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# **D-Link**<sup>®</sup>



# Wireless N 360° Home Network Camera

DCS-6010L

# Preface

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# **Manual Revisions**

Revision	Date	Description
1.0	June 6, 2012	DCS-6010L Revision A1 with firmware version 1.00

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## **Product Overview** Package Contents



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

**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-6010L Wireless N 360° Home Network Camera. The DCS-6010L is a versatile and unique solution for your small office or home. Unlike a standard webcam, the DCS-6010L is a complete system with a built-in CPU and web server that transmits high quality video images for security and surveillance. The DCS-6010L can be accessed remotely, and controlled from any PC/Notebook over your local network or through the Internet via a web browser. The simple installation and intuitive web-based interface offers easy integration with your Ethernet/Fast Ethernet or 802.11n/g wireless network. The DCS-6010L also comes with remote monitoring and motion detection features for a complete and cost-effective home security solution.

## **System Requirements**

- Computer with Microsoft Windows<sup>®</sup> 7, Vista<sup>®</sup>, 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 or 802.11n wireless network
- A MicroSD memory card (optional) is required for recording to onboard storage. SDHC Class 6 or above is recommended.
- Broadband Internet connection

### **Features**

#### 360 Degree Surveillance

The built-in fisheye lens gives you a full 360 degrees of coverage, allowing it to monitor an entire room with ease. It can also be placed on a wall for 180 degree coverage of a hallway. Distortion correction gives you a panoramic view or a normal corrected image that you can pan across easily.

#### Simple to Use

The DCS-6010L is a stand-alone system with a built-in CPU, requiring no special hardware or software. The DCS-6010L supports both ActiveX mode for Internet Explorer and Java mode for other browsers such as Firefox<sup>®</sup> and Safari<sup>®</sup>.

#### **Supports a Variety of Platforms**

Supporting TCP/IP networking, HTTP, and other Internet related protocols. The DCS-6010L can also be integrated easily into other Internet/Intranet applications because of its standards-based features.

#### 802.11n Wireless or Ethernet/Fast Ethernet Support

The DCS-6010L offers wireless 802.11n and Ethernet/Fast Ethernet connectivity, making the DCS-6010L easy to integrate into your existing network environment. The DCS-6010L works with a 10Mbps Ethernet based network or 100Mbps Fast Ethernet based network for traditional wired environments, and works with 802.11n routers or access points for added flexibility. The Site Survey feature also allows you to view and connect to any available wireless networks.

#### **Web Configuration**

Using a standard Web browser, administrators can configure and manage the Network Camera directly from its own Web page via Intranet or Internet. This means you can access your DCS-6010L anytime, anywhere in the world.

#### **Broad Range of Applications**

With today's high-speed Internet services, the Network Camera can provide the ideal solution for delivering live video images over the Intranet and Internet for remote monitoring. The Network Camera allows remote access using a Web browser for live image viewing, and allows the administrator to manage and control the Network Camera anytime, anywhere in the world. Many applications exist, including industrial and public monitoring of homes, offices, banks, hospitals, child-care centers, and amusement parks.

#### **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.

## **Hardware Overview**

### Outside



1	Camera Lens	Records video of the surrounding area
2	Camera Cover	Rotate the cover counter-clockwise to remove it and access the Ethernet port and power connecter Caution: When removing the cover, remove it slowly to avoid disconnecting the microphone.
3	Microphone	Records audio from the surrounding area
4	MicroSD Card Slot	Insert a MicroSD card for Local storage for storing recorded image and video
5	WPS Status LED	Indicates the WPS connection status of the camera Indicates the camera's current status
6	Status LED	Indicates the camera's current power and connectivity status.
7	WPS Button	Press this button, then press the WPS button for 5 seconds on your router to set up a wireless connection automatically
8	<b>Reset Button</b>	Press and hold this button for 10 seconds to reset the camera

### **Internal Ports**



You can access the inside of the DCS-6010L by rotating the camera cover counter-clockwise, then lifting it off of the camera.

1	Power Receptor	Power receptor for the provided power cable or PoE cable to connect to your network
2	Ethernet Port	Connects to an RJ45 Ethernet
3	Cable Channel	Channel for Ethernet and Power cables
4	Cable Channel Guide	Guide to assist correct casing alignment with the cable channel.

**Caution**: When re-attaching the cover, ensure that the cables are seated in the cable channel.

# Installation Wireless Installation Considerations

This D-Link device can connect to your wireless network from anywhere within the operating range of your wireless network. However, the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

- 1. Minimize the number of walls and ceilings between your adapter and other network devices (such as your Network Camera) each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters).
- 2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle, it looks over 42 feet (14 meters) thick. Position your devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
- 3. Building Materials make a difference. A solid metal door or aluminum studs may weaken the wireless signal. Try to position your access points, wireless routers, and other networking devices where the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
- 4. Keep your product at least 3-6 feet or 1-2 meters away from electrical devices or appliances that generate RF noise.
- 5. If you are using 2.4GHz cordless phones or other radio frequency sources (such as microwave ovens), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

Note: The DCS-6010L has a metal underside and mounting bracket.

The metal underside and mounting bracket will affect directional WiFi signal strength adversely if not positioned correctly

## **Zero Configuration Setup**

If you have a mydlink-enabled Cloud Router, you can take advantage of Zero Configuration. Zero Configuration automatically configures your camera's settings for you, and adds it to your mydlink account automatically. This type of setup allows you to set up your camera by simply plugging it in and connecting it to your router.

Connect your camera to your mydlink-enabled Cloud Router and Zero Configuration will automatically configure your DCS-6010L and automatically add the camera to your mydlink account. After the short time it takes to do this you can remotely access your camera from the www.mydlink.com website to manage and monitor your DCS-6010L.

### **Connect the Ethernet Cable**

Using the provided Ethernet cable connect one end to your camera and the other-end to your network.

To install the provided Ethernet cable see "Internal Ports" on page 8 for detailed instructions.

### **Attach the External Power Supply**

Attach the external power supply to the power receptor and to your wall outlet or power strip.

To install the provided power supply see "Internal Ports" on page 8 for detailed instructions.

1	Ethernet Cable	Use an RJ45 Ethernet cable or PoE cable to connect to your network
2	Power Cable	Power cable for the provided power adapter





### **Optional: WPS Wireless Connection**

Alternatively, if your router supports WPS, you can use the WPS button on the camera to easily create a secure wireless connection to your network.

### To create a WPS connection:

### Step 1

Press and hold the WPS button for approximately 5-6 seconds. The WPS LED will blink.

### Step 2

Within 60 seconds press the WPS button on your router. On some routers, you may need to log in to the web interface and click on an on-screen button to activate the WPS feature. If you are not sure where the WPS button is on your router, please refer to your router's User Manual.

The DCS-6010L will automatically create a wireless connection to your router. While connecting, the status LED will flash. When the connection process is complete, the status LED will turn solid.

You can now remove the Ethernet cable by removing the camera cover and disconnecting the Ethernet cable. See "Internal Ports" on page 8 for more details.

**Note**: If your router does not support WPS, you can still use the wired connection method on the previous page. After Zero Configuration setup is complete, your router's wireless settings will be automatically transferred to the camera.



### **Check Your mydlink Account**

From any computer, open a web browser, go to http://www.mydlink.com and log into your account. Once mydlink detects your camera, a **New Device Found!** notice will appear in the bottom-left corner. Click on the device name to continue.



A summary and confirmation notification will appear with the automatically configured details. Make a note of the details and click **OK** to add the camera to your account.

#### Confirming New Device



Zero Configuration is now complete and your camera has been added to your mydlink account. You can now view your camera on the mydlink Live View tab.

If you wish to connect your camera to your router wirelessly, you can simply disconnect the Ethernet cable and move the camera to its intended location; your router's wireless settings have been automatically transferred to the camera, and no further configuration is required.

Your camera is now set up, and you can skip to "mydlink" on page 26 to learn more about the mydlink features of this camera, or to "Configuration" on page 35 for advanced configuration of your camera.



## **Camera Installation Wizard**

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. Simply click **Setup Your Camera** to go through the Installation Wizard, which will guide you through the installation process from connecting your hardware to configuring your camera.



Select your preferred language for the installation from the drop down menu and click on **Start** to continue.



Connect the included Ethernet cable to the internal network cable connecter of the DCS-6010L and attach it to the network.

Click Next to continue.



Connect the other end of the same Ethernet cable to a router.

Click Next to continue.



Attach the external power supply to the power connecter located inside the DCS-6010L and connect it to your wall outlet or power strip.

Click Next to continue.



The LED on the front of the DCS-6010L will blink, then turn solid green once it successfully connects to your network. Click **Next** to proceed.

If the LED continues to stay red, check your connections or click on the "What should I do if the LED stays red?" link for more information.

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





If you wish to remove the camera from a previously registered mydlink account, press and hold the reset button on the rear panel for at least 10 seconds and click **Restart** to restart the wizard.



After you have selected your camera from the list, you will be asked to create and confirm a password for it. The password is case sensitive and must contain at least 2 letters.

Click Next to continue.



To move the camera to a wireless connection by using WPS or by selecting a wireless network, select the appropriate option then follow the steps displayed. Otherwise, click **Next** to continue.



Complete the mydlink account registration form with your details making sure to select the **I accept mydlink terms and conditions box**, and click the **Next** button.



If you already have a mydlink account, enter your login details and click **Next** to proceed.



Confirm your mydlink account details and give the camera a unique name and click **Done**.



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



Your DCS-6010L camera is now set up. Log on to your mydlink account and explore the exciting benefits available to you.

Your camera is now set up, and you can skip to "mydlink" on page 26 to learn more about the mydlink features of this camera, or to "Configuration" on page 35 for advanced configuration of your camera.



## **Manual Hardware Installation**

If you wish to set up your camera without using the Camera Setup Wizard, please follow these steps.

Note: In order to use the mydlink features of this product, you will need to go through the Camera Setup Wizard.

### **Connect the Ethernet Cable**

Using the provided Ethernet cable connect one end to your camera and the other-end to your network.

To install the provided Ethernet cable see "Internal Ports" on page 8 for detailed instructions.

### **Attach the External Power Supply**

Attach the external power supply to the power receptor and to your wall outlet or power strip.

To install the provided power supply see "Internal Ports" on page 8 for detailed instructions.

1	Ethernet Cable	Use an RJ45 Ethernet cable or PoE cable to connect to your network
2	Power Cable	Power cable for the provided power adapter





## **Focusing the Camera**

The DCS-6010L can be focused by adjusting the lens.

### Step 1

Place the camera on a non-slip surface.

### Step 2

Remove the cover by following the steps outlined in "Internal Ports" on page 8.

### Step 3

Adjust the focus by rotating the lens in a clockwise or counter clockwise direction until satisfied.

### Step 4

Ensure the cables are seated in the cable channel.

### Step 5

Seat the cover and rotate to align the cable channel guide over the cable channel.





## **Mounting the Camera**

The DCS-6010L is suitable for mounting to a ceiling, wall or desktop using the bracket provided.

Note: In order to use the mydlink features of this product, you will need to go through the Camera Setup Wizard.

### Step 1

Unclip the wall bracket from the DCS-6010L by sliding the base down.

### Step 2

Position the mounting bracket in the desired location and mark the surface behind it holes using the bracket as a stencil / in pencil

#### Step 3

Use a 6mm drill bit to make required holes approximately 25mm deep.

#### Step 4

Insert wall anchors.

### Step 5

Affix bracket using the screws provided.

#### Step 6

Clip the DCS-6010L to the bracket ensuring a tight fit

**Note**: if mounting on a wall ensure the camera is oriented with the cables positioned to the bottom of the device.



## **WPS - Push Button Setup**

If your router supports WPS, you can use the WPS button on the camera to easily create a secure wireless connection to your network.

### To create a WPS connection:

### Step 1

Press and hold the WPS button for approximately 5-6 seconds. The WPS LED will blink.

#### Step 2

Within 60 seconds press the WPS button on your router. On some routers, you may need to log in to the web interface and click on an on-screen button to activate the WPS feature. If you are not sure where the WPS button is on your router, please refer to your router's User Manual.

The DCS-6010L will automatically create a wireless connection to your router. While connecting, the status LED will flash. When the connection process is complete, the status LED will turn solid.

**Note**: If your router does not support WPS, you can still use the wired connection method on the previous page.



# mydlink

After registering your DCS-6010L camera with a mydlink account in the Camera Installation Wizard. You will be able to remotely access your camera from the www.mydlink.com website. After signing in to your mydlink account, you will see a screen similar to the following:



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Note: The above screenshot is representative only. The mydlink website is constantly improving and so may appear different.

## **Camera Status**

Here, you can see the online status of each of your cameras. Your online status may be one of the following:



A green checkmark indicates that your camera is online and ready to use.



A yellow exclamation point indicates that your camera is online, but the camera password has changed. You will need to enter your new camera password to access your camera again.



A red X indicates that your camera is offline and currently cannot be accessed remotely.

If your camera is offline, try the following:

- Check to make sure that the Internet connection to your camera is working properly.
- Try restarting your Internet router.
- Check your camera's Ethernet and power cable connections and make sure they are secure.
- Check to make sure that the LED on your camera is lit solid green.

If you still cannot access your camera, reset your camera and run the Camera Installation Wizard again from the CD-ROM included in your package.

## **Live Video**

In the main part of the screen, the Live Video tab will be selected by default. If the camera is available, a Live Video feed will be displayed. Video will be shown at VGA resolution (640x480) if viewing your camera from a PC on the same local network, or at QVGA resolution (320x240) if viewing your camera from a PC on a remote network.

$\bigcirc$	View Mode	Here, you can select between the different view modes:
		<ul> <li>Fisheye Mode: shows the full camera view.</li> <li>Normal Mode: shows a corrected view similar to a standard camera view that you can move using the control pad.</li> </ul>
		Panoramic Mode: This shows a corrected, full 180 view across 2 video panels.
		Multi-View with Fisheye: This shows a multiple window view, with a full fisheye view in the top- right panel.
		Hulti-View: This shows a multiple window view.
€¢	Brightness	Adjust the slider control to account for brightness.
୍ରିକ୍ତ	Zoom	Adjust the slider control to zoom in or out.



## Playback

The Playback tab allows you to review pre-recorded footage captured to an inserted microSD card.



Select the date of the footage you wish to preview from the drop down menu, then choose from the recordings available for playback.



## **Settings**

The Settings tab contains several options for you to control how your DCS-6010L operates.

Camera Name: Click on the Edit button to change how the camera name appears.

mydlink No: This is the unique mydlink number for your device.

Model name: This shows the model name of the camera.

MAC: The shows the Media Access Control (MAC) address of the camera.

Camera Activated on: The date the camera was registered to the mydlink service.

**Event Notification** E-mail notification of events can be switched on or off. **Settings:** 

**Recording Settings:** Each of the recording settings will open a further menu.

evices Shared	Devices My Services My Profile	
CS-6010L Liv	e View Playback Settings Events	
Ge	neral Information	
	amera Name: DCS-6010L Edit	
ា	nydlink No.: 44441671	
N	lodel Name: DCS-6010L	
	MC: F07D6809A3D9	
0	amera activated on: 2012-06-01 16:29:32	
Ev	ent Notification Settings	
5	end alert notifications to	
Re	cording Settings	
	Do not record any video clips.	
0	Record video clips when motion is detected.	
0	Record video clips by schedule.	
Ad	vanced Settings	
Sel	ect your camera mounting mode: On ceiling 💌	
You	You can click the Advanced Settings button to access your camera's advanced settings. After clicking the button, use the username and password below to log in.	
u c	semame: admin amera Password: E Show password	
6	Advanced Setting	
Yo	can remove your camera by clicking Delete Camera button.	
	Delete Camera	

Recording Settings		
۲	Do not record any video clips.	
0	Record video clips when motion is detected.	
0	Record video clips by schedule.	

### **Recording Settings**

Record video clips Select this option to enable the automatic recording when motion when motion is is detected.

# Add Detection Area: Click on this icon to draw areas that will trigger automatic recording when motion is detected.

- Remove Detection Area: Click on this icon to erase areas from regions that trigger automatic recording when motion is detected.
- Clear Detection Area: This will remove all detection areas
- **Refresh Snapshot:** This will refresh the current snapshot of the monitored area.
- Increase/Decrease Sensitivity Increase the motion detection sensitivity

Email Notification: Toggles notification by email on or off.

Video Clips Recording In the event that the microSD card can not store further recordings, Mode: the user can choose to record over previous recordings or to be notified and cease recording.

0	Do not record any video clips.
0	Record video clips when motion is detected.
	1 Motion detection
	2 E-mail notification
	<ul> <li><b>3 Video clips</b></li> <li>The inserted MicroSD card can store about 0 days of video maximum.</li> <li>When the MicroSD card is full:</li> <li>© Continue recording &amp; overwrite the oldest video.</li> <li>Stop recording &amp; notify me.</li> </ul>
	Save Cancel

Recording Settings

Record Video Clips by This option enables either continuous or recurring scheduled Record video clips by schedule. Schedule: recording. 1 Schedule setup Record video: Continuously. Only on: Sun Mon Tue Wed Thu Fri Sat From 0:00 to 23:59 Email Notification: Toggles notification by email on or off. 2 E-mail notification Enable e-mail notification I want to send e-mail from: Other Sender E-mail Address: SMTP Mail Server: Port: User Name: Video Clips Recording In the event that the microSD card can not store further recordings, Password: Mode: the user can choose to record over previous recordings or to be Use SSL-TLS: None notified and cease recording. I want the e-mail notification to include Single snapshot, with notifications sent every

## (range 1 to 65535) \*The notification will be sent to the e-mail address registered in mydlink seconds 3 Video clips recording mode The inserted MicroSD card can store about 0 days of video maximum. When the MicroSD card is full: Continue recording & overwrite the oldest video. Stop recording & notify me.

Save Cancel

### **Advanced Settings**

**Show password:** Checking this box will show the password.

Advanced Settings	
Select your camera mounting r	IOde: On ceiling 💌
You can click the Advanced Solid the username and password be	ttings button to access your camera's advanced settings. After clicking the button, us low to log in.
Username: admin Camera Password:	Show password
Advanced Setting	
You can remove your camera t	y clicking Delete Camera button.

Advanced Setting: Clicking on the Advanced Setting button will open a secondary window allowing full configuration of the DCS-6010L





## **Events**

The Events tab contains options for you to keep track of your DCS-6010L event notifications.

Select from the available options to manage your event log.

- Mark Page as Read: Clicking this button will mark the current page of event notifications as read.
- Mark all as Read: Clicking this button will mark all event notifications as read.

