - 23 : 59			
	Linkage Alarm Output E-mail					
Γ	IO Output	Alarm output duratio	n 10 S	Type NC	· ·	
ſ	Snapshot	1.	*Snap	1 s 🗆	E-mail 🗆 Ftp	
[Record 🗌		*Record	60 S	E-mail 🗌 Ftp	
	Audio Out		1.07			
	The value is 1 - 5 The number of s	ve 5,more sensitive when hig snap interval can be a deci	her. imal, such as: 0.5 seconds,	1.5 seconds, etc.		

In this page, motion detection on/off, sensitivity, detection time, linkage alarm output, alarm output duration, E-mail sending when alarm been triggered, linkage snapping/recording features can be set.

- Motion Detection Area: left click and scroll the mouse to set the surveillance areas (4 areas at most).
- All: set the whole video as motion detection area.
- Clear: clear all motion detection areas.
- Sensitivity: sensitivity range is 1~5, greater value means higher sensitivity.
- Enable: enable or disable motion detection.

- Time: set the period of time for motion detection, two periods are allowed.
- Linkage alarm output: support Email, IO output, snapshot and record.
- E-mail: send motion detection alarm messages to users via E-mail. Please refer to network settings for E-mail setting details.
- IO output: enable or disable alarm output.
- Alarm Output duration: set the duration after being triggered (in seconds), the range of the duration is 0~86400s. 0 means that there is no limit for alarm output.
- Snapshot: when alarm is triggered, the device SD card will be driven to snap pictures. The pictures can be send via FTP. For snapping parameters, if the number of pictures snapped at one time is set as 10, and the snapping interval is 1 second, that means when there is an alarm, 10 pictures will be snapped and the interval between each picture is 1 second.
- Record: when alarm is triggered, the device SD card will be driven to record files. The record files can be saved to FTP server.

After setting all the parameters, click Save to make the parameters valid.

Note: Record file packet time equals duration of alarm add the record time set in linkage recording.

5.7.2 Sensor Detection

See Figure 41 for the interface of **Sensor Setting**:

Figure 41

					Live view Rep	lay Langu	age Log
System	Video /	Audio		Netwo	rk	Mainte	enance
Audio Parameter OSD Settings	Video / Au	voibu	Sensor Detectio	'n			
Video Coding Video Mask	Enable		Туре		NO V*		
Video Parameter	Time 1	V 0	: 0 23 : 59				
Picture Parameter Smart Stream	Time 2		: 0 23 : 59				
Smart Detect	Linkage Alarm (Dutput					
Smart Control Motion Detection	E-mail						
Sensor Detection	IO Output		Alarm output	10 S	Туре	NO V	*
Network Detection	Snapshot		1.		*Snap 1 S	🗆 E-mail	🗆 Ftp
	Record				*Record 60 S	E-mail	🗌 Ftp
	Audio Out		•				

* The number of snap interval can be a decimal, such as: 0.5 seconds, 1.5 seconds, etc.

* If the device has an external storage (hard disk, SD card, USB disk), the linkage Snap and linkage Record document will be saved to the external storage first and processed based on file storage mode. Or it will be saved to memory temporarily and then processed based on file storage mode.

Set sensor alarm parameters: enable detect, sensor type, detect time, linkage alarm output, linkage output duration, E-mail sending when alarm has been triggered, linkage snapping/recording, and etc.

- Enable: enable or disable sensor alarm detection.
- Type: NO and NC mode.
- Time: set the period of time for sensor alarm detection. Two periods are allowed.
- Linkage Alarm output: support Email, FTP, IO output, snapshot and record.
- E-mail: send sensor alarm message to users via E-mail. Please refer to network settings for E-mail

setting details.

- IO output: enable or disable linkage alarm output.
- Alarm output duration: set the duration after being triggered (in seconds), the range of the duration is 0~86400s. 0 means that there is no limit for alarm output.
- Snapshot: when alarm is triggered, the device SD card will be driven to snap pictures. The pictures can be saved via E-mail sending or FTP uploading. For snapping parameters, if the number of pictures snapped at one time is set as 10, and the snapping interval is 1 second, which means when there is an alarm, 10 pictures will be snapped and the interval between each picture is 1 second.
- Record: when alarm is triggered, the device SD card will be driven to record files. The record files can be saved to FTP server.

After setting all the parameters, click [Save] to make the parameters valid.

Note: Record file packet time equals duration of alarm add the record time set in linkage recording.

5.7.3 Network Detection

See Figure 42 for the interface of Network detection:

Figure 42

System	Video /	Audio		Networ	k	Maintena	nce
Audio Parameter	Video / Au	.<< oibu	Network Detec	tion			
OSD Settings							
Video Coding	Enable						1
Video Mask	Enable						
/ideo Parameter	Linkage Alarm (Dutput					
icture Parameter	10.0.1.1				T		1
Smart Stream	IO Output		Alarm output	10 S	Туре		
Smart Detect	Snapshot		1.		*Snap	1 S	
Smart Control		+					-
Motion Detection	Record				*Record	60 S	
Sensor Detection	Audio Out						1
letwork Detection							
	Save						

Set network failure alarm parameters: detection on/off, linkage alarm, alarm output duration, E-mail sending when alarm has been triggered, linkage snapping/recording, etc.

temporarily and then processed based on file storage mode.

- Enable: enable or disable network failure alarm detection.
- Linkage Alarm output: support IO output, snapshot and record.
- IO output: enable or disable linkage alarm output.
- Alarm output duration: set the duration of the linkage alarm output after being triggered (in seconds), the range of the duration is 0~86400s. 0 means that there is no limit for alarm output.
- Snap: when alarm is triggered, the device SD card will be driven to snap pictures. The pictures can be saved via E-mail sending or FTP uploading. For snapping parameters, if the number of pictures snapped at one time is set as 10, and the snapping interval is 1 second, that means when there is an alarm, 10 pictures will be snapped and the interval between each picture is 1 second.
- Record: when alarm is triggered, the device SD card will be driven to record files. The record files can be saved to FTP.

After setting all the parameters, click [Save] to make the parameters valid.

Note:

- Record file packet time equals duration of alarm add the record time set in linkage recording.
- When network failure occurs, E-mail sending and FTP uploading cannot be performed, the pictures and recorded files will be stored in SD card. E-mail sending and FTP uploading will resume after network is recovered.

5.8 COM Setting

See Figure 43 for the interface of COM Setting:

Figure 43

Video / Audio		Network	Maintenance
System >> COM Set	tting		
	5		
Roud Date	0600		
Daud Rate	9000	•	
Data Bits	8	~	
Step Pite	1		
Stop Bits	1	•	
Check Type	None	~	
Elour Ctrl	Nono		
	Video / Audio System >> COM Se Baud Rate Data Bits Stop Bits Check Type Flow Ctrl	Video / Audio System >> COM Setting Baud Rate 9600 Data Bits 8 Stop Bits 1 Check Type None Elow Cht None	Video / Audio Network System >> COM Setting Baud Rate 9600 Data Bits 8 Stop Bits 1 Check Type None Flow Ctrl None

 COM Setting: when IP camera is connected to RS485 (or RS232) communication or control device (e.g. PTZ decoder, dome camera), the parameters of RS485 (or RS232) need to be set according to the settings of the communication control device (address, protocol, baud rate), and the corresponding protocol need to be downloaded.

Note: To enable control of add-on communication control device, the parameters and protocol must be correctly set

5.9 System Setting

5.9.1 System Info

See Figure 44 for the interface of System Info:

Figure 44

System	Yideo / Audio	Ne	twork	Maintenance
Local Config	System >> System	Info		
Device Setting				
Record Setting	Device Name	cc		
Snap Setting	bonio fiano			
COM Setting	VO Standard	NTSC	~	
System Info	Language	English	~	
System Time	Language	Lingilion		
User Manage	Device ID	421877114		
System Log	Version	7.8.59.2		
	WEB Version	3.2.4		
	LINUX Version	0-0-0-000		

* Modifying the device language, please close the browser to login

- System: display device name, VO standard, language device ID, version, the device name can be defined.
- Language: support Chinese and English. After changing the language, please reopen the IE browser to login the camera again.

After setting all the parameters, click [Save] to make the parameters valid.

5.9.2 System Time

See Figure 45 for the interface of System Time:

Figure 45

	Live view Replay Language L
System	Video / Audio Network Maintenance
Local Config	System >> System Time
Device Setting	
Record Setting	Date 2001 - 12 - 1 00 · 42 · 11
Snap Setting	
COM Setting	Time Zone (GMT+08:00) Beijing, Honokong, Singapore, Taipei
System Info	
System Time	DST Close V
User Manage	Date setting :
System Log	O NTP Server
	LIPI clock.isc.org
	Synchronize with Local Computer
	⊖ Set the Time Manually
	Time zone conversion
	0

- System time: supports three method to upgrade the device's time.
- NTP Server: after starting the function, switch on NTP switch and select time zone, and click save. The camera will send the query to NTP server. After getting the message from NTP server, the camera will upgrade the system time, and the system time will be displayed in live view.
- Synchronize with Local Computer: after starting the function, the date and time of IP camera will be synchronized with the local PC.
- Set the Time Manually: select this option to modify the time manually.

After setting all the parameters, click Save to make the parameters valid.

5.9.3 User Manage

See Figure 46 for the interface of User Manage:

Figure 46

System	Video / Audio		Network	Maintenance
Local Config	System >> User Mar	agement		
Device Setting	-,			
Record Setting	Validate Mada	WER	~	
Snap Setting	Validate Mode	WED	•	
COM Setting	Select User	Administrator	~	
System Info	Liser Name	admin		
System Time	Oser Name	aumin		
User Manage	Password			
System Log	Confirm Password			



Notice:User name,Password may consist of a-z, 0-9, underscores, and a single dot (.), 1 to 15 characters;capitalization

Modify User name or Password, please login again.

Three users can be set for every camera, one is administrator, and the others are general users.

- Administrator authority: can operate and set all the functions and parameters of IP camera.
- General user authority:
- a.Can perform snapping, recording, playback, talkback, monitoring, alarm clearing, log searching, zooming and full-screen reviewing.

b.Can perform operations like visit setting, image lightness and color adjustment, PTZ and lens control, etc.



Note: user name and password must be 1-16 character-strings consisting of letters, numbers, underlines or dots. The characters are case sensitive.

5.9.4 Upgrade

See Figure 47 for the interface of Upgrade:

Figure 47

Svetem		Y Network	М	aintenance
System	Video / Addio	Network		annenance
Upgrade	Maintenance >> Upgr	ade		
PTZ Upgrade				
Restore	Application version	78592		
Parameter Backup	Application version			
Restart	Choose Upgrade File		Browse	

To upgrade the system, click **Browse** button, select correct file of upgrade (kernel file, suffix. uot), and click **upgrade**. The completion rate will be displayed during this process. After upgrade completes, IP camera will restart automatically. Re-log in device, enter into system settings page, check to see if the kernel edition is the upgraded edition.

Note: Don't cut off the power and internet connection while upgrading.

5.9.5 PTZ Upgrade

See Figure 48 for the interface of PTZ Upgrade:

System	Video / Audio	Network	Maintenance
Upgrade	Maintenance >> Protocol Upgrade	•	
PTZ Upgrade			
Restore			
Parameter Backup	PTZ Address 0		
Restart			
	Protocol File		
	Choose	Browse	
	Upgrade File		
	-ra		

- PTZ address: 1~255.
- Protocol file: echo the built-in protocol name of current IP camera, PELCO-D (STD-Speed). COD as default.

• Choose Upgrade File: can upload the selected decoder/dome camera communication protocol. The system supports hundreds of decoder/dome camera communication protocols, it can also be defined according to the standard format of protocols.

After setting all the parameters, click save to make the parameters valid.

5.9.6 Restore

See Figure 49 for the interface of **Restore**:

Figure 49



All device parameters (including network parameters, excluding physical address) will be recovered as factory setting values.

5.9.7 Restart

See Figure 50 for the interface of **Restart**:

Figure 50

		Live view	Replay Language Log out
System	Video / Audio	Network	Maintenance
Upgrade PTZ Upgrade	Maintenance >> Reboot		
Restore Parameter Backup	Restart The System Automatically	Never V At 00:00 V	
Restart	Restart The System Manually	Reboot	

Click **Reboot** and a box will pop up. Enter the password to restart the IP camera.

5.9.8 System log

See Figure 51 for the interface of System log:

Figure 51

				Li	ve view Re	eplay Lar	nguage Log
System	Video / Au	dio		Network		Mai	intenance
Local Config	System >> Sy	vstem Loa					
Device Setting		5					
Record Setting	Conditions						
Snap Setting	Conditions	2019 04 19		2019 04 20	Por page	25 24	Coarch
COM Setting	Date	2010-04-13	-	2010-04-20	rei page	2.5 🗸	oearch
System Info	Date	Time		Content			Explain
System Time	oute	Time.		ooment			Copidin
User Manage							
System Log							

Search: supports operation log and alarm log searching, the maximum capacity is 512 entries of message. When the number of entries exceeds 512, system will delete records of the earliest date automatically.

Appendix 1 Network Interface of IP Camera

The default network ports of IP camera are:

	80	Web port
ТСР	5000	Communication port, audio/video data transmission port,
	5000	talkback data transmission port
UDP	5000	Audio/video data transmission port
Multi-cast		
port	Multicast origin	nal port + channel number
ONVIF	2000	

Appendix 2 Default Network Parameters

Default network parameters

Cabled Network:	
IP Address: 192.168.0.200	Data Port: 5000
Subnet mask: 255.255.255.0	Web Port: 80
Gateway: 192.168.0.1	DHCP: Off
Wireless Ne	twork:
IP Address: 192.168.0.160	Frequency: Auto
Gateway: 192.168.0.1	Mode: Auto
Subnet mask: 255.255.255.0	

Appendix 3 FAQs

- Fail to visit IP camera via IE browser
- a.Possible Reason 1: network is disconnected.
- Solution: connect your PC to network, check whether it works properly or not. Check whether there is cable failure or network failure caused by PC virus, until PCs can be connected with the command of Ping.
- b.Possible reason 2: IP address has been occupied by other devices.
 Solution: stop the connection between IP camera and network, hook up IP camera to PC separately, reset IP address according to recommended proper operations.
- c. Possible reason 3: IP addresses are in different subnets. Solution: check IP address, subnet masking address of the DVS and the settings of gateway.
- d.Possible reason 4: physical address of network conflicts with IP camera. Solution: modify the physical address of IP camera.
- e.Possible Reason 5: web port has been modified.
- Solution: contact network administrator to obtain related information.
- f. Possible Reason 6: unknown. Solution: press **RESET** to restore default settings. Afterwards, connect it again. The default IP address is 192.168.0.200, subnet mask is 255.255.255.0 (Some special versions, the default IP address is 192.168.0.200, subnet mask is 255.255.255.0).
- No video image displayed in IE browser Possible reason: ActiveX not installed. Solution: ActiveX must be installed when visiting IP camera for the first time via internet explorer. How to install: visit IP camera, click **file**, file download dialog will pop up, select **Run** or **Save** to download. Please refer to ActiveX installation guide to install the ActiveX.
- Fail to upgrade IP camera via IE
 Possible reason: security level of IE is high.
 Solution: change IE Browser Setting.
 Steps: Open IE, IE tools-> Internet options->Security->Custom level as Figure 52, and change the Other parameters as Figure 53.

Figure 52



0) Prompt			*
E	nable MIME Sniffing			
C) Disable			
) Enable			
Ir	clude local directory path v	when uploading fil	es to a server	
C) Disable			
) Enable			
	aunching applications and u	insate files		
0) Disable			
	Denable (not secure)			
	Prompt (recommended)	in an IED AME		
	Diashla			
6) Disable (pot secure)			
0	Promot (recommended)			
PN	avidate windows and frame	e across differen	t domains	-
٠ .	m -		1	¢
*Takes e	ffect after you restart you	r computer		
eset cus	tom settings			
eset to:				
eser to,	Medium-high (default)	•	Reset.	••

- Fail to visit IP camera via IE after upgrade Solution: delete the caching of browser.
 Steps: open IE—click Tools—select Internet Options—click delete files button in Internet temporary files, select delete all offline contents, then click OK and re-log in IP camera.
- The images are not smooth
- a.Possible reason 1: the frame rate of IP camera is too low. Solution: increase the video frame rate.

- b.Possible reason 2: too many users are viewing the images. Solution: block some clients or reduce the video frame rate.
- c. Possible reason 3: the bandwidth is low. Solution: reduce video frame rate or video compression bitrate.
- Forgot Password Solution: there is a **RESET** button on the back panel of the IP camera, press it for 1-2seconds, then release it for 1-2 seconds. Repeat 3 times. Camera will restore all default parameters (Factory Settings), user name and password are "admin" and "pass".

Note: please don't press RESET if you are not a professional operator. After reset, all parameters will restore factory settings (except for the physical network address).

- There is no sound while monitoring
- a.Possible Reason 1: no audio input connection. Solution: check audio connection of the host.
- b.Possible Reason 2: the audio option of IP camera is off. Solution: check audio parameter settings to see if you have opened the audio.
- Device search software cannot find device Possible reason: device search software adopts multicast protocol to perform searching. But the firewall forbids multicast data packet. Solution: disable the firewall.
- Image processing does not work properly
- a.Possible Reason 1: system issue, DirectX function is disabled, which will cause slow display of images and abnormal color.
- b.Possible Reason 2: hardware issue, graphics card does not support image acceleration and hardware zooming functions. (For hardware issue, the only solution is to replace graphics card). Solution: install DirectX image drive, then Start→Run→input DXDIAG as follows:

Note: Enable DirectDraw speedup, Direct3D speedup, AGP veins speedup in DirectX function. If cannot be enabled, that means DirectX installation fails or hardware not supported.