



# 20X/30X D/N 1080P 60FPS FULL HD FAST DOME IP CAMERA



PSD4624EX20 / PSD4624EX30

.....

## User Manual

## Summary

LILIN's PSD4624E Series are Full HD fast dome IP cameras that adopt the latest compression technologies to provide Quadruple Streaming of H.264 and MJPEG in different resolutions. The Quadruple Streaming technology allows transmitting digital video at various bitrates and frame rates to fit both high and low bandwidth network environment.

The built-in intelligent video analytics engine enables audio and motion detection for extra protection. Other useful features include two-way audio, SD card recording, smartphone live access, email snapshot, and continuously sending JPEG snapshots to an FTP server. Moreover, these features are highly compatible with other applications.

The PSD4624E Series support cutting-edge technologies such as video de-interlacing, built-in video analytics, and ONVIF compliance. With LILIN Navigator, this H.264 Full HD fast dome IP camera will provide the best integrated system solution in migrating to IP Video application.

## Key Features

- Capability of recording at 60 FPS
- Supports various encoding formats (H.264 and MJPEG)
- Multiple Streaming technology, supporting 4 concurrent streams
- Supports Android, iPad, and iPhone live monitoring
- Audio and motion detection for notifications via email or FTP
- IVA alarm notifications via email or FTP
- Two-way audio (audio models only)
- Network time protocol (NTP) supported
- DDNS and UPnP supported
- Supports LILIN HTTP API
- Supports PCM/G.711 audio streaming
- Supports ONVIF protocol
- Supports LILIN Navigator

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## Other References

### Smartphone

For smartphone live monitoring, please visit appendix for more details.

### LILIN Universal ActiveX Control

Sample codes and supporting document are included in the product CD and can be downloaded from our official website.

### LILIN HTTP API

For non-ONVIF integration, please see LILIN HTTP API document. We adopt HTTP API document for all LILIN IP cameras.

### Caution

- Do not drop or strike this equipment
- Do not install the equipment near any naked flames or heat sources
- Do not expose this unit to rain, moisture, smoke or dust environment
- Do not cover the opening of the cabinet with cloth and plastic or to install this unit in poor ventilated places. Allow 10cm between this unit and its surroundings
- Do not continue to operate the unit under abnormal conditions such as detection of smoke, strange smell or no display on screen while power is turned on
- Do not touch the power connection with wet hands
- Do not damage the power cord or leave it under pressure
- Do not operate this unit near magnet, speaker system, etc., to avoid unnecessary magnetic interference
- Connection cables should be grounded properly



# Table of Contents

Chapter 1 System Overview .....	6
Chapter 1-1 System Requirements .....	6
Chapter 1-2 Software Requirements .....	6
Chapter 2 Before Accessing IP PTZ Cameras.....	7
Chapter 2-1 Configuring IP Addresses Using the IPScan Utility .....	7
Chapter 2-2 Configuring IP Addresses through HTML Connection.....	8
Chapter 2-3 Internet Browser Setting & Software Component Required .....	8
Chapter 2-4 Login.....	8
Chapter 3 LILIN IP PTZ Camera Operations.....	9
Chapter 3-1 IP PTZ Operational HTML Page .....	9
Chapter 3-2 PTZ Control Panel.....	9
Chapter 3-2-1 Vertical and Horizontal Direction Controls.....	11
Chapter 3-2-2 ePTZ .....	11
Chapter 3-2-3 Control Panel .....	12
Chapter 4 Basic Settings.....	14
Chapter 4-1 System.....	14
Chapter 4-1-1 General [Path: Basic>> System>> General] .....	14
Chapter 4-1-2 User [Path: Basic>> System>> User] .....	15
Chapter 4-1-3 Timer [Path: Basic>> System>> Timer] .....	16
Chapter 4-2 Video/Audio .....	16
Chapter 4-2-1 Video General Setting [Path: Basic>> Video/Audio>> General] .....	16
Chapter 4-2-2 Video Quality Tuner [Path: Basic>> Video/Audio>> Quality Tuner] .....	18
Chapter 4-3 Network .....	21
Chapter 4-3-1 General [Path: Basic>> Network>> General] .....	21
Chapter 4-3-2 General IPv6 [Path: Basic>> Network>> IPv6] .....	22
Chapter 4-3-3 HTTP/RTSP Service [Path: Basic>> Network>> HTTP/RTSP Service].....	22
Chapter 4-3-4 DDNS [Path: Basic>> Network>> DDNS] .....	23
Chapter 4-3-5 SNMP [Path: Basic>> Network>> SNMP] .....	24

Chapter 4-4 Maintenance .....	24
Chapter 4-5 PTZ.....	25
Chapter 4-5-1 Lens Advance Setting [Path: Basic>> PTZ>> Advance>> Lens Advance].....	25
Chapter 4-5-2 Auto Scan Setup [Path: Basic>> PTZ>> Advance>> Auto Scan Setup] .....	25
Chapter 4-5-3 Tour Setup [Path: Basic>> PTZ>> Advance >> Tour Table] .....	26
Chapter 4-5-4 Patrol Setup [Path: Basic>> PTZ>> Advance>> Patrol Setup] .....	27
Chapter 4-5-5 PTZ Schedule Settings [Path: Basic>> PTZ>> Schedule].....	27
Chapter 5 Advanced Mode .....	27
Chapter 5-1 System.....	27
Chapter 5-1-1 System Log [Path: Advance>> System>> System Log].....	28
Chapter 5-2 Video/Audio Setting.....	28
Chapter 5-2-1 Privacy Mask [Path: Advance>> Video/Audio>> SPD Privacy Mask solution] .....	28
Chapter 5-2-2 Audio Adjust [Path: Video/Audio>> Audio Adjust].....	29
Chapter 5-3 Network .....	30
Chapter 5-3-1 Multicast [Path: Advance>> Network>> Multicast].....	30
Chapter 5-3-2 IP Address Filtering [Path: Advance>> Network>> IP Address Filtering].....	31
Chapter 5-3-3 UPnP [Path: Advance>> Network>> UPnP] .....	31
Chapter 5-3-4 Bonjour [Path: Advance>> Network>> Bonjour] .....	31
Chapter 5-3-5 SDDP/Heratbeat [Path: Advance>> Network>> SDDP/Heratbeat] .....	32
Chapter 5-4 Event .....	32
Chapter 5-4-1 Motion Detection [Path: Advance>> Even>> Motion Detection].....	33
Chapter 5-4-2 Audio Detection [Path: Advance>> Event >> Audio Detection] .....	34
Chapter 5-4-3 Alarm Detection [Path: Advance>> Event>> Alarm Detection].....	34
Chapter 5-4-4 Network Detection [Path: Advance>> Event>> Network Detection] .....	35
Chapter 5-5 Notification .....	35
Chapter 5-5-1 FTP Service [Path: Advance>> Notification>> FTP Service] .....	35
Chapter 5-5-2 SMTP Service [Path: Advance>> Notification>> SMTP Service] .....	36
Chapter 5-5-3 HTTP POST Service [Path: Advance>> Notification>> HTTP POST Service] .....	36
Chapter 5-5-4 SD Card Service [Path: Advance>> Notification>> SD Card Service].....	37

Chapter 5-5-5 SD Card Backup File [Path: Advance>> Notification>> SD Card Backup File] .....	37
Chapter 5-6 PTZ.....	38
Chapter 5-6-1 RS-485 [Path: Advance>> PTZ>> RS-485].....	38
Appendix .....	39

# Chapter 1 System Overview

## Chapter 1-1 System Requirements

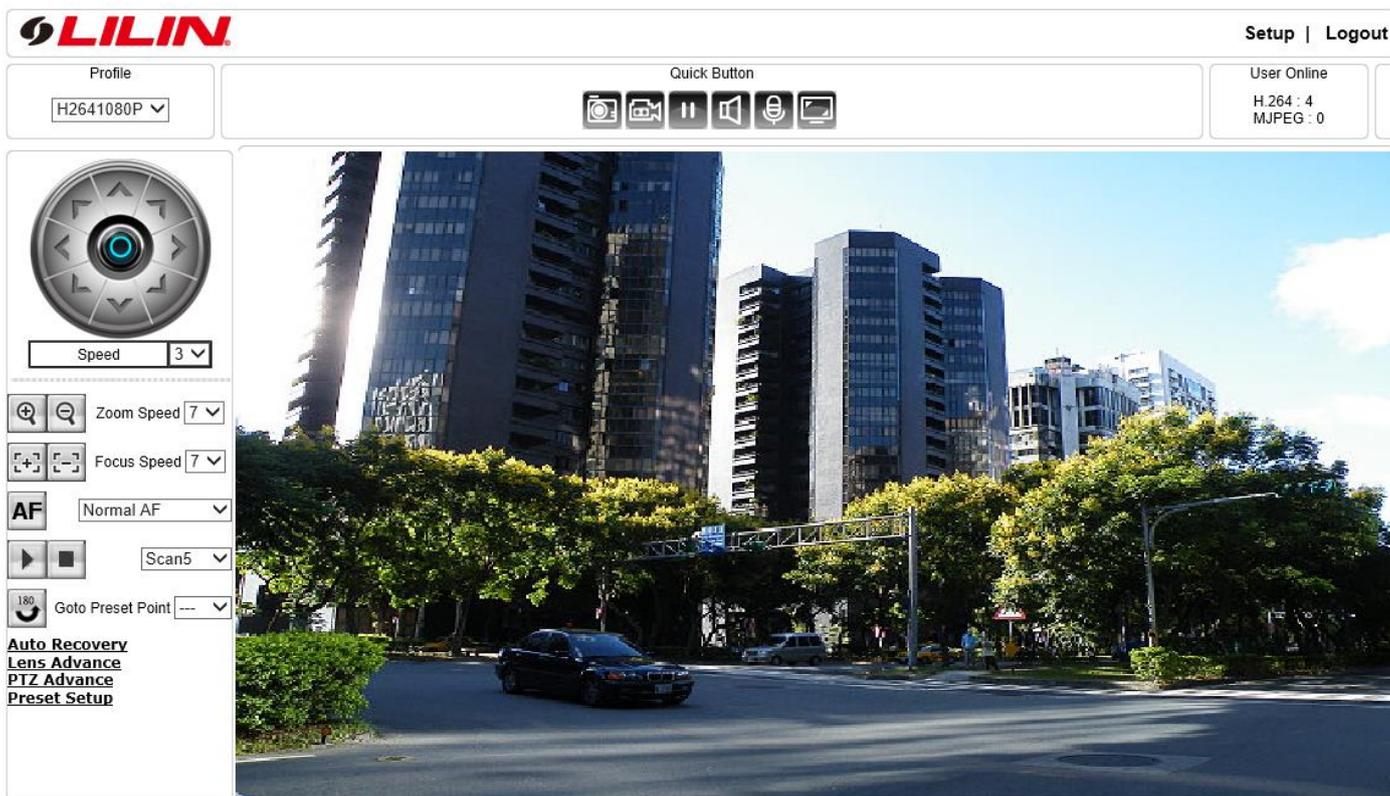
LILIN's IP PTZ Cameras H.264 video compression technology can provide high compression rate and superior video quality. However, video performance highly depends on both CPU computational power of a client PC and the network bandwidth for video streaming. The following sections specify the software requirements for using the H.264 LILIN IP PTZ Cameras.

## Chapter 1-2 Software Requirements

Merit LILIN Universal ActiveX software components or QuickTime are required for a web browser to display MJPEG or H.264 video. When you first log in to our IP camera, you may see a prompt box as below:



Click Install and follow the onscreen instructions to install necessary components.



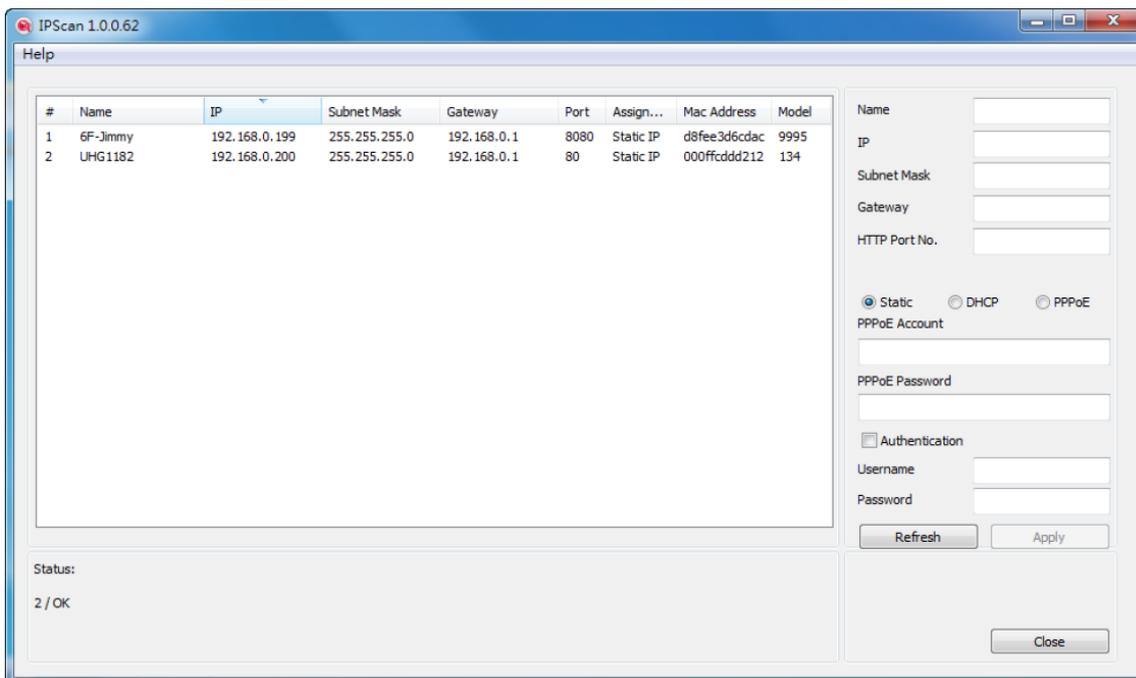
## Chapter 2 Before Accessing IP PTZ Cameras

Before accessing to the IP PTZ camera, make sure that the camera's RJ-45 network cable, audio cable, and IP PTZ camera's power cable are properly installed. For IP address setup, please consult your network administrator for available IP addresses. The default IP address of IP camera is 192.168.0.200. User can also use the default IP address to verify IP camera's network connection.

### Chapter 2-1 Configuring IP Addresses Using the IPScan Utility

To configure the IP address of your cameras, download IPScan from our official website: <http://www.meritlilin.com/webe/html/download>. Or, you can execute the IPScan installer from the installation CD directly. To change the IP address, subnet mask, gateway, or HTTP port of your cameras, follow the steps below:

- Run the IPScan utility.
- Click **Refresh**. All available devices will be listed on the screen.
- Select the device item from the device list.
- To edit or modify IP address, subnet mask, gateway, or HTTP port, use the box.
- Click **Apply** for the changes to take effect.
- Click **Refresh** again to verify the changed settings.



**Note: Make sure your IPScan is version 1.0.0.52 or above.**

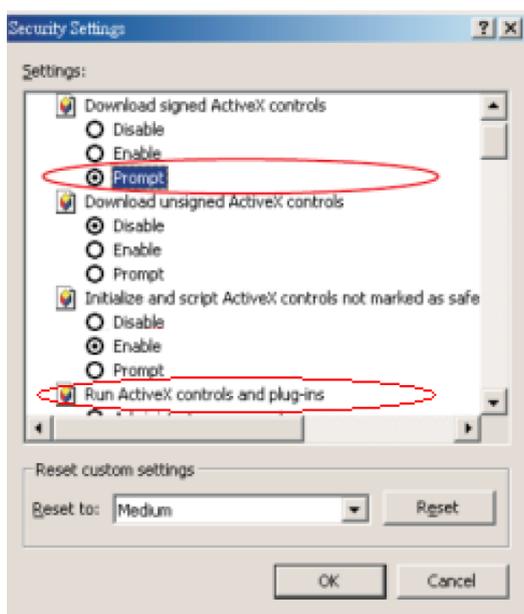
## Chapter 2-2 Configuring IP Addresses through HTML Connection

To change the IP address using the HTML protocol, you need to enter the default IP address, 192.168.0.200, in your Internet browser and follow the steps below:

- Log in to your LILIN IP camera using the default username **admin** and default password **pass**.
- Click **Setup**→**Network** to edit or modify IP address, subnet mask, gateway, or HTTP port.
- Click **Submit** for the changes to take effect.

## Chapter 2-3 Internet Browser Setting & Software Component Required

Make sure your Internet browser allows signed ActiveX plug-in to run on your PC. Set **Download signed ActiveX controls** to **Prompt** and enable **Run ActiveX controls and plug-ins**. You can do this in **Internet Explorer**→**Tools**→**Internet Options**→**Security**→**Custom Settings**.



Once completed, you can access the IP PTZ camera's live video by entering the default IP address into your web browser. A security warning dialog box will appear. Click **OK** to download the ActiveX directly from the IP PTZ camera.

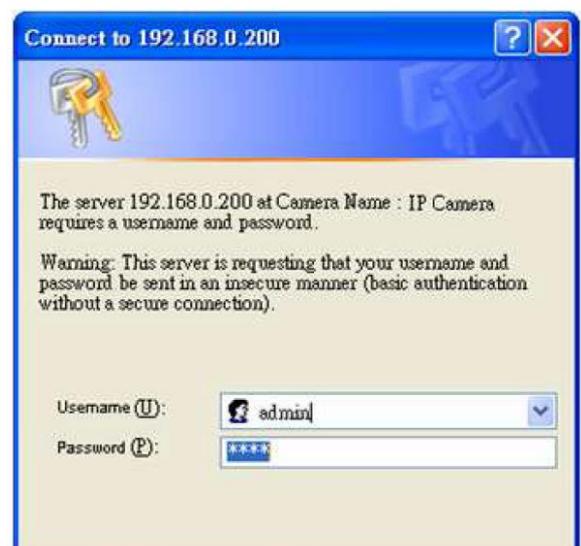
## Chapter 2-4 Login

You can log in to the camera as administrator or guest.

The default usernames and passwords for administrator are:

	Administrator
username	admin
Password	pass

Then press **Submit** to log in.



## Chapter 3 LILIN IP PTZ Camera Operations

When logged in as an administrator, two main features are available: 1) camera operations and 2) configurations.

### Chapter 3-1 IP PTZ Operational HTML Page



1. Quick buttons—IP camera control panel
2. ActiveX display screen—Display RTSP H.264 or MJPEG network video
3. Profile switching menu—Switching from one profile to another
4. Setup menu—IP camera setup menu
5. PTZ control panel

### Chapter 3-2 PTZ Control Panel

	Zoom In		Zoom Out	Zoom Speed <input type="text" value="5"/>	Zoom Speed
	Focus Far		Focus Near	Focus Speed <input type="text" value="0"/>	Focus Speed
	Auto Focus			Normal AF <input type="text"/>	Focus Mode
	Auto Pan Start		Auto Pan Stop	Scan5 <input type="text"/>	Auto Pan Mode
	Flip 180			Goto Preset Point <input type="text" value="---"/>	Go to preset position

Auto Recovery

If the IP PTZ camera idles for a period of time, the selected function will be activated automatically.

Lens Setup

Lens Function Setup

## PTZ Setup

### Preset Setup

**Auto Recovery**

Home Position  ▾

Preset  ▾

Self Return Time  ▾

Min  ▾

Sec.  ▾

Self Return Mode  ▾

▾

**Lens Setup**

**PTZ Setup**

**Preset Setup**

## PTZ Function Setup

### Preset Position Setup

#### Auto Recovery drop-down options

- Home Position: Specify a home position for one of the presets.
- Self Return Time: If the IP PTZ camera idles after the chosen time period, the selected function will be activated automatically.
- Self Return Mode: Return to home position in modes such as home position, auto scan mode, tour mode, or patrol mode. Users are able to set an operation mode to ensure all-day monitoring. In the **Return Mode**, if the IP Fast Dome Camera idles for a period of time, the selected function will be activated automatically. The **Return Mode** allows constant and accurate monitoring to avoid the Dome Camera from idling or missing events.

#### Auto Recovery

#### Lens Setup

Focus Sensitivity  ▾

Digital Zoom  ▾

Preset Position  ▾

Pan-Tilt Movement  ▾

**PTZ Setup**

**Preset Setup**

#### Lens Setup drop-down options

- Focus sensitivity: Auto focus sensitivity.
- Digital Zoom: Enable digital zoom after the optical zoom is exhausted.
- Preset Position: Set the camera to **Auto-Focus (AF)** or **Manual-Focus (MF)** when the camera performs preset operations.
- Pan-Tilt Movement: Set the camera to **Auto-Focus (AF)** or **Manual-Focus (MF)** when the camera performs Pan-Tilt movements.

#### Auto Recovery

#### Lens Setup

#### PTZ Setup

Turbo Speed  ▾

Vertical Operate Angle  ▾

Vertical Flip Function  ▾

Vertical Down Limit Flip  ▾

**Preset Setup**

#### PTZ setup drop-down options

- Turbo Speed: When this function is turned on, the speed of preset position operations will be boosted (360 degrees per second).
- Vertical Operate Angle: Select the camera vertical angle to be 90 or 180 degrees.
- Flip Function: Turn on or off the flip function.
- Vertical Down limit Flip: Turn horizontal flip on or off when running vertically to 90 degrees.

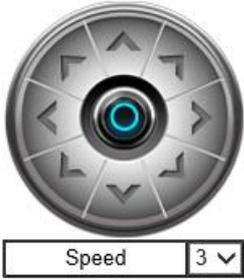
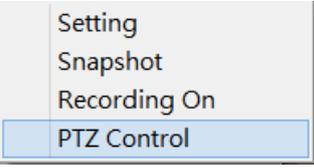
#### Notice:

1. When the vertical operating angle is set to 180 degree, the PTZ horizontal flip function will be closed automatically.
2. When the vertical operating angle is set to 90 degrees, the PTZ horizontal flip function will restore to the previous settings.

<p><b>Auto Recovery</b>  <b>Lens Setup</b>  <b>PTZ Setup</b>  <b>Preset Setup</b></p> <p>Preset Point <input type="text" value="1"/> ▾</p> <p>Speed <input type="text" value="255"/> ▾</p> <p>Dwell Time <input type="text" value="5"/> ▾</p> <p><input type="button" value="Save"/></p> <p>Clear Preset Point <input type="text" value="--"/> ▾</p> <p><input type="button" value="Clean"/></p>	<p><b>Preset Setup drop-down options</b></p> <p>A total of 256 preset positions can be programmed for the IP PTZ camera. Please refer to the instructions below to configure preset positions. To set up a preset point, first move the cursor to the PTZ control panel. Then move to the desired position by using the pan, tilt and zoom buttons. Next, assign a number for the current position from the drop-down <b>Preset Point</b> list. Then assign a <b>Dwell Time</b> and <b>Speed</b> for the current position from the drop-down menus. Click <b>Save</b> for the changes to take effect.</p>
--	---

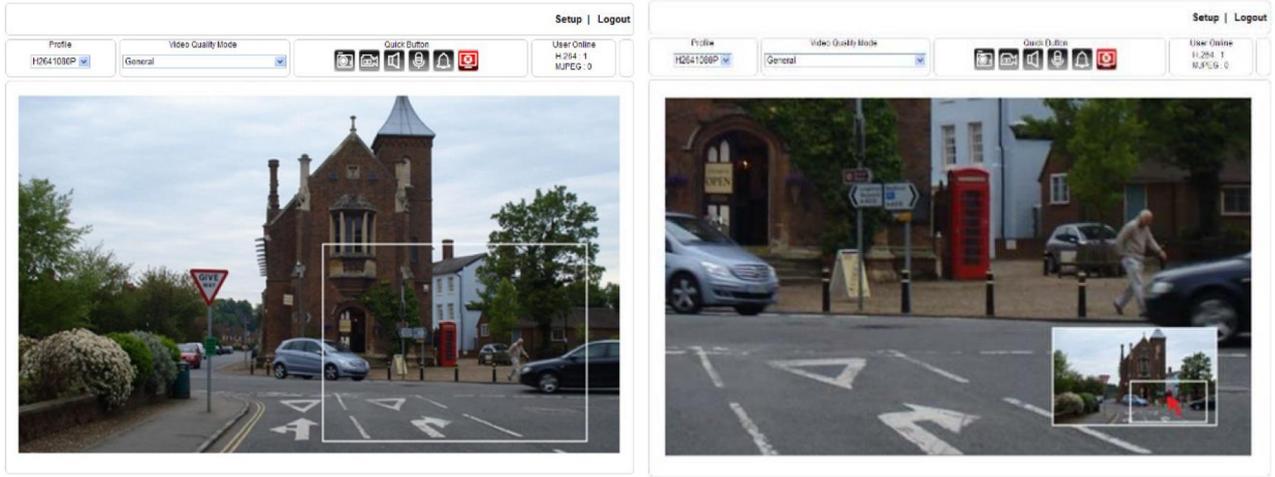
**Chapter 3-2-1 Vertical and Horizontal Direction Controls**

Two modes are available for moving the camera vertically and horizontally. The details are described below:

	<p><b>3-2-1-1 Directional buttons control Pan-Tilt</b></p> <p>As shown in the image to the left, eight arrow buttons and speed options are provided to move around the camera. Select the moving speed from the drop-down menu, and press any arrow to move the fast dome network camera. The greater the <b>Speed</b> number is, the quicker the camera will move.</p>
	<p><b>3-2-1-2 Mouse control PTZ</b></p> <p>As shown in the image to the left, a pop-up menu will appear when you right-click on the screen. Choose <b>PTZ Control</b> to enter the mouse control mode. Click and hold the mouse and move around the screen to control the camera according to your mouse movement. The moving speed depends on the distance between the center of the screen to the cursor: When the distance is short, the camera moves slowly; when the distance is long, the camera moves rapidly.</p>

**Chapter 3-2-2 ePTZ**

The ActiveX control provides an ePTZ (electronic Pan, Tilt, and Zoom) feature. To perform an ePTZ operation, hold and drag your mouse across the screen.



Move your cursor to the PIP window and drag inside it to perform ePan and eTilt actions. The scroll wheel can be used to zoom in and zoom out.

### Chapter 3-2-3 Control Panel

The quick control panel buttons are described below:

	Snapshot: Take a snapshot of the video.
	Recording to the PC.
	Pause recording to the PC.
	Audio on: Turn audio on (audio models only).
	Speak on: Turn on to speak to the remote site (audio models only).
	Switch screen

#### Chapter 3-2-3-1 Two-way Audio (for audio model only)

 To activate two-way audio, please click the microphone icon to speak to the remote site.

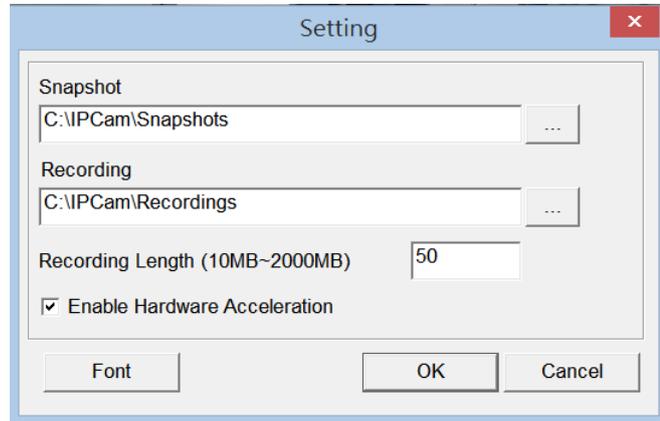
 To stop speaking to the remote site, please click the microphone icon again.

 To listen to the remote site, please click the speaker icon.

 To stop listening to the remote site, please click the speaker icon again.

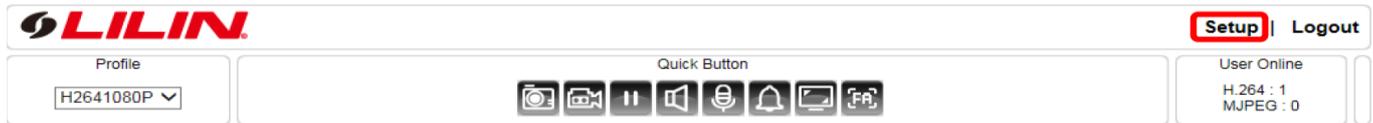
### Chapter 3-2-3-2 Record in a Local PC

To record videos to a local PC, first right-click on the LILIN Universal ActiveX control. Choose **Setting** to specify the recording paths and recording sizes, and choose **Recording On** to start recording. Please make sure that the ePTZ or ROI feature is disabled before trying to open the setting menu.



## Chapter 4 Basic Settings

As an administrator, you can configure the IP camera via a standard HTML webpage. Click **Setup** at the top-right corner of the screen after you log in to the camera.



### Chapter 4-1 System



#### Chapter 4-1-1 General [Path: Basic>> System>> General]

Under **System Settings**→**General**, you will see server system information, such as MAC address, firmware version, user settings, and system time settings. To modify these options, follow the below instructions.

Basic >> System >> General

MAC Address	00:0f:fc:85:85:88
Firmware Version	0.0.1
Firmware Build Date	Dec 3 2015 13:20:14
Pan Firmware Version	0.0.3
Tilt Firmware Version	0.0.3
Camera Firmware Version	0.2
OS Version	Linux 3.8 (Wed Dec 2 17:12:06 CST 2015)
System Reboot Time	2015/12/03 13:23:29
Device Name	<input type="text" value="PSD4624EX30"/>
Language	<input type="text" value="English"/>
Display Device Name	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Display Time Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Display PTZ OSD	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Display AutoPan OSD	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
ActiveX OSD Display	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
ActiveX OSD Name	<input type="text" value="PSD4624EX30"/>
Web Title Name	<input type="text" value="Merit LILIN H.264 PSD4624EX30"/>

- MAC Address: Network MAC address of the IP PTZ camera.
- Firmware Version: You are allowed to upgrade IP PTZ camera's firmware remotely.
- Pan Firmware/Tilt Firmware/Camera Firmware Version: Check if the firmware is up-to-date.
- OS version: Check if the device is up-to-date.

- System Reboot Time: The last time your system was rebooted
- Device Name: The device name can be found using the IPScan utility, which allows you to identify IP cameras. To change the device name, enter a new name for the IP camera and click **Submit**.
- Display Device Name: Enable/disable to display/hide IP PTZ camera device name.
- Display Timer: Enable/disable to display/hide camera time on the OSD.
- Display PTZ OSD: Enable/disable to display/hide IP PTZ currently angle information on the OSD.
- Display Auto Pan OSD: Enable/disable to display/hide IP PTZ Auto-Pan or Self-Run running or not on the OSD.
- ActiveX OSD Display: Enable/disable to display/hide the ActiveX OSD Name.
- ActiveX OSD Name: The name you enter here will be displayed on the top-right corner of the ActiveX screen.
- Web Title Name: Enter the name to be displayed on the web browser.

#### Chapter 4-1-2 User [Path: Basic>> System>> User]

Our camera supports up to 10 user accounts. Each account can be individually configured for access rights. To add/edit a user, click **Add/Edit User**. To access an IP camera without authentication, switch the **Bypass Logon** option to **On**. Enable **IPScan Bypass Logon** to log in the camera through IPScan without authentication.

Basic >> System >> User

Bypass Logon  On  Off  
 IPScan Bypass Logon  On  Off

User

To add a user, press **Add User**, and you will see the following screen:

Account   
 New Password   
 Confirm Password   
 User Group  Administrator ,  Operator ,  Viewer  
 Administrator   
 Panel Control   
 SPD PTZ   
 Streaming 1 (H2641080P)   
 Streaming 2 (JPEG480P)   
 Streaming 3 (H264480P)   
 Streaming 4 (JPEGCIF)

Enter the account name and password for the new account, and then check to assign the access rights for this account.

To edit account information, click **Edit User**. To delete a user, click **Remove User**. Click **Submit** to update the settings.

### Chapter 4-1-3 Timer [Path: Basic>> System>> Timer]

You can change the time of your camera through a HTML web page. Simply select the date and time in the drop-down menus, and click **Submit** to apply. You may also set the daylight saving time in this page.

Basic >> System >> Timer

Server Time	Thu, 03 Dec 2015 15:56:30 GMT+0800
Synchronize with NTP	<input checked="" type="radio"/> Every Hour <input type="radio"/> Off
Time Server	time.stdtime.gov.tw ▼
Time Zone	(GMT +08:00) Taipei ▼
Time	2015 ▼ / 12 ▼ / 3 ▼ 15 ▼ : 56 ▼ : 30 ▼ <input type="button" value="Synchronize with PC"/>
Daylight Saving Time	<input type="radio"/> On <input checked="" type="radio"/> Off
Start Date	1 ▼ / 1 ▼ / 0 ▼ ( Month/Date/Hour )
End Date	12 ▼ / 31 ▼ / 23 ▼ ( Month/Date/Hour )

#### Synchronize with an NTP server

To synchronize with an NTP server, change **Synchronize with NTP** to **Every Hour**. The camera will synchronize its system time with a time server every hour.

**Note: This function requires Internet connection.**

## Chapter 4-2 Video/Audio

System

Video / Audio

Network

Maintenance

PTZ

### Chapter 4-2-1 Video General Setting [Path: Basic>> Video/Audio>> General]

To transmit video over a low bandwidth network such as the Internet, set the bit rate close to the actual upload bandwidth. The camera will encode frames based on the bit rate setting.

Profile : Profile 1 ▾  
TV System :  NTSC  PAL Output On ▾

**H.264 :1920 x 1080**

Profile Name : H2641080P  
Output Frame Rate : 15 ▾  
GOP (Group of Pictures) : 15 ▾  
VBR/CBR Mode : CBR ▾  
Bit Rate : 3 Mbps ▾  
Alarm Weighted Mode :  Enable  Disable  
RTSPURL : rtsp://192.168.3.153/rtspH2641080p

**JPEG :720 x 480**

Profile Name : JPEG480P  
Output Frame Rate : 15 ▾  
Image Quality : 60 ▾  
Alarm Weighted Mode :  Enable  Disable  
RTSPURL : rtsp://192.168.3.153/rtspjpeg480p

**H.264 :720 x 480**

Profile Name : H264480P  
Output Frame Rate : 25 ▾  
GOP (Group of Pictures) : 25 ▾  
VBR/CBR Mode : CBR ▾  
Bit Rate : 1 Mbps ▾  
Alarm Weighted Mode :  Enable  Disable  
RTSPURL : rtsp://192.168.3.153/rtspH264480p

**JPEG :352 x 240**

Profile Name : JPEGCIF  
Output Frame Rate : 15 ▾  
Image Quality : 70 ▾  
Alarm Weighted Mode :  Enable  Disable  
RTSPURL : rtsp://192.168.3.153/rtspjpegcif

- Profile: 4 customizable profiles.
- TV System: NTSC(60)/PAL(50) HZ video system.
- Profile Name: Description of the streaming profile.
- Output Frame Rate: The frame rate of the profile.
- GOP(Group of Picture): I-Frame period per second.
- VBR/CBR Mode: VRB : Variable bit rate encoding mode/constant bit rate encoding mode.
- Bit Rate: Maximum bit rate available for network connection based on actual bandwidth requirements.
- Image Quality: MJPEG image quality.
- Alarm Weighted Mode: Enable to prioritize as the output stream you want to see when an

alarm is detected.

- RTSPURL: Allows you to see the video stream through the Real Time Streaming Protocol

**Note: Setting options may differ depending on the model you use.**

## Chapter 4-2-2 Video Quality Tuner [Path: Basic>> Video/Audio>> Quality Tuner]

### Chapter 4-2-2-1 Day Night Mode [Path: Basic>> Video/Audio>> Quality Tuner>> Day Night Mode]

IR Cut removable controls IR activation, and can be set to (1) auto, (2) day, (3) night.

Day Night Mode	Quality Tuner	Exposure Controller
<input checked="" type="radio"/> Auto		
Day/Night Switch Level	2	
<input type="radio"/> Day Mode		
<input type="radio"/> Night Mode		
<input type="button" value="Load Default"/>		

- Auto: Automatically switches between **Day Mode (colored)** or **Night Mode (black and white)** based on sensor signals.
- Day/Night Switch Level: Set the level of sensitivity for the **Auto Mode**.
- Day Mode: IR cut feature is forced to be always on.
- Night Mode: IR cut feature is removed.

### 4-2-2-2 Quality Tuner [Path: Basic>> Video/Audio>> Quality Tuner>> Quality Tuner]

Day Night Mode	Quality Tuner	Exposure Controller
Mirror	Off	
Flip	Off	
WDR	Off	
DNR	3	
Sharpness	8	
Brightness	128	
White Balance Mode	ATW Indoor	
Manual Red	37	
Manual Blue	37	
Defog Level	Off	
Electronic Image Stabilization	Off	
<input type="button" value="Load Default"/>		

Video setting options are described as followed:

- Mirror: Flip the video horizontally.
- Flip: Flip the video vertically.
- WDR: Enables or disables Wide Dynamic Range to capture greater details. When turned on (the system will be restarted), the camera will record up to 2MP @ 30 fps in H.264. The default is off (the system will be restarted, H.264: up to 2MP @ 60 fps).
- DNR: With the 3D noise reduction function, the processor analyzes pixel by pixel and frame by frame to eliminate environmental noise signal so that the highest quality image can be produced even in low light or slow speed shutter conditions. Options cover **Off** and **1–5**, with a default value of **3**.
- Sharpness: Intensifies the contour of subjects. The settings are **0–15**, with a default of **8**.
- Brightness: This parameter adjusts the brightness of the image. The settings are **1–255**, with a default of **128**.
- White Balance Mode:

Our camera offers two white balance modes: **AWB** (Auto White Balance), which can automatically control the white balance, and **MWB** (Manual White Balance), with which you have to manually control the white balance. **AWB** also provides the **ATW** (Auto Trace White Balance) mode and the **Full Open** mode. The MWB includes specific color temperature settings and a user mode.

  - ATW Indoor: Auto Trace White Balance, Color temperature 2800–9500 K
  - ATW Outdoor: Auto Trace White Balance, Color temperature 2200–10500 K
  - Full Open: Auto Trace White Balance, Color temperature 1500–10500 K
  - Manual: Manual White Balance
- Defog: When the surrounding area of the subject is foggy and shows low contrast, the defog mode will make the subject appear clearer.
- Electronic Image Stabilization: Switching **ON** to reduce image blur caused by, for example, vibration. This function allows you to obtain images without much blurring. A vibration frequency of around 10 Hz can be most effectively reduced. The Image Stabilizer function employs the digital zoom system, so the angle of view and resolution are changed, but the sensitivity is maintained.

### Chapter 4-2-2-3 Exposure Controller [Path: Basic>> Video/Audio>> Quality>> Exposure Controller]

Day Night Mode	Quality Tuner	Exposure Controller
Auto Gain Control(SENSE UP+)	10dB	
Exposure Controller	Full Auto	
Full Auto		
Back-light Compensation	Off	
Shutter Priority		
Shutter Speed	1/60	
Iris Priority		
Iris Position	F1.6	
Manual Mode		
Fix Shutter Speed	1/60	
Fix Iris Position	F1.6	

The exposure settings include automatic exposure mode and manual exposure mode. AE modes: automatic brightness control through exposure level sensing object. This camera features adjustable maximum gain control, full auto, shutter priority, and iris priority. Manual Exposure Mode: Manual adjustment of shutter speed and iris position.

- Auto Gain Control (AGC): AGC Settings (Off, 2dB, 4dB, 6dB, 8dB, 10dB, 12dB, 14dB, 16dB, 18dB, and 20dB, with a default of 18dB).
- Auto exposure mode Full Auto: In this mode, the exposure is automatically controlled by metering the brightness of subjects
- Back Light Compensation (BLC) : When the subject is too dark to be visible, this function will adjust the exposure value, enhance the brightness of the scene, and make the subject clearer.
- Auto exposure mode Shutter Priority: After you select the shutter speed, the iris value will be determined automatically by the camera. Faster shutter speed allows the camera to capture instantaneous streak-free image of a moving subject, while slow speed improves light sensitivity in poorly illuminated areas.
- Shutter Speed: 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, and 1/10000, with a default of 1/60.
- Auto exposure mode Iris Priority: After you select the aperture value, the shutter speed will be determined automatically by the camera.
- Iris Position: F1.6, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11, F14, and Off, with a default of F1.6.
- Manual Mode: Manually determines shutter speed and iris position.
- Fix Shutter Speed: 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, and 1/10000, with a default of 1/60.

- Fix Iris Position: 1.6, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11, F14, and Off, with a default of F1.6.

## Chapter 4-3 Network

System

Video / Audio

Network

Maintenance

PTZ

**Note: Setting options may differ depending on the model you use.**

### Chapter 4-3-1 General [Path: Basic>> Network>> General]

Network settings are the basic settings that connect LILIN IP cameras to the network. The default IP address of our IP cameras is 192.168.0.200. Enter this IP address into your web browser to verify the network connection between a local PC and your IP camera.

To set up a local area network, enter the IP address, subnet mask, gateway, and DNS. Also enter account name and password if you are using PPPoE to connect to the network. Click **Submit** to update the settings.

Basic >> Network >> General

Network	<input checked="" type="radio"/> Static <input type="radio"/> DHCP <input type="radio"/> PPPoE
IP Address	<input type="text" value="192.168.3.153"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="192.168.3.254"/>
Default DNS	<input type="text" value="168.95.1.1"/>
Second DNS	<input type="text" value="168.95.1.1"/>
Account	<input type="text" value="account@pppoe.com"/>
Password	<input type="password" value="••••••••"/>
2nd IP Address	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
2nd IP Address	<input type="text" value="192.168.0.200"/>
2nd Subnet Mask	<input type="text" value="255.255.255.0"/>
3rd IP Address	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
3rd IP Address	<input type="text" value="192.168.0.200"/>
3rd Subnet Mask	<input type="text" value="255.255.255.0"/>

To acquire Internet access, contact your local Internet Service Provider (ISP) for a global IP address. Enter the IP address (global), subnet mask, and gateway IP provided by your ISP.

- Default DNS— The IP address of the default and first DNS server.
- Second DNS—The IP address of the backup and second DNS server to the default DNS.
- PPPoE Account— Username of the PPPoE service.
- PPPoE Password— Password of the PPPoE Service.

A router, gateway, or other DHCP software server can remotely assign an IP address to your IP

camera. There is no need to manually configure the IP address, subnet mask, and gateway. However, every time the DHCP service is rebooted, the IP address of the IP camera may vary. You may need to use IPscan to search for the IP camera. To enable DHCP, click the DHCP option and click **Submit**.

**Note: Once the DHCP option is enabled, the IP camera is assigned an IP address by the DHCP server. This feature is only permitted in a LAN environment.**

### Chapter 4-3-2 General IPv6 [Path: Basic>> Network>> IPv6]

Basic >> Network >> General IPv6

---

Network	<input type="radio"/> On <input checked="" type="radio"/> Off
IP Address	<input type="text" value="fe80::000f:fc24:9000"/> / <input type="text" value="64"/>
Default Router	<input type="text"/>
Default DNS	<input type="text"/>

Enter the information for IPv6 Service.

### Chapter 4-3-3 HTTP/RTSP Service [Path: Basic>> Network>> HTTP/RTSP Service]

HTTP and RTSP are two reliable protocol for video streaming. With correct port forwarding, videos can be sent over the Internet. Details are described in the appendix. To change the HTTP port number, consult your network administrator. Choose the streaming type you want to use (HTTP or RTSP/UDP). Click Submit for the changes to take effect.

Basic >> Network >> HTTP/RTSP Service

---

HTTP Port	<input type="text" value="80"/>
RTSP Port	<input type="text" value="554"/>
ONVIF	<input type="text" value="Standard"/> ▼
ONVIF search	<input checked="" type="radio"/> On <input type="radio"/> Off
RTSP Package Size	<input type="text" value="1"/> ▼ KB
METADATA	<input type="radio"/> On <input checked="" type="radio"/> Off
RTCP Check	<input checked="" type="radio"/> On <input type="radio"/> Off
Repeated delivery of SPS/PPS	<input checked="" type="radio"/> On <input type="radio"/> Off
RTSP Authentication	<input checked="" type="radio"/> On <input type="radio"/> Off
Video Port	<input checked="" type="radio"/> HTTP Port <input type="radio"/> RTSP/UDP Port
Profile Name H264 1920x1080	<input type="text" value="stream0"/>
Profile Name JPEG 720x480	<input type="text" value="stream1"/>
Profile Name H264 720x480	<input type="text" value="stream2"/>
Profile Name JPEG 352x240	<input type="text" value="stream3"/>

Settings on this page are described below:

- ONVIF: Choose an ONVIF protocol from the drop-down list.
- ONVIF search: Enable/disable ONVIF Search Function.
- RTSP Package Size: Choose the size of each RTSP package depending on your bandwidth.
- METADATA: Enable/disable METADATA.
- RTCP Check: Enable to send RTCP packages for transmission optimization
- Repeated Delivery of SPS/PPS: Enable to send SPS/PPS information before I frames
- RTSP Authentication: Enabling this option will require username and password when connecting to the RTSP stream.
- Video Port: Choose between HTTP or RTSP/UDP for your stream
- Profile Name: Change the profile name.

#### Chapter 4-3-4 DDNS [Path: Basic>> Network>> DDNS]

The DDNS service allows you to automatically update the DNS server. LILIN provides three DDNS servers to choose from (we recommend you use the first one from the drop-down menu). Click Submit for the changes to take effect.

Basic >> Network >> DDNS

DynDNS	<input type="text" value="http://www.ddnsipcam.com"/>
DDNS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Account	<input type="text" value="788887"/>
Password	<input type="password" value="••••"/>
New Password	<input type="text"/>
Host name	<input type="text" value="788887"/> <a href="http://788887.ddnsipcam.com">http://788887.ddnsipcam.com</a>
WAN IP	<input type="text"/>

To activate DDNS, go to [www.ddnsipcam.com](http://www.ddnsipcam.com). If the IP camera is on Internet with a global IP address, use the last 6 digits of the MAC address as the host name with default account and the default password,. The IP camera will automatically register to [www.ddnsipcam.com](http://www.ddnsipcam.com).

**Note: The DDNS feature requires Internet connection.**

## Chapter 4-3-5 SNMP [Path: Basic>> Network>> SNMP]

Basic >> Network >> SNMP

SNMP	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SNMP v1/v2	
Read Only Community	<input type="text" value="public"/>
Read/Write Community	<input type="text" value="private"/>
SNMP v3	
Username	<input type="text" value="admin"/>
Authentication Password(MD5)	<input type="text" value="password"/>
Privacy Password(DES)	<input type="text" value="password"/>
Read/Write Security Name	<input type="text" value="public"/>
Read Only Security Name	<input type="text" value="private"/>
SNMP Heartbeat	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SNMP Heartbeat Server	<input type="text" value="255.255.255.255"/>
SNMP Heartbeat Dwell Time	<input type="text" value="1"/> Sec.

Enable to activate SNMP service. Modify the fields to suit your needs, and click Submit for the changes to take effect.

## Chapter 4-4 Maintenance



In the **Maintenance** page, you can click **Load Default** to restore the camera to factory settings, or click **Reboot System** to restart the camera. Restoring to factory settings does not affect IP addresses.

To update the firmware of your IP camera, click **Browse** and locate the update file. Click **Submit** to start the firmware update.

## Basic >> Maintenance >> Firmware Update

Please do not turn off power and wait until this web page shows up automatically. Fail to update firmware correctly due to network communication issue that it may damage this machine and is required to ship back to your vender for repair.

File System(flashamS2pl.bin/flashamLS2pl.bin)

flashamS2pl.bin:Application Firmware

flashamLS2pl.bin:Linux OS

瀏覽...   
Upload 0%

Export Settings

Import Setting  瀏覽...

Load Default   
Reboot System

**Warning: Never disconnect the power during the update. This could cause irreversible damage to your device.**

**Note: If you forget your password, please contact your vendor or send the device us.**

## Chapter 4-5 PTZ

**System** **Video / Audio** **Network** **Maintenance** **PTZ**

### Chapter 4-5-1 Lens Advance Setting [Path: Basic>> PTZ>> Advance>> Lens Advance]

**Lens Advance** **Auto Scan Setup** **Tour Setup** **Patrol Setup**

Type:Camera Advanced

Lens Initialize

Auto Calibration

Bad Pixel Compensation

Self Diagnosis

- Lens Initialize: Click **Apply** to restore the zoom and focus to factory defaults.
- Auto Calibration: Turn on this option to automatically perform AF at 00:00 every night.
- Bad Pixel Compensation: Defective pixels can occur during storage or the manufacturing process. Enabling this option allows the system to replace defective pixels with their neighboring pixels
- Self Diagnosis: Enable/disable the diagnosis function.

### Chapter 4-5-2 Auto Scan Setup [Path: Basic>> PTZ>> Advance>> Auto Scan Setup]

The IP PTZ Camera supports up to sixteen auto scan paths. Please follow the instructions below for

auto scan path setup.

Lens Advance	<b>Auto Scan Setup</b>	Tour Setup	Patrol Setup
--------------	------------------------	------------	--------------

Type:Auto Scan Setup

Auto Scan Path

Dwell Time  Sec.

Speed

Start Position

End Position

- Auto Scan Path: Select a scan path (1 – 16) from the drop-down list.
- Dwell Time: Set the time you want the camera view to stay at the start position or end position.
- Speed: Set the scanning speed between two positions.
- Start Position: Set the start position of the selected scan path.
- End Position: Set the end position of the selected scan path

To set up an auto scan path, please first select a path number from the drop-down list. Then move the cursor to the PTZ control pane, and move the camera to a desired view (PTZ controls) as the start point of an auto scan path. Click **Apply** next to **Start Position** and move around the camera view at will to program the auto scan path via PTZ controls. When you finish programming, click **Apply** next to **End Position** to end the programming process. Next, assign a **Dwell Time** and **Speed** for the current path from the respective drop-down list.

### Chapter 4-5-3 Tour Setup [Path: Basic>> PTZ>> Advance >> Tour Table]

The IP Fast Dome Camera supports up to sixteen tour paths; each path can include up to 32 preset positions. Please refer to the instructions below to program a Tour table.

**NOTE: Before setting this function, users must pre-define at least two Preset Points.**

Lens Advance	Auto Scan Setup	<b>Tour Setup</b>	Patrol Setup
--------------	-----------------	-------------------	--------------

Type:Tour Setup

Tour Path

1	<input type="text" value="-"/>	9	<input type="text" value="-"/>	17	<input type="text" value="-"/>	25	<input type="text" value="-"/>
2	<input type="text" value="-"/>	10	<input type="text" value="-"/>	18	<input type="text" value="-"/>	26	<input type="text" value="-"/>
3	<input type="text" value="-"/>	11	<input type="text" value="-"/>	19	<input type="text" value="-"/>	27	<input type="text" value="-"/>
4	<input type="text" value="-"/>	12	<input type="text" value="-"/>	20	<input type="text" value="-"/>	28	<input type="text" value="-"/>
5	<input type="text" value="-"/>	13	<input type="text" value="-"/>	21	<input type="text" value="-"/>	29	<input type="text" value="-"/>
6	<input type="text" value="-"/>	14	<input type="text" value="-"/>	22	<input type="text" value="-"/>	30	<input type="text" value="-"/>
7	<input type="text" value="-"/>	15	<input type="text" value="-"/>	23	<input type="text" value="-"/>	31	<input type="text" value="-"/>
8	<input type="text" value="-"/>	16	<input type="text" value="-"/>	24	<input type="text" value="-"/>	32	<input type="text" value="-"/>

- Tour Path: Choose a tour path to set up.

- Sequential Preset Points Setting: Set up preset positions for the selected tour path in any order you want from the drop-down list. Finally, click **Apply** to save the settings.

### Chapter 4-5-4 Patrol Setup [Path: Basic>> PTZ>> Advance>> Patrol Setup]

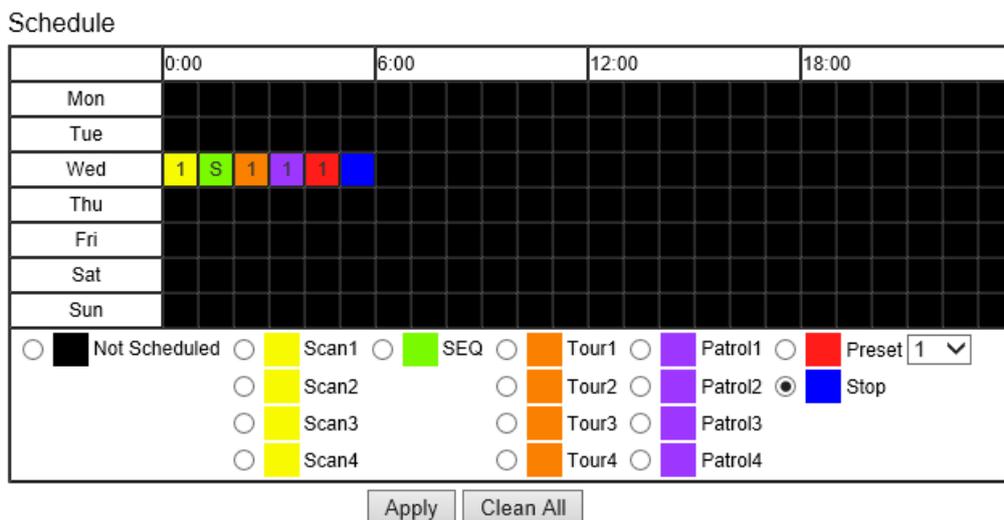


PSD4624E supports up to sixteen patrol paths. Please follow the instructions below for patrol path setup.

To set up a patrol path, select a path number from the drop-down list. Then move the cursor to the PTZ control pane, and move the camera to a desired view (PTZ controls) as the start point of the patrol path. Click **Start** and move around the camera view at will to program the patrol path via PTZ controls. When you finish programming, click **End** to end the programming process.

### Chapter 4-5-5 PTZ Schedule Settings [Path: Basic>> PTZ>> Schedule]

To set up PTZ scheduling, please select PTZ schedule. Select the desired schedule type (**Not Scheduled, Scan, SEQ, Tour, Patrol, and Preset**). Click the schedule to highlight the time intervals you want the camera to perform the pre-determined schedule. Click **Apply** to save the settings and **Clean All** to clear the settings.



## Chapter 5 Advanced Mode

The Advanced Mode provides several professional settings that are not available in the Basic Mode.

### Chapter 5-1 System



## Chapter 5-1-1 System Log [Path: Advance>> System>> System Log]

You can view the system-generated log in this page. Click **Save** to export the log to a text file.

Advance >> System >> System Log

Log Page

1.	192.168.3.137	admin	2015/12/08 08:48:47	PTZ CAMERA SETTING
2.	192.168.3.137	admin	2015/12/08 08:48:45	PTZ CAMERA SETTING
3.	192.168.3.137	admin	2015/12/08 08:35:01	USER LOGIN
4.	192.168.3.145	admin	2015/12/08 07:23:10	USER LOGIN
5.	192.168.3.145	admin	2015/12/08 07:23:08	USER LOGIN
6.			2015/12/08 07:22:37	SPD POWER ON
7.	192.168.3.137	admin	2015/12/07 17:30:19	STREAM LOGOUT
8.	192.168.3.137	admin	2015/12/07 17:30:11	STREAM LOGOUT
9.	192.168.3.132	admin	2015/12/07 12:04:21	STREAM LOGOUT
10.	192.168.3.132	admin	2015/12/07 12:04:16	USER LOGIN
11.	192.168.3.161	admin	2015/12/07 11:19:45	STREAM LOGOUT
12.	192.168.3.161	admin	2015/12/07 11:06:31	USER LOGIN
13.	192.168.3.137	admin	2015/12/07 11:02:06	USER LOGIN
14.	192.168.3.137	admin	2015/12/07 10:56:56	PTZ CAMERA SETTING
15.	192.168.3.137	admin	2015/12/07 10:56:53	USER LOGIN
16.	192.168.3.145	admin	2015/12/07 08:30:56	USER LOGIN
17.	192.168.3.145	admin	2015/12/07 08:30:54	USER LOGIN
18.			2015/12/07 08:29:52	SPD POWER ON
19.	192.168.3.137	admin	2015/12/04 17:29:42	STREAM LOGOUT
20.	192.168.3.137	admin	2015/12/04 17:29:27	STREAM LOGOUT
21.	192.168.3.137	admin	2015/12/04 17:29:20	PTZ CAMERA SETTING
22.	192.168.3.137	admin	2015/12/04 17:10:04	PTZ CAMERA SETTING
23.	192.168.3.137	admin	2015/12/04 17:09:06	PTZ CAMERA SETTING
24.	192.168.3.137	admin	2015/12/04 17:04:13	PTZ CAMERA SETTING
25.	192.168.3.137	admin	2015/12/04 16:56:56	PTZ CAMERA SETTING

Save

## Chapter 5-2 Video/Audio Setting

System

Video / Audio

Network

Event

Notification

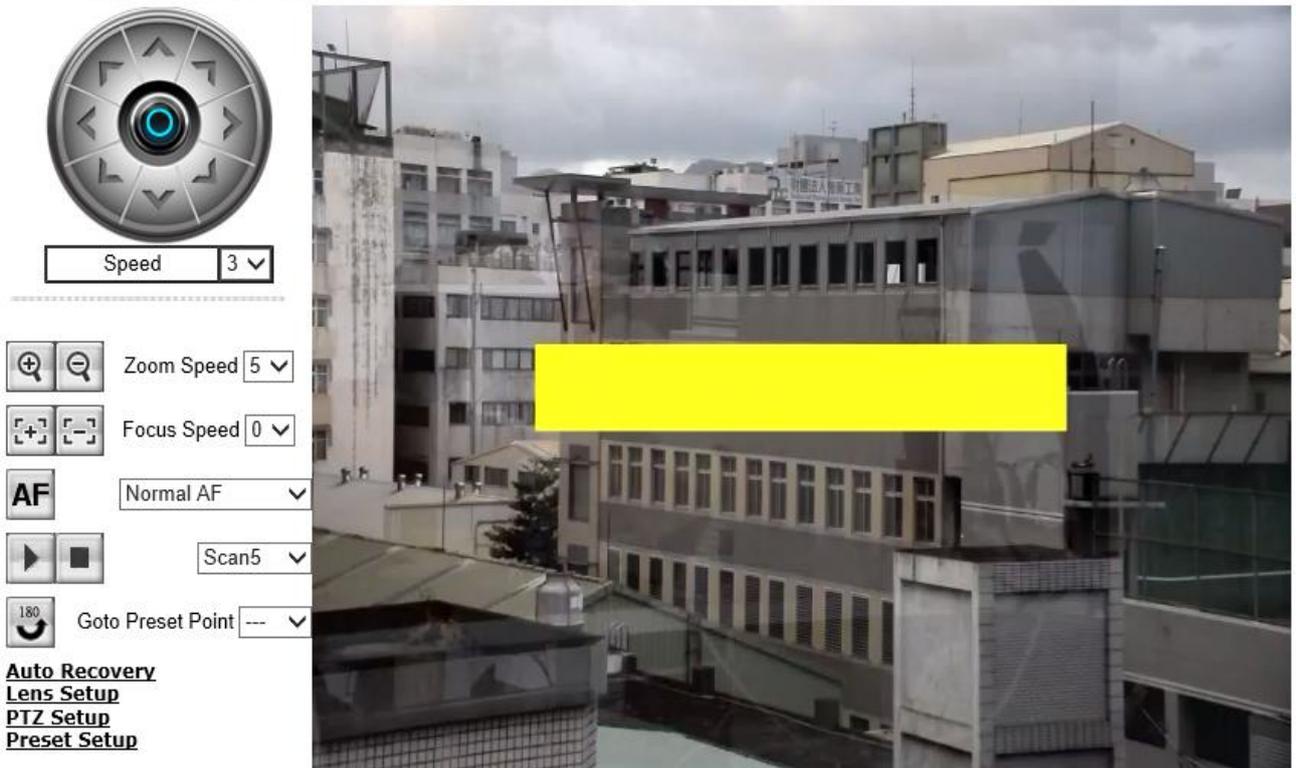
Maintenance

PTZ

**Note: Setting options may differ depending on the model you use.**

### Chapter 5-2-1 Privacy Mask [Path: Advance>> Video/Audio>> SPD Privacy Mask solution]

Lilin PSD4624E PTZ IP camera provides up to 16 privacy masks, Choose a mask number and click **Edit** for a mask to appear in the center of the screen. You can also adjust the color, width, and length of the mask and move the camera to the appropriate position to hide any object. Press **Submit** to save the changes. You are allowed to create up to 16 masks for one camera. To remove a mask, select a number from the **Mask No.** drop-down menu under **Clean Mask** and click **Submit** to save the changes.



Speed 3

Zoom Speed 5

Focus Speed 0

AF Normal AF

Scan5

Goto Preset Point ---

[Auto Recovery](#)  
[Lens Setup](#)  
[PTZ Setup](#)  
[Preset Setup](#)

Privacy Mask

Mask No 1 Edit

Mask Color Yellow Black

Mask Wsize 130

Mask Hsize 15

Submit

Clean Mask

Mask No None

Submit

### Chapter 5-2-2 Audio Adjust [Path: Video/Audio>> Audio Adjust]

Audio Adjust  Enable  Disable

Audio Input Volume 50

Audio Input Gain 0 dB

Audio Output Volume 50

Audio Coding Type  G711 u-law  AAC

Sampling Rate 8000 Hz

Bit Rate 16 kbit/s

Submit

Detailed audio settings are described below:

- Audio Adjust: Enable/disable audio adjustment.
- Audio Input Volume: MIC or line-in volume.
- Audio Input Gain: Level of gain for audio input.
- Audio Output Volume: Volume adjustment.
- Audio Coding Type: G.711 u-Law/ AAC
- Sampling rate: Set the audio sampling rate.
- Bit Rate: 16 Kbit/s.

## Chapter 5-3 Network

System

Video / Audio

Network

Event

Notification

Maintenance

PTZ

### Chapter 5-3-1 Multicast [Path: Advance>> Network>> Multicast]

LILIN cameras support video streaming of 4 different content formats. Under this page, you can configure the settings for individual streams.

Advance >> Network >> Multicast

H2641080P	IP Address	<input type="text" value="239.0.0.0"/>
	Video Port	<input type="text" value="1234"/>
	Video Port RTCP	<input type="text" value="1235"/>
	Audio Port	<input type="text" value="1236"/>
	Audio Port RTCP	<input type="text" value="1237"/>
	TTL	<input type="text" value="5"/>
JPEG480P	IP Address	<input type="text" value="239.0.0.0"/>
	Video Port	<input type="text" value="1234"/>
	Video Port RTCP	<input type="text" value="1235"/>
	Audio Port	<input type="text" value="1236"/>
	Audio Port RTCP	<input type="text" value="1237"/>
	TTL	<input type="text" value="5"/>
H264480P	IP Address	<input type="text" value="239.0.0.2"/>
	Video Port	<input type="text" value="5568"/>
	Video Port RTCP	<input type="text" value="5569"/>
	Audio Port	<input type="text" value="5570"/>
	Audio Port RTCP	<input type="text" value="5571"/>
	TTL	<input type="text" value="5"/>
JPEGCIF	IP Address	<input type="text" value="239.0.0.3"/>
	Video Port	<input type="text" value="5572"/>
	Video Port RTCP	<input type="text" value="5573"/>
	Audio Port	<input type="text" value="5574"/>
	Audio Port RTCP	<input type="text" value="5575"/>
	TTL	<input type="text" value="5"/>

Submit

### Chapter 5-3-2 IP Address Filtering [Path: Advance>> Network>> IP Address Filtering]

LILIN cameras provide an IP address filter to help you block unauthorized IP addresses from accessing the camera. Enable the service before you enter the IP address you want to block, and press **Add**. Click **Delete** to remove an IP address from the list.

Advance >> Network >> IP Address Filtering

---

IP Address Filtering     Enable  Disable

IP Address           

192.168.0.100
---------------

### Chapter 5-3-3 UPnP [Path: Advance>> Network>> UPnP]

The UPnP service is a network protocol that allows Windows PC users to access IP cameras in a LAN environment. To activate the UPnP service, choose **Enable** to activate.

Advance >> Network >> UPnP

---

UPnP Service     Enable  Disable

Friendly Name    UPnP IPCam Device

In Windows, go to **Network**→**File Explorer** to see the IP cameras via the UPnP protocol.

### Chapter 5-3-4 Bonjour [Path: Advance>> Network>> Bonjour]

Bonjour is Apple's implementation of zero-configuration networking protocol. Click **Enable** to activate this service.

Advance >> Network >> Bonjour

---

Bonjour     Enable  Disable

Friendly Name

### Chapter 5-3-5 SDDP/Heartbeat [Path: Advance>> Network>> SDDP/Heartbeat]

With SDDP/Heartbeat support, you can connect to any compatible devices. Enable the service before you make the connection.

Advance >> Network >> SDDP / Heartbeat

---

SDDP Service             Enable  Disable  
 Heartbeat Service       Enable  Disable  
 Heartbeat Server          
 Heartbeat Port            
 Heartbeat Dwell Time     Sec.

### Chapter 5-4 Event



Here you can configure the detection settings for motion, sound, alarm, and network failure. Choose an event type in the drop-down menu, then click **Edit Event**.

Advance >> Event >> Event

---

Event Name   

Event	Status	FTP	SMTP	SD Card	Alarm Output	HTTP POST	SNMP Trap	Schedule
Motion Detection	Disable					V		Auto
Audio Detection	Disable					V		Auto
Alarm Detection	Disable					V		Auto
Network Detection	Disable	-	-			-	-	Auto

Then the page you see allows you to choose the action to take when the chosen events are detected, such as sending JPEG images to an FTP server or an email account, and/or triggering SD card video recording. To schedule event monitoring, choose **Schedule** when you edit an event and highlight the time periods you want the camera to detect events. Click **Submit** for the changes to take effect.

Event **Motion Detection**

Enable

Action

<input type="checkbox"/> FTP Service	Dwell Time	<input type="text" value="10"/> Sec.
<input type="checkbox"/> SMTP Service	Dwell Time	<input type="text" value="10"/> Sec.
<input type="checkbox"/> SD Card Service	Dwell Time	<input type="text" value="60"/> Sec.
<input type="checkbox"/> Alarm Output	Dwell Time	<input type="text" value="10"/> Sec.
<input checked="" type="checkbox"/> HTTP POST Service	Dwell Time	<input type="text" value="5"/> Sec.
HTTP POST Service : URL		<input type="text" value="/url"/>
<input type="checkbox"/> SNMP Trap Service		

Schedule

Always

Schedule

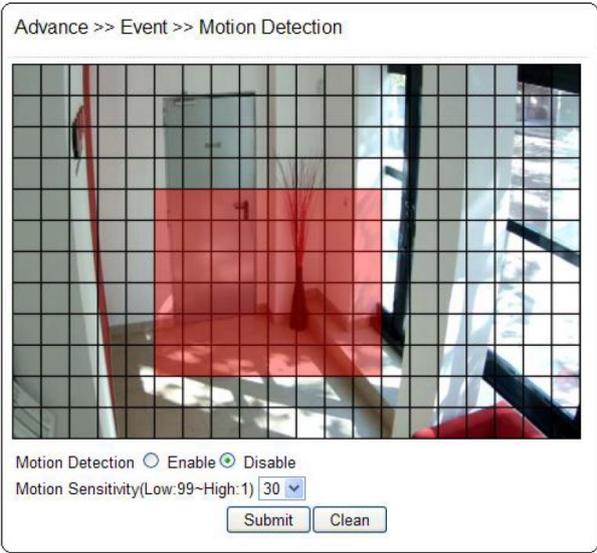
	0:00	6:00	12:00	18:00
Sun				
Mon				
Tue				
Wed				
Thu				
Fri				
Sat				

Event Schedule  
 Not Scheduled

- FTP Service: When an alarm is triggered, snapshots will be sent to a pre-determined FTP site during the specified time.
- SMTP Service: When an alarm is triggered, snapshots will be sent to pre-determined Email addresses during the specified time.
- SD Card Service: When an alarm is triggered, snapshots will be saved to the inserted SD card during the specified time.
- Alarm Output: When an alarm is triggered, alarm notifications will be sent to the external device connected to the camera during the specified time.
- HTTP POST Service: Enter a URL, and when an alarm is triggered, snapshots will be posted to the website during the specified time.

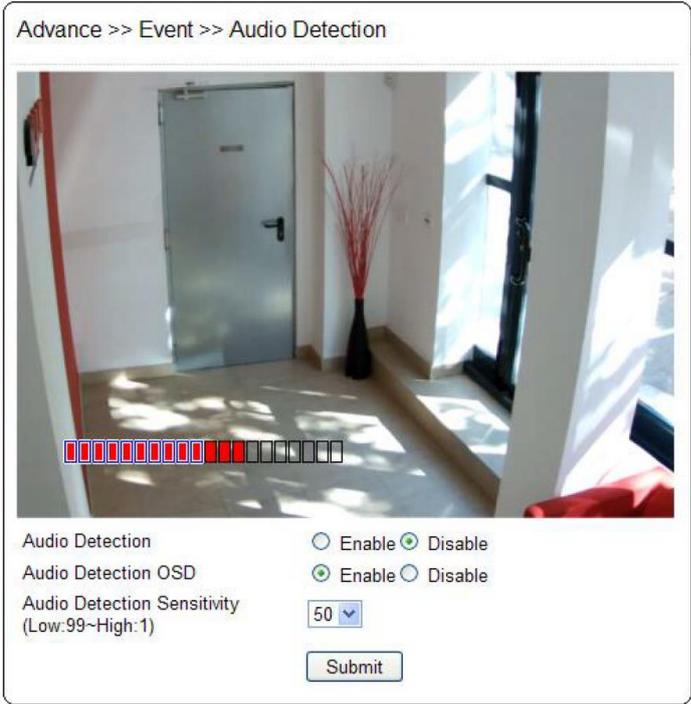
**Chapter 5-4-1 Motion Detection [Path: Advance>> Even>> Motion Detection]**

Once the above configurations are set, click Motion Detection to determine the areas to monitor. Simply double-click or drag across the areas you want to monitor, and cancel your selection by double-click again or drag across the areas you don't want to monitor with the right mouse button.



**Chapter 5-4-2 Audio Detection [Path: Advance>> Event >> Audio Detection]**

When the detected sound exceeds the sensitivity level, the audio detector will trigger an alarm and send a notification.



**Chapter 5-4-3 Alarm Detection [Path: Advance>> Event>> Alarm Detection]**

If you connect an external alarm digital input to the IP camera, enable **Alarm Notification** and switch between **NO** (normally open) and **NC** (normally closed) for the input.

## Advance >> Event >> Alarm Detection

Alarm Notification	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Alarm Input Mode	<input checked="" type="radio"/> NO <input type="radio"/> NC
Alarm OSD	<input type="radio"/> On <input checked="" type="radio"/> Off
Alarm To Preset 1	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm To Preset 2	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm To Preset 3	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm To Preset 4	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm To Preset 5	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm To Preset 6	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm Time Set	<input type="text" value="Off"/> Min.

Submit

## Chapter 5-4-4 Network Detection [Path: Advance>> Event>> Network Detection]

Enable this option to send a notification upon network failure.

### Advance >> Event >> Network Detection

No Network Activity  Enable  Disable

Submit

## Chapter 5-5 Notification

System

Video / Audio

Network

Event

Notification

Maintenance

PTZ

## Chapter 5-5-1 FTP Service [Path: Advance>> Notification>> FTP Service]

Enter the required FTP information to send alarm snapshots to an FTP server.

### Advance >> Notification >> FTP Service

FTP Server IP/DNS	<input type="text" value="ftp.server.com"/>
FTP Server Port	<input type="text" value="21"/>
Account	<input type="text" value="Account"/>
Password	<input type="password" value="••••••••"/>
Directory	<input type="text" value="/alarm_jpeg/"/>
Prefix	<input type="text"/>
Date Format	<input type="text" value="YYMMDD_hhmmss"/> ▼
Posfix	<input type="text"/>
File Format	<input type="text" value="JPEG480P"/> ▼
Auto FTP Sent	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Auto FTP Sent Dwell	<input type="text" value="1 Hour"/> ▼

Submit

- FTP/DN Server IP/DNS: IP address or domain name of the FTP server.
- FTP/DN Server Port: The FTP Server Port.
- Account: Account name to log in to the FTP server.
- Password: Password of the account.
- Directory: File path for storing the JPEG snapshots.
- Prefix: Prefix of the JPEG filename.
- Date Format: Date string for the JPEG filename.
- Postfix: Postfix of the JPEG filename.
- File Formation: Name string for JPEG filename.
- Auto FTP Sent: Enable this function to send alarm notification and snapshots to the designated FTP server.
- Auto FTP Sent Dwell: Choose a dwell time from the drop-down menu.

### Chapter 5-5-2 SMTP Service [Path: Advance>> Notification>> SMTP Service]

If an alarm is triggered, you can send a snapshot to the email account(s) you designate. Enter the required information to enable this service.

Advance >> Notification >> SMTP Service

---

E-mail Receiver Setting

E-mail Address1

E-mail Address2

E-mail Address3

E-mail Address4

E-mail Address5

---

E-mail Sender Setting

E-mail Address

SMTP Server

SMTP Authentication  AUTH LOGIN  AUTH SSL

SMTP Port

Authentication  Enable  Disable

Auth Account

Auth Password

### Chapter 5-5-3 HTTP POST Service [Path: Advance>> Notification>> HTTP POST Service]

Through the POST protocol, the camera can automatically send notification snapshots to a website if an alarm is triggered.

Advance >> Notification >> HTTP POST Service

HTTP POST Server IP/DNS	<input type="text" value="192.168.3.244"/>
HTTP POST Server Port	<input type="text" value="80"/>
Account	<input type="text" value="admin"/>
Password	<input type="password" value="••••"/>
JPEG Attachment	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Attachment File Format	<input type="radio"/> Fixed <input checked="" type="radio"/> Date
Attachment File Name	<input type="text" value="snap"/>

### Chapter 5-5-4 SD Card Service [Path: Advance>> Notification>> SD Card Service]

Ensure an SD card is properly installed to the camera before you enable the SD recording option. The camera will start recording videos when an alarm occurs.

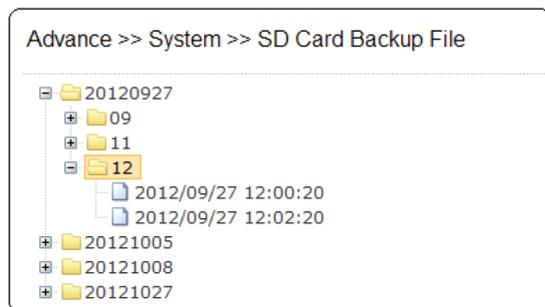
Advance >> Notification >> SD Card Service

SD Recording	<input type="radio"/> On <input checked="" type="radio"/> Off
SD Recording OSD	<input type="radio"/> On <input checked="" type="radio"/> Off
SD Recording Continuous	<input type="radio"/> On <input checked="" type="radio"/> Off
Recording Format	<input type="text" value="H2641080P"/> ▼
Pre Record Time	<input type="text" value="5"/> ▼ Sec.
SD Card Status	NORMAL
SD Card State	SD Card No Plug In
SD Card Total Bytes	0 MBytes
SD Card Free Bytes	0 MBytes

**Warning: Ensure to click Unmount before removing the SD card, or the system may crash.**

### Chapter 5-5-5 SD Card Backup File [Path: Advance>> Notification>> SD Card Backup File]

To download a specific clip, right-click the file you want to download and save the AVI file to a local PC.



## Chapter 5-6 PTZ

System

Video / Audio

Network

Event

Notification

Maintenance

PTZ

### Chapter 5-6-1 RS-485 [Path: Advance>> PTZ>> RS-485]

You can change configurations related to RS-485 if connected to an RS-485 device.

ID	1 ▾
Protocol	MLP2 ▾
Baud Rate	9600 ▾
<input type="button" value="Save"/>	

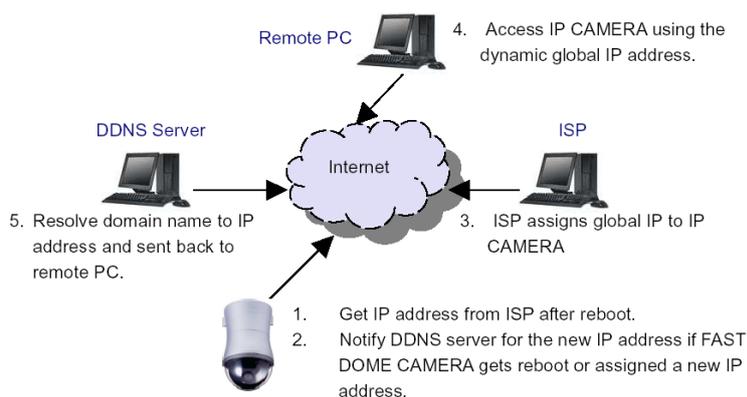
- ID: Set the camera ID.
- Protocol: Set the communication protocol.
- Baud Rate: Set the communication baud rate.

## Appendix

### DDNS and PPPoE Network Settings

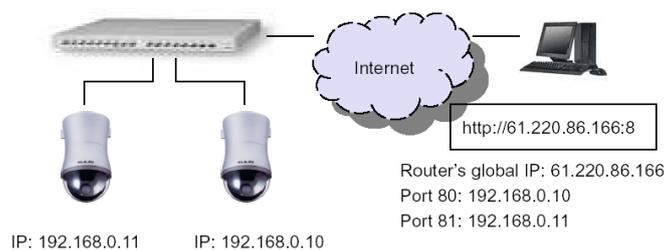
One of the advantages of adopting DDNS and PPPoE services is to save the cost of renting a global IP address. When you power on a camera with a video server and connect to the Internet with the PPPoE service, the camera asks your ISP for a dynamic global IP address. This Internet-accessible IP address will be renewed by the ISP every time you log on the Internet.

Whenever the IP is changed, the camera with the video server will notify the DDNS server of your new IP address. A remote user who intends to connect to the camera with the video server can enter the domain name in the web browser. The domain name will be translated to a new IP address to be used by the camera.



### Advanced Port Forwarding Technology

Communication port forwarding technology has been widely used to share a global Internet IP to other devices on the network. The infrastructure of this technology is shown in the below figure, in which the port 80 of the IP router is forwarded to the device with an IP of 192.168.0.10, and the port 81 of the router is forwarded to the device with an IP of 192.168.0.11. When a remote PC on the Internet tries to access the port 81, the user is actually accessing 192.168.0.11, private IP of given by the router.



### Restore to Factory Default Settings

To restore the IP camera to the factory default, follow the below procedures:

1. Short the "Restore to Factory Default RESET" cable for 10 seconds before releasing.
2. The camera will restart.
3. Launch to IPScan Utility to search for the IP camera.
4. Access the IP camera via an Internet browser.

5. Enter the default username and password.

### SD Card Compatibility

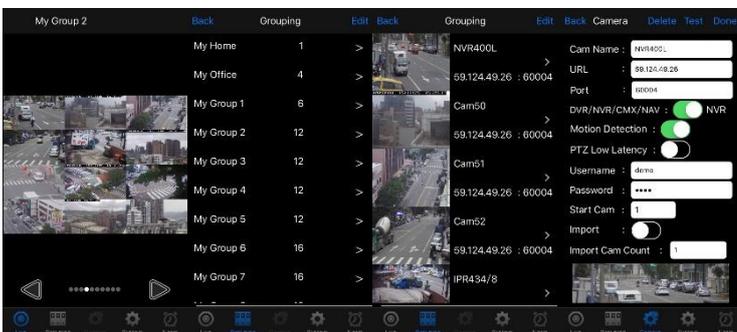
Manufacturer	Capacity	SDHC/SDSC
Sandisk	16GB	SDHC
Sandisk	8GB	SDHC
Transcend	8GB	SDHC
Transcend	4GB	SDHC
Sandisk	32GB	SDHC

### For iPhone Users

Tap **App Store**, and search and download **LILINViewer** by Merit LILIN Ent. Co., Ltd. Or, you can scan the QR Code below.



Open **LILINViewer**, then choose tab **Groupings**. Select a group, choose a camera type, and add a camera.



Next, enter camera information as follows:

1. Cam Name: IP Camera or DVR camera name
2. URL: IP address
3. Port
4. Enter your username and password. The default IP camera user name is **admin**, password **pass**. The default DVR user name is **admin**, password **1111**.

After you enter the above information, tap **Done** to save the changes, and the live view of your IP camera or DVR will appear.

## For Android Users

Tap **Play Store** to download **LILINViewer** by Merit LILIN, or scan the following QR code.



Open **LILINViewer**, then choose tab **Groupings**. Select a group, choose a camera type, and add a camera.



Next, enter camera information as follows:

1. Cam Name: IP Camera or DVR camera name
2. URL: IP address
3. Port
4. Enter your username and password. The default IP camera user name is **admin**, password **pass**. The default DVR user name is **admin**, password **1111**.

After you enter the above information, tap **Done** to save the changes, and the live view of your IP camera or DVR will appear.