TP-LINK®

User Guide

TL-SC3171G

Wireless Day/Night Surveillance Camera



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FCC STATEMENT

FC

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.

Note: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

CE Mark Warning

€ 1588

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-SC3171G Wireless Day/Night 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

P 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	Windows 98, Windows ME (Please see 🌮 Note)
System	Windows2000, 2003, XP, Vista, Mac OS X Leopard, Linux
	Windows OS: Internet Explorer, Safari, Firefox, Google Chrome, Opera, Maxthon
Web Browser	MAC OS: Safari, Firefox
	Linux OS: Firefox

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

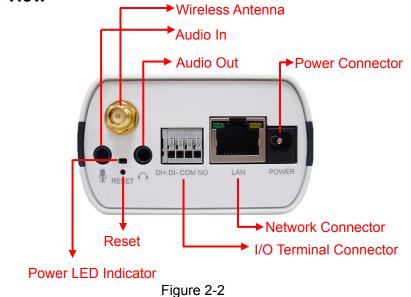
2.1 Front View





Focus Adjustment Ring: Adjust the focus to get a clear image. Built-in Microphone: Built-in microphone for two-way audio.

2.2 Bottom view



Wireless Antenna: For connection of IEEE 802.11b/g wireless network.

Audio In: To support audio in with Microphone for two way audio.

Audio Out: To support audio out with earphones or speakers for two way audio.

Power Connector: For connection of 12V DC input.

Power LED Indicator: Power LED will light up after completing the boot process.

Reset: To successfully restore the camera to factory defaults, please keep the device powered on,

then press and hold the **Reset** Button for at least 10 seconds. The CPU of the camera starts to work completely 1 minute after you release the **Reset** button.

I/O Terminal Connector: Input/Output to support External Alarm and Sensor used for motion detection, event triggering and alarm notification, etc.

Network Connector: For connection to the Ethernet via RJ45 standard.

Chapter 3 Using IP Camera via Web Browser

3.1 Obtain the IP Address

1. Insert the provided CD into your CD-ROM driver. The Setup Wizard will automatically pop up on your computer's screen as shown in the figure below.

Software CD Menu		
IP Surveillance Software		
Intelligent IP Installer		ATTA DAMA
User Manual	TPLING	
Language Pack		1 4

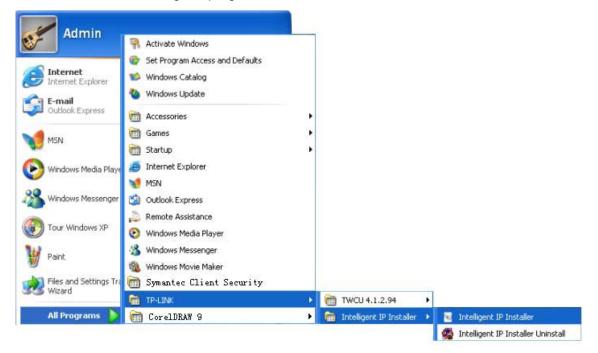
Figure 3-1

2. Choose the **Intelligent IP Installer**, and then the next screen appears. Click on **Intelligent IP Installer** to begin the installation.





3. After the installation is finished, click **Start > Program Files > TP-LINK >Intelligent IP Installer** to start using the program.





4. The following screen will then display. Click the **Search** button to search Network Cameras in the network; it displays Network Cameras information including IP Address.

۲	Intelligent IP	Installer						
	Surveillan	ce Tech.	Innovato	r				
•0	Camera 🕰 Use	r 🖸 About.		-				
	UPnP device list							
	Name	IP Address	MAC Address	Mod. Name	Mod. ID			
	Network Camera	192.168.1.100	001BFE007DEE	Day/Night Surveillance Camera	TL-SC3171	<u>\$</u>	Setup	
						-	Upgrade	
						33 -	Factory default	
						U	Reboot	
	🔰 Search 🤇	🗕 🛛 Link to IE						
	Hint Click on the device I	ist to select a devic	e and click on fun	ction buttons to execute. Click on §	Search to clean	-		
	up the device list an							

Figure 3-4

3.2 Windows Web Browser

 Click Link to IE button in Figure 3-4 or launch your web browser, and enter the IP address (obtain from Figure 3-4Figure 3-4) of the IP camera in the Location / Address field of your browser.



P Note:

- For the first time login with IE, you will need to enable "Download signed ActiveX controls". Please go to Tool→Internet Options...→Security→Custom Level... and find Download signed ActiveV controls to prompt it. For detailed information, please refer to the Quick Installation Guide.
- 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://192.168.1.100/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 192.	168.1.100	? 🔀
Day/Night IP Cam		
<u>U</u> ser name: <u>P</u> assword:	🧟 admin	
	Remember my na	ossword
	ОК	Cancel

Figure 3-5

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").

 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</u> <u>Image Setup</u>.



Figure 3-6

3.3 Mac Web Browser

1. Click the **Safari** icon on the screen as the figure below shown, and enter the IP address of the IP camera (which can be obtained from Figure 3-4) 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://192.168.1.100/index2.htm</u>" as your web URL to view the video without setting page.



Figure 3-7



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

Figure 3-8

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**.

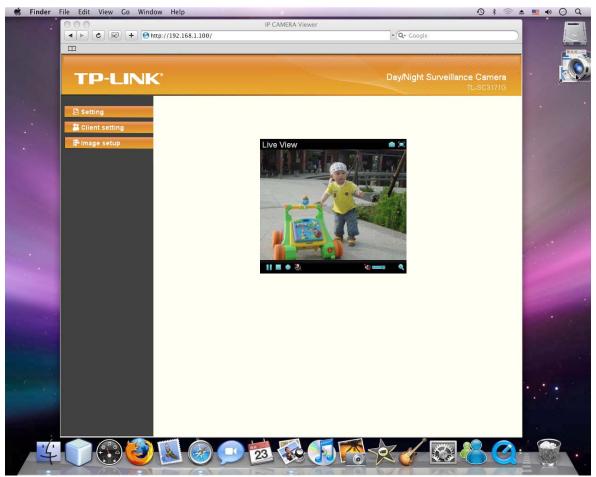


Figure 3-9

Chapter 4 Using IP Camera via Mobile Phone

You can use TP-LINK Web User Interface via mobile phones. 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**". Up to the 15th August, it has been tested that you can use TP-LINK Web User Interface via mobile phones supporting the mobile view modes shown in the table below.

Tested Mobile Phone		Tested Mobile View Mode			
Brand	Model	3G Streaming Mobile View	3G Web Brower Mobile View	2.5G WAP browser Snapshot	2.5G Web browser Snapshot
Nokia	N76	•		•	
Nokia	N82	•			
Nokia	N95	•		•	
Nokia	E66	•		•	
Nokia	5800	•		•	
Nokia	6680	•		•	
Apple	iPhone 3G		•		
SonyEricsson	K310i			٠	
SonyEricsson	K618i			•	
SonyEricsson	C905			•	
SonyEricsson	W550i			•	
SonyEricsson	W580i			•	
Motorola	W220			•	
Motorola	W510			•	
Motorola	E6			•	
HTC	Touch				•
Windows Mot Pho					•

- A Please install Platform4 Player on your phone first.
- Please install Opera Mobile 9.5 on your phone first.
- Please use Real Player and other RSTP streaming media player embedded to view the video in this mode.
- Please use the normal embedded browser in the phone to view the video in this mode.

P Note:

You can have the latest supporting phones information on our website www.tp-link.com.

4.1 3G Streaming Mobile View Mode

For 3G Streaming Mobile View Mode, please type "<u>rtsp://<IP>:<PORT>/video.3gp</u> " into your 3G Streaming Link. <IP> is the IP address of your IP camera (which can be obtained from Figure 3-4); <PORT> is the RTSP port of your IP camera (Default value is 554). For Example: <u>rtsp://192.168.1.100:554/video.3gp</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.

Below is an example of viewing the camera in 3G streaming mode on NOKIA N76:

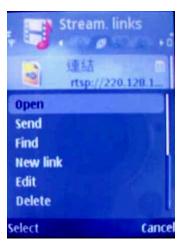
1. Click Function and select Gallery.



2. Click the Streaming links.



3. Click **Option** and add a **New link**.



4. Type the New link **Name** and **Web address**. (The address is Public IP or domain name), Ex: rtsp://tl-sc3130.dyndns.org/video.3gp

Stream.	links ⊧o
通 連結	
Name:	Nd Abc
Link	
Web address:	
rtsp://	
ОК	Cancel

5. Open with Real-Player and click Yes to connect.



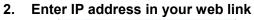
4.2 3G Web Brower Mobile View Mode

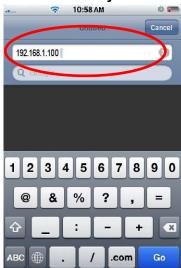
For 3G Web Browser Mobile View Mode, please type "<u>http://<IP></u>" into your 3G Mobile's Web Browser. <IP> is the Public IP address of your IP camera (which can be obtained from Figure 3-4Figure 3-4); For Example: <u>rtsp://192.168.1.100:554/video.3gp</u>

Below is an example of viewing the camera in 3G Web Browser Mobile View Mode on iPhone 3G:

1. Select Safari function







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



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



P Note:

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

4.3 2.5G WAP Browser Snapshot Mode

For 2.5G WAP Browser Snapshot Mode, please type "<u><IP>/mobile.wml</u>" into your 2.5G WAP Browser. <IP> is the IP address of your IP camera, which can be obtained from Figure 3-4.

4.4 2.5G Web Browser Snapshot Mode

For 2.5GWeb Browser Snapshot Mode, please type "<u><IP>/mobile.htm</u>" into your 2.5G Web Browser. <IP> is the IP address of your IP camera, which can be obtained from Figure 3-4.

P Note:

Through 2.5G WAP or Web browser, you can only get the snapshot of the camera, not the video.

4.5 Mobile View on Windows Mobile 6 Smart Phone

The tested Smart Phones installed with Windows Mobile 6 OS are HTC smart mobile phone and HP PDA. Below is the example, and the Platform4 Player and Opera Mobile 9.5 can be downloaded from our website http://www.tp-link.com.

To use IP Camera via HP PDA, please take the following steps:

1. For HP iPDA HSTNH-L05C-WL, you need to install the free software Platform4 Player first. Click the program **Platform4 Player**.



2. Click the setting and type rtsp link in **Open Url** field. Ex: rtsp://tl-sc3130.dyndns.org/video.3gp.

🔧 Platform4 Player 🗹 🗱 🏹 🗲 🗖	¢
_C Open Url —	1
rtsp://192.168.1.100:554/video.mp4-	
Browse	
Broadcast	1
Listen to Broadcast	
Progressive Download	1
Save As	
	-
Open Settings I Settings II About	

.....

3. Click Setting I and select protocol with TCP.

Platform4 Player 🗹	₩TX ¶₹ 0
Protocol: (
Buffer Size:	15 sec. 🕩
Connection TimeOut:	8 sec. 🕩
Data Recept. TimeOut: [15 sec. 🕩
Video Settings ———	
Deblocking Filter	✔ Dithering
Zoom and crop in Fu	llscreen
Open Settings I Settings II	About

4. Click Setting II and select System Settings.

🐉 Platform4 Player 🗹 🗱 🍢 🗲 💀
Progressive Download Settings
 System Settings UserSettings
Proxy Server: Port:
Proxy Bypass:
Proxy Options
Network Type
Open Settings I Settings II About

5. Click **OK** and connect to IP Camera.



To use IP Camera via Opera Mobile with Windows Mobile Smart Phone, please take the following steps:

- 1. Download the "Opera Mobile 9.5.cab" and copy to Windows Mobile 6 Smart Phone.
- 2. Click the "Windows Explorer" to find the download cab file.



3. Click the cab file to install the Opera Mobile 9.5.



4. Click **Programs** to find the **Opera 9.5** icon.

훩 Program	s 🗹	## 7 _× € [x
			-
Calculator	File Explorer	Getting Started	
	22		-
Internet Sharing	Messenger	Notes	
0	**		=
Opera 9.5 Beta	Opera Widgets	Pictures & Videos	
Q	P.	Nor	
Search	SimTkUI	Task Manager	
1		<u> </u>	

5. Type IP or http url link.



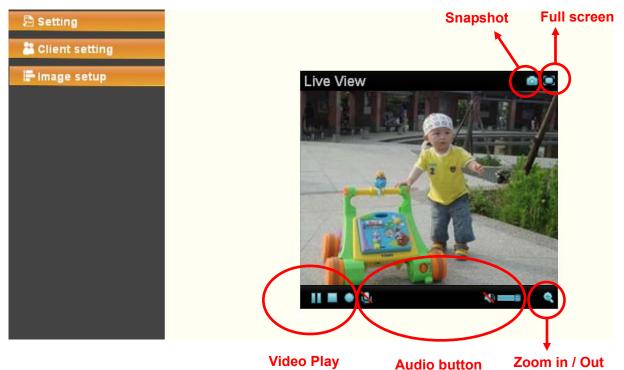
6. Type the username and password or setup authentication off in **Setting > Basic > Security > Account**.



Chapter 5 Configuration of Main Menu

You would find that the illustrative web pages in this Manual are all orange. Please note that they're from our latest firmware, which can be downloaded from our website. Web pages in our previous firmware are blue.

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>, <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.

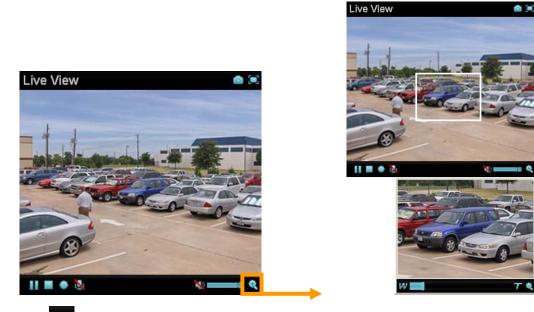
5.1 Live View

5.1.1 Snapshot

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

Symbols	Meaning
۵	click to display a snapshot window
Save Image	to save the picture in your computer
Close	to return to the view page
	full Screen

5.1.1 Zoom in/out the image via the monitor window



- Click
 to display the digital zoom in window.
- Pull **W** to adjust the digital zoom range, and it will be showed on the above 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.

Symbols Meaning	
	Pause the current video
	Play the video
	Stop the current video
٠	Record the current video

5.1.2 Video play buttons

5.1.3 Audio buttons

Symbols	Meaning	G P Note
40	Speakers turned on	mean the speakers of your computer are turned on to transmit the sounds from the connected IP camera(s)
N	Speakers turned off	

۷	Microphone turned on	mean you can broadcast to the connected IP camera(s) via the Ethernet using your microphone
2	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.

€ Home	
SETTING	
+BASIC	
+Advanced	
	The Reliable Choice
	WELCOME TO CAMERA SETTING PAGE

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

There are eight sub-menus under the Advance menu, which includes FTP Client, SMTP, HTTP event, Alarm output, Schedule, Alarm input, Motion detection, and System Log. Fore more information, you can refer to <u>Section 7.1</u>, <u>Section 7.2</u>, <u>Section 7.3</u>, <u>Section 7.4</u>, <u>Section 7.5</u>, <u>Section 7.6</u>, <u>Section 7.7</u> and <u>Section 7.8</u>.

5.3 Client Setting

👪 Client setting

This function is only for the client.

🖹 Setting		
📇 Client sett	ing	
Mode	MPEG4	~
View size	320X240	~
Protocol	HTTP	~
Video buffer	Off	~
F Image seti	φ	



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 MPEG4, MJPEG and JPEG 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. It is suggested that you go to Client Setting to select a suitable View Size before using the IP camera as shown in the figure below. For the PC whose resolution is less than 1280*1024, View Size of 320*240 is recommended.

🖻 Setting		
🔠 🕌 Client setti	ing	
Mode	MPEG4	*
View size	320X240	~
Protocol	HTTP	*
Video buffer	Off	~
📑 Image setu	IP	

5.3.3 Protocol

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

P Note:

This item appears only when **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

F 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	Information	
SETTING -BASIC	Product name	Wireless Day/Night Surveillance Camera
-System ◆ Information	Firmware version	LM.1.6.16.05 Tue Feb 9 19:38:36 CST 2010
• Date/Time • Initialize + Camera + Network + Security + Advanced	Web version	LM.1.6.16.05

6.1.2 Date/Time

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

E Current data tima	
Current date/time	1970-01-01 02:08:42
ion PC clock	2010-02-24 18:02:30
e 📕 Date/time format	yyyy-mm-dd hh:mm:ss 💌
📕 Adjust	⊘ Keep current setting
	Synchronize with PC
	🔿 Manual setting
	2010 - 02 - 24 -
	17 🔍 : 59 🔍 : 09 🖓
	Synchronize with NTP
	NTP server name
	pool,ntp.org 🛛 🗸 Auto
	Interval 1 💌 hours
Time zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi 🛛 🖌
📕 Daylight Saving Time	⊙ On ○ Off
Start time	💿 By date 🔘 By week number
	January 🔽 First 🔛 Mon 🔛 1 💌 0 💌 : 00 💌
End time	💿 By date 🔘 By week number
	January 🗸 First 🗸 Mon 🖌 1 🔽 0 🔽 00

- > **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.

PNote:

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.

- **Time zone**: You can select the format from Greenwich Mean Time. The time displayed will be the same as the current date / time option.
- Daylight Saving Time (DST; also summer time in British English): It is the practice of advancing clocks so that afternoons have more daylight and mornings have less. Here you can find the daylight saving time around the world: <u>http://en.wikipedia.org/wiki/Daylight saving time around the world</u>

6.1.3 Initialize

E Home	Initialize		
SETTING			
-BASIC	Reboot	Reboot	
-System			
 Information 	E Factory default	Factory default	
• Date/Time	Backup setting data	Save	
• Initialize			
+Camera	Restore setting		Browse OK
+Network	📕 Firmware upgrade		Browse OK
+ Security			
+Advanced	📕 Upload language pack		Browse OK
		Language : 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 data: 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.

PNote:

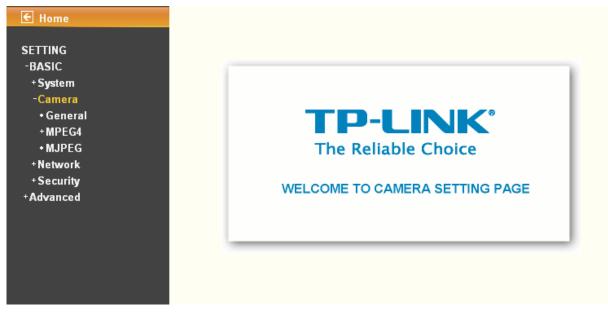
Use only upgrade files that are special for this IP Camera. Otherwise problems may occur. Don't

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.



6.2.1 General

€ Home	General	
SETTING -BASIC +System -Camera	RTSP	 ⊙ On ○ Off RTSP port ⊙ 554 ○ (1024 ~ 65535)
• General + MPEG4	RTP	Port range 5000 (1024 ~ 65532) ~ 7999 (1027 ~ 65535)
• MJPEG	Image rotated	None
+Network +Security	📕 Audio Codec	⊙ On ◯ Off
+Advanced	📕 Exposure mode	○ 50Hz ○ 60Hz ④ Auto
	📕 White Balance	Auto
	IR IR	🔿 On 🔘 Off 💿 Auto
	Threshold	BrightDark
	Overlay	🔿 Text overlay 🔿 Privacy mask 💿 Off
	-	
		OK Cancel

- **RTSP**: Switch On or Off.
 - **RTSP Port**: Specify the transmission port number of RTSP streaming. The default value is 554.
 - **Port Range**: Specify the transmission port range of RTP streaming video. RTP will select a port randomly from this range.

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 rotated**: You can mirror or flip the display screen.
- > Audio Codec: Switch On or Off.
- Exposure mode: You can choose Auto, 50Hz or 60Hz. If you choose Auto option, the camera will adjust automatically to perform well.
- White Balance: You can choose the white balance to Auto, Sunny, Cloudy and Black & White.
- IR: You can choose Auto, On or Off. If you choose Auto option, the camera will adjust automatically to perform well.

P Note:

- The effective range of the IR (Infrared) light is 10 meters (33 feet), and it is strongly suggested that you install it in a place without any barriers within 3 meters of the field of view (10 feet). Reflected light from a large closed barrier (such as a wall) may cause the camera to shut down the infrared light.
- 2) Normally, 10 seconds after the environment becomes darker than the threshold, the camera will turn on the IR (Infrared) light. One typical abnormal situation is that a barrier is very close to the camera and shields all available light.
- > 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

If RTSP is On (see Setting $\rightarrow \text{Basic} \rightarrow \text{Camera} \rightarrow \text{General}),$ the screen will display as shown below.

€ Home	Computer view
SETTING -BASIC + System -Camera • General -MPEG4 • Computer view • Mobile view • MJPEG + Network + Security + Advanced	 Viewer authentication (a) On (b) Off Multicast streaming (a) On (b) Off Multicast address (228.0.0.1) Video port (b) Auto (c) (6000) (1024 ~ 65535) Audio port (c) Auto (c) (7000) (1024 ~ 65535) Time-To-Live (15) (1 to 255) Image Size (640x480) Frame rate (30) (c) fps Quality Auto Fixed quality (Excellent (c) (k) (k) (k) (k) (k) (k) (k) (k) (k) (k
	OK Cancel

- Viewer Authentication: If the viewer authentication is On, the users will be requested to type in username and password when viewing through RTSP.
- > 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 1, 2, 3, 4, 5, 7, 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, Standard, Good, Detailed 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.

If RTSP is Off (see Setting \rightarrow Basic \rightarrow Camera \rightarrow General), the screen will display as shown below.

	€ Home	Computer view
SETTING -BASIC + System -Camera • General -MPEG4 • Computer view • Mobile view • MJPEG + Network + Security + Advanced	+ System -Camera • General -MPEG4 • Computer view • Mobile view • MJPEG + Network + Security	 Frame rate 30 v fps Quality Auto Fixed quality Excellent v Fixed bitrate 2048 v kbps

B. Mobile View

If RTSP is On (see Setting $\rightarrow \text{Basic} \rightarrow \text{Camera} \rightarrow \text{General}),$ the screen will display as shown below.

E Home	Mobile view
SETTING -BASIC + System -Camera • General -MPEG4 • Computer view • Mobile view • MJPEG + Network + Security + Advanced	 Viewer authentication (a) On (b) Off Multicast streaming (a) On (b) Off Multicast address (226.0.0.1) Video port (b) Auto (c) (1000) (1024 ~ 65535) Audio port (c) Auto (c) (1000) (1024 ~ 65535) Time-To-Live (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)
	OK Cancel

- Viewer Authentication: If the viewer authentication is On, the users will be requested to type in username and password when viewing through RTSP.
- > 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, 10fps. The unit "fps" stands for "frames sent 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, Standard, Good, Detailed and Excellent.
 - **Fixed bitrate**: Set the bitrate of MPEG4 image transmission for a line. You can select the values from 16, 32, 48, 64, 128, 256bps.

If RTSP is Off (see Setting \rightarrow Basic \rightarrow Camera \rightarrow General), the screen will display as shown below.

E Home	Mobile view
SETTING	
-BASIC	Viewer authentication On On Off
+ System	
-Camera	Multicast streaming On On Off
• General	
-MPEG4	
Computer view	
Mobile view	
• MJPEG	
+ Network	
+ Security + Advanced	Image Size 160x120 V
Auvanceu	📕 Frame rate 🗧 😪 fps
	Quality
	 Auto
	◯ Fixed quality Excellent ✓
	Fixed bitrate 64 kbps
	OK Cancel

6.2.3 MJPEG

If RTSP is On (see Setting $\rightarrow \text{Basic} \rightarrow \text{Camera} \rightarrow \text{General}),$ the screen will display as shown below.

E Home	
	MJPEG
SETTING	
-BASIC	📕 Image Size 🛛 640x480 😪
+System	Frame rate 45 m
-Camera	Frame rate 15 💟 fps
• General	Quality
+MPEG4	 Auto
• MJPEG	Fixed quality Excellent
+Network	
+ Security	
+Advanced	OK Cancel

If RTSP is Off (see Setting \rightarrow Basic \rightarrow Camera \rightarrow General), the screen will display as shown below.

🗲 Home	MJPEG
SETTING -BASIC + System -Camera -General -MPEG4 - Computer view - Mobile view - Mobile view + Network + Security + Advanced	 Image Size 640x480 Frame rate 15 fps Quality Auto Fixed quality Excellent OK Cancel

- 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 1, 2, 3, 4, 5, 7, 10, 15fps. 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, Detailed and Excellent.

6.3 Network

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

✓ Home SETTING BASIC System Camera Network Information 	TP-LINK °
• PPPoE • DDNS • UPnP • Bonjour • IP Notification • Wireless	The Reliable Choice WELCOME TO CAMERA SETTING PAGE
◆Messenger +Security +Advanced	

6.3.1 Information

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

BASIC	MAC address	00:23:CD:E0:00:01
+System +Camera	💿 Obtain an IP add	ress automatically (DHCP)
-Network • Information • PPPoE • DDNS • UPnP	🔿 Use the following	g IP address
• Bonjour • IP Notification • Wireless • Messenger + Security + Advanced	·········	er address automatically g DNS server address
	HTTP port number	80 (1024 to 65535)

- 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 server.
- Obtain DNS server address automatically: Select this to obtain the address of DNS server automatically.

E Home	Information	
-BASIC	MAC address	00:18:FE:00:FE:E5
+System	🔿 Obtain an IP address	A LINE OF CONTRACTOR
+Camera		
-Network	Use the following IP a	ddress
 Information PPPoE 	IP address	192.168.1.100
• DDNS	Subnet mask	255.255.255.0
• UPnP	Default gateway	192.168.1.1
• Bonjour • IP Notification	O Obtain DNS server ad	dress automatically
• Wireless	Ose the following DNS	3 server address
• Messenger + Security	Primary DNS server	192.168.1.1
+Advanced	Secondary DNS serve	r 0.0.0.0
	HTTP port number	
	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 radio button before 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 and the IP address of your camera is set to 192.168.1.100, you should type in http://192.168.1.100:2000/ to access the device.

The change of settings will not take effect until the camera is rebooted. Please go to "SETTING \rightarrow BASIC \rightarrow System \rightarrow Initialize" page and click the Reboot button as shown in the figure below after you make some changes.

E Home	Initialize
SETTING	
-BASIC	Reboot Reboot
-System	
 Information 	Factory default Factory default
• Date/Time	Backup setting data Save
• Initialize	
+ Camera	Restore setting Browse OK
+Network	Firmware upgrade Browse) OK
+Security	
+Advanced	Upload language pack Browse OK
	Language : English
	Eurgougo - Engnon

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.

E Home	PPPoE	
SETTING -BASIC + System + Camera -Network • Information • PPPoE • DDNS • UPnP • Bonjour • IP Notification • Wireless • Messenger	 PPPoE On Off IP address User ID Password Re-type password Obtain DNS serve 	0.0.0 ar address automatically DNS server address
+Security +Advanced		OK Cancel

- > **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.

IG	PPPoE	
C	📕 PPPoE 💿 On 🔘 Off	
em	IP address	1.0.0
era		
/ork	UserID	
ormation	Password	
PoE	Fassword	
NS	Re-type password	
nP	Obtain DNR convex address a	utomotio ellu
njour	Obtain DNS server address a	utomatically
otification	Ose the following DNS server	address
eless	Primary DNS server	192.168.1.1
ssenger	Descenden DND	
ırity	Secondary DNS server	0.0.0.0
ced		

- 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.

PNote:

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

The change of settings will not take effect until the camera is rebooted. Please go to "SETTING \rightarrow BASIC \rightarrow System \rightarrow Initialize" page and click the Reboot button as shown in the figure below after you make some changes.

E Home	Initialize
SETTING -BASIC	Reboot
-System • Information	Factory default
• Date/Time • Initialize	Backup setting data Save
+Camera	Restore setting
+Network +Security	Firmware upgrade OK
+Advanced	Upload language pack Browse OK
	Language : English

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.noip.org</u>. The Dynamic DNS client service provider will give you a password or key.

NG	DDNS	
iiC	DDNS 💿 On 🔘 Off	
tem	Server name	*
iera vork	User ID	
formation	Password	
PoE	1 4550014	
NS	Re-type password	
ıP	Host name	
jour		
otification		
ess	OK Can	cel
senger		
ity		

- 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**.

		Account Support	ssword? - <u>Create Account</u> News	
	ow to your w er for Windows, now availabl	e Take a tou DNS Se DNS for st MailHog	DynDNS? Ir and see what we do ervices atic and dynamic IP address o Services able email delivery	
News	Dynamic Network Services	Inc. Expands Domain Registration	Services	
News	Dynamic Network Services			
224		Inc. Expands Domain Registration	Services	
Resources	Services	Inc. Expands Domain Registration	Services About DynDNS	
Resources What is DNS?	Services DNS Hosting	Inc. Expands Domain Registration Support 24/7 Premier Support	Services About DynDNS Company Facts	

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

O Dyn	DynDNS		User: Pass:			
	About Services	5 Account	Support	News		
My Account	Create Your DynDNS	Account				
Create Account						
Login	Please complete the form to create	your free DynDNS Acc	ount.			
Lost Password?	-User Information					
	Username:					
Search	Email Address:		Instructions to activate your account will be sent to the email address provided.			
	Confirm Email Address:					
Search	Password:]	Your password needs to b Do not choose a password	e more than 5 characters and cannot be the same that is a common word, or can otherwise be easi	as your username ly guessed.	
	Confirm Password:					
	- About You (optional)					
	Providing this information will help needs. Thanks for your help!	us to better understand	our customers, and t	ailor future offerings more accurately	y to your	
	How did you hear about us:	×		<u>do not sell</u> your account information to anyone, in ress.	cluding your ema	
	Details:					

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

🔿 Dyn	DNS				Logged In User: My Services - My Cart - Log Ou
<u> </u>					HY SERVICES HY CER LOQ OF
	About Services	Account S	upport	News	
	Increase your update	abuse threshold. Consider an	Account Upgrade	1.	
My Account	Account Summary for	duckyiaa			
My Services					
Account Settings	My Services	Billing	1.00	Accoun	t Settings
Billing	View, modify, purchase, a delete your services.	information,	, complete a		Update your email address, set preferences, and delete
My Cart	My Zones	View Shopping Cart	nd view invoices.	Change	your account. e Email Address
~	Add Zone Services	Active Services		Change	e Password
Search	My Hosts	Order History		Change	e Username
	Add Host Services	Billing Profile and Vou	uchers	Contac	t Manager
Search	Account Upgrades	Renew Services		Mailing	Lists
	MailHop Outbound	Auto Renew Settings		Move S	Services
	Network Monitoring	Sync Expirations		Prefere	ences
	SSL Certificates			Close A	Account
	Recursive DNS				
	Support				
	DNS Service Level Agreement				
	Premier Support				

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

	About	Services	Account	Support	News	
	Access t	o more domains, <u>P</u>	<u>remium Domains</u> . C	onsider an <u>Account</u>	<u>Upgrade</u> .	
My Account	Add New Ho	stname				<u>↑ Host Services</u>
My Services Account Upgrades SLA Premier Support					ise some of our Host So Id several other feature	ervice features. Please es. <u>Learn More</u>
Zone Services Host Services	н	ostname:	.[servebbs.org		
MailHop Outbound			Yes, alias "*.hostna		ne settings.	
Recursive DNS Network Monitoring SSL Certificates	Sen	c	Host with IP addres WebHop Redirect Offline Hostname	s		
Renew Services Auto Renew Settings Sync Expirations					0	
Account Settings	IP	Address: Use	auto detected IP ac	dress 122.124.2.21	5.	
Billing		TTL	value is 60 seconds	5. <u>Edit TTL</u> .		
My Cart <u>0 items</u>						
Search	Mai	l Routing: 🛛	Yes, let me configu	re Email routing.		
Search	<u></u>				Create Host	

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

🔿 Dynl	DNS				Logged In User: <u>My Services</u> - <u>My Cart - Log Ou</u>
- /		Services Acco	ount Support	News	
	Access to mor	e domains, <u>Premium Do</u>	<u>mains</u> . Consider an <u>Account Up</u>	grade.	
My Account	Host Services				
My Services Account Upgrades SLA Premier Support Zone Services Host Services		de. Each upgrade allows	c DNS hosts. If you wish to hav s you to create 20 additional ho J <u>pgrade</u> page.		the second s
MailHop Outbound	Hostname	Service	Details		Last Updated
Recursive DNS	ducky-test.dyndns.org	Host	118.169.80.178	May. 29, 20	108 8: <mark>4</mark> 3 PM
Network Monitoring	duckyiaa.dyndns.org	Host	61.216.173.2	May. 30, 20	08 2:41 AM
SSI Certificates		Host	218,170,28,152	May 28 20	
DDE COltineDeco	senmei.dynalias.org	TIOSE		1107. 207 20	08 12:33 AM
SSL Certificates Renew Services Auto Renew Settings	senmei.dynalias.org zcmos.dyndns.org	Host	61.216.171.170	in the second second	08 12:33 AM 08 6:41 AM
Renew Services	and the second se	Notes In the	61.216.171.170 122.124.1.175	May. 29, 20	
Renew Services Auto Renew Settings Sync Expirations	zcmos.dyndns.org	Host		May. 29, 20	08 6:41 AM
Renew Services Auto Renew Settings Sync Expirations Account Settings	zcmos.dyndns.org	Host Host		May. 29, 20	08 6:41 AM
Renew Services Auto Renew Settings	zcmos.dyndns.org zinc.dyndns.org	Host Host		May. 29, 20	08 6:41 AM

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

DDNS
DDNS On Off Server name http://www.dyndns.org V User ID Password Re-type password Host name

6.3.4 UPnP (Universal Plug and Play)

Choose menu "**Network** \rightarrow **UPnP**", and 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	UPnP
SETTING -BASIC + System + Camera -Network • Information • PPPoE • DDNS • UPnP • Bonjour • IP Notification • Wireless • Messenger + Security + Advanced	 UPnP ○ On ○ Off Turn On UPnP port forwarding HTTP port ○ 80 ○ (1024 ~ 65535) SSL port ○ 443 ○ (1024 ~ 65535) MPEG4 RTSP port ○ 554 ○ (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 RTSP port**: Enter the MPEG4 RTSP port, default value is 554.

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	Papiour
SETTING -BASIC + System + Camera -Network • Information • PPPoE • DDNS • UPnP • Bonjour • IP Notification • Wireless • Messenger + Security + Advanced	Bonjour On Off Device name TP-LINK-001BFE00FEE5 OK Cancel
Auvanceu	

> **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.

IP Notification		
	 DHCP Static IP PPPoE 25 (1 ~ 65535) On Off 	☐ \$8L
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>	■ He
	Notify type SMTP server name SMTP server port Authentication User name Password Recipient e-Mail address Administrator e-Mail address Subject	IP Notification ⊙ On Off Notify type □ DHCP □ Static IP □ PPPoE SMTP server name

- > 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.

P Note:

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	IP Notification		
-BASIC	📕 IP Notification 💿 On 🔘 (Dff	
+ System	Notify type	DHCP 🗍 Static IP 🗍 PPPoE	
+Camera	SMTP server name		
-Network • Information			
• PPPoE	SMTP server port	25 (1 ~ 65535)	SSL
• DDNS	Authentication	💿 On 🔘 Off	
• UPnP		🔲 SMTP 🔽 POP before SMTP	
Bonjour IP Notification	POP server name		
• Wireless	User name		
• Messenger	Password		
+ Security			
+Advanced	Recipient e-Mail address		
	Administrator e-Mail address	3	
	Subject	IP Notify	
	Message	Product Name : <product> Web Version : <vweb> APP Version : <vfirm></vfirm></vweb></product>	
	imessaye	http:// <ip>:<port> MAC Address : <mac></mac></port></ip>	- 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. You can specify more than one recipient E-mail address using ";" to separate.
- 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.

6.3.7 Wireless

Choose Network \rightarrow Wireless, you can configure the wireless function for the camera in the figure below.

E Home	Wireless						
SETTING -BASIC	📕 Wireless 💿 On	O Off					
+System	Villeless 🕑 OII	0.01					
+Camera			Status of win	eless netw	orks		
-Network	ESSID	Mode	Security		Channel	Signal strength	Bit rate
 Information 	TP-LINK	Managed	WPA(2)-PSK/	TK 1	69	0	~
• PPPoE)618Managed	Open/NoSecu		71	ō	
• DDNS	yin hong	Managed	Open/WEP	1	81	0	
•UPnP	541G	Managed	Open/NoSecu WPA2-PSK/AE		55 77	0 0	~
• Bonjour	IP-LINK_EF	127BManaged	WPA2-P5K/ AL	.5 4		U	
• IP Notification							Refresh
• Wireless	MAC address		0	0:1B:FE:00	D:FF:49		
• Messenger							
+Security	IP address						
+Advanced	ESSID					Manual se	tting
	Mode		() Manageo	d 🔾 Ad-Ho	00	
	Authentication		C)pen	*		
	Encryption		V	VEP	~		
	Key length		1.7) 64 bit 🔿			
	Active transmit k	ву:		6 HEX char	's or 13 AS	CII chars)	
			Key 1: 💌				
			Re-type				
	💿 Obtain an IF	[,] address automat	tically (DHCP)				
	🚫 Use the follo	owing IP address					
		server address at					
			OK	Cancel			

The wireless network has to be set up by using cable network connection. After setting the camera correctly, the wireless function can work without cable network connection. Please follow the setting process below step by step:

- 1. Connect IP Camera with Ethernet connection.
- Go to SETTING → BASIC → Network → Wireless, and choose option "On". You will see the wireless setting page.
- 3. Then click **Refresh**. All access points (AP) around you will show up.

🗲 Home	2002.000						
	Vireless						
SETTING							
	Wireless 💿 On () Off					
+System							
+Camera	0.000	22.25		wireless n			1 11 <u>11 11 11 11 11 11 11 11 11 11 11 1</u>
-Network	ESSID	Mode	Security		Channe	Signal strength	Bit rate
Information	TP-LINK_muy.		WPA(2)-PS			0	^
• PPPoE	TP-LINK_0106 yinzhongtao.		Open/NoSe Open/WEP		1 71 1 81	0 0	
• DDNS • UPnP	541G	Managed	Open/WoSe			0	
• Bonjour	TP-LINK_EF12		WPA2-PSK,		2 77	0	~
• IP Notification							Refresh
• Wireless							rion com
• Messenger	MAC address			00:1B:FI	E:00:FF:49		
+Security	IP address						
+Advanced	ESSID			-		Manual s	setting
	Mode			Mana	aged 🔿 Ad-	1.1	, and a
	Authentication			Open	~		
	Encryption			WEP	~		
	Key length				t 🔿 128 bit		
	Active transmit key	·		100000000000000000000000000000000000000	chars or 13 A	SCII chars)	
	,		Key 1: 💌				
			1			-	
			Re-type				
	💿 Obtain an IP a	address automat	ically (DHCP)				
	🔘 Use the follov	ving IP address					
	💿 Obtain DNS s	erver address au	utomatically				
	🔘 Use the follow	ving DNS server	address				
	3.		OK	Car	ncel		

- 4. Select the AP you wish to connect.
- 5. Enter password in **Passphrase** field if you need. If you don't know the setting of the wireless AP, please ask your network administrator.

E Home	Wireless						
SETTING -BASIC +System	Wireless 💿 On	O Off					
+Camera						us of wireless r	
-Network	ESSID	Mode	Security		Channel	Signal strength	Bit rate
 Information PPPoE 	TP-LINK	Managed	WPA(2)-PSK		69	0	~
•DDNS	yin hong)618Managed Managed	Open/NoSec Open/WEP	urity 1 1	71 81	0 0	
• UPnP	541G	Managed	Open/NoSec		55	Ő	
• Bonjour	TP-LINK EF:	127BManaged	WPA2-PSK/A	ES 2	77	0	
• IP Notification							Refresh
• Wireless	MAC address			00-18-FF	:00:FF:49		
• Messenger				00.10.FC	1.00.111.43		
+Security	IP address						
+Advanced	ESSID			TP-LINK	EF127B	🗌 🗌 Manu	al setting
	Mode			💿 Mana	ged 🔿 Ad-H	łoc	
	Authentication			WPA2-P	SK 🔽		
	Encryption			AES 🗸			
	Passphrase			•••••			
	Re-type						
	 Use the follow Obtain DNS 	address autom owing IP address server address owing DNS serve	automatically	(64 HEX c	hars or 8 to 6	3 ASCII chars)	
				ОК	Cancel		

6. Choose the option of Obtain an IP address automatically (DHCP) or Use the following IP address:

🗲 Home	Passphrase	*******
SETTING -BASIC	Re-type	(64 HEX chars or 8 to 63 ASCII chars)
+ System + Camera	 Obtain an IP address automaticall Use the following IP address 	
-Network • Information	IP address	0.0.0.0
•PPPoE •DDNS •UPnP	Subnet mask Default gateway	0.0.0.0
• Bonjour • IP Notification	 Use the following DNS server add 	ress
• Wireless • Messenger	Primary DNS server	0.0.0.0
+Security +Advanced	Secondary DNS server	0.0.0
		OK 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 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, if necessary.
- 7. Please click **OK** button to finish the wireless setting. Now please have a short rest or work on other business, for the wireless setting will take effect 1 minute after you click **OK**.
- 8. Please unplug the Ethernet cable connecting the TL-SC3171G and the Router (or the PC), and log into the IP camera with its wireless address.

6.3.8 Messenger

If the firmware of your IP Camera has been updated to LM.1.6.16.03P5, then the **Messenger** submenu will be displayed under the **Network** menu. Click the **Messenger** submenu, the Messenger configuration page will be displayed similar to the figure shows below. This function allows you to use the desired computer with MSN installed to view the video captured by the IP camera.

E Home	Messenger		
SETTING			
-BASIC	Messenger 💿 Or	Off	
+System	- messenger 🕑 on		
+Camera	Protocol	msn	
-Network	Levin Asseumt		
 Information 	Login Account	camtest01@live.cn	
• PPPoE	Password		
• DDNS			
• UPnP	Re-type password	*****	
• Bonjour	Alias	TL-SC3171G	
• IP Notification	Alias	16-8031716	
• Wireless	Port range	20000 (1024 ~ 65531) ~ 21000	(1028 ~ 65535)
Messenger Security	Video mode		
+Advanced	VIDEO INODE	💿 Computer view 🚫 Mobile view	
Advanced	IP Notification	💿 On 🔘 Off	
	Privacy	💿 On 🔘 Off	
	User	camtest02@live.com	
		Add Remove	
		camtest02@live.com	
	Allow list		
		OK Cancel	

- Messenger: Check the radio button before On, so you can use your IP Camera via this function.
- > **Protocol**: Displays the protocol used.
- **Login Account**: Enter the MSN account registered for you IP Camera.
- > **Password**: Enter the password of the MSN account.
- > **Re-type password**: Type the password again.
- Alias: Give an alias for the account of your IP Camera. The figure above takes "TL-SC3171G" for example.
- > **Port range**: Enter the port range used.
- IP Notification: When this feature is enabled, the IP camera would notify "friends" on MSN about its IP address when it logs into the MSN account or when its IP address is changed.
- Privacy: When this feature is enabled, the MSN stream will be secured, then only users whose MSN ids are in the Allow List can add the camera's MSN account and view the camera video. When it's disabled, any user can add the camera's MSN id and see it.
- Allow list: Enter the account of the MSN user you want communicate with in "User" field. Click Add button and then the account will be added to the "Allow list". Choose an account in the "Allow list" and click Remove button to delete it.

To use MSN to view the video captured by the IP camera, please follow the steps below.

A. Configuring your IP camera

P Note:

If you use a Modem Router to access the Internet, you should set your IP Camera as the virtual server with port range 20000-21000 on the Modem Router's web-based management page.

- 1. Click "**BASIC->Network->Messenger**" to enter the "Messenger" page. Enable Messenger and then set the Login Account, Password, Alias, Port range, IP Notification, Privacy and Allow list parameters as the above figure shows. Click **OK** to save your settings.
- 2. Click "**BASIC->Network->Information**" to enter the "Information" page. Add 192.168.1.1 as the Primary DNS server.

TTING BASIC	MAC address	00:18:FE:00:FE:E5
+ System + Camera	💿 Obtain an IP add	ress automatically (DHCP)
-Network • Information • PPPoE • DDNS	O Use the following	g IP address
•UPnP •Bonjour •IP Notification •Wireless		er address automatically g DNS server address
• Messenger	Primary DNS ser	ver 192.168.1.1
+ Security Advanced	Secondary DNS	server 0.0.0.0

3. Click "Advanced->System Log->Setting" to see if there is "Messenger is Ready" information as the figure below shows. If there is, go on with the following steps.

	Remote Log		
ced client P event	Enable remote log		
dule on detection		OK Cancel	
em Log	Current Log		
ing	Jan 1 00:00:09 <info Jan 1 00:01:03 <info Jan 1 00:01:04 <info Jan 1 00:01:04 <info Jan 1 00:01:07 <info Jan 1 00:01:07 <info Jan 1 00:01:07 <info Jan 1 00:07:18 <info< td=""><td> > SYS: log started > NET: Starting network > NET: MAC = 00:23:CD:E0:00:03 > NET: Network type = Static > ALARM: Alarm Buffer Event Receive > Messenger: Login use camtest01@live.cn > WDT: watchdog start > Messenger: Messenger is Ready </td><td></td></info<></info </info </info </info </info </info </info 	 > SYS: log started > NET: Starting network > NET: MAC = 00:23:CD:E0:00:03 > NET: Network type = Static > ALARM: Alarm Buffer Event Receive > Messenger: Login use camtest01@live.cn > WDT: watchdog start > Messenger: Messenger is Ready 	

B. Add the camera's msn account

- 1. Make sure the desired computer with MSN installed. Log into the MSN.
- 2. Make sure the MSN view plugin is installed.

This plugin is embedded in IntelligentIPInstallerSetup(TPLink)-1.1.16.09.exe and will be installed automatically when you install IntelligentIPInstallerSetup(TPLink)-1.1.16.09.exe.

▲ You can download the IntelligentIPInstallerSetup(TPLink)-1.1.16.09.exe here: <u>http://www.tp-link.com/download/ipcamera/Intelligent_IP_Installer.rar</u>

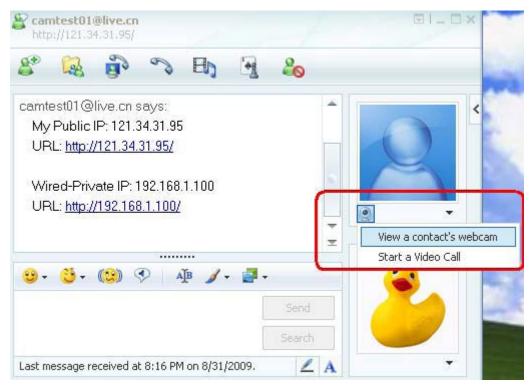
- 3. Log into your MSN account.
- 4. Add the camera's MSN account as a contact.

🚴 Windows Live	Contacts - Add a Contact	
2		
<u>G</u> eneral C <u>o</u> ntact	Instant Messaging Address: camtest01@live.cn Example: example@live.com, example@yahoo.com	
<u>P</u> ersonal <u>W</u> ork <u>N</u> otes	Personal invitation: Enter a message to send to this contact Also send an e-mail invitation to this contact	
	Mobile device: (Used for text messages) Choose a country or region	
	Nickname: Group: Friends	•
	✓ Subscribe to updates for this contact Learn about Windows Live Contacts	<u>C</u> ancel

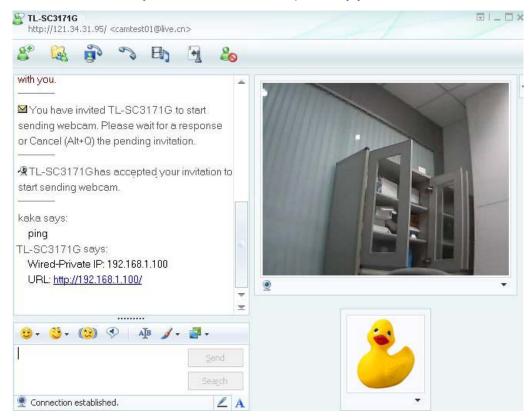
5. Check its status. Normally it should be online.

Enter a personal message> •
(1) 🔀 💥 🗾
Find a contact or number 🌡 🎝
Learn more about the Customer
Experience Improvement Program.
✓ Coworkers
Drag a contact into this group
✓ Family
Drag a contact into this group
Friends (1/1)
👗 camtest01@live.cn - http://121.3
V Non-Instant Messaging Contacts
There are no contacts in this group.

6. Click the camera icon is and select **View a contact's webcam** to view the video.

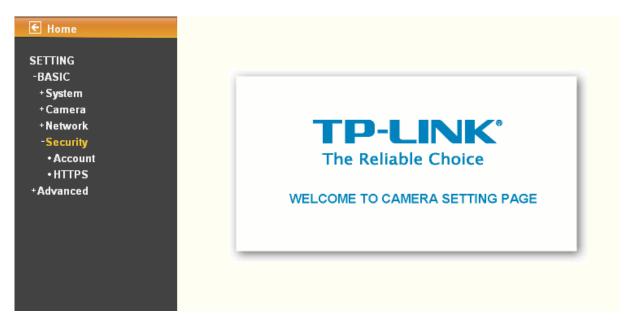


7. Wait for a moment, and you will see the video captured by your IP Camera.



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.

	Account				
SETTING -BASIC +System	User ID	Username	Password	Re-type Password	Viewer mode
+Camera	Administrator	admin			Admin
+Network					
-Security • Account	User 1				Admin 💙
• HTTPS	User 2				Admin 🔽
+Advanced	User 3				Admin 🔽
	User 4				Admin 🔽
	User 5				Admin 👻
	User 6				Admin 🔽
	User 7				Admin 👻
	User 8				Admin 🍟
	User 9				Admin 🗸
		Viewer authentication	💿 On 🔿 Off		
	_		0.0		
		Viewer authentication	 On ○ Off OK Cance 		

- > 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://".

Account Subject Name HTTPS No certificate installed. Advanced Properties Remove	
+Advanced	
HTTPS Connection Policy	
Administrator HTTP	
Operator HTTP	
Viewer HTTP	

- > **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.

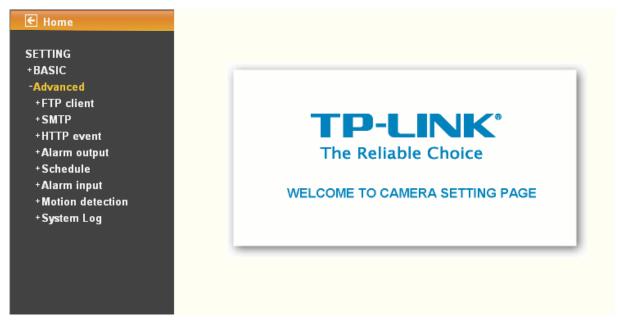
€ Home	HTTPS				
-BASIC +System +Camera +Network	Create & Install	elf-signed certificate	D		
-Security •Account		Create self-signed certific reate self-signed c			? 🔀
• HTTPS +Advanced	No certifica Propertie	Country State or province			
	HTTPS Cont Administrato Operator	 Locality Organization Organizational Unit 			
	Viewer Set Polic	Common Name Validity	365	days(1~1000)	
		ОК	Cancel		_
	http	o://192.168.1.10/create_ssl_cert	ficate.ht 🥑 Ir	iternet	1

P Note:

- 1) 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.
- 2) When enable HTTPS with RTSP off mode, the IP Camera will protect all setting including video and audio.

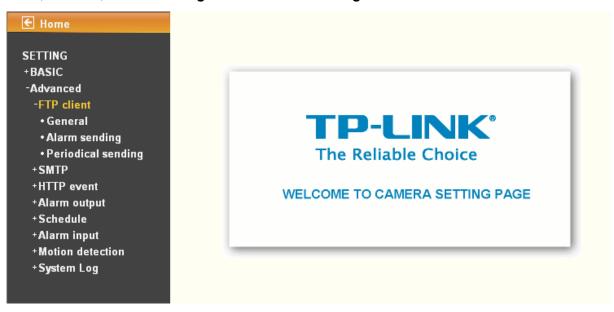
Chapter 7 Setting-Advance

Click Advance to display the submenus including FTP client, SMTP, HTTP event, Alarm output, Schedule, Alarm input, 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	General
SETTING	
+BASIC	📕 FTP client 💿 On 🔘 Off
-Advanced -FTP client	FTP server name
• General	User name
• Alarm sending • Periodical sending	Password
+SMTP	Re-type password
+HTTP event +Alarm output	Passive mode 🚫 On 💿 Off
+Schedule	
+Alarm input	OK Cancel Test
+Motion detection	
+System Log	

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.

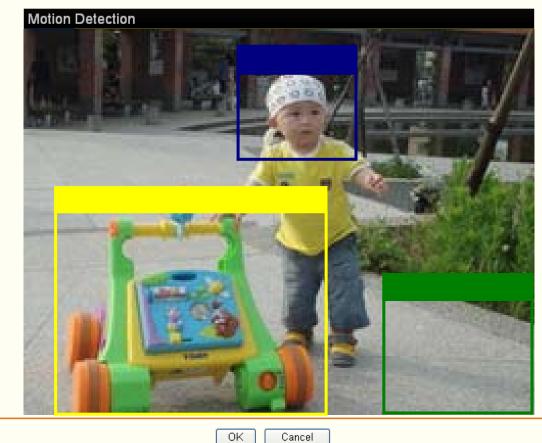
7.1.2 Alarm sending

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.

SETTING	Alarm sendi	ng
+BASIC	📕 Alarm sending (💿 On 🔘 Off
-Advanced -FTP client	Remote path	
• General	Image file name	
• Alarm sending • Periodical sending	Suffix	O Date Time 💿 Sequence number
+SMTP		Sequence number clear Clear
+HTTP event	Alarm	Motion detection Motion detection
+Alarm output +Schedule		Alarm input
+Alarm input	Effective Period	🔿 Always
+Motion detection +System Log		Schedule
		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**.

Motion detection			
Setting			
Motion detection 1 Threshold Sensitivity	Motion detection 2 Threshold Sensitivity	Motion detection 3 Threshold Sensitivity	



P Note:

- 1) 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 <u>Section</u> <u>7.7</u>.
- 2) **Motion Detection** works only when the MPEG4 function is On and the Cropping is set to Off.
- Alarm Input: Select the connected alarm. Sensor input1: The external sensor which is connected to sensor input1 of the alarm input.

Alarm input	
Setting	
Alarm input	
Sensor input 1	
Trigger condition 💿 High 🔘 Low	
OK Cancel	

PNote:

You can set the alarm input function at **Alarm Input** page. (Please go "**Setting** \rightarrow **Advance** \rightarrow **Alarm Input** \rightarrow **Setting**"). For more details, you can check <u>Section 7.6</u>.

- **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.

Sc	hedule													
Settir	ng													
	dule selection iime 00 🔽 : (FTP - Ala nd time 24 💌		~									
Mon	(Empty) 🔽	Add	Delete	0 1 2	345	67	8 9	10 11	12 13	14 15	16 17	8 19 2	20 21 22	23
Tue	(Empty) 🔽	Add	Delete											
Wed	(Empty) 🖌	Add	Delete											
Thu	(Empty) 💌	Add	Delete											
Fri	(Empty) 💙	Add	Delete											
Sat	(Empty) 🔽	Add	Delete											
Sun	(Empty) 🔽	Add	Delete											
🔽 Use	e the same time	e schedul	e every day.											
							ок	Cancel						

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 <u>Section 7.5</u>.

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.

NG	
C	📕 Periodical sending 💿 On 🔘 Off
inced	Remote path
client	
eral	Image file name
m sending	Suffix 🔿 None 🔿 Date Time 💿 Sequence number
dical sending	
	Sequence number clear
ent	Interval 00 H 30 M
tput	
	(MIN : 1 min. MAX : 24-hour interval)
out	Effective Period 🛛 🔿 Always
etection	Schedule Schedule
og	

- 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.

Schedule

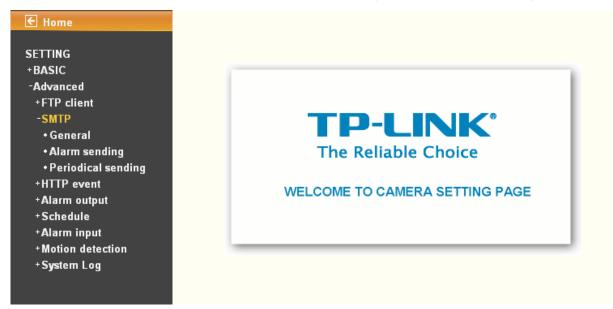
Schedule selection	FTP - Alarm
Start time 🛛 🔽 : 🕻	• End time 24 • : 00 •
Mon (Empty) 🔽	Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Tue (Empty) 🗸	Add Delete
Wed (Empty)	Add Delete
Thu (Empty) 🗸	Add Delete
Fri (Empty) 🖌	Add Delete
Sat (Empty) 🗸	Add Delete
Sun (Empty) 🖌	Add Delete
🔽 Use the same time	schedule every day.

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 <u>Section 7.5</u>.

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, **Genera**l, **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**").

E Home	General		
SETTING +BASIC -Advanced +FTP client -SMTP •General •Alarm sending •Periodical sending +HTTP event +Alarm output +Schedule	e-Mail (SMTP) ③ On 〇 Off SMTP server name SMTP server port Authentication	25 (1 ~ 65535)	SSL
+Alarm input +Motion detection +System Log	Recipient e-Mail address Administrator e-Mail address Subject		
	Message		2
		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.

P Note:

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.

€ Home	General		
SETTING +BASIC -Advanced	e-Mail (SMTP) ③ On 〇 Off SMTP server name		
+FTP client -SMTP •General •Alarm sending	SMTP server port Authentication	25 (1 ~ 65535) ⊙ On ◯ Off	SSL
	POP server name User name	SMTP POP before SMTP	
+Alarm input +Motion detection +System Log	Password Recipient e-Mail address		
	Administrator e-Mail address Subject		
	Message		~
		OK Cancel Test	M

- **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 external sensor input or by the built-in motion detection function. Select **On** to send the image and file to SMTP server linked with the alarm detection.

E Home
SETTING +BASIC -Advanced +FTP client -SMTP • General • Alarm sending • Periodical sending +HTTP event + Alarm output • Alarm input * Schedule • Alarm input • Sortedule • Alarm input • Sortedule • Motion detection • System Log

- > 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 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.

E Home	Alarm sending
SETTING +BASIC -Advanced +FTP client -SMTP • General • Alarm sending	 Alarm sending ③ On 〇 Off File attachment ④ On 〇 Off Image file name Suffix ○ None ○ Date Time ④ Sequence number
• Periodical sending + HTTP event + Alarm output + Schedule	Sequence number clear Clear Alarm I Motion detection Motion detection Alarm input Alarm input
+ Alarm input + Motion detection + System Log	Effective Period O Always Schedule
- 1967 - 198 	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.

Motion detection

Setting

Motion detection 1	Motion dete
Threshold	Threshold
Sensitivity	Sensitivity

] Motion dete reshold	ection 2
ensitivity	

🛃 Motion	detection 3
Threehold	

	٦
Sensitivity	





P Note:

- 1) 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 <u>Section</u> <u>7.7</u>.
- 2) Motion Detection works only when the MPEG4 function is On and the Cropping is set to Off.
- Alarm input: Select the connected alarm. Sensor input1: The external sensor which is connected to sensor input1 of the alarm input.

Alarm input

etting
Alarm input
📃 Sensor input 1
Trigger condition 💿 High 🔘 Lo
OK Cancel

You can set the alarm input function at alarm input page (Please go "Setting \rightarrow Advance \rightarrow Alarm input \rightarrow Setting"). For more details, you can check <u>Section 7.6</u>.

- **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.

Schedule	
Setting	
Start time 00 🕶 : 00 🕶 - 1	FTP - Alarm v End time 24 v: 00 v
Mon (Empty) 🗸 Add	Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Tue (Empty) 🗸 Add	Delete
Wed (Empty) V Add	Delete
Thu (Empty) 🖌 Add	Delete
Fri (Empty) 🖌 Add	Delete
Sat (Empty) 🗸 Add	Delete
Sun (Empty) V Add	Delete
✓ Use the same time schedu	Ile every day.
	OK Cancel

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 <u>Section 7.5</u>.

7.2.3 Periodical sending

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.

+BASIC	
-Advanced	Periodical sending 💿 On 🔘 Off
+FTP client	Image file name
-SMTP	Suffix 🛛 🔿 None 🔿 Date Time 💿 Sequence number
• General	Sequence number clear Clea
• Alarm sending	Sequence number clear Clea
• Periodical sending	Interval 00 H 30 M
+HTTP event	(MIN : 30min. MAX : 24-hour interval)
+Alarm output	Effective Period 🔿 Always
+Schedule	
+Alarm input	Schedule
+Motion detection	
+System Log	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".

Schedule

	dule selection		FTP - A	 ~							
Start	ime 00 🔽 : ()0 🔽 - End	time 24 💌								
Mon	(Empty) 🔽	Add	Delete	346	5 6 7	8 9 10	11 12	3 14 15	16 17 18	19 20 21	22 23
Tue	(Empty) 👻	Add	Delete								
Wed	(Empty) 🔽	Add	Delete								
Thu	(Empty) 🔽	Add	Delete								
Fri	(Empty) 🔽	Add	Delete								
Sat	(Empty) 🔽	Add	Delete								
Sun	(Empty) 🔽	Add	Delete								
🗸 Us	e the same time	e schedule (every day.								

PNote:

You can set schedule function on **Schedule page** (Please go to "**Setting** \rightarrow **Advance** \rightarrow **Schedule** \rightarrow **Setting**"). For more details, you can check <u>Section 7.5</u>.

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

TTING		
ASIC	📕 HTTP event 💿 On () Off
dvanced	URL	
·FTP client ·SMTP	Port 8	
HTTP event • General	User ID	
• Alarm sending	Password	
Alarm output Schedule	Proxy server name	
Alarm input	Proxy port number	
Motion detection System Log	Proxy user ID	
	Proxy password	

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

€ Home	General
SETTING	
+BASIC	HTTP event 💿 On 🔘 Off
-Advanced	
+FTP client	URL 192.168.1.7/cgi-bin/operator/ptzset
+SMTP	Port 80
-HTTP event	
• General	User D admin
• Alarm sending	Password
+Alarm output	Proxy server name
+Schedule	Floxy server name
+Alarm input	Proxy port number
+Motion detection	
+System Log	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.

ETTING BASIC		
	Alarm sending	I 💿 On 🔘 Off
Advanced	Alarm	Motion detection Motion detection
+FTP client +SMTP		Parameter MOVE=DOWN
-HTTP event		
General		Message PTZ DOWN
• Alarm sending		🖌 Alarm input 🛛 Alarm input
⁺Alarm output		Parameter MOVE=DOWN
+ Schedule		
+Alarm input		Message PTZ DOWN
∙Motion detection •System Log	Effective Period	d 🔿 Always
System Log		Schedule

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

- > 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.
 - ✓ 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.

Motion detection

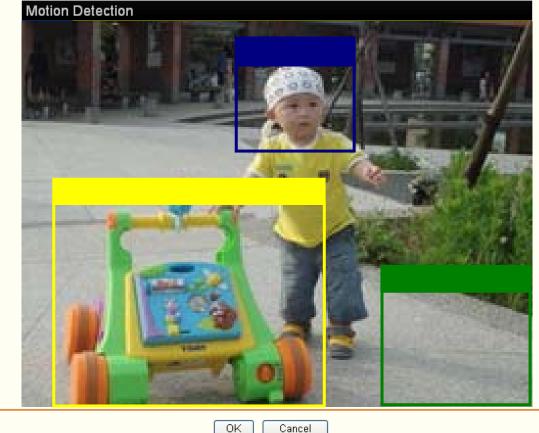
Setting

Motion detection 1	✓ Motion detection
Threshold	Threshold
Sensitivity	Sensitivity

] Motion detection 2 preshold	
ensitivity	

	Motion detection 3	
Thr	eshold	

Sensitivity	



P Note:

- 1. 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 <u>Section 7.7</u>.
- 2. Motion Detection works only when the MPEG4 function is On and the Cropping is set to Off.
 - Alarm input: Select the connected alarm. Sensor input1: The external sensor which is connected to sensor input1 of the alarm input.
 - Parameter: the parameter of CGI (defined in URL of HTTP→General) 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.

Alarm input

Ala	rm input
	Sensor input 1
	Trigger condition 💿 High 🔘 Low
	OK Cancel

You can set the alarm input function at alarm input page (Please go "Setting \rightarrow Advance \rightarrow Alarm input \rightarrow Setting"). For more details, you can check <u>Section 8.6</u>.

- > 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.

Sc	chedule											
Settir	ng											
	dule selection		FTP - Al		*							
Start t	time 00 🔽 : I	00 🔽 - E	End time 🛛 24 🔽	: 00 🗸								
Mon	(Empty) 🔽	Add	Delete	0 1 2	345	6 7	3 9 10	11 12	13 14 15	16 17	18 19 20	21 22 23
Tue	(Empty) 🔽	Add	Delete									
Wed	(Empty) 🗸	Add	Delete									
Thu	(Empty) 🔽	Add	Delete									
Fri	(Empty) 🔽	Add	Delete									
Sat	(Empty) 🔽	Add	Delete									
Sun	(Empty) 🔽	Add	Delete									
🔽 Use	e the same tim	e schedu	le every day.									
						0	< Canc	el				

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 <u>Section 7.5</u>.

7.4 Alarm output

When you click **Alarm output** on the Advance mode menu, the Alarm output setting menu appears. You can set in this menu to control the alarm out of I / O port on the rear of the device linked to the alarm detection and the timer.

🗲 Home
SETTING
+BASIC
-Advanced
+FTP client
+SMTP
+HTTP event
-Alarm output
• Setting
+Schedule
+Alarm input
+Motion detection
+System Log



WELCOME TO CAMERA SETTING PAGE

7.4.1 Setting

E Home	Setting
SETTING +BASIC -Advanced +FTP client +SMTP +HTTP event -Alarm output • Setting +Schedule +Alarm input +Motion detection +System Log	 Alarm output ⊙ On ○ Off Digital output ○ High ⊙ Low Trigger condition ⊙ Alarm ○ Timer Alarm ☑ Motion detection Motion detection ☑ Alarm input Alarm input Alarm input Alarm duration 10 ☑ sec. (1 to 60 sec.) Effective Period ○ Always ⊙ Schedule Schedule
	OK Cancel

Alarm output: To activate the Alarm output function, select **On**. When you do not use the Alarm output function, select **Off**.

- > **Digital output**: Select High signal output and Low signal output as your alarm.
- Trigger condition: Select the mode of the Alarm output function. You can choose "Alarm" or "Timer".
- Alarm: Controls alarm output by synchronizing with an external sensor input or the built-in activity detection function.
 - **Motion Detection**: Click it on for using **Motion Detection** function as a sensor. You can set motion detection function at the motion detection function page.

Motion detection		
Setting		
Motion detection 1 Threshold Sensitivity	Motion detection 2 Threshold Sensitivity	Motion detection 3 Threshold Sensitivity
Motion Detection		

- 1. 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 <u>Section</u> <u>7.7</u>.
- 2. **Motion Detection** works only when the MPEG4 function is On and the Cropping is set to Off.
- Alarm Input: Select the connected alarm. **Sensor input1**: The external sensor which is connected to sensor input1 of the alarm input.

Alarm input

Alarm input Sensor input 1 Trigger condition High Low
Trigger condition 💿 High 🔿 Low

You can set the alarm input function at **alarm input** page (Please go "**Setting** \rightarrow **Advance** \rightarrow **Alarm input** \rightarrow **Setting**"). For more details, you can check <u>Section 7.6</u>.

- > Alarm duration: There are up to 60 second options to choose for alarm duration interval.
- > 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.

Scl	hedule								
Setti	ng								
	edule selection time 00 🕶 : 00 🕶 - En	Alarm output - Alarm d time 24 💙 : 00 💙	¥						
Mon	(Empty) 🖌 Add	Delete 0 1	2345	6 7 8	9 10 11	12 13 14 15	5 16 17 18	19 20 21	22 23
Tue	(Empty) 🖌 Add	Delete							
Wed	(Empty) 🔽 Add	Delete							
Thu	(Empty) 🖌 Add	Delete							
Fri	(Empty) 🖌 Add	Delete							
Sat	(Empty) 💟 🛛 Add	Delete							
Sun	(Empty) 💟 🛛 Add	Delete							
Vs 🔽	e the same time schedule	every day.							
					ок с	ancel			

P Note:

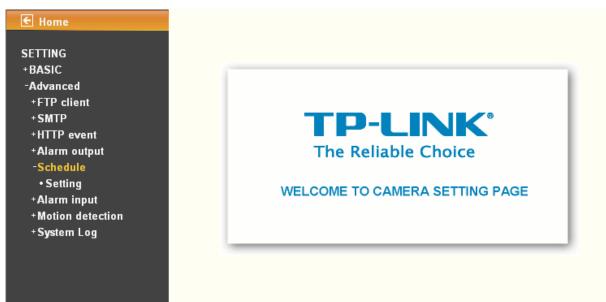
You can set schedule function at **schedule** page. (Please go "**Setting** \rightarrow **Advance** \rightarrow **Schedule** \rightarrow **Setting**") For more details, you can check <u>Section 7.5</u>.

7.5 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.



7.5.1 Setting

E Home	Setting
+BASIC -Advanced +FTP client	Start time 00 V : 00 V - End time 24 V : 00 V
+SMTP +HTTP event	Mon (Empty) 🗸 Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
+Alarm output -Schedule	Tue (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
• Setting +Alarm input	Wed (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
+Motion detection +System Log	Thu (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
	Fri (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
	Sat (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
	Sun (Empty) V Add Delete 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
	Use the same time schedule every day.
	OK Cancel

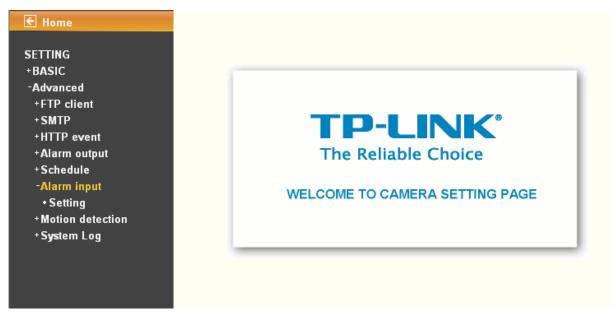
Schedule Selection: Select the list box to specify the schedule you want to set.

- 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.

7.6 Alarm input

When you click **Alarm Input** on the Advance mode menu, the Alarm input setting menu appears. You can set in this menu to control the external alarm input of I / O port on the rear of the device linked to **FTP**, **SMTP**, and **HTTP** sending function.





E Home	Setting
SETTING +BASIC -Advanced +FTP client +SMTP +HTTP event +Alarm output +Schedule -Alarm input •Setting +Motion detection +System Log	 Alarm input Sensor input 1 Trigger condition High Low OK Cancel

- Sensor input 1: Click it on for using external sensor which is connected to sensor input1 of the camera I / O port.
 - Trigger condition: Select High signal output and Low signal output as your alarm.
 - **Camera move**: Pull down the window to select the camera preset position.

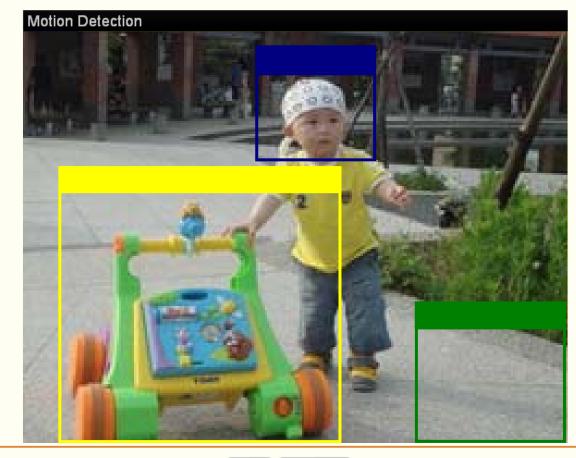
7.7 Motion detection

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 to FTP, SMTP and Alarm output for capturing and sending images or starting alarm output.

€ Home	
SETTING	
+BASIC	
-Advanced	
+FTP client	
+SMTP	
+HTTP event	
+Alarm output	The Reliable Choice
+Schedule	
+Alarm input	WELCOME TO CAMERA SETTING PAGE
-Motion detection	
• Setting	
+System Log	

7.7.1 Setting

Setting		
Motion detection 1 Threshold	Motion detection 2 Threshold	Motion detection 3 Threshold
Sensitivity	Sensitivity	Sensitivity



OK Cancel

- > **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.

7.8 System Log

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

€ Home	
SETTING	
+BASIC	
-Advanced	
+FTP client	
+SMTP	
+HTTP event	
+Alarm output	The Reliable Choice
+Schedule	
+Alarm input	WELCOME TO CAMERA SETTING PAGE
+Motion detection	WELCOME TO CAMERA SETTING PAGE
-System Log	
• Setting	

	Remote Log	
ced client	Enable remote log Server name	
event	Server Port 💿 514 🔘 (1024 ~ 65535)	
n output dule	OK Cancel	
n input	Current Log	
on detection em Log ting	Jan 1 00:00:08 <info> SYS: log started Jan 1 00:00:32 <info> NET: Network type = DHCP Jan 1 00:00:33 <info> WDT: watchdog start Jan 1 00:00:33 <info> NET: Starting network Jan 1 00:00:38 <info> NET: Starting network Jan 1 00:00:38 <info> NET: Network type = DHCP Jan 1 00:00:38 <info> NET: Network type = DHCP Jan 1 00:00:38 <info> NET: Subnet Mask = 255.255.0 Jan 1 00:00:38 <info> NET: Subnet Mask = 255.255.0 Jan 1 00:00:39 <info> NET: Gateway = 192.168.1.1 Jan 1 00:06:15 <info> RTSP: mp4 over HTTP from 192.168.1.93 Jan 1 01:00:38 <info> NET: Starting network Jan 1 01:00:38 <info> NET: Network type = DHCP Jan 1 01:00:39 <info> NET: Network type = DHCP Jan 1 01:00:39 <info> NET: Network type = DHCP Jan 1 01:00:39 <info> NET: Network type = 25.255.255.0</info></info></info></info></info></info></info></info></info></info></info></info></info></info></info></info>	
	Jan 1 01:00:39 <info> NET: Gateway = 192.168.1.1 Jan 1 01:00:39 <info> NET: Primary DNS = 192.168.1.1 Jan 1 01:04:15 <info> RTSP: mp4 over HTTP from 192.168.1.93</info></info></info>	

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

P Note:

7.8.1 Setting

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

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
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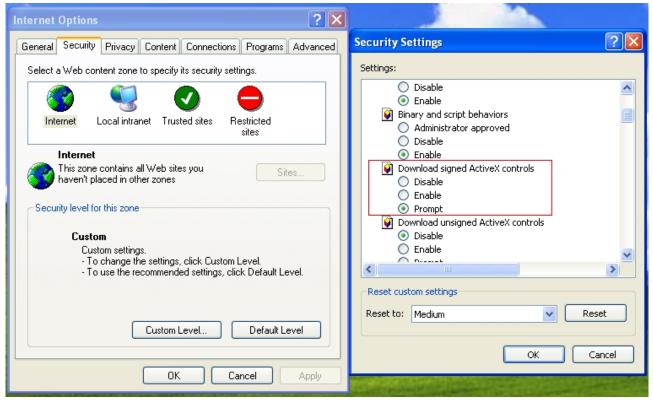
Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate
640*480	2048	30	23.0
640*480	2048	15	22.2
640*480	1536	30	18.5
640*480	1536	15	17.9
640*480	1024	30	10.5
640*480	1024	15	10.5
640*480	512	30	5.3
640*480	512	15	6.3
320*240	1536	30	15.8
320*240	1536	15	16.9
320*240	1024	30	10.5
320*240	1024	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

Q1. What can I do if I forgot the login name and password?

Press and hold the **Reset** button on the bottom panel with a pin or paperclip. Please continue holding down the **Reset** button for approximately 15 seconds. And then IP Camera will reboot. It will require 45 seconds. Both the default username and password are **admin**.

Q2. Why can't I view the image from the web browser?

First, please make sure that you are using the web browser that supports ActiveX (Internet Explorer) or Java script (Firefox or Safari). If it is, please install the ActiveX and Java script.



As to the ActiveX installation, please check your internet option settings to confirm whether you're allowed to install the ActiveX plug-in, which is embedded in the IP camera.

Please click "prompt" in "Download signed ActiveX controls" in the Internet Option \rightarrow Security Settings.

If you check that box, the ActiveX plug-in program would prompt automatically when you log in the camera's web page, and then please choose to install it.

As to the Java script installation, please visit the official website here:

http://www.java.com/en/download/manual/jsp

Q3.If the image is blurry, what can I do?

Please adjust the IP Camera's focus by rotating the Lens.

Q4. If I forgot the IP address and port of my IP Camera. What should I do?

Please download the Intelligent IP Installer Setup from our web site, or run the CD firstly. This software will search the IP Camera automatically. Double click your IP Camera in this software, you will view the IP address and port of your IP Camera.