

DCS-3410

Release 1.00

PoE Day & Night Network Camera

User Manual

Business Class Networking

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Package Contents

- D-Link DCS-3410 PoE Day & Night Network Camera
- CAT5 Ethernet Cable
- Power Adapter
- Manual and Software on CD
- Quick Install Guide
- Camera Stand

Note: Using a power supply with a different voltage than the one included with the package 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 using the D-ViewCam software)

Introduction

The D-Link DCS-3410 PoE Day & Night Network Camera is a powerful surveillance system that can connect to your network. The DCS-3410 differs from a conventional PC Camera because it is a standalone system with a built-in CPU and Web server, providing a low-cost solution capable of solving demanding security and home/office monitoring needs. It is designed with aluminum casing for maximum heat dissipation and better protection. Snapshot enables you to save a snapshot image directly from a Web browser to a local hard drive without installing any software. With 0.3 lux light sensitivity, the DCS-3410 is capable of capturing video in rooms with minimal lighting. With optional Day & Night Auto iris lens, IR LED Lens or night vision illuminator¹, you can customize your surveillance application to enable low light or night vision video streaming. You can also zoom in using the DCS-3410's 4x digital zoom² feature. The DCS-3410 gives you the ability to monitor video and audio in your home/office using an Internet browser anywhere in the world! Simple installation procedures, along with the built-in Web-based interface offers 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.*

¹Optional accessories for Day & Night Morning and night version surveillance are available.

²4x digital zoom enlarges an image by magnifying the pixels in a selected portion of the image by 4 times.

Features

- **Supports a Variety of Protocols:** Supporting TCP/IP networking, SMTP e-mail, HTTP and other Internet related protocols, the DCS-3410 Network Camera can be integrated easily into other Internet/Intranet applications because of its standards-based features.
- **Remote Snapshot Images:** Using the Snapshot feature, you save snapshots directly from the Web browser to a local hard drive without installing any software, making it convenient to instantly capture any moment from a remote location.
- **Low Light Recording and 4x Digital Zoom:** The DCS-3410's 0.3 lux light sensitivity allows you to capture video in rooms with minimal lighting, making it ideal for use at night time. The camera also features 4x digital zoom for closer viewing.
- **Optional Day & Night Auto iris lens, IR LED Lens or night vision illuminator²,** you can customize your surveillance application to enable low light or night vision video streaming.
- **Web Configuration:** Using the Web browser, administrators can configure and manage the Network Camera directly using the web browser via Intranet or Internet. Up to 20 accounts with different settings can be created and controlled by the administrator.
- **Built-in BNC (Bayonet Neil-Concelman) connector** is used for professional video connections. It benefits users who integrate digital IP camera into traditional system (CCTV) for both analog and digital video streaming purposes.
- **Powerful Surveillance and Remote Monitoring Utility:** An administrator is assigned with a pre-defined user ID and password, can modify the Network Camera settings from a remote site via Intranet or Internet. Administrators are allowed to monitor the video image, record the video image to a hard drive, and take snapshots.
- **Broad Range of Applications:** With today's high-speed Internet, the Network Camera provides the ideal solution for remotely monitoring live video images over the Intranet and Internet. The DCS-3410 allows remote access using an Internet Explorer or web browser for live image viewing with audio and allows the administrator to manage and control the Network Camera anywhere and anytime. 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 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.

Hardware Overview

Microphone Connector

The DCS-3410 PoE Day & Night 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-3410 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.

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.



BNC

The BNC connector is used for professional video connections. It benefits users who integrate digital IP camera into traditional system (CCTV) for both analog and digital video streaming purposes.

Reset Button

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

Iris Level

Used only when the DC-Iris lens is connected to the camera. When adjusting the Iris level, you can determine the brightness of the video images.

Hardware Overview

I/O Connector

The DCS-3410 provides a terminal block with three pairs of connectors situated on the back panel. Two pairs are 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.

Power LED

The power LED is on the back of the camera. As soon as the power adapter is connected to the camera, the LED will turn green. Once a connection has been established via Ethernet port, the LINK LED will turn solid green. If traffic is passing to the camera the LINK LED will blink. If no Ethernet connection is detected the LINK LED will not light up.



Link LED

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

DC Power Connector

The DC power input connector is located on the DCS-3410 Network Camera's back panel and is labeled 12V DC with a single socket to supply power to the Network Camera.

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.



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.

Connect Using Power-Over-Ethernet

Once you connect an Ethernet cable to your PoE switch or adapter, the Power LED on the DCS-3410 will turn green to indicate a proper connection.

The Network Camera comes with a camera stand 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 camera stand allowing the Network Camera to be mounted to the ceiling, or any wall securely.



Socket for camera stand

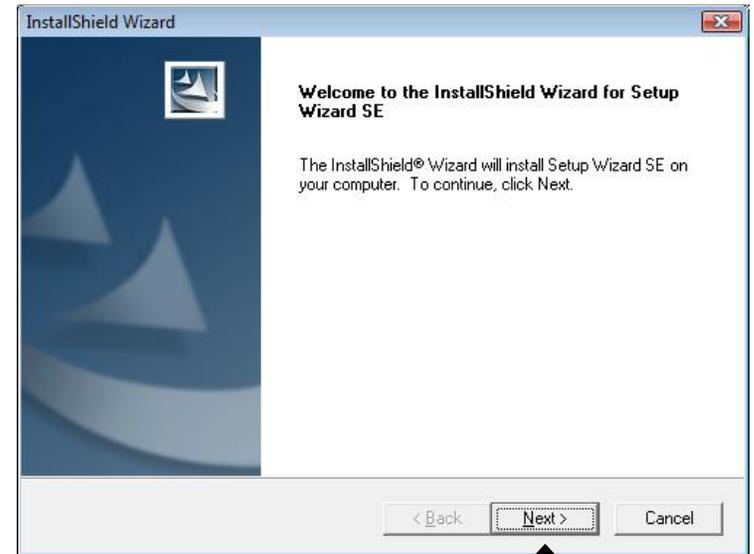
Software Installation

Turn on the computer and Insert the D-Link DCS-3410 Driver CD in the CD-ROM drive. The step-by-step instructions that follow are shown in Windows® XP. The steps and screens are similar for the other Windows operating systems.



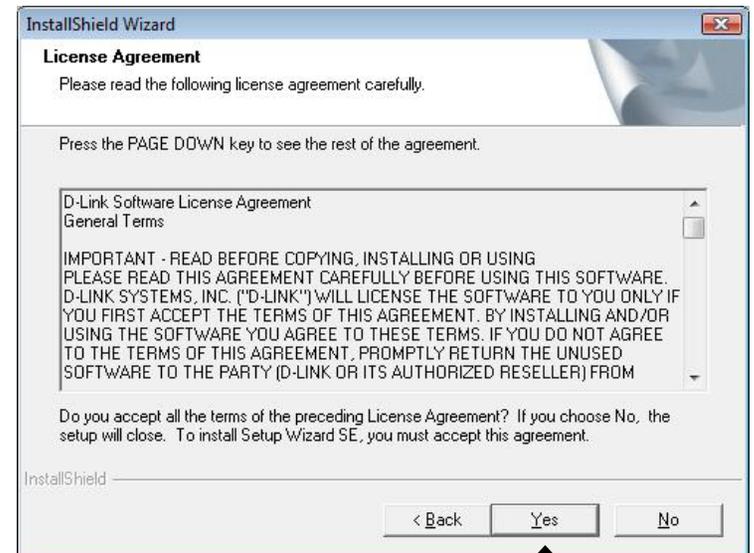
If the CD Autorun function does not automatically start on your computer, click Windows Start > Run. In the Run command box type “**D:\DCS3410.exe**”, where D: represents the drive letter of your CD-ROM. If it does start, proceed to the next screen.

Click **Next** to continue.



Click **Next**

Click **Yes** to accept the License Agreement.

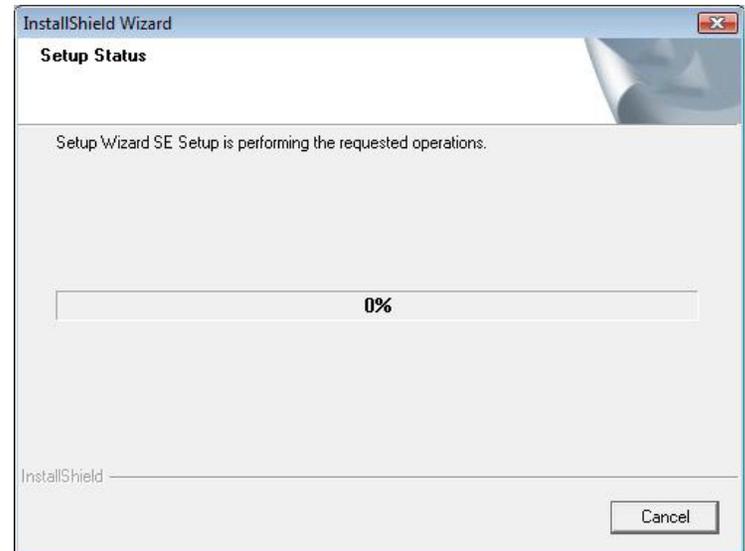
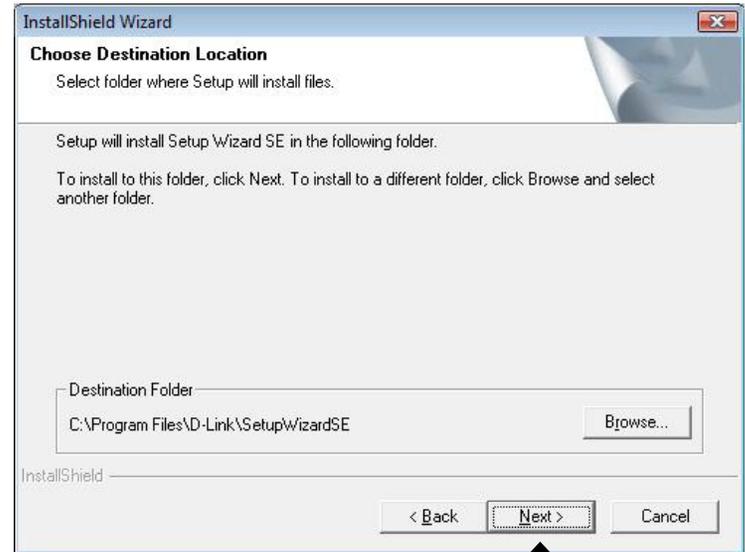


Click **Yes**

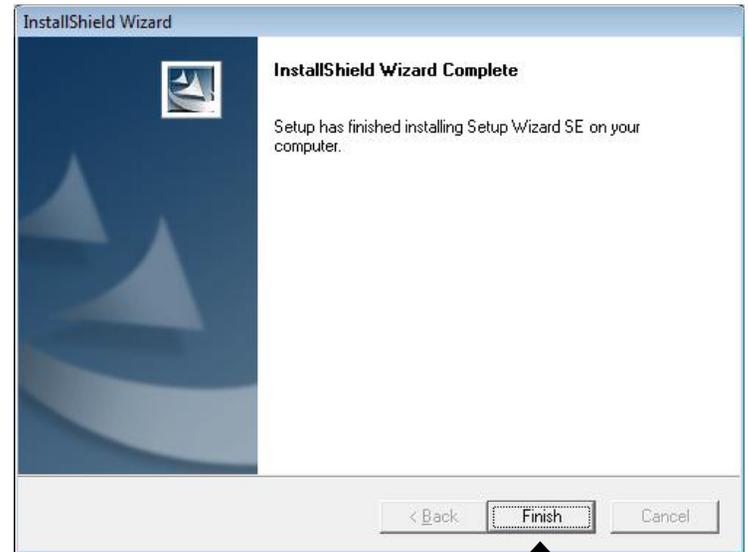
To start the installation click **Next**.

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

Click **Next**



Click **Finish** to complete the installation.



Click **Finish**

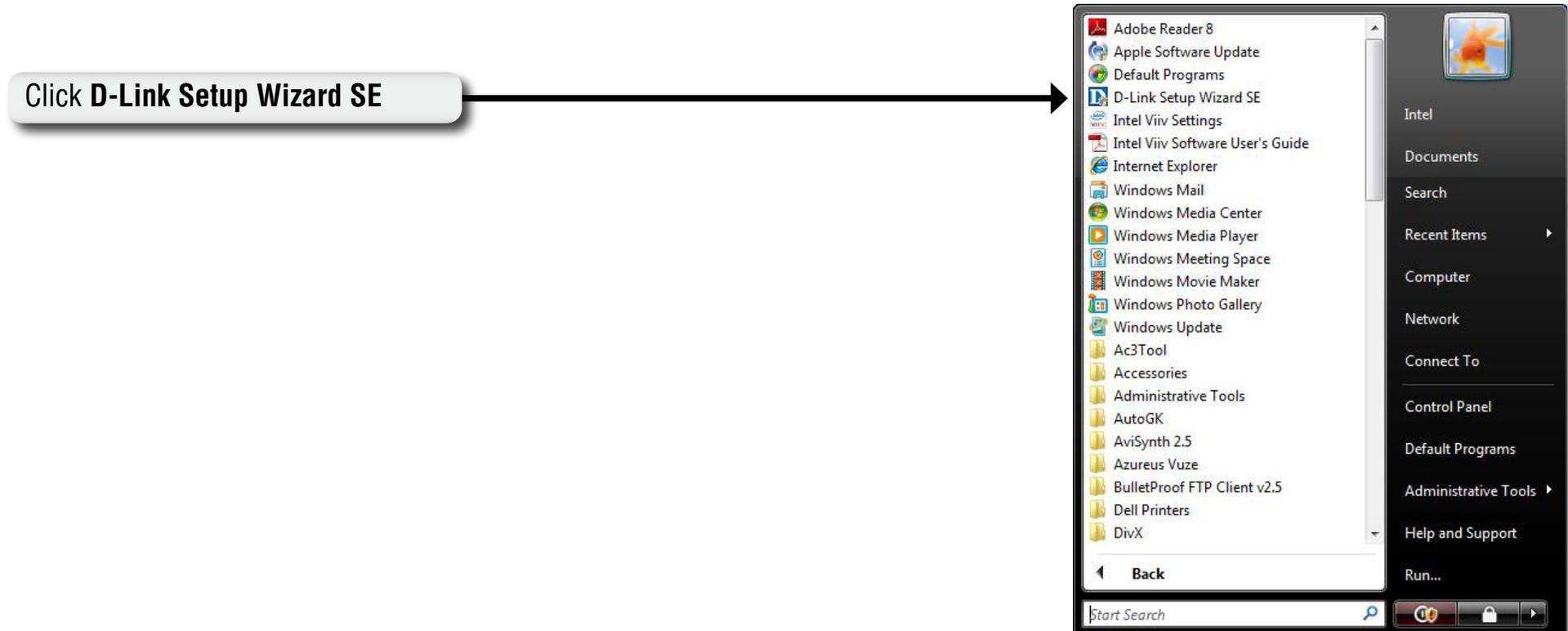


Configuration

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

Setup Wizard Configuration

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



The Setup Wizard will appear and show the MAC address of the DCS-3410 and an IP Address (which may or may not be correct depending on what you have your DCS-3410 connected to). If you have a DHCP server on your network, there will be a valid IP Address displayed here. Click the **Wizard** button to continue.

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



Enter the admin ID and password.

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



Click **Next**



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

D-Link
Building Networks for People

SECURICAM Network

Set IP Address

DHCP

Static IP

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS:

Secondary DNS:

Back Next Exit

Click **Next**

Select static IP to use the same IP address at each boot up.

D-Link
Building Networks for People

SECURICAM Network

Set IP Address

DHCP

Static IP

IP Address:

Subnet Mask:

Default Gateway:

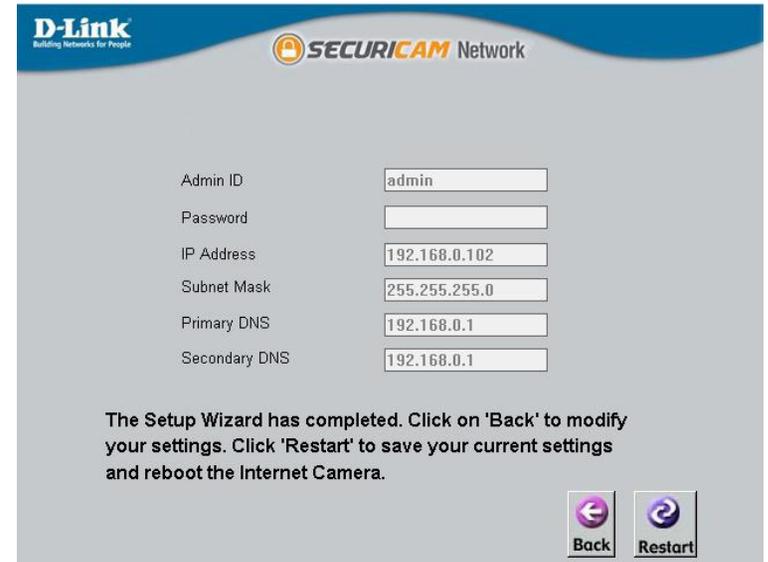
Primary DNS:

Secondary DNS:

Back Next Exit

Click **Next**

Click **Restart** to save your settings and reboot the Network Camera.



Click **Restart**



Click the button labeled **Link** to access the web configuration page. The Setup Wizard will automatically open your web browser to the IP address of the DCS-3410, in this example it is: `http://192.198.0.120`. Your DCS-3410 may have a different IP Address.

Click **Link**



Web-based Configuration Utility

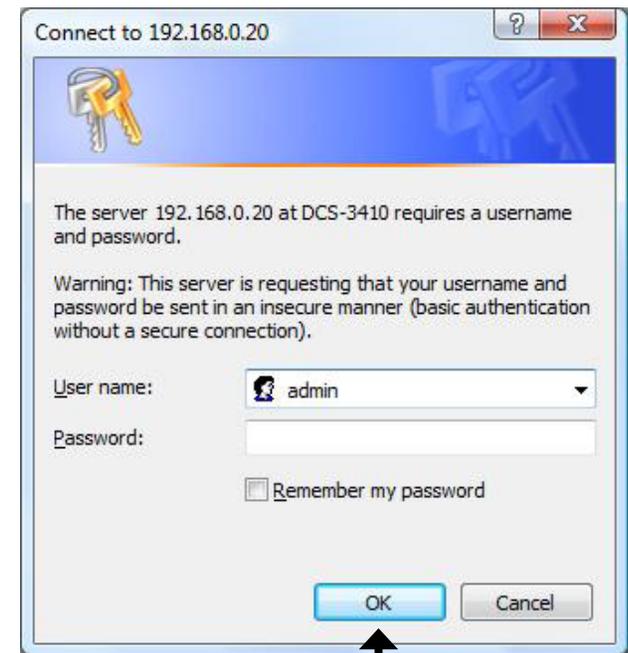
This section will show you how to configure your new D-Link Network Camera using the Web-based Configuration Utility.

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

Note: For example, the address is 192.168.0.120. Your address may differ.

Enter **Admin** for the username and then leave the password blank by default.

Note: To change your password at a later time, please refer to page 38.



Click **OK**

Live Video Camera

This section shows your camera's live video. You may select the available thumbnails for your option of predefined **Video Profile**, **Full Screen** mode, and action items of taking **Snapshot**, **Recording**, **Set Storage Folder**, **Listen**, **Talk**, and **Digital Output**. You may also select your language setting using the drop-down menu.

You can zoom in and out of the live video image using your mouse. Right-click to zoom out and left-click to zoom in on the image.

 **Digital Input Indicator:** This indicator will light up when there is an available digital input signal.

 **Motion Trigger Indicator:** When a trigger event occurs, this will light up.
Note: *The video motion feature for your camera must be enabled.*

 **Recording Indicator:** When a recording is in progress, this indicator will light up.

 **Video Profile 1**

 **Video Profile 2**

 **Video Profile 3**

 **Video Profile 4**

 **Full screen mode**

 **Taking a Snapshot**

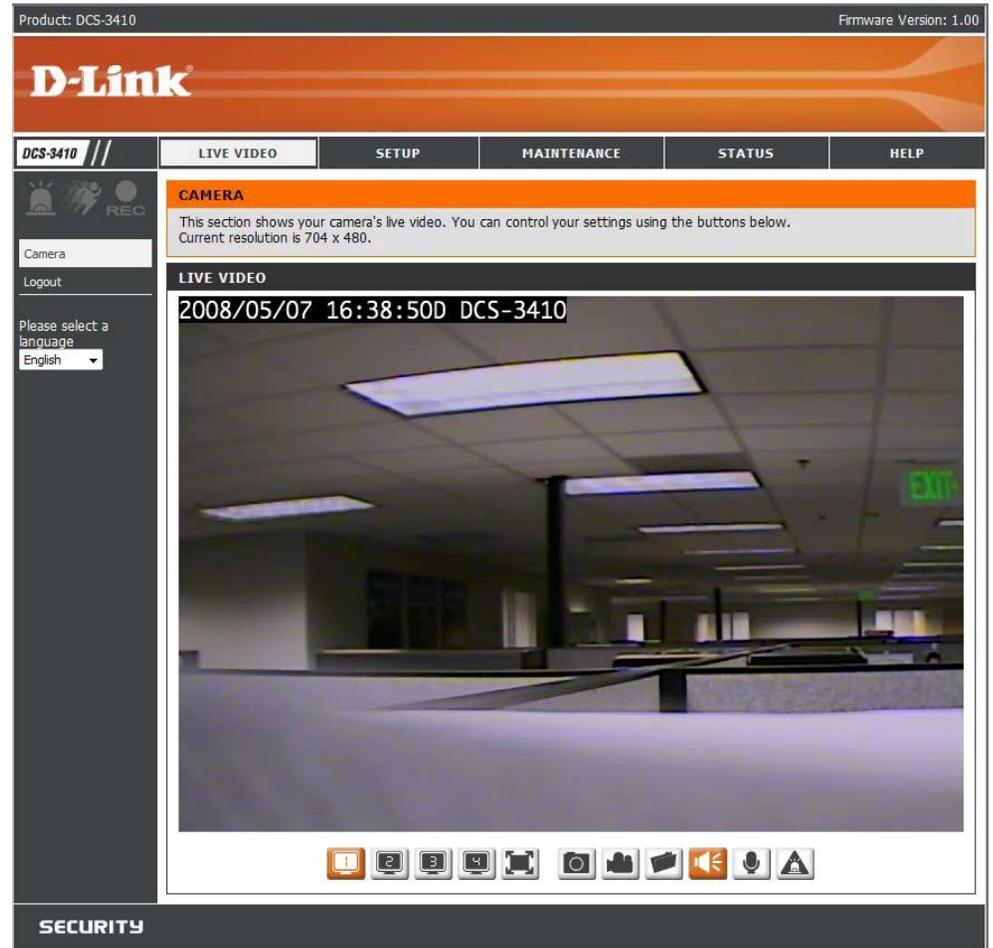
 **Recording a Video Clip**

 **Set a Storage Folder**

 **Listen/Stop Listening**

 **Talk/Stop Talking**

 **Start/Stop Digital Output**

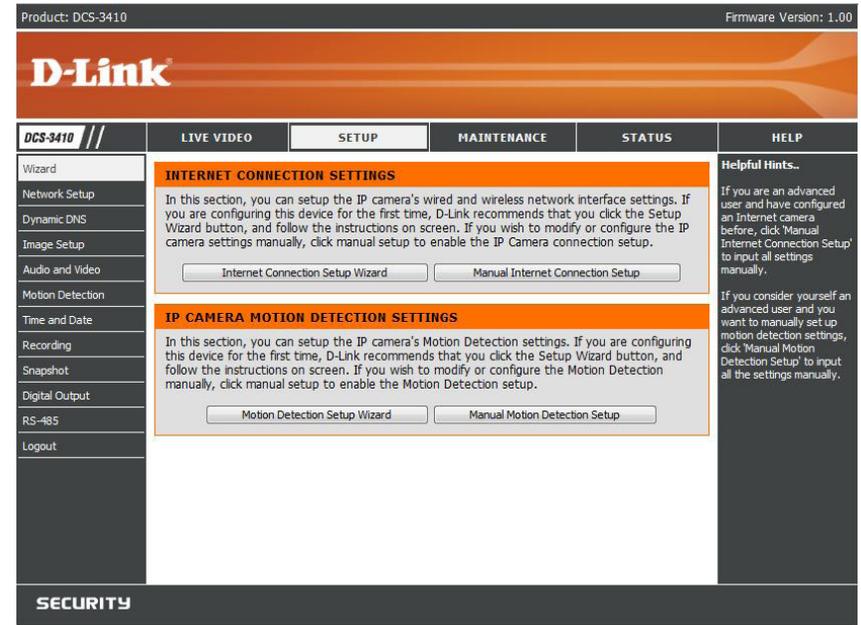


The screenshot displays the D-Link DCS-3410 camera web interface. At the top, it shows 'Product: DCS-3410' and 'Firmware Version: 1.00'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'LIVE VIDEO' tab is selected, showing a 'CAMERA' section with a live video feed. The video feed displays the date and time '2008/05/07 16:38:50D DCS-3410' and shows an indoor office environment. Below the video feed is a control bar with icons for video profiles, full screen, snapshot, recording, storage folder, listen, talk, and digital output. A 'SECURITY' banner is visible at the bottom of the interface.

Setup Wizard

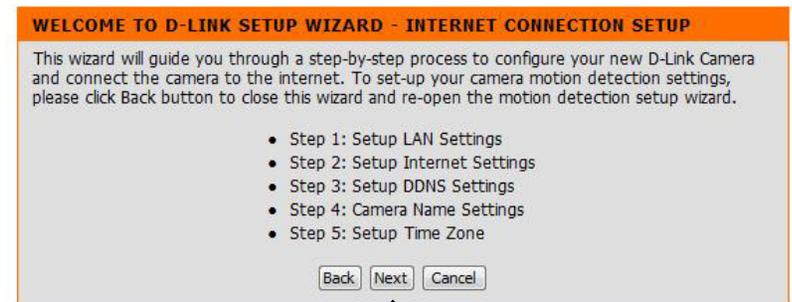
To quickly configure your Network Camera, click **Internet Connection Setup Wizard**, or click **Manual Internet Connection Setup** to manually configure your Network Camera.

To quickly configure your Network Camera's motion detection settings, click **Motion Detection Setup Wizard** and skip to page 24. If you want to enter your settings without running the wizard, click **Manual Motion Detection Setup** and skip to page 27.



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.



Click **Next**

Select **DHCP** if you are unsure which settings to pick. Click **Next** to continue and skip to page 22.

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.

DHCP Connection
 Static IP Address

IP Address
Subnet Mask
Default Gateway
Primary DNS
Secondary DNS

Click **Next**



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. Enter the accurate information for your static IP setting. Click **Next** to continue.

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.

DHCP Connection
 Static IP Address

IP Address
Subnet Mask
Default Gateway
Primary DNS
Secondary DNS

Click **Next**



If you are using PPPoE, select **Enable** and enter your user name and password, otherwise select **Disable** and click **Next** to continue.

STEP 2: SETUP INTERNET SETTINGS

Please enter your ISP Username and Password in the case that your ISP is using PPPoE and then click on the Next button. Please contact your ISP if you do not know your Username and Password.

Enable
 Disable

User Name (e.g. 123456@hinet.net)
Password

Click **Next**



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

STEP 3: SETUP DDNS SETTINGS

If you have a Dynamic DNS account and would like the camera to update your IP address automatically, enable DDNS and enter in your host information below. Please click on the Next button to continue.

Enable

Server Address <<

Host Name
User Name
Password
Verify Password

Click **Next**



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

STEP 4: SERVER NAME SETTINGS

D-Link recommends that you rename your camera for easy accessibility. You can then identify and connect to your camera via this name. Please assign a name of your choice before clicking on the Next button.

Camera Name

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.

STEP 5: SETUP TIME ZONE

Please configure the correct time to ensure that all events are triggered, captured and scheduled at the correct time and day and then click on the Next button.

Time Zone: (GMT-08:00) Pacific Time (US & Canada)

Enable Daylight Saving:

Back Next Cancel

Click **Next**

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 is a summary of your camera settings. Click on the Back button to review or modify settings or click on the Apply button if all settings are correct. It is recommended to note down these settings in order to access your camera on the network or via your web browser.

IP Address:	DHCP turn on.
IP Camera Name:	DCS-3410
Time Zone:	(GMT-08:00) Pacific Time (US & Canada)
DDNS:	Disable
PPPoE:	Disable

Back Apply Cancel

Click **Apply**

If you have 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 is a summary of your camera settings. Click on the Back button to review or modify settings or click on the Apply button if all settings are correct. It is recommended to note down these settings in order to access your camera on the network or via your web browser.

IP Address:	DHCP turn on.
IP Camera Name:	DCS-3410
Time Zone:	(GMT-08:00) Pacific Time (US & Canada)
DDNS:	Disable
PPPoE:	Disable

Back Apply Cancel

Click **Apply**

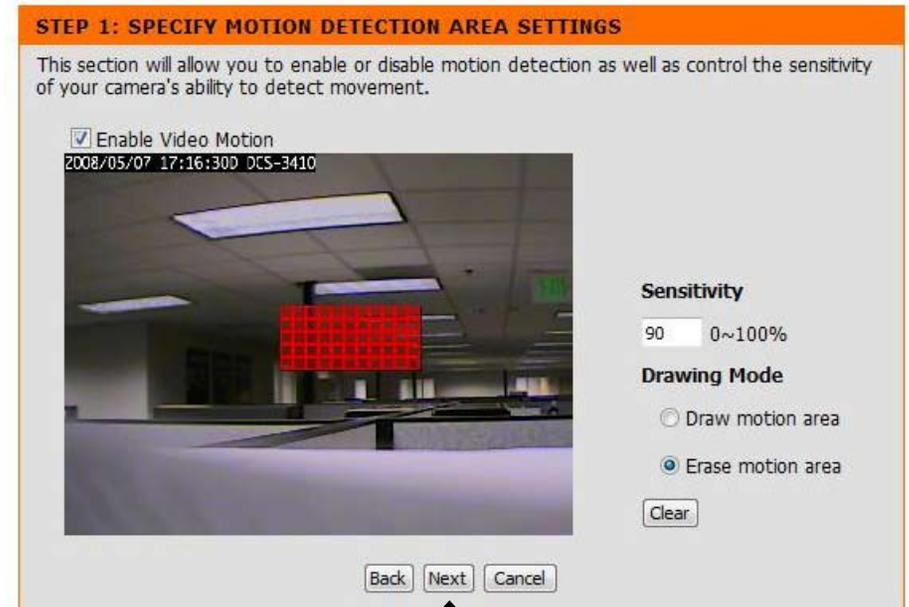
Motion Detection Setup Wizard

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.



Click **Next**

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. You can select the **Drawing Mode** to draw or erase the motion area in your window of live video.



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 2: ALERTS AND NOTIFICATIONS

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.

Enable e-mail notification

User Name

Password

SMTP Mail Server

Sender E-mail Address

Recipient E-mail Address

Port

Enable FTP uploading

User Name

Password

Host Name

Path

Filename Prefix

Port

Passive Mode

Click **Next**



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

STEP 3: 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: Enable
Alerts and Notification: Do not notify me

Click **Apply**



Network Setup

Use this section to configure the network connections for your camera. All relevant information must be entered accurately.

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 Address: 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: Enable this setting to allow your camera to be configured as an UPnP device in your network.

Enable UPnP port forwarding: Enable this setting to allow the camera to add port forwarding entries into the router automatically.

Enable PPPoE: Enable this setting if your network is using PPPoE service.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
 Network Setup
 Dynamic DNS
 Image Setup
 Audio and Video
 Motion Detection
 Time and Date
 Recording
 Snapshot
 Digital Output
 RS-485
 Logout

NETWORK SETUP
 You can configure your LAN and Internet settings here.
 Save Settings Don't Save Settings

LAN SETTINGS

LAN

DHCP Connection
 Static IP Address

IP Address
 Subnet Mask
 Default Gateway
 Primary DNS
 Secondary DNS

Enable UPnP
 Enable UPnP port forwarding
 Enable PPPoE

User Name
 Password
 Confirm password

PORT DETAIL SETTINGS

HTTP port
 RTSP port

Save Settings Don't Save Settings

SECURITY

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Helpful Hints..
 Select 'DHCP Connection' if you are running a DHCP server on your network and would like an IP address assigned to your camera automatically.
 - Enabling UPnP settings will allow you to configure your camera as an UPnP device in the network.
 Port Detail Settings allow you to specify the ports you reserve for both HTTP and RTSP Streaming.
 - HTTP Port is the port you allocate in order to connect to the camera via a standard web browser.
 - RTSP Port is the port you allocate in order to connect to a camera by using streaming mobile device(s), such as a mobile phone or PDA.

User Name: The unique name to your account. You may obtain this information from your ISP.

Password: The password to your account. You may obtain this information from your ISP.

HTTP Port: The default value is 80.

RTSP port: The port number that you use for RTSP streaming to mobile devices, such as mobile phones or PDAs. The default port number is 554.

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 user name 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 or enter the server address manually.

Host Name: Enter the host name of the DDNS server.

User name: Enter your user name 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.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
Network Setup
Dynamic DNS
Image Setup
Audio and Video
Motion Detection
Time and Date
Recording
Snapshot
Digital Output
RS-485
Logout

DYNAMIC DNS

The Dynamic DNS feature allows you to use a domain name that you have purchased (www.yourdomain.com) to access your camera with a dynamically assigned IP address. Most broadband Internet service providers assign dynamic (changing) IP addresses. By using a DDNS service, you can enter your domain name to connect to your camera no matter what your IP address is.

[Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.](http://www.DLinkDDNS.com)

Save Settings Don't Save Settings

DYNAMIC DNS SETTING

Enable DDNS

Server Address << Select Dynamic DNS Server

Host Name

User Name

Password

Verify Password

Timeout (hours)

Status:Disabled

Save Settings Don't Save Settings

SECURITY

Helpful Hints..

Dynamic DNS is useful if you have a DSL or Cable service provider that changes your modem IP address periodically. This will allow you to assign a website domain name to your camera instead of connecting through an IP address.

Image Setup

In this section, you may configure the video image settings for your camera. Preview of the image will be shown in the window of Live Video. Click **Save Settings** to activate and save your changes.

BLC: (Back Light Compensation): When an object is placed in front of bright lights, it is difficult for IP camera to capture the image clearly. Turn on this option will help your camera to capture or see the image of the objects when it is exposed to bright lights.

AWB: (Auto White Balance): While this option has been turned on, objects that appear white are rendered white in your photo.

AGC: (Auto Gain Control) Controls the gain of a signal. Using AGC means that weaker signals receive more gain and stronger signals receive less gain or none at all.

AES: (Auto Electronic Shutter): Allows the shutter speed to be adjusted automatically. Faster shutter speed will allow fast moving objects to be seen more clearly.

Brightness: An adjustable setting to compensate for backlit scenes.

Saturation: This setting controls the strength of color from black and white to bold colors.

Contrast: The measurement for color intensity/strength.

Hue: This setting controls the color tone.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
Network Setup
Dynamic DNS
Image Setup
Audio and Video
Motion Detection
Time and Date
Recording
Snapshot
Digital Output
RS-485
Logout

IMAGE SETUP
Changes to your settings are made immediately.

LIVE VIDEO
2008/05/07 19:02:07D DCS-3410

IMAGE SETTINGS

BLC	<input type="radio"/> On	<input checked="" type="radio"/> Off	Brightness	50
AWB	<input checked="" type="radio"/> On	<input type="radio"/> Off	Contrast	50
AGC	<input checked="" type="radio"/> High	<input type="radio"/> Low	Saturation	50
AES	<input checked="" type="radio"/> On	<input type="radio"/> Off	Hue	50

Reset to Default

Helpful Hints...
Brightness, Saturation, Hue and Contrast can be adjusted from 0 to 100 allowing you to fine-tune your image settings.

BLC - Back Light Compensation - When an object is in front of bright lights it is difficult for IP camera to capture the image clearly. Selecting this option can allow objects to become clearer when exposed to bright lights.

AWB - Auto White Balance - Is the process of removing unrealistic color casts, so that objects which appear white in person are rendered white in your photo.

AGC - Auto Gain Control - Controls the gain of a signal. Using AGC means that weaker signals receive more gain and stronger signals receive less gain or none at all.

AES - Auto Electronic Shutter - Allows the shutter speed to be adjusted automatically. Faster shutter speed will allow fast moving objects to be seen more clearly.

SECURITY

Audio and Video

You may configure 4 video profiles with different setting for your camera. Hence, you may setup different profiles for your computer and mobile display. In addition, you may also configure your audio (speakers and microphone) setup for your camera.

Resolution: This option allows the user to choose the video resolution of the camera between 160x120, 320x240 and 704x480:

- QQVGA @ 176x120 - Usually used for only displays of handheld devices.
- QVGA @ 352x240 - Standard solution for mobile phones and PDAs.
- VGA @ 704x480 - Standard solution for computer display.

FPS: (Frames Per Second): Highest FPS represents highest refresh rate of a picture is updated on screen every second, and provides better quality of video.

BPS: (Bits Per Second): BPS will affect the bit rate of the video recorded by the camera. Higher bit rate will increase the video quality.

RTSP URL: It is the URL name used to connect to the camera when viewing from a mobile device or PDA.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP		
Wizard	AUDIO AND VIDEO				Helpful Hints.. FPS - Frames per Second - The amount of image frames rendered by the camera per second. bps - Bits per Second - Higher value means a higher quality image but consumes more network bandwidth. JPEG Quality - Is the image quality level of JPEG images captured. RTSP URL - Is the URL used to connect to the camera when viewing from a mobile device or PDA. (i.e. rtsp://EXAMPLE.dlinkddns.com/3gpp). Most cell phones only support small resolutions such as 176x120 and low bitrates. We suggest using a resolution of 176x120 at 5 FPS and 20k BPS to watch images on your cell phone or pda.		
Network Setup	Select the audio and video settings that best suit your network environment.						
Dynamic DNS	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>						
Image Setup	VIDEO PROFILE 1						
Audio and Video	Encode Type	Resolution	FPS	bps		Jpeg Quality	RTSP URL
Motion Detection	MPEG4	704x480	30	2M		Excellent	play1.sdp
Time and Date	VIDEO PROFILE 2						
Recording	Encode Type	Resolution	FPS	bps		Jpeg Quality	RTSP URL
Snapshot	MPEG4	352x240	30	1M		Excellent	play2.sdp
Digital Output	VIDEO PROFILE 3						
RS-485	Encode Type	Resolution	FPS	bps	Jpeg Quality	RTSP URL	
Logout	JPEG	704x480	10	--	Excellent	play3.sdp	
	VIDEO PROFILE 4 (FOR MOBILE DEVICE ONLY)						
	Encode Type	Resolution	FPS	bps	Jpeg Quality	RTSP URL	
	MPEG4	176x120	5	20K	--	3gpp	
	AUDIO SETUP						
	Enable Audio Out	<input checked="" type="checkbox"/>					
	Volume	100					
	Enable Microphone	<input checked="" type="checkbox"/>					
	Volume	100					

Motion Detection

Enabling **Video Motion** will allow your camera to use the motion detection feature. You may also draw out the motion area for the monitoring.

Enable Video Motion: Check this option to turn on the motion detection feature for your camera.

Sensitivity: Set the measurable difference between two sequential images that would indicate motion.

Draw motion area: Select this option to draw out the motion detection area by dragging your mouse in the window (indicated by the red-colored box).

Erase motion area: Select this option to erase your motion detection area by dragging your mouse in the window.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
Network Setup
Dynamic DNS
Image Setup
Audio and Video
Motion Detection
Time and Date
Recording
Snapshot
Digital Output
RS-485
Logout

MOTION DETECTION

In order to use motion detection, you must first check the checkboxes, then draw the areas you want to monitor for motion.

Save Settings Don't Save Settings

LIVE VIDEO

Enable Video Motion
2008/05/07 19:18:48 DCS-3410

Sensitivity
90 0~100%

Drawing Mode

Draw motion area
 Erase motion area

Clear

Save Settings Don't Save Settings

Helpful Hints..

Sensitivity - Set the sensitivity for motion detection.
High sensitivity makes the motions easier to be detected.

SECURITY

Time and Date

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

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

Enable Daylight Saving: Select this to enable the daylight saving time.

Auto Daylight Saving: Select this option so that your camera will configure the Daylight Saving setting automatically.

Set date and time manually: Select this option so that you may configure the Daylight Saving date and time manually.

Offset: Sets the amount of time to be added or removed when Daylight Saving is enabled.

Synchronize with NTP server: Enable this feature to obtain time configuration automatically from NTP server.

NTP Server: Network Time Protocol (NTP) synchronizes the DCS-3410 with an Internet time server. Choose the one that is closest to your location.

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

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

The screenshot shows the D-Link DCS-3410 web interface. The top navigation bar includes 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'SETUP' tab is active, and the 'Time and Date' menu item is selected in the left sidebar. The main content area is titled 'SYSTEM SETUP' and contains the following sections:

- SYSTEM SETUP:** A message stating 'You can set the current time for the camera.' with 'Save Settings' and 'Don't Save Settings' buttons.
- TIME CONFIGURATION:**
 - Time Zone: (GMT-08:00) Pacific Time (US & Canada)
 - Enable Daylight Saving
 - Auto Daylight Saving
 - Set date and time manually
 - Offset: +1:00
 - Start time: 3:00 Sunday, 2:00
 - End time: 11:00 Sunday, 2:00
- AUTOMATIC TIME CONFIGURATION:**
 - Synchronize with NTP Server
 - NTP Server: [] << Select NTP Server >>
- SET DATE AND TIME MANUALLY:**
 - Set date and time manually
 - Year: 2008, Month: 5, Day: 7
 - Hour: 19, Minute: 30, Second: 11
 - Copy Your Computer's Time Settings

At the bottom of the configuration area are 'Save Settings' and 'Don't Save Settings' buttons. The footer of the interface displays 'SECURITY'.

Recording

In this section, you can configure and schedule the recording setting for your IP camera.

Enable Recording: Select this option to enable the recording feature.

Samba Auth: To access your account on the Samba network drive, enter your account or anonymous username and password.

Server: The name of your Samba server.

Shared Folder: The name of the shared folder used for recording.

Test: Click this thumbnail to verify the connection status of your camera to the Samba network drive.

Samba Status: Displays the connection status that is determined by the system. You can click **Get Status** to refresh the status.

Resolution: Select your pre-defined profile from the drop-down menu.

When Storage is full: When the recording storage area is full, you may choose to stop recording, or recycle the recording files so that your camera can record the video continuously.

Continuous: Always recording.

Event Based: Records when Motion Recording, Digital Input 1, or Digital Input 2 is triggered.

Prerecord: A preset amount of time before motion recording is triggered.

Postrecord: A preset amount of time after motion recording is triggered.

Continuous: Select this option to manually configure the starting and ending time for the recording.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
Network Setup
Dynamic DNS
Image Setup
Audio and Video
Motion Detection
Time and Date
Recording
Snapshot
Digital Output
RS-485
Logout

RECORDING SETTINGS

In this section, you can set up the camera's recording settings.

Save Settings Don't Save Settings

RECORDING SETUP

Enable recording

Record to samba network drive

Samba Auth Account

User name lab123

Password

Password confirm

Server wemail.yourdomain.com

Shared folder video123

Test

Samba status : disabled Get status

Recording Options

Resolution profile 1

Record until 100 M of free space is left (minimum is 32M)

When storage is full:

Stop recording

Overwrite older recordings

Scheduling

Continuous

Event Based

Motion detection triggered recording

Digital input 1 triggered recording

Digital input 2 triggered recording

Prerecord 5 seconds (range 0 to 15 seconds)

Postrecord 5 seconds (range 0 to 15 seconds)

Scheduled

Hours Minutes Hours Minutes

Sun Start 0 : 0 End 24 : 0

Helpful Hints...

Enable Recording will allow you to record to a Samba network drive based on the selected events. To enable recording, check the Enable Recording checkbox. Next, select a Scheduling method to specify when the camera should record video.

Snapshot

Enable the **Snapshot** feature so that your camera can take snapshots and send it to your email address or FTP server.

Enable Snapshot: Enable or disable snapshot event.

Trigger Event: Select one or more than one of the events such as Motion Detection, D/I Signal 1 and D/I Signal 2 for the source that triggers the action.

E-mail Address: Select this option if you want to receive snapshot images in your e-mail.

FTP Server: Select this option if you want to receive your snapshot images via FTP.

Host name: The host name of your FTP server.

Path: The directory or path where the images will be uploaded to (for example: \publimages).

Prefix Filename: The prefix that will be added to the filename of each file.

Port: The port of the FTP server. The default port is 25.

Passive mode: Some FTP servers allow clients to use passive mode when connecting to an FTP, which uses random ports for transfers.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Wizard
Network Setup
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SNAPSHOT

In order to enable your camera to take snapshots, you must select the checkbox of Enable Snapshot. Then, you can determine the trigger event(s) and FTP and/or email notification(s).

Save Settings Don't Save Settings

TRIGGER

Enable Snapshot

Trigger Event

Motion Detection
 D/I Signal 1
 D/I Signal 2

Send to:

E-mail Address

User Name
Password
SMTP Mail Server
Sender E-mail Address
Recipient E-mail Address
Port

FTP Server

User Name
Password
Host Name
Path
Filename Prefix
Port
Passive Mode

Save Settings Don't Save Settings

Helpful Hints..
You can choose to receive notifications by FTP and/or E-mail.

Digital Output

You may enable the **Digital Output (DO)** feature and configure the source of event for your camera.

Enable D/O This enables the D/O to send a signal when there is a **signal**: triggered event.

Trigger Event: You can choose from one or up to three events, such as Motion Detection, D/I Signal 1, and D/I Signal 2 for the sources of the triggered events.

The screenshot displays the D-Link DCS-3410 web interface. At the top, it shows 'Product: DCS-3410' and 'Firmware Version: 1.00'. The D-Link logo is prominently displayed. Below the logo, there are navigation tabs: 'DCS-3410 //', 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'SETUP' tab is selected. On the left side, there is a vertical menu with options: Wizard, Network Setup, Dynamic DNS, Image Setup, Audio and Video, Motion Detection, Time and Date, Recording, Snapshot, Digital Output (highlighted), RS-485, and Logout. The main content area is titled 'DIGITAL OUTPUT' and contains the following text: 'Here you can enable your D/O port as well as how the event will be triggered.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. Underneath, there is a section titled 'TRIGGER' with a checkbox labeled 'Enable D/O Signal' which is checked. Below this, there is a 'Trigger Event' section with three checkboxes: 'Motion Detection' (checked), 'D/I Signal 1' (unchecked), and 'D/I Signal 2' (unchecked). At the bottom of this section are two buttons: 'Save Settings' and 'Don't Save Settings'. On the right side, there is a 'Helpful Hints..' section with the text: 'You may choose a trigger event like Motion detection or triggers from the D/I port. When an event is triggered, the D/O will begin sending a signal.'

RS-485

You may configure the **RS-485** settings or communication specifications (baud rate, data bit, stop bit, and parity bit) for your camera. RS-485 is a serial communication method for computers and devices. For your camera, RS-485 is used to control a PAN/TILT device, such as an external camera enclosure to perform PAN and TILT movement.

Support PAN-TILT: When enabling Support PAN-TILT, a control panel will be displayed on the Live Video page allowing control through RS-485 for an external camera enclosure.

Protocol: Select one protocol type from the pull-down menu.

ID: Range from **1** to **255**, is the identifier for each RS-485 devices.

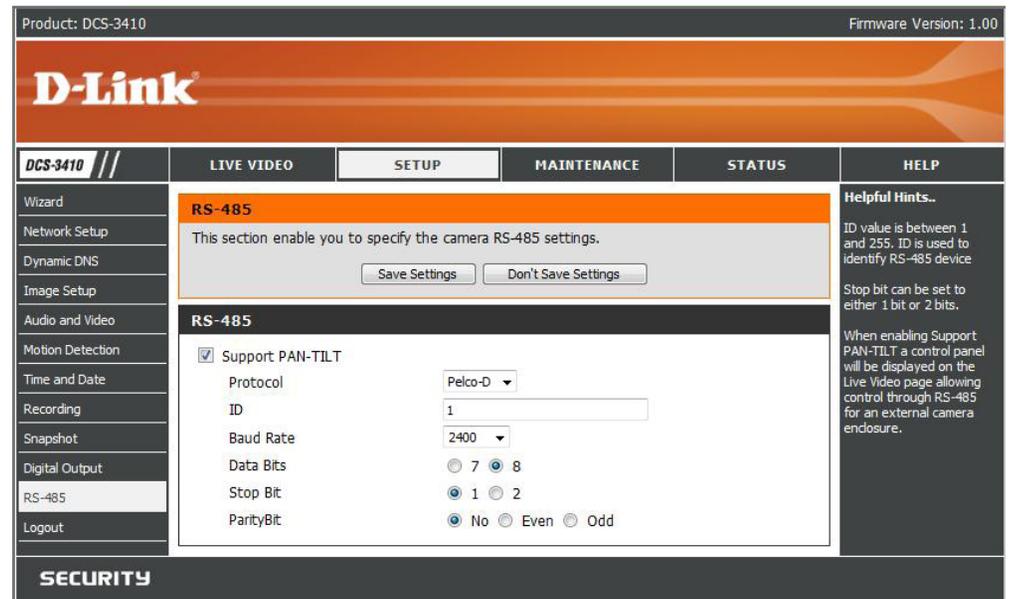
Baud Rate: Range from **2400** to **38400** bps. It is a speed measurement for communication between a transmitter and receiver, indicates the number of bit transfers per second. Higher baud rate will reduce the distance of the two devices (transmitter and receiver). By default, the value is **2400**.

Data Bit: Either **7** or **8**. It is a measurement of the actual data bits in a transmission. By default, the value is **8**.

Stop Bit: Either **1** or **2**. It is used to signal the end of communication for a single packet. The more bits used for stop bits, the greater the lenience in synchronizing the different clocks but the slower the data transmission rate. By default, the value is **1**.

Parity Bit: Choices of **No**, **Even**, and **Odd**. It is a simple form of error checking used in serial communication and you may use no parity. For even and odd parity, the serial port sets the parity bit (the last bit after the data bits) to a value to ensure that the transmission has an even or odd number of logic-high bits.

For example, if the data is 011, for even parity, the parity bit is 0 to keep the number of logic-high bits even. If the parity is odd, the parity bit is 1, resulting in 3 logic-high bits.



Maintenance

Device Management

You may modify the name and administrator's password of your camera, as well as add and manage the user accounts for accessing the camera. You may also use this section to create the unique name and configure the OSD setting for your camera.

Admin password setting: Set a new password for the administrator's account.

Add user account: Add new user account.

User name: The user name for the new account.

Password: The password for the new account.

User List: All the existing user accounts will be displayed here. You may delete any accounts included in the list.

Camera Name: Create a unique name for your camera, in which you can access the camera by using this name in your web-browser. For example: http://DCS-3410 (By default).

Enable OSD: Select this option to enable the On-Screen Display feature for your camera.

Label: The label name.

Show time: Select this option to enable the time-stamp display in the video screen.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Device Management
Backup and Restore
Firmware Upgrade
Logout

DEVICE MANAGEMENT

Here you can change the administrator's password for your camera as well as add and/or delete user account(s). You can configure the information, such as camera's name and time via this page. You can also enable the OSD (On-Screen Display) feature in order to display the camera name and time stamp for your video recordings.

ADMIN PASSWORD SETTING

New Password
Retype Password

ADD USER ACCOUNT

User Name 20 users maximum
New Password
Retype Password

USER LIST

User Name -- User list --

DEVICE SETTING

Camera Name
 Enable OSD

Helpful Hints..

Enabling OSD, the camera name and time will be displayed on the video screen for the user.

For security purposes, it is recommended that you change the password for your administrator account. Be sure to write down the new password to avoid having to reset the camera in the event that it is forgotten.

Backup and Restore

In this section, you may backup, restore and reset the settings as well as reboot your camera.

Save To Local Hard Drive: You may save and document your current configuration settings into your computer.

Local From Local Hard Drive: Locate a pre-saved configuration by clicking **Browse** and then restore the pre-defined settings to your camera by clicking **Load Configuration**.

Restore To Factory Default: You may reset your camera and restore the factory settings to your camera by clicking **Restore Factory Defaults**.

Reboot Device: This will restart your camera.

The screenshot displays the web interface for a D-Link DCS-3410 camera. At the top, it shows 'Product: DCS-3410' and 'Firmware Version: 1.00'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'MAINTENANCE' tab is selected and highlighted in orange. On the left side, there is a sidebar menu with options: 'Device Management', 'Backup and Restore', 'Firmware Upgrade', and 'Logout'. The main content area is titled 'MAINTENANCE' and contains the text: 'Here you may backup, restore, and reboot your camera.' Below this, there is a section titled 'SYSTEM' with four rows of actions, each with a corresponding button:

SYSTEM	
Save To Local Hard Drive	<input type="button" value="Save Configuration"/>
Load From Local Hard Drive	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Load Configuration"/>
Restore To Factory Defaults	<input type="button" value="Restore Factory Defaults"/>
Reboot Device	<input type="button" value="Reboot Device"/>

On the right side of the interface, there is a 'Helpful Hints..' section with the following text: 'After the factory's default settings have been restored, use the installation wizard software provided with your camera to search and connect to the camera.'

Firmware Upgrade

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-3410, 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 version: It will be automatically determined and displayed by the system.

Current Product Name: Name of the existing product.

File Path: Locate the file (upgraded firmware) on your hard drive by clicking **Browse**.

Upload: Start uploading the new firmware to your camera.

Product: DCS-3410 Firmware Version: 1.00

D-Link

DCS-3410 // LIVE VIDEO SETUP MAINTENANCE STATUS HELP

Device Management
Backup and Restore
Firmware Upgrade
Logout

FIRMWARE UPGRADE

A new firmware upgrade may be available for your IP camera. It is recommended to keep your IP camera firmware up-to-date to maintain and improve the functionality and performance of your internet camera. Click here [D-Link Support Page](#) to check for the latest firmware version available.

To upgrade the firmware on your IP camera, 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. Once you have found and opened the file using the browse button, click the "Upload" button to start the firmware upgrade.

FIRMWARE INFORMATION

Current Firmware Version: 1.00
Current Product Name: DCS-3410

FIRMWARE UPGRADE

File Path:

Helpful Hints..

Firmware updates are released periodically to improve the functionality of your IP camera and also to add new features. If you run into a problem with a specific feature of the IP camera, check our support site by clicking [here](#) to check for an upgrade and see if updated firmware is available for your IP camera.

SECURITY

Status

Device Info

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

Product: DCS-3410		Firmware Version: 1.00	
D-Link			
DCS-3410 //	LIVE VIDEO	SETUP	MAINTENANCE
STATUS	HELP		
Device Info	DEVICE INFORMATION		Helpful Hints..
Log	All of your network connection details are displayed on this page. The firmware version is also displayed here.		This page displays all the information about the camera and network settings.
Logout	INFORMATION		
	Camera Name	DCS-3410	
	Time & Date	Wed May 7 20:59:15 2008	
	Firmware Version	1.00, 1729	
	MAC Address	00:1C:F0:D3:FB:0E	
	IP Address	192.168.0.20	
	IP Subnet Mask	255.255.255.0	
	Default Gateway	192.168.0.1	
	Primary DNS		
	Secondary DNS		
	PPPoE	Disabled	
	DDNS	Disabled	
SECURITY			

Logs

This page displays the log information of your camera. You may also download the information by clicking **Download**.

The screenshot shows the web interface for a D-Link DCS-3410 camera. At the top, it displays 'Product: DCS-3410' and 'Firmware Version: 1.00'. Below this is the D-Link logo. A navigation bar contains tabs for 'DCS-3410 //', 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'STATUS' tab is selected. On the left, a sidebar menu includes 'Device Info', 'Log', and 'Logout'. The main content area is titled 'SYSTEM LOG' and contains the text: 'The system log records camera events that have occurred.' Below this is a section for 'CURRENT LOG' with the following entries:

1969-12-31 13:02:00	System is booted up.
2008-05-07 16:14:02	System is booted up.
2008-05-07 18:55:18	System is booted up.

At the bottom of the log section are 'Clear' and 'Download' buttons. On the right side, there is a 'Helpful Hints..' section with the text: 'You can save the log to your local hard drive by clicking the Download button, and you can clear the log by clicking on the Clear button.' The bottom of the interface features a 'SECURITY' banner.

Help

Product: DCS-3410 Firmware Version: 1.00



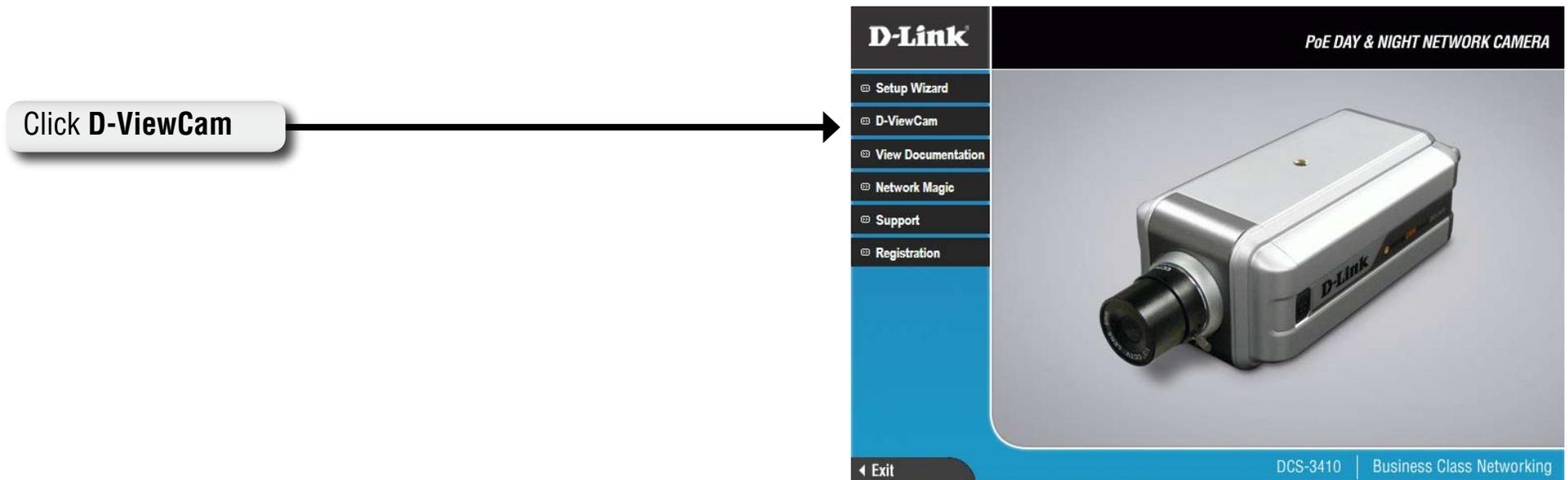
DCS-3410 //	LIVE VIDEO	SETUP	MAINTENANCE	STATUS	HELP
Help Menu Logout	<p>HELP MENU</p> <ul style="list-style-type: none"> • LIVE VIDEO • SETUP • MAINTENANCE • STATUS 				
<p>LIVE VIDEO</p> <ul style="list-style-type: none"> • Camera 					
<p>SETUP</p> <ul style="list-style-type: none"> • Network Setup • Dynamic DNS • Image Setup • Audio And Video • Time and Date • Motion Detection • Recording • Snapshot 					
<p>MAINTENANCE</p> <ul style="list-style-type: none"> • Device Management • Backup and Restore • Firmware Upgrade 					
<p>STATUS</p> <ul style="list-style-type: none"> • Device Info • Log 					
<p>SECURITY</p>					

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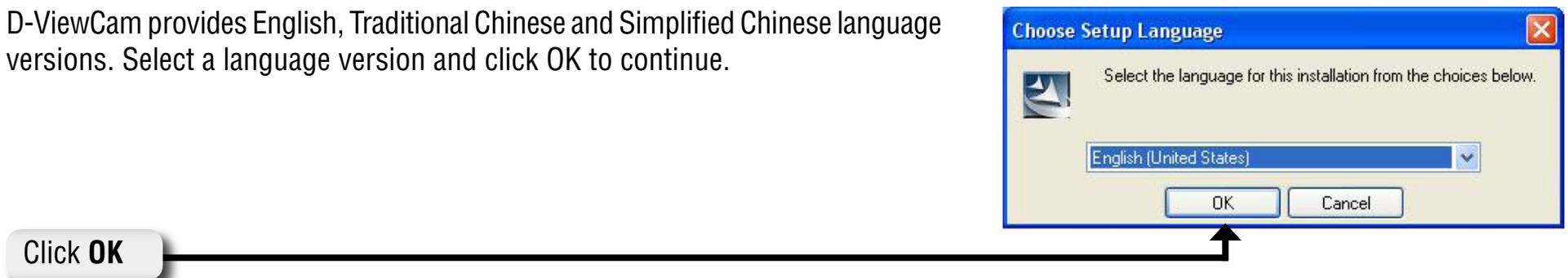
D-ViewCam Installation

D-ViewCam software is included for the administrator to manage up to 32 D-Link IP cameras remotely. You may now use the software to configure all the advanced settings for your cameras. D-ViewCam is a comprehensive management tool for IP surveillance.

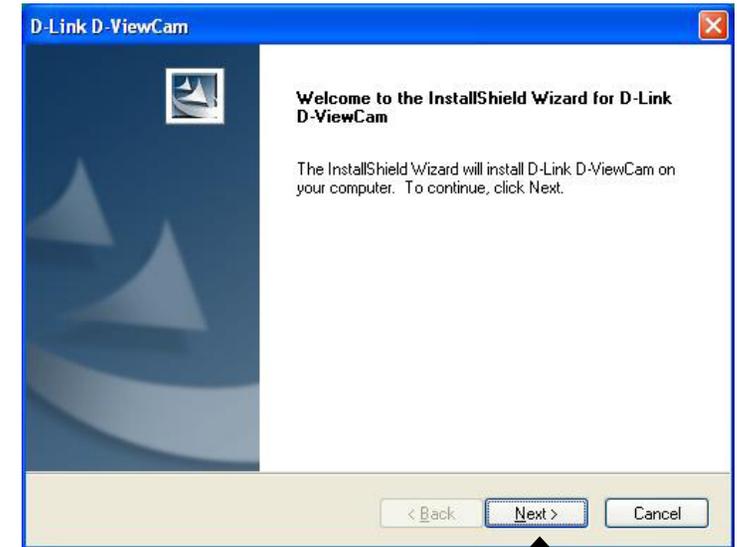
Insert the CD-ROM into the CD-ROM drive. A menu screen will appear as shown below.



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

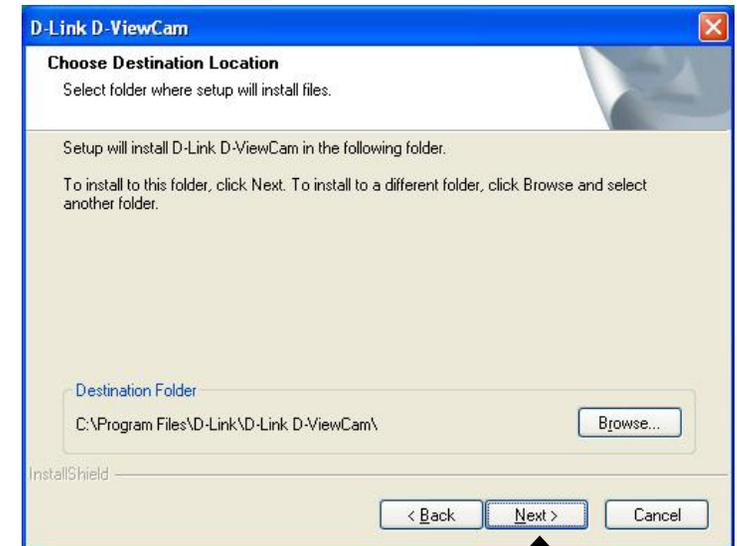


Click **Next** to continue.



Click **Next**

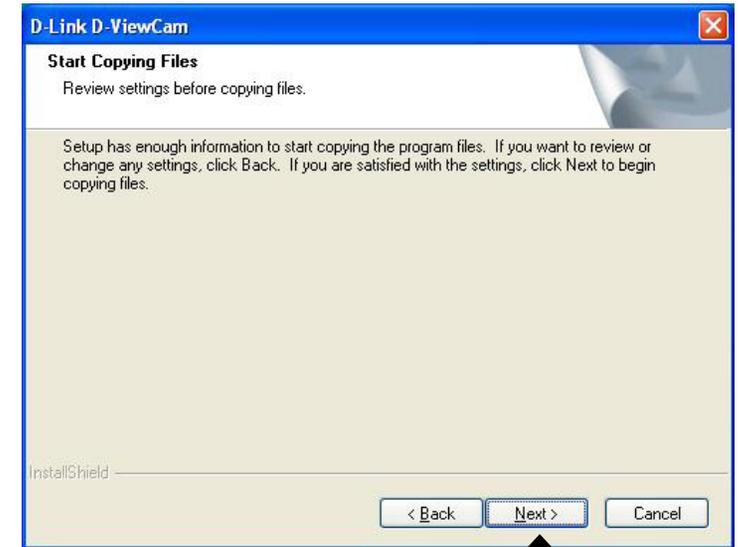
Click **Browse** if you would like to choose a specific folder for the installation, otherwise click **Next** to continue.



Click **Next**

Click **Next** to start the installation.

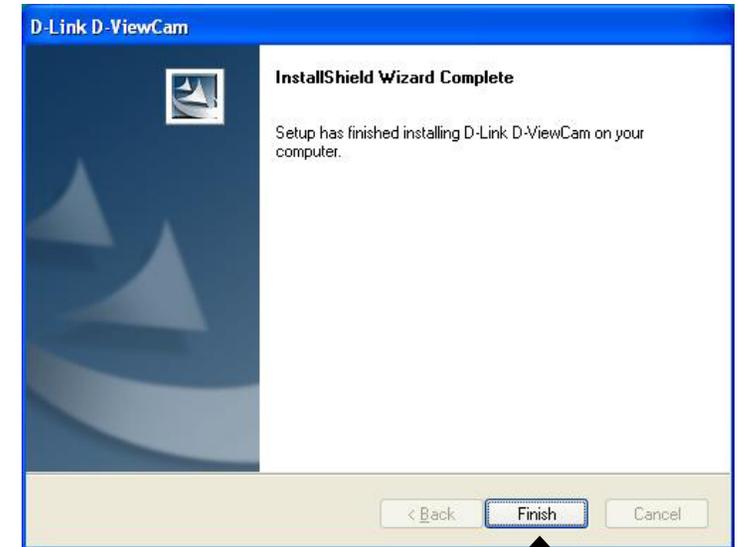
Note: The D-ViewCam installation process may take several minutes to complete.



Click **Next**



Click **Finish** to complete the installation.



Click **Finish**



Add a Camera

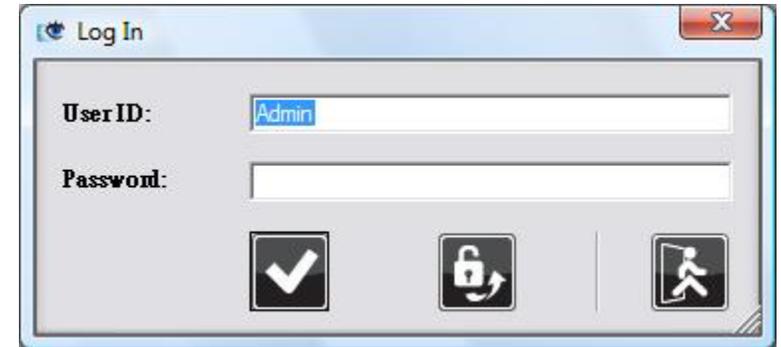
This section will show you how to start and add a camera to the D-ViewCam system.

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



Enter **Admin** as the default user name and leave the password blank. Click / OK to log into the system and access the Add Camera Wizard.

Note: Please refer to page 51 in the D-ViewCam user manual to change your password.



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

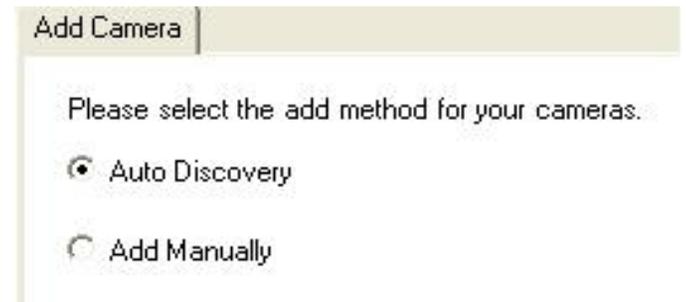
Note: Use the left or right arrow to navigate the wizard.

Click  / **Next** to continue.

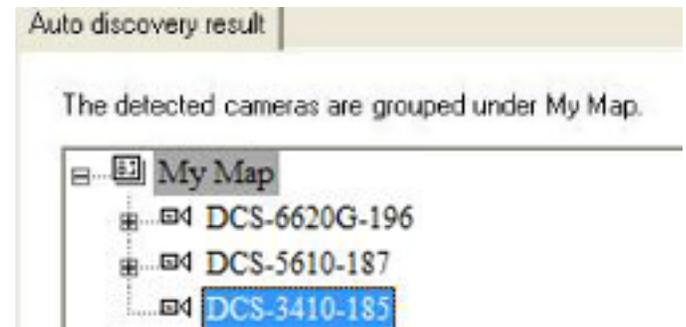


Click **Next**

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 available cameras that are located on the same LAN with same subnet. The system will place all the cameras under the default map called My Map. Click **Next** to continue.



If you choose **Add Manually**, you will need to enter the IP address of the camera(s). Click **Next** to continue.



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 32 for more information.

Click **Next** to continue.

Quick Settings

The discovered cameras information showed as below:

Camera Name	Model	Schedule Recording Type	Status	IP Address	MAC Address
DCS-5610-187	DCS-5610	None	Active	10.129.1.55	000D887D6DC4
DCS-6620G-99	DCS-6620G	None	Active	10.129.1.233	001346DC3BC3
DCS-3410-185	DCS-3410	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 be added. Click **Next** to continue.

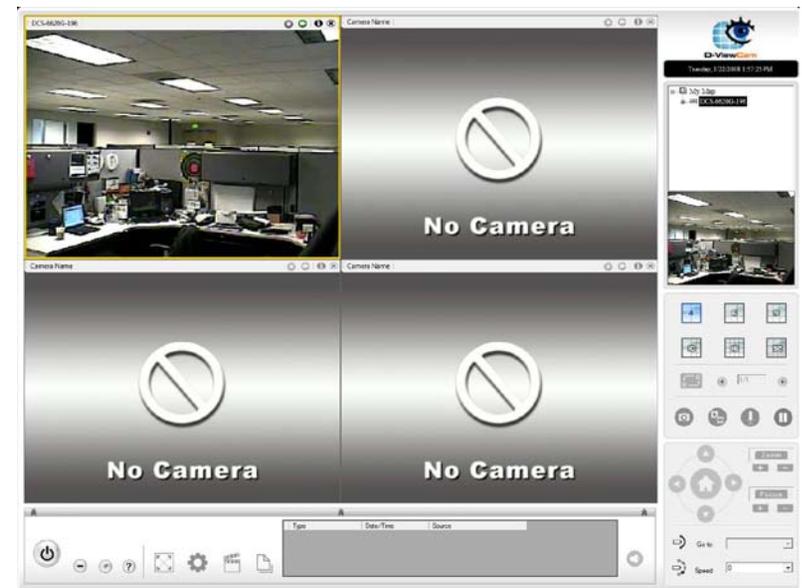


The **Add Camera wizard** is now complete. Click **Close** to access the D-ViewCam's main screen.



Your D-ViewCam Installation is Complete!

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



Troubleshooting

1. What is an Network Camera?

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

2. What is the maximum number of users that can be allowed to access DCS-3410 simultaneously?

The maximum number of users that can log onto the Network Camera at the same time is 10. Please keep in mind the overall performance of the transmission speed will slow down when many users are logged on.

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

The Network Camera utilizes MPEG-4 simple profile image compression technology to provide high quality images.

4. Can I capture still images from the Network Camera?

Yes you are able to capture still images with the snapshot function from the software application CD supplied with the Network Camera or with the snapshot function on the Home page using an Internet browser.

5. Can the Network Camera be used outdoors?

The Network Camera is not weatherproof. It needs to be equipped with a weatherproof case to be used outdoors and it is not recommended.

6. When physically connecting the Network Camera to a network what network cabling is required?

The Network Camera uses Category 5 UTP cable allowing 10 Base-T and 100 Base-T networking.

7. Can the Network Camera be setup as a PC-cam on a computer?

No, the DCS-3410 Network Camera is used only on an wireless 802.11g, Ethernet or Fast Ethernet network.

8. Can the DCS-3410 be connected to the network if it consists of only private IP addresses?

Yes, the Network Camera can be connected to a LAN with private IP addresses.

9. Can the DCS-3410 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-3410 uses port 5002 for streaming audio and port 5003 for streaming video. These ports (or the ports you specify from the Advanced Tab in the Configuration screen if you change the default ports) need to be opened on the firewall.

10. Why am I unable to access the DCS-3410 from a Web browser?

If a router or firewall is used on the network, the correct ports for the DCS-3410 may not be configured on the router or firewall. To correct the problem, you need to determine if the DCS-3410 is behind a router or firewall and if the router or firewall is properly configured for the ports the DCS-3410 is using. 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 Network Camera might be faulty.

11. Why does the Network Camera work locally but not externally?

This might be caused by network firewall protection. The firewall may need to have some settings changed in order for the Network Camera to be accessible outside your local LAN. Check with the Network Administrator for your network. Make sure that the 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 allow the Network Camera to be accessed outside your local LAN.

12. I connected the Network Camera directly to a computer with a cross-over cable Ethernet cable and received the following Windows error upon running the Installation Wizard:

This Windows error will occur if the 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.

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

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

13. 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 Network Camera image display is incorrect. Through the Advanced > Image Setting section of the Web management you need to adjust the image related parameters such as brightness, contrast, hue 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.

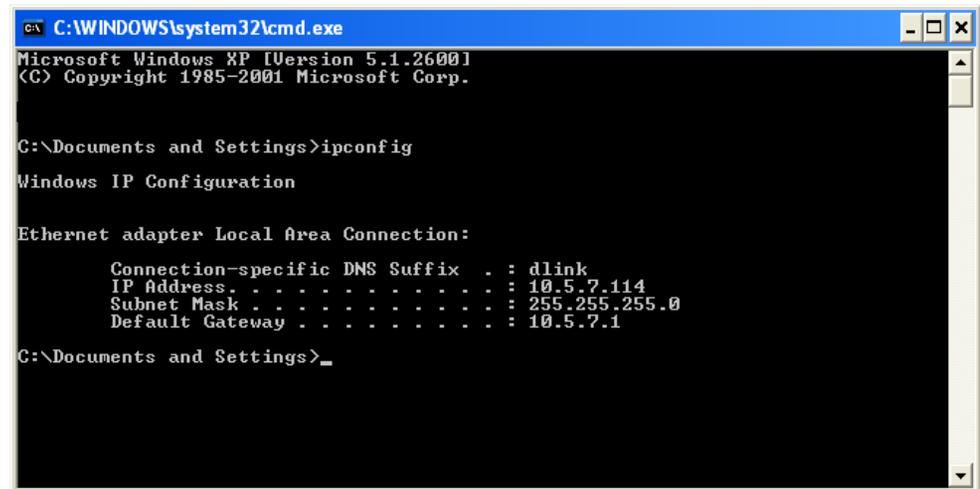
Click on **Start > Run**. In the run box type **cmd** and click **OK**.

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 router. 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.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address. . . . .               : 10.5.7.114
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 10.5.7.1

C:\Documents and Settings>_
```

Statically Assign an IP address

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

Step 1

Windows® XP - Click on **Start > Control Panel > Network Connections**.

Windows® 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

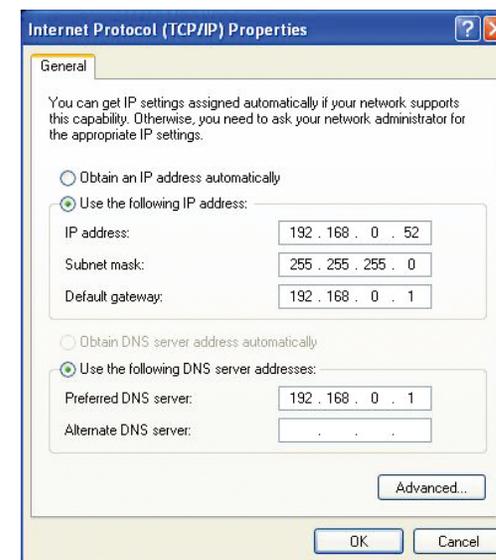
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the 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 router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (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: 5.15kbps, ADPCM: 8Kbps

PoE

Supported IEEE 802.3af standard

Sensor

1/3" Sony CCD sensor, interlace scan mode

SDRAM

32 Mbytes

Flash Memory

8 Mbytes

Lens

6mm, F1.6

LAN

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

MIC

42dB +/- 3dB, Omni-directional

I/O Connector

2 Inputs (Photo relay, Active High; Dropout: 0 VDC)

1 Output (photo relay, Close circuit current: AC 70mA or DC 100mA;

400hm; Open circuit voltage: 240 VAC or 350VDC)

Power Output: 12VDC, 200mA

RS 485

2 pin(485A,485B) (Supported to control external Pan-Tilt device)

Audio Out

Yes

Reset Button

Reset to factory default

Dimension (WxDxH)

177mm x 78mm x 60mm

Weight

577.8g

Max Power Consumption

- 12.5W
- Input: 100-240VAC, 50/60Hz
- Output: 12VDC, 1.25A

Networking

Protocol

- IPV4, ARP, TCP, UDP, ICMP
- DHCP Client
- NTP Client
- DNS Client
- DDNS Client
- SMTP Client
- FTP Client
- HTTP Server
- Samba Client
- PPPoE
- RTP
- RTSP
- RTCP
- 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

Resolution

- 470 TV lines
- Up to 30 frames at 704 x 480 (NTSC) / 704x576(PAL)
- Up to 30 frames at 352 x 240 (NTSC) / 352x288 (PAL)
- Up to 30 frames at 176 x 120 (NTSC) / 176x144(PAL)

Low Lux

0.3 lux @ F1.6

3A control

AGC, AWB, AES

Electronic shutter

NTSC: 1/60 ~ 1/100000 sec.

PAL: 1/50 ~ 1/110000 sec.

Audio

Sample rate

GSM-AMR: 5.15kbps, ADPCM: 8Kbps

Cable

- Cable Length: 1800 ± 30mm
- UL 20AWGx2C (105°C) 300V

Plug

- Type: L type
- Connector Color: Black

Frequency

50 ~ 16000Hz

S/N ratio

More than 58dB

Microphone

Directional

Omni-directional

Frequency

50~16000Hz

S/N ratio

42dB +/- 3dB, Omni-directional

OS Support

Device

Windows 2000 / Windows XP / Windows Vista / 3GPP Mobile Phone

Utility

Windows 2000 / Windows XP / Windows Vista

Physical Environment

Power

- 12V 1.25A switching power adapter
- External AC-to-DC Switching Power Adapter
- Type: USA / UK / EUR / AUS / CN (Order by each territory)

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

- FCC
- IC
- C-Tick

¹Maximum 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.

²Range varies depending on country's regulation.

³The DCS-3410 doesn't include 5.25-5.35GHz & 5.47~5.725GHz.

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DCS-3410)
- Hardware Revision (located on the label on the bottom of the Network Camera (e.g. rev A1))
- Serial Number (s/n number located on the label on the bottom of the Network Camera).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:
(877) 453-5465

Internet Support:
<http://support.dlink.com>

For customers within Canada:

Phone Support:
(800) 361-5265

Internet Support:
<http://support.dlink.com>

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Software Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by DLink in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim:

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. DLink will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

If this device is going to be operated in 5.15 ~ 5.25GHz frequency range, then it is restricted in indoor environment only.

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Industry Canada Notice:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device has been designed to operate with an antenna having a maximum gain of 2 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Registration



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

Version 1.0
May 12, 2008