

OUTDOOR IR NETWORK CAMERA Series

User Manual

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

IMPORTANT SAFEGUARD



All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.



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We reserve the right to revise or remove any content in this manual at any time. We do not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of this manual. The content of this manual is subject to change without notice.

Grounding

This is a Safety Class 1 Product (provided with a protective earthing ground incorporated in the power cord). The mains plug shall only be inserted in a socket outlet provided with a protective earth contact. Any interruption of the protective conductor inside or outside of the instrument is likely to make the instrument dangerous. Intentional interruption is prohibited.

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Do not expose this product to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the product.

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The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.

Further source codes which are subject to the GPL-licenses are available upon request.

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:

Version

Firmware: 1035-1014-1013-1004-A2 Video Viewer Software: 0139

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1. OVERVIEW

1.1 Product Features

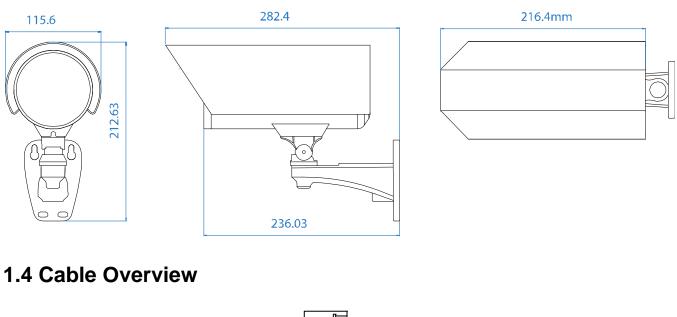
- True Day & Night surveillance & large aperture lens (F1.4)
- The best cost / performance outdoor solution with IP67
- IR effective distance up to 40 meters with 56 IR LEDs
- Smart Light Control to avoid overexposure
- Excellent outdoor ID design with cable management
- Low-latency video streaming with H.264 compression format
- Free CMS software with E-Map for multiple devices control & surveillance
- Powerful mobile surveillance supporting iPhone, BlackBerry, WinCE & J2ME
- Motion detection and alarm notification functions

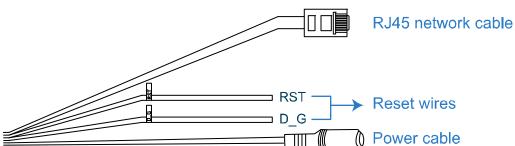
1.2 Package Content



1.3 Dimensions

Unit: mm





CABLE	DESCRIPTION
RJ45 network cable	Connect it to the supplied RJ45 cable extender adapter for cable extension, and prepare another RJ45 network cable with suitable length for your connection.
Reset wires	 Remove the insulating coating of these two wires, and twist them together to reset default. This will reset all parameters, including the IP address to factory default settings. Note: Disconnect power before twisting these two wires together, and connect to power again for reset default.
Power cable	Connect to DC12V power supply.

2. BEFORE USING YOUR NETWORK CAMERA

Before using the network camera, make sure:

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

If not, please refer to your the installation guide.

This network camera can be accessed via our supplied CMS software "Video Viewer", or the web browser "Microsoft Internet Explorer" or "Mozilla Firefox" depending on different using situations.

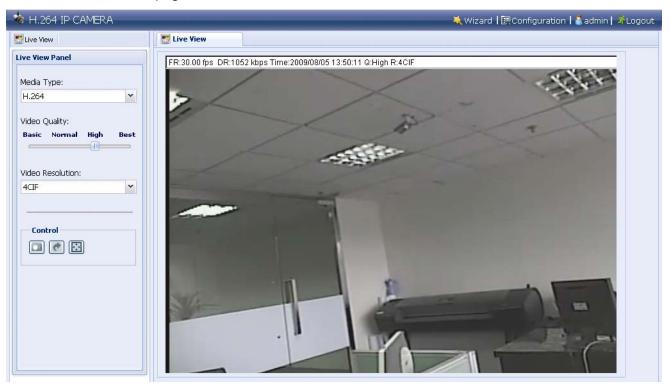
To check or configure up to 16 surveillance devices simultaneously with the record function, please use "Video Viewer".

For details about using Video Viewer, please refer to "3. ACCESSING THE CAMERA VIA VIDEO VIEWER" at page 3, and "4. SYSTEM CONFIGURATION" at page 11.



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 "5. ACCESSING THE CAMERA VIA YOUR WEB BROWSER" at page 21.



3. ACCESSING THE CAMERA VIA VIDEO VIEWER

3.1 Accessing the camera

Step1: Double-click "a" 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: Click "III" to select the IP address of the camera you intend to connect, and double-click it.

Step3: The live view is displayed in the Video Viewer.

3.2 Control panel overview

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

3.2.1 Simplified Version (Default)



Display Mode Switch

3.2.2 Full Function Version



3.2.3 Main Button Overview

B	Button		n Description					
Simplified	Full Function	Function						
1994		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.					
		Miscellaneous Control	Ą	Remote Config	Click to go to the detailed system configuration. For details, please refer to "4. SYSTEM CONFIGURATION" at page 11.			
	B) I	Record Setting	Click to go to the detailed record setting. For details, please refer to "3.3.1 Record" at page 5.			
				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.			
1	A llin	Log			and recording logs, search the desired log(s) by recording of the selected log.			
() (() () () () () () () () () () () ()	@ , @	Record / Record Stop	Click to start / stop the manual recording. The record button will be disabled when the reserved disk capacity se "Record Setting" is larger than the current disk capacity. For details, please refer to "3.3.1 Record" at page 5.					
1	O	Snapshot	Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in "Record Setting".					
Q	9	Information	Click to s	show the curre	ent network connection details.			

3.3 Frequently-used functions

3.3.1 Record

To record remotely, click " \mathbf{III} " or " \mathbf{III} " \rightarrow " \mathbf{III} " to go to the "Record Setting" page.

ecord On	Off			Prev/Post Event Red	cord Time
Manual	🗹 Schedule	Motic	on 🗖 Alarm	Prev.	Sec.
Hard D	isk Overwrite			Post	
Record Ti	me Range				
Weekly	•		Schedule	💻 Alarm	Motion
+ -		0 1 2 3	4 5 6 7 8		16 17 18 19 20 21 22 23
	Sun				
	Mon				
	Tue				
,	√ed	************	*******************		
	Thu	************			
	Fri				
	Sat				
Record P	ath				
Drive	Total(MB)	Free (MB)	Reserve (MB)	Video Path	Picture Path
C:	76308	46064	2048	C:\tempvideo\	C:\temppicture\
E:	78528	41019	2048	EA.	ΕA
F:	131061	85301	2048	FA	FΔ

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".

3.3.2 Playback

To play a recording, click "**I**", 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.

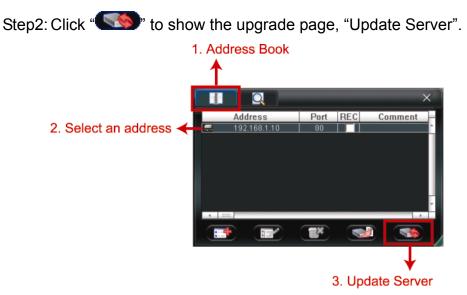
ime Ra Ra	5	One Week		Prev.	Nex	t	-Record Type — User	⊠ A	larm
	Start Time:	2009/0	3/09	<u>.</u>			Motion	₽ B	ETR
	End Time:	2009/0	8/15						
lecord	Backup Ever	nt						Qu	ery
Event	IP	Sta	rt Time	End	Time		File Path	Reserve	Error
Motion	192.168.1.10	08/14/	09 16:27:36	08/14/09	16:27:48	E:\20090814	162736_IPCAM.avc		
Motion	192.168.1.10	08/14/	09 16:27:13	08/14/09	16:27:27	E:\20090814	162713_IPCAM.avc		
Motion	192.168.1.10	08/14/	09 16:27:05	08/14/09	16:27:12	E:\20090814	162706_IPCAM.avc		
Motion	60.251.8.56	08/12/	09 15:42:19	08/12/09	15:59:12	E:\20090812	153505_Live1.avc		
User	60.251.8.56	08/12/	09 15:35:05	08/12/09	15:59:12	E:\20090812	153505_Live1.avc		
Motion	60.251.8.56	08/12/	09 15:35:05	08/12/09	15:59:12	E:\20090812	153505_Live1.avc		
User	60.251.8.56	08/11/	09 16:53:43	08/11/09	17:10:04	E:\20090811	165342_Live1.avc		
Motion	60.251.8.56	08/11/	09 16:53:43	08/11/09	17:10:04	E:\20090811	165342_Live1.avc		
User	60.251.8.56	08/11/	09 16:22:15	08/11/09	16:34:44	E:\20090811	162215_Live1.avc		
Motion	60.251.8.56	08/11/	09 16:22:15	08/11/09	16:34:44	E:\20090811	162215_Live1.avc		
User	60.251.8.56	08/11/	09 16:08:31	08/11/09	16:18:38	E:\20090811	160831_Live1.avc		
Motion	60.251.8.56	08/11/	09 16:08:31	08/11/09	16:18:38	E:\20090811	160831_Live1.avc		
User	60.251.8.56	08/11/	09 16:03:03	08/11/09	16:03:59	E:\20090811	160303_Live1.avc		
Motion	60.251.8.56	08/11/	09 16:03:03	08/11/09	16:03:59	E:\20090811	160303_Live1.avc		
Toto	l Becords:	14	Delete		ete All	Pla	y Repair	1 An	ale, 1
TOTA	r necoras:	14	Delete	Dei	CIC All		y Repair	App	лу
					Close				

3.3.3 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 "[1]]", and select the IP address of your network camera in the address book.



Step3: Click "Add" to browse to the upgrade files.

Update Server(192.168.1.10)		×
Current version: 1W29-	1W11-1W09-1W03	
Firmware		
	Add Remove	
D:\AppImg_8M.bin D:\fboot.bin D:\fernel.bin D:\xml.bin		
	Upgrade Firmware	
Configure File		ון
System Backup:	Backup	
		_

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 "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click "Select the IP address of the camera and click select the IP address of the camera and click select the IP address of the camera and click select the select the IP address of the camera and click select the select the select the IP address of the camera and click select the sel

3.3.4 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

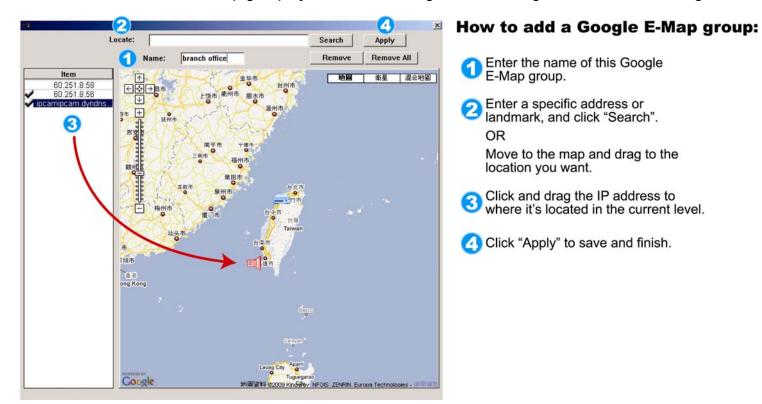
STEP1: In the simplified version, click "
"
"
to switch the control panel to the full function version, and click "

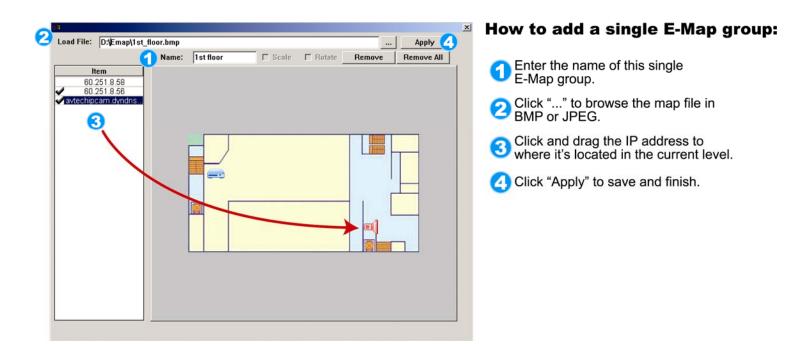
to enter the E-Map page as follows.

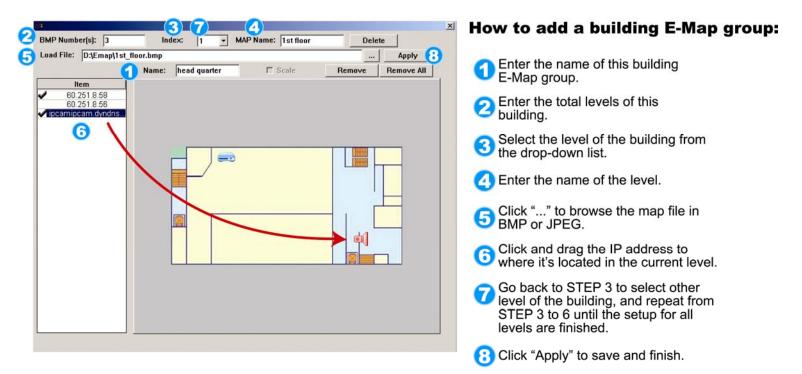
Note: To know where the buttons are, please refer to "3.2.1 Simplified Version (Default)3 at page 3, and "3.2.2 Full Function Version" at page 4.

Add Google E-MAP		
	S.	
Add Building E-MAP		
Click the right button on the mouse for adding emap.		

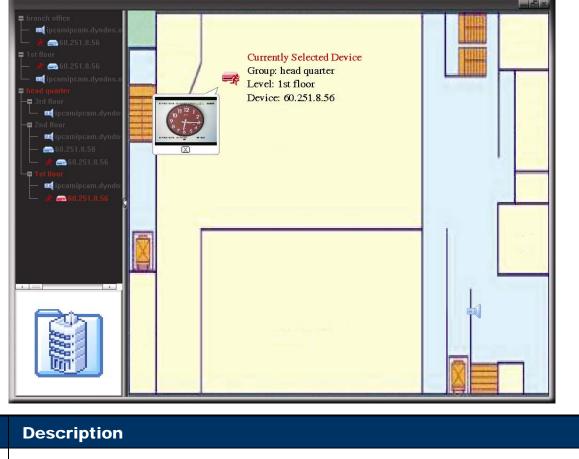
STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add. There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.







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.
Å	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.



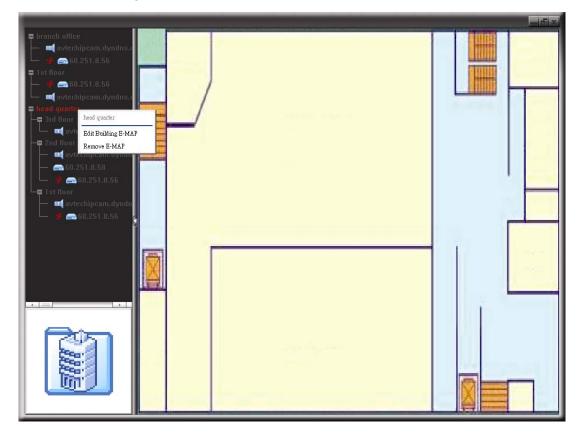
➢ For Single E-Map Group

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. SYSTEM CONFIGURATION

Before using the network camera, make sure you have installed the supplied software, "Video Viewer", and configure network settings. If not, please refer to your installer or the installation guide.

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.

Click **"O"** and select **"A"** to enter the system configuration page. All the system configurations are listed as a tree structure on the left panel as follows.

Main Menu	Sub-menu	What you can do for this function?
General		 Check the firmware version & MAC address of the camera. Change the camera title.
	Log	Check the system event logs.
	Account	 Create a new user account with different access privilege. Modify or delete an existing user account.
	OnLineUser	Check the current online user(s).
	Trigger	 Enable / disable the motion detection. Set the motion detection area. Select the event notification method.
Network		Configure network settings.
	QoS	Limit the data flow for live streaming.
	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" \rightarrow "Trigger".
	MAIL	Enter Email information for event notifications when "Email" is chosen in "General" \rightarrow "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.
Video		Set the image resolution, quality and frame rate.
Camera		Adjust the camera parameters if necessary.
	Color	Adjust the color performance.
	Time	Set daylight saving time and the current time.

4.1 General

In "General", you can check the general information for your network camera, such as the firmware version and MAC address, and also modify the identification name of your camera (up to 15 alphanumeric characters).

🔯 Server Setting : 192.16	58.1.10	×
General Log	General	
Account OnLineUser Trigger	Firmware Version: 1W27-1W10-1W09-1W03	
⊡ Network — QoS — DDNS — SN TP	MAC Address: 00:0E:11:22:33:02	
FTP MAIL Filter	Title: IPCAM	
UPnP Video ⊡. Camera		
Color Time		
ОК		
Cancel		
Apply		

4.1.1 Log

To quickly search the system log you want by event type, click the drop-down list to select the system log type you want to check, and click "Reload" to refresh the list.

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

General	General :: Log				
Account	Reload	Prev. Pa	age	Next Page	Clear
OnLineUser Trigger Network	Event filter:	: [n, Send Mail, FTP Uploa	ad, Reset D 💌
QoS	Event	T	Power		
DDNS	DDNS Update	L	Send N		
SNTP	Remote Login		🗹 FTP Uj	pload	
FTP	DDNS Update		Reset	Default	
MAIL	Remote Login	E F	Remot	te Login	
Filter	DDNS Update	i i i		Update	
UPnP	Remote Login	1		E Update	
Video	DDNS Update				
Camera	Remote Login			Update	
Color	Power On	P		m Error	
Time	SN TP Update	P	SNTP	Update	•
ок	PowerOn			2000/01/01 00:00:15	
UK	DDNS Update			2009/08/14 15:22:17	
Cancel	Remote Login			2000/01/01 00:00:27 2000/01/01 00:00:23	
Cancer	SNTP Update Power On			2000/01/01 00:00:23	
Apply	SN TP Update			2000/01/01 00:00:17	

4.1.2 Account

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

How to create a new account

Step1: Click "New", and fill in the following columns.

📴 Server Setting : 192.16	8.1.10			×
General	General :: Account			
Log Account OnLineUser Trigger	User Name admin	User Level Supervisor	Life Time INFINITE	
Network OS OS ODNS SNTP FTP MAIL Filter				
UPnP ↓ UPnP ↓ Camera ↓ Color	User Name:	Pa	assword:	
Time	User Level:	T	Life Time:	-
ОК	Ne	w Delete	Apply	
Cancel				
Apply	Max User(s):	10 🗆 Anonym	ous User Login	Update
Server Setting : 192.16	8.1.10			×
⊟ General	General :: Account			
-Log -Account	User Name	Uær Level	Life Time	
OnLineUser Trigger	admin	Supervisor	INFINITE	
- Network				
- DDNS - SNTP				
- FTP				
- MAIL - Filter				
UPnP Video				
E-Camera - Color	User Name: offic	e Pa	assword: ****	**
Time	User Level: Power Use	er 🔹	Life Time: 1	DAY 🔹
OK	Can	cel Delete	Apply	_
Cancel				
Apply	Max User(s):	10 C Anonyme	ous User Login	Update

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.
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 "Apply" to save your setting and create a new account.

How to modify or delete an existing account

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

Step2: To modify the account, change the setting directly, and click "Apply". 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.

Server Setting : 192.16				×
General	General :: Account			
Account	User Name	User Level	Life Time	
OnLineUser	admin	Supervisor	INFINIT	3
Trigger				
QoS				
DDNS				
SN TP FTP				
MAIL				
Filter				
UPnP Wideo				
- Camera	User Name:	admin P	assword:	*****
- Color				
Time	User Level: Superv	risor 🔹	Life Time:	INFINITE 🗾
ОК		New Delete	Apply	
Cancel				
Apply	Max User(s):	10 🔽 Anonym	ous User Login	Update

4.1.3 OnLineUser

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

Ger Log Account OnLineUser Trigger	neral :: OnLineUser Online User Ir	oformation.		Refresh
Vetwork	onnie oder n	norma aon.		
- QoS DDNS	User Name	User Level	IP Address	Media Type
SNTP FTP	admin admin	Supervisor Supervisor	192.168.1.10 60.248.97.6	MPEG_AUDIO MPEG_AUDIO
MAIL Filter				
UPnP				
mera Color				
Time				
ок				
Cancel				
Apply				

4.1.4 Trigger

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

🔯 Server Setting : 192.16	8.1.10	X
- General	General :: Trigger	Edit Detection
Log Account OnLineUser	Alarm: CEnable C Disable	Sensitivity: High
⊡ Network ⊡ Network	Motion: © Enable C Disable Setting	
DDNS SNTP	Duration: 5 💌 Seconds	
FTP MAIL	Notify	
- Filter UPnP	Method: 🔽 Email 🗌 FTP	
⊡ ··· Video ⊡ ·· Camera … Color … Time	Video Type: © H264 C MPEG4 C JPEG	
ОК	Total time: 3 💌 Seconds	
Cancel		
Apply		[+]Select All [-]Clear All Apply

Trigger Setting

In this section, you can select to enable or disable the alarm or motion detection.

Item	Description
Motion	Select to enable or disable the motion detection function.
	Motion Detection Area Setting
	When "Enable" is selected, click "Setting" to enter the motion detection area setting page as follows:
	Sensitivity:
	Set the detection sensitivity (High / Normal / Low).
	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.
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 and/or FTP notification when an alarm or a motion happened.

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 or alarm recording happened. FTP When this option is checked, the network camera will upload the captured video clip to the specified FTP site once motion or alarm recording happened.
Video Type	Select the file type of the notification files: H264 (video) / MPEG4 (video) / JPEG (image).
Total	Set the record time of the notification video clip (1 ~ 5 seconds).

4.2 Network

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

📴 Server Setting : 192.16	81.10	×
General	Network	
Account OnLineUser Trigger	IP Type: Static IP PPPOE DHCP Cturic ID	
Network QoS DDNS SNTP	Static IP Server IP: 192 . 168 . 1 . 10	
SN TP FTP MAIL	Gateway: 192 . 168 . 1 . 254	
Filter UPnP	NetMask: 255 . 255 . 0	
⊡ Video ⊡ Camera Color	Web Port: 80	
Time		
ОК	User Name: Password:	
Cancel		
Apply		

4.2.1 QoS

QoS, Quality of Service, is the ability to control the data flow for real-time streaming. This function is important if your network bandwidth is insufficient and you have other devices to share the network bandwidth.

Check "QoS Enable", and set the max. upload rate from 256 to 10240 kbps.

📴 Server Setting : 192.16	8.1.10		×
	Network :: OoS Interface: Max. Upload Rate:	I QoS Enable Ethernet I 4096 kbps	
OK			
Cancel			
Apply			

4.2.2 DDNS

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

🔯 Server Setting : 192.16	58.1.10	x
General	Network :: DDNS	
- Account - OnLineUser - Trigger	DNS Server1: 168 . 95 . 1 . 1	
- Network	DNS Server2: 139 . 175 . 55 . 244	1
SNTP FTP MAIL	DDNS: © On Off Default host name: MAC address of this camera	
Filter UPnP Video	System Name: default 💽 🔶	
⊡ Camera Color Time	Hostname: MAC000E53114389 .ddns.dvrtw.com.tw	
ОК	E-Mail: administrator@network.com	
Cancel		
Apply		

4.2.3 SNTP

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

🔯 Server Setting : 192.16	8.1.10		×
⊡ General General General General Constant Constan	Network :: SNTP GMT: [GMT+08:00] Taipei		
Network			•
QoS DDNS SNIP FTP	Server Name:	tock.stdtime.gov.tw	1
MAIL Filter UPnP	Sync. Period:	None]
- Video ⊟- Camera - Color - Time	Server Time:	08/14/09,15:49:42	
ОК	S	ync Server Time	
Cancel			
Apply			

Function	Description
GMT (Greenwich Mean Time)	Once users choose the time zone, the network camera will adjust the local area time of the system automatically.
Server Name	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync. Period	Select "Daily" to synchronize the camera time with the network time every day or "None" to turn off this function.
Sync Server Time	Click and the network camera will synchronize the time with the network time.

4.2.4 FTP

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

🔯 Server Setting : 192.16	8.1.10		×
General	Network :: FTP		
Log Account OnLineUser Trigger	User Name:	manager	
⊡- Network QoS DDNS	Password:	*****	
SN TP FTP MAIL	Port:	21	
Filter UPnP Video	Server:	192.168.2.32	
⊡ Camera 	Directory:	upload	
OK			
Cancel			
Apply			

4.2.5 MAIL

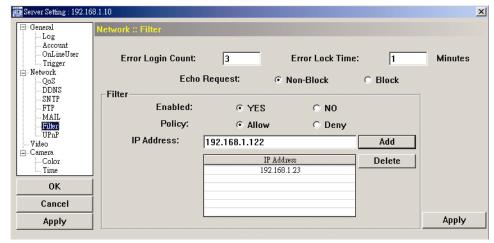
Enter the detailed e-mail information and click "Apply" to confirm. The information you set here will be applied when "Email" is selected in "General" \rightarrow "Trigger".

🔯 Server Setting : 192.16	8.1.10	
eneral	Network :: MAIL	
Account OnLineUser	Server: smtp.gmail.com Port: 465	
- Trigger	Mail From: manager@gmail.com	
- QoS	SSL Encryption: © Yes O No	
SN TP FTP	Verify Password	
	Verify: © Yes © No	
UPnP Wideo	User: manager Password: ****	
⊢- Camera Color	Email Address	
Time	Mail Account	
ОК	manager@tech.com Add	
Cancel	Delete	
Apply		

Function	Description
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.
SSL Encryption	Select "Yes" if your e-mail server is using SSL encryption to protect your e-mail content from unauthorized access.
Verify Password	Some mail servers are required to verify the password. Please enter the "user name" and "password".
Email Address	Add the e-mail address(s) of the assigned recipient(s).

4.2.6 Filter

Choose to permit or block the IP address(es) which can access this camera.



Function	Description	
Error Login 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.	
Filter	Choose to enable (YES) or disable (NO) the filter function.	
	If "YES" is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.	
	 To add an item to the IP address list, key in the IP address in "IP Address", and click "Add". To remove an existing item in the IP address list, click the item you want to remove, and click "Delete". 	
Apply	Click "Apply" on the bottom right corner when any change is made in this menu, or the change will not be recorded in the system.	

4.2.7 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 UPnP" 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".

🔯 Server Setting : 192.16	8.1.10		×
🖻 General	Network :: UPnP		
- Account - OnLineUser - Trigger - Network - QoS - DDNS - SNTP - FTP - MAIL - Filter - Video - Color - Time	Friendly name:	☑ Enable UPnP IP CAMERA (Fixe-000E11223302	
ОК			
Cancel			
Apply			

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.

For details about camera access via your web browser, please refer to "5. ACCESSING THE CAMERA VIA YOUR WEB BROWSER" at page 21.

4.3 Video

Set the image resolution, quality and frame rate.

🚋 Server Setting : 192.16	68.1.10	×
⊡-General Log Account	Video	
OnLineUser Trigger	JPEG: 4CIF V HIGH V	
QoS DDNS SNTP		
FTP MAIL Filter	MPEG: 4CIF HIGH	
UPnP 	H264: 4CIF V HIGH V	
Color Time		
0К		
Cancel	FrameRate: FULL	
Apply		

Item	Description
JPEG / MPEG / H264	Select the image resolution and quality. Image Resolution: CIF / 4CIF Image Quality: BEST / HIGH / NORMAL / LOW
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; 1/20; 1/25; 1/30).
	The actual frame rate depends on the actual network connection, and may be lower than the specified one.

4.4 Camera

Adjust the camera parameters if necessary.

📴 Server Setting : 192.16	8.1.10		×
- General	Camera		
Log Account OnLineUser Trigger	Backlight:	OFF 💌	
- Network	Mirror:	OFF 💌	
DDNS SN TP	IR Control:	IR-PR0 💌	
MAIL Filter	White Balance:	Auto 💌	
UPnP Video	Brightness:	· · · · · · · · · · · · · · · · · · ·	
⊟ Camera Color 	Sharpness:		
OK	Color:	· · · · · · · · · · · · · · · ·	
Cancel	AGC:		
Apply		Default	

Note: To preview the changes, click "Apply".

Item	Description
Backlight	It is the function to adjust the image to compensate for an area that is overpowered by brightness because of excessive light. The image will be properly exposed for clearness. Select to activate (ON) or disable (OFF) this function.
	Note: This function is available only in the day mode.
Mirror	Mirror is used when you want to rotate the images horizontally based on your installation situation. The options are: ON / OFF.
IR Control	Select "IR PRO" to smartly activate the IR LEDs when needed, "Always On" to always activate the IR LEDs, or "Always Off" to deactivate the IR LEDs.
White Balance	The white balance function processes the current image to retain color balance over a color temperature range. According to different color temperatures and installation situations, set the white balance function to the suitable mode.
	The options are: Auto / AWB1 / AWB2 / AWB3.
Brightness	Brightness helps to adjust the bright level of image based on different light conditions.
	Click and drag the slider to adjust the brightness. The value is from 0~127. The larger the value, the brighter the image.
Sharpness	Sharpness enhances the clarity of image detail by adjusting the aperture and sharpening the edges in the pictures.
	Click and drag the slider to adjust the sharpness. The value is from 2~15. The larger the value, the sharper the image.
Color	Color helps to adjust the color level of image through the camera.
	Click and drag the slider to adjust the color level. The value is from 0~127. The larger the value, the thicker the image.
AGC	It is a function to adjust the amplitude of the signal input according to different light conditions.
	Click and drag the slider to adjust the amplitude of the signal input. The value is from 0~255. The larger the value is, the more the signal noise will be.
Default	Click to restore all changes to default values.

4.4.1 Color

Adjust the color performance from Brightness, Contract, Hue and Saturation. Click and drag the slider to preview the color change on the live view panel and adjust the image color. Then, click "Apply" to confirm the change.

To restore the default values, click "Default", and click "Apply" to confirm the change.

🔯 Server Setting : 192.16	8.1.10		×
⊡ General	Color		
Account OnLineUser Trigger Network QoS	Brightness		128(0~255)
DDNS SNTP FTP MAIL	Contrast		128(0~255)
Filter UPnP Video Camera	Hue		128(0~255)
Color Time	Saturation		128(0~255)
Cancel Apply		Default	

4.4.2 Time

Set daylight saving time and the current time.

🔁 Server Setting : 192.16	8.1.10	×
- General Log Account OnLineUser	Time	
	On Off Adjust: 01:00 ↔ Start: Aug. ▼ First Week ▼ Mon. ▼ 06:00 ↔	
FTP MAIL Filter UPnP	End: Oct. Last Week Mon. 10:00	
Video ⊟ Camera Color Time	Time 2009/08/14 16:18:29	
OK Cancel Apply		

Function	Description
Daylight Saving	Specify whether to use daylight saving time (ON / OFF). If this function is enabled, set the time period (START / END), and adjust the daylight saving time in hours (ADJUST).
Time	Set the current time.

5. ACCESSING THE CAMERA VIA YOUR WEB BROWSER

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

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 3.

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.

5.1 Accessing the camera

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

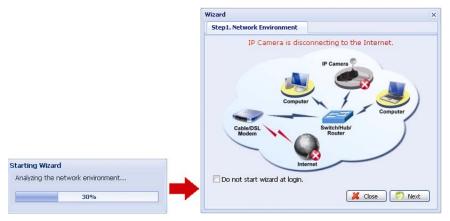
For example, for IP address 60.121.46.236 and port No. 888, please key in "<u>http://60.121.46.236:888</u>" into the URL address box, and press "Enter".

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

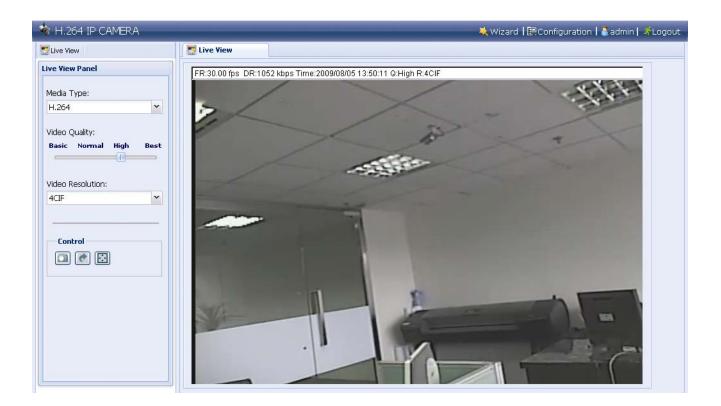


Step3: The wizard is then starting analyzing your network environment, and shows your network environment.

- To continue setting the password, date & time, and network, click "Next" and follow the step-by-step instructions.
- 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".

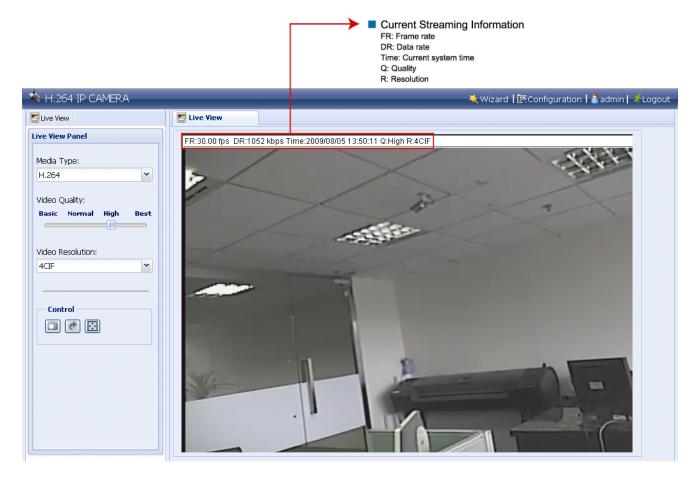


Step3: When the login is successful, the live view is shown similar as follows.



5.2 Control panel overview

5.2.1 Live View Panel



Function	Icon	User Level	Description
Media Type		Supervisor / Power User / Normal User / Guest	Select the web transmission format from the drop-down list: H.264 / MPEG-4 / Motion JPEG / QuickTime
			For users using Mozilla Firefox, only "QuickTime" is selectable.
			QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in you operating system before selecting "QuickTime". When it is selected, you will be promoted to enter the user name and password to access the camera.
Video Quality		Supervisor / Power User / Normal User	Click & drag the slider to select the video quality: Basic / Normal / High / Best.
Video Resolution		Supervisor / Power User / Normal User	Select the video resolution from the drop list: 4CIF / CIF.
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot for the current view, and a new browser window will be opened to display the

Function	Icon	User Level	Description
			captured image.
Flip	•	Supervisor / Power User / Normal User	Click to rotate the image 180 ⁰ counterclockwise when necessary.
Full Screen	$\mathbf{\dot{\cdot}}$	Supervisor / Power User / Normal User	Click to display the image in full screen.

5.2.2 System Configuration Panel

Click "Configuration" to enter the configuration page.

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.

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

- For details about "Network", please refer to "4.2 Network" at page 15.
- For details about "Camera", please refer to "4.4 Camera' at page 18.
- For details about "General", please refer to "4.1 General" at page 12, and "4.3 Video" at page 18.

🐐 H.264 IP CAMERA		🗮 Wizard 📰 Configuration 퉒 admin 🌾 Logout
ELive View	Live View	
Configuration Co	Network Network Configuration IP Type: Server IP: Gateway: Net Mask: Port: DNS1:	Static IP PPPoE DHCP 192.168.1.10 192.168.1.254 255.255.255.0 80 168.95.1.1
 Mirme Advance General Server Log Login Account Trigger Video Google Maps Upgrade 	DNS2: MAC Address:	139.175.55.244 00:0E:11:22:33:02

Main Menu	Sub-menu	Reference
Network	Network	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network}$
	QoS	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{QoS}$
	DDNS	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{DDNS}$
	SNTP	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{SNTP}$
	FTP	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{FTP}$
	Mail	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{MAIL}$
	Filter	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{Filter}$
	UPnP	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Network} \rightarrow \text{UPnP}$
Camera	Color	$ \blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Color} $
	Time	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Time}$
	Advance	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Camera}$
General	General	$ \rightarrow \text{Custom Setting}$
	Server Log	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{General} \rightarrow \text{Log}$
	Login	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{General} \rightarrow \text{Account}$
	Account	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{General} \rightarrow \text{Account}$
	Trigger	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{General} \rightarrow \text{Trigger}$
	Video	$\blacksquare \rightarrow \text{Remote Config} \rightarrow \text{Video}$
	Google Maps	 Allows you to know where the network camera is. The system will prompt you to apply a Goole Maps Key if your access is denied. Please follow the instructions below when you're denied: Click "Sign up for a Google Maps key" to enter the application page. Check the terms and conditions, and enter the IP address of the network camera. Then, click "Generate API Key". Copy the generated API key, and click "Update Google Maps Key" on the web browser to paste it.
	Upgrade	i → i

6. ACCESSING THE CAMERA VIA YOUR MOBILE PHONE

6.1 Checklist Before Using

Device	Make sure
WinCE-Based PDA	The operating system is Windows Mobile 5.0 Packet PC / 6.0 Professional*. Windows Mobile 5.0 Smartphone / 6.0 Standard is NOT supported.
	J2ME MIDP2.0 is supported.
	Internet services via Wireless or GPRS / 3G networks are subscribed and available to use.
	For details, please check with your local network operator or service provider.
J2ME-Based Mobile Phone	J2ME is supported.
	Internet services via GPRS / 3G networks are subscribed and available to use. For details, please check with your local network operator or service provider.
iPhone	For details, please check with your local network operator or service provider. The port number of the connected device is NOT 80. The suggested port
iPhone	For details, please check with your local network operator or service provider. The port number of the connected device is NOT 80. The suggested port number is 88.

Make sure your PDA or mobile phone conform to the following requirements:

* We do not guarantee the compatibility of the mobile surveillance software in every touch panel PDA brand with the operating system of Windows Mobile 5 Packet PC / 6.0 Professional. Please check with your distributor for details.

6.2 Program Download / Installation

6.2.1 For iPhone



STEP1: Go to "App Store" via your iPhone, and search our program with one of the following keywords: EagleEyes / PTZ / IPCAM / Surveillance.

Note: You might be charged for Internet access via wireless or 3G networks. For the Internet access rate details, please check with your local network operator or service provider.

STEP2: Follow the on-screen instructions to download and install the program.

"will be shown on the iPhone desktop for quick access when the program is installed successfully.

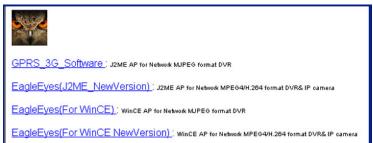
6.2.2 For WinCE- & J2ME-Based Mobile Phone

STEP1: To download the program for mobile surveillance, please visit the following website address from your PDA or mobile phones:

http://211.75.84.102/fae/MobileAP/index.html

- **Note:** The Internet access setting via wireless or GPRS / 3G networks varies depending on different PDA or mobile phone brand. For details, please refer to its individual user manual, or check with your local network operator or service provider.
- **Note:** You might be charged for Internet access via wireless or GPRS / 3G networks. For the Internet access rate details, please check with your local network operator or service provider.

You will see the following four programs available:



- STEP2: Download the program as instructed:
 - Select "EagleEyes (J2ME New version)" if you're using the J2ME-based mobile phone.
 - Select "EagleEyes (For WinCE New Version)" if you're using the WinCE-Based PDA phone.
- STEP3: Follow the on-screen instructions after downloading.

For mobile phones, the program will be saved to the location you specified. For WinCE-Based PDA, the program will be saved to "Programs".

6.3 Program Setup

- STEP1: Get the necessary information for accessing your network camera, such as the IP address, user name, password, port number, etc.
- STEP2: Activate the program, and go to its setting page to fill in the information needed.
- STEP3: Try to access your network camera to see if the connection works.

APPENDIX PRODUCT SPECIFICATIONS

Network Compression	H.264
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
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 or Mozilla FireFox, for single device access, or (2) Free CMS software, Video Viewer, for up to 16 network
	cameras control simultaneously
Camera	
Image Sensor	1/3" HR color CCD image sensor
Pixels	768(H) x 494(V) <ntsc> / 752(H) x 582(V)) <pal></pal></ntsc>
Min Illumination	0.05 Lux / F1.4, 0 Lux (IR ON)
Shutter Speed	1 / 60 (1/50) to 1 / 100,000 sec.
S/N Ratio	More than 48dB (AGC off)
Lens	f6.0mm
Viewing Angle	48°
IR LED	56 units
IR Effective Range	Up to 40 meters
Smart Light Control	YES
White Balance	ATW
AGC	Auto
IRIS Mode	AES
IP Rating	IP67
Power Source (±10%)	DC12V / 1.5A
Operating Temperature	-10°C ~40°C
Dimensions (mm)**	282.4(L) x 115.6(W) x 212.63(H)
Others	
Mobile Surveillance	iPhone, BlackBerry, J2ME & WinCE
Motion Detection	YES
Alarm and event Notification	By FTP and Email
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 Vista, XP, Windows 2000 Server, ME, 98, DirectX 9.0 or I Internet Explorer 6.x or later

** The specifications are subject to change without notice.

** Dimensional tolerance: ± 5mm