



1.3 Megapixel

Compact IP Dome Camera

User's Manual Ver1.4

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1. Software Version

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The Compact IP Dome Camera's current software version is as follows:

Time Released	Version
Oct., 2012	p20091016PS



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The 1.3 Megapixel Compact IP Dome Camera features a 1/3.8" Sony Progressive CMOS Sensor and generates excellent image quality. Having excellent high definition image quality in low-light conditions, this camera could identify the individuals and objects of interest easily.

With Power over Ethernet (IEEE 802.3af) feature, the need of power outlets could be totally eliminated; likewise installation and cabling cost would be significantly reduced.

The IP Dome Camera's flat and sophisticated design enhances more application possibilities, such as indoor/outdoor and mobile surveillance. Additionally, its light weight and compact size offer quick and simple installation on the ceilings or walls of houses and vehicles.

2.1 Features

- 1/3.8" 1.3M progressive CMOS
- Simultaneous MPEG-4 and MJPEG video stream (dual stream)
- Resolution: MPEG-4 VGA,QVGA,CIF,QCIF

MJPEG 1280 x 960(4 VGA), VGA, QVGA, CIF, QCIF

- Frame Rate: MPEG-4 30fps@VGA; MJPEG 15fps@1280 x 960
- Image Setting: Rotation: Flip, Mirror, and 180° Rotate Brightness, Sharpness, Contrast, White Balance, Exposure Control Digital Zoom: x1 ~ x12
- Audio Compression: G.711 PCM 64 kbit/s
 G.726 ADPCM 32 or 24 kbit/s
- Shutter Speed: 1.5~1/15000 sec
- Interface: 10/100 Ethernet
- Compact Size Dome Cover and Housing
- Power over Ethernet



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Please check the package contains the following items listed below.



2.3 Camera Overview



De	signation	Description
4	Reset Button	Restore to default setting; press the
	Reset Bullon	button with a proper tool
2	Lens	Rotate the lens right/left to adjust focus
3	Focus Fixed Screw	Loosen the screw to adjust the lens
4	Tilt Fixed Screw	Loosen the screw to adjust tilt angle



3. Preparations for IP Camera Setup

This chapter outlines information about system requirements for IP Dome Camera operation, power and Ethernet connection for Indoor/Outdoor IP Dome Camera, and access to the camera.

3.1 System Requirements

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To perform the IP Dome Camera via web browser, please ensure your PC is in good network connection, and meet system requirements as described below.

Items	Minimum Requirement
	1. Intel Pentium IV, 3 GHz or higher, Intel Core2 Duo, 2
Baraanal Computer	GHz or higher
Personal Computer	2. 1 GB RAM or more
	3. AGP graphics card 64 MB RAM, Direct Draw
Operating System	Windows VISTA or Windows XP
Web Browser	Microsoft Internet Explorer 6.0 or later
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
Viewer	ActiveX control plug-in for Microsoft IE

3.2 Ethernet Connection

Please follow the instructions below to connect Indoor/Rugged IP Dome Camera's Ethernet cable.

Indoor Camera



PoE Connection

Connect the one end of the PoE cable to the Ethernet port on the camera, and the other end to Power Sourcing Equipment (PSE) like hubs or routers.



Check the status of the link indicator and activity indicator LEDs; if the LEDs are unlit, please check the connections.



Green Link Light indicates good network connection. Orange Activity Light flashes for network activity indication.

Rugged Camera



M12 D-Coded Connector



PoE Waterproof Switch

M12 D-Coded Connection

For the Rugged IP Dome Camera, connect its Ethernet cable to a M12 waterproof switch as shown above.



NOTE: Please use a PoE waterproof switch/hub so that the camera can work.

M12 D-Coded Connector's Pin Definition



Pin 1: Rx+ Pin 2: Tx+ Pin 3: Rx-Pin 4: Tx-

4. Accessing Camera

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For initial access to the IP Dome Camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in "DeviceSearch" folder in the supplied CD.

Device Search Software Setup

Step 1: Double click on the program Device Search.exe (see the icon below); its window will appear as shown below. Then click the "Device Search" button.



Device Se		0.20	Project Filter				
 Local Bro IP Relay 		TCP V	ALL) device(s) fou Device	Search	
Model	Proj	Name	IP	Port	Netmask	Мас	

Step 2: The security alert window will pop up. Click "Unblock" to continue.



Device Search

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Step 3: Click "Device Search" again, and all the finding IP devices will be listed in the page, as shown in the figure below. The IP Dome Camera's default IP address is: 192.168.0.250.

Search Me			Project Filter		2 device(s) found	lk
C IP Rela	ay	TCP V	ALL	<u> </u>	Device S	earch
Model	Proj	Name	IP	Port	Netmask	Мас
NH060	NH060	MegaPixelCamera	192.168.7.240	80	255.255.255.0	00:D0:89:00:AC:C1
NH060	NH060	MegaPixelCamera	192,168.0.250	80	255.255.255.0	00:D0:89:00:A1:07

Step 4: Double click or right click and select "Browse" to access the camera directly via web browser.

Device S	earch - 1.0.0	20				
Search Me			Project Filter	;	2 de∨ice(s) found	1
C IP Rela	w	TCP V	ALL		Device Se	earch
Model	Proj	Name	IP	Port	Netmask	Мас
NH060	NH060	MegaPixelCamera	192.168.7.240	80	255.255.255.0	00:D0:89:00:AC:C1
NH060	NH060	MegaPixelCamera	192.168.0.250	Detail Info.	255.255.0	00:D0:89:00:A1:07
				<u>B</u> rowse Metwork Sett	nb	

Step 5: Then the prompt window of request for entering default username and password (as shown below) will appear for logging in to the IP Dome Camera.

R	45
MegapixelIPCame User name: Password:	era



The default login ID and password for the Administrator are:

Login ID	Password
Admin	1234



NOTE: ID and password are case sensitive.



NOTE: It is strongly advised that administrator's password be altered for the security concerns. Refer to section <u>5.3.2 Security</u> for further details.

Additionally, users can change the IP Dome Camera's network property, either DHCP or Static IP directly in the device finding list. Refer to the following section for changing the IP Dome Camera's network property.

Example of Changing IP Dome Camera's Network Property

Users can directly change an IP Dome Camera's network property, ex. from static IP to DHCP, in the finding device list. The way to change the IP Dome Camera's network property is specified below:

Step 1: In the finding device list, click on the IP Dome Camera that you would like to change its network property. On the selected item, right click and select "Network Setup." Meanwhile, record the IP Dome Camera's MAC address, for future identification.

Search Me	ethod Broadcast		Project Filter		.	3 dev	rice(s) found	łi	
C IP Rel	ау	TCP V	ALL			D	evice S	earch	
Model	Proj	Name	IP		Port	Netr	mask	Мас	
NH060	NH060	MegaPixelCamera	192.168.7.2	40	80	255.	.255.255.0	00:D0:89:00	D:AC:C1
NH060	NH060	MegaPixelCamera	192.168.7.1	Deta	il Info.	ore	255.255.0	00:D0:89:00	D:AC:C2
NH060	NH060	MegaPixelCamera	192.168.7.	Brov			255.255.0	00:D0:89:00	D:AC:C3

Step 2: The "Network Setup" page will come out. Select "DHCP," and press "Apply" button down the page.

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Method al Broadcast	Project Filter		3 device(s) foun	dl
elay TCP 💌			Device S	earch
Network Setup	IP	Port	Netmask	Мас
evice Information	192.168.7.240	80	255.255.255.0	00:D0:89:00:AC:C1
Model NH060	192.168.7.197	80	255.255.255.0	00:D0:89:00:AC:C2
Project NH060	192.168.7.141	80	255.255.255.0	00:D0:89:00:AC:C3
Name MegaPixelCamera				
MAC 00:D0:89:00:AC:C2				
letwork Property				
DHCP Static IP				
IP Address 192.168.7.197				
Gateway 192.168.7.254				
Netmask 255.255.255.0				
DNS 192,168,10,1				
Apply Close				

Step 3: Click "OK" on the Note of setting change. Wait for one minute to re-search the IP Dome Camera.

Note	×
Control package sent. Please try to re-search the device afte OK	er one minute.

Step 4: Click the "Device Search" button to re-search all the devices. Then select the IP Dome Camera with the correct MAC address. Double click on the IP Dome Camera, and the login window will come out.

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Cocal	Search Method C Local Broadcast TCP TCP		Project Filter		3 device(s) found Device S	1
Model	Proj	Name	IP	Port	Netmask	Mac
VH060	NH060	MegaPixelCamera	192.168.7.240	80	255.255.255.0	00:D0:89:00:AC:C1
VH060	NH060	MegaPixelCamera	192.168.7.167	80	255.255.255.0	00:D0:89:00:AC:C2
VH060	NH060	MegaPixelCamera	192.168.7.141	80	255.255.255.0	00:D0:89:00:AC:C3

Step 5: Enter User name and Password to access the IP Dome Camera.

Installing DC Viewer Software Online

For the initial access to the IP Dome Camera, a client program, DC Viewer, will be automatically installed to your PC when connecting to the IP Dome Camera.

If the Web browser doesn't allow DC Viewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (see <u>Appendix B: Internet Security Settings</u>) to continue the process.

The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser (see the figure below). Right click on the Information Bar and select "Install ActiveX Control…" to allow the installation.

File Edit View Favorites Tools	Help		
🔁 Back 🔹 🐑 - 💌 🛃 🤮	🏠 🔎 Search 🤺 Favorites 👩 🙆 • 🎍	🕞 🖑	
dress (1) http://102.149.0.250/			
	tiueY control: 'Menanivel ID Camara Viewer' from 'DVM/COL	OP COLUMN 1	_
The second se	tiveX control: "Megapixel IP Camera Viewer' from 'DYNACOL	OR Install ActiveX Control	
ddress 🗃 http://192.168.0.250/ 7 This site might require the following Ac	tiveX control: 'Megapixel IP Camera Viewer' from 'DYNACOL Megapixel Home	OR Install ActiveX Control What's the Risk?	7

Then the security warning window will pop up. Click "Install" to carry on software installation.

Click "Finish" to close the DC Viewer window when download is finished. For the detailed software download procedure, please refer to <u>Appendix C: DC</u> <u>Viewer Download Procedure</u>.

Once login to the IP Dome Camera, users will see the Home page as shown below:



Administrator/User Privileges

"Administrator" represents the person who can configure the IP Dome Camera and authorize users access to the camera; "User" refers to whoever has access to the camera with limited authority, i.e. entering Home and Camera setting pages.

Lens Adjustment

The image displays on the Home page when successfully accessing to the IP Dome Camera. Adjust the camera's focus to produce a clear image. Please refer to the procedure below.

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Step 1: Unscrew the IP Dome Camera's cover.



Step 2: Loosen the focus fixed screw, and rotate the lens counter-/clockwise to adjust focus; loosen the tilt fixed screw, and adjust the camera's tilt angle.



5. Configuration & Operation

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The IP Dome Camera is provided with a user-friendly browser-based configuration interface, and a free bundled CMS (Central Management System) for record and playback video. In this chapter, information about main page introduction, system related settings and camera settings will be described in detail.

For further information about CMS software, please refer to <u>Chapter 6. CMS</u> <u>Software Introduction</u> and CMS user manual.

5.1 Browser-based Viewer Introduction

The figure below shows the main page of the IP Dome Camera user interface.

At the bottom of the main page, users can adjust video display size (x1, x1/2 and full screen), select a kind of video format (MPEG-4 and MJPEG) and save MJPEG snapshots (see <u>5.3.8 Snapshot</u>).



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There are five tabs: Home, System, Streaming, Camera and Logout on the top panel.

<u>Home</u>

Users can monitor live video of the targeted area.

System setting

Administrator can set host name, system time, root password, network related settings, etc. Further details will be interpreted in section <u>5.3 System Related</u> <u>Settings</u>.

Streaming setting

Administrator can modify video resolution and rotate type and select audio compression mode in this page.

Camera setting

Users can adjust various camera parameters, including <Exposure>, <White Balance>, <Brightness>, <Sharpness>, <Contrast> and <Digital Zoom>.

Logout

Click on the tab to relogin the IP Dome Camera with another username and password.

5.2 Home Page

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In the Home page, there are several function buttons right down the displayed image.



Screen Size Adjustment

Image display size can be adjusted to x1/2 and full screen.

Digital Zoom Control

In the full screen mode, users can implement digital PTZ by right clicking the mouse, rotating the mouse wheel (for zoom in/out), and drag the mouse into any direction.

Snapshot 🧖

Press the button, and the MJPEG snapshots will automatically be saved in the appointed place. The default place of saving snapshots is: C:\.



The figure below shows all categories under the "**System**" tab. Each category in the left column will be explained in the following sections.



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NOTE: The "System" configuration page is only accessible by Administrator.

Megapixel	Home	System	Streaming	Camera	Logout	
System	System					
Security	Host Nam	e:	MegaPixelC	amera		
Network						
DDNS						
Mail	💿 Sync W	ith Compute	r Time			
FTP		PC date	: 2008/07/07	7 [yyyy/mm/c	dd]	
Application						
Motion detection		PC time	: 17:44:54	[hh:mm:ss]		
Snapshot	🔘 Manual					
lris adjustment		Data	: 2007/01/0:		441	
View log file		Date	. 2007/01/0.	r faaaaan ah	10]	
View user information		Time	: 00:00:00 [[hh:mm:ss]		
View parameters			Save			
Factory default						
Software version						
Software upgrade						

5.3.1 Host Name and System Time Setting

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Press the first category: <System> in the left column; the page is shown as below.

Megapixel	Home	System	Streaming	Camera	Logout	
System	System					
Security	Host Nam	ie :	MegaPixel0	Camera		
lletwork						
DDNS						
Mail	💿 Sync W	ith Compute/	r Time			
FTP		PC date	: 2008/07/0	7 [yyyy/mm/c	dd]	
Application						
Motion detection		PC time	: 17:44:54	[hh:mm:ss]		
Snapshot	🔘 Manual					
lris adjustment		Data	: 2007/01/0	1	1	
View log file		Date	: 2007/01/0	T [î î î î î î î î î î î î î î î î î î	aaj	
View user information		Time	: 00:00:00	[hh:mm:ss]		
View parameters			Save			
Factory default						
Software version						
Software upgrade						

Host Name

The name is for camera identification. If Motion Detection function (see <u>5.3.7</u> <u>Motion Detection</u>) is enabled and is set to send alarm message by Mail/FTP, the host name entered here will display in the alarm message.

Sync With Computer Time

Select the item, and video date and time display will synchronize with the PC's.

<u>Manual</u>

The Administrator can set video date, time and day manually. Entry format should be identical with that shown next to the enter field.



5.3.2 Security

Click the category: <Security>, and the page is shown as the figure below.

Megapixel	Home	System	Streaming	Camera	Logout	
System	Security					
Security	Root Pas	sword				
Network		Root pass	word	•••		
DDNS		Confirm pass			Save	
Mail						
FTP	Add User	2				
Motion detection	Aug Osei	User r	iame		1	
Snapshot		User pass	word]	
Iris adjustment		🗹 I/O acce	ess 🔲 Cam	iera control		
View log file		🗌 Talk	🔲 Liste	en	Add	
View user information						
View parameters	Manage I	User				
Factory default		User nam	ie no user	💙 🛛 Delet	Edit	
Software version						
Software upgrade						

Root password

Change the administrator's password by inputting the new password in both text boxes. The input characters/numbers will be displayed as dots for security purposes. After clicking <Save>, the web browser will ask the Administrator for the new password for access. The maximum length of the password is 14 digits.



Add user

Type the new user's name and password and click <Add> to add the new user. Both user name and password can be up to 16 characters. The new user will be displayed in the user name list. There is a maximum of twenty user accounts. Each user can be assigned the privileges of "**Camera control**" and/or "**Listen**".

• I/O access

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This item supports fundamental functions that enable users to view video when accessing to the camera.

Camera control

This item allows the appointed User to change camera parameters on the Camera Setting page.

• Talk/Listen

Talk and Listen functions allow the appointed user in the local site (PC site) communicating with, for instance, the administrator in the remote site.



NOTE: The IP Mini Fixed Dome Camera does not have Talk function.

Manage User

Delete user

To delete a user, pull down the user list, and select the user name you wish to delete. Then click <Delete> to remove it.

Edit user

Pull down the user list and select a user name. Click <Edit> to edit the user's password and privilege.



NOTE: It is required to enter the User password as well as select the function open to the user. When finished, click <Save> to modify the account authority.

http://192.168.7.234/lang	1/server_editaccount.html - Micr 🔳 🗖 🗙
	ser]
☑ I/O access	Camera control
🗌 Talk	Listen
Save	Close

User name	[User]
lser password	••••
🛛 I/O access	Camera control
Talk	🗹 Listen
Save	Close



NOTE: The Compact IP Dome Camera does not have Talk function.

5.3.3 Network

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Click <Network> in the left column, and the page will display as shown below.

Megapixel	Home	System	Streaming	Camera	Logout	9
System	Network	4				
Security	🔘 Get IP	address auto	matically			
Network	💿 Use fixi	ed IP address	5			
DDNS	General					
Mail	IP ad	dress	19	2.168.7.234	1	
FTP	Cuba	et mask	05			
Application	Subh	et mask	25	5.255.255.0		
Motion detection	Defau	ılt gateway	19	2.168.7.254		
Snapshot	Prima	ry DNS	0.0	0.0.0		
Iris adjustment	Socor	ndary DNS		0.0.0		
View log file		iuary DNS	0.0	5.0.0		
View user information	нттр					
View parameters	HTTP	port	80			
Factory default				Save		
Software version	1					
Software upgrade						

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Users can choose to use fixed IP address or dynamic (DHCP) IP address. The following is descriptions for the two ways of setting IP address.

Get IP address automatically (DHCP)

The camera's default setting is "**Use fixed IP address**". Please refer to the previous section <u>Chapter 4. Accessing Camera</u> for logging in with the default IP address.

If select "**Get IP address automatically**", after the IP Dome Camera restarts, users can search it through the installer program: DeviceSearch.exe, which can be found in "DeviceSearch" folder in the supplied CD.



NOTE: Please make the record of the IP Dome Camera's MAC address, which can be found in the label of the camera, for identification in the future.

Use fixed IP address

To setup static IP address, select "**Use fixed IP address**" and move the cursor to the IP address blank (as indicated below) and insert the new IP address, ex. 192.168.7.234; then go to the Default gateway (explained latter) blank and change the setting, ex. 192.168.7.254. Press "Save" to confirm the new setting.

Megapixel	Home	System	Streaming	Camera	Logout						
System	Network										
Security	O Get IP	address auto	omatically								
Network	💿 Use fixi	⊙ Use fixed IP address									
DDNS	General	General									
Mail	IP ad	dress	19	2.168.7.234							
FTP											
Application	Subn	et mask	25	5.255.255.0							
Motion detection	Defau	ılt gateway	19	2.168.7.254							
Snapshot	Prima	ry DNS	0.	0.0.0							
lris adjustment		9 2992									
View log file	a summer and	ndary DNS	0.	0.0.0							
View user information	нттр										
View parameters	HTTP	port	80	·							
Factory default				Gave							
Software version											
Software upgrade											

When using static IP address to login to the IP Dome Camera, users can access it either through "DeviceSearch" software (see <u>Chapter 4. Accessing Camera</u>) or input the IP address in the URL bar and press "Enter".



<u>General</u>

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• IP address

This is necessary for network identification.

Subnet mask

It is used to determine if the destination is in the same subnet. The default value is "255.255.255.0".

Default gateway

This is the gateway used to forward frames to destinations in different subnet. Invalid gateway setting will fail the transmission to destinations in different subnet.

Primary DNS

Primary DNS is the primary domain name server that translates hostnames into IP addresses.

Secondary DNS

Secondary DNS is a secondary domain name server that backups the primary DNS.

• Web Server port

Web server port could be set from 1 to 65535.

<u>Advanced</u>

RTSP port

RTSP port could be set from 1 to 65535. (Normal Setting Port: 554, 1024 ~65535)



NOTE: Be aware to choose the different port from the one set for the web server port.



5.3.4 DDNS

Dynamic Domain Name System (DDNS) allows a DNS name to be constantly synchronized with a dynamic IP address. In other words, it allows those using a dynamic IP address to be associated to a static domain name so others can connect to it by name.

Megapixel	Home	System	Streaming	Camera	Logout	
System	DDNS					
Security	Dynamic Uco Dupi		You Want To		DNS Account.	
Network	CONSCRETE STORE		rou want ro		DINS ACCOUNT.	
DDNS	🔲 Enable					
Mail	Provic	ler	D	ynDNS.org(D	ynamic) 🚩	
FTP	Host r	name				
Application						
Motion detection	Usern	ame/E-mail			2	
Snapshot	Passv	/ord/Key				
Iris adjustment				Save		
View log file						
View user information						
View parameters						
Factory default						
Software version						
Software upgrade						

Enable DDNS

Check the item to enable DDNS.

Provider

Select one DDNS host from the provider list.

<u>Host name</u>

Enter the registered domain name in the field.

<u>Username/E-mail</u>

Enter the username or e-mail required by the DDNS provider for authentication.

Password/Key

Enter the password or key required by the DDNS provider for authentication.

5.3.5 Mail

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The Administrator can send an e-mail via Simple Mail Transfer Protocol (SMTP) when motion is detected. SMTP is a protocol for sending e-mail messages between servers. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified and the message text is transferred. The configuration page is shown as follows:

Megapixel	Home	System	Streaming	Camera	Logout		
System	Mail						
Security	SMTP						
Network	1st SM	4TP (mail) ser	/er				
DDNS	1st SM	ITP account n	ame				
Mail	1st SM	4TP password					
FTP						_	
Application	lst re	cipient email a	address			0.45	
Motion detection	2nd S	MTP (mail) ser	ver				
Snapshot	2nd S	MTP account r	name				
Iris adjustment	2 pd S	MTP password					
View log file							
View user information	2nd re	ecipient email	address				
View parameters	Sende	er email addre	ss 🗌				
Factory default	1			Save			
Software version	1						
Software upgrade]						

Two sets of SMTP can be configured. Each set includes SMTP Server, Account Name, Password and E-mail Address settings. For SMTP server, contact your network service provider for more specific information.



5.3.6 FTP

The Administrator can set as sending alarm message to a specific File Transfer Protocol (FTP) site when motion is detected. Users can assign alarm message to up to two FTP sites. The FTP setting page is shown below. Enter the FTP details, which include server, server port, user name, password and remote folder, in the fields. Press "Save" when finished.

Megapixel	Home	System	Streaming	Camera	Logout		
System	FTP						
Security	FTP	n FTP server p	ort 21				
Network	1014150303	ITP server IP server					
DDNS		rP server port	21	5			
Mail	455270	rP user name				1	
FTP		rP password					
Application	**************************************	IP remote fold(ər 🔽				
Motion detection	1	st FTP passive	mode				
Snapshot	2nd F	TP server					
Iris adjustment	2nd F	TP server port	21				
View log file	2nd F	TP user name					
View user information		TP password					
View parameters	100000000	TP remote fold					
Factory default	21	nd FTP passive		Save			
Software version	1			Dave			
Software upgrade							



5.3.7 Motion Detection

Motion Detection function allows detecting suspicious motion when motion volume in the detected area reaches/exceeds the determined sensitivity threshold value.

Megapixel	Home	System	Streaming	Camera	Logout					
System	Motion D	Motion Detection								
Security	Active I	Motion Detec	tion							
Network	00	n								
DDNS	⊙ <mark>⊙</mark> Of	ff								
Mail	Motion	Detection Se	tting							
FTP	Samp	oling pixel inte	erval [1-100]	10						
Motion detection	Dete	ction level [1-	100]	10						
Snapshot	9292233	itivity level [1	0.452.023	80						
Iris adjustment	racentes.	interval(sec)	[0-7200]	10						
View log file	Action									
View user information			nen motion de		2220					
View parameters		_	to FTP when	motion detec	ted					
Factory default	savi									
Software version	1									
Software upgrade										

Active Motion Detection

You will be able to turn on/off Motion Detection in System section. Default setting is Off.

Motion Detection Setting

Users could adjust the parameter and level of Motion Detection Settings.

- Sampling pixel interval [1-100]: Default value: 10
- Detection level [1-100]: Default value: 10
- Sensitivity level [1-100]: Default value: 80
- Time interval (sec) [0-7200]: Default value: 10

Alternative actions to motion can be selected.

Send E-mail when the motion detected

Once motion is detected, the system could automatically send a notice to user's E-mail address.

Send message to FTP when motion detected

The message will be sent to FTP site which administrator sets when motion is detected.



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NOTE: Make sure SMTP or FTP configuration has been completed. See section <u>5.3.5 Mail</u> and <u>5.3.6 FTP</u> for further details.



5.3.8 Snapshot

The IP Dome Camera supports MJPEG snapshot function. Users can specify a storage location for the snapshots. The default setting is: C:\. Once confirm the setting, press "Save," and all the snapshots will be saved in the designate location.



NOTE: If the specified file folder is indicated as invalid, please check its name and ensure it not containing characters such as spaces.

Megapixel	Home	System	Streaming	Camera	Logout	
System	Snapshot					
Security	Snapshot					
Network		ges stored at	; C:\		Select	
DDNS	Save	J				
Mail						
FTP						
Application						
Motion detection						
Snapshot						
lris adjustment						
View log file						
View user information						
View parameters						
Factory default						
Software version						
Software upgrade						

5.3.9 Iris Adjustment (Box Camera and Vandal Proof Dome)

Users could adjust auto iris lens when different lens is selected to install on the camera. The iris adjustment page is shown below.



Please follow the steps below to adjust iris.

- Step 1: Check if the auto iris lens is set up ready.
- Step 2: Image a gray scale chart type 1(Gamma = 1) over the entire screen.
- Step 3: Press "Start" button and began to adjust iris.

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5.3.10 View Log File

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Click on the link to view the system log file. The content of the file provides useful information about configuration and connections after system boot-up.

Security Intervork DDNS Mail Mail FTP Application Motion detection Snapshot It is adjustment View user information View parameters Factory default Mon Jan 100:00:31 2007]Network interface initialized start Mon Jan 100:00:01 2007]Not Work interface initialized end Mon Jan 100:00:01 2007]Not Mask = 255.255.255.0 Mon Jan 100:00:01 2007]Gateway = 192.168.0.254 Mon Jan 100:00:12 2007]MAC address = 00:00:89:AA:BB:CCC Mon Jan 100:00:12 2007]Connect by Admin@192.168.7.199 Tue Jul 8 09:05:34 2008]connect by Admin@192.168.7.199 Tue Jul 8 09:13:15 2008]connect by Admin@192.168.7.55 Tue Jul 8 09:37:14 2008]connect by Admin@192.168.7.55 Tue Jul 8 09:41:30 2008]connect by Admin@192.168.7.55	Security Ietwork DDIIS Mail TP Application Shapshot ris adjustment View user information View parameters Factory default Software version Mon Jan 1 00:00:31 2007]Network interface initialized start Mon Jan 1 00:00:01 2007]Network interface initialized end [Mon Jan 1 00:00:01 2007]Network interface initialized end [Mon Jan 1 00:00:01 2007]Network interface initialized end [Mon Jan 1 00:00:01 2007]Sateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:14 2007]Connect by Admin@192.168.7.199 [Tue Jul 8 09:31:17 2008]connect by Admin@192.168.7.55 [Tue Jul 8 09:31:17 2008]connect by Admin@192.168.7.55 [Tue Jul 8 09:41:30 2008]connect by Admin@192.168.7.55	Megapixel	Home	System	Streaming	Camera	Logout		
Security [Mon Jan 1 00:00:01 2007]Network interface initialized end Interwork [Mon Jan 1 00:00:01 2007]Host IP = 192.168.0.250 DDNS [Mon Jan 1 00:00:01 2007]Subnet Mask = 255.255.255.0 Mail [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:12 2007]Gateway = 192.168.0.254 [Mon Jan 1 00:00:01 2007]Connect by Admin@192.168.7.199 [Tue Jul 8 09:05:34 2008]connect by Admin@192.168.7.199 [Tue Jul 8 09:37:14 2008]connect by Admin@192.168.7.55 [Tue Jul 8 09:41:30 2008]connect by Admin@192.168.7.55 [Tue Jul 8 09:41:30 2008]connect by Admin@192.168.7.55 [Yiew user information Yiew user information Yiew parameters Factory default X X	Security Mon Jan 1 00:00:01 2007 Network interface initialized end Ietwork Mon Jan 1 00:00:01 2007 Subest Mask = 255.255.255.0 Mon Jan 1 00:00:01 2007 Subest Mask = 255.255.255.0 Mon Jan 1 00:00:01 2007 Gateway = 192.168.0.254 Mon Jan 1 00:00:01 2007 Gateway = 192.168.0.254 Mon Jan 1 00:00:01 2007 Connect by Admin@192.168.0.66 Mon Jan 1 00:00:14 2007 connect by Admin@192.168.7.199 TTP Tue Jul 8 09:05:34 2008 connect by Admin@192.168.7.199 Tue Jul 8 09:31:17 2008 connect by Admin@192.168.7.55 Tue Jul 8 09:37:14 2008 connect by Admin@192.168.7.55 Tue Jul 8 09:41:30 2008 connect by Admin@192.168.7.55 Wew ware information connect by Admin@192.168.7.55 View user information connect by Admin@192.168.7.55 Software version connect by Admin@192.168.7.55	System	System	log					
Interwork [Mon Jan 1 00:00:01 2007]Subnet Mask = 255.255.255.0 DDIIS [Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 Mail [Mon Jan 1 00:00:12 2007]Gateway = 192.168.0.254 Mail [Mon Jan 1 00:00:12 2007]Gateway = 192.168.0.254 FTP [Mon Jan 1 00:00:12 2007]Connect by Admin@192.168.7.199 FTP [Mon Jul 7 17:42:07 2008]connect by Admin@192.168.7.199 Tue Jul 8 09:05:34 2008]connect by Admin@192.168.7.199 Tue Jul 8 09:13:15 2008]connect by Admin@192.168.7.55 Motion detection Snapshot Iris adjustment View user information View user information View parameters Factory default	Idetwork [Mon Jan 1 00:00:01 2007]Subnet Mask = 255.255.255.0 Mon Jan 1 00:00:01 2007]Gateway = 192.168.0.254 Mail [Mon Jan 1 00:00:01 2007]MAC address = 00:D0:99:AA:BB:CC Mon Jan 1 00:00:01 2007]MAC address = 00:D0:99:AA:BB:CC [Mon Jan 1 00:00:01 2007]Connect by Admin@192.168.7.199 TTP Application Motion detection Snapshot ris adjustment View user information View user information View user information View parameters Factory default	Security	Ĩ	Mon Jan 100:	00:01 2007] -	-Network int	erface initiali	zed end	~
DDIS Mail Mail FTP Application Motion detection Snapshot Iris adjustment View user information View parameters Factory default	Mail [Mon Jan 1 00:00:01 2007]MAC address = 00:D0:89:AA:BB:CC Mail [Mon Jan 1 00:00:14 2007]connect by Admin@192.168.0.66 [Mon Jan 1 00:01:14 2007]connect by Admin@192.168.7.199 TTP Application Motion detection Snapshot ris adjustment View user information View parameters Factory default Software version	Network	Ēr	Mon Jan 100:	00:01 2007] -	-Subnet Mas	k = 255.255	.255.0	
Mail [Mon Jul 7 17:42:07 2008]connect by Admin@192.168.7.199 FTP [Tue Jul 8 09:05:34 2008]connect by Admin@192.168.7.199 Application [Tue Jul 8 09:31:17 2008]connect by Admin@192.168.7.55 Motion detection Snapshot Iris adjustment View log file View user information View parameters Factory default	Mail [Mon Jul 7 17:42:07 2008] TP Application Motion detection Snapshot ris adjustment View log file View parameters Factory default Software version	DDNS							
FTP Application Motion detection Snapshot Iris adjustment View user information View parameters Factory default	TP Application (Tue Jul 8 09:13:15 2008)connect by Admin@192.168.7.199 (Tue Jul 8 09:31:17 2008)connect by Admin@192.168.7.55 (Tue Jul 8 09:37:14 2008)connect by Admin@192.168.7.55 (Tue Jul 8 09:41:30 2008)connect by Admin@192.168.7.55	Mail							
Application (Tue Jul 8 09:37:14 2008) connect by Admin@192.168.7.55 (Tue Jul 8 09:41:30 2008) connect by Admin@192.168.7.55 (Tue Jul 8 09:41:30 2008) View log file View log file View parameters Factory default	Application (Tue Jul 8 09:37:14 2008) Motion detection Snapshot ris adjustment View log file View parameters Factory default Software version	FTP	[] [ī	Fue Jul 8 09:1	3:15 2008](connect by A	dmin@192.1	68.7.199	
Motion detection Snapshot Iris adjustment View log file View user information View parameters Factory default	Motion detection Snapshot ris adjustment View log file View user information View parameters Factory default Software version	Application	l (1	Fue Jul 8 09:3	7:14 2008](connect by A	dmin@192.1	68.7.55	
Iris adjustment View log file View user information View parameters Factory default	ris adjustment View log file View user information View parameters Factory default Software version	Motion detection	1 [1	Fue Jul 8 09:4	1:30 2008]	connect by A	dmin@192.1)	68.7.55	
View log file View user information View parameters Factory default	View log file View user information View parameters Factory default	Snapshot	1						
View user information View parameters Factory default	View user information View parameters Factory default Software version	lris adjustment							
View parameters	View parameters	View log file							
Factory default	Factory default	View user information							
	Software version	View parameters	1						
Software version		Factory default							>
	Software upgrade	Software version							
Software upgrade		Software upgrade	1						

5.3.11 View User Information

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The Administrator can view each added user's login information and privileges (see <u>5.3.2 Security</u>).

View User Login Information

All the users in the network will be listed in the "User information" zone, as shown below. As the figure below shows:

User: 4321

It indicates that one user's login username is: User, and the password is: 4321.

Megapixel	Home	System	Streaming	Camera	Logout	
System		ormation				
Security		dmin:1234 ser:4321				
Network	1 -					
DDNS						
Mail						
FTP						
Motion detection						
Snapshot						
lris adjustment						
View log file						
View user information						
View parameters						
Factory default						
Software version	<					2
Software upgrade		get user info	rmation		get user priva	су

View User Privilege

Press "get user privacy" down the page, and the Administrator can view each user's privileges.

Megapixel Home System Streaming Camera Logout System Admin:1:1:1:1 User:1:1:0:1 Security Network DDHS Mail FTP Motion detection Snapshot lris adjustment View log file View user information View parameters Factory default Software version Software upgrade get user information get user privacy

As the figure above shows:

User: 1:1:0:1

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1:1:0:1= I/O access : Camera control : Talk : Listen (see 5.3.2 Security)

☑ I/O access	🗹 Camera control
🗌 Talk	🗹 Listen

Therefore, it denotes the user is granted privileges of I/O access, Camera control and Listen.


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Click on this item to view the entire system's parameter setting.





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The factory default setting page is shown as below. Follow the instructions to reset the IP Dome Camera to factory default setting if needed.



Set Default

Click on the "Set Default" button to recall the factory default settings. Then the system will restart in 30 seconds.



NOTE: The IP address will be restored to default.

<u>Reboot</u>

Click on the "Reboot" button, and the system will restart without changing current settings.



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The current software version is displayed in the software version page, which is shown as the figure below.

Megapixel	Home	System	Streaming	Camera	Logout			
System	Softwar	e version						
Security								
Network								
DDHS								
Mail								
FTP								
Application	The car	era firmware	version is CCI)-cameraFw	-IR-080108			
Motion detection		The camera firmware version is CCD-cameraFw-IR-080108 The software version is d20081013NS						
Snapshot	The soft							
Iris adjustment								
View log file								
View user information								
View parameters	4							
Factory default	•							
Software version								
Software upgrade								

5.3.15 Software Upgrade

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Software upgrade can be carried out in the "Software Upgrade" page, as shown below.



NOTE: Make sure the upgrade software file is available before carrying out software upgrade.

The procedure of software upgrade is like the following:

Step 1: Click "Browse" and select the binary file to be uploaded, ex. Userland.jffs2.

Megapixel Home System Streaming Camera Logout System Follow These Steps To Do The Software Upgrade Security Network Step 1: DDHS Upload the binary file Mail C:\userland\userland.jffs2 Browse. FTP Step2: Application Select binary file you want to upgrade Motion detection userland.jffs2 💌 Snapshot Step3: lris adjustment Click the upgrade button to start the upgrade process View log file View user information Upgrade View parameters Factory default Software version Software upgrade



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NOTE: Do not change the upgrade file name, or the system will fail to find the file.

- **Step 2:** Pull down the upgrade binary file list and select the file you want to upgrade; in this case, select "userland.jffs2."
- **Step 3:** Press "Upgrade". The system will first check whether the upgrade file exists or not, and then begin to upload the upgrade file. Subsequently, the upgrade status bar will display on the page. When it runs to 100%, the upgrade process is finished.

Megapixel Home System Streaming Camera Logout System Security System is in Process of upgrade, Network Please Don't Power-Off The System And Change The Page. DDNS Mail FTP Upgrade now.Please wait Application 4% Motion detection Snapshot lris adjustment View log file View user information View parameters Factory default Software version Software upgrade

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After the upgrade process is finished, the viewer will return to Home page, and operation can continue.



5.4 Video and Audio Streaming Settings

Press the tab "Streaming" in the top of the page, and the configurable video and audio items will display in the left column. In Streaming, the Administrator can configure specific video resolution, video compression mode, video protocol, audio transmission mode, etc. Further details of these settings will be specified in the following sections.

5.4.1 Video Resolution and Rotate Type

Megapixel	Home	System	Streaming	Camera	Logout			
Video Format	Video Fa	ormat						
Video Compression	Video Re	esolution :						
Video OCX Protocol	1	⊙ MJPEG 1	.280x960 (15	fps) + MPEG-	-4 VGA (15fps)			
Video Frame Skip		O MJPEG 1	.280x960 (15	fps) + MPEG-	-4 QVGA (15fps)			
Video Mask	 MJPEG 1280x960 (15fps) + MPEG-4 CIF (15fps) MJPEG 1280x960 (15fps) + MPEG-4 QCIF (15fps) 							
Audio								
			.280x960 (15)					
	 MJPEG 640×480 (30fps) + MPEG-4 VGA (30fps) MJPEG 640×480 (15fps) + MPEG-4 VGA (15fps) 							
		Save						
	Video Ro	otate Type :						
			video					
		O Flip vide	0					
		O Mirror vi	deo					
		🔘 180 deç	iree rotate					
		Save						

The video setting page is shown below:

Video Resolution

The IP Dome Camera provides various video dual streaming formats like the following:

- MJPEG 1280×960 (15fps) + MPEG-4 VGA (15fps)
- MJPEG 1280×960 (15fps) + MPEG-4 QVGA (15fps)
- MJPEG 1280×960 (15fps) + MPEG-4 CIF (15fps)
- MJPEG 1280×960 (15fps) + MPEG-4 QCIF (15fps)
- MJPEG 1280×960 (15fps) + MPEG-4 Disable

• MJPEG 640×480 (30fps) + MPEG-4 VGA (30fps)

• MJPEG 640x480 (15fps) + MPEG-4 VGA (15fps)

Click "Save" to confirm the setting.

Video Rotate Type

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Users can change video display type if necessary. Selectable video rotate types include Normal, Flip, Mirror and 180 degree. Differences among these types are illustrated as below.

Suppose the displayed image of IP Dome Camera is shown as the figure below.



To rotate the image, users can select "Flip", for instance. Then the displayed image will be reversed as shown below.



The following is descriptions for different video rotate type.

• Flip

If select <Flip>, the image will be rotated vertically.

• Mirror

If select <Mirror>, the image will be rotated horizontally.

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• 180 Degree

Selecting <180 Degree> will make the image 180° counter-/clockwise inversed.

Click "Save" to confirm the setting.

5.4.2 Video Compression

Users can select a proper MJPEG/MPEG-4 compression mode in the video compression page (see the figure below), depending on the application.



MJPEG compression settings include:

- high compression, low bitrate, low quality
- middle compression, default
- low compression, high bitrate, high quality

MPEG-4 compression settings include:

- 128 kbps , highest compression , lowest quality
- 256kbps , default
- 512kbps



1024kbps , lowest compression , highest quality

Users can also decide whether to display compression information in Home page.

Click "Save" to confirm the setting.

5.4.3 Video OCX Protocol

In the Video OCX protocol setting page, users can select RTP protocol using UDP or TCP transport, for streaming media over the network. In the case of multicast networking, users can select the Multicast mode. The page is shown as follows.

Megapixel	Home	System	Streaming	Camera	Logout				
Video Format	Video OCX Protocol								
Video Compression		CX protocol s	setting :						
Video OCX Protocol		 RTP over UDP RTP over RTSP(TCP) Multicast mode Multicast IP Address 0.0.00 							
Video Frame Skip									
Video Mask	, T								
Audio	1	Multicast MPEG-4 Video Port							
	i i	Multicast MJPE	G Video Port	0					
	1	Multicast Audi	o Port	0					
	Į	Multicast TTL		1					
	Save]							

Video OCX protocol setting options include:

• RTP over UDP/RTSP(TCP) Select a mode according to your data delivery requirements.

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Multicast Mode

Enter all required data, including multicast IP address, MPEG-4 video port, MJPEG video port and audio port, into each blank.

Click "Save" to confirm the setting.

5.4.4 Video Frame Skip

Video frame skipping is for saving bandwidth if necessary. The setting page is shown as below.



MJPEG/MPEG-4 Frame Skip options include:

- No skipping, default
- Frame skipping at 5 frame internal (lowest frame loss rate)
- Frame skipping at 10 frame internal
- Frame skipping at 15 frame internal (highest frame loss rate)



NOTE: Higher frame skipping rate will decrease video smoothness.

5.4.5 Privacy Masking Function

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Users can setup maximum two privacy masks in the selected areas to avoid any intrusive monitoring. The Mask setting page is shown below:



Mask Setup

Select either Mask1 or Mask2 in the section: **Active Mask Function**, and a red frame will come out in the displayed image. To shift the red frame (mask) to a desired position, move the mouse to the center of the frame and then left click the mouse. As for adjusting the frame size, move the mouse onto the edges of the frame to change its extent.

The mask(s) can be set with a selected color and type in the section: **Mask Setting**. After configure all the settings mentioned previously, click the "Save" button, and the mask(s) will be displayed as user-defined.

Mask Settings Modification

To reposition/resize a mask, draw its red frame to the new position or adjust the frame's size. The mask's color and type can be reselected as well. Click the "Save" button, and the rearranged mask will be displayed after few seconds.

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Mask Cancel

Uncheck either Mask1 or Mask2 or both to cancel the mask(s).

Help Page

A Mask Description page is provided for your reference during privacy mask setup. Click on the question mark in the upper left corner above the displayed image (see the arrow in the figure above), and the Mask Description page will open in a new window, as shown below:

streaming is disabled.	280 x 960 Resolution only when MPEG-
Privacy mask(s) supports all MPEG4 resolutions.	
Privacy mask(s) supports dual video streaming wh MPEG-4 are set at VGA.	nen the resolutions of both MJPEG and
Video Resolution	Mask Function
MJPEG 1280x960 (15fps) + MPEG-4 VGA (15fps)	Only support mask in MPEG-4
MJPEG 1280×960 (15fps) + MPEG-4 QVGA (15fps)	Only support mask in MPEG-4
MJPEG 1280x960 (15fps) + MPEG-4 CIF (15fps)	Only support mask in MPEG-4
MJPEG 1280x960 (15fps) + MPEG-4 QCIF (15fps)	Only support mask in MPEG-4
MJPEG 1280x960 (15fps) + MPEG-4 Disable	Only support mask in MJPEG
MJPEG 640x480 (30fps) + MPEG-4 VGA (30fps)	Support mask in MJPEG and MPEG-4
MJPEG 640x480 (15fps) + MPEG-4 VGA (15fps)	Support mask in MJPEG and MPEG-4





Operation:

- a. Maximum number of privacy mask is Two.
- b. Total eight different colors could be selected to show on masked area(s), included **Black White Yellow Red Green Blue Cyan** and **Magenta**
- c. The privacy mask can be setup as **Solid** or **Transparency**.
- d. While changing video stream resolution, the size of existed privacy mask will have slight change. Users are recommended to setup privacy mask after video stream resolution has been setup.



5.4.6 Audio Setting

The audio setting page is show as below. In the Audio page, the Administrator can select one transmission mode and audio bit rate.

Video Format Audio Video Compression Transmission Mode: Video OCX Protocol Simplex (Listen only) Video Mask Disable Video Mask Save	Megapixel	Home	System	Streaming	Camera	Logout	
Video OCX Protocol Simplex (Listen only) Video Frame Skip Disable Video Mask Bit Rate:	Video Format	Audio					
Video OCX Protocol O Simplex (Listen only) Video Frame Skip O Disable Video Mask Bit Rate:	Video Compression	Transmiss	sion Mode:				
Video Mask Audio Bit Rate: uLAW	Video OCX Protocol			ex (Listen onl	y)		
Audio Bit Rate: ULAW	Video Frame Skip		💿 Disab	le			
		Bit Rate:	-	✓			

Transmission Mode

• Simplex (Listen only)

In the Listen only Simplex mode, the local/remote site can only listen to the other site.

• Disable

Select the item to turn off the audio transmission function.

Bit Rate

Selectable audio transmission bit rate include 16 kbps (G.726), 24 kbps (G.726), 32 kbps (G.726), 40 kbps (G.726), uLAW (G.711) and ALAW (G.711). Both uLAW and ALAW signify 64 kbps but in different compression formats. Higher bit rate will let higher audio quality and require bigger bandwidth.

Click "Save" to confirm the setting.



5.5 Camera Settings

The figure below is the camera configuration page. Details of each parameter setting are described as follows.



5.5.1 Exposure Setting



The exposure is the amount of light received by the image sensor and is determined by the width of lens diaphragm opening (iris adjustment), the amount of exposure by the sensor (shutter speed) and other exposure *oproctor*.

parameters. With this item, users can define how the Auto Exposure function works.

Each exposure mode is specified as follows:

Full Auto Mode

In this mode, the camera's Shutter Speed, IRIS and AGC (Auto Gain Control) control circuits work together automatically to get consistent video output level.

Auto Flickerless (50Hz)/(60Hz) Mode

Television scanning (PAL & NTSC) and power supply systems (AC 50 & 60 Hz) are not the same in different countries and regions. Users might find flickering situation displayed on the screens because the devices are working under different frequency systems. With Auto Flickerless function, users could reduce the symptom.

Manual Mode

In this mode, users can select a number between 1 and 15, which represents shutter speed ranging from 1/4 to 1/10000 sec; bigger number means slower shutter. Once change the setting, press <SET> to confirm the new setting.

Fixed Shutter Mode

In this mode, fixed shutter speed could be selected from the draw-down menu. The range is provided from 1.5 to 1/10000 sec. and total 17 different shutter speed could be chose Users could select suitable shutter speed based on the camera environment.

5.5.2 White Balance Setting

White Balanc	e
O Auto	
O Indoor	
O Outdoor	
🔿 Manual	1 🖂
	SET

A camera needs to find reference color temperature, which is a way of measuring the quality of a light source, for calculating all the other colors. The unit for measuring this ratio is in degree Kelvin (K). Users can select one of the White Balance Control modes according to the operating environment. The

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following table shows the color temperature of some light sources for reference.

Light Sources	Color Temperature in K
Cloudy Sky	6,000 to 8,000
Noon Sun and Clear Sky	6,500
Household Lighting	2,500 to 3,000
75-watt Bulb	2,820
Candle Flame	1,200 to 1,500

Auto Mode

In this mode, white balance works within its color temperature range and calculates the best-fit white balance.

Indoor/outdoor Mode

Select for indoor or outdoor mode.

Manual Mode

In this mode, users can change the White Balance value manually. Users can select a number between $1 \sim 11$, and press <SET> to confirm the new setting.

5.5.3 Backlight Setting



Based on various lighting situations, users could select to turn on or off the function of backlight compensation to optimize the video quality. The default value of Backlight is Off.

5.5.4 Brightness Setting

Brightness	1 🛩		
	S	ET	

Users can adjust the image's brightness by adjusting the item. To increase video brightness, select a bigger number. Press <SET> to confirm the new setting.



5.5.5 Sharpness Setting

Sharpness	1 🗸		
	S	ET	

Increasing the sharpness level can make the image looked sharper; especially enhance the object's edge. Press <SET> to confirm the new setting.

5.5.6 Contrast Setting

Contrast	1	~
	S	ET

Camera image contrast level is adjustable; please select ranging from 1 to 11.

5.5.7 Digital Zoom Setting

×1 🗸				
SE	Т			
	×1 SE			

The camera's digital zoom is adjustable from x1 to x12 at VGA resolution. Press <SET> to confirm the new setting.



5.6 Logout

Press the tab "Logout" in the top of the page, and the login window will pop up. This enables login with another user name.





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The IP Dome Camera bundles Central Management System (CMS) software. Offering powerful functionalities via intuitive interface, it is a centralized monitoring solution of your video surveillance equipments.

It gives the user access to monitor multiple IP Dome Cameras and Digital Video Recorders (DVRs), and allows the user to simultaneously monitor 64 sites per group (up to 10 groups) within several clicks.

For further information on CMS software, please refer to the supplied CD.



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Appendix A: Technical Specifications

Camera				
Image Sensor		1/3.8" Sony progressive CMOS		
Picture Elements		1280(H) x 960 (V), 1.3M CMOS		
Optical				
Lens Focal Length		f = 3.6 mm		
F Number		F = 2.0		
Angle of View		96°		
Operation				
Video Compression		MPEG-4 / MJPEG		
Video Streaming		Simultaneous MPEG-4 and MJPEG video stream (dual		
		stream)		
Resolution		MPEG-4: VGA,QVGA,CIF,QCIF		
		MJPEG: 1280x960(4VGA), VGA		
Horizontal Resolution		>700TVL		
Frame Rate		MPEG-4 30fps@VGA, MJPEG 15fps@1280x960		
Brightness		manual control		
	Exposure	auto and manual control mode		
	Sharpness	manual control		
Image Setting	Contrast	manual control		
	White Balance	Auto, indoor, outdoor, manual control mode		
	Digital Zoom	1x ~ 12x		
Rotation		Flip, Mirror, and 180° Rotate		
Network				
Interface		10/100 Ethernet		
Protocol		IP, TCP, SMTP, DHCP, HTTP		
Password Levels		User and Administrator		
Internet Browser		Internet Explorer (6.0+)		
Mechanical				
Camera Angle Adjustm	ent	Tilt 0-90°; Pan 0-90°		
Connectors		RJ-45 Connector (Indoor Type)		
	Ethernet	M12 D-Coding Cable (Rugged Type)		
		G.711 PCM 64 kbit/s		
Audio		G.726 ADPCM 32 or 24 kbit/s		
General				
Operating Temperature		0°C ~ 50°C		
Operating Humidity		10% to 90%, no condensation		
Power Source		PoE		



Power Consumption	3W
Regulatory	CE, FCC
Certificate	RoHS compliant
	IP66 (Rugged Type Only)
Dimension	
W*H*L	107 x 107 x 47 mm (4.2 x 4.2 x 1.9 inches)

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Appendix B: Internet Security Settings

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

Internet Security Level: Default

Step 1: Start the Internet Explorer (IE).

Step 2: Select <Tools> from the main menu of the browser. Then Click <Internet Options>.



Step 3: Click the <Security> tab, and select <Internet>.

iternet	Options			2		
General	Security	Privacy	Content	Connections	Programs	Advance
Select a	a Web con	tent zone l	to specify	its security set	ings.	
Inte	ernet L	.ocal intrar	net Trus	✓ ted sites R	estricted sites	
	Internet This zone (haven't pla			es you	Si	es
Secu	rity level for	this zone				
	Custo	n				
	- To		e settings	, click Custom ed settings, clia		evel.
		C	Custom I	Level	Default L	evel

Step 4: Down the page, press "Default Level" (see the figure above) and click "OK" to confirm the setting. Close the browser window, and open a new one later when accessing the IP Dome Camera.



ActiveX Controls and Plug-ins Settings

Step 1~3: Refer to the previous section above.

Step 4: Down the page, press "Custom Level" (see the figure below) to change ActiveX controls and plug-ins settings.



The Security Settings screen is displayed as below:

iveX controls and pl	ug-ins	
Automatic promptin		ols
\sim		1
	abaulara	
A A A A A A A A A A A A A A A A A		
Disable	pprovod	
Enable		
Download signed A	ctiveX controls	
🔘 Disable		
🧕 Enable		
<u> </u>	LA DESCRIPTION OF THE	
Download unsigned	Activex controls	
	J.	>
ustom settings —		
		Reset
o: Low		
	Automatic promptin Disable Enable Binary and script be Administrator a Disable Enable Download signed A Disable Enable Prompt Download unsigned	Automatic prompting for ActiveX contr Disable Enable Binary and script behaviors Administrator approved Disable Enable Download signed ActiveX controls Disable Enable Prompt Download unsigned ActiveX controls



Step 5: Under "ActiveX controls and plug-ins", set ALL items (as listed below) to <Enable> or <Prompt>.

ActiveX controls and plug-ins settings:

- 1. Automatic prompting for ActiveX controls
- 2. Binary and scrip behaviors
- 3. Download signed ActiveX controls
- 4. Download using ActiveX controls
- 5. Initialize and script ActiveX not marked as safe
- 6. Run ActiveX controls and plug-ins
- 7. Script ActiveX controls marked safe for scripting
- **Step 6:** Click <OK> to accept the settings and close the <Security> screen.
- **Step 7:** Click <OK> to close the Internet Options screen.
- Step 8: Close the browser window, and restart a new one later for accessing the IP Dome Camera.

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Appendix C: DC Viewer Download Procedure

The procedure of DC Viewer software download is specified as follows.

Step 1: In the DC Viewer installation page, click "Next" for starting installing.



Step 2: Setup starts. Please wait for a while until the loading bar runs out.

🔂 DCView	er - InstallShield Wizard
	g DCViewer gram features you selected are being installed.
	Please wait while the InstallShield Wizard installs DCViewer. This may take several minutes. Status:
InstallShield -	< <u>B</u> ack Next > Cancel



Step 3: Click "Finish" to close the DC Viewer installation page.



Then, the IP Camera's Home page will display as follows:

