Network Camera Web3.0 Operation Manual

Model No. K-EW114L01E

K-EW114L03E

K-EW114L06E

K-EW114L08E

K-EF134L01E

K-EF134L02E

K-EF134L03E

K-EF134L06E

Version 1.0.2

Table of Contents

Important

The following functions are for reference only. Some series products may not support all the functions listed below.

1 Network Connection

These series network camera products support the Web access and management via PC.
Web includes several modules: monitor channel preview, system configuration, alarm and etc.
Please follow the steps listed below for network connection.

- Make sure the network camera has connected to the network properly.
- Network camera IP address and PC IP address shall be in the same network segment. If there is router, please set the corresponding gateway and subnet mask.
- Use order ping ***.***.***.***(* network camera address) to check connection is OK or not.

2 Main Interface Introduction

2.1 Log in

Open IE and input network camera address in the address bar.
For example, if your camera IP is 192.168.0.10, then please input http:// 192.168.0.10 in IE address bar.
See Figure 2-1.

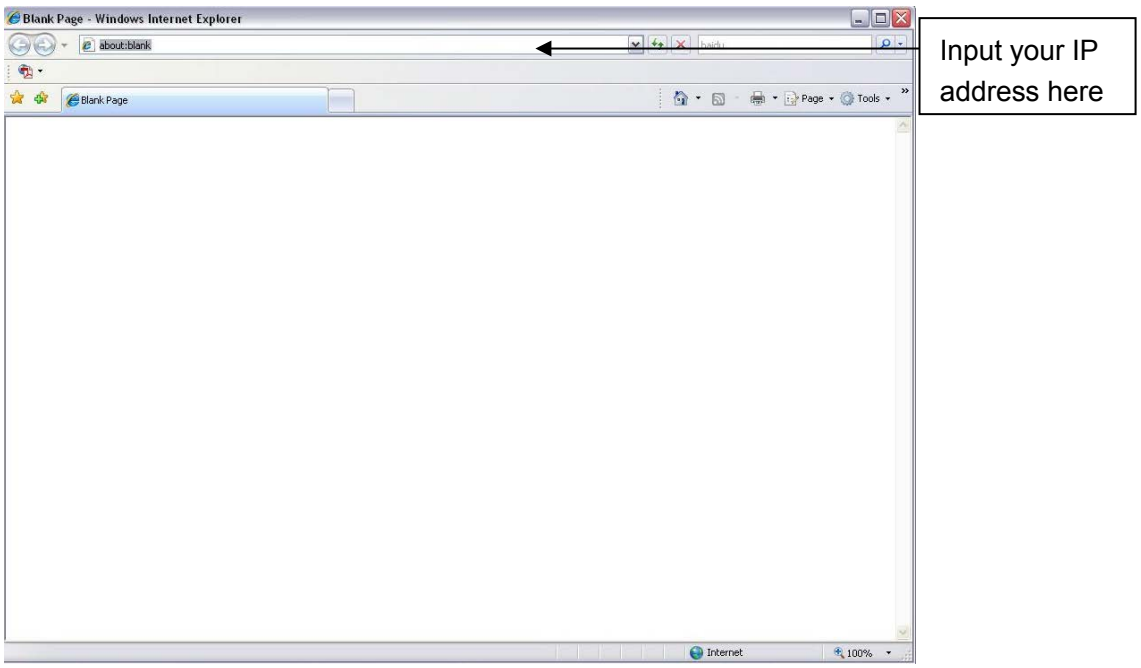


Figure 2-1

The login interface is shown as below. See Figure 2-2.
Please input your user name and password.
Default ID is admin and PWD is 12345 (if connects with ONVIF protocol, Default ID:admin and PWD:admin).
Note: For security reasons, please modify your password after you first login.

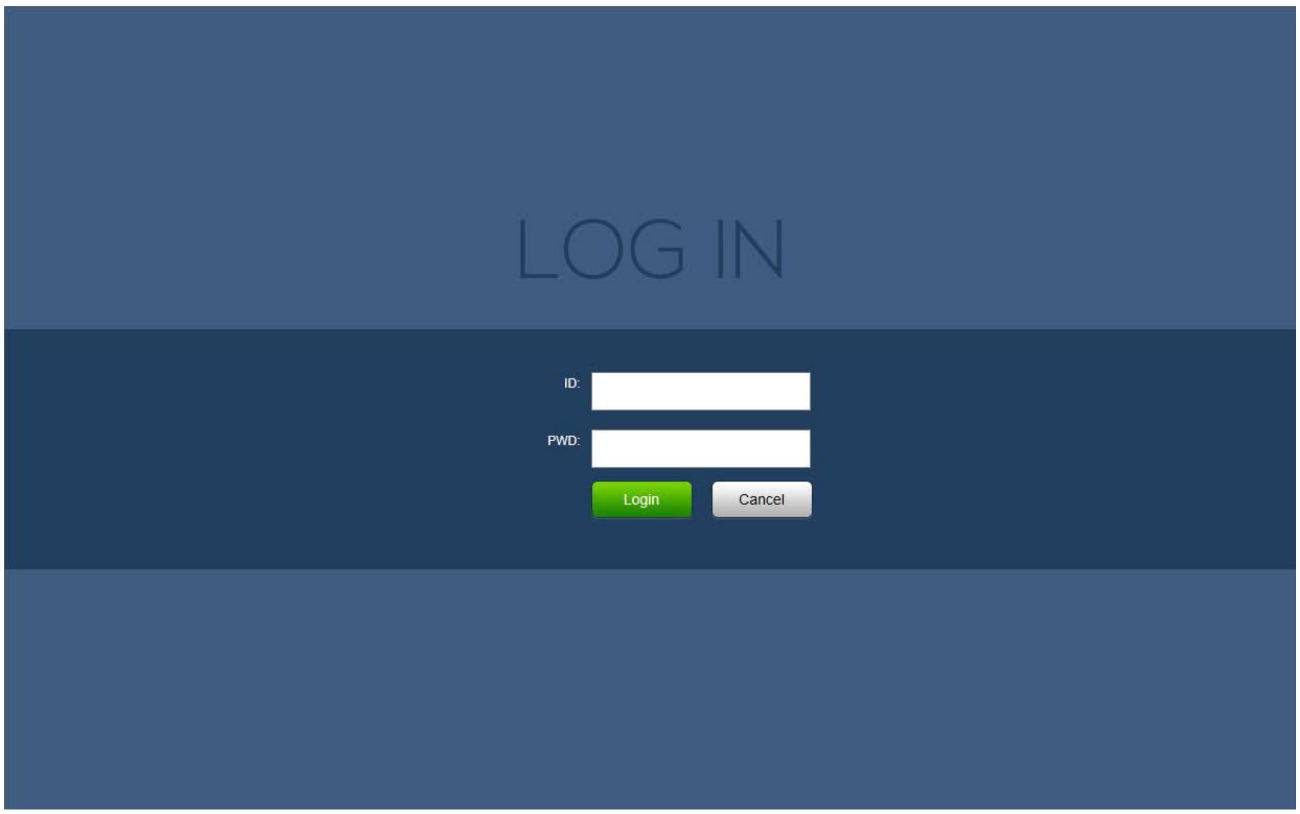


Figure 2-2

If it is your first time to login in, you may see the interface shown as in Figure 2-3.

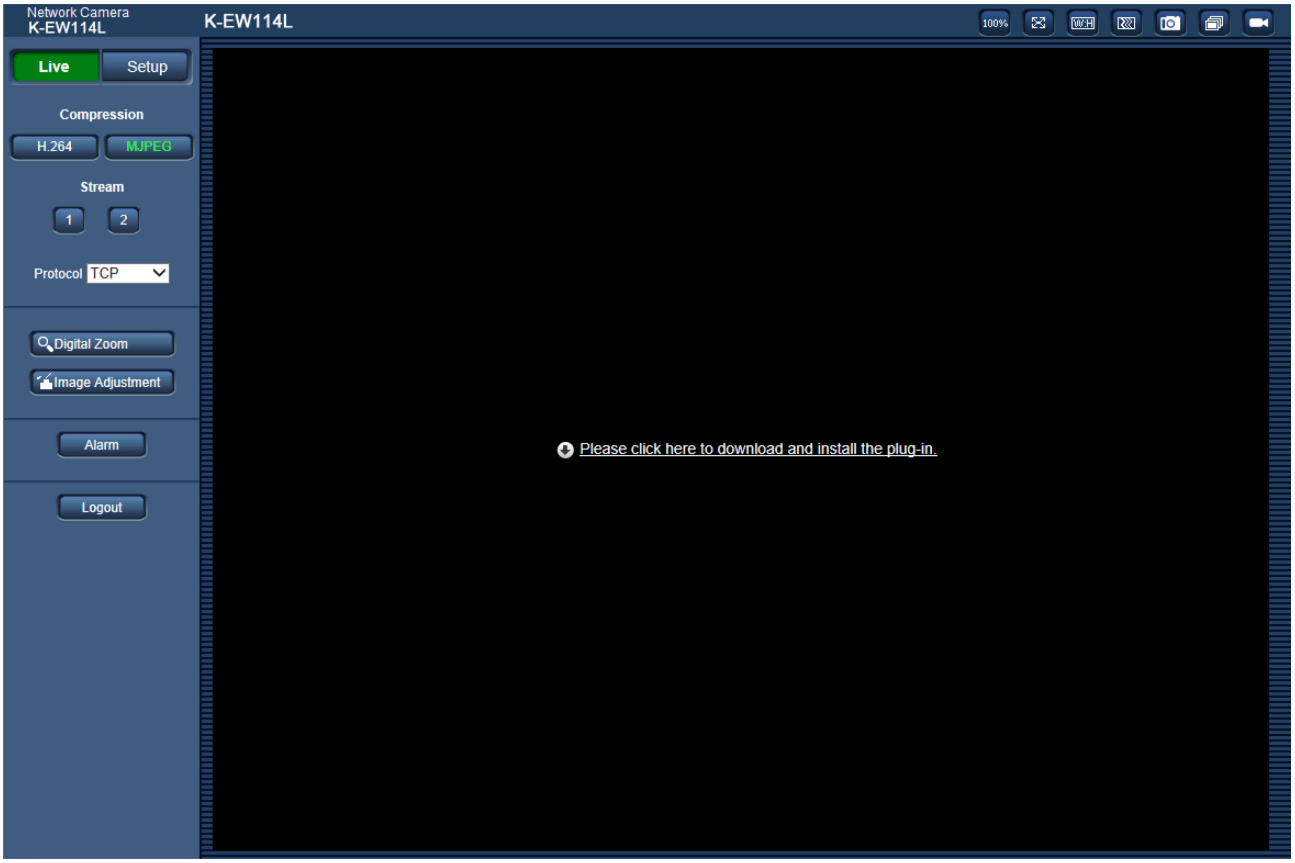


Figure 2-3

Click on “Please click here to download and install the plug-in”. The system pops up warning information to ask you whether run or save this plug-in. See Figure 2-4.

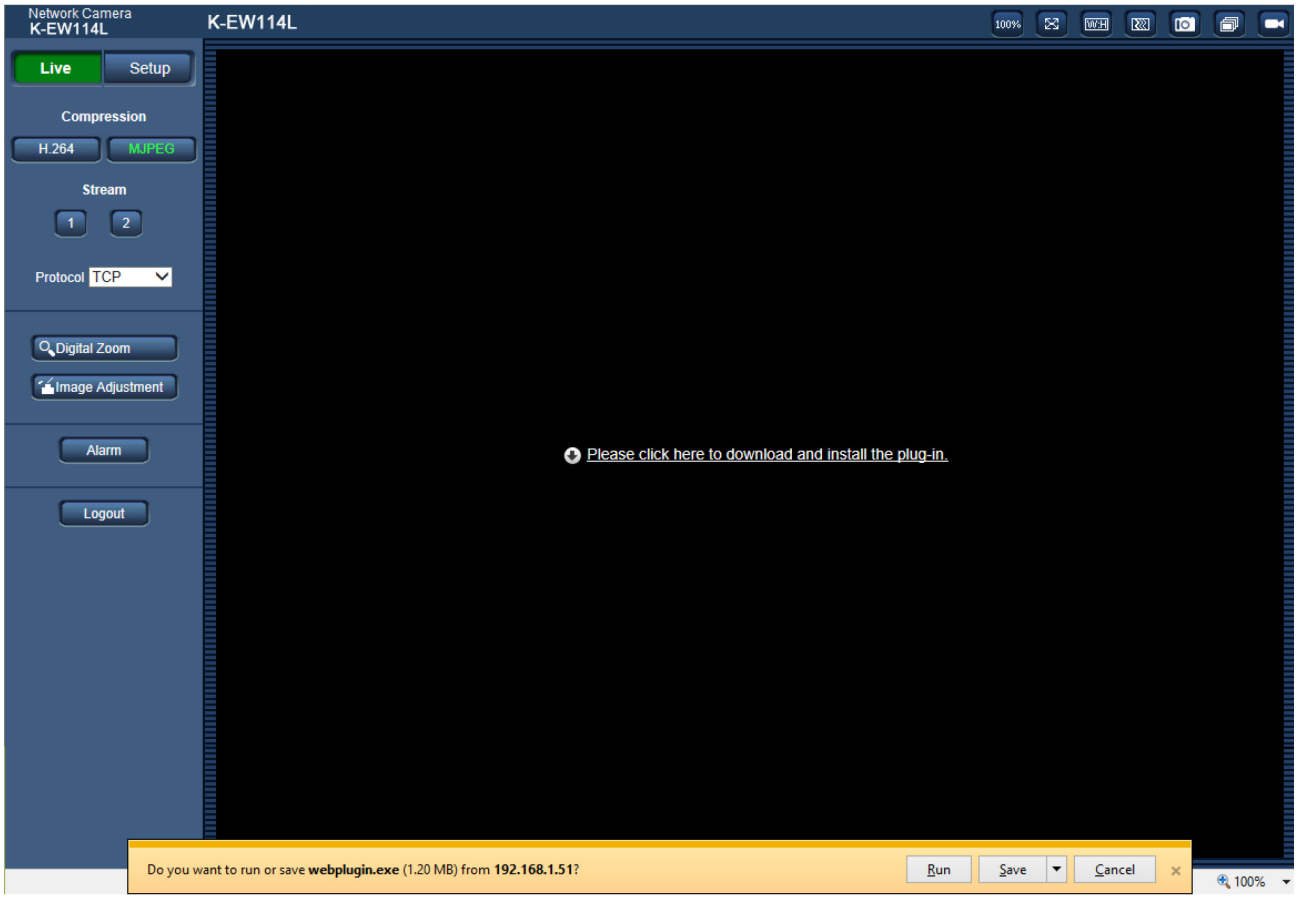


Figure 2-4

You must either run or save the file to local and install it. Follow the following steps. See Figure 2-5 and Figure 2-6.

Note:

The displayed screens are different by the security settings on the PC.

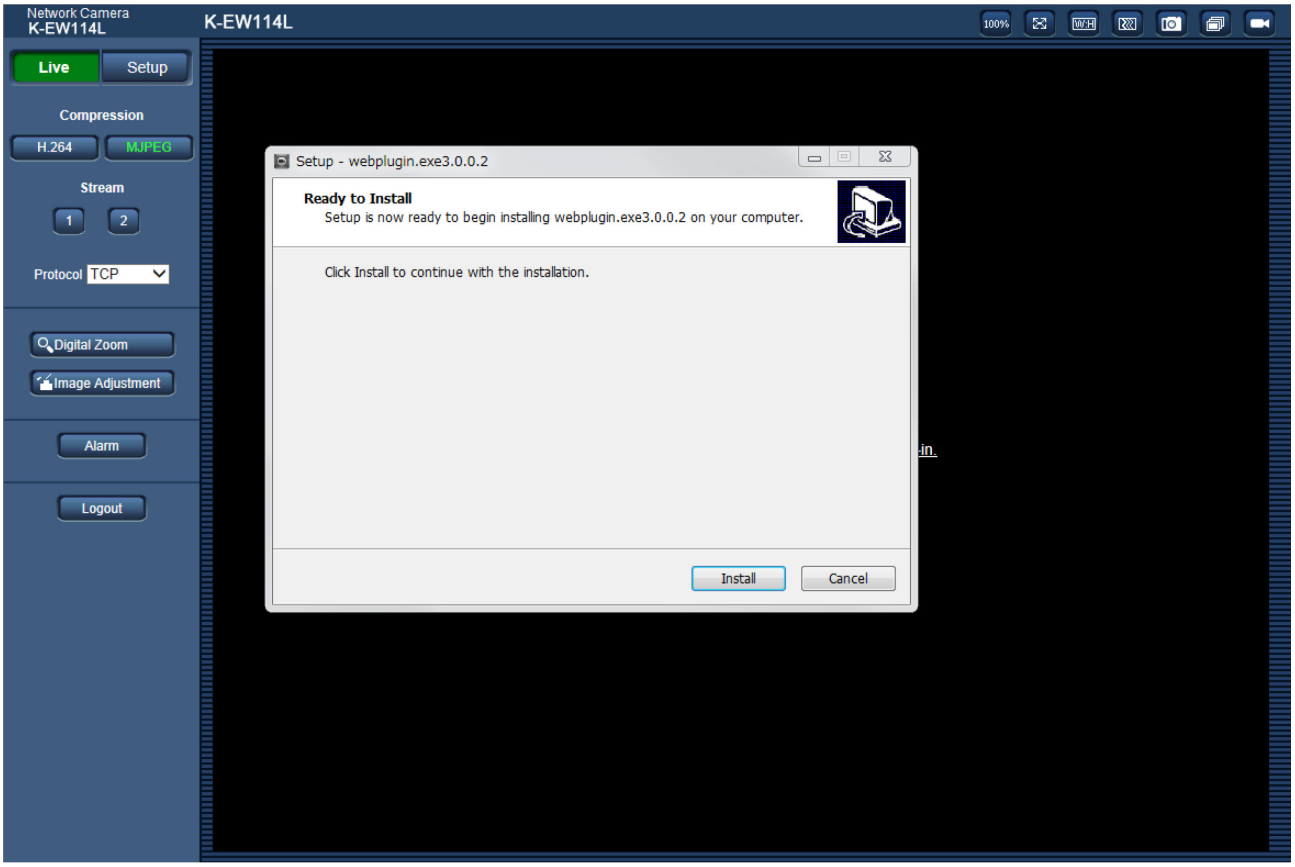

Network Camera
K-EW114L
K-EW114L
Live
Setup
Compression
H.264
MJPEG
Stream
1
2
Protocol TCP
Digital Zoom
Image Adjustment
Alarm
Logout
Setup - webplugin.exe3.0.0.2
Ready to Install
Setup is now ready to begin installing webplugin.exe3.0.0.2 on your computer.
Click Install to continue with the installation.
Install
Cancel

Figure 2-5

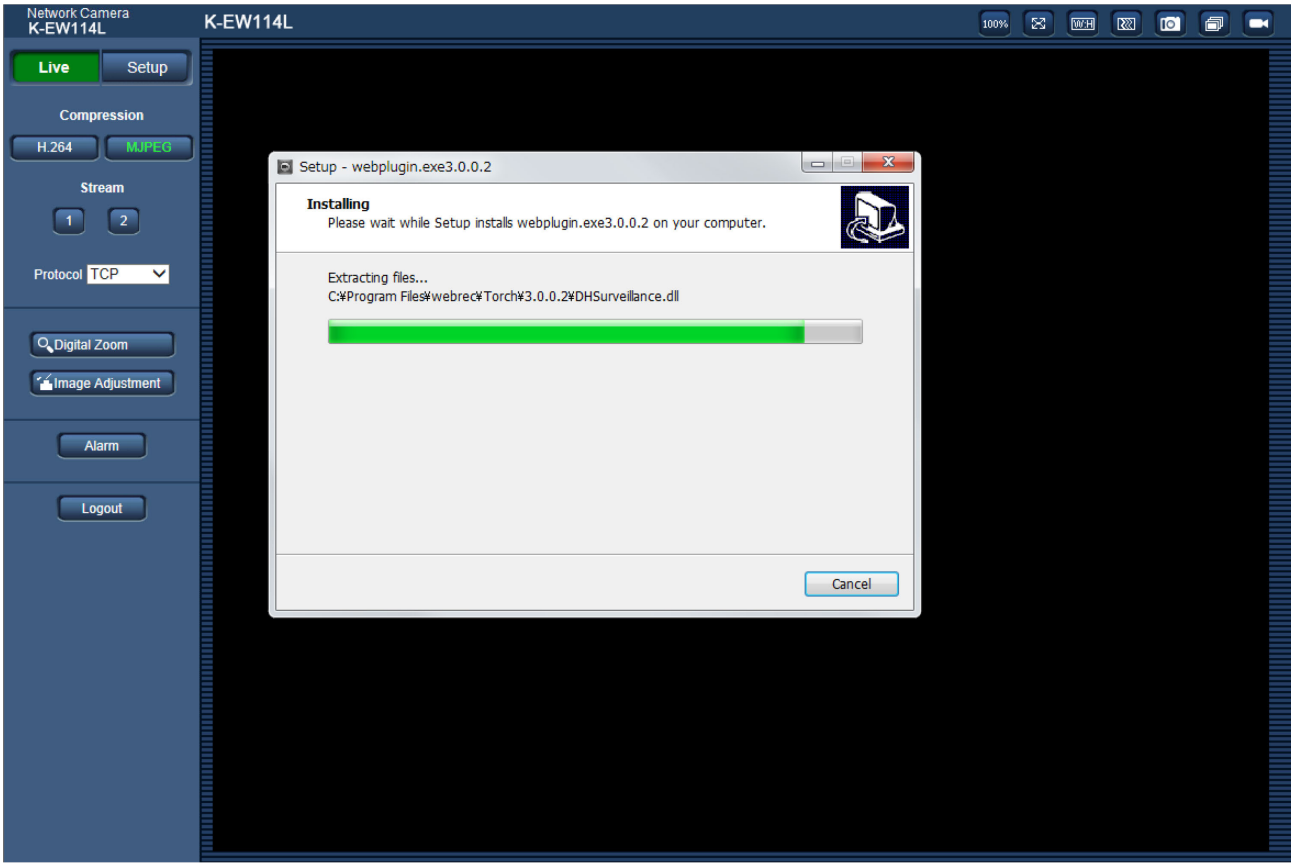


Figure 2-6

When plug-in installation completes, the installation page closes automatically. The web-end will refresh automatically, and then you can view video captured by the camera.

2.2 Live Interface

After you logged in, you can see the live monitor window. See Figure 2-7.

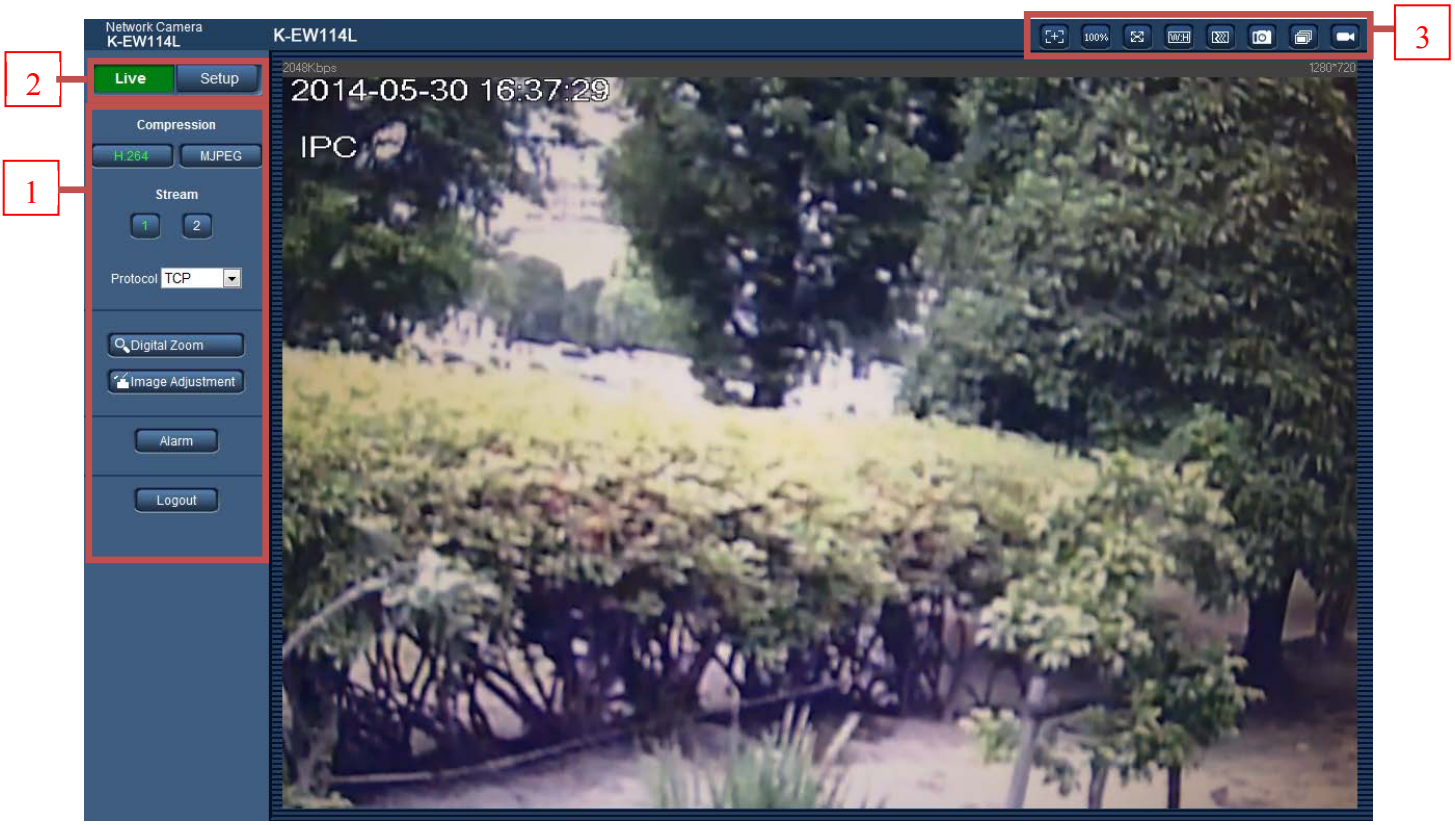


Figure 2-7

There are three sections:

- Section 1: Encode setup bar
- Section 2: System menu
- Section 3: Window function option bar

2.3 Encode Setup

The encode setup interface is shown as in Figure 2-8.

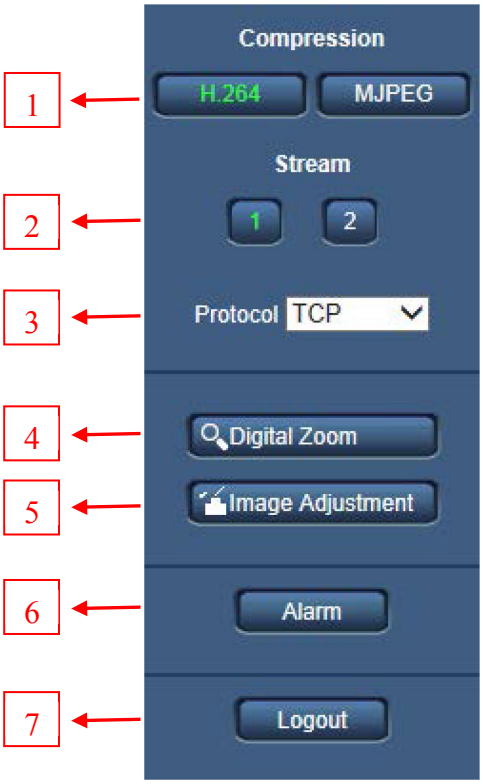


Figure 2-8

Please refer to the following sheet for detailed information.

SN	Parameter	Function
1	Compression	The compression under distribution is displayed by Stream change.
2	Stream	You can switch Stream(1) and (2)
3	Protocol	You can select stream media protocol from the dropdown list. There are three options: TCP/UDP/Multicast
4	Digital Zoom	● When the video is in the original status, click it you can select any zone to zoom in. In the non-original status, you can drag the zoom-in zone in specified range. Right click mouse to restore previous status. ● Click it; you can use the middle button of the mouse to zoom in/out the video size.
5	Image Adjustment	You can adjust image quality.
6	Alarm	It moves to an alarm setting screen.
7	Logout	Click Logout button, system goes back to log in interface.

2.3.1 **Image Adjustment**

Click Image Adjustment button to open picture setup interface. See Figure 2-9. This interface is displayed under a display of Image Adjustment.

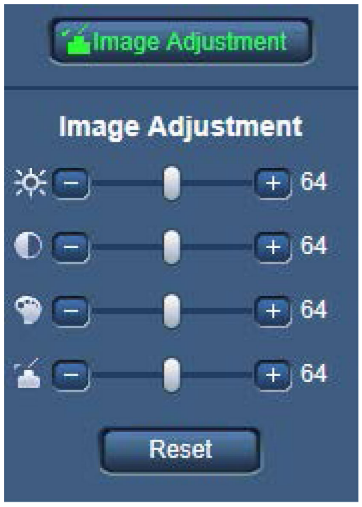


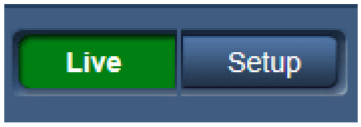
Figure 2-9

Please refer to the following sheet for detailed information.

Parameter		Function	
Video setup		It is to adjust monitor video brightness.	Note: ● All the operations here apply to WEB end only. ● Please go to Setup -> Image -> Image adjust to adjust corresponding items.
		It is to adjust monitor video contrast.	
		It is to adjust monitor video hue.	
		It is to adjust monitor video saturation.	
	Reset 	Restore brightness, contrast saturation and hue to system default setup.	

2.4 System Menu

System menu is click Setup as in Figure 2-10.



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Please refer to chapter 3.1 Basic, chapter 3.2 Image, chapter 3.3 Network, chapter 3.4 Event, chapter 3.5 Storage, chapter 3.6 System, and chapter 3.7 Information for detailed information.

Figure 2-10

2.5 Video Window Function Option

The interface is shown as below. See Figure 2-11.

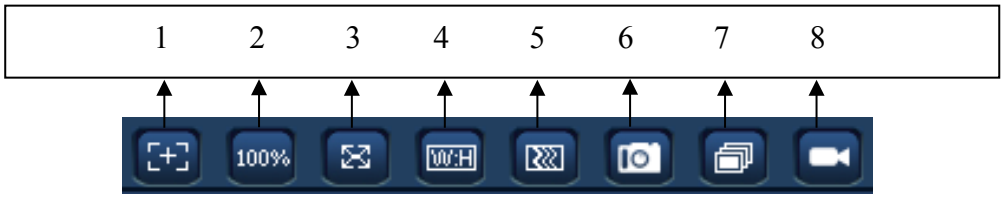

Figure 2-91

Please refer to the following sheet for detailed information.

SN	Parameter	Function
1	Zoom and Focus	Click this button and the zoom and focus interface appears on encode setup bar, as shown in figure 2-12.
2	Original Size	Click this button to go to original size. It is to display the actual size of the video stream. It depends on the resolution of the bit stream.
3	Full Screen	Click it to go to full-screen mode. Double click the mouse or click the Esc button to exit the full screen.
4	Width and Height ratio	Click it to restore original ratio or suitable window.
5	Fluency Adjustment	There are three levels of fluency for you to select. The default is real-time with minimum delay. You may select fluent mode in case connection is slow.
6	Snapshot	You can snapshot important video by clicking on this button. All images are memorized in system folder: \ picture download (default). You can go to Setup -> Image -> JPEG/H.264 -> Path to modify the local record save path.
7	Triple Snapshot	Click it, system can snap at 1 fps. All images are memorized in system storage folder.
8	Record	For manual record. All records are memorized in Setup -> Image -> JPEG/H.264 -> Path.

2.5.1 Zoom and Focus (K-EW114L01E, K-EF134L01E)

Click this button and the zoom and focus interface appears on the encode setup bar, as shown in figure 2-12, please refer to the following sheet for detail infomations to adjust zoom and focus configuration.

Note:

- Auto-focus after zoom focus adjustment.
- Disable the operation till finishing zoom and focus adjustment.

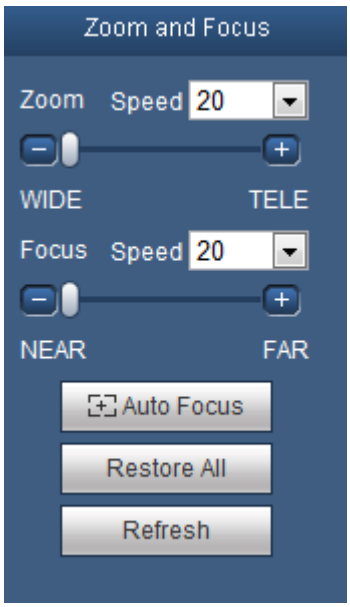

Figure 2- 12

Parameter	Function
Zoom	Adjust the focal length of the lens by clicking or long pressing “+”“-”buttons or moving the slider. Step length(Speed) is used to adjust the length of one step with one click.
Focus	Adjust the sharpness length of the lens by clicking or long pressing “+”、“-” buttons or moving the slider. Step length(Speed) is used to adjust the length of one step with one click.
Auto Focus	Click to adjust the image definition automatically. Note: Other lens operations are not allowed during the process of auto-focus.
Restore All	Reset the lens to zero position to eliminate the accumulative error of lens. Note: Please reset when the image adjustment is not clear or operating zoom focus many times.
Refresh	Synchronize the location of drag slider of lens and zoom focus after hardware zoom focusing.

3 Setup

3.1 Basic

The basic interface includes the local host setup and the date/time setup.
The date and time interface is shown as in Figure 3-1.

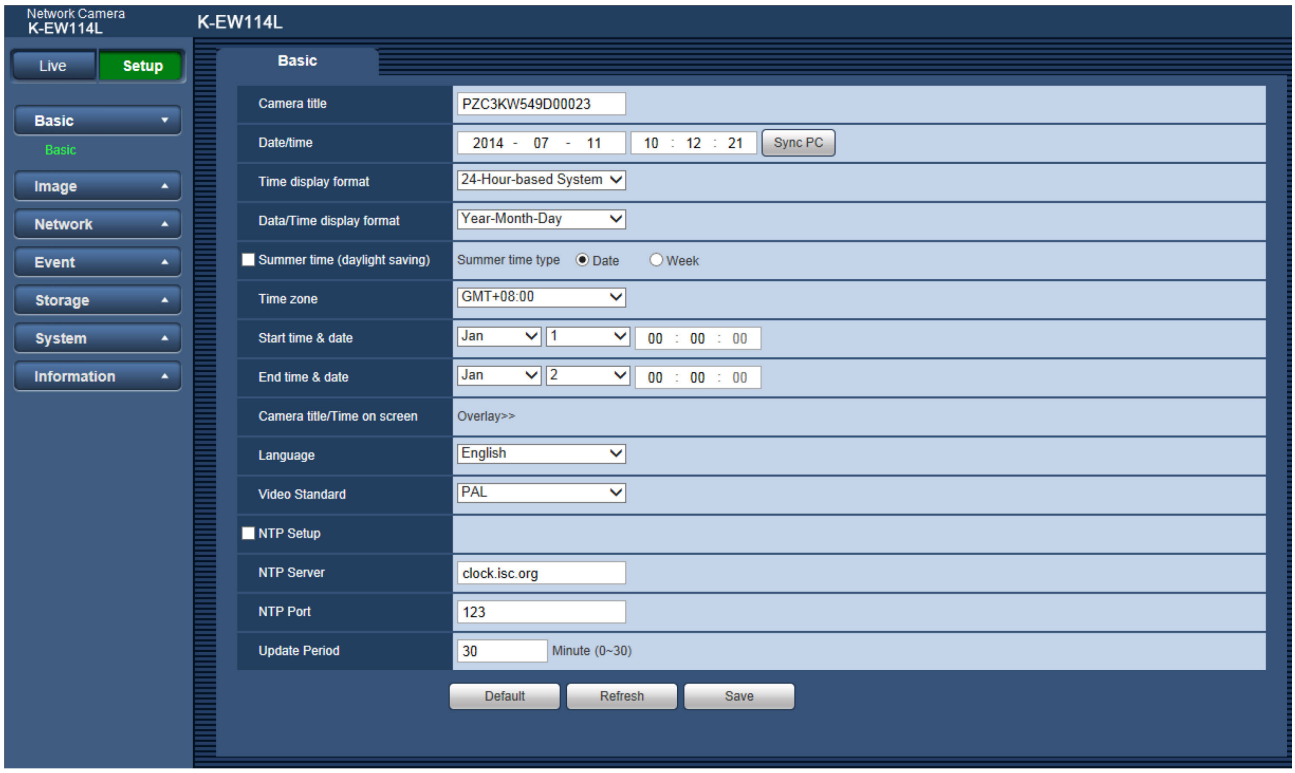

Figure 3-1

Please refer to the following sheet for detailed information.

Parameter	Function
Camera title	It is to set device name.
Date/time	Set date and time. Click “Sync PC” to set PC time to camera.
Time display format	There are two options: 24-H and 12-H.
Date/Time display format	Here you can select date format from the dropdown list.

Summer time(daylight saving)	Here you can set daylight saving time begin time and end time. You can set according to the date format or according to the week format.
Time zone	The time zone of the device.
Camera title/Time on screen	Link Video Overlay (Image->JPEG/H.264->Overlay)
Language	You can select the language from the dropdown list.
Video Standard	This is to display video standard such as NTSC/PAL.
NTP Setup	You can check the box to enable NTP function.
NTP Server	You can set the time server address.
NTP Port	It is to set the time server port.
Update period	It is to set the sync periods between the device and the time server.

3.2 Image

3.2.1 **JPEG/H.264**

3.2.1.1 JPEG/H.264

The video bit stream interface is shown as below. See Figure 3-2.

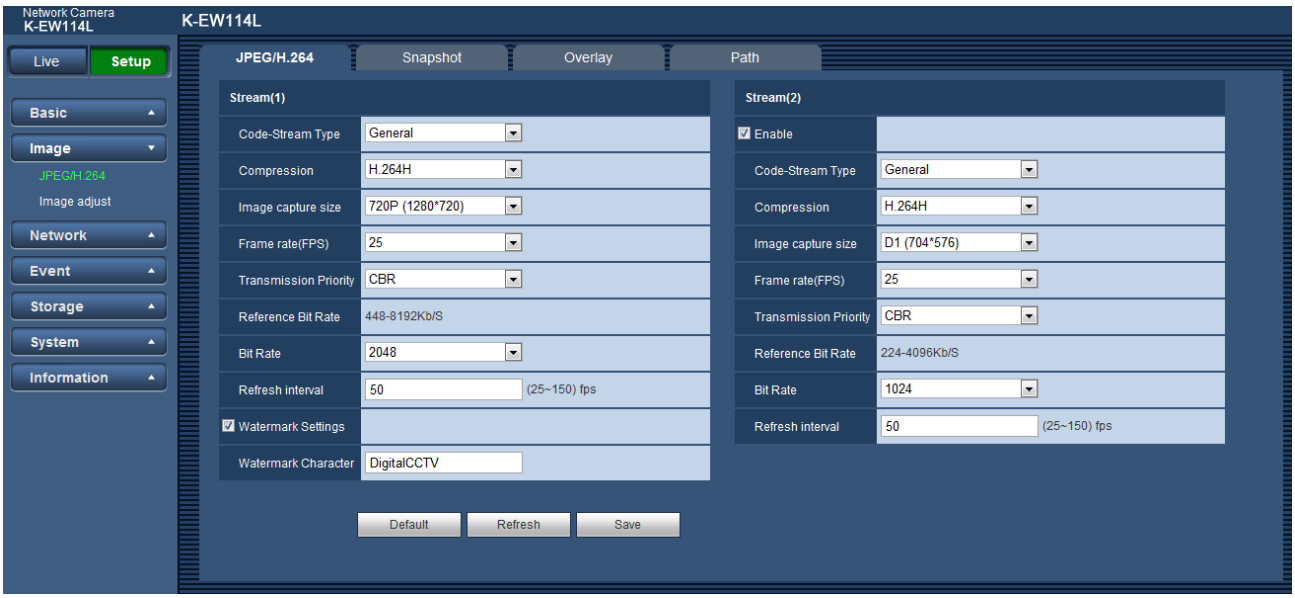

Figure 3-2

Please refer to the following sheet for detailed information.

Parameter		Function
Stream(1)	Code-Stream Type	It includes general stream, motion stream and alarm stream. You can select different encode frame rates form different recorded events. System supports active control frame function (ACF). It allows you to record in different frame rates. For example, you can use high frame rate to record important events, record scheduled event in lower frame rate and it allows you to set different frame rates for VMD record and alarm record.

Parameter		Function
	Compression	There are three options: H.264 (main profile standard), H.264H (high profile standard), H.264B (baseline standard) encode and MJPEG encode. ● H.264 ： Main Profile encode mode. ● H.264H : High Profile encode mode. ● H.264B ： Baseline Profile encode mode ● MJPEG ： In this encode mode, the video needs larger bit stream to guarantee the video definition. You can use the max bit stream value in the recommend bit to get the better video output effect.
	Image capture size	There are multiple resolutions. You can select from the dropdown list. For each resolution, the recommended bit stream value is different. **Important** You cannot set a resolution higher than 720P (not including 720P) when the flip function is in process.
	Frame rate(FPS)	1～30fps The frame rate may vary due to different resolutions.
	Transmission Priority	There are two options: VBR and CBR. Please note, you can set video quality in VBR mode.
	Reference Bit Rate	Reference bit rate value according to the resolution and frame rate you have set.
	Bit Rate	● In VBR, the bit rate here is the max value. In CBR, it is a fixed value. ● See reference bit stream for recommended value.
	Refresh interval	Here you can set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50. Recommended value is frame rate.
	Watermark Settings / Watermark Character	This function allows you to verify the video is tampered or not. Here you can select watermark bit stream, watermark mode and watermark character. Default character is DigitalCCTV. The max length is 85-digit. The character can only include number, character and underline.
Stream(2)	Enable	Please check the box here to enable extra stream function. This function is enabled by default.

Parameter		Function
	Code-Stream Type	General bit stream.
	Compression	There are three options: H.264 (main profile standard, H.264H (high profile standard), H.264B (baseline standard) encode and MJPEG encode. ● The H.264, H.264H and H.264B both are H264 bit stream. H.264 is the Main Profile encode and the H.264B is the Baseline Profile encode mode. H.264B is for Blackberry cell phone to realize the monitor. You need to enable the sub stream function in your camera and set the resolution as CIF. Then you can monitor via the Blackberry cell phone. ● MJPEG: In this encode mode, the video needs to large bit stream to guarantee the video definition. You can use the max bit stream value in the recommend bit to get the better video output effect.
	Image capture size	There are multiple resolutions. You can select from the dropdown list. For each resolution, the recommended bit stream value is different.
	Frame rate(FPS)	NTSC: 1-30fps. PAL: 1-25fps The frame rate may vary due to different resolutions.
	Transmission Priority	There are two options: VBR and CBR. Please note, you can set video quality in VBR mode.
	Reference Bit Rate	Reference bit rate value according to the resolution and frame rate you have set.
	Bit Rate	● In CBR, the bit rate here is the max value. In dynamic video, system needs to low frame rate or video quality to guarantee the value. ● The value is null in VBR mode. ● Please refer to recommend bit rate for the detailed information.
	Refresh interval	Here you can set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50. Recommended value is frame rate.

3.2.1.2 Snapshot

The snapshot interface is shown as in Figure 3-3.

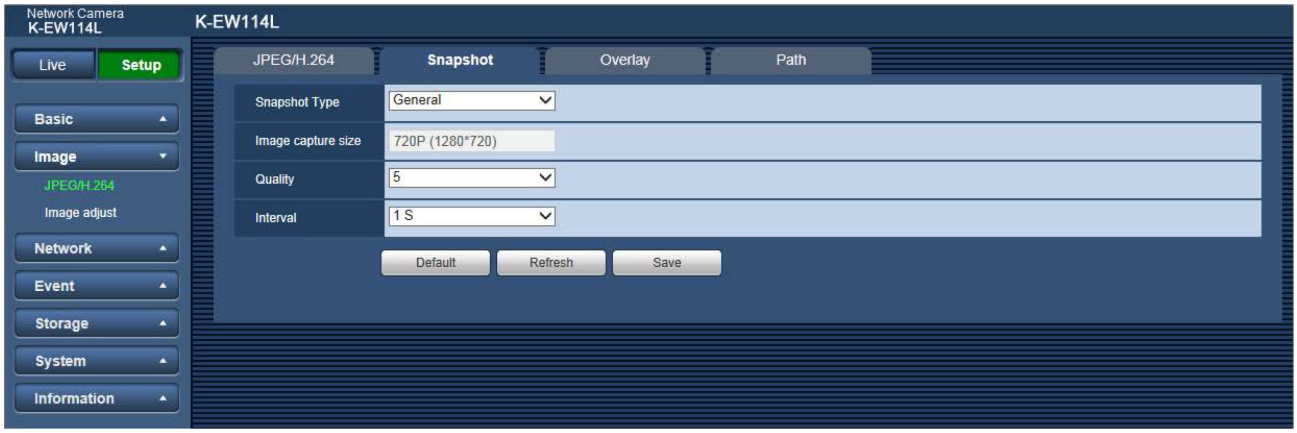

Figure 3-3

Please refer to the following sheet for detailed information.

Parameter	Function
Snapshot Type	There are two modes: general (schedule) and Event (activation).
Image capture size	It is the same with the resolution of the stream(1).
Quality	It is to set the image quality. There are six levels.
Interval	It is to set snapshot frequency. The value ranges from 1s to 7s.

3.2.1.3 Video Overlay

The video overlay interface is shown as in Figure 3-4, Figure 3-5, Figure 3-6, Figure 3-7-1 and Figure 3-7-2.

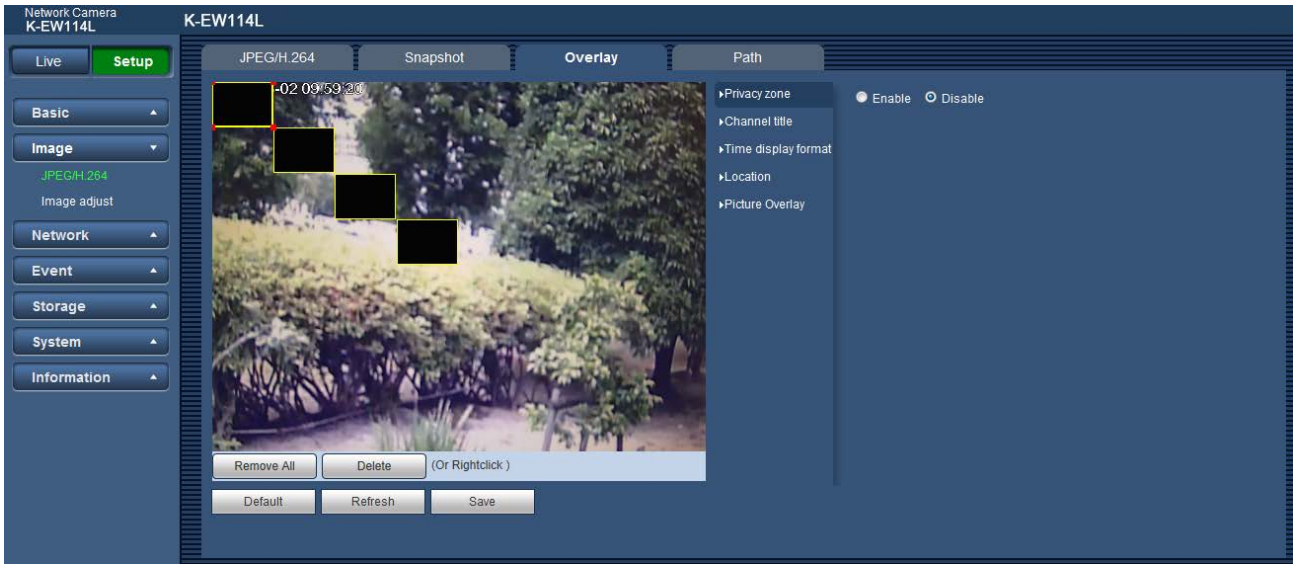

Figure 3-4

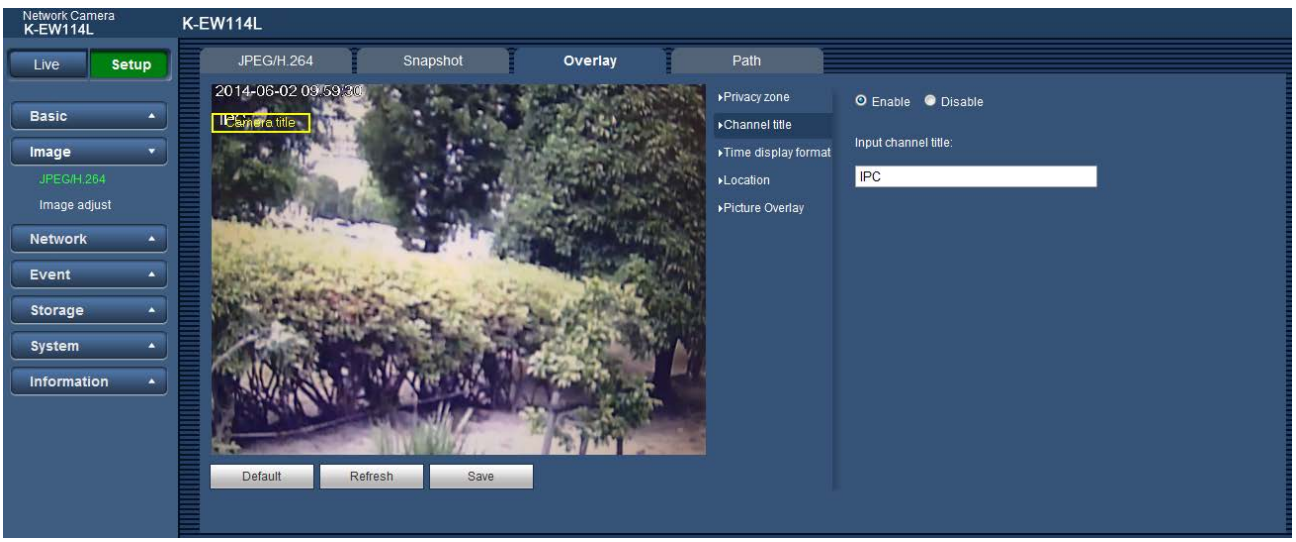

Figure 3-5

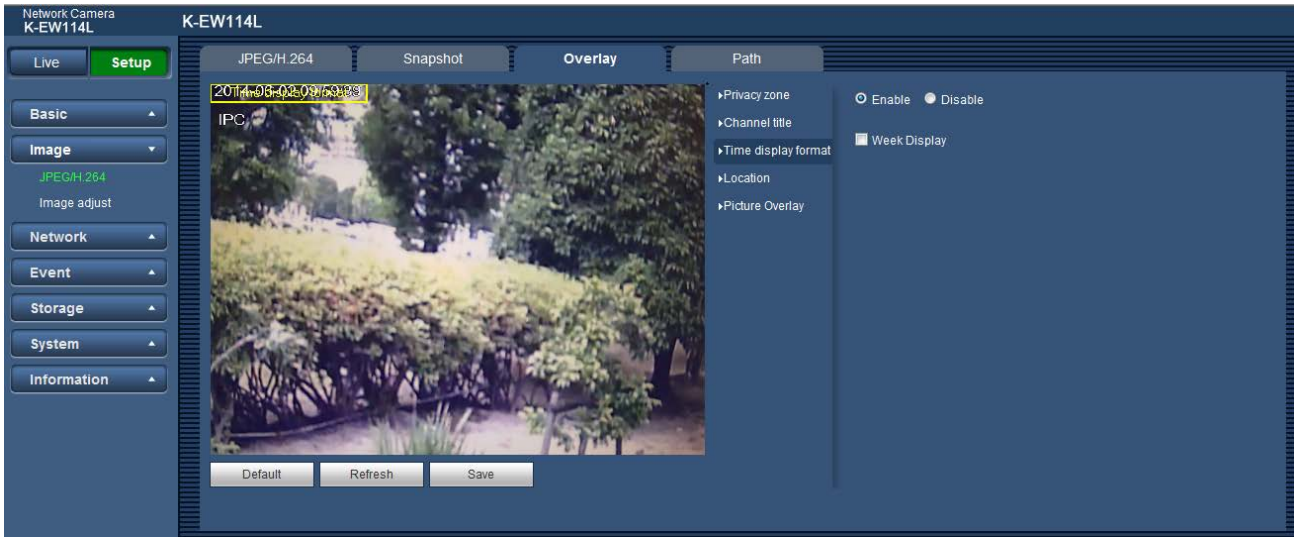

Figure 3-6

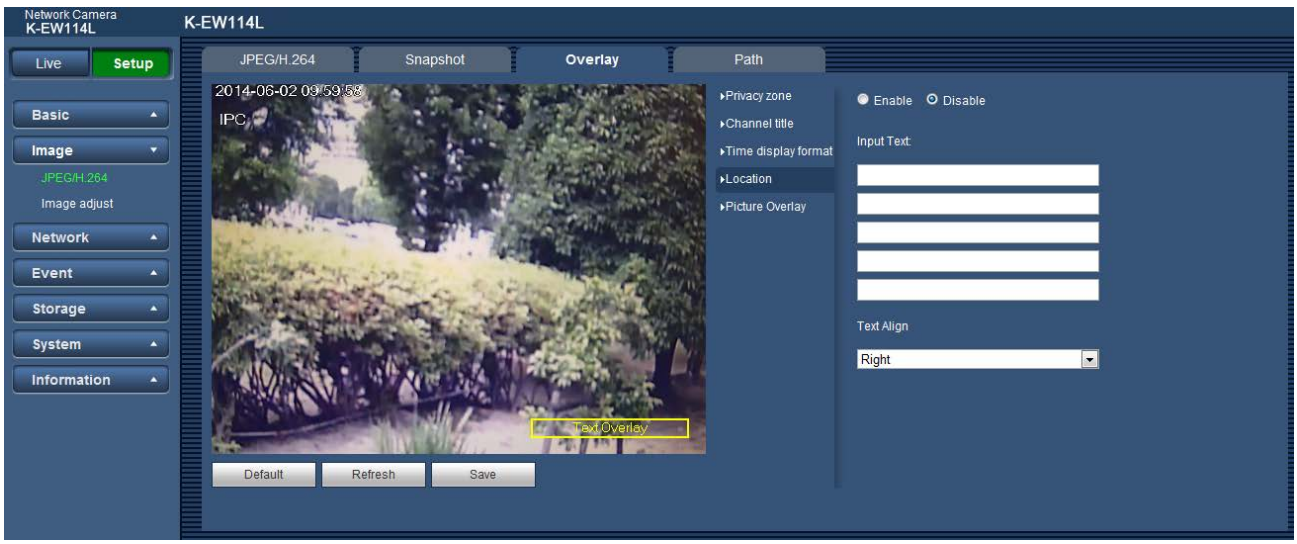

Figure 3-7-1

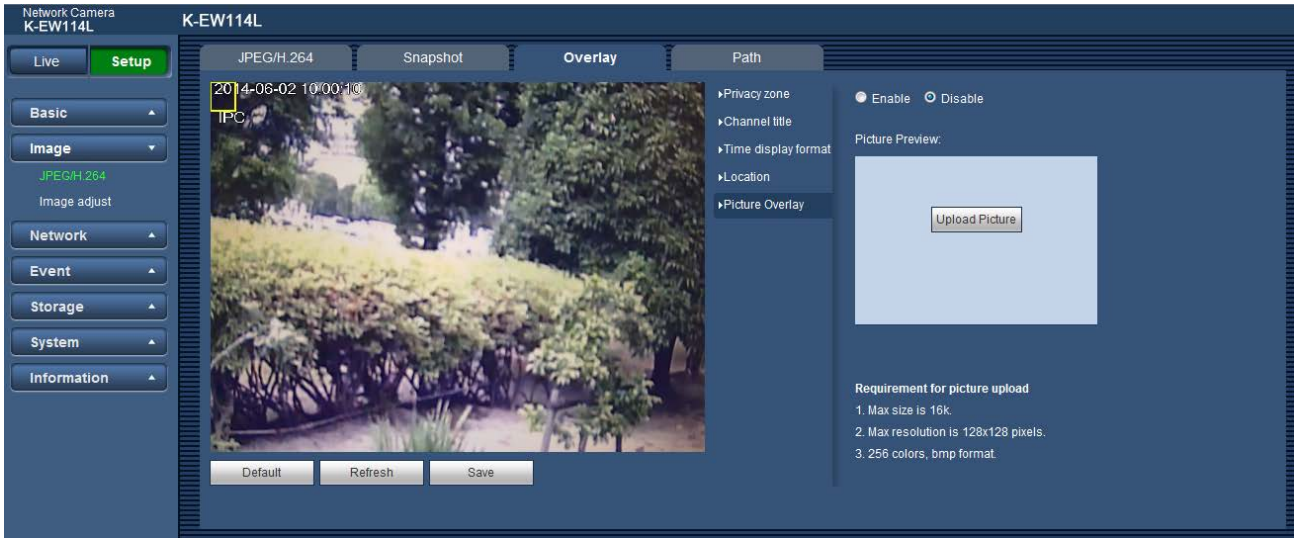

Figure 3-7-2

Please refer to the following sheet for detailed information.

Parameter	Function
Privacy zone	● Here you can privacy mask the specified video in the monitor video. ● System max supports 4 privacy mask zones. See Figure 3-4
Channel title	● You can enable this function so that system overlays channel information in video window. ● You can use the mouse to drag the channel tile position. See Figure 3-5
Time display format	● You can enable this function so that system overlays time information in video window. ● You can use the mouse to drag the time tile position. See Figure 3-6
Location	● You can enable this function so that system overlays location information in video window. ● To change text alignment, you can select by dropdown list. See Figure 3-7-1
Picture Overlay	● You can enable this function to display overlay picture. Click on disable to turn it off. ● Click on Upload Picture to overlay local picture into monitoring window. You can drag the yellow box to move it. Note: You cannot enable location and overlay at the same time.

3.2.1.4 Path

The storage path interface is shown as in Figure 3-8.

Here you can set snap image saved path (in the preview interface) and the record storage path (in the preview interface).The default setup is C:\Users*****\WebDownload\LiveSnapshot and C:\Users*****\WebDownload\LiveRecord. ***** is user name of PC.

Please click the Save button to save current setup.

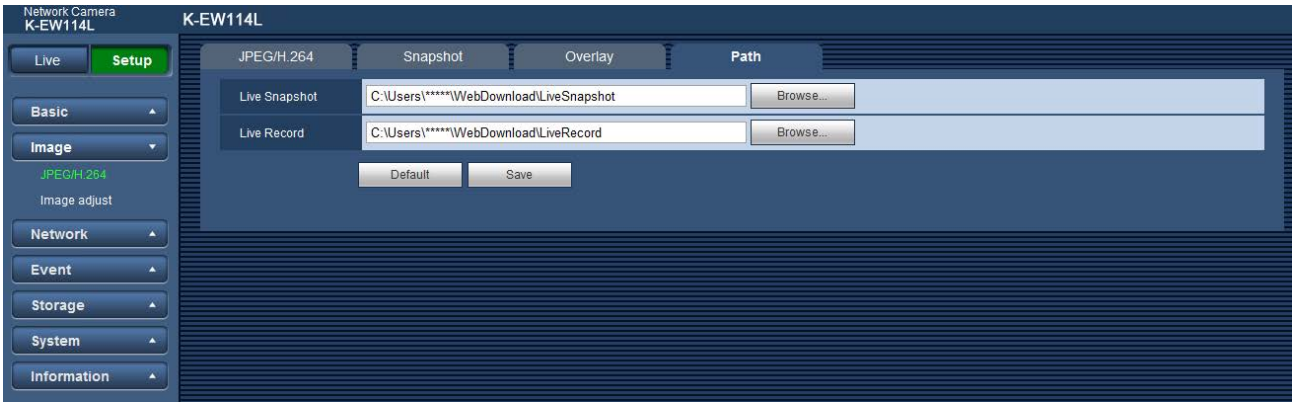

Figure 3-8

3.2.2 **Image adjust**

Here you can view device property information. Slight differences may be found due to different network camera series. The setups become valid immediately after you set. See Figure 3-9.

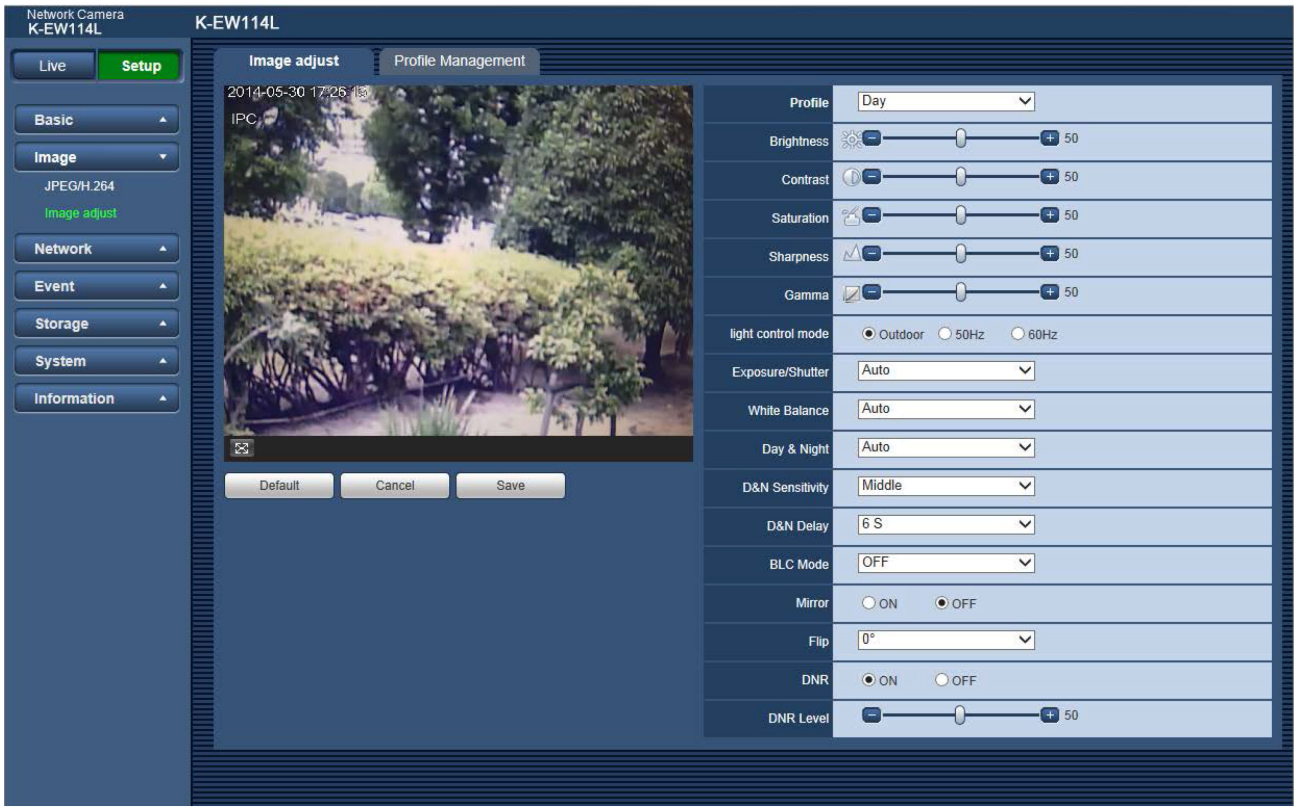

Figure 3-9

Please refer to the following sheet for detailed information.

Parameter	Function
Profile	You may select general, day and night mode.
Brightness	It is to adjust monitor window bright. You can adjust this value if the video is too dark or too bright. The larger the number, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. Please note the video may become hazy if the value is too high. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.

Contrast	It is to adjust monitor window contrast. The larger the number, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.	
Saturation	It is to adjust monitor window saturation. The larger the number, the strong the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.	
Sharpness	The value here is to adjust the edge of the video. The larger the value is, the clear the edge is and vice versa. Please note there is noise if the value here is too high. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.	
Gamma	The value here is to adjust the gamma value of the video. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.	
Light control mode	● Outdoor: In this mode, you can switch exposure mode to get the effect under the corresponding exposure mode. ● 50Hz: When the current is 50Hz, system can auto adjust the exposure according to the environment brightness in case there is any strip. ● 60Hz: When the current is 60Hz, system can auto adjust the exposure according to the environment brightness in case there is any strip.	
Exposure/Shutter	Auto	The video whole brightness can automatically change within the proper exposure range according to the different environments. The higher the gain max value is, the lower the noise is.

	Low Noise	• The video whole brightness can automatically change within the proper exposure range according to the different environments. The higher the gain max value is, the lower the noise is. • For the same environments, the noise of the low noise mode shall be smaller than the noise of the auto mode.
	Low Motion Blur	• The video whole brightness can automatically change within the proper exposure range according to the different environments. The lower the exposure max value is, the week the tail is. • For the same environments, the noise of the low motion blur mode shall be smaller than that of the auto mode.
	Manual	It is to display manual exposure value.
White Balance	It is to set the white balance mode. It has effect on the general hue of the video. This function is on by default. You can select the different scene mode such as auto, sunny, cloudy, home, office, night, disable and etc to adjust the video to the best quality. • Auto: The auto white balance is on. System can auto compensate the color temperature to make sure the vide color is proper. • Sunny: The threshold of the white balance is in the sunny mode. • Night: The threshold of the white balance is in the night mode. • Outdoor: White balance threshold sets to outdoor mode. • Customized: You can set the gain of the red/blue channel. The value reneges from 0 to 100.	
Day&Night	It is to set device color and the B/W mode switch. When config file is general, the default is auto. When config file is day, the default is color. When config file is night, the default is black & white. • Color: Device outputs the color video. • Auto: Device auto select to output the color or the B/W video according to the device feature (The general bright of the video or there is IR light or not.) • B/W: The device outputs the black and white video.	

D&N Sensitivity	It is to set sensitivity to change to Day mode and to Night mode. You can select High, Middle or Low, the default is Middle.	
D&N Delay	It is to set delay time before change to Day mode and to Night mode.	
BLC Mode	BLC	The device auto exposures according to the environments situation so that the darkest area of the video is cleared
	WDR	For the WDR scene, this function can lower the high bright section and enhance the brightness of the low bright section. So that you can view these two sections clearly at the same time. The value ranges from 1 to 100. When you switch the camera from no-WDR mode to the WDR mode, system may lose several seconds record video.
	HLC	After you enabled HLC function, the device can lower the brightness of the brightest section according to the HLC control level. It can reduce the area of the halo and lower the brightness of the whole video. The value ranges from 1 to 100. The default value is 50 when HLC is on. HLC is enabled only when anti-flicker is outdoor and exposure mode is auto.
	OFF	It is to disable the BLC function. Please note this function is disabled by default.
Mirror	It is to switch video left and right limit. This function is disabled by default.	
Flip	It is to switch video up and bottom limit. This function is disabled by default. The video resolution shall be 720P or below if you want to flip 90°.	
DNR	It is to switch digital noise reduction on and off.	
DNR Level	It is to set digital noise reduction level. The value ranges from 1 to 100. The default value is 50.	
Cancel	It is to cancel the operation in current interface and restore previously saved operation.	
Default	It is to set device default setup.	

3.2.3 **Profile Management**

The profile management interface is shown as in Figure 3-10.

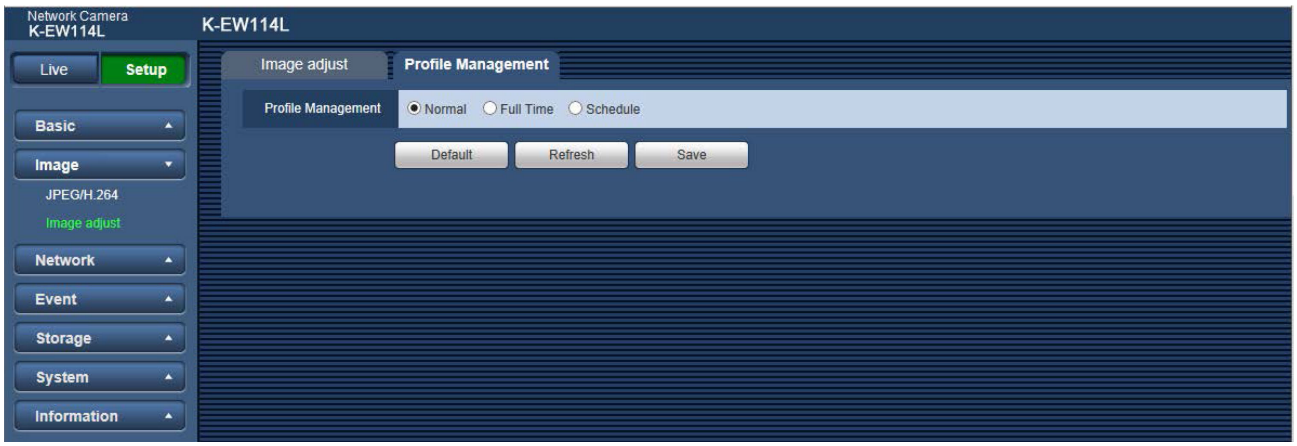

Figure 3-10

Profile management has three modes: normal, full time and schedule. If you select normal, the video will be configured as normal. If you select full time, you must select either day or night, and the video will be configured accordingly. If you select schedule, you can decide detained time interval.

Important

- The setup becomes immediately after you set.

3.2.4 **Zoom and Focus(K-EW114L01E, K-EF134L01E)**

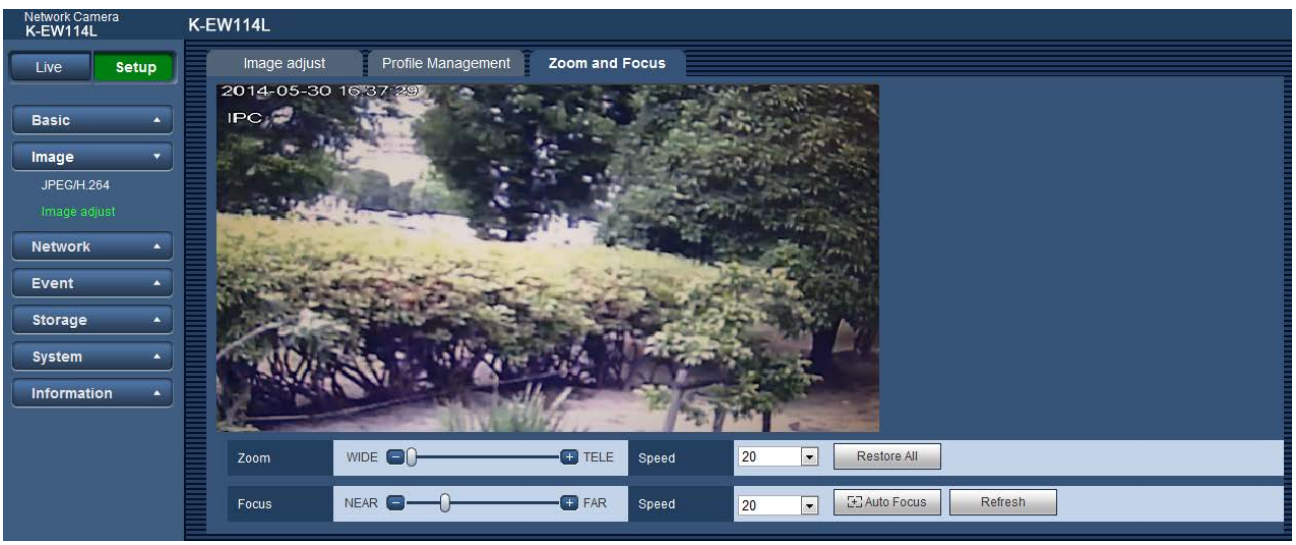

Figure 3-11

Parameter		Function
Zoom	WIDE	Press minus key to make the focal length small
	TELE	Press plus key to make the focal length big
	Speed	Including 1，5，20，100
Focus	NEAR	Press minus key to make the focal plane of the lens move to close shot
	FAR	Press plus key to make the focal lens move to move to long shot
	Speed	Including 1，5，20，100
Restore all		Restore all, the value of both zoom and focus are reset as 0
Auto Focus		Adjust the focal plane of the lens to make the video image stay the clearest.
Refresh		Acquire the latest status of the zoom and focus

3.3 Network

3.3.1 TCP/IP

The TCP/IP interface is shown as in Figure 3-11

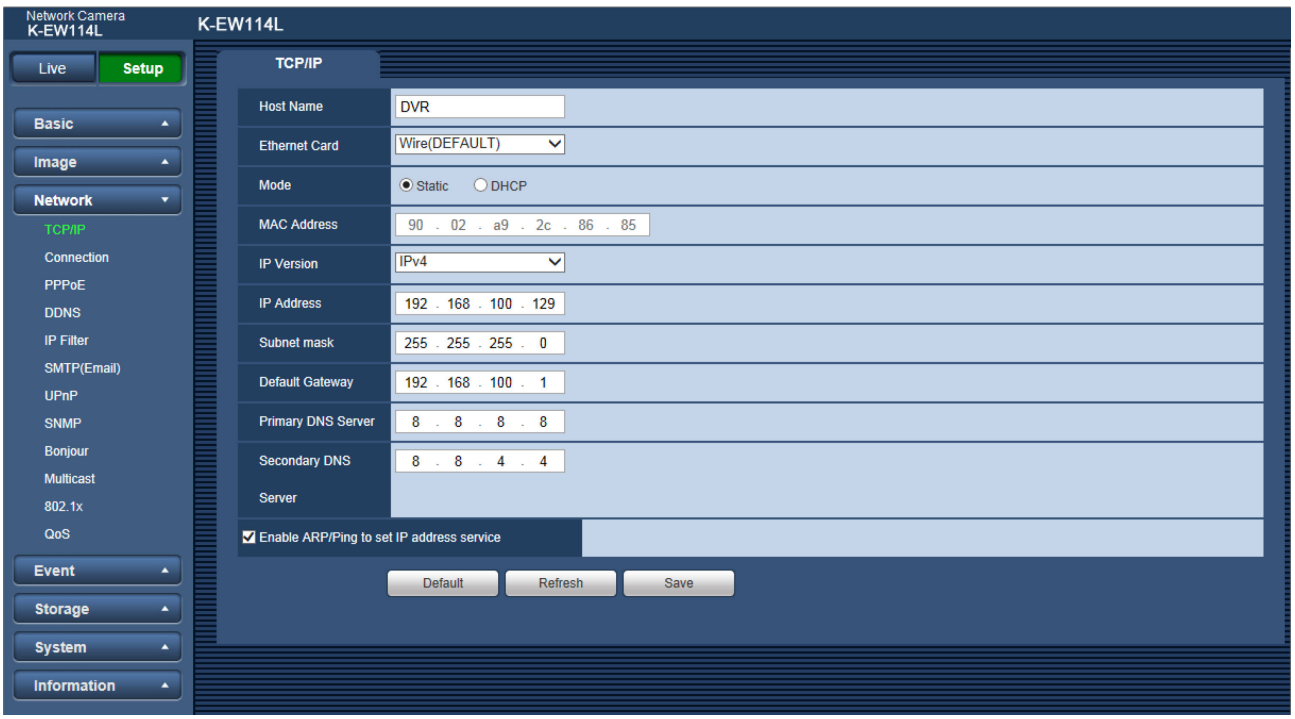

Figure 3-11

Please refer to the following sheet for detailed information.

Parameter	Function
Host Name	It is to set current host device name. It max supports 32-digit character.
Ethernet Card	Please select the Ethernet port. It is for the wire LAN by default. Please note for the -W series product, it has the wireless network card, and you can modify the default Ethernet port setup. Please note the device needs to reboot to activate the new setup once you modify the default setup.

Mode	There are two modes: static mode and the DHCP mode. ● The IP address/subnet mask/gateway are null when you select the DHCP mode to auto search the IP. ● If you select the static mode, you need to set the IP address/subnet mask/gateway manually. ● If you select the DHCP mode, you can view the IP address/subnet mask/gateway from the DHCP. ● If you switch from the DHCP mode to the static mode, you need to reset the IP parameters. ● Besides, IP address/subnet mask/gateway and DHCP are read-only when the PPPoE dial is OK.
MAC Address	It is to display host MAC address.
IP Version	It is to select IP version. IPV4 or IPV6. You can access the IP address of these two versions.
IP Address	Please use the keyboard to input the corresponding number to modify the IP address and then set the corresponding subnet mask and the default gateway.
Subnet mask	Input subnet mask of the network
Default Gateway	Input default gateway of the network
Primary DNS Sever	DNS IP address.
Secondary DNS Server	Alternate DNS IP address.

Enable ARP/Ping to set IP address service.	You can use ARP/Ping command to modify or set the device IP address if you know the device MAC address. Before the operation, please make sure the network camera and the PC in the same LAN. This function is on by default. You can refer to the steps listed below. **Step 1**: Get an IP address. Set the network camera and the PC in the same LAN. **Step 2**: Get the physical address from the label of the network camera. **Step 3**: Go to the Run interface and then input the following commands. arp –s <IP Address> <MAC> ping –l 480 –t <IP Address> Such as：arp -s 192.168.0.125 11-40-8c-18-10-11 ping -l 480 -t 192.168.0.125 **Step 4**: Reboot the device. **Step 5**: You can see the setup is OK if you can see there are output information such as “Reply from 192.168.0.125 …” from the command output lines. Now you can close the command line. **Step 6**: Open the browse and then input http://<IP address>. Click the Enter button, you can access now.

3.3.2 **Connection**

The connection interface is shown as in Figure 3-12.

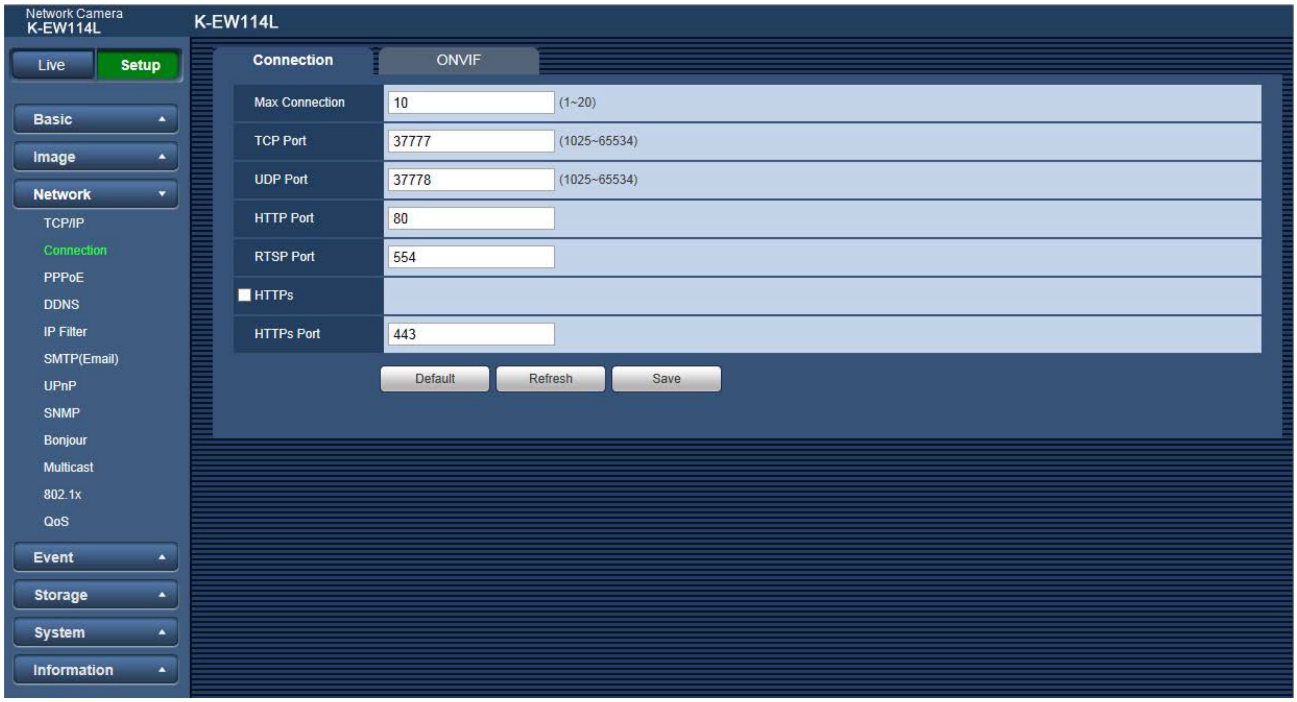

Figure 3-12

Please refer to the following sheet for detailed information.

Parameter	Function
Max Connection	It is the max Web connection for the same device. The value ranges from 1 to 20. The max connection amount is 20.
TCP Port	The default value is 37777. You can input the actual port number if necessary.
UDP Port	The default value is 37778. You can input the actual port number if necessary.
HTTP Port	The default value is 80. You can input the actual port number if necessary.

RTSP Port	The default value is 554. RTSP stream query format is: Main stream: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=0 Sub stream: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=1 You need to input the following four items manually. username/password/IP and port. The IP is device IP and the port default value is 554. You can leave it in blank if it is the default value. Follow standard RTP protocol and when encode mode is MJPEG, the max resolution only supports 2040*2040.
HTTPs	Set to enable HTTPS protocol.
HTTPs Port	The default value is 443. You can input the actual port number if necessary.

3.3.3 **PPPoE**

The PPPoE interface is shown as in Figure 3-13.

Input the PPPoE user name and password you get from the IPS (internet service provider) and enable PPPoE function. Please save current setup and then reboot the device to get the setup activated.

Device connects to the internet via PPPoE after reboot. You can get the IP address in the WAN from the IP address column. When PPPoE is on, please disable UPnP to avoid influence on dial-up.

Please note, you need to go to the IP address item to via the device current device information. You can access the client-end via this address.

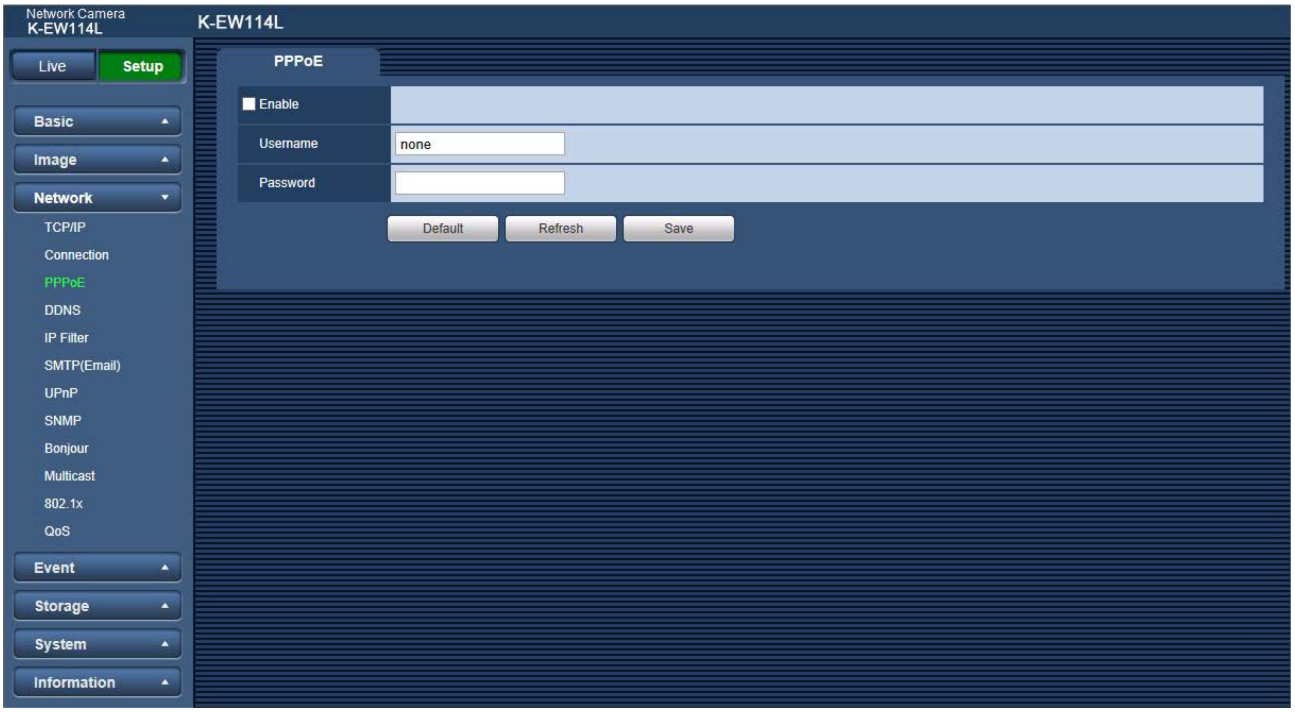

Figure 3-13

3.3.4 **DDNS**

The DDNS interface is shown as in Figure 3-14.

The DDNS is to set to connect the various servers so that you can access the system via the server. Please go to the corresponding service website to apply a domain name and then access the system via the domain. It works even your IP address has changed. When the device connects to WLAN, you should disable UPnP.

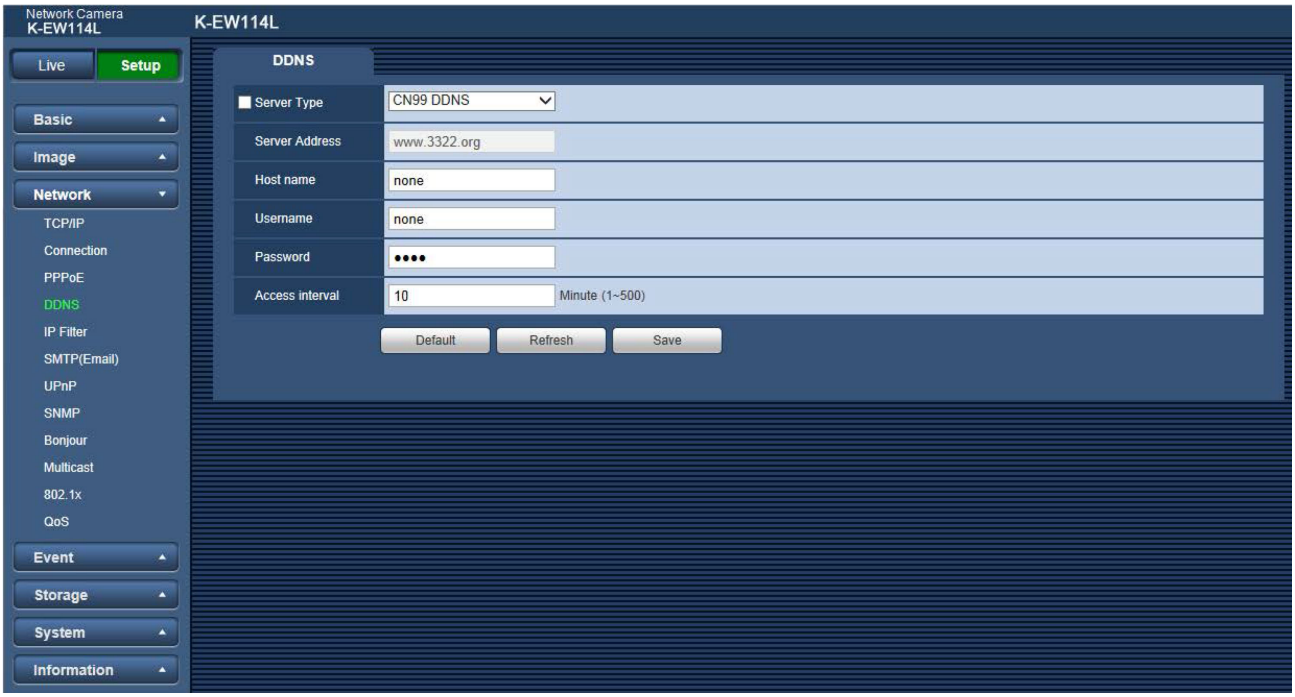

Figure 3-14

Please refer to the following sheet for detailed information.

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list and then enable DDNS function. The QUICK DDNS protocol means you use your self-defined private protocol to realize DDNS function.
Server Address	DDNS server IP address
Host name	Your self-defined host name.
Username	The user name you input to log in the server.
Password	The password you input to log in the server.
Access interval	● Device sends out alive signal to the server regularly. ● You can set interval value between the device and DDNS server here.

3.3.5 **IP filter**

The IP filter interface is shown as in Figure 3-15.

You can enable IP filter function so that some specified IP/MAC user can access the network camera.

You can add IP address or IP address section.

If you do not check the box here, it means there is on access limit.
Here you can add IP address and MAC address. You must add these addresses before enabling the trusted sites.
Please note: You must set MAC address in the same network segment.

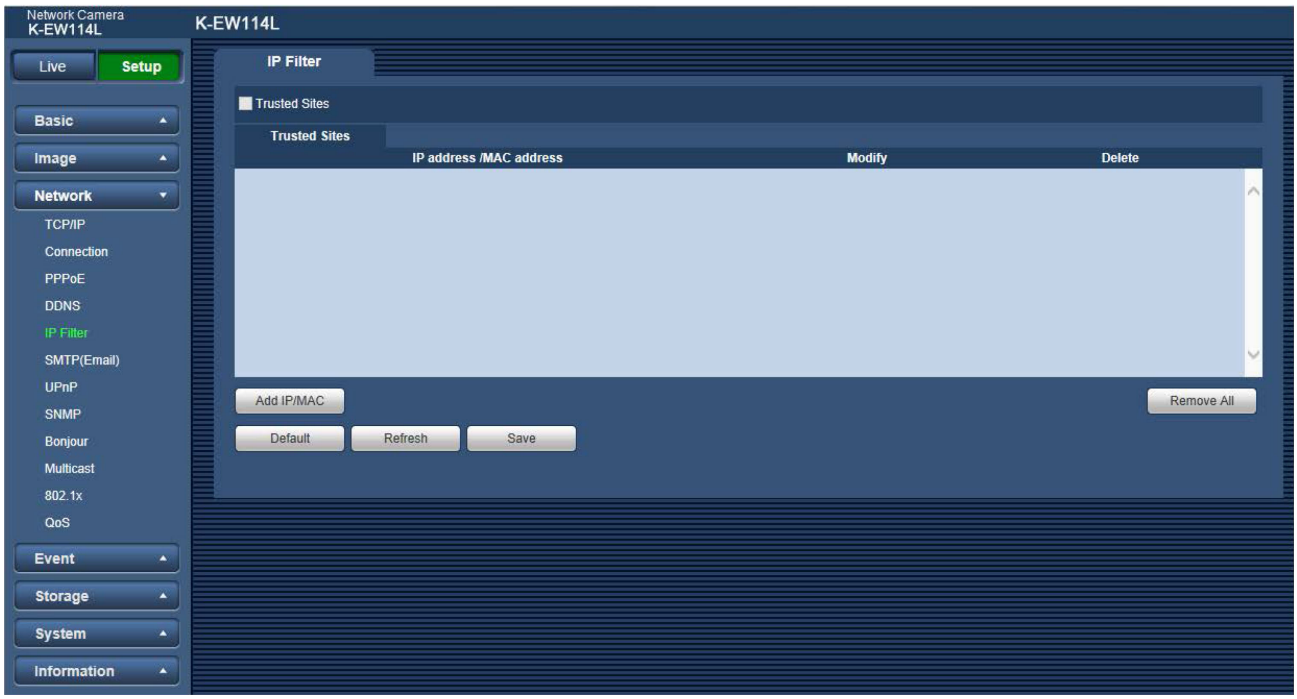

Figure 3-15

3.3.6 **SMTP (Email)**

The SMTP interface is shown as in Figure 3-16.

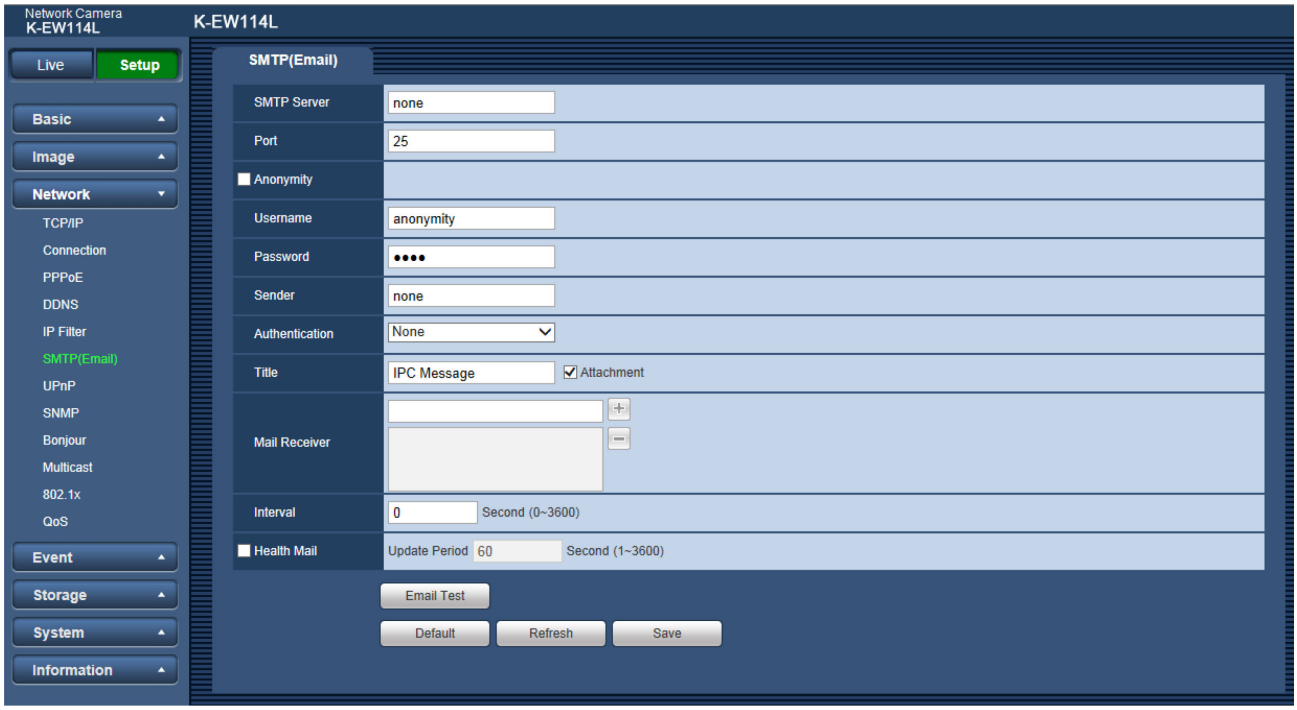

Figure 3-16

Please refer to the following sheet for detailed information.

Parameter	Function
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. You can modify it if necessary.
Anonymity	For the server supports the anonymity function. You can auto login anonymously. You do not need to input the user name, password and the sender information.
Username	The user name of the sender email account.
Password	The password of sender email account.
Sender	Sender email address.
Authentication (Encryption mode)	You can select SSL, TLS or None.
Title (Subject)	Input email subject here.
Attachment	System can send out the email of the snapshot picture once you check the box here.
Mail Receiver	Input receiver email address here. Max three addresses.

Parameter	Function
Interval	The send interval ranges from 0 to 3600 seconds. 0 means there is no interval. Please note system will not send out the email immediately when the alarm occurs. When the alarm, VMD or the abnormity event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the abnormity events, which may result in heavy load for the email server.
Health Mail	Please check the box here to enable this function.
Update Period (interval)	This function allows the system to send out the test email to check the connection is OK or not. Please check the box to enable this function and then set the corresponding interval. System can send out the email regularly as you set here.
Email Test	The system will automatically sent out an email once to test the connection is OK or not .Before the email test, please save the email setup information.

3.3.7 **UPnP**

It allows you to establish the mapping relationship between the LAN and the public network.

Here you can also add, modify or remove UPnP item. For UPnP on different routers, you must disable UPnP function. See Figure 3-17.

In the Windows OS, From Start->Control Panel->Add or remove programs. Click the “Add/Remove Windows Components” and then select the “Network Services” from the Windows Components Wizard. Click the Details button and then check the “Internet Gateway Device Discovery and Control client” and “UPnP User Interface”. Please click OK to begin installation.

Enable UPnP from the Web. If your UPnP is enabled in the Windows OS, the network camera can auto detect it via the “My Network Places”.

Under manual mode, you can modify external port. Under auto mode, select idle port for auto port mapping without user modification.

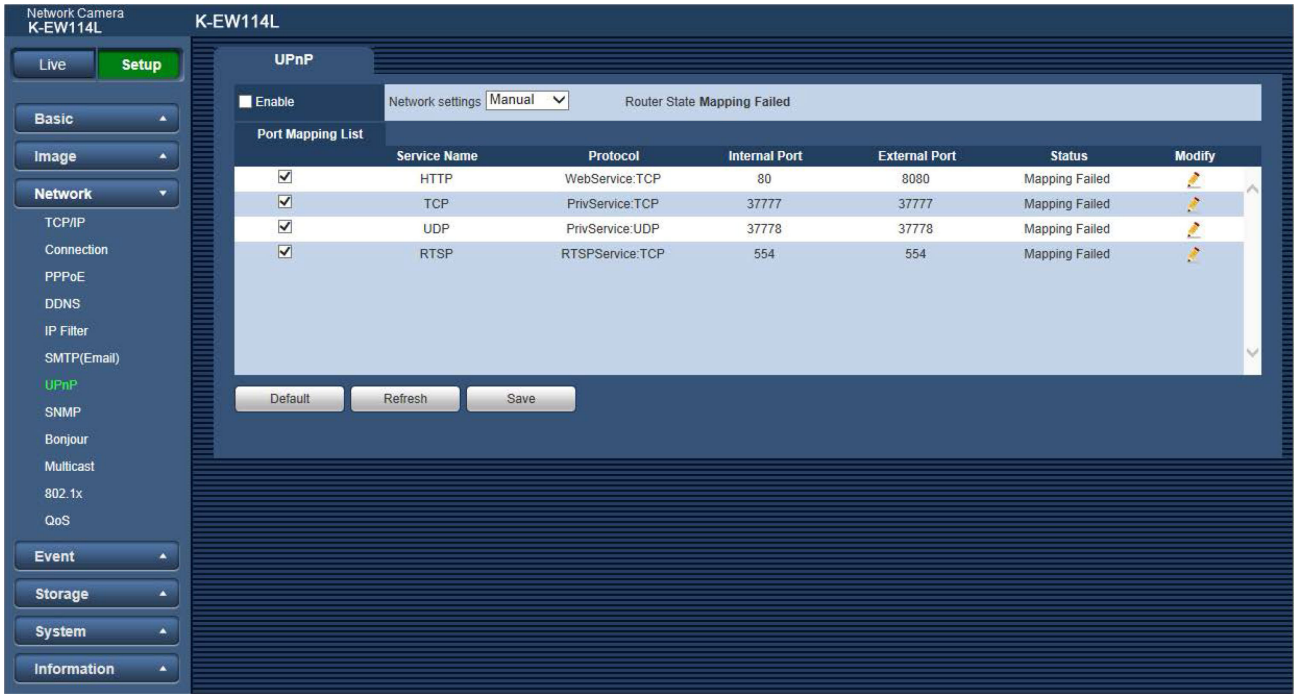

Figure 3-17

3.3.8 **SNMP**

The SNMP interface is shown as in Figure 3-18.

The SNMP allows the communication between the network management work station software and the proxy of the managed device. Please install the software such as “MG MIBBrowser 8.0c “ software or establish the SNMP service before you use this function. You need to reboot the device to activate the new setup.

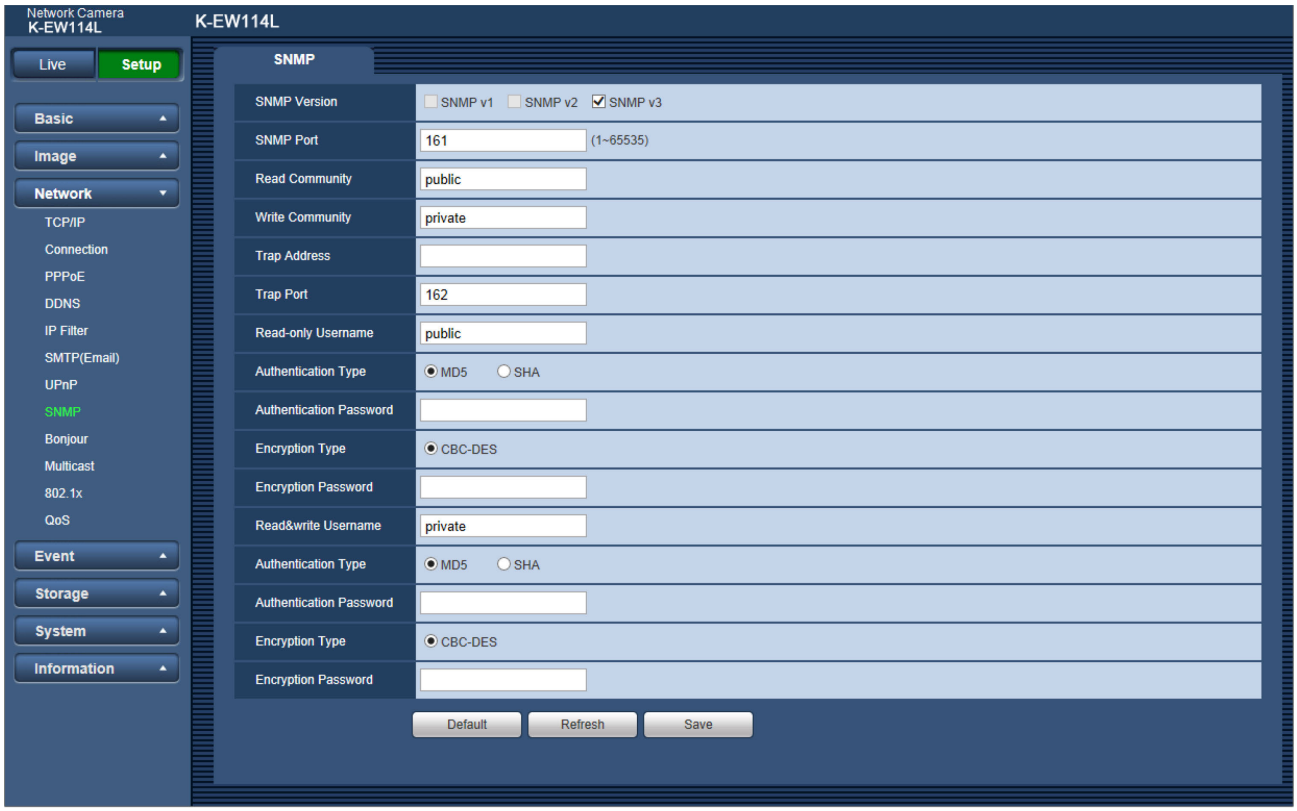

Figure 3-18

Please refer to the following sheet for detailed information.

Parameter	Function
SNMP version	● SNMP V1: system only processes the information of V1. ● SNMP V2: system only processes the information of V2. ● SNMP V3: you can set user name and password. There is account security verification when the server wants to connect to the device. At the same time, the v1 and V2 is null and cannot select.
SNMP Port	The listening port of the proxy program of the device. It is a UDP port not a TCP port. The value ranges from 1 to 65535. The default value is 161
Read Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy and one group of the managers. Please make sure the device and the proxy are the same. The read community will read all the objects the SNMP supported in the specified name. The default setup is public.

Parameter	Function
Write Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy and one group of the managers. Please make sure the device and the proxy are the same. The read community will read/write/access all the objects the SNMP supported in the specified name. The default setup is write.
Trap Address	The destination address of the Trap information from the proxy program of the device.
Trap Port	The destination port of the Trap information from the proxy program of the device. It is for the gateway device and the client-end PC in the LAN to exchange the information. It is a non-protocol connection port. It has no effect on the network applications. It is a UDP port not TCP port. The value ranges from 1 to 165535. The default value is 162.
Read-only Username	Only when SNMP version is SNMP v3, you shall config this parameter. The default is public.
Authentication Type	Only when SNMP version is SNMP v3, you shall config this parameter. You can select either MD5 or SHA. The default is MD5.
Authentication Password	Only when SNMP version is SNMP v3, you shall config this parameter. Password requires min of 8 characters.
Encryption Type	Only when SNMP version is SNMP v3, you shall config this parameter. The default is CBC-DES.
Encryption Password	Only when SNMP version is SNMP v3, you shall config this parameter. Password requires min of 8 characters.
Read&write Username	Only when SNMP version is SNMP v3, you shall config this parameter. The default is private.
Authentication Type	Only when SNMP version is SNMP v3, you shall config this parameter. You can select either MD5 or SHA. The default is MD5.
Authentication Password	Only when SNMP version is SNMP v3, you shall config this parameter. Password requires min of 8 characters.
Encryption Type	Only when SNMP version is SNMP v3, you shall config this parameter. The default is CBC-DES.
Encryption Password	Only when SNMP version is SNMP v3, you shall config this parameter. Password requires min of 8 characters.

3.3.9 **Bonjour**

The Bonjour interface is shown as below. See Figure 3-19.

Bonjour is based on the multicast DNS service from the Apple. The Bonjour device can automatically broadcast its service information and listen to the service information from other device.
You can use the browse of the Bonjour service in the same LAN to search the network camera device and then access if you do not know the network camera information such as IP address.
You can view the server name when the network camera is detected by the Bonjour. Please note the safari browse support this function. Click the “Display All Bookmarks: and open the Bonjour, system can auto detect the network camera of the Bonjour function in the LAN.

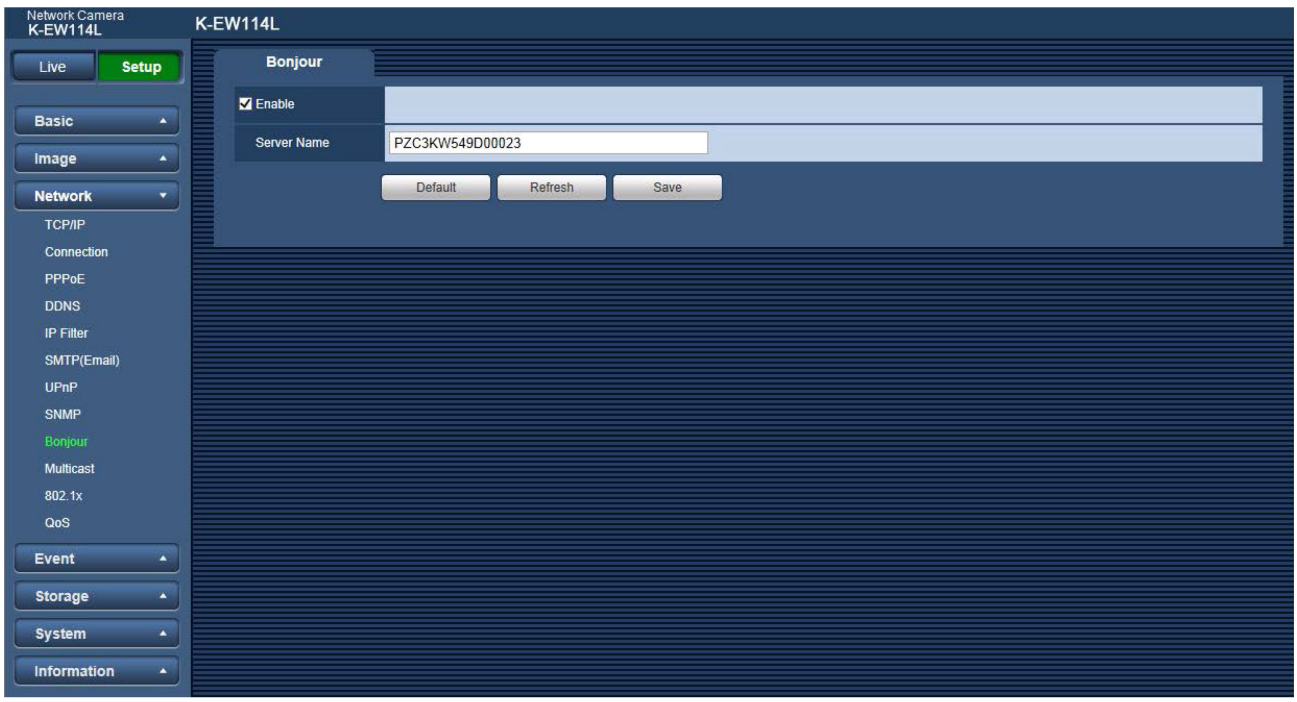

Figure 3-19

3.3.10 **Multicast**

The multicast interface is shown as in Figure 3-20.
Multicast is a transmission mode of data packet. When there is multiple-host to receive the same data packet, multiple-cast is the best option to reduce the broad width and the CPU load. The source host can just send out one data to transit. This function also depends on the relationship of the group member and group of the outer.
Here you can set multicast address and port. You also need to go to Live interface to set the protocol as Multicast.

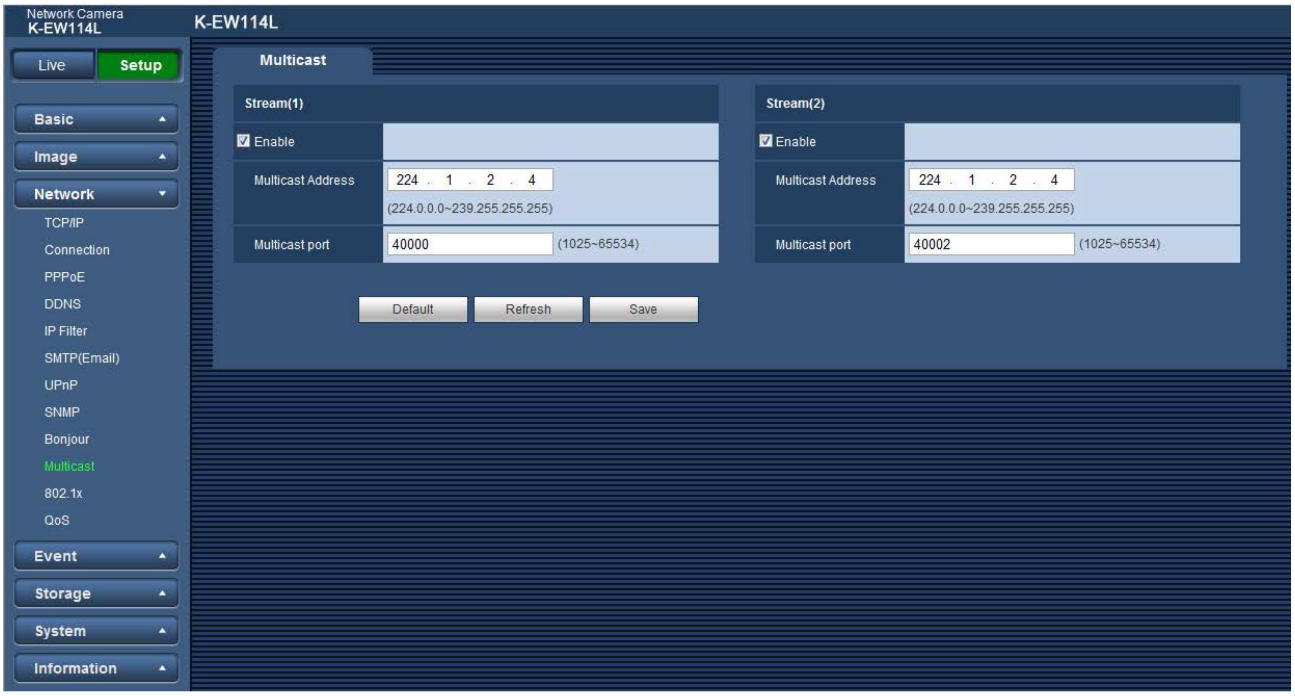

Figure 3-20

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	Select to enable multicast function. Stream(1) and Stream(2) cannot be used at the same time.
Multicast Address	The range of multicast address of Stream(1) and Stream(2) is 224.0.0.0 - 239.255.255.255.
Multicast Port	Multicast port. The range is 1025 - 65534.

3.3.11 **IEEE802**

IEEE802.1X works standing for local and metropolitan area networks and port based network access control protocol. It supports manual operation of the client to choose means of authenticating by which to control it to access to the Local Area Networks or not. It supports the ability to authenticate, to calculate fee, to ensure security and to maintain requirements. See Figure 3-21.

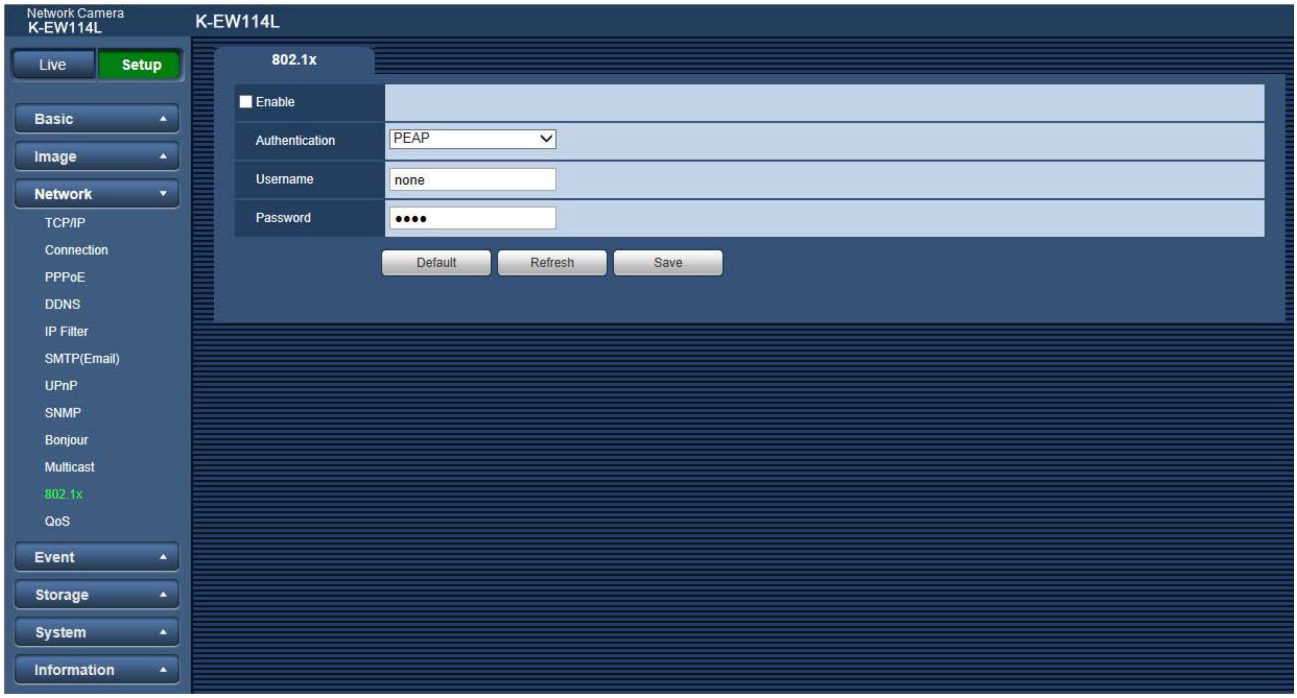

Figure 3-21

Please refer to the following sheet for detailed information.

Parameter	Function
Authentication	PEAP (protected EAP protocol).
Username	It needs the username to login, which is authenticated by the server.
Password	Please input password here.

3.3.12 **QoS**

The QoS interface is shown as below. See Figure 3-22.

QoS (Quality of Service) is network security mechanism. It is a technology to fix the network delay and jam problem and etc. For the network service, the quality of service includes the transmission bandwidth, delay, the packet loss and etc. We can guarantee the transmission bandwidth, lower the delay, reduce the loss of the data packet and anti-dither to enhance the quality.

We can set the DSCP (Differentiated Services Code Point) of the IP to distinguish the data packet so that the router or the hub can provide different services for various data packets. It can select the different queues according to the priority of the packets and select the bandwidth of the each queue. It can also discard at the different ratio when the broad bandwidth is jam.

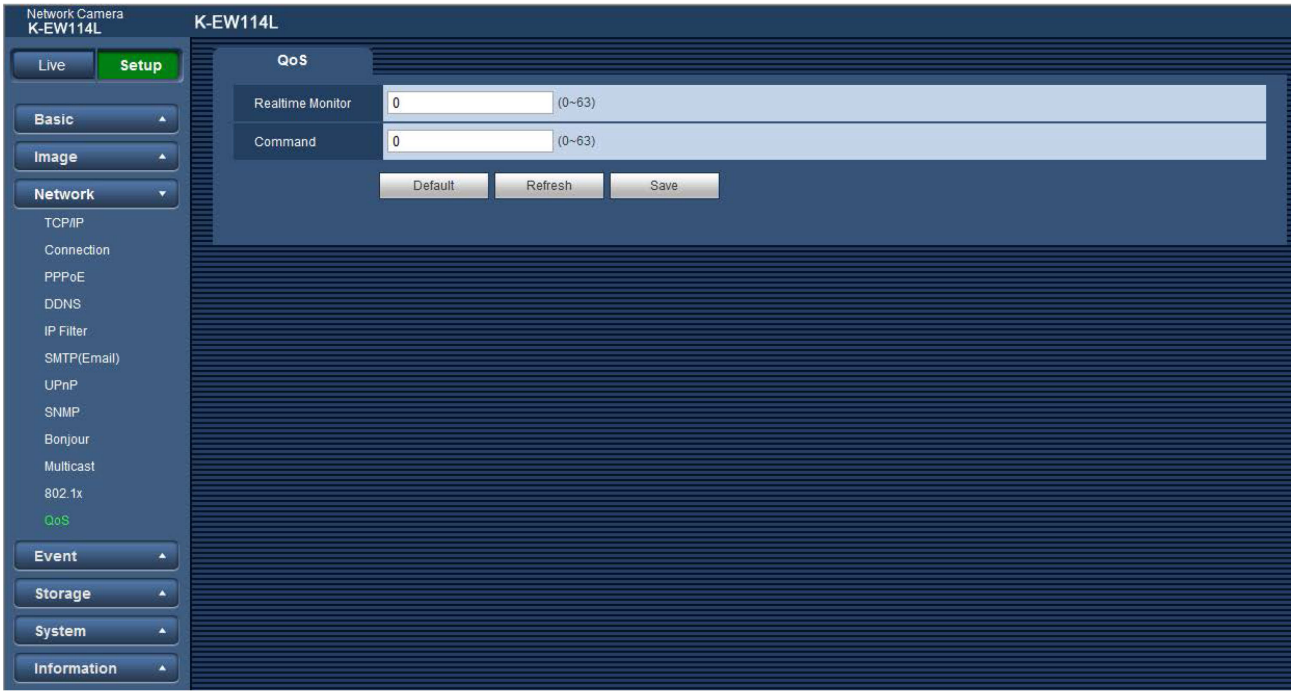

Figure 3-22

Please refer to the following sheet for detailed information.

Parameter	Function
Realtime Monitor	The value ranges from 0 to 63. The router or the switcher can provide different service for various data packets.
Command	The value ranges from 0 to 63. The router or the switcher can provide different service for various data packets.

3.4 Event

3.4.1 **Video Detect**

3.4.1.1 VMD

The VMD interface is shown as in Figure 3-23.

Figure 3-23

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable VMD function.
Working Period	Here you can set arm/disarm period. Click on set button to open period setup menu.
Anti-Dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
VMD area	Here you can set VMD region and its sensitivity and area. The default covers all regions. You must click on save before enabling your setup.
Record	When record is enabled, you can trigger VMD to activate record.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends.
Snapshot	You need to check the box here so that system can backup VMD snapshot file.

See Figure 3-24.

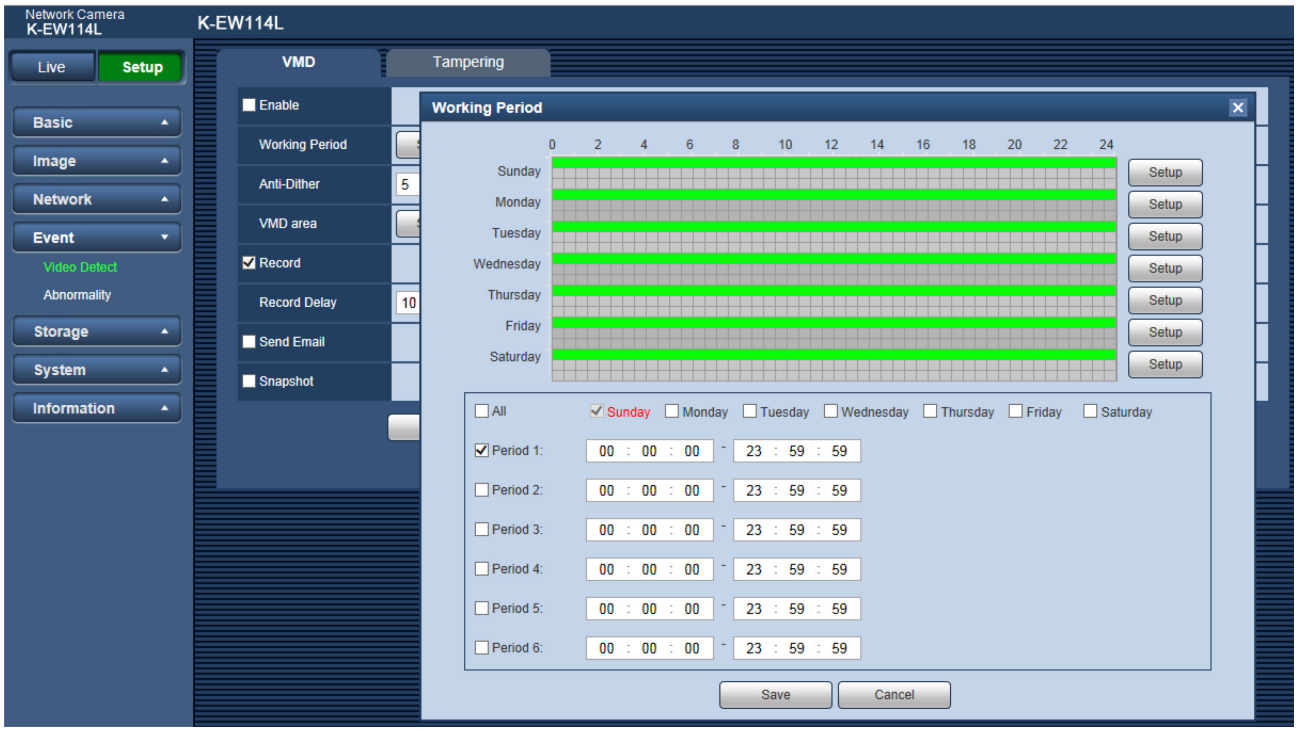

Figure 3-24

See Figure 3-25.

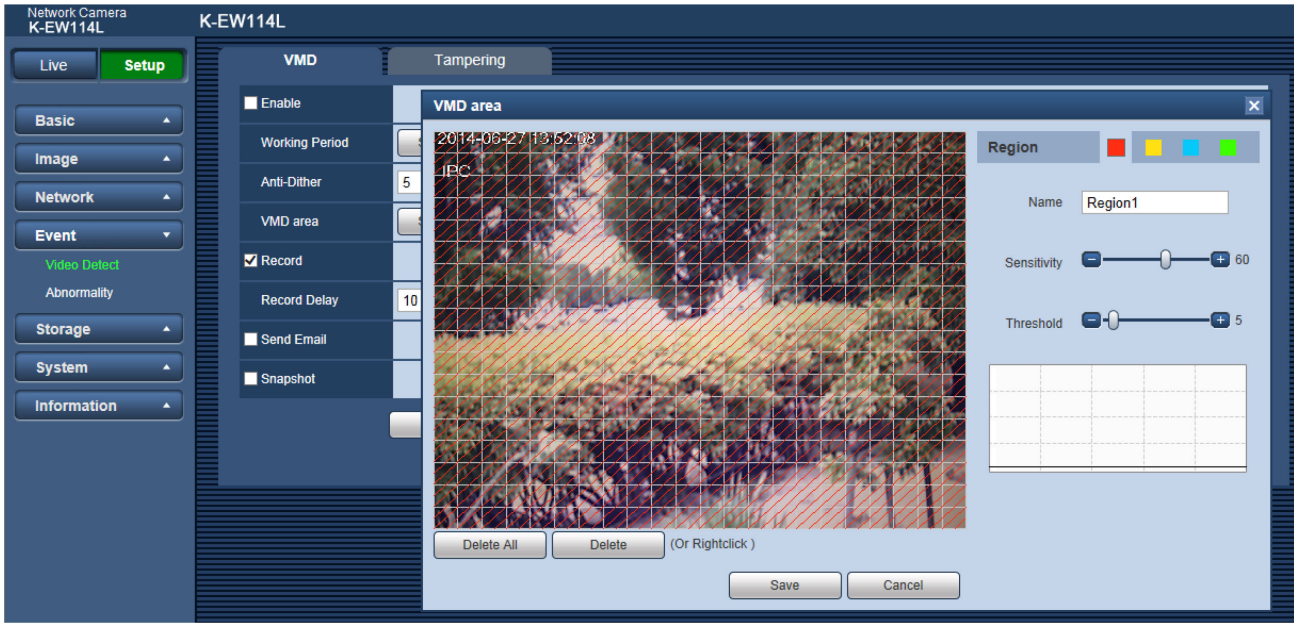

Figure 3-25

Please refer to the following sheet for detailed information.

Parameter	Function
Sensitivity	It is sensitivity of brightness as VMD is more possible to be trigger with high sensitivity. You can set up to four areas. The range is 0 - 100. The recommenced value is 30 - 70. The default is 60.
Threshold	It is to check target object area related to detection area. The lower the area threshold, the easier to trigger VMD. You can set up to four areas. The range is 0 - 100. The recommenced value is 10 - 50.
Delete All	Clear all areas.
Delete	Delete selected area.

3.4.1.2 Tampering

The tampering interface is shown as in Figure 3-26 and Figure 3-27.

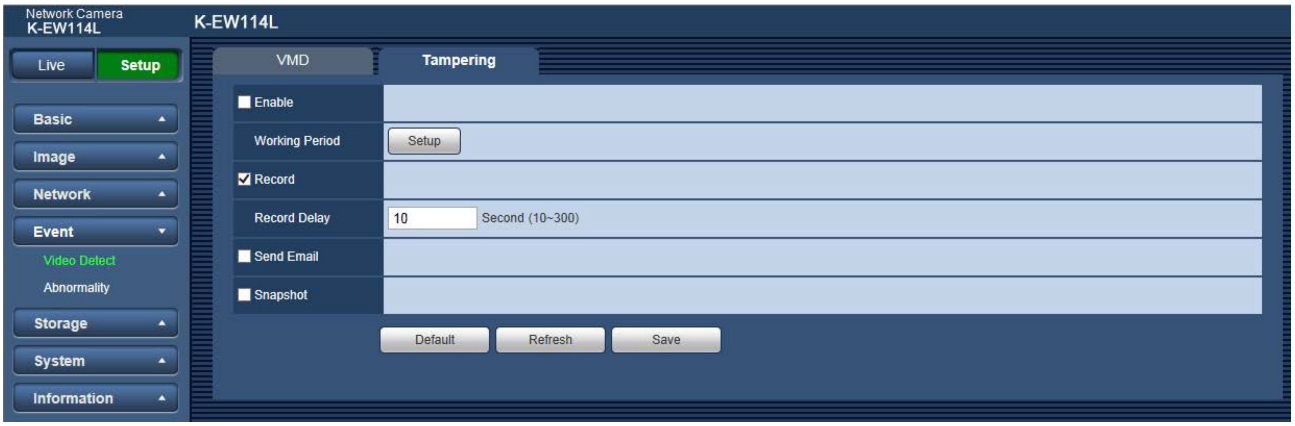

Figure 3-26

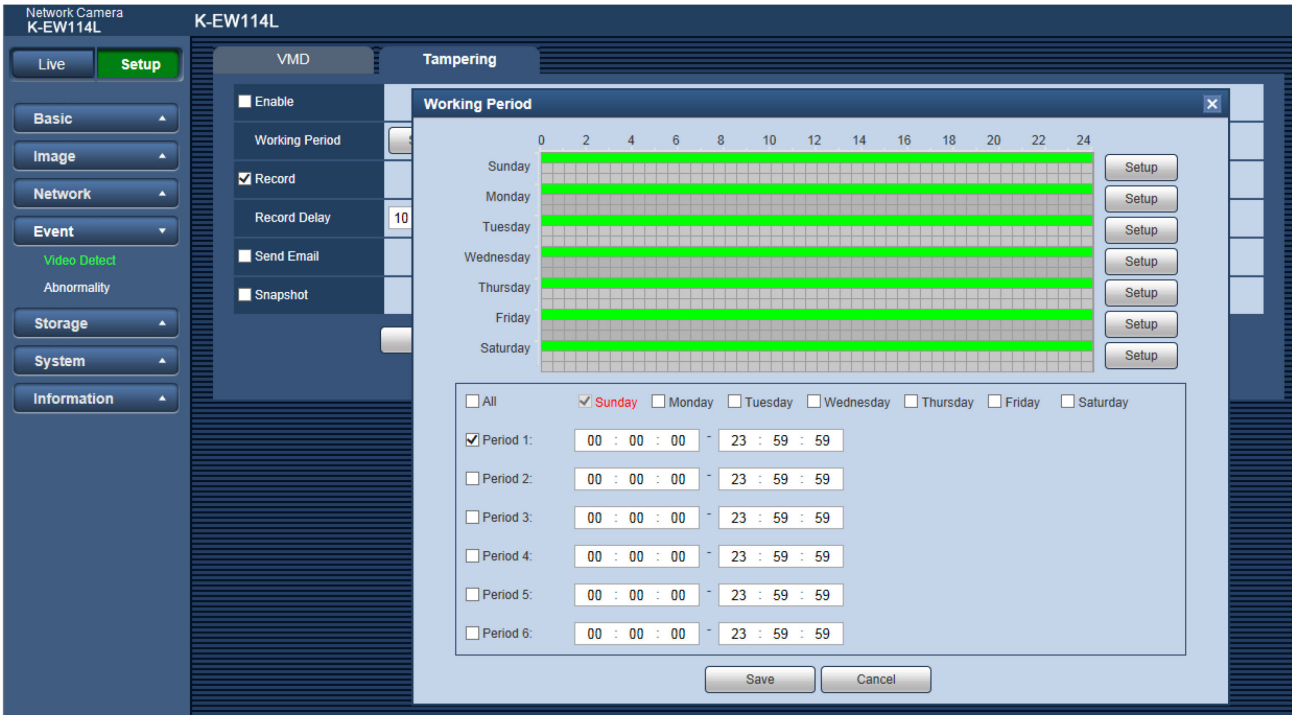

Figure 3-27

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable this function.

Parameter	Function
Working Period	● Video masking function becomes activated in the specified periods. ● There are six periods in one day. Please draw a circle to enable corresponding period. ● Select date. If you do not select, current setup applies to today only. You can select all week column to apply to the whole week. ● Click OK button, system goes back to VMD interface, please click save button to exit.
Record	After record is enabled, video masking can activate video.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs.
Snapshot	After snapshot is enabled and alarm happens, the system will automatically snapshot and alarm.

3.4.2 **Abnormity**

Abnormity includes Disconnection, IP Conflict and Unauthorized Access.

When device is offline or IP conflicts, the network error alarm occurs.

Parameter	Function
Event Type	It includes: Disconnection, IP Conflict
Enable	Check to alarm when network is abnormal.

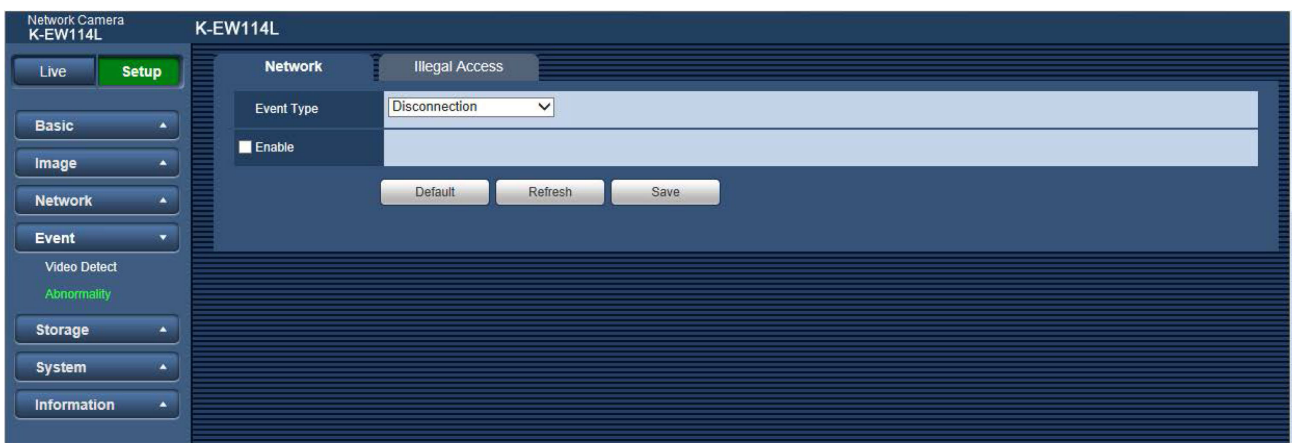

Figure 3-28

When login password keep been wrong for a few times, unauthorized access alarm occurs. This operation is similar to network error. Allow login error times as when it exceeds this limit, user account will be locked.

Figure 3-29

3.5 Storage

3.5.1 Record Schedule and Snapshot Schedule

In these two interfaces, you can add or remove the schedule record/snapshot setup. See Figure 3-30 and Figure 3-31.

There are three record modes: general (auto), VMD and alarm. There are six periods in one day. Please make sure you have enabled the corresponding record mode in the Setup->Storage->Conditions.

You can view the current time period setup from the color bar.

- Green color stands for the general record/snapshot.
- Yellow color stands for the VMD record/snapshot.

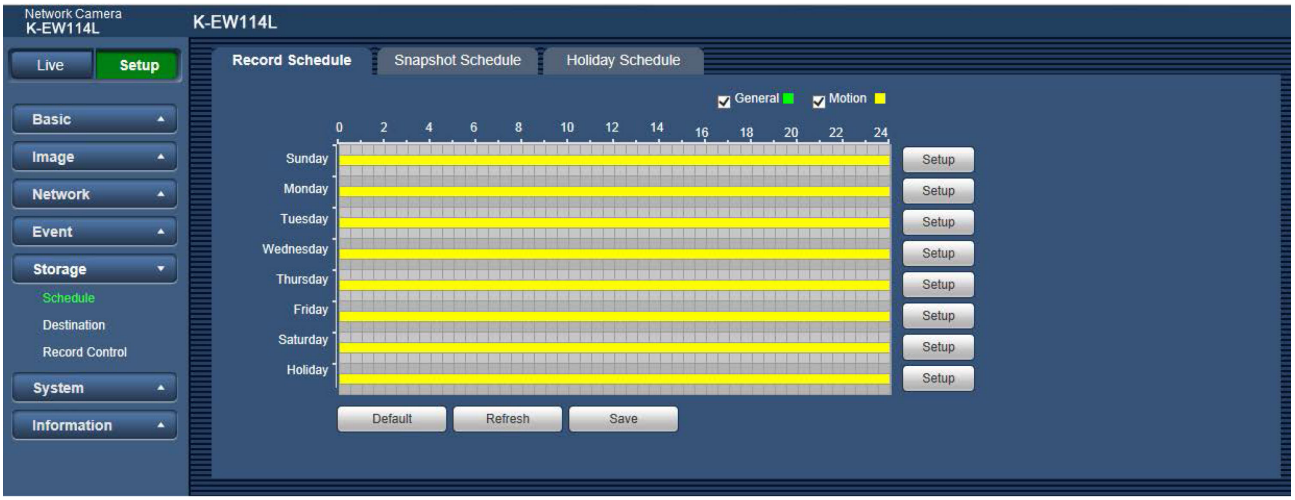

Figure 3-30

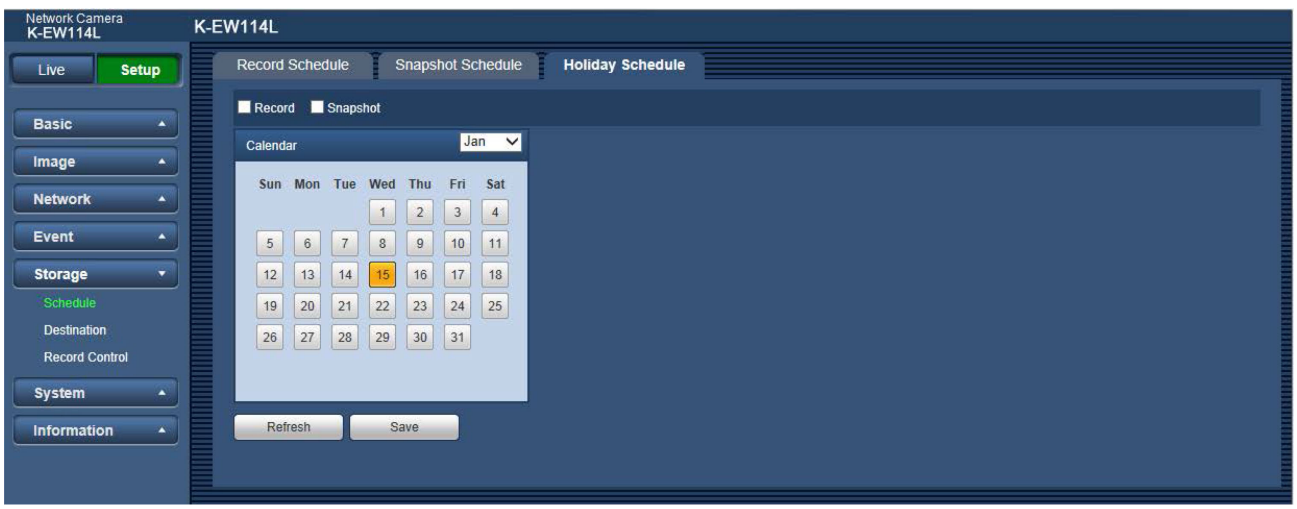

Figure 3-31

You can set specified dates as holiday. When snapshot of holiday is enabled, the selected dates will be snapshot/recorded according to holiday setup.

3.5.2 **Destination**

3.5.2.1 Path

The destination interface is shown as in Figure 3-32.

Path can config record and snapshot storage path. There are two options: FTP and NAS. You can only select one mode. System can save according to the event types. It is corresponding to the two modes (general/motion) in the Schedule interface. Please check the box to enable the save functions.

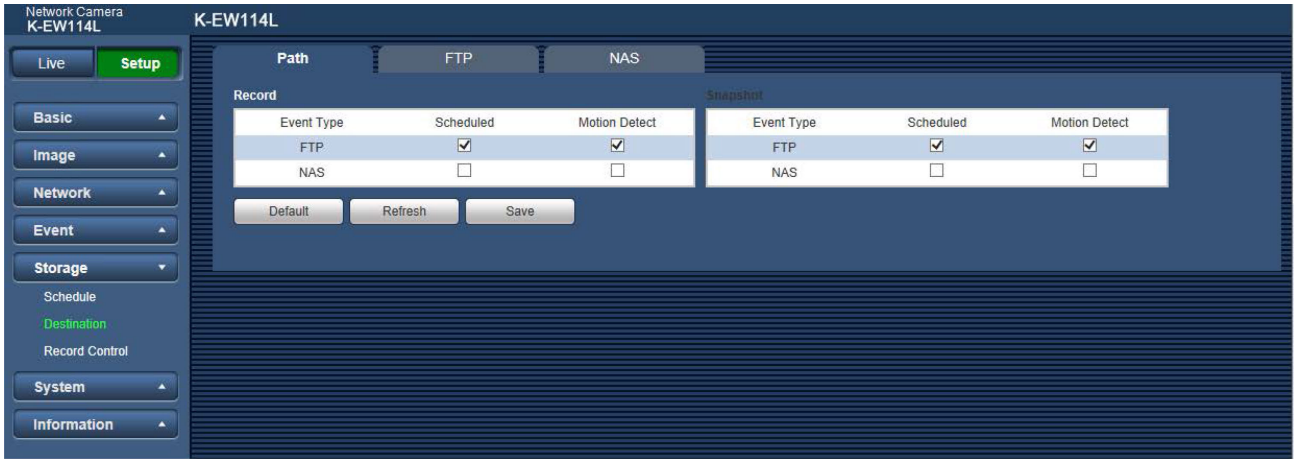

Figure 3-32

Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	It includes: scheduled, motion detect and alarm.
FTP	It saved in the FTP server.
NAS	It saved in NAS disk.

3.5.2.2 FTP

The FTP interface is shown as in Figure 3-33.

You need to check the box to enable the FTP function. When network disconnect occurred or there is malfunction.

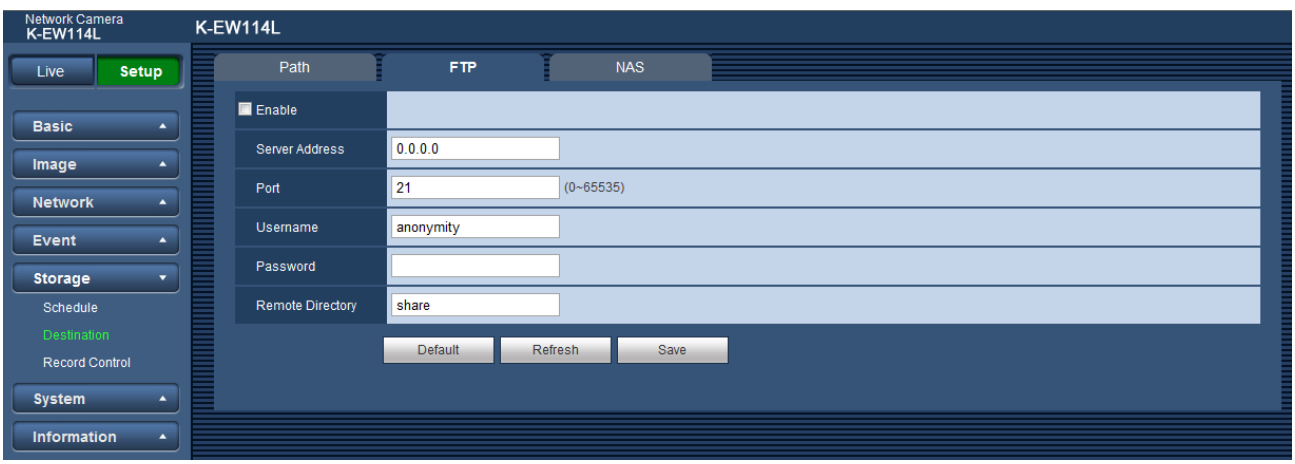

Figure 3-33

3.5.2.3 NAS

You need to check the box to enable the NAS function. Select NAS storage, fill in NAS server address and corresponding store path, then you can store video file or pictorial information in the NAS server. Select NAS storage as to same file to NAS disk. See Figure 3-34.

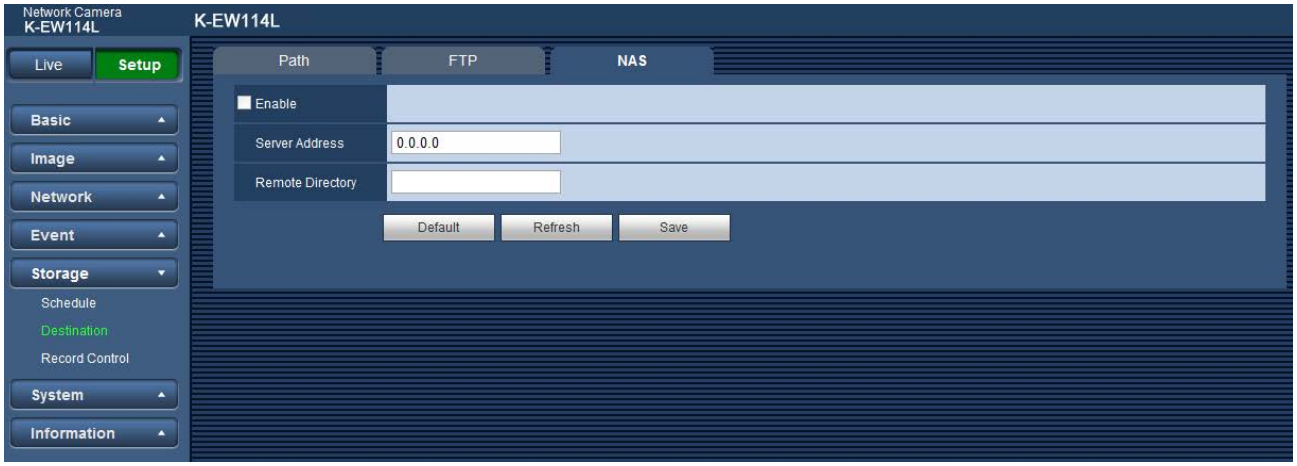

Figure 3-34

Parameter	Function
Server Address	Set IP address of NAS server.
Remote Directory	Set storage directory, videos and pictures can be stored in to corresponding server directory.

3.5.3 **Record Control**

The record control interface is shown as in Figure 3-35.

Figure 3-35

Please refer to the following sheet for detailed information.

Parameter	Function
Pack Duration	Here you can select file size. Default setup is 8 minutes.
Pre-event Record	Please input pre-event record value here. For example, system can record the four seconds video in the buffer. The record begins from the fifth second.
Disk Full	There are two options: stop recording or overwrite the previous files when HDD is full. ● Stop: Current working HDD is overwriting or current HDD is full, it will stop record. ● Overwrite: Current working HDD is full; it will overwrite the previous file.
Record Mode	There are three modes: Auto/Manual/Off.
Record Stream	There are two options: Stream(1) and Stream(2).

3.6 System

3.6.1 **Account (User mng.)**

Note:

- For the character in the following user name or the user group name, system max supports 15-digits. The valid string includes: character, number, and underline.

- The user amount is 18 and the group amount is 8 when the device is shipped out of the factory. The factory default setup includes two levels: user and admin. You can set the corresponding group and then set the rights for the respective user in the specified groups.
- User management adopts group/user modes. The user name and the group name shall be unique. One user shall be included in only one group.

3.6.1.1 User Name

In this interface you can enable anonymity login, add/remove user and modify user name. See Figure 3-36.

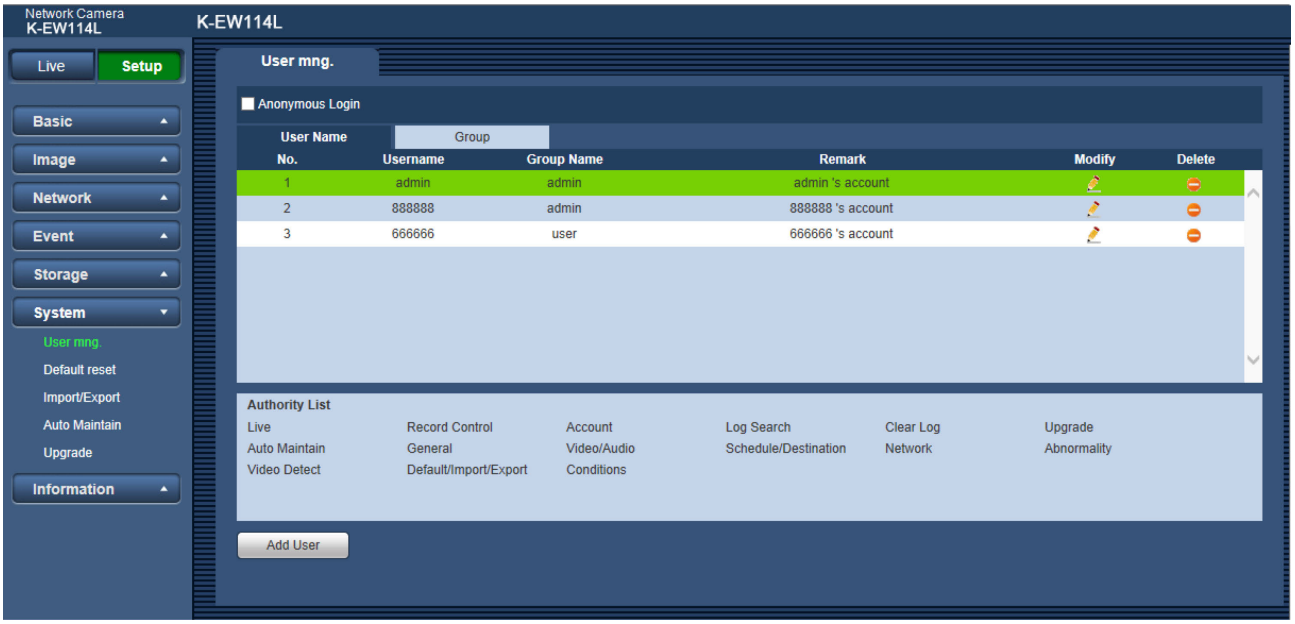

Figure 3-36

Enable anonymity login: Enable anonymity login, and input IP. No username or password is required, you can log in by anonymity (with limited rights). You can click logout to end your session.

Add user: It is to add a name to group and set the user rights. See Figure 3-37.

There are four default users: admin and hidden user “default”.

Hidden user “default” is for system interior use only and cannot be deleted. When there is no login user, hidden user “default” automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.

Here you can input the user name and password and then select one group for current user.

Please note the user rights shall not exceed the group right setup.

For convenient setup, please make sure the general user has the lower rights setup than the admin.

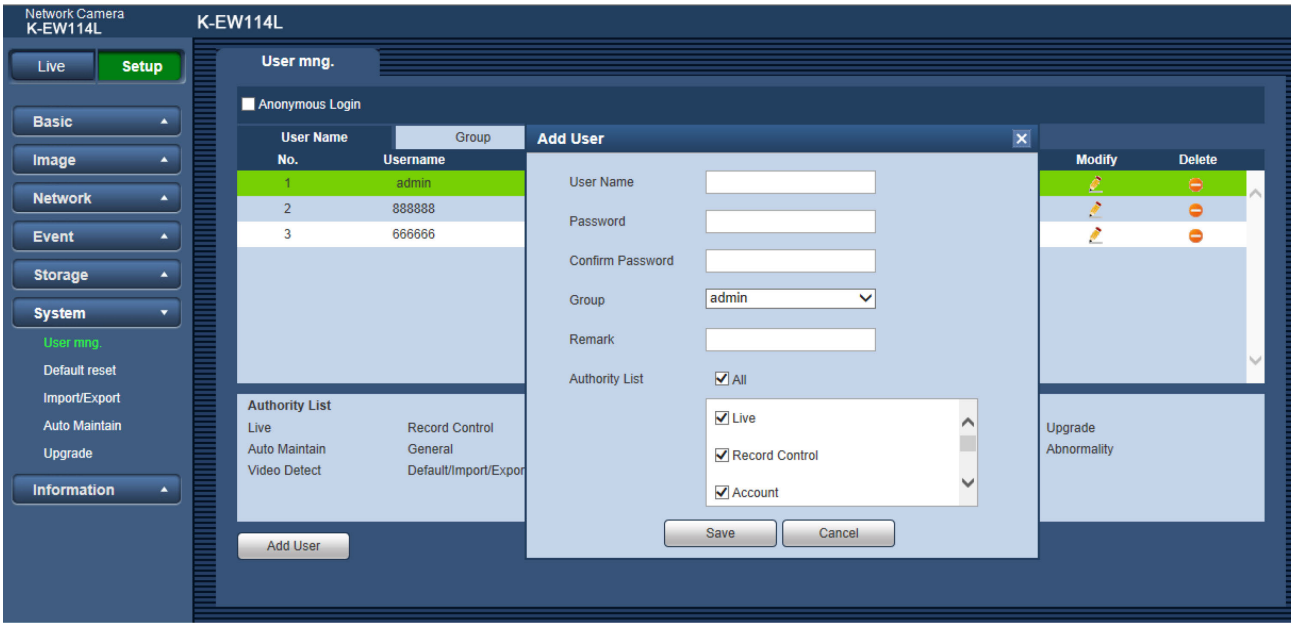

Figure 3-37

Modify user

It is to modify the user property, belonging group, password and rights. See Figure 3-38.

Modify password

It is to modify the user password. You need to input the old password and then input the new password twice to confirm the new setup. Please click the Save button to save.

Please note, the password ranges from 0-digit to 32-digit. It shall include the number and letter only. For the user who has the account rights, he can modify the password of other users.

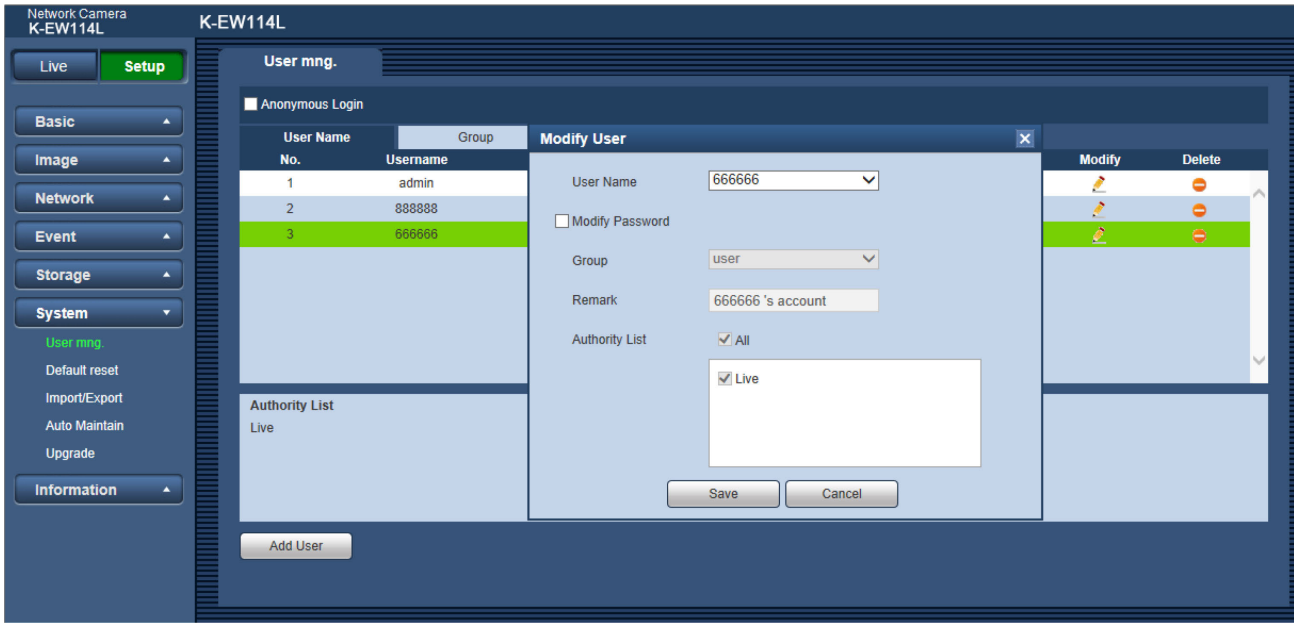

Figure 3-38

3.6.1.2 Group

The group management interface can add/remove group, modify group password and etc. The interface is shown as in Figure 3-39.

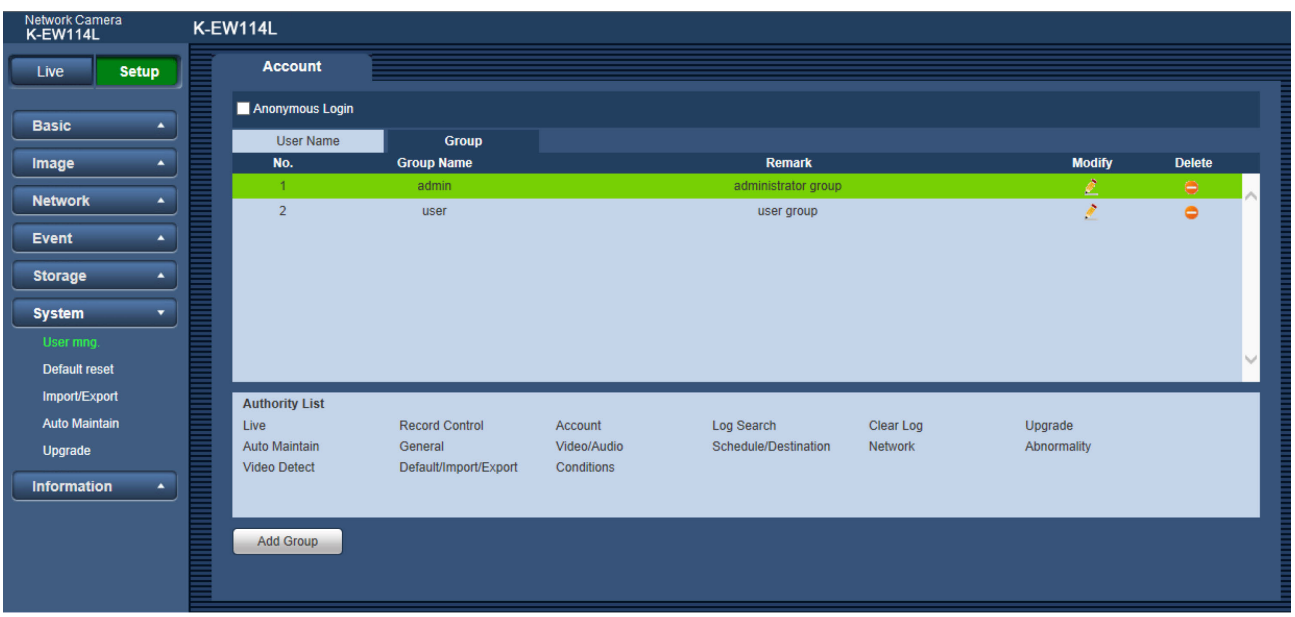

Figure 3-39

Add Group: It is to add group and set its corresponding rights. See Figure 3-40.

Please input the group name and then check the box to select the corresponding rights. It includes: preview, playback, record control and etc.

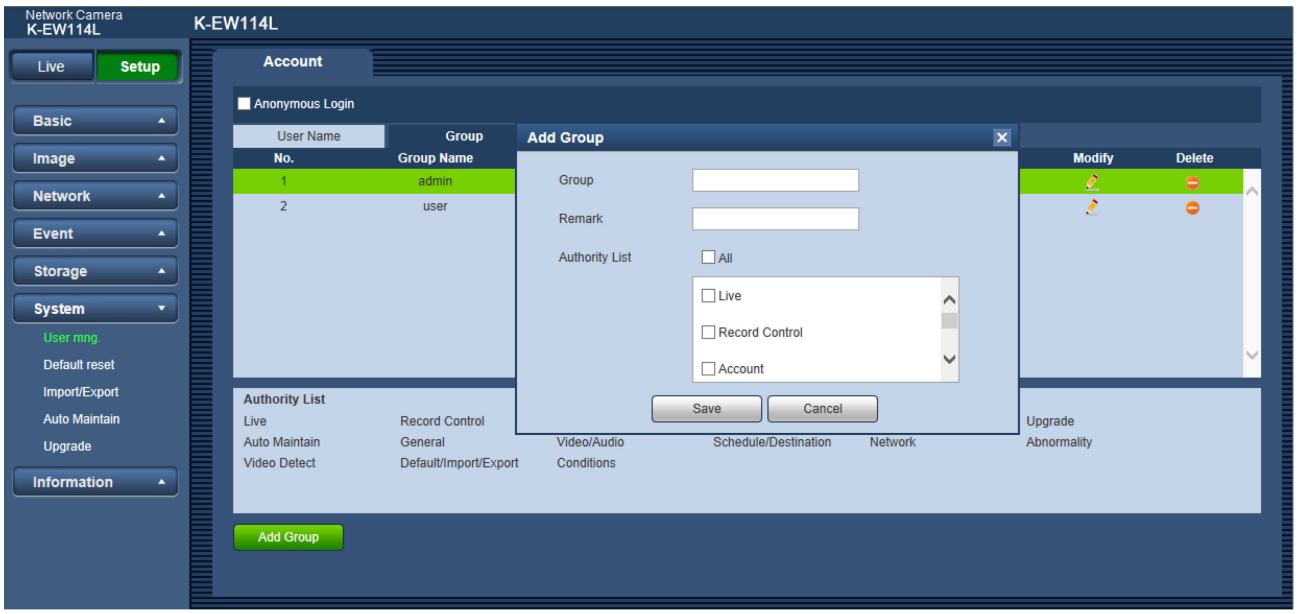

Figure 3-40

Modify group

Click the modify group button, you can see an interface is shown as in Figure 3-41.

Here you can modify group information such as remarks and rights.

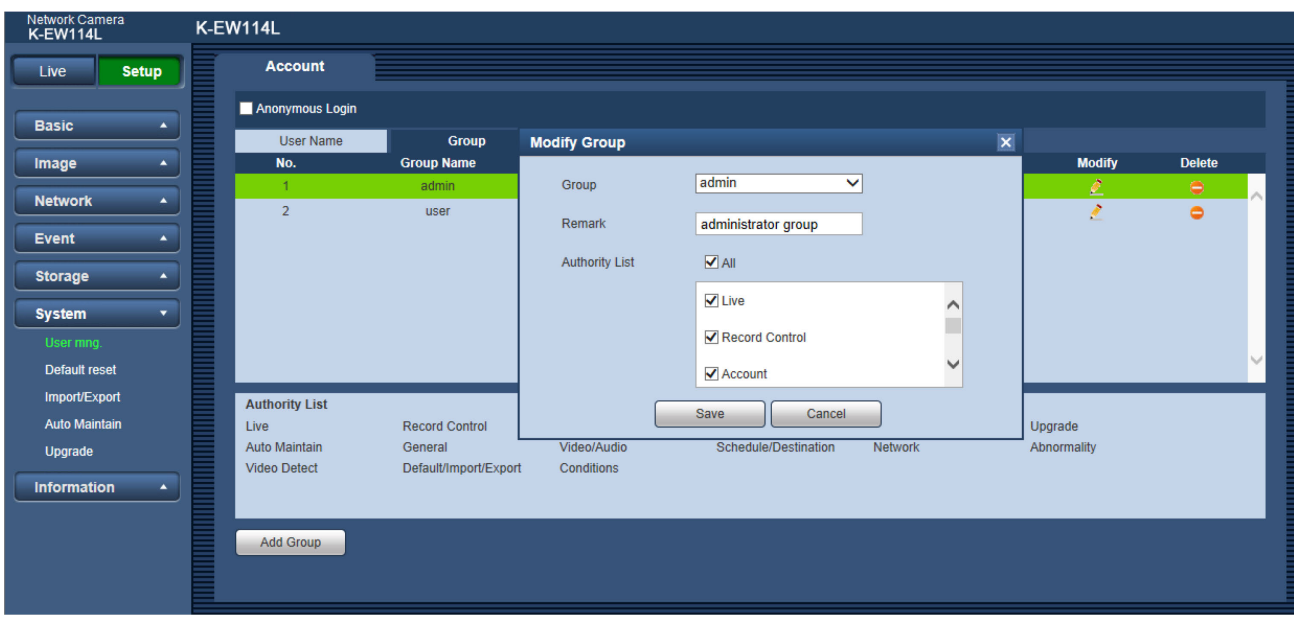

Figure 3-41

3.6.2 **Default reset**

The default reset interface is shown as in Figure 3-42.

Please note system cannot restore some information such as network IP address.

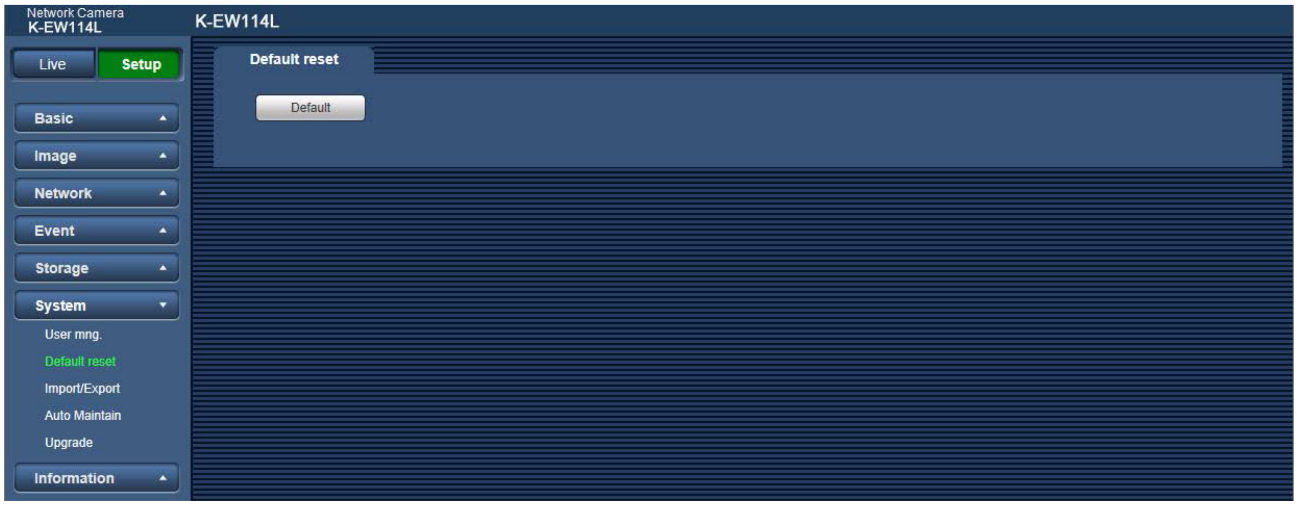

Figure 3-42

3.6.3 **Import/Export**

The interface is shown as in Figure 3-43.

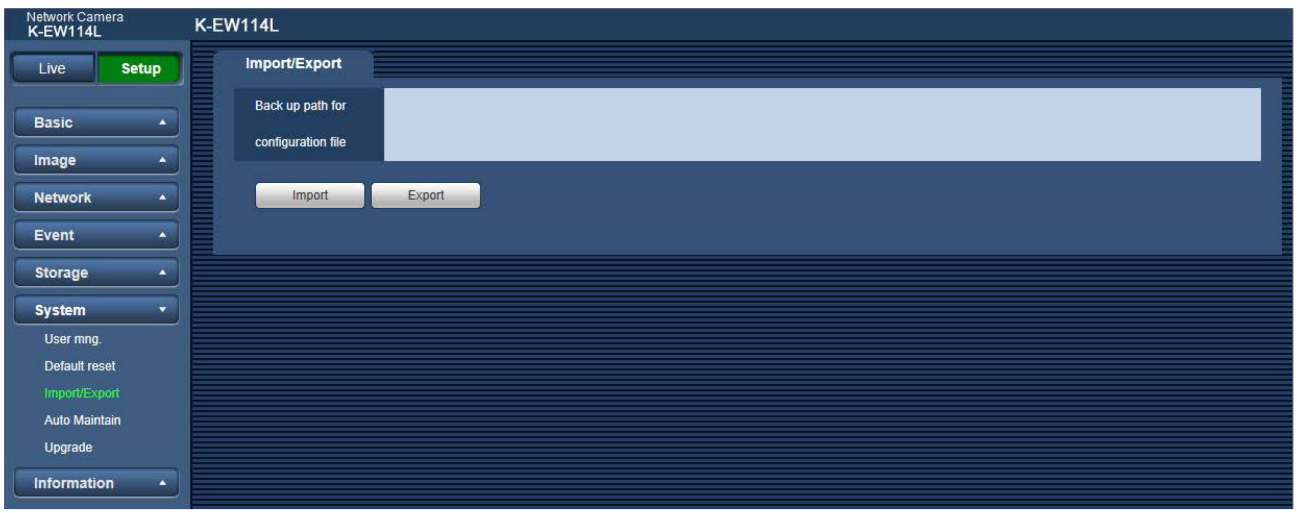

Figure 3-43

Please refer to the following sheet for detailed information.

Parameter	Function
Import	It is to import the local setup files to the system.

Parameter	Function
Export	It is to export the corresponding system setup to your local PC.

3.6.4 **Auto Maintenance**

The auto maintenance interface is shown as in Figure 3-44.

Here you can select auto reboot and auto delete old files interval from the dropdown list.

If you want to use the auto delete old files function, you need to set the file period.

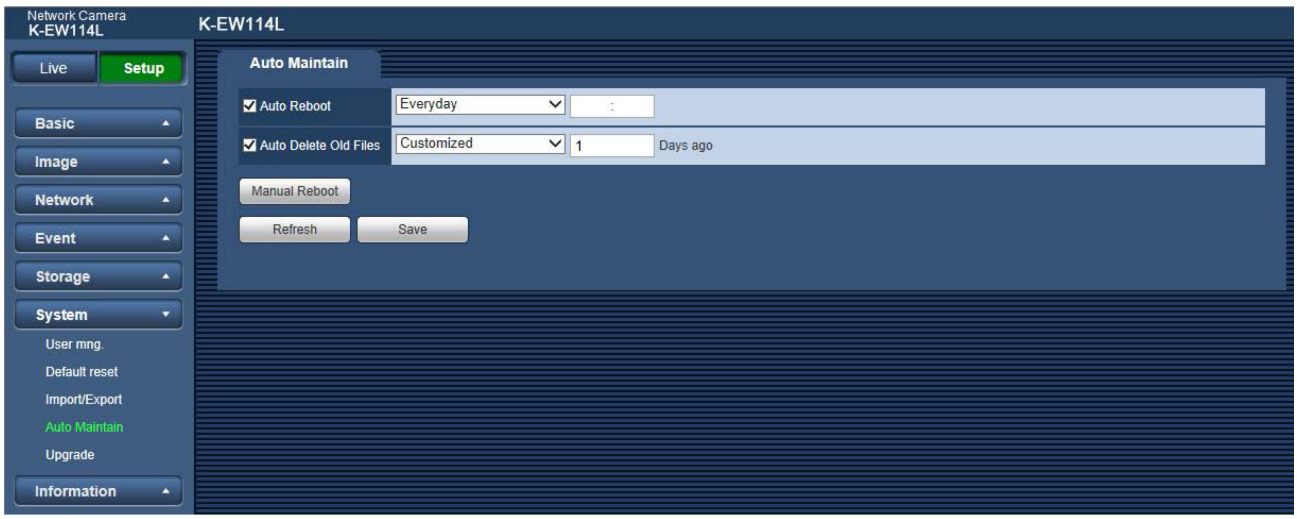

Figure 3-44

3.6.5 **Upgrade**

The upgrade interface is shown as in Figure 3-45.

Please select the upgrade file and then click the Upgrade button to begin firmware update.

Important

Improper upgrade program may result in device malfunction!

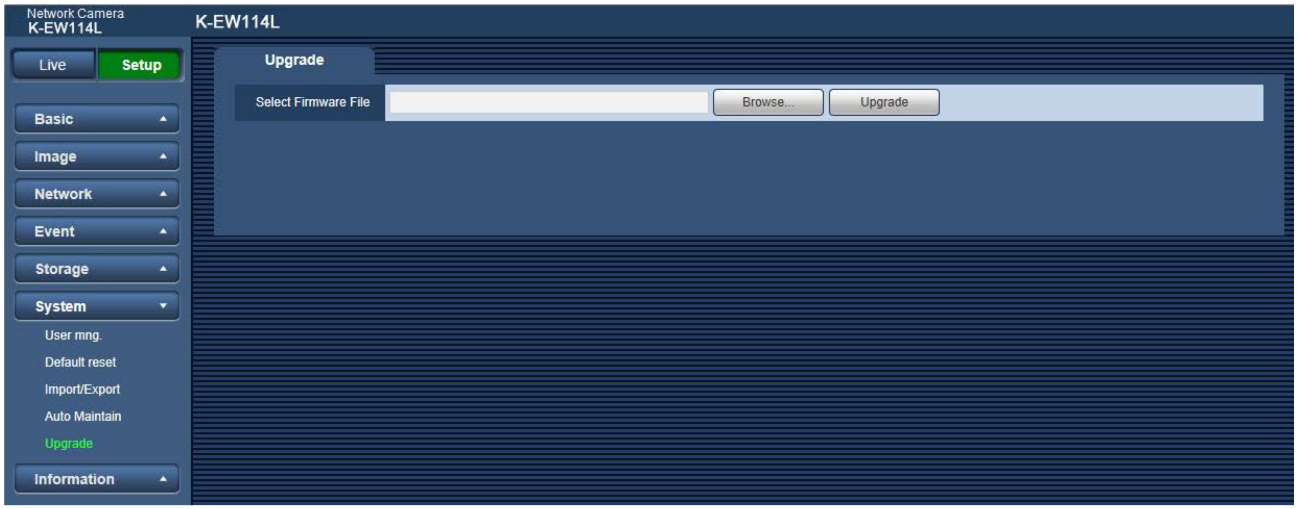

Figure 3-45

3.7 Information

3.7.1 Version

The version interface is shown as in Figure 3-46.

Here you can view system hardware features, software version, release date and etc. Please note the following information is for reference only.

Figure 3-46

3.7.2 Log

Here you can view system log. See Figure 3-47.

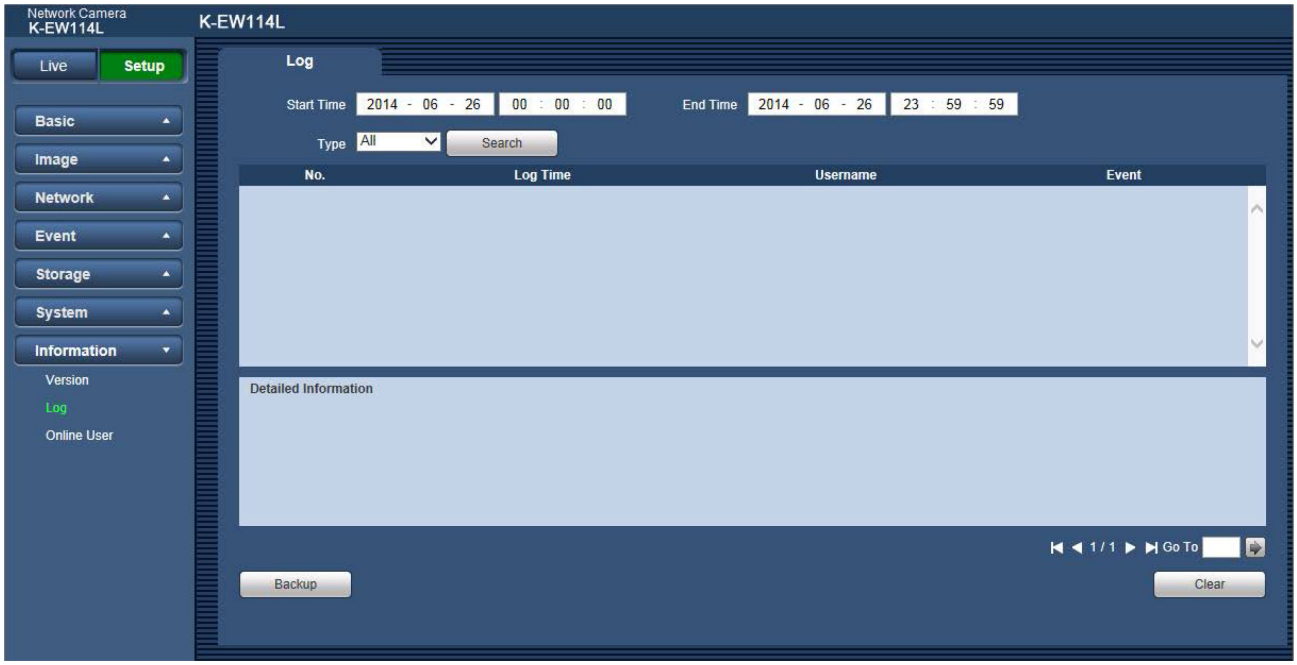

Figure 3-47

Please refer to the following sheet for log parameter information.

Parameter	Function
Type	Log types include: system operation, configuration operation, data operation, event operation, record operation, user management, log clear.
Start Time	Set the start time of the requested log.
End Time	Set the end time of the requested log.
Search	You can select log type from the drop down list and then click search button to view the list. You can click the stop button to terminate current search operation.
Detailed Information	You can select one item in the list to view the detailed information.
Clear	You can click this button to delete all displayed log files. Please note system does not support clear by type.
Backup	You can click this button to backup log files to current PC.

3.7.3 **Online User**

The online user interface is shown as in Figure 3-48.

Here you can view current online user, group name, IP address and login time.

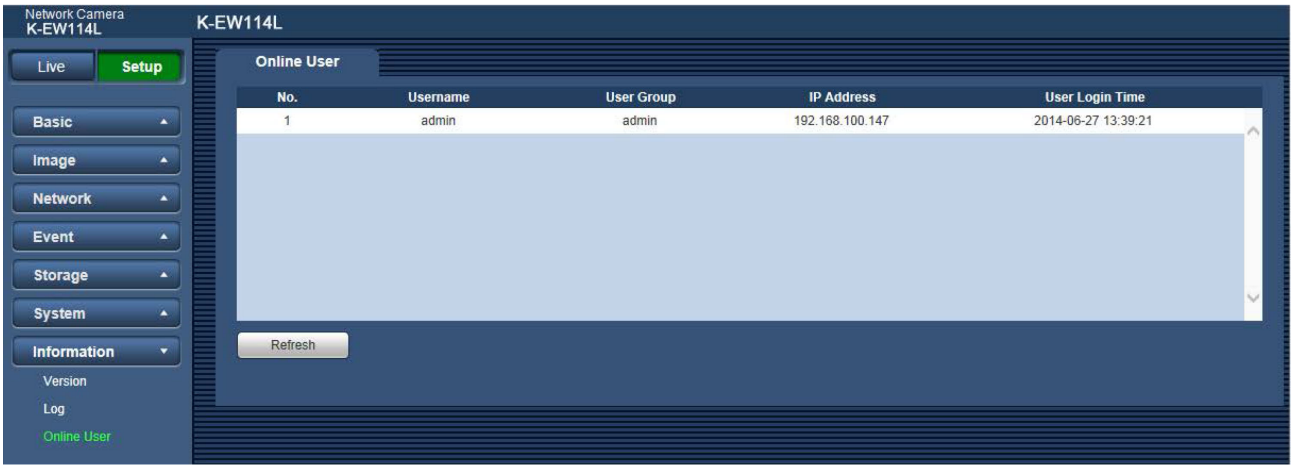

Figure 3-48

4 Alarm

Please note some series product does not support this function.

Click alarm function, you can see an interface is shown as in Figure 4-1.

Here you can set device alarm type and alarm sound setup.

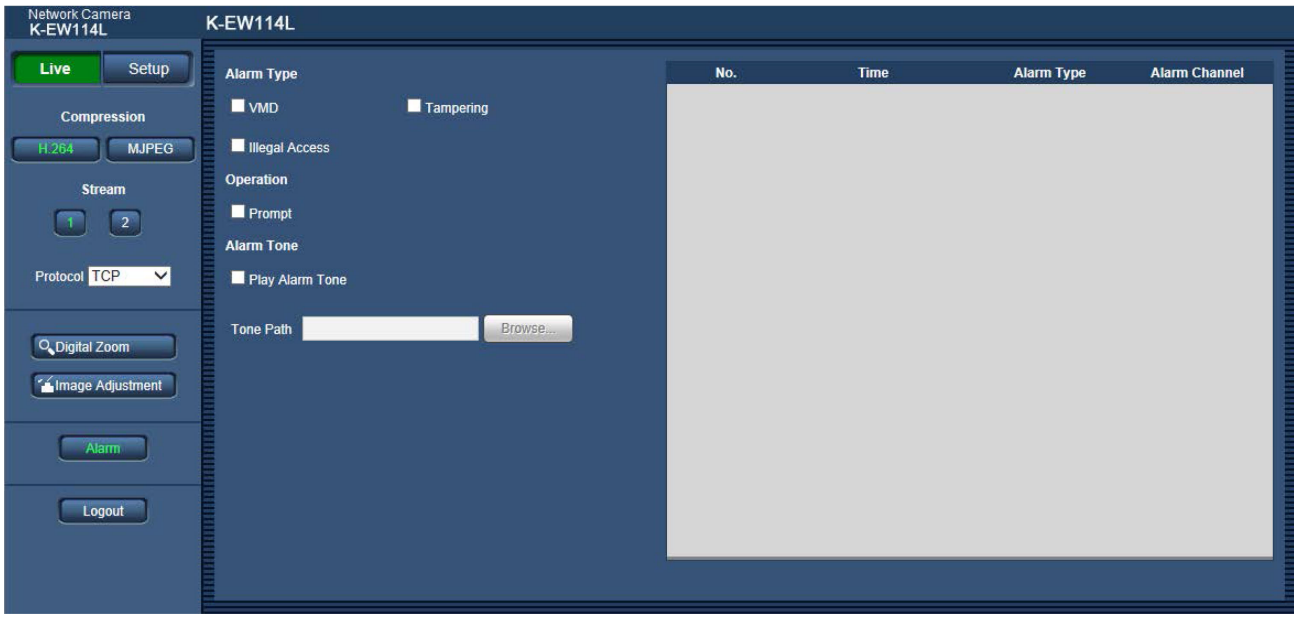

Figure 4-1

Please refer to the following sheet for detailed information.

Type	Parameter	Function
Alarm Type	VMD	System alarms when VMD alarm occurs,
	Tampering	System alarms when tampering alarm occurs.
	Illegal Access	System alarms when illegal access occurs,
Operation	Prompt	System automatically pops up alarm dialogue box.
Alarm Tone	Play Alarm Tone	When alarm occurs, system auto generates alarm audio. The audio supports customized setup.
	Tone Path	Here you can specify alarm sound file.

5 Log out

Click log out button, system goes back to log in interface.

See Figure 5-1.

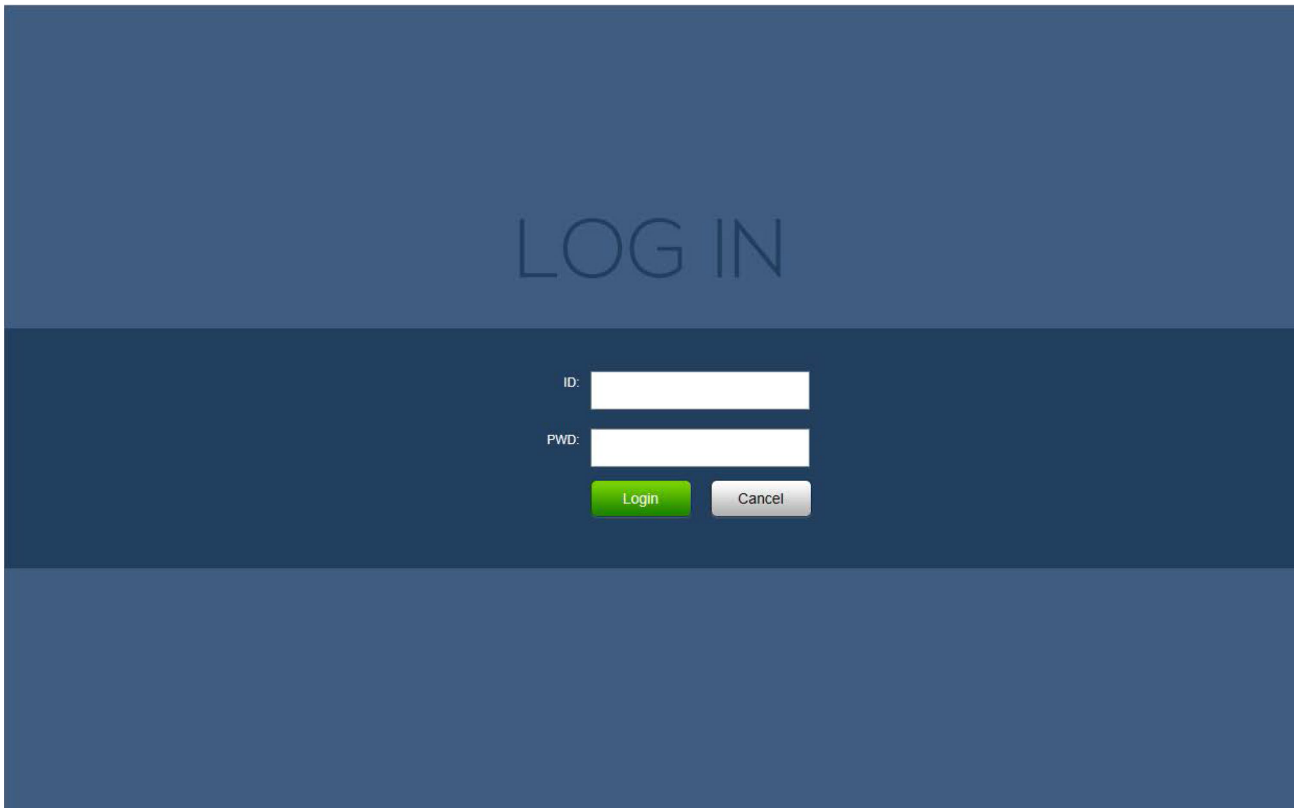

Figure 5-1

Note:

- **This manual is for reference only. Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks mentioned are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**