



# **PTZ PoE Network Camera**

# User Manual

### **Business Class Networking**

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### **Package Contents**

- D-Link DCS-5610 PTZ PoE Network Camera
- CAT5 Ethernet Cable
- Power Adapter
- Manual and Software on CD
- Quick Install Guide
- Camera Mounting Bracket

**Note:** Using a power supply with a different voltage than the one included with your product will cause damage and void the warranty for this product.

If any of the above items are missing, please contact your reseller.



# **System Requirements**

- Windows® XP or Windows Vista®
- At least 256MB of memory (512MB recommended)
- An available Ethernet connection
- Internet Explorer 6.x or higher Internet Web Browser
- VGA card resolution: 800x600 or above
- CPU: 1.7GHz or above processor (2.8GHz plus processor with 512MB memory and a 32MB video card is required for multiple camera viewing and recording in IP surveillance program)

### Introduction

The D-Link DCS-5610 PTZ (Pan, Tilt, and Zoom) PoE Network Camera is a full featured surveillance system that connects to an Ethernet, Fast Ethernet or broadband Internet connection to provide remote high-quality 2-Way Full Duplex audio, and 2.6x optical and 4x digital zoom for greater clarity and detail from your recordings. The DCS-5610 is the latest product added to the D-Link SECURICAM Network line. The DCS-5610 PTZ PoE Network Camera differs from a conventional PC Camera because it is a stand-alone system with a builtin CPU and Web server, capable of solving demanding security and home/office monitoring needs. The PTZ PoE Network Camera can be accessed remotely, and controlled, from any PC or notebook computer over the Internet from anywhere in the world. The simple installation procedures, along with the built-in Web-based interface offer easy integration to your network environments.

**Note:** Use of audio or video equipment for recording the image or voice of a person without their knowledge and consent is prohibited in certain states or jurisdictions. Nothing herein represents a warranty or representation that the D-Link product provided herein is suitable for the end-user's intended use under the applicable laws of his or her state. D-Link disclaims any liability whatsoever for any end-user use of the D-Link product, which fails to comply with applicable state, local, or federal laws.

### **Features**

- Motorized Pan and Tilt Operation The **DCS-5610** has a pan and tilt function that can expand your viewing area to cover a wide 300° angle side-to-side and a 90° angle up and down.
- CCD Sensor The DCS-5610 comes with a high quality CCD sensor that is superior to CMOS type sensor. The variable focus glass lens will facilitate the use of the DCS-5610 providing crystal clear and sharp images. You can view up to 30 frames per second of live motion video with 470 TV lines of resolution.
- Broad Range of Applications With today's high-speed Internet services, the PTZ PoE Network Camera can provide the ideal solution for live video images and audio over the Intranet and Internet for remote monitoring. The DCS-5610 allows remote access from your Web browser for live image viewing with audio, and allows the administrator to manage and control the PTZ PoE Network Camera anytime and anywhere in the world. Apply the Network Camera to monitor various objects and places such as homes, offices, banks, hospitals, child-care centers, amusement parks and other varieties of industrial and public monitoring. The PTZ PoE Network Camera can also be used for intruder detection with its motion-detection mode, capture still images and video images for archiving, and many more applications such as sending images to an FTP server or configuring for E-mail alerts. The DCS-5610 features 2-way Full-Duplex audio with a built-in microphone that lets you remotely monitor and record audio with your video. With the addition of optional speakers (not included), you can have 2-way Full-Duplex audio communication with the people you are viewing. The DCS-5610 also features 2.6x optical and 4x digital zoom for closer viewing.
- Supports a Variety of Protocols In addition, the DCS-5610 supports a variety of platforms including RTSP, FTP, SMTP, NTP, and HTTP. The camera also supports UPnP and DDNS. DDNS allows your camera to be accessed using a static host name rather than an IP address. UPnP will allow users of Windows<sup>®</sup> XP to install the camera with a single mouse click.

- Audio Out Connect a speaker to the camera so that a person in front of the camera can hear the person on the other end of the communication.
- Web Configuration Using a Web browser, administrators can configure and manage the PTZ PoE Network Camera directly from its own Web page via the Intranet or the Internet. Up to 20 user names and passwords are permitted, with privilege settings controlled by the administrator.
- Powerful Surveillance and Remote Monitoring Utility The powerful **D-ViewCam** software application assigns an administrator with a pre-defined user ID and password who can modify the PTZ PoE Network Camera settings from the remote site via the Intranet or the Internet. Administrators are allowed to monitor the image, record the image to a hard drive, take snapshots, and more.
- Connection to External Devices Supporting auxiliary Input/Output connectors, you can connect the PTZ PoE Network Camera to a variety of external devices such as IR-sensors, switches and alarm relays. Combined with programmable alarming equipment, you can develop a variety of security applications that are triggered on alarm-based events. The PTZ PoE Network Camera provides an industry standard in/out external connector for connectivity.
- Internal/External Microphone The *SECURICAM* Network **DCS-5610** allows you to monitor video as well as audio through the web browser. You have the option of using the **DCS-5610**'s integrated microphone or your own external microphone using the connection located at the rear of the unit.

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### Hardware Overview Connections

DC Power Connector

The DC power input connector is located on the DCS-5610 Network Camera's back panel and is labeled 12V DC with a single socket to supply power to the Network Camera.

### Reset Button

Reset will be initiated when the reset button is pressed once and held 30 seconds until the Power LED flashes through its cycle twice.

MIC On/Off Switch Used to turn the microphone on or off.

#### Ethernet Cable Connector (PoE)

The Network Camera's back panel features an RJ-45 connector for connections to 10Base-T Ethernet cabling or 100Base-TX Fast Ethernet cabling. This network port supports the NWay protocol, allowing the Network Camera to automatically detect or negotiate the transmission speed of the network. The Ethernet port can also be used to power the camera by using a PoE switch.

#### Microphone Connector

The DCS-5610 Network Camera has an internal microphone built-in. However, you have the option of using an external microphone by plugging it into the microphone connector.

#### Audio Out Connector

The DCS-5610 provides an Audio Out connector to be used for 2-way audio. Speakers (not included) may be connected to the camera to provide audio for 2-way communication.

#### I/O Connector

The DCS-5610 provides a terminal block with two pairs of connectors situated on the back panel. One pair is for input and the other is for output. The I/O connectors provide the physical interface to send and receive digital signals to and from a variety of external devices.

# Hardware Overview LEDs



### Power/MIC LED

The power LED is at the front base of the camera. As soon as the power adapter is connected to the camera, the LED will turn red.

#### Activity LED

Once a connection has been established via Ethernet port, the Activity LED will turn solid green. If traffic is passing to the camera the Activity LED will blink. If no Ethernet connection is detected the Activity LED will not light up.

# Hardware Installation

### **Connect the Ethernet Cable**

Connect an Ethernet cable to the network cable connector located on the Network Camera's back panel and attach it to the network.

### Connect Using Power-Over-Ethernet

Once you connect an Ethernet cable to your PoE switch or adapter, the Power LED on the DCS-5610 will turn green to indicate a proper connection.

### Attach the External Power Supply

Attach the external power supply to the DC power input connector located on the Network Camera's back panel (labeled DC 12V) and connect it to an AC power outlet.

**Note:** When you have a proper connection, the LED will turn green. The light may cycle on and off and your computer may show an intermittent loss of connectivity, this is normal until you have configured your Network Camera.





The Network Camera comes with a camera mounting bracket with a swivel ball screw head that can be attached to the Network Camera bottom socket cavity. Attach the camera stand to the Network Camera and station it for your application. There are holes located in the base of the mounting bracket allowing the Network Camera to be mounted to the ceiling, or any wall securely.





# **Software Installation**

Turn on the computer and Insert the D-Link DCS-5610 Autorun CD in the CD-ROM drive. The step-by-step instructions that follow are shown in Windows<sup>®</sup> XP. The steps and screens are similar for the other Windows operating systems.



If the CD Autorun function does not automatically start on your computer, click Windows Start > Run. In the Run command box type "D:\DCS5610.exe", where D: represents the drive letter of your CD-ROM. If it does start, proceed to the next screen.

### Click Next to continue.



### **Click Next**

### Click I Agree to accept the License Agreement.

		(Nill)
Please review the license terms befor	e installing InstallationWizard 2 1.0.0.2	
Press Page Down to see the rest of t	he agreement.	
End-User License Agreement		
IMPORTANT - READ CAREFULLY		
software, entitled Installation Wizard 2, v provided in "online" or electronic form ACCEPT" or "YES" below, you agree	rension 1.0.0.2, which may include user doou (the "Software"). By clicking the button le to be bound by the terms of this Agreemen ase do not install or use the Software.	mentation marked "I t. If you do not ~
agree to the terms of this Agreement, plea		
agree to the terms of this Agreement, plea If you accept the terms of the agreer agreement to install InstallationWizar	ment, click I Agree to continue. You mus d 2 1.0.0.2.	st accept the
aguee to the terms of this Agreement, plea If you accept the terms of the agreer agreement to install InstallationWizard Isoft Install System v2.30	ment, dick I Agree to continue. You mu: d 2 1.0.0.2.	st accept the

Click I Agree

To start the installation click Install.

*Note:* The installation may take several minutes to complete.

Choose the folder in which to instal	ll InstallationWizard 2 1.0.0.2.
Setup will install InstallationWizard folder, click Browse and select anot	2 1.0.0.2 in the following folder. To install in a different the folder. Click Install to start the installation.
Destination Folder	
C:\Program Files\D-Link\Installa	ation Wizard 2. Browse
Space required: 5.7MB	
Space available: 3.6GB	
ullsoft Install System v2.30	
ullsoft Install System v2.30 ———	< Back Install Cance

### Click Install

😙 InstallationWizard 2 1.0.0	2 Setup	_ 0 X
	Completing the InstallationV 1.0.0.2 Setup Wizard InstallationWizard 2 1.0.0.2 has been installed computer. Click Finish to close this wizard.	Vizard 2 on your
	Einish	Cancel

### **Click Finish**

# Configuration

This section will show you how to configure your new D-Link Network Camera using the Installation Wizard.

# **Setup Wizard Configuration**

Click on the D-Link Installation Wizard icon that was created in your Windows Start menu.

The Setup Wizard will appear and show the MAC address of the DCS-5610 and an IP Address (which may or may not be correct depending on what you have your DCS-5610 connected to). If you have a DHCP server on your network, there will be a valid IP Address displayed here.

*Note:* A DHCP server is a device that supplies the same IP address.



Enter the admin ID and password.

Note: The default Admin ID is admin with the password left blank.

D-Link	
Sten 1>> System Stop 1>	IP Camera Installation
	System setup Camera name: DCS-5610 Administrator User name: admin Password: Confirm password:
	Date/Time setup Date: 2/21/2008 • Time: 14:15:02 (hh:mm:ss)
	Keep current date and time     Synchronize with computer time     Set date and time manually     Synchronize to network time server automatically
	For security consideration, you can assign the hostname and administrator password for your device. Anyone who does not have correct password cannot access the device. If you forget your administrator password, your device must be restored to default settings.

**Click Next** 

Select DHCP if you want to obtain a new IP address every time the camera boots up.

		10.0	a lastelletter	
Stop 1>> Sustem	Step 2>> Network Setting	IP Came	raInstallation	
Step 1>> System	Get IP by	DHCP Server aut	omatically	
	IP address:		192.168.1.180	
	Subnet mas	a	255.255.255.0	
	Default gate	way:	192.168.1.1	
	Primary DNS	server:	192.168.1.1	
	Secondary D	NS server:		

Choose UPnP Port Forwarding if your router supports it, otherwise choose Manual to enter your port numbers manually. Click Next to continue.



**Click Next** 

Enable DDNS and setup your DDNS service here, if you have subscribed to a DDNS service. Click Next to continue.

Installation Wizard 2 - Setu	ip Your Device	
D-Link		
	IP Camera Installation	
Step 1>> System   Step 2>> Ne	etwork Setting   Step 3>> Ports   Step 4>> DDNS	
	Enable DDNS	
	Registration Information	
	Server name: www.dlinkddns.com(Free) *	
	Host name:	
	E-mail address:	
	Key:	
	O-day law	
	Confirm key:	
	Sign up for D-Link's Free DDNS server at http://www.DLnkDDNS.com Dynamic DNS (Domain Name Service) is a method of keeping a domain n linked to a dynamic public IP address. In many cable/DSL connections, a dynamic public IP address is assigned for every connecting request. You setup your DDNS service here and the device will automatically update yo DDNS host name if the public IP address is changed.	ame can our
	Nex	t

If you want to access the DCS-5610 via mobile phone, click Yes and the video resolution will be set to 176x144.



Click Apply to apply the settings to the device.

IP Camera Installation
Please check the following settings.         Image: System/Date         Image: System/Date

### **Click Apply**

#### Section 3 - Configuration

Double-click the DCS-5610 to launch the camera's web configuration page.



# **Web-based Configuration Utility**

This section will show you how to configure your new D-Link Network Camera using the Web-based Configuration Utility.

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of your Network Camera (http://192.168.0.120)

*Note:* In the example, this address is 192.168.0.120. Your address may differ.

Type Admin in the user name field and leave the password blank by default.

*Note:* You may refer to page 51 to change the password for your admin account.



Connect to 192	2.168.1.130	? 🗙
R		
streaming_server		
<u>U</u> ser name:	🕵 admin	~
Password:		
	<u>R</u> emember my passv	vord
	ОК	Cancel

Click OK

### Live Video Camera

This section shows your camera's live video. You can control your settings using the buttons below.

**Zoom:** "-" zooms out, and "+" zooms in.

Pan Speed: Select the speed at which the camera will pan.

Tilt Speed: Select the speed at which the camera will tilt.

**Zoom Speed:** Select the speed at which the camera will zoom or focus.

Pan: Pans the camera one full cycle.

**Stop:** Stops movement of the camera during pan.

Patrol: Enables the patrol feature. Refer to page 47.

Go to: Select a preset position where the camera will point.



### **Snapshot**

This section shows a snapshot image from your camera's live video.



### **Client Setup**

You may configure and select the setting for your media streaming and recording

Stream Options: You can select which video stream profile to use.

- Media Options: Allows the user to determine whether to receive only video, audio, or both video & audio.
- **Protocol Options:** There are 4 protocols for you to choose for the video streaming.
  - **UDP Protocol:** This is recommended because it is an ideal protocol for transmitting real-time audio and video data, which can tolerate some lost packets.
  - UDP Unicast: Will stream to a single computer.
  - UDP Multicast Will stream to multiple computers using multicast.
    - **TCP:** Provides higher quality video streaming than UDP does. It provides error correction and guarantees packet to be delivered to client. However, transmission speed will be reduced.
  - HTTP Protocol: Offers the highest image and video quality. However, packet losses will diminish image quality when bandwidth becomes restricted. If the network is protected by a firewall and it opens HTTP port (80) only, HTTP protocol must be selected. In this mode, audio is disabled and only video can be viewed.



UDP connections will not be available to remote users if all four ports have not been forwarded (as shown on page 32). Only the HTTP port must be forwarded for remote users to make an HTTP connection (video only).

**Record Options:** Allows the user to specify a destination folder and prefix filename for the recorded video.

### **Setup** Wizard

To quickly configure your internet camera, click Internet Connection Setup Wizard or click Manual Internet Connection Setup to manually configure your internet camera.

To quickly configure your internet camera's motion detection settings, click Motion Detection Setup Wizard and skip to page 29. If you want to enter your settings without running the wizard, click Manual Motion Detection Setup and skip to page 39.



### **Internet Connection Setup Wizard**

This wizard will guide you through a step-by-step process to configure your new D-Link Camera and connect the camera to the internet. Click Next to continue.



Select DHCP if you are unsure which settings to pick. Click Next to continue and skip to page 27.

ect to the Internet with a DHCP connection or Static router, or you are unsure which settings to pick, D- selection of DHCP connection. Otherwise, click on ddress before clicking on the Next button.
192.168.0.100
255.255.255.0
192.168.0.1
192.168.0.1
Next Cancel

### **Click Next**

Select PPPoE if the camera is directly connected to the Internet through a DSL modem, and the ISP (Internet Service Provider) requires you to use PPPoE for the Internet connection. Click Next to continue and skip to Step 2 on page 26.

#### STEP 1: SETUP LAN SETTINGS

Please select whether your camera will connect to the Internet with a DHCP connection or Static IP address. If your camera is connected to a router, or you are unsure which settings to pick, D-Link recommends that you keep the default selection of DHCP connection. Otherwise, click on Static IP address to manually assign and IP address before clicking on the Next button.

⊙ PPPoE		
⊖Static IP Client		
IP address	192.168.0.100	
Subnet mask	255.255.2	
Default Gateway	192.168.0.1	
Primary DNS	192.168.0.1	
Secondary DNS		
Back	k Next Cancel	

Select Static IP if your Internet Service Provider has provided you with connection settings, or you wish to set a static address within your home network. Click Next to continue.

Please select whether your camera will connect to the Internet with a DHCP connection or Static IP address. If your camera is connected to a router, or you are unsure which settings to pick, D-Link recommends that you keep the default selection of DHCP connection. Otherwise, click on Static IP address to manually assign and IP address before clicking on the Next button.					
ODHCP					
OPPPoE					
⊙ Static IP Client					
IP address	192.168.0.100				
Subnet mask	255.255.255.0				
Default Gateway	192.168.0.1				
Primary DNS	192.168.0.1				
Secondary DNS					
Back	Next Cancel				

### **Click Next**

If you have selected PPPoE, enter your username and password. Click Next to continue.

### STEP 2: SETUP INTERNET SETTINGS

Please enter your ISP Username and Password. Contact your ISP if you are unsure.	This will be the case if your ISP uses PPPoE.			
User name				
Password				
Confirm password				
Back Next Cancel				

If you have a Dynamic DNS account and would like the camera to update your IP address automatically, enable DDNS and enter your host information. Click Next to continue.



**Click Next** 

Enter a name for your camera and click Next to continue.

#### STEP 4: SERVER NAME SETTINGS

STEP 5: SETUP TIME ZONE

D-Link recommends that you rename your camera for easy accessibility. You can then identify and connect your camera via this name. Please click on Next button.

	Camera Name DC55610
	Back Next Cancel
Click Next	

Configure the correct time to ensure that all events will be triggered, captured and scheduled at the right time. Click Next to continue.

the correct time and day and then click on the Next button.					
Current Time	07 Jan 2008 01:35:53				
Time Zone	GMT-08:00 Las	GMT-08:00 Las Vegas, San Francisco, Vancouver			
Enable Daylight Saving					
Daylight Saving Dates	5	Month	Week	Day of Week	Time
	DST Start	Oct 💌	2nd 💌	Sun 💌	1 am 🔽
	DST End	Mar 💌	1st 💌	Sat 💌	1 am 💌
Back Next Cancel					

Please configure the correct time to ensure that all events triggered, captured and scheduled at

If you have selected DHCP, you will see a summary of your camera's settings. Please note down all this information as you will need it for accessing your camera within the network. Click Apply to save your settings.

#### **STEP 6: SETUP COMPLETE**

Below you should see a summary of your camera settings. Click back to review or modify settings. Click Restart to apply the settings below. Please note these settings as you will require this information when accessing your camera on the network or via your web browser.



### **Click Apply**

If you have selected PPPoE, you will see a summary of your camera's settings. Please note down all this information as you will need it for accessing your camera within the network. Click Apply to save your settings.

#### STEP 6: SETUP COMPLETE

Below you should see a summary of your camera settings. Click back to review or modify settings. Click Restart to apply the settings below. Please note these settings as you will require this information when accessing your camera on the network or via your web browser.

IP address:	PPPoE
Camera Name	: DC55610
Time Zone:	-8
DDNS:	OFF
PPPoE:	ON
(	Back Apply Cancel

#### **Click Apply**

If you selected Static IP, you will see a summary of your camera's settings. Please note down all this information as you will need it for accessing your camera within the network. Click Apply to save your settings.

#### STEP 6: SETUP COMPLETE

Below you should see a summary of your camera settings. Click back to review or modify settings. Click Restart to apply the settings below. Please note these settings as you will require this information when accessing your camera on the network or via your web browser.



Click Apply

### **Motion Detection Setup Wizard**

This wizard will guide you through a step-by-step process to configure your new D-Link Camera motion detection functions. Click Next to continue.



This section will allow you to enable or disable motion detection as well as control the sensitivity or your camera's ability to detect movement. Specify the window area, window name and sensitivity of detection as well as the type of recording (either snapshot of video clip). Then, click Next to continue.

#### STEP 1: SPECIFY MOTION DETECTION AREA SETTINGS

This section will allow you to enable or disable motion detection as well as control the sensitivity of your camera's ability to detect movement. Please specify the window area, window name and sensitivity of detection before clicking on the Next button.

Enable motion detection 💿 Snanshot 🔿 Video Clin

DCS5610(TCP-AV)	2008/01/07 01:57:28	Window Name:
		Sensitivity:
		Percentage: 0%
R		New Save
	Back Next Cancel	)

#### Section 3 - Configuration

This section will allow you to specify the time and date your camera records motion.

**Note:** Recording camera footage will take up space on your hard drive. Its recommended that you have sufficient disk space for **Always** function.

### **Click Next**

This step allows you to specify how you will receive the events notification of your camera, either via using email or FTP. You will need to enter all the relevant information for your email account or FTP settings. Then, click Next to continue.

#### STEP 3: ALERTS AND NOTIFICATION

**STEP 2: MOTION DETECTION SCHEDULE** 

Time 💿 Always

This final step allows you to specify how you receive notification of camera events. Choose between an email notification or alternatively you can setup an FTP Notification. You will need your email account settings or FTP details. If you are unsure of this information, please contact your ISP. Once you have entered this information, please click on the Next button.

This section allows you to specify the time and dates that your camera records motion. Please note that recorded camera footage will take up space on your hard drive. It is therefore

🗹 Sun 🗹 Mon 🗹 Tue 🗹 Wed 🗹 Thu 🗹 Fri 🗹 Sat

○ From 00 ♥ 00 ♥ to 24 ♥ 00 ♥

Back Next Cancel

recommended that you have sufficient disk space for 'Always' function.

⊙ Do not notify me	
O Notify me by E-mail	
User name	
Password	
SMTP(mail) Server	
Return E-mail Address	
Recipient email address	
O Notify me by FTP	
User name	
Password	
Server address	
Remote folder name	
Server port 21	
Passive mode 🔽	
Back Next Cancel	

You have completed the Motion Detection Wizard. Click Apply to save your settings.

# STEP 4: SETUP COMPLETE You have completed your camera setup. Please click the Back button if you want to review or modify your settings or click on the Apply button to save and apply your settings. Motion Detection: Disable Event: Take Snapshot Schedule Day: Sun, Mon, Tue, Wed, Thu, Fri, Sat Schedule Time: Always Alerts and Notification: Do not notify me

**Click Apply** 

### **Network Setup**

LAN Settings: Settings for your local area network.

- **DHCP:** Select this connection if you have a DHCP server running on your network and would like a dynamic IP address to be updated to your camera automatically.
- Static IP Client: You may obtain a static or fixed IP address and other network information from your network administrator for your camera. A static IP address will ease you for accessing your camera in the future.

IP Address: The fixed IP address.

- **Subnet Mask:** The default value is "255.255.255.0." Used to determine if the destination is in the same subnet.
- **Default Gateway:** The gateway used to forward frames to destinations in a different subnet. Invalid gateway settings may cause the failure of transmissions to a different subnet.

**Primary DNS:** Primary domain name server that translates names to IP addresses.

Secondary DNS: Secondary domain name server to backup the primary one.

**Enable UPnP** Allows a user to find, view and control this camera via a presentation page or **Presentation:** "Network Neighborhood" without configuration.

- **Enable UPnP Port** Enables the camera to add the port forwarding entry into the router automatically **Forwarding:** when this option is enabled.
- **PPPoE Settings:** Enable this setting if your ISP (DSL service) is using PPPoE. You may already have both Username and Password given by your ISP, or you may check with your ISP. The Connect Status will be determined automatically by the system.

oduct Page: DCS-5610					Firmware Version: 1.00
D-Link	(				
CSSAID	LIVE VIDED	SETUP	MAINTENANCE	STATUS	HELP
11	LITE TIDEO	- SETOI			Helpful Hints
voord Isburgk Satura	NETWORK SETUP				Salart THE'D (reportion) if
warning DMS	You can configure your L	AN and internet settings	from here.		you are running a DHCP
mage Setup		Save Settings	Don't Save Settings		would like an IP address
iudio and Video	LAN SETTINGS				assigned by your 1P camera
Notion Detection	ODWOD				Port Detail Settings allow you to specify the ports
ime and Date	Static IR Clent				that you reserve for HTTP and RTSP Streaming.
vent Setup	IP address	2	12.168.0.100		HTTP Port is the port you
ecording	Subnet mask	2	8,255,255,0		allocate in order to connect
amera Control	Default Gatewa	W 1	12.168.0.1		standard web browser.
iccess List	Primary DNS	2	2.168.0.1		RTSP Port is the port you
t and DO	Secondary DNS	·			to streaming mobile devices.
ogout	Enable UPnP present	ation			such as mobile phone or PDA.
	Enable UPnP port for	warding			RTSP streaming:
					Authentication: if enable authentication, you will
	PPPDE SETTINGS				need below "access name"
	⊙ Enable ⊙ Disable				example, if authentication is
	User name				like: RTSP://camera.ip/ ; if
	Password				authentication is enable, you need connect camera
	Confirm password				RTSP stream like: RTSP://camera.io/live.sdo.
	Connect Status	no	ne		(live.sclp is default access
	нттр				below options.
	Authentication	ba	sk 💙		
	HTTP port	80			
	Secondary HTTP port	80	80		
	Access name for stream1	vic	eo.mipg		
	Access name for stream2	vic	eo2.m(pg		
	FTP				
	FTP port	21			
	RTSP STREAMING				
	to disastination	P	while an		
	Authentication	0	sable M		
	Access name for stream?		ersep aft ode		
	RTSD port		4		
	BTP nort for video	*	86		
	BTCP port for video		87		
	RTP port for audio	9	158		
	RTCP port for audio	9	159		
	Enable multicast for	stream 1			
	Multicast group	address 2	9.120.1.99		
	Multicast video	port s	i60		
	Multicast RTCP	video port	61		
	Multicest audio	port 5	62		
	Multicast RTCP	audio port	63		
	Multicast TTL[1	~255] 1	j.		
	Enable multicast for s	stream 2			
	Multicast group	address 2	9.120.1.100		
	Multicast video	port S	264		
	Multicast RTCP	video port	65		
	Multicast audio	port	i66		
	Multicast RTCP	audio port 💿	67		
	Multicast TTL[1	~255) 1	i		
	L				
		Save Settings	Don't Save Settings		
SECURITY					

- HTTP: You may configure two HTTP ports for your camera. HTTP ports allow you to connect to the camera via a standard web browser. These ports can be set to a number other than the default TCP ports 80 and 8080. A corresponding port must be opened on the router. For example, if the port is changed to 1010, users must type in the web browser "http://192.168.0.100:1010" instead of "http://192.168.0.100".
- Authentication: Authentication: Choose either Basic where the password is not encrypted, or Digest where the password is encrypted during the transmission to the web server.

HTTP Port: The default value is 80.

**Secondary HTTP** The default value is 8080.

Port: After you have enabled the Authentication, you will need to configure and use the access name to access your video file. For example, http://camera ip/video.mjpg (video.mjpg is the Access name, you can modify it here)

Access name for The default name is video.mjpg. stream1:

- Access name for The default name is video2.mjpg. stream2:
  - FTP Port: Default port is 21. If you want to change the port number, you will need to specify the port when connecting to the FTP server. For example FTP://68.5.1.81:60 (if you use port 60 for your FTP server)

**RTSP Streaming:** This setting enables you to connect to a camera by using streaming mobile device(s), such as a mobile phone or PDA.

Authentication: Choose either Basic where the password is not encrypted, or Digest where the password is encrypted during the transmission to the web server. After you have enabled the Authentication, you will need to configure and use the access name to access your video file. RTSP:// camera ip/live.sdp (live.sdp is the default access name, you can modify it here)

Access name for The default name is live.sdp. stream1:

Access name for The default name is live2.sdp. stream2:

**RTSP port:** The port number that you use for RSTP streaming, the default port number is 554. RTP (Real Time Protocol) Port is used to streaming audio and video while RTCP (Real Time Control Protocol) port is used to monitor QoS of RTP stream. **Note:** RTP video port and RTP audio port must be an "even" number. The numbers of RTCP video port and RTCP audio port must equal to the numbers of RTP video port and RTP audio port and RTP audio port and RTP audio port. *Protocol* port and RTP audio port.

RTP port for video: Default port number is 5556.

RTCP port for video: Default port number is 5557.

RTP port for audio: Default port number is 5558.

RTCP port for audio: Default port number is 5559.

You may choose to enable multicast for your camera audio and video streaming so that your cameras (sources) and the receivers (clients) can establish the connection to send and receive contents.

Multicast group An IP Multicast group address is used to send and receive content. Sources use this group address as the destination address while address: sending their data packets. Receivers use this group address to inform the network that they are interested in receiving packets sent to that group. For example, if some content is associated with group 239.1.1.1, the source will send data packets destined to 239.1.1.1. Receivers for that content will inform the network that they are interested in receiving data packets sent to the group 239.1.1.1. The receiver "joins"

239.1.1.1. The Multicast address ranges from 224.0.0.0 to 239.255.255.255, or, equivalently, 224.0.0.0/4

Multicast video port: Default port number is 5560, or please choose between 1024 and 65534.

Multicast RTCP video Default port number is 5561, or please choose between 1024 and 65534. port:

Multicast audio port: Default port number is 5562, or please choose between 1024 and 65534.

Multicast RTCP audio Default port number is 5563, or please choose between 1024 and 65534. port:

Multicast TTL Set a Time to Live(TTL) value for multicast packet, please choose between 1 and 255. {1~255]:

### **Dynamic DNS**

DDNS (Dynamic Domain Name Server) will hold a DNS host name and synchronize the public IP address of the modem when it has been modified. The username and password are required when using the DDNS service.

**Enable DDNS:** Click to enable the DDNS function.

- Server Name: Select your Dynamic DNS provider from the pull down menu.
  - **Host Name:** Enter the host name of the DDNS server.
  - Username: Enter your username or e-mail used to connect to the DDNS
  - Password: Enter your password used to connect to the DDNS server.
    - Status: Indicate the connection status, automatically determined by the system.



### Image Setup

You may configure the color, brightness, and orientation settings of the video image. Preview of the image will be shown in the window of Live Video. Click Save Settings to save your changes.

- **Color:** Select either for Color or B/W (black and white, monochrome) video display.
- **Power line** You may need to choose 50 or 60 Hz frequency; and **frequency:** nonetheless maintain the system operation at a basic 50 Hz frequency.
- Video orientation: Two options. Flip will vertically rotate the video while Mirror will horizontally rotate the video. You may check both options if the camera is being installed upside down.
  - White balance: Choose either Auto or Fix white balance.
    - **Brightness:** It has eleven levels ranged from -5 to +5 for you to choose.


## **Audio and Video**

Two different settings for two video streams (stream 1 and stream 2) can be configured here. You may configure one setting for computer display and the other one for mobile display.

- **Mode:** It can be either JPEG or MPEG4. In JPEG mode, the video frames are independent. However, MPEG4 consumes much less network bandwidth than JPEG.
- **Frame Size:** Frame Size: Three options exist for the sizes of the video display. You can select between 176x144, 352x240, or 640x480. It is recommended using 176x144 for mobile viewing and 640x480 for computer viewing.
- Maximum frame 1 is the minimum value while 30 is the maximum value. rate: It is recommended choosing 30 for computer viewing and 5 for mobile viewing.
  - Video quality: This limits the maximal refresh frame rate, which can be combined with the "Fixed quality" to optimize the bandwidth utilization and video quality. If the User wants to fix the bandwidth utilization regardless of the video quality, choose "Constant bit rate" and select the desired bandwidth.
    - Mute: Select this if you want to switch off the sound.

**Internal** Select from the list to set internal microphone input gain. **microphone input** It is necessary to find the optimum gain that transmits gain: the best audio to whoever is listening.

**Note:** dB stands for decibels, unit of audio measurement. More decibels as a positive value indicates that the sound is louder, while more decibels as a negative value indicates that the sound is quieter.



**External** Select from the list to set external microphone input gain.

### microphone

### input:

- Audio type: AAC (Advanced Audio Coding): A wide band audio coding algorithm that exploits two primary coding strategies to dramatically reduce the amount of data needed to convey high-quality digital audio. Select a higher bit rate number for better audio quality.
- **GSM-AMR:** A standard adapted audio codec by the 3GPP video (3rd Generation Partnership Project). It is an Adaptive Multi Rate-Narrow Band (AMR-NB) speech codec. Select a higher bit rate number for better audio quality.
- AAC bit rate: Please select from the list, higher bit rate means higher audio quality but it takes more network bandwidth to transmit.
- **GSM-AMR bit** Please select from the list, higher bit rate means higher audio quality but it takes more network bandwidth to transmit. **rate:**

## **Motion Detection**

Enabling Motion Detection will allow up to three windows that can be created with different settings for monitoring. This allows your camera to serve as a security device that will record when motion is detected.

- Enable motion Check this option to turn on the motion detection. detection:
- Window name: Create your own name for the monitored area/ window. It will show at the top of the motion window.
  - **Sensitivity:** Set the measurable difference between two sequential images that would indicate motion.
  - Percentage: Set the amount of motion in the window being monitored that is required to initiate a motion detected alert. If this is set to 100%, this means that motion is detected within the whole window to trigger a snapshot.
    Note: Setting a higher sensitivity and a lower percentage will make any motion more easily.
    - New: Click to add a new window. A maximum of three motion windows can be opened simultaneously. Use your mouse to drag the window frame to re-size or the title bar to move. Clicking on the 'x' at the upper right corner of the window will close the window.

Save: Save the related settings of that window.



SECURITY

## **Time and Date**

From this section, you may automatically or manually configure, update and maintain the internal system clock for your camera.

Current Server Will be determined by the system. Time:

**Time Zone:** Select your time zone from the drop-down menu.

- Enable Daylight Select this to enable the daylight saving time. Saving:
- **Daylight Saving** You may configure the daylight saving date and time. **Dates:**
- Automatic Time Enable this feature to obtain time configuration Configuration: automatically from NTP server.
  - NTP Server: Network Time Protocol (NTP) synchronizes the DCS-5610 with an Internet time server. Choose the one that is closest to your location.
- **Update Interval:** The time interval for updating the time information from NTP server.

Set the date and This option allows you to set the time and date time manually: manually.

**Copy Your** This will synchronize the time information from your **Computer's Time** PC.

#### Settings:



## **Event Setup**

There are three sections in Event Setup page. They are Event, Server and Media. Click Add to pop up a window to add a new item of event, server or media. Click Delete to delete the selected item from the pull-down menu of event, server or media. Click on the item name to pop up a window for modifying. You can add up to three events, five servers and five medias.

Product Page: DCS-5610					Firmware Version: 1.00
D-Link	¢				$ \prec$
DC55610 //	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Wizard	EVENT SETUP				Helpful Hints
Network Setup Dynamic DNS Image Setup	There are three sections to add a new item of eve media. Click on the item r at most five server and fiv	in Event Setup page. They a int, server or media. Click Del hame to pop a window to ed ve media configurations.	are event, server and media. C ete to delete the selected ite lit it. There can be at most th	lick Add to pop a window m from event, server or ree events. There can be	Suggest setting server and media first before setting event. The servers and media which selected in event list are not be able
Audio and Video Motion Detection Time and Date Event Setup	SERVER Name Type Address/ Server1 email Add V Delete	Location			to modify or delete. Please remove them first from the event if you want to delete or modify them. Recommend using different media in different event to make use all media be
Recording Camera Control Access List DI and DO Logout	MEDIA Media freespace: 4050 Name Type Medial snapshot Add V Delete	KB			produced and received correctly. If using the same media in different events and the events trigger almost simultaneously, the servers in the second triggered event will not receive any media; there would be only notifications.
	EVENT Name Status Sun Mo Event1 OFF V V Add Event1 V Delete	n Tue Wed Thu Fri Sat Tim VVVV 00:1 ]	e Trigger 00~24:00 mation		
SECURITY					

## Add Server

Up to 5 servers, where will store the media with its own settings can be created and configured here.

Server Name: Unique name of your server.

- **Email:** Select this to enable and apply your email account setting for your camera.
  - FTP: Select this to access a granted folder on the external FTP server.
- **HTTP:** Select this to use a web server to store the media.

**Network Storage:** Only one network storage is supported.

Product Page: DCS-5610					Firmware Version: 1.00
D-Lini	<				
CS 5610 //	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Wizard	SERVER				Helpful Hints
Network Setup	You can set at most 5 dif	ferent servers here for	different event.		"Server name" The
Dynamic DNS		Tect Save Settin	as Dop't Save Settings		unique name for server. There are four kinds of
Image Setup			gs boint save settings		servers supported. They are email server, FTP
Audio and Video	SERVER TYPE				server, HTTP server and network storage.
Motion Detection	Server name:				Email corvor:
Time and Date	⊙ Email				"Sender email address"
Event Setup	Sender email ad	ldress			sender.
Recording .	Recipient email	address			"Recipient email address" The email
Camera Control					address of the recipient.
Access List	User name				FTP server: "Remote folder name"
	- Password				Granted folder on the
Logout	● FTP				string must conform to that
	Server address				of the external FTP server. Some FTP servers cannot
	Server port	2	1		accept preceding slash symbol before the path
	User name				without virtual path manning. Refer to the
	Password				instructions for the external
	Remote folder i	name			folder privilege must be
	Passive mo	de			open for upload. "Passive Mode" Check it
	Онттр	_			to enable passive mode in transmission.
	URL	ŀ	ttp://		HTTP server:
	User name	L			"URL" The URL to upload
	Password				Only one network storage
	Network storage	_			is supported. "Network storage
	Network storag	e location			location" The path to upload the media.
	(for example: \ )&(orkgroup	(my_nas\disk\toider)			"Workgroup" The workgroup for network
	Licer parce				storage.
	Dassword				server, user can click on
	Primary WINS s	erver			setting is correct. The
		L			testing result will be shown in a pop-up window.
		Test Save Settin	gs Don't Save Settings		
SECURITY					

## Add Media

Up to 5 media for recording with its own settings can be created and configured here. There are three types of media, Snapshot, Video Clip and System Log.

Media Name:	The unique name for media.
Snapshot:	Select this feature to enable camera to take snapshot.
Source:	The source of stream, stream1 or stream2.
Send pre-event image(s) [0~7]:	The number of pre-event images.
Send post-event image(s) [0~7]:	The number of post-event images.
File name prefix:	The prefix name will be added on the file name of the snapshot images.
Add date and time suffix to file name:	Check it to add timing information as file name suffix.
Video clip:	Select this feature to enable camera to take video clip.
Source:	The source of stream, stream1 or stream2.
Pre-event recording:	The interval of pre-event recording in seconds.
March 1997	

- **Maximum duration:** The maximal recording file duration in seconds.
- Maximum file size: The maximal file size would be generated.
- File name prefix: The prefix name will be added on the file name of the video clip.
  - System log: Select this feature to enable camera to display system log.



### Add Event

Up to 3 events with its own settings can be created and configured here. Meanwhile, you can schedule the events here.

Event name: Unique name for the event.

Enable this event: Select this to activate this event.

- **Priority:** Set the priority for this event and the event with higher priority will be executed first.
- **Delay:** The delay time before checking next event. It is being used for both events of motion detection and digital input trigger.

Trigger: The input type that triggers the event.

- Video motion Motion is detected during live video monitoring. Select the detection: windows that need to be monitored.
  - **Periodic:** The event is triggered in specified intervals. The unit of trigger interval is minute.
- Digital input: External trigger input to the camera.
- System boot: The event is triggered when the system boot up.

Time: Either "Always" or input the time interval.

- **Trigger D/O:** Check it to trigger digital output for specific seconds when event is triggered. The default actions are triggering the D/O and storing the media on a CF card.
- Move to preset If there is a server(s), user can select the available server(s) location: from Move to preset location.



## Recording

Here you can configure and schedule the recording. You may add new entry or delete an existing entry via this page.

**Recording entry:** Available entry(s) is displayed here with its details.

Add: Click this button to add new entry.

**Delete:** Delete an existing entry.

Product Page: DCS-5610					Firmware Version: 1.00
D-Link	Č				
DC55610 //	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Wizard Network Setup	RECORDING				Helpful Hints
Image Setup Audio and Video	RECORDING ENTRY Name Status Sun Mon Add V Delete	Tue Wed Thu Fri Sat Time	Source Destination		
Motion Detection Time and Date					
Event Setup Recording					
Camera Control Access List					
DI and DO Logout					
SECURITY					

## Add Recording

You can add and configure an entry here.

**Recording entry** The unique name of the entry. **name:** 

**Enable this** Select this to enable the recording function. **recording:** 

**Priority:** Set the priority for this entry and the entry with higher priority will be executed first.

Source: The source of stream.

Recording schedule: Scheduling the recording entry.

**Recording settings:** Configuring the setting for the recording.

Destination: Select the folder where will store the recording file.

**Total cycling** Please input a HDD memory volume between 1MB and **recording size:** 200GB for recording space. The recording data will replace the oldest one when total recording size exceeds this value. For example, if each recording file is 6MB, and the total cycling recording size is 600MB, then camera will recording 100 files to the specified location (folder).

Product Page: DCS-5610					Firmware Version: 1.00
DC55610 //	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Wizard	RECORDING				Helpful Hints
Network Setup		Save Settings	Don't Save Settings		
Dynamic DNS					
Image Setup	RECORDING				
Audio and Video	Recording entry name:				
Motion Detection	🗖 🗖 selete dete opposition				
Time and Date	Priority: normal V				
Event Setup	Source: Stream1 💌				
Recording					
Camera Control		IE			
Access List	RECORDING SCHEDO				
DI and DO	🛛 🗹 Sun 🗹 Mon 🗹 Tu	e 🗹 Wed 🗹 Thu 🗹 Fri	🗹 Sat		
Logout	Time				
	Aiways     From 00:00	to 24:00 [hh:mm]			
	RECORDING SETTING	iS			
	Destination 🗸				
	Total cycling recording siz	e: 500 Kbytes			
	Size of each file for record	ling: 200 Kbytes [200~60	000]		
	File Name Prefix:				
		Save Settings	Don't Save Settings		
		_ Javo Jottings	borre save secolitys		
SECURITY					

And then the camera will delete the oldest file and create new file for cycling recording.

Please notice that if the HDD empty space is not enough, the recording will stop. Before you setup this option please make sure you HDD have enough space and it is better not to save other files in the same folder as recording files.

Size of each file for File size for each recording file. You may input the value in the range of 200-6000. recording:

File Name Prefix: The prefix name will be added on the file name of the recording file(s).

## **Camera Control**

Here you can preset the locations and change the default location for your home button.

- **Up, Down, Left,** "Home" aims the camera to the center, where as the **Right, Home:** other buttons aim the camera accordingly.
  - Zoom (-): Zoom widely function.
  - Zoom (+): Zoom telescopically function
  - **Pan Speed:** Select the speed at which the camera will pan for a full cycle from the pull down menu. Select a value between -5 and +5, -5 being the slowest setting.
  - **Tilt Speed:** Select the speed at which the camera will tilt for a full cycle from the pull down menu. Select a value between -5 and +5, -5 being the slowest setting.
  - **Zoom Speed:** Select the speed at which the camera will zoom for a full cycle from the pull down menu. Select a value between -5 and +5, -5 being the slowest setting.
- **Pan/patrol speed:** Select the speed at which the camera will pan during patrol. Select a value between 1 and 5, 1 being the slowest setting.
- **Dwelling time (sec):** Set the value of time that the camera will remain on each preset position before moving to the next. The dwelling time can be set between 1 and 255 seconds.



**Preset locations:** Desired positions that have been configured.

Selected locations: To use the Patrol feature, select the desired preset positions from the Preset Locations list and add them to the Selected Locations list by clicking Select. You can then select the order in which the camera will patrol through the preset locations by selecting a location and clicking UP or DN. Click Remove to remove a location from the list.

**Current** Enter a name for the position at which you would like to preset the DCS-5610. Click Add to add the new preset position to the Preset **Position:** Locations list.

**Preset** A pull-down menu that contains all the preset locations. You can delete a preset position by selecting it and clicking Delete. **Position:** 

**Home** Allow users to set a new home position or default back to the original. **Location:** 

## **Access List**

Here you can configure the access permissions for each user.

- Allow list: The list of IP addresses that have the access right to the camera.
- Start IP address: The starting IP Address of the devices (such as a computer) that have permission to access the video of the camera.
- End IP address: The ending IP Address of the devices (such as a computer) that have permission to access the video of the camera.
- **Delete allow list:** Remove the customized setting from the Allow List.
  - **Deny list:** The list of IP addresses that have no access right to the camera.
- **Delete deny list:** Remove the customized setting from the Delete List.



# **DI** and **DO**

The I/O connector provides the physical interface for digital output (DO) and digital input (DI) that is used for connecting such external alarm devices as IR-Sensors and alarm relays to the PTZ IP camera.

- **DI and DO:** Setting for both Digital input signal and digital output signal can be configured here.
- **Digital input trigger** Please select from "High" or "Low" for digital input **condition:** trigger condition. When external device connect to the digital input pins, the state of the voltage will be monitored. (Max. Input 500mA, 12Vdc)
  - **Digital output:** Select Grounded or Open to define normal status of the digital output. The camera will show whether the trigger is activated or not.



# Maintenance Device Management

You can modify both camera's name and administrator's password of your camera, as well as add more user accounts for accessing the camera.

Admin password Modify a password for the administrator's account. setup:

Add user account: Add new user account.

**Username:** The username for the new account.

Password: The password for the new account.

Privilege: The access right for the new user.

Manage user: Managing the accounts for the existing users.

Authentication: The access right for the existing users.

**Camera Name:** Create a unique name for your camera and you can access the camera using this name in your webbrowser. For example: http://DCS-5610 (By default).



## **Backup and Restore**

You can turn off the front panel LED, restore factory default settings and reboot the camera.

- **Turn off the LED** Check this option to turn off the LED next to the lens. **indicator:** This will prevent anyone from observing the operation of the IP Camera.
  - **Restore:** Click the button will reset the camera back to its factory default settings. This will remove all the configuration settings that were made previously.

**Reboot:** Click the button will restart the camera.

Product Page: DCS-5610					Firmware Version: 1.00
D-Link	Č				
DC55610	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Device Management Backup and Restore Firmware Update Logout	BACKUP AND RESTO You can turn off the from SYSTEM Turn off the LED inc RESTORE Restore all settings to fac REBOOT Reboot the system	RE It panel LED, restore to factor icator :tory default. Default Reboot	y default and reboot the car	nera.	Helpful Hints "Turn off the front panel LED" Check this option to turn off the LED next to the lens. This will prevent anyone from observing the operation of the IP Camera. "Restore to Factory Default" This option will reset the camera back to its factory default settings. This will remove all the configuration settings that were made previously. "Reboot" This option will restart the camera.
SECURITY					

## **Firmware Update**

Your current firmware version and date will be displayed on your screen. You may go to the D-Link Support page to check for the latest firmware version available.

To upgrade the firmware on your DCS-5610, please download and save the latest firmware version from the D-Link Support page to your local hard drive. Locate the file on your local hard drive by clicking the Browse button. Then, open the file and click the "Upload" button to start the firmware upgrade.

- **Current firmware** It will be automatically determined and displayed by the **version:** system.
- **Current firmware** It will be automatically determined and displayed by the **date:** system.
  - File Path: Locate the file (upgraded firmware) on your hard drive using the browse feature.
    - **Upload:** Start uploading and upgrading the new firmware to your camera.



# Status Device Info

This page displays all the details information about your device and network connection.

D-IAM	ıo I <b>k</b>				Firmware Version
55610	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
vice Info	DEVICE INFO				Helpful Hints
js	All of your network conr	nection details are displayed or	n this page. The firmware vers	ion is also displayed here.	All of your WAN and connection details ar
	BASIC INFORMATIC Carnera Name: Date and Time: Firmware Version:	N Network Camera 14 Jan 2008 21:49:23 1.00, 27 Nov 2008			
	IP address: Subnet mask: Default router: Primary DNS:	192.168.0.100 255.255.255.0 192.168.0.1 192.168.0.1			
	Secondary DNS: PPPoE: DDNS:	OFF OFF			
SECURITY					

## Logs

This page displays the log information of your camera. You can configure a remote log server so that you can view your log details remotely.

**Enable remote log:** Enabling this feature so that the camera can send camera log files to a remote server.

Log server settings: Configure the setting for the log server.

- IP Address: The IP address of the remote server.
  - **Port:** The port number of the remote log server. The default port is 514.
  - Save: Save the setting.
- **Current Log:** The system log file that displayed by the system. The content of the file reveals useful information about camera configuration and connectivity status after the camera boots up.



# Help



# **D-ViewCam Installation**

D-ViewCam software is included for the administrator to manage up to 32 D-Link IP cameras remotely. The administrator can use the software to configure the advances settings for the camera. D-ViewCam is a complete management tool and includes all configurative settings.

Insert the CD-ROM into the CD-ROM drive. A menu screen will appear as shown below.



D-ViewCam provides English, Traditional Chinese and Simplified Chinese language versions. Select a language version and click OK to continue.



### Click OK

D-Link DCS-5610 User Manual

### Click Next to continue.



**Click Next** 

Click Browse if you would like to choose a specific folder for the installation, otherwise click Next to continue.

Choose Destination Location Select folder where setup will install files.		
Setup will install D-Link D-ViewCam in the	following folder.	
To install to this folder, click Next. To insta another folder.	ill to a different folder, cli	ick Browse and select
Destination Folder		
Destination Folder C:\Program Files\D-Link\D-Link D-ViewI	Cam\	Browse
Destination Folder C:\Program Files\D-Link\D-Link D-Viewl allShield	Cam\	Biowse

**Click Next** 

Click Next to start the installation.

*Note:* The D-ViewCam installation process may take several minutes to complete.



**Click Next** 

Click Finish to complete the installation.



**Click Finish** 

# Add a Camera

This section will show you how to start and add a camera to the D-ViewCam system.

To start D-ViewCam, select Start > All Programs > D-Link > D-Link D-ViewCam.



Enter admin as the default username and leave the password blank. Click / OK to log into the system and access the Add Camera Wizard.

*Note:* Please refer to page 48 in the D-ViewCam user manual to change your password.

🐮 Log In			×
User ID:	Admin		
Password:			
	$\checkmark$	6,	k

Welcome to the Add Camera Wizard. Use this wizard to add your cameras to the D-ViewCam system.



Choose which method to add your camera(s). You can choose Auto Discovery to automatically search for your camera(s), or choose Add Manually to add your camera(s) via the camera's IP address. Click Next to continue.

If you choose Auto Discovery, the system will search all cameras that are located on the same LAN with same subnet. The system will place all the cameras at the default map called My Map. Click Next to continue.

If you choose **Add Manually**, enter the IP address or domain name, http port, model name, camera ID and password.

Click the "?" button to auto detect the camera's model name, then the model name will appear in the **Model Name** box.

Click Next to continue.

#### Add Camera

Please select the add method for your cameras.

Auto Discovery

Add Manually

Auto discovery result

The detected cameras are grouped under My Map.



Assign IP		
Camera IP Address	?	
Device Port	80	
Model Name	•	
Camera ID		
Camera Password		
		_

D-ViewCam shows the detected IP camera(s) information. You can choose and schedule the recording for each camera.

- 24/7 Continuous Recording: Continuously recording 24 hours a day, 7 days a week.
- 24/7 Motion Detection Recording: Continuously monitoring but ONLY recording when motion is detected.
- Office Hours Only: Continuously monitoring during office hours (08:00 AM to 06.00 PM) and ONLY recording when motion is detected.
- Non-Office Hours Only: Continuously monitoring during non-office hours (06:00 PM to 08.00 AM) and ONLY recording when motion is detected.

*Note:* Excluding 24/7 Continuous Recording, other schedule recording types can ONLY do recording when motion is detected. Please refer to page 29 for more information.

### Click Next to continue.

Camera Name	Model	Schedule Recording Type	Status	IP Address	MAC Address
DCS-5300-55	DCS-5300	None	<ul> <li>Active</li> </ul>	10.129.1.55	000D887D6DC4
DCS-5220-233	DCS-5220	None	\star Active	10.129.1.233	001346DC3BC3
DCS-5220-234	DCS-5220	None	Active	10.129.1.234	001346DC3BEB

Select Yes to add other camera(s), or select No if you have no additional camera(s) to add. Click Next to continue.



The Add Camera wizard is now complete. Click Close to access the D-ViewCam's main screen.



### Your D-ViewCam Installation is Complete!

*Note:* Please refer to the D-ViewCam user manual for information about using D-ViewCam.



# **Frequently Asked Questions**

This chapter provides solutions to problems that may occur during the installation and operation of the DCS-5610. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows<sup>®</sup> XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

### **PTZ PoE Network Camera Features**

1. What is a PTZ PoE Network Camera?

The PTZ PoE Network Camera is a stand-alone system connecting directly to an Ethernet or Fast Ethernet network. The PTZ PoE Network Camera differs from a conventional PC Camera because it has an integrated system with built-in CPU and web-based solutions, providing a low cost solution that can transmit high quality video images for monitoring. The PTZ PoE Network Camera can be remotely managed, accessed and controlled from any PC/Notebook over an Intranet or Internet using a web browser.

2. What is the maximum number of users that can access DCS-5610 simultaneously?

The maximum number of users that can log onto the PTZ PoE Network Camera at the same time is 10. Please keep in mind the overall performance of the transmission speed will be reduced if many users have logged on to the camera simultaneously.

3. What algorithm is used to compress the digital image?

The PTZ PoE Network Camera utilizes MPEG-4 simple profile or MJPEG Mode image compression technology providing high quality images. MJPEG is a standard for image compression and it can be applied to various web browsers and application software without installing any extra software

4. Can I capture still images from the PTZ PoE Network Camera? Yes you can capture still images using the snapshot function.

### **PTZ PoE Network Camera Installation**

1. Can the PTZ PoE Network Camera be used outdoors?

The PTZ PoE Network Camera is not weatherproof. It needs to be equipped with a weatherproof case for outdoor use but it is not recommended.

2. When physically connecting the PTZ PoE Network Camera to a network, what network cabling is required? The PTZ PoE Network Camera uses Category 5 UTP cable allowing 10 Base-T and 100 Base-T networking solutions.

3. Can the PTZ PoE Network Camera be setup as a PC-cam on a computer?

No, the PTZ PoE Network Camera is used only on an Ethernet or Fast Ethernet network.

4. Can the PTZ PoE Network Camera be connected to the network if it consists only of private IP addresses? The PTZ PoE Network Camera can be connected to a LAN with private IP addresses.

5. Can the PTZ PoE Network Camera be installed and work if a firewall exists on the network?

If a firewall exists on the network, port 80 is open for ordinary data communication. The DCS-5610 uses port 5002 for streaming audio and port 5003 for streaming video. These ports (or the ports you have specified in the Advanced Tab in the Configuration screen) need to be opened on the firewall.

6. Why am I unable to access the PTZ PoE Network Camera from a web browser?

If a router or firewall is used on the network, the correct ports for the **DCS-5610** may not be configured on the router or firewall. To correct the problem, you need to determine if the **DCS-5610** is behind a router or firewall and if the router or firewall is properly configured for the ports the **DCS-5610** is using. Refer to Page 28 for help in opening the correct ports on a router or firewall for use with the **DCS-5610**. Other possible problems might be due to the network cable. Try replacing your network cable. Test the network interface of the product by connecting a local computer to the unit, utilizing a Ethernet crossover cable. If the problem is not solved the PTZ PoE Network Camera might be faulty.

7. Why does the PTZ PoE Network Camera work locally but not externally?

- This might be caused by network firewall protection. The setting of the firewall may need to be changed in order for the PTZ PoE Network Camera to be accessible outside of your local LAN. Check with the Network Administrator for your network.
- Make sure that your PTZ PoE Network Camera isn't conflicting with any Web server you may have running on your network.
- The default router setting might be a possible reason. Check that the configuration of the router settings allows the PTZ PoE Network Camera to be accessed outside of your local LAN.

8. I connected the PTZ PoE Network Camera directly to a computer with a cross-over Ethernet cable and received a Windows error upon running the installation Wizard?

- This Windows error will occur if the PTZ PoE Network Camera is connected to a computer that is not properly configured with a valid IP address. Turn off DHCP from the Network Settings in Windows and configure the computer with a valid IP address or connect the camera to a router with DHCP enabled.
- This error can also occur if the **Installation Wizard** icon is clicked on more than once from the setup wizard.

9. Noisy images occur. How can I solve the problem?

The video images might be noisy if the PTZ PoE Network Camera is used in a very low light environment. To solve this issue you need more lighting.

10. The images appear to be of poor quality, how can I improve the image quality?

- Make sure that your computer's display properties are set above 256 colors. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image appear to be of poor quality.
- The configuration on the PTZ PoE Network Camera image display is incorrect. Through the **Advanced>Image Setup** section of the Web management you need to adjust the image related parameters such as brightness, white balance and power line frequency for fluorescent light.

# **Networking Basics**

## **Check your IP address**

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on Start > Run. In the run box type *cmd* and click OK.

At the prompt, type *ipconfig* and press Enter.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your access point. Some firewall software programs may block a DHCP request on newly installed adapters.

If you are connecting to a wireless network at a hotspot

(e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.



### Statically Assign an IP address

If you are not using a DHCP capable gateway/access point, or you need to assign a static IP address, please follow the steps below:

Step 1 Windows<sup>®</sup> XP - Click on Start > Control Panel > Network Connections. Windows<sup>®</sup> 2000 - From the desktop, right-click My Network Places > Properties.

Step 2 Right-click on the Local Area Connection which represents your D-Link network adapter and select Properties.

Step 3 Highlight Internet Protocol (TCP/IP) and click Properties.

### Step 4

Click Use the following IP address and enter an IP address that is on the same subnet as your network or the LAN IP address on your access point.

	a <u>18. waanaa 18</u> .
You can get IP settings assigned this capability. Otherwise, you ne the appropriate IP settings.	automatically if your network supports ed to ask your network administrator fo
🔿 Obtain an IP address autom	atically
Use the following IP addres	s:
IP address:	192.168.0.52
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.0.1
Obtain DNS server address	automatically
Output the following DNS served as a serve serve served as a serve se	er addresses:
Preferred DNS server:	192.168.0.1
Alternate DNS server:	
	Advanced

Example: If the internet camera's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your access point (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your access point (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5 Click OK twice to save your settings.

# **Technical Specifications**

Video Codec MPEG4 / MJPEG

Audio Codec GSM-AMR / MPEG-4 AAC

PoE Supported IEEE 802.3af standard

Sensor 1/4" SONY progressive color CCD sensor

SDRAM 32 Mbytes

Flash Memory 8 Mbytes

### Lens

- 2.8-7.3mm zoom lens
- F1.9~F200 2.6x optical zoom (4x digital zoom)

### LAN

- 10/100Base T ports x1
- IEEE 802.3 compliance
- IEEE 802.3u compliance
- Support Full-Duplex operations
- 802.3x Flow Control support for Full-Duplex mode
- Supported IEEE 802.3af standard (PoE)

### MIC

6mm, -40 db ± 3db

### I/O Connector

4pin-contact terminal block (1x input (2pins), 1x output(2pins)

Audio Out Yes

Mute Button Slide switch for microphone mute (2 status)

Reset Button Reset to factory default

Dimension (WxHxD) 104 X 103.5 X 118 (mm)

Weight 319 (gram)

Power Consumption

- Max 6W (estimate)
- Input: 100-240VAC, 50/60Hz
- Output: 12VDC, 1.5A

### Networking

Protocol

- IPV4, ARP, TCP, UDP, ICMP
- DHCP Client
- NTP Client (D-Link)
- DNS Client
- DDNS Client (D-Link)
- SMTP Client
- FTP Client
- HTTP Server
- Samba Client
- PPPoE
- UPnP Port Forwarding
- RTP
- RTSP

- RTCP
- IP filtering
- 3GPP

Ethernet 10/100M BaseT Fast Ethernet auto negotiation

Video Algorithm Supported MPEG4/MJPEG dual format compression simultaneously JPEG for still image.

### Features

- Adjustable image size and quality
- Time stamp and text overlay
- Three configurative motion detection windows
- Flip & mirror

### Resolution

### • 470 TV lines

- Up to 30 frames at 176x144
- Up to 30 frames at 320x240
- Up to 30 frames at 640x480

### Low lux

1 Lux / F1.9

3A control AGC, AWB, AES

Electronic shutter 1/60(1/50)~1/100,000sec Sample rate 8/24/32K bps

Audio Frequency 50 ~ 16000Hz

S/N ratio More than 58dB

Mode Full duplex 2-way audio communication

Directional Omnidirectional

Microphone Frequency 50 ~ 16000Hz

S/N ratio 6mm, - 40 dB + 3db

OS Support Device Windows 2000 / Windows XP / Windows Vista / 3GPP Mobile Phone

Utility Windows 2000 / Windows XP / Windows Vista

Operation Temperature 0 to 40 °C (32 to 104°F) Storage Temperature - 20 to 70 °C (-4 to 158 °F)

Humidity 20-80% RH non-condensing

Emission (EMI), Safety & Other Certifications

• FCČ • CE

• C-Tick

<sup>1</sup>Maximum wireless signal rate derived from IEEE Standard 802.11g, 802.11a and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range. <sup>2</sup>Range varies depending on country's regulation. <sup>3</sup>The DCS-5610 doesn't include 5.25-5.35GHz & 5.47~5.725GHz.