



# M511W Firmware User Manual

## **M511W Wireless Pan/Tilt IP Camera**

## **Firmware User Manual**

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# **Firmware User Manual**

## **Chapter 1. Minimum System Requirement**

We strongly recommend your computers follow our minimum requirements in order to use this IP-Camera normally. If computer level is lower than this, it might cause some problems.

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

#### 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. Using IP Camera via Web Browser**

#### **2.1Windows Web Browser**

1. Start your web browser, and enter the IP address or host name of the IP camera in the Location / Address field of your browser.

Note :

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

#### 2. Use the default account "admin" and default password "admin".

Note :

The default user name "admin" and the password 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 monitor image will be displayed in your browser. In the far left side of main configuration are Setting, Client Setting, and Image Setup and PT control. For more details, you can check Chapter 6.2 \ Chapter 6.3 \ Chapter 6.4 and Chapter 6.5.

| Setting       |
|---------------|
| Lient setting |
| Image setup   |
| S PT control  |
|               |
|               |
|               |
|               |
|               |





### 2.2 Mac Web Browser

# 1. Click the Safari icon, and enter the IP address of the IP camera in the Location / Address field of your browser.

#### Note :

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





2. Use the default account "admin" and default password "admin".

Note :

The default user name "admin" and the password 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 monitor image will be displayed in your browser. In the far left side of main configuration are Setting, Client Setting, and Image Setup and PT control. For more details, you can check Chapter 6.2 \ Chapter 6.3 \ Chapter 6.4 and Chapter 6.5.





## **Chapter 3. Setting up Wireless Configuration**

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:

Connect IP Camera with Ethernet connection. (Check chapter 7.3.6 for more details)
 Go to Setting → Basic → Network → Wireless choose option "On". You will see the wireless setting page.

| Ф номе  | □ Wireless ⓒ On ◯ Off   |   |
|---|---|---|
| SETTING<br>BASIC<br>System<br>Camera<br>Network         | ESSID Mode<br>Refreshing  | Status of wireless networks<br>Security Channel Signal strength           |
| Information<br>PPPoE<br>DDNS<br>UPnP<br>IP Notification | <ul> <li>IP address</li> <li>ESSID</li> <li>Mode</li> </ul>                     | <ul> <li>Manual setting</li> <li>Managed ○ Ad-Hoc</li> </ul>              |
| Wireless<br>Messenger<br>D Security<br>Advance          | Authentication     Encryption     Key length     Active transmit key:     Key 1 | Open M<br>WEP M<br>O 64 bit O 128 bit<br>(26 HEX chars or 13 ASCII chars) |

3. Then click <u>"Refresh".</u> All access points (AP) around you will show up.

| ⊒ Wireless ⊙ On | O Off  |   |   |   |  |   |
|-----------------|--|---|---|---|--|---|
|                 |  | Status of wire  | less networ   | ka  |  |   |
| ESSID           | Mode   | Security  | Channel   | Signal strength   | Bit rate   |   |
| OQC - AP        | Managed  | Open/WEP  | 6   | 67  | 0  | •   |
| MFT_Wireless    | Managed  | Open/NoSecurity   | 9   | 79  | 0  |   |
| zavio           | Managed  | Open/MEP  | 11  | 73  | 0  |   |
| ellone          | Managed  | Open/NoSecurity   | 11  | 59  | 0  |   |
| Mick AP         | Hanaged  | WPA-P5K/TKIP  | 11  | 79  | 0  | 5   |
|                 | ESSID<br>OQC - AF<br>MFT_Wireless<br>ravio<br>eNome<br>Mick_AP | ESSID Mode<br>ESSID Mode<br>OQC - AF Managed<br>NFT_Wireless Managed<br>ravio Managed<br>eNome Managed<br>Mick_AP Managed | UWIreless () On () Off<br>Status of wire<br>ESSID Mode Security<br>OQC - AF Managed Open/MEP<br>NFT_Wireless Managed Open/NoSecurity<br>zavio Managed Open/NoSecurity<br>Mick_AP Managed WPA-PSK/IKIP | UWireless () On () Off<br>Status of wireless network<br>ESSID Mode Security Channel<br>OQC - AF Managed Open/MEP 6<br>NFT_Wireless Managed Open/NoSecurity 9<br>zavio Managed Open/NoSecurity 11<br>Nick_AP Managed NPA-P5K/IKIP 11 | Image       Status of wireless networks         ESSID       Mode       Security       Channel       Signal strength         OQC - AF       Managed       Open/MEP       6       67         NFT_Nireless       Managed       Open/MEP       6       67         NFT_Nireless       Managed       Open/MEP       1       79         eNome       Managed       Open/MEP       11       73         eNome       Managed       Open/NoSecurity       11       59         Mick_AP       Managed       WPA-PSK/TKIP       11       79 | Wireless () On () Off         Status of wireless networks         Status of wireless networks         ESSID       Mode       Security       Channel       Signal strength       Bit rate         OQC - AF       Managed       Open/MEF       6       67       0         NFT_Wireless       Managed       Open/N0Security       9       79       0         zavio       Managed       Open/NEF       11       73       0         eNome       Managed       Open/NoSecurity       11       59       0         Mick_AP       Managed       MPA-PSK/TKIP       11       79       0 |



4. Select the AP you wish to connect.

5. Enter password at <u>active transmit key</u> if you need. If you don't know the setting of the wireless AP, please ask your network administrator.

|                 |                  |             | Status of wire       | iess netwo | rks             |          |       |
|-----------------|------------------|-------------|----------------------|------------|-----------------|----------|-------|
| HOME            | ESSID            | Mode        | Security             | Channel    | Signal strength | Bit rate |       |
|                 | funP             | Managed     | WPA-PSK/TKIP         | 2          | 61              | Ô        | ^     |
| <               | FON TURD         | Managed     | Open/NoSecurity      | 2          | 59              | 0        | -     |
| SETTING         | OQC - AP         | Managed     | Open/WEP<br>Open/WEP | 6          | 65<br>71        | 0        |       |
| BASIC           | david            | AdHoc       | Open/NoSecurity      | 11         | 59              | õ        | ~     |
| System          |                  |             |                      |            |                 | Re       | fresh |
| 🕑 Camera 🛛      | MAC address      |             | 00:10:60:9E:7D:08    |            |                 |          |       |
| Network         | ID a d data a    |             |                      | _          |                 |          |       |
| Information     | I IP address     |             |                      |            |                 |          |       |
| PPPoE E         | ESSID            |             |                      | □ Ma       | nual setting    |          |       |
| DDNS E          | Mode             |             | ⊙ Managed ⊖ Ad       | I-Hoc      |                 |          |       |
| UPnP            | Authenticatio    | n           | Open M               |            |                 |          |       |
| IP Notification | Encounties       |             | WED                  |            |                 |          |       |
| Wireless        | Encryption       |             | WEP M                |            |                 |          |       |
| Messenger       | Key length       |             | ○ 64 bit ○ 128 bi    | t          |                 |          |       |
| Security        | Active transm    | nit key:    | (26 HEX chars or 1   | 3 ASCIL    | chare)          |          |       |
| Advance         | $\boldsymbol{C}$ | Key 1: 💌    | •••••                |            |                 |          |       |
|                 |                  | Re-type     | •••••                |            |                 |          |       |
|                 | Obtain an IP a   | ddress au   | itomatically (DHCP)  |            |                 |          |       |
|                 | Use the follow   | ving IP add | dress                |            |                 |          |       |

- 6. Choose the option of Obtain an IP address automatically (DHCP).
- 7. Choose the option of Obtain DNS server address automatically.

| T) Network                           | O Obtain an ID address au                        |                    |
|--------------------------------------|--|--------------------|
| 3 Nethork                            | O Obtain an IP address au                        | tomatically (DHCP) |
| Information                          | Use the following IP add                         | iress              |
| PPPoE                                | IP address                                       | 0.0.0.0            |
| UPnP                                 | Subnet mask                                      | 0.0.0.0            |
| IP Notification                      | Default gateway                                  | 0.0.0.0            |
| Wireless                             |  |                    |
| Messenger<br>> Security<br>> Advance | <ul> <li>Use the following DNS server</li> </ul> | 0.0.0              |
|                                      | Secondary DNS server                             | 0.0.0.0            |



- **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.

#### 8. Connect to the IP camera with wireless IP address, then you can remove the Ethernet

connection.



## **<u>Chapter 4. Using IP Camera via Mobile Phone</u>** 4.1 Using IP Camera via iPhone

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

1. Select Safari function



Type name and password.
 Default value is admin / admin.
 Then click Login In



2. Type IP address in your web link.



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



Note: The image is continuous snapshots not video.Therefore, you can't record live image here.



## **4.2 Mobile Phone Viewing**

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

#### 4.2.1. 3G Mobile Phone Streaming Viewing

For 3G mobile phone viewing, type "**rtsp:**//**<IP>:<PORT>**/**video.3gp** " into your 3G Streaming Link. **<IP>** is the Public IP address of your IP camera; **<PORT>** is the RTSP port of your IP camera (Default value is 554.) Example: rtsp://100.10.10.1:554/video.3gp

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

### 4.2.2. 2.5G Mobile Phone WAP Viewing

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

#### 4.2.3. 2.5G Mobile Phone Browser Viewing

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



## **Chapter 5. MSN Messenger**

Please see the following steps to set up the Messenger function.

**1.** You can download MSN software freely and create a **new MSN account (camera at home)** to use Microsoft Live Messenger.

**2.**Go to Setting $\rightarrow$ Basic $\rightarrow$ Network $\rightarrow$ Messenger, set the Messenger to "ON". Then, <u>login in new</u> account and password (Camera at home).

| □ Messenger   On ( | 0.0#   |   |
|--------------------|--|---|
| Protocol           | man  |   |
| Login Account      | camera at home@hotmail.com   |   |
| Password           | •••••  |   |
| Re-type password   |  |   |
| Alias              |  |   |
|                    | Protocol<br>Login Account<br>Passwold<br>Re-type password<br>Alias | Protocol men<br>Login Account camera at home@hotmail.com<br>Password ••••••<br>Re-type password ••••••<br>Alias |

**3.** Choose "On" at the option of <u>IP Notification.</u> If this feature switches On, camera will send IP notification to the users who are allowed.

**4.** Choose "On" at the option of <u>**Privacy.**</u> If you can choose "On" at the privacy option, you can set an allow list.

| DDNS<br>UPnP                | IP Notification<br>Privacy | <ul> <li>On ○ Off</li> <li>On ○ Off</li> </ul> |   |
|-----------------------------|----------------------------|--|---|
| IP Notification<br>Wireless | Use                        | huayulee0519@msn.com                           |   |
| ) Security<br>Advance       | Allow list                 | huayulee0519@msn.com                           | ) |
|                             |                            | OK Cancel                                      |   |

5. Use your account to login in the Messenger software. Then, add the new MSN account (**Camera at home** )

**6.** The Camera at home will show up with its Public IP and Private IP if the option of IP Notification is "On". (You can enter "Ping" to show up with Public IP and Private IP.)





**8.** The IP Camera will accept your invitation; the live video will show up in the right screen after few seconds.





9. Click Action button and choose Start control panel to use control panel.



10. The dialog box will show up with "This application is not part if Window Live Message......" Tick the box of "Don't show me this again" and click OK





11. The IP Camera will accept your invitation to start Control Panel.



0

**12.** You can click **Camera icon** 

to snapshot then the picture will send to you immediately.





**13.** You can click **paint palette icon** showing up with tool bar to set up image. Then, you

Default

can use the tool bar to optimize video Brightness, Contrast

to make the setting back to the

🍠, Saturation 🖬 and Hue 🛄

After the adjustment of all setting, you can still click original setting.



14. You can click joystick icon showing up with arrows of different directions. You can click the arrow button of direction to do PT control.





## **Chapter 6. Configuration of Main Menu**

In the far left side of main configuration are Setting, Client Setting, Image Setup and PTZ control. For more details, you can check Chapter 6.2 \ Chapter 6.3 \ Chapter 6.4. \ Chapter 6.5.



In your right hand side, you can use Live View in your main Browser. There are Snapshot, Zoom and Audio and Video Play four different function. You can see more details as follow.



## 6.1 Live View

### A. Snapshot

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

| Symbols | Meaning                              |
|---------|--------------------------------------|
|         | a snapshot window will appear        |
| Save    | to save the picture in your computer |
| Close   | to return to the view page           |
|         | full Screen                          |

#### **B.** Zoom in / out the image via the monitor window





- Click ( to display the digital zoom in window.
- Pull the would be be 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.



## C. Video play buttons

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

Note:

Concerning the recording storage requirement of your hard disk, please refer to the CHAPTER 9. APPENDIX / B. Storage Requirement Table.

## **D.** Audio buttons

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



### 6.2 Setting

#### Setting

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

| Ф номе    |                                 |
|-----------|---------------------------------|
| SETTING   |                                 |
| PJ BASIC  |                                 |
| E Advance |                                 |
|           |                                 |
|           | Welcome to Camera Settings Page |
|           |                                 |
|           |                                 |
|           |                                 |

Click Basic folder, there are four sub-folders including System, Camera, Network, and Security. Fore more information, you can see Chapter 7.1 × Chapter 7.2 × Chapter 7.3 and Chapter 7.4.

Click Advance folder, there are four sub-folders including PT control, Preset position, Patrol, FTP Client, SMTP, HTTP event, Alarm output, Schedule, Alarm input, Motion Detection, and System Log. Fore more information, you can see Chapter 8.1 \ Chapter 8.2 \ Chapter 8.3 \ Chapter 8.4 \ Chapter 8.5 \ Chapter 8.6 \ Chapter 8.7 \ Chapter 8.8 \ Chapter 9.9 \ Chapter 8.10 and Chapter 8.11.

## **6.3 Client Setting**

**A** Client setting

This function is only for the client.

| & Client set | ting    |   |
|--------------|---------|---|
| Mode         | MPEG4   | Y |
| View size    | 320X240 | ۷ |
| Protocol     | HTTP    | ۷ |
| Video buffer | Off     | ٧ |
| Image set    | up      |   |



Click this button to control Mode, View Size, Protocol, and Video Buffer.

### 6.3.1 Mode

Click the pull-down box to choose between MPEG4 and MJPEG video compression mode.

MJPEG streaming is unavailable if RTSP mode is "On."

(Please check Setting  $\rightarrow$  Basic  $\rightarrow$  Camera  $\rightarrow$  General)

Note : MJPEG streaming is unavailable if RTSP mode is On.

#### 6.3.2 View Size

Select the desired display image resolution to 640X480 or 320X240.

#### 6.3.3 Protocol

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

#### 6.3.4 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.



## 6.4 Image Setup

#### 💽 Image setup

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

| Client se   | tting   |
|-------------|---------|
| Image se    | tup     |
| Brightness  | 50      |
| Contrast    | 80      |
| Saturation  | 80      |
| Hue         | 60      |
|             | Default |
| S. PT contr | ol      |



#### 6.4.1 Brightness

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

Default

### 6.4.2 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 of color you can have.

#### 6.4.3 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.

### 6.4.4 Hue

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

## 6.4.5 Default

After the adjustment of all setting, you can still click Default to make the setting back to the original setting.



## 6.5 PT Control

Sector PT control

#### 6.5.1 Pan / Tilt / Home control buttons

Click the arrow button of the direction you want the IP camera to move.



#### 6.5.2 Other camera control functions

| Set | Preset | Go |
|-----|--------|----|
| Set | Patrol | Go |

Preset: Move the camera toward the preset direction.

**Patrol**: Before you start this function, you need to specify **Guard tour settings** in the **Setting Menu** under **Advance** / **Patrol** setting.



## **Chapter 7. Setting-Basic**

Click the folder of **Basic** to display the sub folders including **System**, **Camera**, **Network**, and **Security**.



## ZAVIG

## 7.1 System

Click the folder of **System** to display the sub-folders including **Information**, **Date** / **Time**, **and Initialize**.





### 7.1.1 Information

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

|                         | Product name     | Fixed IR CMQ5 Camera (Tero way audio) Wireless |                              |  |
|-------------------------|------------------|--|------------------------------|--|
| SETTING                 | Firmware version | LM 1 6 16.02                                   | The May 29 14 51 43 CST 2008 |  |
| BASIC                   | □ Web version    | LM 1.6.16.02                                   |                              |  |
| 🕑 System                |                  |  |                              |  |
| Information             |                  |  |                              |  |
| Date/Time<br>Initialize |                  |  |                              |  |
| D Camera                |                  |  |                              |  |
| Network                 |                  |  |                              |  |
| 5 Security              |                  |  |                              |  |
| Advance                 |                  |  |                              |  |



### 7.1.2 Date / Time

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

| W HOME              | □ Current date/time            | 2008-06-20 10-54-05  |         | 1 |
|---------------------|--------------------------------|--|---------|---|
| TING                | PC clock                       | 2008-06-20 10:63:49  |         | £ |
| System<br>Date/Time | ⊒ Date/time format<br>⊒ Adjust | yyyy-mm-dd hh mm ss 💌<br>O Keep current setting<br>O Synchronize with PC<br>O Manual setting |         |   |
| Enitialize          |                                | Synchronize with NTP     NTP server name   | El Auto |   |
| Advance             |                                | Interval 1 M hours   | E Auto  |   |
|                     | II Time zone                   | (GMT+08.00) Taipei   |         | ~ |

**Current date** / **time**: This displays the current date and time of this IP Camera.

**PC clock**: This displays the date and time of the monitoring PC clock.

> Date / Time format: You can click the pull down box 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: Select this mode to keep the date and time of this IP Camera is the same as the monitoring PC.
- •Manual setting: Select this mode to adjust manually the date and time of this IP Camera.
- •Synchronize with NTP: Specify the NTP server name and the Refresh Interval to synchronize the date and time of this IP Camera with those of the time server, known as the NTP server.
- Time Zone: You can select the Time Zone of the format from Greenwich Mean Time. The time will display the same as the current date / time option.

#### Note:

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



### 7.1.3 Initialize

| W HOME                | Reboot               | Reboot             |         |    |
|-----------------------|----------------------|--------------------|---------|----|
| SETTING               | Factory default      | Factory default    |         |    |
| BASIC                 | Backup setting data  | Save               |         |    |
| System<br>Information | Restore setting      |                    | Browse. | OK |
| Date/Time             | Firmware upgrade     |                    | Browse. | OK |
| Initialize            |                      |                    |         |    |
| b) Camera             | Upload language pack |                    | Browse  | OK |
| 5 Network             |                      | Language : Englisi | h       |    |
| 5 Security            |                      |                    |         |    |
| Advance               |                      |                    |         |    |

**Reboot**: Click this bottom 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 bottom to reset this IP Camera to the factory default setting. A confirmation dialogue will appear and then click "OK" to process. The network indicator on this IP Camera will start to blink. This IP Camera will reboot automatically after completing adjustments to the default setting. Don't turn off this IP Camera until the device reboots.

**Backup Setting**: You can save the setting data of this IP Camera into a file. Click "Save" and follow the instructions on the browser to save the setting data file to your specified location.

**Restore Setting**: Download the saved setting data of this IP Camera. Click "Browse" and select saved file. Click "OK" and this IP Camera is adjusted according to the loaded data and then restarted.

Firmware Update: Upgrade the device software. Click "Browse" and select the file for upgrading. A confirmation dialogue will appear. Click "OK" to start upgrading. This IP Camera will reboot upon completion.

#### Note:

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



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

### ZAVIG

## 7.2 Camera

Click the folder of **Camera** to display the sub folders including **General**, **MPEG4** and **MJPEG**.



Welcome to Camera Settings Page

## ZAVIG

### 7.2.1 General

-

| Ф номе   | URTSP  | ⊛ On ⊖ Off  |
|--|--|---|
| SETTING<br>및 BASIC<br>) System<br>및 Camera                           | □Image rotated<br>□Night Mode<br>□Lighting<br>□White Balance | None M<br>O Auto Off<br>O 50Hz O 60Hz O Outdoor<br>Auto M                   |
| General<br>MPEG4<br>MJPEG<br>MJPEG<br>Network<br>Security<br>Advance | DLED<br>Threshold<br>DOverlay                                | O On O Off ⊗ Auto<br>Bright 2 2 Dark<br>O Text overlay O Privacy mask ⊗ Off |
|  |  | OK. Cancel  |

#### **RTSP** : Switch On / Off

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

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

Night Mode: You can choose Auto / Off. If you choose Auto option, the camera will adjust automatically to perform well when the environment is dark

▶ Lighting: You can choose the environment among 50 Hz, 60 Hz, and Outdoor.

➤ White Balance: You can choose the white balance to Auto, Florescent, Incandescent and Black & White.

➤ IR: You can turn LEDs light On / Off and Auto. If you select Auto mode, you can adjust threshold for LEDs Auto-On and Auto-Off respectively. In the right hand side of threshold, if the tool bar is closer to the right, the LEDs will auto-on easily in the dark environment. Conversely, in the left hand side of threshold, if the tool bar is more approach to the left, the LEDs will auto-off easily in the bright environment.

#### > 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.



### 7.2.2MPEG4

#### A. Computer View

| O HOME   | D RTSP          |
|--|-----------------|
| SETTING<br>SETTING<br>System<br>Camera<br>General<br>MPEC4<br>Computer view<br>MJPEC<br>Network<br>Security<br>Advance | RTSP port O 554 |
|  |                 |

- > RTSP (if RTSP mode is On, please check "Setting  $\rightarrow$  Basic  $\rightarrow$  Camera  $\rightarrow$  General ")
  - •RTSP Port: Specify the transmission port number of RTSP streaming. The default value is 8554.
  - •Viewer Authentication: If the viewer authentication is On, the users will be requested to key-in username and password when viewing through RTSP.

#### ➢ RTP (if RTSP mode is On, please check "Basic→ Camera → General")

- •Unicast Streaming Video / Audio Port Range: Specify the transmission port range of RTP streaming video. RTP will select a port randomly from the range.
- •Multicast Streaming (If it is ON)
- •Multicast Address: Specify the multicast server address.
- •Video / Audio Port: Specify the transmission port number of the video data. Specify an even number from 1024 to 65534.
- •Time to Live: Set the maximum TTL that multicast can pass through.

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

#### General")

•Unicast Streaming Video / Audio Port Number: Specify the transmission port number of the video data. It is initially set to 8090. You can specify an even number from 1024 to 65534.

> Image Size: Specify the image size when the network camera transmits. You can choose among  $640 \ge 480$ ,  $320 \ge 240$  and  $160 \ge 120$ .



> Frame Rate: Set the frame rate of the MPEG4 image. You can choose values from 5, 10,

15, 20, 25, and 30 fps. The unit "fps" stands for "frames per second".

#### ➤ Quality:

- •Auto: The quality and bitratee will be adjusted automatically according to the frame rate.
- •Fixed Quality: You can select the value of quality among Medium, Good, Delicate and Excellent.
- •Fixed Bitrate: Set the bitrate of MPEG4 image transmission for a line. You can select the values from 64, 128, 256, 384, 512, 768, 1024, 1280, 1536, and 2048 kbps.

| 🕲 номе   | MPEG4 viewer port     Unicast streaming  |
|--|--|
| SETTING<br>BASIC<br>System<br>Camera<br>General<br>MPEG4 | Video/Audio port number 8090 (1024 ~ 65534)<br>Video/Audio port number(SSL) 8091<br>Image Size 640x480 M<br>Frame rate 30 M fps<br>Quality<br>Auto |
| Computer view  | ○ Fixed bitrate 2048 kbps  |
| Mobile view  | OK Cancel  |
| MJPEG  |  |
| Network  |  |
| Security   |  |
| Advance  |  |

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

#### General")

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

#### Note:

Concerning how to select the suitable image quality for Fixed Quality or Fixed Bitrate, please refer to the CHAPTER 9. APPENDIX / A. Frame-rate & Bitrate Table.



#### **B. Mobile View**

| D HOME                         | I RTSP  |
|--------------------------------|---|
| SETTING<br>한 BASIC<br>는 System | RTSP port © 554 (1024 ~ 65535)<br>RTP<br>Unicast streaming<br>Port range 9000 (1024 - 65532) ~ 11999 (1027 - 65535)<br>Multicast streaming © On © Off |
| 🗂 Camera                       | Multicast address 226.0.0.1   |
| General                        | Video port O Auto O 10000 (1024 ~ 65535)  |
| MPEG4                          | Audio port O Auto @ 11000 (1024 - 65535)  |
| Computer view                  | Time-To-Live 15 (1 to 255)  |
| Mobile view                    | El Imaria Siza 110-130  |
| MJPEQ                          | D inage Size  |
| 5 Network                      | C Ousling   |
| 5 Security                     | Auto  |
| Advance                        | <ul> <li>○ Fixed quality Excelent.</li> <li>◎ Fixed bitrate 32 w kbps</li> <li>○ K Cancel</li> </ul>  |

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

15, 20 fps. The unit "fps" stands for "frames sent per second".

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

#### Note:

Concerning how to select the suitable image quality for Fixed Quality or Fixed Bitrate, please refer to the CHAPTER 9. APPENDIX / A. Frame-rate & Bitrate Table.


## 7.2.3 **MJPEG**

| 🕲 номе  | □ MJPEG viewer port   |
|---|---|
| SETTING<br>Setting<br>System<br>Camera<br>Ceneral<br>MPEG4<br>Computer view | Unicast streaming<br>Video/Audio port number 8070 (1024 ~ 65534)<br>Video/Audio port number(SSL)<br>Image Size 640x480<br>Frame rate 15 fps<br>Quality<br>Auto<br>Fixed quality Excellent |
| Mobile view   | OK Cancel   |
| MJPEG   |   |
| Network   |   |
| Security  |   |
| Advance   |   |

### MJPEG Viewer Port:

•Unicast Streaming Video / Audio Port Number: Specify the transmission port number of the video data. It is initially set to 8070. You can specify an even number from 1024 to 65534.

➤ **Image Size**: Specify the image size when the network camera transmits. You can choose among 640 x 480, 320 x240 and 160 x120.

> Frame Rate: Set the frame rate of the MJPEG image. You can choose values from 5, 10,

15 fps. The unit "fps" stands for "frames per second".

### ➤ Quality:

- •Auto: The quality will be automatically decided.
- •Fixed Quality: You can select the value of quality among Medium, Standard, Good, Delicate and Excellent.

Note:

Concerning how to select the suitable image quality for Fixed Quality or Fixed Bitrate, please refer to the CHAPTER 9. APPENDIX / A. Frame-rate & Bitrate Table.



# 7.3 Network

Click the folder of Network to display the sub folders including Information, PPPoE, DDNS, UPnP, Bonjour, IP Notification, Wireless and Messenger.

| Фноме           |                                     |
|-----------------|-------------------------------------|
| SETTING         |                                     |
| T BASIC         |                                     |
| 🕑 System        |                                     |
| E) Camera       |                                     |
| Network         | Welcome to Company Sollings Reprint |
| Information     | weicome to Camera Settings Page     |
| PPPoE           |                                     |
| DDNS            |                                     |
| UPnP            |                                     |
| Bonjour         |                                     |
| IP Notification |                                     |
| Wireless        |                                     |
| Messenger       |                                     |
| E Security      |                                     |
| E Advance       |                                     |
|                 |                                     |



## 7.3.1 Information

Display the MAC address of the device.

| 🕲 номе          | MAC address                           | 00.1B.FE.00.25.1A       |
|-----------------|---------------------------------------|-------------------------|
| SETTING         | Obtain an IP addre                    | ss automatically (DHCP) |
| BASIC           | O Use the following I                 | P address               |
| 🕑 System        |                                       |                         |
| 🕑 Camera        |                                       |                         |
| T Network       |                                       |                         |
| Information     |                                       |                         |
| PPPoE           | <ul> <li>Obtain DNS server</li> </ul> | address automatically   |
| DDNS            | O Use the following I                 | DNS server address      |
| UPnP            |                                       |                         |
| Bonjour         |                                       |                         |
| IP Notification | T UTTP part number                    |                         |
| Wireless        | u Hill portnumber                     | 0 80 0 1024 to 65535    |
| Messenger       |                                       | OK Cancel               |
| 5 Security      |                                       |                         |
| M Advance       |                                       |                         |

> Obtain an IP address automatically (DHCP): If a DHCP server is installed on the network, to select this while the IP address is assigned by the DHCP server.

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



| <u> </u> |                            |  |
|----------|----------------------------|--|
|          | MAC address                | 00:1B;FE:00:25:1A  |
| C        | ) Obtain an IP address au  | utomatically (DHCP)  |
| 0        | ) Use the following IP add | dress  |
|          | IP address                 | 10.0.0.42  |
|          | Subnet mask                | 255.255.255.0  |
|          | Default dateway            | 10.0.0.1   |
|          | Derault gateway            | 10.0.0.1   |
| =        |                            |  |
| 0        | Use the following DNS      | server address   |
|          | Primary DNS server         | 0.0.0.0  |
|          | Secondary DNS server       | 0.0.0.0  |
|          |                            |  |
|          | HIIP port number           |  |
|          | -OI                        | < Cancel   |
|          |                            |  |
|          |                            |  |
|          |                            |  |
|          |                            | <ul> <li>MAC address</li> <li>Obtain an IP address au</li> <li>Use the following IP address</li> <li>Subnet mask</li> <li>Default gateway</li> <li>Use the following DNS Primary DNS server</li> <li>Secondary DNS server</li> <li>HTTP port number</li> </ul> |

> 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.

> HTTP port number: Select 80 in general situations. If you want to use a port number

other than **80**, select the text box and enter a port number between 1024 and 65535.

•When you have set the HTTP port number to a number other than 80 on the Network setting page or in the Setup Program, access the device by typing the IP address of the device on the web browser as follows: Example: when HTTP port number is set to 2000 http://192.168.1.100:2000/

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

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



## 7.3.2 PPPoE (Point-to-Point Protocol over Ethernet)

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

| HOME   | PPPoE      On      Off   |   |
|--|--|---|
| ETTING<br>BASIC<br>System<br>Camera<br>Network<br>Information<br>PPPoE<br>DDNS<br>UPnP<br>Bonjour<br>IP Notification<br>Wireless<br>Messenger<br>Security<br>Advance | IP address<br>User ID<br>Password<br>Re-type password<br>Obtain DNS server ad<br>Use the following DNS | dress automatically S server address Cancel |

> **IP address**: The IP address obtained at the PPPoE connecting with network.

➤ 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.



|   | IP addrase                 | 0000             |
|---|----------------------------|------------------|
| SETTING   | 11 4441668                 | hinan            |
| BASIC   | User ID                    |                  |
| 🎒 System  | Password                   |                  |
| 🕑 Camera  | Re-type password           |                  |
| Network   | O Obtain DNS earver addre  | ee automatically |
| Information   | Obtain Divis server addres | ss automatically |
| PPPoE   | Ose the following DNS se   | erver address    |
| DDNS  | Primary DNS server         | 0.0.0.0          |
| UPnP  | Secondary DNS server       | 0.0.0.0          |
| Bonjour   |                            |                  |
| A LONG AND A |                            | Descrit          |
| IP Notification   | OK                         | Cancer           |
| IP Notification<br>Wireless   |                            |                  |
| IP Notification<br>Wireless<br>Messenger  |                            |                  |
| IP Notification<br>Wireless<br>Messenger<br>Security  |                            |                  |

> 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.

Note :

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

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

**3.** The IP Camera with Intelligent IP Installer can't be founded after turning on the PPPoE and reboot.



## 7.3.3 DDNS (Dynamic DNS)

DDNS is a system which allows the domain name data held in a name server to be updated in real time. The most common use for DDNS is allowing an internet domain name to be assigned to a computer with a varying / dynamic IP Address. This makes it possible for other sites on the internet to establish connection to the machine without needing to track the IP Address themselves.

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.



#### Note :

How to apply DDNS username and Host name??

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

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



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

|                |  |                                |  | Contract of the second s |  |
|----------------|--|--------------------------------|--|---|--|
|                | HEIS MEANER V Haple  |                                | w sale or families   | e bale a loga   |  |
| a Coudeta      | ninted Registration  | IN THE REAL OF                 |  |   | · OALO ·   |
|                |  |                                |  | Spottions - Spot - Spot   | 8 - Esquerate  |
| 🔿 Dyr          | DNS  |                                | -  | nan  <br>Lat Desk Later   | Loge   |
|                | About Serie  | Assest                         | Support  | News  |  |
| My Account     | Create Your DynD!  | NS Account                     |  |   |  |
| Create Account | Please complete the form to pre  | with your Tree DynCNE Aut      | NR.  |   |  |
| Lost Password? | ther Information   |                                |  |   |  |
|                | Bernane  |                                |  |   |  |
| Search         | total Address  |                                | Transition to anti-see (d  | to arrive of is set a fit and atting of   | - 24   |
|                | Confirm Email Address  |                                |  |   |  |
| Dearch         | Patroned   |                                | The summer with the local state of the summer of the sum of the su | a real dat if database and server in the or-  | A providence of the second sec |
|                | Confirm Pannamed   |                                |  |   |  |
|                | About You (suffered)   |                                |  |   |  |
|                | Providing this other mattern will be<br>needle. Thanks for your halfpi | rig och better understand      | l out scatterners, and S   | alar futura afferinge mara ausurat  | why he your  |
|                | How did you bear about an  | - 3                            | 1  | A CALL OF A DECK PROPERTY AND A DECK  | needing your small   |
|                | Detaile  |                                |  |   |  |
|                | Terms of Service   |                                |  |   |  |
|                | Plenie rold the acceptable un-   | and a state (ALP) and accept ( | prior to creating your   | accord. Also advaiwhelps that a   | mu may only  |
|                |  |                                |  |   |  |



3. Login with new account and click Account  $\rightarrow$  My Hosts  $\rightarrow$  Add Host Services



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





5. After type information, check your DDNS service.

| A State B. Marchen  | the state of the s  |  |   | a lange of the second se | 85           |
|---|---|--|---|---|--------------|
| A REAL PROPERTY OF THE PARTY OF   | a Route course mathematicated   |  | 2   | 4 X Hart Inch   |              |
| and the search and  | Eis Rosean / Asters []:   |  | mine y fill y fastill   | e tate e l'apè  |              |
| Contraction and   | unat-RetDesist  |  |   |   | ORE          |
|   |   |  |   | Specific - Specific - Specific  | · Corporate  |
| C Dynl  | DNS   |  |   | Legari<br>Dubular   | turint water |
|   | Aland Services  | A  | ort. Support  | See.  |              |
|   | Access its mere domains   | freman las   | nama Consider an Account.U  | agate   |              |
| Ny Assessed   | Host Services   |  |   |   |              |
|   | structures and property improved. Earth of  | and the state of the second  | time in preside the schelenced in   | and the second second second  |              |
| SLA<br>Pranie: Support<br>2014 Services<br>Holt Services  | perchase on <u>account apprents</u> . Each a<br>You like to see your marrient sample of   | pyrate allows<br>The Account I   | you to create 21 additional to<br>byzale propi  | one plus <u>antificing fastices</u>   |              |
| 12,4<br>Premier Support<br>2014 Services<br>Hold Services<br>Helfitz Outpound   | perfose or <u>extent append</u> . Each a<br>You like it see your period sample of<br><b>Rodrame</b>   | The Account in   | pin is main 21 additional h<br>togaile page.<br>Detaile   | inte plus <u>additional features</u><br>Lant Medicin  | ed .         |
| 12,4<br>Premier Support<br>Zonie Services<br>Holt Services<br>Helfite OutDourid<br>Recursive SHS  | perfore or <u>extent appeds</u> . Each a<br>Missible is see your partent lange of<br><b>Hoofsame</b><br>dadg bail. doubs.arg  | Pre Account In<br>Network at   | pice to presta 24 additional h<br>bugada propi<br>Debada<br>114.345 JULTIV  | Last Lipster<br>Hans, 26, 200 (L-1) PR  | nd           |
| RLA<br>Preview Support<br>Jona Services<br>Host Services<br>Hadrog OutDourid<br>Records Mindonrog<br>Betwook Mindonrog<br>Stationals  | perfore or <u>extent appeds</u> . Each a<br>Missilie is see your partent sample of<br><b>Hostcame</b><br>ducks test double any<br>ducks test double any   | Pre Account In<br>Second   | you to prease 24 additional h<br>tografie propi-<br>Destaile<br>116.344 JUL (79.2   | Last Modern<br>Hars, 25, 2000 & 42, PM<br>Hars, 26, 2000 & 42, PM   | ed .         |
| 92.4<br>Preview Support<br>2014 Services<br>Hold Devices<br>Helding Outbrand<br>Records Phil<br>Detwork Heidung<br>105, Celffultes<br>Record Services   | Perfore et <u>extent appels</u> . Forh s<br>Missilie is see your partent ange et<br><b>Hostoare</b><br>ducky test dandmang<br>ducky test dandmang<br>anton, dandmang  | The Account is<br>Second a<br>Head<br>Head   | pro to mode 24 additional fo<br>tograde prope<br>tilature en LTM<br>et.200.125.2<br>218.125.25  | Last System<br>Hay 25, 200 2 41 70<br>Hay 25, 200 2 41 70<br>Hay 26, 200 2 41 44<br>Hay 26, 200 12 13 40  | ed.          |
| RA<br>Annue Suppol<br>20% Service<br>Hot Service<br>Hot Service<br>Hot Service<br>Received INS<br>Betwork Northering<br>35, Certhizten<br>Renew Service<br>Auto Benew Settrage  | performent <u>period</u> , tark a<br>Yes like to see your partent sample of<br><b>Hocksame</b><br>ducks task doubts any<br>ducks task doubts any<br>anone. doubts any<br>processing doubts any  | Pre-Accuret ()<br>Secolul<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst  | pro to revelte 24 additional fe<br>togradie 2404<br>184,344.075.2<br>86,254.075.2<br>214,175.2<br>86,255.152  | Last System<br>Reg. 25, 2000 B 42 FP<br>Reg. 26, 2000 B 42 FP<br>Reg. 36, 2000 Z 42 AM<br>Reg. 26, 2000 Z 42 AM   | nd<br>I      |
| BA<br>Premier Support<br>Zana Dervise<br>Madhag Outbound<br>Recurst And<br>Recurst And<br>Recurst And<br>Recurst Sectors<br>Auto Recess Sectors<br>Auto Recess Sectors  | performent <u>period</u> . Fork a<br>You like for one your partent image of<br><b>Hootsame</b><br>ducky tool dyndmany<br>Buckyon dyndmany<br>anton dyndmany<br>anton dyndmany<br>anton dyndmany   | Pre-Assamet In<br>Becoker<br>Heat<br>Heat<br>Heat  | pro to revenue 24 actilitante la<br>contralia 2400.<br>Contralia<br>110.100 APR.179.2<br>110.100 APR.179.2<br>110.100 APR.150<br>112.110.1179<br>112.110.1179 | Last Molecture<br>Hay 26, 2000 1-42 PM<br>Hay 26, 2000 1-42 PM<br>Hay 26, 2000 1-42 PM<br>Hay 26, 2000 1-52 AM<br>Hay 28, 2000 12 22 PM   | al .         |
| 19.4<br>Premier Susport<br>Zana barveas<br>Madrag Outbound<br>Madrag Outbound<br>Madrag Outbound<br>Mathewas And<br>Mathania<br>Sala Castholates<br>Banes Sarveas<br>Auto Renies Settings<br>Sanc Datastis  | performent <u>period</u> , tark a<br>You like for one your partent image of<br><b>Hootsame</b><br>decky task dyndmany<br>Belgenk dyndmany<br>anton dyndmany<br>anton dyndmany<br>anton try dyndmany   | Pre-Account IV<br>Becoker<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst  | pro to revenue 24 actilitante la<br>contralia 2404.   | Last Molecture<br>Hay 26, 2000 1-42 PM<br>Hay 26, 2000 1-42 PM<br>Hay 26, 2000 1-43 PM<br>Hay 26, 2000 1-53 PM<br>Hay 26, 2000 1-52 PM  | ed .         |
| 10.4<br>Parmie Support<br>Zona barveau<br>Malitz Bancias<br>Malitza Outloand<br>Malitza Outloand<br>Malitza Outloand<br>Bancas Dividiarity<br>Still Certificates<br>Bance Services<br>Auto Renice Settings<br>Sector Settings<br>Maling   | Performent <u>period</u> , tark a<br>You like for one your partent image of<br><b>Hootsame</b><br>decky test development<br>and | Provide advances of the Account of t | pro to readin 24 additional IX<br>torcalis 2404<br>100,300 PM (19)<br>46,200,175,2<br>210,179,20,152<br>46,200,171,179<br>122,124,5,179                       | Last Melden<br>Hay 25, 2000 1-42 PH<br>Hay 25, 2000 1-42 PH<br>Hay 26, 2000 1-42 PH<br>Hay 26, 2000 1-42 PH<br>Hay 28, 2000 1-42 PH   |              |
| SA<br>Paraise Stappet<br>Zana Sanose<br>Matter Sanose<br>Matter Oxforung<br>Matter Oxforung<br>Balanske Dirf<br>Matter Sanose<br>Rates Sanose<br>Rate | performent <u>percent appeds</u> . Each a<br>You like to see your partent sample of<br><b>Hocksone</b><br>ducks that doubts any<br>autopolic doubts any<br>autopolic doubts any<br>autopolic doubts any<br>autopolic doubts any<br>autopolic doubts any<br>autopolic doubt and<br>autopolic doubt an   | Pri Assert I<br>Secola<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst<br>Inst   | pro to readin 24 additional IX<br>operating prope<br>100.348 AM LTW<br>46.236.175.2<br>218.179.28.152<br>45.236.273.179<br>122.124.3.175                      | Last Syder<br>Hay, 25, 2000 3–41 PH<br>Hay, 36, 2000 2–41 PH<br>Hay, 36, 2000 2–41 AM<br>Hay, 36, 2000 2–41 AM<br>Hay, 28, 2000 2–51 PH<br>Hay, 28, 2000 2–52 PH  |              |

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

| UPoP<br>IP Rotification<br>Wireless<br>Massenger<br>() Security<br>() Advance |                               |                   |  |
|---|-------------------------------|-------------------|--|
| DDNS  | 10                            | Cancel            |  |
| 5) Network<br>Information   | Re-type password<br>Host name |                   |  |
| E System  | Password                      | ſ                 |  |
| 5 8450  | Server name<br>User 10        | Na lawa data an D |  |
| O HOME  | UDDNS # On C O                |                   |  |



## 7.3.4 UPnP (Universal Plug and Play)

If you have a Router to access to internet and the Router supports UPnP IGD function, you need to turn on the UPnP Port Forwarding function.

| □ UPnP      On      Off     Turn On UPnP port forv     HTTP port     SSL Port                                 | varding<br>● 80 ○ (1024 ~ 65535)  |
|---|---|
| Turn On UPnP port forv<br>HTTP port<br>SSL Port   | varding<br>● 80 ○ (1024 ~ 65535)  |
| HTTP port<br>SSL Port   |   |
| SSL Port  |   |
|   | ⊙ 443 ○ (1024 ~ 65535)  |
| MPEG4 viewer port<br>MPEG4 viewer port(SSL)<br>MJPEG viewer port<br>MJPEG viewer port(SSL)<br>MPEG4 RTSP port | 8090       (1024 ~ 65535)         8091       (1024 ~ 65535)         8070       (1024 ~ 65535)         8071       (1024 ~ 65535) |
| Computer view<br>Mobile view<br>OK  | 8050 (1024 ~ 65535)<br>⊙ 554 ⊙ 8030 (1024 ~ 65535)<br>Cancel  |
|   | MPEG4 viewer port(SSL)<br>MJPEG viewer port<br>MJPEG viewer port(SSL)<br>MPEG4 RTSP port<br>Computer view<br>Mobile view        |

**HTTP port**: Enter the HTTP port number and default HTTP port is 80.

**SSL port:** Enter the SSL port number and default SSL port is 443.

> MPEG4 viewer port: Enter the MPEG4 viewer port number and default MPEG4 viewer port is 8090.

> MPEG4 viewer port (SSL): Enter the MPEG4 SSL viewer port and default is 8091.

> MJPEG viewer port: Enter the MJPEG viewer port number and default MJPEG viewer port is 8070.

> MJPEG viewer port (SSL): Enter the MPEG4 SSL viewer port and default is 8071.

> MPEG4 RTSP port: Enter the MPEG4 RTSP port, default value is 8050 for computer view, 8030 for mobile view.



#### 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 in the 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.



## 7.3.5 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.

| 🖲 номе          | ■Bonjour <ul> <li>On O Off</li> </ul> |
|-----------------|---------------------------------------|
| ETTING          | Device name Zavio-IPCam               |
| S BASIC         |                                       |
| 5) System       | OK Cancel                             |
| ಶ Camera        |                                       |
| Network         |                                       |
| Information     |                                       |
| PPPoE           | ±                                     |
| DDNS            |                                       |
| UPnP            |                                       |
| Bonjour         |                                       |
| IP Notification |                                       |
| Wireless        |                                       |
| Messenger       |                                       |
| 5 Security      |                                       |
| Advance         |                                       |

> Device Name: Enter Device Name you wish.

Note: How to use Bonjour in your Windows Browser UI? Please check the link below: http://www.apple.com/support/downloads/bonjourforwindows.html



## 7.3.6 IP Notification

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

| O HOME  | Notify type  |   | Static IP 🔲 PPPoE                              | E      |
|---|--|---|--|--------|
| SETTING   | SMTP server name                                   |   |  |        |
| S BASIC   | SMTP server port                                   | 25 (1 ~   | 65535)   | SSL    |
| 🕑 System  | Authentication                                     | 💿 On 🔘 Off  |  |        |
| 🕑 Camera  |  | SMTP P  | OP before SMTP                                 |        |
| Network   |  |   |  |        |
| Information   |  |   |  |        |
| PPPoE   | Designet a Mall address                            |   |  |        |
|   | Recipient e-Mail address                           |   |  |        |
| DDNS  |  |   |  |        |
| DDNS<br>UPnP  | Administrator e-Mail address                       |   |  |        |
| DDNS<br>UPnP<br>Bonjour   | Administrator e-Mail address<br>Subject            | IP Notify   |  |        |
| DDNS<br>UPnP<br>Bonjour<br>IP Notification                          | Administrator e-Mail address<br>Subject            | IP Notify<br>Product Name :   | <preduct></preduct>                            |        |
| DDNS<br>UPnP<br>Bonjour<br>IP Notification<br>Wireless              | Administrator e-Mail address<br>Subject<br>Message | IP Notify<br>Product Name :<br>Web Version : 4<br>APP Version : 4                                 | <pre>cproducts cyrebs cyfines</pre>            | 6      |
| DDNS<br>UPnP<br>Bonjour<br>IP Notification<br>Wireless<br>Messenger | Administrator e-Mail address<br>Subject<br>Message | IP Notify<br>Product Name :<br>Web Version : -<br>APP Version : -<br>http://cipo:cpo              | <pre>sproduct&gt; swebs syfines ort&gt;</pre>  |        |
| DDNS<br>UPnP<br>Bonjour<br>IP Notification<br>Wireless<br>Messenger | Administrator e-Mail address<br>Subject<br>Message | IP Notify<br>Product Name :<br>Web Version :<br>AFP Version :<br>http://clp>:cpe<br>MAC Address : | cproduct><br>cweb><br>svfine><br>ort><br>gaaco | ★ Help |

> 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.

•Security setting: Tick SSL box if the mail server you use has security restriction.

### Note:

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

> Authentication: Select the authentication required when you send an email.

- •Off: Select if no authentication is necessary when an email is sent.
- •On: When authentication is necessary an e-mail is sent, there are **SMPT**, **POP before SMPT or both** three options.



| SETTING       Notify type       DHCP Static IP PPPoE         SETTING       SMTP server name         BASIC       SMTP server port       25 (1 ~ 65535)         System       Authentication       On O Off         Camera       POP server name         Network       POP server name         Information       POP server name         PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Subject       IP Notify         Product Name : <prodect>       Network         Wireless       Message       APP Version : <vrip>         Messenger       Message       Message</vrip></prodect>                        | (B) HOME               | IP Notification O On O Off   |  |          |
|--|------------------------|------------------------------|--|----------|
| SETTING       SMTP server name         SMTP server port       25 (1 ~ 65535)         System       Authentication         Camera       Ø On Ø Off         Network       POP server name         Information       POP server name         PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Administrator e-Mail address         Bonjour       Subject         IP Notification       Wreless         Message       Message         App Version : cyrinob       Information         Wireless       Message         Message       App Version : cyrinob         Message       Message                             | HOME                   | Notify type                  | DHCP Static IP PPPol                                       | Ε        |
| SASIC       SMTP server port       25 (1~65535)       SSL         System       Authentication       On O Off         Camera       POP server name       SMTP POP before SMTP         Information       POP server name       Security         Information       Password       Password         PPPoE       Password       Pop server e-Mail address         UPnP       Administrator e-Mail address       Administrator e-Mail address         Bonjour       Subject       IP Notify         Wireless       Message       Message       App Version : cwebp         Messenger       Message       App Version : cwebp       App Version : cwebp | SETTING                | SMTP server name             |  |          |
| System       Authentication       On Off         Camera       POP server name         Network       POP server name         Information       Password         PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Administrator e-Mail address         Bonjour       Subject         Wireless       Message         Messenger       Message   | BASIC                  | SMTP server port             | 25 (1~65535)   | SSL      |
| Camera       Information         Information       POP server name         Information       Password         PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Administrator e-Mail address         Bonjour       Subject         IP Notification       Product Name : <product>         Wireless       Message         Messenger       Message         Security       Message</product>  | System                 | Authentication               | ⊙ On O Off   |          |
| Network       POP server name         Information       User name         PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Administrator e-Mail address         Bonjour       Subject         IP Notification       Product Name : <product>         Wireless       Message         Messenger       Message         Security       Message</product>  | Camera                 |                              | SMTP POP before SMTP                                       |          |
| Information     User name       PPPoE     Password       DDNS     Recipient e-Mail address       UPnP     Administrator e-Mail address       Bonjour     Subject       IP Notification     Product Name : <product>&gt;       Wireless     Message       Messenger     Message</product>   | Network                | POP server name              |  |          |
| PPPoE       Password         DDNS       Recipient e-Mail address         UPnP       Administrator e-Mail address         Bonjour       Subject         IP Notification       Product Name : <product>         Wireless       Message         Messenger       Message         Security       Message</product>  | Information            | User name                    |  |          |
| DDNS     Recipient e-Mail address       UPnP     Administrator e-Mail address       Bonjour     Subject       IP Notification       Wireless     Message       Messenger     Message       Security     Message  | PPPoE                  | Password                     |  |          |
| UPnP     Administrator e-Mail address       Bonjour     Subject       IP Notification     Product Name : <product>       Wireless     Message       Messenger     Message       Security     Message</product>   | DDNS                   | Recipient e-Mail address     |  |          |
| Bonjour     Subject     IP Notify       IP Notification     Product Name : <product>       Wireless     Message       Messenger     Message       Security     Message</product>   | UPnP                   | Administrator e-Mail address |  |          |
| IP Notification     Product Name : <product>       Wireless     Message       Messenger     Message       Security     Message</product>   | Bonjour                | Subject                      | IP Notify  |          |
| Wireless     Message     APP Version :         Messenger     McK Address :       Help.   | <b>IP</b> Notification |                              | Product Name : <product></product>                         | <u>_</u> |
| Messenger http://cip>: <port><br/>MAC Address : caac&gt; Help</port>   | Wireless               | Message                      | APP Version : <vvet></vvet>                                | -        |
| E Security   | Messenger              |                              | http:// <ip>:<port><br/>MAC_Address : cmac&gt;</port></ip> | Help     |
| DK Cancel Test   | Security               | OK                           | Cancel Test  |          |
| D Advance  | Advance                |                              |  |          |
|  |                        |                              |  |          |

> Authentication: Select the authentication required when you send an email.

- •Off: Select if no authentication is necessary when an email is sent.
- •On: When authentication is necessary an e-mail is sent, there are **SMPT**, **POP** before **SMPT** or both three options.

SMTP: Select 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.

- •POP server name: It is necessary when the POP before SMTP is selected in Authentication. Type the POP (receiving mail) server name up to 64 characters, or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-mails performs authentication using the POP user account.
- •User name, Password: Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-mails performs authentication.

**Recipient e-mail address**: Type the recipient e-Mail address up to 64 characters. You can specify up to three recipient E-mail addresses.

Administrator e-mail address: Type the Administrator e-Mail address up to 64 characters. This address is used for reply mail and sending system messages from the SMTP server.

Subject: Type the subject/title of the e-Mail up to 64 characters. With respect to mail which is sent according to the IP notification.

Message: Type the text of the E-mail up to 384 characters. Default value provides network information including IP, Port, MAC, Model, Firmware Version and Web Version.



## 7.3.7 Wireless

The wireless network has to be set up by using cable network connection. After setting the camera correctly, the wireless function can work with cable network connection. Wireless settings must be the same as the access point or ad-hoc device. When changing the settings they should always be made first in the camera and then in the wireless access point. This ensures that the camera is always accessible when making changes.

|                 |             |            | SI         | atus of wireless net | works              |          |
|-----------------|-------------|------------|------------|----------------------|--------------------|----------|
| TTING           | ESSID       | Mode       | Security   | Channe               | I Signal strength  | Bit rate |
| BASIC           | Please refr | esh.       |            |                      |                    |          |
| 🔄 System        |             |            |            |                      |                    |          |
| E) Camera       |             |            |            |                      |                    |          |
| S Network       |             |            |            |                      |                    | Refresh  |
| Information     | MAC add     | ress       |            | 00 40 25 00 00 00    | N                  |          |
| PPPoE           | IP addres   | s          |            |                      | 1                  |          |
| DDNS            | ESSID       |            |            |                      | Manual se          | etting   |
| UPnP            | ⊒ Mode      |            |            | Managed (            | Ad-Hoc             |          |
| IP Notification | a Authentic | ation      |            | Open 🖌               |                    |          |
| Wireless        | Encryptic   | in         |            | WEP                  |                    |          |
| Messenger       | Key lengt   | 'n         |            | O 64 bit O 12        | 8 bit              |          |
| 5 Security      | Active tra  | nsmit key: |            | (26 HEX chars        | or 13 ASCII chars) |          |
| Advance         |             |            | Mary 1 Mar | -                    |                    |          |

### Status of Wireless Network

This list is the result of network scan. The network is currently linked to will be shown in blue. The following information is provided.

- •ESSID The name of a wireless network (or ad-hoc device). If the same name occurs several times this means that several access points for that network were found. The camera cannot be configured to only associate with one particular access point.
- •Mode Shows if the network type is Master (access point or router) or Ad-Hoc (another client).
- •Security Shows which type of security the network uses. See below for the security types supported by the camera.
- •Channel Shows the wireless channel currently in use.
- •Signal strength Shows the signal strength.
- •Bit rate Shows the bit rate in Megabit/s. This can only be shown for the access point currently in use. Note that the bit rate shown is the current rate, and that this value may vary over time.



### ➤ Wireless Setting

These settings control how the camera interacts with the wireless network. It is also possible to enable wireless encryption apart from identifying the wireless network.

- •IP Address This displays blank, 0.0.0.0 or IP Address. When it is blank, the camera doesn't establish physical link with access point yet. The 0.0.0.0 means that physical link was established but trying to get IP address. When it displays IP address, then user can use wireless network.
- •ESSID (ESSID is sometimes written as SSID.) This is the name of the wireless network the camera is configured for. The field accepts up to 32 alphanumeric characters. The name must be exactly the same as that used in the wireless access point or the connection will not be established.
- •Leaving this field blank means the camera will attempt to access the nearest open network.
- •Mode Setting this to Managed means the camera will attempt to access the nearest open access point. The Ad-hoc option allows the camera to connect to other wireless devices clients.

#### Note :

1. WPA-/WPA2-PSK (Wi-Fi Protected Access - Pre-Shared Key) the camera uses a pre-shared key (PSK) to initiate WPA security. The pre-shared key is entered on the access point and on each device on the wireless network. The key can be entered either as Manual hex, as 64 hexadecimal (0-9, A-F) characters, or as a Passphrase, using 8 to 63 ASCII characters. The access point keeps out unauthorized users by requiring the key to communicate.

2. WEP (Wired Equivalent Protection) the original security standard used in wireless networks that provides a minimal level of security that can deter minor trespasses. The administrator can select the key length among 64 or 128 bits. 64bits is the default setting.



## 7.3.8 Messenger

Messenger function provide an easy-connect feature. User can easy to know what camera's private and public IP address is.

| > Security<br>Advance  | Allow list   |  |
|--|--|--|
| Messenger  |  |  |
| ETTING<br>BASIC<br>System<br>Camera<br>Network<br>Information<br>PPPoE<br>DDNS<br>UPnP<br>Bonjour<br>IP Notification<br>Wireless | Protocol<br>Login Account<br>Password<br>Re-type password<br>Alias<br>Port range<br>IP Notification<br>Privacy<br>User | On ○ Off     Off     On ○ Off     Off     Add Remove |

**Protocol**: support MSN only.

**Login Account**: Camera will use this account to login MSN server. This MSN account should be applied form http://<u>www.msn.com</u>.

> **Password**: password for this msn account.

**Re-type password**: re-type password to double confirm.

> Alias: This alias will display on MSN like the following which display in red frame.

> Port range: Camera will select one port from this port range for video transmission.

> IP Notification: Switch the IP notification On / Off. If this feature switches On, camera will send IP notification to the users who are allowed.

Privacy: Switch privacy On / Off. When privacy turns on, only those users in allow list can access the camera

**User**: Input to this blank to edit allow list.

> Allow list: When privacy turns on, only those users in allow list can access the camera



# 7.4 Security

Click the folder of Security to display the sub folders including Account and HTTPS.

| Ф номе     |                                 |
|------------|---------------------------------|
| SETTING    |                                 |
| BASIC      |                                 |
| System     |                                 |
| と Camera   |                                 |
| Network    | Welcome to Camera Sattings Page |
| Security   | Welcome to camera settings rage |
| Account    |                                 |
| HTTPS      |                                 |
| Pi Advance |                                 |

# ZAVIG

## 7.4.1 Account

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

| Ф номе     | User ID       | User name | Password | Re-type<br>Password | Viewern | nod |
|------------|---------------|-----------|----------|---------------------|---------|-----|
| SETTING    | Administrator | admin     |          | ][                  | Admin   |     |
| S BASIC    |               |           |          |                     |         |     |
| 5 System   | User 1        |           |          |                     | Admin   | ×   |
| D Camera   | User 2        |           |          | 10                  | Admin   | ~   |
| E Network  | User 3        |           | ][       | 1                   | Admin   | w.  |
| T Security | User 4        |           | 10       | 1                   | Admin   | *   |
| Account    | User 5        |           |          |                     | Admin   | *   |
| HTTPS      | User 6        |           | 1        |                     | Admin   | *   |
| 5 Advance  | User 7        |           | 1        | 10                  | Admin   |     |
|            | User 8        |           | 1        | 16                  | Admin   | ¥   |
|            | User 9        | 1         | 1        | 16                  | Admin   | ~   |

▶ User name: Set a user name between 4-16 characters.

> Password: Set a password between 4-16 characters.

**Re-type Password**: Re-type the password to confirm.

> Viewer Mode: Set the user mode among Admin, Operator, and Viewer. Different viewer mode has different limits of authority.

- •The Admin mode has all authority of configuration.
- •The Operator mode can not only view the Live View but also control the PTZ (apply in speed dome).
- •The Viewer mode only can view the Live View.

> Viewer Authentication: Allows any viewer direct access to Live View.

## 7.4.2 HTTPS

**HTTPS** is a URI scheme used to indicate a secure HTTP connection. It is syntactically identical to the http:// scheme normally used for accessing resources using HTTP. Using an 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://.

| ● номе   | Create & Install<br>Create self-sign           | ed certificate   |  |
|--|--|------------------|--|
| SETTING  | Installed Certifica<br>Subject Name            | te               |  |
| Bystem   | No certificate installed<br>Properties         | emove            |  |
| <ul> <li>Network</li> <li>Security</li> <li>Account</li> </ul> | HTTPS Connection Administrator Operator Viewer | HTTP V<br>HTTP V |  |
| HTTPS  | Set Policy                                     |                  |  |

> Create & Install: Create a self-signed certificate for HTTPS to recognize.

> Installed Certificate: Display or remove the properties of the installed certificate.

> HTTPS Connection Policy: Set HTTPS connection policy for different level of users.

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

| Фноме   | Create & Install<br>Create set-sign  | red certificate             | ate sell signed certificati<br>pi//38.6.5 19/reste_ss_ortific<br>to sell-signed certific       | Willips<br>ate3de | g-Dalog    | 2<br>~ |
|---|--|-----------------------------|--|-------------------|------------|--------|
| SETTING<br>S BASIC<br>System<br>Camera<br>Network<br>S Security | Installed Certifica<br>Subject Name<br>No certificate installed<br>Properties IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | tempse<br>on Policy<br>HTTP | Country<br>State or province<br>Locality<br>Organization<br>Organizational Unit<br>Common Name |                   |            |        |
| Account<br>HTTPS<br>D Advance                                   | Viewer<br>Dat Policy   | нтр                         | Validity   | 365<br>Cancel     | days(1~100 | 0)     |

#### Note:

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



# **Chapter 8. Setting-Advance**

Click the folder of Advance to display the sub folders including PT control, Preset position, Patrol, FTP client, SMTP, HTTP event, Alarm output, Schedule, Alarm input, Motion detection and System Log.





# 8.1 PT Control

1112

In this section, it provides Pan, Tilt, Auto Pan speed control setting.

|                    | Pan speed       | 50 |
|--------------------|-----------------|----|
| SETTING            | aTilt speed     | 50 |
| BASIC              | EAuto Pan speed | 50 |
| J Advance          |                 |    |
| T control          |                 |    |
| Setting            |                 |    |
| Preset position    | OK Cancel       |    |
| > Patrol           |                 |    |
| シ FTP client       |                 |    |
| 5 SMTP             |                 |    |
| と HTTP event       |                 |    |
| Alarm output       |                 |    |
| 5 Schedule         |                 |    |
| Alarm input        |                 |    |
| 5 Motion detection |                 |    |
| 🛃 System Log       |                 |    |
| (a)                |                 |    |

# 8.1.1 Setting

- > Pan speed: Use it to move bar from 0 to 100.
- **Tilt speed**: Use it to move bar from 0 to 100.
- > Auto Pan speed: Use it to move bar from 0 to 100.

# **8.2 Preset Position**

| HOME A           |                |            |               |        |
|------------------|----------------|------------|---------------|--------|
|                  | Preset positio | n Home De  | ete All Calib | ration |
| ¥) Advance       | Preset Pos.    | vame       |               |        |
| b) of sector     | Preset Ga      | Empty      | Control Panel |        |
| D PT control     | Home position  | n          |               |        |
| Preset position  | Home Pos. N    | lame       |               |        |
| Setting          |                | 2011/12/20 |               |        |
| Patrol           | No Name        | -          | No Name       |        |
| FTP client       | 1              | Delete     | 17            | Delete |
| N SMTD           | 2              | Delete     | 18            | Delete |
| b) trem output   | 3              | Delete.    | 19            | Deloto |
| G HITP event     | 4              | Delete     | 20            | Delete |
| Alarm output     | 5              | Delete     | 21            | Delete |
| Schedule         | 6              | Delete     | 22            | Delete |
| Alarm input      | 7              | Delete     | 23            | Delete |
| Motion detection | 8              | Delete     | 24            | Delete |
| System Log       | 9              | Delete     | 25            | Delete |
|                  | 10             | Delete     | 26            | Delete |
| A                | 44             | Dalata     | 27            | Delete |

## 8.2.1 Setting

Set: Use it to save the camera position to a preset number.

Carry out the following steps.

- Move the camera to the position to be saved while you are checking the image with the main console.
- Write the preset position name in Preset Pos. Name text box.
- Click the SET. The camera position is saved.
- If want to set this position as home position, click Home option on. Click the **SET**. The camera position is saved as home position.

### Note: Setting the new Home position will replace previous Home position.

- Reset: When writing the preset position name in Preset Pos. Name text box, press Reset to clean filed words.
- Delete All: Be careful! When pressing Delete All, all Preset Position information will be deleted.
- Delete: Select a preset number from 1 to 32 in the list box. Use it to delete specific number preset position setting.



# 8.3 Patrol

There are four patrol tours to set for composing different preset positions. Each one lists up to 8 positions which can be programmed, and the camera moves to the programmed positions sequentially. The camera stops when it moves to the last preset position.

| 5 BASIC          | Tour Name Guardsur1                 |
|------------------|-------------------------------------|
| Advance          | Tour Position                       |
| > PT control     | Order W Pas east Waiting time : Sec |
| Preset position  | Sel Dear Cour Al                    |
| 3 Patrol         | Set as default tour                 |
| Tour 1           |                                     |
| Tour 2           | Preset Pos. Name Waiting time (Sec) |
| Tour 3           | 1                                   |
| Tour 4           | 2                                   |
| き FTP client     | 4                                   |
| 5) SMTP          | 6                                   |
| b) HTTP event    | 6.                                  |
| Alarm output     | 7.                                  |
| 5 Schedule       | 8.                                  |
| Alarm input      |                                     |
| Motion detection | Cancel                              |

- **Tour name**: Rename the tour name.
- > Tour position
  - Order: There are 8 orders to select for camera directions.
  - Select Pos.: There are up to 32 preset positions to choose for each order.
  - **Recall**: When you click **Recall**, the camera moves to position of the selected preset number.
  - Clear: When setting specific preset number position to tour, click Clear to clear this direction information.
  - Clear All: Be careful! When you click Clear All, it will clear this tour all information out.
  - Set: Use it to save the camera position to a preset number.
- Set as default tour: Click it on to set this tour as default.
  - Tour Start: To click Tour Start, and the camera moves on patrol tour.
  - **Tour Stop**: While the camera moves on patrol tour, click **Tour Stop** to stop the patrol tour.
- **Carry** out the following steps:
  - 1. Click Order to choose one of eight orders.
  - 2. Click Select Pos. to set the preset position.
  - 3. Click the **SET**. The tour position is saved.
  - 4. Follow the steps to set the other orders.
  - 5. Click the **OK** to save the tour.



# 8.4 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** which has been shot and recorded linked with the external sensor input or with the built-in motion detection function to FTP server. FTP client setting menu is composed of two tabs, **General**, **Alarm sending** and **Periodical sending**.



Welcome to Camera Settings Page



### 8.4.1 General

Select **On** when you use FTP function. The FTP client setting page appears. Select **Off**, when you do not wish to use the FTP client function.

#### Note:

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

| D HOME  |   |
|---|---|
| HOME  SETTING  BASIC  Advance  PT control  Preset position  Patrol  FTP client  General  Atarm sending Periodical sen | ■ FTP client ③ On ④ Off<br>FTP server name<br>User name<br>Password<br>Re-type password<br>Passive mode<br>ON ④ Off<br>OK Cancet Test |
| Periodical sen  |   |
| HTTP event  |   |
| Schedule  |   |
| Motion detection  |   |

- 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 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.



## 8.4.2 Alarm sending

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

| HOME                | •                |                                |
|---------------------|------------------|--------------------------------|
|                     | Alarm sending ③  | On O Off                       |
| SETTING             | Remote path      |                                |
| BASIC               | image file name  |                                |
| Advance             | and ge me manu   |                                |
| PT control          | Suffix           | ○ Date Time    Sequence number |
| > Preset position   |                  | Sequence number clear          |
| Patrol              | Alarm            | Motion detection               |
| FTP client          |                  | Alarm input                    |
| General             | Effective Period | © Abraus                       |
| Alarm sending       | Ellecuve Period  | © Amaya                        |
| Periodical sen      |                  | O Schedule                     |
| E SMTP              |                  | OK Cancel                      |
| > HTTP event        |                  |                                |
| Alarm output        |                  |                                |
| 5 Schedule          |                  |                                |
| Alarm input         |                  |                                |
| Fi Motion detection |                  |                                |

- **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 \_ (underline) for naming.
- Suffix: Select a suffix to add to the file name
  - •Date & time: The date & time suffix is added to the Image file name. The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
  - •Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.
  - •Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.



| HOME 0  |   |   |
|---|---|---|
| HOME SETTING BASIC Advance PT control Preset position Patrol FTP client General Alarm sending Periodical senv SMTP HTTP event Alarm output Schedule | <ul> <li>Alarm sending (*)<br/>Remote path<br/>Image file name<br/>Suffix</li> <li>Alarm</li> <li>Effective Period</li> </ul> | On Off<br>Date Time & Sequence number<br>Sequence number clear Clear<br>Motion detection Motion detection<br>Alarm input Alarm input<br>Alarm input Schedule<br>OK Cancel |
| SMTP HTTP event Alarm output Schedule Alarm input Hotion detection  |   | OK Cancel   |

### ≻ Alarm

•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.



**Note:** You can set motion detection at motion detection page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Motion detection  $\rightarrow$  Setting") For more details, you can check Chapter 8.10.



•Alarm Input: Select the connected alarm. Sensor input1: The external sensor which is connected to sensor input1 of the alarm input.

| Alarm input  |  |
|--|--|
| <ul> <li>□ Alarm input</li> <li>□ Sensor input 1</li> <li>Trigger condition          <ul> <li>● High</li> <li>● Low</li> </ul> </li> </ul> |  |
| OK Cancel  |  |

**Note:** 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 Chapter 8.9.

**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.

**Note:** You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

### Schedule

| Schedule - Windows Internet Explorer      | × |
|---|---|
| C http://10.0.0.47/schedule.htm           | ~ |
| Schedule selection FTP - Alarm            | < |
| Mon Start time 00 : 00 - End time 24 : 00 |   |
| Tue Start time 00 : 00 - End time 24 : 00 |   |
| Wed Start time 00 : 00 - End time 24 : 00 |   |
| Thu Start time 00 : 00 - End time 24 : 00 |   |
| Fri Start time 00 : 00 - End time 24 : 00 |   |
| Sat Start time 00 : 00 - End time 24 : 00 |   |
| Sun Start time 00 : 00 - End time 24 : 00 |   |
| Use the same time schedule every day.     |   |
| OK Cancel                                 |   |
|   | - |
| Done 🕞 🚱 Internet 🗮 100% 🔹                |   |
| 65  |   |

## 8.4.3 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.

| W HOME  |   |
|---|---|
| SETTING<br>BASIC<br>Advance<br>Preset position<br>Patrol<br>FTP client<br>General<br>Alarm sending<br>Periodical sen<br>SMTP<br>HTTP event<br>Alarm output<br>Schedule<br>Alarm input<br>Motion detection | Periodical sending  On Off Remote path Image file name Suffix ONone O Date Time O Sequence number Sequence number clear Clear Interval OH 30 M (MIN : 1min. MAX : 24-hour interval) Effective Period O Always OK Cancel |

- Image file name: Type the file name of the image sent by SMTP up to 10 alphanumeric characters, (hyphen) and \_ (under score).
- Suffix: Select a suffix to be added to the file name sent by SMTP.
  - •None: The name of the sent file will be the Image file name.
  - •Date & time: The date & time suffix is added to the Image file name. The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.
  - •Sequence number: A consecutive number is added to the Image file name.
  - •Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.

➤ Interval: Set the periodical sending is effective interval. Min value is 1 min and Max value is 24 hour.



- **Effective period**: Set the period when the periodical sending is effective.
  - •Always: The periodical sending is always effective.
  - •Schedule: You can specify the period when the periodical sending is effective in the schedule setting in the other section. Please check "Setting  $\rightarrow$  Advance $\rightarrow$  Schedule  $\rightarrow$ Setting".

**Note:** You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

Schedule

| Schedule - Windows Internet Explorer      | ×        |
|---|----------|
| http://10.0.0.47/schedule.htm             | ×        |
| Schedule selection FTP - Alarm            | <u></u>  |
| Mon Start time 00 : 00 - End time 24 : 00 |          |
| Tue Start time 00 : 00 - End time 24 : 00 |          |
| Wed Start time 00 : 00 - End time 24 : 00 |          |
| Thu Start time 00 : 00 - End time 24 : 00 |          |
| Fri Start time 00 : 00 - End time 24 : 00 |          |
| Sat Start time 00 : 00 - End time 24 : 00 |          |
| Sun Start time 00 : 00 - End time 24 : 00 |          |
| Use the same time schedule every day.     |          |
| OK Cancel                                 |          |
|   | ×        |
| Done 🕢 🐻 🕞 Internet                       | R 100% · |



# 8.5 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** which has been shot linked with the external sensor input or with the built-in motion detection function. The image file can also be sent periodically. E-Mail (SMTP) setting menu is composed of three tabs, **General**, **Alarm sending** and **Periodical sending**.



Welcome to Camera Settings Page



## 8.5.1 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.

Note :

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

| ETTING<br>D BASIC<br>D Advance      | B e-Mail (SMTP)      On O Off     SMTP server name     SMTP server port | 25 (1 ~ 65535)   | SSL |
|-------------------------------------|---|--|-----|
| PT control Preset position Patrol   | Authentication  | <ul> <li>On ○ Off</li> <li>SMTP □ POP before SMTP</li> </ul> |     |
| FTP client                          |   |  |     |
| General<br>Alarm sent<br>Periodical | Recipient e-Mail address  |  |     |
| b HTTP event                        |   |  |     |
| Schedule                            | Administrator e-Mail address  |  |     |
| Alarm input                         | Subject   |  |     |
| System Log                          | Message   |  |     |

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: Tick SSL box if the mail server you use has security restriction.

#### Note:

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

> Authentication: Select the authentication required when you send an email.

- •Off: Select 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.



| SETTING          | SMTP server name             |                      |       |
|------------------|------------------------------|----------------------|-------|
| BASIC            | SMTP server port             | 25 (1~65535)         | D SSL |
| Advance          | Authentication               | ⊙ On ⊖ Off           |       |
| D PT control     |                              | SMTP POP before SMTP |       |
| Preset position  | POP server name              |                      |       |
| Patrol           | User name                    |                      |       |
| と FTP client     | Password                     |                      |       |
| SMTP             | Perintente Mail address      |                      |       |
| General          | Neuplent e-man autress       |                      |       |
| Alarm sending    |                              |                      |       |
| Periodical seni  |                              |                      |       |
| HTTP event       | Administrator e-Mail address |                      |       |
| Alarm output     |                              |                      |       |
| 🕑 Schedule       | Subject                      |                      |       |
| Alarm input      |                              |                      |       |
| Motion detection | Massaga                      |                      |       |
| 5) System Log    | messalle                     |                      |       |

> Authentication: Select the authentication required when you send an email.

- •Off: Select 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.
- **SMTP**: Select 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.

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

- •POP server name: It is necessary when the POP before SMTP is selected in Authentication. Type the POP (receiving mail) server name up to 64 characters, or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-mails performs authentication using the POP user account.
- •User name, Password: Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-mails performs authentication.

**Recipient e-mail address**: Type the recipient e-Mail address up to 64 characters. You can specify up to three recipient E-mail addresses.

- Administrator e-mail address: Type the Administrator e-Mail address up to 64 characters. This address is used for reply mail and sending system messages from the SMTP server.
- Subject: Type the subject/title of the e-Mail up to 64 characters. With respect to mail which is sent according to the 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.)


## 8.5.2 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.

|                  | <u>e</u> |  |
|------------------|----------|--|
| SETTING          |          |  |
| BASIC            |          | □ Alarm sending <ul> <li>On O Off</li> </ul> |
| Advance          |          | File attachment 💿 On 🔿 Off                   |
| PT control       |          | Image file name                              |
| Preset position  |          | Suffix O None O Date Time O Sequence number  |
| Patrol           |          | Sequence number clear Clear                  |
| FTP client       |          | Alarm  Motion detection                      |
| SMTP             |          |  |
| General          | н        | Alarm input                                  |
| Alarm sending    |          | Effective Period   Always                    |
| Periodical sen   |          | Schedule                                     |
| HTTP event       |          | OK Cancel                                    |
| Alarm output     |          |  |
| Schedule         |          |  |
| Alarm input      |          |  |
| Motion detection | ٦        |  |
| 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 0000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.
  - •Sequence number clear: Click Clear and the suffix of the sequence number returns to 1.



| SETTING          | ^ |   |
|------------------|---|---|
| BASIC            |   | □ Alarm sending <ul> <li>On</li> <li>Off</li> </ul> |
| Advance          |   | File attachment 💿 On 🔘 Off                          |
| PT control       |   | Image file name                                     |
| Preset position  |   | Suffix O None O Date Time  Sequence number          |
| Patrol           |   | Sequence number clear Clear                         |
| ト FTP client     |   | Sequence number clear                               |
| SMTP             |   | Alarm Motion detection Motion detection             |
| General          |   | Alarm input Alarm input                             |
| Alarm sending    |   | Effective Period 🔿 Always                           |
| Periodical sent  |   | Schedule     Schedule                               |
| b) HTTP event    |   |   |
| Alarm output     |   | OR Cancel   |
| Schedule         |   |   |
| Alarm input      |   |   |
| Motion detection | u |   |
| 🕑 System Log     | ~ |   |
| 4                |   |   |

#### ≻ Alarm

•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.



**Note:** You can set motion detection at motion detection page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Motion detection  $\rightarrow$  Setting") For more details, you can check Chapter 8.10.



•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 ③ High ○ Low |  |
| OK Cancel   |  |

**Note:** 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 Chapter 8.9.

**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.

**Note:** You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

### Schedule

| 🖉 Schedule - Windows Internet Explorer    | × |
|---|---|
| http://10.0.0.47/schedule.htm             | ~ |
| Schedule selection FTP - Alarm            | ~ |
| Mon Start time 00 : 00 - End time 24 : 00 |   |
| Tue Start time 00 : 00 - End time 24 : 00 |   |
| Wed Start time 00 : 00 - End time 24 : 00 |   |
| Thu Start time 00 : 00 - End time 24 : 00 |   |
| Fri Start time 00 : 00 - End time 24 : 00 |   |
| Sat Start time 00 : 00 - End time 24 : 00 |   |
| Sun Start time 00 : 00 - End time 24 : 00 |   |
| Use the same time schedule every day.     |   |
| OK Cancel                                 |   |
|   | × |
| Done 📑 🚱 Internet 💐 100% 👻                |   |
| 74  |   |

## 8.5.3 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.



- 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 30 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. Please check "Setting → Basic → Advance → Schedule → Setting."

**Note:** You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

### Schedule

| 🖉 Schedule - Windows Inter    | net Explorer            | _ 🗆 🔀    |
|-------------------------------|-------------------------|----------|
| http://10.0.0.47/schedule.htm |                         | ×        |
| Schedule selection            | FTP - Alarm             | ~        |
| Mon Start time 00             | : 00 - End time 24 : 00 |          |
| Tue Start time 00             | : 00 - End time 24 : 00 |          |
| Uved Start time 00            | : 00 - End time 24 : 00 |          |
| Thu Start time 00             | : 00 - End time 24 : 00 |          |
| Fri Start time 00             | : 00 - End time 24 : 00 |          |
| Sat Start time 00             | : 00 - End time 24 : 00 |          |
| Sun Start time 00             | : 00 - End time 24 : 00 |          |
| Use the same time s           | schedule every day.     |          |
|                               | OK Cancel               |          |
|                               |                         | ~        |
| Done                          | 😱 😜 Internet            | R 100% · |



# 8.6 HTTP Event

Set up this menu for sending commands to an HTTP server. By using HTTP client function, you can send the command defined by yourself, linked with the external sensor input or with the built-in motion detection function to HTTP server. HTTP client setting menu is composed of two tabs, **General** and **Alarm sending**.





## 8.6.1 General

| I HOME   |   |
|--|---|
| SETTING<br>BASIC<br>Advance<br>PT control<br>Preset position<br>Patrol<br>FTP client<br>SMTP<br>HTTP event<br>General<br>Alarm sending<br>Alarm sending<br>Alarm input<br>Motion detection<br>Hotion detection | HTTP event  On Off URL Port 80 User ID Password Proxy server name Proxy user ID Proxy password OK Caecel Test |

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

| Ф номе             | BHTTP event @ On  | 0.0#                                |
|--------------------|-------------------|-------------------------------------|
| SETTING            | URL               | 192.168.1.7/cgi-bin/operator/ptzset |
| BASIC              | Port              | 80                                  |
| 🖞 Advance          | User ID           | admin                               |
| > PT control       | Password          |                                     |
| Preset position    | Proxy server name |                                     |
| 5 Patrol           | Proxy port number |                                     |
| PTP client         | Provident ID      |                                     |
| E SMTP             | Prexy user to     |                                     |
| T HTTP event       | Proxy password    |                                     |
| General            | 1                 | OK Cancel Test                      |
| Alarm sending      |                   |                                     |
| Alarm output       |                   |                                     |
| 5 Schedule         |                   |                                     |
| Alarm input        |                   |                                     |
| > Motion detection |                   |                                     |
| 5) System Log      |                   |                                     |

For example:

URL: 192.168.1.7/cgi-bin/operator/ptzset

Note: The setting of URL should be the same as CGI



## 8.6.2 Alarm sending

Set to send the commands via the alarm detection, external sensor input or built-in motion detection function. Select **On** to send the commands to HTTP server linked with the alarm detection.

| O HOME  |  |
|---|--|
| SETTING<br>BASIC<br>Advance<br>PT control<br>Preset position<br>Patrol<br>FTP client<br>SMTP<br>HTTP event<br>General | Alarm sending      On      Off     Alarm     Motion detection     Parameter     Message     Alarm input     Parameter     Message     Effective Period      Always     Schedule     Schedule |
| Alarm sending<br>Alarm output<br>Schedule<br>Alarm input<br>Motion detection  | OK Cancel  |

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

≻ Alarm

#### •Motion detection • Alarm input

- **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.

Note:

You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

#### ≻ Alarm

•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.



Note: You can set motion detection at motion detection page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Motion detection  $\rightarrow$  Setting") For more details, you can check Chapter 8.10. Note : Motion Detection works only when the MPEG4 function is On.

| Фноме  | u Alarm sending ⊕ On O Off  |
|--|---|
| SETTING<br>S BASIC<br>Advance<br>P Freedupertion<br>P Freedupertion<br>P Freedupertion<br>S FIFE cleant<br>S SETT<br>S SETT<br>Center21<br>Advance seeding | Alarm Di Monn detection Mesos detection<br>Parameter MONE-DOMN<br>Mesoage Pt2 Comi<br>I Anne input<br>Effective Period O Always<br>Schwidule Effective<br>Di Cancel |
| D Alarm surport  |   |
| C/ Stitedule   |   |
| 5 Alam input   |   |
| 5 Motion detection   |   |
| 5 System Log   |   |

- ✓ **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: Select the connected alarm. Sensor input1: The external sensor which is connected to sensor input1 of the alarm input.

| Alarm input   |  |
|---------------|--|
| ■ Alarm input |  |
| OK Cancel     |  |

#### Note:

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 Chapter 8.9.

| C HOME             |  |
|--------------------|--|
|                    | □ Alarm sending   On  Off                |
| SETTING            | Alarm   Motion detection                 |
| E BASIC            | F Alarm lapot Nominput                   |
| Advance            |  |
| PT control         | Parameter MOVE=DOWN                      |
| Preset position    | Message PTZ DOWN                         |
| Patrol             | Effective Period O Nevays                |
| FTP client         | Schedule     Schedule                    |
| 5 SMTP             | OK Cancel                                |
| HTTP event         |  |
| General            |  |
| Alarm sending      | i la |
| Alarm output       |  |
| 5 Schedule         |  |
| Alarm input        |  |
| 5 Motion detection | 1 w                                      |
| ¢ 5                |  |

- ✓ 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.

- **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.

**Note:** You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

### Schedule

| Schedule - Windows Internet Explorer      | 🛛        |
|---|----------|
| http://10.0.0.47/schedule.htm             | <b></b>  |
| Schedule selection FTP - Alarm            | <u>^</u> |
| Mon Start time 00 : 00 - End time 24 : 00 |          |
| Tue Start time 00 : 00 - End time 24 : 00 |          |
| Wed Start time 00 : 00 - End time 24 : 00 |          |
| Thu Start time 00 : 00 - End time 24 : 00 |          |
| Fri Start time 00 : 00 - End time 24 : 00 |          |
| Sat Start time 00 : 00 - End time 24 : 00 |          |
| Sun Start time 00 : 00 - End time 24 : 00 |          |
| Use the same time schedule every day.     |          |
| OK Cancel                                 |          |
|   | ×        |
| Done 🕞 🕞 Internet                         | 🔍 100% 🔹 |

# 8.7 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.



## 8.7.1 Setting



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.





Note: You can set motion detection at motion detection page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Motion detection  $\rightarrow$  Setting"). For more details, you can check Chapter 8.10. Note : Motion Detection works only when the Video mode is set to MPEG4 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   |  |
|---|--|
| <ul> <li>■ Alarm input</li> <li>■ Sensor input 1</li> <li>Trigger condition <ul> <li>● High <ul> <li>● Low</li> </ul> </li> </ul></li></ul> |  |
| OK Cancel   |  |

Note:

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 Chapter 8.9.

> 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.

#### Note:

You can set schedule function at schedule page. (Please go "Setting  $\rightarrow$  Advance  $\rightarrow$  Schedule  $\rightarrow$  Setting") For more details, you can check Chapter 8.8.

### Schedule

| Schedule - Windows Internet Explorer      | _ 🗆 🔀  |
|---|--------|
| http://10.0.0.47/schedule.htm             | ×      |
| Schedule selection FTP - Alarm            | <      |
| Mon Start time 00 : 00 - End time 24 : 00 |        |
| Tue Start time 00 : 00 - End time 24 : 00 |        |
| Wed Start time 00 : 00 - End time 24 : 00 |        |
| Thu Start time 00 : 00 - End time 24 : 00 |        |
| Fri Start time 00 : 00 - End time 24 : 00 |        |
| Sat Start time 00 : 00 - End time 24 : 00 |        |
| Sun Start time 00 : 00 - End time 24 : 00 |        |
| Use the same time schedule every day.     |        |
| OK Cancel                                 |        |
|   | ~      |
| Done 🔂 🖓 Internet                         | 300% * |

# 8.8 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, Alarm out setting menu and so on.

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



## 8.8.1 Setting

| O HOME                      | * | □ Schedule        | selection  | FTP - Alarm |                       |                       |
|-----------------------------|---|-------------------|------------|-------------|-----------------------|-----------------------|
| BASIC                       | 1 | Mon Star Tue Star | t time 00  | : 00        | End time     End time | 24 : 00<br>24 : 00    |
| Advance  PT control         |   | Thu Star          | t time 00  | : 00        | - End time            | 24 :  00<br> 24 :  00 |
| Preset position             |   | Fri Star          | t time 00  | ; 00        | - End time            | 24 : 00               |
| FTP client                  |   | Sun Star          | t time 00  | : 00        | - End time            | 24 : 00               |
| HTTP event                  |   | Use the sa        | ame time s | chedule ev  | ery day.              |                       |
| Alarm output     Schedule   |   |                   |            |             |                       |                       |
| Setting                     |   |                   |            |             |                       |                       |
| Alarm input                 |   |                   |            |             |                       |                       |
| Motion detection System Log |   |                   |            |             |                       |                       |
|                             |   |                   |            |             |                       |                       |

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
- •Alarm output- Alarm
- •Alarm output- Timer

> 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.

# 8.9 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**.



## 8.9.1 Setting

**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.

# 8.10 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.



## 8.10.1 Setting



> Threshold: It means the extent which the alarm will be triggered.

Sensitivity: It means that how often the sensor will scan the image different. The higher

sensitivity it is and the more frequently it scans.

•Motion Detection 1: Click it on 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 on 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 on for using Motion Detection 3 function as a sensor. You can adjust and move the detecting zone by using mouse.

# 8.11 System Log

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

## 8.11.1 Setting

| HOME               | □ Remote Log   |
|--------------------|--|
| SETTING            | Enable remote log  |
| EASIC              |  |
| 🕑 Advance          |  |
| D PT control       |  |
| > Preset position  | UN. Cancer   |
| > Patrol           | D Current Log  |
| 5 FTP client       | Jan 1 00:00:09 kinfo > SYS: log started  |
| 5 SMTP             | Sep 10 14:10:11 cinfo > NET: Starting network<br>Sep 10 14:10:11 cinfo > NET: MAC = 00:18:FE:00:12:08  |
| b HTTP event       | Sep 10 14:10:11 cinfo > NET: Network type = DHCP   |
| Alarm output       | Sep 10 14:10:15 cinfo > WDT: watchdog start  |
| 5 Schedule         | Sep 10 14:14:29 cinfo > RTSP: HTTP from 10.0.0.76<br>Sep 10 14:14:29 cinfo > RTSP: Close from 10.0.0.76  |
| > Alarm input      | Sep 10 14:21:47 cinfo > RTSP: HTTP from 10.0.0.76<br>Sep 10 14:22:40 cinfo > RTSP: Close from 10.0.0.76  |
|                    | A REAL PROPERTY AND A REAL |
| b Motion detection | Sep 10 14:40:52 cinfo > RTSP: HTTP from 10.0.0.76  |
| Motion detection   | Sep 10 14:40:52 cinfo > RTSP: MTTP from 10.0.0.76<br>Sep 10 14:42:40 cinfo > RTSP: Close from 10.0.0.76  |

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

# **CHAPTER 9. APPENDIX**

**A. Frame-rate and Bitrate Table** – Help to set IPCamera with your network environment to access Internet.

Base on your network UPLOAD environment to choose the suitable Image-Quality setting. For example, if the network environment is ADSL 256Kb/s(upload) / 2Mb/s(download), the most fluent Image-Quality needs to set up under 256 Kb situation.

#### A.1. NTSC CCD IP Camera

| Wi LO4 (@ 501ps / Kops |         |         |         |  |  |  |
|------------------------|---------|---------|---------|--|--|--|
| Quality                | 704*480 | 352*240 | 176*120 |  |  |  |
| Excellent              | 2000    | 800     | 200     |  |  |  |
| Detailed               | 850     | 250     | 80      |  |  |  |
| Good                   | 450     | 150     | 60      |  |  |  |
| Standard               | 350     | 110     | 50      |  |  |  |
| Medium                 | 250     | 90      | 40      |  |  |  |

A.1.1. MPEG4 @ 30fps / Kbps

#### A.1.2. MPEG4 / Kbps, fps

|            |                 | <b>.</b>        |                 |                 |            |
|------------|-----------------|-----------------|-----------------|-----------------|------------|
| Imaga Siza | Ditroto Sotting | Frame-Rate      | Comment Dituate | Current         |            |
|            | Image-Size      | Bitrate Setting | Setting         | Current Bitrate | Frame-Rate |
|            | 704*480         | 2048            | 30              | 1800            | 25         |
|            | 704*480         | 2048            | 15              | 2100            | 16         |
|            | 704*480         | 1536            | 30              | 1500            | 30         |
|            | 704*480         | 1536            | 15              | 1700            | 16         |
|            | 704*480         | 1024            | 30              | 1050            | 30         |
|            | 704*480         | 1024            | 15              | 1100            | 16         |
|            | 704*480         | 512             | 30              | 520             | 30         |
|            | 704*480         | 512             | 15              | 650             | 16         |
|            | 352*240         | 1536            | 30              | 1500            | 30         |
|            | 352*240         | 1536            | 15              | 1600            | 16         |
|            | 352*240         | 1024            | 30              | 1100            | 30         |
|            | 352*240         | 1024            | 15              | 1100            | 16         |
|            | 352*240         | 512             | 30              | 530             | 30         |
|            | 352*240         | 512             | 15              | 600             | 16         |
|            | 176*120         | 1024            | 30              | 1000            | 30         |
|            | 176*120         | 1024            | 15              | 900             | 16         |
|            | 176*120         | 512             | 30              | 530             | 30         |
|            | 176*120         | 512             | 15              | 550             | 16         |
|            | 176*120         | 128             | 30              | 150             | 30         |
|            | 176*120         | 128             | 15              | 150             | 16         |

#### A.1.3. MJPEG @ 15fps / Kbps

|           | , I     |         |         |
|-----------|---------|---------|---------|
| Quality   | 704*480 | 352*240 | 176*120 |
| Excellent | 7500    | 2800    | 1000    |
| Detailed  | 5000    | 1500    | 700     |
| Good      | 3500    | 1000    | 500     |
| Standard  | 2000    | 800     | 400     |
| Medium    | 1300    | 500     | 300     |

#### A.1.4. MJPEG / Kbps, fps

| Imaga Siza  | Quality   | Frame-Rate | Current Ditroto | Current    |
|-------------|-----------|------------|-----------------|------------|
| Innage-Size | Setting   | Setting    |                 | Frame-Rate |
| 704*480     | Excellent | 15         | 7500            | 11         |
| 704*480     | Excellent | 5          | 4000            | 5          |
| 704*480     | Good      | 15         | 3500            | 13         |
| 704*480     | Good      | 5          | 1500            | 5          |
| 704*480     | Medium    | 15         | 1300            | 13         |
| 704*480     | Medium    | 5          | 550             | 5          |
| 352*240     | Excellent | 15         | 2800            | 12         |
| 352*240     | Excellent | 5          | 1200            | 5          |
| 352*240     | Good      | 15         | 1000            | 12         |
| 352*240     | Good      | 5          | 450             | 5          |
| 352*240     | Medium    | 15         | 500             | 12         |
| 176*120     | Medium    | 5          | 220             | 5          |
| 176*120     | Excellent | 15         | 1000            | 15         |
| 176*120     | Excellent | 5          | 400             | 5          |
| 176*120     | Good      | 15         | 500             | 15         |
| 176*120     | Good      | 5          | 200             | 5          |
| 176*120     | Medium    | 15         | 300             | 15         |
| 176*120     | Medium    | 5          | 100             | 5          |

#### A.2. PAL CCD IPCamera

#### A.2.1. MPEG4 @ 25fps / Kbps

| Quality   | 704*576 | 352*288 | 176*144 |
|-----------|---------|---------|---------|
| Excellent | 1800    | 400     | 100     |
| Detailed  | 600     | 150     | 50      |
| Good      | 400     | 100     | 40      |
| Standard  | 300     | 80      | 30      |
| Medium    | 200     | 60      | 20      |

#### A.2.2. MPEG4 / Kbps, fps

| Imaga Siza | Dituata Satting | Frame-Rate | Cumont Dituata  | Current    |
|------------|-----------------|------------|-----------------|------------|
| Image-Size | Bitrate Setting | Setting    | Current Bitrate | Frame-Rate |
| 704*576    | 2048            | 25         | 2000            | 23         |
| 704*576    | 2048            | 15         | 2100            | 16         |
| 704*576    | 1536            | 25         | 1600            | 25         |
| 704*576    | 1536            | 15         | 1700            | 16         |
| 704*576    | 1024            | 25         | 1100            | 25         |
| 704*576    | 1024            | 15         | 1200            | 16         |
| 704*576    | 512             | 25         | 550             | 25         |
| 704*576    | 512             | 15         | 650             | 16         |
| 352*288    | 1536            | 25         | 1500            | 25         |
| 352*288    | 1536            | 15         | 1600            | 16         |
| 352*288    | 1024            | 25         | 1100            | 25         |
| 352*288    | 1024            | 15         | 1100            | 16         |
| 352*288    | 512             | 25         | 550             | 25         |
| 352*288    | 512             | 15         | 600             | 16         |
| 176*144    | 1024            | 25         | 1000            | 25         |
| 176*144    | 1024            | 15         | 1000            | 16         |
| 176*144    | 512             | 25         | 550             | 25         |
| 176*144    | 512             | 15         | 600             | 16         |
| 176*144    | 128             | 25         | 150             | 25         |
| 176*144    | 128             | 15         | 150             | 16         |

#### A.2.3. MJPEG @ 15fps / Kbps

| Quality   | 704*576 | 352*288 | 176*144 |
|-----------|---------|---------|---------|
| Excellent | 7800    | 1700    | 650     |
| Detailed  | 4300    | 1000    | 450     |
| Good      | 2500    | 650     | 350     |
| Standard  | 1300    | 450     | 250     |
| Medium    | 1000    | 300     | 180     |

#### A.2.4. MJPEG / Kbps, fps

| Imaga Siza  | Quality   | Frame-Rate | Cumont Dituata  | Current    |
|-------------|-----------|------------|-----------------|------------|
| Innage-Size | Setting   | Setting    | Current Bitrate | Frame-Rate |
| 704*576     | Excellent | 15         | 7800            | 11         |
| 704*576     | Excellent | 5          | 4000            | 5          |
| 704*576     | Good      | 15         | 2500            | 11         |
| 704*576     | Good      | 5          | 1200            | 5          |
| 704*576     | Medium    | 15         | 1000            | 11         |
| 704*576     | Medium    | 5          | 500             | 5          |
| 352*288     | Excellent | 15         | 1700            | 11         |
| 352*288     | Excellent | 5          | 900             | 5          |
| 352*288     | Good      | 15         | 650             | 11         |
| 352*288     | Good      | 5          | 330             | 5          |
| 352*288     | Medium    | 15         | 300             | 11         |
| 352*288     | Medium    | 5          | 160             | 5          |
| 176*144     | Excellent | 15         | 650             | 12         |
| 176*144     | Excellent | 5          | 300             | 5          |
| 176*144     | Good      | 15         | 350             | 12         |
| 176*144     | Good      | 5          | 150             | 5          |
| 176*144     | Medium    | 15         | 180             | 12         |
| 176*144     | Medium    | 5          | 75              | 5          |

#### A.3. CMOS IP Camera

#### A.3.1. MPEG4 @ 30fps / Kbps

| 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.3.2. MPEG4 / Kbps, fps

|   | Imaga Cira | Dituata Satting | Frame-Rate | Cumont Dituata  | Current    |
|---|------------|-----------------|------------|-----------------|------------|
|   | Image-Size | Bitrate Setting | Setting    | Current Bitrate | Frame-Rate |
| Γ | 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         |
| Γ | 640*480    | 512             | 15         | 600             | 16         |
| Γ | 320*240    | 1536            | 30         | 1500            | 30         |
|   | 320*240    | 1536            | 15         | 1600            | 16         |
|   | 320*240    | 1024            | 30         | 1000            | 30         |
|   | 320*240    | 1024            | 15         | 1000            | 16         |
| ſ | 320*240    | 512             | 30         | 550             | 30         |
| ſ | 320*240    | 512             | 15         | 600             | 16         |
| Γ | 160*120    | 1024            | 30         | 950             | 30         |
| Γ | 160*120    | 1024            | 15         | 750             | 16         |
| Γ | 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.3.3. 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.3.4. MJPEG / Kbps, fps

| Imaga Siza | Quality   | Frame-Rate | Current Ditroto | Current    |
|------------|-----------|------------|-----------------|------------|
| Inage-Size | Setting   | Setting    | Current Bitrate | 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          |

### **B. Storage Requirement Table** - Help to set Recording Storage System.

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

#### **B.1. NTSC CCD IPCamera**

| Quality   | 704*480 | 352*240 | 176*120 |
|-----------|---------|---------|---------|
| Excellent | 21.1    | 8.4     | 2.1     |
| Detailed  | 9.0     | 2.6     | 0.8     |
| Good      | 4.7     | 1.6     | 0.6     |
| Standard  | 3.7     | 1.2     | 0.5     |
| Medium    | 2.6     | 0.9     | 0.4     |

B.1.2. MPEG4 Storage Requirement GB / channel / day @ 15fps

| Quality   | 704*480 | 352*240 | 176*120 |  |
|-----------|---------|---------|---------|--|
| Excellent | 10.5    | 4.2     | 1.1     |  |
| Detailed  | 4.5     | 1.3     | 0.4     |  |
| Good      | 2.3     | 0.8     | 0.3     |  |
| Standard  | 1.8     | 0.6     | 0.2     |  |
| Medium    | 1.3     | 0.5     | 0.2     |  |

| I C'       |                 |                    | Storage     |
|------------|-----------------|--------------------|-------------|
| Image-Size | Bitrate Setting | Frame-Rate Setting | Requirement |
| 704*480    | 2048            | 30                 | 23.0        |
| 704*480    | 2048            | 15                 | 22.1        |
| 704*480    | 1536            | 30                 | 18.5        |
| 704*480    | 1536            | 15                 | 17.9        |
| 704*480    | 1024            | 30                 | 11.1        |
| 704*480    | 1024            | 15                 | 11.6        |
| 704*480    | 512             | 30                 | 5.5         |
| 704*480    | 512             | 15                 | 6.9         |
| 352*240    | 1536            | 30                 | 15.8        |
| 352*240    | 1536            | 15                 | 16.9        |
| 352*240    | 1024            | 30                 | 11.6        |
| 352*240    | 1024            | 15                 | 11.6        |
| 352*240    | 512             | 30                 | 5.6         |
| 352*240    | 512             | 15                 | 6.3         |
| 176*120    | 1024            | 30                 | 10.5        |
| 176*120    | 1024            | 15                 | 9.5         |
| 176*120    | 512             | 30                 | 5.6         |
| 176*120    | 512             | 15                 | 5.8         |
| 176*120    | 128             | 30                 | 1.6         |
| 176*120    | 128             | 15                 | 1.6         |

B.1.3. MPEG4 Storage Requirement GB / channel / day

| <b>†</b> . | r. Mil EO Storage Requirement OD / channer / day @ 151ps |         |         |         |  |  |
|------------|--|---------|---------|---------|--|--|
|            | Quality  | 704*480 | 352*240 | 176*120 |  |  |
|            | Excellent  | 79.1    | 29.5    | 10.5    |  |  |
|            | Detailed   | 52.7    | 15.8    | 7.4     |  |  |
|            | Good   | 36.9    | 10.5    | 5.3     |  |  |
|            | Standard   | 21.1    | 8.4     | 4.2     |  |  |
|            | Medium   | 13.7    | 5.3     | 3.2     |  |  |

B.1.4. MJPEG Storage Requirement GB / channel / day @ 15fps

### B.1.5. MJPEG Storage Requirement GB / channel / day

| Image-Size | Quality Setting | Frame-Rate Setting | Current Bitrate |
|------------|-----------------|--------------------|-----------------|
| 704*480    | Excellent       | 15                 | 79.1            |
| 704*480    | Excellent       | 5                  | 42.2            |
| 704*480    | Good            | 15                 | 36.9            |
| 704*480    | Good            | 5                  | 15.8            |
| 704*480    | Medium          | 15                 | 13.7            |
| 704*480    | Medium          | 5                  | 5.8             |
| 352*240    | Excellent       | 15                 | 29.5            |
| 352*240    | Excellent       | 5                  | 12.7            |
| 352*240    | Good            | 15                 | 10.5            |
| 352*240    | Good            | 5                  | 4.7             |
| 352*240    | Medium          | 15                 | 5.3             |
| 176*120    | Medium          | 5                  | 2.3             |
| 176*120    | Excellent       | 15                 | 10.5            |
| 176*120    | Excellent       | 5                  | 4.2             |
| 176*120    | Good            | 15                 | 5.3             |
| 176*120    | Good            | 5                  | 2.1             |
| 176*120    | Medium          | 15                 | 3.2             |
| 176*120    | Medium          | 5                  | 1.1             |

#### **B.2. PAL CCD IPCamera**

| . In DO I Storage Requirement OD / enamer / day to sorps |         |         |         |  |
|--|---------|---------|---------|--|
| Quality  | 704*480 | 352*240 | 176*120 |  |
| Excellent  | 19.4    | 4.3     | 1.1     |  |
| Detailed   | 6.5     | 1.6     | 0.5     |  |
| Good   | 4.3     | 1.1     | 0.4     |  |
| Standard   | 3.2     | 0.9     | 0.3     |  |
| Medium   | 2.2     | 0.6     | 0.2     |  |

B.2.1. MPEG4 Storage Requirement GB / channel / day @ 30fps

#### B.2.2. MPEG4 Storage Requirement GB / channel / day @ 15fps

| - $        -$ |         |         |         |
|---------------|---------|---------|---------|
| Quality       | 704*480 | 352*240 | 176*120 |
| Excellent     | 9.7     | 2.2     | 0.5     |
| Detailed      | 3.2     | 0.8     | 0.3     |
| Good          | 2.2     | 0.5     | 0.2     |
| Standard      | 1.6     | 0.4     | 0.2     |
| Medium        | 1.1     | 0.3     | 0.1     |

| Lucas Cine | Ditroto Sotting | Ename Data Catting | Storage     |
|------------|-----------------|--------------------|-------------|
| Image-Size | Bitrate Setting | Frame-Rate Setting | Requirement |
| 704*480    | 2048            | 30                 | 21.6        |
| 704*480    | 2048            | 15                 | 22.7        |
| 704*480    | 1536            | 30                 | 17.3        |
| 704*480    | 1536            | 15                 | 18.4        |
| 704*480    | 1024            | 30                 | 11.9        |
| 704*480    | 1024            | 15                 | 13.0        |
| 704*480    | 512             | 30                 | 5.9         |
| 704*480    | 512             | 15                 | 7.0         |
| 352*240    | 1536            | 30                 | 16.2        |
| 352*240    | 1536            | 15                 | 17.3        |
| 352*240    | 1024            | 30                 | 11.9        |
| 352*240    | 1024            | 15                 | 11.9        |
| 352*240    | 512             | 30                 | 5.9         |
| 352*240    | 512             | 15                 | 6.5         |
| 176*120    | 1024            | 30                 | 10.8        |
| 176*120    | 1024            | 15                 | 10.8        |
| 176*120    | 512             | 30                 | 5.9         |
| 176*120    | 512             | 15                 | 6.5         |
| 176*120    | 128             | 30                 | 1.6         |
| 176*120    | 128             | 15                 | 1.6         |

B.2.3. MPEG4 Storage Requirement GB / channel / day

| +. | MJFEO Storage Requirement OB / channel / day @ 151ps |         |         |         |  |
|----|--|---------|---------|---------|--|
|    | Quality  | 704*480 | 352*240 | 176*120 |  |
|    | Excellent  | 84.2    | 18.4    | 7.0     |  |
|    | Detailed   | 46.4    | 10.8    | 4.9     |  |
|    | Good   | 27.0    | 7.0     | 3.8     |  |
|    | Standard   | 14.0    | 4.9     | 2.7     |  |
|    | Medium   | 10.8    | 3.2     | 1.9     |  |

B.2.4. MJPEG Storage Requirement GB / channel / day @ 15fps

### B.2.5. MJPEG Storage Requirement GB / channel / day

| Image-Size | Quality Setting   | Frame-Rate Setting | Current Bitrate |
|------------|-------------------|--------------------|-----------------|
| 704*480    | Excellent 15      |                    | 84.2            |
| 704*480    | Excellent         | 5                  | 43.2            |
| 704*480    | Good              | 15                 | 27.0            |
| 704*480    | Good              | 5                  | 13.0            |
| 704*480    | Medium            | 15                 | 10.8            |
| 704*480    | Medium            | 5                  | 5.4             |
| 352*240    | Excellent         | 15                 | 18.4            |
| 352*240    | Excellent         | 5                  | 9.7             |
| 352*240    | Good              | 15                 | 7.0             |
| 352*240    | Good              | 5                  | 3.6             |
| 352*240    | Medium            | 15                 | 3.2             |
| 176*120    | Medium            | 5                  | 1.7             |
| 176*120    | Excellent         | 15                 | 7.0             |
| 176*120    | 176*120 Excellent |                    | 3.2             |
| 176*120    | Good              | 15                 | 3.8             |
| 176*120    | Good              | 5                  | 1.6             |
| 176*120    | Medium            | 15                 | 1.9             |
| 176*120    | Medium            | 5                  | 0.8             |

#### **B.3. CMOS IPCamera**

| <br>in Do't Storage Requirement OD / enamer / day to opp |      |         |         |  |  |
|--|------|---------|---------|--|--|
| 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.3.1. MPEG4 Storage Requirement GB / channel / day @ 30fps

#### B.3.2. 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.3.3. MPEG4 Storage Requirement GB / channel / day

| <u> </u>   |                 | 2                  |                 |
|------------|-----------------|--------------------|-----------------|
| 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             |

| +. | win no storage requirement OD / channel / day @ 151ps |         |         |         |  |  |
|----|---|---------|---------|---------|--|--|
|    | Quality   | 640*480 | 320*240 | 160*120 |  |  |
|    | Excellent   | 42.2    | 15.8    | 6.3     |  |  |
|    | Detailed  | 25.3    | 9.5     | 4.2     |  |  |
|    | Good  | 16.9    | 6.9     | 3.2     |  |  |
|    | Standard  | 13.7    | 5.3     | 2.5     |  |  |
|    | Medium  | 9.5     | 3.7     | 1.8     |  |  |

B.3.4. MJPEG Storage Requirement GB / channel / day @ 15fps

### B.3.5. MJPEG Storage Requirement GB / channel / day

| Image-Size        | Quality SettingFrame-Rate Setting |    | Current Bitrate |
|-------------------|-----------------------------------|----|-----------------|
| 640*480           | Excellent                         | 15 | 42.2            |
| 640*480           | Excellent                         | 5  | 16.9            |
| 640*480           | Good                              | 15 | 16.9            |
| 640*480           | Good                              | 5  | 6.9             |
| 640*480           | Medium                            | 15 | 9.5             |
| 640*480           | Medium                            | 5  | 3.8             |
| 320*240           | Excellent                         | 15 | 15.8            |
| 320*240           | Excellent                         | 5  | 5.8             |
| 320*240           | Good                              | 15 | 6.9             |
| 320*240           | 320*240 Good                      |    | 2.7             |
| 320*240           | Medium                            | 15 | 3.7             |
| 160*120           | Medium                            | 5  | 1.4             |
| 160*120           | 160*120 Excellent                 |    | 6.3             |
| 160*120 Excellent |                                   | 5  | 2.4             |
| 160*120 Good      |                                   | 15 | 3.2             |
| 160*120           | Good                              | 5  | 1.2             |
| 160*120           | Medium                            | 15 | 1.8             |
| 160*120           | Medium                            | 5  | 0.7             |

### C. System Requirement & D1 Performance of 16 Channel IP Camera

#### Equipment Configuration

| Software:         | MainConsole Version 2.6.4 Professional |
|-------------------|--|
| CPU:              | AMD Athlon 64*2 @3600+MHz              |
| Memory:           | 2048 MB (2 x 1024 DDR2-SDRAM )         |
| Ethernet:         | VIA Rhine II Fast Ethernet Adapter     |
| Hard Disk:        | ST3250620A (250 GB)                    |
| Graphic card:     | ATI Technologies Inc EAX1600 Series    |
| Operating System: | Windows XP Professional SP2 x64        |

#### Results from Test with a Resolution of 704×480 CCD IPCamera

| 704x480      | Quality   | Frame Rate | CPU Load | Bandwidth  |
|--------------|-----------|------------|----------|------------|
| 16 IP camera | Excellent | 30         | 95%      | 15~20 Mbps |

#### Results from Test with a Resolution of 640×480 CMOS IPCamera

| 640x480      | Quality   | Frame Rate | CPU Load | Bandwidth  |
|--------------|-----------|------------|----------|------------|
| 16 IP camera | Excellent | 30         | 95%      | 10~15 Mbps |