TP-LINK®

User Guide



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FCC STATEMENT



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to pro-vide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- > Reorient or relocate the receiving antenna.
- > Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- > Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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Package Contents

The follow items should be found in your package:

- > TL-SC3130 2-Way Audio Surveillance Camera
- > Power Adapter
- > Mounting Bracket with three screws, a Lock Ring, a Brace and a Base Plate
- > RJ45 Cable
- > Quick Installation Guide
- > Resource CD, including:
 - This User Guide
 - Other helpful information

Note:

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact your distributor.

Chapter 1 Minimum System Requirements

We strongly recommend your computers follow our minimum requirements in order to use this IP-Camera normally. If your computer doesn't meet these requirements below, it might cause some problems.

Item	Requirements	
CPU	Pentium 4 1600MHz (or equivalent AMD)	
Graphic Card	64 MB RAM graphic cards(or equivalent on-board graphic cards)	
RAM	512 MB	
Operating System	Windows 98, Windows ME (Please see ^{P Note}) Windows2000, 2003, XP, Vista, Mac OS X Leopard	
Web Browser	Internet Explore 6 or above	

P Note:

- 1. If you are using Windows 98 or Windows ME, please install IP Installer before using WEB UI to ensure the system runs normally.
- 2. If you can't view the record video file, please install **Xvid codec** while installing Intelligent IP Installer. (For Windows 98, ME or 2000 server, the codec might not work properly. You'll need to download Xvid codec 1.0 from the Internet.
- 3. Please always update the latest Windows component. (Net Framework, Windows Media Player, Enhance ActiveX Security)

Chapter 2 Physical Overview

2.1 Front View



Focus Adjustment Ring: Adjust the focus ring to get a clear image.

Network LED Indicator: It lights up when the IP Camera is well connected to the network. It flashes when there are data being transmitted.

Power LED Indicator: It lights up when the IP Camera is powered on.

Built-in Microphone: The location where the voice from your partner comes out.

2.2 Bottom view



Power Connector: The power connector is where you connect the power adapter.

Reset: Keep the device powered on. Press and hold the Reset Button for 10 seconds to restore the settings to factory defaults.

Audio Out (Speaker): The Audio Out (Speaker) port is where the speaker is connected.

LAN (Network Connector): Through this port, you can connect the IP Camera to your computer or the other Ethernet network devices.

Chapter 3 Using IP Camera via Web Browser

3.1 Windows Web Browser

1. Launch your web browser, and enter the IP address (the default value is 192.168.1.10) of the IP camera in the Location / Address field of your browser.

http//192.168.1.10	~	,
--------------------	---	---

P Note:

If you only want to view the video without setting page, enter "<u>http://<IP>/index2.htm</u>" as your web URL . For example, you can enter <u>"http://192.168.1.10/index2.htm</u>" as your web URL to view the video without setting page.

2. Enter the default User name "admin" and password "admin" in the login window as shown below.

Connect to 19	2.168.1.10	? 🛛
R		
IP Camera		
User name: Password:	🕵 admin *****	~
		id.
	ОК	Cancel

P Note:

The default User name "admin" and Password "admin" are set at the factory for the administrator. You can change them in the Account Menu. (Please check "**Setting** \rightarrow **Basic** \rightarrow **Security** \rightarrow **Account**")

3. The web-based management page will display on your screen. On the leftmost column of the web-based management page are **Setting**, **Client Setting**, and **Image Setup**. For more details, you can refer to <u>Section 5.2 Setting</u>, <u>Section 5.3 Client Setting</u> and <u>Section 5.4 Image Setup</u>.



3.2 Mac Web Browser

1. Click the **Safari** icon on the screen as the figure below shown, and enter the IP address (the default value is 192.168.1.10) of the IP camera in the Location / Address field of your browser.

P Note:

If you only want to view the video without setting page, enter <u>"http://<IP>/index2.htm"</u> as your web URL. For example, you can enter <u>"http://192.168.1.10/index2.htm"</u> as your web URL to view the video without setting page.



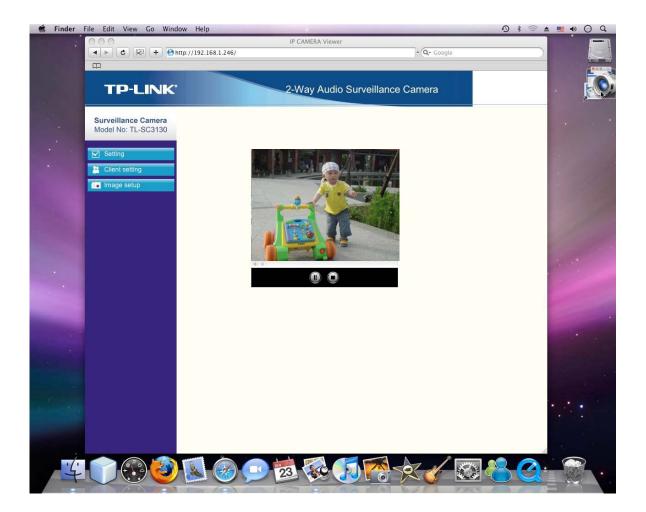


2. Enter the default User name "admin" and password "admin" in the dialog box as shown below.

P Note:

The default Name "admin" and Password "admin" are set at the factory for the administrator. You can change them in the Account Menu. (Please check "**Setting** \rightarrow **Basic** \rightarrow **Security** \rightarrow **Account**")

3. The web-based management page will be display on your screen. In the leftmost column of the web-based management page are **Setting**, **Client Setting**, and **Image Setup**. For more details, you can refer to **Section 5.2**, **Section 5.3** and **Section 5.4**.



Chapter 4 Using IP Camera via Mobile Phone

4.1 Using IP Camera via iPhone

You can use Zavio Web User Interface via iPhone. Please follow the setting process as below. Then you can use Zavio web UI via iPhone.

1. Select Safari function



3. Enter name and password. Default values are both admin. Then click Log in



2. Enter IP address in your web link.



4. The Zavio User Interface and live image will show up in the middle of the screen.



Note It will show continuous snapshots not a real time video streaming. Therefore, the recording feature is disabled.

4.2 Mobile Phone Viewing

To use IP cameras via mobile phones, please make sure your RTSP is set to "On" (Default is "On"). To change the settings of IP cameras, **Please check "Settings** \rightarrow **Basic** \rightarrow **Camera** \rightarrow **General."**

1. 3G Mobile Phone Streaming Viewing

For 3G mobile phone viewing, type "<u>rtsp://<IP>:<PORT>/video.3gp</u>" into your 3G Streaming Link. <IP> is the Public IP address of your IP camera (the default value is 192.168.1.10); <PORT> is the RTSP port of your IP camera (Default value is 554). For Example: <u>rtsp://192.168.1.10:554/video.3qp</u>

P Note:

You can also use RTSP clients (RealPlayer, VLC, QuickTime Player etc) to view RTSP streaming, just type in "<u>rtsp://<IP>:<PORT>/video.3gp</u>" as the Player URL.

2. 2.5G Mobile Phone WAP Viewing

For 2.5G mobile phone viewing, type " <u><IP>/mobile.wml</u> " into your 2.5G WAP Browser. <IP> is the Public IP address of your IP camera.

3. 2.5G Mobile Phone Browser Viewing

For 2.5G mobile phone viewing, type " <u><IP>/mobile.htm</u>" into your 2.5G Web Browser. <IP> is the Public IP address of your IP camera.

Chapter 5 Configuration of Main Menu

On the leftmost column of the web-based management page are **Setting**, **Client Setting**, **Image Setup**. For more details, you can refer to <u>Section 5.2 Setting</u>, <u>Section 5.3 Client Setting</u>, <u>Section 5.4 Image Setup</u>.



On the right column of the web-based management page, you can use Live View. There are four different functions which are **Snapshot**, **Zoom**, **Audio** and **Video Play.** You can see more details as follows.

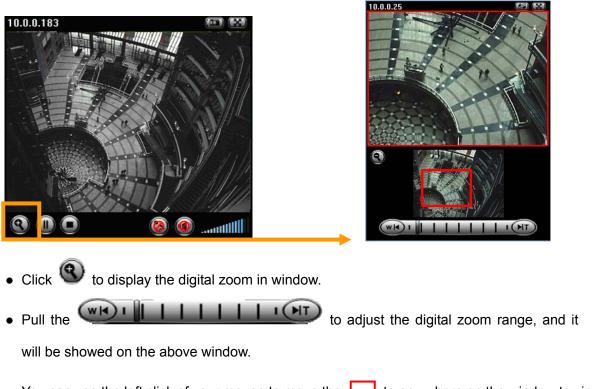
5.1 Live View

5.1.1 Snapshot

Symbols	Meaning	
	Click it, a snapshot window will appear	
Save	to save the picture in your computer	
Close	to return to the view page	
(\mathbf{X})	full Screen	

You can capture a still image shot by the camera and save it in your computer.

5.1.2 Zoom in / out the image via the monitor window



• You can use the left click of your mouse to move the ______ to any where on the window to view the desired detail more clearly.

5.1.3 Video play buttons

Symbols	Meaning	
	Pause the current video	
۲	Play the video	
۲	Stop the current video	
0	Record the current video	

5.1.4 Audio buttons

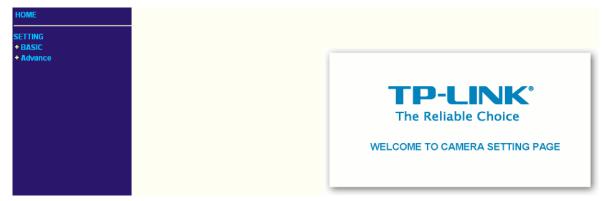
Symbols Meaning	Prote
-----------------	-------

•	Speakers turned on	mean the speakers of your computer are turned on to transmit the sounds from the connected IP camera(s)
1	Speakers turned off	
•>	Microphone turned on	mean you can broadcast to the connected IP camera(s) via the Ethernet using your microphone
8	Microphone turned off	
	Volume control bar	

5.2 Setting

Setting

This function is only for the Administrator. Click this button to get into the **Basic** and **Advance settings** menus.



There are four sub-menus under the **BASIC** menu, which includes **System**, **Camera**, **Network**, and **Security**. For more information, you can refer to **Section 6.1** \sim **Section 6.2** \sim **Section 6.3** and **Section 6.4**.

There are six sub-menus under the Advance menu, which includes FTP Client, SMTP, HTTP event, Schedule, Motion Detection, and System Log. Fore more information, you can refer to Section 7.1, Section 7.2, Section 7.3, Section 7.4, Section 7.5 and Section 7.6.

5.3 Client Setting



This function is only for the client.



Click this button to configure the settings of IP Camera, which includes **Mode**, **View Size**, **Protocol**, and **Video Buffer**.

5.3.1 Mode

Click the drop-down list to choose between MPEG4 and MJPEG video compression mode.

P Note:

MJPEG streaming is unavailable if **RTSP mode** is On (Please check **Setting** \rightarrow **Basic** \rightarrow **Camera** \rightarrow **General**).

5.3.2 View Size

Select the desired display image resolution to 640×480 or 320×240 .

5.3.3 Protocol

Select the transferring protocol from TCP, UDP, HTTP and Multicast.

PNote:

This item appears just after **RSTP mode** is enabled (selecting **Setting** \rightarrow **Basic** \rightarrow **Camera** \rightarrow **General**)

5.3.4 Video Buffer

Turn the Video Buffer function ON / OFF. The Video Buffer function makes the streaming more smoothly in unsteady network environment, but might cause a little delay in live viewing

5.4 Image Setup



You can use the tool bar to optimize video Brightness, Contrast, Saturation and Hue.

5.4.1 Brightness

The higher value the **brightness** is, the brighter the image is.

5.4.2 Contrast

The contrast is a measure of a display system, defined as the ratio of white to black that the system is capable of producing. The higher value the **contrast** is, the more delicate color you can get.

5.4.3 Saturation

The saturation of a color is determined by a combination of light intensity and how much it is distributed across the spectrum of different wavelengths. The higher value the saturation is, the more colorful the image will be.

5.4.4 Hue

Hue is one of the three main attributes of perceived color, which is affected by different wavelength of color. With higher value of hue, color will be much more vivid.

5.4.5 Default

After the adjustment of all settings, you can still click **Default** to make the setting back to the factory default settings.

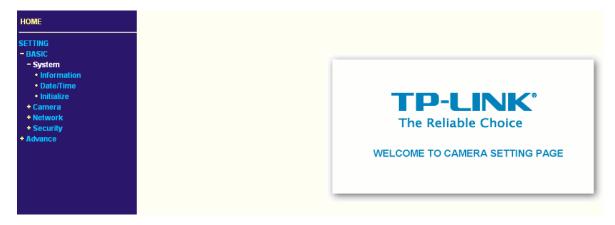
Chapter 6 Setting-Basic



Click **BASIC** to display the submenus including **System**, **Camera**, **Network**, and **Security**.

6.1 System

Click System to display the submenus including Information, Date / Time, and Initialize.



6.1.1 Information

The **Information** page provides the basic information of the product which includes Product Name, Firmware Version and Web Version.

HOME	
SETTING - BASIC	Information
 System Information 	Product name 2-Way Audio Surveillance Camera
• Date/Time • Initialize	Firmware version LM.1.6.16.03P2_Sign2 Wed Apr 15 16:28:22 CST 2009
+ Camera + Network	Web version
+ Security + Advance	

6.1.2 Date / Time

The **Date/ Time** page displays all options of time setting.

HOME		
SETTING - BASIC	Date/Time	
- System • Information	📒 Current date/time	1970-01-01 00:18:51
Date/Time Initialize	PC clock	2009-04-23 16:24:21
+ Camera	📃 Date/time format	yyyy-mm-dd hh:mm:ss 💌
+ Network	📃 Adjust	○ Keep current setting
+ Security + Advance		Synchronize with PC
		 Manual setting
		2009 - 04 - 23 -
		16 🕶 : 24 🕶 : 05 🕶
		Synchronize with NTP
		NTP server name
		pool.ntp.org
		Interval 1 💌 hours
	📕 Time zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi 🛛
		OK Cancel

- **Current date / time**: Displays the current date and time of this IP Camera.
- > **PC clock**: Displays the date and time of the monitoring PC clock.
- Date / Time format: You can click the drop-down list to select different time display formats.
- > Adjust: You can select one of those four adjusting modes for your IP Camera.
 - **Keep current setting**: Select this mode to keep the current date and time of this IP Camera.
 - **Synchronize with PC**: Select this mode to keep the date and time of this IP Camera the same with the monitoring PC.
 - Manual setting: Select this mode to adjust manually the date and time of this IP Camera.
 - **Synchronize with NTP**: Specify the NTP server name and the Refresh Interval to synchronize the date and time of this IP Camera with those of the time server, known as the NTP server.
 - **Time Zone**: You can select the format from Greenwich Mean Time. The time displayed will be the same as the current date / time option.

P Note:

The NTP server (Network Time Protocol) is the time server which is an Internet standard protocol built on the top of TCP / IP. This assures accurate synchronization to the millisecond of computer clock time in a network of computers.

6.1.3 Initialize

HOME	Initializa	
SETTING	Initialize	
- BASIC		
= System	Reboot Reb	oot
Information Date/Time	E Factory default	actory default
• Initialize + Camera	Backup setting data Save	9
+ Network + Security	E Restore setting	Browse) OK
* Advance	📑 Firmware upgrade	Browse OK
	📑 Upload language pack	Browse OK
	Langu	uage : English
	· · · · · · · · · · · · · · · · · · ·	

- Reboot: Click this button to reboot this IP Camera. A confirmation dialogue will appear and then click OK to process. It takes two minutes to reboot this IP Camera.
- Factory Default: Click this button to reset this IP Camera to the factory default settings. A confirmation dialogue will appear and then click OK to process. The network LED indicator on the IP Camera will start to blink. This IP Camera will reboot automatically after the restoring has been finished. Don't turn off this IP Camera during this process.
- Backup Setting: You can save configuration setting data of this IP Camera into a file. Click Save and follow the instructions on the browser to save this setting data file to specified location.
- Restore Setting: Download the saved setting data of this IP Camera. Click Browse... and select the saved file. Click OK and this IP Camera is adjusted according to the loaded data and then restarted.
- Firmware Upgrade: Upgrade the device software. Click Browse... and select the file for upgrading. A confirmation dialogue will appear. Click OK to start. This IP Camera will reboot after upgrading has been finished.

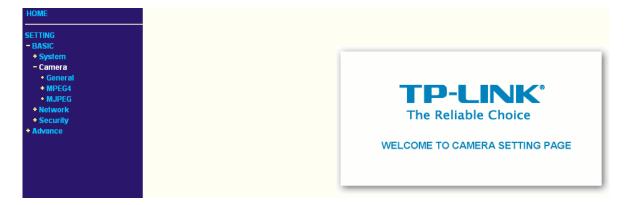
Note:

Use only upgrade files that are special for this IP Camera. Otherwise problems may occur. Don't turn off the IP Camera power or disconnect the network until the upgrading is completed.

Upload Language Pack: Upgrade the device language pack. Click Browse... and select the file for upgrading. A confirmation dialogue will appear. Click OK to start upgrading. The upgrade is applied immediately. The default language is "English."

6.2 Camera

Click Camera to display the submenus including General, MPEG4 and MJPEG.





HOME	General	
SETTING - BASIC	Ceneral	
+ System - Camera	E RTSP	💿 On 🔘 Off
General	📃 Image rotated	None
+ MPEG4 • MJPEG	📃 Night Mode	💿 Auto 🔘 Off
+ Network	Lighting	🔿 50Hz 💿 60Hz 🔿 Outdoor
+ Security + Advance	📒 White Balance	Auto 🗸
	Overlay	🔿 Text overlay 🔿 Privacy mask 💿 Off
		OK Cancel

RTSP: Switch is On or Off

P Note:

RTSP (Real Time Streaming Protocol) is a protocol used in streaming media system which allows clients to remotely control a streaming video server. RTSP is supports by most of the media clients such as Real Player, QuickTime and VLC...etc.

> Image Rotate: You can mirror or flip the display screen.

- Night Mode: You can choose Auto / Off. If you choose Auto option, the camera will adjust automatically to perform well when the environment is not bright enough.
- **Lighting**: You can choose the environment among 50 Hz, 60 Hz, and Outdoor.
- White Balance: You can choose the white balance to Auto, Florescent, Incandescent and Black & White.
- > Overlay:
 - **Text Overlay**: You can see some information on the display screen which includes Date / Time and user-defined text. Also, you can change the background color.
 - **Privacy Mask**: You can cover a specific area of the video image.

6.2.2 MPEG4

A. Computer View

HOME	
SETTING	Computer view
- BASIC	
+ System – Camera	RTSP
General	RTSP port 🔘 554 💿 8554 (1024 ~ 65535)
- MPEG4	Viewer authentication 🔘 On 💿 Off
 Computer view Mobile view 	RTP
MJPEG	Unicast streaming
+ Network	Port range 5000 (1024 ~ 65532) ~ 7999 (1027 ~ 65535)
+ Security + Advance	
Advance	Multicast streaming 💽 On 🔿 Off
	Multicast address 228.0.0.1
	Video port 🔿 Auto 💿 6000 (1024 ~ 65535)
	Audio port 🔿 Auto 💿 7000 (1024 ~ 65535)
	Time-To-Live 15 (1 to 255)
	Image Size 640x480 v
	🗖 Frame rate 30 💌 fps
	Quality
	O Auto
	● Fixed quality Good
	○ Fixed bitrate 2048 kbps
	OK Cancel

- > RTSP (if RTSP mode is On, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow General")
 - RTSP Port: Specify the transmission port number of RTSP streaming. The default value is

8554.

- Viewer Authentication: If the viewer authentication is **On**, the users will be requested to type in username and password when viewing through RTSP.
- > RTP (if RTSP mode is On, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow General")
 - Unicast Streaming Video / Audio Port Range: Specify the transmission port range of RTP streaming video. RTP will select a port randomly from this range.
 - Multicast Streaming (If it is ON)
 - ✓ **Multicast Address**: Specify the multicast server address.
 - Video / Audio Port: Specify the transmission port number of the video data, which is an even number from 1024 to 65534.
 - Time- to- Live: Set the maximum TTL(Transistor-Transistor Logic) that multicast can pass through.
- Image Size: Specify the image size when the network camera transmits. You can choose among 640 x 480, 320 x 240, and 160 x 120.
- Frame Rate: Set the frame rate of the MPEG4 image. You can choose values from 5, 10, 15, 20, 25, and 30 fps. The unit "fps" stands for "frames per second".
- > Quality:
 - Auto: The quality and bitrate will be adjusted automatically according to the frame rate.
 - Fixed Quality: You can select the value of quality among Medium, Good, Delicate and Excellent.
 - Fixed Bitrate: Set the bitrate of MPEG4 image transmission for a line. You can select the values from 64, 128, 256, 384, 512, 768, 1024, 1280, 1536, and 2048 kbps.

HOME	
SETTING	Computer view
- BASIC + System - Camera + General - MPEG4 + Computer view + Mobile view + MJPEG + Network + Security	 MPEG4 viewer port Unicast streaming Video/Audio port number 8090 (1024 ~ 65534) Video/Audio port number(SSL) 8091 Image Size 640x480 v Frame rate 30 v fps
+ Advance	Quality
	Auto
	💿 Fixed quality 🛛 Good 🛛 👻
	◯ Fixed bitrate 2048 🖌 kbps
	OK Cancel

> MPEG4 view port (if RTSP mode is Off, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow

General")

 Unicast Streaming Video / Audio Port Number: Specify the transmission port number of the video data (the default value is 8090). You can specify an even number from 1024 to 65534. If you change the setting of Video / Audio Port Number, the setting of Video / Audio Port Number (SSL) will change automatically.

B. Mobile View

SETTING - BASIC * System - Camera • General • General • Computer view • MDPEG • MJPEG • Network • Security • Advance ✓ Ideo port • Auto ● 10000 (1024 ~ 65535) ■ RTP Unicast streaming ● Port range ● Out © On ● Out © On ● Out © On ● Out © On ● Inage Size ● Iox 120 ■ Frame rate ● Out © Yes
 Auto Fixed quality Excellent Fixed bitrate 64

- ▶ RTSP (if RTSP mode is On, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow General")
 - **RTSP Port**: Specify the transmission port number of RTSP streaming. The default value is 554.
- > RTP (if RTSP mode is On, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow General")
 - Unicast Streaming Video / Audio Port Range: Specify the transmission port range of RTP streaming video. RTP will select a port randomly from the range.
 - Multicast Streaming (If it is ON)
 - ✓ Multicast Address: Specify the multicast server address.
 - Video / Audio Port: Specify the transmission port number of the video data, which is an even number from 1024 to 65534. It is set to 10000 and 11000 by default.
 - Time- to- Live: Set the maximum TTL(Transistor-Transistor Logic) that multicast can pass through.
- > Image Size: The image size of Mobile View is fixed at 160 x 120.
- Frame Rate: Set the frame rate of the MPEG4 image. You can choose values from 5, 10, 15,

20 fps. The unit "fps" stands for "frames sent per second".

- > Quality:
 - **Fixed Bitrate**: Set the bitrate of MPEG4 image transmission for a line. You can select the value from 64, 32, 16 kbps.

6.2.3 MJPEG

HOME	
SETTING	MJPEG
- BASIC	
+ System - Camera	MJPEG viewer port
General	Unicast streaming
- MPEG4	Video/Audio port number 8070 (1024 ~ 65534)
Computer view	
Mobile view MJPEG	Video/Audio port number(SSL) 8071
+ Network	🗖 Image Size 🛛 640×480 🐱
+ Security + Advance	Erame rate 15 💙 fps
	Quality
	Auto
	⊙ Fixed quality Excellent 🛩
	OK Cancel

- ▶ MJPEG Viewer Port (If RTSP is off, please check "Setting \rightarrow Basic \rightarrow Camera \rightarrow General")
 - Unicast Streaming Video / Audio Port Number: Specify the transmission port number of the video data (the default value is 8070). You can specify an even number from 1024 to 65534. If you change the setting of Video / Audio Port Number, the setting of Video / Audio Port Number (SSL) will change automatically.
- Image Size: Specify the image size when the network camera transmits. You can choose among 640 x 480, 320 x 240, and 160 x 120.
- Frame Rate: Set the frame rate of the MJPEG image. You can choose values from 5, 10, 15 fps. The unit "fps" stands for "frames per second".
- > Quality:
 - Auto: The quality will be automatically decided.
 - **Fixed Quality**: You can select the value of quality among Medium, Standard, Good, Delicate and Excellent.

6.3 Network

Click **Network** to display the submenus including **Information**, **PPPoE**, **DDNS**, **UPnP**, **Bonjour**, **IP Notification**.



6.3.1 Information

The page of Information displays the MAC address of the device.

IOME					
ETTING	Information				
BASIC + System	MAC address 00:18;FE:00:51:D6				
+ Camera – Network	Obtain an IP address automatically (DHCP)				
Information PPPoE DDNS UPnP	Use the following IP address				
Bonjour IP Notification Security Advance	• Obtain DNS server address automatically				
Auvance	 Use the following DNS server address 				
	■ HTTP port number				
	OK Cancel				

- Obtain an IP address automatically (DHCP): (If a DHCP server is installed on the network) Select this, the IP will be assigned by the DHCP serve.
- Obtain DNS server address automatically: Select this to obtain the address of DNS server automatically.

HOME	la fa una dia a	
SETTING - BASIC	Information	
+ System	MAC address	00:1B:FE:00:51:D6
+ Camera - Network	🔘 Obtain an IP address :	automatically (DHCP)
Information PPPoE	O Use the following IP ac	
• DDNS	IP address	192.168.1.10
• UPnP • Bonjour	Subnet mask	255.255.255.0
IP Notification Security	Default gateway	192.168.1.1
+ Advance		
	Ose the following DNS	server address
	Primary DNS server	0.0.0.0
	Secondary DNS serve	r 0.0.0.0
	📕 HTTP port number	⊙ 80 ○ (1024 to 65535)
	ОК	Cancel

- > Use the following IP address: Select this when the fixed IP address is set.
 - **IP address**: Enter the IP address of the device.
 - Subnet mask: Enter the subnet mask.
 - **Default gateway**: Enter the default gateway.
- Use the following DNS server address: Select this when you set the fixed IP address as the IP address of DNS server.
 - Primary DNS server: Enter the IP address of the primary DNS server.
 - Secondary DNS server (optional): Enter the IP address of the secondary DNS server if necessary.
- HTTP port number: Select 80 in general situations. If you want to use a port number other than 80, select the text box and enter a port number between 1024 and 65535.
 - When you have set the HTTP port number to a number other than 80 on the Network setting page or in the Setup Program, access the device by typing the IP address of the device on the web browser as follows: for example, when HTTP port number is set to 2000, you should type in <u>http://192.168.1.100:2000/</u> to access the device.

P Note:

The IP Camera needs to be rebooted after it finishes changing the network setting completely.

P Note:

If you connect the IP Camera with your computer directly, the default network domain of camera is 192.168.1.x

6.3.2 PPPoE (Point-to-Point Protocol over Ethernet)

If your ISP provides Dynamic IP with authentication by username and password, enter all PPPoE information in this part. When you use the PPPoE function, you need to turn on the DDNS or IP Notification function at the same time.

+ Camera - Network • Information	IP address	0.0.0.0
Information		
PPPoE	User ID	
• DDNS	Password	
• UPnP • Bonjour	Re-type password	
IP Notification Security	 Obtain DNS server 	r address automatically
vance	🔘 Use the following [DNS server address

- > **IP address**: The IP address obtained when the IP camera connecting with network at PPPoE.
- User ID: Enter the user ID for authentication necessary for PPPoE connections. Type it up to 64 characters.
- Password: Enter the password for authentication necessary for PPPoE connections. Type it up to 32 characters.
- **Re-type password**: Re-type the password to confirm.
- Obtain DNS server address automatically: Select this to obtain the address of DNS server automatically.

HOME	PPPoE
SETTING - BASIC + System + Camera - Network + Information + PPPoE + DDNS + UPnP + Bonjour + IP Notification + Security + Advance	 PPPoE On Off IP address User ID Password Re-type password Obtain DNS server address automatically Obtain DNS server address Primary DNS server 0.0.0 Secondary DNS server OK Cancel

- Use the following DNS server address: Select this when you set the fixed IP address as the IP address of DNS server.
 - Primary DNS server: Enter the IP address of the primary DNS server.
 - Secondary DNS server: Enter the IP address of the secondary DNS server.

P Note:

1. **PPPoE** (**Point-to-Point Protocol over Ethernet**): PPPoE is a network protocol for encapsulating Point-to-Point Protocol frames insider Ethernet frames. PPPoE connection is used mainly with ADSL service where individual users connect to the ADSL transceiver (modem) over Ethernet work. It also widely used in XDSL (digital affiliate line such as ADSL, VDSL or SDSL)

2. The IP Camera needs to be rebooted after it finishes changing the network completely.

3. The IP Camera with Intelligent IP Installer can't be founded after enabling the PPPoE and rebooting.

6.3.3 DDNS (Dynamic DNS)

Choose menu "Dynamic DNS", you can configure the Dynamic DNS function.

The IP Camera offers the **DDNS** (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address, and then your friends can connect to your server by entering your domain name no matter what your IP address is. Before using this feature, you need to sign up for DDNS service providers such as <u>www.dyndns.org</u>, or <u>www.no-ip.com</u>. The Dynamic DNS client service provider will give you a password or key.

HOME	
SETTING - BASIC	DDNS
+ System	🗖 DDNS 💿 On 🔘 Off
+ Camera – Network	Server name
 Information PPPoE 	User ID
• DDNS • UPnP	Password
• Bonjour	Re-type password
IP Notification Security	Host name
+ Advance	OK Cancel

- Server name: Choose the DDNS Server from the list.
- User ID: Enter the user ID for authentication necessary for DDNS connections. Type it up to 64 characters.
- Password: Enter the password for authentication necessary for DDNS connections. Type it up to 32 characters.
- > **Re-type password**: Re-type the password to confirm.
- > Host name: Enter the host name that is registered to the DDNS server.

P Note:

How to apply DDNS username and Host name?

You can apply DDNS username and Host name by the following steps:

1. Log in <u>http://www.dyndns.org</u>, click the **Create Account**.

	₽・ I具@・*
連結 🕃 Google 🙋 中時電子報 👱 聯合新聞網 \phantom W Wikipedia 💿 zavio 🧚 tw mojim.com 🧶 FAE 🖉 TmyURL 🧶 On tw 🖉 1-apple	工具() • "
	エ具(2)・ "
😪 🏟 🖉 DynDNS: DNS Hotting, Email Delivery and Other Serv	
DynDNS.com > Dynest > DynTLD > Co	orporate 🚊
OpynDNS.	
About Services Account Support News	
A NEW WINDOW TO YOUR WORLD All-new DynDNS Updater for Windows, now available Us for static and dynamic IP address Mailhop Services Ensure reliable email delivery Search News Dynamic Network Services Inc. Expands Domain Registration Services	
Resources Services Support About DynDNS	
What is DNS? DNS Hosting 24/7 Premier Support Company Facts DNS Tools Free Dynamic DNS DNS Update API Technologies Home Solutions Email Relay Update Clients DNS Inc. Jobs Business Solutions Domain Names Updater for Windows Contacts	
	100% • //

2. Input all information and follow step by step with DynDNS.

	ww.dyndns.com/account/create.html			<u> </u>	🔒 🔸 🗙 🛛	ahoo! Search
	見(Y) 我的最愛(A) 工具(I) i 非電子報 🙁 聯合新聞網 W/ W:		🗚 tw.mojim.com	🥭 FAE 🙍 TinyUR	L 🤌 Orz.tw 🖉	1-apple
🛷 , 🖓 DynDNS Ac	count Registration				🔓 • 🔊	- 🖶 - 🔂 網頁化 - 🚫 工具(
					DynDNS.com	Dynect > DynTLD > Corpora
🕽 Dyn	DNS			User:	Lost Pass	Pass: Log
	About	Services	Account	Support	News	
Account	Create Your D		ount			
eate Account gin	Please complete the form	•		unt.		
st Password?	-User Information					
	Userna	ame:				
earch	Email Addr	ess:	ī	Instructions to activate y	vour account will be se	nt to the email address provided.
	Confirm Email Addr	ess:				
Search	Passw	Password:		Your password needs to be more than 5 characters and cannot be the same as your usemal Do not choose a password that is a common word, or can otherwise be easily guessed.		
	Confirm Password:					
	- About You (optional) Providing this information needs. Thanks for your h	n will help us to b	petter understand	our customers, and	tailor future offe	rings more accurately to your
	How did you hear a	bout us:	•		e <u>do not sell</u> your acco Idress.	unt information to anyone, including your em
	Det	tails:				

3. Log in with new account and click $\textbf{Account} \rightarrow \textbf{My Hosts} \rightarrow \textbf{Add Host Services}.$

🕒 💽 🔹 🚫 https://ww	w.dyndns.com/account/	*	🔒 😽 🗙 Yal	100! Search	
	(Y) 我的最愛(A) 工具(D) 說明(H) 電子報 図 聯合新聞網 W Wikipedia ○ zavio	🍁 tw.mojim.com 👩 FAE 👩 TinyU	RL 🙋 Orz.tw 🙋 1	-apple	
🍾 🍻 🕥 DynDNS: My	Account		🗿 • 🛍	- 🖶 - 📑 網頁 🕑 - 🎯 工具 🔘	
_			DynDNS.com >	Dynect > DynTLD > Corporate	
	DNC			Logged In User: duckyia	
🔿 Dyn	DIN3.			My Services - My Cart - Log Or	
	About Services	Account Support	News		
	Increase your update abu	se threshold. Consider an Account U	lograde.		
	, ,		and the second sec		
My Account	Account Summary for du	ckyiaa			
My Services	· · · · · · · · · · · · · · · · · · ·				
Account Settings	My Services	Billing	Account	t Settings	
Billing	View, modify, purchase, and delete your services.	Update your billing information, complete	a (Update your email address, set preferences, and delete	
My Cart Oitems	-	purchase, and view in		your account.	
	My Zones	View Shopping Cart	Change	Change Email Address	
	Add Zone Services	Active Services	Change	Change Password	
Search	My Hosts	Order History	Change	Username	
	Add Host Services	Billing Profile and Vouchers	Contact	Contact Manager	
Search	Account Upgrades	Renew Services	Mailing	Mailing Lists	
	MailHop Outbound	Auto Renew Settings	Move S	ervices	
	Network Monitoring	Sync Expirations	Prefere	Preferences	
	SSL Certificates		Close A	ccount	
	Recursive DNS				
	Support				
	DNS Service Level Agreement				
	Premier Support				

4. Type domain in the **Hostname** field and select sub-domain.

車結 💈 Google 💋 中時間		L) 工具(I) 副 新聞網 ₩ Wi] zavio 🕺	tw.mojim.com	🔊 FAE 🍙 T	inyURL	🖉 Ozz.tv 🖉	1-apple	
	MERA Setting	1	AMERA S			Account	1		 - 🖶 • 🔂 網頁® • 🎯 エ	具(2) •
	1	About	Service	IS	Account	Support		News		
		Access to mo	ore doma	ins, <u>Premiu</u>	um Domains. (Consider an <u>Ao</u>	count U	pgrade.		
My Account	Add N	lew Hosti	name						<u>↑ Host Ser</u>	rvices
My Services Account Upgrades SLA Premier Support									Host Service features. Please features. <u>Learn More</u>	
Zone Services Host Services		Hostr	name:			servebbs.org		•		
MailHop Outbound Recursive DNS Network Monitoring SSL Certificates Renew Services		Wild Service	lcard: Type:	 Host Web 	alias "*.hostn with IP addre Hop Redirect ne Hostname	ame.domain" t ss	o same			
Auto Renew Settings Sync Expirations	_	IP Add	lress:					9	0	
Account Settings	-				Sector States	ddress 122.124	.2.215			
Billing My Cart <u>O items</u>	_			I I L valu	e is 60 secono	is. <u>Edit I I L</u> .				
Search		Mail Ro	uting:	□ Yes,	let me configu	ure Email routir	g.			
ocurci							C	reate Host	1	

5. After typing in information, check your DDNS service.

🚽 🦳 👻 🚺 🚺 🔰 🚺	.d yndns.com/account/services/hos	sts/	•	o! Search	
	⑦ 我的最愛(▲) 工具(T) 電子報 12 聯合新聞網 W №		jim.com 🩋 FAE 🍙 TinyURI	L 🙋 Orz.tw 🙋 1-e	pple
🔹 🔿 DynDNS Acc	count Host Services			🖸 • 📾 •	🖶 • 🔂 網頁 🕑 • 🎯 工具 🛛 •
				DynDNS.com > D	ynect > DynTLD > Corporate
🔿 Dyn[DNS				Logged In User: duckyia : <u>Mv Services</u> - <u>Mv Cart</u> - <u>Log Ou</u>
	About	Services Acc	ount Support	News	
1y Account	Host Services		mains. Consider an <u>Account</u>		
ny Services		-	-		
Account Upgrades SLA Premier Support Zone Services	purchase an account up	The second s	c DNS hosts. If you wish to h s you to create 20 additional Jpgrade page.		and the second se
Account Upgrades SLA Premier Support Zone Services Host Services	purchase an account up	grade. Each upgrade allow	s you to create 20 additional		and the second se
Account Upgrades SLA Premier Support Zone Services Host Services MailHop Outbound Recursive DNS	purchase an <u>account up</u> You like to see your curr	grade. Each upgrade allow	s you to create 20 additional	hosts plus <mark>additiona</mark>	al features.
Account Upgrades SLA Premier Support Zone Services Host Services MailHop Outbound Recursive DNS Network Monitoring	purchase an <u>account up</u> You like to see your curr <u>Hostnam</u>	grade. Each upgrade allow rent usage on the <u>Account I</u> the <u>Service</u>	s you to create 20 additional <u>Jpgrade</u> page. <u>Details</u>	hosts plus <u>additiona</u> May. 2	<u>l features</u> . Last Updated
Account Upgrades SLA Premier Support Zone Services Host Services MailHop Outbound Recursive DNS Network Monitoring SSL Certificates	yurchase an <u>account up</u> You like to see your curr <u>Hostnam</u> <u>ducky-test.dyndns.org</u>	grade. Each upgrade allow rent usage on the <u>Account I</u> te <u>Service</u> Host	s you to create 20 additional Jpgrade page. Details 118.169.80.178	hosts plus <u>additions</u> May. 2 May. 2	<u>Last Updated</u> 29, 2008 8:43 PM
Account Upgrades SLA Premier Support Zone Services MailHop Outbound Recursive DNS Network Monitoring SSL Certificates Renew Services	purchase an <u>account up</u> You like to see your cur <u>Hostnam</u> <u>ducky-test.dyndns.org</u> <u>duckyiaa.dyndns.org</u>	grade. Each upgrade allow rent usage on the <u>Account 1</u> te <u>Service</u> Host Host Host	s you to create 20 additional Jpgrade page. <u>Details</u> 118.169.80.178 61.216.173.2	hosts plus <u>addition</u> May. 2 May. 2 May. 2	Last Updated 29, 2008 8:43 PM 30, 2008 2:41 AM
Account Upgrades SLA Premier Support Zone Services Host Services MailHop Outbound Recursive DNS Network Monitoring SSL Certificates Renew Services Auto Renew Settings	You like to see your curr Hostnam ducky-test.dyndns.org senmei.dynalias.org	grade. Each upgrade allow rent usage on the <u>Account 1</u> te <u>Service</u> Host Host Host	s you to create 20 additional Jpgrade page. 118.169.80.178 61.216.173.2 218.170.28.152	hosts plus <u>addition</u> May. 2 May. 2 May. 2 May. 2 May. 2	Last Updated 29, 2008 8:43 PM 30, 2008 2:41 AM 28, 2008 12:33 AM
Account Upgrades SLA Premier Support Zone Services Hail-top Outbound Recursive DNS Network Monitoring SSL Certificates Renew Services Auto Renew Settings Sync Expirations	You like to see your cun Hostnam ducky-test.dyndns.org duckviaa.dyndns.org zavio-cmos.dyndns.org zavio-inc.dyndns.org	grade. Each upgrade allow rent usage on the <u>Account I</u> ae <u>Service</u> Host Host Host Host Host	s you to create 20 additional Jpgrade page. 118.169.80.178 61.216.173.2 218.170.28.152 61.216.171.170	hosts plus <u>addition</u> May. 2 May. 2 May. 2 May. 2 May. 2	Last Updated 29, 2008 8:43 PM 30, 2008 2:41 AM 28, 2008 12:33 AM 29, 2008 6:41 AM
Account Upgrades SLA Premier Support Zone Services Host Services MailHop Outbound Recursive DNS Recursive DNS Network Monitoring SSL Certificates Renew Services Auto Renew Settings Sync Expirations Account Settings	You like to see your curr Hostnam ducky-test.dyndns.org senmei.dynalias.org zavio-cmos.dyndns.org	grade. Each upgrade allow rent usage on the <u>Account I</u> ae <u>Service</u> Host Host Host Host Host	s you to create 20 additional Jpgrade page. 118.169.80.178 61.216.173.2 218.170.28.152 61.216.171.170	hosts plus <u>addition</u> May. 2 May. 2 May. 2 May. 2 May. 2	Last Updated 29, 2008 8:43 PM 30, 2008 2:41 AM 28, 2008 12:33 AM 29, 2008 6:41 AM
Wy Services Account Upgrades SLA Premier Support Zone Services MailHop Outbound Recursive DNS Network Monitoring SSL Certificates Renew Services Auto Renew Settings Sync Expirations Account Settings Billing My Cart	Purchase an account up You like to see your cur Hostnam ducky-test.dyndns.org duckyiaa.dyndns.org zavio-cmos.dyndns.org zavio-inc.dyndns.org	grade. Each upgrade allow rent usage on the <u>Account I</u> ae <u>Service</u> Host Host Host Host Host	s you to create 20 additional Jpgrade page. 118.169.80.178 61.216.173.2 218.170.28.152 61.216.171.170	hosts plus <u>addition</u> May. 2 May. 2 May. 2 May. 2 May. 2	Last Updated 29, 2008 8:43 PM 30, 2008 2:41 AM 28, 2008 12:33 AM 29, 2008 6:41 AM

6. Type your DDNS User ID, Password and Host name in Setting \rightarrow Network \rightarrow DDNS. After completing setting, reboot IP Camera.

HOME	
SETTING	DDNS
- BASIC	
+ System	🗖 DDNS 💿 On 🔘 Off
+ Camera - Network	Server name http://www.dyndns.org 😪
Information PPPoE	User ID
• DDNS	Password
UPnP Bonjour	Re-type password
IP Notification Security	Host name
+ Advance	OK Cancel

6.3.4 UPnP (Universal Plug and Play)

Choose menu "**Network** \rightarrow **UPnP**", you can view the information about **UPnP** (Universal Plug and Play) in the screen as shown in the following figure. The UPnP feature allows the devices, such as Internet computers, to access the local host resources or devices as needed. UPnP devices can be automatically discovered by the UPnP service application on the LAN.

HOME	
SETTING - BASIC	UPnP
+ System + Camera	■ UPnP On Off Turn On UPnP port forwarding
 Network Information PPPoE 	HTTP port
• DDNS • UPnP	SSL Port
Bonjour IP Notification Security	MPEG4 viewer port 8090 (1024 ~ 65535) MPEG4 viewer port(SSL) 8091 (1024 ~ 65535)
+ Advance	MJPEG viewer port 8070 (1024 ~ 65535)
	MJPEG viewer port(SSL) 8071 (1024 ~ 65535)
	MPEG4 RTSP port Computer view 8050 (1024 ~ 65535)
	Mobile view O 554 (1024 ~ 65535) (1024 ~ 65535)
	OK Cancel

- **HTTP port**: Enter the HTTP port number and the default HTTP port is 80.
- **SSL port**: Enter the SSL port number and the default SSL port is 443.
- MPEG4 viewer port: Enter the MPEG4 viewer port number and the default MPEG4 viewer port is 8090.
- MPEG4 viewer port (SSL): Enter the MPEG4 SSL viewer port and the default MPEG4 viewer port number is 8091.
- MJPEG viewer port: Enter the MJPEG viewer port number and default MJPEG viewer port is 8070.
- MJPEG viewer port (SSL): Enter the MPEG4 SSL viewer port and default MJPEG viewer port number is 8071.
- MPEG4 RTSP port: Enter the MPEG4 RTSP port, default value is 8050 for computer view, 8030 for mobile view.

P Note:

UPnP (Universal Plug and Play): UPnP is a set of computer network protocol. It allows devices to connect seamlessly and simplify the implementation of networks at home and corporate environments. The device supports UPnP which is enabled by default. The device will be automatically detected and a new icon will be added to "My Network Place" if it also enables on your computer. It provides Port Forwarding for opening a port in a router or firewall in a private network in order to let a party from the outside world contact a inside user.

6.3.5 Bonjour

Bonjour, also known as zero-configuration networking, enables automatic discovery of computers, devices, and services on IP networks. **Bonjour** uses industry standard IP protocols to allow devices to automatically discover each other without the need to enter IP addresses or configure DNS servers.

HOME
 SETTING BASIC System Camera Network Information PPPoE DDNS UPnP Bonjour IP Notification Security Advance

> **Device Name**: Enter Device Name to your needs.

P Note:

How to use Bonjour in your Windows Browser UI? Please check the link below:

http://www.apple.com/support/downloads/bonjourforwindows.html

6.3.6 IP Notification

When network notify type is set to "ON", you can send an e-mail notification of the completion of the network setting.

HOME						
SETTING - BASIC	IP Notification					
+ System	📕 IP Notification 🛛 💿 On 🔘 Off					
+ Camera - Network • Information	Notify type	DHCP Static IP PPOE				
PPPoE	SMTP server name					
DDNS UPnP	SMTP server port	25 (1 ~ 65535)	SSL			
• Bonjour	Authentication	💿 On 🔘 Off				
IP Notification		🗹 SMTP 🔲 POP before SMTP				
+ Security + Advance						
	User name					
	Password					
	Recipient e-Mail address					
	Administrator e-Mail address					
	Subject	IP Notify				
	Message	Product Name : <product> Web Version : <vweb> APP Version : <vfirm> http://(ip):<port> MAC Address : <mac></mac></port></vfirm></vweb></product>	 Help 			
		OK Cancel Test				

- > Notify Type: You can select the notify type among DHCP, Static IP, and PPPoE.
- SMTP Server Name: Type the SMTP server name up to 64 characters, or the IP address of the SMTP server.
- SMTP Server Port: You can set port number from 1~65535 according to your mail server. The default value is 25.
 - **SSL**: It is Security setting. Checking **SSL** box if the mail server you use has security restriction.

If you use g-mail as your mail server, you should set 587 as your port number and check **SSL** box.

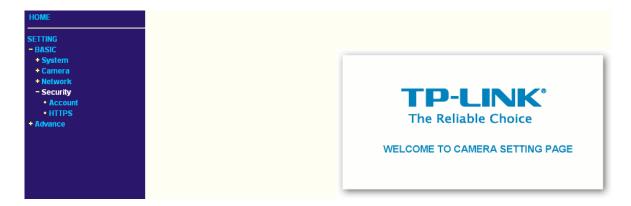
- > Authentication: Select the authentication required when you send an email.
 - Off: Select this if no authentication is necessary when an email is sent.
 - On: If authentication is necessary when an e-mail is sent, there are SMPT, POP before SMPT or both three options.
 - **SMTP**: Select this if SMTP authentication is necessary when an e-mail is sent.
 - **POP before SMTP**: Select this if POP before SMTP authentication is necessary when an e-mail is sent. If this option is selected, the **IP Notification** page will be different as following figure shown.

HOME					
SETTING - BASIC	IP Notification				
+ System	🗖 IP Notification 🛛 💿 On 🔘 Off				
+ Camera – Network	Notify type	🔲 DHCP 🔲 Static IP 🔲 PPPoE			
 Information PPPoE 	SMTP server name				
DDNS	SMTP server port	25 (1 ~ 65535)	SSL		
• UPnP • Bonjour	Authentication	💿 On 🔘 Off			
IP Notification		SMTP POP before SMTP			
+ Security + Advance	POP server name				
	User name				
	Password				
	Recipient e-Mail address				
	Administrator e-Mail address				
	Subject	IP Notify			
	Message	Product Name : <product> Web Version : <vweb> APP Version : <vfirm> http://<ip>:<port> MAC Address : <mac></mac></port></ip></vfirm></vweb></product>	Help		
		OK Cancel Test			

- **POP server name**: It is necessary when the POP before SMTP is selected in Authentication. Type the POP (receiving mail) server name up to 64 characters, or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-mails performs authentication using the POP user account.
- User name, Password: Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-mails performs authentication.
- Recipient e-mail address: Type the recipient e-Mail address up to 64 characters. You can specify up to three recipient E-mail addresses.
- Administrator e-mail address: Type the Administrator e-Mail address up to 64 characters. This address is used for reply mail and sending system messages from the SMTP server.
- Subject: Type the subject/title of the e-Mail up to 64 characters. With respect to mail which is sent according to the IP notification.
- Message: Type the text of the E-mail up to 384 characters. Default value provides network information including IP, Port, MAC, Model, Firmware Version and Web Version.

6.4 Security

Click Security to display the submenus including Account and HTTPS.



6.4.1 Account

The device default account and password setting is "admin / admin". That means everyone who knows IP address can access the device including all configuration. Therefore, it is necessary to assign a password if the device is intended to be accessed by others.

Use	r ID User nam	e Password	Re-type Password	Viewer n	node
Admini	strator admin	••••	••••	Admin	~
Use	er 1			Admin	*
Use	er 2			Admin	~
Use	r3			Admin	~
Use	er 4			Admin	~
Use	r 5			Admin	~
Use	er 6			Admin	~
Use	er 7			Admin	~
Use	r8			Admin	~
Use	er 9			Admin	¥

- **User name**: Set a user name between 4-16 characters.
- > **Password**: Set a password between 4-16 characters.
- > **Re-type Password**: Re-type the password to confirm.
- Viewer Mode: Set the user mode among Admin, Operator, and Viewer. Different viewer mode has different limits of authority.
 - The Admin mode has all authority of configuration.
 - The Operator mode can not only view the Live View but also control the PTZ (apply in speed dome).
 - The Viewer mode only can view the Live View.
- > Viewer Authentication: Allows all viewers directly access to Live View.

6.4.2 HTTPS

HTTPS is a URL scheme used to indicate a secure HTTP connection. It is syntactically identical to the http:// scheme normally used for accessing resources using HTTP. Using https: //URL/ with a different default TCP port (443) and an additional encryption / authentication layer between the HTTP and TCP, you can use the IP camera through HTTPS easily by using "https://" instead of "http://".

HOME SETTING	HTTPS					
- BASIC + System + Camera + Network - Security • Account	Create & Install Create self-sig	ned certificate				
• HTTPS	Installed Certificate					
+ Advance	Subject Name	Subject Name				
	No certificate installe	No certificate installed.				
	Properties	Remove				
	HTTPS Connection Po	licy				
	Administrator	НТТР				
	Operator	НТТР				
	Viewer	НТТР				
	Set Policy					

- > Create & Install: Create a self-signed certificate for HTTPS to recognize.
- > Installed Certificate: Display or remove the properties of the installed certificate.
- > HTTPS Connection Policy: Set HTTPS connection policy for different level of users.

To use the HTTPS encryption, please set up "Create self-signed certificate" for the first time you use the HTTPS function, and then set up the connection policy for different users.

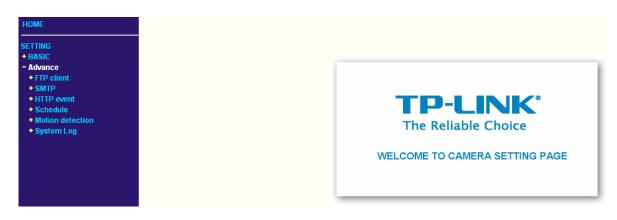
Create &	Install			_	-	ertificate 网页对话框
	reate self-signed	certificate)	Crea	ate self-signed	certificate
🗖 Installed	Certificate			-	Country	
Subject	Name				State or province	
No certi	ficate installed.			•	Locality	
Prope	erties Rem	ove		•	Organization	
- Tope					Organizational Unit	
📃 HTTPS C	onnection Policy				Common Name	
Administ	trator	HTTP	*	•	Validity	365 days(1~1000)
Operator	r	HTTP	~			
Viewer		HTTP	*		OK	Cancel
Set P		L				

When enable HTTPS with RTSP on mode, the IP Camera only protect the setting such as username and password and do not protect video and audio.

When enable HTTPS with RTSP off mode, the IP Camera will protect all setting including video and audio.

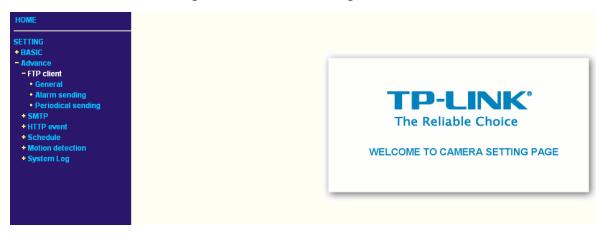
Chapter 7 Setting-Advance

Click Advance to display the submenus including FTP client, SMTP, HTTP event, Schedule, Motion detection and System Log.



7.1 FTP Client

Use this menu to set up for capturing and sending images to an FTP server. By using FTP client function, you can send the image and video file which has been shot and recorded linked with the built-in motion detection function to FTP server. FTP client setting menu is composed of three items, **General**, **Alarm sending** and **Periodical sending**.



7.1.1 General

HOME	
SETTING + BASIC	General
- Advance	= FTP client 💿 On 🔘 Off
 FTP client General 	FTP server name
Alarm sending Periodical sending	User name
+ SMTP + HTTP event	Password
+ Schedule	Re-type password
+ Motion detection + System Log	Passive mode i On 💿 Off
	OK Cancel Test

Select **On** when you use FTP function. The FTP client setting page will appear.

Select **Off** when you do not wish to use the FTP client function.

P Note:

The frame rate and operability on the main viewer may decrease while a file is being transmitted by the FTP client function.

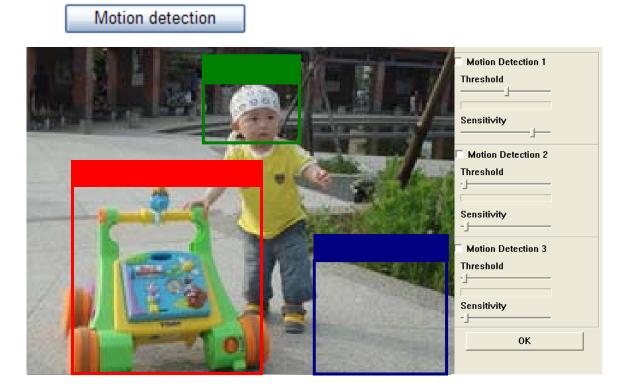
- FTP server name: Type the FTP server name to upload still images up to 64 characters, or the IP address of the FTP server.
- **User name**: Type the user name for the FTP server.
- > **Password**: Type the password for the FTP server.
- Retype password: To confirm the password, type the same characters as you have typed in the Password box.
- Passive mode: Set whether you use the passive mode of FTP server or not when connecting to FTP server. Select On to connect to FTP server using the passive mode.

7.1.2 Alarm sending

Set to forward the image and video file to the specified FTP server linked with the alarm detection by the built-in motion detection function. Select On to send the image file to FTP server linked with the alarm detection.

НОМЕ	Alarm sending	
SETTING	Alam Schang	
+ BASIC - Advance - FTP client	🗖 Alarm sending 💿 On 🔘 Off	
General	Remote path	
Alarm sending Periodical sending	Image file name	
+ SMTP	Suffix 🛛 🔿 Date Time 💿 Sequer	nce number
+ HTTP event + Schedule	Sequence numbe	er clear 🛛 Clear
+ Motion detection + System Log	Alarm 🔽 Motion detection 📃	Motion detection
	Effective Period 🔿 Always	
	Schedule	chedule
	OK Cancel	

- **Remote Path**: Type the path to the destination in FTP server up to 64 characters.
- Image File Name: Type the file name you want to assign to the images when sending to the FTP server. You can use up to 10 alphanumeric characters, - (hyphen) and _ (underscore) for naming.
- > **Suffix**: Select a suffix to add to the file name
 - Date & time: The date & time suffix is added to the Image file name. The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
 - **Sequence number**: A consecutive number of 10 digits between 000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.
 - Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.
- > Alarm
 - **Motion Detection**: Click it for using Motion Detection function as a sensor. You can set motion detection function on the **motion detection page**.



You can set motion detection on **motion detection page**. (Please go to "Setting \rightarrow Advance \rightarrow Motion detection \rightarrow Setting") For more details, you can check Section 6.5.

- > Effective period: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.
 - **Schedule**: You can specify the period when the periodical sending is effective in the Schedule setting in the other section.

P Note:

You can set schedule function on Schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

Schedule

🗿 http://192.168.1.10 - Schedule - Microsoft In	nternet Explorer
Schedule selection FTP - Alarm	<u>_</u>
Mon Start time 00 : 00 - End time 2	:4 : 00
Tue Start time 00 : 00 - End time 2	.4 : 00
Uved Start time 00 : 00 - End time 2	24 : 00
Thu Start time 00 : 00 - End time 2	24 : 00
🔲 Fri Start time 🛛 : 🗤 - End time 🛛	24 : 00
🔲 Sat Start time 🛛 : 🗤 - End time 🛛	24 : 00
Sun Start time 00 : 00 - End time 2	4 : 00
Use the same time schedule every day.	
OK Cancel	
	<u> </u>
🙆 完毕	🥶 Internet

7.1.3 Periodical sending

You can set to send an image file to FTP server periodically by selecting **On** to send the image file to FTP server linked with setting period.

HOME	
SETTING + BASIC	Periodical sending
- Advance - FTP client • General	 Periodical sending On Off Remote path
 Alarm sending Periodical sending SMTP 	Image file name Suffix 🛛 O None 🔿 Date Time 💿 Sequence number
+ HTTP event + Schedule + Motion detection	Sequence number clear Clear
+ System Log	Interval 00 H 30 M (MIN : 1min. MAX : 24-hour interval)
	Effective Period O Always
	OK Cancel

Image file name: Type the file name of the image sent by SMTP up to 10 alphanumeric characters, - (hyphen) and _ (under score).

- Suffix: Select a suffix to be added to the file name sent by SMTP.
 - None: The name of the sent file will be the Image file name.
 - Date & time: The date & time suffix is added to the Image file name. The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
 - Sequence number: A consecutive number is added to the Image file name.
 - Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.
- Interval: Set the periodical sending is effective interval. Min value is 1 min and Max value is 24 hour.
- > Effective period: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.
 - **Schedule**: You can specify the period when the periodical sending is effective in the schedule setting in the other section.

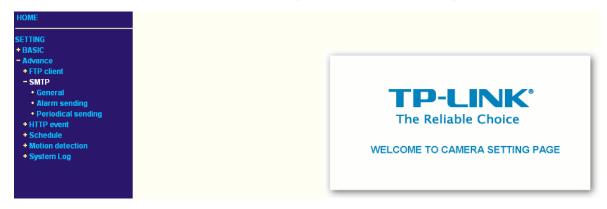
You can set schedule function on schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

Schedule

🗿 http://192.168.1.10 - Schedule - Microsoft Intern	net Explorer
Schedule selection FTP - Periodical 🗸	<u>^</u>
Mon Start time 00 : 00 - End time 24	: 00
Tue Start time 00 : 00 - End time 24	: 00
Wed Start time 00 : 00 - End time 24	: 00
Thu Start time 00 : 00 - End time 24	: 00
Fri Start time 00 : 00 - End time 24	: 00
Sat Start time 00 : 00 - End time 24	: 00
Sun Start time 00 : 00 - End time 24	: 00
Use the same time schedule every day.	
OK Cancel	
	🎽 🔮 Internet

7.2 SMTP

Set the SMTP menu when you want to send an image via e-mail. By using Mail (SMTP) function, you can send a mail with attached image and video which has been shot linked with the built-in motion detection function. The image file can also be sent periodically. E-Mail (SMTP) setting menu is composed of three items, **General**, **Alarm sending** and **Periodical sending**.



7.2.1 General

Select **On** when you use the SMTP function. The common setting options are displayed below.

Select **Off** if you do not wish to use the e-Mail (SMTP) function.

P Note:

The Setting of **General** will be the same as the setting of IP Notification (Please check "**Setting** \rightarrow **Basic** \rightarrow **Network** \rightarrow **IP Notification**")

SETTING	General		
+ HASIC - Advance + FTP client - SMTP - General - Alarm sending - Periodical sending + HTTP event + Schedule + Motion detection + System Log	 e-Mail (SMTP) On Off SMTP server name SMTP server port Authentication 	25 (1 ~ 65535) On ○ Off SMTP □ POP before SMTP 	SSL
	Recipient e-Mail address Administrator e-Mail address Subject		
	Message		< >
		OK Cancel Test	

- SMTP server name: Type the SMTP server name up to 64 characters, or the IP address of the SMTP server.
- SMTP Server Port: You can set port number from 1~65535 according to your mail server. The default value is 25.
- > Security setting: Check SSL box if the mail server you use has security restriction.

If you use g-mail as your mail server, you should set 587 as your port number and check SSL box.

- > Authentication: Select the authentication required when you send an email.
 - Off: Select it if no authentication is necessary when an email is sent.
 - On: When authentication is necessary an e-mail is sent, select one of the authentication methods from the followings.

НОМЕ	General		
SETTING + BASIC - Advance + FTP client - SMTP • General • Alarm sending • Periodical sending + HTTP event + Schedule + Motion detection + System Log	General e-Mail (SMTP) On Off SMTP server name SMTP server port Authentication POP server name User name Password Recipient e-Mail address Administrator e-Mail address Subject Message	25 (1 ~ 65535) ● On ● Off ♥ SMTP ♥ POP before SMTP 	SSL
		OK Cancel Test	

- > **SMTP**: Select it if SMTP authentication is necessary when an e-mail is sent.
- > **POP before SMTP**: Select if POP before SMTP authentication is necessary when an e-mail is sent.

P Note:

When you set to On, be sure to select either or both SMTP or / and POP before SMTP.

- **POP server name**: When the **POP before SMTP** is selected in Authentication, type the POP (receiving mail) server name up to 64 characters, or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-mails performs authentication using the POP user account.
- User name, Password: Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-mails performs authentication.
- Recipient e-mail address: Type the recipient e-Mail address up to 64 characters. You can specify up to three recipient E-mail addresses.
- Administrator e-mail address: Type the Administrator e-Mail address up to 64 characters. This address is used for reply mail and sending system messages from the SMTP server.
- Subject: Type the subject/title of the e-Mail up to 64 characters. With respect to mail which is sent according to the alarm detection when Alarm sending of the alarm tab is set to On, the characters standing for the sensor type added to the subject.
- > Message: Type the text of the E-mail up to 384 characters. (A line break is equivalent to 2

characters.)

7.2.2 Alarm sending

Set to send the mail with connection to the alarm detection by the built-in motion detection function. Select **On** to send the image and file to SMTP server linked with the alarm detection.

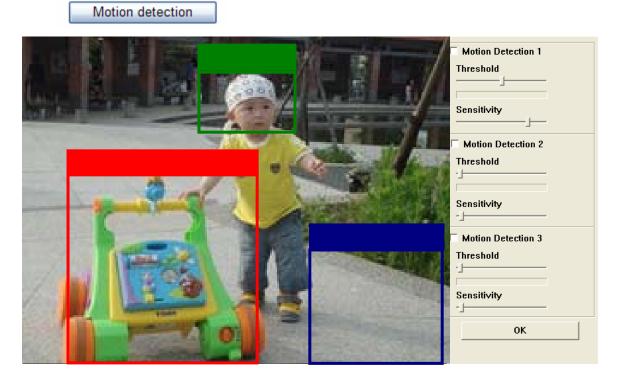
HOME	Alarm sending
SETTING	Alarm Schuling
+ BASIC	
- Advance	🗖 Alarm sending 💿 On 🔘 Off
+ FTP client	File attachment 💿 On 🔘 Off
- SMTP	File attachment 🕑 On 🔘 Oli
General	Image file name
 Alarm sending 	
 Periodical sending 	Suffix 🛛 🔿 None 🔿 Date Time 💿 Sequence number
+ HTTP event + Schedule	Sequence number clear Clear
Schedule Motion detection	Alarm Motion detection
+ System Log	
	Effective Period 💿 Always
	Schedule
	OK Cancel

- > Alarm sending: Select On to set to send mail with connection to the alarm detection.
- File attachment: Set whether an image file is attached to the mail sent or not. When On is selected, the image file made by the settings below is attached. When Off is selected, only the message is sent.
- Image file name: Type the file name you want to assign to the image to attach a mail. You can use up to 10 alphanumeric, - (hyphen) and _ (underscore) for naming.
- > **Suffix**: Select a suffix to add to the file name
 - Date & time: The date & time suffix is added to the Image file name. The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
 - **Sequence number**: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.
 - Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.

HOME	.
SETTING	Alarm sending
+ BASIC - Advance + FTP client	■ Alarm sending ③ On 〇 Off File attachment ③ On 〇 Off
- SMTP • General • Alarm sending • Periodical sending	Image file name Suffix O None O Date Time O Sequence number
+ HTTP event + Schedule + Motion detection	Sequence number clear Clear
+ System Log	Alarm 🔽 Motion detection Motion detection Effective Period 🔿 Always
	Schedule
	OK Cancel

> Alarm

• **Motion Detection**: Click it for using Motion Detection function as a sensor. You can set motion detection function on the **motion detection page**.



P Note:

You can set motion detection on motion detection page. (Please go to "Setting \rightarrow Advance \rightarrow Motion detection \rightarrow Setting"). For more details, you can check Section 7.5.

- **Effective period**: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.

• **Schedule**: You can specify the period when the periodical sending is effective in the Schedule setting in the other section.

P Note:

You can set schedule function on Schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

🚰 http://192.168.1.10 - Schedule - Microsoft Internet Explorer	
Schedule selection e-Mail(SMTP) - Alarm	<u>^</u>
Mon Start time 00 : 00 - End time 24 : 00	
Tue Start time 00 : 00 - End time 24 : 00	
─ Wed Start time 00 : 00 - End time 24 : 00	
Thu Start time 00 : 00 - End time 24 : 00	
☐ Fri Start time 00 : 00 - End time 24 : 00	
Sat Start time 00 : 00 - End time 24 : 00	
Sun Start time 00 : 00 - End time 24 : 00	
Use the same time schedule every day.	
OK Cancel	
● 完毕	<u>⊻</u>

7.2.3 Periodical sending

Schedule

You can set to send an image file by SMTP server periodically by selecting **On** to send the image file by SMTP server linked with setting period.

HOME	
SETTING + BASIC	Periodical sending
- Advance	🗖 Periodical sending 💿 On 🔘 Off
+ FTP client - SMTP	Image file name
 General Alarm sending 	Suffix 🛛 🔿 None 🔿 Date Time 💿 Sequence number
 Periodical sending 	Sequence number clear Clear
+ HTTP event + Schedule	Interval 00 H 30 M
+ Motion detection	(MIN : 30min. MAX : 24-hour interval)
+ System Log	Effective Period 🔘 Always
	Schedule
	OK Cancel

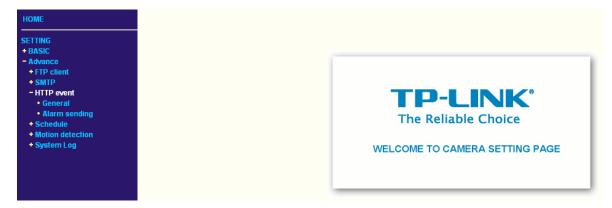
- Image file name: Type the file name of the image sent by SMTP up to 10 alphanumeric characters,
 (hyphen) and _ (under score).
- > **Suffix**: Select a suffix to be added to the file name sent by SMTP.
 - None: The name of the sent file will be the Image file name.
 - Date & time: The date & time suffix is added to the Image file name. The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
 - Sequence number: A consecutive number is added to the Image file name.
 - Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.
- Interval: Set the periodical sending is effective interval. Minimum value is 30 min and Maximal value is 24 hour.
- > Effective period: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.
 - Schedule: You can specify the period when the periodical sending is effective in the schedule setting in the other section. Please check "Setting → Basic → Advance → Schedule → Setting."

You can set schedule function on Schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

Schedule		
🚰 http://192.168.1.10 - Schedule - Microsoft Inter	rnet Explorer	×
Schedule selection e-Mail(SMTP) - Periodical		^
Mon Start time 00 : 00 - End time 24	: 00	
Tue Start time 00 : 00 - End time 24	: 00	
□ Wed Start time 00 : 00 - End time 24	: 00	
☐ Thu Start time 00 : 00 - End time 24	: 00	
Fri Start time 00 : 00 - End time 24	: 00	
Sat Start time 00 : 00 - End time 24	: 00	
Sun Start time 00 : 00 - End time 24	: 00	
Use the same time schedule every day.		
OK Cancel		*
2 2 2 2 2 2 2	🥶 Internet	

7.3 HTTP event

Use this menu to set up for capturing and sending images to an HTTP server. By using HTTP client function, you can send the image file and audio file which has been shot and recorded linked with the built-in motion detection function to HTTP server. HTTP client setting menu is composed of two items, **General** and **Alarm sending**.



7.3.1 General

HOME	
SETTING	General
+ BASIC - Advance + FTP client + SMTP - HTTP event • General • Alarm sending + Schedule + Motion detection + System Log	 HTTP event On Off URL Port B0 User ID Password Proxy server name
	Proxy port number Proxy user ID Proxy password OK Cancel Test

> **HTTP event**: Set up the HTTP server URL, port, User ID, Password, and Proxy Server settings.

НОМЕ	
SETTING + BASIC	General
- Advance + FTP client	HTTP event On Off
+ SMTP - HTTP event	URL 192.168.1.7/cgi-bin/operator/ptzset
General Alarm sending	Pafft 80 User ID admin
+ Schedule + Motion detection + System Log	Password
• System Log	Proxy server name
	Proxy port number
	Proxy user ID
	Proxy password
	OK Cancel Test

For example: URL: 192.168.1.7/cgi-bin/operator/ptzset

P Note:

The setting of URL should be the same as CGI

7.3.2 Alarm sending

Set to send the mail with connection to the alarm detection by the built-in motion detection function. Select **On** to send the image and audio file to HTTP server linked with the alarm detection.

HOME	Alarm sending
SETTING + BASIC	
- Advance	🗖 Alarm sending 💿 On 🔘 Off
+ FTP client + SMTP	Alarm Motion detection Motion detection
- HTTP event + General	Parameter
Alarm sending Schedule	Message
 Motion detection 	Effective Period 🔘 Always
+ System Log	Schedule Schedule
	OK Cancel

Alarm sending: Select On to set to send mail with connection to the alarm detection.

> Alarm

- Motion detection
- **Effective period**: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.
 - Schedule: You can specify the period when the periodical sending is effective in the schedule

setting in the other section.

P Note:

You can set schedule function on schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

> Alarm

• Motion Detection: Click it for using Motion Detection function as a sensor. You can set motion detection function on the motion detection function page.

Motion detection



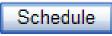
P Note:

You can set motion detection on **motion detection page**. (Please go to "**Setting** \rightarrow **Advance** \rightarrow **Motion detection** \rightarrow **Setting**") For more details, you can check **Section 7.5**. Motion Detection works only when the MPEG4 function is On.

HOME	Alarm sending
+ BASIC	
- Advance	🗖 Alarm sending 💿 On 🔘 Off
+ FTP client + SMTP - HTTP event • General • Alarm sending + Schedule	Alarm Motion detection Metion detection Parameter MOVE=DOWN Message PTZ DOWN
+ Motion detection + System Log	Effective Period Always Schedule Schedule OK Cancel

- Parameter: the parameter of CGI (defined in Setting → Advance → HTTP event → General → URL) is from your target device. For example, move=down.
- **Message**: message will show up in the form of Message = PTZ down. If your target device didn't support the parameter of message, you can't see the message. So you can just take the message as a note. For example: PTZ down.
- > Effective period: Set the period when the periodical sending is effective.
 - Always: The periodical sending is always effective.
 - **Schedule**: You can specify the period when the periodical sending is effective in the Schedule setting in the other section.

You can set schedule function on Schedule page. (Please go to "Setting \rightarrow Advance \rightarrow Schedule \rightarrow Setting") For more details, you can check Section 7.4.

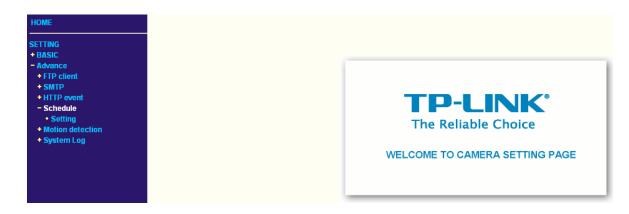


😂 http://192.168.1.10 - Schedule - Microsoft Internet Explorer	
Schedule selection HTTP event - Alarm	<u>~</u>
Mon Start time 00 : 00 - End time 24 : 00	
Tue Start time 00 : 00 - End time 24 : 00	
Wed Start time 00 : 00 - End time 24 : 00	
Thu Start time 00 : 00 - End time 24 : 00	
Fri Start time 00 : 00 - End time 24 : 00	
Sat Start time 00 : 00 - End time 24 : 00	
Sun Start time 00 : 00 - End time 24 : 00	
Use the same time schedule every day.	
OK Cancel	
	~
⑧ 完毕	Internet

7.4 Schedule

When you click **Schedule** on the **Advance** mode menu, the **Schedule** setting menu appears. This is the same menu as the setting menu which is displayed when you click **Schedule** to set Effective period and **Schedule** in FTP client setting menu, e-Mail (SMTP) setting menu, HTTP Event setting menu and so on.

Example: When setting e-Mail (SMTP) (the alarm sending) in the **Schedule setting** menu.



7.4.1 Setting

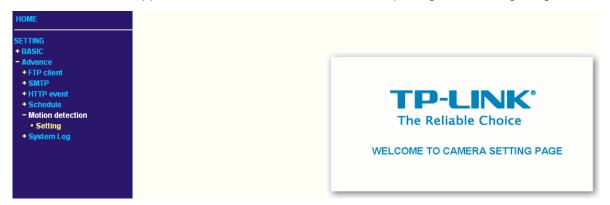
HOME	O attinue
ETTING BASIC	Setting
Advance	Schedule selection FTP - Alarm
+ FTP client + SMTP	Mon Start time 00 : 00 - End time 24 : 00
+ HTTP event - Schedule	Tue Start time 00 : 00 - End time 24 : 00
Setting Motion detection	Wed Start time 00 : 00 - End time 24 : 00
+ System Log	Thu Start time 00 : 00 - End time 24 : 00
	Fri Start time 00 : 00 - End time 24 : 00
	Sat Start time 00 : 00 - End time 24 : 00
	Sun Start time 00 : 00 - End time 24 : 00
	Use the same time schedule every day.
	OK Cancel

- Schedule Selection: Select the list box to specify the schedule you want to set.
 - FTP -Alarm
 - FTP Periodical
 - e-Mail (SMTP) -Alarm
 - e-Mail (SMTP) -Periodical
 - HTTP event -Alarm
- Mon (Monday) to Sun (Sunday): The time period on the right of the checked day is the effective period of the schedule.
- Start time, End time: Specify the Start time and the End time.
- Use the same time schedule every day: When this is checked, the Start time and End time set to Mon (Monday) are applied to all days. In this case, the Start time and End time of the other days than Mon (Monday) cannot be input.

7.5 Motion Detection

There are three Motion Detection functions as sensors to set for different detecting zones. Each one

has Threshold and Sensitivity inputs which you can adjust to specific zone sequentially. Motion Detection function can support FTP, SMTP and HTTP event for capturing and sending images.



7.5.1 Setting



- > **Threshold**: It means the extent which the alarm will be triggered.
- Sensitivity: It means that how often the sensor will scan the image. The higher sensitivity it is and the more frequently it scans.
 - **Motion Detection 1**: Click it for using **Motion Detection 1** function as a sensor. You can adjust and move the detecting zone by using mouse.
 - Motion Detection 2: Click it for using Motion Detection 2 function as a sensor. You can adjust and move the detecting zone by using mouse.
 - **Motion Detection 3**: Click it for using **Motion Detection 3** function as a sensor. You can adjust and move the detecting zone by using mouse.

7.6 System Log

The System Log function allows users to review any changes and events happened. The system begins logging automatically after started.

7.6.1 Setting

HOME	Setting	
+ BASIC - Advance + FTP client + SMTP + HTTP event + Schedule + Motion detection - System Log + Setting	 Remote Log Enable remote log Server name Server Port • 514 • (1024 ~ 65535) OK Cancel 	
	Jan 1 00:00:09 <info< td=""> > SYS: log started Jan 1 00:01:01 <info< td=""> > NET: Starting network Jan 1 00:01:01 <info< td=""> > NET: MAC = 00:1B:FE:00:51:D6 Jan 1 00:01:01 <info< td=""> > NET: Network type = Static Jan 1 00:01:02 <info< td=""> > ALARM: Alarm Buffer Event Receive Jan 1 00:01:02 <info< td=""> > WDT: watchdog start Jan 1 00:01:25 <info< td=""> > Video: MPEG4 - New Connection from 192.168.1.100 Jan 1 00:13:29 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 00:13:29 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 00:13:29 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 00:13:29 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 00:13:29 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 00:27:21 <info< td=""> > Video: MPEG4 - New Connection from 192.168.1.100 Jan 1 01:03:12 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100 Jan 1 01:03:42 <info< td=""> > Video: MPEG4 - Close Connection from 192.168.1.100</info<></info<></info<></info<></info<></info<></info<></info<></info<></info<></info<></info<></info<></info<></info<>	2

> Enable remote log: Enables user to send the log data to a specified log server.

P Note:

There is a function called Watchdog which can automatically detect errors and restart the IP camera while mpeg, mjepg, 3gpp, or web cannot work. It will take about 5 minutes from detection to reboot, and it will show up with "connecting" on mainpage during this 5 minutes. If the Watchdog function detects errors ,"*** ffmpeg", "*** mjpeg", "*** gsm" or "*** boa"will be shown in system log. In this case, please send the file "backup" to TP-LINK (you can save it from Setting > Basic > System > Initialize > Backup setting data), and also provide the router spec you're using, we will analyze and solve the problem as soon as possible.

E-mail : support@tp-link.com

Chapter 8 Appendix

APPENDIX A – FRAME RATE & BIT RATE TABLE

This chapter provides tables that help you to optimize your IP camera with your network environment. Base on your network upload environment to choose the best Image-Quality setting.

For example, if the network environment is ADSL 256Kb(upload) / 2Mb(download), the most fluent Image-Quality needs to set up under 256 Kb situation.

Quality	640*480	320*240	160*120
Excellent	1000	300	90
Detailed	400	150	50
Good	300	100	30
Standard	250	70	25
Medium	250	55	20

A.1 MPEG4 @ 30fps / kbps

A.2 MPEG4 / kbps, fps

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
640*480	2048	30	1800	26
640*480	2048	15	2200	16
640*480	1536	30	1500	30
640*480	1536	15	1700	16
640*480	1024	30	1000	30
640*480	1024	15	1000	16
640*480	512	30	500	30
640*480	512	15	600	16
320*240	1536	30	1500	30
320*240	1536	15	1600	16
320*240	1024	30	1000	30
320*240	1024	15	1000	16
320*240	512	30	550	30

320*240	512	15	600	16
160*120	1024	30	950	30
160*120	1024	15	750	16
160*120	512	30	500	30
160*120	512	15	50	16
160*120	128	30	130	30
160*120	128	15	140	16

A.3 MJPEG @ 15fps / kbps

Quality	640*480	320*240	160*120
Excellent	4000	1500	600
Detailed	2400	900	400
Good	1600	650	300
Standard	1300	500	240
Medium	900	350	170

A.4 MJPEG / kbps, fps

Image-Size	Quality Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
640*480	Excellent	15	4000	13
640*480	Excellent	5	1600	5
640*480	Good	15	1600	13
640*480	Good	5	650	5
640*480	Medium	15	900	14
640*480	Medium	5	360	5
320*240	Excellent	15	1500	13
320*240	Excellent	5	550	5
320*240	Good	15	650	13
320*240	Good	5	260	5

320*240	Medium	15	350	13
160*120	Medium	5	130	5
160*120	Excellent	15	600	13
160*120	Excellent	5	230	5
160*120	Good	15	300	13
160*120	Good	5	115	5
160*120	Medium	15	170	13
160*120	Medium	5	65	5

APPENDIX B – STORAGE REQUIREMENT TABLE

This chapter provides tables that help you set your recording storage system.

Please refer to the following table to find out the capability for recording into your hard disk.

B.1 MPEG4 Storage Requirement GB / channel / day @ 30fps

Quality	640*480	320*240	160*120
Excellent	10.5	3.2	0.9
Detailed	4.2	1.6	0.5
Good	3.2	1.1	0.3
Standard	2.6	0.7	0.3
Medium	2.6	0.6	0.2

B.2 MPEG4 Storage Requirement GB / channel / day @ 15fps

Quality	640*480	320*240	160*120
Excellent	5.3	1.6	0.4
Detailed	2.1	0.8	0.3
Good	1.6	0.6	0.2
Standard	1.3	0.4	0.1
Medium	1.3	0.3	0.1

B.3 MPEG4 Storage Requirement GB / channel / day

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate
640*480	2048	30	23.0
640*480	2048	15	22.2
640*480	1536	30	18.5
640*480	1536	15	17.9
640*480	1024	30	10.5
640*480	1024	15	10.5
640*480	512	30	5.3
640*480	512	15	6.3
320*240	1536	30	15.8
320*240	1536	15	16.9
320*240	1024	30	10.5
320*240	1024	15	10.5
320*240	512	30	5.8
320*240	512	15	6.3
160*120	1024	30	10.0
160*120	1024	15	7.9
160*120	512	30	5.3
160*120	512	15	0.5
160*120	128	30	1.4
160*120	128	15	1.5