HD NETWORK SURVEILLANCE CAMERA

User Manual

Please read instructions thoroughly before operation and retain it for future reference.

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We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor.

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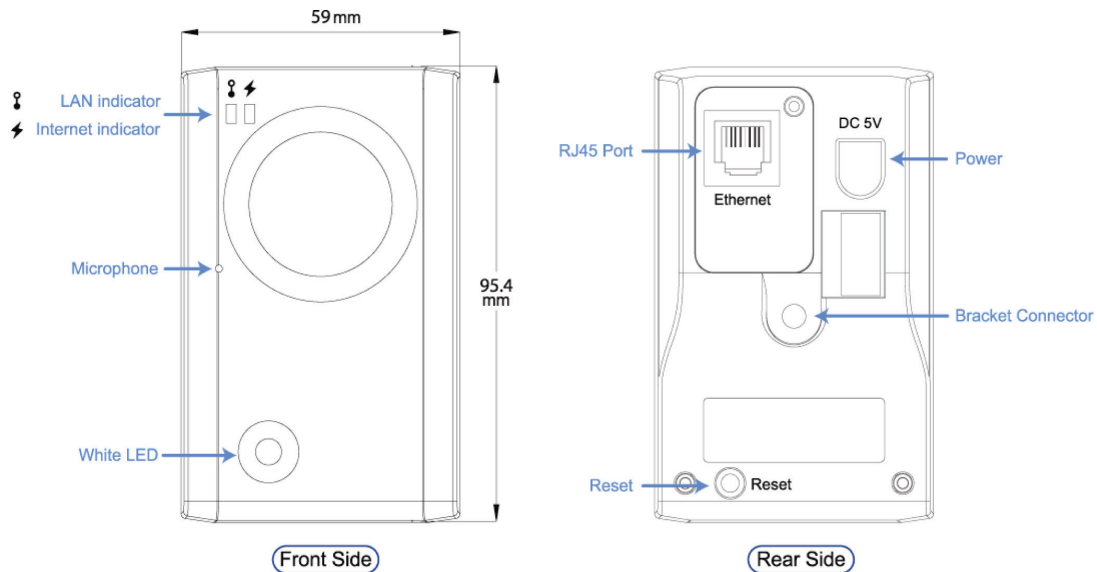
1. OVERVIEW

1.1 Product features

● Powerful Remote Surveillance on Multiple Mobile Platforms
  -- For mobile device platforms, iPad®, iPod®, iPhone®, BlackBerry®, Nokia® Symbian, Windows® Mobile & Android™ (with their built-in web browsers or EagleEyes)
  -- For web browsers, Internet Explorer®, Mozilla Firefox®, Mac® Safari®, Google Chrome™ and Opera
  -- For operating systems, Windows & Mac
  -- For multiple device control, our CMS software, Video Viewer, is provided for free
● 1.3 Megapixel live MOS sensor
● HD 720p quality, allowing users to notice minor details more easily
● Multiple video streams selectable: H.264 / MPEG4 / MJPEG
● Motion detection and event notification functions
● Digital pan / tilt / zoom for more details checking
● White LED application to illuminate the scene manually, automatically, or scheduled by a timer
● Face tracking function for human face detection and tracking
● Microphone built-in for audio recording
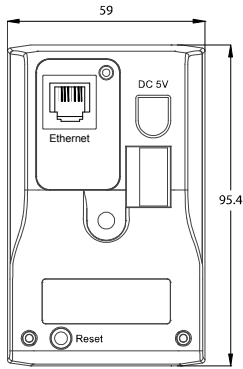● ONVIF standard supported to simplify system integration

1.2 Package content

|	
☐ Network camera	☐ Camera Bracket
☐ Installation Guide	☐ Adapter
☐ CD-ROM disc (including user manuals & CMS software "Video Viewer")	

1.3 Product Overview

LAN indicator
Internet indicator
Microphone
White LED
59 mm
95.4 mm
Front Side

RJ45 Port
Ethernet
DC 5V
Power
Bracket Connector
Reset
Reset
Rear Side

1.4 Rear Panel

Ethernet:	Connect your network cable.
DC 5V:	Connect the supplied regulated power supply.
Reset:	With the power connected, press to reset all parameters, including the IP address to factory default settings. The camera will reboot after default reset. Please do not disconnect your camera during the reset process.

1.5 Status Indicator
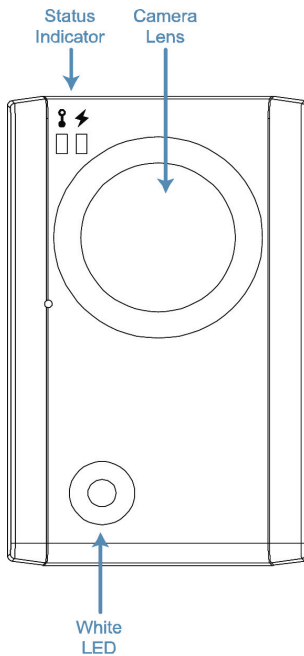
ICON	LAN connection status	Internet connection status
System Status		
During powering on	Always on	Always on
Reset default	Blinking (on 250 ms, off 250 ms) ●○●○●○●○●○	Always off
Upgrade	Blinking (on 250 ms, off 250 ms) ●○●○●○●○●○	Blinking (on 250 ms, off 250 ms) ●○●○●○●○●○
Connection Status		
LAN connected	Always on	--
LAN disconnected	Blinking (on 100 ms, off 500 ms) ●○○●○○●○○	--
Internet connected	--	Always on
Internet disconnected	--	Blinking (on 100 ms, off 500 ms) ●○○●○○●○○

* LED blinking frequency - ● LED on / ○ LED off

2. BEFORE USING YOUR NETWORK CAMERA

This network camera can be accessed via our supplied CMS software "Video Viewer", the web browser (such as "Microsoft Internet Explorer" or "Mozilla Firefox"), and smart phones with our self-developed program "EagleEyes" installed depending on different using situations.

Note: For details about accessing network cameras via smart phones, please refer to http://www.eagleeyescctv.com.

Before using the network camera, make sure:

1) You have installed the supplied CMS software, "Video Viewer", or a web browser.
2) You have configured the network settings, and the network connection is fine.

For Video Viewer installation, please refer to "3.1 Installing Video Viewer" at page 4.
For network configurations, please refer to your installation guide.

■ To check or configure up to 16 surveillance devices simultaneously with the record function, please use "Video Viewer".
For details about using Video Viewer, please refer to "3. ACCESSING THE CAMERA VIA VIDEO VIEWER" at page 4, and "4. CAMERA CONFIGURATION" at page 13.

■ To check or configure this network camera only, it's recommended to use the web browser "Microsoft Internet Explorer" or "Mozilla Firefox".
For details about using the web browser, please refer to "4. CAMERA CONFIGURATION" at page 13.
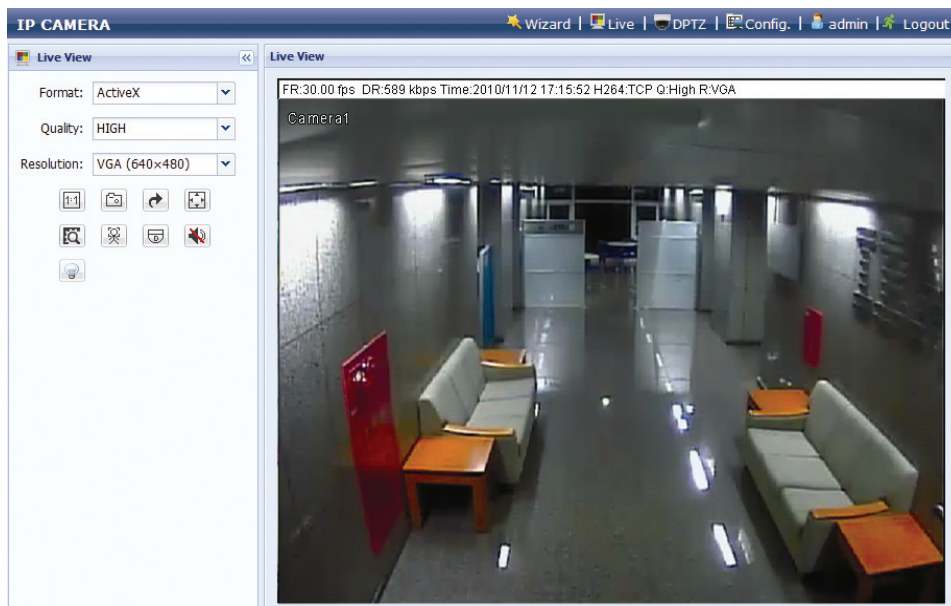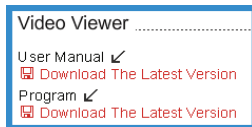
3. ACCESSING THE CAMERA VIA VIDEO VIEWER

3.1 Installing Video Viewer

Step1: Place the supplied CD into your CD-ROM or DVD-ROM drive. The program will be automatically run.

Step2: Click "Program" in the "Video Viewer" section to install Video Viewer, or click "Download The Latest Version" under "Program" to download the latest version of Video Viewer from the Internet (if your PC is connected to Internet).

Video Viewer ....
User Manual ↙
↓ Download The Latest Version
Program ↙
↓ Download The Latest Version

Step3: Follow the on-screen instructions to finish the installation. When the installation is completed, a shortcut icon " " will be placed on your PC desktop.

3.2 Accessing the camera

Step1: Double-click " " on your PC desktop to open Video Viewer. By defaults, the "Address Book" panel will be displayed on the right side of the control panel.

Step2: In "Address Book", click " " to key in the IP address, user name, password, and port number of the camera you intend to connect.

OR

Click " " → " " to search the available IP address(es) of other camera(s) under the same domain as your PC's IP address. The found address(es) will be listed, and can be added into the address book by clicking " ".
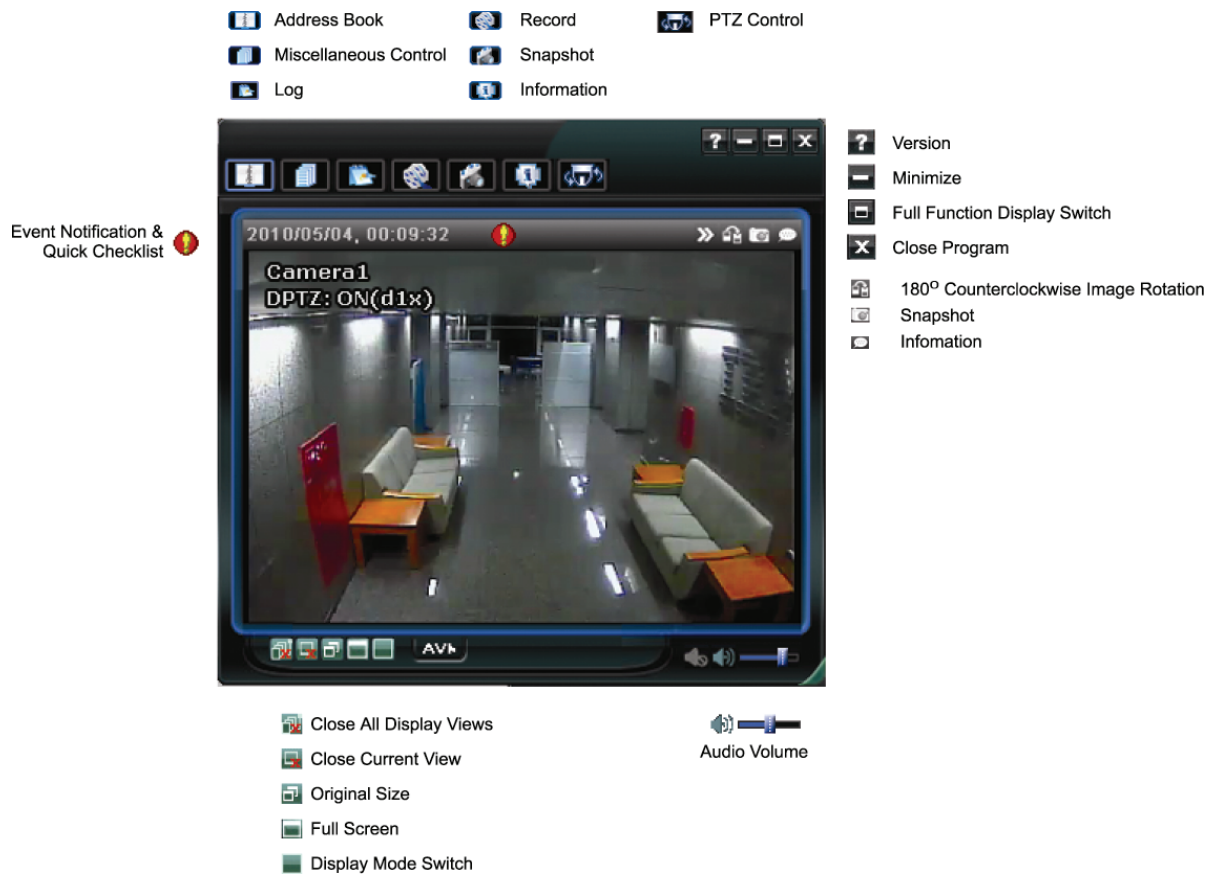
Step3: Double-click the IP address you just added into the address book to log in. The live view is displayed in the Video Viewer.

3.3 Control panel overview

Two control panels are available and can be switched depending on your using habit.

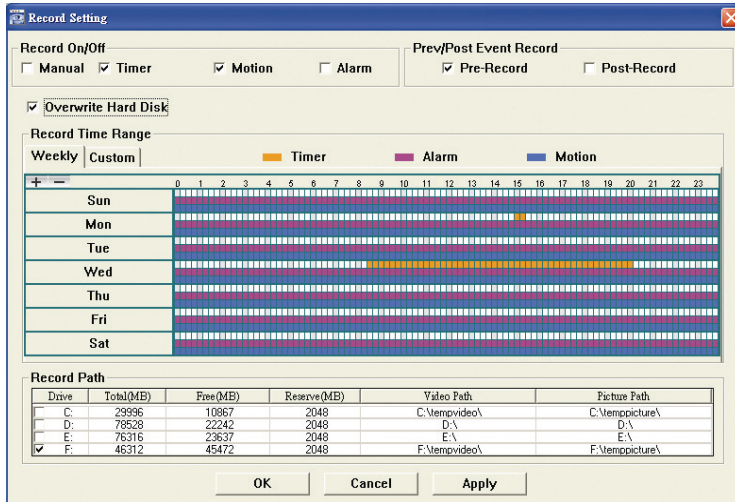### 3.3.1 Simplified version (Default)

3.3.2 Full function version

3.3.3 Main button overview

Button		Function	Description		
Simplified	Full Function				
(icon)	(icon)	Address Book	Click to show the predefined IP address(es). You can add, remove or search the IP address to log in the DVR remotely.		
(icon)	(icon)	Miscellaneous Control	(icon)	Remote Config	Click to go to the detailed system configuration. For details, please refer to "4. CAMERA CONFIGURATION" at page 13.
			(icon)	Record Setting	Click to go to the detailed record setting. For details, please refer to "3.4.1 Record" at page 7.
			(icon)	Custom Setting	Click to choose the language of this program, or set the password when activating this program. The changes will take effect when this program is closed and executed again.
(icon)	(icon)	Log	Click to view all event and recording logs, search the desired log(s) by date, or playback the recording of the selected log.		
(icon) / (icon)	(icon) / (icon)	Record / Record Stop	Click to start / stop the manual recording. The record button will be disabled when the reserved disk capacity set in "Record Setting" is larger than the current disk capacity. For details, please refer to "3.4.1 Record" at page 7.		
(icon)	(icon)	Snapshot	Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in "Record Setting".		
(icon)	(icon)	Information	Click to show the current network connection details.		
(icon)	(icon)	PTZ Control	Click to enter the DPTZ control panel.		

3.4 Frequently-used functions

3.4.1 Record

To record remotely, click "▨" or "▨" → "▨" to go to the "Record Setting" page.

In the "Record Setting" page, you can set the following items:

・Record type

・Pre- / post-event record time (0~10 seconds)

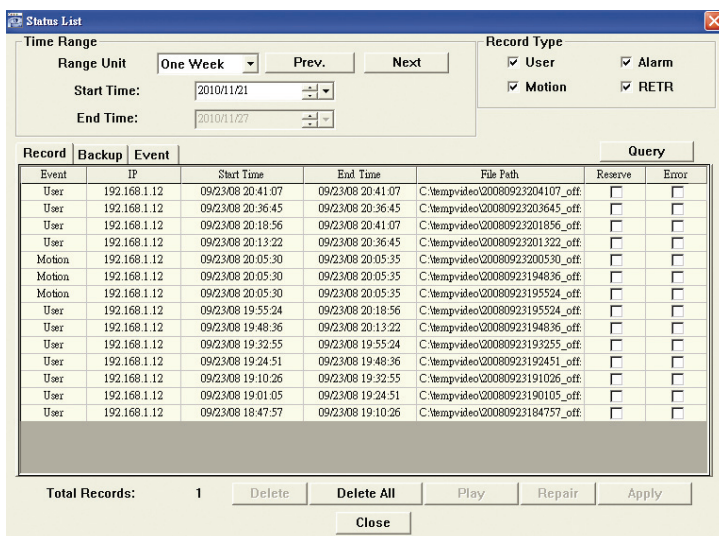・Record time setting

・Record path

Note: The record function will be disabled when the reserved disk capacity in "Reserved(MB)" is larger than the current disk capacity in "Free(MB)".

When "Manual" is checked, click "▨" or "▨" on the main control panel to start the manual recording immediately, and the recordings will be saved in the location specified in "Record Path".

When "Motion" and / or "Alarm" are checked, the recording function will be enabled for any motion or alarm event, and the recordings will be saved in the location specified in "Record Path".

3.4.2 Playback

To play a recording, click "▨" or "▨", and select the "Record" tab. A list of all the recordings will be shown by defaults, and you can also sort out the logs you want to speed up the search time.
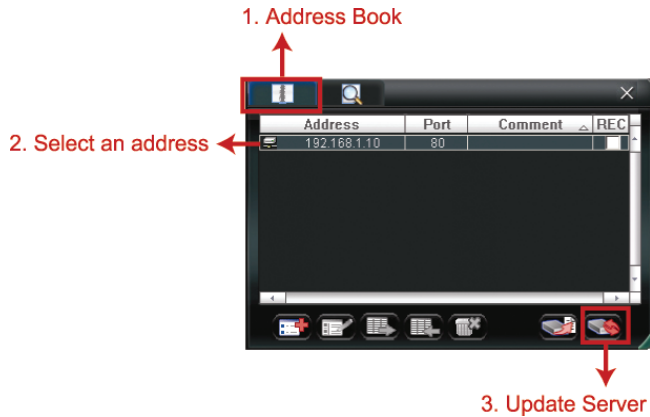
3.4.3 Firmware upgrade

This function is used when users need to upgrade the network camera for function scalability.

Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Step1: Click " ", and select the IP address of your network camera in the address book.

Step2: Click " " to show the upgrade page, "Update Server".

1. Address Book

2. Select an address

3. Update Server

Step3: Click "Add" to browse to the upgrade files.
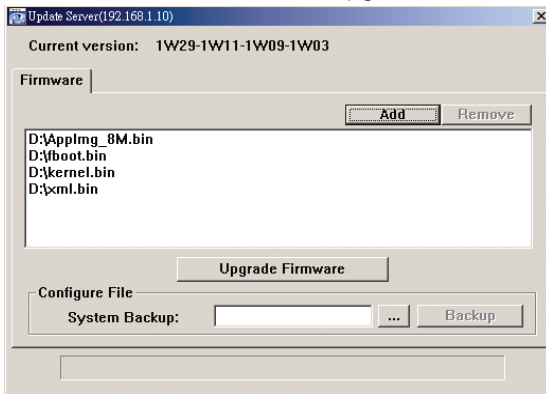
Step4: Click "Upgrade Firmware" to start firmware upgrade.

Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

Step5: Select the IP address of the camera and click " " again to check if the firmware is upgraded.

3.4.4 E-Map

Video Viewer is also a Central Management System (CMS) software, which allows network device control & management for up to 16 devices simultaneously.

Note: Before using this function, make sure Video Viewer is connected to all the devices (up to 16) you want to monitor.

E-Map is **ONLY** available when the control panel is switch to the full function version.

How to add an E-Map group

STEP1: In the simplified version, click " " to switch the control panel to the full function version, and click " " to enter the E-Map page as follows.

Note: To know where the buttons are, please refer to "3.3.1 Simplified version (Default) at page 5, and "3.3.2 Full function version" at page 6.
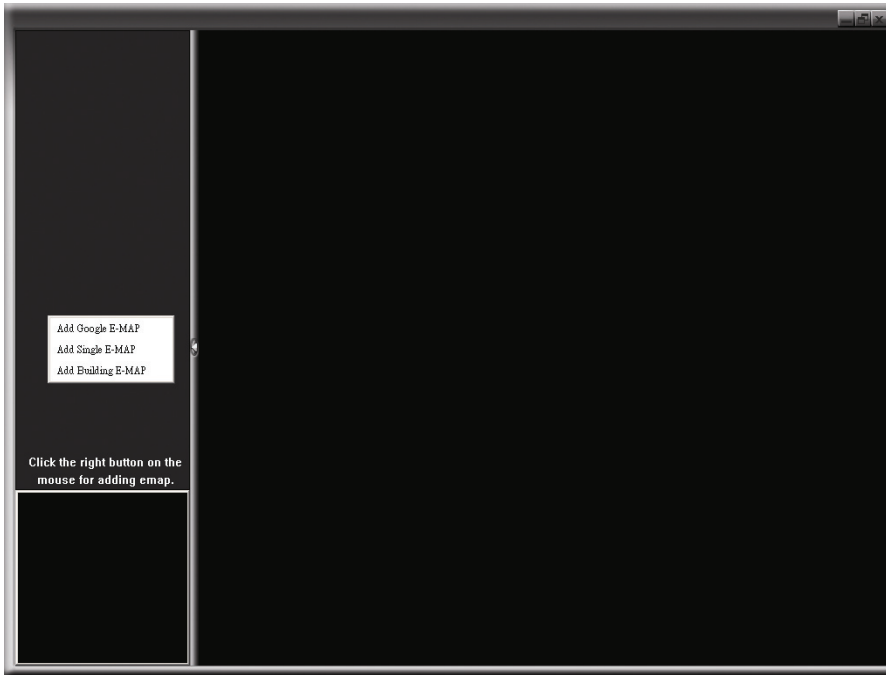
STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add. There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.
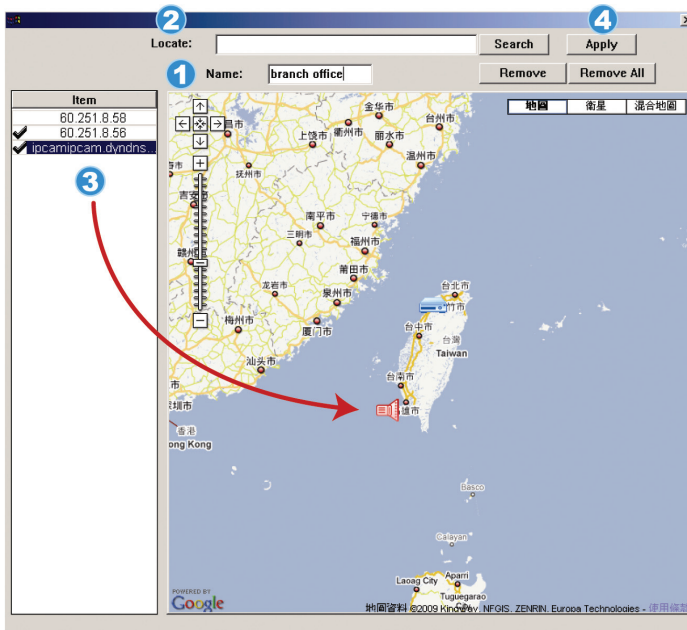
How to add a Google E-Map group:

1. Enter the name of this Google E-Map group.

2. Enter a specific address or landmark, and click "Search".
   OR
   Move to the map and drag to the location you want.

3. Click and drag the IP address to where it's located in the current level.

4. Click "Apply" to save and finish.
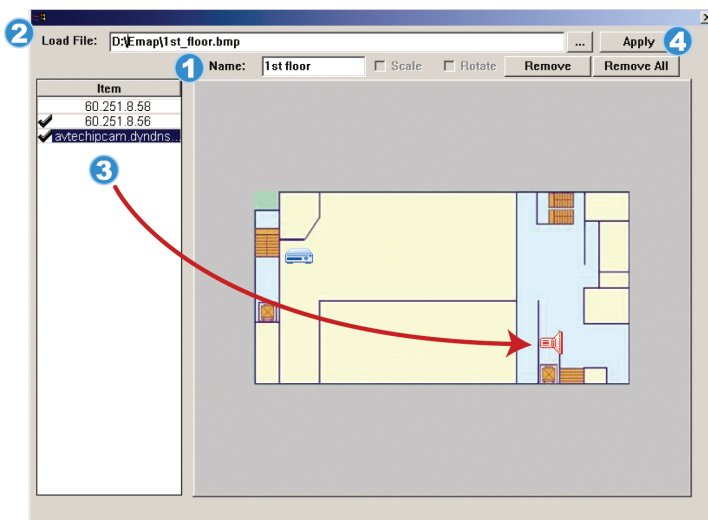
How to add a single E-Map group:

1. Enter the name of this single E-Map group.

2. Click "..." to browse the map file in BMP or JPEG.

3. Click and drag the IP address to where it's located in the current level.

4. Click "Apply" to save and finish.
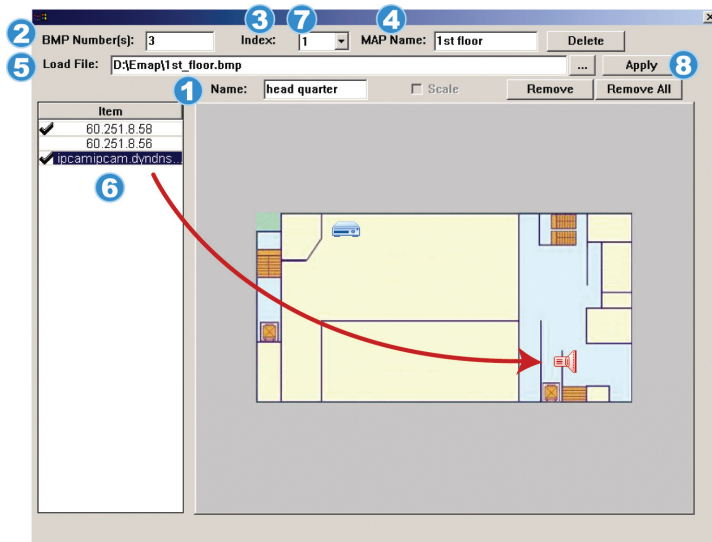
How to add a building E-Map group:

1. Enter the name of this building E-Map group.

2. Enter the total levels of this building.

3. Select the level of the building from the drop-down list.

4. Enter the name of the level.

5. Click "..." to browse the map file in BMP or JPEG.

6. Click and drag the IP address to where it's located in the current level.

7. Go back to STEP 3 to select other level of the building, and repeat from STEP 3 to 6 until the setup for all levels are finished.

8. Click "Apply" to save and finish.

STEP3: When the E-Map group is created, you will see the tree on the top-left panel, showing all the devices you've added to this group.
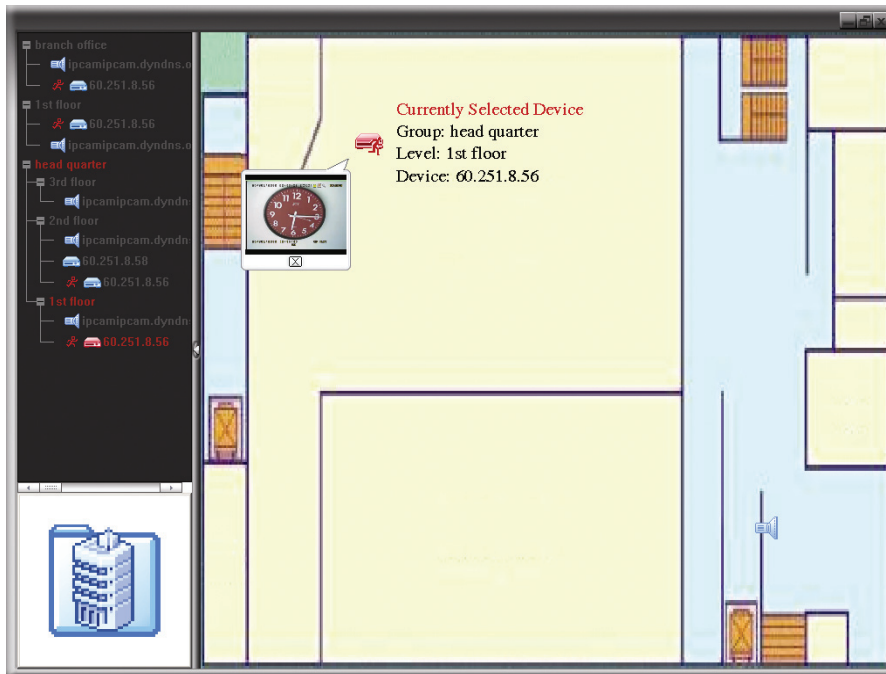
Icon	Description
	The connected device is camera. When it's selected, it will become red.
	The connected device is DVR. When it's selected, it will become red.
	For any motion or alarm event, it will appear on the screen to catch your attention. To know what's happening quickly, double-click the device icon on the E-Map to show the live view.

How to edit / remove an existing E-Map group

➢ For Google E-Map Group

Right-click on the group name to show the shortcut menu list, and select "Edit E-MAP" or "Remove E-MAP" as needed.

You can also add a single E-Map group (Add Single E-MAP) or Building E-Map group (Add Building E-MAP) into the existing Google E-Map group.
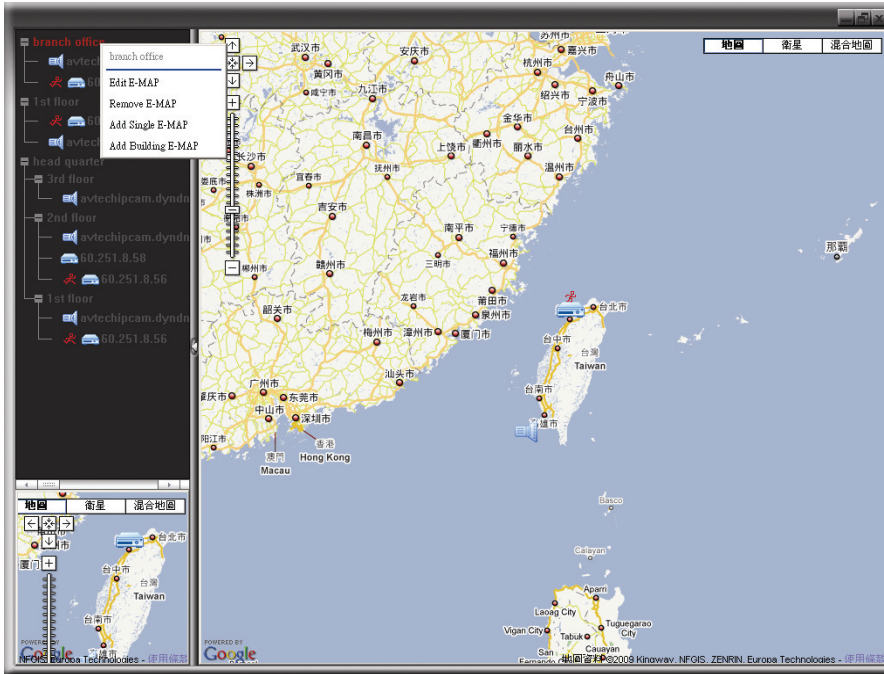
➢ For Single E-Map Group

Right-click on the group name to show the shortcut menu list, and select "Edit E-MAP" or "Remove E-MAP" as needed.
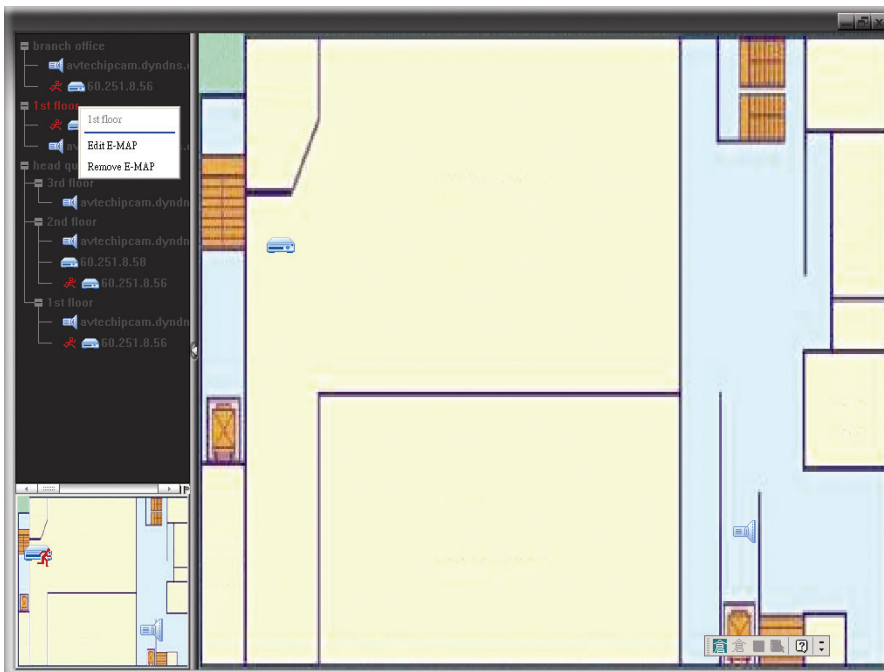
➢ For Building E-Map Group

Right-click on the group name to show the shortcut menu list, and select
"Edit Building E-MAP" or "Remove E-MAP" as needed.
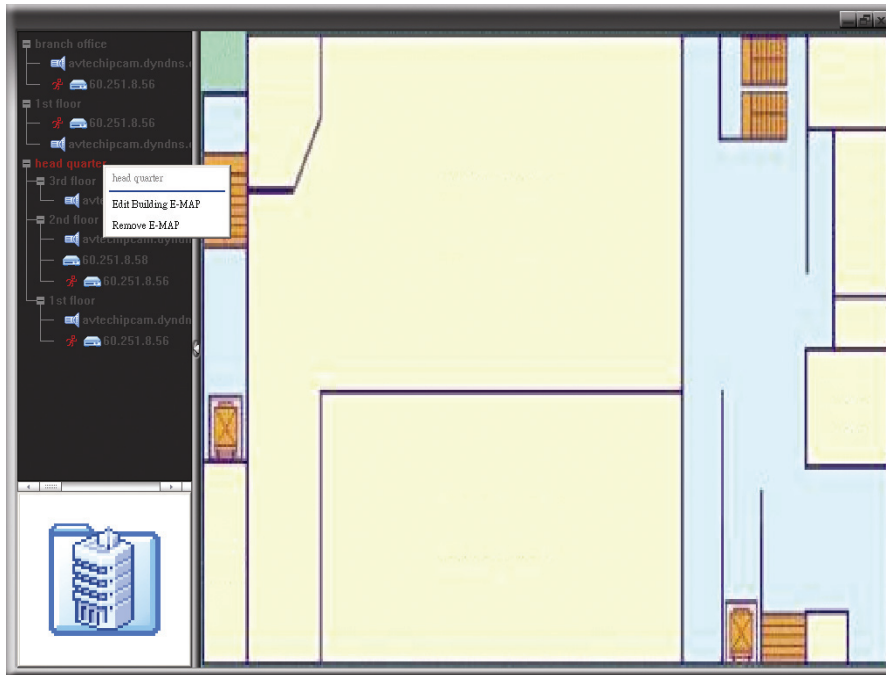
4. CAMERA CONFIGURATIONS VIA WEB BROWSER

Users can also access the network camera via a web browser, such as Microsoft Internet Explorer, Mozilla Firefox, Google Chrome and Safari.

Note: It's recommended to consult with your installer before changing system configurations.

Note: You need to be the supervisor to enter the system configuration page. If not, please re-log into the camera with the supervisor user level.

However, the web browser is only available for single device access. If users want to access more than two devices through one interface, it's recommended to use our supplied CMS software, Video Viewer. For details, please refer to "3. ACCESSING THE CAMERA VIA VIDEO VIEWER" at page 4.

Before using the network camera, make sure you have configured the network settings and have the IP address, user name and password used for accessing the camera in hand. If not, please refer to the installation guide.

4.1 Accessing the camera

Step1: Open your web browser, and key in http://*ipaddress:portnum* in the URL address box.

For example, for IP address 60.121.46.236 and port No. 888, please key in "http://60.121.46.236:888" into the URL address box, and press "Enter".

Step2: In the login page, key in the user name and password, and enter the security code from the image below if any. Then, click "LOGIN".

Step3: The wizard is then started.
- To skip the wizard and directly access the camera live view, click "Close".
- To directly access the camera live view without starting the wizard for the login next time, check "Do not start wizard at login".

Step4: When the login is successful, the live view is shown.

4.2 Control panel overview

Note: The buttons available depend on the web browser you're using, and the user level used to log in.

Function	Icon	User Level	Description
Configuration Page:		Supervisor / Power User	
Live			Switch to the live view page.
DPTZ			Switch to the DPTZ configuration page. For details, please refer to "4.4 Digital PTZ (DPTZ) operations" at page 15.
Config.			Switch to the system configuration page, and the functions available for "Supervisor" and "Power User" are different. For details, please refer to "4.5 System configuration menu" at page 17.
Format	--	Supervisor / Power User / Normal User / Guest	Select the web transmission format from the drop-down list: ■ ActiveX ■ QuickTime For users using Mozilla Firefox or Google Chrome, only "QuickTime" is selectable. QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in your operating system before selecting "QuickTime". When it is selected, you will be promoted to enter the user name and password to access the camera.
Quality	--	Supervisor / Power User / Normal	Click & drag the slider to select the video quality: BASIC / NORMAL / HIGH / BEST.
Resolution	--	Supervisor / Power User / Normal	Select the image resolution from the drop list: ■ SXGA (1280 x 1024) ■ SXVGA (1280 x 960) ■ 720P (1280 x 720) ■ VGA (640 x 480) ■ QVGA (320 x 240)
Live View Size:		Supervisor / Power User / Normal User	
Normal Size			The current live view size is the same as the selected resolution.
Fit to screen			Resize the selected resolution to fit into the live view size. *This icon appears only when the selected resolution is larger than the current live view size.*
Scale			Click and hold the movable square on the left bottom corner of the live view to move *This icon appears only when the selected resolution is larger than the current live view size.*
CIF Resize			Resize the QVGA resolution to fit into the live view size. *This icon appears only when the selected resolution is QVGA (CIF) than the current live view size.*
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot of the current view, and save to the location specified in "Config." → "Camera" → "Camera" → "Snapshot Path".
Flip		Supervisor / Power User / Normal User	Click to rotate the image 180^0 counterclockwise when necessary.
Full Screen		Supervisor / Power User / Normal User	Click to display the image in full screen. To exit the full screen mode, press "Esc" on your keyboard.
Smart Zoom		Supervisor / Power User / Normal User	Click to activate the digital smart zoom function.
Face Tracking		Supervisor / Power User / Normal User	Click to enable the face tracking function. *Note: This function is disabled when the stream format is set to "Multi-Mode".*
DPTZ		Supervisor / Power User / Normal User	Click to enable digital PTZ functions.
Audio On / Off	/	Supervisor / Power User / Normal User	Click to switch the audio on / off.
White LED		Supervisor / Power User / Normal User	Click to enable the white LED. Before enabling the white LED, make sure you've already adjusted the brightness of the light to the level you need in "Config." → "Camera" → "LED". *Note: The LED will also be enabled when you've scheduled it to be activated in "Config." → "Camera" → "LED".*

** Face Tracking, DPTZ & Smart Zoom can't be activated simultaneously.

4.3 Face tracking configurations

Face tracking is used to especially zoom in on the intruder's face, easy for everyone to identify.

Note: When this function is enabled, DPTZ, Smart Zoom, and optical zoom are not allowed to use.

Note: Face tracking is not supported when the stream format is set to Multi-Mode, and this menu will not be shown in the configuration page.
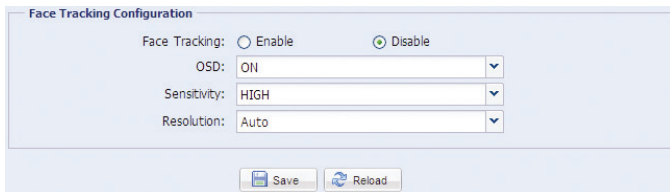
STEP1: Click "Config." → "Camera" → "Face Tracking" to enter the configuration page.

STEP2: Select and set as described below:

ITEM	DESCRIPTION
Face Tracking	Select "Enable" to activate or "Disable" to deactivate this function.
OSD	Select "ON" to display the following status messages on the live view:
	FACE STANDBY: This function is activated and ready to use.
	FACE TRACKING: This function is tracking.
	FACE ZOOM IN / OUT: This function is zooming on the face for tracking / zooming out when the tracking object leaves the surveillance area.
Sensitivity	Set the tracking sensitivity from HIGH / MEDIUM / LOW.
Resolution	Set the resolution for face tracking from Auto / VGA / QVGA.

STEP3: When all the configurations are done, click "Save" to save your changes, and click "Live" on the top to return to the live view.

4.4 Digital PTZ (DPTZ) operations

This fixed network camera type has PTZ capability, i.e. digital PTZ (hereafter called "DPTZ"), for wide area monitoring.

Note: When this function is enabled, Face Tracking, Smart Zoom, and optical zoom are not allowed to use.

STEP1: Click "DPTZ" to show the DPTZ control panel.
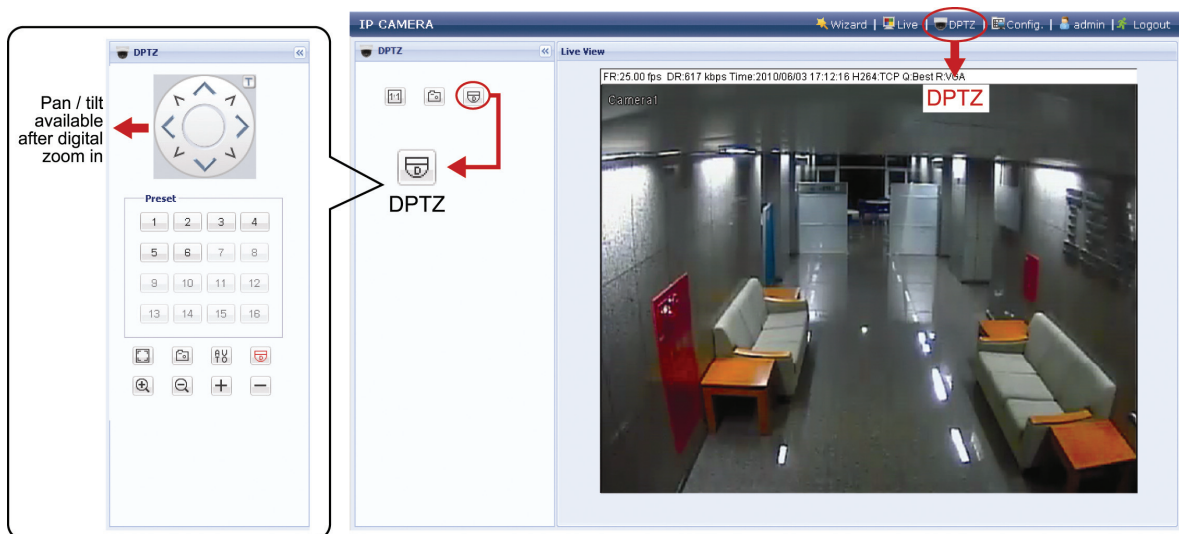
STEP2: Select the functions when needed:

ICON	FUNCTION	DESCRIPTION
⬚ / 1:1	Fit to screen / Restore to original size	There are several monitor resolutions available. When the selected resolution is out of your current live view support, a part of your surveillance area might get covered on the screen, and you need to manually move on the screen to check the covered part.
		⬚ : This is used to scale the selected resolution to fit in the current live view size.
		1:1 : This is used to restore the scaled live view resolution to its original size.
📷	Take snapshots	Click to take a snapshot of the current view, and save to the location specified in "Config." → "Camera" → "Camera" → "Snapshot Path".
AUTO	Enable Auto mode	Click to activate the auto mode of the camera. The auto mode could be "Sequence" or "Auto Pan" specified in "Config." → "Camera" → "Cruise" → "Active Mode".
		Note: This function is available only when DPTZ is enabled.
		Sequence: Move to several preset points accordingly and regularly specified in "Config." → "Camera" → "Cruise" → "Active Mode" → "Sequence".
		Note: Preset points are set in "Config." → "Camera" → "Preset".
		Auto Pan: Pan automatically and horizontally.
⬚	Enable DPTZ	Click to activate the digital PTZ function. When this function is enabled, the following operations are available: ■ Auto mode ■ Move up / down / left / right after digital zoom-in.
⊕ / ⊖	Zoom in / out	Click to zoom in / out the image.
+ / −	Max. zoom in / out	Click to zoom in / out the image.

4.5 System configuration menu

Click "Config." to enter the configuration page.

Note: You need to be "Supervisor" or "Power User" to enter the system configuration page, and the functions available for these two user levels are different. If you're not either of these two user levels, please re-log into the camera with one of them.

The functions are categorized into three menus: Network, Camera and General.

■ For details about "Network", please refer to "4.6 Network" at page 18.

■ For details about "Camera", please refer to "4.7 Camera" at page 21.

■ For details about "General", please refer to "4.8 General" at page 26.

Main Menu	Sub-Menu	Reference
Network	Network	Configure network settings.
	DDNS	Enter DDNS information when the network type is PPPOE or DHCP.
	SNTP	Synchronize your camera time with the networked computer systems.
	FTP	Enter the FTP information for event notifications when "FTP" is chosen in "General" → "Trigger".
	Mail	Enter Email information for event notifications when "Email" is chosen in "General" → "Trigger".
	SMS	Enter text messaging information for SMS notifications when "SMS" is chosen in "General" → "Trigger".
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UpnP	Allow this camera to be detected among devices within the same network area for easy and quick usage.
Camera	Camera	1. Set the camera title. 2. Specify the snapshot path. 3. Select the streaming settings based on your network environment.
	Preset	Set the preset points for the DPTZ function.
	Cruise	Set the cruise mode when the auto mode is enabled: Sequence or Auto Pan.
	Color	Adjust the color performance.
	Time	Set daylight saving time and the current time.
	LED	1. Set the activation of the LED to be manual or automatic. 2. Adjust the brightness of white LED light. 3. Set the schedule to enable LED.
	Digital Smart Zoom	Set the sensitivity and standby interval.
	Face Tracking	*Hidden only when the steam format is set to "Multi-Mode".* Configure the parameters for face tracking.
General	General	1. Select the language of the web browser. 2. Check the MAC address of the camera. 3. Lock camera access after the specified time.
	Server Log	*Available for Supervisor only.* Check the system event logs.
	Online	*Available for Supervisor only.* Check the current online user(s).
	Account	*Available for Supervisor only.* 1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Trigger	1. Enable / disable face and motion detection. 2. Set the motion detection area. 3. Select the event notification method.
	Upgrade	*Available for Supervisor only.* Check the current firmware version and upgrade.

4.6 Network

4.6.1 Network

You can set the network configuration of the network camera depending on your network type. For details, please refer to your installation guide.

4.6.2 DDNS

Select "On" when the selected network type in "Network" is "PPPOE" or "DHCP". For details, please refer to the installation guide.

4.6.3 SNTP

SNTP (Simple Network Time Protocol) is used to synchronize your camera time with the networked computer systems.

Function	Description
GMT	Once users choose the time zone, the network camera will adjust the local area time of the system automatically.
NTP Server	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync	Click and the network camera will synchronize the time with the network time.

4.6.4 FTP

Enter the detailed FTP information and click "Save" to confirm. The information you set here will be applied when "FTP" is selected in "General" → "Trigger".

4.6.5 MAIL

Enter the detailed e-mail information and click "Save" to confirm. The information you set here will be applied when "Email" is selected in "General" → "Trigger".

Function	Description
SMTP Server	Enter the SMTP server address provided from your e-mail system supplier.
Port	Enter the port number provided from your e-mail system supplier. If this column is left blank, the e-mail server will use port 25 to send e-mails.
Mail From	Enter the entire mail address to ensure e-mails will not be blocked by SMTP.
Verify Password	Some mail servers are required to verify the password. Please enter the "user name" and "password".
E-Mail Address List	Add the e-mail address(es) of the assigned recipient(s).

4.6.6 SMS

Note: Before using this function, you need to apply an API ID from the mobile messaging company, Clickatell, and you will be charged starting from the 11th message. For details, please refer to "APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING' at page 31.

Enter the detailed information needed for text messaging, and click "Save" to confirm. The information you set here will be applied when "SMS" is selected in "General" → "Trigger".

Function	Description
System	The text messaging service provider is Clickatell.
User name / Password	Enter the account user name and password you created in Clickatell.
API ID	Enter the API ID you applied from Clickatell.
Recipient	Click "Add" to enter the phone number, including the country code, to receive the text message. Five sets of phone numbers are allowed.
Transfer Interval	Set the interval time in minutes between two-message sending. The options are 0, 15, 30 & 60.
Reset Counter	Click to restart the text messaging, and the SMS will be sent after the specified time interval since you click this button.
Message	Enter the text content (up to 70 characters) you want to send with the text message.
Test SMS	To know whether your SMS setting is correct, click this button to immediately send a SMS to your phone. Note: This testing is not free and you will be charged for SMS sending base on your local rate.

4.6.8 Filter

Choose to permit or block the IP address(es) which can access this camera, and click "Save" to confirm.

Function	Description
■ **Filter Configuration**	
Error Count	Set the maximum count for login failure. When the maximum count is reached, the IP address trying to access the network camera will be locked.
Error Lock Time	Set the lock time in minutes when the maximum count of error login for an IP address is reached.
Echo Request	Select "Non-Block" to allow other users to use the ping command to detect the IP address of your network camera, or "Block" to deny the ping command request.
■ **IP/MAC Filter Configuration**	
IP/MAC Filter	Choose to enable or disable the filter function.
IP/MAC Filter Policy	If "Enable" is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.
■ **IP/MAC Filter Rules**	
Rule	• To add an item to the IP address list, key in the IP address in "Rule", and click "Add". • To remove an existing item in the IP address list, click the item you want to remove, and click "Delete".

4.6.9 UPnP

"UPnP" stands for "Universal Plug and Play", which allows devices to connect seamlessly in the home and corporate environments and simplify installation of computer components.

Check "Enable" to allow the network camera to be detected among devices within the same network area, and set the identification name of the camera in "Friendly name".

When this function is activated, the other PC within the same domain as this camera will be able to search this camera in "Network Neighbor" with the identification name set in "Friendly name". Double-click it to quickly open the web browser for camera access.

4.7 Camera

4.7.1 Camera

Adjust the camera parameters if necessary.

Item	Description
Title	Enter the title for the camera with up to 15 alphabetic characters.
Snapshot Path	Specify the location to save the snapshot pictures.
Environment	Select the current environment for the camera to automatically adjust itself to produce the images suitable for the selected environment.
Frame Rate	The frame rate allowed to each viewer can be adjusted to adapt to the bandwidth on the network.
	Set the desired image frequency to the maximum (FULL) or to a specified frame rate (1/2; 1/3; 1/4; 1/5; 1/10; 1/15).
	The actual frame rate depends on the actual network connection, and may be lower than the specified one.
System Type	It shows the current system type: NTSC or PAL.
Stream Format	Select the stream format to Single H.264 / Single MPEG-4 / Single Motion JPEG / Multi-Mode.
	Note:
	1. *Motion detection is not supported when the stream format is set to Motion JPEG.*
	2. *Face tracking is not supported when the stream format is set to Multi-Mode.*
ADSL Upload Speed	Select your Internet upload speed, and the system will automatically adjust your data flow.
	The options are: Local (>2Mbps) / 2M (2000Kbps) / 1M (1000Kbps) / 640Kbps / 512 Kbps / 256Kbps / 128 Kbps / 64Kbps
OSD	Select "ON" to show the camera title on the live view, or "OFF" to hide the camera title.
Maximum Exposure Limits	This function is used to extend the exposure time for clearer images when the light is not sufficient.
	Select 1 ~ 3 to extend the exposure time based on your current light condition. The larger the value, the longer the exposure time, and the less the fps.
	0 means function off.

4.7.2 Preset

**Note:** Before using this function, make sure the DPTZ function is enabled.

You can set new preset points (up to 16) or check existing points here.

How to set a new preset point

Step1: Click DPTZ icon.

Step2: Click to where you want to see, and you'll get a 5x zoom-in image. To slightly zoom out, draw a square from the bottom right to top left, and you'll get a 3x image. Draw the square again and you'll return to the original size.

Step3: In "Current Position", give a name to this point, and click "Add".
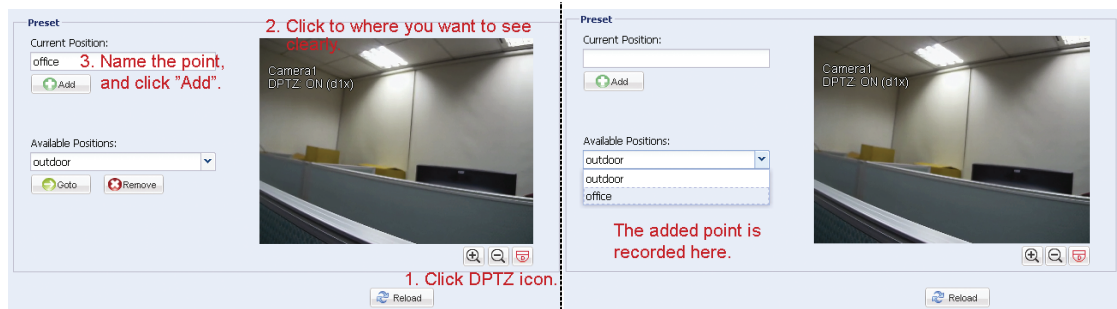
How to check an existing preset point

In "Available Positions", select the name of the point you want to check from the drop-down list, and click "Goto".

You will see the camera view on the right side moving to the point it's recorded.

How to delete an existing preset point

In "Available Positions", select the name of the point you want to check from the drop-down list, and click "Remove".

4.7.3 Cruise

Note: Before using this function, make sure you have finished setting several preset points.

Here defines how the auto mode of the camera is going to work when ⬚ is selected: Sequence or Auto Pan.

Auto Pan

When "Auto Pan" is selected here and ⬚ is clicked on the DPTZ page, the camera will start panning in the 5x zoom-in ratio.
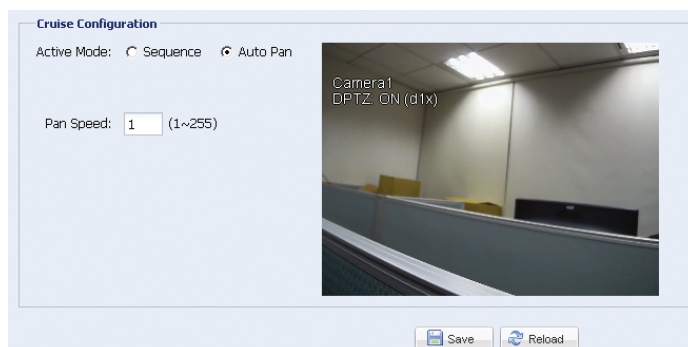
Sequence

When "Sequence" is selected here and ⬚ is clicked on the live view page, the camera will start patrolling each preset point defined in "Sequence".

Step1: Click "Add" to choose a preset point from the drop-down list, and select the duration to stay at this point from 1 ~ 60 minutes.

Then, click "Save" to confirm.
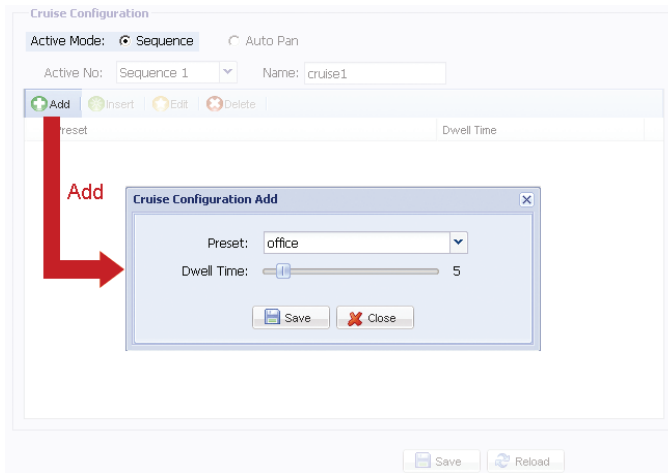
Step2: Click "Add" again to add more preset points. When all the points are added, click "Save" to confirm.
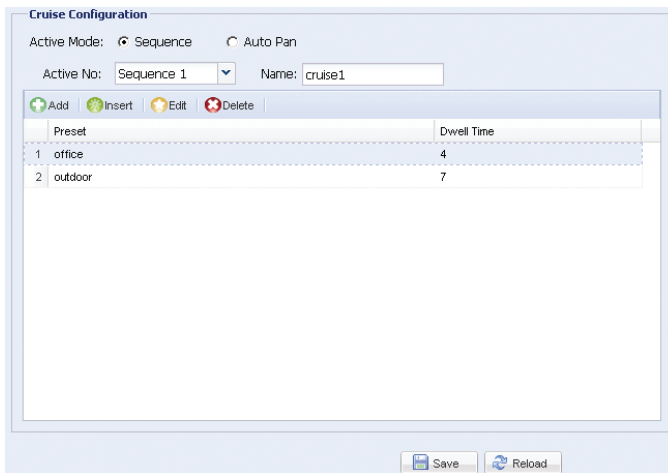
4.7.4 Color

Adjust the color performance from Brightness, Contract, Hue and Saturation. Click and drag the slider to preview the color change on the right side of ths page and adjust the image color.

To restore the default values, click "Back to Default".

4.7.5 Time

Set daylight saving time and the current time, and click "Save" to confirm.

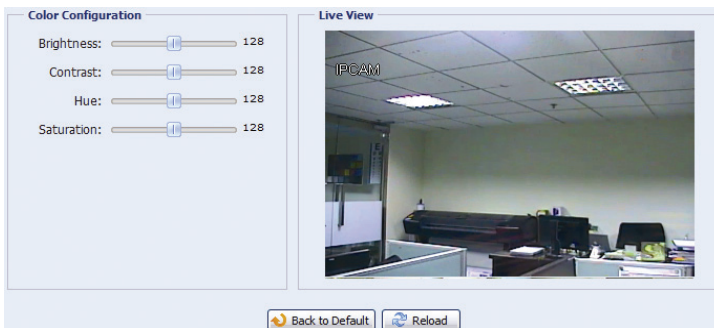| Function	Description
■ **Time Configuration**	
Date	Set the current date.
Time	Set the current time.
■ **Daylight Saving Time Configuration**	
Daylight Saving Time	Specify whether to use daylight saving time (Enable / Disable).
	If this function is enabled, set the time period (Start Time / End Time), and adjust the daylight saving time in hours (Adjust Time).

4.7.6 LED

In "LED Configuration":

➤ To allow the LED to be activated manually, select "Yes" in "Manual Enable".
➤ To set the LED to be activated automatically when the light condition gets dark, select "Yes" in "Auto Enable", and set the sensitivity for the camera to determine how dark the LED should be activated. There are three options: HIGH / MEDIUM / LOW.
➤ To adjust the brightness level of the LED, drag the slider from left to right in "Light".

Note: When you adjust the brightness level of the LED light, please drag the slider from the very left, and slightly move to the right to find the suitable light brightness.

Note: When the brightness level is adjusted to 100%, the system will enable the brightness of 100% for 3 minutes, reduce to 50% for 1 minute, and return to 100% for 3 minutes, etc. This is to protect and extend the lifetime of the white LED.

To schedule the white LED to be enabled, go to "LED Timer Configuration", select "Yes" in "Enable", and set the time to enable the LED. Each square equals 30 minutes.

4.7.7 Digital Smart Zoom

Column	Description
Smart Zoom	To switch this function on or off, select "Enable" or "Disable". Or, it's also available to click [icon] to enable / disable this function on the live view panel.
Detection	Select to set a specific detection area for this function.
Sensitivity	Select the digital smart zoom sensitivity (HIGH / MEDIUM / LOW)
Stand-by Interval	Select the stand-by interval (Short / Normal / Long).

4.7.8 Face Tracking

Configure the parameters for face tracking.

Note: Face tracking is not supported when the stream format is set to Multi-Mode, and will not be shown in the configuration page.

Function	Description
Face Tracking	Select "Enable" to activate or "Disable" to deactivate this function.
OSD	Select "ON" to display the following status messages on the live view:
	FACE STANDBY: This function is activated and ready to use.
	FACE TRACKING: This function is detecting.
	FACE ZOOM IN / OUT: This function is zooming on the face for tracking / zooming out when the tracking object leaves the surveillance area.
Sensitivity	Set the tracking sensitivity from HIGH / MEDIUM / LOW.
Resolution	Set the resolution for face tracking from Auto / VGA / QVGA.

4.8 General

4.8.1 General
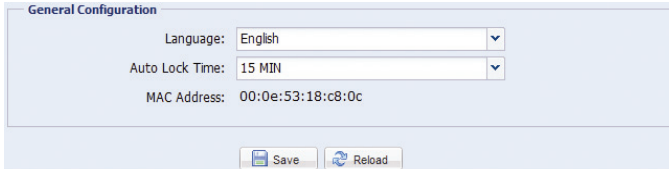
In "General", you can select the UI language to English or Chinese, and check the MAC address of your camera.

To lock camera access when it's not used after the specified time, select "5 MIN", "15 MIN" or "30 MIN" from the drop-down list of "Auto Lock Time", or select "NEVER" to disable this function.

Note: When the camera access is locked after the specified time, to resume camera access, please enter the password.
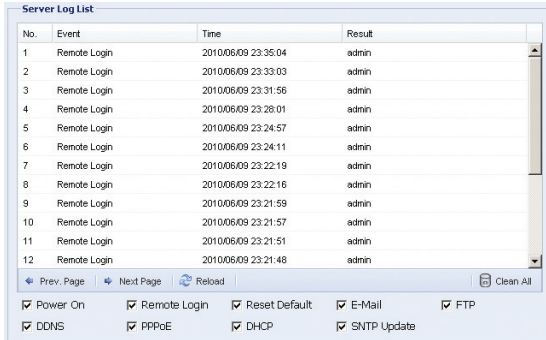
4.8.2 Server Log

Note: This function is available only for "Supervisor".

To quickly search the system logs you want by event type, click "Prev. Page" or "Next Page" to find the logs you want, or check the event type(s) and click "Reload" to start searching.

To clear all system event logs, click "Clear All".

4.8.3 Online

Note: This function is available only for "Supervisor".

You can check the current online user(s) with respective online information. To refresh the list, click "Reload".

➢ To allow anonymous login, select "Enable" in "Anonymous Viewer Login".
➢ To disable image code verification at login, select "No" in "Login with CAPTCHA Image".

4.8.4 Account

Note: This function is available only for "Supervisor".

You can create a new account with different user access privilege, or delete or modify an existing account setting.

<u>How to create a new account</u>

Step1: Click "New", and fill in the following columns.
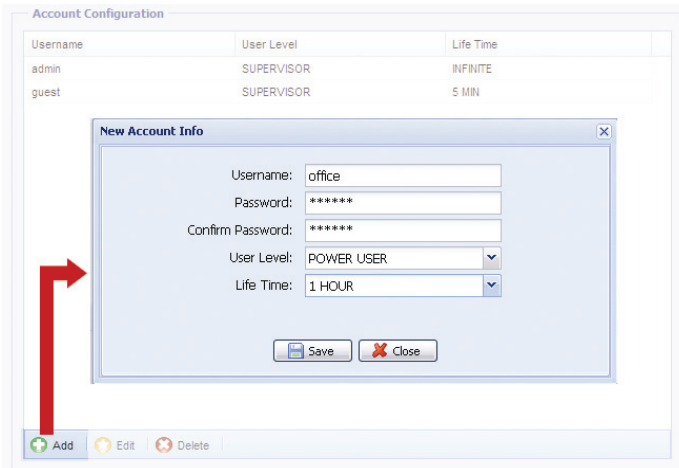
Column	Description
User Name	Set a user name that will be used for camera access. The user name allows up to 16 alphanumeric characters.
Password	Set the password that will be used for remote login. The password allows up to 16 alphanumeric characters.
Confirm Password	Enter the password again to confirm.
User Level	Set the security level of an account to give the permission to control different functions. There are four user levels: SUPERVISOR, POWER USER, NORMAL USER and GUEST.
Life Time	Select how long this account is allowed to stay online (1 MIN / 5 MIN / 10 MIN / 1 HOUR / 1 DAY / INFINITE)

Step2: Then, click "Save" to save your setting and create a new account.

<u>How to modify or delete an existing account</u>

Step1: Select the account you want to modify or delete.

Step2: To modify the account, click "Edit" to change the settings, and click "Save".
To remove the account, click "Delete".

Note: It's not allowed to remove an account when there's only one account in the account list.

4.8.5 Trigger

You can set the motion or face detection and select the notification function.

Note: Motion detection is not supported when the stream format is Motion JPEG.

Note: Face detection is not supported when the stream format is set to Multi-Mode.

◆ Trigger Setting

In this section, you can select to enable or disable motion & face detection.

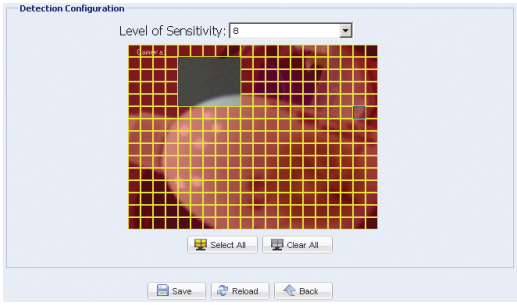| Item	Description
Motion	Select to enable or disable the motion detection function.
	· Motion Detection Area Setting
	When "Enable" is selected, click "Detection" to enter the motion detection area setting page as follows:
	Level of Sensitivity:
	Set the detection sensitivity from 0 ~ 9.
	Area Setting:
	Set the motion detection area by selecting the area grids with your mouse. Pink grids represent the area that is not being detected while the transparent grids are the area under detection. You can set multiple areas under detection.
	Click "Clear All" to set the whole area undetected.
	Click "Select All" to set the whole area under detection.
Trigger Duration	Set the duration time for trigger recording (5 / 10 / 20 / 40 seconds).

◆ Notification Setting

In this section, you can select to enable E-mail / FTP / SMS notification when a motion event happens.

Item	Description
Method	**• Email**
	When this option is checked, the network camera will upload the captured video clip to the assigned e-mail address(s) once motion recording happened.
	• FTP
	When this option is checked, the network camera will upload the captured video clip to the specified FTP site once motion recording happened.
	• SMS
	When this option is checked, the network camera will send a text message to the specified mobile phone number once a motion or face detection event occurs. For details, please refer to "4.6.6 SMS" at page 19.
Trigger Duration	Set the duration when a motion or face detection event occurs (5 / 10 / 20 / 40 seconds).
Record Time	Set the record time of the notification video clip (1 ~ 5 seconds).

4.8.8 Upgrade

Note: This function is available only for "Supervisor".
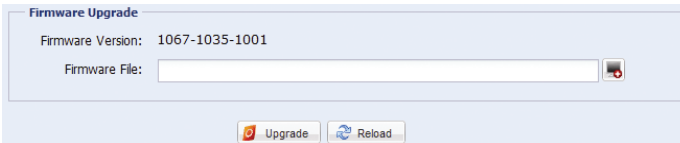
This function is used when users need to upgrade the network camera for function scalability.

Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Note: For system upgrade from a web browser, it only supports upgrading one file at a time. To upgrade all files, you need to start from Step1 again when one file is upgraded.
If you want to upgrade all files at a time, please use our supplied CMS software, Video Viewer. For details, please refer to "3.4.3 Firmware upgrade" at 8.

Step1: Click "" to browse to where you save the upgrade files, and select one of them.

Step2: Click "Upgrade" to start system upgrading.

Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

APPENDIX 1 PRODUCT SPECIFICATIONS

■ Network	
Network Compression	H.264 / MPEG4 / MJPEG
Multiple Video Streaming (Encode Modes, IPS, Resolution)	3 (H.264, MJPEG, MPEG4)
LAN Port	YES
LAN Speed	10/100 Based-T Ethernet
Supported Protocols	DDNS, PPPoE, DHCP, NTP, SNTP, TCP/IP, ICMP, SMTP, FTP, HTTP, RTP, RTSP, UPnP
Frame Rate	NTSC:30, PAL:25
Number of Online Users	10
Security	Multiple user access levels with password
Web management	(1) Web browsers, such as Internet Explorer, Mozilla Firefox, Google Chrome, & Safari for single device access, or (2) Free CMS software, Video Viewer, for up to 16 network cameras control simultaneously
■ Camera	
Image Sensor	1/3" Live MOS image sensor
Video Resolution	SXGA, SXVGA, 720P, VGA, QVGA
Min Illumination	0.1 Lux / F1.5, 0 Lux (LED ON)
Shutter Speed	1 / 60 (1/50) to 1 / 100,000 sec.
S/N Ratio	More than 48dB (AGC off)
Lens	f4.0mm / F1.5
Viewing Angle	75°
White LED	YES
White Balance	ATW
IRIS Mode	AES
Microphone	YES
Power Source (±10%)	5V / 1.2A
Operating Temperature	-0℃~40℃
■ Others	
Mobile Surveillance	iPad, iPod, iPhone, BlackBerry, Windows Mobile, Symbian & Android
RTC (real-time clock)	YES
ONVIF Compatible	YES
Motion Detection	YES
Digital Pan / Tilt / Zoom	YES
Face Tracking	YES
Event Notification	FTP / Email / SMS
Minimum Web Browsing Requirements	Pentium 4 CPU 1.3 GHz or higher, or equivalent AMD 256 MB RAM AGP graphics card, Direct Draw, 32MB RAM Windows 7, Vista & XP, DirectX 9.0 or later Internet Explorer 7.x or later

** The specifications are subject to change without notice.

** Dimensional tolerance: ± 5mm

APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING

To allow the camera automatically sending a text message when an event happens, you need to apply an API ID from Clickatell, one mobile messaging company, first.

Note: The SMS messaging is not totally free. You will be charged starting from the 11th message.

Please follow the steps below for application.

Step1: Go to http://www.clickatell.com/login.php. In "New Customers", select "Clickatell Central (API)" from the drop-down list.
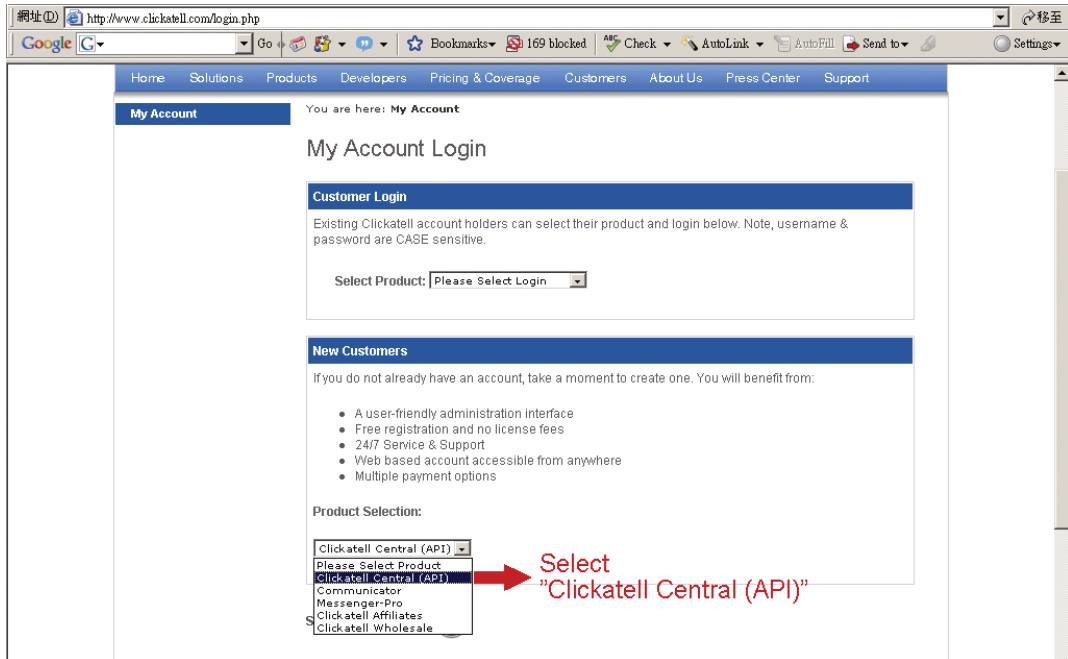
Step2: Fill in your information to create an account, and click "CONTINUE".

Note: Note down the user name and password, and the mobile phone number you specified here for SMS notification setting later.

Step2: When the account is created, the system will automatically send an Email to your specified Email address and ask you to activate your account.

Click the link in the Email to complete account activation, and enter the login page as follows. Enter the password you set, and click "Login".

Step3: Enter the mobile phone number (including your country code) you want the text message to be sent, and click "SEND ACTIVATION CODE". The system will send an activation code to that number for verification.

Check if you receive a text message from Clickatell.

Step4: Go back to Clickatell, and click the tab "Manage my Products".

Then, select "HTTP" from the drop-down list "My Connections".

Step5: In "Add HTTP API", enter a descriptive name for this service, and make sure the dial prefix is correct and callback type is "HTTP GET". Then, click "Submit".

Step5: You will get an API ID as follows.

Note: Note down the API ID for SMS notification setting later.


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APPENDIX 3 BIT RATE TABLE FOR REFERENCE

The data below is for reference only.

The bit rates listed here may vary depending on the resolution, image quality & frame rate you choose, the complexity of your monitoring area, and how often the moving objects show in your monitoring area.

Testing Environment

- Place: Office Entrance
- Network translation: H.264
- Camera type: Megapixel camera
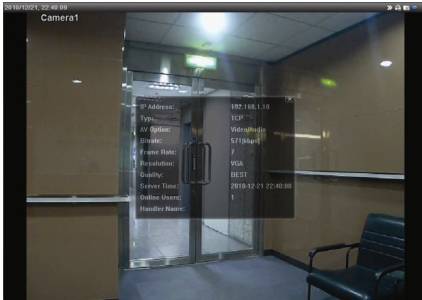
Static: No one coming in and out

Dynamic: One or two people coming in and out

Resolution	Quality	Frame Rate	(Dynamic) kbps	(Static) kbps
SXGA	Best	FULL	3253	3216
	High		2375	2160
	Normal		1571	1266
	Basic		1465	873
VGA	Best		2010	1261
	High		1042	1034
	Normal		685	572
	Basic		457	350
QVGA	Best		646	366
	High		482	350
	Normal		302	286
	Basic		168	161
SXGA	Best	1/4	1163	1076
	High		989	715
	Normal		855	534
	Basic		719	443
VGA	Best		789	571
	High		451	447
	Normal		349	237
	Basic		217	165
QVGA	Best		269	147
	High		182	131
	Normal		164	113
	Basic		97	71

Resolution	Quality	Frame Rate	(Dynamic) kbps	(Static) kbps
SXGA	Best	1/15	581	374
	High		405	342
	Normal		487	248
	Basic		337	141
VGA	Best		358	79
	High		201	63
	Normal		180	28
	Basic		92	15
QVGA	Best		111	84
	High		99	68
	Normal		97	54
	Basic		58	42