

DCS-3410

Version 1.20

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.





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

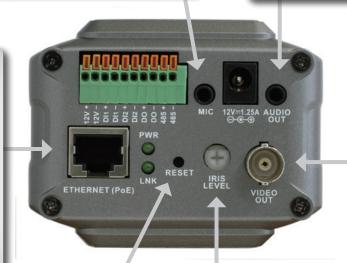
The DCS-3410 PoE Day & Night Network Camera has an internal microphone built-in. However, you have the option of using an external microphone by plugging it into the microphone connector.

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.

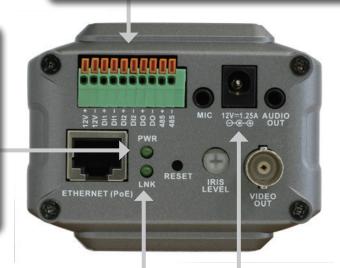
Hardware Overview

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.

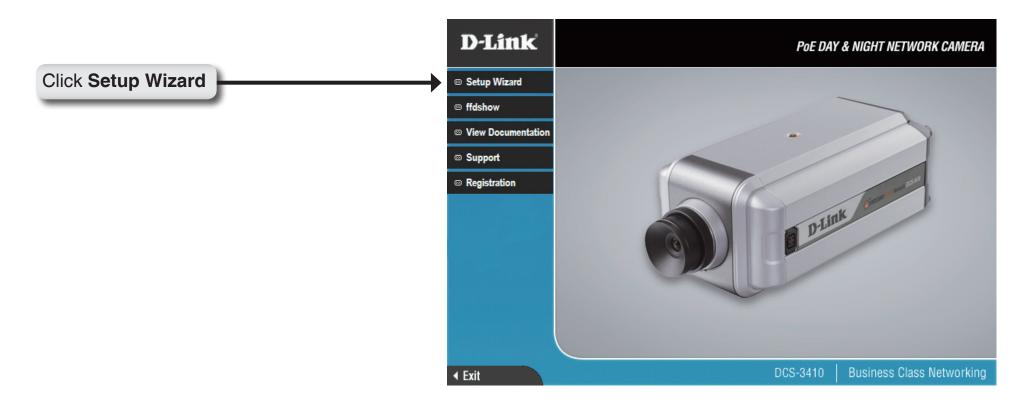
The Network Camera comes with a camera stand with a swivel ball screw head that can be attached to the Network Camera bottom socket cavity. Attach the camera stand to the Network Camera and station it for your application. There are holes located in the base of the camera stand allowing the Network Camera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



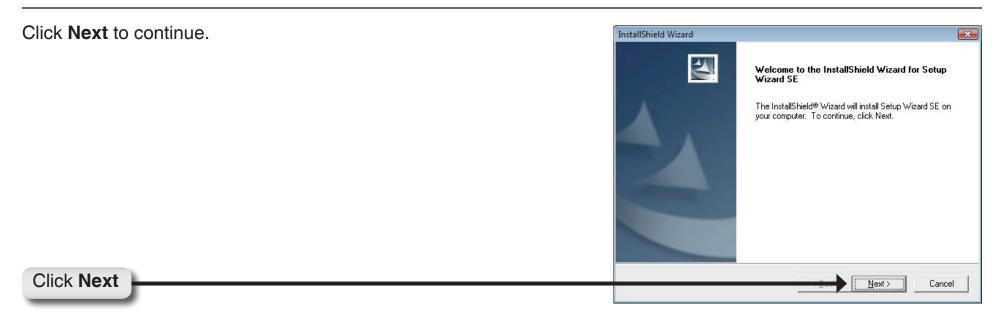


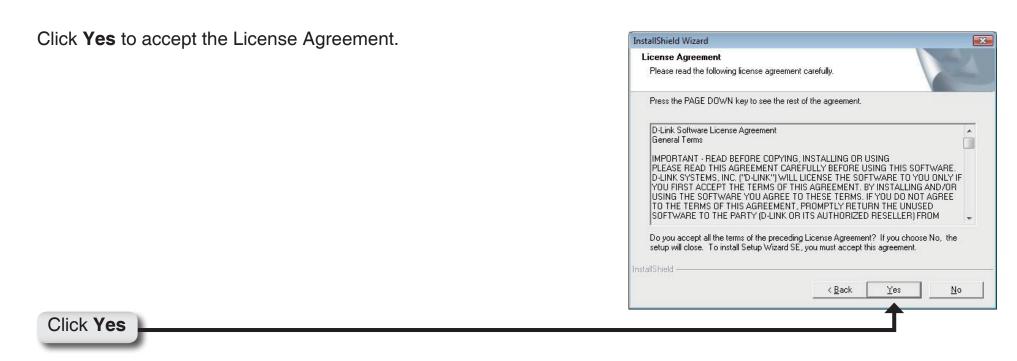
Software Installation

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.



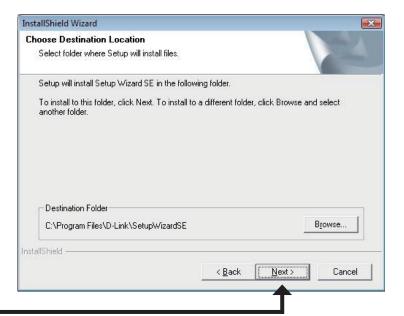
If the CD Autorun function does not automatically start on your computer, click Windows Start > Run. In the Run command box type "D:\DCS3410.exe", where D: represents the drive letter of your CD-ROM. If it does start, proceed to the next screen.



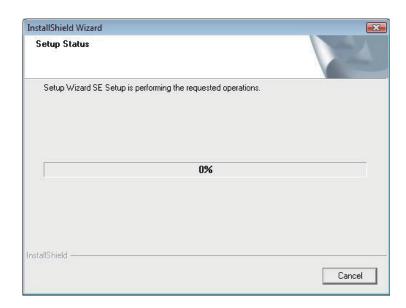


To start the installation click Next.

Note: The installation may take several minutes to complete.

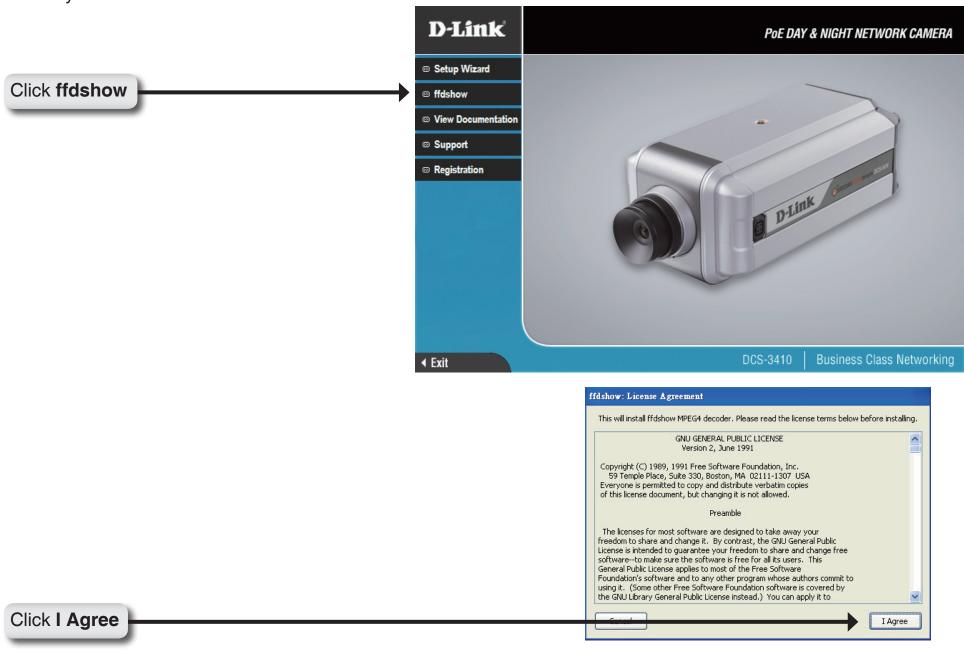


Click Next

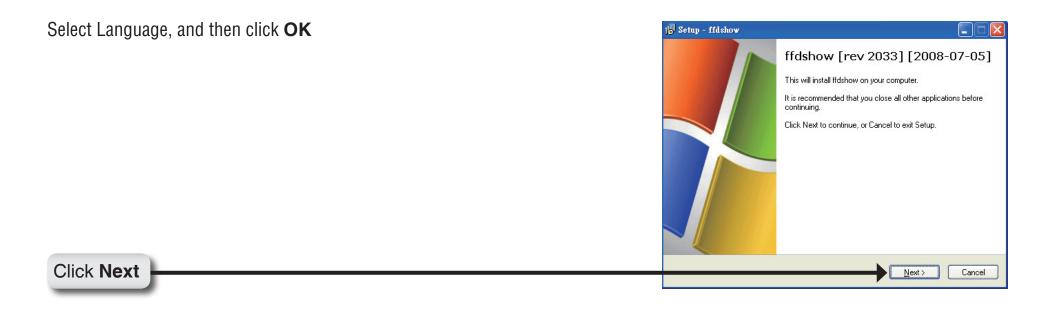


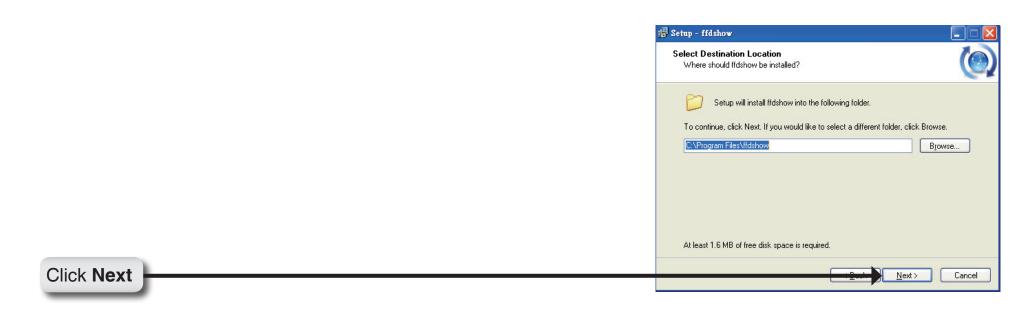


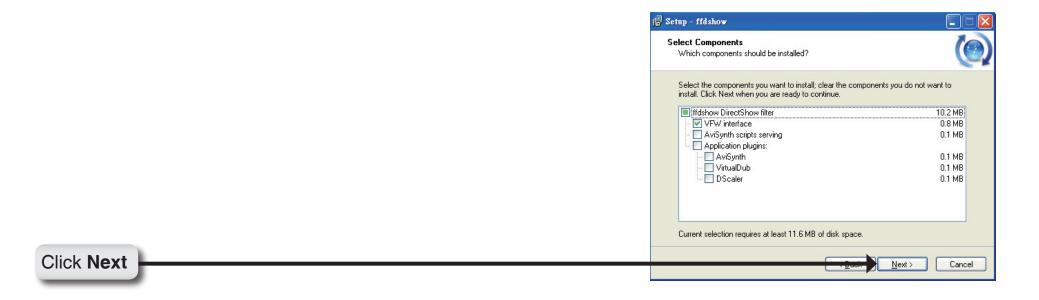
Now, click on **ffdshow** from the autorun screen. This will install the proper codecs that will allow you to playback video taken by the DCS-3410.

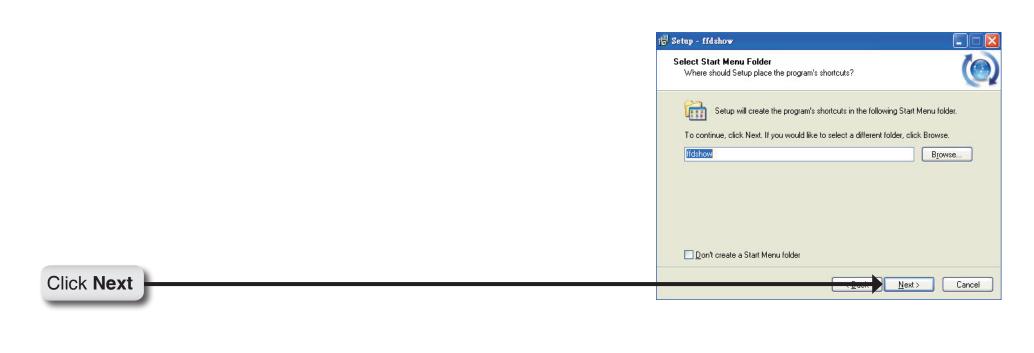


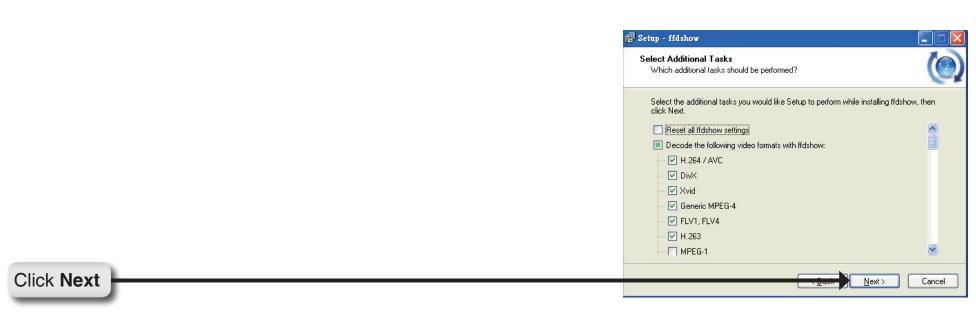


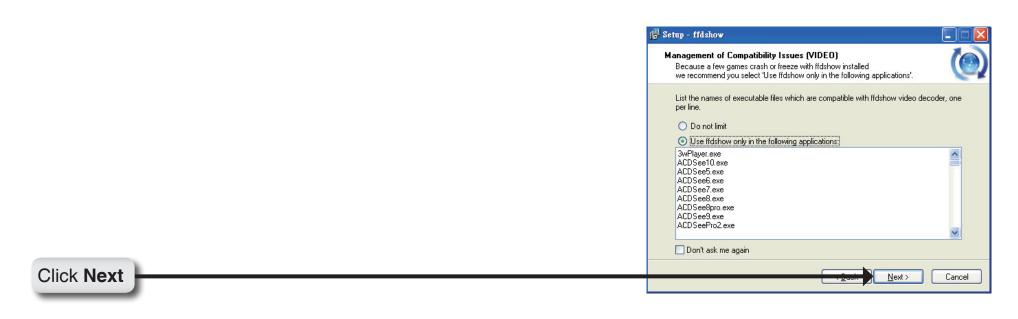


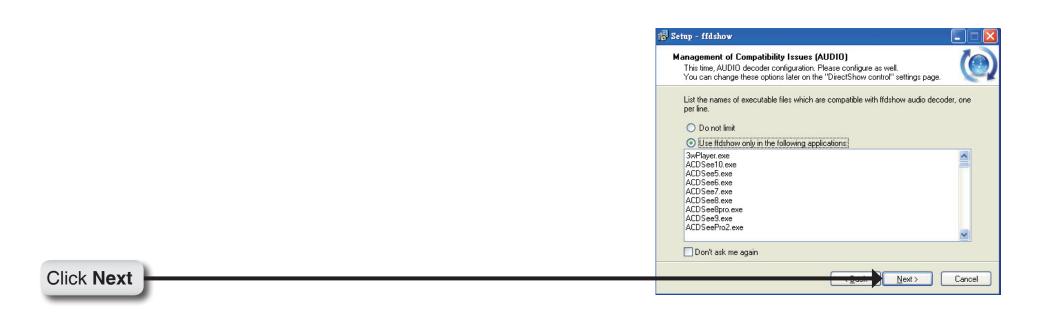


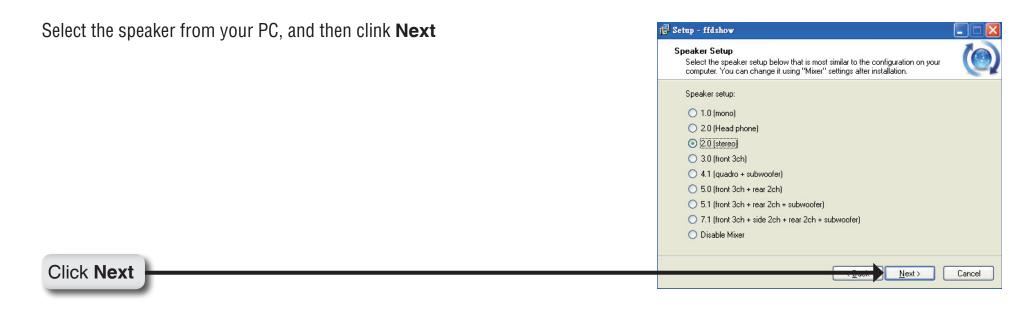


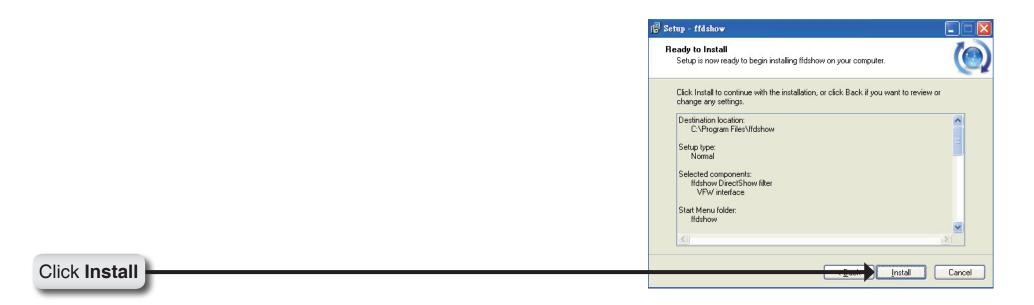




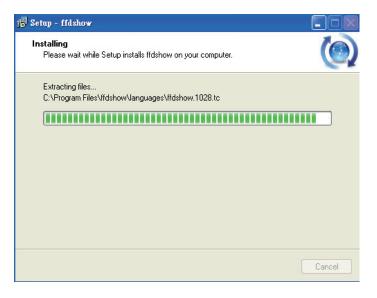


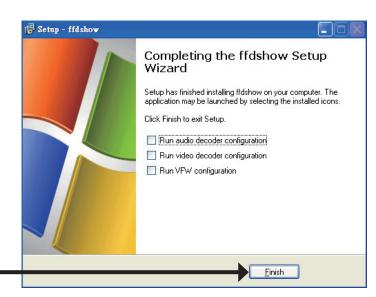






Installing





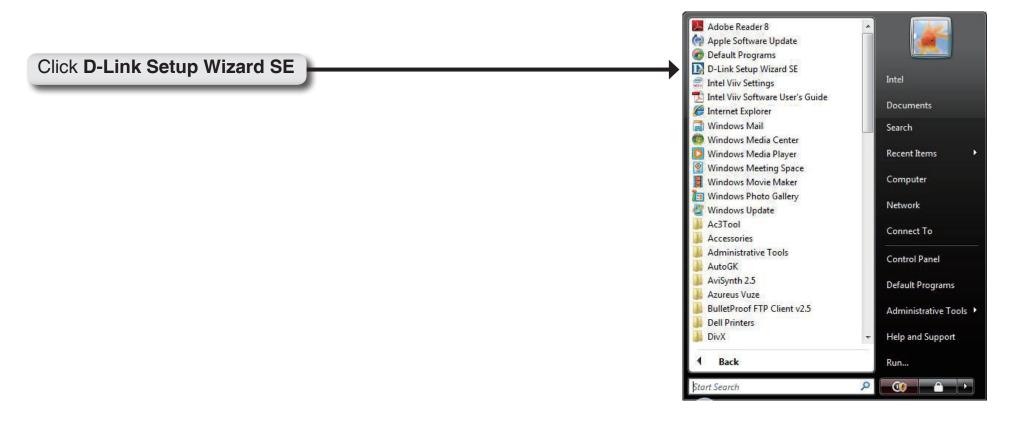
Click Finish

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.



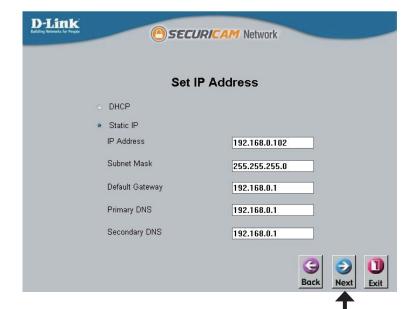
Click Next

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



Click Next

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



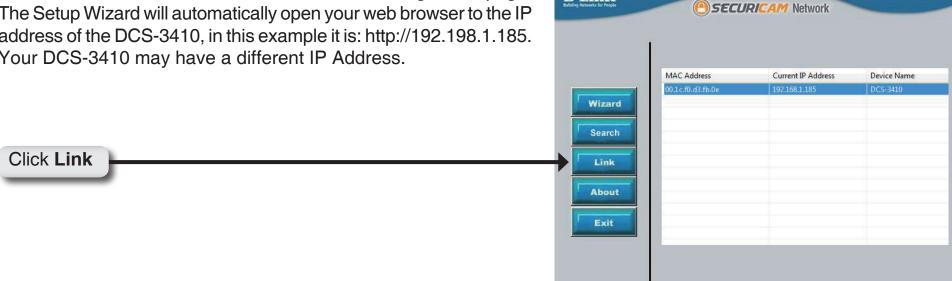
Click Next

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://192.198.1.185. Your DCS-3410 may have a different IP Address.



D-Link

Click **OK**

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 47.





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:

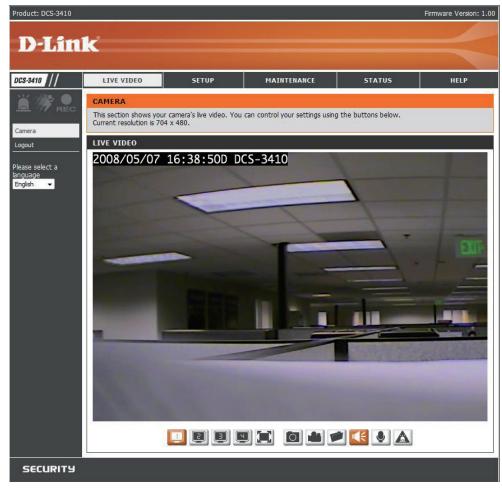
When a trigger event occurs, this will light

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



Setup Wizard

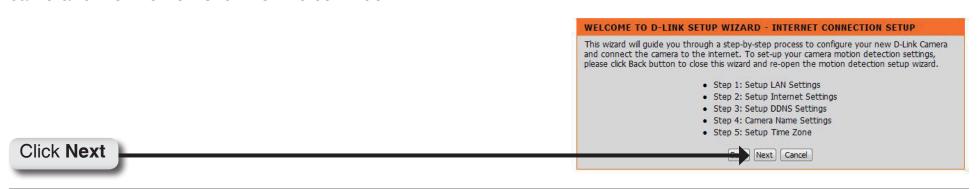
To quickly configure your Network Camera, click Internet Connection Setup Wizard, or click Manual Internet Connection Setup to manually configure your Network Camera.

To quickly configure your Network Camera's motion detection settings, click **Motion Detection Setup Wizard** and skip to page 31. 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.

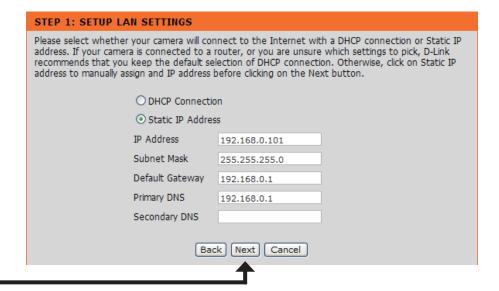


Click Next

Click Next

Select **DHCP** if you are unsure which settings to pick. STEP 1: SETUP LAN SETTINGS Click **Next** to continue and skip to page 29. 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 O Static IP Address IP Address 192.168.0.101 Subnet Mask 255.255.255.0 Default Gateway 192.168.0.1 Primary DNS 192.168.0.1 Secondary DNS

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



Back | Next

Cancel

If you are using PPPoE, select Enable and enter your STEP 2: SETUP INTERNET SETTINGS user name and password, otherwise select **Disable** and 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. click **Next** to continue. O Enable Disable User Name (e.g. 123456@hinet.net) Password Back | Next Cancel Click Next If you have a Dynamic DNS account and would like the STEP 3: SETUP DDNS SETTINGS camera to update your IP address automatically, Select If you have a Dynamic DNS account and would like the camera to update your IP address **Enable** and enter your host information. Click **Next** to automatically, enable DDNS and enter in your host information below. Please click on the Next button to continue. continue. Enable Server Address << | Select Dynamic DNS Server | + Host Name User Name Password Verify Password Back Next Cancel Click Next Enter a name for your camera and click Next to STEP 4: SERVER NAME SETTINGS D-Link recommends that you rename your camera for easy accessibility. You can then identify and continue. connect to your camera via this name. Please assign a name of your choice before clicking on the Next button. Camera Name DCS-3410 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.

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

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)

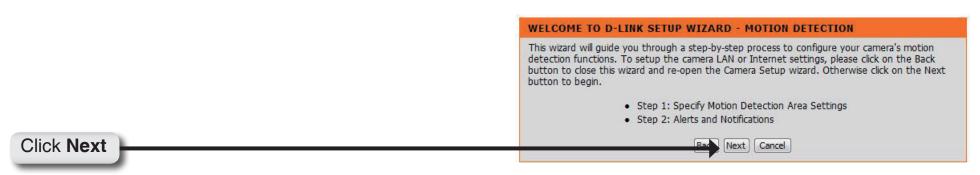
DDNS Disable PPPoE Disable

Back Apply Cancel

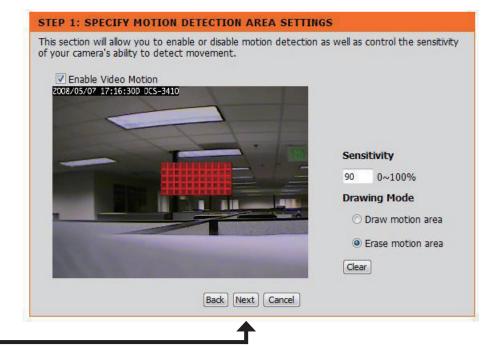
Click Apply

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.



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: ALERIS 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	25			
Enable FTP uploading User Name Password Host Name Path Filename Prefix Port Passive Mode	DCS-3410 21 V			
Louis				

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

Back Apply Cancel

Click Apply

Network Setup

Use this section to configure the network connections for you 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 "255.255.25.0." 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

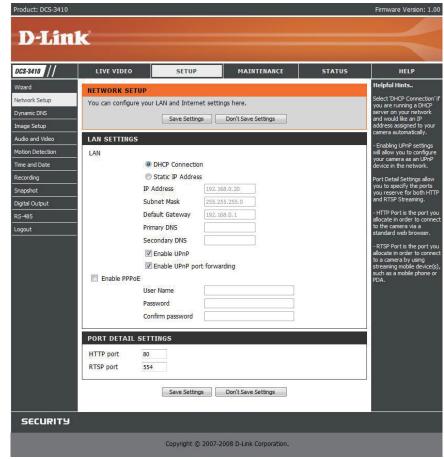
addresses.

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



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

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.

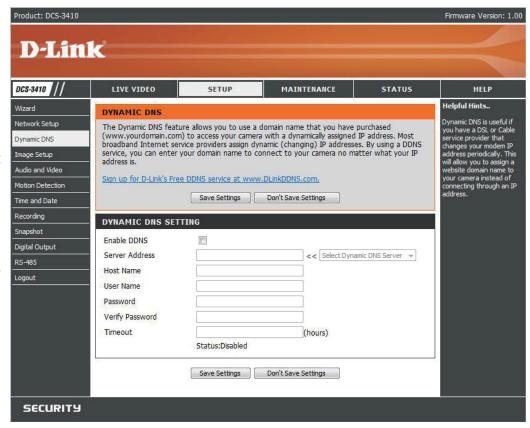


Image Setup

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.



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.

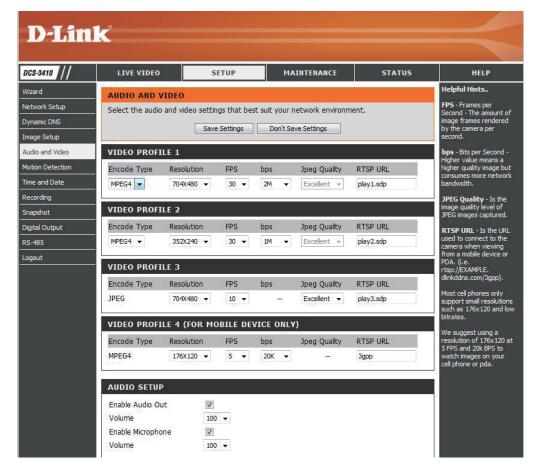
Resolution: This option allows the user to choose the video resolution of the camera between 160x120, 320x240 and 704x480:

- 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: Is the URL name used to connect to the camera when viewing from a mobile device or PDA.



Motion Detection

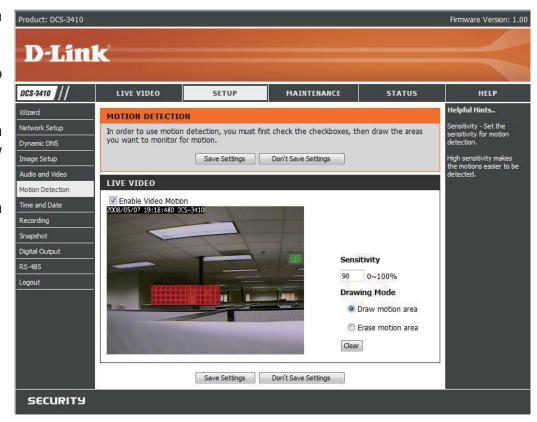
Enabling **Video Motion** will allow your camera to use the motion detection feature. You may also draw out the motion area for the monitoring.

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

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

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

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



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 Select this to enable the daylight saving time. **Saving:**

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

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

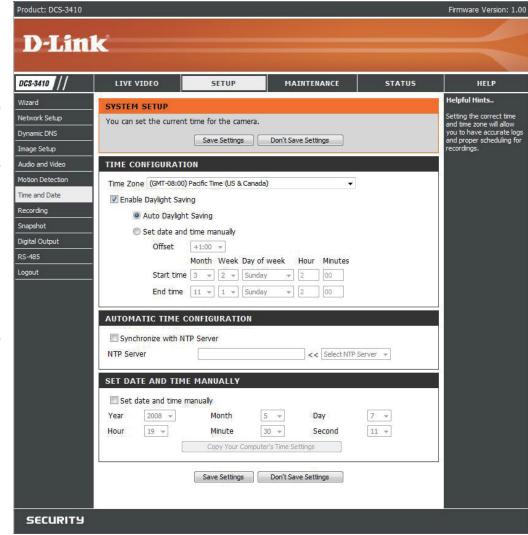
Offset: Sets the amount of time to be added or removed when Daylight Saving is enabled.

Synchronize with Enable this feature to obtain time configuration **NTP server**: 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 This option allows you to set the time and date **time manually**: manually.

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



Recording

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

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

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 When the recording storage area is full, you may choose

full: to stop recording, or recycle the recording files so that your

camera can record the video continuously.

Continuous: Always recording.

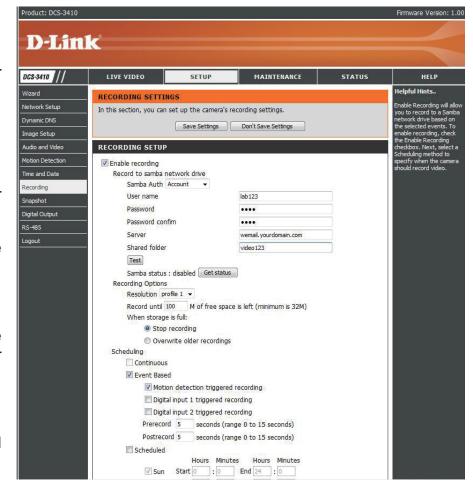
Event Based: Records when Motion Recording, Digital Input 1, or Digital

Input 2 is triggered.

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

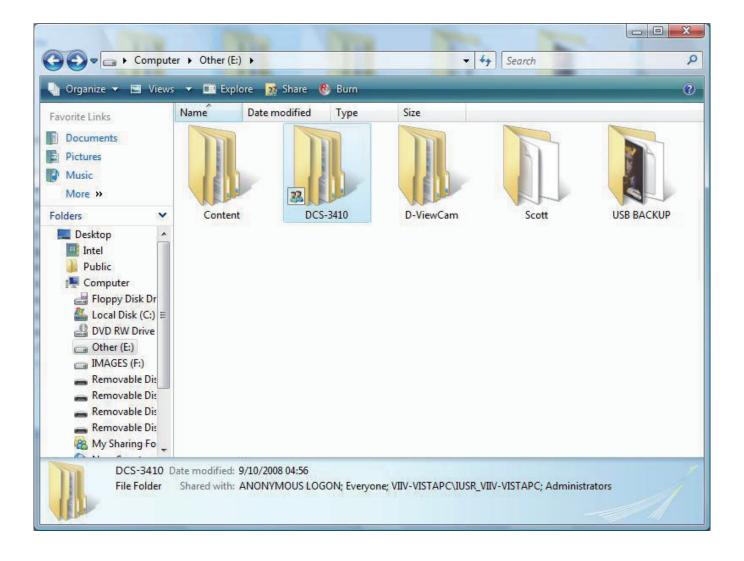
Postrecord: A preset amount of time after motion recording is triggered.

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

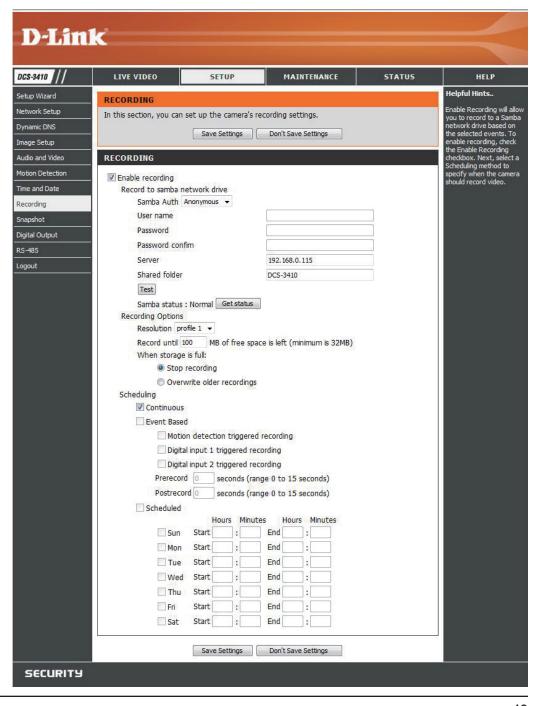


How to save video to a shared folder?

1. Set the folder in your computer to shared. You can set as anonymous authentication or set a user name and password.



- 2. Click Enable Recording.
- 3. Set the Samba Authentication to Anonymous or Account. Enter the IP address of the computer or network attached storage with the shared folder and the name of the shared folder in step 1 to record to. If you selected Account, enter the user name and password from step 1.
- 4. Set the recording and schedule options.
- 5. Click **Save Settings**. The status will be set to **Normal** when connected properly.



Snapshot

Enable the **Snapshot** feature so that your camera can take snaphots 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: \pub\images).

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.



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 **signal**: is a triggered event.

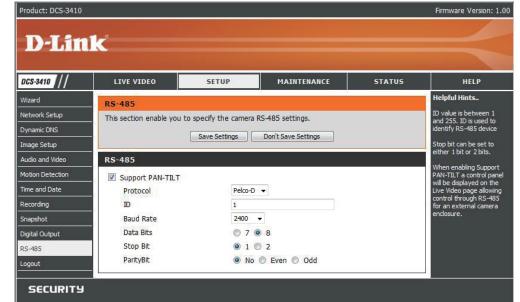
Trigger Event: You can choose from one or up to three events, such as Motion Detection, D/I Signal 1, and D/I Signal 2 for the sources of the triggered events.



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. Bye 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.

Product: DCS-3410

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

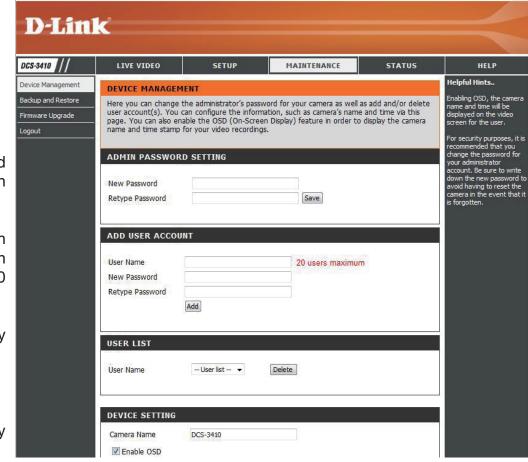
Enable OSD: Select this option to enable the On-Screen Display

feature for your camera.

Label: The label name.

Show time: Select this option to enable the time-stamp display

in the video screen.



Firmware Version: 1.00

Backup and Restore

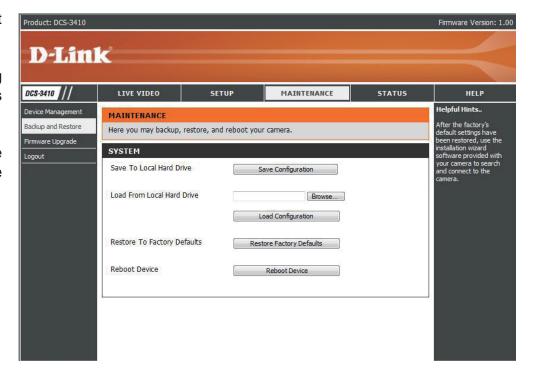
In this section, you may backup, restore and reset the settings as well as reboot your camera.

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

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

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

Reboot Device: This will restart your 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.

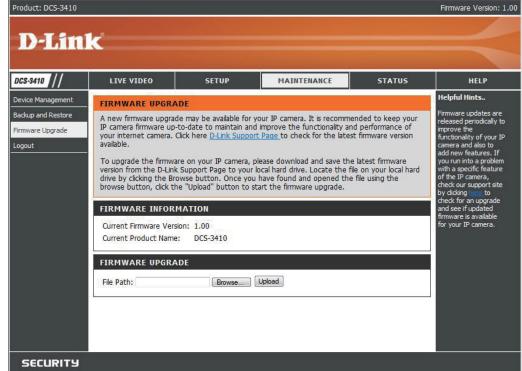
Current firmware It will be automatically determined and displayed **version**: by the system.

Current Product Name of the existing product.

Name:

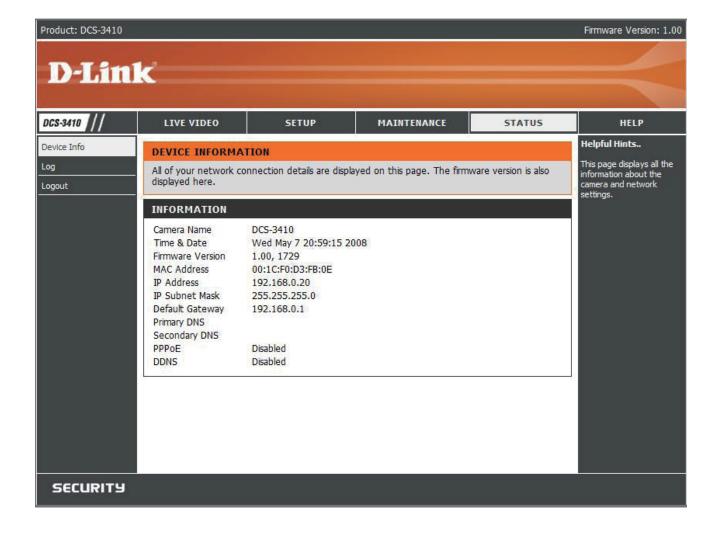
File Path: Locate the file (upgraded firmware) on your hard drive by clicking **Browse**.

Upload: Start uploading the new firmware to your camera.



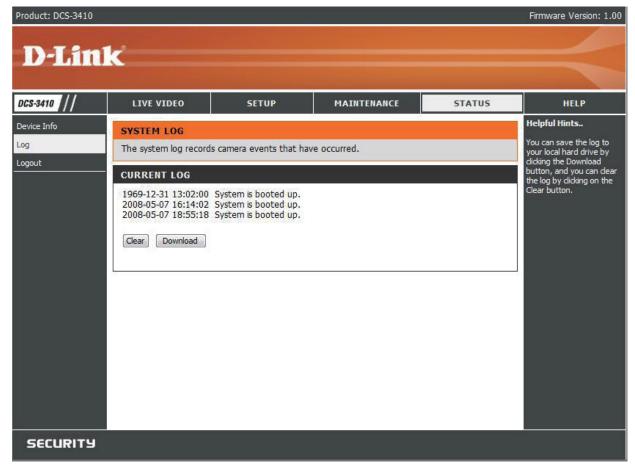
Status Device Info

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



Logs

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



Help



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?

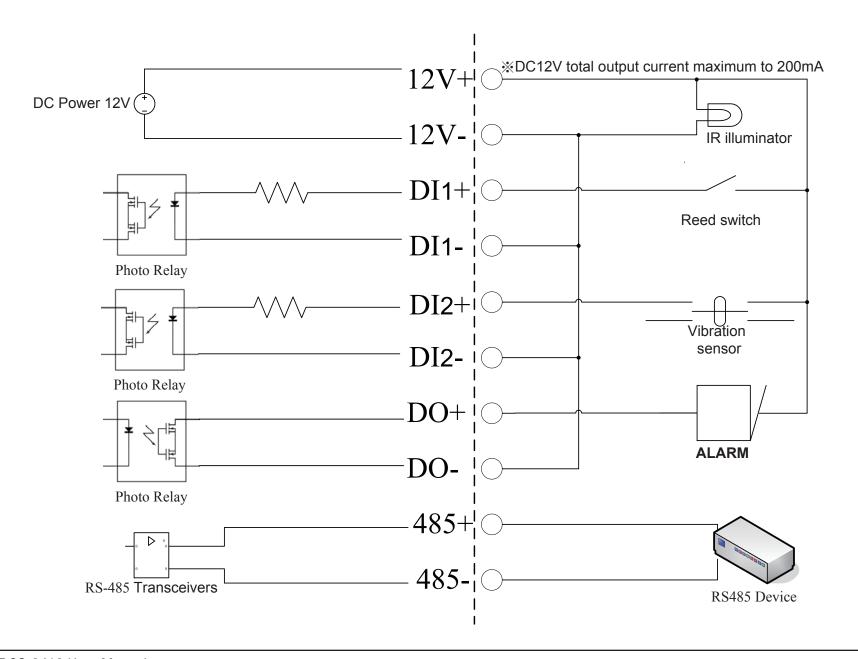
The video images might be noisy if the Network Camera is used in a very low light environment. To solve this issue you need more lighting.



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.

DI/DO



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 and click **OK**.

At the prompt, type 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
         Default Gateway
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.

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

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