

User Manual

Network Camera

Version: 2017.11

Directory

1	Note	
2	Precautions	4
3	Web Access	6
	3.1 Network Connection	6
	3.2 Quick Access	6
4	Basic function operation	9
	4.1 Preview interface information:	9
	4.2 Setup	
	4.2.1 Camera	
	4.2.1.1 Video Configuration	
	4.2.1.2 Image Configuration	14
	4.2.1.3 Audio Configuration	
	4.2.2 Perimeter set	
	4.2.2.1 Global Config	
	4.2.2.2 Line Crossing	
	4.2.3 Network	
	4.2.3.1 TCP/IP	
	4.2.3.2 PPPOE	
	4.2.3.3 DDNS	
	4.2.3.4 IP Filter	
	4.2.3.5 SMTP(Email)	
	4.2.3.6 UPnP	
	4.2.3.7 Multicast	
	4.2.3.8 P2P	
	4.2.3.9 Phone Push	
	4.2.4 Event management	
	4.2.4.1 Video detection	
	4.2.4.2 Abnormality	
	4.2.5 Storage	
	4.2.5.1 Schedule	
	4.2.5.2 Location	
	4.2.5.3 Record Control	
	4.2.6 System	
	4.2.6.1 Local Settings	
	4.2.6.2 Account	
	4.3 Alarm	
5	Function	
	5.1 DDNS Function	
	5.1.1 3322(www.3322.org)	
	5.1.2 NO-IP(www.no-ip.com)	
	5.1.3 Dyndns DDNS(www.dyndns.com)	41

5.1.4 Test and Verify DDNS	41
5.2 Port Mapping	
5.2.1 UPnP Function	
5.2.2 Manual Port Mapping	44
5.3 NTP Function	
5.3.1 Internet Configuration	45
5.3.2 Intranet Configuration	45
5.4 Voice Intercom	
5.4.1 Summary	
5.4.2 Configuration	
6 APPENDIX	
6.1 TERMS	

1 Note

Please kindly review this user manual before operation for reference.

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

If any doubt, or to obtain the latest 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, to prevent danger or loss of property. Therefore, please read the manual carefully and keep it for your future reference before using the products.

As shown below, the preventive measures are 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



- Please use the required power meets SELV (safety extra-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.



- 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~+
 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 using environment and using time, so please check them regularly. For more information, please consult with your purchasing distributors.

3 Web Access

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:

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.

Internet Options 2 8		
General Security Privacy Content. Connections Programs Advanced	Security Settings - Internet Zone	
Set one to view or change security settings.		
Internet Lacal intranet Trusted sites Restricted	Settings	
Internet This zone is for Internet websites, except those listed in trusted and restricted zone.	Ownied signed Active's controls Disable Disable (hot secure) Promote (instance) Promote (instance) Downied angeed Active's controls	
Security level for this zone Custom Custom settings. - To change the settings, dick Custom level.	Obable (recommended) Enable (not secure) Protectine and sociol Active's controls not marked as safe for s Obable (recommended) Enable (rot secure)	
- To use the recommended settings, dick Default level. Enable Protected Mode (recurres restarting Internet Explorer) Custom level Default level	Prompt Porpt Porpt	
Reset all zones to default level	Reset to: Medum-high (default) Reset to: Medum-high (default)	
OK Cancel Apply	OK Cancel	

Figure 3-1 Set ActiveX Control and Plug-in

Please enter the camera's IP address in the address bar and click "Enter", the login 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

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

After installing the plug-in, Browsing the interface :



Figure 3-4 browsing the interface

Live: to preview.

Setup: to set the parameters and functions.

Alarm: to check the alarm log.

4 Basic function operation

4.1 Preview interface information:



Click "Live" go to preview interface:

Stream: Mail Stream, Sub Stream 1, Sub Stream 2





Image Config: Click *i*, then pop up image configuration interface.



Full Screen: Click 🤽 , the image is displayed in full screen.

Original/Adaptive: Click 🗖 , switching the screen aspect ratio

Display Rules: Click display/ hide the rules

off, the button will change to

Record: Click to record files at this computer. The button will change to after record is enabled. Click this button, then will stop recording.

Digital Zoom: Click enable the digital zoom function, the icon changed to Drag the mouse from the upper left to the lower right corner, you can enlarge the preview image in the region. Click to recovery

preview image. Snapshot: Click is to snapshot one picture. Triple Snapshot: Click is to snapshot three pictures. Audio: Click is, ON/OFF audio. When the audio is opened, the button will change to is, after the audio off, the button will change to is. Talk: Click is, ON/OFF Talk. When the talk is off, the button will be turn on, or it will always be dark. Tip: Talk and Audio can't at the same time open.

4.2 Setup

Click 【Setup】, enter the parameter configuration interface.

4.2.1 Camera

4.2.1.1 Video Configuration

video configuration shown in Figure 4-1:

rra view shapping CSD KON
Code-Stream Type Conoral Code-Stream Type Conoral Code-Stream Type Conoral detection Encode Mode H 265 Encode Mode H 265 V ork Resolution 2590x1440 (4M) N Resolution D1 (704*576) V t FPS 20 V FPS 20 V ge Bit Rate Type CBR Bit Rate Type CBR V mm Refered Bit Rate 1530-81120Xi/S Refered Bit Rate 100.5304Kb/S Bitrate 2048 Bitrate 1024 V I Frame Interval 40 (20-150) I Frame Interval 40
detection Encode Mode H 265 Encode Mode H 265 V ork Resolution 2590x1440 (4M) Resolution D1 (704*576) V t FPS 20 V FPS 20 V ge Bit Rate Type CBR V Bit Rate Type CBR V mm Refered Bit Rate 1508-8192Kor/S Refered Bit Rate 100.5394Kbr/S Bitrate 2048 Bitrate 1024 V I Frame Interval 40 (20~150) I Frame Interval 40 (20-150)
Resolution 2560x1440 (4M) Resolution D1 (704*576) V t FPS 20 V FPS 20 V ge Bit Rate Type CBR V Bit Rate Type CBR V mm Refered Bit Rate 1508-5150/k0/S Refered Bit Rate 160-3594/k0/S Bitrate 10024 V liFrame Interval 40 (20-150) I Frame Interval 40 (20-150)
t FPS 20 Y FPS 20 Y ge Bit Rate Type CBR Y Bit Rate Type CBR Y mm Refered Bit Rate 1530-8152/KurS Refered Bit Rate 160-3594/KurS Bitrate 2048 Bitrate 1024 Y I Frame Interval 40 (20-150) 1 Frame Interval 40 (20-150)
ge Bit Rate Type CBR Bit Rate Type CBR CBR mm Refered Bit Rate 1536-5152Kb/S Refered Bit Rate 160-3584Kb/S Bitrate 2048 Bitrate 1024 V I Frame Interval 40 (20-150) I Frame Interval 40 (20-150)
Refered Bit Rate 1536-5102/kD/S Refered Bit Rate 160-3584/kD/S Bitrate 2048 Bitrate 1024 V I Frame Interval 40 (20-150) I Frame Interval 40 (20-150)
I Frame Interval 40 (20-150) I Frame Interval 40 (20-150)
Belleder Disable M Reflection Disable M
Remodes Disable • Remodes Usable •
W Watermark Settings
Watermark Character DigitalCCTV

Figure4-1 Video Parameters

Video configuration \rightarrow Main Stream

Video stream configuration parameters are described below:

Parameters	Description
Code-Stream	Choice of general code, motion detection code or alarm
Туре	code
Encode Mode	Set video encoding mode according to the actual demand
	Different types of camera supports multiple resolutions,
Resolution	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
l Frame Interval	Not recommended modification
Watermark	Watermark Settings

After modifying parameters, please click [Save] to save the settings.

Snapshot shown in Figure 4-2

Camera	Video	Snapshot	Overlay	Interest Area
o video config	Snapshot Type	General	•	
Image config	Image Size	2560x1440 (4M)		
Smart settings	Quality	5	•	
Network	Snapshot Stream	🖲 Main Stream 🔍 Sub	Stream	
Event	Interval	1 S	•	
Storage	Default	Refresh	01/0	
System	Default	Refresh	ave	

Figure 4-2 Snapshot

Video configuration \rightarrow Snapshot

By configuring the capture parameters, the device can automatically capture.

Snapshot Type: can choice General or Event.

Image Size: the image size is based on the snapshot stream. Using the same resolution with snapshot stream's

Snapshot Stream: can choice "Main Stream" or "Sub Stream".

Picture 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 configuration \rightarrow 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

Video overlay shown in Figure 4-3:



Figure 4-3 Overlay

Privacy Masking:

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



Figure 4-4 Overlay

Zone setting:

Click the left mouse button and drag in the picture, and then release. A regional map is finished. Support up to 4 zones. When regional map is finished, click ok, end the regional map Select 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



Interest Area:

Figure 4-5 Interest area

Drag the mouse from the upper left to the lower right corner, you can draw an interested region in the image.

The image will much more clearly in this interest region.

If want more regions, can draw more, but up to 4.

The RONI FPS (the uninteresting areas): the FPS is lower, the interest area image is much clearer.

4.2.1.2 Image Configuration

Image configuration as show in figure 4-6:



Figure 4-6 Image Configuration

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.

Image Config

User can adjust the image parameters of the camera, like "Brightness", "Contrast", "Saturation", "Hue", "Image Mode",

"Color Mode", according to picture effect.

•	Image config		
	Brightness	0	50
	Contrast	0	50
	Saturation		50
	Hue	0	50
	Image Mode	Transparent -	
	Color Mode	Standard 🝷	

Figure 4-7 Image Config

Image Mode:

Transparent: Enhanced sharpness. The dark in the image will darker, the bright in the image will brighter

Real: Reduce sharpness. The image colors are more realistic

Exposure Adjust:



Figure 4-8 Exposure Adjust

Exposure Mode: The camera electronic shutter mode can set 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 Regulate: Used to adjust the gain upper limit, the user can choose different gain level in view of the actual situation.

Day and Night:





Day & Night: There are three choices: "Auto", "Color", "Black & White".

"Color" mode stays color images.

"Black & White" mode stays black and white image.

"Auto" mode: equipment choose "day/night mode automatically" according to the external environment brightness.

Buffer Times: The image will change the day/night mode after the buffer time.

Image Enhance:



Figure 4-10 Image Enhance

WDR: It is suitable for the models with wide dynamic function, some models support wide dynamic level adjustment, user can adjust the dynamic value to change the strengthness of WDR according to the actual need.
3Ddenoise: It is used to reduce the image noise, user can choose to enable or not according to the situation.
Through the Fog: Users can choose "disable", "weak", "Medium", "Strong". It can improve the object recognizable degree in the mist weather.

Image Transform:





Mirror: It's Convenient for the customer to change the orientation of the picture at any time.

Notice:

The front-end parameters configuration options in the display setting include 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.

4.2.1.3 Audio Configuration

Audio configuration shown in Figure 4-12:

imera	Video	Snapshot		OSD	ROI			
video config	Main Stream				Sub Stream			
Image config	Main Stream							
Audio config					C Enable	Sub Stream 1	~	
rimeter set	Code-Stream Type	General	v		Code-Stream Type	General	~	
ce detection	Encode Mode	H.265	¥		Encode Mode	H.265	¥	
twork	Resolution	2560x1440 (4M)	¥		Resolution	D1 (704*576)	~	
ent	FPS	20	~		FPS	20	~	
orage	Bit Rate Type	CBR	v		Bit Rate Type	CBR	¥	
stem	Refered Bit Rate	1536-8192Kb/S			Refered Bit Rate	160-3584Kb/S		
	Bitrate	2048	¥		Bitrate	1024	¥	
	I Frame Interval	40	((20~150)	I Frame Interval	40		(20~150)
	RefModes	Disable	¥		RefModes	Disable	~	
	Watermark Settings							
	Watermark Character	DigitalCCTV						



4.2.2 Perimeter set

This is for perimeter function.

4.2.2.1 Global Config

Camera	Global Config	
Camera Perimeter set O Global Config Line crossing Intrusion detection Object Abandoned Object Missing Crossing the fence Face detection Network Event Storage System	2017-11-03 14:52-14 Advanced BKThrd 35 Var Thrd 20 Initial Var 40 Initial Weight 35 Learning Rate 12	(0-100) (0-100) (0-100) (0-100) (0-141) (0-100) (500-4000) (8-300)

Figure 4-13 Global Configuration

Yellow Box is Target Filter; Green Box is Vehicle Area; Blue Box is Person Area.

Advance: can design parameter, example BKThrd, Var Thrd, Initial Var, Learning Rate, Pix Thrd, Area Thrd, Waiting

Thrd, Distance Thrd.

Tip: Vehicle area can not be less than 2.2 time the area of people.

If the Object is small than the filter, then won't trigger when the object across the rule.

In the vehicle area and person area, if the object is big than the filter, than won't trigger when the object across the rule.

4.2.2.2 Line Crossing



Figure 4-14 Line Crossing

This is Line Crossing function. You should enable and set rules first.

1) Enable the Line crossing.(if can't enable, please check whether you enable the motion detection, disable it,

then enable the regional invasion).

- 2) Then draw rules. You draw 4 rules.
- 3) Back to the live view page. You will see the rule you drew. Click the alarm snapshots, and tick the line

crossing, If event occurs, you will see the snapshots in the "Display alarm subscription"



Figure 4-15 Display alarm subscription

4.2.3 Network

4.2.3.1 TCP/IP

In the TCP / IP configuration interface, tick the "DHCP", the IP camera can automatically obtain IP address. You also

can manually modify the network parameters by ticking Static.

IP Version: Parts of IP cameras support IP v6 mode.

Camera	TCP/IP	
Smart settings	Host Name	IPC
o TCP/IP	Ethernet Card	Wire(DEFAULT)
Port		Static DHCP
PPPoE	MAC Address	e0 · 61 · b2 · 28 · 89 · 4b
DDNS	IP Version	IPv4 •
IP Filter	IP Address	10 · 12 · 4 · 154
SMTP(Email)	Subnet mask	255 · 255 · 255 · 0
UPnP	Default Gateway	
Multicast	Preferred DNS Server	8 . 8 . 8 . 8
P2P	Alternate DNS Server	
BullCloud		
Phone push	Default	Refresh Save
Event		
Storage		
System		

Figure 4-16 TCP/IP

4.2.3.2 PPPOE

PPPOE Settings as shown in figure 4-17 :

Camera	PPPoE		
Smart settings	Enable		
Network	Username	none	
TCP/IP	Password		Ī
Port			
o PPPoE	Default	Refresh Save	
DDNS			
IP Filter			
SMTP(Email)			
UPnP			
Multicast			
P2P			
BullCloud			
Phone push			
Event			
Storage			
System			

Figure 4-17 PPPOE

Check "enable dial", enable 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

Default gate way fail after PPPOE configuration open; after modifying the parameters of Network

Settings, it needs to restart the IP camera.

4.2.3.3 DDNS

DDNS Settings as shown in figure 4-18:

DDNS		
Server Type	NO-IP DDNS	•
Server Address	dynupdate.no-ip.com	
Domain Name	none	
Username	none	
Password	••••	
Update Period	10	Minute(1~500)
Default	Refresh Save	
		Figure •

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.

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.

4.2.3.4 IP Filter

IP filter setting as shown in figure 4-19:

Camera	IP Filter	
Smart settings	Trusted Sites	
Network	Trusted Sites	
TCP/IP	IP address /MAC address	Modify Delete
Port		
PPPoE		
DDNS		
o IP Filter		
SMTP(Email)		
UPnP		
Multicast		
P2P		
BullCloud	Add IP/MAC	Remove All
Phone push	Dafault Dafaab Dava	
Event	Default Refresh Save	
Storage		
System		



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 pool, click the IP address added, then can operate the IP address pool by clicking the [amended], [deleted] and [empty] button .

4.2.3.5 SMTP(Email)

Camera	SMTP(Email)		
Smart settings	SMTP Server	none	
Network	Port	25	
TCP/IP	Anonymity		
Port	Username	anonymity	
PPPoE	Password	••••	
DDNS	Sender	none	
IP Filter			
o SMTP(Email)	Authentication	None	
UPnP	Title	IPC Message Attachment	
Multicast	Mail Receiver		
P2P			
BullCloud			
Phone push	Interval	0 Second (0~3600)	
Event	Health Mail	Update Period 60 Second(1~3600))
Storage	Email Test		
System	Default	Refresh Save	

SMTP (E-mail) setting as shown in figure 4-20:

Figure 4-20 SMTP Setting

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

Enter the address of the SMTP 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.

4.2.3.6 UPnP

UPNP Settings are described in figure 4-21:

Camera	UPnP								
Smart settings	Enable	Status No Mappin	g						
Network	Port Mapping	g List							
TCP/IP		Server Name	Protocol	Internal Port	External Port	Status	Modify	Delete	
Port		WebService	TCP	80	8080	Mapping Faild	2	•	
PPPoE		PrivService	TCP	8000	8000	Mapping Faild	2	•	
		PrivService	UDP	8001	8001	Mapping Faild	2	•	
DDNS		RTSPService	TCP	554	554	Mapping Faild	2	•	
IP Filter									
SMTP(Email)									
o UPnP									
Multicast									
P2P									
BullCloud	Add Mapping	Default	Refresh		Save				
Phone push									
Event									
Storage									
System									

Figure 4-21 Upnp Settings

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.

4.2.3.7 Multicast

Multcast settings are described in figure 4-22:

Camera	Multicast		
Smart settings	Main Stream		
Network	Enable		
TCP/IP	Multicast Address	239 · 255 · 42 · 42	(224.0.0.0~239.255.255.255)
Port	Port	36666	(1025~65534)
PPPoE			
DDNS	Sub Stream 1		
IP Filter	Enable		٦
SMTP(Email)	Multicast Address	239 · 255 · 42 · 43	
UPnP	Port	36667	(1025~65534)
o Multicast	Sub Stream 2		
P2P	Enable		
BullCloud	Multicast Address	239 · 255 · 42 · 44	(224.0.0.0~239.255.255.255)
Phone push	Port	36668	(1025~65534)
Event	Default	Refresh Save	
Storage			
System			

Feature 4-22 Multicast settings

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.

4.2.3.8 P2P

P2P settings are described in figure 4-23:

Camera	In network service			
Smart settings	P2P	Enable	•	「白いいで見ていた」
Network	Transmission QOS	Disable	•	
TCP/IP	Account multiplexing			
Port	Device ID	0028894b		2206L9 FM62
PPPoE				49.42.324/347
DDNS	Control password	g4OTRi		
IP Filter	Local port	3000	(3000-65534)	
SMTP(Email)	Connection status	Online		
UPnP				ET 2*A8 4 7.4
Multicast				
• P2P	Default	Refresh	Save	
BullCloud				
Phone push				
Event				
Storage				
System				

Feature 4-23 P2P setting

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

in www.atvsip.com.

4.2.3.9 Phone Push

Phone push is described in figure 4-24:

Camera	Phone push
Smart settings Network TCP/IP	Push enabled Picture enabled Time interval 60 Second(60~3600)
Port	Event Tripwire Grade Important
DDNS	Default Refresh Save
SMTP(Email)	
UPnP Multicast	
P2P	
BullCloud Phone push	
Event	
Storage System	

Feature 4-24 Phone push setting

Event: Device Restart, Tripwire

Grade: Important, general, emergency. If the grade is emergency, the interval time will be invalid, the snapshot will be uploaded once triggered.

Add the P2P ID into the P2P account, then access this account on our smart APP- AntarView , enable the push function. The app will get the alarm information or snapshots.

4.2.4 Event management

4.2.4.1 Video detection

nera	Motion Detect Privacy Mask Camera Shift Color Cast Focus Distortion
meter set	Enable
e detection work nt Motion Detection	Working Period Setup Anti-flicker 5 Second(0~100) Area Setup
Abnormity	Record
rage tem	Record Delay 10 Second(10-300) Send Email
	Default Refresh Save

Feature 4-25 Motion detection settings

Video detection \rightarrow Motion detection

Check "Enable" means the function of motion detection of the IPC is on.

Working Perio	od									\mathbf{X}
1	0 2	4	6 8	10	12 14	16 18	20	22 24		
Sunday _									Setup	
Monday									Setup	
Tuesday									Setup	
Wednesday									Setup	
Thursday									Setup	
Friday									Setup	
Saturday									Setup	
All Period Period Period Period Period Period	1: 00 : 2: 00 : 3: 00 : 4: 00 : 5: 00 :	Monday 00 : 00 - 00 : 00 -	 Tuesday 23 : 59 : 	59 59 59 59 59	inesday 🔲 1	Thursday 🔲 I	Friday 🔲 S	Saturday		
				Save	0	ancel				

Feature 4-26 Working-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 4-27 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 \rightarrow Video Masking

Camera	Motion Detect	Video Masking	
mart settings	Enable		
Network Event	Working Period	Setup	
o Video Detect	Record		
Abnormality	Record Delay	10 Second(10~	300)
Storage	Send Email		
System	Snapshot		
	Default	Refresh Save	

Feature 4-28 Video occlusion settings

Check "Default" means the function of abnormality of the IPC is on.

orking Period	_		_			_		_	_	_	_	_		
0	2	4	6	8	10	12	14	16	18	20	22	24		
Sunday													Setup	
Monday													Setup	
Tuesday													Setup	
Wednesday													Setup	
Thursday													Setup	
Friday													Setup	
Saturday													Setup	
All Su						ednesda	y 🔲	Thursda	y 🔲 Fr	iday 🗌	Saturd	ау		
Period 1:	00 : 0	00 : 00	_ 23	: 59 :	59									
Period 2:	00 : 0	00 : 00	- 23	: 59 :	59									
Period 3:	00 : 0	00 : 00	- 23	: 59 :	59									
Period 4:	00 : 0	00 : 00	23	: 59 :	59									
Period 5:	00 : 0	00 : 00	_ 23	: 59 :	59									
Period 6:	00 : 0	00 : 00	- 23	: 59 :	59									
					Save		(Cancel						

Feature 4-29 Working period settings

Working 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.

Video detection → Camera Shift

Feature 4-30 Camera Shift setting

Enable the camera shift (if can't enable, please check whether you enable the motion detection, disable it, then

enable the camera move).

Check "Default" means the function of abnormality of the IPC is on.



Feature 4-31 Working period settings

Working 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.

Back to the live view page. You will see the rule you drew. Click the alarm snapshots, and tick the camera move, If

event occurs, you will see the snapshots in the "Display alarm subscription"



Figure 4-32 Display alarm subscription

4.2.4.2 Abnormality

Abnormality can be divided into the following categories: Disconnection, IP Conflict.

The abnormality of each exception is shown below. When the interface is set to enable it , will detected.

Live Setup	Alarm
Camera	Disconnection IP Conflict
Perimeter set	Enable
Face detection	Record
Network	Record Delay 10 Second (10~300)
Event	Send Email
Motion Detection	
o Abnormity	Default Refresh Save
Storage	
System	

Feature 4-33 Disconnection

Live	Setup	Alarm	
Camera		Disconnection	IP Conflict
Perimeter	set	Enable	
Face detec	tion	Record	
Network		Record Delay	10 Second (10~300)
Event		Default	Refresh Save
Motion	Detection	Delaut	Tellesii Save
o Abnorm	nity		
Storage			
System			
	1 1		Feature 4-34 IP Conflict

4.2.5 Storage

4.2.5.1 Schedule

Camera	Record Sci	neaui	e	Snapsh	IOL SCH	equie	H	oliday	Schedu								
Smart settings		0	2	4	6	8	10	12	14	Ge 16	neral 18	Motio	on 2	Alarm	24		
Network	Sunday	0	2	4	0	•	10	12	14	10	10	20	2		24	Setup	
Event		-															
Storage	Monday															Setup	
o Schedule	Tuesday															Setup	
Destination	Wednesday															Setup	
Record Control	Thursday															Setup	
System	Friday															Setup	
	Saturday															Setup	
	Holiday															Setup	
	Default		F	Refresh		S	ave										



Record Schedule:

Click the "Setup" to manage the schedule time

Setup	Ε
I AII	Sunday Monday Tuesday Wednesday Thursday Friday Saturday Holiday
Period 1:	00 : 00 - 23 : 59 : 59 General 🗹 Motion 🕅 Alarm
Period 2:	00 : 00 - 23 : 59 : 59 General Motion Alarm
Period 3:	00 : 00 - 23 : 59 : 59 General Motion Alarm
Period 4:	00 : 00 - 23 : 59 : 59 General Motion Alarm
Period 5:	00 : 00 - 23 : 59 : 59 General Motion Alarm
Period 6:	00 : 00 - 23 : 59 : 59 General Motion Alarm
L	Save Cancel

Feature 4-36Arming period settings

Snapshot Schedule:





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.

Holiday Schedule:

Camera	Record Schedule Snapshot Schedule Holiday Schedule	
Smart settings	Record Snapshot	
letwork	Dec 🔻	
Event		
Storage	Sun Mon Tue Wed Thu Fri Sat	
o Schedule	1 2	
Destination	3 4 5 6 7 8 9	
Record Control	10 11 12 13 14 15 16	
System	17 18 19 20 21 22 23	
	24 25 26 27 28 29 30	
	31	

Figure 4-38 holiday time schedule setting

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

4.2.5.2 Location

re Setup	Alarm									
mera	Path	F	TP							
rimeter set	Record				Snapshot					
ce detection twork	Event Type FTP	Scheduled	Motion Detection	Alarm	Event Type FTP	Scheduled	Motion Detection	Alarm		
ent orage	Default	Refresh	Save							
Schedule Location										
Record Control										
stem										

Figure 4-39 FTP setting

Local:

Tick local, you can Store files and pictures locally.

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 address 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.

4.2.5.3 Record Control

Camera	Record Control			
Smart settings	Pack Duration	8	Minute (1~120)	
Network	Pre-event Record	5	Second (0~5)	
Event	Disk Full	Overwrite		
Storage	Record Mode	exactly a state of the stat		
Schedule	Record Stream	Main Stream]	
Destination				
o Record Control	Default	Refresh Save		
System				

Figure 4-40 Record control settings

Record Control:

- 【Pack Duration】 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.

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

【Record Mode】 Select Automatic/Manual/off to chose the recording mode.

【Record Stream】 Select Main Stream/Sub Stream 1/Sub Stream 2 to store the video.

4.2.6 System

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.

4.2.6.1 Local Settings

	Conoral	local config		Data®Time
Camera	General	local config		Date&Time
Smart settings	Device Name	03115807_11818	0	
Network	Language	English	•	
Event	Video Standard	NTSC	-	
Storage	Default	Refresh	Cours.	
System	Default	Reliesh	Save	
o General				
Account				
Default				
Import/Export				
Auto Maintain				
Upgrade				
Log				
Version				
Online User				



Local Config:

In the Local Configuration Interface, you can set the Device name of the IP camera, the Language and the video format .
Camera	General	local config	Date&Time	
Smart settings	Snapshot Path	D:\用户目录\我的文档	IPC-Download	Browse
Network	Record Path	D:\用户目录\我的文档	IPC-Download	Browse
Event				
Storage	Alarm capture path	D:\用户目录\我的文档	\IPC-Download	Browse
System	Default	Save		
o General	Deladik	Gave		
Account				
Default				
Import/Export				
Auto Maintain				
Upgrade				
Log				
Version				
Online User				

Figure 4-42 local config

Date & Time:

You can set the path of captured pictures and videos.

Camera	General	local config	Date&Time
Smart settings	Date Format	Year-Month-Day 🔹	
Network	Time Format	24-Hour-based System 🔻	
Event	Time Zone	GMT+08:00 -	
Storage	Current Time	2000 - 12 - 06 23 :	20 : 25 Sync PC
System	DST Enable		
o General	DST Type	Date OWeek	
Account	Start Time	Jan ▼ 1 ▼ 00 : 00 :	00
Default	EndTime	Jan ▼ 2 ▼ 00 : 00 :	00
Import/Export	Synchronize with NTP		
Auto Maintain	NTP Server	clock.isc.org	
Upgrade	Port	123	
Log	Update Period	10 Minute(0~30)	
Version			
Online User	Default	Refresh Save	



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.

4.2.6.2 Account

amera							
mart settings	No.	User Name Group	Name	Remark		Modify	Delete
letwork	1	admin adr	nin	admin 's account		2	•
vent							
torage							
ystem							
General							
o Account							
Default							
Import/Export	Authority List						
Import/Export Auto Maintain	Authority List Live	Record control	Account	Log Search	Clear Log	Upgrade	
	Live Auto Maintain	General	Video/Audio	Schedule/Destination	-	Upgrade Abnormality	1
Auto Maintain	Live			-	-		1
Auto Maintain Upgrade	Live Auto Maintain	General	Video/Audio	Schedule/Destination	-		1

Figure 4-44 User Settings

$\mathsf{Account} \to \mathsf{User}\,\mathsf{Nam}\,\mathsf{e}$

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".

Admin super user can only change the password. Different models can create different number of users, please regard a practical number as a standard.

Camera	User Name	Group					
Smart settings	No.	Group Name		Remark		Modify	Delete
Network	1	admin		administrator group		2	•
Event	2	user		user group		2	•
Storage							
System							
General							
o Account							
Default							
Import/Export	Authority List						
Auto Maintain	Live	Record control	Account	Log Search	Clear Log	Upgrade	
Upgrade	Auto Maintain	General	Video/Audio	Schedule/Destination	Network	Abnormality	
Log	Video Detect	Default/Import/Export	Video config	Smart settings			
Version							
Online User	Add Group						

Figure 4-45 User Group Settings

Account \rightarrow 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.

4.3 Alarm

				× ^{Logout} 요 ^{admin}		
ve Setup Alarm						
No:	Time	Alarm Type	Alarm Channel	Alarm Type Motion Detect Operation Pop-up Alarm Tone Path Detect		

Figure 4-46 Alarm interface

Alarm → Alarm Type

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.

Live Setup	Alarm
------------	-------

Alarm \rightarrow Operation

Check (Prompt) 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.

5 Function

5.1 DDNS Function

5.1.1 3322 (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

0		ι.		I .					
Open	Main Menu	\rightarrow	Configuration	\rightarrow	【INetwork】 →	Advanced	\rightarrow	DDINS	→Enable

Name	Configuration
DDNS	3322 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.

5.1.2 NO-IP (<u>www.no-ip.com</u>)

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

5.1.3 Dyndns DDNS (<u>www.dyndns.com</u>)

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

					-				
Onen	【Main Menu】 →	Management	\rightarrow	[Network] —	→ 【 /	Advanced I	\rightarrow	\rightarrow	(Fnahle)
open	I Main Micha	<pre>Indidgenterica</pre>			• • •	avancea _			

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

5.1.4 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.

C:\WINDOWS\system32\cmd.exe	- 🗆 X
Microsoft Windows XP [版本 5.1.2600] <c> 版权所有 1985-2001 Microsoft Corp.</c>	<u> </u>
C:\Documents and Settings\Administrator>	
搜狗拼音 半:	-

Input "ping+ Domain name" then press Enter,

C:\WINDOWS\system32\cmd.exe	- 🗆 ×
Microsoft Windows XP [版本 5.1.2600] <c> 版权所有 1985-2001 Microsoft Corp.</c>	<u> </u>
C:\Documents and Settings\Administrator>ping 🗾 1002.vssip.net	
Pinging 002.vssip.net [123.157.155.106] with 32 bytes of data:	
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128	
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128	
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128	
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128	
Ping statistics for 123.157.155.106: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),	
Approximate round trip times in milli-seconds:	
Minimum = Oms, Maximum = Oms, Average = Oms	
C:\Documents and Settings\Administrator>	
搜狗拼音 半:	-

The computer will analyses the domain name configured 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.

5.2 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, SMTP, 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.

5.2.1 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.

 $m Z\Delta$ 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 **C** network transmission capacity, ports, multicast etc. **C**.

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.

5.2.2 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 ransmission 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.

5.3 NTP Function

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

5.3.1 Internet Configuration

Get to the $[Configuration] \rightarrow [Network]$, 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.

5.3.2 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 \rightarrow "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.

5.4 Voice Intercom

5.4.1 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.

5.4.2 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.

6 APPENDIX

6.1 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.

l 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.

ZK Building, Wuhe Road, Gangtou, Bantian, Buji Town, Longgang District, Shenzhen China 518129

Tel: +86 755-89602345

Fax: +86 755-89602394

www.zkteco.com



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