



IP Camera Operation Manual

HICC-1300W/2300/2300T

HIDC-1300V/1300W/2300V

HIVDC-1300W/2300V

Contents

1	Introduction	1
	Function introduction	1
	Application Environment	2
	Installation Environment	2
2	Operating Guide for IP Camera	4
	Search IP Camera	4
	Download and install ActiveX	4
	Liveview	6
	Record Playback	7
	Set System Parameters (Configure)	10
	Local config	10
	Remote config	10
	Audio	10
	Video Settings	11
	Text Overlay	11
	Video Coding	12
	Video Mask	16
	Video Parameter	17
	Picture Parameter	23
	Network Settings	23
	Basic	23
	LAN	24
	PPPOE	25
	UPNP	25
	EMail	26
	FTP	28
	DDNS	28
	VPN	29
	RTSP	30
	IP EMail	31
	Connecting	31
	Storage Settings	31
	Device Setting	31
	Record Setting	33
	Snap Setting	34
	Alarm Settings	34

	Motion detection.....	34
	Sensor Setting	36
	Failure Setting.....	37
	COM Setting	38
	System	38
	System Info	38
	System Time	39
	User Manage.....	39
	Upgrade.....	40
	PTZ Upgrade.....	41
	Restore.....	41
	Reboot.....	42
3	Appendix.....	43
	Main Technical Parameters.....	43
	Network Interface of IP Camera	48
	Default Network Parameters	48
	Apply for DDNS domain name service	49
	IP camera DDNS introduction	49
	DDNS function of IP camera	49
	The DDNS process of IP camera is as follow:	49
	Visit IP camera under different network environments.....	51
	LAN	51
	Static IP.....	51
	Dynamic IP	52
	Internet	53
	Fixed IP mode.....	53
	Broadband and router sharing Internet access mode (dynamic obtainment of extranet IP address mode) like ADSL and so on;.....	54
	PPPoE dial-up access	57
	FAQs	58

CAUTION



- Non-technician should not try to operate this dome device before reading this manual carefully.
- Cut the power supply off before operating the dome device to avoid damage caused by mal-operation.
- Interior of the dome device are precision optical and electrical instruments. Heavy pressure, shock and other incorrect operations should be prevented. Otherwise, may cause damage to product.
- All the wiring of the dome device should be conducted strictly according to the wiring instruction. When necessary, thunder-proof, surge-proof and other protecting measures should be carried out.
- Please do not use the product under circumstances where the limits exceed the maximum specified temperature, humidity or power supply specifications.
- Contents in this manual may be different from the edition that you are using. Should any unsolved problem occur given that the product is used according to this manual, please contact our technical support department or your product suppliers.
- The default communication protocol for this dome device is PELCO-D, and baud rate is 2400 BIT/s, dome address is No.1.

Packing List

Check if the packing contents match the packing list on receiving the products. The packing list is as below:

Part	Quantity
IP Box Camera/ IP Fixed Dome	1
Compact Disk	1
Accessories of SD card cover (pitch circle + card cover + two screws) (for box camera)	1
Installation positioning sticker (for fixed dome)	1
KM3.5*35 screws + stopper accessory (each 3 pieces) (for fixed dome)	1
Power supply	1

Contact your local retailer if anything is missing in your package.

1 Introduction

Function introduction

- User can visit megapixel IP camera via IE to perform real-time monitor and playback;
- Standard H.264 video compression algorithm to satisfy the transmission of high definition video in narrow bandwidth network;
- Progressive CMOS sensor;
- Support network monitor and audio talkback;
- Support simultaneous review of 2 users maximum;
- Support infrared night vision function (depending on specific models);
- Support local storage of SD card (depending on specific models) maximum capacity is 32GB;
- Support real-time encoding at a maximum definition of 1920*1080/1280*720;
- Support local and network alarming. Once an invasion is detected by the detector, video surveillance function will be enabled to automatically shoot pictures and record the situation on the spot, and information of the scene will be sent to the preset storage space in the forms of text, picture, record, etc.;
- Support video masking; 4 video mask areas can be set up;
- Support video motion detection, able to trigger device recording and alarming based on needs;
- Alarm information and snapped pictures can be sent to users via E-mail and FTP uploading;
- Support multiple network protocols;
- HTTP, TCP/IP, UDP, SMTP, DDNS, SNTP, BOOTP, DHCP, FTP, SNMP, RTP, UPNP;
- Bi-directional audio talkback and broadcast;
- Network self-adapting function; adjust stream and encoding frame rate automatically according to network bandwidth;
- Support dynamic domain name service, LAN and Internet (ADSL, Cable Modem);
- Offers video loss, motion detection (area and sensitivity are adjustable) and sensor alarm functions;
- Support remote configuration and upgrade, failure detection and auto-inspection.

Application Environment

- Minimum configuration of hardware environment
CPU: Pentium 2.8. GHz
Memory: 512MB
Graphics Card: TNT2
Sound Card: necessary for audio surveillance and bi-directional talk
Hard Disk: minimum 40G capacity required for image recording
- Recommended configuration of hardware environment
CPU: dual-core 2.6Ghz
Memory: 1G
Graphics Card: Nvidia Geforce FX5200 or ATI RADEON 7000(9000) series 256M Display Card Memory
- Operation system
32-bit Simplified Chinese & English edition of Windows2000, Windows2003, Windows XP, Windows Vista, 64-bit Simplified Chinese & English edition of Windows2003, Windows XP, etc.
- Software Environment
IE 6.0 edition or above
DirectX8.0 edition or above
TCP/IP protocol
- Other requirements:
The PC installed with this software requires a graphics card that supports color change and zoom of image, now the graphics card that has been tested are: Nvidia Tnt/Tnt2, Geforce Mx200/400/420/440 Fx5200/5600 series, ATI Radeon 7000/7200/7500/8500/9000/9200/9500/9600 series, MatroxG450/550 and INTEL845G/865G series. Please note that the graphics card driver must be hardware scaling supportive.

Installation Environment

- Installation environment requirements
Far away from high-temperature resource and environment; improper place for ventilation; avoid install on shaky place.
- Recommended operating environment
Temperature: -10 ~ +55℃
Humidity: 0% ~ 90% RH

- Hardware installation steps

Please make sure LAN or Internet is in working order before installation of the IP camera.

Steps:

- ①. Unpack the box to check the goods;
- ②. Take out all goods which needed for installation from the box;
- ③. Connect related cables according to actual need (Power line, reticle, audio frequency line etc.);
- ④. Connect the power supply.

For connection way and SD card port of box camera, please see figure below:



For connection way and SD card port of fixed dome camera, please see figure below (remove the outer cover):



- Please double-check the box to confirm that the items are consistent with the list.
- Read the user manual carefully before installation.
- Be sure to turn off all power before the network camera is installed.
- Use matched voltage.

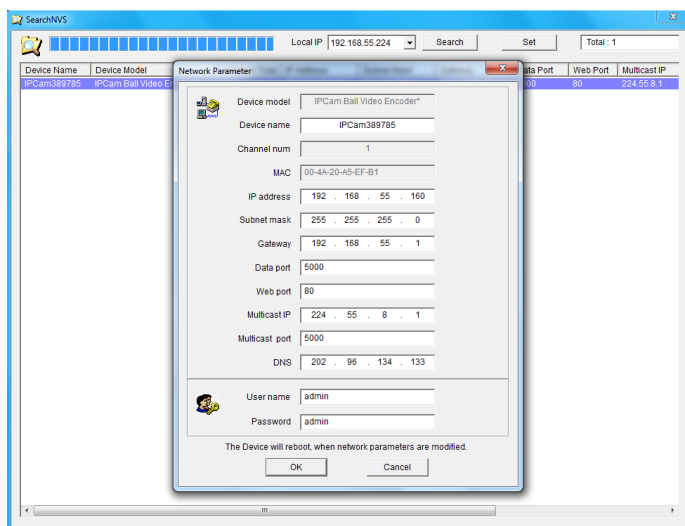
2 Operating Guide for IP Camera

Search IP Camera

Use search engine to find camera IP address. After install NVS software, user can find search tool. Its icon like  SearchNVS. Once click that icon, user can get IP address and other relevant parameters of all cameras connected to the host machine. And all those information is changeable through double click the IP address.

Before accessing the IP Camera by Internet Explorer, You need to set the network of client in the same LAN with IP Camera(e.g. IP address:192.168.55.123, Subnet mask:255.255.255.0, Gateway:192.168.55.1).

Figure 2-1



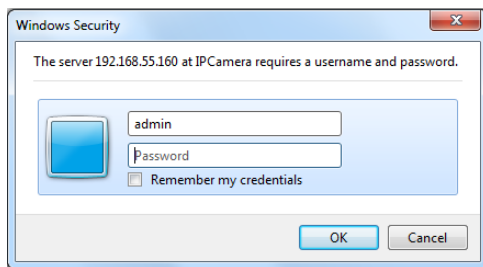
Download and install ActiveX

You need to install ActiveX Control when you visit IP camera for the first time through IE browser.

ActiveX installing method:

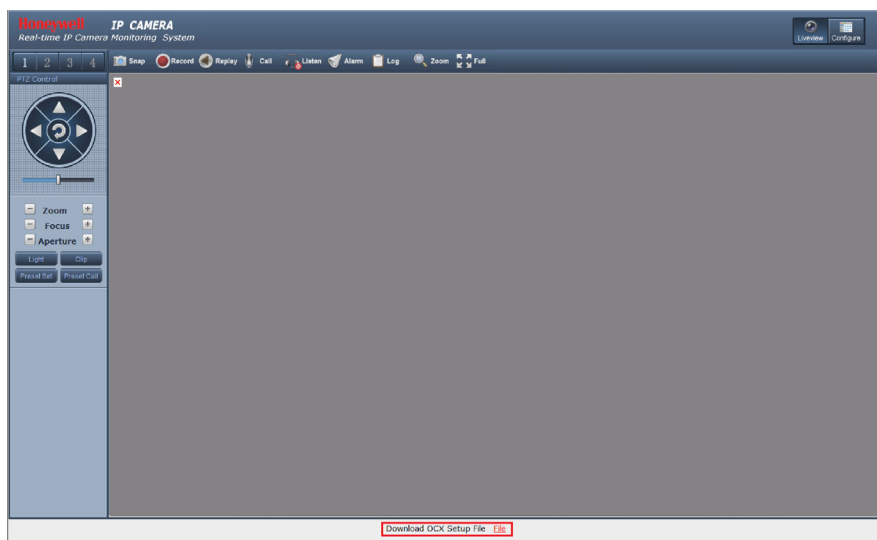
Download installation: Input the IP address of IP camera in Internet Explorer to enter into login page (see Figure 2-2), type in user name and password (default user name and password are: admin):

Figure 2-2



After enter into the live view interface, click the "File".

Figure 2-3



File download dialogue box pops up, click **Run** or **Save** to download ActiveX, after download it, double-click the downloaded file "xdview.exe" to install it. After installation completes, a message "Register OCX success!" will appear.

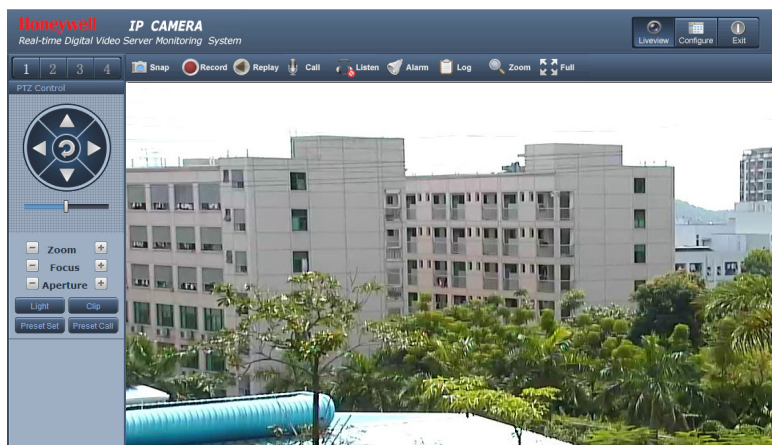
Figure 2-4



Liveview

See the following figure for the interface of "Liveview":

Figure 2-5



In the Liveview interface, users can do operations like Snapping, Recording, Playback, Call, Listen, Clear Alarm, Log Search, Local Zoom of Image, Full-screen Viewing, PTZ and Lens Control.

Snap: Click "Snap", snap the current image and save it in .JPG format automatically to the storage directory of snapped images. The default path is C:\XDNVs.

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 turned on. The status icon for Record shows as:



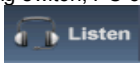
Replay: Click "Replay", the playback page will pop up for searching and playback of recorded files or snapped pictures.

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 status icon for



Call shows as:

Listen: After switch on the monitoring switch, PC can monitor the sound at the device end.



The status icon for Listen shows as:

Alarm: When there is an alarm, double-click **[Alarm]** to cancel the alarm manually.

Log: Allow users to search for operations and alarm log. The maximum capacity is 512 entries of message, when the number of entries exceeds 512, system will delete records of the earliest date automatically.

Zoom: This feature allows the manual drag and drop of video display area to realize partial zoom in.

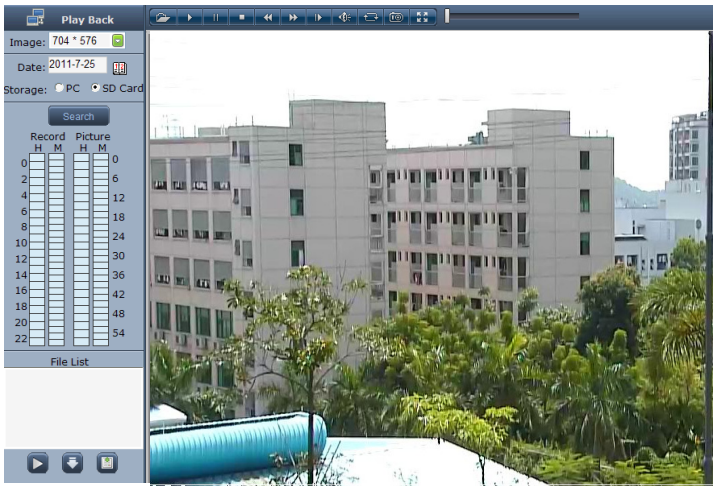
Full Screen: Display images in full-screen, right click to exit full screen mode.

Record Playback



Click  enter into video playback page (see the following figure):

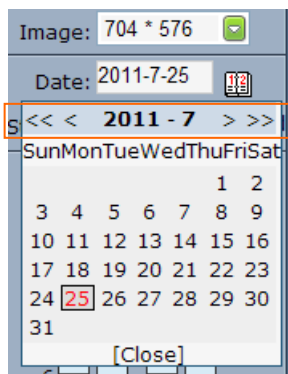
Figure 2-6



Users can search for recorded image files or snapped pictures in local PC or storage device according to date.

Date: Users can select certain date to perform recorded image file or snapped picture searching, click “date” button , data selection page will pop up(see the following figure):

Figure 2-7



Click "«" icon to turn to previous year
Click "»" icon to turn to next year
Click "<" icon to turn to previous month
Click ">" icon to turn to next month

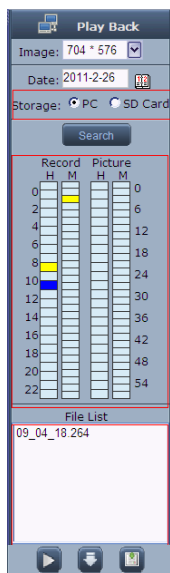
PC: Users can select certain date to perform recorded image file or snapped picture (stored in local PC) searching.

SD Card: Users can select certain date to perform recorded image file or snapped picture (stored in device SD card) searching.

File List: Shows the recorded image files or snapped pictures searched in the File List.

The way to search for recorded image files or snapped pictures of a specific period (see the following figure):

Figure 2-8



Select to search for record files or snapped pictures in PC or device SD card

The record file list searched is displayed on the left
The picture list searched is displayed on the right
The left side stands for hour, each grid means one hour
The right side stands for minute, each grid means 2 minutes
Yellow indicates the selected search period
Blue indicates there are files and pictures searched of the selected period

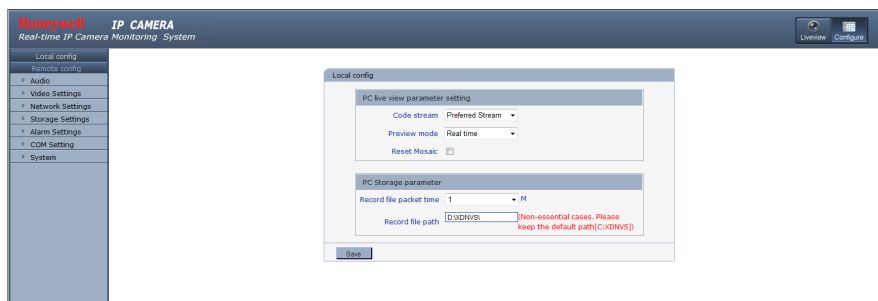
Display the files and pictures searched of the selected period

Set System Parameters (Configure)

Local config

See the following figure for the interface of "Local config":

Figure 2-11



PC live view parameter setting

Code stream: set video stream for PC live preview, preferred stream and alternate stream are selectable. The parameters of preferred and alternate stream can be set up in **Video Settings**.

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.

PC storage parameter

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. The default path is C:\XDNVS.

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

Remote config

Audio

See the following figure for the interface of "Audio setting":

Figure 2-12

The screenshot shows a web-based configuration interface for audio settings. The window is titled 'Audio setting'. It contains several configuration options, each with a label and a control element (checkbox or dropdown menu). The 'Enable audio' option is a checkbox that is currently unchecked. The other options are dropdown menus: 'Input type' is set to 'Mic', 'Type' is set to 'G.711A', 'Sampling rate' is set to '16000', 'Sampling' is set to '8k', 'Input Volume' is set to '15', and 'Output Volume' is set to '15'. A 'Save' button is located at the bottom left of the window.

Enable audio: 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.

Input type: You can choose MIC or Line In input.

Type: Support three types of audio compressed format:G.726, G.711A, G.711U.

Sampling: Support audio sample rates of 8k ,16k 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.

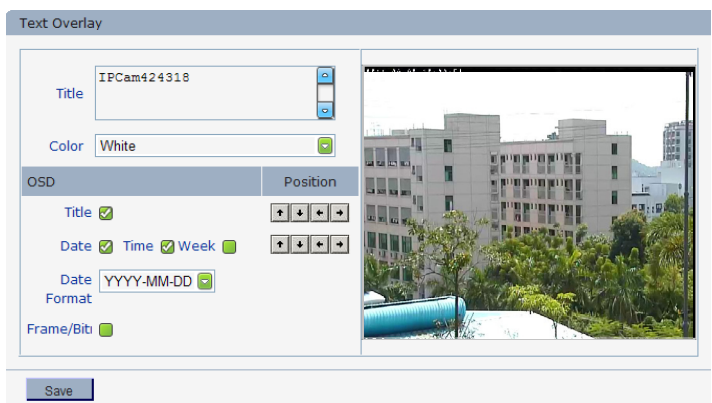
After you set these parameters, please click **Save** to make them valid.

Video Settings

Text Overlay

See the following figure for the interface of "Text Overlay":

Figure 2-13



Title: The name of video channel, displayed at the bottom left of image(movable), maximum characters allowed: 22.

Color: You can choose different colors for the text.

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 you set these parameters, please click **Save** to make them valid.

Video Coding

See Figure 2-14 & Figure 2-15 for the interface of "Video Coding":

Figure 2-14 HICC-1300W) / (HIDC-1300V) / (HIDC-1300W) / (HIVDC-1300W

Video Coding	
Preferred Stream	Alternate Stream
Coding: H.264	H.264
Image: 1280 * 720	640 * 480
Quality: Fine	Fine
Advanced: ☒	☒
I frame interval: 75 F	50 F
Frame rate: 25 F/S	25 F/S
Rate control: VBR	VBR
Bitrate: 4096 Kbps	2048 Kbps
Quality: 2	4
LAN... WAN...	LAN... WAN...
Save	

Figure 2-15 HICC-2300) / (HICC-2300T) / (HIDC-2300V) / (HIVDC-2300V

Video Coding	
Preferred Stream	Alternate Stream
Coding: H.264	H.264
Image: 1920 * 1080	320 * 240
Quality: Fine	Fine
Advanced: ☒	☒
I frame interval: 75 F	50 F
Frame rate: 25 F/S	25 F/S
Rate control: VBR	VBR
Bitrate: 4096 Kbps	2048 Kbps
Quality: 2	4
LAN... WAN...	LAN... WAN...
Save	

Coding: H.264 and MJPEG.

Image: Set definition of images.

HD camera support:

Preferred Stream: 1920*1080/1280*960/1280*720

Alternate Stream: 640*480/320*240

Quality: You can choose the right quality according to your need: Fine, Normal, Basic, and the parameters can also be user-defined by choosing **advanced**.

I frame interval: Adjustable between 1~200(Preferred Stream), 1~120(Alternate Stream). Smaller I frame interval means higher image bitrate and better image quality. It is recommended to set the I frame interval as above 25.

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.

Rate control: CBR and VBR are optional. CBR adopts constant encoding bitrate, VBR adopts variable encoding bitrate.

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.

Under CBR setting, **Bitrate** is the constant bitrate of encoding.

Under VBR setting, **Bitrate** is the variable bitrate of encoding.

Quality: Under CBR setting: set the bitrate range via "Image Quality", 1 means it is controlled by the software, 2~6 means corresponding bitrate range is $\pm 10\% \sim \pm 50\%$

Under VBR setting: set image quality via "Image Quality", smaller value of image quality means better quality and higher bitrate, but the bitrate will not exceed its set value.

LAN default value: See the following figures for LAN default value:

Figure 2-16 HICC-1300W) / (HIDC-1300V) / (HIDC-1300W) / (HIVDC-1300W

The screenshot displays the 'Video Coding' configuration window. It is divided into two main columns: 'Preferred Stream' and 'Alternate Stream'. Each column contains a series of settings for video encoding. The 'Preferred Stream' settings are: Coding (H.264), Image (1280 * 720), Quality (Fine), Advanced (checked), I frame interval (75 F), Frame rate (25 F/S), Rate control (VBR), Bitrate (2048 Kbps), and Quality (2). The 'Alternate Stream' settings are: Coding (H.264), Image (640 * 480), Quality (Fine), Advanced (checked), I frame interval (50 F), Frame rate (25 F/S), Rate control (VBR), Bitrate (512 Kbps), and Quality (4). At the bottom of each column, there are buttons for 'LAN...' and 'WAN...'.

Setting	Preferred Stream	Alternate Stream
Coding	H.264	H.264
Image	1280 * 720	640 * 480
Quality	Fine	Fine
Advanced	☒	☒
I frame interval	75 F	50 F
Frame rate	25 F/S	25 F/S
Rate control	VBR	VBR
Bitrate	2048 Kbps	512 Kbps
Quality	2	4

Figure 2-17 HICC-2300) / (HICC-2300T) / (HIDC-2300V) / (HIVDC-2300V

Video Coding	
Preferred Stream	Alternate Stream
Coding: H.264	H.264
Image: 1920 * 1080	640 * 480
Quality: Fine	Fine
Advanced: ☒	☒
I frame interval: 75 F	50 F
Frame rate: 25 F/S	25 F/S
Rate control: VBR	VBR
Bitrate: 6144 Kbps	512 Kbps
Quality: 2	4
LAN... WAN...	LAN... WAN...

WAN default value

See the following figures for WAN default value:

Figure 2-18 HICC-1300W) / (HIDC-1300V) / (HIDC-1300W) / (HIVDC-1300W

Video Coding	
Preferred Stream	Alternate Stream
Coding: H.264	H.264
Image: 1280 * 720	640 * 480
Quality: Fine	Fine
Advanced: ☒	☒
I frame interval: 50 F	50 F
Frame rate: 5 F/S	5 F/S
Rate control: VBR	VBR
Bitrate: 384 Kbps	384 Kbps
Quality: 4	4
LAN... WAN...	LAN... WAN...

Figure 2-19 HICC-2300) / (HICC-2300T) / (HIDC-2300V) / (HIVDC-2300V

Video Coding

	Preferred Stream	Alternate Stream
Coding	H.264	H.264
Image	1920 * 1080	640 * 480
Quality	Fine	Fine
Advanced	☒	☒
I frame interval	50 F	50 F
Frame rate	5 F/S	5 F/S
Rate control	VBR	VBR
Bitrate	384 Kbps	384 Kbps
Quality	4	4
	LAN... WAN...	LAN... WAN...

After you set these parameters, please click **Save** to make them valid(Sometimes if you modify the **image**, the device will be reboot).

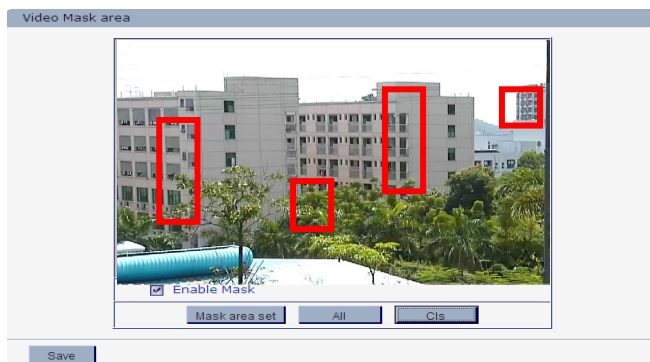


Non-professional users please use "Advanced Settings" with caution.

Video Mask

See Figure 2-10 for the interface of "Video Mask":

Figure 2-20



Enable Mask: Enable or disable video mask.

Mask area set: Click and move cursor to set image masking area, an image can be entirely or partially masked, maximum 4 areas supported.

All: Mask the whole image.

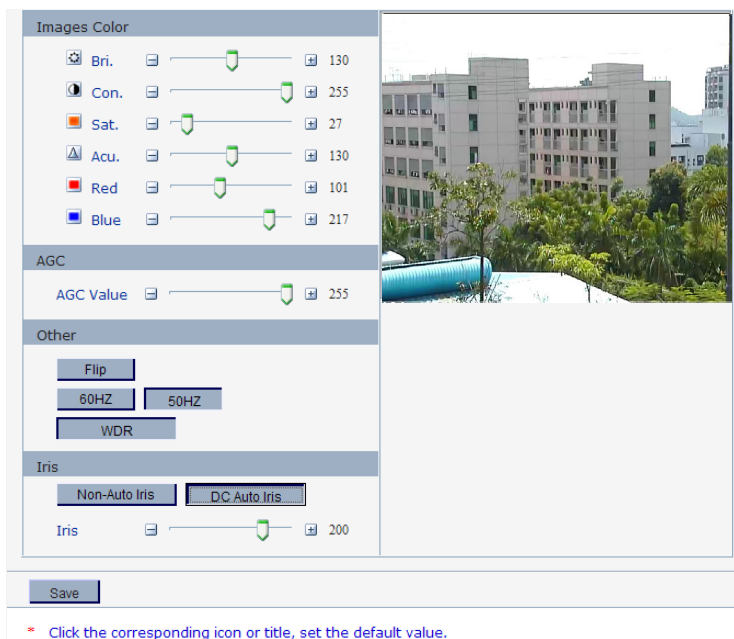
Cls: Clear masked areas.

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

Video Parameter

See Figure 2-21, Figure 2-22, Figure 2-23, Figure 2-24 and Figure 2-25 for the interface of "Video Parameter":

Figure 2-21 (HICC-1300W)



The screenshot displays the configuration interface for the HICC-1300W camera. It is divided into several sections:
Images Color: Contains sliders for Brightness (Bri.), Contrast (Con.), Saturation (Sat.), Acutance (Acu.), Red, and Blue, each with a default value and a range.
AGC: Includes an AGC Value slider.
Other: Features buttons for Flip, 60HZ, 50HZ, and WDR.
Iris: Includes buttons for Non-Auto Iris and DC Auto Iris, and an Iris slider.
Save: A button at the bottom to apply changes.
Preview: A live video feed showing a building and trees.
Footer: A note stating: '* Click the corresponding icon or title, set the default value.'

Images Color: Adjust the Brightness, Contrast, Saturation, Acutance, Red, Blue of video

AGC: Change the value of AGC can adjust the effect of image in low light-level.

Other: Set Flip, vertically rotate the video.

In indoor environment, if the flashing of lamps results in the flickering of images, please choose 50HZ or 60HZ according to the power frequency.
Set WDR accordingly.

Iris: Choose Non-Auto Iris or DC Auto Iris according to actual environment.

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

Figure 2-22 (HICC-2300)



* Click the corresponding icon or title, set the default value.

Images Color: Adjust the Brightness, Contrast, Saturation, Acutance, Red, Blue, Gamma of video.

BLC: To get better image effect, you can select BLC. If the backlighting of the monitored objects is strong, it will compensates light automatically for the scope where is necessary.

Shutter: Set the value of Shutter to control luminous flux.

Other: Set Mirror, horizontally rotate the video

Set Flip, vertically rotate the video

In indoor environment, if the flashing of lamps results in the flickering of images, please choose 50HZ or 60HZ according to the power frequency.

Set CTB ,IPC will automatically turns on D/N function according to the image's situation.

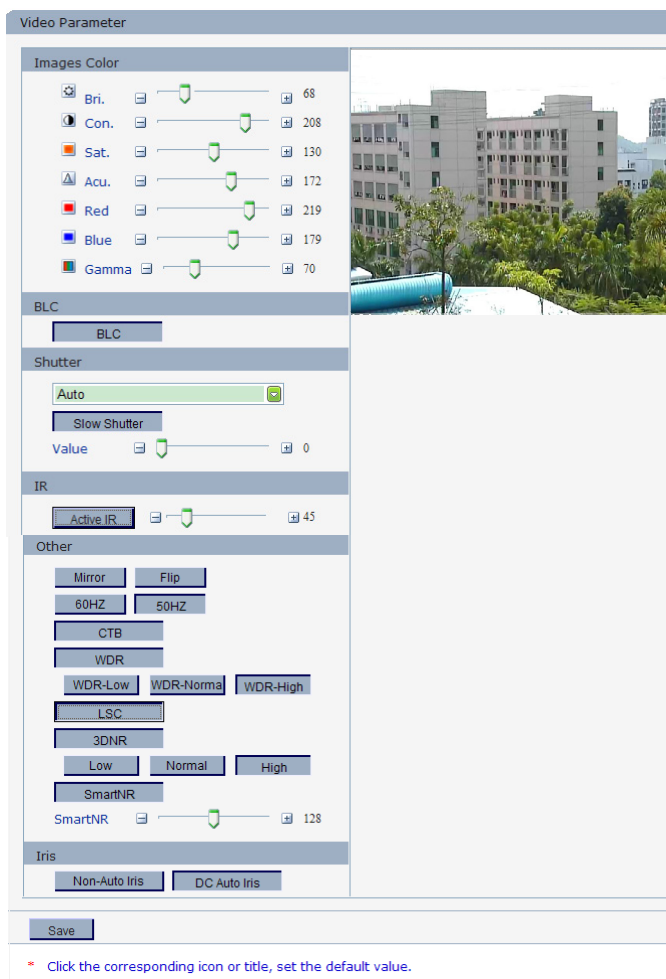
Set WDR, user can choose WDR-Low, WDR-Normal and WDR-High accordingly.

To get a better image effect, user can set LSC, 3DNR and SmartNR accordingly.

Iris: Adjust the control level of iris to control the luminous flux. Available options are Non-Auto Iris and DC Auto Iris.

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

Figure 2-23 (HICC-2300T)



Images Color: Adjust the Brightness, Contrast, Saturation, Acutance, Red, Blue, Gamma of video.

BLC: To get better image effect, you can select BLC. If the backlighting of the monitored objects is strong, it will compensates light automatically for the scope where is necessary.

Shutter: Set the value of Shutter to control luminous flux.

IR: If the camera has infrared function, you can select it to regulate the valve value of night time start dot.

Other: Set Mirror, horizontally rotate the video.

Set Flip, vertically rotate the video.

In indoor environment, if the flashing of lamps results in the flickering of images, please choose 50HZ or 60HZ according to the power frequency.

Set CTB ,IPC will automatically turns on D/N function according to the image's situation.

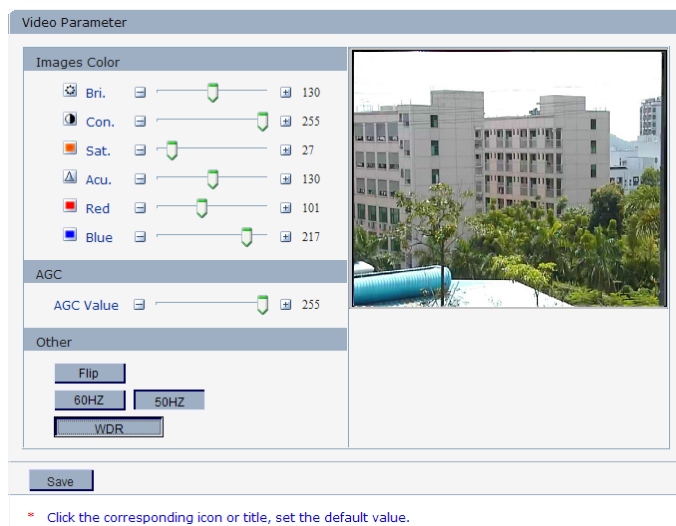
Set WDR, user can choose WDR-Low, WDR-Normal and WDR-High accordingly.

To get a better image effect, user can set LSC, 3DNR and SmartNR accordingly.

Iris: Adjust the control level of iris to control the luminous flux. Available options are Non-Auto Iris and DC Auto Iris.

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

Figure 2-24 HIDC-1300V) / (HIDC-1300W) / (HIVDC-1300W



Images Color: Adjust the Brightness, Contrast, Saturation, Acutance, Red, Blue of video.

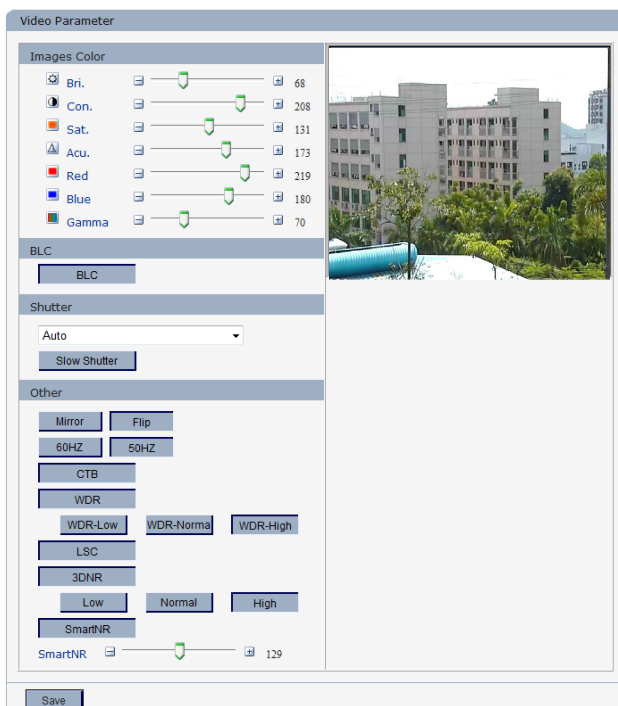
AGC: Change the value of AGC can adjust the effect of image in low light-level.

Other: Set Flip, vertically rotate the video.

In indoor environment, if the flashing of lamps results in the flickering of images, please choose 50HZ or 60HZ according to the power frequency.
Set WDR accordingly.

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

Figure 2-25 H1DC-2300V) / (H1VDC-2300V



* Click the corresponding icon or title, set the default value.

Images Color: Adjust the Brightness, Contrast, Saturation, Acutance, Red, Blue, Gamma of video.

BLC: To get better image effect, you can select BLC. If the backlighting of the monitored objects is strong, it will compensates light automatically for the scope where is necessary.

Shutter: Set the value of Shutter to control luminous flux.

Other: Set Mirror, horizontally rotate the video.

Set Flip, vertically rotate the video.

In indoor environment, if the flashing of lamps results in the flickering of images, please choose 50HZ or 60HZ according to the power frequency.

Set CTB, IPC will automatically turns on D/N function according to the image's situation.

Set WDR, user can choose WDR-Low, WDR-Normal and WDR-High accordingly.

To get a better image effect, user can set LSC, 3DNR and SmartNR accordingly.

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

Picture Parameter

See Figure 2-26 and Figure 2-27 for the interface of "Picture Parameter":

Figure 2-26 HICC-1300W) / (HIDC-1300V) / (HIDC-1300W) / (HIVDC-1300W

Snap picture parameter setting

Picture format: jpg

Resolution: 1280 * 720

Save

Figure 2-27 HICC-2300) / (HICC-2300T) / (HIDC-2300V) / (HIVDC-2300V

Snap picture parameter setting

Picture format: jpg

Resolution: 1920 * 1080

Save

Snap picture parameter setting: Supports only images of JPG format currently, megapixel camera definition is the same as set in **video definition**, other cameras can choose different pixel by yourself.

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

Network Settings

Basic

See the following figure for the interface of "Basic setting":

Figure 2-28

The screenshot shows a web interface titled "Basic setting". Inside, there is a light gray box containing two labels with corresponding text input fields: "Data port" with the value "5000" and "Web port" with the value "80". Below this box is a blue "Save" button.

Data port: Default value is 5000 (users are recommended not to change it).

Web port: Default value is 80 (users are recommended not to change it).

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

LAN

See the following figure for the interface of "LAN setting":

Figure 2-29

The screenshot shows a web interface titled "LAN setting". It contains a light gray box with several configuration options: "Enable DHCP" with an unchecked checkbox, "IP address" with the value "192.168.55.160", "Subnet mask" with "255.255.255.0", "GateWay" with "192.168.55.1", "MAC" with "00-4a-20-a6-60-1d" and a checked checkbox, "Preferred DNS" with "202.96.134.133", and "Alternate DNS" with "202.106.0.20". Below the box is a blue "Save" button.

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

IP address: Set the camera's IP address.

Subnet mask: Default value is 255.255.255.0 (users are 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.

MAC: The Physical address of IP camera (users are recommended not to change it).

DNS: The default DNS address is the DNS address of Guangdong province, users outside the area please use DDNS function to set the DNS address as their local DNS address.



After revise and save parameters, the device will restart. If it is applied in LAN, please pay attention to avoid conflict between its IP address and the IP addresses of other devices or PC in the LAN.

PPPOE

See the following figure for the interface of "PPPOE setting":

Figure 2-29

Enable PPPOE: 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 you set these parameters, please click **Save** to make them valid.

UPNP

See the following figure for the interface of "UPNP setting":

Figure 2-30

UPNP setting

Enable UPNP ☒

Network card Lineate

Mode Designate

Server URL

Data port map No.

Web port map No.

Data mapping status

Web mapping status

* 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 can mapping to the appointed port, if port was occupied then mapping failed.
 * In automatic mode, will mapping to the appointed port in priority; if appointed port was occupied, the mapping 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.

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 you set these parameters, please click **Save** to make them valid.

Email

See the following figure for the interface of “Email setting”:

Figure 2-31

Email setting

SMTP server

MAIL From

MAIL To

SMTP username

SMTP Password

MAIL title

SMTP port

SSL ☐

Save

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

SMTP server: The address of servers that send the mails, the address format of mail servers varies from provider to provider, e.g. the SMTP server of 163 mailbox is smtp.163.com.

MAIL From: Mailbox that sends mails.

MAIL To: Mailbox that receives mails.

SMTP username: The login user name of the mailbox that sends mails.

SMTP password: The login password of the mailbox that sends mails.

MAIL title: Title of mails.

SMTP Port: Port of SMTP port, different mail server has different port. For example, the server port of Gmail is 587.

Commonly used mail server configuration:

Gmail mail server:

SMTP server: smtp.gmail.com

SMTP user name: username@gmail.com

SMTP port: 587

SSL: enabled

Yahoo mail server:

SMTP server: smtp.mail.yahoo.com

SMTP user name: username

SMTP port: 465

SSL: enabled

163 mail server:

SMTP server: smtp.163.com
SMTP user name: username
SMTP port: 25
SSL: disabled

FTP

See the following figure for the interface of “FTP setting”:

Figure 2-32

FTP setting

	Preferred Server	Alternate Server
Server URL		
Server port	21	21
FTP catalog		
User name		
Password		
Start port	0	
End port	0	

Save

FTP server sends the record files and snapped images generated after alarm is triggered in FTP mode to specified FTP server, 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 doesn't 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.



If you want to upload the record files and snapped images, you must have the authority to write on the FTP server.

DDNS

See the following figure for the interface of “DDNS setting”:

Figure 2-33

Bind the device with a fixed domain name by DDNS 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 DDNS: Enable or disable DDNS function.

Link mvddns.net: click this link to turn to www.mvddns.net <http://www.mvddns.net/>, users can sign up on this website.

Provider: mvddns.net, 3322.org, dyndns.org and blank are selectable. If blank is selected, DDNS function will be disabled. Otherwise, DDNS is enabled and not editable.

Username: User registered in DDNS server.

Password: User password registered in DDNS server.

Domain: The domain name set up by users, e.g.: test1.mvddns.net.

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 (users are 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.

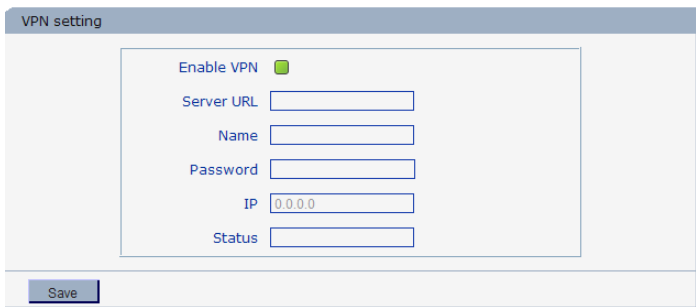
Update Interval: Default value is 30 minutes.

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

VPN

See the following figure for the interface of "VPN setting":

Figure 2-34



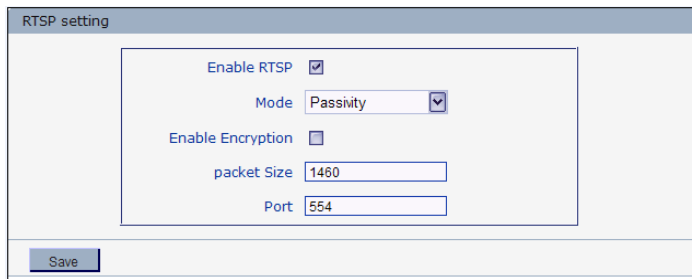
The image shows a web interface titled "VPN setting". It contains a form with the following fields: "Enable VPN" with a green toggle switch, "Server URL" with a text input field, "Name" with a text input field, "Password" with a text input field, "IP" with a text input field containing "0.0.0.0", and "Status" with a text input field. At the bottom left of the form is a "Save" button.

- Enable VPN:** Enable or disable VPN function.
 - Server URL:** IP address or domain of VPN server.
 - Name:** User registered in VPN server.
 - Password:** User password registered in VPN server.
 - IP:** Display IP after VPN dial-up success.
 - Status:** Display the status of dial-up.
- After you set these parameters, please click **Save** to make them valid.

RTSP

See the following figure for the interface of "RTSP setting":

Figure 2-35



The image shows a web interface titled "RTSP setting". It contains a form with the following fields: "Enable RTSP" with a checked checkbox, "Mode" with a dropdown menu showing "Passivity", "Enable Encryption" with an unchecked checkbox, "packet Size" with a text input field containing "1460", and "Port" with a text input field containing "554". At the bottom left of the form is a "Save" button.

- Enable RTSP:** Check RTSP switch to enable RTSP function.
 - 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.
- After you set these parameters, please click **Save** to make them valid.

IP Email

See the following figure for the interface of "Public IP noticed by email":

Figure 2-36

Public IP noticed by email(Device power on or public ip changed,send email to notice.)

Enable Email ☐

Update Interval Default ▾

Save

Enable Email: Check this switch to enable public IP mail notification function.

Update Interval: Select the interval of public IP mail notifications.

After enable this function, when the device starts or detects public IP change, it will send notification mail to the mail address set in **mail setting**.

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

Connecting

See the following figure for the interface of "Connect setting":

Figure 2-37

Connect setting

Auto connect ☐

Center URL 192.168.55.8

Center port No. 6000

Save

Auto connect: Enable or disable active connection of the device to surveillance center.

Center URL: The address of surveillance center (e.g. 192.168.55.8).

Center port No.: The port of surveillance center (e.g. 6000).

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

Storage Settings

Device Setting

See the following figure for the interface of "Device Setting":

Figure 2-39

The screenshot shows a 'Device setting' window with three main sections:

- Storage device Info:** A table with columns 'ChooseNo.', 'TotalSize(M)', 'FreeSize(M)', and 'State'. Below the table are 'Format' and 'Refresh' buttons.
- Storage device record parameters:** Includes a 'Code stream' dropdown set to 'Preferred Str', a 'Record file packet time' spinner set to '1' with a unit 'M', and a 'Record Save' spinner set to '0' with a unit 'Day'.
- Other parameters:** Two checkboxes: 'Overwrite old files when disk is full' (checked) and 'Auto search the storage device when start' (unchecked).

A 'Save' button is located at the bottom of the window.

Storage Device Info: View information of SD card here, including No., TotalSize, FreeSize and Status.

Users can also click **Format** button to format SD card, during the formatting process, please click **Refresh** button to the display formatting completion percentage.

Storage device record parameters

Code stream: Set record stream for SD card, preferred stream and alternate stream are selectable.

Record file packet time: Set packing intervals for each segment of record file when SD card is recording. 1 means files will be packed every 1 minute.

Other Parameters

Overwrite old files when disk is full: When the storage capacity of SD card is used up, the device will delete old files automatically. The way to delete old files: first delete the files of the earliest date, if the space is still not enough, then delete the files of the earliest date but one, then go on like this if necessary. If the record files are taken on the current date, then first delete the files of the earliest hour. But files of the current hour cannot be deleted, if the SD card gets full in one hour, the device will stop recording and snapping images. After the one-hour session ends, system will delete the files of the hour and continue to record and snap pictures.

Auto search the storage device when start: Check storage device or not when IP camera starts.

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



- Hot-plugging is not recommended for SD card, compulsory hot-plugging may damage the SD card, causing 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 doesn't support the storage that can be formatted into several partitions, so if you want to format it on PC before using it, please format it into one partition.

Record Setting

See the following figure for the interface of "Record Setting":

Figure 2-38

Record Schedule: Set the period of scheduled recording, two periods allowed.

File save 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.



Record files are saved via FTP uploading. SD card is needed for cache memory support, otherwise record files will be overwritten by new files due to insufficient cache memory space.

Snap Setting

See the following figure for the interface of “Snap setting”:

Figure 2-39

Snap setting

Snap parameter

Snap spacing* 1.0 S

Snap schedule

Time 1

Time 2

☐

 0 : 0 -- 23 : 59

☐

 0 : 0 -- 23 : 59

File save mode

☐ E-mail ☐ Ftp

Save

* When device has storage (hard disk, SD card, USB disk), schedule Snap will be saved to the storage first and do related process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

Snap parameter: Set the interval of IP camera picture snapping, minimum interval is 1 second.

Snap schedule: Set the period of scheduled snapping, two periods 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**.

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

Alarm Settings

Motion detection

See the following figure for the interface of “Motion detection”:

Figure 2-40



Detection Area

Area set All Cfg

Detection Setting

☐ Motion Sensitivity 4

Deployment Time

Time 1 0 : 0 -- 23 : 59

Time 2 0 : 0 -- 23 : 59

Alarm Output	☐	Alarm output duration	10S	E-mail	☐
Event	Channels	Snap	spacing / time	File save mode	
Snap	☐	1	1S	☐ E-mail	☐ Ftp
Record	☐		60S	☐ E-mail	☐ Ftp

Save

- The value is 1 - 5, more sensitive when higher.
- Snap time for a float number, such as: 0.5 seconds, 1.5 seconds, and so on.
- When device has storage (hard disk, SD card, USB disk), linkage Snap, linkage Record document will be saved to storage first and do related process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

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

Enable detect: Enable or disable motion detection.

Sensitivity: Sensitivity range is 1~5, greater value means higher sensitivity.

Deployment Time: Set the period of time for motion detection, two periods allowed.

Alarm 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 0~7200s.0 means that there is no limit for alarm output.

E-mail: Send motion detection alarm information to users via E-mail, details about E-mail setting please refer to **Network Settings**.

Linkage Snapping: 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.

Linkage recording: When alarm is triggered, the device SD card will be driven to record images. The record files can be saved via E-mail sending or FTP uploading.

Motion Detection Area: Left click and drive 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.

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



Record file packet time equals duration of alarm add the record time set in **Linkage recording**.

Sensor Setting

See the following figure for the interface of "Sensor Setting":

Figure 2-41

Sensor Detection Setting

Sensor Detection

☒ Enable detect Sensor type: NO

Deployment Time

Time 1: 0 : 00 -- 23 : 59 Time 2: 0 : 00 -- 23 : 59

Alarm Output ☐ Alarm output duration: 10 S E-mail ☐

Event	Channels	Snap	spacing / time	File save mode
Snap ☐		1	*1 S	☐ E-mail ☐ Ftp
Record ☒			60 S	☐ E-mail ☐ Ftp

Save

* Snap time for a float number, such as: 0.5 seconds, 1.5 seconds, and so on.
 * When device has storage (hard disk, SD card, USB disk), linkage Snap, linkage Record document will be saved to storage first and do related process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

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

Enable detect: Enable or disable sensor alarm detection.

Sensor type: NO and NC mode.

Deployment Time: Set the period of time for sensor alarm detection, two periods allowed.

Alarm 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 0~7200s.0 means that there is no limit for alarm output.

E-mail: Send sensor alarm information to users via E-mail, details about E-mail setting please refer to “Network Settings”.

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 images. The record files can be saved via E-mail sending or FTP uploading.

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



Record file packet time equals duration of alarm add the record time set in **Linkage recording**.

Failure Setting

See the following figure for the interface of “Failure Setting”:

Figure 2-42

Failure Detection Setting

☐ Enable detect

Alarm Output ☐

Alarm output duration S

Event	Channels	Snap	spacing / time
Snap ☐		1	1 S
Record ☐			60 S

Save

* Snap time for a float number, such as: 0.5 seconds, 1.5 seconds, and so on.

* When device has storage (hard disk, SD card, USB disk), linkage Snap, linkage Record document will be saved to storage.

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

Enable detect: Enable or disable network failure alarm detection.

Alarm 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 0~2147483647s.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 images. The record files can be saved via E-mail sending or FTP uploading.

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



- 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.

COM Setting

See the following figure for the interface of "COM Setting":

Figure 2-43

COM RS485: 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.



Only when the parameters and protocol are correctly set that the control of add-on communication control device can be implemented.

System

System Info

See the following figure for the interface of "System Info":

Figure 2-44

System Info: Display information like Device Name, Device ID and Version. User can define the device name.

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

System Time

See the following figure for the interface of "System Time":

Figure 2-45

System time Setting: You can choose the proper time zone.

Update via NTP Server: After starting the function, switch on NTP switch and select time zone, save it to turn to **Liveview**, the system time that has been automatically corrected by NTP server can be displayed.

Synchronize with Local Computer: After starting the function, the date and time of IP camera will be synchronized with PC.

Set the Time Manually: If you select this option, you can modify the time in **System time**.

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

User Manage

See the following figure for the interface of “User Management”:

Figure 2-46

User Management

Select userAdministrator

User nameadmin

Passwordadmin

Confirm password

Save

Notice:

User name,Password may consist of a-z, 0-9, underscores, and a single dot (.), 1 to 16 characters;capitalization matters.

Modify User name or Password,please login again.

You can set three users for every camera, one is Administrator, the others are general users.

Administrator authority: Can operate and set all functions and parameters of IP camera.

General user authority:

- (1) Can perform operations like snapping, recording, playback, talkback, monitoring, alarm clearing, log searching, zooming and full-screen reviewing;
- (2) Can perform operations like Local setting, PTZ setting, Record and Replay etc.

Default user name of administrator: admin	Password: admin
Default user name of general user: user 1 \user 2	Password: user 1 \user 2
Note: user name and password are case sensitive	

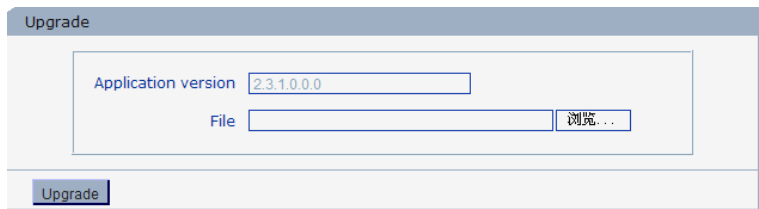


User name and password must be 1-16-character-strings consisted by letters, numbers, underlines or dots. The characters are case sensitive.

Upgrade

See the following figure for the interface of “Upgrade”:

Figure 2-49



Click **Browse** button, and select correct file of upgrade (kernel file, suffix.uot),click **upgrade**, then you can upgrade your system, 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 whether the kernel edition is the upgraded edition.

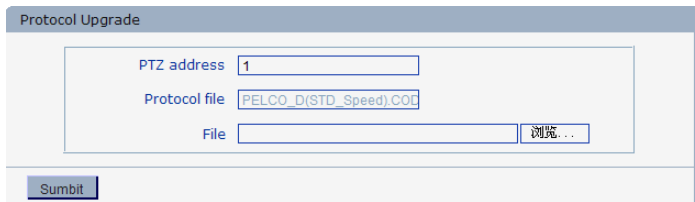


Don't cut off the power and internet connection while upgrading.

PTZ Upgrade

See the following figure for the interface of "Protocol Upgrade":

Figure 2-47



PTZ address: 1~255.

Protocol file: Echo the built-in protocol name of current IP camera.

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

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

Restore

See the following figure for the interface of "Restore":

Figure 2-48



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

Reboot

See the following figure for the interface of "Reboot":

Figure 2-49



Click **Reboot**, it will pop up a box. Enter the password, the IP camera will restart.

3 Appendix

Main Technical Parameters

Model		HICC-1300W	HICC-2300	HICC-2300T
Video				
Image Sensor		1/3" Progressive Scan Megapixel CMOS Sensor		
Effective Pixels		1280(H)×720(V)	1920(H)×1080(V)	
Minimum Illumination		Color: 0.05Lux	Color: 0.1Lux B/W: 0.005Lux	Color: 0.1Lux B/W: 0.001Lux
S/N Ratio		≥50db(AGC OFF, Weight On)		
Day/Night		/	SDN	TDN
Shutter Speed		AES	1/25—1/10000sec; slow shutter 1/2,1/4,1/8,1/12	
Wide Dynamic Range		ON/OFF	/	
Digital Noise Reduction		/	ON/OFF	
OSD Overlay		Name/date/stream information; Position adjustable		
Lens		DC Iris		
IP Specification				
Video Compression		H.264 Main Profile and Motion JPEG simultaneously		
Image Resolution	Main stream	1280*720, 1-25 (30) fps/sec;	1920*1080, 1-25 (30) fps/sec 1280*960, 1-25 (30)fps /sec 1280*720, 1-25 (30)fps /sec	
	Extra stream	640*480,1-25 (30) fps/sec; 320*240,1-25 (30) fps/sec		
Bit Rate		32Kbps~16Mbps continuously adjustment; Supports CBR/VBR		
Audio Compression		G.726、G.711A、G.711U		
Support Protocol		TCP/IP、UDP、RTP、RTSP、RTCP、HTTP、DNS、DDNS、DHCP、FTP、NTP、PPPOE、SMTP、UPNP		
Data Storage		Video or snapshot		
Security		Password protection, IP address filtering, user access log		

User	2 simultaneous users		
API	SDK or ONVIF protocol		
Alarm and Event			
Alarm Trigger	Intelligent video motion detection and external input		
Motion Detection	4 zones		
Alarm Event	Event server: FTP server, SMTP server, Web browser		
Electrical			
Power Supply	12V DC		
PoE	IEEE 802.3af		
Power consumption	7W max		
Mechanical			
Dimension	148(L) * 78(W) * 56(H)mm		
Weight	Approx. 0.6Kg		
Lens Mount	C/CS Lens Mount		
Local Storage	Micro SDHC card; SD2.0 standard, maximum 32G		
Connector	RJ-45 10BaseT/100BaseTX; DC jack; 1 Alarm Input/1 Output; RS485; 1 Audio In / 1 Audio Out		
Environmental			
Protection Class	Indoor use (Need protective cover for outdoor use)		
Operating Temperature	-10℃ - +55℃		
Operating Humidity	0% - 90% (non-condensing)		
Video System			
Browser	IE 6.0 or above		
Video player	VLC, Quick Time, Real Player		
Software			
Operating Platform	Honeywell HUS Platform(Live View can not use multicast)		
Regulatory			
Certification	CE, FCC		
Model	HIDC-1300V	HIDC-1300W	HIDC-2300V
Video			

Image Sensor		1/3" Progressive Scan Megapixel CMOS Sensor	
Effective Pixels		1280(H)×720(V)	1920(H)×1080(V)
Minimum Illumination		Color: 0.05Lux	Color: 0.1Lux
S/N Ratio		≥50db(AGC OFF, Weight On)	
Day/Night		SDN	
Shutter Speed		Auto	1/25-1/100000sec,slow shutter 1/2,1/4,1/8,1/12sec
Wide Dynamic Range		≥100db	/
OSD Overlay		Name/date/stream information; Position adjustable	
Lens		Manual Iris	
Focus Length		2.8-12mm	
IP Specification			
Video Compression		H.264 Main Profile and Motion JPEG simultaneously	
Image Resolution	Main stream	1280*720, 1-25 (30) fps/sec;	1920*1080, 1-25 (30) fps/sec 1280*960, 1-25 (30)fps /sec 1280*720, 1-25 (30)fps /sec
	Extra stream	640*480,1-25(30) fps/sec; 320*240,1-25(30) fps/sec	
Bit Rate		32Kbps～16Mbps continuously adjustment; Supports CBR/VBR	
Audio Compression		G.726、G.711A、G.711U	
Support Protocol		TCP/IP、UDP、RTP、RTSP、RTCP、HTTP、DNS、DDNS、DHCP、FTP、NTP、PPPOE、SMTP、UPNP	
Data Storage		Video or snapshot	
Security		Password protection, IP address filtering, user access log	
User		2 simultaneous users	
API		SDK or ONVIF protocol	
Alarm and Event			
Alarm Trigger		Intelligent video motion detection and external input	

Motion Detection	4 zones	
Alarm Event	Event server: FTP server, SMTP server, Web browser	
Electrical		
Power Supply	12V DC	
PoE	IEEE 802.3af	
Power consumption	5W max	
Mechanical		
Dimension	Φ 145(D)*104(H)mm	
Weight	Approx. 0.6Kg	
Lens Mount	CS Lens Mount	
Local Storage	Micro SDHC card; SD2.0 standard, maximum 32G	
Connector	RJ-45 10BaseT/100BaseTX; DC jack; 1 Alarm Input/1 Output; RS485; 1 Audio In/1 Audio Out	
Environmental		
Protection Class	Indoor use (Need protective cover for outdoor use)	
Operating Temperature	-10℃ - +55℃	
Operating Humidity	0% - 90% (non-condensing)	
Video System		
Browser	IE 6.0 or above	
Video player	VLC, Quick Time, Real Player	
Software		
Operating Platform	Honeywell HUS Platform(Live View can not use multicast)	
Regulatory		
Certification	CE, FCC	
Model	HIVDC-1300W	HIVDC-2300V
Video		
Image Sensor	1/3" Progressive Scan Megapixel CMOS Sensor	
Effective Pixels	1280(H)×720(V)	1920(H)×1080(V)
Minimum Illumination	Color: 0.05Lux	Color: 0.1Lux
S/N Ratio	≥50db	
Day/Night	SDN	
Shutter Speed	Auto	1/25—1/10000 sec, slow

		shutter 1/2,1/4,1/8,1/12sec	
Wide Dynamic Range		≥100db	/
OSD Overlay		Name/date/stream information; Position adjustable	
Lens		Manual Iris	
Focus Length		2.8-12mm	
IP Specification			
Video Compression		H.264 Main Profile and Motion JPEG simultaneously	
Image Resolution	Main stream	1280*720, 1-25 (30) fps/sec;	1920*1080, 1-25(30) fps/sec; 1280*960, 1-25(30) fps/sec; 1280*720, 1-25(30) fps/sec;
	Extra stream	640*480,1-25(30) fps/sec; 320*240,1-25(30) fps/sec	
Bit Rate		32Kbps～16Mbps continuously adjustment; Supports CBR/VBR	
Audio Compression		G.726、G.711A、G.711U	
Support Protocol		TCP/IP、UDP、RTP、RTSP、RTCP、HTTP、DNS、DDNS、DHCP、FTP、NTP、PPPOE、SMTP、UPNP	
Data Storage		Video or snapshot	
Security		Password protection, IP address filtering, user access log	
User		2 simultaneous users	
API		SDK or ONVIF protocol	
Alarm and Event			
Alarm Trigger		Intelligent video motion detection and external input	
Motion Detection		4 zones	
Alarm Event		Event server: FTP server, SMTP server, Web browser	
Electrical			
Power Supply		12V DC	
PoE		IEEE 802.3af	
Power consumption		5W max	
Mechanical			
Dimension		112(H) * Φ 165(D)mm	
Weight		Approx.1.5Kg	
Lens Mount		CS Lens Mount	

Local Storage	Micro SDHC card; SD2.0 standard, maximum 32G
Connector	RJ-45 10BaseT/100BaseTX; DC jack; 1 Alarm Input/1 Output; RS485; 1 Audio In /1 Audio Out
Environmental	
Protection Class	Indoor use (Need protective cover for outdoor use)
Anti-vandal ability	Withstand impact of 1 ton
Operating Temperature	-10℃ - +55℃
Operating Humidity	0% - 90% (non-condensing)
Video System	
Browser	IE 6.0 or above
Video player	VLC, Quick Time, Real Player
Software	
Operating Platform	Honeywell HUS Platform(Live View can not use multicast)
Regulatory	
Certification	CE, FCC

Network Interface of IP Camera

The default network ports of IP camera are:

TCP	80	Web port
	5000	Communication port, audio/video data transmission port, talkback data transmission port
UDP	5000	Audio/video data transmission port
Multi-cast port	Multicast original port + channel number	

Default Network Parameters

Default network parameters

Cabled Network:

IP Address: 192.168.55.160

Data Port: 5000

Subnet mask: 255.255.255.0

Web Port: 80

Gateway: 192.168.55.1

DHCP: Off

Apply for DDNS domain name service

IP camera DDNS introduction

DDNS function of IP camera

DDNS (Dynamic Domain Name Service) refers to the real-time analysis of a fixed domain name and the dynamic public IP address of the IP camera.

With this function, all Internet users can visit the IP camera via a fixed domain name.

The DDNS process of IP camera is as follow:



The DDNS process flow diagram of IP camera

Apply for DDNS domain name service

Step 1: Sign up

Users need to sign up to manage and inquire about domain name status when using this dynamic domain name management system for the first time. Visit DDNS server (<http://www.mvddns.net>) to sign up. See the picture below:

Dynamic Domain

www.mvddns.net

Home | Register | Login | Download | Demo | Help | LogOut

『 中文版 』

Login

UserID:

Password:

[Forget Password?](#)

Announce

User announcement

动态域名 Dynamic Domain

Dynamic Domain service has made much more convenience for you:
Before we had to use the special cable to operate other's device by network. But unfortunately, it is too expensive to stop using. Now we have Domain Management System--the latest solution "Dynamic Domain Service+Network Camera". It solves the all troubles!

[Register Now](#)

动态域名 Dynamic Domain

Dear Users:
The DDNS server has been upgraded. New system reserves some customer's password was changed to 888888. Please login, revise the password and system. (Get the password when you forget it). Sorry for inconvenience to system!

2007.09.03

Home | Register | Login | Download | Demo | Help | LogOut

Home == > Register

Take " " of have to fill in

UserID:*	
Password:*	(The minimal 6, the most 18)
Confirm password:*	
Name:	
ID card number:	
Address:	
Telephone:	
Email:*	
Hint problem:	Your native place (Used for finding back a password)
Key:	(Used for finding back a password, inside 200 words)
Confirm Reset	

Step 2: User login

Enter registered user name and password, click "login" to enter into domain name management interface as follow:

Home ==> Login

Login	
UserID:	test2009 Register
Password:	***** Forget Password
Login Reset	

Step 3: Domain name registration

A domain name must be registered first, then put into use. Click “Domain name management”, a page appears as follow:

Customer

zhmonth

(58.251.136.51)

Account

Domain

Information

Password

LogOut

Dynamic Domain list

Domain: http://.mvdns.net

Remarks:

Confirm

Reset

PrevPage

NextPage

Domain	IP	Device Name	IsOnline	Allow Analyze	Operation
zhmonth	221.182.46.87	IPCem305110	Off-line	Using	Delete Detail

1

Add an domain not a demand an importation an ex- suffix , eg:demo1.mvdns.net Only Demand importation 'demo1'.

Click 'allow analyze' item, can carry on a modification to the domain's information.

Register and submit the domain name to be used. For example: “test.mvdns.net”.

Visit IP camera under different network environments

You can visit IP camera with your PC via LAN or WAN, the following contents will tell you how to use IP camera under different network environments.

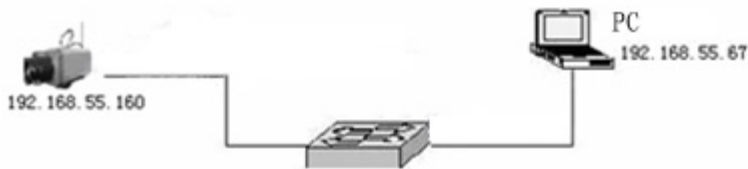
LAN

There are two ways to connect IP camera to LAN: static IP and dynamic IP.

Static IP

Static IP means that Your network administrator assigns a LAN IP address to IP camera. The IP of your PC and IP camera must be in the some network segment to make visiting to the camera possible.

See below picture for the network topology:



Please refer to below picture for the network settings:

LAN setting

Enable DHCP
☐

IP address

Subnet mask

GateWay

MAC
☐

Preferred DNS

Alternate DNS

Save

Setup steps:

Step 1: Log in IP camera via the IE browser (the default IP is 192.168.55.160).

Step 2: Switch to the page “network settings”, fill in the device IP address assigned by network administrator in to “Basic Parameters”, e.g. 192.168.55.160;

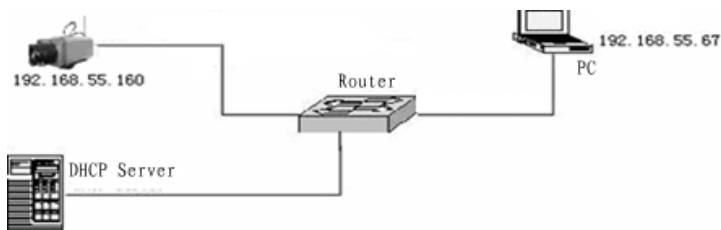
Step 3: Fill in subnet mask, default value is 255.255.255.0;

Step 4: Fill in gateway address, default value is 255.255.255.0;

Click **Save** to save the parameters. Start the device, enter its IP address into IE browser to visit it.

Dynamic IP

Dynamic IP means that IP camera obtains IP address from DHCP server. See below picture for the network topology:



Please refer to below picture for the network settings:

LAN setting

Enable DHCP	☒
IP address	192.168.33.78
Subnet mask	255.255.255.0
GateWay	192.168.33.1
MAC	00-4a-20-a0-2d-52 ☐
Preferred DNS	202.96.134.133
Alternate DNS	202.106.0.20

Save

Log in IP camera via IE, turn to "Network Settings" and check "Enable DHCP".

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

Internet

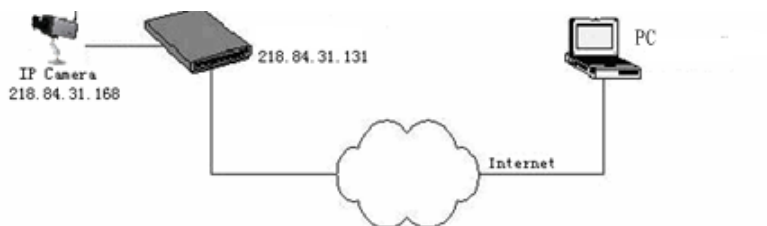
You have three ways to connect IP camera to Internet:

- Fixed IP mode;
- Broadband and router sharing Internet access mode (dynamic obtainment of extranet IP address mode) like ADSL and so on;
- PPPoE dial-up access.

After IP camera is connected to Internet, remote Internet users can visit it directly via domain name or IP address.

Fixed IP mode

See below picture for the network topology:



Please refer to below picture for the network settings:

LAN setting

Enable DHCP	☐
IP address	218.84.31.168
Subnet mask	255.255.255.0
GateWay	218.84.31.131
MAC	00-5d-34-55-35-12 ☐
Preferred DNS	202.96.134.133
Alternate DNS	202.106.0.20

Save

Setup steps:

Step 1: Log in IP camera via crossover cable direct connection.(For details, please refer to [Hardware Installation])

Step 2: Switch to the page “network settings”, fill in the device IP address requested from network service provider in to “Basic Parameters”, e.g. 218.84.31.168;

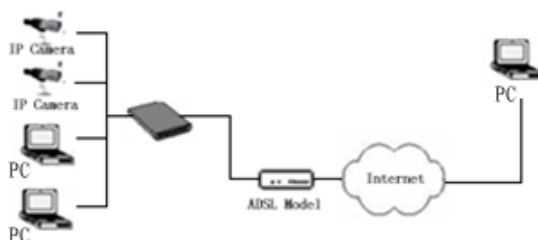
Step 3: enter correct subnet mask, e.g. 255.255.255.192;

Step 4: enter correct gateway, e.g. 218.84.31.131;

After setup completes, click **Save** and restart the device, then connect it to public network so that all Internet users can visit the IP camera remotely via entering <http://218.84.31.168> to IE browser.

Broadband and router sharing Internet access mode (dynamic obtainment of extranet IP address mode) like ADSL and so on;

For dial-up access with router, see below picture for the network topology:



Users can set up DDNS domain name service at the same time. Fills the username and password which were applied in the DDNS server into the DDNS setting item, implement port mapping from the router. The router determines and points to the IP camera that need to be visited according to different ports, long-distance Internet user can visit the IP camera on the network via domain name directly.

Please refer to below picture for the network settings:

DDNS setting

Enable DDNS ☒ link to mvddns.net

provider mvddns.net

RegName xiaoling

Password

domain xyz.mvddns.net

server URL www.mvddns.net

server Port 30000

Data port map No. 5000

Web port map No. 80

Update Interval 2 minutes

Domain E.C.: test1.mvddns.net

Save ddns ip refresh success!

DDNS setup steps:

Step 1: Log in DDNS server (e.g. <http://www.mvddns.net>), register user account and password.(For details, please refer to Appendix 3.)

Step 2: Click to open DDNS;

Step 3: Select DDNS service provider, e.g. mvddns.net;

Step 4: Fill in the registration name to log into DDNS server;

Step 5: Fill in the registration password to log into DDNS server;

Step 6: fill in the domain name applied on DDNS server, e.g. test.mvddns.net;

Step 7: Fill in DDNS server address, e.g. www.mvddns.net;

Step 8: fill in the port of DDNS server, default value is 30000 (users are recommended not to change it);

Step 9: fill in the port number of public network data after mapping, the default port is 5000.If several IP cameras are connected to one router, different web ports need to be specified for each device, and port mapping needs to be done for every specified port.

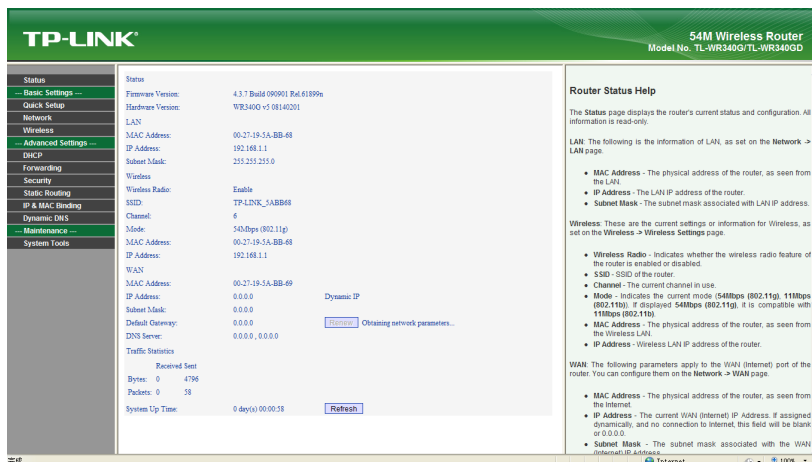
Step 10: fill in the port number of public network web after mapping, the default port is 80.If several IP cameras are connected to one router, different web ports need to be specified for each device, and port mapping needs to be done for every specified port.

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

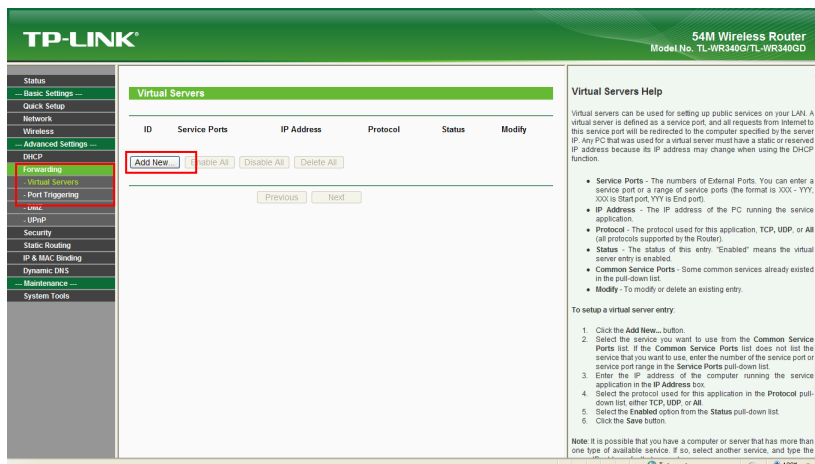
Port mapping setup steps:

Take the TL-WR340G router of TP-LINK as an example for illustration:

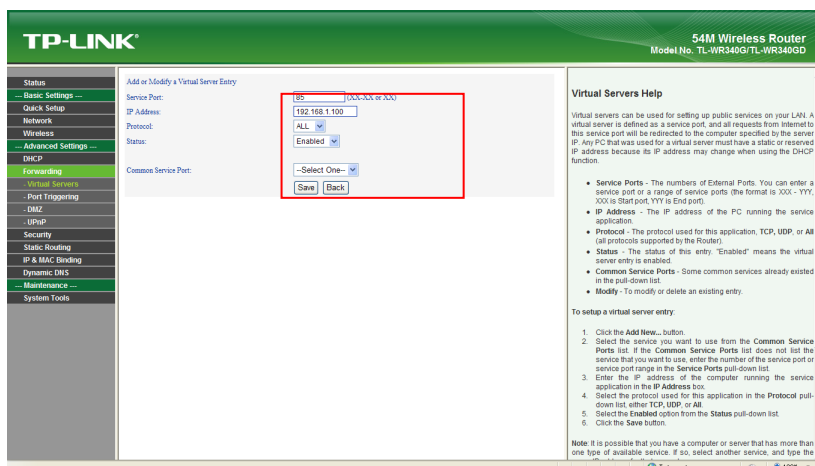
Step 1: Ask network administrator for the IP address of the router (i.e. LAN gateway address), login user name and password, then log in the router. The main interface is as follow:



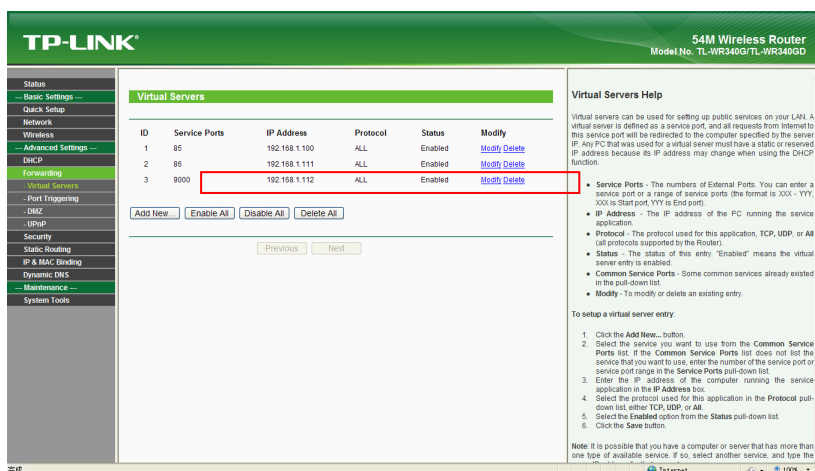
Step 2: Open “Forwarding”, select “Virtual Servers” as below picture shows:



Step 3: Select “Add New Items”, enter the IP address of the IP camera (e.g.192.168.1.100), port (e.g. 85), status (valid) and other information, click save, see below picture:



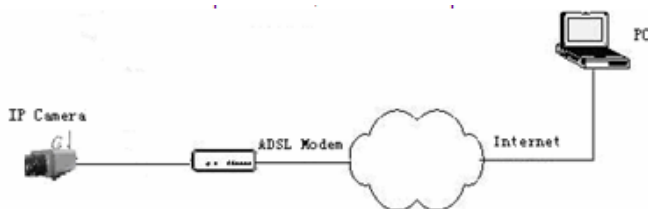
Step 4: After save successfully, below screen appears:



Step 5: If DDNS is successfully set in "Network Settings" of IP camera, direct visit to the IP camera can be realized via entering <http://test.mvddns.net:85> into IE browser.

PPPoE dial-up access

For IP camera dial-up access, see below picture for the network topology:



Setup steps:

Step 1: Log in IP camera via crossover cable direct connection.(For details, please refer to "Hardware Installation")

Step 2: Set PPPoE parameters.(for details, please refer to "PPPOE settings")

Step 3: Connect IP camera to Internet.

Step 4: If DDNS service is successfully set for the device, the device can be visited via entering domain name into IE browser.

See below picture for PPPoE settings:

The screenshot shows a web interface titled "PPPOE setting". Inside a light blue box, there are several fields:

- "Enable PPPOE" with a checked checkbox.
- "IP" with the value "58.250.11.209".
- "Username" with the value "szLAN01368494@169".
- "password" with masked characters "*****".
- "Online time" with the value "0minutes".

 Below the box, there is a "Save" button and a red message "dial-up success!".

FAQs

1. Forget Password

There is a **RESET** button on the back panel of the IP camera, press it to restore all default parameters (Factory Settings), user name and password are both "admin".



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).

2. IP camera audio/video function fails after abnormalities or abnormal power cut occur during upgrade, core edition is V4.0.0.0 (Backup file)

Connect the power cord and network cable of IP camera, press on RESET button and release it after 10 seconds, system will run the back-up programme automatically. After enter into the back-up programme, upgrade system. After upgrade completes, the IP camera will work normally. The back-up programme offers only upgrade and parameter setup functions, audio and video functions are not available.

3. 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 Explore.

How to install: Visit IP camera, click **Download Address**, file download dialog will pop up, select **Run** or **Save** to download. After download finishes, installation interface will pop up, click **install**, the installation of ActiveX will start automatically, "Register OCX success" dialog box will pop up to remind the completion of installation process.

4. Fail to visit IP camera via IE after upgrade

Solution: Delete the caching of Browser:

Open IE→click **Tool**→select "Internet Options"→click **delete files** button in "Internet temporary files"→ select "delete all offline contents"→click **OK** and re-log in IP camera.

5. The images do not flow

Possible reason 1: The frame rate of IP camera is too low.

Solution: Increase the video frame rate

Possible reason 2: Too many users are viewing the images.

Solution: Block some clients or reduce the video frame rate.

Possible reason 3: The bandwidth is low.

Solution: Reduce video frame rate or video compression bitrate.

6. Fail to visit IP camera via IE browser

Possible Reason 1: Network is disconnected.

Solution: Connect your PC to network, checking 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.

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 the proper operations recommended.

Possible reason 3: IP addresses are in different subnets.

Solution: Check IP address, subnet masking address of the DVS and the settings of Gateway.

Possible reason 4: Physical address of network conflict with IP camera

Solution: Modify the physical address of IP camera.

Possible Reason 5: Web port has been modified

Solution: Contact Network Administrator to obtain related information.

Possible Reason 6: Unknown

Solution: Press RESET to restore default settings then connect it again, the default IP address is 192.168.55.160, subnet mask is 255.255.255.0

7. The color of images is abnormal (green or other colors)

Sometimes IP camera images cannot display properly for the difference between Graphics Cards, the images appears to be green or other colors, then you should run the programme Config.exe (or run C:\windows\system32\Config.exe) to set the following parameters of display buffer: auto-detection, used display card memory or system memory, then reopen IE and connect IP camera.

8. There is no sound while monitoring

Possible Reason 1: No audio input connection

Solution: Check audio connection of the host

Possible Reason 2: The audio option of IP camera is off

Solution: Check audio parameter settings to see if you have opened the audio.

9. Search NVS software cannot find device

Possible reason: Search NVS software adopts multicast protocol to perform searching. But the firewall forbids multicast data packet.

Solution: Disable the firewall.

10. Image processing doesn't work properly

Possible Reason 1: System issue, DirectX function is disabled, which will cause slow display of images and abnormal color.

Possible Reason 2: Hardware issue, graphics card doesn't 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:



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

Honeywell Security

Honeywell Security Asia Pacific

35F Tower A, City Center, 100 Zun Yi Road, Shanghai 200051, China

TEL +86 21 22196888

FAX +86 21 62370740

Honeywell Security

Block 28, Section 2

Huai De Cui Gang Industrial Estate

Fu Yong, Bao An, Shenzhen, P.R.China

TEL +86 755 27326500

FAX +86 755 27391736

Honeywell

© 2012 Honeywell International Inc.

<http://www.cn.security.honeywell.com> <http://www.security.honeywell.com>