



User Manual

Full HD Day & Night Outdoor Network Camera

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes. Information in this document may become obsolete as our services and websites develop and change.

Manual Revisions

Revision	Date	Description
1.0	July 10, 2012	DCS-7413 Revision A1 with firmware version 1.00

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Product Overview Package Contents



DCS-7413 Full HD Day & Night Outdoor Network Camera



Wire in Bracket and Mounting Shoe



CAT5 Ethernet cable



Power adapter



CD-ROM with User Manual and software



Mounting Plate



Alignment Sticker and Fixings Kit



Quick Installation Guide



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



Introduction

Congratulations on your purchase of the DCS-7413 Full HD Day & Night Outdoor Network Camera. The DCS-7413 is a professional surveillance and security solution for small, medium, and large enterprises alike. The DCS-7413 uses a 2 megapixel progressive scan CMOS sensor; the professional sensor results in low noise and high sensitivity capabilities ideal for surveillance applications.

The DCS-7413 is a complete system built with an ARM SoC CPU that incorporates a web server, allowing it to transmit excellent real-time Full HD resolution video quality for security and outdoor surveillance.

The DCS-7413 can be accessed remotely, controlled and configured from any PC/Notebook over your local network or through the Internet via a web browser. The simple installation and intuitive web-based interface offer easy configuration across the full range of its advanced feature set, including granular control over multiple video streams with different configurations and multicast video/audio streams which helps you manage your network load.

The DCS-7413 has an IP66 certified weatherproof housing designed for both indoor and outdoor applications. The built-in removable IR-cut filter and IR LEDs give the DCS-7413 the capability to view up to 30M at night. The DCS-7413 also incorporates Power over Ethernet (PoE), allowing it to be easily installed in a variety of locations without the need for supplemental power cabling. The combination of IP66 housing, IR-Cut Filter, IR LEDs and PoE make the DCS-7413 an ideal solution for a dependable and cost-effective 24 hour surveillance solution with an easy clutter-free installation.

System Requirements

- Computer with Microsoft Windows® 7, Vista®, or XP (for CD-ROM Setup Wizard), Mac OS or Linux
- PC with 1.3GHz or above; at least 128MB RAM
- Internet Explorer 7 or above, Firefox 3.5 or above, Safari 4 and Chrome 8.0 or above
- Existing 10/100 Ethernet-based network
- An SD memory card (optional) is required for recording to onboard storage. SDHC Class 6 or above is recommended.

Broadband Internet connection

Features

Simple to Maintain

The DCS-7413 is a stand-alone system with a built-in CPU, requiring no special hardware or software. The DCS-7413 supports both ActiveX mode for Internet Explorer and Java mode for other browsers such as Chrome®, Firefox® and Safari®.

Supports a Variety of Platforms

Supporting TCP/IP networking, HTTP, and other Internet related protocols. The DCS-7413 can also be integrated easily into other Internet/Intranet applications because of its standards-based features. The DCS-7413 works with any 10/100 Ethernet network, making the DCS-7413 easy to integrate into your existing network environment.

Advanced Event Management

The DCS-7413 can be set up to send e-mail notifications with snapshots when an event occurs, such as when motion is detected. Events can be triggered from several sources, such as motion detection, timer based events or digital input based events.

Automatic Thermostat Temperature Regulation

The DCS-7413 monitors and automatically regulates its temperature to ensure it can perform at its optimal ability. It balances fan use against a built in heater based on a range of preset thermostatic settings. This gives the DCS-7413 the ability to perform in the most demanding of environments.

Remote Monitoring Utility

The D-ViewCam application adds enhanced features and functionality for the Network Camera and allows administrators to configure and access the Network Camera from a remote site via Intranet or Internet. Other features include image monitoring, recording images to a hard drive, viewing up to 32 cameras on one screen, and taking snapshots.

IR LED for Day and Night Functionality

The built-in infrared LEDs enables night time viewing of up to 30 meters (98 feet).

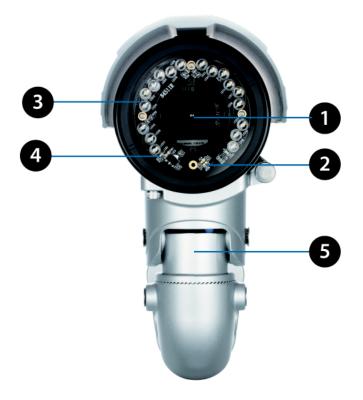
IP66 Weatherproof Housing

The DCS-7413 uses an IP66 weatherproof housing, allowing you to rest assured that in the toughest of conditions, it will continue to provide round-the-clock surveillance.

PoE (Power over Ethernet) for Flexible Installation

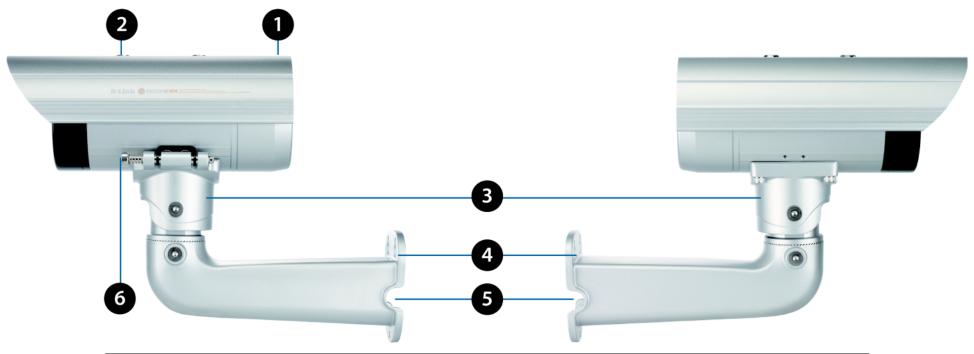
The DCS-7413 can draw all the power it needs from a PoE switch or PoE injector for a simple and clutter-free installation.

Hardware Overview Front



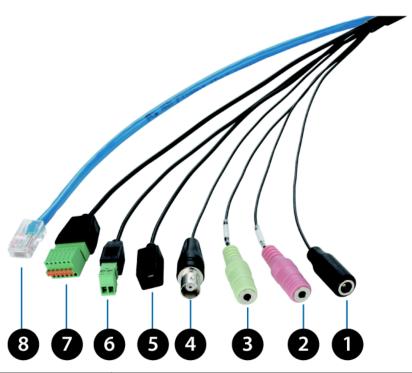
1	Camera Lens	Fixed lens to record video of the surrounding area
2	ICR Sensor	The IR-Cut Removable sensor measures the lighting conditions and switches between color and infrared accordingly
3	IR LEDs	Infrared LEDs illuminate the camera's field of view at night
4	Power/Status LED	Indicates the camera's current status
5	Weatherproof Casing	The camera is housed in an IP66 certified weatherproof casing, which protects it against rain and dust.

Sides



1	Adjustable Top Shield	Shields the camera sensor from direct sunlight.
2	Adjustment Screw	Allows adjustment of the Top Shield.
3	Camera Shoe	Adjustable mounting seat.
4	Wire in Bracket	Tightly assembles and protects the cables from outdoor wear and tear.
5	Cable Channel	Channel for cable placement.
6	Quick Release Rod	Allows the camera to be swiveled into position for easy maintenance.

Cable Harness



1	Power Connector	Power connector for the provided 12V DC power adapter.
2	Audio In (Red)	Connects to a microphone.
3	Audio Out (Green)	Connects to a speaker.
4	BNC Connector	The BNC connector is recommended for use with handheld monitors to check the Field of View during installation.
5	Reset Button	Press and hold the recessed button for 10 seconds to reset the camera.
6	24 V Power Connector	Connects to 24 V AC power supply.
7	DI/DO Connector	I/O connectors for external devices. 12V DC output.
8	Ethernet Jack	Connects to an RJ45 Ethernet port. Can be replaced with a PoE cable to provide power to the camera.

Internal **SD Card Slot** Insert an SD card for Local storage for storing recorded image and video

Note: For step-by-step instruction on how to insert an SD card please skip to "Installing an SD Card" on page 11.

Assembly and Installation Installing an SD Card

Step 1

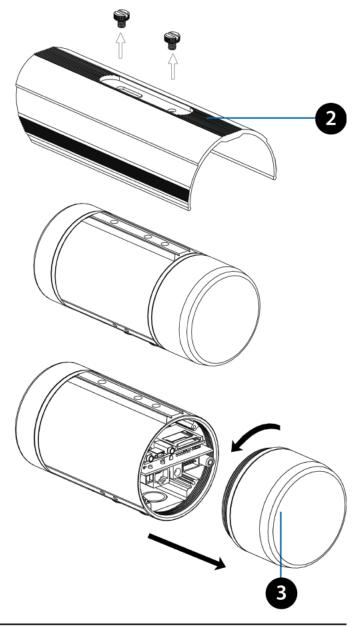
Place the camera face down on a non-slip flat surface.

Step 2

Remove the adjustable top shield by removing the two retaining screws.

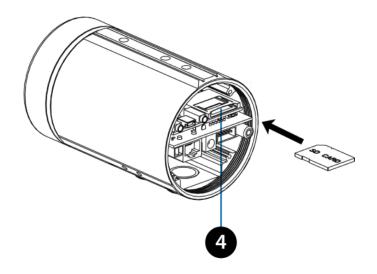
Step 3

Remove the base of the camera by holding the camera firmly and rotating the base in a counter clockwise direction.



Step 4

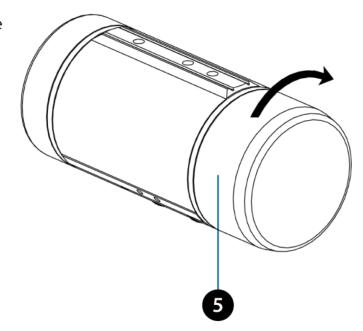
Insert your SD memory card into the slot with the notch oriented to the fore of the camera.



Step 5

Replace the base of the camera by holding the camera firmly and rotating the base in a clockwise direction ensuring a tight fit.

Note: Users are advised to ensure that the weatherproof seals are secured firmly in place.



Mounting the Camera

The DCS-7413 is suitable for mounting to a wall using the camera shoe and wire-in bracket provided.

Step 1

Straighten the two sets of cables from the camera side by side.

Step 2

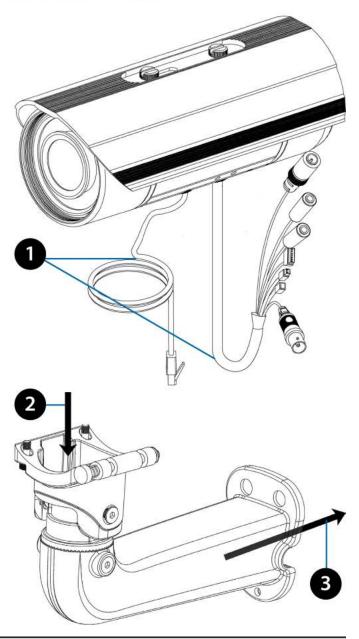
Pass individual cables into the wire-in bracket ensuring the head of each has fully passed through the bend.

Step 3

Once all the cables are in the wire-in bracket push the cable until you are able to pull them through the base of the bracket.

Step 4

Attach the camera bracket to the wire-in bracket following the steps outlined in "Attaching the Camera to the Wire-in Bracket" on page 14.



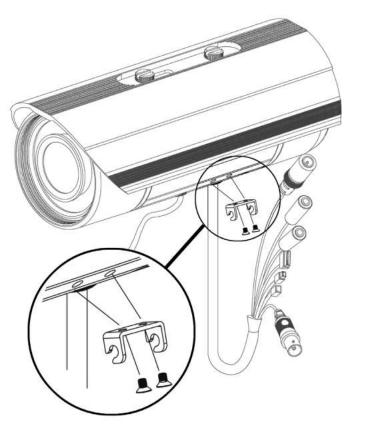
Attaching the Camera to the Wire-in Bracket

Note:

Before attaching the camera to the wire-in bracket, ensure the camera shoe is oriented correctly for its final position. For instructions on how to orient the camera shoe skip to "Orienting the Camera" on page 16.

Step 1

Using the two screws provided attach the quick release retention clip to the underside of the camera.



Step 2

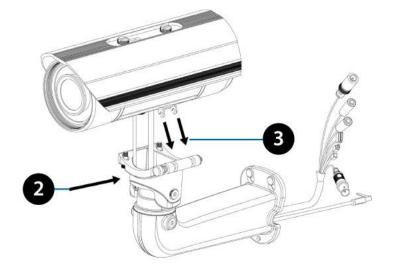
Push the quick release rod to reveal the attachment notches.

Step 3

Slot the quick release retention clip over the quick release rod.

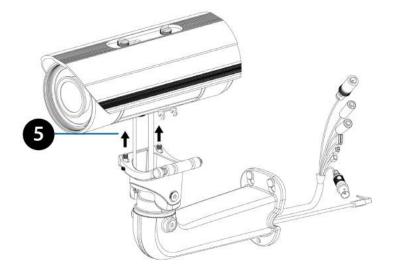
Step 4

Allow the quick release rod to return.



Step 5

Using the Allen Wrench provided, tighten the two remaining fixing bolts.



Orienting the Camera

The DCS-7413 can be adjusted to ensure an optimal viewing position when mounted to a wall by following the steps outlined.

Step 1

Using the Allen Wrench provided, loosen the adjusting bolts on both sides of the camera shoe. This will allow you to adjust the vertical orientation of the camera.

Step 2

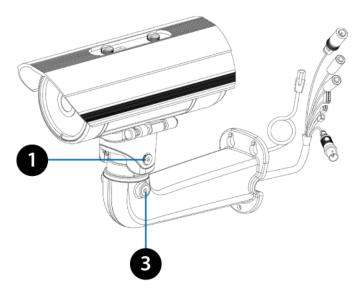
Firmly tighten the adjustment bolts on both sides of the camera shoe.

Step 3

Using the Allen Wrench provided, loosen the adjusting bolts on both sides of the wire-in bracket. This will allow you to adjust the horizontal orientation of the camera.



Firmly tighten the adjustment bolts on both sides of the wire-in bracket.



Deploying the Camera

Note: Before deploying the camera to a fixed location, it is recommended that you take a photo from the desired location to ensure an adequate field-of-view.

Step 1

Position the Alignment Sticker in the desired location making sure the Camera and Wire-in-Bracket have sufficient space. Use the dimension diagrams in "Dimensions" on page 68 for additional reference.

Step 2

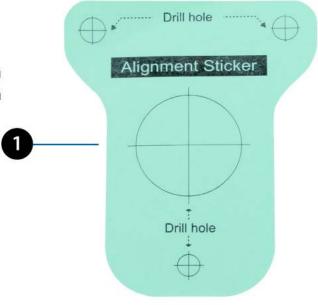
Use a 6mm drill bit to make required holes approximately 30mm deep.

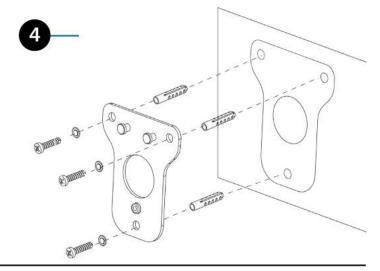
Step 3

Remove the Alignment Sticker.

Step 4

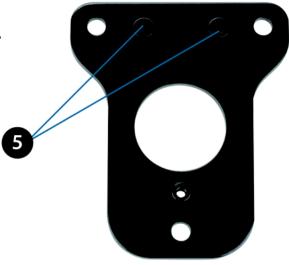
Insert wall anchors and affix the mounting plate using the screws provided.





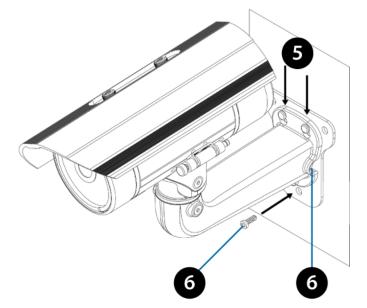
Step 5

Suspend the camera and wire-in bracket from the two lugs on the mounting plate.



Step 6

Fasten the camera firmly to the mounting plate using the screw provided ensuring clear passage for the cables through the cable channel or via the mounting plate cut-out.

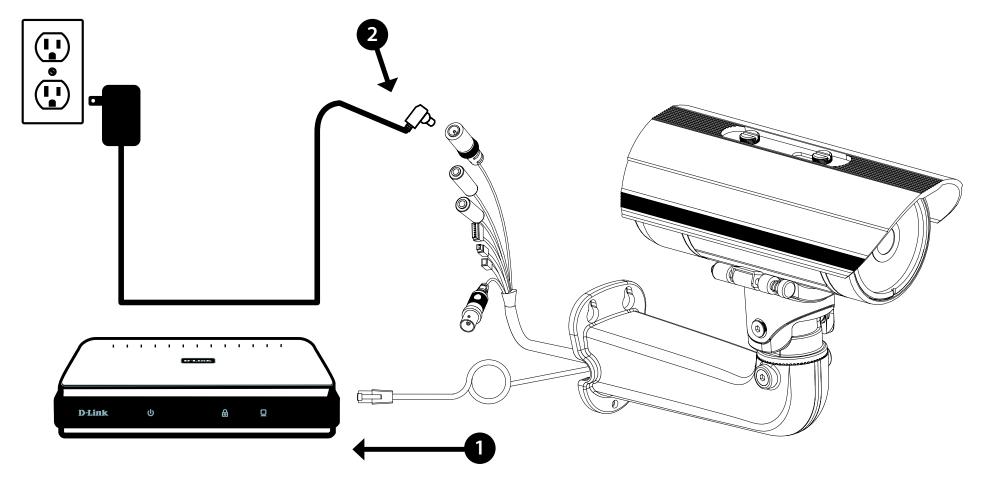


Camera Installation Wizard Connection with 12 V DC Power Adapter

Step 1

Connect the network camera to a hub via an Ethernet cable.

Step 2Connect the supplied power cable from the camera to a power outlet.



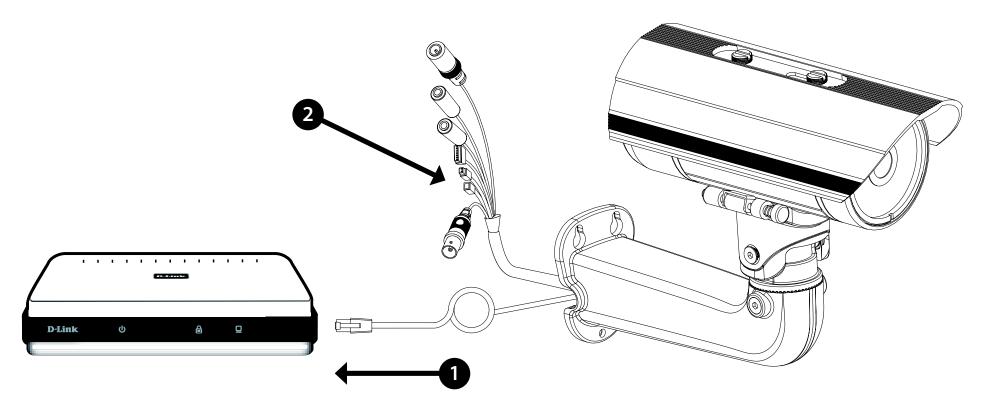
Connection with 24 V AC Power Wiring

Step 1

Connect the network camera to a hub via an Ethernet cable.

Step 2

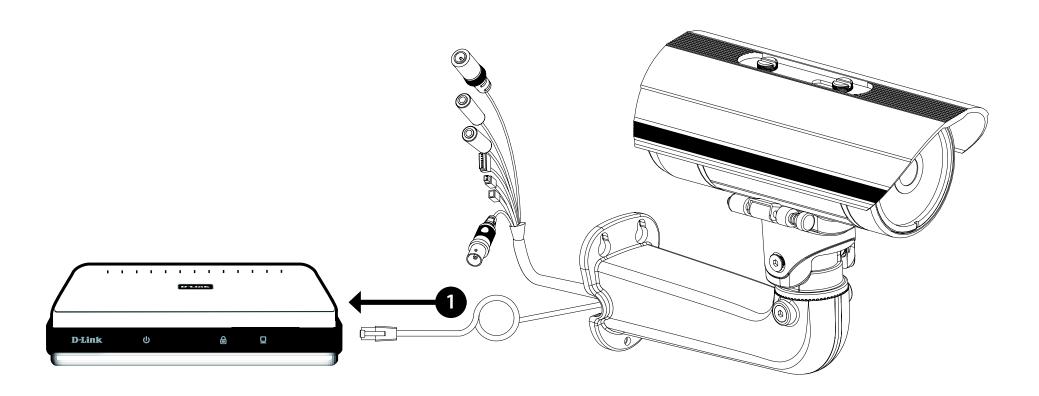
Connect the supplied power cable from the camera to a power source such as your building's emergency power.



Connection with Power over Ethernet

Step 1

If you are using a PoE hub, connect the IP camera to the hub via an Ethernet cable, which will provide transmission of both power and data over a single cable.



Software Installation

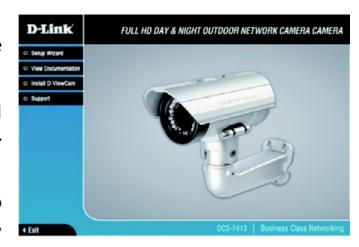
Step 1

Insert the Installation CD-ROM into your computer's optical drive to start the autorun program.

The CD-ROM will open the Camera Installation Wizard. The Setup Wizard will guide you through the installation process through to configuring your camera.

Note:

If the autorun program does not automatically start on your computer, go to Windows, click **Start** > **Run**. In the Run command box type **D:\autorun.exe**, where D: represents your CD-ROM drive.



Step 2

Accept the End User Licence Agreement and follow the on screen prompts to install the Camera Installation Wizard.

Step 3

Select your camera from the list, then click **Wizard**. If you have multiple cameras, you can identify them by the MAC ID printed on the label on the back of your camera.



Step 4

By default the **Admin ID** is "admin" and the password is blank.

It is recommended that you create and confirm a password for your device. Click **Next** to continue.



Step 5

Select **Static IP** if your Internet Service Provider has provided you with connection settings, or if you wish to set a static address within your home network. Enter the correct configuration information and click **Next** to continue.

Note: Select DHCP if you are unsure of which settings to choose.

Click **Next** to continue.



Step 6

Confirm your camera login details and IP address details and click **Restart**.

The LED on the front of the DCS-7413 will blink, then turn solid green once it successfully connects to your network.



Step 7

Your DCS-7413 camera is now set up, Click **Exit** to exit the wizard and can skip to "Configuration" on page 25 for advanced configuration of your camera.



ConfigurationUsing the Configuration Interface

After completing the Camera Installation Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your DCS-7413. At the end of the wizard, click **Link**, or enter the IP address of your camera into a web browser, such as Mozilla Firefox. To log in, use the User name **admin** and the password you created in the Installation Wizard. If you did not create a password, the default password is blank. After entering your password, click **OK**.

Step 1

Click the **Link** button on the Wizard.



Step 2

Enter your credentials to access the configuration interface.



Live Video

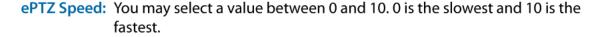
This section shows your camera's live video. You may select any of the available icons listed below to operate the camera. You may also select your language using the drop-down menu on the left side of the screen.

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

SD Status: This option displays the status of the SD card. If no SD card has been inserted, this screen will display the message "Card Invalid."

IO Status: This option displays the status of your I/O device if a device has been connected.

	Digital Input Indicator	This indicator will change color when a digital input signal is detected.
The same of the sa	Motion Trigger Indicator	This indicator will change color when a trigger event occurs.
		Note: The video motion feature for your camera must be enabled.
REC	Recording Indicator	When a recording is in progress, this indicator will change color.
(to t)	Control Pad	This control pad can be used to electronically pan, tilt, and zoom (ePTZ) within the camera's predefined view area, if one has been defined.
+	Auto Pan	Starts the automatic panning function. The ROI will pan from back and forth within the FOV
×	Stop	Stops the camera ePTZ motion
~	Preset Path	Starts the camera's motion along the predefined path





Full screen mode

Global View: This window indicates the total field of view (FOV) of the camera. The red box indicates the visible region of interest (ROI).

Language: You may select the interface language using this menu.

Video Profile 1
Record a Video Clip

Video Profile 2
Set a Storage Folder

Start/Stop Audio Out (to speaker)

Taking a Snapshot Start/Stop Digital Output

Go To: If any presets have been defined, selecting a preset from this list will (Preset List) display it.



Setup Setup Wizard

To configure your Network Camera, click **Internet Connection Setup Wizard**. Alternatively, you may click **Manual Internet Connection Setup** to manually configure your Network Camera and skip to "Network Setup" on page 34.

To quickly configure your Network Camera's motion detection settings, click **Motion Detection Setup Wizard**. If you want to enter your settings without running the wizard, click **Manual Motion Detection Setup** and skip to "Motion Detection" on page 44.



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.



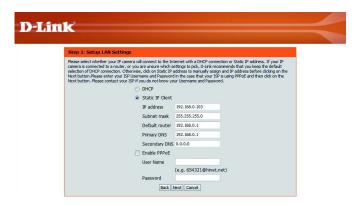
Note: Select DHCP if you are unsure of which settings to choose.

Click **Next** to continue.



Select **Static IP** if your Internet Service Provider has provided you with connection settings, or if you wish to set a static address within your home network. Enter the correct configuration information and click **Next** to continue.

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



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



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



Configure the correct time to ensure that all events will be triggered as scheduled. Click **Next** to continue.



Confirm the settings are correct and click **Apply** to save them.



The settings will be saved to the DCS-7413 and the camera will restart.



Motion Detection Setup Wizard

This wizard will guide you through a step-by-step process to configure your camera's motion detection functions.

Click **Next** to continue.



Step 1

This step will allow you to enable or disable motion detection, specify the detection sensitivity, and adjust the camera's ability to detect movement.

You may specify whether the camera should capture a snapshot or a video clip when motion is detected.

Please see the **Motion Detection** section on "Motion Detection" on page 44 for information about how to configure motion detection.



Step 2

This step allows you to enable motion detection based on a customized schedule. Specify the day and hours. You may also choose to always record whenever motion is detected.

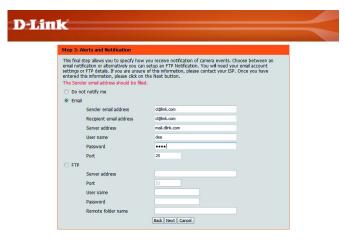


Step 3

This step allows you to specify how you will receive event notifications from your camera. You may choose not to receive notifications, or to receive notifications via e-mail or FTP.

Please enter the relevant information for your e-mail or FTP account.

Click **Next** to continue.



Step 4

You have completed the Motion Detection Wizard.

Please verify your settings and click **Apply** to save them.

Step 4: Setup Complete

You have concluded you. Pleaser a setup. Fleare click the Back button if you want to review or modify your settings or click on the Apply button to serve and apply your settings.

Motion Detection:

EVENT:

EVENT:

Schedule Day:
Sun "Mon , Tue "Wed , Thu "Fri , Sat ,
Schedule Time:
Always
Alests and Nutrification: Emaile

East. Apply Cancel

Please wait a few moments while the camera saves your settings and restarts.



Network Setup

Use this section to configure the network connections for your camera. All relevant information must be entered accurately. After making any changes, click the **Save Settings** button to save your changes.

LAN Settings: This section lets you configure settings for your local area network.

DHCP: Select this connection if you have a DHCP server running on your network and would like your camera to obtain an IP address automatically.

If you choose DHCP, you do not need to fill out the IP address settings.

Static IP Client: You may obtain a static or fixed IP address and other network information from your network administrator for your camera. A static IP address may simplify access to your camera in the future.

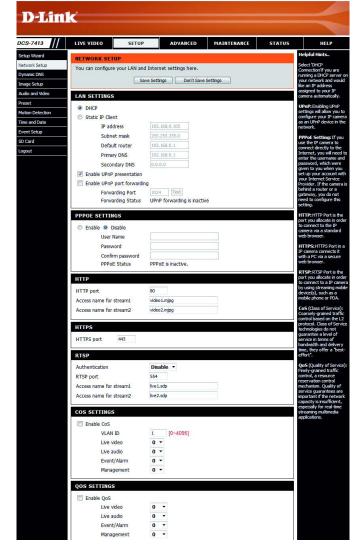
IP Address: Enter the fixed IP address in this field.

Subnet Mask: This number is used to determine if the destination is in the same subnet. The default value is 255,255,255.0.

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: The primary domain name server translates names to IP addresses.

Secondary DNS: The secondary DNS acts as a backup to the primary DNS.



Enable UPnP Presentation: Enabling this setting allows your camera to be configured

as a UPnP device on your network.

Enable UPnP Port Forwarding: Enabling this setting allows the camera to add port

forwarding entries into the router automatically on a

UPnP capable network.

Enable PPPoE: Enable this setting if your network uses PPPoE.

User Name / Password: Enter the username and password for your PPPoE

account. Re-enter your password in the Confirm Password field. You may obtain this information from

your ISP.

HTTP Port: The default port number is 80.

Access Name for Stream 1~3: The default name is video#.mjpg, where # is the number of the stream.

HTTPS Port: You may use a PC with a secure browser to connect to

the HTTPS port of the camera. The default port number

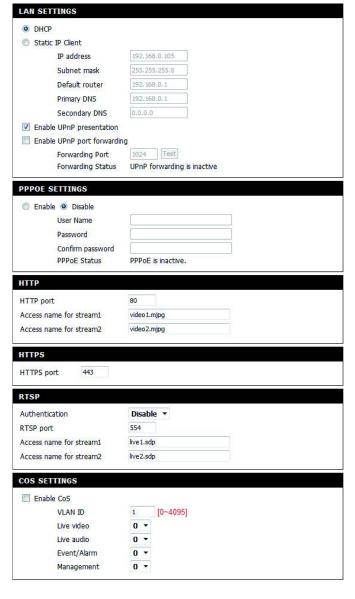
is 443.

Authentication: Choose to enable or disable RTSP digest encryption.

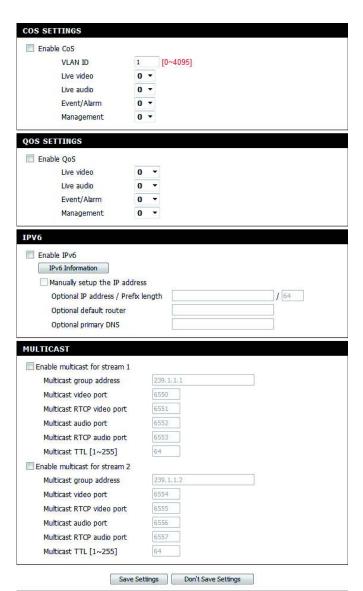
Digest encryption uses MD5 hashes.

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. You may specify the address of a particular stream. For instance, live1.sdp can be accessed at rtsp://x.x.x.x/video1.sdp where the x.x.x.x

represents the ip address of your camera.



- **Enable CoS:** Enabling the Class of Service setting implements a best-effort policy without making any bandwidth reservations.
- **Enable QoS:** Enabling QoS allows you to specify a traffic priority policy to ensure a consistent Quality of Service during busy periods. If the Network Camera is connected to a router that itself implements QoS, the router's settings will override the QoS settings of the camera.
- Enable IPv6: Enable the IPv6 setting to use the IPv6 protocol. Enabling the option allows you to manually set up the address, specify an optional IP address, specify an optional router and an optional primary DNS.
- Enable Multicast for stream The DCS-7413 allows you to multicast each of the available streams via group address and specify the TTL value for each stream. Enter the port and TTL settings you wish to use if you do not want to use the defaults.



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. A user name and password are required when using the DDNS service. After making any changes, click the **Save Settings** button to save your changes.

Enable DDNS: Select this checkbox to enable the DDNS function.

Server Address: 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 the user name or e-mail used to connect to your

DDNS account.

Password: Enter the password used to connect to your DDNS

server account.

Timeout: Enter the DNS timeout values you wish to use.

Status: Indicates the connection status, which is automatically

determined by the system.



Image Setup

In this section, you may configure the video image settings for your camera. A preview of the image will be shown in Live Video.

Enable Privacy Mask: The Privacy Mask setting allows you to specify up to 3 rectangular areas on the camera's image to be blocked/

excluded from recordings and snapshots.

You may click and drag the mouse cursor over the camera image to draw a mask area. Right clicking on the camera image brings up the following menu options:

Disable All: Disables all mask areas **Enable All:** Enables all mask areas **Reset All:** Clears all mask areas.

Mirror: This will mirror the image horizontally.

Flip: This will flip the image vertically. When turning Flip on, you may want to consider turning Mirror on as well.

Power Line: Select the frequency used by your power lines to avoid

interference or distortion.

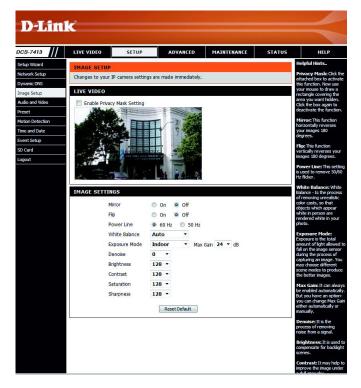
White Balance: Use the drop-down box to change white balance settings

to help balance colors for different environments. You can choose from Auto, Outdoor, Indoor, Fluorescent,

and Push Hold.

Exposure Mode: Changes the exposure mode. Use the drop-down

box to set the camera for Indoor, Outdoor, or Night



environments, or to Moving to capture moving objects. The Low Noise option will focus on creating a high-quality picture without noise. You can also create 3 different custom exposure modes. The Max Gain setting will allow you to control the maximum amount of gain to apply to brighten the picture.

Denoise: This setting controls the amount of noise reduction that will be applied to the picture.

Brightness: Adjust this setting to compensate for backlit subjects.

Contrast: Adjust this setting to alter the color intensity/strength.

Saturation: This setting controls the amount of coloration, from

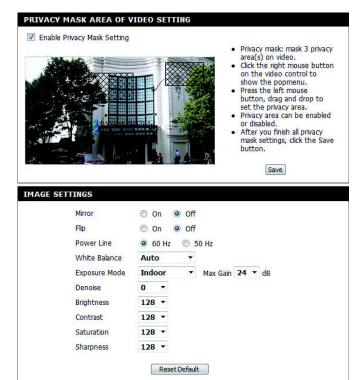
grayscale to fully saturated.

Sharpness: Specify a value from 0 to 8 to specify how much

sharpening to apply to the image.

Reset Default: Click this button to reset the image to factory default

settings.



Audio and Video

You may configure up to 3 video profiles with different settings for your camera. Hence, you may set up different profiles for your computer and mobile display. In addition, you may also configure the two-way audio settings for your camera. After making any changes, click the **Save Settings** button to save your changes.

> Aspect ratio: Set the aspect ratio of the video to 4:3 standard or 16:9 widescreen.

Mode: Set the video codec to be used to JPEG, MPEG-4, or H.264.

Frame size / View window area: Frame size determines the total capture resolution, and View window area determines the Live Video viewing window size. If the Frame size is larger than the Live Video size, you can use the ePTZ controls to look around.

- 16:9 1920 x 1080 (up to 15 fps), 1280 x 720, 800 x 450, 640 x 360, 480 x 270, 320 x 176, 176 x 144 up to 30 fps
- 1440 x 1080 (up to 15 fps), 1280 x 960, 1024 4:3 x 768, 800 x 600, 640 x 480, 320 x 240, 176 x 144 up to 30 fps

Note: If your View window area is the same as your Frame size, you will not be able to use the ePTZ function.

Maximum frame rate: A higher frame rate provides smoother motion for videos, and requires more bandwidth. Lower frame rates will result in stuttering motion, and requires less bandwidth.



This limits the maximum frame rate, which can be Video Quality: combined with the "Fixed quality" option to optimize the bandwidth utilization and video quality. If fixed bandwidth utilization is desired regardless of the video quality, choose "Constant bit rate" and select the desired bandwidth.

The bps will affect the bit rate of the video recorded Constant bit rate: by the camera. Higher bit rates result in higher video quality.

Select the image quality level for the camera to try to Fixed quality: maintain. High quality levels will result in increased bit rates.

Selecting this checkbox will mute incoming audio.

Audio in off:

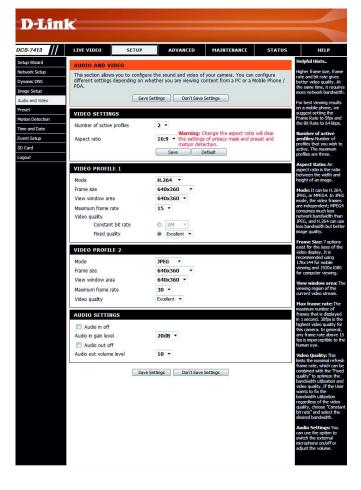
This setting controls the amount of gain applied to Audio in gain level: incoming audio to increase its volume.

Selecting this checkbox will mute outgoing audio.

Audio out off:

This setting controls the amount of gain applied to

Audio out volume level: outgoing audio to increase its volume.



Preset

This screen allows you to set preset points for the ePTZ function of the camera, which allows you to look around the camera's viewable area by using a zoomed view. Presets allow you to quickly go to and view a specific part of the area your camera is covering, and you can create preset sequences, which will automatically change the camera's view between the different presets according to a defined order and timing you can set.

Note: If your View window area is the same as your Frame size, you will not be able to use the ePTZ function.

Video Profile: This selects which video profile to use.

ePTZ Speed: You may select a value between 0 and 10.0 is the slowest

and 10 is the fastest.

Arrow Buttons and Home Button: Use these buttons to move to a specific part of the

viewing area, which you can then set as a preset. Click the Home button to return to the center of the viewing

area.

Input Preset Name: Enter the name of the preset you want to create, then

click the **Add** button to make a new preset. If an existing preset has been selected from the Preset List, you can change its name by typing in a new name, then clicking

the **Rename** button.

Preset List: Click this drop-down box to see a list of all the presets

that have been created. You can select one, then click the **GoTo** button to change the displayed camera view to the preset. Clicking the **Remove** button will delete

the currently selected preset.

Preset Sequence: This section allows you to create a preset sequence,

which automatically moves the camera's view between

a set of preset views.

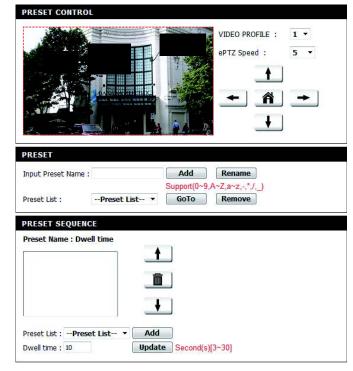


Preset List: To add a preset to the sequence, select it from the drop-down box at the bottom of this window, set the **Dwell** time to determine how long the camera view will stay at that preset, then click the **Add** button. The preset name will appear in the list, followed by the dwell time to view that preset for.

You can rearrange your presets in the sequence by selecting a preset in the sequence, then clicking the arrow buttons to move it higher or lower in the current sequence.

Clicking the trash can button will remove the currently selected preset from the sequence.

If you want to change the dwell time for a preset, select it from the list, enter a new dwell time, then click the **Update** button.



Motion Detection

Enabling Video Motion will allow your camera to use the motion detection feature. You may draw a finite motion area that will be used for monitoring. After making any changes, click the **Save Settings** button to save your changes.

Enable Video Motion: Select this box to enable the motion detection feature of your camera.

Sensitivity: Specifies the measurable difference between two sequential images that would indicate motion. Please enter a value between 0 and 100.

Percentage: Specifies the amount of motion in the window being monitored that is required to initiate an alert. If this is set to 100%, motion is detected within the whole window will trigger a snapshot.

Draw Motion Area: Draw the motion detection area by dragging your mouse in the window (indicated by the red square).

Erase Motion Area: To erase a motion detection area, simply click on the red square that you wish to remove.

Right clicking on the camera image brings up the following menu options:

Select All: Draws a motion detection area over the entire screen.

Clear All: Clears any motion detection areas that have been drawn.

Restore: Restores the previously specified motion detection areas.



Time and Date

This section allows you to automatically or manually configure, update, and maintain the internal system clock for your camera. After making any changes, click the **Save Settings** button to save your changes.

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

Enable Daylight Saving: Select this to enable Daylight Saving Time.

Auto Daylight Saving: Select this option to allow your camera to configure the

Daylight Saving settings automatically.

Set Date and Time Manually: Selecting this option allows you to 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 automatically from an

NTP server.

NTP Server: Network Time Protocol (NTP) synchronizes the DCS-7413

with an Internet time server. Choose the one that is

closest to your location.

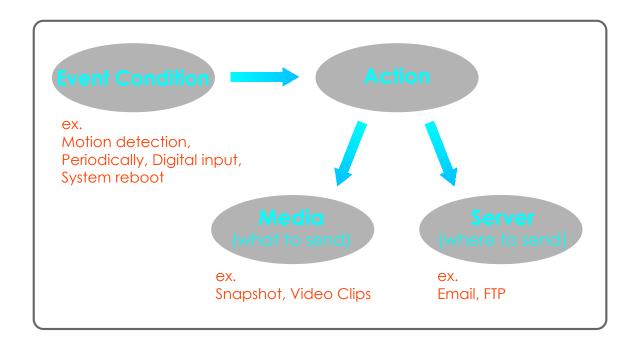
Set the Date and Time Manually: This option allows you to set the time and date manually.

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



Event Setup

In a typical application, when motion is detected, the DCS-7413 sends images to a FTP server or via e-mail as notifications. As shown in the illustration below, an event can be triggered by many sources, such as motion detection. When an event is triggered, a specified action will be performed. You can configure the Network Camera to send snapshots or videos to your e-mail address or FTP site.



To start plotting an event, it is suggested to configure server and media columns first so that the Network Camera will know what action shall be performed when a trigger is activated.

The Event Setup page includes 4 different sections.

- Event
- Server
- Media
- Recording
- 1. To add a new item "event, server or media," click **Add**. A screen will appear and allow you to update the fields accordingly.
- 2. To delete the selected item from the pull-down menu of event, server or media, click **Delete**.
- 3. Click on the item name to pop up a window for modifying.



Add Server

You can configure up to 5 servers to save snapshots and/or video to. After making any changes, click the **Save Settings** button to save your changes.

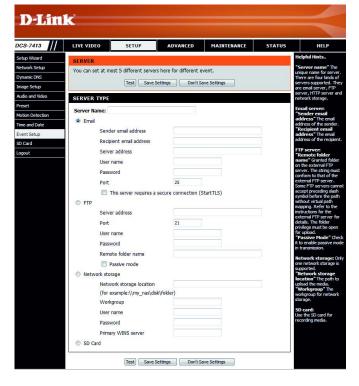
Server Name: Enter the unique name of your server.

E-mail: Enter the configuration for the target e-mail server account.

FTP: Enter the configuration for the target FTP server account.

Network Storage: Specify a network storage device. Only one network storage device is supported.

SD Card: Use the camera's onboard SD card storage.



Add Media

There are three types of media, **Snapshot**, **Video Clip**, and **System Log**. After making any changes, click the **Save Settings** button to save your changes.

Media Name: Enter a unique name for media type you want to create.

Snapshot: Select this option to set the media type to snapshots.

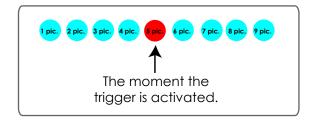
Source: Set the video profile to use as the media source. Refer to **Audio and Video** on "Audio and Video" on page 40 for more information on video profiles.

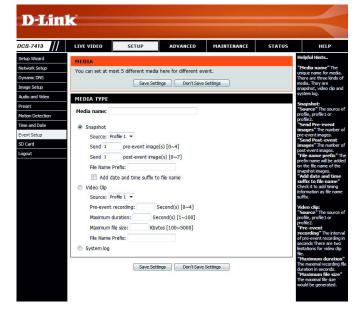
Send pre-event image(s) [0~4]: Set the number of pre-event images to take. Pre-event images are images taken before the main event snapshot is taken.

Send post-event image(s) [0~7]: Set the number of post-event images to take. Post-event images are images taken after the main event snapshot is taken. You can set up to 7 post-event images to be taken.

For example:

If both the Send pre-event images and Send post-event images are set to four, a total of 9 images are generated after a trigger is activated.





File name prefix: The prefix name will be added on the file name.



Add date and time suffix to file Check this to add timing information as file name suffix.

name:

Video clip: Select this option to set the media type to video clips.

Source: Set the video profile to use as the media source. Refer to "Audio and Video" on page 40 for more information on video profiles.

Pre-event recording: This sets how many seconds to record before the main event video clip starts. You can record up to 4 seconds of

pre-event video.

Maximum duration: Set the maximum length of video to record for your

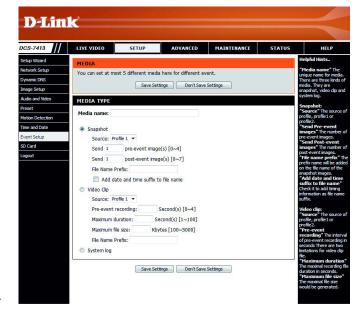
video clips.

Maximum file size: Set the maximum file size to record for your video clips.

System log: Select this option to set the media type to system logs.

This will save the event to the camera system log, but

will not record any snapshots or video.



Add Event

Create and schedule up to 3 events with their own settings here. After making any changes, click the **Save Settings** button to save your changes.

Event name: Enter a name for the event.

Enable this event: Select this box to activate this event.

Priority: Set the priority for this event. The event with higher priority will be executed first.

Delay: Select the delay time before checking the next event. It is being used for both events of motion detection and digital input trigger.

Trigger: Specify the input type that triggers the event.

Video Motion Detection: Motion is detected during live video monitoring. Select

the windows that need to be monitored.

Periodic: The event is triggered in specified intervals. The trigger

interval unit is in minutes.

Digital Input: The external trigger input to the camera.

System Boot: Triggers an event when the system boots up.

Network Lost: Triggers an event when the network connection is lost.

Time: Select **Always** or enter the time interval.

Server: Specify the location where the event information should

be saved to.



Add Recording

Here you can configure and schedule the recording settings. After making any changes, click the Save Settings button to save your changes.

Recording entry name: The unique name of the entry.

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

Priority: Set the priority for this entry. The entry with a higher

priority value will be executed first.

Source: The source of the stream.

Recording schedule: Scheduling the recording entry.

Recording settings: Configuring the setting for the recording.

Destination: Select the folder where the recording file will be stored.

Total cycling recording size: Please input a HDD volume between 1MB and 2TB for recording space. The recording data will replace the oldest record when the total recording size exceeds this value. For example, if each recording file is 6MB, and the total cyclical recording size is 600MB, then the camera will record 100 files in the specified location (folder) and then will delete the oldest file and create new file for cyclical recording.

> Please note that if the free HDD space is not enough, the recording will stop. Before you set up this option please make sure your HDD has enough space, and it is better to not save other files in the same folder as recording files.



Size of each file for recording: If this is selected, files will be separated based on the file

size you specify.

Time of each file for recording: If this is selected, files will be separated based on the

maximum length you specify.

File Name Prefix: The prefix name will be added on the file name of the

recording file(s).



SD Card

Here you may browse and manage the recorded files which are stored on the SD card.

Format SD Card: Click this icon to automatically format the SD card and

create "picture" & "video" folders.

View Recorded Picture: If the picture files are stored on the SD card, click on the

picture folder and choose the picture file you would like

to view.

Playback Recorded Video: If video files are stored on the SD card, click on the video

folder and choose the video file you would like to view.

Refresh: Reloads the file and folder information from the SD card.



Advanced Digital Input/Output

This screen allows you to control the behavior of digital input and digital output devices. The I/O connector provides the physical interface for digital output (DO) and digital input (DI) that is used for connecting a variety of external alarm devices such as IR-Sensors and alarm relays. The digital input is used for connecting external alarm devices and once triggered images will be taken and e-mailed. After making any changes, click the **Save Settings** button to save your changes.

Select D/I or D/O Mode: The camera will send a signal when an event is triggered, depending upon the type of device connected to the DI circuit.

N.C. stands for **Normally Closed**. This means that the normal state of the circuit is closed. Therefore events are triggered when the device status changes to "Open."

N.O. stands for **Normally Open**. This means that the normal state of the circuit is open. Therefore events are triggered when the device status changes to "Closed."

LED: You may specify whether or not to illuminate the status LED on the camera.

Video Output: Enable/ disable the BNC terminal TV output signal.



ICR and **IR**

Here you can configure the ICR and IR settings. An IR(Infrared) Cut-Removable(ICR) filter can be disengaged for increased sensitivity in low light environments.

Automatic: The Day/Night mode is set automatically. Generally, the

camera uses Day mode and switches to Night mode

when needed.

Day Mode: Day mode enables the IR Cut Filter.

Night Mode: Night mode disables the IR Cut Filter.

Schedule Mode: Set up the Day/Night mode using a schedule. The camera

will enter Day mode at the starting time and return to

Night mode at the ending time.

IR Light Control: The camera can enable or disable the IR (infrared) light

according to your preferences. This setting provides additional controls depending on your specific application.

Off: The IR light will always be off.

On: The IR light will always be on.

Sync: The IR light will turn on when the ICR sensor is on.

Schedule: The IR light will turn on or off according to the schedule

that you specify below.



HTTPS

This page allows you to install and activate an HTTPS certificate for secure access to your camera. After making any changes, click the **Save Settings** button to save your changes.

Enable HTTPS Secure Connection: Enable the HTTPS service.

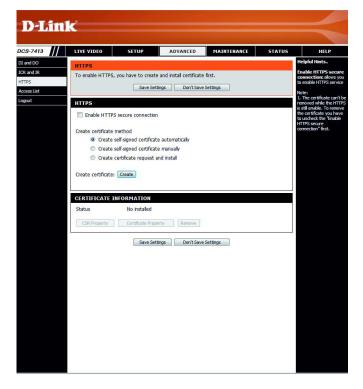
Create Certificate Method: Choose the way the certificate should be created. Three

options are available:

Create a self-signed certificate automatically Create a self-signed certificate manually Create a certificate request and install

Status: Displays the status of the certificate.

Note: The certificate cannot be removed while the HTTPS is still enabled. To remove the certificate, you must first uncheck **Enable HTTPS secure connection**.



Access List

Here you can set access permissions for users to view your DCS-7413.

Allow list: The list of IP addresses that have the access right to the camera.

Start IP address: The starting IP Address of the devices (such as a computer) that have permission to access the video of the camera. Click **Add** to save the changes made.

Note: A total of seven lists can be configured for both columns.

End IP address: The ending IP Address of the devices (such as a computer) that have permission to access the video of the camera.

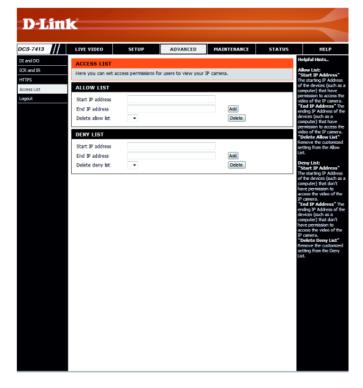
Delete allow list: Remove the customized setting from the Allow List.

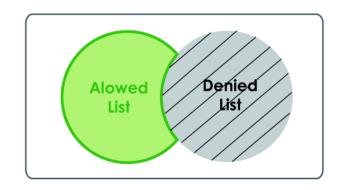
Deny list: The list of IP addresses that have no access rights to the camera.

Delete deny list: Remove the customized setting from the Delete List.

For example:

When the range of the Allowed List is set from 1.1.1.0 to 192.255.255.255 and the range of the Denied List is set from 1.1.1.0 to 170.255.255.255. Only users with IPs located between 171.0.0.0 and 192.255.255.255 can access the Network Camera.





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 a unique name and configure the OSD settings 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 accounts included in the list, but you may want to reserve at least one as a guest account.

Camera Name: Create a unique name for your camera that will be added

to the file name prefix when creating a snapshot or a

video clip.

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

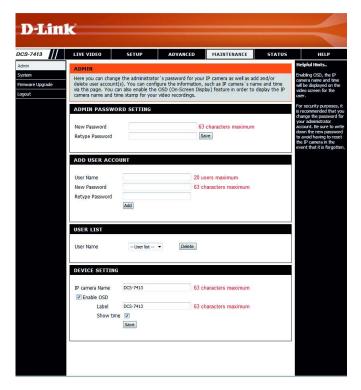
feature for your camera.

Label: Enter a label for the camera, which will be shown on the

OSD when it is enabled.

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

the video screen.



System

In this section, you may backup, restore and reset the camera configuration, or reboot the camera.

Save To Local Hard Drive: You may save your current camera configuration as a file

on 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 by clicking Restore Factory Defaults.

Reboot Device: This will restart your camera.



Firmware Upgrade

The camera's current firmware version will be displayed on this screen. You may visit the D-Link Support Website to check for the latest available firmware version.

To upgrade the firmware on your DCS-7413, 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. Select the file and click the **Upload** button to start upgrading the firmware.

Current Firmware Version: Displays the detected firmware version.

Current Product Name: Displays the camera model name.

File Path: Locate the file (upgraded firmware) on your hard drive

by clicking Browse.

Upload: Uploads the new firmware to your camera.



Status Device Info

This page displays detailed information about your device and network connection.



Logs

This page displays the log information of your camera. You may download the information by clicking **Download**. You may also click **Clear** to delete the saved log information.

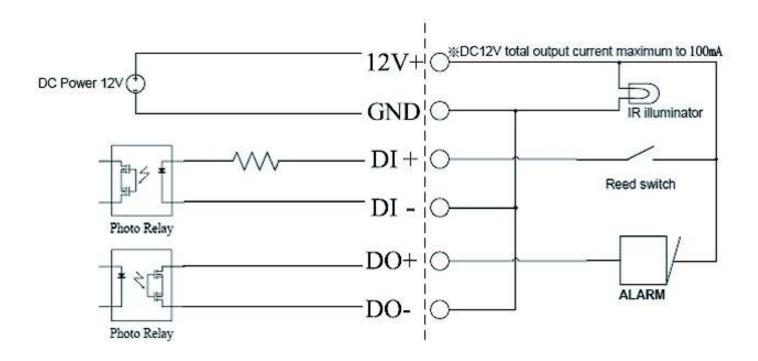


Help

This page provides helpful information regarding camera operation.



DI/DO Specifications



Technical Specifications

Camera	Camera Hardware Profile	 1/2.7" 2 Megapixel progressive CMOS sensor 30 meter IR illumination distance Minimum illumination: 0 lux with IR LED on Built-in Infrared-Cut Removable (ICR) Filter module 10x digital zoom 	 Focal length: 4.3 mm Aperture: F2.0 Angle of view: (H) 73.5° (V) 42.5° (D) 83.3°
	Camera Housing	IP-66 compliant weatherproof housing	Wire-in bracket
	Image Features	 Configurable image size, quality, frame rate, and bit rate Time stamp and text overlays Configurable motion detection windows 	 Configurable privacy mask zones Configurable shutter speed, brightness, saturation, contrast, and sharpness
	Video Compression	 Simultaneous H.264/MPEG-4/MJPEG format compression H.264/MPEG-4 multicast streaming 	JPEG for still images
	Video Resolution	16:9 - 1920 x 1080 (up to 15 fps), 1280 x 720, 800 x 450, 640 x 360, 480 x 270, 320 x 176, 176 x 144 up to 30 fps	4:3 - 1440 x 1080 (up to 15 fps), 1280 x 960, 1024 x 768, 800 x 600, 640 x 480, 320 x 240, 176 x 144 up to 30 fps
	Audio Support	G.726	G.711
	External Device Interface	■ 10/100 BASE-TX Fast Ethernet port	■ SD/SDHC card slot
		■ Supports 802.3af PoE	Audio input/output
Network	Network Protocols	■ IPv6	■ HTTP / HTTPS
		■ IPv4	■ Samba client
		■ TCP/IP	■ PPPoE
		■ UDP	UPnP port forwarding
		■ ICMP	■ RTP / RTSP/ RTCP
		■ DHCP client	■ IP filtering
		NTP client (D-Link)	■ QoS
		■ DNS client	■ CoS
		DDNS client (D-Link)	■ Multicast
		■ SMTP client	■ IGMP
		FTP client	ONVIF compliant
	Security	Administrator and user group protection Password authentication	HTTP and RTSP digest encryption

System Management	System Requirements for Web Interface	■ Browser: Internet Explorer, Firefox, Chrome, Safari	
	Event Management	Motion detection	■ Supports multiple SMTP and FTP servers
		 Event notification and uploading of snapshots/video clips via e-mail or FTP 	Multiple event notificationsMultiple recording methods for easy backup
	Remote Management	■ Take snapshots/video clips and save to local hard drive or NAS via web browser	Configuration interface accessible via web browser
	Mobile Support	Windows 2000/XP/Vista/Windows 7/iPhone/iPad/Android	
	D-ViewCam™ System Requirements	 Operating System: Microsoft Windows 7/Vista/XP Web Browser: Internet Explorer 7 or higher 	■ Protocol: Standard TCP/IP
	D-ViewCam™ Software Functions	Remote management/control of up to 32 camerasViewing of up to 32 cameras on one screen	Supports all management functions provided in web interfaceScheduled motion triggered, or manual recording options
General	Weight	1920g (with bracket and sunshield)	
	External Power Adapter	Input: 100 to 240 V AC, 50/60 Hz	Output: 12 V DC 1.25 A
	Power Consumption	11.2 +-5% Watt	
	Temperature	Operating: -40 to 50 °C (-40 to 122 °F)	Storage: -20° to 70° C (-4° to 158° F)
	Humidity	Operating: 20% to 80% non-condensing	Storage: 5% to 95% non-condensing
	Certifications	CE CE LVD	FCC C-Tick

